



12 April 2007

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San Francisco Bay Region
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Subject: Semi-Annual Groundwater Monitoring Report, Third and Fourth Quarters 2006,
 Presidio-Wide Quarterly Groundwater Monitoring Program, Presidio of San Francisco,
 California

Dear Devender and Robert:

Attached please find one hard copy and one electronic copy of the *Semi-Annual Groundwater Monitoring Report, Third and Fourth Quarters 2006, Presidio-Wide Quarterly Groundwater Monitoring Program, Presidio of San Francisco (Volumes I and II)* prepared by Treadwell & Rollo for the Presidio Trust. This document is being submitted in accordance with Task 11 of the RWQCB Order R2-2003-0080.

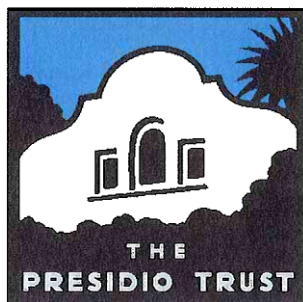
Please feel free to call me at 415-561-4259 if you have any questions and/or comments.

Sincerely,
The Presidio Trust

Craig Cooper
Remediation Program Manager

Enclosure

cc: Brian Ullensvang, NPS
 Doug Kern, RAB (electronic only)



**SEMI-ANNUAL GROUNDWATER MONITORING REPORT
THIRD AND FOURTH QUARTERS 2006
PRESIDIO-WIDE GROUNDWATER MONITORING PROGRAM
PRESIDIO OF SAN FRANCISCO, CALIFORNIA
Volume I of II**

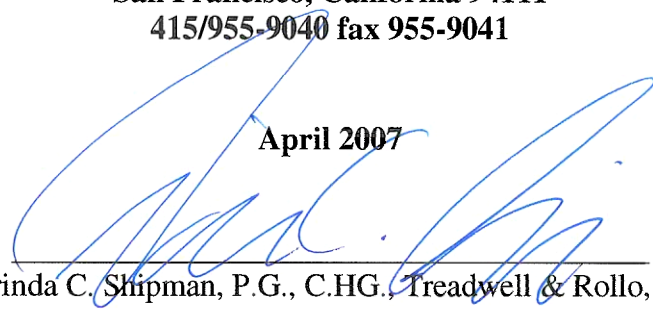
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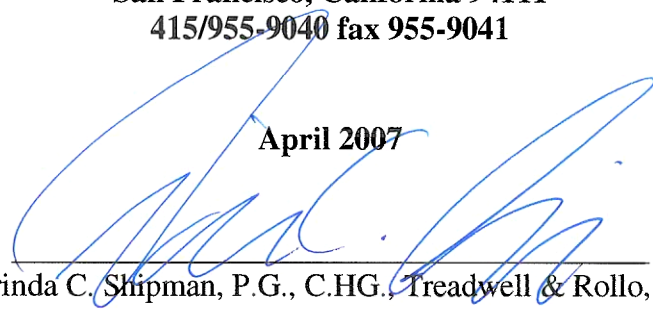
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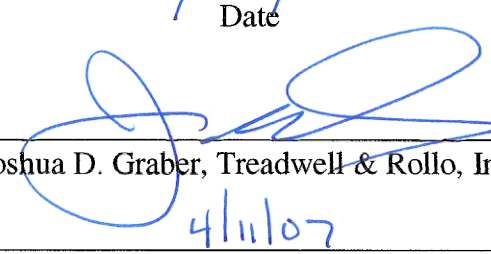
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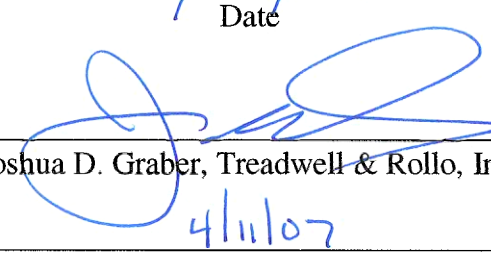
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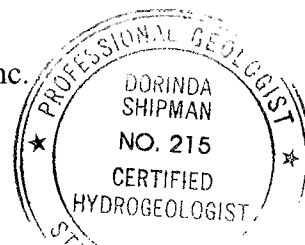
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Volume II of II**

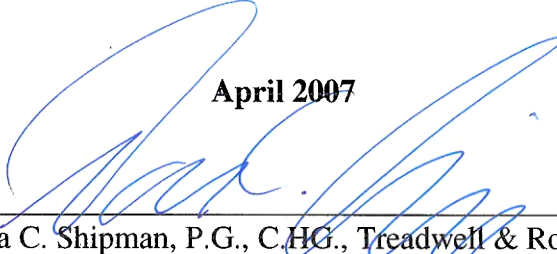
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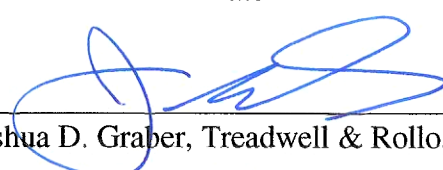
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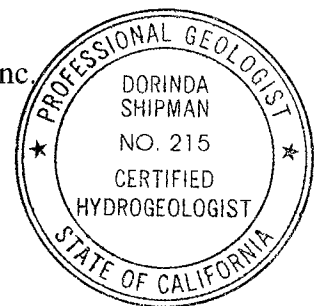
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THIRD AND FOURTH QUARTERS 2006
PRESIDIO-WIDE GROUNDWATER MONITORING PROGRAM
Presidio of San Francisco, California**

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**SEMI-ANNUAL GROUNDWATER MONITORING REPORT
THIRD AND FOURTH QUARTERS 2006
PRESIDIO-WIDE GROUNDWATER MONITORING PROGRAM
Presidio of San Francisco, California**

List of Acronyms and Abbreviations

Action Plan	<i>Commissary Seeps Interim Source Removal Action Plan</i>
ANL	Argonne National Laboratory
Army	United States Department of Defense, Department of the Army
As III	pentavalent arsenic or arsenate
As V	trivalent arsenic or arsenite
AST	aboveground storage tank
BBDA 3	Baker Beach Disturbed Area 3
BGMP	Basewide Groundwater Monitoring Program
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylenes
°C	degrees Celsius
CAP	Corrective Action Plan
CCR	<i>Construction Completion Report for Landfill 4 and Fill Site 5</i>
CD	compact disk
CDHS	California Department of Health Services
Chaudhary	Chaudhary and Associates
Chromalab	STL Chromalab
cis-1,2-DCE	cis-1,2-dichloroethene
Cleanup Levels Document	Development of Presidio-wide Cleanup Levels for Soil, Sediment, Groundwater, and Surface Water
Coast Guard Station	former U. S. Coast Guard Station
COC	Contaminant of Concern
COPC	Compound of Potential Concern
CPT	cone penetrometer test

List of Acronyms and Abbreviations (continued)

CTR	California Toxics Rule
Curtis & Tompkins	Curtis & Tompkins, Ltd.
CWA	Clean Water Act
DAF	dilution attenuation factor
DataVal	DataVal, Inc.
DCA	dichloroethane
DCE	dichlorethene
DEH	Directorate of Engineering and Housing
DEH RAP	<i>Directorate of Engineering and Housing (DEH) Study Area, Evaluation of Remedial Alternatives and Draft Remedial Action Plan (RAP)</i>
DO	dissolved oxygen
DTSC	California Environmental Protection Agency, Department of Toxic Substances Control
DUP	duplicate
DVSR	<i>Data Validation Summary Report for the Presidio Trust Groundwater Monitoring</i>
EDD	electronic data deliverable
EKI	Erler & Kalinowski, Inc.
EPA	United States Environmental Protection Agency
ERB	equipment rinsate blank
FDS	fuel distribution system
Fe	iron
FFS	Focused Feasibility Study
FPALDR	<i>Fuel Product Action Level Development Report</i>
FS	Feasibility Study
FS 5	Fill Site 5
FS 6A	Fill Site 6A
FS 6B	Fill Site 6B
FSP	Field Sampling Plan
FYR/WP	<i>Five-year Review and Field Investigation Work Plan for Landfills 8 and 10</i>

List of Acronyms and Abbreviations (continued)

GC/MS	gas chromatograph/mass spectrometer
GGTR	Golden Gate Tank Removal
GGTS	Golden Gate Tidal Station
Golder	Golder Associates
gpm	gallon per minute
GPS	global positioning system
Hg	mercury
ICP	inductively coupled plasma
IT	International Technology Corporation
LF 4	Landfill 4
LUCs	Land Use Controls
MBAS	methylene blue active substances
MCL	Maximum Contaminant Level
µg/dl	micrograms per deciliter
µg/kg	micrograms per kilogram
µg/L	micrograms per liter
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
Mini-CAP Report	<i>Mini-CAPs Site Reviews and Recommendations to Address Former Petroleum Release Sites</i> Report
MS	mass spectrography confirmation
MS/MSD	matrix spike/matrix spike duplicate
MTBE	methyl tertiary-butyl ether
NDMA	N-nitrosodimethylamine
NGVD29	National Geodetic Vertical Datum of 1929
NOAA	National Oceanic and Atmospheric Administration
NPS	United States Department of the Interior, National Park Service
OCF	organochlorine pesticides
ORC	Oxygen Release Compound
PAH	polycyclic aromatic hydrocarbon

List of Acronyms and Abbreviations (continued)

PALs	Performance Acceptance Limits
PBDE	polybrominated diphenyl ether
PCB	polychlorinated biphenyl
PCE	tetrachloroethene
PCOC	Potential Contaminant of Concern
PHSH	Public Health Service Hospital
PHSH ROD	Public Health Service Hospital Record of Decision
PLLW	Presidio Lower Low Water
POL	petroleum oil and lubricants
Presidio	Presidio of San Francisco
PX	Post Exchange
QAPP	<i>Presidio-wide Quality Assurance Project Plan Sampling and Analysis Plan</i>
QA/QC	quality assurance/quality control
QC	quality control
RAB	Restoration Advisory Board
RAP	Remedial Action Plan
Redox	reduction/oxidation
RI	Remedial Investigation
ROD	Record of Decision
RPD	relative percent difference
RU	Remedial Unit
RWQCB	California Environmental Protection Agency, Regional Water Quality Control Board, San Francisco Bay Region
SCRs	Site Cleanup Requirements
SDG	Sample Delivery Group
SDWA	Safe Drinking Water Act
Sequoia	Sequoia Analytical
SI	Site Investigation
SOP	Standard Operating Procedure
SVOC	semivolatile organic compound

List of Acronyms and Abbreviations (continued)

TB	trip blank
TCE	trichloroethene
TCP	1,2,3-trichloropropane
TDS	total dissolved solids
THR	Tennessee Hollow Restoration
TMB	trimethylbenzene
Towill	Towill, Inc.
TOC	total organic carbon
TPH	total petroleum hydrocarbons
TPHfo	total petroleum hydrocarbons as fuel oil
TPHg	total petroleum hydrocarbons as gasoline
TPHd	total petroleum hydrocarbons as diesel
TPHmo	total petroleum hydrocarbons as motor oil
TPHss	total petroleum hydrocarbons as stoddard solvent
Treadwell & Rollo	Treadwell & Rollo, Inc.
Trust	The Presidio Trust
TSS	total suspended solids
µg/L	micrograms per Liter
UST	underground storage tank
VOC	volatile organic compound

**SEMI-ANNUAL GROUNDWATER MONITORING REPORT
THIRD AND FOURTH QUARTERS 2006
Presidio of San Francisco, California**

E.1 EXECUTIVE SUMMARY

The Presidio-Wide Quarterly Groundwater Monitoring Program continued, with modifications, during the Third and Fourth Quarters 2006. The Third Quarter 2006 sampling event began on 16 August and was completed on 18 August 2006. The Fourth Quarter 2006 sampling event began on 4 December 2006 and was completed on 6 December 2006. This executive summary serves as a semi-annual summary of the groundwater monitoring program at the Presidio for the second half of 2006.

E.1.1 Changes to the Quarterly Groundwater Monitoring Program, Third and Fourth Quarters 2006

Several modifications to the Presidio-wide Quarterly Monitoring Program were implemented during the Third and Fourth Quarters 2006. Changes to the monitoring program are depicted in red text in Tables 1A and 1B. The majority of the changes were associated with reductions in sampling frequency at sites with decision documents in place. All changes approved for the Third and Fourth Quarters 2006 are summarized below and are detailed in Tables 1A and 1B, respectively.

E.1.1.1 Third Quarter 2006

The following changes were approved and implemented during the Third Quarter 2006, as detailed in Table 1A.

Sampling Method Modifications

No monitoring well, piezometer, or seep sampling method modifications were proposed during the Third Quarter 2006.

Water Level/Seep Evaluation Frequency Changes

No changes were proposed for the frequency of water level/seep evaluation measurements during the Third Quarter 2006, as detailed in Table 1A.

Analytical Additions and Reductions

Several changes in the sampling and analytical program scope were approved for the Third Quarter 2006. The following changes were approved and implemented during the Third Quarter 2006, as detailed in Table 1A.

- Sampling at 1349MW02 has been reduced to annual until the Building 1349 Area CAP has been implemented. This change is in accordance with the Fill Site 5 RAP and is consistent with other like Building 1349 Area wells.
- Landfill 10 monitoring well LF10GW02 and seep LF10SP01 could not be sampled during the First or Second Quarters 2006 due to thick vegetation overgrowth. Samples were proposed for collection at these locations during the Third Quarter 2006.

E.1.1.2 Fourth Quarter 2006

The following changes were approved and implemented during the Fourth Quarter 2006, as detailed in Table 1B.

Sampling Method Modifications

No monitoring well, piezometer, or seep sampling method modifications were proposed during the Fourth Quarter 2006.

Water Level/Seep Evaluation Frequency Changes

The frequency of water level / seep evaluation measurements was reduced to annual to match the sampling frequency for all Landfill 8, Building 900s Area, Fill Site 1, Landfill 2, El Polin Spring, and Landfill E (with the exception of DAESP03) monitoring locations.

Based on the large historical data set, the frequency of water level measurements has been reduced to annual for all Upgradient and Tennessee Hollow monitoring wells.

The frequency of water level / seep evaluation measurements was reduced to semi-annual to match the sampling frequency for all Fill Site 5 and Nike Missile Facility monitoring locations.

Water level / seep evaluation measurements have been temporarily suspended at the Commissary/PX Area while the CAP is being implemented. Water level/seep evaluation measurements will resume at the Commissary/PX Area, in accordance with the CAP, following its implementation.

All changes proposed for the frequency of water level/seep evaluation measurements during the Fourth Quarter 2006 are detailed in Table 1B.

Analytical Additions and Reductions

There were some additions and reductions in the sampling and analytical program scope approved prior to the Fourth Quarter 2006, as detailed below.

- Sampling at the Commissary/PX Area was temporarily suspended prior to the Fourth Quarter 2006, while the Commissary/PX Area CAP is being implemented. Sampling will resume, in accordance with the CAP, when the implementation is complete.
- In accordance with the RAP, TPH analyses were reduced to semi-annual sampling at Baker Beach Disturbed Area 3 monitoring well BB3GW100, as no TPH detections have occurred for four quarterly events.
- Landfill 10 locations LF10GW02 and LF10SP01 could not be sampled during the First, Second, or Third Quarters 2006 due to thick vegetation overgrowth. The brush was cleared prior to the Fourth Quarter 2006 and samples were collected at these locations, as proposed, during the Fourth Quarter 2006.

E.1.2 Arsenic and Redox Evaluations

Several parameters were measured in the field and in the laboratory to help determine the redox state of groundwater at Fill Site 6, Building 231/207, Building 1065, and Commissary/PX Areas. The parameters collected were included in the groundwater monitoring program at the aforementioned sites during the Third and/or Fourth Quarter 2006.

The field and analytical data were collected at Fill Site 6, Building 231/207, Building 1065 and Commissary/PX Areas to better understand redox conditions at each site. Modified redox diagrams were developed for Fill Site 6 (A-3), Building 231/207 (A-10), Building 1065 (A-11) and Commissary/PX (A-16) Areas and presented to illustrate the redox conditions spatially across each site.

The redox diagrams were generated using the Sequence™ program and imported onto the figures. The redox diagrams were developed using concentrations of dissolved oxygen, nitrate, manganese, iron, sulfate and methane. Each redox diagram consists of multiple axes, with each individual axis representing one of the above analytes. Each redox diagram is associated with one monitoring well location. The relative shape of each redox diagram represents an approximation of the redox state within the well studied. In general, the larger the polygon, the more oxidizing the environment is within the well location; conversely, the smaller the polygon, the more reducing the environment. Examples of typical redox environments (i.e., aerobic, nitrate-reducing, manganogenic, ferrogenic, sulfate-reducing, and methanogenic) and their associated redox diagrams are presented on each redox diagram figure.

E.1.3 Significant Observations and Accomplishments in Third and Fourth Quarters 2006

Significant changes or trends in groundwater characteristics and chemistry as well as significant site-specific milestones are discussed below. Changes to proposed site-specific sampling schedules are discussed in the site-specific sections of Appendix A.

E.1.3.1 Building 900s Area (Appendix A-1)

Groundwater elevations, gradients, and flow directions during Third Quarter 2006 are consistent with historical values and interpretations. The groundwater sampling frequency at the Building 900s Area will continue to be annual until the first five-year review, which is scheduled to be completed in 2007.

E.1.3.2 Landfill 8 (Appendix A-2)

Groundwater elevations, gradients, and flow directions during the Third Quarter 2006 are consistent with historical values and interpretations.

Until the Landfill 8 RAP has been finalized and implemented, the sampling frequency and groundwater elevation measurements at Landfill 8 will continue to be annual during the First Quarter only. Sampling at Landfill 8 will be performed per the Landfill 8 RAP following the RAP implementation.

E.1.3.3 Fill Site 6 (Appendix A-3)

Groundwater elevations, gradients, and flow directions are consistent with historical values and interpretations. No significant trends or observations were identified at Fill Site 6 during the Third and Fourth Quarters 2006.

No applicable groundwater cleanup levels were exceeded at Fill Site 6 during either the Third or Fourth Quarters 2006.

E.1.3.4 Battery Howe/Wagner (Appendix A-4)

Groundwater elevations, gradients, and flow directions during Third and Fourth Quarters 2006 are consistent with historical values and interpretations.

Dissolved oxygen and general chemistry results during the Third and Fourth Quarters 2006 were generally within historical ranges.

Third and Fourth Quarters 2006 were only the second and third times, respectively, that dissolved metals have been analyzed for in samples from wells HWGW100 and HWGW101. Therefore, analysis for dissolved metals will continue at these and remaining locations in future

monitoring events to establish a baseline for HWGW100 and HWGW101 and to determine if metals concentrations are increasing or decreasing.

E.1.3.5 Building 1349 Area (Appendix A-5)

Four Building 1349 monitoring wells were sampled during the Third Quarter 2006. Only well 1349MW100 was sampled during the Fourth Quarter 2006.

The Building 1349 Study Area Final CAP was submitted to the stakeholders in February 2006, and was approved by the RWQCB in February 2006. Groundwater sampling at the Building 1349 Area will be conducted in accordance with the Final CAP when the CAP is implemented. The recommended corrective actions for the Building 1349 Area are discussed in Section 4.0 of this appendix. Cleanup levels in the Final CAP are presented in Tables A-5-2 through A-5-7.

TPH, OCP, PAH and VOC concentrations continue to be detected in monitoring well 1349MW100 groundwater samples above CAP-specified cleanup levels. The majority of the dissolved metal concentrations detected during the Third and Fourth Quarters 2006 are within historical ranges. Arsenic was detected above the CAP-specified cleanup level of 10 µg/L during the Fourth Quarter 2006 at a concentration 12 µg/L in well 1349MW100. Arsenic concentrations continue to fluctuate within this well around the CAP-specified cleanup level.

Groundwater concentration trends, within both monitoring well 1349MW100 and the remaining wells associated with Building 1349 Study Area, will continue to be monitored and evaluated.

E.1.3.6 Fill Site 1, Landfill 2, El Polin Spring, Tennessee Hollow, And Upgradient Wells (Appendix A-6)

Groundwater elevations and flow directions measured during the Third Quarter 2006 were consistent with historical measurements. Groundwater sampling will continue at Fill Site 1, Landfill 2, and El Polin Spring during First Quarter 2007.

E.1.3.7 Landfill E (Appendix A-7)

Groundwater elevations, gradients, and flow directions are consistent with historical values and interpretations. No significant trends or observations were identified at Landfill E during the Third Quarter 2006.

The proposed sampling frequency at Landfill E seep (DAESP03) was increased to quarterly beginning with the First Quarter 2006 to assess seasonal and variable conditions. All other site wells are sampled on an annual basis in the First Quarter of each year. Due to the non-flowing conditions in Landfill E seep DAESP03, no groundwater samples were collected; thus there were no analytical results for the Third and Fourth Quarters 2006.

A FS has been prepared for Landfill E (CH2MHill, 2005). The reduction to annual sampling at monitoring wells DAEGW03 through DAEGW08 until a Landfill E RAP have been finalized was approved by the stakeholders prior to First Quarter 2004. Sampling will be performed per the RAP once it has been finalized and implemented.

E.1.3.8 Landfill 4 (Appendix A-8)

No significant trends were observed in the samples collected during the Third and Fourth Quarters 2006. The majority of the general chemistry parameter results measured during the Third and Fourth Quarters 2006 are within historical ranges and appear to be stable. No PCBs were detected above the laboratory's reporting limit within LF4GW103 or LF4GW104 during the Third Quarter 2006.

Dissolved metals concentrations at Landfill 4 have remained relatively stable in recent quarters. No dissolved metals exceeded the RAP-specified cleanup levels during the Third or Fourth Quarters 2006. However, dissolved nickel was detected at the cleanup level of 100 µg/L within LF4GW103 during both the Third and Fourth Quarters 2006. Nickel has been detected at concentrations above its applicable cleanup level several times within LF4GW103 during recent monitoring events. Therefore, the potential for increasing or decreasing dissolved nickel concentrations within monitoring wells LF4GW103 and LF4GW104 will continue to be evaluated in future monitoring events, in accordance with the RAP.

E.1.3.9 Fill Site 5 (Appendix A-9)

Groundwater elevations at Fill Site 5 were generally higher during the Third Quarter 2006 when compared to the Third Quarter 2005 at Fill Site 5. Elevations, gradients and flow directions are consistent with historical values and interpretations. Groundwater monitoring well locations and groundwater elevations are illustrated on Figure A-9-1.

Samples collected from Fill Site 5 monitoring wells during the Third Quarter 2006 were analyzed for OCPs. No OCPs were detected within the Fill Site 5 monitoring wells sampled during the Third Quarter 2006.

Dissolved oxygen concentrations measured were within historical ranges.

TPHg, TPHd, several VOCs, OCPs, PAHs, and dissolved metals were detected in the upgradient Building 1349 monitoring well 1349MW100 samples during the Third and Fourth Quarters 2006. Fill Site 5 RAP cleanup levels do not apply to upgradient Building 1349 monitoring wells.

E.1.3.10 Building 231/207 Area (Appendix A-10)

Building 231/207 Area monitoring well 231MW09 was purged and sampled during the Third and Fourth Quarters 2006 and was the only Building 231/207 monitoring well scheduled for

sampling during these events. No TPH or VOC compounds were detected at or above their laboratory reporting limits.

The majority of detected analytes were within historical bounds during the Third and Fourth Quarters 2006. Dissolved nickel was detected at 231GW09 above its CAP-specified cleanup level during both the Third and Fourth Quarters 2006. However, both of these detections were within historical ranges. No other CAP-specified cleanup levels were exceeded during either the Third or Fourth Quarters 2006. There are no proposed changes to the groundwater sampling schedule or procedures at this site.

E.1.3.11 Building 1065/1027 Area (Appendix A-11)

TPHd was detected within piezometer 1065PZ4A in the Third Quarter 2006 at 90 µg/L, for the first time since the Third Quarter 2001; however, no TPHg, TPHd and TPHfo concentrations detected were in excess of CAP-specified cleanup levels.

Dissolved arsenic continues to be detected at concentrations exceeding the CAP-specified cleanup level (10 µg/L) within 1065PZ1A, 1065PZ2A, 1065PZ4A, 1065PZ5AR, 1065MW9A, and 1065MW101. The dissolved arsenic concentrations detected within 1065MW9A and 1065MW101 were detected at new high concentrations.

Several new high concentrations of MTBE were detected during the Third and Fourth Quarters 2006 within the Building 1065 Area, but the concentrations are all under the CAP-specified cleanup level of 13 µg/L for MTBE at the Building 1065 Area.

Groundwater sampling frequency was reduced to annual within all Building 1065/1027 Area wells and piezometers, except 1065PZ1A, 1065PZ1B, 1065PZ2A, 1065PZ4A, 1065PZ5AR, 1065MW9A, 1065MW9B, 1065MW101, 1065MW102, and 1047MW101 until the Building 1065/1027 Area CAP is approved and implemented, at which time the groundwater monitoring program will be conducted in accordance with the CAP.

E.1.3.12 Mini-CAP Areas (Appendix A-12)

TPHg continues to be detected in monitoring well 1213GW101 at concentrations below its cleanup level. Benzene and 1,2-dichloroethane were detected in monitoring well 1213GW101 at concentrations above their groundwater cleanup levels during both the Third and Fourth Quarters 2006. Chromium was detected above its cleanup level within 1213GW101 during the Fourth Quarter 2006; though the elevated chromium concentration is thought to be from naturally occurring chromium found in the serpentinite rock in which this well is screened. No other compounds were detected in Mini-CAP groundwater samples above their associated cleanup levels during the Third and Fourth Quarters 2006.

E.1.3.13 Nike Missile Facility (Appendix A-13)

Groundwater elevations, gradients, and flow directions during the Third Quarter 2006 are consistent with historical values and interpretations.

NDMA was not detected within any of the Third Quarter 2006 groundwater samples. This is the first sampling event where NDMA was not detected above laboratory detection limits in groundwater samples from NKGW01, NKGW04, and NKGW05. NDMA was detected above laboratory limits within three of the four Nike Missile Facility monitoring wells during the First Quarter 2006.

A RAP is currently being prepared for the Nike Missile Facility and a revised groundwater monitoring plan will be implemented, in accordance with the RAP, when it is approved by the DTSC, RWQCB, and other stakeholders. There are no proposed changes to the groundwater monitoring program at this site.

E.1.3.14 Baker Beach Disturbed Area 3 (Appendix A-14)

The Third and Fourth Quarters 2006 were the eighth and ninth monitoring events, respectively, conducted at BBDA 3 since the groundwater monitoring network was installed. No RAP-specified cleanup level exceedances have been detected to date within any groundwater or surface water samples collected following the remedial action.

No significant trends were identified during the Third and Fourth Quarters 2006 at BBDA 3. Future detections and trends will continue to be monitored and evaluated in accordance with the RAP.

E.1.3.15 Landfill 10 (Appendix A-15)

Groundwater elevations, gradients, and flow directions during Third and Fourth Quarters 2006 are consistent with historical values and interpretations.

During the Fourth Quarter 2006, TPHd and TPHfo were detected in seep LF10SP01 at new high concentrations of 2,700 µg/L and 1,100 µg/L, respectively. The concentration of TPHd was almost 20 times higher than the previously recorded high concentration and was the first detection of TPHd at this location since the Second Quarter 2003. TPHfo was detected for the first time at this location. TPH will continue to be monitored within Landfill 10 monitoring wells and seep LF10SP01 during future sampling events to see if apparent trends develop or if the Fourth Quarter 2006 results at LF10SP01 are an anomaly.

MTBE was detected at a new high concentration of 18 µg/L within monitoring well LF10GW02 during the Fourth Quarter 2006. MTBE will continue to be measured at LF10GW02.

Total vanadium was detected for the first time during Fourth Quarter 2006 at a concentration of 13 µg/L. Dissolved metal and total metal concentrations will continue to be measured at LF10SP01 to see if apparent trends develop.

E.1.3.16 Commissary/PX Area (Appendix A-16)

No CAP-specified cleanup levels were exceeded during the Third Quarter 2006. No other significant findings or data trends were observed during the Third Quarter 2006.

Groundwater monitoring will not be performed within Commissary/PX Area monitoring wells until the CAP is finalized and implemented at which point groundwater monitoring will be conducted in accordance with the Revised Final CAP.

E.1.3.17 Baker Beach Disturbed Areas 1 and 2A (Appendix A-17)

BBDAs 1 and 2A were added to the Presidio-Wide Groundwater Monitoring Program beginning Second Quarter 2006. Two piezometers (BB1PZ100 and BB1PZ101) monitor fresh water seeps at BBDA 1 and one seep location is monitored at BBDA 2A (BB2ASW100).

Due to limited data collected to date, no significant trends were identified during the Third and Fourth Quarters 2006 at BBDAs 1 and 2A. Future detections and trends will continue to be monitored and evaluated in accordance with the RAP, which is scheduled to be completed in 2007.

No RAP-specified cleanup levels were exceeded in BB1PZ100 or BB1PZ101 during the Third or Fourth Quarters 2006.

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PRESIDIO-WIDE GROUNDWATER MONITORING PROGRAM
Presidio of San Francisco, California**

1.0 INTRODUCTION

This Semi-Annual Groundwater Monitoring Report for the Third and Fourth Quarters 2006 of the Presidio-Wide Groundwater Monitoring Program has been prepared by Treadwell & Rollo, Inc. (Treadwell & Rollo) for The Presidio Trust (Trust). During the Third and Fourth Quarters 2006, 17 sites at the Presidio of San Francisco (Presidio) were included in the groundwater monitoring program, as shown on Figure 1. Although the Presidio is currently under the jurisdiction of the Trust and the National Park Service (NPS), the Trust is managing the Presidio-wide Groundwater Monitoring Program.

This report describes the groundwater elevation monitoring and sampling methods used, summarizes the laboratory analytical procedures and results, and presents the results of the quality assurance and quality control (QA/QC) and data validation activities for samples collected during the Third and Fourth Quarters 2006. This report also summarizes historical sampling data previously collected by others. The groundwater monitoring, laboratory, and data validation methods and procedures used by others during historical sampling events have been discussed in previous quarterly groundwater monitoring reports (Montgomery Watson, 1996b, 1999a-n, 2000; Treadwell & Rollo, 2001b, 2002b, 2002d, 2002f, 2002g, 2002h).

The Trust worked with the United States Environmental Protection Agency (EPA), California Environmental Protection Agency, Department of Toxic Substances Control (DTSC), Regional Water Quality Control Board, San Francisco Bay Region (RWQCB), and Restoration Advisory Board (RAB) representatives to develop the Cleanup Levels Document. The *Development of Presidio-Wide Cleanup Levels for Soil, Sediment, Groundwater, and Surface Water* (Cleanup Levels Document) summarizes the derivation of human health and ecological cleanup for soil, sediment, groundwater, and surface water, and the development of soil background metal concentrations at the Presidio (Erler & Kalinowski, Inc. [EKI], 2002). The document also presents the proposed methodology for determining Presidio-specific cleanup levels based on the protection of human health and ecological receptors for chemicals that may potentially be encountered in soil, sediment, and water at the Presidio (EKI, 2002). These cleanup levels were developed to be applied to new decision documents for chemical release sites within the Presidio.

Cleanup of petroleum program sites, such as the Commissary/Post Exchange (PX), must adhere to Site Cleanup Requirements (SCRs), per *Order No. R2-2003-0080, Revised Site Cleanup Requirements and Rescission of Order No. 91-082 and Order No. 96-070* (RWQCB, 2003). This new Order requires that the Presidio-Wide Quarterly Groundwater Monitoring Program report monitoring activities and findings, and publish chemical concentration plume maps of appropriate contaminants of concern semi-annually. This report is intended to comply with the requirements of the new Order.

1.1 Report Organization

This report is organized as described below.

- The Executive Summary presents a brief, concise synopsis of the most significant changes to the monitoring program and any significant findings, observations, and recommendations.
- The Main Body of the report presents the project background, the geologic and hydrogeologic setting, the groundwater monitoring procedures, the laboratory analyses, and the QA/QC procedures and findings. The main body of the report includes a site location figure and tables summarizing monitoring plans, sampling and analytical procedures and methods, and data validation procedures.
- Appendix A presents sections for each of the areas included in the program. Each section describes the site background and site-specific geologic and hydrogeologic setting, presents current and historical sampling results, and provides recommendations for modifications in future monitoring events. Each site section contains site-specific figures, tables summarizing analytical results, and monitoring well purge records.
- Appendix B contains completed equipment calibration forms.
- Appendix C contains groundwater-level measurement logs.
- Appendix D contains the laboratory analytical quality control (QC) reports for the Third and Fourth Quarters 2006 prepared by DataVal, Inc. (DataVal), the project data validation firm. Appendix D is included in electronic form on a compact disk (CD).
- Appendix E contains Curtis & Tompkins, Ltd. (Curtis & Tompkins) laboratory analytical data reports. Curtis & Tompkins was the designated primary laboratory for the Third and Fourth Quarters 2006. Appendix E is included in electronic form on a compact disk (CD).

- Appendix F contains Columbia Analytical Services (CAS) laboratory analytical data reports. CAS was the QC laboratory designated to analyze the QC duplicate samples for the Third and Fourth Quarters 2006. Appendix F is included in electronic form on a CD.

1.2 Field Sampling Plan

The groundwater monitoring activities documented in this report were performed in accordance with the *Field Sampling Plan, Presidio Groundwater Monitoring Project, Presidio of San Francisco, San Francisco, California* (FSP) (Treadwell & Rollo, 2001a) and the *Presidio-wide Quality Assurance Project Plan Sampling and Analysis Plan* (QAPP) (Tetra Tech, 2001). The FSP identified the groundwater elevation monitoring and sampling schedules, well locations, sampling procedures, and proposed analytical test methods. Standard operating procedures (SOPs) were presented for required monitoring tasks and for optional tasks such as well abandonment, which may be performed within the scope of the groundwater monitoring program. The *Base-wide Groundwater Monitoring Plan* (BGMP) (Montgomery Watson, 1996b) and site-specific corrective and remedial action plans (CAPs and RAPs) were also consulted in preparation of this report.

Modifications to the FSP may be required if the scope of work is modified, or if there are substantial revisions to the QAPP. If modifications to the FSP are required, a letter will be prepared which will include a brief discussion of the proposed changes and copies of revised tables and figures. The letter will be submitted to the NPS and appropriate regulatory agencies for review and comment. Minor adjustments may be made to the monitoring program depending on field conditions, and those changes will be documented in field logs and reported in the semi-annual reports.

1.3 Groundwater Monitoring Objectives

The general objectives of the Presidio-wide Groundwater Monitoring Program, as presented in the FSP, are as follows:

- Monitor the lateral and vertical extent of groundwater contamination.
- Track contaminant concentration and migration to help evaluate impacts to potential beneficial uses of groundwater.
- Provide data on contaminant concentration and migration needed for studies to evaluate potential exposure pathways to human and ecological receptors.
- Improve understanding of the Presidio geology and hydrogeology.
- Validate, optimize, and evaluate the effectiveness of groundwater remedial measures.

- Evaluate whether remedial objectives have been met.
- Provide the information necessary to establish and update long-term monitoring strategies.
- Provide groundwater monitoring reports with defensible data in accordance with the QAPP, SOPs, site-specific remedial plans and decision documents, and applicable regulatory agency requirements.

Site-specific monitoring objectives are identified in the site-specific sections presented in Appendix A.

2.0 BACKGROUND

The United States Department of Defense, Department of the Army (Army) operated the Presidio as a military base until 1994, when the Army closed this base and transferred the Presidio's administrative jurisdiction to the NPS. As part of the Army's responsibilities under base closure legislation, the Army initiated certain actions to address environmental conditions at the Presidio, including instituting the BGMP. The Army retained Montgomery Watson to prepare the BGMP and to conduct the groundwater monitoring program.

The Trust was established following passage of the Presidio Trust Act in 1996. The Trust negotiated with the Army to assume the Army's environmental cleanup responsibilities in order to expedite the environmental remediation efforts. The Trust retained Montgomery Watson to continue the Groundwater Monitoring Program through the Third Quarter 2000 and retained Treadwell & Rollo to perform the Presidio-wide Groundwater Monitoring Program beginning with the Second Quarter 2001.

3.0 GEOLOGIC AND HYDROGEOLOGIC SETTING

Tectonic activity in the San Francisco Bay Area, and the Presidio specifically, has resulted in an irregular topography of near-surface and surficial bedrock (referred to as the Franciscan Formation). Throughout the Presidio, the Franciscan Complex consists mostly of serpentinite that is typically overlain by relatively permeable units of poorly consolidated or unconsolidated sediments. These units are defined as (from oldest to youngest): the Merced Formation, the Colma Formation, the West Valley Clay, and dune sand.

The Merced Formation is a discontinuous unit, composed primarily of clay with low hydraulic conductivity. The Colma Formation overlies the Merced Formation, and overlies the Franciscan Formation bedrock in areas where the Merced is absent. The Colma Formation consists of horizontally bedded, fine-grained, slightly silty sand. A local, discontinuous clay deposit of unknown origin, referred to as the West Valley Clay, has been observed in a layer up to 30 feet thick overlying the Colma Formation. Dune sands are the most recent continuous unit deposited across the Presidio. Dune sands generally overlie the Colma Formation, but may also overlie the Franciscan, Merced, or West Valley Clay where erosion of the Colma Formation has occurred. The dune sands are generally well sorted, fine- to medium-grained, and yellow-brown to light gray in color.

Previous investigations have identified three groundwater basins at the Presidio. These basins are the Lobos Creek Groundwater Basin, the Coastal Bluffs Groundwater Basin, and the Marina Groundwater Basin (Figure 1). The Lobos Creek Groundwater Basin includes Lobos Creek, the principle perennial stream at the Presidio. The Marina Groundwater Basin includes the West Valley, Northeastern, and the Crissy Field Groundwater Areas (Montgomery Watson, 1996b). The Coastal Bluffs Groundwater Basin is not subdivided into groundwater areas.

The Lobos Creek Groundwater Basin is underlain by the Franciscan Formation and substantial thicknesses of relatively permeable, unconsolidated units. Several groundwater wells within this basin were used to supply a portion (approximately 10 percent) of the water used for former Presidio operations.

The Marina Groundwater Basin is the largest of the three basins at the Presidio. As mentioned above, this basin includes three groundwater areas, based on their geographic location. The Marina Groundwater Basin is underlain by all of the geologic units identified at the Presidio.

The Coastal Bluffs Groundwater Basin is the smallest of the three groundwater basins and is predominantly underlain by relatively impermeable serpentinite rock (Franciscan Formation) with minor amounts of overlying permeable materials. Groundwater yields in this basin are expected to be extremely low.

The BGMP was prepared in 1996 and has been supplemented by subsequent site-specific investigations. Summaries of geologic and hydrogeologic conditions encountered at each sampling area are presented in Appendix A.

4.0 GROUNDWATER MONITORING

The scope of field work for this report included collecting groundwater elevation measurements and samples from groundwater monitoring wells, piezometers, and seeps or springs at 17 areas at the Presidio (Figure 1). Tables 1A and 1B identify the elevation monitoring, sampling, and analyses schedules for wells, piezometers, seeps, and springs at each area for the Third and Fourth Quarters 2006, respectively. The 17 areas are:

1. Building 900s Area
2. Landfill 8
3. Fill Site 6
4. Battery Howe/Wagner
5. Building 1349 Area
6. Fill Site 1, Landfill 2, El Polin Spring, Tennessee Hollow, and Upgradient Wells
7. Landfill E
8. Landfill 4
9. Fill Site 5
10. Building 231/207 Area
11. Building 1065/1027 Area
12. Mini-CAP Areas
13. Nike Missile Facility
14. Baker Beach Disturbed Area 3
15. Landfill 10
16. Commissary/PX Area
17. Baker Beach Disturbed Areas 1 and 2A

4.1 Groundwater Elevation Monitoring

On 14 August and 4 December 2006, groundwater elevation measurements were collected, or groundwater seeps were evaluated for flow, at 209 and 114 wells, piezometers, or seeps, respectively. Tables 2A and 2B summarize the groundwater elevation measurements collected

during the Third and Fourth Quarters 2006, respectively. Groundwater elevations were measured using a Slope Indicator model #51453 or a Solinst model #101 water level meter. Copies of all field equipment calibration forms are included in Appendix B. A minimum of three measurements was taken at each well and recorded on the groundwater elevation log, as described in the SOPs. Copies of the groundwater-level measurement logs are included as Appendix C. The water level meters were decontaminated after each use by spraying them with an Alconox detergent solution, then rinsing with potable water, in conformance with the SOPs.

During the Third Quarter 2006, groundwater elevation measurements were collected at 209 monitoring wells, piezometers and/or seep locations on 14 August 2006 (Table 2A). Tidal elevations at the Golden Gate Tidal Station on 14 August 2006 are shown on Figure 2A. The following monitoring locations, UBR01GW01, 1065PZ6B, LF10GW02, and LF10SP01 were not located or were inaccessible during the Third Quarter 2006 and therefore, no groundwater elevation measurement was collected. Additionally, the following wells or piezometers did not contain water and the following seeps were not flowing during the Third Quarter 2006; HWGW102, LF5SP01, DAESP03, BB2ASW100, BB3PZ101, BB3SW102, and BB3SW104. Monitoring wells 600GW101 and LF6GW104 were abandoned prior to the Third Quarter 2006 as part of the ongoing remedial actions at the Commissary/PX Area and Fill Site 6A and therefore, were not measured for groundwater elevation.

During the Fourth Quarter 2006, groundwater elevation measurements were collected at 114 monitoring wells, piezometers and/or seep locations on 4 December 2006 (Table 2B). Tidal elevations at the Golden Gate Tidal Station on 4 December 2006 are shown on Figure 2B. Prior to Fourth Quarter 2006, the frequency of water level/seep evaluation was reduced to annual to match the sampling frequency at many sites, including: Landfill 8, Building 900s Area, Fill Site 1, Landfill 2, Fill Site 5, Commissary/PX Area, Landfill E, Upgradient Area, and Tennessee Hollow. In addition, nine wells, piezometers or seeps (DAESP03, HWGW102, LF4GW101, BB2ASW100, BB3PZ101, BB3PZ102, BB3SW102, BB3SW104, and HWGW102) were found either to be dry or to contain an insufficient amount of water to measure (i.e., water was trapped in the well end-cap and therefore was not representative of the aquifer). Monitoring well 1349MW102 and piezometer 1065PZ6A were not located or were inaccessible during the Fourth Quarter 2006. The conditions at these wells and seeps are identified in Table 2B.

4.1.1 Groundwater Elevation Monitoring at Tidally Influenced Wells

During the Third Quarter 2006, low and high tides were predicted to be at 4:20 AM and 10:55 PM on 14 August 2006, respectively. Observed low tide on 14 August 2006 was at 4:42 AM with a magnitude of 0.79 feet above Presidio Lower Low Water (PLLW). Observed high tide on 14 August 2006 was at 11:18 PM with a magnitude of 6.26 feet above PLLW. The Third Quarter 2006 predicted and observed tidal times and magnitudes are presented in the notes on Table 2A.

During the Fourth Quarter 2006, low and high tides were predicted to be at 4:58 PM and 9:58 AM on 4 December 2006, respectively. Observed low tide on 4 December 2006 was at 4:54 PM with a magnitude of -1.56 feet above PLLW. Observed high tide on 4 December 2006 was at 10:00 AM with a magnitude of 6.93 feet above PLLW. The Fourth Quarter 2006 predicted and observed tidal times and magnitudes are presented in the notes on Table 2B.

During the Third Quarter 2006, depth to groundwater measurements were collected between 11:50 AM and 13:21 PM on 14 August 2006 at the Building 900s and Commissary/PX Areas, which the Trust has determined are tidally influenced. Figure 2A shows graphical tide plots for the Golden Gate Tidal Station on 14 August 2006.

During Fourth Quarter 2006, tidal influence was not a factor during water level measurements as potential tidally influenced locations had been reduced to annual measurement prior to Fourth Quarter 2006.

Varying degrees of tidal lag may exist at site wells, causing groundwater elevations within monitoring wells to vary and to not necessarily be synchronized to the tidal schedule. The “tidal lag” is the length of time between a tidal extreme and the maximum influence measured in a well. The distance inland from the nearest tidally influenced surface water body is used to determine the tidal lag. In a homogeneous aquifer, the tidal lag time should be directly proportional to the distance from the surface water body. Variations in the tidal lag may be due to aquifer heterogeneity or the presence of man-made structures. At Crissy Field, the shallow aquifer may be hydraulically connected to the tidal marsh, whereas the intermediate and deeper aquifer may be hydraulically connected to the San Francisco Bay, though these relationships have not been specifically characterized.

4.2 Groundwater Sampling

The equipment and methods described in the FSP are summarized below. Groundwater samples were collected in laboratory-supplied sample containers, sealed, labeled, and placed into ice chests containing a sufficient volume of ice to maintain a temperature of 4.0 degrees Celsius (°C) for transport to the offsite analytical laboratories, in accordance with the methods described in the FSP. All samples were documented with chain-of-custody protocols, as described in the chain-of-custody SOP. The site-specific sections in Appendix A present details of well, piezometer, and seep sampling.

During the Third Quarter 2006, three groundwater sampling crews purged and/or sampled 46 wells, piezometers, and groundwater seeps between 16 August and 18 August 2006. The following monitoring wells, piezometers, and/or groundwater seeps LF5SP100, DAESP03, NKGW03, BB2ASW100, BB3GW101, BB3PZ101, BB3PZ102, BB3SW100, BB3SW101, BB3SW102, BB3SW104, HWGW102, LF6GW104, LF10GW02, and LF10SP01 were either dry

or did not contain a sufficient amount of water for sampling during the Third Quarter 2006. The Commissary/PX Area monitoring locations 600GW101, 600GW105, 600GW106, 600GW108, 610GW101 through 610GW103, 610SP01 and 610SP02 were not sampled during the Third Quarter 2006 due to the ongoing corrective action that was taking place at the time of sampling. Commissary/PX Area seep 610SP01 was sampled even though it was not proposed for sampling because a petroleum-like sheen was observed in the area of this seep. The results of this sampling are detailed in Appendix A section A-16.

During the Fourth Quarter 2006, three groundwater sampling crews purged and/or sampled 36 wells, piezometers, and groundwater seeps between 4 December and 6 December 2006. The following monitoring wells, piezometers, and/or groundwater seeps (DAESP03, BB2ASW100, BB3GW101, BB3PZ101, BB3PZ102, BB3SW100, BB3SW101, BB3SW102, BB3SW104, and HWGW102) were either dry or did not contain a sufficient amount of water for sampling during the Fourth Quarter 2006.

4.2.1 Groundwater Purging Methods and Selection Criteria

The following sections describe the groundwater purging methods and selection criteria that were used during this quarter.

4.2.1.1 Groundwater Purging Methods

Two primary groundwater well purging methods, normal and low flow, were used during the Third and Fourth Quarters 2006 and are described below. Tables 1A and 1B identify the sampling methods that were proposed for each well. If field conditions required any changes from the proposed methods, those changes are described in the site-specific summaries in Appendix A.

Normal – This method involves purging until three borehole volumes of groundwater have been extracted or until groundwater parameters have stabilized, whichever is greater. Table 3 identifies well construction details required to calculate the borehole volumes for each well. Table 4 shows the precalculated volume of water in a 1-foot section of various borehole and casing sizes. For low-yield wells that require slower pumping rates than would be used with the normal method, Tables 1A and 1B identify a modified normal method, which is the same as the normal method except that a maximum purging rate of 0.5 gallons per minute (gpm) is designated. If the well is able to sustain a 0.5 gpm purge rate, well purging is considered complete after groundwater parameters have stabilized. If a well is purged dry using the normal or modified purging methods, the groundwater level is allowed to recharge to within 80 percent of its pre-purging elevation prior to sampling. Additional details on this method are presented in the FSP.

Low Flow – This method involves purging at a rate as low as 0.02 gpm in order to minimize groundwater sample disturbance. Additional details on this method are presented in the FSP.

4.2.1.2 Groundwater Purging Method Selection Criteria

The Trust has determined which purging method to use at each well using the following selection criteria:

1. Whenever possible, wells should be purged using the normal method.
2. To help maintain data comparability, the purging method for a well should remain consistent from quarter to quarter except as noted below.
3. If a well is pumped dry or shows a significant drop in the groundwater elevation using the normal method and requires a slower pumping rate, the modified normal purge method will be used. This change to a slower pumping rate can be made during purging, depending upon groundwater recharge conditions.
4. If a well is pumped dry using the modified normal method and requires a slower pumping rate, the low-flow purge method will be used. This method requires specialized equipment and has the potential to affect data comparability, so changes to this method would only occur with Trust approval prior to future quarterly sampling.
5. When not conflicting with criteria 1 through 4, all wells at a single site screened in the same zone shall be purged using the same method.

4.2.2 Groundwater Sampling Methods

The sampling methods used following purging are described below.

4.2.2.1 Groundwater Sampling Methods After Normal Purging

Following normal purging, groundwater samples were collected using a new disposable bailer, a 2-inch-diameter Grundfos Redi-Flow™ or a peristaltic pump, and decanted into the appropriate laboratory-supplied containers. Monitoring wells that are sampled using either a 2-inch Redi-Flow™ or peristaltic pump may have dedicated tubing associated with them. Dedicated tubing is stored at the Central Magazine in new plastic bags after each use.

4.2.2.2 Groundwater Sampling After Low-Flow Purging

Following low-flow purging, groundwater samples were collected using either a peristaltic pump or a 2-inch Redi-Flow™ pump. Monitoring wells that are sampled using either a 2-inch

Redi-Flow™ or peristaltic pump may have dedicated tubing associated with them. Dedicated tubing is stored at the Central Magazine in new plastic bags after each use.

4.2.2.3 Sampling at Seeps

Nine seep and fixed monitoring locations were identified for sampling as part of this program during the Third and Fourth Quarters 2006 (Tables 1A and 1B). Because spring and seep locations can change over time, the sample locations were identified by the Trust.

Three Baker Beach Disturbed Area 3 (BBDA 3) fixed surface water seep monitoring points, BB3SW100, BB3SW101, and BB3SW102, were installed on 8 and 23 May 2005 at depths of 2.5, 3.0, and 2.5 feet bgs, respectively. The fixed monitoring points are purged prior to sampling, in accordance with the 'modified' method of sampling described in Section 4.2.2.1 above.

One seep sample (610SP01) was collected during the Third Quarter 2006, in accordance with procedures presented in the FSP. Seeps and fixed monitoring points (LF5SP100, DAESP03, BB2ASW100, BB3SW100, BB3SW101, BB3SW102, and BB3SW104) were not flowing or did not contain a sufficient amount of water during the Third Quarter 2006 and were not sampled. In addition, LF10SP01 was inaccessible for sampling and therefore, no samples were collected at this location during the Third Quarter 2006.

One seep sample (LF10SP01) was collected during the Fourth Quarter 2006, in accordance with procedures presented in the FSP. Seeps and fixed monitoring points (DAESP03, BB2ASW100, BB3SW100, BB3SW101, BB3SW102, and BB3SW104) were not flowing or did not contain a sufficient amount of water during the Fourth Quarter 2006 and were not sampled.

During the Third and Fourth Quarters 2006, all seep samples were analyzed for dissolved metals and total metals, as requested by the DTSC.

4.3 Sample Preservation, Handling, and Transportation

Samples were collected in laboratory-supplied sample containers, sealed, labeled, and placed into an ice chest containing a sufficient volume of ice to maintain a temperature of 4.0 °C (plus or minus 2.0 °C) for transport to the offsite analytical laboratories, in conformance with procedures presented in the FSP. Temperature blanks were included in coolers for measurement by the laboratory upon receipt.

4.3.1 Sample Labels and Chain-of-Custody Documentation

Sample labels for each container were preprinted on adhesive paper prior to beginning sampling operations. Prior to sampling, each field team was designated a number (e.g., 1 through 4 in the

case of four sampling teams) for the duration of the sampling event. The samples were identified according to the numbering scheme described in the FSP, with the following modifications.

- The FSP specified that trip blanks be identified as TB and the date. When multiple trip blanks were generated by different sampling crews on the same date, the number assigned to the field crew collecting the sample (1, 2, 3, or 4) and a letter (i.e., A, B, C, etc.), indicating which sample of the day it was for that team, were added to the sample identification to ensure that all trip blanks had unique identifications. For example, trip blank TB081606A was the first trip blank collected on 16 August 2006 by field crew number 1.
- The FSP specified that duplicate samples be identified as duplicate (DUP) and the date. When multiple duplicate samples were generated by different sampling crews on the same date, the same labeling methodology described above for trip blanks was applied to the duplicates. The number assigned to the field crew collecting the sample and a letter (i.e., A, B, C, etc.), indicating which sample of the day it was for that team, were added to the sample identification to ensure that all duplicates had unique identifications. For example, duplicate sample DUP0816062A was the first duplicate sample collected on 16 August 2006 by field crew number 2.

After labeling, each sample's requested laboratory analyses were recorded on individually numbered triplicate chain-of-custody forms. The sample coolers and chain-of-custody forms were kept in the possession of the samplers or in a secure, locked location prior to pickup by the laboratory courier.

All samples login summaries are reviewed as samples are received by the laboratories and changes to sample identifications are typically documented in laboratory reports (Appendices E and F). All samples were correctly labeled during the Third and Fourth Quarters 2006 and did not require changing.

4.3.2 Filtration of Groundwater Samples for Metals Analyses

Beginning in the Second Quarter 2001 and through the Third Quarter 2002, all groundwater samples collected for dissolved metals analyses were filtered in the field with a 0.45-micron, Clearwater Engineering™ filter prior to being placed in preserved containers. For reasons discussed below in Section 5.4.3.4, a different brand of filter was selected beginning in the Fourth Quarter 2002.

Beginning in the Fourth Quarter 2002, all groundwater samples collected for dissolved metals analyses were filtered in the field with a 0.45-micron, high-capacity polyethersulfone QED

Quickfilter™ prior to being placed in preserved containers. The filters were flushed with at least 200 milliliters of sample water prior to collecting the sample, which adheres to the manufacturer's instructions. For wells being analyzed for total dissolved solids (TDS), analyses were also performed using the filtered sample.

At DTSC's request and beginning in the Second Quarter 2003, both dissolved (filtered) and total (unfiltered) metals samples were collected at seep and fixed monitoring point locations. The total metals results are applicable for use in health risk assessments, but are not representative of dissolved metal conditions in groundwater.

All dissolved metals samples collected during the Third and Fourth Quarters 2006 were filtered using QED Quickfilters™.

5.0 LABORATORY ANALYSES

5.1 Analytical Methods

Table 5 lists the types of analyses, analytical methods, sample container types and volumes, preservatives used (if applicable), and the maximum allowable holding times prior to extraction for each analysis. The following carbon ranges were used for total petroleum hydrocarbon (TPH) analyses and are summarized in Table 5.

- TPH as gasoline (TPHg, carbon range C7–C12). This carbon range was specified by the QAPP.
- TPH as stoddard solvent (TPHss, carbon range C7–C12). TPHss analyses were added to the Presidio-wide Groundwater Monitoring Program beginning with the First Quarter 2004 at the request of the Trust. The carbon range for TPHss is not specified in the QAPP. TPHss is a specialized formulation of TPHg and is found in the same carbon range as TPHg. Laboratory quantification for TPHss is achieved by comparing the shape of the analytical chromatogram within the same carbon range as TPHg for a diagnostic combination of spikes.
- TPH as diesel (TPHd, carbon range C12–C24). This carbon range was specified by the QAPP.
- TPH as fuel oil (TPHfo, carbon range C24–C36). No carbon range for TPHfo was specified by the QAPP. At the request of the Trust, TPHfo is qualified by the laboratory using the TPH as motor oil (TPHmo) standard and the QAPP carbon range for TPHmo. This issue is discussed in more detail in Section 5.4.3.1.

Table 6 lists compounds of potential concern (COPC) identified in the QAPP and analytical reporting limits for COPCs in the groundwater monitoring program. Several water quality criteria are summarized in Table 6 for comparison with the laboratory reporting limits. The water quality criteria presented in Table 6 do not necessarily represent cleanup criteria for Presidio sites.

The analytical methods for some metals and polycyclic aromatic hydrocarbons (PAHs) were changed from those identified in the FSP in order to reach the lower reporting limits identified in the QAPP. The following changes, approved by the Trust, were made.

- Twelve metals (antimony, arsenic, barium, beryllium, cadmium, copper, chromium, cobalt, nickel, silver, thallium, and zinc) were analyzed using Environmental Protection Agency (EPA) Method 6020 instead of EPA Method 6010 as proposed in the FSP between the Second Quarter 2001 and the First Quarter 2003. Beginning in

the Second Quarter 2003, seven of these metals (arsenic, barium, beryllium, chromium, cobalt, nickel and zinc) were granted variance by the stakeholders from the QAPP reporting limits and were analyzed using EPA Method 6010.

- PAHs were analyzed using EPA Method 8310 instead of EPA Method 8270 as proposed in the FSP.

Four emergent chemicals (perchlorate, N-nitrosodimethylamine [NDMA], 1,4-dioxane and polybrominated diphenyl ether [PBDE]) were added to the First Quarter 2004 groundwater monitoring event at the request of the RWQCB. As listed on Table 5, analytical methods for the emergent chemicals are:

- Perchlorate, EPA Method 314.0;
- NDMA, EPA Method 1625;
- 1,4-dioxane, using EPA Method 8270C; and
- PBDE, EPA Method 1614.

NDMA was the only emergent chemical analyzed during the Third Quarter 2006. No samples were analyzed for the four emergent chemicals during the Fourth Quarter 2006.

5.2 Analytical Data Delivery Methods

The analytical laboratories submitted all analytical reports in paper and electronic formats to Treadwell & Rollo. Both the electronic and paper copies were forwarded to DataVal. DataVal reviewed both the electronic and paper data, and prepared two Data Validation Summary Reports (QCSR) dated 29 November 2006 and 19 February 2007. The reports entitled, *Data Validation Summary Report for the Third Quarter 2006, Groundwater Monitoring, Presidio of San Francisco, CA* and *Data Validation Summary Report for the Fourth Quarter 2006, Groundwater Monitoring, Presidio of San Francisco, CA*, respectively, are discussed in Section 6.1 and attached as Appendix D.

5.3 Analytical Results

The tables in this report that present new analytical data were generated from laboratory-supplied EDDs, after the EDDs had been validated by DataVal and imported into the project database. Analytical summary tables were prepared for each site and are presented in Appendix A.

5.4 Analytical Data Comparability

One of the goals of this Groundwater Monitoring Program has been to establish standards for groundwater sampling and analytical methods that provide a high degree of data comparability among different wells throughout the Presidio, and between the current and historical data collected at the same well. The primary variables that can influence data comparability are the field methods, sampling methodology, the types of analyses performed, and the analytical methods used by the laboratory. These issues are discussed below.

5.4.1 Field Methods

To assist with data comparability, the FSP established Presidio-wide standard well purging and sampling methods, and criteria for selecting purging methods, as described in Section 4.2. The selection criteria include evaluating the historical purging and sampling methods at a particular well and at other wells within a single site.

To assist with comparability of data collected from direct-reading field instruments, this program has attempted to employ similar methods and instrumentation at wells purged using the same method.

5.4.1.1 Dissolved Oxygen

Dissolved oxygen (DO) results are discussed in the individual site-specific sections in Appendix A. In general, wells purged with the low-flow method used an in-line oxygen probe. Wells purged with the normal method have used a downhole oxygen probe since the Third Quarter 2001. During the Second Quarter 2001, DO was recorded with either a downhole probe or a surface instrument in wells purged with the normal method. The surface instrument generally recorded higher DO concentrations than the downhole instrument because of water turbulence caused by collecting the sample with a bailer.

Beginning in the Second Quarter 2002, in an effort to increase the accuracy and precision of the DO measurements being collected in the field, additional protocols were added to the existing calibration procedure (i.e. calibrating to 100% air saturation) and measurement method, where appropriate. Each field team measures the DO concentrations simultaneously within a single, randomly selected monitoring well with their respective DO meters. This protocol is performed once per week throughout each event and the measured values are recorded on a calibration record (Appendix B). The recorded values are used to evaluate the precision between DO meters. If a significant difference between DO meters is observed, a correction factor can be used to ensure that relative values between sampling teams are comparable.

Another field protocol used involves lowering the down-hole DO meter probe slowly to the middle of the screened interval in each well before recording the DO measurement. This

protocol ensures that the relatively disturbed and aerated water near the top of the water column is not measured. This protocol does not apply to wells sampled using the low flow sampling method, because those wells are measured using a flow-through-cell at the surface.

These additional protocols have produced significantly more stable, and generally lower, DO measurements when compared to historical values.

5.4.2 Analytical Suite

To assist with data comparability, the analytical suite for each well was selected for consistency with previous analyses conducted by others. Additionally, analytes were added to provide greater consistency with the analytical suite for all wells at a site and with wells at adjacent sites.

5.4.3 Analytical Methods

To assist with data comparability, the laboratory analytical methods used, beginning in the Second Quarter 2001, generally remained the same between subsequent quarters, and these methods were similar to most of the methods previously used by others. A significant change from previous TPH analyses was the introduction of carbon ranges specified in the QAPP that differ from previous ranges. Additional significant changes from previous analytical methods involved PAH compounds and 12 metals, as described in Section 5.1.

5.4.3.1 TPH Analyses

The TPH analytical methods used during the Third and Fourth Quarters 2006 are the same as those used in recent quarterly sampling events. However, historical TPHfo analyses used a carbon range of C₂₄-C₃₆, which the QAPP states should be called TPHmo. During the Second and Third Quarters 2001, TPH within the C₁₂-C₅₀ and C₂₄-C₃₆ carbon ranges were reported as TPHfo and TPHmo, respectively. Beginning in the Fourth Quarter 2001, TPH within the C₂₄-C₃₆ carbon range is reported as TPHfo in order to conform with the reporting convention used prior to the Second Quarter 2001.

It is a standard procedure in this monitoring program to use silica gel cleanup EPA Method 3630A to remove non petroleum-based hydrocarbons in all TPHd, TPHmo, and TPHfo analyses. For Third Quarter 2001, EPA Method 3630A was requested for all TPHd, TPHmo, and TPHfo analyses on the chain-of-custody forms, but the primary laboratory mistakenly did not perform the silica gel cleanup for most of these analyses. For Second Quarter 2002, the QC laboratory mistakenly did not perform the silica gel cleanup for the sample from monitoring well 937GW42. Performing TPH analyses without using a silica gel cleanup to remove non petroleum-based hydrocarbons can lead to elevated TPH concentrations, due to the quantification of naturally occurring hydrocarbons as TPH. This is especially true for sites underlain by material with very

high organic content, such as the shallow Bay Mud present in portions of Crissy Field. Previous groundwater monitoring reports have described this issue and presented justification for why the TPH detections in samples run without the silica gel cleanup are not representative of petroleum-based hydrocarbons, and why this data is not being relied upon (Treadwell & Rollo, 2002b, 2002d, 2002f, 2002g, 2002h).

All of the samples with detections of TPHd, TPHfo, and TPHmo, which were not run with the silica gel cleanup, were qualified with an 'NJ' by DataVal. The USEPA National Functional Guidelines for Organic Data Review defines 'NJ' as follows: "The analysis indicates the presence of an analyte that has been 'tentatively identified' and the associated numerical value represents its approximate concentration."

Per Trust request, monitoring well 1047MW100 was sampled for TPHss beginning in Fourth Quarter 2003.

5.4.3.2 Xylene Analyses

Beginning in the Fourth Quarter 2001, xylenes were reported as total xylenes in order to conform to the reporting convention used prior to the Second Quarter 2001. During the Second and Third Quarters 2001, xylenes were reported as m,p-xylenes and o-xylenes, because the QAPP identified reporting limits for these compounds only and not for total xylenes. The sum of the concentrations of m,p-xylenes and o-xylenes is equivalent to total xylenes. The reporting limit for total xylenes is 0.5 micrograms per liter ($\mu\text{g/L}$), the same as currently being used for the two xylene compounds.

5.4.3.3 PAH Analyses

The new method used for PAH compounds beginning in the Second Quarter 2001 (EPA Method 8310) has lower detection limits than the previous method (EPA Method 8270). EPA Method 8310 analytical data generally confirms historical findings that detectable concentrations of PAHs are not present at most sites.

5.4.3.4 Metals Analyses

The new method used to analyze 12 metals beginning in the Second Quarter 2001 (EPA Method 6020) has lower detection limits than the previous analytical method (EPA Method 6010). A description of the differences between these methods was included in previous reports (Treadwell & Rollo, 2002c, 2002e).

Results using EPA Method 6020 showed detectable concentrations of some metals for the first time in some wells, such as antimony and arsenic, beginning in the Second Quarter 2001. For metals such as antimony and arsenic, the detected concentrations were generally lower than the historical reporting limits. Analytical results measured between the Second Quarter 2001 and

the Third Quarter 2002 indicated that some zinc concentrations and the majority of barium concentrations were higher than historically reported.

The reason for the increases in barium and zinc concentrations between the Second Quarter 2001 and the Third Quarter 2002 was determined to be a result of the brand of filter used, as discussed in the *Semi-Annual Groundwater Monitoring Report, First and Second Quarters 2004* (Treadwell & Rollo, 2004c).

6.0 QUALITY ASSURANCE, QUALITY CONTROL, AND DATA VALIDATION

The QA/QC program for this project is designed to verify that the information presented in this report is based upon accurate and reliable laboratory analytical data. The program includes the collection and analyses of many types of QA/QC samples, including duplicates (Table 7), equipment rinsate blanks (Table 8), trip blanks (Table 9) source water blanks (Table 10), and running matrix spike/matrix spike duplicate (MS/MSDs) to ensure that the analytical laboratories perform and document all required calibrations and internal QA/QC procedures.

Overall, the project data quality objectives have been met for the Third and Fourth Quarters 2006. Where data have required qualification, a discussion is provided in each quarterly data validation report and in each site-specific section. The following sections describe the data validation procedures and the results of the QA/QC sample evaluation for both the Third and Fourth Quarters 2006.

6.1 Data Validation

DataVal reviewed both the electronic and paper data, and prepared Data Validation Summary Reports (DVSR) dated 29 November 2006 and 19 February 2007. The reports entitled, *Data Validation Summary Report for the Third Quarter 2006, Groundwater Monitoring, Presidio of San Francisco, CA* and *Data Validation Summary Report for the Fourth Quarter 2006, Groundwater Monitoring, Presidio of San Francisco, CA*, respectively, are attached as Appendix D. The reports evaluate the relative percent difference (RPD) for the duplicate samples from Curtis & Tompkins and QC duplicates from CAS, and the following QC data (where applicable) for each analytical method.

- Reporting limits
- Holding times
- Target blanks
- Gas chromatograph/mass spectrometer equipment tunes
- Initial equipment calibration
- Continuing equipment calibration
- Matrix spike/matrix spike duplicate
- Laboratory control samples
- Surrogate recoveries
- Internal standards

The following data validation qualifiers used by DataVal and shown in our tables are those recommended in *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review* (EPA, 1999).

- U The analyte was analyzed for, but was not detected above, the reported sample quantitation limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- Jb The analyte was identified below the laboratory reporting limit but above the laboratory method detection limit and QAPP-specified reporting limit.
- N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a “tentative identification.”
- NJ The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated numerical value represents its approximate concentration.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet QC criteria. The presence or absence of the analyte cannot be verified.

Table 11 summarizes the data qualifiers used during these events and previous Treadwell & Rollo sampling events.

6.2 Quality Assurance and Quality Control Sampling

Field QC samples include duplicates, QC duplicates, equipment rinsate blanks, field blanks, and trip blanks. The following sections summarize the QA/QC samples that were collected during the Third and Fourth Quarters 2006.

6.2.1 Duplicate Samples

Duplicate groundwater samples were collected on a minimum schedule of 1 duplicate per 10 samples (10 percent) for the primary laboratory (Curtis & Tompkins), and 1 duplicate per 20 samples (5 percent) for the duplicate QC laboratories (CAS). Duplicate groundwater samples were collected using the same methods as the primary samples, as described in the FSP. The duplicate samples were analyzed for the same suite of analytes as the primary samples.

Third Quarter 2006

For the Third Quarter 2006, 46 primary samples were collected for analyses. Eight duplicate samples (17 percent) were analyzed by the primary laboratory and four QC duplicate samples (9 percent) were analyzed by the QC duplicate laboratory (CAS). The relative percentages of duplicate and QC duplicate samples collected are typically higher than the QAPP requirements in order to attain sufficient duplicates for each analysis. Table 7 summarizes the sample identifications and analyses for the duplicate samples. The analytical results for the duplicates are presented in the site-specific analytical tables in Appendix A.

Fourth Quarter 2006

For the Fourth Quarter 2006, 36 primary samples were collected for analyses. Six duplicate samples (17 percent) were analyzed by the primary laboratory and four QC duplicate samples (11 percent) were analyzed by the QC duplicate laboratory (CAS). The relative percentages of duplicate and QC duplicate samples collected are typically higher than the QAPP requirements in order to attain sufficient duplicates for each analysis. Table 7 summarizes the sample identifications and analyses for the duplicate samples. The analytical results for the duplicates are presented in the site-specific analytical tables in Appendix A.

6.2.1.1 Duplicate Sample Analytical Results

The field and primary laboratory duplicate precision was evaluated by collecting duplicate samples, as described in the FSP, submitting the samples blind to Curtis & Tompkins for analyses, and then calculating the RPD between the detected results in the sample and its duplicate. This evaluation assumes that the water sample collected from a well is homogenous.

The control limit of 50 percent or less was used for the RPDs to determine whether project data quality objectives were being met. RPDs are calculated for two samples by subtracting the concentration of Sample One from the concentration of Sample Two and then dividing this result by the average of the two concentrations.

Third Quarter 2006

The overall correlation of analytical results met project data quality objectives. All analytes in each duplicate pair met the RPD control limit requirements, except for the following:

- In field duplicates 1213GW101 and DUP0816063A, the RPD between the detected results failed the 50% acceptance criteria for ethylbenzene at -51%, and gasoline at -78%.

- In field duplicates BB3GW100 and DUP0815061A, the absolute difference between the results was greater than the reporting limit for dissolved manganese. The original result for dissolved manganese was 24 µg/L and the duplicate result was non-detect at 10 µg/L.

The *Data Validation Summary Report for the Presidio Trust Groundwater Monitoring (DVSR)* Third Quarter 2006 (Appendix D) discusses the duplicate sample RPD results, the analytical results and RPD calculations (Table 3). Data was not qualified by DataVal due to RPD failure of duplicate samples because the effect on the quality of the data is not known.

Fourth Quarter 2006

The detected results of the original sample and the associated duplicate sample were compared and the calculated RPDs reported. All RPDs met the 50 percent precision control limit requirement.

The DVSR Fourth Quarter 2006 (Appendix D) discusses the duplicate sample RPD results, the analytical results and RPD calculations (Table 3).

6.2.1.2 Quality Control Duplicate Sample Analytical Results

The laboratory-to-laboratory duplicate precision was evaluated by collecting QC duplicate samples and submitting the primary duplicate sample to Curtis & Tompkins and a QC duplicate sample to CAS. All the QC duplicate samples submitted the QC laboratory had the same sample identification as the primary sample, with a “CL” added to the end. The relative precision was evaluated by calculating the RPD between the detected results in the duplicate sample and its QC duplicate. This evaluation assumes that the water sample collected from a well is homogenous.

The control limit of 50 percent or less was used for the RPDs to determine whether project data quality objectives were being met.

Third Quarter 2006

The overall correlation of analytical results between the two laboratories met project data quality objectives. All analytes in each duplicate pair met the RPD control limit requirements, except for:

- In QC split duplicates 1213GW101 and 1213GW101CL, the RPD between the reported results failed the 50% RPD acceptance criteria for ethylbenzene at 109%, gasoline at 93%, nitrate-N at -158%, and sulfate at -162%.

- In QC split duplicates 1065MW9B and 1065MW9BCL, the RPD between the reported results failed the 50% RPD acceptance criteria for chloride at 84%, nitrate-N at 80%, and sulfate at 81%.

The DVSR Third Quarter 2006 (Appendix D) discusses the QC split sample RPD results, the analytical results and RPD calculations (Table 4). Data was not qualified by DataVal due to RPD failure of QC split samples because the effect on the quality of the data is not known (DataVal, 2006).

Fourth Quarter 2006

The overall correlation of analytical results between the two laboratories met project data quality objectives. All analytes in each duplicate pair met the RPD control limit requirements, except for the following:

- In QC split duplicates 1065MW9A and 1065MW9ACL, the RPD between the reported results failed the 50% RPD acceptance criteria for dissolved arsenic at 51%.

The DVSR Fourth Quarter 2006 (Appendix D) discusses the QC split sample RPD results, the analytical results and RPD calculations (Table 4). Data was not qualified by DataVal due to RPD failure of QC split samples because the effect on the quality of the data is not known (DataVal, 2007).

6.2.2 Equipment Rinsate Blanks

Up to one equipment rinsate blank (ERB) was collected per non-dedicated sampling device per day. Per the FSP, the ERBs were collected by pouring clean laboratory-supplied deionized water over the decontaminated sampling device and directly into the sampling container. Table 8 summarizes the analytical results for the ERB samples.

Third Quarter 2006

During this sampling event, two ERB's were collected and submitted for the same analyses as the sample that the equipment was used to collect. The following analytes were detected in the ERB during the Third Quarter 2006.

- Equipment blank 1065MW9BRB9A had a detected level of sodium (600 µg/L). The associated sample had sodium values greater than 125 times the blank amount, and qualification was not required.

- Equipment blank BHWGW05RB01 had a detected level of alkalinity (1.5 mg/L). The associated sample had alkalinity values greater than 400 times the blank amount, and qualification was not required.
- Equipment blank BHWGW05RB01 had a detected level of calcium (770 µg/L). The associated sample had calcium values greater than 90 times the blank amount, and qualification was not required.

Fourth Quarter 2006

During this sampling event, one ERB was collected and submitted for the same analyses as the sample that the equipment was used to collect. The following analyte was detected in the ERB during the Fourth Quarter 2006.

- Equipment blank BHWGW04RBHWGW100 had a detected level of alkalinity (1.1 mg/L). The associated samples had alkalinity values greater than 280 times the blank amount, and qualification was not required.

6.2.3 Trip Blanks

The laboratory supplied 40-milliliter trip blanks with each shipment of volatile organic compound (VOC) sampling containers sent from the laboratory. One trip blank was included with each cooler containing field samples planned for VOC analyses. Table 9 summarizes the analytical results for the trip blank samples.

Third Quarter 2006

Three trip blank samples were received by the analytical laboratories and analyzed for VOCs. No VOCs were detected within any of the trip blank samples collected during this quarter.

Fourth Quarter 2006

Five trip blank samples were received by the analytical laboratories and analyzed for VOCs.

- Trip blank TB1206061A had a detected level of chloroform at 7.7 µg/L. All associated project samples were non-detect for chloroform, and qualification was not required
- Trip blank TB1207061A had a detected level of acetone at 22 µg/L. All associated project samples were non-detect for acetone, and qualification was not required

- Trip blank TB1207061B had a detected level of chloroform at 5.4 µg/L. All associated project samples were non-detect for dichloromethane, and qualification was not required

6.2.4 Source Water Blanks

Blaine Tech Services, Inc., the contractor who performed groundwater monitoring tasks, provided deionized water for decontamination purposes from the water deionization system at its San Jose facility. Source water blanks were collected from the outflow of the water deionization system and from the water tanks mounted on one of the sampling vehicles. The source water blanks were submitted to the primary laboratory for all analyses in the Groundwater Monitoring Program. Table 10 summarizes the analytical results for the source water blanks.

Third Quarter 2006

Source blank DW081706A was collected from the water tank on a sampling vehicle and had a detected level of sodium at 800 µg/L. The elevated concentration of sodium in this sample appears to be anomalous based on the non-detect value reported in the source blank collected from the water deionization system at Blaine Tech's facility in San Jose, California and the magnitude of the sample result. Third Quarter 2006 samples had sodium detected at concentrations ranging from 56,000 to 3,800,000 µg/L. It is unlikely that the 800 µg/L concentration detected in the source blank would have contributed to elevated sodium results in groundwater samples.

No other analytes were detected above laboratory detection limits within this source water sample during this quarter.

Source blank DW082106B was collected from the water deionization system and had detected levels of TDS at 50 mg/L and acetone at 16 µg/L. Third Quarter 2006 samples had TDS detected at concentrations ranging from 450 to 10,900 mg/L. It is not likely that 50 µg/L concentration detected in the source blank would have contributed to elevated TDS results in groundwater samples.

Acetone was not detected in any other project samples during the Third Quarter 2006 and therefore, this source water detection does not appear to have significantly affected data quality. No other analytes were detected above laboratory detection limits within this source water sample during this quarter.

Fourth Quarter 2006

A source blank was collected from the water tank on a sampling vehicle, but was mistakenly left of the chain of custody by the field team and the laboratory neglected to login the sample. The

error was discovered after a significant number of sample hold times had expired and therefore, the sample was not analyzed. The field team has been instructed to double check the chain of custody and field forms prior to submitting samples and the laboratory has been instructed to inform Treadwell & Rollo when samples are received but are not on the chain of custody in a more timely manner.

Source blank DW120606B was collected from the water deionization system and had detected levels of TDS at 30 mg/L. Fourth Quarter 2006 samples had TDS detected at concentrations ranging from 320 to 2,480 mg/L. It is not likely that concentration detected in the source blank would have contributed to elevated TDS results in groundwater samples. No other analytes were detected above laboratory detection limits within this source water sample during this quarter.

6.2.5 Temperature Blanks

Temperature blanks were included in coolers containing field samples sent to analytical laboratories, and the blank temperatures were recorded by the laboratory upon arrival. The QAPP specifies a temperature of 4.0 °C, plus or minus 2.0 °C.

Third Quarter 2006

The temperature of all nine temperature blanks sent to Curtis & Tompkins ranged from 2.4 to 5.8 °C, which is within QAPP requirements.

Fourth Quarter 2006

The temperature range of all 12 temperature blanks ranged from 2.0 to 3.8 °C except for five coolers sent to Curtis & Tompkins, which had temperatures ranging from 1.1 to 1.7 °C upon arrival. The slightly lower blank temperature is not considered to be significant.

6.2.6 Matrix Spike and Matrix Spike Duplicate Samples

Three times the normal amount of sample volume was collected on every twentieth groundwater sample for MS/MSD analysis. The MS/MSD results for the various analytical methods were evaluated by DataVal and discussed in the DVSRs, which are attached as Appendix D.

7.0 FIELD WORK DOCUMENTATION

This section describes the field documentation prepared for this sampling event, in conformance with the FSP. Field personnel are responsible for recording field activities on the appropriate field documentation form in sufficient detail to allow reconstruction of the sampling event without relying on memory. The location of completed field documentation forms and logs described in the FSP and used during this sampling event are described below.

- Field Instrument Calibration Logs (located in Appendix B and project files)
- Health & Safety Meeting Form (located in project files)
- Groundwater Level Measurements Logs (located in Appendix C and project files)
- Monitoring Well Sampling Logs (located at the end of each site-specific section in Appendix A and in project files)
- Chain-of-Custody Forms (located in Appendices E and F and project files)
- Field Investigation Daily Reports (located in project files)
- Bound Field Book (located in project files)
- Field Audit Forms (located in project files)

8.0 DISPOSAL OF PURGE AND DECONTAMINATION WATER

All water purged from wells and used for decontamination during the Third and Fourth Quarters 2006 was collected and stored in two 2,800-gallon polyethylene above ground storage tanks located at the Central Magazine. A purge water sample was not collected following the Third Quarter 2006 because the amount of purge water generated during the event did not warrant this sample to be collected. The purge water was stored in the tanks until following the Fourth Quarter 2006.

On 14 December 2005, water sample WT121405 was collected from the water tanks with laboratory-supplied containers and submitted to the primary laboratory for the analytes required by the City of San Francisco for batch discharge into the sanitary sewer system. Table 12 summarizes the analyses required by the City of San Francisco and the analytical results. The laboratory data reports are in Appendix E. All results were below discharge criteria. Trust personnel discharged the water to the sanitary sewer.

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TABLES

Table 1A
Proposed Sampling Schedule Third Quarter 2006
Presidio-wide Groundwater Monitoring Project
Presidio of San Francisco, California

Site Name/ID	Well ID	Sampling Information				Analytical Requirements																								Notes/Comments			
		Water Level/Seep Evaluation	Sampling Method ¹	Well Access ²	Sampling Order ³	NDMA	General Chemistry Parameters	Total Organic Carbon	Dissolved Gases ⁴	MBAS	Total Hardness	Molybdenum (from metals container)	Dissolved Metals ^{5,6}	Total Metals ^{5,6} (Not Filtered)	Arsenic III and Arsenic V	Total Dissolved Solids	Dissolved Oxygen ⁷	ORP ⁸	Organochlorine Pesticides	PCBs	VOCs MTBE	BTEX MTBE	PAHs	SVOCs	Total Sulfide ⁹	Cyanide	Chlorinated Herbicides	TPHg	TPHd		TPHfo	TPHss	
						1625	various	EPA 9060	EPA 3810 / RSK 175	E425.1		ICP/MS	EPA 6010/6020	EPA 6010/6020	ICP/MS	EPA 160.1	(field probe)	(field probe)	EPA 8081	EPA 8082	EPA 8260 modified	EPA 8021B or 8020	EPA 8310	EPA 8270	EPA 376.2	EPA 9012 modified	EPA 8150	EPA 8015	EPA 3630A		EPA 8015	EPA 3630A	EPA 8015
Landfill 8	LF08GW01	Q	Low Flow	Hand	1		Q1					Q1 (23)			Q1	Q1	Q1	Q1	Q1	Q1	Q1		Q1		Q1	Q1							A Focused Feasibility Study (FFS) for Landfills 8 and 10 has been prepared. The Trust is preparing a RAP for the two landfill sites, which is anticipated to be distributed to stakeholders in 2007. Monitoring will continue as shown until the RAP is implemented.
Landfill 8	LF08GW02B	Q	Low Flow	Hand	1		Q1					Q1 (23)			Q1	Q1	Q1	Q1	Q1	Q1		Q1		Q1	Q1								
Landfill 8	LF08GW03	Q	Low Flow	Hand	1		Q1					Q1 (23)			Q1	Q1	Q1	Q1	Q1	Q1		Q1		Q1	Q1								
Landfill 8	LF08GW04	Q	Low Flow	Hand	1		Q1					Q1 (23)			Q1	Q1	Q1	Q1	Q1	Q1		Q1		Q1	Q1								
Landfill 8	LF08GW06	Q	Low Flow	Hand	1		Q1					Q1 (23)			Q1	Q1	Q1	Q1	Q1	Q1		Q1		Q1	Q1								
Landfill 8	LF08PZ01	Q	EM	Truck																													
Landfill 8	LF08PZ02	Q	EM	Truck																													
Building 900s	937GW06	Q	Modified	Truck	2											Q1					Q1							Q1	Q1	Q1			The Crissy Field RAP requires that monitoring continue until at least 2007, at which time the monitoring program will be reviewed. A reduction to annual sampling for the Building 900s Area was approved by the stakeholders prior to the First Quarter 2004.
Building 900s	937GW07	Q	Modified	Hand	1											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW12	Q	Normal	Truck	2											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW15	Q	Modified	Hand	2											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW32R	Q	Normal	Truck	3											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW35	Q	Normal	Hand	3											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW37	Q	Normal	Truck	1											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW38	Q	Modified	Truck	1											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW39	Q	Modified	Truck	2											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW42	Q	Normal	Truck	4											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW101	Q	Normal	Truck	3											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW102	Q	Normal	Truck	3											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW103	Q	Normal	Truck	2											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW104	Q	Normal	LIV	1											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW105	Q	Normal	LIV	3											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW106	Q	Normal	LIV	3											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW107	Q	Normal	LIV	3											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW108	Q	Normal	Truck	1											Q1					Q1							Q1	Q1	Q1			
Building 900s	950GW108	Q	Normal	LIV	4											Q1					Q1							Q1	Q1	Q1			
Building 900s	979GW109	Q	Normal	LIV	3											Q1					Q1							Q1	Q1	Q1			
Building 900s	979GW110	Q	Normal	LIV	3											Q1					Q1							Q1	Q1	Q1			
Building 900s	979GW111R	Q	Normal	LIV	1											Q1					Q1							Q1	Q1	Q1			
Building 900s	979GW112	Q	Normal	LIV	3											Q1					Q1							Q1	Q1	Q1			
Building 900s	979GW113	Q	Normal	LIV	3											Q1					Q1							Q1	Q1	Q1			
Building 900s	979GW114	Q	Normal	LIV	3											Q1					Q1							Q1	Q1	Q1			
Building 900s	979GW115	Q	Normal	LIV	3											Q1					Q1							Q1	Q1	Q1			
Building 900s	979GW116	Q	Normal	LIV	4											Q1					Q1							Q1	Q1	Q1			
Building 900s	979GW117	Q	Modified	LIV	1											Q1					Q1							Q1	Q1	Q1			
Fill Site 1	LF01GW01	Q	Modified	Truck	1		Q1					Q1 (22)			Q1	Q1										Q1							Cyanide has been reduced to annual sampling at the El Polin Spring because it has not been detected at this location since 1994. Additionally, TDS analysis has been reduced to annual based on a lack of significant detections. Due to the potential for human exposure, total dissolved solids, dissolved and total metals, general chemistry parameters and dissolved oxygen will continue to be monitored on an annual basis at El Polin Spring to ensure potential changes in water chemistry are identified.
Fill Site 1	LF01GW02	Q	Modified	Truck	1		Q1					Q1 (22)			Q1	Q1										Q1							
Fill Site 1	LF01GW03	Q	Modified	Truck	1		Q1					Q1 (22)			Q1	Q1										Q1							
Fill Site 1	LF01GW04	Q	Modified	Truck	2		Q1					Q1 (22)			Q1	Q1										Q1							
Fill Site 1	LF01GW05	Q	Modified	Truck	1		Q1					Q1 (22)			Q1	Q1										Q1							
Fill Site 1	LF01GW06	Q	Modified	Truck	2		Q1					Q1 (22)			Q1	Q1										Q1							
Fill Site 1	LF01GW07	Q	Modified	Truck	1		Q1					Q1 (22)			Q1	Q1										Q1							
El Polin Spring	EPSP01	Q	Surface	Hand	3		Q1					Q1 (22)	Q1 (22)		Q1	Q1										Q1							
Landfill 2	LF02GW01	Q	Modified	Truck	1		Q1					Q1 (22)			Q1	Q1										Q1							
Landfill 2	LF02GW02	Q	Modified	Truck	1		Q1					Q1 (22)			Q1	Q1										Q1							
Landfill 2	LF02GW04	Q	Modified	Truck	1		Q1					Q1 (22)			Q1	Q1										Q1							

Table 1A
Proposed Sampling Schedule Third Quarter 2006
Presidio-wide Groundwater Monitoring Project
Presidio of San Francisco, California

Site Name/ID	Well ID	Sampling Information				Analytical Requirements																						Notes/Comments				
		Water Level/Seep Evaluation	Sampling Method ¹	Well Access ²	Sampling Order ³	NDMA	General Chemistry Parameters	Total Organic Carbon	Dissolved Gases ⁴	MBAS	Total Hardness	Molybdenum (from metals container)	Dissolved Metals ^{5,6}	Total Metals ^{5,6} (Not Filtered)	Arsenic III and Arsenic V	Total Dissolved Solids	Dissolved Oxygen ⁷	ORP ⁸	Organochlorine Pesticides	PCBs	VOCs MTBE	BTEX MTBE	PAHs	SVOCs	Total Sulfide ⁹	Cyanide	Chlorinated Herbicides		TPH _g	TPH _d	TPH _{f/o}	TPH _s
						1625	various	EPA 9060	EPA 3810 / RSK 175	E425.1		ICP/MS	EPA 6010/6020	EPA 6010/6020	ICP/MS	EPA 160.1	(field probe)	(field probe)	EPA 8081	EPA 8082	EPA 8360 modified	EPA 8021B or 8020	EPA 8310	EPA 8270	EPA 376.2	EPA 9012 modified	EPA 8150		EPA 8015	EPA 8015 EPA 3630A	EPA 8015 EPA 3630A	EPA 8015
Building 1349	1349MW01	Q	Modified	Truck	1		Q1					Q1 (23)			Q1	Q1	Q1	Q1			Q1		Q1					Q1	Q1	Q1		The reduction to annual sampling at wells (1349MW01, and 1349MW103 through 1349MW105) not serving as upgradient monitoring points for Fill Site 5 (per the Fill Site 5 RAP) until the Building 1349 Area CAP has been implemented. finalized was approved by the stakeholders prior to First Quarter 2004 based on the lack of significant detections. ORP is measured for the evaluation of redox conditions, in accordance with recommendations from the Technical Memorandum on Arsenic and Other Metals in Groundwater at Three CAP Sites (pending). Sampling at 1349MW02 has been reduced to annual until the Building 1349 Area CAP has been implemented. This change is in accordance with the Fill Site 5 RAP and is consistent with other like Building 1349 Area wells. TPH, PAHs, VOCs, PCBs, chlorinated herbicides, general chemistry parameters, TDS, and dissolved metals (see Attachment 1 for a discussion of chromium results) have met their post-remediation groundwater monitoring requirements and cleanup levels from the Fill Site 5 RAP for the required frequency of monitoring within 1349MW03R, 1349MW101, and 1349MW102 and were approved for removal prior to the Second Quarter 2006. The Trust requests cessation of these analytical compounds from the Groundwater Monitoring Program at Fill Site 5+ Building 1349 (including 1349MW03R, 1349MW101, and 1349MW102) prior to the Second Quarter 2006 (see Attachment 1). It is noted that these three wells will be monitored per requirements of the Building 1349 Area CAP, once it is finalized and implemented.
Building 1349	1349MW02	Q	Modified	Truck	1		Q1, Q3					Q1, Q3 (23)			Q1, Q3	Q1, Q3	Q1, Q3	Q1, Q3	Q1, Q3	Q1, Q3	Q1, Q3					Q1, Q3	Q1, Q3	Q1, Q3				
Building 1349	1349MW03R	Q	Modified	Hand	1													Q1, Q3														
Building 1349	1349MW100	Q	Modified	Truck	4		Q					Q (23)			Q	Q	Q	Q	Q1, Q3		Q		Q					Q	Q	Q		
Building 1349	1349MW101	Q	Modified	Hand	1														Q1, Q3													
Building 1349	1349MW102	Q	Modified	Hand	3														Q1, Q3													
Building 1349	1349MW103	Q	Modified	Hand	2		Q1					Q1 (23)			Q1	Q1	Q1	Q1	Q1		Q1		Q1				Q1	Q1	Q1			
Building 1349	1349MW104	Q	Modified	Hand	1		Q1					Q1 (23)			Q1	Q1	Q1	Q1	Q1		Q1		Q1				Q1	Q1	Q1			
Building 1349	1349MW105	Q	Modified	Hand	2		Q1					Q1 (23)			Q1	Q1	Q1	Q1	Q1		Q1		Q1				Q1	Q1	Q1			

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		Water Level/Seep Evaluation	Sampling Method ¹	Well Access ²	Sampling Order ³	NDMA	General Chemistry Parameters	Total Organic Carbon	Dissolved Gases ⁴	MBAS	Total Hardness	Molybdenum (from metals container)	Dissolved Metals ^{5,6}	Total Metals ^{5,6} (Not Filtered)	Arsenic III and Arsenic V	Total Dissolved Solids	Dissolved Oxygen ⁷	ORP ⁸	Organochlorine Pesticides	PCBs	VOCs MTBE	BTEX MTBE	PAHs	SVOCs	Total Sulfide ⁹	Cyanide	Chlorinated Herbicides	TPH _g		TPH _d	TPH _{f/o}	TPH _{ss}
						1625	various	EPA 9060	EPA 3810 / RSK 175	E425.1		ICP/MS	EPA 6010/6020	EPA 6010/6020	ICP/MS	EPA 160.1	(field probe)	(field probe)	EPA 8081	EPA 8082	EPA 8360 modified	EPA 8021B or 8020	EPA 8310	EPA 8270	EPA 376.2	EPA 9012 modified	EPA 8150	EPA 8015		EPA 8015 EPA 3630A	EPA 8015 EPA 3630A	EPA 8015
Fill Site 5	LF5GW100	Q	Low Flow	Hand	2												Q1, Q3		Q1, Q3													The following sampling locations are included in the Fill Site 5 groundwater monitoring plan; LF5GW100 through LF5GW104, LF5SP100, 1349MW02, 1349MW03R, 1349MW101, and 1349MW102.
Fill Site 5	LF5GW101	Q	Low Flow	Hand	2												Q1, Q3		Q1, Q3													
Fill Site 5	LF5GW102	Q	Modified	Hand	1												Q1, Q3		Q1, Q3													
Fill Site 5	LF5GW103	Q	Modified	Hand	1												Q1, Q3		Q1, Q3													
Fill Site 5	LF5GW104	Q	Modified	Hand	1												Q1, Q3		Q1, Q3													
Fill Site 5	LF5SP100	Q	Surface	Hand	2												Q1, Q3		Q1, Q3													See Attachment 1 for a review of the Post Remediation Groundwater Monitoring Program conducted to date at Fill Site 5. The post-remediation groundwater monitoring requirements and cleanup levels from the RAP have been met for the required frequency of monitoring for TPH, PAHs, VOCs, PCBs, chlorinated herbicides, general chemistry parameters, TDS, and dissolved metals parameters. The Trust requests cessation of these parameters from the Groundwater Monitoring Program at FS 5 (including 1349MW03R, 1349MW101, and 1349MW102) prior to the Second Quarter 2006. Monitoring of pesticides will continue until the Colma backfill soil sampling has been conduct evaluated at Fill Site 5.
Landfill 4	LF04GW03	Q	Low Flow	Truck	3																											
Landfill 4	LF4GW100	Q	Low Flow	Truck	1																											
Landfill 4	LF4GW101	Q	Low Flow	Truck	1																											
Landfill 4	LF4GW102	Q	Modified	Hand	2																											
Landfill 4	LF4GW103	Q	Modified	Hand	1		Q					Q (14)			Q	Q			Q1, Q3													
Landfill 4	LF4GW104	Q	Modified	Hand	1		Q					Q (14)			Q	Q			Q1, Q3													
Landfill 4	LF4GW105	Q	Modified	Hand	1																											
Landfill 4	LF4GW106	Q	Modified	Truck	1																											

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Site Name/ID	Well ID	Sampling Information				Analytical Requirements																								Notes/Comments		
		Water Level/Seep Evaluation	Sampling Method ¹	Well Access ²	Sampling Order ³	NDMA	General Chemistry Parameters	Total Organic Carbon	Dissolved Gases ⁴	MBAS	Total Hardness	Molybdenum (from metals container)	Dissolved Metals ^{5,6}	Total Metals ^{5,6} (Not Filtered)	Arsenic III and Arsenic V	Total Dissolved Solids	Dissolved Oxygen ⁷	ORP ⁸	Organochlorine Pesticides	PCBs	VOCs MTBE	BTEX MTBE	PAHs	SVOCs	Total Sulfide ⁹	Cyanide	Chlorinated Herbicides	TPHg	TPHd		TPHfo	TPHss
						1625	various	EPA 9060	EPA 3810 / RSK 175	E425.1		ICP/MS	EPA 6010/6020	EPA 6010/6020	ICP/MS	EPA 160.1	(field probe)	(field probe)	EPA 8081	EPA 8082	EPA 8360 modified	EPA 8021B or 8020	EPA 8310	EPA 8270	EPA 376.2	EPA 9012 modified	EPA 8150	EPA 8015	EPA 8015 EPA 3630A		EPA 8015 EPA 3630A	EPA 8015
Comm / PX	600GW101	Q	Low Flow	Truck	3		Q					Q (14)			Q	Q	Q				Q			Q			Q	Q	Q		PAH and VOC analyses within 600GW108 will be conducted annually in the First Quarter, along with other site wells, because PAHs have never been detected and no significant detections have been reported in the last four sampling events within 600GW108. The Final CAP for the Comm/PX Area was submitted to the regulatory agencies for review in December 2005. Groundwater sampling will continue to be conducted at the Commissary/PX Area as shown until the CAP is implemented. TOC is proposed for removal from the program for the evaluation of redox conditions, in accordance with recommendations from the Technical Memorandum on Arsenic and Other Metals in Groundwater at Three CAP Sites (pending). ORP is measured for the evaluation of redox conditions, in accordance with recommendations from the Technical Memorandum on Arsenic and Other Metals in Groundwater at Three CAP Sites (pending) .	
Comm / PX	600GW102	Q	Normal	Truck	3		Q1					Q1 (14)			Q1	Q1	Q1				Q1		Q1		Q1		Q1	Q1	Q1			
Comm / PX	600GW103	Q	Normal	Truck	3		Q1					Q1 (14)			Q1	Q1	Q1				Q1		Q1		Q1		Q1	Q1	Q1			
Comm / PX	600GW104	Q	Normal	Truck	3		Q1					Q1 (14)			Q1	Q1	Q1				Q1		Q1		Q1		Q1	Q1	Q1			
Comm / PX	600GW105	Q	Low Flow	Truck	3		Q					Q (14)			Q	Q	Q				Q1		Q1		Q		Q	Q	Q			
Comm / PX	600GW106	Q	Low Flow	Truck	3		Q					Q (14)			Q	Q	Q				Q1		Q1		Q		Q	Q	Q			
Comm / PX	600GW107	Q	Modified	Truck	3		Q1					Q1 (14)			Q1	Q1	Q1				Q1		Q1		Q1		Q1	Q1	Q1			
Comm / PX	600GW108	Q	Low Flow	Hand	3		Q					Q (14)			Q	Q	Q				Q1		Q1		Q		Q	Q	Q			
Comm / PX	600GW109	Q	Normal	Hand	3		Q1					Q1 (14)			Q1	Q1	Q1				Q1		Q1		Q1		Q1	Q1	Q1			
Comm / PX	610GW101	Q	Low Flow	Truck	1		Q					Q (14)			Q	Q	Q					Q			Q		Q	Q	Q			
Comm / PX	610GW102	Q	Low Flow	Truck	2		Q					Q (14)			Q	Q	Q					Q			Q		Q	Q	Q			
Comm / PX	610GW103	Q	Low Flow	Truck	3		Q					Q (14)			Q	Q	Q					Q			Q		Q	Q	Q			
Comm / PX	610SP01	Q	Surface	Hand	3		Q					Q (14)	Q (14)		Q	Q	Q					Q			Q		Q	Q	Q			
Comm / PX	610SP02	Q	Surface	Hand	3		Q					Q (14)	Q (14)		Q	Q	Q					Q			Q		Q	Q	Q			
Landfill E	DAEGW03	Q	Normal	Hand	1		Q1					Q1 (22)			Q1	Q1		Q1	Q1	Q1		Q1					Q1	Q1	Q1		A focused feasibility study has been prepared for Landfill E. The reduction to annual sampling at Landfill E monitoring wells (DAEGW101 through DAEGW104) until the Landfill E RAP has been implemented has been approved. The proposed sampling frequency at Landfill E seep (DAESP03) has been increased to quarterly beginning with the First Quarter 2006 to assess seasonal and variable conditions.	
Landfill E	DAEGW04	Q	Normal	Hand	2		Q1					Q1 (22)			Q1	Q1				Q1		Q1						Q1	Q1	Q1		
Landfill E	DAEGW05	Q	Normal	Hand	1		Q1					Q1 (22)			Q1	Q1		Q1	Q1	Q1		Q1					Q1	Q1	Q1			
Landfill E	DAEGW06	Q	Modified	Hand	1		Q1					Q1 (22)			Q1	Q1				Q1		Q1							Q1	Q1		
Landfill E	DAEGW07	Q	Low Flow	Hand	3		Q1					Q1 (22)			Q1	Q1	Q1	Q1	Q1	Q1		Q1	Q1	Q1			Q1	Q1	Q1			
Landfill E	DAEGW08	Q	Normal	Hand	1		Q1					Q1 (22)			Q1	Q1		Q1	Q1	Q1		Q1					Q1	Q1	Q1			
Landfill E	DAESP03	Q	Surface	Hand	1		Q			Q	Q	Q	Q (23)	Q (23)		Q	Q		Q	Q	Q		Q		Q		Q	Q	Q			
Landfill E	DAEGW101	Q	Modified	Hand	1		Q1					Q1 (23)			Q1	Q1		Q1	Q1	Q1		Q1					Q1	Q1	Q1			
Landfill E	DAEGW102	Q	Modified	Hand	2		Q1					Q1 (23)			Q1	Q1		Q1	Q1	Q1		Q1					Q1	Q1	Q1			
Landfill E	DAEGW103	Q	Normal	Truck	2		Q1					Q1 (23)			Q1	Q1		Q1	Q1	Q1		Q1					Q1	Q1	Q1			
Landfill E	DAEGW104	Q	Modified	Hand	1		Q1					Q1 (23)			Q1	Q1		Q1	Q1	Q1		Q1					Q1	Q1	Q1			
Landfill E	DAEPZ101	Q	EM	Hand	--																											
Landfill E	DAEPZ102	Q	EM	Hand	--																											
Nike Facility	NKGW01	Q	Modified	Truck	2	Q1, Q3						Q1 (23)			Q1	Q1, Q3					Q1					Q1		Q1	Q1	Q1		No changes to the Nike Missile Facility monitoring program are currently proposed.
Nike Facility	NKGW02	Q	Modified	Truck	1	Q1, Q3						Q1 (23)			Q1	Q1, Q3					Q1					Q1		Q1	Q1	Q1		
Nike Facility	NKGW03	Q	Low Flow	Truck	1	Q1, Q3						Q1 (23)			Q1	Q1, Q3	Q1, Q3				Q1					Q1		Q1	Q1	Q1		
Nike Facility	NKGW04	Q	Modified	Truck	3	Q1, Q3						Q1 (23)			Q1	Q1, Q3					Q1					Q1		Q1	Q1	Q1		
Nike Facility	NKGW05	Q	Modified	Truck	2	Q1, Q3						Q1 (23)			Q1	Q1, Q3					Q1					Q1		Q1	Q1	Q1		
Baker Beach Disturbed Areas 1 and 2A	BB1PZ100	Q	Modified	Hand	2		Q					Q (23)	Q (23)			Q		Q					Q						Q	Q		Monitoring will be completed within these piezometers and seep to establish baseline conditions in order to evaluate how construction operations will affect groundwater quality.
Baker Beach Disturbed Areas 1 and 2A	BB1PZ101	Q	Modified	Hand	1		Q					Q (23)	Q (23)			Q		Q					Q						Q	Q		
Baker Beach Disturbed Areas 1 and 2A	BB2ASW100	Q	Modified	Hand	1		Q					Q (23)	Q (23)			Q		Q					Q						Q	Q		

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		Water Level/Seep Evaluation	Sampling Method ¹	Well Access ²	Sampling Order ³	NDMA	General Chemistry Parameters	Total Organic Carbon	Dissolved Gases ⁴	MBAS	Total Hardness	Molybdenum (from metals container)	Dissolved Metals ^{5,6}	Total Metals ^{5,6} (Not Filtered)	Arsenic III and Arsenic V	Total Dissolved Solids	Dissolved Oxygen ⁷	ORP ⁸	Organochlorine Pesticides	PCBs	VOCs MTBE	BTEX MTBE	PAHs	SVOCs	Total Sulfide ⁹	Cyanide	Chlorinated Herbicides	TPHg	TPHd		TPHfo	TPHs
						1625	various	EPA 9060	EPA 3810 / RSK 175	E425.1		ICP/MS	EPA 6010/6020	EPA 6010/6020	ICP/MS	EPA 160.1	(field probe)	(field probe)	EPA 8081	EPA 8082	EPA 8260 modified	EPA 8021B or 8020	EPA 8310	EPA 8270	EPA 376.2	EPA 9012 modified	EPA 8150	EPA 8015	EPA 8015 EPA 3630A		EPA 8015 EPA 3630A	EPA 8015
Baker Beach Disturbed Area 3	BB3GW100	Q	Modified	Hand	1		Q					Q (22)			Q	Q												Q	Q	Q	Groundwater analyses are conducted in general accordance with the Baker Beach Disturbed Area 3 RAP. Fixed monitoring points BB3SW100 through BB3SW102 are sampled using a disposable bailer and are purged prior to sampling, in accordance with the modified method of purging.	
Baker Beach Disturbed Area 3	BB3GW101	Q	Modified	Hand	1		Q					Q (22)			Q	Q											Q	Q	Q			
Baker Beach Disturbed Area 3	BB3PZ101	Q	Modified	Hand	1		Q					Q (22)			Q	Q											Q	Q	Q			
Baker Beach Disturbed Area 3	BB3PZ102	Q	Modified	Hand	1		Q					Q (22)	Q (22)		Q	Q												Q	Q	Q	In accordance with the RAP, TPH analyses were reduced to semi-annual sampling at BB3SW101 and BB3SW102, as no TPH detections have occurred for four quarterly events. For metals, chromium exceeded the cleanup level during the Fourth Quarter 2005 at BB3SW102; thus, all seeps will continue to be analyzed on a quarterly basis for metals and general chemistry parameters. At BB3GW101, BB3PZ101, and BB3SW100, no detections have occurred above cleanup levels over one or two events; sampling of these wells will continue on a quarterly basis until sufficient data have been collected. At BB3GW100, no TPH detections have occurred and metals have not been detected above cleanup levels. Per the RAP, monitoring at BB3GW100 could be reduced to a semi-annual basis, however, quarterly sampling of this well will continue for evaluation of upgradient conditions.	
Baker Beach Disturbed Area 3	BB3SW100	Q	Modified	Hand	1		Q					Q (22)	Q (22)		Q	Q												Q	Q	Q		
Baker Beach Disturbed Area 3	BB3SW101	Q	Modified	Hand	1		Q					Q (22)	Q (22)		Q	Q											Q1, Q3	Q1, Q3	Q1, Q3			
Baker Beach Disturbed Area 3	BB3SW102	Q	Modified	Hand	1		Q					Q (22)	Q (22)		Q	Q												Q1, Q3	Q1, Q3	Q1, Q3	At the request of the DTSC, piezometer BB3PZ102 and surface water location BB3SW104 were added to the groundwater monitoring program prior to the First Quarter 2006 to evaluate downgradient and surface water dissolved and total metal concentrations.	
Baker Beach Disturbed Area 3	BB3SW104	Q	Surface	Hand	1		Q					Q (22)	Q (22)		Q	Q											Q	Q	Q			
Battery Howe/Wagner	BHWGW01	Q	Low Flow	Truck	3		Q					Q (22)				Q	Q1			Q1											Dissolved metals and general chemistry parameters are proposed for quarterly analysis within all Battery Howe/Wagner wells for comparison with data from the new upgradient wells (Mini-CAP Area wells 1213GW101 and 1221GW104).	
Battery Howe/Wagner	BHWGW04	Q	Low Flow	Truck	1		Q					Q (22)				Q	Q1			Q1												
Battery Howe/Wagner	BHWGW05	Q	Low Flow	Truck	2		Q					Q (22)				Q	Q1			Q1												
Battery Howe/Wagner	HWGW100	Q	Low Flow	Truck	1		Q					Q (22)				Q	Q1			Q1												
Battery Howe/Wagner	HWGW101	Q	Low Flow	Truck	1		Q					Q (22)				Q	Q1			Q1												
Battery Howe/Wagner	HWGW102	Q	Low Flow	Truck	1		Q					Q (22)				Q	Q1			Q1												

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						1625	various	EPA 9060	EPA 3810 / RSK 175	E425.1		ICP/MS	EPA 6010/6020	EPA 6010/6020	ICP/MS	EPA 160.1	(field probe)	(field probe)	EPA 8081	EPA 8082	EPA 8360 modified	EPA 8021B or 8020	EPA 8310	EPA 8270	EPA 376.2	EPA 9012 modified	EPA 8150	EPA 8015		EPA 8015 EPA 3630A	EPA 8015 EPA 3630A	EPA 8015	
Fill Site 6B	LF6GW100	Q	Modified	Truck	1		Q1					Q1 (23)			Q1	Q1	Q1	Q1	Q1				Q1		Q1			Q1	Q1			A decision document for Fill Site 6B is currently being prepared. The reduction in sampling frequency for Fill Site 6B wells to annual was approved by the stakeholders prior to First Quarter 2004. The Fill Site 6A RAP is currently being implemented. Fill Site 6A monitoring well LF6GW103 will continue to be sampled in order to provide upgradient groundwater data for the Building 1065 Area. Fill Site 6A wells are sampled in accordance with the RAP.	
Fill Site 6B	LF6GW101	Q	Modified	Truck	1		Q1					Q1 (23)			Q1	Q1	Q1	Q1	Q1				Q1		Q1			Q1	Q1				
Fill Site 6A	LF6GW103	Q	Modified	Truck	1		Q					Q (23)			Q	Q	Q	Q	Q				Q		Q1			Q	Q				
Fill Site 6A	LF6GW104	Q	Modified	Hand	TBD		Q					Q (23)			Q	Q	Q						Q		Q1				Q	Q			
Fill Site 6A	LF6GW105	Q	Modified	Hand	TBD		Q					Q (23)			Q	Q	Q								Q1								
Fill Site 6A	LF6GW106	Q	Modified	Hand	TBD		Q					Q (23)			Q	Q	Q						Q		Q1				Q	Q			TPHd, TPHfo and PAHs are sampled at monitoring wells LF6GW104 and LF6GW106 to assess impacts from the nearby FDS lines.
Fill Site 6A	LF6PZ101	Q	EM	Hand	TBD																												
Fill Site 6A	LF6PZ102	Q	EM	Hand	TBD																												
Fill Site 6A	LF6PZ103	Q	EM	Hand	TBD																												
Fill Site 6A	LF6PZ104	Q	EM	Hand	TBD																												
Fill Site 6A	LF6PZ105	Q	EM	Hand	TBD																												
Fill Site 6A	LF6PZ106	Q	EM	Hand	TBD																												
Bldg 1065	1065PZ1A	Q	Low Flow	Truck	4		Q					Q (15)			Q	Q	Q			Q					Q			Q	Q	Q			
Bldg 1065	1065PZ1B	Q	Normal	Truck	1		Q					Q (15)			Q	Q	Q			Q					Q			Q	Q	Q			
Bldg 1065	1065PZ2A	Q	Low Flow	Truck	3		Q					Q (15)			Q	Q	Q					Q			Q			Q	Q	Q			
Bldg 1065	1065PZ2B	Q	Normal	Truck	1		Q1					Q1 (15)			Q1	Q1	Q1					Q1			Q1			Q1	Q1	Q1			
Bldg 1065	1065PZ3A	Q	Low Flow	Truck	2		Q1					Q1 (15)			Q1	Q1	Q1					Q1			Q1			Q1	Q1	Q1			
Bldg 1065	1065PZ3B	Q	Normal	Truck	3		Q1					Q1 (15)			Q1	Q1	Q1					Q1			Q1			Q1	Q1	Q1			
Bldg 1065	1065PZ4A	Q	Low Flow	Truck	3		Q					Q (15)			Q	Q	Q					Q			Q			Q	Q	Q			
Bldg 1065	1065PZ4B	Q	Modified	Truck	1		Q1					Q1 (15)			Q1	Q1	Q1					Q1			Q1			Q1	Q1	Q1			
Bldg 1065	1065PZ5AR	Q	Normal	Truck	3		Q					Q (15)			Q	Q	Q					Q			Q			Q	Q	Q			
Bldg 1065	1065PZ5B	Q	Modified	Truck	3		Q1					Q1 (15)			Q1	Q1	Q1					Q1			Q1			Q1	Q1	Q1			
Bldg 1065	1065PZ6A	Q	Modified	Truck	4		Q1					Q1 (15)			Q1	Q1	Q1					Q1			Q1			Q1	Q1	Q1			
Bldg 1065	1065PZ6B	Q	Normal	Truck	1		Q1					Q1 (15)			Q1	Q1	Q1					Q1			Q1			Q1	Q1	Q1			
Bldg 1065	1065PZ7A	Q	Modified	Truck	1		Q1					Q1 (15)			Q1	Q1	Q1					Q1			Q1			Q1	Q1	Q1			
Bldg 1065	1065PZ7B	Q	Modified	Truck	1		Q1					Q1 (15)			Q1	Q1	Q1					Q1			Q1			Q1	Q1	Q1			
Bldg 1065	1065MW9A	Q	Normal	Truck	3		Q					Q (15)			Q	Q	Q					Q			Q			Q	Q	Q			
Bldg 1065	1065MW9B	Q	Normal	Truck	3		Q					Q (15)			Q	Q	Q					Q			Q			Q	Q	Q			
Bldg 1065	1065MW10A	Q	Normal	Truck	3		Q1					Q1 (15)			Q1	Q1	Q1					Q1			Q1			Q1	Q1	Q1			
Bldg 1065	1065MW10B	Q	Normal	Truck	3		Q1					Q1 (15)			Q1	Q1	Q1					Q1			Q1			Q1	Q1	Q1			
Bldg 1065	1065MW11A	Q	Normal	Truck	3		Q1					Q1 (15)			Q1	Q1	Q1					Q1			Q1			Q1	Q1	Q1			
Bldg 1065	1065MW11B	Q	Normal	Truck	3		Q1					Q1 (15)			Q1	Q1	Q1					Q1			Q1			Q1	Q1	Q1			
Bldg 1065	1065MW101	Q	Low Flow	Truck	3		Q					Q (15)			Q	Q	Q			Q					Q			Q	Q	Q			
Bldg 1065	1065MW102	Q	Low Flow	Truck	3		Q					Q (15)			Q	Q	Q			Q					Q			Q	Q	Q			
Bldg 1065	1047MW101	Q	Normal	Truck	1		Q1					Q1 (15)			Q1	Q1	Q1			Q					Q1			Q				Q ¹⁰	

Table 1A
Proposed Sampling Schedule Third Quarter 2006
Presidio-wide Groundwater Monitoring Project
Presidio of San Francisco, California

Site Name/ID	Well ID	Sampling Information				Analytical Requirements																				Notes/Comments						
		Water Level/Seep Evaluation	Sampling Method ¹	Well Access ²	Sampling Order ³	NDMA	General Chemistry Parameters	Total Organic Carbon	Dissolved Gases ⁴	MBAS	Total Hardness	Molybdenum (from metals container)	Dissolved Metals ^{5,6}	Total Metals ^{5,6} (Not Filtered)	Arsenic III and Arsenic V	Total Dissolved Solids	Dissolved Oxygen ⁷	ORP ⁸	Organochlorine Pesticides	PCBs	VOCs MTBE	BTEX MTBE	PAHs	SVOCs	Total Sulfide ⁹		Cyanide	Chlorinated Herbicides	TPHg	TPHd	TPHfo	TPHss
						1625	various	EPA 9060	EPA 3810 / RSK 175	E425.1		ICP/MS	EPA 6010/6020	ICP/MS	EPA 160.1	(field probe)	(field probe)	EPA 8081	EPA 8082	EPA 8260 modified	EPA 8021B or 8020	EPA 8310	EPA 8270	EPA 376.2	EPA 9012 modified		EPA 8150	EPA 8015 EPA 3630A	EPA 8015 EPA 3630A	EPA 8015		
Bldg 207/231	207GW03	Q	Normal	Truck	2		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1		The Building 207/231 Area CAP has been submitted to the stakeholders. The reduction in sampling frequency to annual (during First Quarter, except monitoring well 231GW09) for all wells until the CAP is implemented has been approved. Monitoring wells 231GW09, 231GW10, 231GW13, 231GW20, 231GW21, 231GW22, 231GW26, 231PZ01, and 231PZ04 will be sampled at least two months prior to the Building 231/207 Area remedial action in order to establish a baseline of pre-construction TPH and arsenic data (currently anticipated to be during the Third Second Quarter 2007/6), which is scheduled to begin in August 2007 December 2006 , in accordance with the Building 207/231 CAP.	
Bldg 207/231	231GW06	Q	Normal	Truck	1		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1			
Bldg 207/231 (Fill Site 6A)	231GW09	Q	Modified	Truck	1		Q					Q (23)			Q	Q	Q			Q				Q			Q	Q	Q			
Bldg 207/231	231GW10	Q	Low Flow	Truck	2		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1			
Bldg 207/231	231GW11	Q	Modified	Truck	1		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1			
Bldg 207/231	231GW13	Q	Normal	Truck	1		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1			
Bldg 207/231	231GW15	Q	Normal	Truck	1		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1			
Bldg 207/231	231GW16	Q	Low Flow	Truck	3		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1			
Bldg 207/231	231GW17	Q	Normal	Truck	2		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1			
Bldg 207/231	231GW18	Q	Normal	Truck	2		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1			
Bldg 207/231	231GW19	Q	Normal	Truck	1		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1			
Bldg 207/231	231GW20	Q	Normal	Truck	2		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1			
Bldg 207/231	231GW21	Q	Low Flow	Truck	4		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1			
Bldg 207/231	231GW22	Q	Low Flow	Truck	4		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1			
Bldg 207/231	231GW23	Q	Modified	Truck	2		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1			
Bldg 207/231	231GW24	Q	Normal	Truck	1		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1			
Bldg 207/231	231GW25	Q	Modified	Truck	2		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1			
Bldg 207/231	231GW26	Q	Normal	Truck	2		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1			
Bldg 207/231	231GW27	Q	Normal	Truck	2		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1			
Bldg 207/231	231GW28	Q	Modified	Truck	2		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1			
Bldg 207/231	231GW29	Q	Normal	Truck	2		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1			
Bldg 207/231	231GW30	Q	Low Flow	Truck	3		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1			
Bldg 207/231	231PZ01	Q	Low Flow	Truck	4		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1			
Bldg 207/231	231PZ02	Q	Low Flow	Truck	4		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1			
Bldg 207/231	231PZ03	Q	Low Flow	Truck	4		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1			
Bldg 207/231	231PZ04	Q	Low Flow	Truck	4		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1			
Bldg 207/231	OW-1	Q	EM	Truck																												
Bldg 1027/1065	1027MW01	Q	EM	Truck																												
Bldg 1027/1065	1027MW03	Q	EM	Truck																												
Mini-CAP Areas	FM14EX07GW102	Q	Normal	Truck	1											Q					Q	Q					Q	Q	Q		VOCs were detected within 1213GW101 during the First Quarter 2006, therefore, VOC analyses will continue on a quarterly basis within this well. Additionally, since BTEX/MTBE is included in the VOC list, this analyses has been removed. The PAH, fluoranthene, was detected within FM14EX07GW102 and 514AGW101 during the First Quarter 2006 and therefore, PAH analyses are scheduled to be conducted quarterly within wells with detections (FM14EX07GW101, FM14EX07GW102, 1213GW101, and 514AGW101). TPH compounds will continue to be analyzed within wells with detections (FM14EX07GW101, FM14EX07GW102, 1213GW101, and 514AGW101) to establish a baseline of data.	
Mini-CAP Areas	FM14EX07GW101	Q	Normal	Truck	1											Q					Q	Q					Q	Q	Q			
Mini-CAP Areas	1260GW102	Q	Normal	Truck	1																											
Mini-CAP Areas	1260GW103	Q	Normal	Truck	1																											
Mini-CAP Areas	1260GW101	Q	Normal	Truck	1																											
Mini-CAP Areas	1213GW101	Q	Normal	Truck	3		Q					Q (22)				Q				Q		Q					Q	Q	Q			
Mini-CAP Areas	1221GW103	Q	Normal	Truck	1																											
Mini-CAP Areas	1221GW102	Q	Normal	Truck	2																											
Mini-CAP Areas	1221GW104	Q	Normal	Truck	1		Q					Q (22)				Q																
Mini-CAP Areas	1221GW101	Q	Normal	Truck	1																											
Mini-CAP Areas	514AGW101	Q	Normal	Truck	1											Q					Q	Q					Q	Q	Q			
Upgradient	UBR01GW01	Q	EM	Truck																												
Upgradient	UBR02GW01	Q	EM	Truck																												
Upgradient	UBR02GW02	Q	EM	Truck																												
Upgradient	UBR03GW01	Q	EM	Truck																												
Upgradient	UBR03GW02	Q	EM	Truck																												
Tennessee Hollow	TH-1	Q	EM	Hand																												
Tennessee Hollow	TH-2	Q	EM	Truck																												
Tennessee Hollow	TH-3	Q	EM	Truck																												
Tennessee Hollow	TH-4	Q	EM	Hand																												
Tennessee Hollow	PGFGW100	Q	EM	Truck																												
Tennessee Hollow	10GW100	Q	EM	Truck																												

Table 1A
Proposed Sampling Schedule Third Quarter 2006
Presidio-wide Groundwater Monitoring Project
Presidio of San Francisco, California

Site Name/ID	Well ID	Sampling Information				Analytical Requirements																						Notes/Comments				
		Water Level/Seep Evaluation	Sampling Method ¹	Well Access ²	Sampling Order ³	NDMA	General Chemistry Parameters	Total Organic Carbon	Dissolved Gases ⁴	MBAS	Total Hardness	Molybdenum (from metals container)	Dissolved Metals ^{5,6}	Total Metals ^{5,6} (Not Filtered)	Arsenic III and Arsenic V	Total Dissolved Solids	Dissolved Oxygen ⁷	ORP ⁸	Organochlorine Pesticides	PCBs	VOCs MTBE	BTEX MTBE	PAHs	SVOCs	Total Sulfide ⁹	Cyanide	Chlorinated Herbicides		TPHg	TPHd	TPHfo	TPHs
						1625	various	EPA 9060	EPA 3810 / RSK 175	E425.1		ICP/MS	EPA 6010/6020	EPA 6010/6020	ICP/MS	EPA 160.1	(field probe)	(field probe)	EPA 8081	EPA 8082	EPA 8260 modified	EPA 8021B or 8020	EPA 8310	EPA 8270	EPA 376.2	EPA 9012 modified	EPA 8150		EPA 8015	EPA 8015 EPA 3630A	EPA 8015 EPA 3630A	EPA 8015
Landfill 10	LF10GW01	Q	Modified	Hand	1		Q1					Q1 (23)			Q1	Q1						Q1						Q	Q	Q	A Focused Feasibility Study (FFS) for Landfills 8 and 10 has been prepared. The Trust is preparing a RAP for the two landfill sites, which is anticipated to be distributed to stakeholders in 2007. LF10GW02 and LF10SP01 could not be sampled during Q1 or Q2 2006 due to thick vegetation. Samples will be collected at these locations during Q3 2006 if the brush can be cleared. TPH analyses have been increased from an annual to quarterly basis in all Landfill 10 wells and seep due to recent detections in groundwater at Landfill 10. The TPH data will be evaluated in the RAP. -LF10GW02 and LF10SP01 could not be sampled during Q2 2006 due to continued obstruction by thick vegetation.	
Landfill 10	LF10GW02	Q	Normal	Hand	1		Q3*					Q3* (23)			Q3*	Q3*						Q3*					Q	Q	Q			
Landfill 10	LF10GW03	Q	Modified	Hand	2		Q1					Q1 (23)			Q1	Q1						Q1					Q	Q	Q			
Landfill 10	LF10GW100	Q	Normal	Truck	2		Q1					Q1 (23)			Q1	Q1						Q1					Q	Q	Q			
Landfill 10	LF10SP01	Q	Surface	Hand	2		Q3*					Q3* (23)	Q3* (23)		Q3*	Q3*						Q3*					Q	Q	Q			

Notes

1 - Normal, Low Flow, Modified, and Surface water sampling techniques. A description of sampling techniques can be found in the *Field Sampling Plan, Presidio Groundwater Monitoring Project* (Treadwell & Rollo, 2001a).

2 - Truck - Well accessible by truck
LIV - Low Impact Vehicle - Well accessible by LIV or hand truck only
Hand - Well accessible by hand truck only

3 - Sampling Order: At each site sample the wells with the lowest number first. For example, sample the number 1 wells first, the number 2 wells second etc. The following key explains the numbering system.

1 - Wells without significant detections of chemicals of concern
2 - Wells with occasional detections of low concentrations chemicals of concern
3 - Wells with consistent or recent detections of low concentrations chemicals of concern
4 - Wells with high concentrations of chemicals of concern
5 - Wells with very high concentrations of chemicals of concern. Potential for free phase product.

4 - Dissolved gases include methane, ethane, and ethene.

5 - Beginning with Second Quarter 2003, variance was granted from QAPP specified reporting limit requirements for seven metals.

6 - The table has been reformatted to one dissolved metals column. The number of dissolved metals proposed for analysis are denoted by parentheses. For example, Q (23) indicates the 23 metals list should be analyzed on a quarterly basis. The metals associated with each metals list are detailed below.

23 Metals List - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Tl, V, and Zn.

22 Metals List - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Tl, V, and Zn.

15 Metals List - Al, Sb, As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Pb, Ni and Zn.

14 Metals List - Al, As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Pb, Ni and Zn.

9 Metals List - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn.

8 Metals List - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn.

7 Metals List - As, Cr, Cd, Cu, Pb, Ni and Zn.

3 Metals List - Al, Fe, and Cr.

7 - Dissolved Oxygen (DO) concentration will be included in field sampling logs. DO values should be recorded immediately before sample collection.

8 - Oxidation-Reduction Potential (ORP) is measured within all wells proposed to be sampled using the low flow method using a flow through cell. For specified wells identified to be sampled by either the normal or modified methods and proposed for ORP measurements, ORP will be measured using a down-hole meter.

9 - Total sulfides are analyzed by the laboratory for all samples collected at the Presidio.

10 - Stoddard Solvent is a specialized formulation of gasoline. Laboratory quantification for Stoddard Solvent is achieved by comparing the shape of the analytical chromatogram within the same carbon range as TPHg for a diagnostic combination of spikes. Since TPHg is also proposed for analysis in this well, the comparison between this well and other sites which may be or have been evaluated for Stoddard Solvent will be maintained. Stoddard Solvent has been specified for this well per MACTEC request. MACTEC will evaluate the Stoddard Solvent data as part of their Building 1047 investigation.

Bold red text indicates proposed changes for the Third Quarter 2006.

All surface seeps where metals analysis is proposed will have two samples collected; one will be filtered and analyzed for dissolved metals and another one will not be filtered and analyzed for total metals.

EM - Elevation Monitoring only

Surface - Surface Water Sampling per Standard Operating Procedure

Trust - the Presidio Trust will evaluate seep BB3SP01 for flow on a quarterly basis and will inform the sampling crew if a sample can be collected.

Q1, Q3, etc. - Sample during specified quarters only

Q - Sample during all quarters unless otherwise directed

Q3* - Annual sampling has been moved to the Third Quarter because samples could not be collected during Q2 2006. Samples will be collected during Q3 2006, if possible.

TPHg, TPHd, TPHf, TPHs: Total Petroleum Hydrocarbons as gasoline, diesel, fuel oil, and stoddard solvent - EPA 3630A: Silica Gel Cleanup Step

General Chemistry Parameters; Alkalinity (total), bicarbonate, carbonate, chloride, fluoride, nitrate+nitrite (as N), sulfate

NDMA - N-nitrosodimethylamine

TBD - To Be Determined

Table 1B
Proposed Sampling Schedule Fourth Quarter 2006
Presidio-wide Groundwater Monitoring Project
Presidio of San Francisco, California

Site Name/ID	Well ID	Sampling Information					Analytical Requirements																				Notes/Comments						
		Water Level/Seep Evaluation	Sampling Method ¹	Well Access ²	Sampling Order ³	NDMA	General Chemistry Parameters	Total Organic Carbon	Dissolved Gases ⁴	MBAS	Total Hardness	Molybdenum (from meals container)	Dissolved Metals ^{5,6}	Total Metals ^{5,6} (Not Filtered)	Arsenic III and Arsenic V	Total Dissolved Solids	Dissolved Oxygen ⁷	ORP ⁸	Organochlorine Pesticides	PCBs	VOCs MTBE	BTEX MTBE	PAHs	SVOCs	Total Sulfide ⁹	Cyanide		Chlorinated Herbicides	TPHg	TPHd	TPHfo	TPHfs	
						1625	various	EPA 9060	EPA 3810 / RSK 175	E425.1		ICP/MS	EPA 6010/6020	EPA 6010/6020	ICP/MS	EPA 160.1	(field probe)	(field probe)	EPA 8081	EPA 8082	EPA 8260 modified	EPA 8021B or 8020	EPA 8310	EPA 8270	EPA 376.2	EPA 9012 modified		EPA 8150	EPA 8015	EPA 8015 EPA 3630A	EPA 8015 EPA 3630A	EPA 8015	
Landfill 8	LF08GW01	Q1	Low Flow	Hand	1		Q1					Q1 (23)			Q1	Q1	Q1	Q1	Q1	Q1		Q1			Q1	Q1							A Focused Feasibility Study (FFS) for Landfills 8 and 10 has been prepared. The Trust is preparing a RAP for the two landfill sites, which is anticipated to be distributed to stakeholders in 2007. Monitoring will continue as shown until the RAP is implemented. The frequency of water level / seep evaluation measurements was reduced to annual to match the sampling frequency at this site.
Landfill 8	LF08GW02B	Q1	Low Flow	Hand	1		Q1					Q1 (23)			Q1	Q1	Q1	Q1	Q1	Q1		Q1			Q1	Q1							
Landfill 8	LF08GW03	Q1	Low Flow	Hand	1		Q1					Q1 (23)			Q1	Q1	Q1	Q1	Q1	Q1		Q1			Q1	Q1							
Landfill 8	LF08GW04	Q1	Low Flow	Hand	1		Q1					Q1 (23)			Q1	Q1	Q1	Q1	Q1	Q1		Q1			Q1	Q1							
Landfill 8	LF08GW06	Q1	Low Flow	Hand	1		Q1					Q1 (23)			Q1	Q1	Q1	Q1	Q1	Q1		Q1			Q1	Q1							
Landfill 8	LF08PZ01	Q1	EM	Truck																													
Landfill 8	LF08PZ02	Q1	EM	Truck																													
Building 900s	937GW06	Q1	Modified	Truck	2											Q1					Q1							Q1	Q1	Q1			The Crissy Field RAP requires that monitoring continue until at least 2007, at which time the monitoring program will be reviewed. A reduction to annual sampling for the Building 900s Area was approved by the stakeholders prior to the First Quarter 2004. The frequency of water level / seep evaluation measurements was reduced to annual to match the sampling frequency at this site.
Building 900s	937GW07	Q1	Modified	Hand	1											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW12	Q1	Normal	Truck	2											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW15	Q1	Modified	Hand	2											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW32R	Q1	Normal	Truck	3											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW35	Q1	Normal	Hand	3											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW37	Q1	Normal	Truck	1											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW38	Q1	Modified	Truck	1											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW39	Q1	Modified	Truck	2											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW42	Q1	Normal	Truck	4											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW101	Q1	Normal	Truck	3											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW102	Q1	Normal	Truck	3											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW103	Q1	Normal	Truck	2											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW104	Q1	Normal	LIV	1											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW105	Q1	Normal	LIV	3											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW106	Q1	Normal	LIV	3											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW107	Q1	Normal	LIV	3											Q1					Q1							Q1	Q1	Q1			
Building 900s	937GW108	Q1	Normal	Truck	1											Q1					Q1							Q1	Q1	Q1			
Building 900s	950GW108	Q1	Normal	LIV	4											Q1					Q1							Q1	Q1	Q1			
Building 900s	979GW109	Q1	Normal	LIV	3											Q1					Q1							Q1	Q1	Q1			
Building 900s	979GW110	Q1	Normal	LIV	3											Q1					Q1							Q1	Q1	Q1			
Building 900s	979GW111R	Q1	Normal	LIV	1											Q1					Q1							Q1	Q1	Q1			
Building 900s	979GW112	Q1	Normal	LIV	3											Q1					Q1							Q1	Q1	Q1			
Building 900s	979GW113	Q1	Normal	LIV	3											Q1					Q1							Q1	Q1	Q1			
Building 900s	979GW114	Q1	Normal	LIV	3											Q1					Q1							Q1	Q1	Q1			
Building 900s	979GW115	Q1	Normal	LIV	3											Q1					Q1							Q1	Q1	Q1			
Building 900s	979GW116	Q1	Normal	LIV	4											Q1					Q1							Q1	Q1	Q1			
Building 900s	979GW117	Q1	Modified	LIV	1											Q1					Q1							Q1	Q1	Q1			
Fill Site 1	LF01GW01	Q1	Modified	Truck	1		Q1					Q1 (22)			Q1	Q1										Q1							Due to the potential for human exposure, total dissolved solids, dissolved and total metals, general chemistry parameters and dissolved oxygen will continue to be monitored on an annual basis at El Polin Spring to ensure potential changes in water chemistry are identified. The frequency of water level / seep evaluation measurements was reduced to annual to match the sampling frequency at this site.
Fill Site 1	LF01GW02	Q1	Modified	Truck	1		Q1					Q1 (22)			Q1	Q1										Q1							
Fill Site 1	LF01GW03	Q1	Modified	Truck	1		Q1					Q1 (22)			Q1	Q1										Q1							
Fill Site 1	LF01GW04	Q1	Modified	Truck	2		Q1					Q1 (22)			Q1	Q1											Q1						
Fill Site 1	LF01GW05	Q1	Modified	Truck	1		Q1					Q1 (22)			Q1	Q1											Q1						
Fill Site 1	LF01GW06	Q1	Modified	Truck	2		Q1					Q1 (22)			Q1	Q1											Q1						
Fill Site 1	LF01GW07	Q1	Modified	Truck	1		Q1					Q1 (22)			Q1	Q1											Q1						
El Polin Spring	EPS01	Q1	Surface	Hand	3		Q1					Q1 (22)	Q1 (22)		Q1	Q1											Q1						
Landfill 2	LF02GW01	Q1	Modified	Truck	1		Q1					Q1 (22)			Q1	Q1											Q1						
Landfill 2	LF02GW02	Q1	Modified	Truck	1		Q1					Q1 (22)			Q1	Q1											Q1						
Landfill 2	LF02GW04	Q1	Modified	Truck	1		Q1					Q1 (22)			Q1	Q1											Q1						

Table 1B
Proposed Sampling Schedule Fourth Quarter 2006
Presidio-wide Groundwater Monitoring Project
Presidio of San Francisco, California

Site Name/ID	Well ID	Sampling Information				Analytical Requirements																				Notes/Comments						
		Water Level/Seep Evaluation	Sampling Method ¹	Well Access ²	Sampling Order ³	NDMA	General Chemistry Parameters	Total Organic Carbon	Dissolved Gases ⁴	MBAS	Total Hardness	Molybdenum (from meals container)	Dissolved Metals ^{5,6}	Total Metals ^{5,6} (Not Filtered)	Arsenic III and Arsenic V	Total Dissolved Solids	Dissolved Oxygen ⁷	ORP ⁸	Organochlorine Pesticides	PCBs	VOCs MTBE	BTEX MTBE	PAHs	SVOCs	Total Sulfide ⁹		Cyanide	Chlorinated Herbicides	TPHg	TPHd	TPHfo	TPHss
						1625	various	EPA 9060	EPA 3810 / RSK 175	E425.1		ICP/MS	EPA 6010/6020	EPA 6010/6020	ICP/MS	EPA 160.1	(field probe)	(field probe)	EPA 8081	EPA 8082	EPA 8260 modified	EPA 8021B or 8020	EPA 8310	EPA 8270	EPA 376.2		EPA 9012 modified	EPA 8150	EPA 8015	EPA 8015 EPA 3630A	EPA 8015 EPA 3630A	EPA 8015
Building 1349	1349MW01	Q	Modified	Truck	1		Q1					Q1 (23)			Q1	Q1	Q1	Q1			Q1		Q1					Q1	Q1	Q1	The reduction to annual sampling at wells (1349MW01, and 1349MW103 through 1349MW105) not serving as upgradient monitoring points for Fill Site 5 (per the Fill Site 5 RAP) until the Building 1349 Area CAP has been implemented. ORP is measured for the evaluation of redox conditions, in accordance with recommendations from the Technical Memorandum on Arsenic and Other Metals in Groundwater at Three CAP Sites.	
Building 1349	1349MW02	Q	Modified	Truck	1		Q1					Q1 (23)			Q1	Q1	Q1	Q1	Q1			Q1						Q1	Q1	Q1		
Building 1349	1349MW03R	Q	Modified	Hand	1													Q1, Q3														
Building 1349	1349MW100	Q	Modified	Truck	4		Q					Q (23)			Q	Q	Q	Q	Q1, Q3	Q			Q					Q	Q	Q		
Building 1349	1349MW101	Q	Modified	Hand	1													Q1, Q3														
Building 1349	1349MW102	Q	Modified	Hand	3													Q1, Q3														
Building 1349	1349MW103	Q	Modified	Hand	2		Q1					Q1 (23)			Q1	Q1	Q1	Q1		Q1		Q1						Q1	Q1	Q1		
Building 1349	1349MW104	Q	Modified	Hand	1		Q1					Q1 (23)			Q1	Q1	Q1	Q1		Q1		Q1						Q1	Q1	Q1		
Building 1349	1349MW105	Q	Modified	Hand	2		Q1					Q1 (23)			Q1	Q1	Q1	Q1				Q1						Q1	Q1	Q1		

TPH, PAHs, VOCs, PCBs, chlorinated herbicides, general chemistry parameters, TDS, and dissolved metals have met their post-remediation groundwater monitoring requirements and cleanup levels from the Fill Site 5 RAP for the required frequency of monitoring within 1349MW03R, 1349MW101, and 1349MW102 and were approved for removal prior to the Second Quarter 2006. It is noted that these three wells will be monitored per requirements of the Building 1349 Area CAP, once it is finalized and implemented.

Table 1B
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Presidio of San Francisco, California

Site Name/ID	Well ID	Sampling Information				Analytical Requirements																								Notes/Comments		
		Water Level/Seep Evaluation	Sampling Method ¹	Well Access ²	Sampling Order ³	NDMA	General Chemistry Parameters	Total Organic Carbon	Dissolved Gases ⁴	MBAS	Total Hardness	Molybdenum (from meals container)	Dissolved Metals ^{5,6}	Total Metals ^{5,6} (Not Filtered)	Arsenic III and Arsenic V	Total Dissolved Solids	Dissolved Oxygen ⁷	ORP ⁸	Organochlorine Pesticides	PCBs	VOCs MTBE	BTEX MTBE	PAHs	SVOCs	Total Sulfide ⁹	Cyanide	Chlorinated Herbicides	TPHg	TPHd		TPHfo	TPHss
						1625	various	EPA 9060	EPA 3810 / RSK 175	E425.1		ICP/MS	EPA 6010/6020	EPA 6010/6020	ICP/MS	EPA 160.1	(field probe)	(field probe)	EPA 8081	EPA 8082	EPA 8260 modified	EPA 8021B or 8020	EPA 8310	EPA 8270	EPA 376.2	EPA 9012 modified	EPA 8150	EPA 8015	EPA 3630A		EPA 8015	EPA 3630A
Fill Site 5	LF5GW100	Q1, Q3	Low Flow	Hand	2											Q1, Q3		Q1, Q3														The following sampling locations are included in the Fill Site 5 groundwater monitoring plan; LF5GW100 through LF5GW104, LF5SP100, 1349MW02, 1349MW03R, 1349MW101, and 1349MW102. The frequency of water level / seep evaluation measurements was reduced to semi-annual to match the sampling frequency at this site.
Fill Site 5	LF5GW101	Q1, Q3	Low Flow	Hand	2											Q1, Q3		Q1, Q3														
Fill Site 5	LF5GW102	Q1, Q3	Modified	Hand	1											Q1, Q3		Q1, Q3														
Fill Site 5	LF5GW103	Q1, Q3	Modified	Hand	1											Q1, Q3		Q1, Q3														
Fill Site 5	LF5GW104	Q1, Q3	Modified	Hand	1											Q1, Q3		Q1, Q3														
Fill Site 5	LF5SP100	Q1, Q3	Surface	Hand	2											Q1, Q3		Q1, Q3														Post-remediation groundwater monitoring requirements from the RAP have been met for TPH, PAHs, VOCs, OCPs, and chlorinated herbicides for the required frequency of monitoring and therefore, these analytical compounds are no longer included in the Groundwater Monitoring Program at Landfill 4. Due to recent cleanup level exceedances of dissolved nickel and Aroclor 1260 and fluctuating concentrations of general chemistry parameters in wells LF4GW103 and/or LF4GW104, the Trust will continue to monitor for dissolved metals, PCBs, general chemistry parameters, and TDS as indicated within wells LF4GW103 and LF4GW104.
Landfill 4	LF04GW03	Q	Low Flow	Truck	3																											
Landfill 4	LF4GW100	Q	Low Flow	Truck	1																											
Landfill 4	LF4GW101	Q	Low Flow	Truck	1																											
Landfill 4	LF4GW102	Q	Modified	Hand	2																											
Landfill 4	LF4GW103	Q	Modified	Hand	1		Q					Q (14)			Q	Q			Q1, Q3													
Landfill 4	LF4GW104	Q	Modified	Hand	1		Q					Q (14)			Q	Q			Q1, Q3													
Landfill 4	LF4GW105	Q	Modified	Hand	1																											
Landfill 4	LF4GW106	Q	Modified	Truck	1																											

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Site Name/ID	Well ID	Sampling Information				Analytical Requirements																								Notes/Comments			
		Water Level/Seep Evaluation	Sampling Method ¹	Well Access ²	Sampling Order ³	NDMA	General Chemistry Parameters	Total Organic Carbon	Dissolved Gases ⁴	MBAS	Total Hardness	Molybdenum (from metals container)	Dissolved Metals ^{5,6}	Total Metals ^{5,6} (Not Filtered)	Arsenic III and Arsenic V	Total Dissolved Solids	Dissolved Oxygen ⁷	ORP ⁸	Organochlorine Pesticides	PCBs	VOCs MTBE	BTEX MTBE	PAHs	SVOCs	Total Sulfide ⁹	Cyanide	Chlorinated Herbicides	TPHg	TPHd		TPHfo	TPHfs	
						1625	various	EPA 9060	EPA 3810/ RSK 175	E425.1		ICP/MS	EPA 6010/6020	EPA 6010/6020	ICP/MS	EPA 160.1	(field probe)	(field probe)	EPA 8081	EPA 8082	EPA 8260 modified	EPA 8021B or 8020	EPA 8310	EPA 8270	EPA 376.2	EPA 9012 modified	EPA 8150	EPA 8015	EPA 8015 EPA 3630A		EPA 8015 EPA 3630A	EPA 8015	
Comm / PX	600GW101	Q	Low-Flow	Truck	3		Q					Q (+14)			Q	Q	Q				Q			Q			Q	Q	Q		PAH and VOC analyses within 600GW108 will be conducted annually in the First Quarter, along with other site wells, because PAHs have never been detected and no significant detections have been reported in the last four sampling events within 600GW108. The Final CAP for the Comm/PX Area was submitted to the regulatory agencies for review in December 2005. Groundwater sampling will continue to be conducted at the Commissary/PX Area as shown until the CAP is currently being implemented. Sampling will not be conducted while the CAP is being implemented. Sampling will resume, in accordance with the CAP, once the implementation is complete (sampling is expected to resume First Quarter 2007). ORP is measured for the evaluation of redox conditions, in accordance with recommendations from the Technical Memorandum on Arsenic and Other Metals in Groundwater at Three CAP Sites.		
Comm / PX	600GW102	Q	Normal	Truck	3		Q†					Q† (+14)			Q†	Q†	Q†					Q†			Q†			Q†	Q†	Q†			
Comm / PX	600GW103	Q	Normal	Truck	3		Q†					Q† (+14)			Q†	Q†	Q†					Q†			Q†			Q†	Q†	Q†			
Comm / PX	600GW104	Q	Normal	Truck	3		Q†					Q† (+14)			Q†	Q†	Q†					Q†			Q†			Q†	Q†	Q†			
Comm / PX	600GW105	Q	Low-Flow	Truck	3		Q					Q (+14)			Q	Q	Q					Q†			Q			Q	Q	Q			
Comm / PX	600GW106	Q	Low-Flow	Truck	3		Q					Q (+14)			Q	Q	Q					Q†			Q			Q	Q	Q			
Comm / PX	600GW107	Q	Modified	Truck	3		Q†					Q† (+14)			Q†	Q†	Q†					Q†			Q†			Q†	Q†	Q†			
Comm / PX	600GW108	Q	Low-Flow	Hand	3		Q					Q (+14)			Q	Q	Q					Q†			Q			Q	Q	Q			
Comm / PX	600GW109	Q	Normal	Hand	3		Q†					Q† (+14)			Q†	Q†	Q†					Q†			Q†			Q†	Q†	Q†			
Comm / PX	610GW101	Q	Low-Flow	Truck	1		Q					Q (+14)			Q	Q	Q				Q			Q			Q	Q	Q				
Comm / PX	610GW102	Q	Low-Flow	Truck	2		Q					Q (+14)			Q	Q	Q				Q			Q			Q	Q	Q				
Comm / PX	610GW103	Q	Low-Flow	Truck	3		Q					Q (+14)			Q	Q	Q				Q			Q			Q	Q	Q				
Comm / PX	610SP01	Q	Surface	Hand	3		Q					Q (+14)	Q (+14)		Q	Q	Q				Q			Q			Q	Q	Q				
Comm / PX	610SP02	Q	Surface	Hand	3		Q					Q (+14)	Q (+14)		Q	Q	Q				Q			Q			Q	Q	Q				
Landfill E	DAEGW03	Q1	Normal	Hand	1		Q1					Q1 (22)			Q1	Q1		Q1	Q1	Q1		Q1					Q1	Q1	Q1		A focused feasibility study has been prepared for Landfill E. The reduction to annual sampling at Landfill E monitoring wells (DAEGW101 through DAEGW104) until the Landfill E RAP has been implemented has been approved. The proposed sampling frequency at Landfill E seep (DAESP03) has been increased to quarterly beginning with the First Quarter 2006 to assess seasonal and variable conditions. The frequency of water level evaluation measurements was reduced to annual to match the sampling frequency for groundwater wells at this site.		
Landfill E	DAEGW04	Q1	Normal	Hand	2		Q1					Q1 (22)			Q1	Q1				Q1		Q1						Q1	Q1	Q1			
Landfill E	DAEGW05	Q1	Normal	Hand	1		Q1					Q1 (22)			Q1	Q1		Q1	Q1	Q1		Q1					Q1	Q1	Q1				
Landfill E	DAEGW06	Q1	Modified	Hand	1		Q1					Q1 (22)			Q1	Q1				Q1		Q1							Q1	Q1		Q1	
Landfill E	DAEGW07	Q1	Low Flow	Hand	3		Q1					Q1 (22)			Q1	Q1	Q1	Q1	Q1	Q1		Q1	Q1		Q1			Q1	Q1	Q1			
Landfill E	DAEGW08	Q1	Normal	Hand	1		Q1					Q1 (22)			Q1	Q1		Q1	Q1	Q1		Q1						Q1	Q1	Q1			
Landfill E	DAESP03	Q	Surface	Hand	1		Q			Q	Q	Q	Q (23)	Q (23)	Q	Q		Q	Q	Q		Q			Q			Q	Q	Q			
Landfill E	DAEGW101	Q1	Modified	Hand	1		Q1			Q1	Q1	Q1	Q1 (23)		Q1	Q1		Q1	Q1	Q1		Q1						Q1	Q1	Q1			
Landfill E	DAEGW102	Q1	Modified	Hand	2		Q1			Q1	Q1	Q1	Q1 (23)		Q1	Q1		Q1	Q1	Q1		Q1						Q1	Q1	Q1			
Landfill E	DAEGW103	Q1	Normal	Truck	2		Q1			Q1	Q1	Q1	Q1 (23)		Q1	Q1		Q1	Q1	Q1		Q1						Q1	Q1	Q1			
Landfill E	DAEGW104	Q1	Modified	Hand	1		Q1			Q1	Q1	Q1	Q1 (23)		Q1	Q1		Q1	Q1	Q1		Q1						Q1	Q1	Q1			
Landfill E	DAEPZ101	Q1	EM	Hand	--																												
Landfill E	DAEPZ102	Q1	EM	Hand	--																												
Nike Facility	NKGW01	Q1, Q3	Modified	Truck	2	Q1, Q3						Q1 (23)			Q1	Q1, Q3				Q1					Q1		Q1	Q1	Q1			No changes to the Nike Missile Facility monitoring program are currently proposed. The frequency of water level / seep evaluation measurements was reduced to match the sampling frequency at this site.	
Nike Facility	NKGW02	Q1, Q3	Modified	Truck	1	Q1, Q3						Q1 (23)			Q1	Q1, Q3				Q1					Q1		Q1	Q1	Q1				
Nike Facility	NKGW03	Q1, Q3	Low Flow	Truck	1	Q1, Q3						Q1 (23)			Q1	Q1, Q3	Q1, Q3			Q1					Q1		Q1	Q1	Q1				
Nike Facility	NKGW04	Q1, Q3	Modified	Truck	3	Q1, Q3						Q1 (23)			Q1	Q1, Q3				Q1					Q1		Q1	Q1	Q1				
Nike Facility	NKGW05	Q1, Q3	Modified	Truck	2	Q1, Q3						Q1 (23)			Q1	Q1, Q3				Q1					Q1		Q1	Q1	Q1				
Baker Beach Disturbed Areas 1 and 2A	BB1PZ100	Q	Modified	Hand	2		Q					Q (23)	Q (23)			Q		Q					Q						Q	Q		Monitoring will be completed within these piezometers and seep to establish baseline conditions in order to evaluate how construction operations will affect groundwater quality.	
Baker Beach Disturbed Areas 1 and 2A	BB1PZ101	Q	Modified	Hand	1		Q					Q (23)	Q (23)			Q		Q					Q						Q	Q			
Baker Beach Disturbed Areas 1 and 2A	BB2ASW100	Q	Modified	Hand	1		Q					Q (23)	Q (23)			Q		Q					Q						Q	Q			

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						1625	various	EPA 9060	EPA 3810/RSK 175	E425.1		ICP/MS	EPA 6010/6020	EPA 6010/6020	ICP/MS	EPA 160.1	(field probe)	(field probe)	EPA 8081	EPA 8082	EPA 8260 modified	EPA 8021B or 8020	EPA 8310	EPA 8270	EPA 376.2	EPA 9012 modified	EPA 8150	EPA 8015	EPA 8015 EPA 3630A		EPA 8015 EPA 3630A	EPA 8015
Baker Beach Disturbed Area 3	BB3GW100	Q	Modified	Hand	1		Q						Q (22)			Q	Q												Q1, Q3	Q1, Q3	Q1, Q3	Groundwater analyses are conducted in general accordance with the Baker Beach Disturbed Area 3 RAP. Fixed monitoring points BB3SW100 through BB3SW102 are sampled using a disposable bailer and are purged prior to sampling, in accordance with the modified method of purging.
Baker Beach Disturbed Area 3	BB3GW101	Q	Modified	Hand	1		Q						Q (22)			Q	Q											Q	Q	Q		
Baker Beach Disturbed Area 3	BB3PZ101	Q	Modified	Hand	1		Q						Q (22)			Q	Q											Q	Q	Q		
Baker Beach Disturbed Area 3	BB3PZ102	Q	Modified	Hand	1		Q						Q (22)	Q (22)		Q	Q											Q	Q	Q		
Baker Beach Disturbed Area 3	BB3SW100	Q	Modified	Hand	1		Q						Q (22)	Q (22)		Q	Q											Q	Q	Q		
Baker Beach Disturbed Area 3	BB3SW101	Q	Modified	Hand	1		Q						Q (22)	Q (22)		Q	Q											Q1, Q3	Q1, Q3	Q1, Q3		
Baker Beach Disturbed Area 3	BB3SW102	Q	Modified	Hand	1		Q						Q (22)	Q (22)		Q	Q											Q1, Q3	Q1, Q3	Q1, Q3	At the request of the DTSC, piezometer BB3PZ102 and surface water location BB3SW104 were added to the groundwater monitoring program prior to the First Quarter 2006 to evaluate downgradient and surface water dissolved and total metal concentrations.	
Baker Beach Disturbed Area 3	BB3SW104	Q	Surface	Hand	1		Q						Q (22)	Q (22)		Q	Q											Q	Q	Q		
Battery Howe/Wagner	BHWGW01	Q	Low Flow	Truck	3		Q						Q (22)				Q	Q1			Q1											Dissolved metals and general chemistry parameters are proposed-for sampled quarterly analysis-within all Battery Howe/Wagner wells for comparison with data from the new upgradient wells (Mini-CAP Area wells 1213GW101 and 1221GW104).
Battery Howe/Wagner	BHWGW04	Q	Low Flow	Truck	1		Q						Q (22)				Q	Q1			Q1											
Battery Howe/Wagner	BHWGW05	Q	Low Flow	Truck	2		Q						Q (22)				Q	Q1			Q1											
Battery Howe/Wagner	HWGW100	Q	Low Flow	Truck	1		Q						Q (22)				Q	Q1			Q1											
Battery Howe/Wagner	HWGW101	Q	Low Flow	Truck	1		Q						Q (22)				Q	Q1			Q1											
Battery Howe/Wagner	HWGW102	Q	Low Flow	Truck	1		Q						Q (22)				Q	Q1			Q1											

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						1625	various	EPA 9060	EPA 3810 / RSK 175	E425.1		ICP/MS	EPA 6010/6020	EPA 6010/6020	ICP/MS	EPA 160.1	(field probe)	(field probe)	EPA 8081	EPA 8082	EPA 8260 modified	EPA 8021B or 8020	EPA 8310	EPA 8270	EPA 376.2	EPA 9012 modified	EPA 8150	EPA 8015	EPA 8015 EPA 3630A		EPA 8015 EPA 3630A	EPA 8015	
Fill Site 6B	LF6GW100	Q	Modified	Truck	1		Q1					Q1 (23)			Q1	Q1	Q1	Q1	Q1				Q1		Q1			Q1	Q1			A decision document for Fill Site 6B is currently being prepared. The reduction in sampling frequency for Fill Site 6B wells to annual was approved by the stakeholders prior to First Quarter 2004. Fill Site 6A monitoring well LF6GW103 will continue to be sampled in order to provide upgradient groundwater data for the Building 1065 Area. Fill Site 6A wells are sampled in accordance with the RAP.	
Fill Site 6B	LF6GW101	Q	Modified	Truck	1		Q1					Q1 (23)			Q1	Q1	Q1	Q1	Q1				Q1		Q1			Q1	Q1				
Fill Site 6A	LF6GW103	Q	Modified	Truck	1		Q					Q (23)			Q	Q	Q	Q	Q				Q		Q1			Q	Q				
Fill Site 6A	LF6GW104	Q	Modified	Hand	TBD		Q					Q (23)			Q	Q	Q						Q		Q1				Q	Q			
Fill Site 6A	LF6GW105	Q	Modified	Hand	TBD		Q					Q (23)			Q	Q	Q								Q1								
Fill Site 6A	LF6GW106	Q	Modified	Hand	TBD		Q					Q (23)			Q	Q	Q						Q		Q1				Q	Q			
Fill Site 6A	LF6PZ101	Q	EM	Hand	TBD																												TPHd, TPHfo and PAHs are sampled at monitoring wells LF6GW104 and LF6GW106 to assess impacts from the nearby FDS lines.
Fill Site 6A	LF6PZ102	Q	EM	Hand	TBD																												
Fill Site 6A	LF6PZ103	Q	EM	Hand	TBD																												
Fill Site 6A	LF6PZ104	Q	EM	Hand	TBD																												
Fill Site 6A	LF6PZ105	Q	EM	Hand	TBD																												
Fill Site 6A	LF6PZ106	Q	EM	Hand	TBD																												
Bldg 1065	1065PZ1A	Q	Low Flow	Truck	4		Q					Q (15)			Q	Q	Q				Q				Q			Q	Q	Q			A-Draft The recommended Final CAP for the Building 1065 Area has been submitted to the regulatory agencies for review. Building 1065 monitoring wells and piezometers will continue to be sampled as shown-until implementation of the Building 1065 CAP, after which sampling will be in accordance with CAP requirements. Dissolved antimony was also added to the metals list to evaluate recent detections during the Building 1065 investigation.
Bldg 1065	1065PZ1B	Q	Normal	Truck	1		Q					Q (15)			Q	Q	Q				Q				Q			Q	Q	Q			
Bldg 1065	1065PZ2A	Q	Low Flow	Truck	3		Q					Q (15)			Q	Q	Q				Q				Q			Q	Q	Q			
Bldg 1065	1065PZ2B	Q	Normal	Truck	1		Q1					Q1 (15)			Q1	Q1	Q1				Q1				Q1			Q1	Q1	Q1			
Bldg 1065	1065PZ3A	Q	Low Flow	Truck	2		Q1					Q1 (15)			Q1	Q1	Q1				Q1				Q1			Q1	Q1	Q1			
Bldg 1065	1065PZ3B	Q	Normal	Truck	3		Q1					Q1 (15)			Q1	Q1	Q1				Q1				Q1			Q1	Q1	Q1			
Bldg 1065	1065PZ4A	Q	Low Flow	Truck	3		Q					Q (15)			Q	Q	Q				Q				Q			Q	Q	Q			
Bldg 1065	1065PZ4B	Q	Modified	Truck	1		Q1					Q1 (15)			Q1	Q1	Q1				Q1				Q1			Q1	Q1	Q1			
Bldg 1065	1065PZ5AR	Q	Normal	Truck	3		Q					Q (15)			Q	Q	Q				Q				Q			Q	Q	Q			
Bldg 1065	1065PZ5B	Q	Modified	Truck	3		Q1					Q1 (15)			Q1	Q1	Q1				Q1				Q1			Q1	Q1	Q1			
Bldg 1065	1065PZ6A	Q	Modified	Truck	4		Q1					Q1 (15)			Q1	Q1	Q1				Q1				Q1			Q1	Q1	Q1			
Bldg 1065	1065PZ6B	Q	Normal	Truck	1		Q1					Q1 (15)			Q1	Q1	Q1				Q1				Q1			Q1	Q1	Q1			
Bldg 1065	1065PZ7A	Q	Modified	Truck	1		Q1					Q1 (15)			Q1	Q1	Q1				Q1				Q1			Q1	Q1	Q1			
Bldg 1065	1065PZ7B	Q	Modified	Truck	1		Q1					Q1 (15)			Q1	Q1	Q1				Q1				Q1			Q1	Q1	Q1			
Bldg 1065	1065MW9A	Q	Normal	Truck	3		Q					Q (15)			Q	Q	Q				Q				Q			Q	Q	Q			
Bldg 1065	1065MW9B	Q	Normal	Truck	3		Q					Q (15)			Q	Q	Q				Q				Q			Q	Q	Q			
Bldg 1065	1065MW10A	Q	Normal	Truck	3		Q1					Q1 (15)			Q1	Q1	Q1				Q1				Q1			Q1	Q1	Q1			
Bldg 1065	1065MW10B	Q	Normal	Truck	3		Q1					Q1 (15)			Q1	Q1	Q1				Q1				Q1			Q1	Q1	Q1			
Bldg 1065	1065MW11A	Q	Normal	Truck	3		Q1					Q1 (15)			Q1	Q1	Q1				Q1				Q1			Q1	Q1	Q1			
Bldg 1065	1065MW11B	Q	Normal	Truck	3		Q1					Q1 (15)			Q1	Q1	Q1				Q1				Q1			Q1	Q1	Q1			
Bldg 1065	1065MW101	Q	Low Flow	Truck	3		Q					Q (15)			Q	Q	Q			Q					Q			Q	Q	Q			
Bldg 1065	1065MW102	Q	Low Flow	Truck	3		Q					Q (15)			Q	Q	Q			Q					Q			Q	Q	Q			
Bldg 1065	1047MW101	Q	Normal	Truck	1		Q1					Q1 (15)			Q1	Q1	Q1				Q				Q1			Q				Q ¹⁰	

Table 1B
Proposed Sampling Schedule Fourth Quarter 2006
Presidio-wide Groundwater Monitoring Project
Presidio of San Francisco, California

Site Name/ID	Well ID	Sampling Information				Analytical Requirements																								Notes/Comments		
		Water Level/Seep Evaluation	Sampling Method ¹	Well Access ²	Sampling Order ³	NDMA	General Chemistry Parameters	Total Organic Carbon	Dissolved Gases ⁴	MBAS	Total Hardness	Molybdenum (from metals container)	Dissolved Metals ^{5,6}	Total Metals ^{5,6} (Not Filtered)	Arsenic III and Arsenic V	Total Dissolved Solids	Dissolved Oxygen ⁷	ORP ⁸	Organochlorine Pesticides	PCBs	VOCs MTBE	BTEX MTBE	PAHs	SVOCs	Total Sulfide ⁹	Cyanide	Chlorinated Herbicides	TPHg	TPHd		TPHfo	TPHfs
						1625	various	EPA 9060	EPA 3810 / RSK 175	E425.1		ICP/MS	EPA 6010/6020	EPA 6010/6020	ICP/MS	EPA 160.1	(field probe)	(field probe)	EPA 8081	EPA 8082	EPA 8260 modified	EPA 8021B or 8020	EPA 8310	EPA 8270	EPA 376.2	EPA 9012 modified	EPA 8150	EPA 8015	EPA 8015 EPA 3630A		EPA 8015 EPA 3630A	EPA 8015
Bldg 207/231	207GW03	Q	Normal	Truck	2		Q1					Q1 (14)			Q1	Q1	Q1			Q1					Q1			Q1	Q1	Q1		The Recommended Final CAP for the Building 207/231 Area CAP has been submitted to the stakeholders. The reduction in sampling frequency to annual (during First Quarter, except monitoring well 231GW09) for all wells until the CAP is implemented has been approved. Monitoring wells 231GW09, 231GW10, 231GW13, 231GW20, 231GW21, 231GW22, 231GW26, 231PZ01, and 231PZ04 will be sampled at least two months prior to the Building 231/207 Area remedial action in order to establish a baseline of pre-construction TPH and arsenic data (currently anticipated to be during the Second Quarter 2007), which is scheduled to begin in August 2007, in accordance with the Building 207/231 CAP.
Bldg 207/231	231GW06	Q	Normal	Truck	1		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1			
Bldg 207/231 (Fill Site 6A)	231GW09	Q	Modified	Truck	1		Q					Q (23)			Q	Q	Q			Q				Q			Q	Q	Q	Q		
Bldg 207/231	231GW10	Q	Low Flow	Truck	2		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1	Q1		
Bldg 207/231	231GW11	Q	Modified	Truck	1		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1	Q1		
Bldg 207/231	231GW13	Q	Normal	Truck	1		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1	Q1		
Bldg 207/231	231GW15	Q	Normal	Truck	1		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1	Q1		
Bldg 207/231	231GW16	Q	Low Flow	Truck	3		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1	Q1		
Bldg 207/231	231GW17	Q	Normal	Truck	2		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1	Q1		
Bldg 207/231	231GW18	Q	Normal	Truck	2		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1	Q1		
Bldg 207/231	231GW19	Q	Normal	Truck	1		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1	Q1		
Bldg 207/231	231GW20	Q	Normal	Truck	2		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1	Q1		
Bldg 207/231	231GW21	Q	Low Flow	Truck	4		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1	Q1		
Bldg 207/231	231GW22	Q	Low Flow	Truck	4		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1	Q1		
Bldg 207/231	231GW23	Q	Modified	Truck	2		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1	Q1		
Bldg 207/231	231GW24	Q	Normal	Truck	1		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1	Q1		
Bldg 207/231	231GW25	Q	Modified	Truck	2		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1	Q1		
Bldg 207/231	231GW26	Q	Normal	Truck	2		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1	Q1		
Bldg 207/231	231GW27	Q	Normal	Truck	2		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1	Q1		
Bldg 207/231	231GW28	Q	Modified	Truck	2		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1	Q1		
Bldg 207/231	231GW29	Q	Normal	Truck	2		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1	Q1		
Bldg 207/231	231GW30	Q	Low Flow	Truck	3		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1	Q1		
Bldg 207/231	231PZ01	Q	Low Flow	Truck	4		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1	Q1		
Bldg 207/231	231PZ02	Q	Low Flow	Truck	4		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1	Q1		
Bldg 207/231	231PZ03	Q	Low Flow	Truck	4		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1	Q1		
Bldg 207/231	231PZ04	Q	Low Flow	Truck	4		Q1					Q1 (14)			Q1	Q1	Q1			Q1				Q1			Q1	Q1	Q1	Q1		
Bldg 207/231	OW-1	Q	EM	Truck																												
Bldg 1027/1065	1027MW01	Q	EM	Truck																												
Bldg 1027/1065	1027MW03	Q	EM	Truck																												
Mini-CAP Areas	FM14EX07GW102	Q	Normal	Truck	1											Q						Q	Q					Q	Q	Q		VOCs were detected within 1213GW101 during the First Quarter 2006, therefore, VOC analyses will continue on a quarterly basis within this well. Additionally, since BTEX-MTBE is included in the VOC list, this analyses has been removed. —The PAH, fluoranthene, was detected within FM14EX07GW102 and 514AGW101 during the First Quarter 2006 and therefore, PAH analyses are scheduled to be conducted quarterly within wells with detections (FM14EX07GW101, FM14EX07GW102, 1213GW101, and 514AGW101). TPH compounds will continue to be analyzed within wells with detections (FM14EX07GW101, FM14EX07GW102, 1213GW101, and 514AGW101) to establish a baseline of data.
Mini-CAP Areas	FM14EX07GW101	Q	Normal	Truck	1											Q						Q	Q					Q	Q	Q		
Mini-CAP Areas	1260GW102	Q	Normal	Truck	1																											
Mini-CAP Areas	1260GW103	Q	Normal	Truck	1																											
Mini-CAP Areas	1260GW101	Q	Normal	Truck	1																											
Mini-CAP Areas	1213GW101	Q	Normal	Truck	3		Q					Q (22)				Q				Q		Q					Q	Q	Q	Q		
Mini-CAP Areas	1221GW103	Q	Normal	Truck	1																											
Mini-CAP Areas	1221GW102	Q	Normal	Truck	2																											
Mini-CAP Areas	1221GW104	Q	Normal	Truck	1		Q					Q (22)				Q																
Mini-CAP Areas	1221GW101	Q	Normal	Truck	1																											
Mini-CAP Areas	514AGW101	Q	Normal	Truck	1											Q						Q	Q					Q	Q	Q		Quarterly analysis of dissolved metals and general chemistry parameters are proposed for wells 1213GW101 and 1221GW104 to evaluate conditions upgradient of Battery Howe/Wagner.

Table 1B
Proposed Sampling Schedule Fourth Quarter 2006
Presidio-wide Groundwater Monitoring Project
Presidio of San Francisco, California

Site Name/ID	Well ID	Sampling Information					Analytical Requirements																				Notes/Comments					
		Water Level/Seep Evaluation	Sampling Method ¹	Well Access ²	Sampling Order ³	NDMA	General Chemistry Parameters	Total Organic Carbon	Dissolved Gases ⁴	MBAS	Total Hardness	Molybdenum (from metals container)	Dissolved Metals ^{5,6}	Total Metals ^{5,6} (Not Filtered)	Arsenic III and Arsenic V	Total Dissolved Solids	Dissolved Oxygen ⁷	ORP ⁸	Organochlorine Pesticides	PCBs	VOCs MTBE	BTEX MTBE	PAHs	SVOCs	Total Sulfide ⁹	Cyanide		Chlorinated Herbicides	TPHg	TPHd	TPHfo	TPHss
						1625	various	EPA 9060	EPA 3810/RSK 175	E425.1		ICP/MS	EPA 6010/6020	EPA 6010/6020	ICP/MS	EPA 160.1	(field probe)	(field probe)	EPA 8081	EPA 8082	EPA 8260 modified	EPA 8021B or 8020	EPA 8310	EPA 8270	EPA 376.2	EPA 9012 modified		EPA 8150	EPA 8015	EPA 8015 EPA 3630A	EPA 8015 EPA 3630A	EPA 8015
Upgradient	UBR01GW01	Q1	EM	Truck																												Based on the large historical data set, the frequency of water level measurements has been reduced to annual.
Upgradient	UBR02GW01	Q1	EM	Truck																												
Upgradient	UBR02GW02	Q1	EM	Truck																												
Upgradient	UBR03GW01	Q1	EM	Truck																												
Upgradient	UBR03GW02	Q1	EM	Truck																												
Tennessee Hollow	TH-1	Q1	EM	Hand																												
Tennessee Hollow	TH-2	Q1	EM	Truck																												
Tennessee Hollow	TH-3	Q1	EM	Truck																												
Tennessee Hollow	TH-4	Q1	EM	Hand																												
Tennessee Hollow	PGFGW100	Q1	EM	Truck																												
Tennessee Hollow	10GW100	Q1	EM	Truck																												
Landfill 10	LF10GW01	Q	Modified	Hand	1		Q1					Q1 (23)			Q1	Q1					Q1							Q	Q	Q		A Focused Feasibility Study (FFS) for Landfills 8 and 10 has been prepared. The Trust is preparing a RAP for the two landfill sites, which is anticipated to be distributed to stakeholders in 2007. LF10GW02 and LF10SP01 could not be sampled during Q1, Q2, or Q3 2006 due to thick vegetation. The brush has been cleared and samples will be collected at these locations during Q4 2006 if the brush can be cleared. TPH analyses have been increased from annual to quarterly in all Landfill 10 wells and seep due to recent detections in groundwater at Landfill 10. The TPH data will be evaluated in the RAP. LF10GW02 and LF10SP01 could not be sampled during Q2 2006 due to continued obstruction by thick vegetation.
Landfill 10	LF10GW02	Q	Normal	Hand	1		Q4*					Q4* (23)			Q4*	Q4*					Q4*						Q	Q	Q			
Landfill 10	LF10GW03	Q	Modified	Hand	2		Q1					Q1 (23)			Q1	Q1					Q1						Q	Q	Q			
Landfill 10	LF10GW100	Q	Normal	Truck	2		Q1					Q1 (23)			Q1	Q1					Q1						Q	Q	Q			
Landfill 10	LF10SP01	Q	Surface	Hand	2		Q4*					Q4* (23)	Q4* (23)		Q4*	Q4*					Q4*						Q	Q	Q			

Notes

1 - Normal, Low Flow, Modified, and Surface water sampling techniques. A description of sampling techniques can be found in the *Field Sampling Plan, Presidio Groundwater Monitoring Project* (Treadwell & Rollo, 2001a).

2 - Truck - Well accessible by truck
LIV - Low Impact Vehicle - Well accessible by LIV or hand truck only
Hand - Well accessible by hand truck only

3 - Sampling Order: At each site sample the wells with the lowest number first. For example, sample the number 1 wells first, the number 2 wells second etc. The following key explains the numbering system.

1 - Wells without significant detections of chemicals of concern
2 - Wells with occasional detections of low concentrations chemicals of concern
3 - Wells with consistent or recent detections of low concentrations chemicals of concern
4 - Wells with high concentrations of chemicals of concern
5 - Wells with very high concentrations of chemicals of concern. Potential for free phase product.

4 - Dissolved gases include methane, ethane, and ethene.

5 - Beginning with Second Quarter 2003, variance was granted from QAPP specified reporting limit requirements for seven metals.

6 - The table has been reformatted to one dissolved metals column. The number of dissolved metals proposed for analysis are denoted by parentheses. For example, Q (23) indicates the 23 metals list should be analyzed on a quarterly basis. The metals associated with each metals list are detailed below.

23 Metals List - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Ti, V, and Zn.
22 Metals List - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Ti, V, and Zn.
15 Metals List - Al, Sb, As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Pb, Ni and Zn.
14 Metals List - Al, As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Pb, Ni and Zn.
9 Metals List - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn.
8 Metals List - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn.
7 Metals List - As, Cr, Cd, Cu, Pb, Ni and Zn.
3 Metals List - Al, Fe, and Cr.

7 - Dissolved Oxygen (DO) concentration will be included in field sampling logs. DO values should be recorded immediately before sample collection.

8 - Oxidation-Reduction Potential (ORP) is measured within all wells proposed to be sampled using the low flow method using a flow through cell. For specified wells identified to be sampled by either the normal or modified methods and proposed for ORP measurements, ORP will be measured using a down-hole meter.

9 - Total sulfides are analyzed by the laboratory for all samples collected at the Presidio.

10 - Stoddard Solvent is a specialized formulation of gasoline. Laboratory quantification for Stoddard Solvent is achieved by comparing the shape of the analytical chromatogram within the same carbon range as TPHg for a diagnostic combination of spikes. Since TPHg is also proposed for analysis in this well, the comparison between this well and other sites which may be or have been evaluated for Stoddard Solvent will be maintained. Stoddard Solvent has been specified for this well per the Trust's request. The Trust will evaluate the Stoddard Solvent data as part of their Building 1047 investigation.

Bold red text indicates proposed changes for the Fourth Quarter 2006.

All surface seeps where metals analysis is proposed will have two samples collected; one will be filtered and analyzed for dissolved metals and another one will not be filtered and analyzed for total metals.

EM - Elevation Monitoring only

Surface - Surface Water Sampling per Standard Operating Procedure

Trust - the Presidio Trust will evaluate seep BB3SP01 for flow on a quarterly basis and will inform the sampling crew if a sample can be collected.

Q1, Q3, etc. - Sample during specified quarters only

Q - Sample during all quarters unless otherwise directed

Q4* - Annual sampling has been moved to the Fourth Quarter because samples could not be collected during Q3 2006 due to heavy vegetation.

TPHg, TPHd, TPHfo, TPHss: Total Petroleum Hydrocarbons as gasoline, diesel, fuel oil, and stoddard solvent - EPA 3630A: Silica Gel Cleanup Step

General Chemistry Parameters; Alkalinity (total), bicarbonate, carbonate, chloride, fluoride, nitrate+nitrite (as N), sulfate

NDMA - N-nitrosodimethylamine

TBD - To Be Determined

Table 2A
Groundwater Elevation Summary for Presidio Monitoring Wells
Elevations Collected on 14 August 2006
Presidio of San Francisco, California

Site	Well ID	Time	Average Depth to Water ¹ (feet)	Top of Casing Elevation ² (feet PLLW)	Groundwater Elevation ² (feet PLLW)	Well Type	Water Level Frequency
Building 900s Area	937GW06	13:12	5.64	11.05	5.41	MW	Q
Building 900s Area	937GW07 ³	12:50	8.79	13.94	5.15	MW	Q
Building 900s Area	937GW12	13:02	2.49	10.34	7.85	MW	Q
Building 900s Area	937GW15	12:53	7.07	12.90	5.83	MW	Q
Building 900s Area	937GW32R	13:21	5.10	10.60	5.50	MW	Q
Building 900s Area	937GW35	12:58	7.09	11.64	4.55	MW	Q
Building 900s Area	937GW37	12:56	6.91	12.74	5.83	MW	Q
Building 900s Area	937GW38	13:05	4.06	10.23	6.17	MW	Q
Building 900s Area	937GW39	13:03	7.46	12.49	5.03	MW	Q
Building 900s Area	937GW42	13:17	5.20	10.62	5.42	MW	Q
Building 900s Area	937GW101	12:39	6.35	11.81	5.46	MW	Q
Building 900s Area	937GW102	12:42	6.20	11.69	5.49	MW	Q
Building 900s Area	937GW103	12:46	6.05	11.56	5.51	MW	Q
Building 900s Area	937GW104	13:05	6.65	11.52	4.87	MW	Q
Building 900s Area	937GW105	13:07	6.40	11.50	5.10	MW	Q
Building 900s Area	937GW106	12:50	10.10	15.20	5.10	MW	Q
Building 900s Area	937GW107	12:53	10.30	15.11	4.81	MW	Q
Building 900s Area	937GW108	13:12	4.84	12.11	7.27	MW	Q
Building 900s Area	950GW108	13:00	6.82	11.60	4.78	MW	Q
Building 900s Area	979GW109	12:49	6.35	10.62	4.27	MW	Q
Building 900s Area	979GW110	12:52	6.19	10.62	4.43	MW	Q
Building 900s Area	979GW111R	12:41	15.34	19.69	4.35	MW	Q
Building 900s Area	979GW112	12:38	15.40	19.72	4.32	MW	Q
Building 900s Area	979GW113	12:46	6.23	10.41	4.18	MW	Q
Building 900s Area	979GW114	12:40	6.55	10.53	3.98	MW	Q
Building 900s Area	979GW115	12:30	8.07	12.26	4.19	MW	Q
Building 900s Area	979GW116	12:33	8.00	12.19	4.19	MW	Q
Building 900s Area	979GW117	12:30	9.83	12.17	2.34	MW	Q
Landfill 8	LF08GW01	14:42	21.74	234.54	212.80	MW	Q
Landfill 8	LF08GW02B	14:52	47.70	225.27	177.57	MW	Q
Landfill 8	LF08GW03	14:48	37.24	230.41	193.17	MW	Q
Landfill 8	LF08GW04	14:56	36.20	234.70	198.50	MW	Q
Landfill 8	LF08GW06	14:46	20.62	234.31	213.69	MW	Q
Landfill 8	LF08PZ01	14:40	13.90	234.34	220.44	PZ	Q
Landfill 8	LF08PZ02	14:50	26.85	234.62	207.77	PZ	Q
Fill Site 1	LF01GW01	12:15	7.09	105.31	98.22	MW	Q
Fill Site 1	LF01GW02	12:05	20.55	98.98	78.43	MW	Q
Fill Site 1	LF01GW03	13:57	44.76	151.82	107.06	MW	Q
Fill Site 1	LF01GW04	13:50	50.65	159.39	108.74	MW	Q
Fill Site 1	LF01GW05	12:00	7.83	83.72	75.89	MW	Q
Fill Site 1	LF01GW06	13:53	59.65	145.23	85.58	MW	Q
Fill Site 1	LF01GW07	13:48	52.57	162.00	109.43	MW	Q
El Polin Spring	EPSP01 ⁴	12:00	Running	NM	NM	Seep	Q
Landfill 2	LF02GW01	12:04	0.80	98.57	97.77	MW	Q
Landfill 2	LF02GW02	12:07	3.15	101.99	98.84	MW	Q
Landfill 2	LF02GW04	13:40	19.24	172.60	153.36	MW	Q

Table 2A
Groundwater Elevation Summary for Presidio Monitoring Wells
Elevations Collected on 14 August 2006
Presidio of San Francisco, California

Site	Well ID	Time	Average Depth to Water ¹ (feet)	Top of Casing Elevation ² (feet PLLW)	Groundwater Elevation ² (feet PLLW)	Well Type	Water Level Frequency
Tennessee Hollow	10GW100	13:45	42.79	76.88	34.09	MW	Q
Tennessee Hollow	PGFGW100	14:00	34.50	133.71	99.21	MW	Q
Tennessee Hollow	TH-1	14:21	15.48	80.76	65.28	MW	Q
Tennessee Hollow	TH-2	14:07	52.12	111.26	59.14	MW	Q
Tennessee Hollow	TH-3	12:14	7.14	64.68	57.54	MW	Q
Tennessee Hollow	TH-4	14:15	0.48	44.59	44.11	MW	Q
Upgradient	UBR01GW01 ⁵	14:35	NM	164.71	NM	MW	Q
Upgradient	UBR02GW01	14:15	8.71	253.39	244.68	MW	Q
Upgradient	UBR02GW02	14:10	8.91	253.56	244.65	MW	Q
Upgradient	UBR03GW01	14:17	33.45	171.22	137.77	MW	Q
Upgradient	UBR03GW02	14:15	15.13	170.96	155.83	MW	Q
Building 1349	1349MW01	10:35	22.79	300.44	277.65	MW	Q
Building 1349	1349MW02	11:10	27.25	311.22	283.97	MW	Q
Building 1349	1349MW03R	10:56	24.67	304.13	279.46	MW	Q
Building 1349	1349MW100	11:13	25.37	309.60	284.23	MW	Q
Building 1349	1349MW101	10:53	22.75	311.63	288.88	MW	Q
Building 1349	1349MW102	10:48	17.90	305.68	287.78	MW	Q
Building 1349	1349MW103	11:15	31.11	318.07	286.96	MW	Q
Building 1349	1349MW104	10:55	28.19	314.58	286.39	MW	Q
Building 1349	1349MW105	11:00	24.38	312.05	287.67	MW	Q
Fill Site 5	LF5GW100	10:32	6.62	229.74	223.12	MW	Q
Fill Site 5	LF5GW101	10:38	4.80	234.36	229.56	MW	Q
Fill Site 5	LF5GW102	10:59	24.57	294.76	270.19	MW	Q
Fill Site 5	LF5GW103	11:02	6.98	279.12	272.14	MW	Q
Fill Site 5	LF5GW104	11:06	19.75	286.05	266.30	MW	Q
Fill Site 5	LF5SP100 ⁴	12:45	Not Flowing	NM	NM	Seep	Q
Landfill E	DAEGW03	11:53	52.68	107.48	54.80	MW	Q
Landfill E	DAEGW04	13:59	41.15	94.38	53.23	MW	Q
Landfill E	DAEGW05	11:35	51.45	105.65	54.20	MW	Q
Landfill E	DAEGW06	12:04	12.67	119.26	106.59	MW	Q
Landfill E	DAEGW07	11:20	9.40	75.66	66.26	MW	Q
Landfill E	DAEGW08	11:23	18.34	71.66	53.32	MW	Q
Landfill E	DAEGW101	11:32	39.09	107.09	68.00	MW	Q
Landfill E	DAEGW102	12:09	11.50	116.72	105.22	MW	Q
Landfill E	DAEGW103	11:59	28.47	111.73	83.26	MW	Q
Landfill E	DAEGW104	12:06	15.53	120.28	104.75	MW	Q
Landfill E	DAEPZ101	12:19	23.73	113.83	90.10	PZ	Q
Landfill E	DAEPZ102	11:44	27.88	110.09	82.21	PZ	Q
Landfill E	DAESP03 ⁴	11:36	Not Flowing	NM	NM	Seep	Q
Nike Facility	NKGW01	10:10	29.11	278.38	249.27	MW	Q
Nike Facility	NKGW02	9:52	17.34	312.00	294.66	MW	Q
Nike Facility	NKGW03	10:26	14.54	334.60	320.06	MW	Q
Nike Facility	NKGW04	9:58	8.82	299.60	290.78	MW	Q
Nike Facility	NKGW05	10:14	21.78	284.20	262.42	MW	Q
Battery H-W	BHWGW01	11:52	19.90	178.04	158.14	MW	Q
Battery H-W	BHWGW04	11:40	13.69	197.73	184.04	MW	Q
Battery H-W	BHWGW05	11:45	27.69	202.95	175.26	MW	Q
Battery H-W	HWGW100	11:20	23.15	209.68	186.53	MW	Q
Battery H-W	HWGW101	11:28	25.50	214.24	188.74	MW	Q
Battery H-W	HWGW102	11:56	Dry	211.44	174.44 ⁶	MW	Q

Table 2A
Groundwater Elevation Summary for Presidio Monitoring Wells
Elevations Collected on 14 August 2006
Presidio of San Francisco, California

Site	Well ID	Time	Average Depth to Water ¹ (feet)	Top of Casing Elevation ² (feet PLLW)	Groundwater Elevation ² (feet PLLW)	Well Type	Water Level Frequency
Comm/PX	600GW101 ⁷	12:36	NM	10.66	NM	MW	Q
Comm/PX	600GW102	12:50	4.14	10.10	5.96	MW	Q
Comm/PX	600GW103	12:54	3.05	10.31	7.26	MW	Q
Comm/PX	600GW104	13:00	4.21	10.48	6.27	MW	Q
Comm/PX	600GW105	13:04	3.00	17.64	14.64	MW	Q
Comm/PX	600GW106	12:59	4.18	16.04	11.86	MW	Q
Comm/PX	600GW107	12:45	4.34	16.76	12.42	MW	Q
Comm/PX	600GW108	12:50	5.35	12.29	6.94	MW	Q
Comm/PX	600GW109	12:54	4.35	11.67	7.32	MW	Q
Comm/PX	610GW101	12:22	3.37	9.91	6.54	MW	Q
Comm/PX	610GW102	12:36	3.84	10.29	6.45	MW	Q
Comm/PX	610GW103	12:39	4.95	11.13	6.18	MW	Q
Comm/PX	610SP01	11:50	Flowing	NM	NM	Seep	Q
Comm/PX	610SP02	11:58	Flowing	NM	NM	Seep	Q
Fill Site 6	LF6GW100	10:18	12.59	28.73	16.14	MW	Q
Fill Site 6	LF6GW101	10:10	11.63	27.03	15.40	MW	Q
Fill Site 6	LF6GW103	9:59	7.37	18.41	11.04	MW	Q
Fill Site 6	LF6GW104 ⁵	11:19	NM	25.74	NM	MW	Q
Fill Site 6	LF6GW105	9:30	22.15	41.97	19.82	MW	Q
Fill Site 6	LF6GW106	11:51	10.07	25.69	15.62	MW	Q
Fill Site 6	LF6PZ101	12:19	1.23	10.44	9.21	MW	Q
Fill Site 6	LF6PZ102	12:05	0.58	11.59	11.01	MW	Q
Fill Site 6	LF6PZ103	12:08	3.16	14.09	10.93	MW	Q
Fill Site 6	LF6PZ104	12:10	7.17	17.45	10.28	MW	Q
Fill Site 6	LF6PZ105	12:16	0.87	13.75	12.88	MW	Q
Fill Site 6	LF6PZ106	12:13	4.90	15.23	10.33	MW	Q
Building 1065	1047MW101	10:25	4.40	19.92	15.52	MW	Q
Building 1065	1065MW9A	10:39	4.00	13.31	9.31	MW	Q
Building 1065	1065MW9B ⁸	10:43	0.00	13.39	13.39	MW	Q
Building 1065	1065MW10A	10:36	3.96	17.33	13.37	MW	Q
Building 1065	1065MW10B	10:56	3.57	17.40	13.83	MW	Q
Building 1065	1065MW11A	11:07	8.84	23.61	14.77	MW	Q
Building 1065	1065MW11B	11:11	8.50	23.43	14.93	MW	Q
Building 1065	1065MW101	11:35	5.72	13.06	7.34	MW	Q
Building 1065	1065MW102	11:25	5.00	12.83	7.83	MW	Q
Building 1065	1065PZ1A	11:28	5.80	13.30	7.50	PZ	Q
Building 1065	1065PZ1B	11:31	1.03	13.31	12.28	PZ	Q
Building 1065	1065PZ2A	10:49	3.40	12.82	9.42	PZ	Q
Building 1065	1065PZ2B	10:46	1.35	15.56	14.21	PZ	Q
Building 1065	1065PZ3A	10:04	9.38	23.96	14.58	PZ	Q
Building 1065	1065PZ3B	11:15	9.05	23.65	14.60	PZ	Q
Building 1065	1065PZ4A	11:41	5.22	14.19	8.97	PZ	Q
Building 1065	1065PZ4B	11:38	2.58	14.45	11.87	PZ	Q
Building 1065	1065PZ5AR	10:31	3.55	17.38	13.83	PZ	Q
Building 1065	1065PZ5B	11:02	2.19	17.34	15.15	PZ	Q
Building 1065	1065PZ6A	10:14	10.68	26.19	15.51	PZ	Q
Building 1065	1065PZ6B ⁵	11:08	NM	26.36	NM	PZ	Q
Building 1065	1065PZ7A	13:53	3.03	16.11	13.08	PZ	Q
Building 1065	1065PZ7B	13:48	2.64	15.73	13.09	PZ	Q

Table 2A
Groundwater Elevation Summary for Presidio Monitoring Wells
Elevations Collected on 14 August 2006
Presidio of San Francisco, California

Site	Well ID	Time	Average Depth to Water ¹ (feet)	Top of Casing Elevation ² (feet PLLW)	Groundwater Elevation ² (feet PLLW)	Well Type	Water Level Frequency
Building 1027	1027MW01	9:55	8.95	23.10	14.15	MW	Q
Building 1027	1027MW03	9:50	8.98	23.57	14.59	MW	Q
Building 207/231	207GW03	9:06	4.31	9.98	5.67	MW	Q
Building 207/231	231GW06	10:42	5.14	13.86	8.72	MW	Q
Building 207/231	231GW09	9:51	13.47	24.28	10.81	MW	Q
Building 207/231	231GW10	9:14	3.87	11.37	7.50	MW	Q
Building 207/231	231GW11	10:33	2.84	11.11	8.27	MW	Q
Building 207/231	231GW13	9:35	2.81	13.70	10.89	MW	Q
Building 207/231	231GW15	9:29	4.17	11.00	6.83	MW	Q
Building 207/231	231GW16	9:32	5.70	10.80	5.10	MW	Q
Building 207/231	231GW17	9:47	1.48	12.50	11.02	MW	Q
Building 207/231	231GW18	9:45	2.73	12.30	9.57	MW	Q
Building 207/231	231GW19	9:42	4.67	12.20	7.53	MW	Q
Building 207/231	231GW20	10:37	2.28	13.30	11.02	MW	Q
Building 207/231	231GW21	10:40	5.69	13.50	7.81	MW	Q
Building 207/231	231GW22	10:20	6.80	15.88	9.08	MW	Q
Building 207/231	231GW23	9:17	3.53	11.84	8.31	MW	Q
Building 207/231	231GW24	9:38	4.67	11.63	6.96	MW	Q
Building 207/231	231GW25	9:26	4.56	12.45	7.89	MW	Q
Building 207/231	231GW26	10:18	7.33	16.13	8.80	MW	Q
Building 207/231	231GW27	10:12	10.75	20.32	9.57	MW	Q
Building 207/231	231GW28	9:54	3.74	12.03	8.29	MW	Q
Building 207/231	231GW29	9:57	2.81	11.11	8.30	MW	Q
Building 207/231	231GW30	9:21	5.73	12.68	6.95	MW	Q
Building 207/231	231PZ01	10:04	6.38	15.47	9.09	PZ	Q
Building 207/231	231PZ02	10:06	6.12	15.13	9.01	PZ	Q
Building 207/231	231PZ03	10:25	5.75	13.95	8.20	PZ	Q
Building 207/231	231PZ04	10:28	5.42	13.60	8.18	PZ	Q
Building 207/231	OW-1	10:01	2.25	13.28	11.03	PZ	Q
Landfill 10	LF10GW01	9:24	7.15	115.59	108.44	MW	Q
Landfill 10	LF10GW02 ¹⁰	9:52	NM	105.67	NM	MW	Q
Landfill 10	LF10GW03	9:42	40.35	180.80	140.45	MW	Q
Landfill 10	LF10GW100 ⁹	9:32	38.73	175.30	136.57	MW	Q
Landfill 10	LF10SP01 ^{4,10}	9:52	NM	NM	NM	Seep	Q
Landfill 4	LF04GW03	9:54	12.64	292.70	280.06	MW	Q
Landfill 4	LF4GW100	9:38	16.89	299.84	282.95	MW	Q
Landfill 4	LF4GW101	10:00	19.86	297.35	277.49	MW	Q
Landfill 4	LF4GW102	9:16	21.33	329.49	308.16	MW	Q
Landfill 4	LF4GW103	9:33	17.62	304.26	286.64	MW	Q
Landfill 4	LF4GW104	9:28	15.63	297.75	282.12	MW	Q
Landfill 4	LF4GW105	9:57	26.78	300.57	273.79	MW	Q
Landfill 4	LF4GW106	9:44	11.00	311.36	300.36	MW	Q

Table 2A
Groundwater Elevation Summary for Presidio Monitoring Wells
Elevations Collected on 14 August 2006
Presidio of San Francisco, California

Site	Well ID	Time	Average Depth to Water ¹ (feet)	Top of Casing Elevation ² (feet PLLW)	Groundwater Elevation ² (feet PLLW)	Well Type	Water Level Frequency
Baker Beach Disturbed Area 1	BB1PZ100 ¹¹	9:30	3.80	107.48	103.68	PZ	Q
Baker Beach Disturbed Area 1	BB1PZ101 ¹¹	9:20	4.75	68.36	63.61	PZ	Q
Baker Beach Disturbed Area 2A	BB2ASW100 ⁴	--	Not Flowing	28.69	NM	Seep	Q
Baker Beach Disturbed Area 3	BB3GW100	10:00	29.94	193.84	163.90	MW	Q
Baker Beach Disturbed Area 3	BB3GW101	10:05	27.39	158.28	130.89	MW	Q
Baker Beach Disturbed Area 3	BB3PZ101 ¹²	10:29	Dry	156.97	136.97 ⁶	PZ	Q
Baker Beach Disturbed Area 3	BB3PZ102	10:25	6.97	73.18	66.21	PZ	Q
Baker Beach Disturbed Area 3	BB3SW100	10:20	4.85	67.34	62.49	FMP	Q
Baker Beach Disturbed Area 3	BB3SW101	10:25	3.00	78.98	75.98	FMP	Q
Baker Beach Disturbed Area 3	BB3SW102	10:31	Dry	115.39	110.39 ⁶	FMP	Q
Baker Beach Disturbed Area 3	BB3SW104	15:00	Not Flowing	66.07	NM	FMP	Q
Mini-CAP Areas	FM14EX07GW101	12:10	27.05	183.43	156.38	MW	Q
Mini-CAP Areas	FM14EX07GW102	12:04	25.45	173.29	147.84	MW	Q
Mini-CAP Areas	1213GW101	11:15	23.75	221.35	197.60	MW	Q
Mini-CAP Areas	1221GW101	10:58	8.51	223.59	215.08	MW	Q
Mini-CAP Areas	1221GW102	11:08	9.73	223.46	213.73	MW	Q
Mini-CAP Areas	1221GW103	10:50	11.44	223.34	211.90	MW	Q
Mini-CAP Areas	1221GW104	11:04	15.36	223.39	208.03	MW	Q
Mini-CAP Areas	1260GW101	11:40	10.80	145.76	134.96	MW	Q
Mini-CAP Areas	1260GW102	11:35	20.80	145.91	125.11	MW	Q
Mini-CAP Areas	1260GW103	11:38	25.68	145.89	120.21	MW	Q
Mini-CAP Areas	514AGW101	14:16	20.30	201.34	181.04	MW	Q

Notes:

- 1 - Depth to water reading was measured from the northernmost side of the casing.
The elevation presented is the average of three measurements.
- 2 - Elevations reported in Presidio Lower Low Water (PLLW) datum.
- 3 - Top of casing elevation is approximate due to damaged casing.
- 4 - Surface water sample, no groundwater elevation.
- 5 - Unable to locate monitoring well / piezometer on 14 August 2006.
- 6 - Value represents the bottom of casing elevation in PLLW.
- 7 - Well 600GW101 was destroyed in July 2006.
- 8 - Groundwater level was above the top of casing.
- 9 - The lid of monitoring well LF10GW100 has been surveyed by the Trust (175.60 feet PLLW). The elevation difference between the monitoring well lid and the top of casing was measured in the field and has been verified to be 0.30 feet. Therefore, the LF10GW100 top of casing elevation is approximately 175.30 feet PLLW.
- 10 - LF10GW02 and LF10SP01 were inaccessible due to overgrown vegetation.
- 11 - Piezometer used to monitor surface water seep location.

Table 2A
Groundwater Elevation Summary for Presidio Monitoring Wells
Elevations Collected on 14 August 2006
Presidio of San Francisco, California

Site	Well ID	Time	Average Depth to Water ¹ (feet)	Top of Casing Elevation ² (feet PLLW)	Groundwater Elevation ² (feet PLLW)	Well Type	Water Level Frequency
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12 - BB3PZ101 was formerly named BB3SW103. Additionally, the depth to water measurement (14.45 feet) during the Fourth Quarter 2004 was measured from the ground surface. Subsequently, the ground and the top of casing elevations were surveyed and the depth to water measurement was converted to a top of casing measurement (16.80 feet).

13 - Predicted tidal schedules were taken from:

http://tidesandcurrents.noaa.gov/get_predictions.shtml?year=2006&stn=1813+San+Francisco

14 - Actual high and low tidal schedules and magnitudes were taken from:

http://co-ops.nos.noaa.gov/data_res.html by selecting 'U.S. and Global Coastal Stations' then selecting station number '9414290 San Francisco, CA'. Water level magnitudes were taken by selecting the 'W3 - High/Lows' Time Interval and converting the data into the PLLW datum.

Predicted Tidal Schedule on 14 August 2006 ¹⁰:

Low Tide - 4:20 AM (Magnitude 0.7 feet PLLW)

High Tide - 10:55 PM (Magnitude 6.3 feet PLLW)

Observed Tidal Schedule and Magnitude on 14 August 2006 ¹¹:

Low Tide - 4:42 AM (Magnitude 0.79 feet PLLW)

High Tide - 11:18 PM (Magnitude 6.26 feet PLLW)

Acronyms

FMP - Fixed Water Monitoring Point consisting of a slotted PVC casing installed up to 3 feet below ground surface.

MW - Monitoring well

NA - Not applicable

NM - Not measured

PZ - Piezometer

Q - Quarterly monitoring schedule

Table 2B
Groundwater Elevation Summary for Presidio Monitoring Wells
Elevations Collected on 4 December 2006
Presidio of San Francisco, California

Site	Well ID	Time	Average Depth to Water ¹ (feet)	Top of Casing Elevation ^{2,3} (feet PLLW)	Groundwater Elevation ³ (feet PLLW)	Well Type	Water Level Frequency
Building 1349	1349MW01	13:25	24.19	300.44	276.25	MW	Q
Building 1349	1349MW02	15:33	29.88	311.22	281.34	MW	Q
Building 1349	1349MW03R	14:10	26.50	304.13	277.63	MW	Q
Building 1349	1349MW100	13:20	28.01	309.60	281.59	MW	Q
Building 1349	1349MW101	14:00	27.49	311.63	284.14	MW	Q
Building 1349	1349MW102 ⁵	--	NM	305.68	NM	MW	Q
Building 1349	1349MW103	13:05	33.11	318.07	284.96	MW	Q
Building 1349	1349MW104	13:08	30.74	314.58	283.84	MW	Q
Building 1349	1349MW105	13:00	26.88	312.05	285.17	MW	Q
Landfill E	DAESP03 ⁴	14:53	Not Flowing	NM	NM	Seep	Q
Battery H-W	BHWGW01	10:59	20.55	178.04	157.49	MW	Q
Battery H-W	BHWGW04	10:48	14.21	197.73	183.52	MW	Q
Battery H-W	BHWGW05	10:55	28.35	202.95	174.60	MW	Q
Battery H-W	HWGW100	11:10	27.30	209.68	182.38	MW	Q
Battery H-W	HWGW101	11:15	27.86	214.24	186.38	MW	Q
Battery H-W	HWGW102	11:04	Dry	211.44	174.44 ⁶	MW	Q
Fill Site 6	LF6GW100	10:47	13.04	28.73	15.69	MW	Q
Fill Site 6	LF6GW101	10:41	12.08	27.03	14.95	MW	Q
Fill Site 6	LF6GW103	12:30	7.61	18.41	10.80	MW	Q
Fill Site 6	LF6GW104	15:18	10.12	25.74	15.62	MW	Q
Fill Site 6	LF6GW105	12:39	22.55	41.97	19.42	MW	Q
Fill Site 6	LF6GW106	12:45	10.33	25.69	15.36	MW	Q
Fill Site 6	LF6PZ101	13:20	1.06	10.44	9.38	MW	Q
Fill Site 6	LF6PZ102	13:15	0.45	11.59	11.14	MW	Q
Fill Site 6	LF6PZ103	13:12	3.12	14.09	10.97	MW	Q
Fill Site 6	LF6PZ104	13:09	7.21	17.45	10.24	MW	Q
Fill Site 6	LF6PZ105	13:04	0.31	13.75	13.44	MW	Q
Fill Site 6	LF6PZ106	13:00	4.90	15.23	10.33	MW	Q
Building 1065	1047MW101	11:02	5.04	19.92	14.88	MW	Q
Building 1065	1065MW9A	11:29	4.02	13.31	9.29	MW	Q
Building 1065	1065MW9B ⁷	11:32	0.00	13.39	13.39	MW	Q
Building 1065	1065MW10A	11:10	4.11	17.33	13.22	MW	Q
Building 1065	1065MW10B	11:14	3.37	17.40	14.03	MW	Q
Building 1065	1065MW11A	10:50	9.15	23.61	14.46	MW	Q
Building 1065	1065MW11B	10:54	8.53	23.43	14.90	MW	Q
Building 1065	1065MW101	11:49	5.65	13.06	7.41	MW	Q
Building 1065	1065MW102	11:39	4.71	12.83	8.12	MW	Q
Building 1065	1065PZ1A	11:43	5.68	13.30	7.62	PZ	Q
Building 1065	1065PZ1B	11:46	2.18	13.31	11.13	PZ	Q
Building 1065	1065PZ2A	11:24	3.46	12.82	9.36	PZ	Q
Building 1065	1065PZ2B	11:19	1.44	15.56	14.12	PZ	Q
Building 1065	1065PZ3A	10:30	9.78	23.96	14.18	PZ	Q
Building 1065	1065PZ3B	10:26	9.22	23.65	14.43	PZ	Q
Building 1065	1065PZ4A	11:52	5.60	14.19	8.59	PZ	Q
Building 1065	1065PZ4B	11:54	2.40	14.45	12.05	PZ	Q
Building 1065	1065PZ5AR	11:08	3.70	17.38	13.68	PZ	Q
Building 1065	1065PZ5B	11:05	2.50	17.34	14.84	PZ	Q
Building 1065	1065PZ6A ⁵	--	NM	26.19	NM	PZ	Q

Table 2B
Groundwater Elevation Summary for Presidio Monitoring Wells
Elevations Collected on 4 December 2006
Presidio of San Francisco, California

Site	Well ID	Time	Average Depth to Water ¹ (feet)	Top of Casing Elevation ² (feet PLLW)	Groundwater Elevation ³ (feet PLLW)	Well Type	Water Level Frequency
Building 1065	1065PZ6B	10:36	10.95	26.36	15.41	PZ	Q
Building 1065	1065PZ7A	12:02	3.24	16.11	12.87	PZ	Q
Building 1065	1065PZ7B	12:07	2.81	15.73	12.92	PZ	Q
Building 1027	1027MW01	10:23	9.21	23.10	13.89	MW	Q
Building 1027	1027MW03	10:20	9.25	23.57	14.32	MW	Q
Building 207/231	207GW03	13:45	4.21	9.98	5.77	MW	Q
Building 207/231	231GW06	14:02	4.88	13.86	8.98	MW	Q
Building 207/231	231GW09	14:34	13.35	24.28	10.93	MW	Q
Building 207/231	231GW10	13:27	3.45	11.37	7.92	MW	Q
Building 207/231	231GW11	13:50	2.53	11.11	8.58	MW	Q
Building 207/231	231GW13	13:50	2.80	13.70	10.90	MW	Q
Building 207/231	231GW15	13:52	3.92	11.00	7.08	MW	Q
Building 207/231	231GW16	13:55	5.63	10.80	5.17	MW	Q
Building 207/231	231GW17	14:16	1.50	12.50	11.00	MW	Q
Building 207/231	231GW18	14:17	2.63	12.30	9.67	MW	Q
Building 207/231	231GW19	14:19	4.28	12.20	7.92	MW	Q
Building 207/231	231GW20	13:56	2.31	13.30	10.99	MW	Q
Building 207/231	231GW21	13:58	5.68	13.50	7.82	MW	Q
Building 207/231	231GW22	13:39	6.92	15.88	8.96	MW	Q
Building 207/231	231GW23	13:30	3.23	11.84	8.61	MW	Q
Building 207/231	231GW24	14:07	4.45	11.63	7.18	MW	Q
Building 207/231	231GW25	13:38	4.28	12.45	8.17	MW	Q
Building 207/231	231GW26	13:37	7.03	16.13	9.10	MW	Q
Building 207/231	231GW27	14:09	10.54	20.32	9.78	MW	Q
Building 207/231	231GW28	13:13	4.18	12.03	7.85	MW	Q
Building 207/231	231GW29	13:17	2.56	11.11	8.55	MW	Q
Building 207/231	231GW30	13:20	5.75	12.68	6.93	MW	Q
Building 207/231	231PZ01	13:30	6.32	15.47	9.15	PZ	Q
Building 207/231	231PZ02	13:28	5.98	15.13	9.15	PZ	Q
Building 207/231	231PZ03	13:43	5.59	13.95	8.36	PZ	Q
Building 207/231	231PZ04	13:48	5.18	13.60	8.42	PZ	Q
Building 207/231	OW-1	13:23	2.23	13.28	11.05	PZ	Q
Landfill 10	LF10GW01	9:30	9.25	115.59	106.34	MW	Q
Landfill 10	LF10GW02	9:38	4.20	105.67	101.47	MW	Q
Landfill 10	LF10GW03	12:48	42.00	180.80	138.80	MW	Q
Landfill 10	LF10GW100 ⁸	9:55	39.30	175.30	136.00	MW	Q
Landfill 10	LF10SP01 ⁴	9:44	Flowing	NM	NM	Seep	Q
Landfill 4	LF04GW03	12:22	18.80	292.70	273.90	MW	Q
Landfill 4	LF4GW100	12:02	20.29	299.84	279.55	MW	Q
Landfill 4	LF4GW101	12:20	Dry	297.35	274.55 ⁶	MW	Q
Landfill 4	LF4GW102	11:47	29.04	329.49	300.45	MW	Q
Landfill 4	LF4GW103	11:57	18.79	304.26	285.47	MW	Q
Landfill 4	LF4GW104	12:10	19.05	297.75	278.70	MW	Q
Landfill 4	LF4GW105	12:15	30.62	300.57	269.95	MW	Q
Landfill 4	LF4GW106	11:52	13.96	311.36	297.40	MW	Q

Table 2B
Groundwater Elevation Summary for Presidio Monitoring Wells
Elevations Collected on 4 December 2006
Presidio of San Francisco, California

Site	Well ID	Time	Average Depth to Water ¹ (feet)	Top of Casing Elevation ^{2,3} (feet PLLW)	Groundwater Elevation ³ (feet PLLW)	Well Type	Water Level Frequency
Baker Beach Disturbed Area 1	BB1PZ100 ⁹	10:55	3.82	107.48	103.66	PZ	Q
Baker Beach Disturbed Area 1	BB1PZ101 ⁹	11:00	5.12	68.36	63.24	PZ	Q
Baker Beach Disturbed Area 2A	BB2ASW100 ⁴	--	Not Flowing	28.69	NM	Seep	Q
Baker Beach Disturbed Area 3	BB3GW100	11:24	30.64	193.84	163.20	MW	Q
Baker Beach Disturbed Area 3	BB3GW101	11:33	27.39	158.28	130.89	MW	Q
Baker Beach Disturbed Area 3	BB3PZ101 ¹⁰	11:27	Dry	156.97	136.97 ⁶	PZ	Q
Baker Beach Disturbed Area 3	BB3PZ102	11:32	Dry	73.18	65.18 ⁶	PZ	Q
Baker Beach Disturbed Area 3	BB3SW100	11:15	4.10	67.34	63.24	FMP	Q
Baker Beach Disturbed Area 3	BB3SW101	11:32	2.90	78.98	76.08	FMP	Q
Baker Beach Disturbed Area 3	BB3SW102	11:35	Dry	115.39	110.39 ⁶	FMP	Q
Baker Beach Disturbed Area 3	BB3SW104	11:30	Not Flowing	66.07	NM	FMP	Q
Mini-CAP Areas	FM14EX07GW101	14:06	30.04	183.43	153.39	MW	Q
Mini-CAP Areas	FM14EX07GW102	14:01	27.30	173.29	145.99	MW	Q
Mini-CAP Areas	1213GW101	11:22	29.86	221.35	191.49	MW	Q
Mini-CAP Areas	1221GW101	10:24	9.70	223.59	213.89	MW	Q
Mini-CAP Areas	1221GW102	10:35	8.46	223.46	215.00	MW	Q
Mini-CAP Areas	1221GW103	10:30	13.05	223.34	210.29	MW	Q
Mini-CAP Areas	1221GW104	10:40	16.59	223.39	206.80	MW	Q
Mini-CAP Areas	1260GW101	11:30	17.50	145.76	128.26	MW	Q
Mini-CAP Areas	1260GW102	11:34	26.60	145.91	119.31	MW	Q
Mini-CAP Areas	1260GW103	11:38	29.70	145.89	116.19	MW	Q
Mini-CAP Areas	514AGW101	13:49	21.40	201.34	179.94	MW	Q

Notes:

- 1 - Depth to water reading was measured from the northernmost side of the casing.
The elevation presented is the average of three measurements.
- 2 - Top of casing elevation is approximate due to damaged casing.
- 3 - Elevations reported in Presidio Lower Low Water (PLLW) datum.
- 4 - Surface water sample, no groundwater elevation.
- 5 - Unable to locate monitoring well / piezometer on 4 December 2006.
- 6 - Value represents the bottom of casing elevation in PLLW.
- 7 - Groundwater level was above the top of casing.
- 8 - The lid of monitoring well LF10GW100 has been surveyed by the Trust (175.60 feet PLLW). The elevation difference between the monitoring well lid and the top of casing was measured in the field and has been verified to be 0.30 feet. Therefore, the LF10GW100 top of casing elevation is approximately 175.30 feet PLLW.
- 9 - Piezometer used to monitor surface water seep location.

Table 2B
Groundwater Elevation Summary for Presidio Monitoring Wells
Elevations Collected on 4 December 2006
Presidio of San Francisco, California

Site	Well ID	Time	Average Depth to Water ¹ (feet)	Top of Casing Elevation ^{2,3} (feet PLLW)	Groundwater Elevation ³ (feet PLLW)	Well Type	Water Level Frequency
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10 - BB3PZ101 was formerly named BB3SW103. Additionally, the depth to water measurement (14.45 feet) during the Fourth Quarter 2004 was measured from the ground surface. Subsequently, the ground and the top of casing elevations were surveyed and the depth to water measurement was converted to a top of casing measurement (16.80 feet).

11 - Predicted tidal schedules were taken from:

http://tidesandcurrents.noaa.gov/get_predictions.shtml?year=2006&stn=1813+San+Francisco

12 - Actual high and low tidal schedules and magnitudes were taken from:

http://co-ops.nos.noaa.gov/data_res.html by selecting 'U.S. and Global Coastal Stations' then selecting station number '9414290 San Francisco, CA'. Water level magnitudes were taken by selecting the 'W3 - High/Lows' Time Interval and converting the data into the PLLW datum.

Predicted Tidal Schedule on 4 December 2006 ¹¹:

Low Tide - 4:58 PM (Magnitude -1.6 feet PLLW)

High Tide - 9:58 AM (Magnitude 6.9 feet PLLW)

Observed Tidal Schedule and Magnitude on 4 December 2006 ¹²:

Low Tide - 4:54 PM (Magnitude -1.56 feet PLLW)

High Tide - 10:00 AM (Magnitude 6.93 feet PLLW)

Acronyms

FMP - Fixed Water Monitoring Point consisting of a slotted PVC casing installed up to 3 feet below ground surface.

MW - Monitoring well

NA - Not applicable

NM - Not measured

PZ - Piezometer

Q - Quarterly monitoring schedule

Table 3
Well Construction Details
Presidio-wide Groundwater Monitoring Program
Presidio of San Francisco, California

Site Name	Well ID	Installation Date	Top of Casing Elevation (feet PLLW)	Total Depth of Boring (feet)	Borehole Diameter (inches)	Casing Diameter (inches)	Bottom of Casing (depth in feet)	Top of Screen (depth in feet)	Bottom of Screen (depth in feet)
Building 900s Area	937GW06	03/02/84	11.05	19	6	2	18.3	3.3	18.3
Building 900s Area	937GW07	03/02/84	13.94	14	6	2	13.6	3.6	13.6
Building 900s Area	937GW12	05/16/84	10.34	15	6	2	12.9	2.9	12.9
Building 900s Area	937GW15	05/17/84	12.90	14.7	6	2	12.3	8.0	12.3
Building 900s Area	937GW32R	04/12/94	10.60	41.5	11	4	40.0	29.5	39.5
Building 900s Area	937GW35	10/09/91	11.64	16.5	10	4	15.5	5.0	15.0
Building 900s Area	937GW37	10/27/92	12.74	16	12	4	14.7	4.7	14.7
Building 900s Area	937GW38	10/28/92	10.23	48.5	12	4	47.0	37.0	47.0
Building 900s Area	937GW39	10/30/92	12.49	45.5	12	4	46.0	35.0	45.0
Building 900s Area	937GW42	04/13/94	10.62	31.7	10.5	4	29.5	19.0	29.0
Building 900s Area	937GW101	06/20/01	11.81	15	8	2	15.0	5.0	15.0
Building 900s Area	937GW102	06/20/01	11.69	30	8	2	30.0	20.0	30.0
Building 900s Area	937GW103	06/21/01	11.56	54	8	2	45.0	35.0	45.0
Building 900s Area	937GW104	06/19/01	11.52	15	8	2	15.0	5.0	15.0
Building 900s Area	937GW105	06/19/01	11.50	30	8	2	30.0	20.0	30.0
Building 900s Area	937GW106	06/27/01	15.20	15	8	2	15.0	5.0	15.0
Building 900s Area	937GW107	06/27/01	15.11	30	8	2	30.0	20.0	30.0
Building 900s Area	937GW108	05/24/02	12.11	15	8	2	15.0	5.0	15.0
Building 900s Area	950GW108	06/29/01	11.60	30	8	2	30.0	20.0	30.0
Building 900s Area	979GW109	06/21/01	10.62	15	8	2	15.0	5.0	15.0
Building 900s Area	979GW110	06/22/01	10.62	30	8	2	30.0	20.0	30.0
Building 900s Area	979GW111R	06/28/01	19.69	15	8	2	15.0	5.0	15.0
Building 900s Area	979GW112	06/28/01	19.72	30	8	2	30.0	20.0	30.0
Building 900s Area	979GW113	06/25/01	10.41	15	8	2	15.0	5.0	15.0
Building 900s Area	979GW114	06/22/01	10.53	30	8	2	30.0	20.0	30.0
Building 900s Area	979GW115	06/22/01	12.26	15	8	2	15.0	5.0	15.0
Building 900s Area	979GW116	06/26/01	12.19	30	8	2	30.0	20.0	30.0
Building 900s Area	979GW117	06/25/01	12.17	45	8	2	45.0	35.0	45.0
Landfill 8	LF08GW01	09/25/90	234.54	50	10	4	44.5	34.0	44.0
Landfill 8	LF08GW02B	08/21/94	225.27	70	10	4	59.0	49.0	59.0
Landfill 8	LF08GW03	10/01/90	230.41	56.5	10	4	43.25	33.0	43.0
Landfill 8	LF08GW04	10/03/90	234.70	56.5	10	4	43.1	33.1	43.1
Landfill 8	LF08GW06	08/25/96	234.31	32	10	4	24.0	18.5	23.5
Landfill 8	LF08PZ01	08/25/96	234.34	30	8	2	22.5	12.0	22.0
Landfill 8	LF08PZ02	08/22/96	234.62	39.5	8	2	38.0	17.5	37.5
DEH Area	DEHGW01	08/13/92	11.18	14	10	4	13.2	2.7	12.7
DEH Area	DEHGW03	08/18/92	12.82	15.5	10.5	4	15.5	5.0	15.0
DEH Area	DEHGW05	05/24/99	10.36	15	10	4	15.0	4.5	14.5
DEH Area	DEHGW06	05/24/99	10.00	14.5	10	4	13.5	3.0	13.0
DEH Area	DEHGW07	05/25/99	12.15	15	10	4	15.0	4.5	14.5
DEH Area	DEHGW08	05/25/99	11.40	15	10	4	15.0	4.5	14.5
DEH Area	DEHGW09	05/25/99	9.91	15	10	4	13.5	3.0	13.0
DEH Area	DEHGW10	05/26/99	10.31	15	10	4	14.5	4.0	14.0
DEH Area	DEHGW11	05/26/99	10.27	15	10	4	14.5	4.0	14.0
DEH Area	DEHGW12	05/26/99	11.00	15	10	4	14.5	4.0	14.0
Fill Site 1	LF01GW01	10/23/90	105.31	18	10	4	16.5	6.0	16.0
Fill Site 1	LF01GW02	10/24/90	98.98	45	10	4	43.5	33.0	43.0
Fill Site 1	LF01GW03	10/31/90	151.82	66.5	10	4	63.0	52.5	62.5
Fill Site 1	LF01GW04	10/26/90	159.39	72.5	10	4	72.5	62.0	72.0
Fill Site 1	LF01GW05	11/01/90	83.72	41.5	10	4	37.0	26.5	36.5
Fill Site 1	LF01GW06	08/20/92	145.23	90	10	4	86.0	75.5	85.5
Fill Site 1	LF01GW07	11/16/94	162.00	70	10.25	4	70.0	59.6	69.6
Landfill 2	LF02GW01	10/19/90	98.57	21	10	4	20.0	9.5	19.5
Landfill 2	LF02GW02	10/22/90	101.99	19	10	4	19.0	8.5	18.5
Landfill 2	LF02GW04	12/09/94	172.60	29.5	10.5	4	29.5	19.0	29.0

Table 3
Well Construction Details
Presidio-wide Groundwater Monitoring Program
Presidio of San Francisco, California

Site Name	Well ID	Installation Date	Top of Casing Elevation (feet PLLW)	Total Depth of Boring (feet)	Borehole Diameter (inches)	Casing Diameter (inches)	Bottom of Casing (depth in feet)	Top of Screen (depth in feet)	Bottom of Screen (depth in feet)
Building 100/104	100GW101	10/07/02	84.45	70.0	8	2	70.0	50.0	70.0
Building 100/104	104GW101	10/07/02	53.88	50.0	8	2	50.0	30.0	50.0
Building 1349	1349MW01	07/20/95	300.44	50	8	4	41.0	28.0	41.0
Building 1349	1349MW02	07/21/95	311.22	50	8	4	46.5	33.5	46.5
Building 1349	1349MW03R	05/01/03	304.13	36	8	2	36.0	19.0	36.0
Building 1349	1349MW100	09/24/02	309.60	40	8	2	40.0	25.0	40.0
Building 1349	1349MW101	04/30/03	311.63	45	8	2	44.0	34.0	44.0
Building 1349	1349MW102	04/22/03	305.68	35	8	2	35.0	25.0	35.0
Building 1349	1349MW103	04/25/03	318.07	48	8	2	48.0	33.0	48.0
Building 1349	1349MW104	04/22/03	314.58	42	8	2	42.0	32.0	42.0
Building 1349	1349MW105	05/01/03	312.05	42	8	2	42.0	30.0	42.0
Fill Site 5	LF5GW100	07/13/00	229.74	28	8	2	20.5	10.0	20.0
Fill Site 5	LF5GW101	07/13/00	234.36	21	8	2	21.0	10.0	20.0
Fill Site 5	LF5GW102	04/22/03	294.76	40	8	2	40.0	30.0	40.0
Fill Site 5	LF5GW103	04/21/03	279.12	23.5	8	2	22.0	12.0	22.0
Fill Site 5	LF5GW104	04/21/03	286.05	32	8	2	32.0	22.0	32.0
Landfill 4	LF04GW03	12/20/94	292.70	39.5	10.25	4	18.5	8.1	18.1
Landfill 4	LF4GW100	08/24/00	299.84	22.5	8	2	22.5	12.0	22.0
Landfill 4	LF4GW101	07/13/00	297.35	22.8	8	2	22.8	12.5	22.5
Landfill 4	LF4GW102	02/27/03	329.49	45	8	2	45.0	35.0	45.0
Landfill 4	LF4GW103	02/26/03	304.26	45	8	2	35.0	45.0	45.0
Landfill 4	LF4GW104	02/26/03	297.75	42	8	2	42.0	32.0	42.0
Landfill 4	LF4GW105	02/26/03	300.57	48.5	8	2	48.5	38.5	48.5
Landfill 4	LF4GW106	02/26/03	311.36	40	8	2	40.0	30.0	40.0
Building 637	637-01R	01/19/94	12.24	17	10.25	4	16.0	11.3	16.0
Building 637	637-19	01/25/94	11.81	21	10.25	4	20.0	10.4	20.0
Building 637	637-26	11/09/95	10.98	6	10	4	6.0	3.5	6.0
Building 637	637-27	11/08/95	11.70	6	10	4	6.0	2.5	6.0
Building 637	637-33	02/03/98	12.54	28	8.5	2	21.0	10.5	20.5
Building 637	637-34	10/20/99	12.94	8	7	2	7.8	4.8	7.8
Building 637	637-35	10/20/99	15.21	12.5	7	2	11.0	7.0	11.0
Building 637	637-36	10/21/99	14.31	8.5	7	2	8.0	5.0	8.0
Building 637	637-37	10/21/99	13.78	7	7	2	7.0	4.0	7.0
Building 637	637-38	10/20/99	11.69	8.5	7	2	6.0	3.0	6.0
Building 637	637-39R	07/27/01	10.25	6	8	2	6.0	3.0	6.0
Building 637	637-40	10/20/99	10.25	16	7	2	14.5	9.5	14.5
Building 637	LF07GW11	11/07/95	12.75	6	10.25	4	6.0	2.5	6.0
Commissary/PX	600GW101	08/06/02	10.66	7	8	2	7.0	3.0	7.0
Commissary/PX	600GW102	08/06/02	10.10	7	8	2	7.0	3.0	7.0
Commissary/PX	600GW103	08/05/02	10.31	7	8	2	6.5	3.0	6.5
Commissary/PX	600GW104	08/06/02	10.48	7	8	2	7.0	3.0	7.0
Commissary/PX	600GW105	08/05/02	17.64	10	8	2	8.0	3.0	8.0
Commissary/PX	600GW106	08/05/02	16.04	8	8	2	8.0	3.0	8.0
Commissary/PX	600GW107	08/02/02	16.76	8	8	2	8.0	3.0	8.0
Commissary/PX	600GW108	08/02/02	12.29	8	8	2	8.0	3.0	8.0
Commissary/PX	600GW109	08/05/02	11.67	8	8	2	8.0	3.0	8.0
Commissary/PX	610GW101	07/27/01	9.91	6	8	2	6.0	3.0	6.0
Commissary/PX	610GW102	07/27/01	10.29	5.5	8	2	5.5	2.5	5.5
Commissary/PX	610GW103	07/27/01	11.13	7	8	2	7.0	3.0	7.0

Table 3
Well Construction Details
Presidio-wide Groundwater Monitoring Program
Presidio of San Francisco, California

Site Name	Well ID	Installation Date	Top of Casing Elevation (feet PLLW)	Total Depth of Boring (feet)	Borehole Diameter (inches)	Casing Diameter (inches)	Bottom of Casing (depth in feet)	Top of Screen (depth in feet)	Bottom of Screen (depth in feet)
Landfill E	DAEGW03	08/17/92	107.48	93	10	4	78.0	67.5	77.5
Landfill E	DAEGW04	10/21/92	94.38	65	10	4	64.0	54.0	64.0
Landfill E	DAEGW05	10/23/92	105.65	84.5	10	4	71.0	61.0	71.0
Landfill E	DAEGW06	12/16/94	119.26	41	10.25	4	40.6	30.6	40.6
Landfill E	DAEGW07	12/06/94	75.66	12	10.5	4	8.0	3.5	7.5
Landfill E	DAEGW08	12/07/94	71.66	32.5	10.5	4	32.5	22.0	32.0
Landfill E	DAEGW101	11/13/02	107.09	45.5	8	2	42.0	32.0	42.0
Landfill E	DAEGW102	11/13/02	116.72	35	8	2	30.0	20.0	30.0
Landfill E	DAEGW103	11/15/02	111.73	36	8	2	35.0	25.0	35.0
Landfill E	DAEGW104	11/14/02	120.28	35	8	2	42.0	32.0	42.0
Landfill E	DAEPZ101	11/15/02	113.83	36.5	8	2	29.0	19.0	29.0
Landfill E	DAEPZ102	11/14/02	110.09	41	8	2	34.0	24.0	34.0
Nike Facility	NKGW01	08/20/92	278.38	48	10.5	4	48.0	37.5	47.5
Nike Facility	NKGW02	12/12/94	312.00	20.5	12.25	4	20.5	10.0	20.0
Nike Facility	NKGW03	12/12/94	334.60	19.5	10.5	4	15.15	8.5	13.5
Nike Facility	NKGW04	12/12/94	299.60	20.9	12.25	4	20.9	10.5	20.5
Nike Facility	NKGW05	12/13/94	284.20	34	12.25	4	34.0	23.6	33.6
Baker Beach Disturbed Area 1	BB1PZ100	04/21/05	107.48	17	7	2	15.5	10.2	15.5
Baker Beach Disturbed Area 1	BB1PZ101	04/22/05	68.36	10	7	2	9.5	4.2	9.5
Baker Beach Disturbed Area 3	BB3GW100	12/06/04	193.84	36.5	8	2	36.0	26.0	36.0
Baker Beach Disturbed Area 3	BB3GW101	12/06/04	158.28	31.25	8	2	25.0	15.0	25.0
Baker Beach Disturbed Area 3 ¹	BB3PZ101	12/13/04	156.97	48	8	2	18.0	3.0	18.0
Baker Beach Disturbed Area 3 ¹	BB3PZ102	03/01/06	73.18	6.5	3	2	6.5	0.0	6.5
Baker Beach Disturbed Area 3 ²	BB3SW100	12/08/04	67.34	2.5	8	2	2.5	-1.89	2.5
Baker Beach Disturbed Area 3 ²	BB3SW101	12/08/04	78.98	3	8	2	3.0	-1.00	3.0
Baker Beach Disturbed Area 3 ²	BB3SW102	12/08/04	115.39	2.5	8	2	2.5	-2.19	2.5
Battery H-W	BHWGW01	07/21/92	178.04	29	10.5	4	28.8	18.3	28.3
Battery H-W	BHWGW04	07/22/92	197.73	31	10.25	4	27.7	17.2	27.2
Battery H-W	BHWGW05	08/05/92	202.95	36.5	10.5	4	36.0	25.5	35.5
Battery H-W	HWGW100	07/13/00	209.68	31	8	2	31.0	20.0	30.0
Battery H-W	HWGW101	07/12/00	214.24	31	8	2	31.0	20.0	30.0
Battery H-W	HWGW102	07/12/00	211.44	40	8	2	37.0	26.0	36.0
Fill Site 6	LF6GW100	07/11/00	28.73	23	8	2	23.0	12.0	22.0
Fill Site 6	LF6GW101	07/10/00	27.03	25	8	2	25.0	14.0	24.0
Fill Site 6	LF6GW103	07/11/00	18.41	26	8	2	26.0	15.0	25.0
Fill Site 6	LF6GW104	11/16/05	25.74	25	8	2	25.0	10.0	25.0
Fill Site 6	LF6GW105	11/16/05	41.97	30	8	2	30.0	20.0	30.0
Fill Site 6	LF6GW106	11/17/05	25.69	25	8	2	25.0	10.0	25.0
Building 215	215GW01	10/29/90	50.45	46	11	4	44.67	34.17	44.17
Building 215	215GW02	11/05/90	46.96	41	10	4	40.5	30.0	40.0
Building 215	215GW03	11/06/90	47.58	40.5	10	4	39.5	29.0	39.0
Building 1065	1065PZ1A	04/16/97	13.30	9	8	2	9.0	4.0	8.0
Building 1065	1065PZ1B	04/16/97	13.31	22	8	2	22.0	16.0	21.0
Building 1065	1065PZ2A	04/17/97	12.82	9	8	2	9.0	3.0	8.0

Table 3
Well Construction Details
Presidio-wide Groundwater Monitoring Program
Presidio of San Francisco, California

Site Name	Well ID	Installation Date	Top of Casing Elevation (feet PLLW)	Total Depth of Boring (feet)	Borehole Diameter (inches)	Casing Diameter (inches)	Bottom of Casing (depth in feet)	Top of Screen (depth in feet)	Bottom of Screen (depth in feet)
Building 1065	1065PZ2B	04/17/97	15.56	20	8	2	20.0	16.0	19.5
Building 1065	1065PZ3A	04/17/97	23.96	12	8	2	12.0	8.0	11.0
Building 1065	1065PZ3B	04/18/97	23.65	26	8	2	26.0	22.0	25.0
Building 1065	1065PZ4A	04/18/97	14.19	12	8	2	12.0	6.0	11.0
Building 1065	1065PZ4B	04/18/97	14.45	23	8	2	23.0	18.0	22.0
Building 1065 ³	1065PZ5AR	10/01/02	17.38	9.3	8	2	9.0	4.0	9.0
Building 1065	1065PZ5B	04/21/97	17.34	26	8	2	26.0	21.0	25.0
Building 1065	1065PZ6A	04/23/97	26.19	22	8	2	22.0	14.0	21.0
Building 1065	1065PZ6B	04/24/97	26.36	27	8	2	27.0	24.5	26.5
Building 1065	1065PZ7A	04/22/97	16.11	12	8	2	12.0	4.0	11.0
Building 1065	1065PZ7B	04/22/97	15.73	25	8	2	25.0	17.0	24.0
Building 1065	1065MW9A	09/30/02	13.31	15.5	8	2	13.3	3.0	13.0
Building 1065	1065MW9B	09/30/02	13.39	32	14/8	2	32.0	26.0	32.0
Building 1065	1065MW10A	09/25/02	17.33	14	8	2	13.4	6.0	13.0
Building 1065	1065MW10B	09/24/02	17.40	28	14/8	2	28.0	22.0	28.0
Building 1065	1065MW11A	10/01/02	23.61	15.5	8	2	15.0	8.0	15.0
Building 1065	1065MW11B	10/01/02	23.43	31.5	14/8	2	30.0	23.0	30.0
Building 1065	1065MW101	07/30/04	13.06	11	8	2	10.0	4.5	9.5
Building 1065	1065MW102	07/30/04	12.83	13	8	2	7.5	4.5	7.5
Building 207/231	207GW03	02/02/98	9.98	25	8.5	2	23.5	13.0	23.0
Building 207/231	231GW06	10/24/90	13.86	25	11	4	23.7	13.3	23.3
Building 207/231	231GW09	10/02/91	24.28	23.4	10	4	21.0	10.5	20.5
Building 207/231	231GW10	10/02/91	11.37	18	10	4	9.0	4.5	8.5
Building 207/231	231GW11	10/03/91	11.11	13	10	4	9.5	4.5	9.5
Building 207/231	231GW13	01/10/94	13.70	44	10	4	44.0	33.5	43.5
Building 207/231	231GW15	01/11/95	11.00	20	10.5	4	20.0	14.5	19.5
Building 207/231	231GW16	03/01/95	10.80	8.5	10.5	4	8.5	4.5	8.5
Building 207/231	231GW17	02/28/95	12.50	35.5	10.5	4	35.5	25.0	35.0
Building 207/231	231GW18	02/28/95	12.30	18.5	10.5	4	18.8	15.0	18.3
Building 207/231	231GW19	02/28/95	12.20	9.5	10.5	4	9.8	4.5	9.3
Building 207/231	231GW20	02/28/95	13.30	40.5	10.5	4	40.5	30.0	40.0
Building 207/231	231GW21	03/01/95	13.50	9.1	10.5	4	9.0	4.8	8.8
Building 207/231	231GW22	03/18/97	15.88	10.5	10	4	10.0	3.7	9.7
Building 207/231	231GW23	03/28/97	11.84	8.5	10	4	8.0	3.7	7.7
Building 207/231	231GW24	03/21/97	11.63	9	10	4	8.0	2.7	7.7
Building 207/231	231GW25	03/21/97	12.45	11	10	4	10.5	3.2	10.2
Building 207/231	231GW26	03/17/97	16.13	24.5	10	4	24.0	13.7	23.7
Building 207/231	231GW27	03/28/97	20.32	26.5	10	4	26.0	18.7	25.7
Building 207/231	231GW28	03/28/97	12.03	12	10	4	11.5	7.2	11.2
Building 207/231	231GW29	03/31/97	11.11	18.5	10	4	18.0	14.7	17.7
Building 207/231	231GW30	03/31/97	12.68	10	10	4	9.5	4.2	9.2
Building 207/231	231PZ01	01/15/98	15.47	10	2	1	10.0	2.0	10.0
Building 207/231	231PZ02	01/15/98	15.13	9	2	1	9.0	2.0	9.0
Building 207/231	231PZ03	01/15/98	13.95	9.1	2	1	9.1	2.1	9.1
Building 207/231	231PZ04	01/15/98	13.60	9.3	2	1	9.3	2.3	9.3
Building 207/231	OW-1 ⁴	06/27/02	TBD	31	8	2	30.12 ⁵	24.87	29.84
Bldg 651	651MW01	02/21/95	15.65	20.5	10.25	4	20.0	10.0	20.0
Bldg 651	651MW02	02/22/95	15.38	16.5	10.25	4	16.0	6.0	16.0
MiniCAPs	514AGW101	08/24/05	201.34	38.5	NR	2	38.5	23.5	38.5
MiniCAPs	1213GW101	08/29/05	221.35	40	NR	2	40.0	20.0	40.0
MiniCAPs	1221GW101	08/25/05	223.59	35	NR	2	35.0	20.0	35.0
MiniCAPs	1221GW102	08/26/05	223.46	15	NR	2	15.0	5.0	15.0
MiniCAPs	1221GW103	08/26/05	223.34	30	NR	2	30.0	20.0	30.0
MiniCAPs	1221GW104	08/29/05	223.39	30.1	NR	2	30.0	20.0	30.0

Table 3
Well Construction Details
Presidio-wide Groundwater Monitoring Program
Presidio of San Francisco, California

Site Name	Well ID	Installation Date	Top of Casing Elevation (feet PLLW)	Total Depth of Boring (feet)	Borehole Diameter (inches)	Casing Diameter (inches)	Bottom of Casing (depth in feet)	Top of Screen (depth in feet)	Bottom of Screen (depth in feet)
MiniCAPs	1260GW101	08/30/05	145.76	31	NR	2	30.0	15.0	30.0
MiniCAPs	1260GW102	08/30/05	145.91	40	NR	2	40.0	20.0	40.0
MiniCAPs	1260GW103	08/31/05	145.89	35.5	NR	2	35.0	15.0	35.0
MiniCAPs	FM14EX07GW101	08/23/05	183.43	45	NR	2	45.0	25.0	45.0
MiniCAPs	FM14EX07GW102	08/24/05	173.29	46.3	NR	2	45.0	25.0	45.0
Graded Area 9	LF9GW100A	06/16/00	247.19	36	8	2	35.0	25.0	35.0
Graded Area 9	LF9GW100B	06/20/00	246.46	18.5	8	2	18.0	8.0	18.0
Graded Area 9	LF9GW101	06/16/00	234.95	45	8	2	40.0	29.0	39.0
Graded Area 9	LF9GW102	06/19/00	235.86	35.5	8	2	35.5	25.0	35.0
Building 1027	1027MW01	05/11/95	23.10	18.5	10.25	4	18.0	7.5	17.5
Building 1027	1027MW03	02/27/95	23.57	17.5	10.25	4	17.5	7.0	17.0
Upgradient	UBR01GW01	02/24/99	164.71	55	8	2	55.0	45.0	55.0
Upgradient	UBR02GW01	02/25/99	253.39	48.5	8	2	48.5	48.0	33.0
Upgradient	UBR02GW02	02/26/99	253.56	29.5	8	2	29.0	24.0	29.0
Upgradient	UBR03GW01	02/23/99	171.22	75	8	2	65.5	50.0	65.0
Upgradient	UBR03GW02	02/24/99	170.96	36.5	8	2	36.5	31.0	36.0
Tennessee Hollow	TH-1	09/14/93	80.76	40	8.5	2	40.0	30.0	30.0
Tennessee Hollow	TH-2	09/15/93	111.26	70	8.5	2	70.0	60.0	70.0
Tennessee Hollow	TH-3	09/14/93	64.68	30	8.5	2	30.0	20.0	30.0
Tennessee Hollow	TH-4	09/15/93	44.59	16.5	8.5	2	15.0	10.0	15.0
Tennessee Hollow	PGFGW100	02/04/02	133.71	53.5	12	2	53.0	43.0	53.0
Tennessee Hollow	10GW100	02/04/02	76.88	58.5	12	2	58.0	38.0	58.0
Landfill 10	LF10GW01	08/26/94	115.59	18	12	4	17.5	8.5	17.5
Landfill 10	LF10GW02	08/25/94	105.67	12	12	4	11.5	6.5	11.5
Landfill 10	LF10GW03	09/01/94	180.80	54	12	4	52.0	42.0	52.0
Landfill 10	LF10GW100	11/19/02	175.30	55	8	2	55.0	45.0	55.0
Golf Course	300GW01	03/22/99	304.21	40	8	2	40.0	30.0	40.0

Footnotes

1 - BB3PZ101 was formerly named BB3SW103

2 - Note BBDA 3 fixed monitoring points

3 - Piezometer construction details for 1065PZ5AR are based on narrative description, last paragraph of Section 4.6, *Interim Data Report, Building 1065 Area, Presidio of San Francisco, California*, February 19, 2003, by MACTEC.

4 - Well construction details for OW-1 are from a .pdf boring log (10-14-2003 E:\Backups\OW-1.bor) provided by the Trust via email on 14 October 2003.

5 - OW-1 total depth was reported as 29.12 feet in a .pdf boring log (10-14-2003 E:\Backups\OW-1.bor) provided by the Trust via email on 14 October 2003. Based on screen interval, this value was assumed to be in error and was increased to 30.12.

6 - All well construction details for the Doyle Drive wells were measured from boring logs and converted from metric units as reported in Attachment A to the *Request for Authorization to Perform a Aquifer Testing near Building 230 at the Presidio, San Francisco*, by Baseline Environmental Consulting, 1 April 2002. Boring logs do not indicate sand trap or presence of end caps. Therefore, the bottom of casing is the same as the bottom of the screened interval.

7 - Borehole diameter was not reported for Doyle Drive wells on boring logs included as Attachment B to the *Request for Authorization to Perform a Aquifer Testing near Building 230 at the Presidio, San Francisco*, by Baseline Environmental Consulting, 1 April 2002. Boring method described as "rotary wash" without reference to boring diameter in the *Data Report, Piezometer Installation and Development, Doyle Drive Reconstruction Project, San Francisco*, by Baseline Environmental Consulting, 11 April 2001.

NR - Not reported

PLLW - Presidio Lower Low Water datum

TBD - To be determined

Table 4
Groundwater Purge Volume Calculations
Presidio-wide Groundwater Monitoring Program
Presidio of San Francisco, California

Well Borehole Diameter (inches)	Well Casing Inside Diameter (inches)	Borehole Annular Volume (gallons/foot)	Well Casing Volume (gallons/foot)	Volume of Liquid in 1-foot Well Section (gallons)
2.1	0.75	0.021	0.0031	0.070
2	1	0.016	0.0055	0.077
6	2	0.174	0.0218	0.555
7	2	0.245	0.0218	0.714
8	2	0.327	0.0218	0.897
8	4	0.262	0.0872	1.240
8.5	2	0.372	0.0218	0.998
10	4	0.458	0.0872	1.680
10.25	4	0.486	0.0872	1.742
10.5	4	0.514	0.0872	1.805
11	4	0.572	0.0872	1.937
12	4	0.698	0.0872	2.218

Note

See Groundwater Sampling Standard Operating Procedure No. 002 in the *Field Sampling Plan, Presidio Groundwater Monitoring Project* (Treadwell & Rollo, 2001a) for complete equations for calculating borehole volumes.

Table 5
Analytical Plan Summary
Presidio-wide Groundwater Monitoring Program
Presidio of San Francisco, California

Analyte	Laboratory Method	Container Type and Volume ¹	Preservative ²	Holding Time ¹
TPH as gasoline (carbon range C7-C12)	Modified EPA 8015B	3 x 40 mL VOAs	HCl	14 Days
TPH as Stoddard Solvent (carbon range C7-C12)	Modified EPA 8015B	3 x 40 mL VOAs (C&T) 2 x 1L Amber (CAS)	HCl	14 Days
TPH as diesel ³ (carbon range C12-C24)	Modified EPA 8015B	1 x 1L Amber 2 x 1L Amber (CAS)	-	14 Days Extract
TPH as fuel oil ³ (carbon range C24-C36)	Modified EPA 8015B	1 x 1L Amber 2 x 1L Amber (CAS)	-	14 Days Extract
VOCs	EPA 8260B	3 x 40 mL VOAs	HCl	14 Days
VOCs (TCE only)	EPA 8260B	3 x 40 mL VOAs	HCl	14 Days
BTEX	EPA 8021B	2 x 40 mL VOAs	HCl	14 Days
PAHs	EPA 8310	2 x 1L Ambers	-	7 Days Extract
SVOCs	EPA 8270C	2 x 1L Ambers	-	7 Days Extract
OCP / PCBs	EPA 8081/8082	2 x 1L Ambers	-	7 Days Extract
Chlorinated Herbicides	EPA 8151A	2 x 1L Ambers	-	7 Days Extract
Arsenic (III and V) Speciation	EPA 1632 Mod	1 x 250 mL Plastic	HCl	28 Days
Mercury	EPA 7470	1 x 500 mL Plastic	HNO3	28 Days
Dissolved Metals (ICP) ⁴	EPA 6010	1 x 500 mL Plastic	HNO3	6 Months
Dissolved Metals (ICP/MS) ⁴	EPA 6020	1 x 500 mL Plastic	HNO3	6 Months
Dissolved Gases	RSK 175	3 x 40 mL VOAs	HCl	14 Days
Hexavalent Chromium	EPA 7196A	1 x 250 mL Plastic	-	24 Hours
Dissolved Lead ⁴	EPA 7470	1 x 500 mL Plastic	HNO3	28 Days
Cyanide	EPA 335.2	1 x 1L Plastic	NaOH	14 Days
Sulfide	EPA 376.2	1 x 1L Plastic	NaOH+ZnOAc	7 Days
TDS ⁵	EPA 160.1	1 x 1L Plastic	-	7 Days
TOC	EPA 415.2	3 x 40 mL VOAs	H ₂ SO ₄	28 Days
TSS ⁵	EPA 160.2	1 x 1L Plastic	-	7 Days
Perchlorate	EPA 314.0	1 x 250 mL Plastic	-	28 Days
NDMA	EPA 1625	2 x 1L Ambers	-	7 Days Extract
1,4-dioxane	EPA 8270C	2 x 1L Ambers	-	7 Days Extract
PBDE	EPA 1614	3 x 1L Ambers	-	7 Days Extract
General Chemistry				
Alkalinity ⁵	EPA 310.1	1 x 1L Plastic	-	28 Days
Bicarbonate ⁵	EPA 310.1	1 x 1L Plastic	-	28 Days
Carbonate ⁵	EPA 310.1	1 x 1L Plastic	-	28 Days
Chloride ⁵	EPA 300.0	1 x 1L Plastic	-	28 Days
Fluoride ⁵	EPA 300.0	1 x 1L Plastic	-	28 Days
Nitrate as Nitrogen / Nitrite as Nitrogen ⁵	EPA 300.0	1 x 1L Plastic	-	48 Hours
Nitrate as Nitrogen/ Nitrite as Nitrogen	EPA 353.2	1 x 125 mL Plastic	H ₂ SO ₄	28 Days
Sulfate ⁵	EPA 300.0	1 x 1L Plastic	-	28 Days

Notes

1 - Minimum sample volumes and holding times as specified by the project laboratory Curtis and Tompkins.

2 - All samples will be placed on ice and kept at an EPA prescribed temperature of 4 degrees Celsius.

3 - This analysis includes silica gel cleanup.

4 - Field filtration to be performed in the field using a 0.45 micron filter.

5 - All of these analyses can be taken from the same 1L plastic container.

Acronyms

BTEX - Benzene, Toluene, Ethylbenzene, and Xylenes

ICP - Inductively Coupled Plasma

ICP/MS - Inductively Coupled Plasma with

Mass Spectrography confirmation

NDMA - N-nitrosodimethylamine

OCPs - Organochlorine Pesticides

PAHs - Polycyclic Aromatic Hydrocarbons

PBDE - Polybrominated diphenyl ether

PCBs - Polychlorinated Biphenyls

SVOCs - Semi-Volatile Organic Compounds

TCE - Trichloroethene

TDS - Total Dissolved Solids

TOC - Total Organic Carbon

TPH - Total Petroleum Hydrocarbons

TSS - Total Suspended Solids

VOCs - Volatile Organic Compounds

- = No preservative

Table 6
Water Quality Criteria and Analytical Reporting Limits
Presidio Groundwater Monitoring Program
Presidio of San Francisco, California

Compounds of Potential Concern (COPC)	Water Quality Criteria ¹				QAPP Analytical Reporting Limit ² (µg/L)	Project Laboratory Reporting Limit (µg/L)
	Surface Water (a) (µg/L)	Freshwater Seep (b) (µg/L)	Saltwater Protection Zone (c) (µg/L)	Drinking Water Cleanup Level (d) (µg/L)		
Inorganic Chemicals						
Antimony	14 (e)	- (f)	-	6	2.0	1.0
Arsenic	190	190 (g)	36	10	2.0	1.0
Barium	-	-	-	1,000	1.0	1.0
Beryllium	-	-	-	4	1.0	1.0
Cadmium	1.1 (h)	1.1 (h)	9.3	5	1.0	1.0
Chloride	-	-	-	250,000	-	100
Chromium (III)	180 (h); (i)	180 (h); (i)	-	50	-	10
Hexavalent Chromium	11	11	50	-	10	10
Chromium (Total)	180 (h); (i)	180 (h); (i)	50	50	2.0	1.0
Cobalt	-	-	-	-	1.0	1.0
Copper	11.8 (h)	11.8 (h)	2.9	1,000 (j)	2.0	1.0
Cyanide	5.2	5.2	5	200	-	10
Lead	3.2 (h)	3.2 (h)	5.6	15 (k)	5.0	3.0
Mercury	0.012 (l)	0.012 (l)	0.025	2	-	0.2
Nickel	158 (h)	158 (h)	7.1	100	2.0	1.0
Selenium	5 (m)	5 (m)	71	50	5.0	5.0
Silver	4.1 (h); (n)	4.1 (h); (n)	2.3 (n)	50	1.0	1.0
Thallium	1.7	-	-	2	5.0	1.0
Vanadium	-	-	-	-	10	10
Zinc	106 (h)	106 (h)	58	5,000	2.0	1.0

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	Surface Water (a) (µg/L)	Freshwater Seep (b) (µg/L)	Saltwater Protection Zone (c) (µg/L)	Drinking Water Cleanup Level (d) (µg/L)		
Semivolatile Organic Compounds (by EPA method 8310 except where noted)						
Acenaphthene	1,200	-	-	-	5.0	5
Acenaphthylene	-	-	-	-	2.0	10
Anthracene	9,600	-	-	770 (o)	0.2	0.5
Benzo(a)anthracene	0.0044 (p)	-	-	0.1	0.2	0.1
Benzo(a)pyrene	0.0044 (p)	-	-	0.2	0.2	0.1
Benzo(b)fluoranthene	0.0044 (p)	-	-	0.2	0.2	0.2
Benzo(g,h,i)perylene	-	-	-	150	0.2	0.2
Benzo(k)fluoranthene	0.0044 (p)	-	-	2	0.2	0.1
Benzyl Alcohol	-	-	-	-	10	10 (EPA 8270)
Bis(2-ethylhexyl)phthalate	1.8	-	-	4	10	10 (EPA 8270)
Chrysene	0.0044 (p)	-	-	20	0.2	0.1
Dibenzo(a,h)anthracene	0.0044 (p)	-	-	-	0.5	0.2
Dibenzofuran	-	-	-	-	10	10 (EPA 8270)
Fluoranthene	300	-	-	300	0.2	0.4
Fluorene	1,300	-	-	300	1.0	1
Indeno(1,2,3-c,d)-pyrene	0.0044 (p)	-	-	-	0.2	0.14
2-methylnaphthalene	-	-	-	-	10	10 (EPA 8270)
Naphthalene	-	-	-	300	5.0	5
n-nitrosodiphenylamine	5	-	-	-	10	10 (EPA 8270)
Pentachlorophenol	0.28	-	7.9	1	50	10 (EPA 8270)
Phenanthrene	-	-	-	230	1.0	0.5
Phenol	21,000	-	-	1	10	10
Polycyclic Aromatic Hydrocarbons	0.031 (p)	-	0.031	26	-	0.1 to 10
Pyrene	960	-	-	230	0.2	0.2

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Presidio Groundwater Monitoring Program
Presidio of San Francisco, California

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	Surface Water (a) (µg/L)	Freshwater Seep (b) (µg/L)	Saltwater Protection Zone (c) (µg/L)	Drinking Water Cleanup Level (d) (µg/L)		
Volatile Organic Compounds						
Acetone	-	-	-	-	-	10
Bromodichloromethane	0.56	-	-	80	1.0	0.5
2-Butanone (MEK)	-	-	-	-	-	10
Carbon Tetrachloride	0.25	-	-	0.5	0.5	0.5
Chlorodibromomethane	0.40	-	-	80	-	0.5
Chlorobenzene	680	-	-	70	2.0	0.5
Chloroform	-	-	-	80	0.5	0.5
Chloromethane	-	-	-	-	1.0	1.0
1,4-dichlorobenzene	400	-	-	5	2.4	0.5
1,2-dichloroethane	0.38	-	-	0.5	0.5	0.5
1,1-dichloroethene	0.057	-	-	6.0	0.5	-
cis-1,2-dichloroethene	-	-	-	6.0	-	0.5
Methylene Chloride	4.7	-	-	5	4.5	5.0
Tetrachloroethene	0.8	-	-	5	0.5	0.5
1,2,3-trichlorobenzene (s)	-	-	-	70	-	-
1,2,4-trichlorobenzene	-	-	-	70	10	-
1,1,1-trichloroethane	-	-	-	200	0.5	0.5
Trichloroethene	2.7	-	-	5	0.5	0.5
Trichlorofluoromethane	-	-	-	150	10	0.5
Petroleum Hydrocarbons and Constituents						
Gasoline Range Hydrocarbons	443	443 (q)	1.2	770	-	50
Diesel Range Hydrocarbons	-	-	2.2	880	-	50
Fuel Oil Range Hydrocarbons	-	-	2.2	1,200	-	300
Motor Oil Range Hydrocarbons	-	-	-	1,200	-	300
Benzene	1.2	463	0.51	1	-	0.5
Ethylbenzene	845	845	0.043	700	-	0.5
Toluene	490	490	1.0	150	-	0.5
Tetraethyl Lead	-	-	-	-	-	100
Total Xylenes	318	318	0.13	1,750	-	0.5
Methyl t-butyl ether (MTBE)	-	-	4.4	13	2.0	0.5

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Presidio Groundwater Monitoring Program
Presidio of San Francisco, California

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	Surface Water (a) (µg/L)	Freshwater Seep (b) (µg/L)	Saltwater Protection Zone (c) (µg/L)	Drinking Water Cleanup Level (d) (µg/L)		
PCBs, Pesticides, and Herbicides						
Polychlorinated Biphenyls	0.00017 (r)	0.014 (r); (t)	0.03	0.5	-	0.5-1.0
Aldrin	0.00013 (r)	3	1.3	-	-	0.05
Chlordane	0.00057 (r)	0.0043 (r)	0.004	0.1	-	0.5
2,4-D	-	-	-	70	-	1.0
4,4'-DDD	0.00083 (p)	-	0.001 (t)	-	-	0.1
4,4'-DDE	0.00059 (p)	-	0.001 (t)	-	-	0.1
4,4'-DDT	0.00059 (p)	0.001 (p)	0.001 (t)	-	-	0.1
Dicamba	-	-	-	-	-	1.0
Dieldrin	0.00014 (p)	0.056 (p)	0.0019 (t)	0.5 (s)	-	0.1
Endosulfan	0.056	0.056 (p)	0.0087 (t)	-	-	0.05
Endrin	0.36	0.036 (p)	0.0023 (t)	2	-	0.1
Endrin Aldehyde (s)	0.36	0.036 (p)	0.0023 (t)	2	-	0.05
Endrin Ketone (s)	0.36	0.036 (p)	0.0023 (t)	2	0.1	0.05
beta-BHC	0.014	-	-	0.3	0.05	0.05
gamma-BHC (Lindane)	0.019 (p)	-	0.16	0.2	-	0.05
Heptachlor	0.00021 (p)	0.0038 (p)	0.0036 (t)	0.01 (p)	-	0.1
Heptachlor Epoxide	0.00021 (p)	0.0038 (p)	0.0036 (t)	0.01	-	0.05
Isodrin	0.0013	3	1.3	-	-	0.05
MCPP	-	-	-	-	-	500
Methoxychlor	-	-	-	40	-	0.5

Notes

Edits shown in **bold** text were made on 1 April 2003 based on updated version of Table 7-6 of the QAPP, transmitted from Chris Nelson on 14 March 2003.

1 Water Quality Criteria is from Table 7-6 of the Cleanup Levels Document (EKI, 2002).

2 These are limits established in the QAPP (Tetra Tech, 2001).

- = not established

(a) Cleanup levels are based upon concentrations of COPCs that result in chronic toxicity to aquatic organisms, or to humans through consumption of water and fish, whichever is more stringent. Cleanup levels apply to surface water and groundwater that may exfiltrate directly to surface water, such as Lobos Creek, Mountain Lake, and the Tennessee Hollow Riparian Corridor upon enhancement.

Table 6
Water Quality Criteria and Analytical Reporting Limits
Presidio Groundwater Monitoring Program
Presidio of San Francisco, California

Notes (continued)

- (b) Cleanup levels are based upon concentrations of COPCs that result in chronic toxicity to aquatic organisms. Cleanup levels apply to seeps and to groundwater that emerges as freshwater seeps.
- (c) Cleanup levels are based upon concentrations of COCs that result in chronic toxicity to marine organisms. Cleanup levels apply to marine or salt water environments.
- (d) Cleanup level listed is a promulgated or proposed federal Maximum Contaminant Level (MCL), or promulgated or proposed MCL or action level specific to the State of California. MCLs obtained from U.S. EPA Region IX, *Drinking Water Standards and Health Advisories Tables*, dated February 2000. Drinking water cleanup levels apply to groundwater and surface water at the Presidio.
- (e) Cleanup level obtained from Title 40 of the Code of Federal Regulations, Part §131.38, *Establishment of Numerical Criteria for Priority Toxic Pollutants for the State of California*, or *California Toxics Rule (CTR)*, promulgated 18 May 2000.
- (f) Hyphen indicates that a cleanup level is not specified in Presidio Trust QAPP.
- (g) Cleanup level obtained from California Environmental Protection Agency, Regional Water Quality Control Board, San Francisco Bay Region, *Water Quality Control Plan, San Francisco Bay Basin. San Francisco Bay Region* ("Basin Plan"), dated 21 June 1995.
- (h) Cleanup level is a function of hardness. Value shown is based on a hardness of 100 mg/L as calcium carbonate.
- (i) Cleanup level is expressed as a function of the water-effects ratio, as defined in the CTR.
- (j) Cleanup level listed is a secondary MCL. Secondary MCLs apply to chemicals in drinking water that adversely affect its odor, taste, or appearance and therefore cause people to discontinue using the water.
- (k) MCL based upon treatment technique. Treatment technique and public notification required at action level of 15 µg/L for lead.
- (l) Cleanup level for mercury is 0.012 µg/L. However, this level is below the typical analytical method reporting limit of 0.025 µg/L. A cleanup objective of 0.012 µg/L is desirable, but attainment can only be determined at the analytical method reporting limit.
- (m) Cleanup level for COC in total recoverable form.
- (n) Cleanup level for COC corresponds to instantaneous maximum value.
- (o) Cleanup level obtained from Montgomery Watson, *Fuel Product Action Level Development Report, Presidio of San Francisco, California* ("FPALDR").

Table 6
Water Quality Criteria and Analytical Reporting Limits
Presidio-wide Groundwater Monitoring Program
Presidio of San Francisco, California

Notes (continued)

- (p) This level is below the typical analytical method reporting limit range of 0.1 to 10 µg/L for semivolatile organic compounds. Cleanup level listed is desirable, but attainment can only be determined at the analytical method reporting limit. Cleanup level is established at the typical analytical method reporting limit range for semivolatile organic compounds assuming no matrix interference. In the event of matrix interference, actual method reporting limits determining compliance with cleanup levels may be raised.
- (q) Cleanup level obtained from Montgomery Watson, *Development of Point of Compliance Concentrations (POCCs) for Gasoline in Surface Waters and Sediments of the Proposed Freshwater Stream, Presidio of San Francisco, California*, dated 4 May 1999. Numerical values based upon bioassay studies performed by RWQCB and review of toxicological data published in scientific literature.
- (r) Cleanup level applies to total PCBs.
- (s) Cleanup level is State of California action level for drinking water.
- (t) This level is below the typical analytical method reporting limit range of 0.05 to 0.5 µg/L for PCBs and pesticides. Cleanup level listed is desirable, but attainment can only be determined at the analytical method reporting limit.

Table 7
Duplicate and Quanlity Control Duplicate Sampling Schedule
Presidio-wide Groundwater Monitoring Program
Presidio of San Francisco, California

					Analytical Requirements																							
Site Name	Primary Sample Identification	C&T Duplicate	QC Duplicate	Date Sampled	NDMA	General Water Quality Parameters	Total Organic Carbon	Dissolved Gases	MBAS	Total Hardness	Molybdenum	Dissolved Metals ¹	Total Metals	Total Dissolved Solids	Organo-chlorine Pesticides	PCBs	VOCs	BTEX / MTBE	PAHs	SVOCs	Sulfide	Cyanide	Chlorinated Herbicides	TPH-G ²	TPH-D ²	TPH-FO ²	TPH-Stoddard Solvent	
					EPA 1625	various	EPA 9060	RSK 175	E425.1			various	various		EPA 8080	EPA 8080	EPA 8260 modified	EPA 8021B or 8020	EPA 8310	EPA 8270	EPA 376.2	EPA 9012 modified	EPA 8150	EPA 8015	EPA 8015 EPA 3630A	EPA 8015 EPA 3630A	EPA 8015	
Third Quarter 2006																												
Fill Site 5	LF5GW104	DUP0817062A	No												1													
Nike Missile Facility	NKGW04	DUP0816061B	NKGW04CL		1																							
BBDA 3	BB3GW100	DUP0815061A	No			1						1 (22)		1										1	1	1		
Battery Howe/Wagner	BHWGW01	DUP0815062A	No			1						1 (22)																
Fill Site 6	LF6GW103	DUP0816061A	LF6GW103CL			1						1 (23)		1	1	1			1					1	1			
Building 1065	1065MW9B	DUP0816062A	1065MW9BCL			1						1 (15)		1				1			1			1	1	1		
Mini-Cap Areas	1221GW104	DUP0815063A	No			1						1 (22)									1							
Mini-Cap Areas	1213GW101	DUP0816063A	1213GW101CL			1						1 (22)					1		1					1	1	1		
Fourth Quarter 2006																												
Fill Site 6	LF6GW103	DUP1205062A	LF6GW103CL			1						1 (23)		1	1	1			1					1	1			
Bldg 231/207	231GW09	DUP1205062B	231GW09CL			1						1 (23)		1			1				1			1	1	1		
Battery Howe/Wagner	BHWGW04	DUP1207062A	No			1						1 (22)																
Building 1065	1065MW1B	DUP1205061A	1065PZ1BCL			1						1 (15)		1			1				1			1	1	1		
Building 1065	1065MW9A	DUP1205062C	1065MW9ACL			1						1 (15)		1				1			1			1	1	1		
Mini-Cap Areas	1221GW104	DUP1206063A	No			1						1 (22)																

Notes

- 1 - The table has been reformatted to one dissolved metals column. The number of dissolved metals proposed for analysis are denoted by parentheses. For example, Q (23) indicates the 23 metals list should be analyzed on a quarterly basis. The metals associated with each metals list are detailed below.
- 23 Metals List - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Th, V, and Zn.
- 22 Metals List - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Th, V, and Zn.
- 15 Metals List - Al, Sb, As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Pb, Ni and Zn.
- 14 Metals List - Al, As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Pb, Ni and Zn.
- 9 Metals List - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn.
- 8 Metals List - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn.
- 7 Metals List - As, Cr, Cd, Cu, Pb, Ni and Zn.
- 3 Metals List - Al, Fe, and Cr.
- 2 - TPH-G, TPH-D, TPH-FO: Total Petroleum Hydrocarbons as gasoline, diesel and fuel oil - EPA 3630A: Silica Gel Cleanup Step
- 3 - Commissary/PX Area samples will be analyzed for dissolved sulfide rather than total sulfide.
- 4 - If DAESP03 is dry do not replace this duplicate sample with another.

Bold indicates samples that are duplicated at both the project and QC laboratories.

Table 8
Analytical Results for Equipment Rinsate Blanks
Presidio-wide Groundwater Monitoring Program
Presidio of San Francisco, California

Sample ID	Sample Date	Total Alkalinity	Bicarbonate	General Chemistry Parameters ¹	Sulfide	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil ² (Carbon Range C ₂₄ -C ₃₆)	All VOCs	Dissolved Arsenic	Dissolved Calcium	Dissolved Iron	Dissolved Sodium	All Other Dissolved Metals	TDS
	Analytical Method	E310.1	E310.1	Various	E376.2	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8260M	E1632	SW6010	SW6010	SW6010	SW6010/ SW6020	E160.1
		(mg/L)	(mg/L)	--	(mg/L)	(µg/L)	(µg/L)	(µg/L)	--	(µg/L)	(µg/L)	(µg/L)	(µg/L)	--	(mg/L)
Third Quarter 2006															
1065MW9BRB9A	08/16/06	< 1	< 1	ND	< 0.04	< 50	< 50	< 300	ND	< 5	< 500	< 100	600	ND	< 50
BHWGW05RB01	08/15/06	1.5	< 1	ND	NA	NA	NA	NA	NA	< 5	770	< 100	< 500	ND	NA
Fourth Quarter 2006															
1047MW101RB1065MW9B	12/07/06	NA	NA	NA	NA	< 50	NA	NA	ND	NA	NA	NA	NA	NA	NA
BHWGWO4RBHWGW100	12/07/06	1.1	< 1	ND	NA	NA	NA	NA	NA	< 5	< 500	< 100	< 500	ND	NA

Notes

- 1 - General Chemistry Parameters include total alkalinity, bicarbonate, chloride, fluoride, nitrate, nitrite, sulfate, and total dissolved solids.
2 - TPH as fuel oil uses a motor oil standard for carbon range (C₂₄-C₃₆).
Table 11 identifies current and historical data qualifiers.

BTEX - benzene, toluene, ethylbenzene, and xylenes
MTBE - methyl tert-butyl ether
NA - Not analyzed
ND - Not detected above the laboratory reporting limit
TDS - total dissolved solids
TPH - total petroleum hydrocarbons
VOC - volatile organic compounds
mg/L - milligrams per liter
µg/L - micrograms per liter

Table 9
Analytical Results for Trip Blanks
Presidio-wide Groundwater Monitoring Program
Presidio of San Francisco, California

Trip Blank Identification	Sample Date	Acetone	Chloroform	Dichloro-methane	All Other VOCs
	Analytical Method	SW8260M	SW8260M	SW8260M	SW8260M
Third Quarter 2006					
TB0815061A	08/15/06	< 10	< 0.5	< 4	ND
TB081606A	08/16/06	< 10	< 0.5	< 4	ND
TB081706A	08/17/06	< 10	< 0.5	< 4	ND
Fourth Quarter 2006					
TB1205061B	12/5/2006	< 10 U	< 0.5 U	< 4.5 U	ND
TB1205061A	12/5/2006	< 10	< 0.5	< 4	ND
TB1206061A	12/6/2006	< 10	7.7	< 4	ND
TB1207061A	12/7/2006	22	< 0.5	5.4	ND
TB1207061B	12/7/2006	< 10	0.5	< 4	ND

Notes

All results reported in micrograms per liter.

Table 11 identifies data qualifiers.

ND - Not detected above the laboratory reporting limit

VOCs - Volatile organic compounds

Table 10
Analytical Results for Source Water Blanks
Presidio-wide Groundwater Monitoring Program
Presidio of San Francisco, California

Sample ID	Sample Date	General Chemistry Parameters								VOCs		All OCPs and PCBs	All PAHs	All SVOCs	All Chlorinated Herbicides	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil ² (Carbon Range C ₂₄ -C ₃₆)
		Alkalinity, Total	Bicarbonate	Chloride	Sulfate	TDS	All Other General Chemistry	Sodium	All Other Metals ¹	Acetone	All Other VOCs							
	Analytical Method	E310.1	E310.1	E300.0	E300.0	E160.1	Various	SW6010/ SW6020/	SW6010/ SW6020/	SW8260B	SW8260B	SW8081A/ SW8082	SW8310	SW8270	SW8150	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
Source Water Blanks		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Third Quarter 2006																		
DW081706A ³	08/17/06	< 1	< 1	< 0.2	< 0.04 UJ	< 50	ND	800	ND	< 10	ND	ND	ND	ND	ND	< 50	< 50	< 300
DW082106B ⁴	08/21/06	< 1	< 1	< 0.2	< 0.04 UJ	50	ND	< 500	ND	16	ND	ND	ND	ND	ND	< 50	< 50	< 300
Fourth Quarter 2006																		
DW120606B ⁴	12/06/06	< 1	< 1	< 0.2	< 0.5	30	ND	< 500 UJ	ND	< 10	ND	ND	ND	ND	ND	< 50	< 50	< 300

Notes

1 - Metals include aluminum, arsenic, arsenite, arsenate, antimony, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, nickel, potassium, sodium, silver, selenium, thallium, vanadium, and zinc.

2 - TPH as fuel oil uses a motor oil standard for carbon range (C₂₄-C₃₆).

3 - Sample collected from source water tank on a field vehicle.

4 - Sample collected from the deionization system outlet at Blaine Tech Services, Inc. facility in San Jose, CA.

Table 11 identifies current and historical data qualifiers.

TDS - total dissolved solids

NA - Not analyzed

ND - Not detected above the laboratory reporting limit

OCPs - organochlorine pesticides

PAHs - polycyclic aromatic hydrocarbons

PCBs - polychlorinated biphenyls

SVOCs - semi-volatile organic compounds

TPH - total petroleum hydrocarbons

VOCs - volatile organic compounds

µg/L - micrograms per liter

mg/L - milligrams per liter

Table 11
Laboratory Qualifiers for Current and Historical Analytical Data
Presidio-wide Groundwater Monitoring Program
Presidio of San Francisco, California

The following data validation qualifiers were used for analytical data generated beginning in the Second Quarter 2001. Multiple data qualifiers can be applied to individual sample results. These qualifiers are recommended in the October 1999 document titled *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review*:

#	The continuing calibration verification (CCV) drifted outside the limits although the average CCV drift was within the limits per method requirements.
U	The analyte was analyzed for, but was not detected above, the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample, refer to the specific analytical report for the rationale behind the qualification.
J+	The analyte was positively identified; the associated numerical value is biased high due to a high surrogate recovery and should be considered an approximate concentration of the analyte in the sample.
J-	The analyte was positively identified; the associated numerical value is biased low due to a low surrogate recovery and should be considered an approximate concentration of the analyte in the sample.
Jb	The analyte was identified below the laboratory reporting limit but above the laboratory method detection limit and QAPP-specified reporting limit.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

The current reported analytical data also includes the following laboratory supplied validation comments:

A-01	No H ₂ SO ₄ preserved sample available for 28 day hold time.
B	Analyte is found in the associated blank as well as in the sample.
C	Presence confirmed, but confirmation concentration differed by more than a factor of two.
g	Compound was found in the blank and sample.
H	Heavier hydrocarbons contributed to the quantitation.
HT-04	This sample was analyzed beyond the EPA recommended holding time. The results may still be useful for their intended purpose.

Table 11
Laboratory Qualifiers for Current and Historical Analytical Data
Presidio-wide Groundwater Monitoring Program
Presidio of San Francisco, California

HT-RA	This sample was originally analyzed within the EPA recommended hold time. Re-analysis for confirmation or dilution was performed past the recommended hold time. The results may still be used for their intended purpose.
ndp	Hydrocarbon reported does not match the pattern of the diesel standard.
L	Lighter hydrocarbons contributed to the quantitation.
QB01	The method blank contains this analyte at a concentration above the reporting limit; however, the concentration is less than 5% of the sample result, which is negligible according to method criteria.
Y	Sample exhibits a fuel pattern, which does not resemble standard.
Z	Sample exhibits unknown single peak or peaks.

Analytical data reported prior to the second quarter of 2001 have used the same data qualifiers described above, but have also used the validation qualifiers and comments Q, Rd, DR, D, B, G, P, d, j, k, z. Descriptions of these previously used validation qualifiers and comments are provided in the quarterly monitoring report corresponding to the sampling date shown in the analytical summary tables.

The following is a table of data validation qualifiers and comments used by Montgomery Watson for their previous Presidio groundwater monitoring work.

Data Validation Qualifiers:

J – Qualified as estimated

U – Qualified as not detected

R – Qualified as rejected

Data Validation Comments:

1. Qualified due to detected concentration in associated method blank sample.
2. Qualified due to detected concentration in associated trip blank sample.
3. Qualified due to detected concentration in associated filter blank sample.
4. Qualified due to detected concentration in associated equipment rinsate blank sample.
5. Qualified as positively biased due to surrogate recoveries above the established acceptance limits.
6. Qualified as negatively biased due to surrogate recoveries below the established acceptance limits.
7. Qualified due to surrogate recoveries outside the established acceptance limits; bias cannot be determined.
8. Qualified as positively biased due to MS/MSD recoveries above the established acceptance limits.
9. Qualified as negatively biased due to MS/MSD recoveries below the established acceptance limits.
10. Qualified due to MS/MSD recoveries outside the established acceptance limits; bias cannot be determined.
11. Qualified as positively biased due to LCS recoveries above the established acceptance limits.
12. Qualified as negatively biased due to LCS recoveries below the established acceptance limits.
13. Qualified due to LCS recoveries outside the established acceptance limits; bias cannot be determined.
14. Qualified as positively biased due to calibration nonconformances.

Table 11
Laboratory Qualifiers for Current and Historical Analytical Data
Presidio-wide Groundwater Monitoring Program
Presidio of San Francisco, California

15. Qualified as negatively biased due to calibration nonconformances.
16. Qualified due to calibration nonconformances; bias cannot be determined.
17. Qualified as negatively biased due to holding time nonconformances.
18. Qualified as negatively biased due to sample receipt nonconformances.
19. Qualified as positively biased due to sample receipt nonconformances.
20. Qualified due to sample receipt nonconformances; bias cannot be determined.
21. Qualified as positively biased due to other criteria.
22. Qualified as negatively biased due to other criteria.
23. Qualified due to other criteria; bias cannot be determined.
24. Qualified due to detected concentration in associated source water sample.
25. Qualified due to chromatographic pattern of the sample does not match the calibration pattern.
26. Reported value determined by method of standard addition; bias cannot be determined.
27. Qualified as negatively biased due to post-digest spike recovery between 40% and 85%.
28. Estimated value; result is detected between the method detection limit (MDL) and the reporting limit.
29. Qualified due to holding times exceeded.
30. Qualified as estimated; compound is a common laboratory contaminant.
31. Reported value determined by GC/MS library search; compound is tentatively identified and quantitation is estimated.
32. Qualified data explained further in the report associated with the sampling event.
33. Qualified to field duplicate RPD outside of established limits; bias cannot be determined.
34. Final purge readings are not representative of site conditions. The reported readings are taken from earlier entries associated with that purge log.
35. Questionable field parameter results; readings do not appear to be representative of site conditions.

Table 12
Analytical Results for Purge and Decontamination Water
Presidio-wide Groundwater Monitoring Program
Presidio of San Francisco, California

Sample Name	Sample Date	Metals									Cyanide	Dissolved Sulfide	Total Oil & Grease	Phenolic Compounds	pH
		Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Silver	Zinc					
	Analytical Method	SW6020	SW6020	SW6020	SW6020	SW6010	SW7470	SW6020	SW6020	SW6020	SW9012	E376.2	E1664A	E420.1	SW9040B
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	--
Discharge Criteria		4,000	500	5,000	4,000	1,500	50	2,000	600	7,000	1,000	500	300,000	23,000	6.0 - 9.5
Fourth Quarter 2006															
WT120706	12/07/06	47	15	1,100	290	83	0.38	990	< 1	2,900	0.11	0.04	< 4.9	< 0.05	7.7

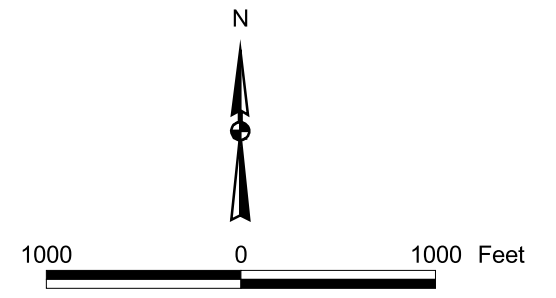
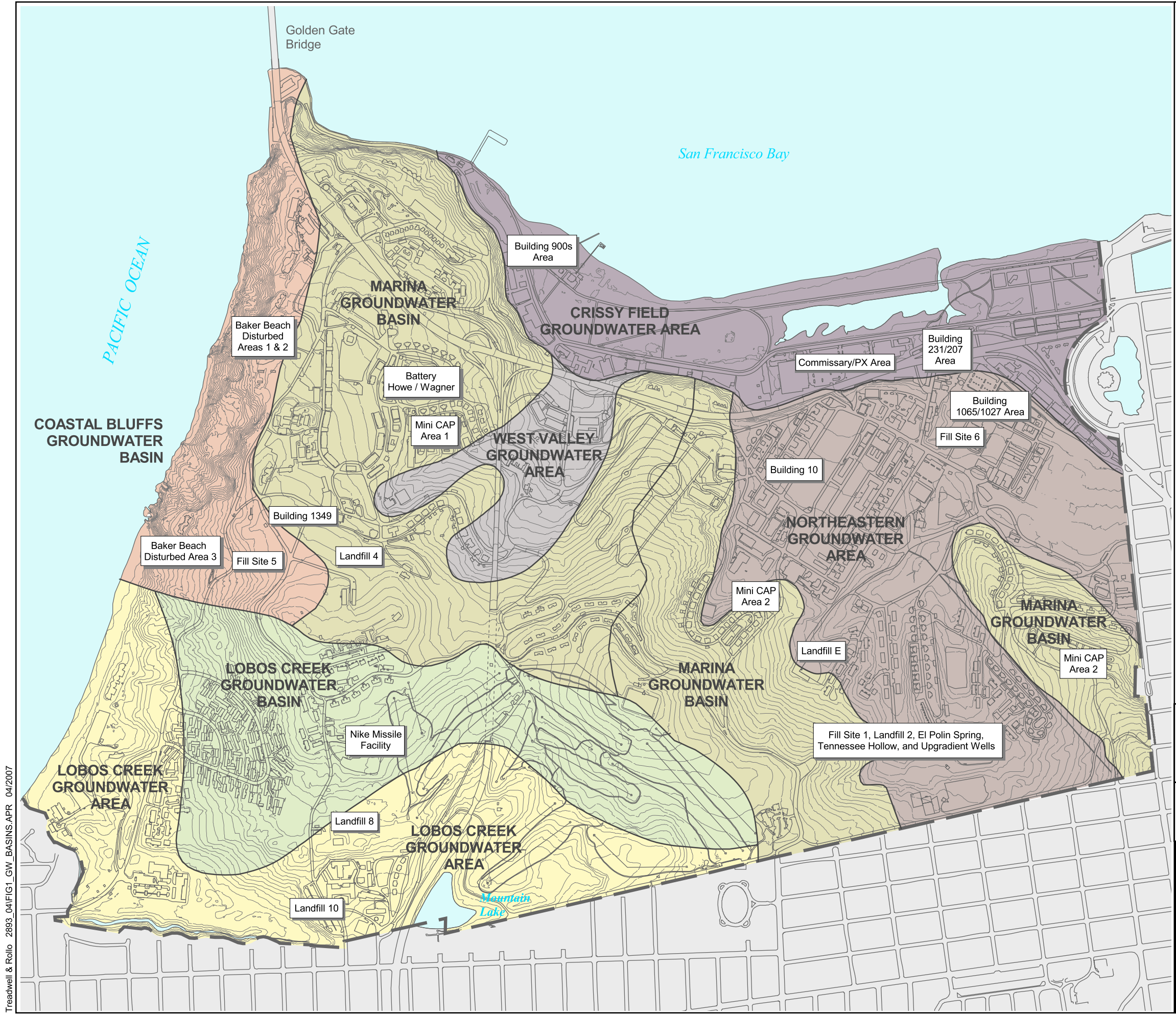
Note

Table 11 identifies current and historical data qualifiers.

µg/L - micrograms per liter

mg/L - milligrams per liter

FIGURES



LEGEND

— Presidio Base Map
— Presidio Boundary
— Topographic Contours (Contour Interval 10 feet)

GROUNDWATER BASIN AREAS

- Coastal Bluffs Groundwater Basin
- Crissy Field Groundwater Area
- Lobos Creek Groundwater Area
- Lobos Creek Groundwater Basin
- Marina Groundwater Basin
- Northeastern Groundwater Area
- West Valley Groundwater Area

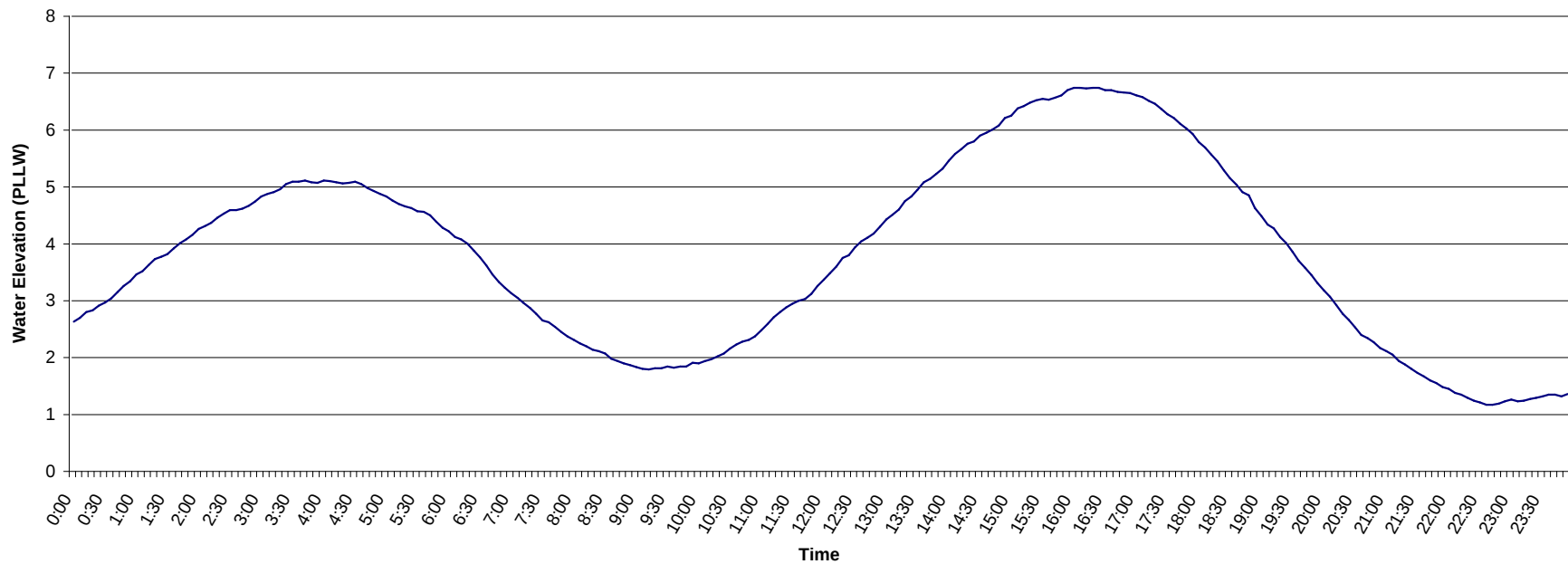
Notes:
Horizontal Datum: NAD 27, CA State Plane Coordinates, Zone 3, feet
Vertical Datum (topography): North American Vertical Datum, NAVD88

**PRESIDIO MAP
WITH SAMPLING AREAS AND
GROUNDWATER BASINS**

Treadwell&Rollo



Presidio Trust
34 Graham Street
P.O. Box 29052
San Francisco, CA 94129-0052
415/561-5300
fax 415/561-5315
April 2007
FIGURE 1



— Water Elevation

Notes:

Actual water level data were taken from:

http://tidesandcurrents.noaa.gov/station_retrieve.shtml?type=Historic+Tide+Data

Station Number '9414290' and converted to PLLW.

Water level magnitudes were collected by NOAA every six minutes.

NOAA - National Oceanographic and Atmospheric Administration

PLLW - Presidio Lower Low Water datum

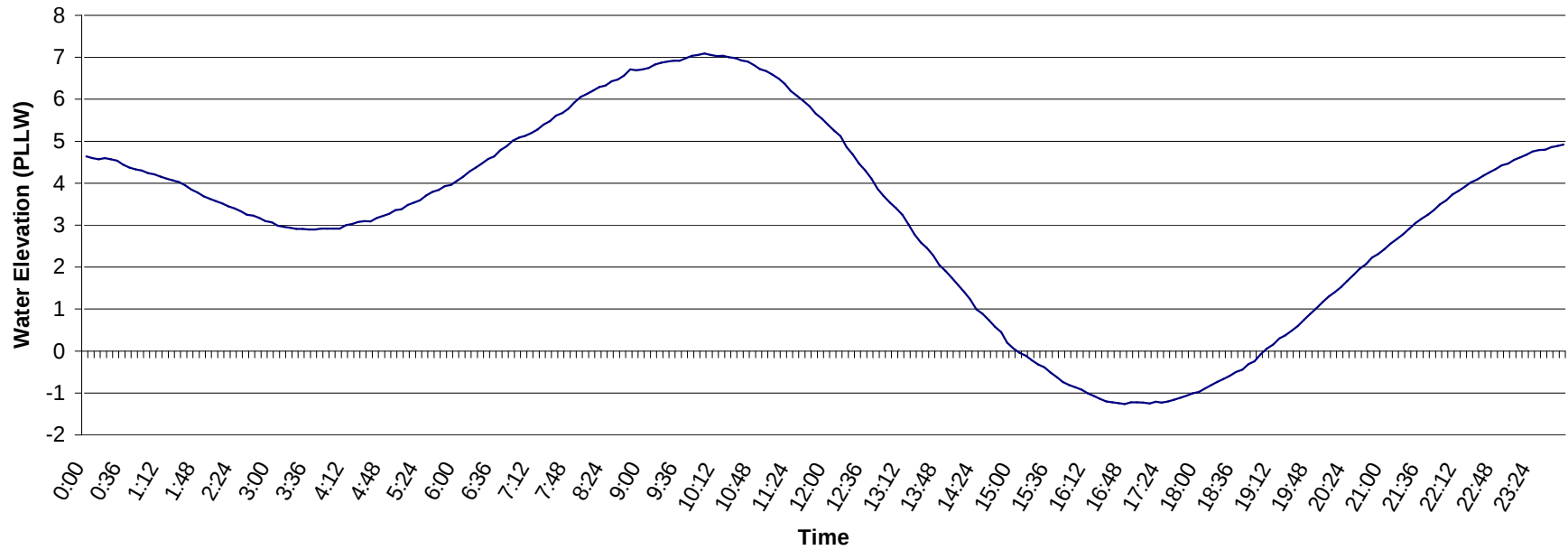
**TIDAL ELEVATIONS AT THE
GOLDEN GATE TIDAL STATION ON
14 AUGUST 2006**



Presidio Trust

34 Graham Street
P.O. Box 29052
San Francisco, CA
94129-0052
415/561-5300
April 2007

FIGURE 2A



— Water Elevation

Notes:

Actual water level data were taken from:

http://tidesandcurrents.noaa.gov/station_retrieve.shtml?type=Historic+Tide+Data

Station Number '9414290' and converted to PLLW.

Water level magnitudes were collected by NOAA every six minutes.

NOAA - National Oceanographic and Atmospheric Administration

PLLW - Presidio Lower Low Water datum

**TIDAL ELEVATIONS AT THE
GOLDEN GATE TIDAL STATION ON
4 DECEMBER 2006**



Presidio Trust

34 Graham Street
P.O. Box 29052
San Francisco, CA
94129-0052
415/561-5300
April 2007

FIGURE 2B

APPENDIX A
Sampling Area Summaries

**BUILDING 900s AREA
APPENDIX SECTION A-1
SEMI-ANNUAL GROUNDWATER MONITORING REPORT
THIRD AND FOURTH QUARTERS 2006
Presidio of San Francisco, California**

1.0 INTRODUCTION AND BACKGROUND

The Building 900s Area is located in the northern portion of the Presidio, adjacent to Crissy Field at the boundary of the San Francisco Bay, just southeast of the Golden Gate Bridge (Figure 1). The site is approximately 15 acres with surface elevations ranging from approximately 10 to 15 feet above the Presidio lower low water (PLLW) datum (Montgomery Watson, 1996b).

Buildings in the Building 900s Area were associated with aviation maintenance activities for Crissy Field, which was built in 1919, and a formerly active Coast Guard Station (Figure A-1-1). Building uses shifted from airfield maintenance to vehicle maintenance in 1936. Building uses of concern include: a former motor pool repair shop, transformer storage, a solvent dip tank, bulk oil and waste oil storage, automotive bodywork, painting, battery storage, a former fuel pump house, fuel storage, steam cleaning, an underground oil-water separator, aircraft maintenance, a boiler house, equipment storage, vehicle maintenance, waste oil/solvent storage, a fueling area, and mine storage (Montgomery Watson, 1997a). Documented potential sources of environmental concern are surface spills associated with vehicle maintenance and waste oil storage and subsurface releases from underground storage tanks (USTs) and associated piping (Dames & Moore, 1997).

Groundwater samples collected from site wells have previously been analyzed for total petroleum hydrocarbons (TPH) as gasoline (TPHg), TPH as diesel (TPHd), TPH as fuel oil (TPHfo), volatile organic compounds (VOCs), and dissolved metals. Dissolved metals analysis has not been a part of the Building 900s Area monitoring program since 1997. Summaries of dissolved oxygen, TPH, and VOC results can be found in Tables A-1-1 through A-1-3.

The Coast Guard Station is located adjacent to and southeast of the site and has three associated monitoring wells, CGGW01, CGGW02, and CGGW03 (Figure A-1-1). The Coast Guard station is no longer included in the Presidio-wide Groundwater Monitoring Program. Prior groundwater sampling of these wells did not detect any concentrations of TPHg, TPHd, TPHfo or metals above laboratory detection limits and sampling was subsequently discontinued in 1996. Coast Guard Station groundwater analytical results for TPH and lead are summarized in Table A-17-1 in Appendix A of the *Draft Presidio Quarterly Groundwater Monitoring Annual Summary Report, Fourth Quarter 2001* (Treadwell & Rollo, 2002c).

A reduction in sampling frequency for all Building 900s Area wells to annual was previously approved by the stakeholders and sampling was only conducted at the site once in 2006, during the First Quarter.

2.0 SITE DESCRIPTION AND GEOLOGY

Unconsolidated deposits encountered during previous site investigations in the Building 900s Area include three units: fill material, estuarine sand deposits with local interbedded fine-grained estuarine deposits, and Franciscan Complex bedrock.

Prior to remediation activities, the Building 900s Area consisted mostly of artificial fill with isolated areas of debris fill. The artificial fill was a mixture of sand, silt, and clay composed primarily of dredged sand from San Francisco Bay (used to fill historic wetlands beneath Crissy Field) and serpentinite and/or chert gravel used as road base. The debris fill was composed of silt and sand mixed with construction debris, including concrete, wood, glass, brick fragments, and wire (Dames & Moore, 1997). Fill materials range in thickness from 1.5 to 7 feet.

The fill materials are underlain by native estuarine sands interbedded with fine-grained estuarine deposits. The sand thickness extends up to approximately 50 feet, and the interbedded, fine-grained sediments range in thickness from 1 inch to 2.5 feet. Shell fragments and layers of organic material (including peat) up to 0.9 feet thick are locally present. At the location of former well 937GW01, adjacent to the serpentinite cliff that borders the site to the west and southwest, silty clay with sand and gravel (weathered serpentinite) extends to at least 35 feet below ground surface (bgs).

The laterally continuous, shallow, fine-grained estuarine deposits (also known as Bay Mud), which separate shallow water-bearing sand units to the southeast in the Building 637 Area (described in Appendix A, of the *Semi-Annual Groundwater Monitoring Report, First and Second Quarters 2004*, Treadwell & Rollo, 2004c), are not present beneath the Building 900s Area. Interbedded, fine-grained sediments are discontinuous and mostly occur locally north of Building 937.

The estuarine sediments are underlain by Franciscan Complex bedrock, predominantly serpentinite. The massive serpentinite outcrop exposed along the western portion of the Building 900s Area forms a cliff approximately 60 feet above ground surface (Figure A-1-1). At the base of the cliff, the serpentinite bedrock dips below ground surface and the depth to bedrock generally increases from the cliff to San Francisco Bay, with the maximum encountered depth at approximately 50 feet bgs.

A single, heterogeneous, unconfined (water table) coastal aquifer is present beneath the Building 900s Area. The water table beneath the Building 900s Area has, in the past, typically ranged from 6 to 9 feet bgs. The thickness of the aquifer increases as the depth to bedrock increases from the serpentinite cliff on the west side of the site toward San Francisco Bay (Figure A-1-1).

The Building 900s Area monitoring wells are generally screened in estuarine sand deposits of the aquifer, with some wells screened partially in fine-grained lenses or in weathered serpentinite bedrock. Because the site wells are screened in a single water table aquifer without discrete water-bearing zones, the wells are separated into three groups based on relative screened elevation rather than water-bearing zones. These screened intervals are referred to as the shallow, intermediate, and deep.

Groundwater in the Crissy Field Groundwater Area (Figure 1) generally flows north to northeast toward San Francisco Bay, with locally divergent flow directions (Montgomery Watson, 1999a). In the northwestern portion of the Building 900s Area, the historical coastal features influence the hydrogeology in the shallow interval by diverting groundwater flow (and contaminant migration) northwest and north along the historic lagoonal water channel (Montgomery Watson, 1997b), rather than northeast directly toward the bay. All three intervals have similar groundwater elevations.

3.0 REMEDIAL ACTION PLAN

In April 1998, the Department of Toxic Substances Control (DTSC) approved the Crissy Field Remedial Action Plan (RAP). The Crissy Field RAP addressed multiple Crissy Field area contamination sites, including the Building 900s Area. For the Building 900s Area, the Crissy Field RAP selected source soil removal and subsequent confirmation groundwater monitoring to ensure that contaminant concentrations do not exceed applicable standards. Approximately 39,000 tons of contaminated soil and fill were excavated and removed (Army and DTSC, 1998). The Crissy Field RAP requires that groundwater monitoring be conducted for a minimum of five years following construction completion, and that, should contamination concentrations exceed applicable standards for two consecutive quarters, the data be reviewed with the stakeholders and an action plan developed and implemented to address the groundwater contamination. Seventeen additional monitoring wells were installed between 19 and 29 June 2001 to expand the monitoring well network for this area (Figure A-1-1). The Crissy Field RAP identifies the following groundwater cleanup levels for this area:

Cis-1,2-dichloroethene (cis-1,2-DCE)	140,000 micrograms per Liter (µg/L)
Trans-1,2 dichloroethene (trans-1,2-DCE)	140,000 µg/L
Trichloroethene (TCE)	81 µg/L
Vinyl chloride	525 µg/L

In addition, five-year reviews of groundwater use in this area are required to ensure that no human use is occurring without appropriate treatment. These reviews are to continue until the groundwater meets drinking water standards or is no longer classified as a “potential drinking water source.” In May 2002, monitoring well 937GW108 was installed at the Building 937 Area as requested by the DTSC, and on 14 May 2002, dry well 979GW111 was replaced with

monitoring well 979GW111R. This completed the monitoring well network required by the Crissy Field RAP.

4.0 GROUNDWATER MONITORING

The Building 900s Area has 28 associated monitoring wells (Figure A-1-1). Work at the site is currently being performed in accordance with the *Crissy Field RAP* and the *Field Sampling Plan* (FSP) (Treadwell & Rollo, 2001a). In accordance with Table 1A, groundwater elevations were collected during the Third Quarter 2006 from all Building 900s Area wells. Groundwater elevations were not proposed for collection during the Fourth Quarter 2006 (Table 1B).

Groundwater sampling was only proposed during the First Quarter 2006 and therefore, no groundwater samples were collected from any of the Building 900s Area wells during either the Third or Fourth Quarters 2006. First Quarter 2006 TCE, DCE, and vinyl chloride results are shown in Figures A-1-5 through A-1-7.

4.1 Groundwater-Level Measurements and Interpretation

Building 900s Area monitoring wells are screened in three different intervals of the single aquifer present. These screened intervals are referred to as shallow, intermediate, and deep zones and are differentiated by relative screen depths. A complete list of site wells, their associated water-bearing zones, and historical groundwater elevations, are presented in Table A-1-4.

Third Quarter 2006 groundwater elevation measurements were manually collected on 14 August 2006. Groundwater elevations at the Building 900s Area were not collected in the Fourth Quarter 2006. The frequency of water level measurements was reduced to an annual basis prior to the Fourth Quarter 2006. The next water level measurements at Buildings 900 Area will be performed in the First Quarter 2007. Water level meters were calibrated on 14 August and calibration logs can be found in Appendix B. Groundwater elevation field forms can be found in Appendix C.

4.1.1 Shallow Groundwater

During the Third Quarter 2006, shallow groundwater elevations at the Building 900s Area ranged from 4.18 to 7.85 feet above PLLW in monitoring wells 979GW113 and 937GW12, respectively. The majority of groundwater elevations measured during the Third Quarter 2006 was within the range of historical elevations. The Third Quarter 2006 shallow groundwater flow direction in the northern portion of the Building 900s Area was northerly along the historic lagoonal channel, while the groundwater flow direction in the southern portion of the site was northeasterly towards San Francisco Bay (Figure A-1-2). The average groundwater gradients for

the shallow monitoring wells in the northern and southern portions of the site were estimated to be approximately 0.005 and 0.015 feet per foot, respectively.

4.1.2 Intermediate Groundwater

During the Third Quarter 2006, intermediate groundwater elevations at the Building 900s Area ranged from 3.98 feet above PLLW in monitoring well 979GW114 to 5.49 feet above PLLW in monitoring well 937GW102. The Third Quarter 2006 intermediate groundwater flow direction was north to northeasterly towards San Francisco Bay (Figure A-1-3). The average groundwater gradients for the intermediate monitoring wells in the northern and southern portions of the site were estimated to be approximately 0.004 and 0.009 feet per foot, respectively.

4.1.3 Deep Groundwater

During the Third Quarter 2006, deep groundwater elevations at the Building 900s Area ranged from 2.34 to 6.17 feet above PLLW in monitoring wells 979GW117 and 937GW38, respectively. The deep groundwater flow direction was northerly (Figure A-1-4). The average groundwater gradient for the deep monitoring wells was estimated to be approximately 0.006 feet per foot.

4.1.4 Vertical Gradients

Building 900s Area vertical gradients are presented in Table A-1-5. Vertical groundwater gradients were calculated for three well clusters each having one shallow, intermediate, and deep well: 900WC-1, 900WC-2, and 900WC-3. Well clusters 900WC-1 and 900WC-2 are located northeast of Building 937 (Figure A-1-1). Well cluster 900WC-3 is located in the northern portion of the site. A description of which wells are contained in each well cluster and a description of how the vertical gradients were calculated can be found in Table A-1-5.

During Third Quarter 2006 vertical gradients were estimated as follows:

- A downward (positive) vertical gradient was observed between the intermediate/deep and shallow/deep intervals within well cluster 900WC-3.
- An upward (negative) vertical gradient was observed between the all three intervals within well clusters 900WC-1 and 900WC-2.
- No vertical gradient was observed between the shallow/intermediate intervals within well cluster 900WC-3.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Groundwater elevations, gradients, and flow directions during Third Quarter 2006 are consistent with historical values and interpretations. The groundwater sampling frequency at the Building 900s Area will continue to be annual until the first five-year review, which is scheduled to be completed in 2007.

Table A-1-1
Summary of Dissolved Oxygen Measurements
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	Dissolved Oxygen
	Analytical Method	Field
		(mg/L)
937GW06 (shallow)	03/14/06	0.98
	03/17/05	0.4
	03/16/04	0.1
	12/05/03	1.1
	08/18/03	0.7
	06/03/03	0.5
	03/20/03	0.6
	12/05/02	1.3
	08/28/02	1.4
	05/31/02	1.4
	03/05/02	1.1
	11/27/01	1.2
	09/06/01	NM
	05/16/01	2.5
	06/20/00	0.03
	01/10/00	0.7
	09/01/99	0.52
	06/01/99	0.3
	03/15/99	0.54
	12/14/98	0.39
	09/03/98	0.81
	05/27/98	0.55
	02/24/98	0.58
	11/25/97	0.26
	08/26/97	0.67
	06/04/97	0.25
	03/10/97	0.13
937GW07 (shallow)	03/14/06	0.23
	03/23/05	1.1
	03/18/04	0.93
	12/10/03	0.8
	08/18/03	0.7
	06/06/03	0.5
	03/20/03	1.4
	12/05/02	1.8
	09/06/02	0.4
	06/04/02	1
	03/06/02	1
	12/04/01	2.01
	09/07/01	2.6
	05/18/01	2.5
	06/20/00	0.08
	01/20/00	9.47
	03/09/99	3.27
	12/07/98	2.79

Table A-1-1
Summary of Dissolved Oxygen Measurements
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	Dissolved Oxygen
	Analytical Method	Field
		(mg/L)
937GW07 (shallow)	09/02/98	0.36
	05/19/98	0.69
	02/25/98	6.8 (J35)
	12/01/97	2.27
	08/27/97	0.55
	06/16/97	0.4
	03/18/97	0.4
937GW12 (shallow)	03/13/06	5.17
	03/16/05	0.9
	03/12/04	0.7
	12/03/03	0.8
	08/18/03	0.7
	06/03/03	0.7
	03/20/03	0.5
	12/05/02	0.5
	08/28/02	1
	05/31/02	1.2
	03/05/02	1.2
	11/27/01	2.09
	09/06/01	0.7
	05/15/01	3.2
	06/19/00	0.11
	01/11/00	0.98
	09/01/99	1.01
	06/02/99	1.13
	03/10/99	0.79
	12/07/98	0.72
	09/01/98	0.92
	05/26/98	0.76
	02/25/98	1.32
	01/07/98	1.58
	12/01/97	0.17
	08/27/97	0.32
	06/10/97	0.72
	03/13/97	0.12
937GW15 (shallow)	03/15/06	0.4
	03/23/05	1.4
	03/18/04	0.16
	12/10/03	1.5
	08/18/03	0.6
	06/06/03	2.9
	03/20/03	0.8
	12/05/02	1.2
	09/06/02	0.4
	06/04/02	1.8

Table A-1-1
Summary of Dissolved Oxygen Measurements
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	Dissolved Oxygen
	Analytical Method	Field
		(mg/L)
937GW15 (shallow)	03/06/02	1.6
	12/04/01	1.3
	09/07/01	3.4
	05/17/01	4.5
	06/20/00	0.39
	01/20/00	3.37
	09/02/99	3.5
	06/02/99	6.3 (J35)
	03/10/99	0.91
	12/07/98	0.42
	09/01/98	1.21
	05/19/98	1
	02/16/98	4.07
	11/20/97	0.16
	08/21/97	0.13
	06/02/97	0.19
937GW32R (deep)	03/04/97	2.2
	03/13/06	0.73
	03/18/05	0.2
	03/12/04	0.2
	12/09/03	0.7
	08/18/03	0.6
	06/03/03	0.4
	03/20/03	0.4
	12/05/02	0.7
	08/29/02	0.8
	06/04/02	1
	03/05/02	0.2
	11/27/01	NM
	09/06/01	0.76
	05/16/01	3.3
	06/16/00	0.05
	01/13/00	0.4
	06/01/99	0.25
	03/15/99	0.26
	12/14/98	0.23
	09/03/98	0.29
	05/27/98	0.4
	02/24/98	0.35
	11/25/97	0.16
	08/26/97	0.23
	06/04/97	0.1
	03/04/97	0.06

Table A-1-1
Summary of Dissolved Oxygen Measurements
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	Dissolved Oxygen
	Analytical Method	Field
		(mg/L)
937GW35 (shallow)	03/13/06	0.51
	03/18/05	0.7
	03/16/04	0.5
	12/09/03	1.8
	08/20/03	0.5
	06/03/03	1
	03/20/03	1
	12/05/02	NM
	08/29/02	1.2
	06/04/02	0.9
	03/05/02	1.5
	11/27/01	2.66
	09/06/01	4.9
	05/16/01	3.2
	06/16/00	0.22
	09/01/99	1.34
	06/01/99	1.34
	03/09/99	1.47
	12/02/98	0.6
	09/03/98	0.93
	05/18/98	1.94
	02/11/98	2
	11/17/97	0.49
	08/18/97	0.87
	05/27/97	1.36
	03/03/97	0.78
937GW37 (shallow)	03/13/06	0.34
	03/16/05	0.7
	03/12/04	0.1
	12/03/03	0.8
	08/15/03	0.6
	06/03/03	0.8
	03/19/03	0.6
	12/05/02	1
	08/28/02	1.3
	05/31/02	0.9
	03/05/02	1.4
	11/27/01	2.99
	09/06/01	0.91
	05/15/01	1.3
	06/19/00	0.08
	01/13/00	0.67
	09/02/99	0.67
	06/02/99	4.4
	03/10/99	2.57
	12/07/98	0.5
	09/02/98	0.47
	05/26/98	0.89
	02/26/98	4.46

Table A-1-1
Summary of Dissolved Oxygen Measurements
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	Dissolved Oxygen
	Analytical Method	Field
		(mg/L)
937GW37 (shallow)	12/02/97	0.52
	08/28/97	0
	06/11/97	0.91
	03/17/97	0.1
937GW38 (deep)	03/13/06	0.52
	03/16/05	0.4
	03/12/04	0.2
	12/03/03	0.8
	08/18/03	0.9
	06/03/03	0.4
	03/19/03	0.3
	12/05/02	1
	08/28/02	0.8
	05/31/02	0.9
	03/05/02	1.2
	11/27/01	2.7
	09/06/01	0.56
	05/15/01	1.7
	06/19/00	0.1
	01/11/00	0.3
	09/02/99	0.46
	06/02/99	0.11
	03/10/99	0.12
	12/03/98	0.13
	09/01/98	0.87
	05/26/98	0.98
	02/26/98	0.82
	12/02/97	0.19
	08/27/97	0.22
	06/10/97	0
	03/13/97	0.05
937GW39 (deep)	03/13/06	0.42
	03/17/05	0.6
	03/12/04	0.3
	12/05/03	1
	08/18/03	0.8
	06/03/03	0.7
	03/20/03	0.4
	12/05/02	0.6
	08/28/02	1.5
	05/31/02	0.7
	03/05/02	1.1
	11/27/01	1.9
	09/07/01	0.91
	05/18/01	0.6
	06/16/00	0.1
	01/13/00	0.22
	09/02/99	0.3
	06/01/99	1.1

Table A-1-1
Summary of Dissolved Oxygen Measurements
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	Dissolved Oxygen
	Analytical Method	Field
		(mg/L)
937GW39 (deep)	03/09/99	0.13
	12/02/98	0.1
	08/31/98	4.65
	05/21/98	0.11
	02/18/98	0.68
	12/03/97	0.83
	08/28/97	0
	06/16/97	0.03
	03/18/97	0.04
937GW42 (intermediate)	03/14/06	0.43
	03/18/05	0.3
	03/12/04	0.1
	12/09/03	1
	08/20/03	0.9
	06/09/03	0.8
	03/20/03	0.4
	12/05/02	0.9
	08/29/02	0.9
	06/04/02	0.7
	03/06/02	0.9
	11/28/01	1.4
	09/06/01	0.61
	05/16/01	1
	06/16/00	0.18
	01/10/00	0.98
	09/03/98	0.73
	05/28/98	0.67
	02/24/98	0.42
	11/25/97	0.13
	08/26/97	0.35
	06/04/97	0.14
	03/10/97	0
937GW101 (shallow)	03/13/06	0.09
	03/18/05	0.6
	03/16/04	0.66
	12/04/03	0.7
	08/12/03	0.9
	06/04/03	1.7
	03/19/03	0.2
	12/10/02	0.7
	08/28/02	0.7
	06/04/02	1.1
	03/08/02	4
	11/27/01	0.9
	09/06/01	0.4

Table A-1-1
Summary of Dissolved Oxygen Measurements
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	Dissolved Oxygen
	Analytical Method	Field
		(mg/L)
937GW102 (intermediate)	03/13/06	2.87
	03/18/05	0.7
	03/16/04	0.62
	12/04/03	0.8
	08/12/03	0.6
	06/03/03	1.2
	03/19/03	0.3
	12/10/02	1
	08/28/02	0.9
	05/30/02	1.4
	03/08/02	3.8
	11/28/01	1
937GW103 (deep)	09/06/01	0.4
	03/13/06	3.42
	03/18/05	0.7
	03/16/04	0.7
	12/04/03	0.6
	08/12/03	0.7
	06/03/03	1.7
	03/19/03	0.4
	12/10/02	3.4
	08/28/02	0.9
	05/30/02	0.9
	03/08/02	4.4
937GW104 (shallow)	11/27/01	2.4
	09/06/01	0.4
	03/13/06	1.3
	03/30/05	0.8
	03/12/04	0.48
	12/08/03	2.1
	08/12/03	0.3
	06/03/03	0.3
	03/11/03	1
	12/10/02	0.4
	08/30/02	0.4
	05/31/02	0.4
937GW105 (intermediate)	03/13/02	4.3
	12/03/01	1.1
	09/07/01	0.98
	03/13/06	0.9
	03/30/05	1
	03/16/04	0.11
	12/09/03	1
	08/15/03	0.4
	06/04/03	0.3
	03/19/03	0.2
	12/10/02	0.3
	09/05/02	0.5
	05/31/02	0.4
	03/13/02	0.9
	12/03/01	0.74
	09/07/01	6.3

Table A-1-1
Summary of Dissolved Oxygen Measurements
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	Dissolved Oxygen
	Analytical Method	Field
		(mg/L)
937GW106 (shallow)	03/13/06	1.5
	03/30/05	1.3
	03/16/04	0.37
	12/09/03	0.8
	08/18/03	0.4
	06/04/03	0.5
	03/18/03	0.2
	12/10/02	0.2
	09/05/02	0.5
	05/31/02	0.3
	03/13/02	0.3
	11/29/01	1.4
937GW107 (intermediate)	08/31/01	1.3
	03/14/06	0.4
	03/30/05	0.7
	03/16/04	0.1
	12/09/03	1.4
	08/18/03	0.3
	06/03/03	0.2
	03/18/03	0.2
	12/10/02	0.3
	09/05/02	0.4
937GW108 (shallow)	05/31/02	0.4
	03/13/02	0.4
	11/29/01	0.8
	08/31/01	NM
	03/13/06	0.09
	03/17/05	0.4
	03/19/04	1.1
	12/03/03	0.5
	08/15/03	0.4
	06/03/03	0.6
950GW108 (intermediate)	03/19/03	0.4
	12/10/02	1.1
	09/05/02	1.9
	06/04/02	1.6
	03/09/06	0.81
	03/31/05	0.8
	03/16/04	0.39
	12/04/03	NM
	08/12/03	0.9
	06/06/03	0.3
	03/18/03	0.4
	12/11/02	0.1
	08/29/02	0.7
	06/04/02	0.9
	03/14/02	0.4
	11/30/01	0.4
	09/06/01	4.65

Table A-1-1
Summary of Dissolved Oxygen Measurements
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	Dissolved Oxygen
	Analytical Method	Field
		(mg/L)
979GW109 (shallow)	03/14/06	0.5
	03/18/05	0.8
	03/16/04	0.4
	12/09/03	0.5
	08/20/03	0.4
	06/06/03	0.3
	03/19/03	0.8
	12/10/02	2.7
	08/29/02	0.8
	06/04/02	1.1
	03/08/02	1.8
	11/28/01	2
979GW110 (intermediate)	09/07/01	0.57
	03/14/06	0.4
	03/18/05	0.7
	03/16/04	0.7
	12/04/03	0.7
	08/12/03	0.8
	06/05/03	2
	03/19/03	0.8
	12/11/02	0.5
	08/29/02	0.9
	05/30/02	0.9
	03/14/02	0.2
979GW111R (intermediate)	11/28/01	4.1
	09/07/01	4.5
	03/13/06	0.1
	03/30/05	1.1
	03/12/04	0.11
	12/09/03	1.7
	08/12/03	0.3
	06/03/03	1.4
	03/11/03	1.9
979GW112 (shallow)	12/10/02	0.6
	08/30/02	0.3
	06/05/02	1.5
	03/14/06	0.3
	03/30/05	1.4
	03/12/04	0.09
	12/09/03	0.9
	08/15/03	0.6
	06/03/03	0.5
	03/18/03	0.2
	12/10/02	0.3
	08/30/02	0.3
	06/05/02	0.3
	03/14/02	2.7
	12/03/01	1.3
	08/31/01	3.8

Table A-1-1
Summary of Dissolved Oxygen Measurements
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	Dissolved Oxygen
	Analytical Method	Field
		(mg/L)
979GW113 (shallow)	03/14/06	1
	03/18/05	0.6
	03/16/04	0.43
	12/04/03	0.9
	08/12/03	1
	06/05/03	2.4
	03/19/03	0.4
	12/10/02	2.7
	08/28/02	1.1
	05/30/02	1.1
	03/13/02	1.1
	11/29/01	0.8
979GW114 (intermediate)	09/07/01	6.9
	03/14/06	0.3
	03/18/05	NM
	03/16/04	0.6
	12/04/03	NM
	08/12/03	0.5
	06/04/03	2.1
	03/19/03	0.2
	12/10/02	2.9
	08/28/02	1
	05/30/02	1.1
	03/13/02	0.9
979GW115 (shallow)	11/29/01	0.6
	09/07/01	10.4
	03/13/06	0.5
	03/30/05	1.1
	03/12/04	0.24
	12/09/03	0.5
	08/12/03	0.3
	06/03/03	0.3
	03/18/03	0.3
	12/11/02	0.2
	08/30/02	0.3
	06/05/02	0.3
979GW116 (intermediate)	03/13/02	1.7
	11/29/01	1
	08/29/01	4.7
	03/14/06	0.3
	03/31/05	0.9
	03/16/04	0.15
	12/09/03	0.2
	08/18/03	0.3
	06/04/03	0.4
	03/19/03	0.3
	12/10/02	0.2
	09/05/02	0.4
	06/06/02	4.3
	03/14/02	3.9
	11/29/01	1
	08/29/01	4.2

Table A-1-1
Summary of Dissolved Oxygen Measurements
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	Dissolved Oxygen
	Analytical Method	Field
		(mg/L)
979GW117 (deep)	03/13/06	0.2
	03/17/05	0.60
	03/12/04	0.15
	12/08/03	2.1
	08/12/03	0.3
	06/03/03	0.3
	03/18/03	0.2
	12/10/02	0.4
	08/30/02	0.3
	05/31/02	1.4
	03/13/02	1.6
	11/29/01	1.4
	08/29/01	8.1

Notes

mg/L - milligrams per liter

NM - Not measured

Table 11 in the main report identifies current and historical data qualifiers.

Table A-1-2
Results of VOC Analyses
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	1,1- Dichloro- ethane	1,1-Dichloro- ethene	1,2-DCE (cis & trans)	Cis-1,2- DCE	Trans-1,2- DCE	1,4- Dichloro- benzene	2-Butanone	Acetone	Benzene	Bromo- methane	Carbon Disulfide	Chloro- benzene	Chloro- methane	Dichloro- methane	Ethyl- benzene	MTBE	PCE	Styrene	Toluene	TCE	Vinyl Chloride	Total Xylenes	All Other VOCs	
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	--	--	140,000	140,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	81	525	--	--	
937GW06 (shallow)	03/14/06	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND	
	03/17/05	< 0.5	< 0.5	NA	3.9	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5 UJ	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND	
	03/16/04	< 0.5	< 0.5	NA	0.6	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	12/05/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/18/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	06/03/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/20/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	0.1 J	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	12/05/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/28/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	05/31/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/05/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1 UJ	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	11/27/01	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	09/06/01	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	05/16/01	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 10	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 5	< 0.5	< 0.5 UJ	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	06/20/00	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	01/10/00	< 0.5	< 0.5	NA	1	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	09/01/99	< 0.5	< 0.5	NA	1.8	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	06/01/99	< 0.5	< 0.5	NA	1.2	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/15/99	< 0.5	< 0.5	NA	4 (J33)	0.56	< 0.5	NA	NA	0.3 (J28)	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	4.7 (J33)	< 0.5	ND
	12/14/98	< 0.5	< 0.5	NA	16	2.5	< 0.5	NA	NA	< 1.2 (U2)	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	14	< 0.5	ND
	09/03/98	< 0.5	< 0.5	NA	1.9 (J18)	0.55 (J18)	< 0.5	NA	NA	< 0.5 (U18)	< 0.5	< 5	< 0.5	0.72 (J18)	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5 (U18)	< 0.5 (U18)	< 0.5 (U18)	< 0.5	ND	
	05/27/98	< 0.5	< 0.5	NA	1.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	02/24/98	< 0.5	< 0.5	NA	12	2.1	< 0.5	NA	NA	1.4	< 0.5	< 5	< 0.5	0.62	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	17	< 0.5	ND
	11/25/97	< 0.5	< 0.5	NA	2.3	0.64	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/26/97	< 0.5	< 0.5	NA	1.7	0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	06/04/97	< 0.5	< 0.5	NA	1	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/10/97	< 0.5	< 0.5	NA	0.65	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	11/11/96	< 0.5	< 0.5	NA	0.96	< 0.5	< 0.5	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	0.55	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/14/96	< 0.5	< 0.5	0.94	NA	NA	< 0.5	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	04/15/96	< 0.5	< 0.5	7.8	NA	NA	< 0.5	< 10	< 10	0.7	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	18	< 0.5	ND
	01/23/96	< 0.5	< 0.5	3.3	NA	NA	< 0.5	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	10/19/95	< 0.5 U	< 0.5	NA	7.3	7.7	NA	< 10	< 10	0.54	< 0.5 U	< 5	<												

Table A-1-2
Results of VOC Analyses
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	1,1-Dichloro-ethane	1,1-Dichloro-ethene	1,2-DCE (cis & trans)	Cis-1,2-DCE	Trans-1,2-DCE	1,4-Dichloro-benzene	2-Butanone	Acetone	Benzene	Bromo-methane	Carbon Disulfide	Chloro-benzene	Chloro-methane	Dichloro-methane	Ethyl-benzene	MTBE	PCE	Styrene	Toluene	TCE	Vinyl Chloride	Total Xylenes	All Other VOCs	
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	--	--	140,000	140,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	81	525	--	--	
937GW07 (shallow)	12/07/98	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	09/02/98	< 0.5	< 0.5	NA	< 0.5 (U18)	< 0.5 (U18)	< 0.5	NA	NA	< 0.5 (U18)	< 0.5	< 5	< 0.5	< 0.5 (U18)	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5 (U18)	< 0.5 (U18)	< 0.5 (U18)	< 0.5	ND	
	05/19/98	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	02/25/98	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	12/01/97	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/27/97	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	06/16/97	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/18/97	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	11/18/96	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/21/96	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	04/17/96	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	01/25/96	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	10/24/95	< 0.5 U	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 0.5 U	< 5	< 0.5 U	< 0.5	< 4.5 U	< 0.5 U	NA	< 0.5 U	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5 U	ND	
	07/27/95	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	05/04/95	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	02/03/95	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	11/02/94	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/11/94	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	05/11/94	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	02/11/94	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	11/02/93	< 0.5	NA	NA	< 0.5	< 0.5	< 0.5	NA	< 10	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 5	< 0.5	NA	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	07/30/93	< 0.5	NA	NA	< 0.5	< 0.5	< 0.5	NA	< 5	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 5	< 0.5	NA	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	ND	
937GW12 (shallow)	03/13/06	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND	
	03/16/05	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10 UJ	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND	
	03/12/04	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	12/03/03	< 0.5	< 0.5	NA	0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/18/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	06/03/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1 J,U	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.7	< 0.5	ND
	03/20/03	< 0.5	< 0.5	NA	< 0.5	0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.6	< 0.5	ND	
	12/05/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/28/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10 UJ	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1	< 0.5	ND
	05/31/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/05/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 1 UJ	< 4	< 0.5	< 0.5								

Table A-1-2
Results of VOC Analyses
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	1,1- Dichloro- ethane	1,1-Dichloro- ethene	1,2-DCE (cis & trans)	Cis-1,2- DCE	Trans-1,2- DCE	1,4- Dichloro- benzene	2-Butanone	Acetone	Benzene	Bromo- methane	Carbon Disulfide	Chloro- benzene	Chloro- methane	Dichloro- methane	Ethyl- benzene	MTBE	PCE	Styrene	Toluene	TCE	Vinyl Chloride	Total Xylenes	All Other VOCs	
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	--	--	140,000	140,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	81	525	--	--	
937GW12 (shallow)	01/26/96	< 0.5	< 0.5	1.2	NA	NA	< 0.5	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	0.65	< 0.5	ND	
	10/25/95	< 0.5 U	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 0.5 U	< 5	< 0.5 U	< 0.5	< 4.5 U	< 0.5 U	NA	< 0.5 U	< 0.5	< 0.5	< 0.5	< 0.5 U	< 0.5 U	ND	
	07/26/95	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	05/03/95	< 0.5	< 0.5	0.94	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	02/09/95	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	11/01/94	< 0.5	< 0.5	2.4	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.65	< 0.5	ND
	08/10/94	< 0.5	< 0.5	1.1	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	0.66	< 0.5	ND	
	05/10/94	< 0.5	< 0.5	2.5	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	02/14/94	< 0.5	< 0.5	3.1	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	11/02/93	< 0.5	NA	NA	< 0.5	< 0.5	< 0.5	NA	< 10	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 5	< 0.5	NA	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	ND	
08/02/93	< 0.5	NA	NA	0.5	< 0.5	< 0.5	< 0.5	NA	< 5	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 5	< 0.5	NA	< 0.5	NA	< 0.5	< 0.5	0.56	< 0.5	ND	
937GW15 (shallow)	03/15/06	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/23/05	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/18/04	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	12/10/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/18/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	06/06/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/20/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	12/05/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	09/06/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	06/04/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10 UJ	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
DUP0907014A	03/06/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10 UJ	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/04/01	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	09/07/01	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	09/07/01	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/17/01	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/20/00	< 0.5	< 0.5	NA	< 0.5 (U20)	< 0.5 (U20)	< 0.5	NA	NA	< 0.5 (U20)	< 0.5	< 5	< 0.5	< 0.5 (U20)	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5 (U20)	< 0.5 (U20)	< 0.5 (U20)	< 0.5 (U20)	< 0.5	ND
	01/20/00	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	09/02/99	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/02/99	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/10/99	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/07/98	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	09/01/98	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	0.66	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/19/98	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	02/16/98	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	11/20/97	< 0.5	< 0.5	NA	0.89	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.6	ND
	08/21/97	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	8.4	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/02/97	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/04/97	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	11/05/96	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/09/96	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	04/15/96	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	01/23/96	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	10/19/95	< 0.5 U	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 0.5 U	< 5	< 0.5 U	< 0.5	< 4.5 U	< 0.5 U	NA	< 0.5 U	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5 U	< 0.5 U	ND
	07/21/95	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	<													

Table A-1-2
Results of VOC Analyses
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	1,1-Dichloroethane	1,1-Dichloroethene	1,2-DCE (cis & trans)	Cis-1,2-DCE	Trans-1,2-DCE	1,4-Dichlorobenzene	2-Butanone	Acetone	Benzene	Bromo-methane	Carbon Disulfide	Chlorobenzene	Chloromethane	Dichloromethane	Ethylbenzene	MTBE	PCE	Styrene	Toluene	TCE	Vinyl Chloride	Total Xylenes	All Other VOCs	
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	
Cleanup Levels ²		--	--	--	140,000	140,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	81	525	--	--	
937GW32R (deep)	03/14/06	< 0.5	< 0.5	NA	1.8	< 0.5	NA	< 10	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND	
	03/18/05	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND	
	03/12/04	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	12/09/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
DUP0906011B	08/18/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	0.1 J	< 1 UJ	< 0.5	< 0.5	< 1 UJ	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	06/03/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/20/03	< 0.5	< 0.5	NA	0.7	< 0.5	NA	< 10	< 10	0.2 J	< 1	< 0.5	< 0.5	< 1	< 4	0.8	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.3	ND	
	12/05/02	< 0.5	< 0.5	NA	0.7	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/29/02	< 0.5	< 0.5	NA	0.8	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1 UJ	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	06/04/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10 UJ	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1.0	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/05/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1 UJ	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	11/27/01	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	09/06/01	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	09/06/01	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	05/16/01	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	06/16/00	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 1	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	01/13/00	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	09/09/99	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	06/01/99	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/15/99	< 12	< 12	NA	< 12	< 12	< 12	NA	NA	< 12	< 12	< 120	< 12	< 12	< 110	< 12	NA	< 12	< 12	< 12	< 12	< 12	< 12	ND	
	12/14/98	< 12	< 12	NA	< 12	< 12	< 12	NA	NA	< 12	< 12	< 120	< 12	< 12	< 110	< 12	NA	< 12	< 12	< 12	< 12	< 12	< 12	ND	
	09/03/98	< 12	< 12	NA	< 12 (U18)	< 12 (U18)	< 12	NA	NA	< 12 (U18)	< 12	< 120	< 12	< 12 (U18)	< 110	< 12	NA	< 12	< 12	< 12 (U18)	< 12 (U18)	< 12 (U18)	< 12 (U18)	< 12	ND
	05/27/98	< 12	< 12	NA	< 12	< 12	< 12	NA	NA	< 12	< 12	< 120	< 12	< 12	< 110	< 12	NA	< 12	< 12	< 12	< 12	< 12	< 12	< 12	ND
	02/24/98	< 12	< 12	NA	< 12	< 12	< 12	NA	NA	< 12	< 12	< 120	< 12	< 12	< 110	< 12	NA	< 12	< 12	< 12	< 12	< 12	< 12	< 12	ND
	11/25/97	< 12	< 12	NA	< 12	< 12	< 12	NA	NA	< 12	< 12	< 120	< 12	< 12	< 110	< 12	NA	< 12	< 12	< 12	< 12	< 12	< 12	< 12	ND
	08/26/97	< 5	< 5	NA	< 5	< 5	< 5	NA	NA	< 5	< 5	< 50	< 5	< 5	< 45	< 5	NA	< 5	< 5	< 5	< 5	< 5	< 5	< 5	ND
	06/04/97	< 2.5	< 2.5	NA	< 2.5	< 2.5	< 2.5	NA	NA	< 2.5	< 2.5	< 25	< 2.5	< 2.5	< 22	< 2.5	NA	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	ND
	03/04/97	< 12	< 12	NA	< 12	< 12	< 12	NA	NA	< 12	< 12	< 120	< 12	< 12	< 110	< 12	NA	< 12	< 12	< 12	< 12	< 12	< 12	< 12	ND
	11/05/96	< 12	< 12	NA	< 12	< 12	< 12	< 12	< 250	< 250	< 12	< 12	< 120	< 12	< 12	< 110	< 12	NA	< 12	< 12	< 12	< 12	< 12	< 12	ND
	08/09/96	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	04/15/96	< 12	< 12	< 12	NA	NA	< 12	< 250	< 250	< 12	< 12	< 120	< 12	< 12	< 110	< 12	NA	< 12	< 12	< 12	< 12	< 12	< 12	< 12	ND
	01/23/96	< 12	< 12	< 12	NA	NA	< 12	< 250	< 250	< 12	< 12	< 120	< 12	< 12	< 110	< 12	NA	< 12	< 12	< 12	< 12	< 12	< 12	< 12	ND
	10/19/95	< 0.5 U	< 0.5	NA	2.9	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 0.5 U	< 5	< 0.5 U	< 0.5	< 4.5 U	< 0.5 U	NA	< 0.5 U	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5 U	ND
	07/20/95	< 12	< 12	< 12	NA	NA	NA	< 250	< 250	< 12	< 12	< 120	< 12	< 12	< 110	< 12	NA	< 12	< 12	< 12	< 12	< 12	< 12	< 12	ND
	04/27/95	< 12	< 12	< 12	NA	NA	NA	< 250	< 250	< 12	< 12	< 120	< 12	< 12	< 110	< 12	NA	< 12	< 12	< 12	< 12	< 12	< 12	< 12	ND
	02/13/95	< 12	< 12	< 12	NA	NA	NA	< 250	< 250	< 12	< 12	< 120	< 12	< 12	< 110	< 12	NA	< 12	< 12	< 12	< 12	< 12	< 12	< 12	ND
	11/01/94	< 5	< 5	< 5	NA	NA	NA	< 100	< 100	< 5	< 5	< 50	< 5	< 5	< 45	< 5	NA	< 5	< 5	< 5	< 5	< 5	< 5	< 5	ND
	07/29/94	< 0.5	< 0.5	1.6	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/06/94	< 0.5	< 0.5	0.81	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	02/10/94	< 0.5	< 0.5	2.9	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	11/10/93	< 0.5	NA	NA	7.2	< 0.5	< 0.5	NA	< 10	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 5	< 0.5	NA	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/06/93	< 0.5	NA	NA	1.6	< 0.5	< 0.5	NA	< 5	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 5	< 0.5	NA	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	937GW35 (shallow)	03/13/06	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.5	2	< 1	ND
		03/18/05	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5 UJ	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.9	< 1	ND
03/16/04		< 0.5	< 0.5	NA	0.7	< 0.5	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.4	< 0.5	ND		
12/09/03		< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.1	< 0.5	< 0.5	ND	
DUP0829023A	08/20/0																								

Table A-1-2
Results of VOC Analyses
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	1,1- Dichloro- ethane	1,1-Dichloro- ethene	1,2-DCE (cis & trans)	Cis-1,2- DCE	Trans-1,2- DCE	1,4- Dichloro- benzene	2-Butanone	Acetone	Benzene	Bromo- methane	Carbon Disulfide	Chloro- benzene	Chloro- methane	Dichloro- methane	Ethyl- benzene	MTBE	PCE	Styrene	Toluene	TCE	Vinyl Chloride	Total Xylenes	All Other VOCs	
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	--	--	140,000	140,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	81	525	--	--	
937GW35 (shallow)	05/16/01	< 0.5	< 0.5	NA	0.8	0.7	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	3.3	< 0.5	ND
	06/16/00	< 0.5	< 0.5	NA	0.78	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	0.59	7.1	< 0.5	ND	
	09/01/99	< 0.5	< 0.5	NA	1.4	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	0.54	3.6	< 0.5	ND	
	06/01/99	< 0.5	< 0.5	NA	0.91	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	7.1	< 0.5	ND	
	03/09/99	< 0.5	< 0.5	NA	1	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	0.82	4.3	< 0.5	ND
	12/02/98	< 0.5	< 0.5	NA	1.2	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	0.61	7.4	< 0.5	ND
	09/03/98	< 0.5	< 0.5	NA	1.2	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	7.3	< 0.5	ND	
	05/18/98	< 0.5	< 0.5	NA	1.8	0.53	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	0.7	2.9	< 0.5	ND
	02/11/98	< 0.5	< 0.5	NA	2	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	1.7	0.9	< 0.5	ND
	11/17/97	< 0.5	< 0.5	NA	1.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	0.61	9.7	< 0.5	ND
	08/18/97	< 0.5	< 0.5	NA	1.3	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.54 (U2)	9.7	< 0.5	ND	
	05/27/97	< 0.5	< 0.5	NA	1	0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	7.8	< 0.5	ND	
	03/03/97	< 0.5	< 0.5	NA	0.77	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	13	< 0.5	ND	
	11/04/96	< 0.5	< 0.5	NA	1.2	0.51	< 0.5	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	8	< 0.5	ND	
	08/08/96	< 0.5	< 0.5	0.96	NA	NA	< 0.5	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	1	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	14	< 0.5	ND	
	04/09/96	< 0.5	< 0.5	1.5	NA	NA	< 0.5	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	0.9	3.8	< 0.5	ND
	01/17/96	< 0.5	< 0.5	2.4	NA	NA	< 0.5	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	1.9	4.5	< 0.5	ND
	10/16/95	< 0.5 U	< 0.5	NA	1.8	0.63	NA	< 10	< 10	< 0.5	< 0.5 U	35	< 0.5 U	< 0.5	< 4.5 U	< 0.5 U	NA	< 0.5 U	< 0.5	< 0.5	< 0.5	0.79	6.3	< 0.5 U	ND
	07/18/95	< 0.5	< 0.5	0.54	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	9.4	< 0.5	ND
	04/25/95	< 0.5	< 0.5	2.2	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	0.54	4.7	< 0.5	ND
	01/31/95	< 0.5	< 0.5	2.7	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	1.2	5.2	< 0.5	ND
	10/25/94	< 0.5	< 0.5	9.1	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	9.7	< 0.5	ND
	08/10/94	< 0.5	< 0.5	3.2	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	8.5	< 0.5	ND
	05/05/94	< 0.5	< 0.5	1.5	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	11	< 0.5	ND
	02/15/94	< 0.5	< 0.5	2.4	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	0.55	13	< 0.5	ND
	11/12/93	< 0.5	NA	NA	1.4	0.52	< 0.5	NA	< 10	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 5	< 0.5	NA	< 0.5	NA	< 0.5	< 0.5	< 0.5	6.1	< 0.5	ND
	08/09/93	< 0.5	NA	NA	2.1 (J5)	0.7 (J5)	< 0.5	NA	< 5	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 5	< 0.5	NA	< 0.5	NA	< 0.5	< 0.5	< 0.5	8.6 (J5)	< 0.5	ND
937GW37 (shallow)	03/13/06	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND	
	03/16/05	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND	
	03/12/04	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	12/03/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/15/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	

Table A-1-2
Results of VOC Analyses
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	1,1-Dichloro-ethane	1,1-Dichloro-ethene	1,2-DCE (cis & trans)	Cis-1,2-DCE	Trans-1,2-DCE	1,4-Dichloro-benzene	2-Butanone	Acetone	Benzene	Bromo-methane	Carbon Disulfide	Chloro-benzene	Chloro-methane	Dichloro-methane	Ethyl-benzene	MTBE	PCE	Styrene	Toluene	TCE	Vinyl Chloride	Total Xylenes	All Other VOCs		
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M		
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	
Cleanup Levels ²		--	--	--	140,000	140,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	81	525	--	--		
937GW37 (shallow)	11/15/96	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/20/96	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	04/23/96	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	01/31/96	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	10/30/95	< 0.5 U	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 0.5 U	< 5	< 0.5 U	< 0.5	< 4.5 U	< 0.5 U	NA	< 0.5 U	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5 U	< 0.5	ND	
	07/26/95	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	05/03/95	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	02/09/95	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	10/27/94	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/05/94	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	05/09/94	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	02/17/94	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
11/16/93	< 0.5	NA	NA	< 0.5	< 0.5	< 0.5	NA	< 10	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 5	< 0.5	NA	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND		
08/10/93	< 0.5	NA	NA	< 0.5	< 0.5	< 0.5	NA	< 5	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 5	< 0.5	NA	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND		
937GW38 (deep)	03/13/06	< 0.5	< 0.5	NA	0.7	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND	
	03/16/05	< 0.5	< 0.5	NA	1 J+	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND	
	03/12/04	< 0.5	< 0.5	NA	7.2	< 0.5	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	12/03/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/18/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	06/03/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1 J,U	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/19/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	1	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	0.6	< 0.5	< 0.5	1.6	< 0.5	< 0.5	0.5	ND		
	12/05/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/28/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	05/31/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/05/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1 UJ	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	11/27/01	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	09/06/01	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	05/15/01	< 0.5	< 0.5	NA	15	2.7	< 0.5	< 10	< 10 UJ	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 5	< 0.5	< 0.5 UJ	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	06/19/00	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	01/11/00	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	09/02/99	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	06/02/99	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/10/99	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	12/03/98	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	09/01/98	< 0.5	< 0.5	NA	< 0.5 (U18)	< 0.5 (U18)	< 0.5	< 0.5	NA	NA	< 0.5 (U20)	< 0.5	< 5	< 0.5	< 0.86 (U18, U4)	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5 (U18)	< 0.5 (U18)	< 0.5 (U18)	< 0.5	ND	
	05/26/98	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	02/26/98	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	0.6	< 0.5	< 0.5	ND	
	12/02/97	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/27/97	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/10/97	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/13/97	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	11/13/96	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/16/96	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	04/09/96	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5</		

Table A-1-2
Results of VOC Analyses
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	1,1-Dichloro-ethane	1,1-Dichloro-ethene	1,2-DCE (cis & trans)	Cis-1,2-DCE	Trans-1,2-DCE	1,4-Dichloro-benzene	2-Butanone	Acetone	Benzene	Bromo-methane	Carbon Disulfide	Chloro-benzene	Chloro-methane	Dichloro-methane	Ethyl-benzene	MTBE	PCE	Styrene	Toluene	TCE	Vinyl Chloride	Total Xylenes	All Other VOCs	
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	--	--	140,000	140,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	81	525	--	--	
937GW39 (deep)	03/13/06	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND	
	03/17/05	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND	
	03/12/04	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	12/05/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/18/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	06/03/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/20/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	12/05/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/28/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	05/31/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/05/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1 UJ	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	11/27/01	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	09/07/01	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	05/18/01	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 10	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 5	< 0.5	< 0.5 UJ	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	05/18/01	< 0.5	< 1	NA	< 1	< 1	< 1	< 10	< 50	< 1	< 5	< 1	< 0.5	< 1	< 4	< 0.5	< 5	< 0.5	< 1	< 1	< 1	< 1	< 0.5	ND	
	05/18/01	< 0.5	< 1	NA	< 1	< 1	< 1	< 10	< 50	< 1	< 5	< 1	< 0.5	< 1	< 5	< 0.5	< 5	< 0.5	< 1	< 1	< 1	< 1	< 0.5	ND	
	06/16/00	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	01/13/00	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	09/02/99	< 0.5	< 0.5	NA	0.81	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	06/01/99	< 0.5	< 0.5	NA	1.4	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/09/99	< 0.5	< 0.5	NA	0.55	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	12/02/98	< 0.5	< 0.5	NA	1.1	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/31/98	< 0.5	< 0.5	NA	1.4	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	05/21/98	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	02/18/98	< 0.5	< 0.5	NA	0.85	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	12/03/97	< 0.5	< 0.5	NA	0.69	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/28/97	< 0.5	< 0.5	NA	1.2	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	06/16/97	< 0.5	< 0.5	NA	2.4	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/18/97	< 0.5	< 0.5	NA	3	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	11/18/96	< 0.5	< 0.5	NA	0.5	< 0.5	< 0.5	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/21/96	< 0.5	< 0.5	0.73	NA	NA	< 0.5	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	04/17/96	< 0.5	< 0.5	2.7	NA	NA	< 0.5	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	01/25/96	< 0.5	< 0.5	1.5	NA	NA	< 0.5	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	10/24/95	< 0.5 U	< 0.5	NA	1.3	< 0.5	NA	< 10	< 10	< 0.5	< 0.5 U	< 5	< 0.5 U	< 0.5	< 4.5 U	< 0.5 U	NA	< 0.5 U	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5 U	ND	
	07/31/95	< 0.5	< 0.5	2.6	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	05/08/95	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	02/01/95	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	10/26/94	< 0.5	< 0.5	1.2	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/12/94	< 0.5	< 0.5	0.68	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	05/11/94	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	02/16/94	< 0.5	< 0.5	< 0.5	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	11/15/93	< 0.5	NA	NA	< 0.5	< 0.5	< 0.5	NA	< 10	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 5	< 0.5	NA	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/10/93	< 0.5	NA	NA	1.1 (J5)	< 0.5	< 0.5	< 0.5	NA	< 5	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 5	< 0.5	NA	< 0.5	NA	< 0.5	< 0.5	< 0.5	ND	
937GW42 (intermediate)	03/14/06	< 0.5	< 0.5	NA	20	17	NA	< 10	< 10	2.3	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.8	< 1	ND	
	03/18/05	< 0.5	< 0.5	NA	88	43	NA	< 10	< 10	0.6	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	6.5	< 1	ND	
	03/17/04	< 0.5	< 0.5	NA	26	2.5	NA	< 10	< 10	0.3 J	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	3.9	< 0.5	ND	
	12/09/03	< 0.5	< 0.5	NA	12	2.2	NA	< 10	< 10	0.4 J	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5								

Table A-1-2
Results of VOC Analyses
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	1,1- Dichloro- ethane	1,1-Dichloro- ethene	1,2-DCE (cis & trans)	Cis-1,2- DCE	Trans-1,2- DCE	1,4- Dichloro- benzene	2-Butanone	Acetone	Benzene	Bromo- methane	Carbon Disulfide	Chloro- benzene	Chloro- methane	Dichloro- methane	Ethyl- benzene	MTBE	PCE	Styrene	Toluene	TCE	Vinyl Chloride	Total Xylenes	All Other VOCs	
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	--	--	140,000	140,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	81	525	--	--	
937GW42 (intermediate) DUP1128011C 937GW42CL DUP0906011C	11/28/01	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	23	< 0.5	< 1 U	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	11/28/01	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	22	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	11/28/01	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 50	< 50	< 0.5	< 1	< 5	< 0.5	< 1	< 5	< 0.5	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	09/06/01	< 0.7	< 0.7	NA	< 0.7	< 0.7	NA	15	160	< 0.7	< 1.4	8.4	< 0.7	< 1.4	< 5.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	ND	
	09/06/01	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	15	170	< 0.5	< 1	4	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.6	ND
	05/16/01	< 0.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 10	78	< 0.5	< 1	1.6	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/16/00	< 0.5	< 0.5	NA	0.64 (J5)	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.77	ND
	01/10/00	< 0.5	< 0.5	NA	8	1.3	< 0.5	NA	NA	0.19	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	3.7	< 0.5	ND
	09/03/98	< 1	< 1	NA	41 (J18)	9.2 (J18)	< 1	NA	NA	4.8 (J18)	< 1	< 10	< 1	1.3 (J18)	< 9	< 1	NA	< 1	< 1	< 1 (U18)	< 1 (U18)	14 (J18)	< 1	ND	
	05/28/98	< 0.5	< 0.5	NA	16	3.1	< 0.5	NA	NA	1.4	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	7.5	< 0.5	ND
	02/24/98	< 0.5	< 0.5	NA	4	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	11/25/97	< 0.5	< 0.5	NA	5.5	0.86	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/26/97	< 0.5	< 0.5	NA	7.6	2.1	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	3.8	< 0.5	ND
	06/04/97	< 0.5	< 0.5	NA	3.1	1.8	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	4.8	< 0.5	ND
	03/10/97	< 0.5	< 0.5	NA	2.1	0.61	< 0.5	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	11/11/96	< 0.5	< 0.5	NA	5.2	9.4	< 0.5	< 10	< 10	1.1	< 0.5	< 5	< 0.5	< 0.5	NA	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	4.2	< 0.5	ND
	08/14/96	< 0.5	< 0.5	14	NA	NA	< 0.5	0.92	< 10	0.9	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	6.4	< 0.5	ND
	04/12/96	< 0.5	< 0.5	9.8	NA	NA	< 0.5	< 10	< 10	1.1	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	27	< 0.5	ND
	01/22/96	< 0.5	< 0.5	47	NA	NA	< 0.5	< 10	< 10	0.95	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	8.3	< 0.5	ND
	10/20/95	< 0.5 U	< 0.5	NA	37	71	NA	< 10	< 10	2.4	< 0.5 U	< 5	< 0.5 U	< 0.5	< 4.5 U	< 0.5 U	NA	< 0.5 U	< 0.5	< 0.5	< 0.5	< 0.5	23	< 0.5 U	ND
	07/24/95	< 5	< 5	300	NA	NA	NA	< 100	< 100	4.6	< 5	< 50	< 5	< 5	< 45	< 5	NA	< 5	< 5	< 5	< 5	< 5	20	< 5	ND
	05/01/95	< 5	< 5	290	NA	NA	NA	< 100	< 100	< 5	< 5	< 50	< 5	< 5	< 45	< 5	NA	< 5	< 5	< 5	< 5	< 5	22	< 5	ND
	02/14/95	< 0.5	< 0.5	21	NA	NA	NA	< 10	< 10	0.26 (J28)	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	11	< 0.5	ND
	10/27/94	< 0.5	< 0.5	8	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	2	< 0.5	ND
	08/01/94	< 0.5	< 0.5	5.8	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	3.1	< 0.5	ND
	05/05/94	< 0.5	< 0.5	4	NA	NA	NA	< 10	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.84	< 0.5	ND
937GW101 (shallow)	03/13/06	< 0.5	< 0.5	NA	0.8	4.2	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/18/05	< 0.5	< 0.5	NA	2.1	10	NA	< 10	< 10	< 0.5	< 1	< 0.5 UJ	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.1	< 1	ND
	03/16/04	< 0.5	< 0.5	NA	7.8	4.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	30	< 0.5	ND
	12/04/03	< 0.5	< 0.5	NA	0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/12/03	< 0.5	< 0.5	NA	0.6	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.8	< 0.5	ND
	06/04/03	< 0.5	< 0.5	NA	0.9	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	5.2	< 0.5</	

Table A-1-2
Results of VOC Analyses
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	1,1-Dichloro-ethane	1,1-Dichloro-ethene	1,2-DCE (cis & trans)	Cis-1,2-DCE	Trans-1,2-DCE	1,4-Dichloro-benzene	2-Butanone	Acetone	Benzene	Bromo-methane	Carbon Disulfide	Chloro-benzene	Chloro-methane	Dichloro-methane	Ethyl-benzene	MTBE	PCE	Styrene	Toluene	TCE	Vinyl Chloride	Total Xylenes	All Other VOCs		
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M		
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	
Cleanup Levels ²		--	--	--	140,000	140,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	81	525	--	--		
937GW103 (deep)	03/13/06	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND		
	03/18/05	< 0.5	< 0.5	NA	0.6	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5 UJ	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND		
DUP1204032A 937GW103CL	03/16/04	< 0.5	< 0.5	NA	0.9	0.6	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND		
	12/04/03	< 0.5	< 0.5	NA	1.1	1	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND		
	12/04/03	< 0.5	< 0.5	NA	0.8	1.1	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND		
	12/04/03	< 0.5	< 0.5	1.7	NA	NA	< 0.5	< 5	< 10 R	< 0.5	< 1	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND		
	08/12/03	< 0.5	< 0.5	NA	0.6	1	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND		
	06/03/03	< 0.5	< 0.5	NA	1.1	1.6	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND		
	03/19/03	< 0.5	< 0.5	NA	< 0.5 U	3.4	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5 U	< 0.5	ND		
	12/10/02	< 0.5	< 0.5	NA	1.7	2.9	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5 UJ	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.5	< 0.5	ND	
	08/28/02	< 0.5	< 0.5	NA	2.4	3.3	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1	< 0.5	ND	
	05/30/02	< 0.5	< 0.5	NA	3.7	4.8	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	2.2	< 0.5	ND
	03/08/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	11/27/01	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	09/06/01	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	937GW104 (shallow)	03/13/06	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND	
		03/30/05	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND	
		03/12/04	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
12/08/03		< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND		
08/12/03		< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND		
06/03/03		< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1 J,U	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
03/11/03		< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND		
12/10/02		< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10 UJ	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND		
08/30/02		< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND		
05/31/02		< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND		
03/13/02		< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10 UJ	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND		
12/03/01		< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10 UJ	< 0.5	0.7 Jb	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND		
09/07/01		< 0.5 UJ	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10 UJ	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1 UJ	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND		
937GW105 (intermediate)		03/13/06	< 0.5	< 0.5	NA	2.4	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	3.9	< 1	ND
		03/30/05	< 0.5	< 0.5	NA	0.8	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	3.3	< 1	ND
		03/16/04	< 0.5	< 0.5	NA	1	< 0.5	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.5	< 0.5	ND
	12/09/03	< 0.5	< 0.5	NA	0.8	< 0.5	NA	< 10	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/15/03	< 0.5	< 0.5	NA	0.8	< 0.5	NA	< 10	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/15/03	< 0.5	< 0.5	NA	0.7	< 0.5	NA	< 10	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/15/03	< 0.5	< 0.5	0.92	NA	NA	< 0.5	< 5	< 10	< 0.5	< 1	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND		
	06/04/03	< 0.5	< 0.5	NA	0.9	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND		
DUP0905022A	03/19/03	< 0.5	< 0.5	NA	0.6	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	12/10/02	< 0.5	< 0.5	NA	0.7	< 0.5	NA	< 10 UJ	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	09/05/02	< 0.5	< 0.5	NA	0.8	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND		
	09/05/02	< 0.5	< 0.5	NA	0.9	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	05/31/02	< 0.5	< 0.5	NA	0.8	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/13/02	< 0.5	< 0.5	NA	0.8	< 0.5	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	12/03/01	< 0.5	< 0.5	NA	0.6	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND		
	09/07/01	< 0.5	< 0.5	NA	0.9	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
937GW106 (shallow)	03/13/06	< 0.5	< 0.5	NA	0.6	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	3.6</				

Table A-1-2
Results of VOC Analyses
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	1,1- Dichloro- ethane	1,1-Dichloro- ethene	1,2-DCE (cis & trans)	Cis-1,2- DCE	Trans-1,2- DCE	1,4- Dichloro- benzene	2-Butanone	Acetone	Benzene	Bromo- methane	Carbon Disulfide	Chloro- benzene	Chloro- methane	Dichloro- methane	Ethyl- benzene	MTBE	PCE	Styrene	Toluene	TCE	Vinyl Chloride	Total Xylenes	All Other VOCs	
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	--	--	140,000	140,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	81	525	--	--	
937GW107 (intermediate)	03/14/06	< 0.5	< 0.5	NA	13	8.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND	
	03/30/05	< 0.5	< 0.5	NA	9.8	8.4	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND	
	03/16/04	< 0.5	< 0.5	NA	13	5.9	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	12/09/03	< 0.5	< 0.5	NA	12.0	4.2	NA	< 10	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/18/03	< 0.5	< 0.5	NA	6.4	2.4	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
DUP0818031A	08/18/03	< 0.5	< 0.5	NA	6.1	2.3	NA	< 10	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1 UJ	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	06/03/03	< 0.5	< 0.5	NA	5	1.9	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
DUP0905022B	03/18/03	< 0.5	< 0.5	NA	2.6	1.3	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	12/10/02	< 0.5	< 0.5	NA	5.2	2.4	NA	< 10 UJ	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	09/05/02	< 0.5	< 0.5	NA	4.4	2	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	09/05/02	< 0.5	< 0.5	NA	4.5	2	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	05/31/02	< 0.5	< 0.5	NA	3.2	1.7	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/13/02	< 0.5	< 0.5	NA	4.4	2.1	NA	< 10	< 10 UJ	< 0.5	< 1	1.7	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	11/29/01	< 0.5	< 0.5	NA	14	5.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/31/01	< 0.5	< 0.5	NA	14	6.2	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	937GW108 (shallow)	03/13/06	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
		03/17/05	< 0.5	< 0.5	NA	0.7	< 0.5	NA	< 10	< 10	0.1 J	< 1	< 0.5 UJ	0.8	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
DUP1203033B 937GW108CL	03/19/04	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	0.9	< 1	< 0.5	3.6	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.2	ND	
	12/03/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	48	< 1	< 0.5	19	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	0.8	< 0.5	< 0.5	< 0.5	ND	
	12/03/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	46	< 1	< 0.5	17	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	0.8	< 0.5	< 0.5	< 0.5	ND	
937GW108CL	12/03/03	< 1	< 1	< 1	NA	NA	1.8	< 10	< 20 R	34	< 2	< 10	15	< 1	1.9	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	ND	
	08/15/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	24	< 1 UJ	< 0.5	45 J-	< 1 UJ	< 4	< 0.5	< 0.5	< 0.5	1.1	< 0.5	< 0.5	< 0.5	1.9	ND	
	06/03/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	46	< 1	< 0.5	53	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	1.3	< 0.5	< 0.5	1.6	ND	
	03/19/03	0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	54	< 1	2.8	29	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	0.6	< 0.5	< 0.5	< 0.5	ND	
DUP0319032A	03/19/03	0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	61	< 1	2.8	32	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	0.6	< 0.5	< 0.5	0.6	ND	
	12/10/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	15	< 1	2.5	3.1	< 1	< 4	< 0.5	< 0.5 UJ	< 0.5	< 0.5	3.3	< 0.5	< 0.5	0.7	ND	
DUP1210022A 937GW108CL	12/10/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	15	< 1	1.4	4.3	< 1	< 4	< 0.5	< 0.5 UJ	< 0.5	< 0.5	2.9	< 0.5	< 0.5	1.2	ND	
	12/10/02	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.92	< 5	< 10	17	< 1	< 5	3.5	< 0.5	< 0.5	0.57	< 0.5	< 0.5	< 0.5	4	< 0.5	< 0.5	1.69	ND	
	09/05/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	54 J-	7.7	< 1	< 0.5	5	< 1	< 4	0.7	< 0.5	< 0.5	< 0.5	6	< 0.5	< 0.5	2.5	ND	
	06/04/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10 UJ	< 10 UJ	30	< 1	< 0.5	39	< 1	< 4	0.9	< 0.5	< 0.5	< 0.5	1	< 0.5	< 0.5	4.2	ND	
950GW108 (intermediate) DUP0309062A	03/09/06	< 1	< 1	NA	150	81	NA	< 20	< 20	0.5 J	< 2	< 1	< 1	< 2	< 8	< 1	< 1	< 1	< 1	< 1	< 1	3.9	< 2	ND	
	03/09/06	< 0.5	< 0.5	NA	160	89	NA	< 10	< 10	0.4 J	< 1	< 0.5	< 0.5												

Table A-1-2
Results of VOC Analyses
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	1,1-Dichloro-ethane	1,1-Dichloro-ethene	1,2-DCE (cis & trans)	Cis-1,2-DCE	Trans-1,2-DCE	1,4-Dichloro-benzene	2-Butanone	Acetone	Benzene	Bromo-methane	Carbon Disulfide	Chloro-benzene	Chloro-methane	Dichloro-methane	Ethyl-benzene	MTBE	PCE	Styrene	Toluene	TCE	Vinyl Chloride	Total Xylenes	All Other VOCs	
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	--	--	140,000	140,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	81	525	--	--	
979GW109 (shallow)	03/14/06	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND	
	03/18/05	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND	
	03/16/04	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/16/04	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	12/09/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
DUP1210022B	08/20/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	06/06/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/19/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	12/10/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	12/10/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/29/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/04/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/08/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	11/28/01	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	0.8	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	09/07/01	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	979GW110 (intermediate)	03/14/06	< 0.5	< 0.5	NA	6.7	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
03/18/05		< 0.5	< 0.5	NA	3.2	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
03/16/04		< 0.5	< 0.5	NA	0.9	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
12/04/03		< 0.5	< 0.5	NA	6.6	0.7	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
08/12/03		< 0.5	< 0.5	NA	1.2	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
DUP0319032B	06/05/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/19/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/19/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	12/11/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/29/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	05/30/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/14/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	11/28/01	< 0.5	< 0.5	NA	5.7	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	09/07/01	< 0.5	< 0.5	NA	3.6	0.6	NA	< 10	< 10	< 0.5	< 1	0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
979GW111R (intermediate)	03/13/06	< 0.5	< 0.5	NA	3.9	4.8	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/30/05	< 0.5	< 0.5	NA	4.3	6.6	NA	< 10	< 10	0.2 J	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/12/04	< 0.5	< 0.5	NA	12	5.9	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	12/09/03	< 0.5	< 0.5	NA	14	5.4	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/12/03	< 0.5	< 0.5	NA	7.9	5.2	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	06/03/03	< 0.5	< 0.5	NA	4.2	6.8	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/11/03	< 0.5	< 0.5	NA	6.7	5.7	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	12/10/02	< 0.5	< 0.5	NA	9.5	4.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/30/02	< 0.5	< 0.5	NA	11	5.9	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
979GW112 (shallow)	06/05/02	< 0.5	< 0.5	NA	11	6.0	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/14/06	< 0.5	< 0.5	NA	16	7.8	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/30/05	< 0.5	< 0.5	NA	9.7	8.1	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/12/04	< 0.5	< 0.5	NA	22	5.5	NA	< 10	< 10	< 0.5	0.5 J	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	03/12/04	< 0.5	< 0.5	NA	22	5.7	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
979GW112CL	03/12/04	< 0.5	< 0.5	27	NA	NA	< 0.5	< 5	< 10	< 0.5	< 1	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	12/09/03	< 0.5	< 0.5	NA	23	6.1	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	08/15/03	< 0.5	< 0.5	NA	16	4.8	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5				

Table A-1-2
Results of VOC Analyses
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	1,1- Dichloro- ethane	1,1-Dichloro- ethene	1,2-DCE (cis & trans)	Cis-1,2- DCE	Trans-1,2- DCE	1,4- Dichloro- benzene	2-Butanone	Acetone	Benzene	Bromo- methane	Carbon Disulfide	Chloro- benzene	Chloro- methane	Dichloro- methane	Ethyl- benzene	MTBE	PCE	Styrene	Toluene	TCE	Vinyl Chloride	Total Xylenes	All Other VOCs	
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	--	--	140,000	140,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	81	525	--	--	
979GW113 (shallow)	03/14/06	< 0.5	< 0.5	NA	11	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	3.9	0.8	< 1	ND
	03/18/05	< 0.5	< 0.5	NA	7.4	< 0.5	NA	< 10	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	3.1	0.6	< 1	ND
	03/16/04	< 0.5	< 0.5	NA	2.7	< 0.5	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.7	< 0.5	< 0.5	ND
	12/04/03	< 0.5	< 0.5	NA	0.7	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1	< 0.5	< 0.5	ND
	08/12/03	< 0.5	< 0.5	NA	1.7	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.2	< 0.5	< 0.5	ND
	06/05/03	< 0.5	< 0.5	NA	1.6	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.5	< 0.5	< 0.5	ND
	03/19/03	< 0.5	< 0.5	NA	<0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<0.5	<0.5	< 0.5	ND
	12/10/02	< 0.5	< 0.5	NA	0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5 UJ	< 0.5	< 0.5	< 0.5	< 0.5	0.9	< 0.5	< 0.5	ND
	08/28/02	< 0.5	< 0.5	NA	3.4	< 0.5	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	2.1	0.7	< 0.5	ND
	05/30/02	< 0.5	< 0.5	NA	4.1	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	2.2	0.5	< 0.5	ND
	03/13/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10 UJ	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.5	< 0.5	< 0.5	ND
	03/13/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10 UJ	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	11/29/01	< 0.5	< 0.5	NA	0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.7	< 0.5	< 0.5	ND
	09/07/01	< 0.5	< 0.5	NA	0.8	< 0.5	NA	< 10 UJ	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.9	< 0.5	< 0.5	ND
979GW114 (intermediate)	03/14/06	< 0.5	< 0.5	NA	1	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/18/05	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
DUP0316042A (intermediate)	03/16/04	< 0.5	< 0.5	NA	2	< 0.5	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/16/04	< 0.5	< 0.5	NA	2.1	< 0.5	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP0530021D	12/04/03	< 0.5	< 0.5	NA	29	1.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	3.7	< 0.5	ND
	08/12/03	< 0.5	< 0.5	NA	33	1.3	NA	< 10	< 10	0.1 J	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.1	< 0.5	ND	
	06/04/03	< 0.5	< 0.5	NA	29	0.8	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.6	< 0.5	ND	
	03/19/03	< 0.5	< 0.5	NA	< 0.5 U	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/10/02	< 0.5	< 0.5	NA	36	1.1	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5 UJ	< 0.5	< 0.5	< 0.5	< 0.5	1.4	< 0.5	ND	
	08/28/02	< 0.5	< 0.5	NA	31	0.9	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.8	< 0.5	ND
	05/30/02	< 0.5	< 0.5	NA	8.7	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/30/02	< 0.5	< 0.5	NA	8.6	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.6	< 0.5	ND	
	03/13/02	< 0.5	< 0.5	NA	25	< 0.5	NA	< 10 UJ	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	2.9	< 0.5	ND
	11/29/01	< 0.5	< 0.5	NA	16	0.6	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.1	< 0.5	ND
	09/07/01	< 0.5	< 0.5	NA	9.1	< 0.5	NA	< 10 UJ	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	979GW115 (shallow)	03/13/06	< 0.5	< 0.5	NA	27	1.3	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.2	< 1	ND
03/30/05		< 0.5	<																						

Table A-1-2
Results of VOC Analyses
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	1,1-Dichloro-ethane	1,1-Dichloro-ethene	1,2-DCE (cis & trans)	Cis-1,2-DCE	Trans-1,2-DCE	1,4-Dichloro-benzene	2-Butanone	Acetone	Benzene	Bromo-methane	Carbon Disulfide	Chloro-benzene	Chloro-methane	Dichloro-methane	Ethyl-benzene	MTBE	PCE	Styrene	Toluene	TCE	Vinyl Chloride	Total Xylenes	All Other VOCs	
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	--	--	140,000	140,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--	81	525	--	--	
979GW116 (intermediate)	12/10/02	< 0.5	< 0.5	NA	35	1.2	NA	< 10 UJ	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	09/05/02	< 0.5	< 0.5	NA	57	1.7	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.7	< 0.5	ND
DUP0905022C	09/05/02	< 0.5	< 0.5	NA	57	1.7	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.6	< 0.5	ND
	979GW116CL	09/05/02	< 0.5	< 0.5	NA	51	1.5	NA	< 50 R	< 50	< 0.5	< 1	< 5	< 0.5	< 1	< 5	< 0.5	< 5	< 0.5	< 0.5	< 0.5	0.39 J	0.64	< 1	ND
DUP0314021A	06/06/02	< 0.5	< 0.5	NA	89	2	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1	1.1	< 0.5	ND
	979GW116CL	03/14/02	< 0.5	< 0.5	NA	120	2.4	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.6	1.4	< 0.5	ND
	03/14/02	< 0.5	< 0.5	NA	120	2.3	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.5	< 0.5	ND
	03/14/02	< 0.5	< 0.5	NA	78	< 0.5	< 0.5	< 50 R	< 50	< 0.5	< 1	< 5	< 0.5	< 1	< 5 UJ	< 0.5	< 5	< 0.5	< 0.5	< 0.5	< 0.5	1.5	< 1	ND	
DUP1129011A	979GW116CL	11/29/01	< 0.5	< 0.5	NA	34	1.7	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	5.1	< 0.5	ND
	11/29/01	< 0.5	< 0.5	NA	34	1.6	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	4.7	< 0.5	ND
	979GW116CL	11/29/01	< 0.5	< 0.5	NA	32	2.1	< 0.5	< 50	< 10	< 0.5	< 1	< 5	< 0.5	< 1	< 4	< 0.5	< 5	< 0.5	< 0.5	< 0.5	< 0.5	5.6	< 0.5	ND
	08/29/01	< 0.5	< 0.5	NA	29	1.8	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
979GW117 (deep)	03/13/06	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND	
	03/17/05	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND	
	03/12/04	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
	12/08/03	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/12/03	< 0.5	< 0.5	NA	1.6	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/03/03	< 0.5	< 0.5	NA	0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/18/03	< 0.5	< 0.5	NA	2.6	< 0.5	NA	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/10/02	< 0.5	< 0.5	NA	0.7	< 0.5	NA	< 10 UJ	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/30/02	< 0.5	< 0.5	NA	0.8	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/31/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/13/02	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10 UJ	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	11/29/01	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/29/01	< 0.5	< 0.5	NA	< 0.5	< 0.5	NA	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in their respective quarterly reports.

2 - Groundwater cleanup levels were taken from the *Final RAP, Crissy Field Area*, Presidio of San Francisco, California (Army, Headquarters, I Corps, and Fort Lewis and California DTSC, 1998).

Concentrations in **BOLD** indicate an exceedance of applicable cleanup levels.

µg/L - micrograms per liter

ND - Not Detected

NA - Not analyzed

1,2-DCE - 1,2-Dichloroethene

Cis-1,2-DCE - cis-1,2-Dichloroethene

Trans-1,2-DCE - trans-1,2-Dichloroethene

MTBE - Methyl tert-butyl ether

TCE - Trichloroethene

PCE - Tetrachloroethene

VOC - Volatile organic compound

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

-- - Clean up concentrations not established.

Table A-1-3
Results of TPH Analyses
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
937GW06 (shallow)	03/14/06	< 50	< 50	< 300
	03/17/05	< 50	< 50	< 300
	03/16/04	< 50	< 50	< 300
	12/05/03	< 50	< 50	< 300
	08/18/03	< 50	< 50	< 300
	06/03/03	< 50	< 50	< 300
	03/20/03	< 50	< 50	< 300
	12/05/02	< 50	< 50	< 300
	08/28/02	< 50	< 50	< 300
	05/31/02	< 50	< 50	< 300
	03/05/02	< 50	< 50	< 300
	11/27/01	< 50	< 50	< 300
	09/06/01	< 50	< 50 ²	< 300 ²
	05/16/01	< 50	< 50	< 300
	06/20/00	< 50 (U20)	< 50 (U12, U20, U21)	< 300 (U21)
	01/10/00	< 50	< 50 (U12)	< 300
	09/01/99	< 50	< 50	< 300
	06/01/99	< 50	< 50	< 300
	03/15/99	< 50	< 50	< 300
	12/14/98	< 50	< 50	< 300
	09/03/98	< 50 (U18)	< 50	< 300
	05/27/98	< 50	< 50	< 300
	02/24/98	< 50	< 50	< 300
	11/25/97	< 50	< 50	< 300
	08/26/97	< 50	< 50	< 300
	06/04/97	< 50	< 50	< 300
	03/10/97	< 50 (U29)	< 50 (U29)	< 300 (U29)
	11/11/96	< 50	< 50	< 300
	08/14/96	< 50	61 (J25)	< 300
	04/15/96	< 50	< 50	< 300
	01/23/96	< 50	< 50	350 (J25, J32)
	10/19/95	< 50	< 50	< 300
	07/19/95	< 50	< 50	< 300
	04/26/95	< 50	89 (J25)	NA
	02/03/95	< 50	< 50	NA
	11/07/94	< 50	< 50	NA
	07/28/94	< 50	310 (J25)	NA
	04/28/94	< 50	< 50	NA
	02/11/94	< 50	< 50	NA
	11/01/93	< 50	< 50	NA
	08/02/93	< 50	< 50	NA

Table A-1-3
Results of TPH Analyses
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
937GW07 (shallow)	03/14/06	< 50	< 50	< 300
	03/23/05	< 50	< 50	< 300
	03/18/04	< 50	< 50	< 300
	12/10/03	< 50	< 50	< 300
	08/18/03	< 50	< 50	< 300
	06/06/03	< 50	< 50	< 300
	03/20/03	< 50	< 50	< 300
	12/05/02	< 50	< 50	< 300
	09/06/02	< 50	< 50	< 300
	06/04/02	< 50	< 50	< 300
	03/06/02	< 50	< 50	< 300
	12/04/01	< 50	< 50	< 300
	09/07/01	< 50	< 50 ²	< 300 ²
	05/18/01	< 50	< 50	< 300
	06/20/00	< 50 (U20)	< 50 (U12, U20, U21)	< 300 (U12, U20, U21)
	01/20/00	< 50	< 50 (U6, U12)	< 300 (U6)
	12/07/98	< 50	< 50	< 300
	09/02/98	< 50 (U18)	< 50	< 300
	05/19/98	< 50	< 50	< 300
	02/25/98	< 50	< 50	< 300
	12/01/97	< 50	< 50	< 300
	08/27/97	< 50	< 50	< 300
	06/16/97	< 50	< 50	< 300
	03/18/97	< 50	< 50	< 300
	11/18/96	< 50	< 50	< 300
	08/21/96	< 50	< 50	< 300
	04/17/96	< 50	< 50	< 300
	01/25/96	93 (J25)	62 (J25)	< 3000 (U23)
	10/24/95	< 50	< 50	< 300
	07/27/95	< 50	< 50	< 300
	05/04/95	< 50	81 (J25)	NA
	02/03/95	< 50	130 (J25)	NA
	11/02/94	< 50	< 50	NA
	08/11/94	< 50	130 (J25)	NA
	05/11/94	< 50	< 50	NA
	02/11/94	< 50	88 (J25)	NA
	11/02/93	< 50	< 50	NA
	07/30/93	< 50	< 50	NA

Table A-1-3
Results of TPH Analyses
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
937GW12 (shallow)	03/13/06	< 50	< 50	< 300
	03/16/05	< 50	< 50	< 300
	03/12/04	< 50	< 50	< 300
	12/03/03	< 50	< 50	< 300
	08/18/03	< 50	< 50	< 300
	06/03/03	< 50	< 50	< 300
	03/20/03	< 50	< 50	< 300
	12/05/02	< 50	< 50	< 300
	08/28/02	< 50	< 50	< 300
	05/31/02	< 50	< 50	< 300
	03/05/02	< 50	< 50	< 300
	11/27/01	< 50	< 50	< 300
	09/06/01	< 50	110 ² YH,NJ	< 300 ² NJ
	05/15/01	< 50	< 50	< 300
	09/07/00	NA	< 50	< 300
	06/19/00	< 50	150 (J12, J21)	< 300 (U12, U21)
	01/11/00	< 50	< 50 (U12)	< 300
	09/01/99	< 50	< 50	< 300
	06/02/99	< 50	< 50	< 300
	03/10/99	< 50	< 50	< 300 (U12)
	12/07/98	< 50	< 50	< 300
	09/01/98	< 50 (U18)	< 50	< 300
	05/26/98	< 50	< 50	< 300
	02/25/98	< 50	< 50	< 300
	12/01/97	< 50	< 50	< 300
	08/27/97	< 50	< 50	< 300
	06/10/97	< 50	< 50	< 300
	03/13/97	< 50	< 50	< 300
	11/13/96	< 50	< 50	< 300
	08/16/96	< 50	250 (J25)	460 (J25)
	05/20/96	< 50	< 50	< 300
	01/26/96	< 50	< 50	< 3000 (U23)
	10/25/95	< 50	< 50	< 300
	07/26/95	< 50	< 50	< 300
	05/03/95	< 50	< 50	NA
	02/09/95	< 50	140 (J25)	NA
	11/01/94	< 50	71 (J25)	NA
	08/10/94	< 50	110 (J25)	NA
	05/10/94	< 50	62 (J25)	NA
	02/14/94	< 50	72 (J25)	NA
	11/02/93	< 50	< 50	NA
	08/02/93	< 50	< 50	NA

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Well Name (screened interval)	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
937GW15 (shallow)	03/15/06	< 50	< 50	< 300
	03/23/05	< 50	< 50	< 300
DUP0907014A	03/18/04	< 50	< 50	< 300
	12/10/03	< 50	< 300	< 300
	08/18/03	< 50	< 50	< 300
	06/06/03	< 50	< 50	< 300
	03/20/03	< 50	< 50	< 300
	12/05/02	< 50	< 50	< 300
	09/06/02	< 50	< 50	< 300
	06/04/02	< 50	< 50	< 300
	03/06/02	< 50	< 50	< 300
	12/04/01	< 50	< 50	< 300
	09/07/01	< 50	< 50 ²	< 300 ²
	09/07/01	< 50	< 50 ²	< 300 ²
	05/17/01	< 50	< 50	< 300
	06/20/00	< 50 (U20)	< 50 (U12, U20, U21)	< 300 (U12, U20, U21)
	01/20/00	< 50	< 50 (U12)	< 300
	09/02/99	< 50	< 50	< 300
	06/02/99	< 50	< 50	< 300
	03/10/99	< 50	< 50	< 300
	12/07/98	< 50	< 50	< 300
	09/01/98	< 50	< 50	< 300
	05/19/98	< 50	< 50	< 300
	02/16/98	< 50	< 50	< 300
	11/20/97	< 50	230 (J25)	< 300
	08/21/97	< 50	150 (R32)	< 300
	06/02/97	< 50	< 50	< 300
	03/04/97	< 50 (U6)	< 50	< 300
	11/05/96	< 50	< 50	< 300
	08/09/96	< 50	< 50	< 300
	04/15/96	< 50	< 50	< 300
	01/23/96	< 50	< 50	< 300
	10/19/95	< 50	< 50	< 300
	07/21/95	< 50	< 50	< 300
	04/28/95	< 50	98 (J25)	NA
	02/01/95	< 50	52 (J25)	NA
	11/08/94	< 50	< 50	NA
	08/04/94	< 50	350 (J25)	NA
05/03/94	< 50	< 50	NA	
02/18/94	< 50	< 50	NA	
11/03/93	< 50	55 (J25)	NA	
08/03/93	< 50	< 50	NA	

Well Name (screened interval)	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
937GW32R (deep)	03/14/06	< 50	< 50	< 300
	03/18/05	< 50	< 50	< 300
	03/12/04	< 50	< 50	< 300
	12/09/03	< 50	< 50	< 300
	08/18/03	< 50	< 50	< 300
	06/03/03	< 50	< 50	< 300
	03/20/03	< 50	< 50	< 300
	12/05/02	< 50	< 50	< 300
	08/29/02	< 50	< 50	< 300
	06/04/02	< 50	< 50	< 300
DUP0906011B	03/05/02	< 50	< 50	< 300
	11/27/01	< 50	< 50	< 300
	09/06/01	< 50	< 50 ²	< 300 ²
	09/06/01	< 50	< 50 ²	< 300 ²
	05/16/01	< 50	< 50	< 300
	09/11/00	NA	270	< 300
	06/16/00	< 50	1,300 (J21)	< 1,500 (U21)
	01/13/00	< 50	1,700 (J21)	< 300
	09/09/99	< 50	< 50	< 300
	06/01/99	< 50	< 50	< 300
	03/15/99	< 500	< 50	< 300
	12/14/98	< 50	< 50	< 300
	09/03/98	< 50 (U18)	< 50	< 300
	05/27/98	< 50	< 50	< 300
	02/24/98	< 50	< 50	< 300
	11/25/97	< 50	< 50	< 300
	08/26/97	< 50	< 50	< 300
	06/04/97	< 50	< 50	< 300
	03/04/97	< 50 (U6)	< 50	< 300
	11/05/96	< 50	< 50	< 300
	08/09/96	< 50	< 50	< 300
	04/15/96	< 50	< 50	< 300
	01/23/96	< 50	< 50	< 300
	10/19/95	< 50	< 50	< 300
	07/20/95	< 50	< 50	< 300
	04/27/95	< 500	72 (J25, J6)	NA
	02/13/95	< 50	70 (J25)	NA
	11/01/94	< 50	160 (J25)	NA
	07/29/94	< 50	100 (J25)	NA
	05/06/94	< 50	< 50	NA
	02/10/94	< 50	< 50	NA
	11/10/93	< 50	< 50	NA
	08/06/93	< 50	< 50	NA

Table A-1-3
Results of TPH Analyses
Building 900s Area
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Well Name (screened interval)	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
937GW35 (shallow)	03/13/06	< 50	< 50	< 300
	03/18/05	< 50	< 50	< 300
DUP0829023A	03/16/04	< 50	< 50	< 300
	12/09/03	< 50	< 50	< 300
	08/20/03	< 50	< 50	< 300
	06/03/03	< 50	< 50	< 300
	03/20/03	< 50	< 50	< 300
	12/05/02	< 50	< 50	< 300
	08/29/02	< 50	< 50	< 300
	08/29/02	< 50	< 50	< 300
	06/04/02	< 50	< 50	< 300
	03/05/02	< 50	< 50	< 300
DUP1127011A	11/27/01	< 50	< 50	< 300
	11/27/01	< 50	< 50	< 300
	09/06/01	< 50	740 ² YH,NJ	520 ² YL,NJ
	05/16/01	< 50	< 50	< 300
	09/07/00	NA	< 50 (U5)	< 300
	06/16/00	< 50	54 (J21)	< 300
	09/01/99	< 50	< 50	< 300
	06/01/99	< 50	< 50	< 300
	03/09/99	< 50	< 50 (U6)	< 300
	12/02/98	< 50	< 50	< 300
	09/03/98	< 50	< 50	< 300
	05/18/98	< 50	< 50	< 300
	02/11/98	< 50	< 50	< 300
	11/17/97	< 50	< 50	< 300
	08/18/97	< 50	< 50	< 300
	05/27/97	< 50	< 50	< 300
	03/03/97	< 50 (U6)	< 50	< 300
	11/04/96	< 50	< 50	< 300
	08/08/96	< 50	< 50	< 300
	04/09/96	320 (J25)	< 50	< 300
	01/17/96	< 50	< 50	< 300
	10/16/95	< 50	< 50	< 300
	07/18/95	< 50	< 50	< 300
	04/25/95	< 50	< 50	NA
	01/31/95	< 50	< 50	NA
	10/25/94	< 50	< 50	NA
	08/10/94	< 50	< 50 (U9)	NA
	05/05/94	< 50	< 50	NA
	02/15/94	< 50	51 (J25)	NA
	11/12/93	< 50	< 50	NA
	08/09/93	< 50	< 50	NA

Table A-1-3
Results of TPH Analyses
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
937GW37 (shallow)	03/13/06	< 50	< 50	< 300
	03/16/05	< 50	< 50	< 300
	03/12/04	< 50	< 50	< 300
	12/03/03	< 50	< 50	< 300
	08/15/03	< 50	< 50	< 300
	06/03/03	< 50	< 50	< 300
	03/19/03	< 50	< 50	< 300
	12/05/02	< 50	< 50	< 300
	08/28/02	< 50	< 50	< 300
	05/31/02	< 50	< 50	< 300
	03/05/02	< 50	< 50	< 300
	11/27/01	< 50	< 50	< 300
	09/06/01	< 50	140 ² YH,NJ	< 300 ²
	05/15/01	< 50	< 50	< 300
	09/07/00	NA	< 50	< 300
	06/19/00	< 50	58 (U12, U21)	< 300 (U12, U21)
	01/13/00	< 50	< 50 (U6)	< 300 (U6)
	01/11/00	< 50	< 50	< 300
	09/02/99	< 50	< 50	715
	06/02/99	< 50	< 50	< 300
	03/10/99	< 50	< 50	< 300 (U12)
	12/07/98	< 50	< 50	< 300
	12/03/98	< 50	< 50	< 300
	09/02/98	< 50	< 50	< 300
	05/26/98	< 50	< 50	< 300
	02/26/98	< 50	< 50	< 300
	12/02/97	< 50	< 50	< 300
	08/28/97	< 50	< 50 (U29)	< 300
	06/11/97	< 50	< 50	< 300
	03/17/97	< 50	< 50	< 300
	11/15/96	< 50	< 50	< 300
	08/20/96	< 50	53 (J25)	< 300
	04/23/96	< 50	< 50	< 300
	01/31/96	< 50	< 50	420 (J25, J32)
	10/30/95	< 50	< 50	< 300
	07/26/95	< 50	< 50	< 300
	05/03/95	< 50	< 50	NA
	02/09/95	< 50	90 (J25)	NA
	10/27/94	< 50	83 (J25)	NA
	08/05/94	< 50	67 (J25)	NA
	05/09/94	< 50	< 50	NA
	02/17/94	< 50	54 (J25)	NA
	11/16/93	< 50	< 50	NA
	08/10/93	< 50	100 (J25)	NA

Table A-1-3
Results of TPH Analyses
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
937GW38 (deep)	03/13/06	< 50	< 50	< 300
	03/16/05	< 50	< 50	< 300
	03/12/04	< 50	< 50	< 300
	12/03/03	< 50	< 50	< 300
	08/18/03	< 50	< 50	< 300
	06/03/03	< 50	< 50	< 300
	03/19/03	< 50	< 50	< 300
	12/05/02	< 50	< 50	< 300
	08/28/02	< 50	< 50	< 300
	05/31/02	< 50	< 50	< 300
	03/05/02	< 50	< 50	< 300
	11/27/01	< 50	< 50	< 300
	09/06/01	< 50	< 50 ²	< 300 ²
	05/15/01	< 50	< 50	< 300
	06/19/00	< 50	< 50 (U12, U21)	< 300 (U12, U21)
	01/11/00	< 50	< 50 (U12)	< 300
	09/02/99	< 50	< 50	< 300
	06/02/99	< 50	< 50	< 300 (U6)
	03/10/99	< 50	< 50	< 300
	12/03/98	< 50	< 50	< 300
	09/01/98	< 50 (U18)	< 50	< 300
	05/26/98	< 50	< 50	< 300
	02/26/98	< 50	< 50	< 300
	12/02/97	< 50	< 50	< 300
	08/27/97	< 50	< 50	< 300
	06/10/97	< 50	< 50	< 300
	03/13/97	< 50	< 50	< 300
	11/13/96	< 50	< 50	< 300
	08/16/96	< 50	68 (J25)	< 300
	04/09/96	< 50	< 50	< 300
	01/17/96	< 50	< 50	< 300
	10/16/95	< 50	< 50	< 300
	07/17/95	< 50	< 50	< 300
	04/24/95	< 50	< 50	NA
	01/31/95	< 50	< 50	NA
	10/25/94	< 50	< 50	NA
	08/09/94	< 50	< 50 (U9)	NA
	05/10/94	< 50	< 50	NA
	02/15/94	< 50	68 (J25)	NA
	11/15/93	< 50	< 50	NA
	08/09/93	< 50	< 50	NA

Well Name (screened interval)	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
937GW39 (deep)	03/13/06	< 50	< 50	< 300
	03/17/05	< 50	< 50	< 300
	03/12/04	< 50	< 50	< 300
	12/05/03	< 50	< 50	< 300
	08/18/03	< 50	< 50	< 300
	06/03/03	< 50	< 50	< 300
	03/20/03	< 50	< 50	< 300
	12/05/02	< 50	< 50	< 300
	08/28/02	< 50	< 50	< 300
	05/31/02	< 50	< 50	< 300
DUP0518013BCL 937GW39CL	03/05/02	< 50	< 50	< 300
	11/27/01	< 50	< 50	< 300
	09/07/01	< 50	< 50 ²	< 300 ²
	05/18/01	< 50	< 50	< 300
	05/18/01	< 50	< 50	< 500
	05/18/01	< 50	< 50	< 500
	06/16/00	< 50	< 50 (U21)	< 300 (U21)
	01/13/00	< 50	< 50	< 300
	09/02/99	< 50	< 50	< 300
	06/01/99	< 50	< 50	< 300
	03/09/99	< 50	< 50	< 300 (U12)
	12/02/98	66 (J25)	< 50	< 300
	08/31/98	< 50	< 50	< 300
	05/21/98	< 50	< 50	< 300
	02/18/98	< 50	< 50	< 300
	12/03/97	< 50	< 50	< 300
	08/28/97	< 50	< 50 (U29)	< 300
	06/16/97	< 50	< 50	< 300
	03/18/97	< 50	< 50	< 300
	11/18/96	< 50	< 50	< 300
	08/21/96	< 50	< 50	< 300
	04/17/96	< 50	< 50	< 300
	01/25/96	< 50	< 50	< 300
	10/24/95	< 50	< 50	< 300
	07/31/95	< 50	< 50	< 300
	05/08/95	< 50	< 50	NA
	02/01/95	< 50	120 (J25)	NA
	10/26/94	< 50	< 50	NA
	08/12/94	< 50	< 50	NA
	05/11/94	< 50	< 50	NA
	02/16/94	< 50	91 (J25)	NA
	11/15/93	< 50	< 50	NA
	08/10/93	< 50	69 (J25)	NA

Table A-1-3
Results of TPH Analyses
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
937GW42 (intermediate)	03/14/06	< 50	< 50	< 300
	03/18/05	< 50	< 50	< 300
	03/17/04	< 50	< 50	< 300
	12/09/03	< 50	< 50	< 300
	08/20/03	< 50	< 50	< 300
	06/09/03	< 50	< 50	< 300
	03/20/03	< 50	< 50	< 300
	12/05/02	< 50	< 50	< 300
	08/29/02	< 50	< 50	< 300
	06/04/02	< 50	< 50	< 300
DUP0604021B	06/04/02	< 50	< 50	< 300
937GW42CL	06/04/02	< 50	860 ² ndp,J-NJ	2,800 ² NJ
DUP0306022C	03/06/02	< 50	< 50	< 300
	03/06/02	< 50	110 YH	340
	11/28/01	< 50	340 YH	490
DUP1128011C	11/28/01	< 50	720 YH	470
937GW42CL	11/28/01	< 50	150 ndp	530
DUP0906011C	09/06/01	< 50	59,000 ² YH,NJ	67,000 ² YL,NJ
	09/06/01	< 50	60,000 ² YH,NJ	67,000 ² YL,NJ
	05/16/01	< 50	< 50	< 300
	09/11/00	NA	4,100	3,700
	06/16/00	85	10,000 (J21)	12,000 (J21)
	01/10/00	< 50	< 50 (U12)	< 300
	09/03/98	< 50 (U18)	< 50	< 300
	05/28/98	< 50	< 50	< 300
	02/24/98	< 50	< 50	< 300
	11/25/97	< 50	< 50	< 300
	08/26/97	< 50	< 50	< 300
	06/04/97	< 50	< 50	< 300
	03/10/97	< 50	< 50 (U12, U20, U29)	< 300 (U29)
	11/11/96	< 50	< 50	< 300
	08/14/96	< 50	87 (J25)	< 300
	04/12/96	< 50	< 50	< 300
	01/22/96	< 50	< 50	< 300
	10/20/95	< 50	< 50	< 300
	07/24/95	< 50	< 50	< 300
	05/01/95	< 50	92 (J25)	NA
	02/14/95	< 50	57 (J25)	NA
	10/27/94	< 50	< 50	NA
	08/01/94	< 50	68 (J25)	NA
	05/05/94	< 50	< 50	NA

Table A-1-3
Results of TPH Analyses
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
937GW101 (shallow)	03/13/06	< 50	< 50	< 300
	03/18/05	< 50	< 50	< 300
	03/16/04	< 50	< 50	< 300
	12/04/03	< 50	< 50	< 300
	08/12/03	< 50	< 50	< 300
	06/04/03	< 50	< 50	< 300
	03/19/03	< 50	< 50	< 300
	12/10/02	< 50	< 50	< 300
	08/28/02	< 50	< 50	< 300
	06/04/02	< 50	< 50	< 300
	03/08/02	< 50	< 50	< 300
	11/27/01	< 50	< 50	< 300
	09/06/01	< 50	63 ² YH,NJ	< 300 ²
937GW102 (intermediate)	03/13/06	< 50	< 50	< 300
	03/18/05	< 50	< 50	< 300
	03/16/04	< 50	< 50	< 300
	12/04/03	< 50	< 50	< 300
	08/12/03	< 50	< 50	< 300
	06/03/03	< 50	< 50	< 300
	03/19/03	< 50	< 50	< 300
	12/10/02	< 50	< 50	< 300
	08/28/02	< 50	< 50	< 300
	05/30/02	< 50	< 50	< 300
	03/08/02	< 50	< 50	< 300
	11/28/01	< 50	< 50	< 300
	09/06/01	< 50	210 ² YH,NJ	< 300 ²
937GW103 (deep) DUP1204032A 937GW103CL	03/13/06	< 50	< 50	< 300
	03/18/05	< 50	< 50	< 300
	03/16/04	< 50	< 50	< 300
	12/04/03	< 50	< 50	< 300
	12/04/03	< 50	< 50	< 300
	12/04/03	< 50	< 48	< 240
	08/12/03	< 50	< 50	< 300
	06/03/03	< 50	< 50	< 300
	03/19/03	< 50	< 50	< 300
	12/10/02	< 50	< 50	< 300
	08/28/02	< 50	< 50	< 300
	05/30/02	< 50	< 50	< 300
	03/08/02	< 50	< 50	< 300
	11/27/01	< 50	< 50	< 300
	09/06/01	< 50	< 50 ²	< 300 ²

Table A-1-3
Results of TPH Analyses
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
937GW104 (shallow)	03/13/06	< 50	< 50	< 300
	03/30/05	< 50	< 50	< 300
	03/12/04	< 50	< 50	< 300
	12/08/03	< 50	< 50	< 300
	08/12/03	< 50	< 50	< 300
	06/03/03	< 50	< 50	< 300
	03/11/03	< 50	< 50	< 300
	12/10/02	< 50	< 50	< 300
	08/30/02	< 50	< 50	< 300
	05/31/02	< 50	< 50	< 300
	03/13/02	< 50	< 50	< 300
	12/03/01	< 50	< 50	< 300
	09/07/01	< 50	< 50 ²	< 300 ²
937GW105 (intermediate) DUP0815031A 937GW105CL DUP0905022A	03/13/06	< 50	< 50	< 300
	03/30/05	< 50	< 50	< 300
	03/16/04	< 50	< 50	< 300
	12/09/03	< 50	< 50	< 300
	08/15/03	< 50	< 50	< 300
	08/15/03	< 50	240 HY	< 300
	08/15/03	< 50	< 48	< 240
	06/04/03	< 50	< 50	< 300
	03/19/03	< 50	< 50	< 300
	12/10/02	< 50	< 50	< 300
	09/05/02	< 50	< 50	< 300
	09/05/02	< 50	< 50	< 300
	09/05/02	< 50	< 50	< 300
	05/31/02	< 50	< 50	< 300
	03/13/02	< 50	< 50	< 300
	12/03/01	< 50	< 50	< 300
	09/07/01	< 50	77 ² YH,NJ	< 300 ²
937GW106 (shallow)	03/13/06	< 50	< 50	< 300
	03/30/05	< 50	< 50	< 300
	03/16/04	< 50	< 50	< 300
	12/09/03	< 50	< 50	< 300
	08/18/03	< 50	110 Y	< 300
	06/04/03	< 50	68 Y	< 300
	03/18/03	< 50	< 50 UJ	< 300 UJ
	12/10/02	< 50	< 50	< 300
	09/05/02	< 50	< 50	< 300
	05/31/02	< 50	< 50	< 300
	03/13/02	< 50	< 50	< 300
	11/29/01	< 50	< 50	< 300
	08/31/01	< 50	230 ² YH,NJ	< 300 ²

Table A-1-3
Results of TPH Analyses
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
937GW107 (intermediate) DUP0818031A DUP0905022B	03/14/06	< 50	< 50	< 300
	03/30/05	< 50	< 50	< 300
	03/16/04	< 50	< 50	< 300
	12/09/03	< 50	< 50	< 300
	08/18/03	< 50	< 50	< 300
	08/18/03	< 50	< 50	< 300
	06/03/03	< 50	< 50	< 300
	03/18/03	< 50	< 50	< 300
	12/10/02	100 YH	62 HY	470
	09/05/02	< 50	< 50	< 300
	09/05/02	< 50	< 50	< 300
	05/31/02	< 50	< 50	< 300
	03/13/02	< 50	< 50	< 300
	11/29/01	< 50	< 50	< 300
	08/31/01	< 50	64 ² Y,NJ	< 300 ²
937GW108 (shallow) DUP1203033B 937GW108CL DUP0319032A DUP1210022A 937GW108CL	03/13/06	140 HY	55 LY	< 300
	03/17/05	380 HY	330 HLY	940
	03/19/04	620 HY	160 LY	580
	12/03/03	460 H,J+	< 50	< 300
	12/03/03	390 H	50 Y	< 300
	12/03/03	290	1000 A-01	750
	08/15/03	430 Y,J+	400 HLY	840
	06/03/03	740 YH	530 HLYZ	760
	03/19/03	570	< 50	< 300
	03/19/03	600	450 YLH	390 L
	12/10/02	850 YH	630 HLY	1,800
	12/10/02	540 HY	60 Y	< 300
	12/10/02	680	< 50	800
	09/05/02	770 YH	< 50	< 300
	06/04/02	1,200 YH	680 YLH	1,900
950GW108 (intermediate) DUP0309062A 950GW108CL DUP0331052A 950GW108CL DUP0316042B DUP0318031B 950GW108CL	03/09/06	< 50	< 50	< 300
	03/09/06	< 50	< 50	< 300
	03/09/06	< 50 U	120	< 300 U
	03/31/05	< 50	< 50	< 300
	03/31/05	< 50	< 50	< 300
	03/31/05	< 50 U	< 50 U	< 300 U
	03/16/04	< 50	< 50	< 300
	03/16/04	< 50	< 50	< 300
	12/04/03	< 50	< 50	< 300
	08/12/03	< 50	< 50	< 300
	06/06/03	< 50	< 50	< 300
	03/18/03	< 50	< 50 UJ	< 300 UJ
	03/18/03	< 50	< 50	< 300
	03/18/03	< 50	< 50	< 250

Table A-1-3
Results of TPH Analyses
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
950GW108 (intermediate) DUP0829022A	12/11/02	< 50	< 50	< 300
	08/29/02	< 50	< 50	< 300
	08/29/02	< 50	< 50	< 300
	08/29/02	< 50	< 50	< 300
	06/04/02	< 50	< 50	< 300
	06/04/02	< 50	< 50	< 300
	06/04/02	< 50	< 50 UJ	< 300
	03/14/02	< 50	< 50	NA
	03/14/02	< 50	< 50	NA
	03/14/02	< 50	< 50	NA
	11/30/01	< 50	< 50	< 300
	11/30/01	< 50	< 50	< 300
979GW109 (shallow) DUP1210022B	09/06/01	< 50	< 50 ²	< 300 ²
	03/14/06	< 50	< 50	< 300
	03/18/05	< 50	< 50	< 300
	03/16/04	< 50	< 50	< 300
	12/09/03	< 50	< 50	< 300
	08/20/03	< 50	< 50	< 300
	06/06/03	< 50	< 50	< 300
	03/19/03	< 50	< 50	< 300
	12/10/02	79 YH	< 50	< 300
	12/10/02	< 50	< 50	< 300
	08/29/02	< 50	< 50	< 300
	06/04/02	< 50	< 50	< 300
979GW110 (intermediate) DUP0319032B	03/08/02	< 50	< 50	< 300
	11/28/01	< 50	< 50	< 300
	09/07/01	< 50	160 ² YH,NJ	< 300 ²
	03/14/06	< 50	< 50	< 300
	03/18/05	< 50	< 50	< 300
	03/16/04	< 50	< 50	< 300
	12/04/03	< 50	< 50	< 300
	08/12/03	< 50	< 50	< 300
	06/05/03	< 50	100 HY	540
	03/19/03	< 50	< 50	< 300
	03/19/03	< 50	< 50	< 300
	12/11/02	< 50	< 50	< 300
DUP0319032B	08/29/02	< 50	< 50	< 300
	05/30/02	< 50	< 50	< 300
	03/14/02	< 50	< 50	NA
	11/28/01	< 50	< 50	< 300
	09/07/01	< 50	< 50 ²	< 300 ²

Table A-1-3
Results of TPH Analyses
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
979GW111R (intermediate)	03/13/06	< 50	< 50	< 300
	03/30/05	< 50	< 50	< 300
	03/12/04	< 50	< 50	< 300
	12/09/03	< 50	< 50	< 300
	08/12/03	< 50	< 50	< 300
	06/03/03	< 50	< 50	< 300
	03/11/03	< 50	< 50	< 300
	12/10/02	< 50	< 50	< 300
	08/30/02	< 50	< 50	< 300
	06/05/02	< 50	< 50	< 300
979GW112 (intermediate) DUP0312041A 979GW112CL DUP0815031B 979GW112CL DUP1210021A 979GW112CL	03/14/06	< 50	< 50	< 300
	03/30/05	< 50	< 50	< 300
	03/12/04	< 50	< 50	< 300
	03/12/04	< 50	< 50 HY,U	< 300
	03/12/04	< 50	< 48	< 240
	12/09/03	< 50	< 50	< 300
	08/15/03	< 50	< 50	< 300
	08/15/03	< 50	< 50	< 300
	08/15/03	< 50	< 48	< 240
	06/03/03	< 50	< 50	< 300
	03/18/03	< 50	< 50	< 300
	12/10/02	< 50	< 50	< 300
	12/10/02	< 50	< 50	< 300
	12/10/02	< 50	< 50	< 250
	08/30/02	< 50	< 50	< 300
	06/05/02	< 50	< 50	< 300
	03/14/02	< 50	< 50	< 300
	12/03/01	< 50	< 50	< 300
	08/31/01	< 50	< 50 ²	< 300 ²
979GW113 (shallow) DUP0313022A	03/14/06	< 50	< 50	< 300
	03/18/05	< 50	< 50 Y U	< 300
	03/16/04	< 50	< 50	< 300
	12/04/03	< 50	< 50	< 300
	08/12/03	< 50	54 HY	< 300
	06/05/03	< 50	< 50	< 300
	03/19/03	< 50	710 YLH	760
	12/10/02	< 50	< 50	< 300
	08/28/02	< 50	< 50	< 300
	05/30/02	< 50	< 50	< 300
	03/13/02	< 50	< 50	< 300
	03/13/02	< 50	< 50	< 300
	11/29/01	< 50	< 50	< 300
	09/07/01	< 50	310 ² YH,NJ	< 300 ²

Table A-1-3
Results of TPH Analyses
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
979GW114 (intermediate) DUP0316042A DUP0530021D	03/14/06	< 50	< 50	< 300
	03/18/05	< 50	< 50	< 300
	03/16/04	< 50	< 50	< 300
	03/16/04	< 50	< 50	< 300
	12/04/03	< 50	< 50	< 300
	08/12/03	< 50	< 50	< 300
	06/04/03	< 50	< 50	< 300
	03/19/03	< 50	< 50	< 300
	12/10/02	< 50	< 50	< 300
	08/28/02	< 50	< 50	< 300
	05/30/02	< 50	< 50	< 300
	05/30/02	< 50	< 50	< 300
	03/13/02	< 50	< 50	< 300
	11/29/01	< 50	< 50	< 300
	09/07/01	< 50	110 ² YH,NJ	< 300 ²
979GW115 (shallow) DUP1211021A DUP0605021B 979GW115CL	03/13/06	< 50	< 50	< 300
	03/30/05	< 50	< 50	< 300
	03/12/04	< 50	< 50 HY,U	< 300
	12/09/03	< 50	< 50	< 300
	08/12/03	< 50	< 50	< 300
	06/03/03	< 50	< 50	< 300
	03/18/03	< 50	< 50 UJ	< 300 UJ
	12/11/02	< 50	< 50 UJ	< 300 UJ
	12/11/02	< 50	< 50	< 300
	08/30/02	< 50	< 50	< 300
	06/05/02	< 50	< 50	< 300
	06/05/02	< 50	< 50	< 300
	06/05/02	< 50	< 50 UJ	< 300
	03/13/02	< 50	< 50	< 300
	11/29/01	< 50	< 50	< 300
	08/29/01	< 50	84 ² Y,NJ	< 300 ²
979GW116 (intermediate) DUP0314061A DUP0331052B 979GW116CL DUP0604031A DUP0319031A	03/14/06	< 50	< 50	< 300
	03/14/06	< 50	< 50	< 300
	03/31/05	< 50	< 50	< 300
	03/31/05	< 50	< 50	< 300
	03/31/05	< 50 U	< 50 U	< 300 U
	03/16/04	< 50	< 50	< 300
	12/09/03	< 50	< 50	< 300
	08/18/03	< 50	< 50	< 300
	06/04/03	< 50	< 50	< 300
	06/04/03	< 50	< 50	< 300
	03/19/03	< 50	< 50	< 300
	03/19/03	< 50	< 50	< 300

Table A-1-3
Results of TPH Analyses
Building 900s Area
Presidio of San Francisco, California

Well Name (screened interval)	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
979GW116 (intermediate) DUP0905022C 979GW116CL DUP0314021A 979GW116CL DUP1129011A 979GW116CL	12/10/02	< 50	< 50	< 300
	09/05/02	< 50	< 50	< 300
	09/05/02	< 50	< 50	< 300
	09/05/02	< 50	< 50	< 300
	06/06/02	< 50	< 50	< 300
	03/14/02	< 50	< 50	< 300
	03/14/02	< 50	< 50	< 300
	03/14/02	< 50	< 50	< 300
	11/29/01	< 50	< 50	< 300
	11/29/01	< 50	< 50	< 300
	11/29/01	< 50	< 50	< 500
	08/29/01	< 50	50 ² Y,NJ	< 300 ²
979GW117 (deep)	03/13/06	< 50	< 50	< 300
	03/17/05	< 50	< 50	< 300
	03/12/04	< 50	< 50 HY,U	< 300
	12/08/03	< 50	< 50	< 300
	08/12/03	< 50	< 50	< 300
	06/03/03	< 50	< 50	< 300
	03/18/03	< 50	< 50	< 300
	12/10/02	< 50	< 50	< 300
	08/30/02	< 50	< 50	< 300
	05/31/02	< 50	< 50	< 300
	03/13/02	< 50	< 50	< 300
	11/29/01	< 50	< 50	< 300
	08/29/01	< 50	< 50 ²	< 300 ²

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001.

The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - TPH analysis was not run using the silica gel cleanup method 3630A, although it was marked on the chain of custody.

H - Heavier hydrocarbons contributed to the quantitation

L - Lighter hydrocarbons contributed to the quantitation

Y - Sample exhibits fuel pattern which does not resemble standard

NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

ndp - Hydrocarbon reported does not match the pattern of the diesel standard.

µg/L - micrograms per liter

NA - Not analyzed

TPH - Total petroleum hydrocarbons

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-1-4
Groundwater Elevation Summary
Building 900s Area
Presidio of San Francisco, California

Well ID	Date	Tidal Cycle	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
Shallow Monitoring Wells						
937GW06	08/14/06	--	5.64	11.05	5.41	MW
	05/22/06	--	5.86	11.05	5.19	MW
	03/06/06	--	4.53	11.05	6.52	MW
	11/28/05	--	6.30	11.05	4.75	MW
	08/29/05	--	5.56	11.05	5.49	MW
	05/23/05	--	5.58	11.05	5.47	MW
	03/14/05	--	5.02	11.05	6.03	MW
	12/13/04	--	4.68	11.05	6.37	MW
	08/09/04	--	6.08	11.05	4.97	MW
	05/24/04	--	6.18	11.05	4.87	MW
	03/08/04	--	5.69	11.05	5.36	MW
	12/01/03	--	5.85	11.05	5.20	MW
	08/11/03	Low	6.47	11.05	4.58	MW
	06/02/03	Low	6.50	11.05	4.55	MW
	03/10/03	Low	6.29	11.05	4.76	MW
	12/02/02	Low	6.13	11.05	4.92	MW
	08/26/02	Low	6.67	11.05	4.38	MW
	05/28/02	Low	6.67	11.05	4.38	MW
	03/04/02	Low	5.93	11.05	5.12	MW
	11/26/01	Low	6.27	11.05	4.78	MW
	11/26/01	High	5.83	11.05	5.22	MW
	08/27/01	Low	6.67	11.05	4.38	MW
	08/27/01	High	6.70	11.05	4.35	MW
	05/08/01	Low	6.75	11.05	4.30	MW
	05/08/01	High	6.55	11.05	4.50	MW
937GW07 ²	08/14/06	--	8.79	13.94	5.15	MW
	05/22/06	--	8.87	13.94	5.07	MW
	03/06/06	--	7.62	13.94	6.32	MW
	11/28/05	--	9.28	13.94	4.66	MW
	08/29/05	--	8.84	13.94	5.10	MW
	05/23/05	--	8.76	13.94	5.18	MW
	03/14/05	--	8.10	13.94	5.84	MW
	12/13/04	--	7.92	13.94	6.02	MW
	08/09/04	--	9.27	13.94	4.67	MW
	05/24/04	--	9.11	13.94	4.83	MW
	03/08/04	--	8.70	13.94	5.24	MW
	12/01/03	--	9.02	13.94	4.92	MW
	08/11/03	Low	9.31	13.94	4.63	MW
	06/02/03	Low	9.37	13.94	4.57	MW
	03/10/03	Low	9.41	13.94	4.53	MW
	12/02/02	Low	8.95	13.94	4.99	MW
	08/26/02	Low	9.71	13.94	4.23	MW
	05/28/02	Low	9.53	13.94	4.41	MW
	03/04/02	Low	9.12	13.94	4.82	MW
	11/26/01	Low	9.13	13.94	4.81	MW
	11/26/01	High	9.04	13.94	4.90	MW
	08/27/01	Low	9.84	13.94	4.10	MW
	08/27/01	High	9.85	13.94	4.09	MW
	05/08/01	Low	9.76	13.94	4.18	MW
	05/08/01	High	9.71	13.94	4.23	MW

Table A-1-4
Groundwater Elevation Summary
Building 900s Area
Presidio of San Francisco, California

Well ID	Date	Tidal Cycle	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
937GW12	08/14/06	--	2.49	10.34	7.85	MW
	05/22/06	--	6.63	10.34	3.71	MW
	03/06/06	--	2.30	10.34	8.04	MW
	11/28/05	--	3.61	10.34	6.73	MW
	08/29/05	--	2.23	10.34	8.11	MW
	05/23/05	--	2.63	10.34	7.71	MW
	03/14/05	--	1.93	10.34	8.41	MW
	12/13/04	--	2.69	10.34	7.65	MW
	08/09/04	--	3.05	10.34	7.29	MW
	05/24/04	--	2.90	10.34	7.44	MW
	03/08/04	--	2.75	10.34	7.59	MW
	12/01/03	--	4.67	10.34	5.67	MW
	08/11/03	Low	5.25	10.34	5.09	MW
	06/02/03	Low	5.39	10.34	4.95	MW
	03/10/03	Low	5.19	10.34	5.15	MW
	12/02/02	Low	5.02	10.34	5.32	MW
	08/26/02	Low	5.59	10.34	4.75	MW
	05/28/02	Low	5.50	10.34	4.84	MW
	03/04/02	Low	4.95	10.34	5.39	MW
	11/26/01	Low	5.29	10.34	5.05	MW
	11/26/01	High	5.16	10.34	5.18	MW
	08/27/01	Low	5.85	10.34	4.49	MW
	08/27/01	High	5.89	10.34	4.45	MW
	05/08/01	Low	5.67	10.34	4.67	MW
	05/08/01	High	5.82	10.34	4.52	MW
937GW15	08/14/05	--	7.07	12.90	5.83	MW
	05/22/06	--	7.29	12.90	5.61	MW
	03/06/06	--	6.06	12.90	6.84	MW
	11/28/05	--	7.77	12.90	5.13	MW
	08/29/05	--	7.02	12.90	5.88	MW
	05/23/05	--	7.10	12.90	5.80	MW
	03/14/05	--	6.27	12.90	6.63	MW
	12/13/04	--	6.33	12.90	6.57	MW
	08/09/04	--	7.49	12.90	5.41	MW
	05/24/04	--	7.47	12.90	5.43	MW
	03/08/04	--	6.92	12.90	5.98	MW
	12/01/03	--	7.83	12.90	5.07	MW
	08/11/03	Low	8.16	12.90	4.74	MW
	06/02/03	Low	8.20	12.90	4.70	MW
	03/10/03	Low	8.00	12.90	4.90	MW
	12/02/02	Low	7.85	12.90	5.05	MW
	08/26/02	Low	8.39	12.90	4.51	MW
	05/28/02	Low	8.35	12.90	4.55	MW
	03/04/02	Low	7.78	12.90	5.12	MW
	11/26/01	Low	7.98	12.90	4.92	MW
	11/26/01	High	7.82	12.90	5.08	MW
	08/27/01	Low	8.58	12.90	4.32	MW
	08/27/01	High	8.58	12.90	4.32	MW
	05/08/01	Low	8.68	12.90	4.22	MW
	05/08/01	High	8.61	12.90	4.29	MW

Table A-1-4
Groundwater Elevation Summary
Building 900s Area
Presidio of San Francisco, California

Well ID	Date	Tidal Cycle	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
937GW35	08/14/06	--	7.09	11.64	4.55	MW
	05/22/06	--	6.90	11.64	4.74	MW
	03/06/06	--	5.04	11.64	6.60	MW
	11/28/05	--	6.92	11.64	4.72	MW
	08/29/05	--	7.00	11.64	4.64	MW
	05/23/05	--	6.27	11.64	5.37	MW
	03/14/05	--	6.45	11.64	5.19	MW
	12/13/04	--	6.10	11.64	5.54	MW
	08/09/04	--	7.21	11.64	4.43	MW
	05/24/04	--	6.86	11.64	4.78	MW
	03/08/04	--	7.11	11.64	4.53	MW
	12/01/03	--	6.11	11.64	5.53	MW
	08/11/03	Low	6.96	11.64	4.68	MW
	06/02/03	Low	6.83	11.64	4.81	MW
	03/10/03	Low	6.56	11.64	5.08	MW
	12/02/02	Low	6.43	11.64	5.21	MW
	08/26/02	Low	7.41	11.64	4.23	MW
	05/28/02	Low	6.78	11.64	4.86	MW
	03/04/02	Low	6.13	11.64	5.51	MW
	11/26/01	Low	6.63	11.64	5.01	MW
	11/26/01	High	6.46	11.64	5.18	MW
	08/27/01	Low	7.43	11.64	4.21	MW
	08/27/01	High	7.43	11.64	4.21	MW
	05/08/01	Low	6.98	11.64	4.66	MW
	05/08/01	High	7.18	11.64	4.46	MW
937GW37	08/14/06	--	6.91	12.74	5.83	MW
	05/22/06	--	7.16	12.74	5.58	MW
	03/06/06	--	5.93	12.74	6.81	MW
	11/28/05	--	7.75	12.74	4.99	MW
	08/29/05	--	6.87	12.74	5.87	MW
	05/23/05	--	6.95	12.74	5.79	MW
	03/14/05	--	6.20	12.74	6.54	MW
	12/13/04	--	6.21	12.74	6.53	MW
	08/09/04	--	7.35	12.74	5.39	MW
	05/24/04	--	7.27	12.74	5.47	MW
	03/08/04	--	6.86	12.74	5.88	MW
	12/01/03	--	7.49	12.74	5.25	MW
	08/11/03	Low	8.07	12.74	4.67	MW
	06/02/03	Low	8.10	12.74	4.64	MW
	03/10/03	Low	7.92	12.74	4.82	MW
	12/02/02	Low	7.75	12.74	4.99	MW
	08/26/02	Low	8.30	12.74	4.44	MW
	05/28/02	Low	8.25	12.74	4.49	MW
	03/04/02	Low	7.64	12.74	5.10	MW
	11/26/01	Low	7.77	12.74	4.97	MW
	11/26/01	High	7.66	12.74	5.08	MW
	08/27/01	Low	8.34	12.74	4.40	MW
	08/27/01	High	8.43	12.74	4.31	MW
	05/08/01	Low	8.54	12.74	4.20	MW
	05/08/01	High	8.37	12.74	4.37	MW

Table A-1-4
Groundwater Elevation Summary
Building 900s Area
Presidio of San Francisco, California

Well ID	Date	Tidal Cycle	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
937GW101	08/14/06	--	6.35	11.81	5.46	MW
	05/22/06	--	6.58	11.81	5.23	MW
	03/06/06	--	5.33	11.81	6.48	MW
	11/28/05	--	7.02	11.81	4.79	MW
	08/29/05	--	6.28	11.81	5.53	MW
	05/23/05	--	6.34	11.81	5.47	MW
	03/14/05	--	5.76	11.81	6.05	MW
	12/13/04	--	5.35	11.81	6.46	MW
	08/09/04	--	6.77	11.81	5.04	MW
	05/24/04	--	6.83	11.81	4.98	MW
	03/08/04	--	6.35	11.81	5.46	MW
	12/01/03	--	6.65	11.81	5.16	MW
	08/11/03	Low	7.19	11.81	4.62	MW
	06/02/03	Low	7.21	11.81	4.60	MW
	03/10/03	Low	7.09	11.81	4.72	MW
	12/02/02	Low	6.88	11.81	4.93	MW
	08/26/02	Low	7.46	11.81	4.35	MW
	05/28/02	Low	7.43	11.81	4.38	MW
	03/04/02	Low	6.81	11.81	5.00	MW
	11/26/01	Low	7.04	11.81	4.77	MW
	11/26/01	High	6.65	11.81	5.16	MW
	08/27/01	Low	7.45	11.81	4.36	MW
	08/27/01	High	7.46	11.81	4.35	MW
937GW104	08/14/06	--	6.65	11.52	4.87	MW
	05/22/06	--	6.57	11.52	4.95	MW
	05/22/06	--	6.57	11.52	4.95	MW
	03/06/06	--	4.55	11.52	6.97	MW
	11/28/05	--	6.65	11.52	4.87	MW
	08/29/05	--	6.44	11.52	5.08	MW
	05/23/05	--	6.18	11.52	5.34	MW
	03/14/05	--	6.08	11.52	5.44	MW
	12/13/04	--	4.85	11.52	6.67	MW
	08/09/04	--	6.96	11.52	4.56	MW
	05/24/04	--	6.83	11.52	4.69	MW
	03/08/04	--	6.72	11.52	4.80	MW
	12/01/03	--	6.02	11.52	5.50	MW
	08/11/03	Low	6.75	11.52	4.77	MW
	06/02/03	Low	6.45	11.52	5.07	MW
	03/10/03	Low	6.98	11.52	4.54	MW
	12/02/02	Low	6.03	11.52	5.49	MW
	08/26/02	Low	7.26	11.52	4.26	MW
	05/28/02	Low	6.86	11.52	4.66	MW
	03/04/02	Low	6.47	11.52	5.05	MW
	11/26/01	Low	6.63	11.52	4.89	MW
	11/26/01	High	6.07	11.52	5.45	MW
	08/27/01	Low	7.00	11.52	4.52	MW
	08/27/01	High	7.05	11.52	4.47	MW
937GW106	08/14/06	--	10.10	15.20	5.10	MW
	05/22/06	--	10.11	15.20	5.09	MW
	03/06/06	--	8.53	15.20	6.67	MW
	11/28/05	--	10.26	15.20	4.94	MW
	08/29/05	--	10.23	15.20	4.97	MW
	05/23/05	--	9.60	15.20	5.60	MW

Table A-1-4
Groundwater Elevation Summary
Building 900s Area
Presidio of San Francisco, California

Well ID	Date	Tidal Cycle	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
937GW106	03/14/05	--	9.36	15.20	5.84	MW
	12/13/04	--	9.52	15.20	5.68	MW
	08/09/04	--	10.23	15.20	4.97	MW
	05/24/04	--	10.15	15.20	5.05	MW
	03/08/04	--	9.82	15.20	5.38	MW
	12/01/03	--	10.15	15.20	5.05	MW
	08/11/03	Low	10.22	15.20	4.98	MW
	06/02/03	Low	10.27	15.20	4.93	MW
	03/10/03	Low	9.13	15.20	6.07	MW
	12/02/02	Low	10.09	15.20	5.11	MW
	08/26/02	Low	10.37	15.20	4.83	MW
	05/28/02	Low	10.19	15.20	5.01	MW
	03/04/02	Low	8.83	15.20	6.37	MW
	11/26/01	Low	9.82	15.20	5.38	MW
	11/26/01	High	9.80	15.20	5.40	MW
	08/27/01	Low	10.37	15.20	4.83	MW
	08/27/01	High	10.39	15.20	4.81	MW
937GW108	08/14/06	--	4.84	12.11	7.27	MW
	05/22/06	--	5.69	12.11	6.42	MW
	03/06/06	--	4.07	12.11	8.04	MW
	11/28/05	--	6.81	12.11	5.30	MW
	08/29/05	--	5.20	12.11	6.91	MW
	05/23/05	--	5.34	12.11	6.77	MW
	03/14/05	--	4.36	12.11	7.75	MW
	12/13/04	--	5.41	12.11	6.70	MW
	08/09/04	--	6.67	12.11	5.44	MW
	05/24/04	--	6.72	12.11	5.39	MW
	03/08/04	--	5.64	12.11	6.47	MW
	12/01/03	--	6.86	12.11	5.25	MW
	08/11/03	Low	7.45	12.11	4.66	MW
	06/02/03	Low	7.44	12.11	4.67	MW
	03/10/03	Low	7.17	12.11	4.94	MW
	12/02/02	Low	7.25	12.11	4.86	MW
	08/26/02	Low	5.94	12.11	6.17	MW
	05/28/02	Low	7.68 ³	12.11	4.43	MW
979GW109	08/14/06	--	6.35	10.62	4.27	MW
	05/22/06	--	6.58	10.62	4.04	MW
	03/06/06	--	5.39	10.62	5.23	MW
	11/28/05	--	6.46	10.62	4.16	MW
	08/29/05	--	6.17	10.62	4.45	MW
	05/23/05	--	6.18	10.62	4.44	MW
	03/14/05	--	6.05	10.62	4.57	MW
	12/13/04	--	5.55	10.62	5.07	MW
	08/09/04	--	6.54	10.62	4.08	MW
	05/24/04	--	6.59	10.62	4.03	MW
	03/08/04	--	6.51	10.62	4.11	MW
	12/01/03	--	5.65	10.62	4.97	MW
	08/11/03	Low	6.58	10.62	4.04	MW
	06/02/03	Low	6.69	10.62	3.93	MW
	03/10/03	Low	6.18	10.62	4.44	MW
	12/02/02	Low	6.07	10.62	4.55	MW
	08/26/02	Low	6.91	10.62	3.71	MW
	05/28/02	Low	6.75	10.62	3.87	MW

Table A-1-4
Groundwater Elevation Summary
Building 900s Area
Presidio of San Francisco, California

Well ID	Date	Tidal Cycle	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
979GW109	03/04/02	Low	5.96	10.62	4.66	MW
	11/26/01	Low	6.63	10.62	3.99	MW
	11/26/01	High	6.02	10.62	4.60	MW
	08/27/01	Low	6.57	10.62	4.05	MW
	08/27/01	High	6.57	10.62	4.05	MW
979GW112	08/14/06	--	15.40	19.72	4.32	MW
	05/22/06	--	15.47	19.72	4.25	MW
	03/06/06	--	14.73	19.72	4.99	MW
	11/28/05	--	15.80	19.72	3.92	MW
	08/29/05	--	15.28	19.72	4.44	MW
	05/23/05	--	14.87	19.72	4.85	MW
	03/14/05	--	15.15	19.72	4.57	MW
	12/13/04	--	14.65	19.72	5.07	MW
	08/09/04	--	15.61	19.72	4.11	MW
	05/24/04	--	15.75	19.72	3.97	MW
	03/08/04	--	15.52	19.72	4.20	MW
	12/01/03	--	15.06	19.72	4.66	MW
	08/11/03	Low	15.85	19.72	3.87	MW
	06/02/03	Low	15.98	19.72	3.74	MW
	03/10/03	Low	14.95	19.72	4.77	MW
	12/02/02	Low	15.60	19.72	4.12	MW
	08/26/02	Low	16.03	19.72	3.69	MW
	05/28/02	Low	15.97	19.72	3.75	MW
	03/04/02	Low	14.65	19.72	5.07	MW
	11/26/01	Low	15.77	19.72	3.95	MW
	11/26/01	High	15.25	19.72	4.47	MW
	08/27/01	Low	15.73	19.72	3.99	MW
	08/27/01	High	15.74	19.72	3.98	MW
979GW113	08/14/06	--	6.23	10.41	4.18	MW
	05/22/06	--	6.61	10.41	3.80	MW
	03/06/06	--	6.10	10.41	4.31	MW
	11/28/05	--	6.68	10.41	3.73	MW
	08/29/05	--	6.01	10.41	4.40	MW
	05/23/05	--	6.76	10.41	3.65	MW
	03/14/05	--	6.41	10.41	4.00	MW
	12/13/04	--	5.97	10.41	4.44	MW
	08/09/04	--	6.63	10.41	3.78	MW
	05/24/04	--	6.80	10.41	3.61	MW
	03/08/04	--	6.87	10.41	3.54	MW
	12/01/03	--	5.68	10.41	4.73	MW
	08/11/03	Low	6.98	10.41	3.43	MW
	06/02/03	Low	7.12	10.41	3.29	MW
	03/10/03	Low	6.68	10.41	3.73	MW
	12/02/02	Low	6.29	10.41	4.12	MW
	08/26/02	Low	7.25	10.41	3.16	MW
	05/28/02	Low	7.15	10.41	3.26	MW
	03/04/02	Low	6.28	10.41	4.13	MW
	11/26/01	Low	7.03	10.41	3.38	MW
	11/26/01	High	5.80	10.41	4.61	MW
	08/27/01	Low	6.41	10.41	4.00	MW
	08/27/01	High	6.41	10.41	4.00	MW

Table A-1-4
Groundwater Elevation Summary
Building 900s Area
Presidio of San Francisco, California

Well ID	Date	Tidal Cycle	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
979GW115	08/14/06	--	8.07	12.26	4.19	MW
	05/22/06	--	7.99	12.26	4.27	MW
	03/06/06	--	7.45	12.26	4.81	MW
	11/28/05	--	8.25	12.26	4.01	MW
	08/29/05	--	7.96	12.26	4.30	MW
	05/23/05	--	7.97	12.26	4.29	MW
	03/14/05	--	7.76	12.26	4.50	MW
	12/13/04	--	7.54	12.26	4.72	MW
	08/09/04	--	8.30	12.26	3.96	MW
	05/24/04	--	8.26	12.26	4.00	MW
	03/08/04	--	8.24	12.26	4.02	MW
	12/01/03	--	7.66	12.26	4.60	MW
	08/11/03	Low	8.28	12.26	3.98	MW
	06/02/03	Low	8.49	12.26	3.77	MW
	03/10/03	Low	7.97	12.26	4.29	MW
	12/02/02	Low	7.93	12.26	4.33	MW
	08/26/02	Low	8.61	12.26	3.65	MW
	05/28/02	Low	8.45	12.26	3.81	MW
	03/04/02	Low	7.65	12.26	4.61	MW
	11/26/01	Low	8.27	12.26	3.99	MW
	11/26/01	High	8.03	12.26	4.23	MW
CGGW01	08/27/01	Low	8.42	12.26	3.84	MW
	08/27/01	High	8.45	12.26	3.81	MW
	08/09/04	Low	NM	10.53	NM	MW
	05/24/04	Low	NM	10.53	NM	MW
	03/08/04	Low	3.55	10.53	6.98	MW
	08/11/03	Low	5.43	10.53	5.10	MW
	06/02/03	Low	5.53	10.53	5.00	MW
	03/10/03	Low	5.33	10.53	5.20	MW
	12/02/02	Low	5.12	10.53	5.41	MW
	08/26/02	Low	5.68	10.53	4.85	MW
	05/28/02	Low	5.63	10.53	4.90	MW
	03/04/02	Low	5.10	10.53	5.43	MW
	11/26/01	Low	5.09	10.53	5.44	MW
	11/26/01	High	5.06	10.53	5.47	MW
CGGW02	08/27/01	Low	5.90	10.53	4.63	MW
	08/27/01	High	5.89	10.53	4.64	MW
	05/08/01	Low	5.93	10.53	4.60	MW
	05/08/01	High	5.92	10.53	4.61	MW
	08/09/04	Low	NM	9.87	NM	MW
	05/24/04	Low	NM	9.87	NM	MW
	03/08/04	Low	NM	9.87	NM	MW
	08/11/03	Low	5.02	9.87	4.85	MW
	06/02/03	Low	5.16	9.87	4.71	MW
	03/10/03	Low	5.20	9.87	4.67	MW

Table A-1-4
Groundwater Elevation Summary
Building 900s Area
Presidio of San Francisco, California

Well ID	Date	Tidal Cycle	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
CGGW02	12/02/02	Low	4.70	9.87	5.17	MW
	08/26/02	Low	5.21	9.87	4.66	MW
	05/28/02	Low	5.27	9.87	4.60	MW
	03/04/02	Low	4.94	9.87	4.93	MW
	11/26/01	Low	4.88	9.87	4.99	MW
	11/26/01	High	4.87	9.87	5.00	MW
	08/27/01	Low	5.60	9.87	4.27	MW
	08/27/01	High	5.59	9.87	4.28	MW
	05/08/01	Low	5.48	9.87	4.39	MW
	05/08/01	High	5.55	9.87	4.32	MW
CGGW03	08/09/04	--	Not located	11.58	--	MW
	05/24/04	--	Not located	11.58	--	MW
	03/08/04	--	Not located	11.58	--	MW
	08/11/03	--	Not located	11.58	--	MW
	06/02/03	--	Not located	11.58	--	MW
	03/10/03	--	Not located	11.58	--	MW
	12/02/02	--	Not located	11.58	--	MW
	08/26/02	--	Not located	11.58	--	MW
	05/28/02	--	Not located	11.58	--	MW
	03/04/02	--	Not located	11.58	--	MW
	11/26/01	--	Not located	11.58	--	MW
	08/27/01	--	Not located	11.58	--	MW
	05/08/01	--	Not located	11.58	--	MW
Intermediate Monitoring Wells						
937GW42	08/14/06	--	5.20	10.62	5.42	MW
	05/22/06	--	5.67	10.62	4.95	MW
	03/06/06	--	4.90	10.62	5.72	MW
	11/28/05	--	6.18	10.62	4.44	MW
	08/29/05	--	5.06	10.62	5.56	MW
	05/23/05	--	5.10	10.62	5.52	MW
	03/14/05	--	4.78	10.62	5.84	MW
	12/13/04	--	4.17	10.62	6.45	MW
	08/09/04	--	5.67	10.62	4.95	MW
	05/24/04	--	5.88	10.62	4.74	MW
	03/08/04	--	5.40	10.62	5.22	MW
	12/01/03	--	5.75	10.62	4.87	MW
	08/11/03	Low	6.35	10.62	4.27	MW
	06/02/03	Low	6.11	10.62	4.51	MW
	03/10/03	Low	5.75	10.62	4.87	MW
	12/02/02	Low	6.06	10.62	4.56	MW
	08/26/02	Low	6.27	10.62	4.35	MW
	05/28/02	Low	6.50	10.62	4.12	MW
	03/04/02	Low	5.69	10.62	4.93	MW
	11/26/01	Low	6.14	10.62	4.48	MW
	11/26/01	High	5.12	10.62	5.50	MW

Table A-1-4
Groundwater Elevation Summary
Building 900s Area
Presidio of San Francisco, California

Well ID	Date	Tidal Cycle	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
937GW42	08/27/01	Low	6.27	10.62	4.35	MW
	08/27/01	High	6.36	10.62	4.26	MW
	05/08/01	Low	9.97	10.62	0.65	MW
	05/08/01	High	9.05	10.62	1.57	MW
937GW102	08/14/06	--	6.20	11.69	5.49	MW
	05/22/06	--	6.60	11.69	5.09	MW
	03/06/06	--	5.43	11.69	6.26	MW
	11/28/05	--	7.09	11.69	4.60	MW
	08/29/05	--	6.12	11.69	5.57	MW
	05/23/05	--	6.30	11.69	5.39	MW
	03/14/05	--	5.82	11.69	5.87	MW
	12/13/04	--	5.20	11.69	6.49	MW
	08/09/04	--	6.57	11.69	5.12	MW
	05/24/04	--	6.81	11.69	4.88	MW
	03/08/04	--	6.26	11.69	5.43	MW
	12/01/03	--	6.59	11.69	5.10	MW
	08/11/03	Low	7.30	11.69	4.39	MW
	06/02/03	Low	7.31	11.69	4.38	MW
	03/10/03	Low	7.03	11.69	4.66	MW
	12/02/02	Low	7.10	11.69	4.59	MW
	08/26/02	Low	7.47	11.69	4.22	MW
	05/28/02	Low	7.51	11.69	4.18	MW
	03/04/02	Low	6.80	11.69	4.89	MW
	11/26/01	Low	7.22	11.69	4.47	MW
	11/26/01	High	6.59	11.69	5.10	MW
	08/27/01	Low	7.38	11.69	4.31	MW
	08/27/01	High	7.41	11.69	4.28	MW
937GW105	08/14/06	--	6.40	11.50	5.10	MW
	05/22/06	--	7.18	11.50	4.32	MW
	03/06/06	--	6.21	11.50	5.29	MW
	11/28/05	--	7.61	11.50	3.89	MW
	08/29/05	--	6.45	11.50	5.05	MW
	05/23/05	--	6.57	11.50	4.93	MW
	03/14/05	--	6.47	11.50	5.03	MW
	12/13/04	--	4.95	11.50	6.55	MW
	08/09/04	--	6.71	11.50	4.79	MW
	05/24/04	--	7.35	11.50	4.15	MW
	03/08/04	--	6.55	11.50	4.95	MW
	12/01/03	--	6.57	11.50	4.93	MW
	08/11/03	Low	7.52	11.50	3.98	MW
	06/02/03	Low	7.69	11.50	3.81	MW
	03/10/03	Low	7.30	11.50	4.20	MW
	12/02/02	Low	7.71	11.50	3.79	MW
	08/26/02	Low	7.62	11.50	3.88	MW
	05/28/02	Low	7.78	11.50	3.72	MW
	03/04/02	Low	6.84	11.50	4.66	MW
	11/26/01	Low	7.56	11.50	3.94	MW
	11/26/01	High	6.47	11.50	5.03	MW
	08/27/01	Low	7.19	11.50	4.31	MW
	08/27/01	High	7.27	11.50	4.23	MW

Table A-1-4
Groundwater Elevation Summary
Building 900s Area
Presidio of San Francisco, California

Well ID	Date	Tidal Cycle	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
937GW107	08/14/06	--	10.30	15.11	4.81	MW
	05/22/06	--	10.87	15.11	4.24	MW
	03/06/06	--	10.08	15.11	5.03	MW
	11/28/05	--	11.28	15.11	3.83	MW
	08/29/05	--	10.23	15.11	4.88	MW
	05/23/05	--	10.46	15.11	4.65	MW
	03/14/05	--	10.35	15.11	4.76	MW
	12/13/04	--	9.04	15.11	6.07	MW
	08/09/04	--	10.60	15.11	4.51	MW
	05/24/04	--	11.08	15.11	4.03	MW
	03/08/04	--	10.51	15.11	4.60	MW
	12/01/03	--	10.23	15.11	4.88	MW
	08/11/03	Low	11.26	15.11	3.85	MW
	06/02/03	Low	11.42	15.11	3.69	MW
	03/10/03	Low	10.66	15.11	4.45	MW
	12/02/02	Low	11.27	15.11	3.84	MW
	08/26/02	Low	11.37	15.11	3.74	MW
	05/28/02	Low	11.45	15.11	3.66	MW
	03/04/02	Low	10.39	15.11	4.72	MW
	11/26/01	Low	11.24	15.11	3.87	MW
	11/26/01	High	10.17	15.11	4.94	MW
950GW108	08/27/01	Low	10.83	15.11	4.28	MW
	08/27/01	High	10.87	15.11	4.24	MW
	08/14/06	--	6.82	11.60	4.78	MW
	05/22/06	--	7.54	11.60	4.06	MW
	03/06/06	--	6.78	11.60	4.82	MW
	11/28/05	--	8.07	11.60	3.53	MW
	08/29/05	--	6.90	11.60	4.70	MW
	05/23/05	--	6.98	11.60	4.62	MW
	03/14/05	--	7.05	11.60	4.55	MW
	12/13/04	--	5.50	11.60	6.10	MW
	08/09/04	--	7.18	11.60	4.42	MW
	05/24/04	--	7.75	11.60	3.85	MW
	03/08/04	--	7.13	11.60	4.47	MW
	12/01/03	--	6.90	11.60	4.70	MW
	08/11/03	Low	7.88	11.60	3.72	MW
	06/02/03	Low	8.03	11.60	3.57	MW
	03/10/03	Low	7.33	11.60	4.27	MW
	12/02/02	Low	8.00	11.60	3.60	MW
	08/26/02	Low	7.82	11.60	3.78	MW
	05/28/02	Low	8.10	11.60	3.50	MW
	03/04/02	Low	7.04	11.60	4.56	MW
	11/26/01	Low	7.88	11.60	3.72	MW
	11/26/01	High	6.71	11.60	4.89	MW
	08/27/01	Low	7.32	11.60	4.28	MW
	08/27/01	High	7.40	11.60	4.20	MW

Table A-1-4
Groundwater Elevation Summary
Building 900s Area
Presidio of San Francisco, California

Well ID	Date	Tidal Cycle	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
979GW110	08/14/06	--	6.19	10.62	4.43	MW
	05/22/06	--	9.91	10.62	0.71	MW
	03/06/06	--	6.50	10.62	4.12	MW
	11/28/05	--	7.41	10.62	3.21	MW
	08/29/05	--	6.12	10.62	4.50	MW
	05/23/05	--	6.48	10.62	4.14	MW
	03/14/05	--	6.57	10.62	4.05	MW
	12/13/04	--	4.74	10.62	5.88	MW
	08/09/04	--	6.40	10.62	4.22	MW
	05/24/04	--	7.14	10.62	3.48	MW
	03/08/04	--	6.54	10.62	4.08	MW
	12/01/03	--	5.76	10.62	4.86	MW
	08/11/03	Low	7.15	10.62	3.47	MW
	06/02/03	Low	7.29	10.62	3.33	MW
	03/10/03	Low	6.67	10.62	3.95	MW
	12/02/02	Low	7.33	10.62	3.29	MW
	08/26/02	Low	7.08	10.62	3.54	MW
	05/28/02	Low	7.43	10.62	3.19	MW
	03/04/02	Low	6.41	10.62	4.21	MW
	11/26/01	Low	7.17	10.62	3.45	MW
	11/26/01	High	5.75	10.62	4.87	MW
979GW111R	08/27/01	Low	6.41	10.62	4.21	MW
	08/27/01	High	6.45	10.62	4.17	MW
	08/14/06	--	15.34	19.69	4.35	MW
	05/22/06	--	15.40	19.69	4.29	MW
	03/06/06	--	14.68	19.69	5.01	MW
	11/28/05	--	15.78	19.69	3.91	MW
	08/29/05	--	15.21	19.69	4.48	MW
	05/23/05	--	14.84	19.69	4.85	MW
	03/14/05	--	15.13	19.69	4.56	MW
	12/13/04	--	14.55	19.69	5.14	MW
	08/09/04	--	15.54	19.69	4.15	MW
	05/24/04	--	15.72	19.69	3.97	MW
	03/08/04	--	15.46	19.69	4.23	MW
	12/01/03	--	15.02	19.69	4.67	MW
	08/11/03	Low	15.79	19.69	3.90	MW
	06/02/03	Low	15.67	19.69	4.02	MW
	03/10/03	Low	14.90	19.69	4.79	MW
	12/02/02	Low	15.55	19.69	4.14	MW
	08/26/02	Low	15.98	19.69	3.71	MW
	05/28/02	Low	15.92	19.69	3.77	MW
979GW114	08/14/06	--	6.55	10.53	3.98	MW
	05/22/06	--	6.47	10.53	4.06	MW
	03/06/06	--	6.34	10.53	4.19	MW
	11/28/05	--	7.05	10.53	3.48	MW
	08/29/05	--	6.23	10.53	4.30	MW
	05/23/05	--	6.57	10.53	3.96	MW
	03/14/05	--	6.40	10.53	4.13	MW
	12/13/04	--	5.04	10.53	5.49	MW
	08/09/04	--	6.36	10.53	4.17	MW
	05/24/04	--	6.93	10.53	3.60	MW
	03/08/04	--	6.65	10.53	3.88	MW

Table A-1-4
Groundwater Elevation Summary
Building 900s Area
Presidio of San Francisco, California

Well ID	Date	Tidal Cycle	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
979GW114	12/01/03	--	5.75	10.53	4.78	MW
	08/11/03	Low	7.01	10.53	3.52	MW
	06/02/03	Low	7.08	10.53	3.45	MW
	03/10/03	Low	6.64	10.53	3.89	MW
	12/02/02	Low	6.90	10.53	3.63	MW
	08/26/02	Low	7.00	10.53	3.53	MW
	05/28/02	Low	7.26	10.53	3.27	MW
	03/04/02	Low	6.33	10.53	4.20	MW
	11/26/01	Low	6.90	10.53	3.63	MW
	11/26/01	High	6.14	10.53	4.39	MW
	08/27/01	Low	6.71	10.53	3.82	MW
	08/27/01	High	6.66	10.53	3.87	MW
979GW116	08/14/06	--	8.00	12.19	4.19	MW
	05/22/06	--	7.94	12.19	4.25	MW
	03/06/06	--	7.40	12.19	4.79	MW
	11/28/05	--	8.23	12.19	3.96	MW
	08/29/05	--	7.89	12.19	4.30	MW
	05/23/05	--	7.90	12.19	4.29	MW
	03/14/05	--	7.74	12.19	4.45	MW
	12/13/04	--	7.45	12.19	4.74	MW
	08/09/04	--	8.22	12.19	3.97	MW
	05/24/04	--	8.24	12.19	3.95	MW
	03/08/04	--	8.19	12.19	4.00	MW
	12/01/03	--	7.60	12.19	4.59	MW
	08/11/03	Low	8.25	12.19	3.94	MW
	06/02/03	Low	8.45	12.19	3.74	MW
	03/10/03	Low	7.90	12.19	4.29	MW
	12/02/02	Low	7.90	12.19	4.29	MW
	08/26/02	Low	8.56	12.19	3.63	MW
	05/28/02	Low	8.41	12.19	3.78	MW
	03/04/02	Low	7.59	12.19	4.60	MW
	11/26/01	Low	8.24	12.19	3.95	MW
	11/26/01	High	7.93	12.19	4.26	MW
	08/27/01	Low	8.34	12.19	3.85	MW
	08/27/01	High	8.37	12.19	3.82	MW
Deep Monitoring Wells						
937GW32R	08/14/06	--	5.10	10.60	5.50	MW
	05/22/06	--	5.62	10.60	4.98	MW
	03/06/06	--	4.45	10.60	6.15	MW
	11/28/05	--	6.05	10.60	4.55	MW
	08/29/05	--	5.14	10.60	5.46	MW
	05/23/05	--	5.31	10.60	5.29	MW
	03/14/05	--	4.54	10.60	6.06	MW
	12/13/04	--	4.01	10.60	6.59	MW
	08/09/04	--	5.58	10.60	5.02	MW
	05/24/04	--	5.83	10.60	4.77	MW
	03/08/04	--	5.12	10.60	5.48	MW
	12/01/03	--	5.57	10.60	5.03	MW
	08/11/03	Low	6.26	10.60	4.34	MW
	06/02/03	Low	6.31	10.60	4.29	MW

Table A-1-4
Groundwater Elevation Summary
Building 900s Area
Presidio of San Francisco, California

Well ID	Date	Tidal Cycle	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
937GW32R	03/10/03	Low	5.86	10.60	4.74	MW
	12/02/02	Low	6.10	10.60	4.50	MW
	08/26/02	Low	6.37	10.60	4.23	MW
	05/28/02	Low	6.47	10.60	4.13	MW
	03/04/02	Low	5.69	10.60	4.91	MW
	11/26/01	Low	6.19	10.60	4.41	MW
	11/26/01	High	5.50	10.60	5.10	MW
	08/27/01	Low	6.18	10.60	4.42	MW
	08/27/01	High	6.24	10.60	4.36	MW
	05/08/01	Low	6.08	10.60	4.52	MW
	05/08/01	High	6.72	10.60	3.88	MW
937GW38	08/14/06	--	4.06	10.23	6.17	MW
	05/22/06	--	4.68	10.23	5.55	MW
	03/06/06	--	4.00	10.23	6.23	MW
	11/28/05	--	4.13	10.23	6.10	MW
	08/29/05	--	4.15	10.23	6.08	MW
	05/23/05	--	4.44	10.23	5.79	MW
	03/14/05	--	3.65	10.23	6.58	MW
	12/13/04	--	3.75	10.23	6.48	MW
	08/09/04	--	4.36	10.23	5.87	MW
	05/24/04	--	4.53	10.23	5.70	MW
	03/08/04	--	3.86	10.23	6.37	MW
	12/01/03	--	4.73	10.23	5.50	MW
	08/11/03	Low	5.35	10.23	4.88	MW
	06/02/03	Low	5.20	10.23	5.03	MW
	03/10/03	Low	4.85	10.23	5.38	MW
	12/02/02	Low	5.00	10.23	5.23	MW
	08/26/02	Low	5.64	10.23	4.59	MW
	05/28/02	Low	5.10	10.23	5.13	MW
	03/04/02	Low	4.60	10.23	5.63	MW
	11/26/01	Low	4.91	10.23	5.32	MW
	11/26/01	High	4.30	10.23	5.93	MW
	08/27/01	Low	4.69	10.23	5.54	MW
	08/27/01	High	4.70	10.23	5.53	MW
	05/08/01	Low	5.12	10.23	5.11	MW
	05/08/01	High	4.83	10.23	5.40	MW
937GW39	08/14/06	--	7.46	12.49	5.03	MW
	05/22/06	--	8.02	12.49	4.47	MW
	03/06/06	--	6.88	12.49	5.61	MW
	11/28/05	--	8.38	12.49	4.11	MW
	08/29/05	--	7.54	12.49	4.95	MW
	05/23/05	--	7.66	12.49	4.83	MW
	03/14/05	--	7.37	12.49	5.12	MW
	12/13/04	--	6.23	12.49	6.26	MW
	08/09/04	--	7.84	12.49	4.65	MW
	05/24/04	--	8.22	12.49	4.27	MW
	03/08/04	--	7.40	12.49	5.09	MW
	12/01/03	--	7.64	12.49	4.85	MW

Table A-1-4
Groundwater Elevation Summary
Building 900s Area
Presidio of San Francisco, California

Well ID	Date	Tidal Cycle	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
937GW39	08/11/03	Low	8.56	12.49	3.93	MW
	06/02/03	Low	8.73	12.49	3.76	MW
	03/10/03	Low	8.26	12.49	4.23	MW
	12/02/02	Low	8.66	12.49	3.83	MW
	08/26/02	Low	8.75	12.49	3.74	MW
	05/28/02	Low	8.74	12.49	3.75	MW
	03/04/02	Low	8.06	12.49	4.43	MW
	11/26/01	Low	8.72	12.49	3.77	MW
	11/26/01	High	7.77	12.49	4.72	MW
	08/27/01	Low	8.37	12.49	4.12	MW
	08/27/01	High	8.47	12.49	4.02	MW
	05/08/01	Low	9.15	12.49	3.34	MW
937GW103	05/08/01	High	8.17	12.49	4.32	MW
	08/14/06	--	6.05	11.56	5.51	MW
	05/22/06	--	6.39	11.56	5.17	MW
	03/06/06	--	5.50	11.56	6.06	MW
	11/28/05	--	6.88	11.56	4.68	MW
	08/29/05	--	5.93	11.56	5.63	MW
	05/23/05	--	6.08	11.56	5.48	MW
	03/14/05	--	5.62	11.56	5.94	MW
	12/13/04	--	5.00	11.56	6.56	MW
	08/09/04	--	6.38	11.56	5.18	MW
	05/24/04	--	6.63	11.56	4.93	MW
	03/08/04	--	6.09	11.56	5.47	MW
	12/01/03	--	6.44	11.56	5.12	MW
	08/11/03	Low	7.15	11.56	4.41	MW
	06/02/03	Low	7.15	11.56	4.41	MW
	03/10/03	Low	6.82	11.56	4.74	MW
	12/02/02	Low	6.95	11.56	4.61	MW
	08/26/02	Low	7.30	11.56	4.26	MW
	05/28/02	Low	7.35	11.56	4.21	MW
	03/04/02	Low	6.59	11.56	4.97	MW
	11/26/01	Low	7.06	11.56	4.50	MW
	11/26/01	High	6.42	11.56	5.14	MW
	08/27/01	Low	7.16	11.56	4.40	MW
	08/27/01	High	7.15	11.56	4.41	MW
979GW117	08/14/06	--	9.83	12.17	2.34	MW
	05/22/06	--	11.07	12.17	1.10	MW
	03/06/06	--	7.96	12.17	4.21	MW
	11/28/05	--	8.25	12.17	3.92	MW
	08/29/05	--	8.32	12.17	3.85	MW
	05/23/05	--	8.58	12.17	3.59	MW
	03/14/05	--	7.84	12.17	4.33	MW
	12/13/04	--	7.97	12.17	4.20	MW
	08/09/04	--	8.63	12.17	3.54	MW
	05/24/04	--	9.41	12.17	2.76	MW
	03/08/04	--	9.65	12.17	2.52	MW
	12/01/03	--	10.05	12.17	2.12	MW
	08/11/03	Low	8.64	12.17	3.53	MW
	06/02/03	Low	10.73	12.17	1.44	MW
	03/18/03	Low	9.19 ⁴	12.17	2.98	MW

Table A-1-4
Groundwater Elevation Summary
Building 900s Area
Presidio of San Francisco, California

Well ID	Date	Tidal Cycle	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
979GW117	12/02/02	Low	9.16	12.17	3.01	MW
	08/26/02	Low	9.83	12.17	2.34	MW
	05/28/02	Low	9.39	12.17	2.78	MW
	03/04/02	Low	8.94	12.17	3.23	MW
	11/26/01	Low	8.50	12.17	3.67	MW
	11/26/01	High	9.67	12.17	2.50	MW
	08/27/01	Low	8.61	12.17	3.56	MW
	08/27/01	High	8.54	12.17	3.63	MW

Notes

1- All depth to water measurements are an average of three measurements recorded in the field.

2 - Top of casing elevation is approximate due to damaged casing.

3 - This depth to water (7.68 feet) was measured on 4 June 2002 during sampling.

4 - This depth to water (9.19 feet) was measured at approximately 10:30 AM on 18 March 2003 during sampling.

MW - Monitoring well

-- = Groundwater level measurements were not collected on a tidal schedule beginning with Fourth Quarter 2003.

NM - Not measured

feet PLLW - feet above Presidio Lower Low Water vertical datum.

Table A-1-5
Summary of Vertical Gradients at Well Clusters
Building 900s Area
Presidio of San Francisco, California

Well Cluster (WC)	Well ID	Groundwater Zone	Date	Groundwater Elevation ¹ (feet PLLW)	Ground Surface Elevation (feet PLLW)	Depth to Screen Midpoint (feet bgs)	Screen Midpoint Elevation ² (feet PLLW)	Shallow/Intermediate			Intermediate/Deep			Shallow/Deep		
								Difference in Groundwater Elevation (feet PLLW)	Difference in Screen Midpoint Elevation (feet PLLW)	Vertical Gradient ³ (feet/foot)	Difference in Groundwater Elevation (feet PLLW)	Difference in Screen Midpoint Elevation (feet PLLW)	Vertical Gradient ³ (feet/foot)	Difference in Groundwater Elevation (feet PLLW)	Difference in Screen Midpoint Elevation (feet PLLW)	Vertical Gradient ³ (feet/foot)
Third Quarter 2006																
900WC-1	937GW06	Shallow	08/14/06	5.41	10.98	10.8	0.18	0.01	-13.14	-0.001	0.080	-10.590	-0.008	0.090	-23.730	-0.004
	937GW42	Intermediate	08/14/06	5.42	11.04	24.0	-12.96									
	937GW32R	Deep	08/14/06	5.50	10.95	34.5	-23.55									
900WC-2	937GW101	Shallow	08/14/06	5.46	11.81	10.0	1.81	0.03	-15.12	-0.002	0.020	-15.130	-0.001	0.050	-30.250	-0.002
	937GW102	Intermediate	08/14/06	5.49	11.69	25.0	-13.3									
	937GW103	Deep	08/14/06	5.51	11.56	40.0	-28.44									
900WC-3	979GW115	Shallow	08/14/06	4.19	12.56	10.0	2.56	0.00	-15.00	0.000	-1.850	-14.970	0.124	-1.850	-29.970	0.062
	979GW116	Intermediate	08/14/06	4.19	12.56	25.0	-12.44									
	979GW117	Deep	08/14/06	2.34	12.59	40.0	-27.41									
Second Quarter 2006																
900WC-1	937GW06	Shallow	05/22/06	5.86	10.98	10.8	0.18	-0.19	-13.14	0.014	-0.050	-10.590	0.005	-0.240	-23.730	0.010
	937GW42	Intermediate	05/22/06	5.67	11.04	24.0	-12.96									
	937GW32R	Deep	05/22/06	5.62	10.95	34.5	-23.55									
900WC-2	937GW101	Shallow	05/22/06	6.58	11.81	10.0	1.81	0.02	-15.12	-0.001	-0.210	-15.130	0.014	-0.190	-30.250	0.006
	937GW102	Intermediate	05/22/06	6.60	11.69	25.0	-13.3									
	937GW103	Deep	05/22/06	6.39	11.56	40.0	-28.44									
900WC-3	979GW115	Shallow	05/22/06	7.99	12.56	10.0	2.56	-0.05	-15.00	0.003	3.130	-14.970	-0.209	3.080	-29.970	-0.103
	979GW116	Intermediate	05/22/06	7.94	12.56	25.0	-12.44									
	979GW117	Deep	05/22/06	11.07	12.59	40.0	-27.41									
First Quarter 2006																
900WC-1	937GW06	Shallow	03/06/06	6.52	10.98	10.8	0.18	-0.80	-13.14	0.061	0.430	-10.590	-0.041	-0.370	-23.730	0.016
	937GW42	Intermediate	03/06/06	5.72	11.04	24.0	-12.96									
	937GW32R	Deep	03/06/06	6.15	10.95	34.5	-23.55									
900WC-2	937GW101	Shallow	03/06/06	6.48	11.81	10.0	1.81	-0.22	-15.12	0.015	-0.200	-15.130	0.013	-0.420	-30.250	0.014
	937GW102	Intermediate	03/06/06	6.26	11.69	25.0	-13.3									
	937GW103	Deep	03/06/06	6.06	11.56	40.0	-28.44									
900WC-3	979GW115	Shallow	03/06/06	4.81	12.56	10.0	2.56	-0.02	-15.00	0.001	-0.580	-14.970	0.039	-0.600	-29.970	0.020
	979GW116	Intermediate	03/06/06	4.79	12.56	25.0	-12.44									
	979GW117	Deep	03/06/06	4.21	12.59	40.0	-27.41									
Fourth Quarter 2005																
900WC-1	937GW06	Shallow	11/28/05	4.75	10.98	10.8	0.18	-0.31	-13.14	0.024	0.110	-10.590	-0.010	-0.200	-23.730	0.008
	937GW42	Intermediate	11/28/05	4.44	11.04	24.0	-12.96									
	937GW32R	Deep	11/28/05	4.55	10.95	34.5	-23.55									
900WC-2	937GW101	Shallow	11/28/05	4.79	11.81	10.0	1.81	-0.19	-15.12	0.013	0.080	-15.130	-0.005	-0.110	-30.250	0.004
	937GW102	Intermediate	11/28/05	4.60	11.69	25.0	-13.3									
	937GW103	Deep	11/28/05	4.68	11.56	40.0	-28.44									
900WC-3	979GW115	Shallow	11/28/05	4.01	12.56	10.0	2.56	-0.05	-15.00	0.003	-0.040	-14.970	0.003	-0.090	-29.970	0.003
	979GW116	Intermediate	11/28/05	3.96	12.56	25.0	-12.44									
	979GW117	Deep	11/28/05	3.92	12.59	40.0	-27.41									

Table A-1-5
Summary of Vertical Gradients at Well Clusters
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Well Cluster (WC)	Well ID	Groundwater Zone	Date	Groundwater Elevation ¹ (feet PLLW)	Ground Surface Elevation (feet PLLW)	Depth to Screen Midpoint (feet bgs)	Screen Midpoint Elevation ² (feet PLLW)	Shallow/Intermediate			Intermediate/Deep			Shallow/Deep		
								Difference in Groundwater Elevation (feet PLLW)	Difference in Screen Midpoint Elevation (feet PLLW)	Vertical Gradient ³ (feet/foot)	Difference in Groundwater Elevation (feet PLLW)	Difference in Screen Midpoint Elevation (feet PLLW)	Vertical Gradient ³ (feet/foot)	Difference in Groundwater Elevation (feet PLLW)	Difference in Screen Midpoint Elevation (feet PLLW)	Vertical Gradient ³ (feet/foot)
Third Quarter 2005																
900WC-1	937GW06	Shallow	08/29/05	5.49	10.98	10.8	0.18	0.07	-13.14	-0.005	-0.100	-10.590	0.009	-0.030	-23.730	0.001
	937GW42	Intermediate	08/29/05	5.56	11.04	24.0	-12.96									
	937GW32R	Deep	08/29/05	5.46	10.95	34.5	-23.55									
900WC-2	937GW101	Shallow	08/29/05	5.53	11.81	10.0	1.81	0.04	-15.12	-0.003	0.060	-15.130	-0.004	0.100	-30.250	-0.003
	937GW102	Intermediate	08/29/05	5.57	11.69	25.0	-13.3									
	937GW103	Deep	08/29/05	5.63	11.56	40.0	-28.44									
900WC-3	979GW115	Shallow	08/29/05	4.30	12.56	10.0	2.56	0.00	-15.00	0.000	-0.450	-14.970	0.030	-0.450	-29.970	0.015
	979GW116	Intermediate	08/29/05	4.30	12.56	25.0	-12.44									
	979GW117	Deep	08/29/05	3.85	12.59	40.0	-27.41									
Second Quarter 2005																
900WC-1	937GW06	Shallow	05/23/05	5.47	10.98	10.8	0.18	0.05	-13.14	-0.004	-0.230	-10.590	0.022	-0.180	-23.730	0.008
	937GW42	Intermediate	05/23/05	5.52	11.04	24.0	-12.96									
	937GW32R	Deep	05/23/05	5.29	10.95	34.5	-23.55									
900WC-2	937GW101	Shallow	05/23/05	5.47	11.81	10.0	1.81	-0.08	-15.12	0.005	0.090	-15.130	-0.006	0.010	-30.250	0.000
	937GW102	Intermediate	05/23/05	5.39	11.69	25.0	-13.3									
	937GW103	Deep	05/23/05	5.48	11.56	40.0	-28.44									
900WC-3	979GW115	Shallow	05/23/05	4.29	12.56	10.0	2.56	0.00	-15.00	0.000	-0.700	-14.970	0.047	-0.700	-29.970	0.023
	979GW116	Intermediate	05/23/05	4.29	12.56	25.0	-12.44									
	979GW117	Deep	05/23/05	3.59	12.59	40.0	-27.41									
First Quarter 2005																
900WC-1	937GW06	Shallow	03/14/05	6.03	10.98	10.8	0.18	-0.19	-13.14	0.014	0.220	-10.590	-0.021	0.030	-23.730	-0.001
	937GW42	Intermediate	03/14/05	5.84	11.04	24.0	-12.96									
	937GW32R	Deep	03/14/05	6.06	10.95	34.5	-23.55									
900WC-2	937GW101	Shallow	03/14/05	6.05	11.81	10.0	1.81	-0.18	-15.12	0.012	0.070	-15.130	-0.005	-0.110	-30.250	0.004
	937GW102	Intermediate	03/14/05	5.87	11.69	25.0	-13.3									
	937GW103	Deep	03/14/05	5.94	11.56	40.0	-28.44									
900WC-3	979GW115	Shallow	03/14/05	4.50	12.56	10.0	2.56	-0.05	-15.00	0.003	-0.120	-14.970	0.008	-0.170	-29.970	0.006
	979GW116	Intermediate	03/14/05	4.45	12.56	25.0	-12.44									
	979GW117	Deep	03/14/05	4.33	12.59	40.0	-27.41									

Table A-1-5
Summary of Vertical Gradients at Well Clusters
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Presidio of San Francisco, California

Well Cluster (WC)	Well ID	Groundwater Zone	Date	Groundwater Elevation ¹ (feet PLLW)	Ground Surface Elevation (feet PLLW)	Depth to Screen Midpoint (feet bgs)	Screen Midpoint Elevation ² (feet PLLW)	Shallow/Intermediate			Intermediate/Deep			Shallow/Deep		
								Difference in Groundwater Elevation (feet PLLW)	Difference in Screen Midpoint Elevation (feet PLLW)	Vertical Gradient ³ (feet/foot)	Difference in Groundwater Elevation (feet PLLW)	Difference in Screen Midpoint Elevation (feet PLLW)	Vertical Gradient ³ (feet/foot)	Difference in Groundwater Elevation (feet PLLW)	Difference in Screen Midpoint Elevation (feet PLLW)	Vertical Gradient ³ (feet/foot)
Fourth Quarter 2004																
900WC-1	937GW06	Shallow	12/13/04	6.37	10.98	10.8	0.18	0.08	-13.14	-0.006	0.140	-10.590	-0.013	0.220	-23.730	-0.009
	937GW42	Intermediate	12/13/04	6.45	11.04	24.0	-12.96									
	937GW32R	Deep	12/13/04	6.59	10.95	34.5	-23.55									
900WC-2	937GW101	Shallow	12/13/04	6.46	11.81	10.0	1.81	0.03	-15.12	-0.002	0.070	-15.130	-0.005	0.100	-30.250	-0.003
	937GW102	Intermediate	12/13/04	6.49	11.69	25.0	-13.3									
	937GW103	Deep	12/13/04	6.56	11.56	40.0	-28.44									
900WC-3	979GW115	Shallow	12/13/04	4.72	12.56	10.0	2.56	0.02	-15.00	-0.001	-0.540	-14.970	0.036	-0.520	-29.970	0.017
	979GW116	Intermediate	12/13/04	4.74	12.56	25.0	-12.44									
	979GW117	Deep	12/13/04	4.20	12.59	40.0	-27.41									
Third Quarter 2004																
900WC-1	937GW06	Shallow	08/09/04	4.97	10.98	10.8	0.18	-0.02	-13.14	0.002	0.070	-10.590	-0.007	0.050	-23.730	-0.002
	937GW42	Intermediate	08/09/04	4.95	11.04	24.0	-12.96									
	937GW32R	Deep	08/09/04	5.02	10.95	34.5	-23.55									
900WC-2	937GW101	Shallow	08/09/04	5.04	11.81	10.0	1.81	0.08	-15.12	-0.005	0.060	-15.130	-0.004	0.140	-30.250	-0.005
	937GW102	Intermediate	08/09/04	5.12	11.69	25.0	-13.3									
	937GW103	Deep	08/09/04	5.18	11.56	40.0	-28.44									
900WC-3	979GW115	Shallow	08/09/04	3.96	12.56	10.0	2.56	0.01	-15.00	-0.001	-0.430	-14.970	0.029	-0.420	-29.970	0.014
	979GW116	Intermediate	08/09/04	3.97	12.56	25.0	-12.44									
	979GW117	Deep	08/09/04	3.54	12.59	40.0	-27.41									
Second Quarter 2004																
900WC-1	937GW06	Shallow	05/24/04	4.87	10.98	10.8	0.18	-0.13	-13.14	0.010	0.030	-10.590	-0.003	-0.100	-23.730	0.004
	937GW42	Intermediate	05/24/04	4.74	11.04	24.0	-12.96									
	937GW32R	Deep	05/24/04	4.77	10.95	34.5	-23.55									
900WC-2	937GW101	Shallow	05/24/04	4.98	11.81	10.0	1.81	-0.10	-15.12	0.007	0.050	-15.130	-0.003	-0.050	-30.250	0.002
	937GW102	Intermediate	05/24/04	4.88	11.69	25.0	-13.3									
	937GW103	Deep	05/24/04	4.93	11.56	40.0	-28.44									
900WC-3	979GW115	Shallow	05/24/04	4.00	12.56	10.0	2.56	-0.05	-15.00	0.003	-1.190	-14.970	0.079	-1.240	-29.970	0.041
	979GW116	Intermediate	05/24/04	3.95	12.56	25.0	-12.44									
	979GW117	Deep	05/24/04	2.76	12.59	40.0	-27.41									

Table A-1-5
Summary of Vertical Gradients at Well Clusters
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Well Cluster (WC)	Well ID	Groundwater Zone	Date	Groundwater Elevation ¹ (feet PLLW)	Ground Surface Elevation (feet PLLW)	Depth to Screen Midpoint (feet bgs)	Screen Midpoint Elevation ² (feet PLLW)	Shallow/Intermediate			Intermediate/Deep			Shallow/Deep		
								Difference in Groundwater Elevation (feet PLLW)	Difference in Screen Midpoint Elevation (feet PLLW)	Vertical Gradient ³ (feet/foot)	Difference in Groundwater Elevation (feet PLLW)	Difference in Screen Midpoint Elevation (feet PLLW)	Vertical Gradient ³ (feet/foot)	Difference in Groundwater Elevation (feet PLLW)	Difference in Screen Midpoint Elevation (feet PLLW)	Vertical Gradient ³ (feet/foot)
First Quarter 2004																
900WC-1	937GW06	Shallow	03/08/04	5.36	10.98	10.8	0.18	-0.14	-13.14	0.011	0.260	-10.590	-0.025	0.120	-23.730	-0.005
	937GW42	Intermediate	03/08/04	5.22	11.04	24.0	-12.96									
	937GW32R	Deep	03/08/04	5.48	10.95	34.5	-23.55									
900WC-2	937GW101	Shallow	03/08/04	5.46	11.81	10.0	1.81	-0.03	-15.12	0.002	0.040	-15.130	-0.003	0.010	-30.250	0.000
	937GW102	Intermediate	03/08/04	5.43	11.69	25.0	-13.3									
	937GW103	Deep	03/08/04	5.47	11.56	40.0	-28.44									
900WC-3	979GW115	Shallow	03/08/04	4.02	12.56	10.0	2.56	-0.02	-15.00	0.001	-1.480	-14.970	0.099	-1.500	-29.970	0.050
	979GW116	Intermediate	03/08/04	4.00	12.56	25.0	-12.44									
	979GW117	Deep	03/08/04	2.52	12.59	40.0	-27.41									
Fourth Quarter 2003																
900WC-1	937GW06	Shallow	12/01/03	5.20	10.98	10.8	0.18	-0.33	-13.14	0.025	0.160	-10.590	-0.015	-0.170	-23.730	0.007
	937GW42	Intermediate	12/01/03	4.87	11.04	24.0	-12.96									
	937GW32R	Deep	12/01/03	5.03	10.95	34.5	-23.55									
900WC-2	937GW101	Shallow	12/01/03	5.16	11.81	10.0	1.81	-0.06	-15.12	0.004	0.020	-15.130	-0.001	-0.040	-30.250	0.001
	937GW102	Intermediate	12/01/03	5.10	11.69	25.0	-13.3									
	937GW103	Deep	12/01/03	5.12	11.56	40.0	-28.44									
900WC-3	979GW115	Shallow	12/01/03	4.60	12.56	10.0	2.56	-0.01	-15.00	0.001	-2.470	-14.970	0.165	-2.480	-29.970	0.083
	979GW116	Intermediate	12/01/03	4.59	12.56	25.0	-12.44									
	979GW117	Deep	12/01/03	2.12	12.59	40.0	-27.41									
Third Quarter 2003, Low Tide																
900WC-1	937GW06	Shallow	08/11/03	4.58	10.98	10.8	0.18	-0.31	-13.14	0.024	0.070	-10.590	-0.007	-0.240	-23.730	0.010
	937GW42	Intermediate	08/11/03	4.27	11.04	24.0	-12.96									
	937GW32R	Deep	08/11/03	4.34	10.95	34.5	-23.55									
900WC-2	937GW101	Shallow	08/11/03	4.62	11.81	10.0	1.81	-0.23	-15.12	0.015	0.020	-15.130	-0.001	-0.210	-30.250	0.007
	937GW102	Intermediate	08/11/03	4.39	11.69	25.0	-13.3									
	937GW103	Deep	08/11/03	4.41	11.56	40.0	-28.44									
900WC-3	979GW115	Shallow	08/11/03	3.98	12.56	10.0	2.56	-0.04	-15.00	0.003	-0.410	-14.970	0.027	-0.450	-29.970	0.015
	979GW116	Intermediate	08/11/03	3.94	12.56	25.0	-12.44									
	979GW117	Deep	08/11/03	3.53	12.59	40.0	-27.41									

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Well Cluster (WC)	Well ID	Groundwater Zone	Date	Groundwater Elevation ¹ (feet PLLW)	Ground Surface Elevation (feet PLLW)	Depth to Screen Midpoint (feet bgs)	Screen Midpoint Elevation ² (feet PLLW)	Shallow/Intermediate			Intermediate/Deep			Shallow/Deep		
								Difference in Groundwater Elevation (feet PLLW)	Difference in Screen Midpoint Elevation (feet PLLW)	Vertical Gradient ³ (feet/foot)	Difference in Groundwater Elevation (feet PLLW)	Difference in Screen Midpoint Elevation (feet PLLW)	Vertical Gradient ³ (feet/foot)	Difference in Groundwater Elevation (feet PLLW)	Difference in Screen Midpoint Elevation (feet PLLW)	Vertical Gradient ³ (feet/foot)
Second Quarter 2003, Low Tide																
900WC-1	937GW06	Shallow	06/02/03	4.55	10.98	10.8	0.18	-0.04	-13.14	0.003	-0.220	-10.590	0.021	-0.260	-23.730	0.011
	937GW42	Intermediate	06/02/03	4.51	11.04	24.0	-12.96									
	937GW32R	Deep	06/02/03	4.29	10.95	34.5	-23.55									
900WC-2	937GW101	Shallow	06/02/03	4.60	11.81	10.0	1.81	-0.22	-15.12	0.015	0.030	-15.130	-0.002	-0.190	-30.250	0.006
	937GW102	Intermediate	06/02/03	4.38	11.69	25.0	-13.3									
	937GW103	Deep	06/02/03	4.41	11.56	40.0	-28.44									
900WC-3	979GW115	Shallow	06/02/03	3.77	12.56	10.0	2.56	-0.03	-15.00	0.002	-2.300	-14.970	0.154	-2.330	-29.970	0.078
	979GW116	Intermediate	06/02/03	3.74	12.56	25.0	-12.44									
	979GW117	Deep	06/02/03	1.44	12.59	40.0	-27.41									
First Quarter 2003, Low Tide																
900WC-1	937GW06	Shallow	03/10/03	4.76	10.98	10.8	0.18	0.11	-13.14	-0.008	-0.130	-10.590	0.012	-0.020	-23.730	0.001
	937GW42	Intermediate	03/10/03	4.87	11.04	24.0	-12.96									
	937GW32R	Deep	03/10/03	4.74	10.95	34.5	-23.55									
900WC-2	937GW101	Shallow	03/10/03	4.72	11.81	10.0	1.81	-0.06	-15.12	0.004	0.080	-15.130	-0.005	0.020	-30.250	-0.001
	937GW102	Intermediate	03/10/03	4.66	11.69	25.0	-13.3									
	937GW103	Deep	03/10/03	4.74	11.56	40.0	-28.44									
900WC-3	979GW115	Shallow	03/10/03	4.29	12.56	10.0	2.56	0.00	-15.00	0.000	-1.310	-14.970	0.088	-1.310	-29.970	0.044
	979GW116	Intermediate	03/10/03	4.29	12.56	25.0	-12.44									
	979GW117	Deep	03/18/03	2.98	12.59	40.0	-27.41									
Fourth Quarter 2002, Low Tide																
900WC-1	937GW06	Shallow	12/02/02	4.92	10.98	10.8	0.18	-0.36	-13.14	0.027	-0.060	-10.590	0.006	-0.420	-23.730	0.018
	937GW42	Intermediate	12/02/02	4.56	11.04	24.0	-12.96									
	937GW32R	Deep	12/02/02	4.5	10.95	34.5	-23.55									
900WC-2	937GW101	Shallow	12/02/02	4.93	11.81	10.0	1.81	-0.34	-15.12	0.022	0.020	-15.130	-0.001	-0.320	-30.250	0.011
	937GW102	Intermediate	12/02/02	4.59	11.69	25.0	-13.3									
	937GW103	Deep	12/02/02	4.61	11.56	40.0	-28.44									
900WC-3	979GW115	Shallow	12/02/02	4.33	12.56	10.0	2.56	-0.04	-15.00	0.003	-1.280	-14.970	0.086	-1.320	-29.970	0.044
	979GW116	Intermediate	12/02/02	4.29	12.56	25.0	-12.44									
	979GW117	Deep	12/02/02	3.01	12.59	40.0	-27.41									

Table A-1-5
Summary of Vertical Gradients at Well Clusters
Building 900s Area
Presidio of San Francisco, California

Well Cluster (WC)	Well ID	Groundwater Zone	Date	Groundwater Elevation ¹ (feet PLLW)	Ground Surface Elevation (feet PLLW)	Depth to Screen Midpoint (feet bgs)	Screen Midpoint Elevation ² (feet PLLW)	Shallow/Intermediate			Intermediate/Deep			Shallow/Deep		
								Difference in Groundwater Elevation (feet PLLW)	Difference in Screen Midpoint Elevation (feet PLLW)	Vertical Gradient ³ (feet/foot)	Difference in Groundwater Elevation (feet PLLW)	Difference in Screen Midpoint Elevation (feet PLLW)	Vertical Gradient ³ (feet/foot)	Difference in Groundwater Elevation (feet PLLW)	Difference in Screen Midpoint Elevation (feet PLLW)	Vertical Gradient ³ (feet/foot)
Third Quarter 2002, Low Tide																
900WC-1	937GW06	Shallow	08/26/02	4.38	10.98	10.8	0.18	-0.03	-13.14	0.002	-0.120	-10.590	0.011	-0.150	-23.730	0.006
	937GW42	Intermediate	08/26/02	4.35	11.04	24.0	-12.96									
	937GW32R	Deep	08/26/02	4.23	10.95	34.5	-23.55									
900WC-2	937GW101	Shallow	08/26/02	4.35	11.81	10.0	1.81	-0.13	-15.12	0.009	0.040	-15.130	-0.003	-0.090	-30.250	0.003
	937GW102	Intermediate	08/26/02	4.22	11.69	25.0	-13.3									
	937GW103	Deep	08/26/02	4.26	11.56	40.0	-28.44									
900WC-3	979GW115	Shallow	08/26/02	3.65	12.56	10.0	2.56	-0.02	-15.00	0.001	-1.290	-14.970	0.086	-1.310	-29.970	0.044
	979GW116	Intermediate	08/26/02	3.63	12.56	25.0	-12.44									
	979GW117	Deep	08/26/02	2.34	12.59	40.0	-27.41									
Second Quarter 2002, Low Tide																
900WC-1	937GW06	Shallow	05/28/02	4.38	10.98	10.8	0.18	-0.26	-13.14	0.020	0.010	-10.590	-0.001	-0.250	-23.730	0.011
	937GW42	Intermediate	05/28/02	4.12	11.04	24.0	-12.96									
	937GW32R	Deep	05/28/02	4.13	10.95	34.5	-23.55									
900WC-2	937GW101	Shallow	05/28/02	4.38	11.81	10.0	1.81	-0.20	-15.12	0.013	0.030	-15.130	-0.002	-0.170	-30.250	0.006
	937GW102	Intermediate	05/28/02	4.18	11.69	25.0	-13.3									
	937GW103	Deep	05/28/02	4.21	11.56	40.0	-28.44									
900WC-3	979GW115	Shallow	05/28/02	3.81	12.56	10.0	2.56	-0.03	-15.00	0.002	-0.550	-14.970	0.037	-0.580	-29.970	0.019
	979GW116	Intermediate	05/28/02	3.78	12.56	25.0	-12.44									
	979GW117	Deep	05/28/02	3.23	12.59	40.0	-27.41									
First Quarter 2002, Low Tide																
900WC-1	937GW06	Shallow	03/04/02	5.12	10.98	10.8	0.18	-0.19	-13.14	0.014	-0.020	-10.590	0.002	-0.210	-23.730	0.009
	937GW42	Intermediate	03/04/02	4.93	11.04	24.0	-12.96									
	937GW32R	Deep	03/04/02	4.91	10.95	34.5	-23.55									
900WC-2	937GW101	Shallow	03/04/02	5.00	11.81	10.0	1.81	-0.11	-15.12	0.007	0.080	-15.130	-0.005	-0.030	-30.250	0.001
	937GW102	Intermediate	03/04/02	4.89	11.69	25.0	-13.3									
	937GW103	Deep	03/04/02	4.97	11.56	40.0	-28.44									

Table A-1-5
Summary of Vertical Gradients at Well Clusters
Building 900s Area
Presidio of San Francisco, California

Well Cluster (WC)	Well ID	Groundwater Zone	Date	Groundwater Elevation ¹ (feet PLLW)	Ground Surface Elevation (feet PLLW)	Depth to Screen Midpoint (feet bgs)	Screen Midpoint Elevation ² (feet PLLW)	Shallow/Intermediate			Intermediate/Deep			Shallow/Deep		
								Difference in Groundwater Elevation (feet PLLW)	Difference in Screen Midpoint Elevation (feet PLLW)	Vertical Gradient ³ (feet/foot)	Difference in Groundwater Elevation (feet PLLW)	Difference in Screen Midpoint Elevation (feet PLLW)	Vertical Gradient ³ (feet/foot)	Difference in Groundwater Elevation (feet PLLW)	Difference in Screen Midpoint Elevation (feet PLLW)	Vertical Gradient ³ (feet/foot)
900WC-3	979GW115	Shallow	03/04/02	4.61	12.56	10.0	2.56	-0.01	-15.00	0.001	-1.370	-14.970	0.092	-1.380	-29.970	0.046
	979GW116	Intermediate	03/04/02	4.60	12.56	25.0	-12.44									
	979GW117	Deep	03/04/02	3.23	12.59	40.0	-27.41									

Notes

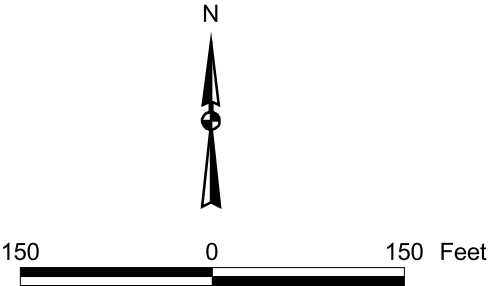
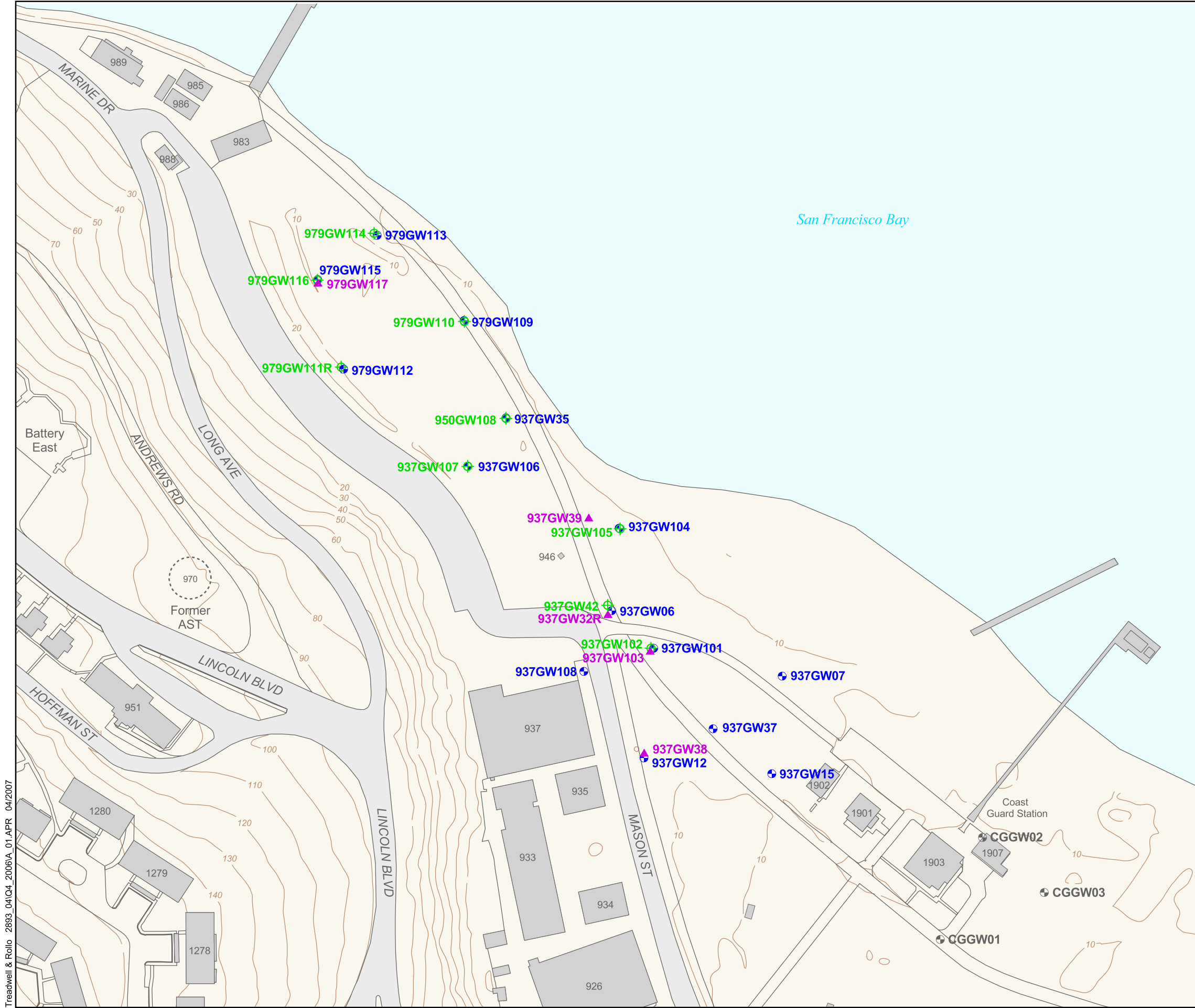
feet PLLW - feet above Presidio Lower Low Water vertical datum.

bgs - below ground surface

1 - Groundwater elevations are presented in Table A-1-4.

2 - The screen midpoint elevations are calculated by subtracting the depth to the screen midpoint from the ground surface elevation (Montgomery Watson, 1999i).

3 - Vertical gradients are calculated by dividing the vertical difference in groundwater elevations between two adjacent wells screened in different vertical locations within the water-bearing zone by the vertical difference between the midpoint elevations of the two well screens (Table 3). The value for the shallower well is subtracted from that of the deeper well. A positive value indicates a downward vertical gradient, while a negative number indicates an upward vertical gradient. For the groundwater and screen midpoint elevations, the absolute difference between the elevations and depths are calculated.



LEGEND

- 937GW06 Shallow Groundwater Monitoring Well
- 937GW42 Intermediate Groundwater Monitoring Well
- 937GW103 Deep Groundwater Monitoring Well
- CGGW01 Adjacent Study Area Shallow Groundwater Well
- Topographic Contour (Contour Interval : 10 ft)
- 935 Building and Number

Notes:
Horizontal Datum: NAD 27, CA State Plane Coordinates, Zone 3, feet
Vertical Datum: (topography) North American Vertical Datum, NAVD88

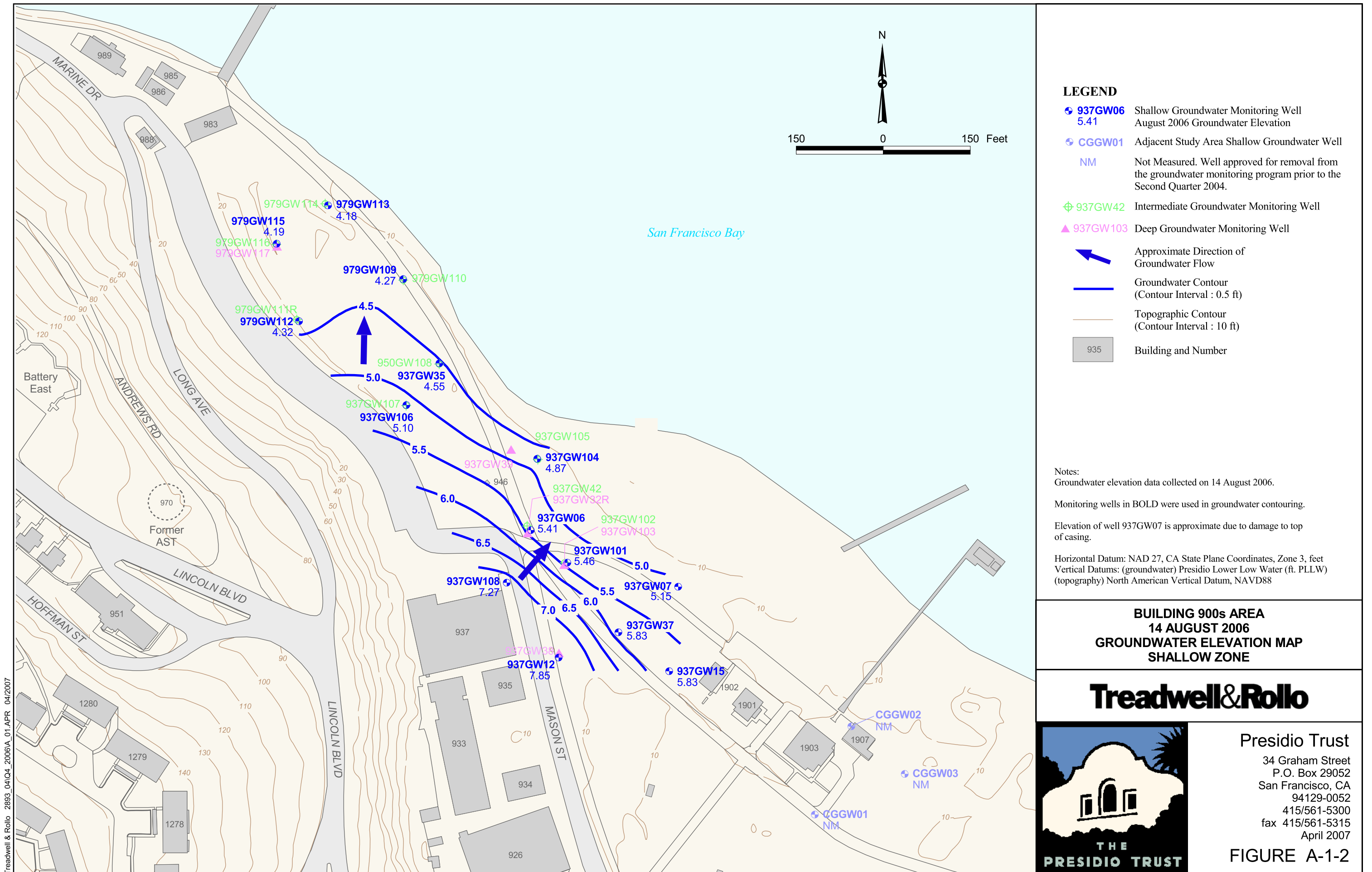
**BUILDING 900s AREA
SITE PLAN**

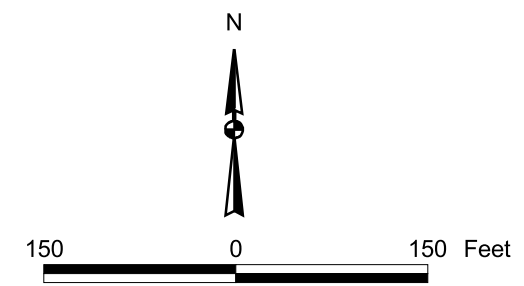
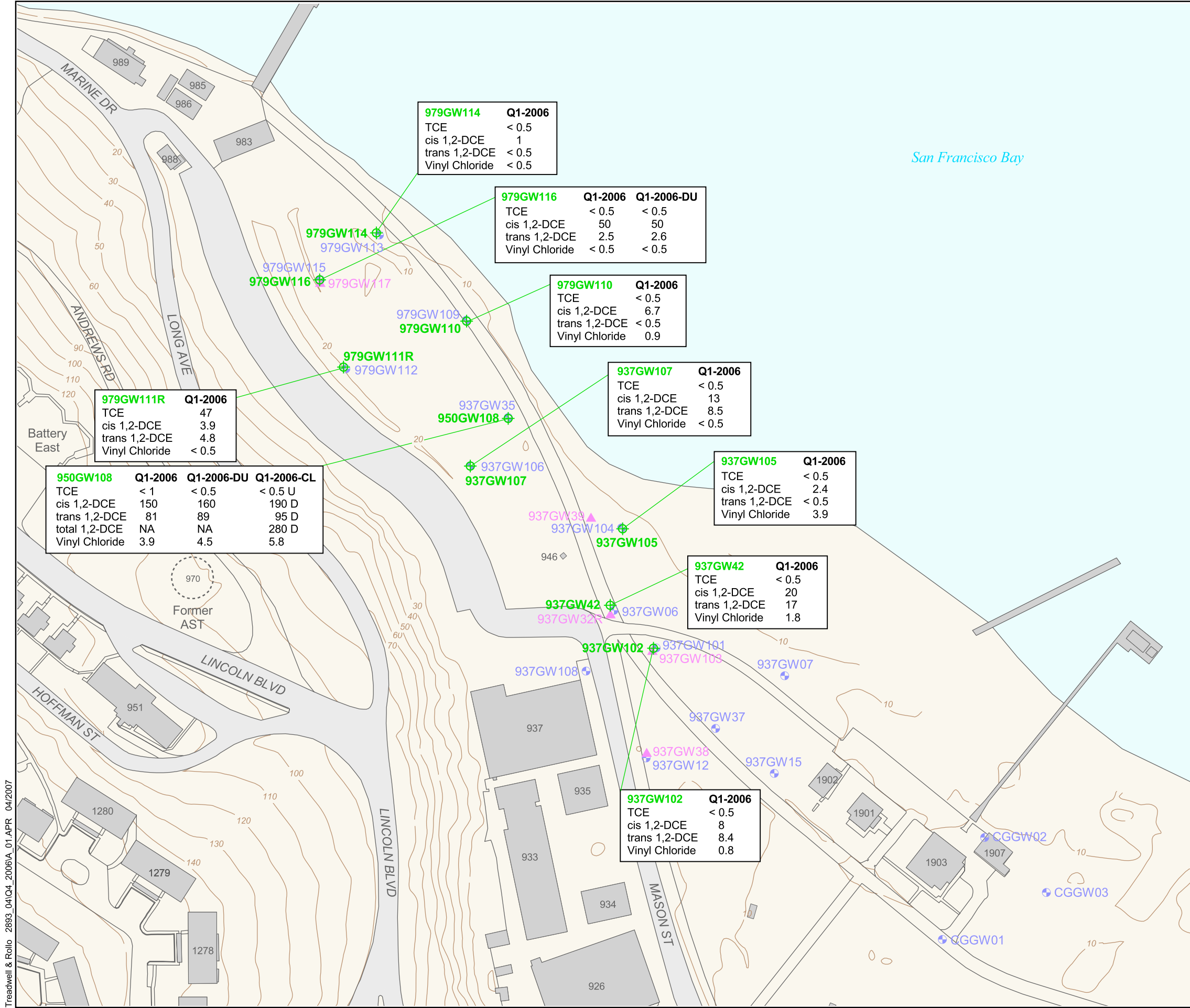
Treadwell&Rollo



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April 2007

FIGURE A-1-1





LEGEND

⊕ **937GW42** Intermediate Groundwater Monitoring Well

⊕ **937GW06** Shallow Groundwater Monitoring Well

▲ **937GW103** Deep Groundwater Monitoring Well

— Topographic Contour
(Contour Interval : 10 ft)

935 Building and Number

Notes:
Building 900s Area monitoring wells were only scheduled to be sampled during the First Quarter 2006 in accordance to the proposed plan.

Groundwater concentration data in µg/L - micrograms per liter

CLEANUP LEVELS:
TCE - Trichloroethene - 81 µg/L
cis 1,2-DCE - cis 1,2-Dichloroethene - 140,000 µg/L
trans 1,2-DCE - trans 1,2 Dichloroethene - 140,000 µg/L
total 1,2-DCE - cis & trans 1,2 Dichloroethene
Vinyl Chloride - 525 µg/L

CL - Quality Control Duplicate
DU - Blind Duplicate

Refer to Table 11 for data qualifiers.

Horizontal Datum: NAD 27, CA State Plane Coordinates, Zone 3, feet
Vertical Datum: (topography) North American Vertical Datum, NAVD88

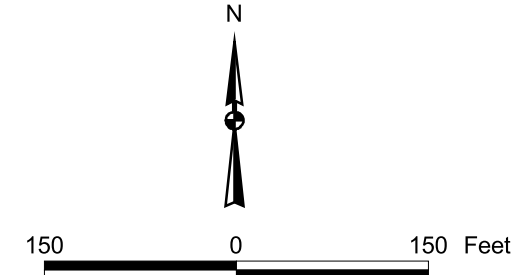
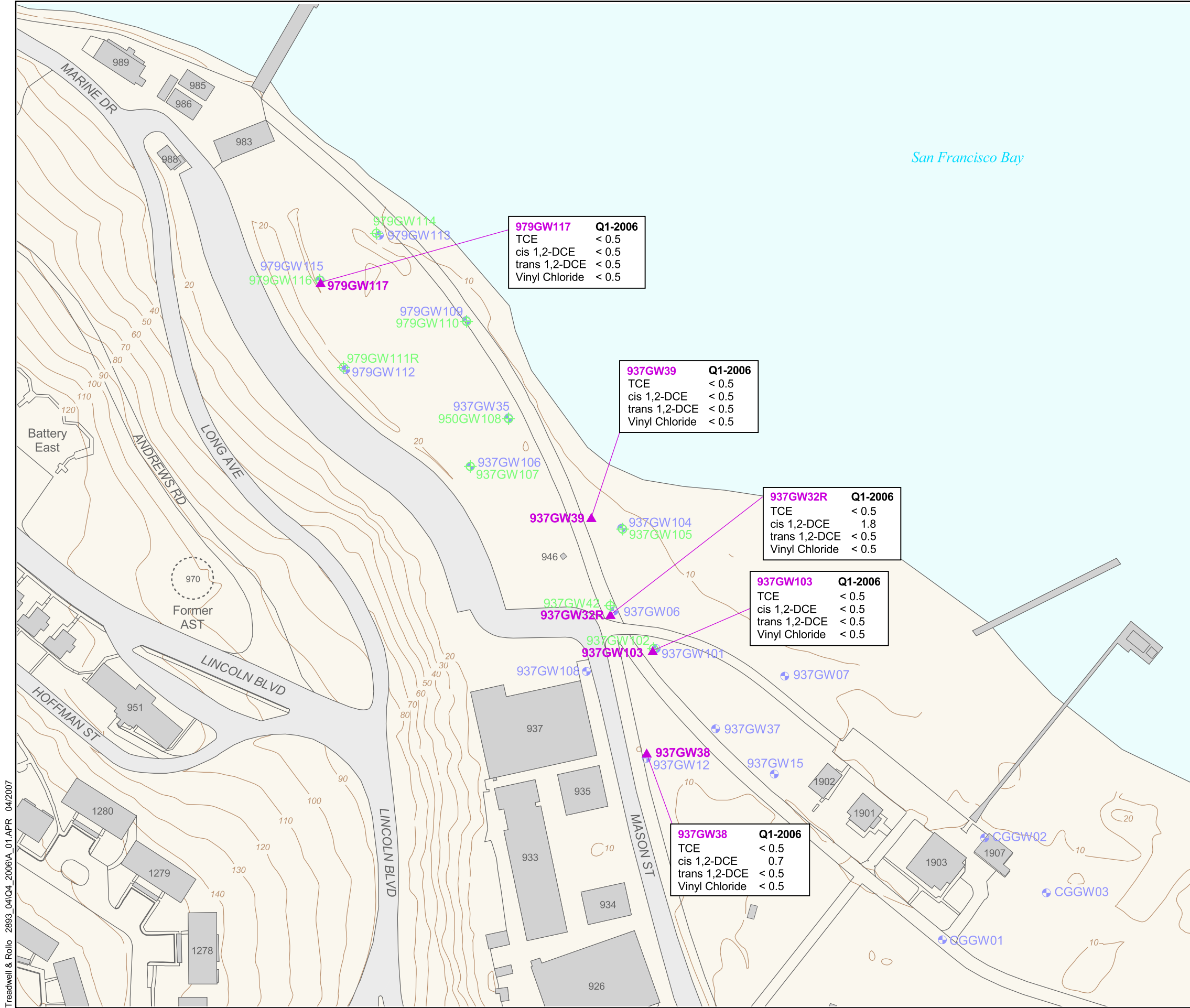
**BUILDING 900s AREA
2006 CHEMICAL CONCENTRATION MAP
TCE, DCE, AND VINYL CHLORIDE IN
INTERMEDIATE GROUNDWATER**

Treadwell&Rollo



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April 2007

FIGURE A-1-6



LEGEND

- ▲ 937GW103 Deep Groundwater Monitoring Well
- 937GW06 Shallow Groundwater Monitoring Well
- ⊕ 937GW42 Intermediate Groundwater Monitoring Well
- Topographic Contour (Contour Interval : 10 ft)
- 935 Building and Number

Notes:
Building 900s Area monitoring wells were only scheduled to be sampled during the First Quarter 2006 in accordance to the proposed plan.

Groundwater concentration data in µg/L - micrograms per liter

CLEANUP LEVELS:
TCE - Trichloroethene - 81 µg/L
cis 1,2-DCE - cis 1,2-Dichloroethene - 140,000 µg/L
trans 1,2-DCE - trans 1,2 Dichloroethene - 140,000 µg/L
Vinyl Chloride - 525 µg/L

Horizontal Datum: NAD 27, CA State Plane Coordinates, Zone 3, feet
Vertical Datum: (topography) North American Vertical Datum, NAVD88

**BUILDING 900s AREA
2006 CHEMICAL CONCENTRATION MAP
TCE, DCE, AND VINYL CHLORIDE
IN DEEP GROUNDWATER**

Treadwell&Rollo



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April 2007

FIGURE A-1-7

LANDFILL 8
APPENDIX SECTION A-2
SEMI-ANNUAL GROUNDWATER MONITORING REPORT
THIRD AND FOURTH QUARTERS 2006
Presidio of San Francisco, California

1.0 INTRODUCTION AND BACKGROUND

Landfill 8 is located in the southwestern portion of the Presidio (Figure 1) in the vicinity of the U.S. Public Health Services Hospital (PHSH). The site elevation (Figure A-2-1) is approximately 250 feet above PLLW in the northeast and approximately 190 feet above PLLW in the southwest (Montgomery Watson, 1996b). In 1874, the PHSH was established as a full-service U.S. Merchant Marine Hospital and laboratory. The U.S. Public Health Services took control of the facility in 1927 and operated the hospital until it was closed in November 1981 (Montgomery Watson, 1996b). Landfill 8 was used between the years of 1946 and 1973 to dispose of vegetative debris, miscellaneous building debris, and some garbage and clean fill (Woodward Clyde Consultants, 1990; USACE, 1990).

Groundwater samples have been collected from Landfill 8 monitoring wells since September 1994. Previous laboratory analyses of the groundwater samples included general chemistry, cyanide, metals, VOCs, polycyclic aromatic hydrocarbons (PAHs), organochlorine pesticides (OCPs), polychlorinated biphenyls (PCBs), and chlorinated herbicides. No PAHs, OCPs, PCBs, or chlorinated herbicides have been detected above laboratory reporting limits at Landfill 8 since monitoring began in September 1994. Summaries of previous dissolved oxygen, general chemistry, cyanide, PAH, OCP, PCB, chlorinated herbicides, VOC, and metals results can be found in Tables A-2-1 through A-2-3.

A reduction in sampling frequency for all Landfill 8 wells to annual was previously approved by the stakeholders and sampling was only conducted during the First Quarter in 2006, in accordance with the approved plan (Table 1A).

2.0 SITE DESCRIPTION AND GEOLOGY

Landfill 8 is a part of the Lobos Creek Groundwater Basin (Figure 1). Groundwater is found at approximately 10 to 50 feet bgs and flows to the southeast. Soils beneath Landfill 8 consist of unconsolidated Colma Formation sedimentary deposits of sand, silt, and clay. These deposits are underlain by Franciscan Formation bedrock (Montgomery Watson, 1996b).

3.0 PUBLIC HEALTH SERVICE HOSPITAL RECORD OF DECISION

In early 1995, the U.S. Army completed the Record of Decision (ROD) for the Former PHS Area (PHS ROD). The PHS ROD addressed three remediation sites within the PHS Area, including Landfill 8. The selected remedy was quarterly groundwater monitoring for five years to confirm that chemicals are not leaching from the fill material to the groundwater.

The quarterly monitoring program at Landfill 8 has met the requirements of the PHS ROD. The *Five Year Review and Field Investigation Work Plan for Landfills 8 and 10* was finalized in October 2002. In order to evaluate remedial actions undertaken in accordance with the 1995 PHS ROD, the Trust will determine whether a ROD amendment or an Explanation of Significant Differences will be required for future site remediation. Potential future remedial actions to be completed at Landfill 8 include construction of a permeable landfill cover or partial landfill removal. A landfill delineation study was completed at Landfill 8 in November 2002. Results of the study will be used in the selection of the final remedy for the site (URS, 2002).

The *Five Year Review and Field Investigation Report for Landfills 8 and 10* (FYR) was submitted to the regulatory agencies and RAB in January 2004 (URS, 2004). A Draft Feasibility Study (FS) for Landfills 8 and 10 has also been prepared (EKI, 2005). Additionally, the Trust is currently writing a RAP and designing new remedial actions for the two landfill sites. The RAP is scheduled to be completed in 2007.

4.0 GROUNDWATER MONITORING

Landfill 8 has five associated monitoring wells and two piezometers (Figure A-2-1). Groundwater elevations were collected from all area wells and piezometers during the Third Quarter 2006, in accordance with Table 1A. Groundwater elevations were not proposed for collection during the Fourth Quarter 2006, in accordance with Table 1B.

Groundwater sampling was not performed in any of the Landfill 8 monitoring wells or piezometers during either the Third or Fourth Quarters 2006. Groundwater sampling and water level measurements will resume in the First Quarter 2007.

4.1 Groundwater-Level Measurements and Interpretation

Groundwater elevation measurements were collected on 14 August at all five Landfill 8 monitoring wells and both piezometers. A summary of groundwater elevations is presented in Table A-2-4. Water level meters were calibrated on 14 August and the calibration log can be found in Appendix B. Groundwater elevation field forms are presented in Appendix C.

Third Quarter 2006 groundwater elevations ranged from 177.57 to 220.44 feet above PLLW in monitoring wells LF08GW02B and LF08PZ01, respectively. Groundwater flow was determined to be in a southeasterly direction, which follows the general topographic trend. The groundwater

gradient was calculated to be approximately 0.09 feet per foot. A groundwater elevation map showing the Third Quarter 2006 groundwater contours and flow direction for Landfill 8 is included as Figure A-2-1. Groundwater gradients and flow directions are consistent with previous findings at the site.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Groundwater elevations, gradients, and flow directions during the Third Quarter 2006 are consistent with historical values and interpretations.

Until the Landfill 8 RAP has been finalized and implemented, the sampling frequency and groundwater elevation measurements at Landfill 8 will continue to be annual during the First Quarter only. Sampling at Landfill 8 will be performed per the Landfill 8 RAP following the RAP implementation.

Table A-2-1
Results of General Chemistry, Cyanide and Sulfide Analyses
Landfill 8
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Cyanide	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate	Sulfide
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	SW9010/ SW9012/ E335.2	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056	E376.1/ E376.2
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LF08GW01	03/17/06	220	220	240	< 0.01	2.68	0.17	1.1	< 0.05	NA	41	< 0.04 R
	03/16/05	150	150	190	< 0.01	1.40	0.16	1.4	< 0.05	NA	38	< 0.04
DUP0311041A	03/11/04	160	160	210	< 0.01 UJ	2.5	0.17	1.4	< 0.05	NA	40	< 0.04
	03/11/04	160	160	210	< 0.01 UJ	--	0.17	1.4	< 0.05	NA	40	< 0.04
LF08GW01CL	03/11/04	160	160	200	< 0.005	--	0.12	1.4	< 0.05	1.4	37	< 0.1
	08/20/03	140	140	190	< 0.01	2.89	0.17	1.3	< 0.05	NA	38	< 0.04
DUP0820031A	08/20/03	160	160	190	< 0.01	--	0.17	1.4	< 0.05	NA	38	< 0.04
	08/20/03	150	150	190	0.005 J-	--	0.14 J+	1.6 J-	< 0.05	1.6 J-	34	< 0.1
LF08GW01CL	03/13/03	180	180	180	< 0.01	2.15	0.11	1.5	< 0.05	NA	35	< 0.04
	08/27/02	140 J-	140 J-	220	< 0.01	1.85	0.31	0.94	< 0.05	NA	39	< 0.04
DUP0827021A	08/27/02	140 J-	140 J-	210	< 0.01	--	0.32	0.95	< 0.05	NA	39	< 0.04
	08/27/02	130	130	210	< 0.01 U	--	< 1	1.1 ³	< 1	NA	40	< 1 U
LF08GW01CL	03/12/02	160	160	160	< 0.01	2.75	< 0.1 U	1.6	< 0.05	NA	36	< 0.04
	09/04/01	140	140	200	< 0.01	4.47	0.28	0.88	< 0.05	NA	42	< 0.04
	05/16/01	140	140	170	< 0.01	4.06	0.19	2.3	< 0.05	NA	39	< 0.04
	06/15/00	192	146	173	< 0.01	1.48	0.307	NA	NA	775	51.4	< 0.05
	01/12/00	157	157	166	< 0.01	1.49	0.263	NA	NA	0.827	50.3	< 0.05
	08/30/99	174	174	133	< 0.01	4.86	0.303	NA	NA	0.64	52.2	< 0.05
	02/24/99	165	165	119	< 0.01	1.65	0.247	NA	NA	1.28	52.3	< 0.05
	08/19/98	158	158	109	< 0.01	1.62	0.22	NA	NA	0.956	58.2	< 0.05
	06/02/98	165	165	111	< 0.01	1.3	0.35	NA	NA	1.27	63.9	< 0.05
	03/09/98	163	163	99.9	< 0.01	1.71	0.269	NA	NA	1.34	63.7	< 0.05
	12/11/97	163	163	90	< 0.01	1.07	0.8	NA	NA	1.36	46.8	< 0.05
	09/10/97	158	158	107	< 0.01	0.75	0.31	NA	NA	1.27	61	< 0.05
	06/25/97	163	163	101	< 0.01	2.03	< 0.1	NA	NA	1.65	65.7	< 0.05
	03/27/97	161	161	96.9	< 0.01	0.99	0.344	NA	NA	2	61.1	< 0.05
	12/20/96	172	172	76.9	< 0.01	NM	0.222	NA	NA	2.2	40.9	< 0.05
	09/11/96	157	157	86.5	< 0.01	NM	0.23	NA	NA	3	47.4	< 0.05
	06/03/96	128	128	81.8	< 0.01	NM	0.15	NA	NA	1.6 (J33)	46.9	< 0.05
	03/15/96	164	164	78.8	< 0.01	NM	0.22	NA	NA	2.8	40.2	< 0.05
	11/28/95	155	155	78	< 0.01	NM	0.23	NA	NA	2.5	40.8	< 0.05
	09/19/95	150	150	76.7	< 0.01	NM	0.29	NA	NA	2.6	43.1	< 0.05
	06/05/95	185	185	76.6	< 0.01	NM	0.34	NA	NA	2.9	40.1	< 0.05
	03/08/95	174	174	78.5	< 0.01	NM	0.39	NA	NA	2.9	41.2	< 0.05

Table A-2-1
Results of General Chemistry, Cyanide and Sulfide Analyses
Landfill 8
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Cyanide	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate	Sulfide
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	SW9010/ SW9012/ E335.2	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056	E376.1/ E376.2
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LF08GW01	12/15/94	169	169	78.2	< 0.01	NM	0.23	NA	NA	2.8	42	< 0.05
	09/23/94	187	187	81.2	< 0.01	NM	0.24	NA	NA	2.9	42.7	< 0.05
LF08GW02B	03/16/06	150	150	44	< 0.01	5.65	< 0.1	4.5	< 0.05	NA	29	< 0.04 R
	03/16/05	150	150	49	< 0.01	4.50	< 0.1	3.6	< 0.05	NA	32	< 0.04
	03/11/04	150	150	50	< 0.01 UJ	4.2	< 0.1	4	< 0.05	NA	33	< 0.04
	08/20/03	190	190	41	< 0.01	5.91	0.11	4.8	< 0.05	NA	28	< 0.04
	03/13/03	180	180	44	< 0.01	5.66	< 0.1	4.6	< 0.05	NA	33	< 0.04
	08/27/02	150 J-	150 J-	42	< 0.01	4.05	0.22	4.9	< 0.05	NA	29	< 0.04
	03/12/02	130	130	48	< 0.01	6.3	< 0.1 U	4.3	< 0.05	NA	35	< 0.04
	09/05/01	150	150	51	< 0.01	9.01	0.16	3.9	< 0.05	NA	32	< 0.04
	05/16/01	150	150	49	< 0.01 UJ	7.53	0.16	3.7	< 0.05	NA	32	< 0.04
	06/15/00	139	139	40	< 0.01	0.53	0.114	NA	NA	697	28.8	< 0.05
	01/12/00	139	139	49.6	< 0.01	6.63	0.119	NA	NA	4	28	< 0.05
	08/31/99	142	142	42.3	< 0.01	7.64	0.14	NA	NA	4.6	28.7	< 0.05
	02/25/99	146	146	49.5	< 0.01	6.02	0.126	NA	NA	4.1	29.7	< 0.05
	08/20/98	140	140	39.5	< 0.01	6.04	0.15	NA	NA	5.3	32.1	< 0.05
	06/03/98	143	143	35.4	< 0.01	5.14	0.18	NA	NA	6.1	41.9	< 0.05
	03/10/98	2,870	< 5 (R20)	42.3 (J20)	< 0.01	6.41	0.103 (J20)	NA	NA	4.8	44.6 (J20)	< 0.05
	12/15/97	129	129	43.5	< 0.01	5.54	0.154	NA	NA	3.1	33.5	< 0.05
	09/11/97	144	144	45.1	< 0.01	4.6	0.149	NA	NA	4.1	36.2	< 0.05
	06/24/97	138	138	40.8	< 0.01	5.38	< 0.1	NA	NA	5.7	45	< 0.05
	03/25/97	135	135	42.1	< 0.01	5.29	0.13	NA	NA	5.3	46.2	< 0.05
	12/23/96	144	144	44.6	< 0.01	NM	0.138	NA	NA	4.3	37.7	< 0.05
	09/11/96	135	135	53.5	< 0.01	NM	0.11	NA	NA	4.6	42.2	< 0.05
	06/03/96	128	128	40.6	< 0.01	NM	0.12	NA	NA	6.8	51.7	< 0.05
	03/15/96	108	108	46.3	< 0.01	NM	0.12	NA	NA	4	38	< 0.05
	11/28/95	103	103	50.1	< 0.01	NM	0.14	NA	NA	4.2	35.9	< 0.05
	09/19/95	131	131	51.1	< 0.01	NM	0.11	NA	NA	3.9	37	< 0.05
	06/06/95	124	114	51.2	< 0.01	NM	0.14	NA	NA	4.6	35.3	< 0.05
	03/23/95	47	< 5	53.2	< 0.01	NM	0.17	NA	NA	4.6	28.9	< 0.05
	12/16/94	67	< 5	61.3	< 0.01	NM	0.12	NA	NA	3	30.9	< 0.05
	09/26/94	118	99.3	67.8	< 0.01	NM	0.11	NA	NA	2.9	34.3	< 0.05

Table A-2-1
Results of General Chemistry, Cyanide and Sulfide Analyses
Landfill 8
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Cyanide	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate	Sulfide
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	SW9010/ SW9012/ E335.2	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056	E376.1/ E376.2
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LF08GW03	03/16/06	290	290	72	< 0.01	1.49	< 0.1	4.4	< 0.05	NA	49	< 0.04 R
	03/16/05	220	220	65	< 0.01	1.00	< 0.1	5.6	< 0.05	NA	51	< 0.04
	03/11/04	230	230	70	< 0.01 UJ	0.9	< 0.1	5	< 0.05	NA	49	< 0.04
	08/20/03	220	220	68	< 0.01	1.1	< 0.1	4.3	< 0.05	NA	44	< 0.04
	03/13/03	210	210	68	< 0.01	0.9	< 0.1	4.7	< 0.05	NA	40	< 0.04
	08/27/02	230 J-	230 J-	71	< 0.01	0.78	0.24	4.6	< 0.05	NA	43	< 0.04
	03/12/02	240	240	70	< 0.01	0.96	< 0.1 U	5.7	< 0.05	NA	44	< 0.04
	09/04/01	240	240	71	< 0.01	1.39	0.13	4.5	< 0.05	NA	44	< 0.04
	05/16/01	230	230	68	< 0.01 UJ	2.43	0.12	4.5	< 0.05	NA	46	< 0.04
	06/15/00	234	234	70.1	< 0.01	0.2	0.113	NA	NA	587	42.4	< 0.05
	01/12/00	239	239	73	< 0.01	2.9	NA	NA	NA	4.3	45	< 0.05
	08/31/99	244	244	69.5	< 0.01	3.64	0.147	NA	NA	3.9	43.1	< 0.05
	02/25/99	242	242	73.6	< 0.01	3.25	0.105	NA	NA	4.4	45.1	< 0.05
	08/20/98	237	237	69.8	< 0.01	3.15	NA	NA	NA	4.4	43.7	< 0.05
	06/03/98	241	241	66.3	< 0.01	2.3	0.12	NA	NA	4.6	43.3	< 0.05
	03/10/98	2,810	< 5 (R20)	64.9 (J20)	< 0.01	3.94	< 0.10 (U20)	NA	NA	5.1	44.2 (J20)	< 0.05
	12/15/97	241	241	67.7	< 0.01	2.48	0.11	NA	NA	4	39.2	< 0.05
	09/11/97	240	240	69.4	< 0.01	2.17	0.112	NA	NA	3.8	42.6	< 0.05
	06/24/97	242	242	69	< 0.01	1.77	NA	NA	NA	4.4	42.8	< 0.05
	03/26/97	241	241	65.6	< 0.01	2	NA	NA	NA	5.1	42.6	< 0.05
	12/20/96	238	238	68	< 0.01	NM	0.151	NA	NA	4.2	41.8	< 0.05
	09/10/96	236	236	71.9	< 0.01	NM	0.12	NA	NA	4.5	43.4	0.086
	03/18/96	233	233	67.2	< 0.01	NM	NA	NA	NA	5.1	44.3	< 0.05
	11/29/95	234	234	71.1	< 0.01	NM	0.12	NA	NA	4.5	39.9	< 0.05
	09/18/95	220	220	68.4	< 0.01	NM	0.1	NA	NA	4.6	44.2	< 0.05
	06/07/95	231	231	61	< 0.01	NM	0.1	NA	NA	6.3	48.4	< 0.05
	03/24/95	224	224	67.2	< 0.01	NM	0.11	NA	NA	6.1	47.4	< 0.05
	12/14/94	234	234	75	< 0.01	NM	0.12	NA	NA	4.2	40.6	< 0.05
	09/26/94	227	227	80.1	< 0.01	NM	0.1	NA	NA	4.2	42.5	< 0.05

Table A-2-1
Results of General Chemistry, Cyanide and Sulfide Analyses
Landfill 8
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Cyanide	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate	Sulfide
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	SW9010/ SW9012/ E335.2	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056	E376.1/ E376.2
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LF08GW04 DUP0316064A	03/16/06	130	130	30	< 0.01	2.43	< 0.1	1.6	< 0.05	NA	17	< 0.04 R
	03/16/06	86	86	30	0.03	--	< 0.1	1.5	< 0.05	NA	17	< 0.04 R
DUP0317052A LF08GW04CL	03/17/05	90	90	29	< 0.01	2.20	< 0.1	2.3	< 0.05	NA	14	< 0.04
	03/17/05	78	78	29	< 0.01	--	< 0.1	2.3	< 0.05	NA	14	< 0.04
DUP0313031A LF08GW04CL	03/17/05	79	79	28	< 0.01 U	--	< 0.3 U	2.44	< 0.1 U	NA	13.7	< 0.04 U
	03/11/04	110	110	24	< 0.01 UJ	2	< 0.1	1.8	< 0.05	NA	18	< 0.04
DUP0904013A LF08GW04CL	08/20/03	130	130	33	< 0.01	4.79	< 0.1	6	< 0.05	NA	33	< 0.04
	03/13/03	94	94	34	< 0.01	1.78	< 0.1	0.58	< 0.05	NA	11	< 0.04
DUP0904013A LF08GW04CL	03/13/03	82	82	34	< 0.01	--	< 0.1	0.59	< 0.05	NA	11	< 0.04
	03/13/03	56	56	35	< 0.005	--	< 0.1	0.58	< 0.05 UJ	0.58	10	< 0.1
DUP0904013A LF08GW04CL	08/28/02	63	63	21	< 0.01	3	< 0.1	9	< 0.05	NA	150	< 0.04
	03/14/02	94	94	19	< 0.01 UJ	2	0.044 J	2.8	< 0.05	NA	11	< 0.04
DUP0904013A LF08GW04CL	09/04/01	66	66	15	< 0.01	5.4	0.056 J	13	< 0.05	NA	100	< 0.04
	09/04/01	68	68	15	< 0.01	--	0.06 J	13	< 0.05	NA	100	< 0.04
DUP0904013A LF08GW04CL	09/04/01	NA	62	14	< 0.01	--	< 1	13 ³	< 1	NA	100	< 1
	05/16/01	73	73	17	< 0.01 UJ	3.55	< 0.1	2.9	< 0.05	NA	15	< 0.04
DUP0904013A LF08GW04CL	05/16/01	70	70	16	< 0.01	NM	< 1	2.7 ³	< 1	NA	14	< 1
	06/19/00	58	58	10.6	< 0.01	0.18	< 0.1	NA	NA	799	5.33	< 0.05
DUP0904013A LF08GW04CL	01/12/00	130	130	33.3	< 0.01	4.94	< 0.1	NA	NA	6.6	29.8	< 0.05
	08/31/99	111	111	36	< 0.01	2.51	< 0.1	NA	NA	4.3	25.5	< 0.05
DUP0904013A LF08GW04CL	02/24/99	160	160	26.5	< 0.01	0.52	< 0.1	NA	NA	2.2	18	< 0.05
	08/19/98	85	84.8	38	< 0.01	4.49	< 0.1	NA	NA	0.56	19.6	< 0.05
DUP0904013A LF08GW04CL	06/02/98	68	68.2	29.6	< 0.01	0.46 (J35)	< 0.1	NA	NA	0.26	13.5	< 0.05
	03/09/98	60	59.8	13	< 0.01	4.25	< 0.1	NA	NA	1.4	11.2	< 0.05
DUP0904013A LF08GW04CL	12/11/97	183	183	14.7	< 0.01	6.57	< 0.1	NA	NA	7.2	121	< 0.05
	09/10/97	74	74.1	23.6	< 0.01	4.36	< 0.1	NA	NA	6.9	82.9	< 0.05
DUP0904013A LF08GW04CL	06/23/97	85	84.8	35.9	< 0.01	3.32	< 0.1	NA	NA	2.1	23.4	< 0.05
	03/24/97	70	70.3	18	< 0.01	1.3	< 0.1	NA	NA	0.54	13.1	< 0.05
DUP0904013A LF08GW04CL	12/19/96	128	128	20.2	< 0.01	NM	< 0.1	NA	NA	5.1	26.8	< 0.05
	09/10/96	89	89	36.4	< 0.01	NM	< 0.1	NA	NA	4.6	26.3	< 0.05
DUP0904013A LF08GW04CL	03/18/96	83	83	21.6	< 0.01	NM	< 0.1	NA	NA	1.8	15.8	< 0.05
	11/29/95	72	71.5	18.7	< 0.01	NM	< 0.1	NA	NA	3.4	39.5	< 0.05
DUP0904013A LF08GW04CL	09/20/95	79	78.5	22.4	< 0.01	NM	< 0.1	NA	NA	3	32.1	< 0.05

Table A-2-1
Results of General Chemistry, Cyanide and Sulfide Analyses
Landfill 8
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Cyanide	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate	Sulfide
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	SW9010/ SW9012/ E335.2	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056	E376.1/ E376.2
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LF08GW04	06/07/95	60	60	29.1	< 0.01	NM	< 0.1	NA	NA	0.14	20.1	< 0.05
	03/23/95	76	76	22.1	< 0.01	NM	< 0.1	NA	NA	0.4	15.9	< 0.05
	12/16/94	153	153	9.6	< 0.01	NM	< 0.1	NA	NA	9.9	49.2	< 0.05
	09/23/94	107	107	7.2	< 0.01	NM	< 0.1	NA	NA	5	72	< 0.05
LF08GW06	03/17/06	220	220	140	< 0.01	6.85	0.24	1.1	< 0.05	NA	78	< 0.04 R
	03/16/05	220	220	220	< 0.01	5.40	0.2	1	< 0.05	NA	98	0.07
	03/11/04	190	190	250	< 0.01 UJ	4.1	0.23	1.2	< 0.05	NA	100	< 0.04
	08/20/03	NA	NA	NA	NA	5.4	NA	NA	NA	NA	NA	NA
	06/10/03	150	150	240	< 0.01	5.77	< 0.1	1.2	< 0.05	NA	92	< 0.04 UJ
	03/13/03	170	170	240	< 0.01	5.79	0.16	1.2	< 0.05	NA	84	< 0.04
	06/05/02	140	140	260	0.02 J-	4.8	0.22	1.2	< 0.05	NA	110	0.08
	03/12/02	160	160	250	< 0.01	5.12	< 0.1 U	1.5	< 0.05	NA	120	< 0.04
	05/10/01	160	160	240	< 0.01	7.57	0.33	1.3	< 0.05	NA	100	< 0.04
	05/21/99	175	175	221	< 0.01	9.5 (J35)	0.30	NA	NA	1.5	145	< 0.05
	02/25/99	263	263	181	< 0.01	8.84	0.33	NA	NA	1.8	102	< 0.05
	12/14/98	NA	NA	NA	< 0.01	4.62 (J35)	NA	NA	NA	NA	NA	< 0.05
	06/02/98	NA	NA	NA	NA	5.44	NA	NA	NA	NA	NA	< 0.05
	03/10/98	3,000	< 5 (R20)	169 (J20)	NA	5.21	0.34 (J20)	NA	NA	2.33	125 (J20)	< 0.05
	09/10/97	NA	NA	NA	< 0.01	1.93	NA	NA	NA	NA	NA	< 0.05
	03/27/97	262	262	262	< 0.01	4.79	0.39	NA	NA	1.2	80	< 0.05

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - Total dissolved solids analysis was mistakenly not marked on the chain-of-custody by the field team and was therefore not analyzed by the laboratory.

3 - The QC laboratory nitrate results shown have been converted to nitrate as nitrogen (nitrate-N) as other laboratory results are reported. The QC laboratory reported nitrate as NO₃ concentrations (nitrate-NO₃) which are 4.43 times higher than nitrate-N concentrations. Section 6.2.1.2 in the main report of the *Draft Semi-Annual Groundwater Monitoring Report, First and Second Quarters 2003, Presidio-Wide Quarterly Groundwater Monitoring Program* discusses this issue (Treadwell & Rollo, 2003e).

mg/L - milligrams per liter

NA - not analyzed

NM - not measured

"--" dissolved oxygen measurements were not taken for duplicate and quality control samples.

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-2-2
Results of PAH, OCP, PCB, Chlorinated Herbicide, and VOC Analyses
Landfill 8
Presidio of San Francisco, California

Well Name	Sample Date	All PAHs	All OCPs and PCBs	All Chlorinated Herbicides	VOCs				
					Dichloro-methane	MTBE	PCE	Toluene	All Other VOCs
	Analytical Method ¹	SW8310	SW8081/ SW8081A/ SW8082	SW8151/ SW8151A	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
LF08GW01	03/17/06	ND	ND	NA	< 4	< 0.5	< 0.5	< 0.5	ND
	03/16/05	ND	ND	ND	< 4	< 0.5	0.5	< 0.5	ND
DUP0311041A	03/11/04	ND	ND	ND	< 4	< 0.5	< 0.5	< 0.5	ND
	03/11/04	ND	ND	ND	< 4	< 0.5	< 0.5	< 0.5	ND
	03/11/04	ND	ND	ND	0.69	< 0.5	< 0.5	< 0.5	ND
LF08GW01CL	08/20/03	ND	ND	NA	< 4	< 0.5	< 0.5	< 0.5	ND
	08/20/03	ND	ND	NA	< 4	< 0.5	< 0.5	< 0.5	ND
	08/20/03	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP0820031A	03/13/03	ND	ND	ND	< 4	< 0.5	< 0.5	< 0.5	ND
	08/27/02	NA	NA	NA	NA	NA	NA	NA	NA
	08/27/02	NA	NA	NA	NA	NA	NA	NA	NA
LF08GW01CL	08/27/02	NA	NA	NA	NA	NA	NA	NA	NA
	03/12/02	ND	ND	ND	< 4	< 0.5	< 0.5	< 0.5	ND
	09/04/01	NA	NA	NA	NA	NA	NA	NA	NA
DUP0827021A	05/16/01	ND	ND	ND	< 5	< 0.5	< 0.5	< 0.5	ND
	02/24/99	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	03/09/98	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	03/27/97	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	12/20/96	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	09/11/96	ND	ND	ND	< 4.5	NA	< 0.5	0.81	ND
	06/03/96	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	03/15/96	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	11/28/95	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	09/19/95	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	06/05/95	ND	ND	ND	< 5	NA	< 5	< 5	ND
	03/08/95	ND	ND	ND	< 5	NA	< 5	< 5	ND
	12/15/94	ND	ND	ND	< 5	NA	< 5	< 5	ND
	09/23/94	ND	ND	ND	< 5	NA	< 5	< 5	ND
LF08GW02B	03/16/06	ND	ND	NA	< 4	< 0.5	< 0.5	< 0.5	ND
	03/16/05	ND	ND	ND	< 4	< 0.5	< 0.5	< 0.5	ND
	03/11/04	ND	ND	ND	< 4	< 0.5	< 0.5	< 0.5	ND
	08/20/03	ND	ND	NA	< 4	< 0.5	< 0.5	< 0.5	ND
	03/13/03	ND	ND	ND	< 4	< 0.5	< 0.5	< 0.5	ND
	08/27/02	NA	NA	NA	NA	NA	NA	NA	NA
	03/12/02	ND	ND	ND	< 4	< 0.5	< 0.5	< 0.5	ND
	09/05/01	NA	NA	NA	NA	NA	NA	NA	NA
	05/16/01	ND	ND	ND	< 5	< 0.5	< 0.5	< 0.5	ND
	02/25/99	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	03/10/98	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	03/25/97	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	12/23/96	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	09/11/96	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	06/03/96	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	03/15/96	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	11/28/95	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND

Table A-2-2
Results of PAH, OCP, PCB, Chlorinated Herbicide, and VOC Analyses
Landfill 8
Presidio of San Francisco, California

Well Name	Sample Date	All PAHs	All OCPs and PCBs	All Chlorinated Herbicides	VOCs				
					Dichloro-methane	MTBE	PCE	Toluene	All Other VOCs
	Analytical Method ¹	SW8310	SW8081/ SW8081A/ SW8082	SW8151/ SW8151A	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
LF08GW02B	09/19/95	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	06/06/95	ND	ND	ND	< 5	NA	< 5	< 5	ND
	03/23/95	ND	ND	ND	< 5	NA	< 5	< 5	ND
	12/16/94	ND	ND	ND	< 5	NA	< 5	< 5	ND
	09/26/94	ND	ND	ND	< 5	NA	< 5	< 5	ND
LF08GW03	03/16/06	ND	ND	NA	< 4	< 0.5	< 0.5	< 0.5	ND
	03/16/05	ND	ND	ND	< 4	< 0.5	< 0.5	< 0.5	ND
	03/11/04	ND	ND	ND	< 4	< 0.5	< 0.5	< 0.5	ND
	08/20/03	ND	ND	NA	< 4	< 0.5	< 0.5	< 0.5	ND
	03/13/03	ND	ND	ND	< 4	< 0.5	< 0.5	< 0.5	ND
	08/27/02	NA	NA	NA	NA	NA	NA	NA	NA
	03/12/02	ND	ND	ND	< 4	< 0.5	< 0.5	< 0.5	ND
	09/04/01	NA	NA	NA	NA	NA	NA	NA	NA
	05/16/01	ND	ND	ND	< 5	< 0.5	< 0.5	< 0.5	ND
	02/25/99	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	03/10/98	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	03/26/97	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	12/20/96	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	09/10/96	ND	ND	ND	< 4.5	NA	< 0.5	0.72	ND
	03/18/96	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	11/29/95	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	09/18/95	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	06/07/95	ND	ND	ND	< 5	NA	< 5	< 5	ND
	03/24/95	ND	ND	ND	< 5	NA	< 5	< 5	ND
	12/14/94	ND	ND	ND	< 5	NA	< 5	< 5	ND
	09/26/94	ND	ND	ND	< 5	NA	< 5	< 5	ND
LF08GW04 DUP0316064A DUP0317052A LF08GW04CL DUP0313031A LF08GW04CL DUP0904013A LF08GW04CL LF08GW04CL	03/16/06	ND	ND	NA	< 4	< 0.5	< 0.5	< 0.5	ND
	03/16/06	ND	ND	NA	< 4	< 0.5	< 0.5	< 0.5	ND
	03/17/05	ND	ND	ND	< 4	< 0.5	< 0.5	< 0.5	ND
	03/17/05	ND	ND	ND	< 4	< 0.5	< 0.5	< 0.5	ND
	03/17/05	ND	ND	ND	< 4.5 U	< 0.5 U	< 0.5 U	< 0.5 U	ND
	03/11/04	ND	ND	ND	< 4	< 0.5	< 0.5	< 0.5	ND
	08/20/03	ND	ND	NA	< 4	< 0.5	< 0.5	< 0.5	ND
	03/13/03	ND	ND	ND	< 4	< 0.5	< 0.5	< 0.5	ND
	03/13/03	ND	ND	ND	< 4	< 0.5	< 0.5	< 0.5	ND
	03/13/03	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/28/02	NA	NA	NA	NA	NA	NA	NA	NA
	03/14/02	ND	ND	ND	< 4	< 0.5	< 0.5	< 0.5	ND
	09/04/01	NA	NA	NA	NA	NA	NA	NA	NA
	09/04/01	NA	NA	NA	NA	NA	NA	NA	NA
	09/04/01	NA	NA	NA	NA	NA	NA	NA	NA
	05/16/01	ND	ND	ND	< 5	< 0.5	< 0.5	< 0.5	ND
	05/16/01	ND	ND	ND	< 5	< 5	< 1	< 1	ND
	02/24/99	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	03/09/98	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND

Table A-2-2
Results of PAH, OCP, PCB, Chlorinated Herbicide, and VOC Analyses
Landfill 8
Presidio of San Francisco, California

Well Name	Sample Date	All PAHs	All OCPs and PCBs	All Chlorinated Herbicides	VOCs				
					Dichloro-methane	MTBE	PCE	Toluene	All Other VOCs
	Analytical Method ¹	SW8310	SW8081/ SW8081A/ SW8082	SW8151/ SW8151A	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
LF08GW04	03/24/97	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	12/19/96	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	09/10/96	ND	ND	ND	< 4.5	NA	< 0.5	1	ND
	03/18/96	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	11/29/95	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	09/20/95	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	06/07/95	ND	ND	ND	< 5	NA	< 5	< 5	ND
	03/23/95	ND	ND	ND	< 5	NA	< 5	< 5	ND
	12/16/94	ND	ND	ND	< 5	NA	< 5	< 5	ND
	09/23/94	ND	ND	ND	< 5	NA	< 5	< 5	ND
LF08GW06	03/17/06	ND	ND	NA	< 4	< 0.5	< 0.5	< 0.5	ND
	03/16/05	ND	ND	ND	< 4	< 0.5	< 0.5	< 0.5	ND
	03/11/04	ND	ND	ND	< 4	< 0.5	< 0.5	< 0.5	ND
	08/20/03	ND	ND	ND	< 4	< 0.5	< 0.5	< 0.5	ND
	06/10/03	ND	ND	ND	< 4	< 0.5	< 0.5	< 0.5	ND
	03/13/03	ND	ND	ND	< 4	< 0.5	< 0.5	< 0.5	ND
	06/05/02	ND	ND	NA	< 4 UJ	< 0.5	< 0.5	< 0.5	ND
	03/12/02	ND	ND	ND	< 4	< 0.5	< 0.5	< 0.5	ND
	05/10/01	ND	ND	ND	< 5	< 0.5	< 0.5 UJ	< 0.5 UJ	ND
	05/21/99	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	02/25/99	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	12/14/98	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	03/10/98	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND
	03/27/97	ND	ND	ND	< 4.5	NA	< 0.5	< 0.5	ND

Notes

1 The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

µg/L - micrograms per liter

NA - not analyzed

ND - not detected

PAHs - polycyclic aromatic hydrocarbons

OCPs - organochlorine pesticides

PCE - tetrachloroethylene

PCBs - polychlorinated biphenyls

VOC - volatile organic compound

MTBE - methyl tert-butyl ether

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-2-3
Results of Dissolved Metals Analyses
Landfill 8
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7470/ SW7470A	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
LF08GW01	03/17/06	< 100	< 1	< 5	310	< 2	< 1	43,000	< 10	< 10	< 1	< 100	< 3	28,000 J	< 10	< 0.2	< 20	1,700 J-	< 5	< 1	150,000	< 1	< 10	< 20	790
	03/15/05	< 100	< 1	< 5	240	< 2	< 1	34,000	< 10	< 10	< 1	< 100	< 3	29,000	< 10	< 0.2	< 20	1,300	< 5	< 1	130,000	< 1	< 10	< 20	560
	03/11/04	< 100	< 1	< 5	250	< 2	< 1	35,000	< 10	< 10	< 1	120	< 3	27,000	18	< 0.2	< 20	1,300	< 5	< 1 UJ	120,000	< 1	< 10	< 20	470
	03/11/04	< 100	< 1	< 5	260	< 2	< 1	37,000	< 10	< 10	< 1	120	< 3	28,000	17	< 0.2	< 20	1,300	< 5	< 1 UJ	130,000	< 1	< 10	< 20	520
DUP0311041A	03/11/04	< 100	< 5	< 5	240	< 1	< 1	35,000	< 10	< 7	< 10	< 500	< 3	27,000	16	< 0.2	< 10	1,300	< 5	< 1	120,000	< 2	< 10	< 20	530
	08/20/03	< 100	< 1	< 5	230	< 2	< 1	27,000	< 10	< 10	< 1	110	< 3	26,000	15	< 0.2	< 20	1,200	< 5	< 1 UJ	120,000	< 1	< 10	< 20 UJ	590
DUP0820031A	08/20/03	< 100	< 1	< 5	220	< 2	< 1	27,000	< 10	< 10	< 1	220	< 3	26,000	16	< 0.2	< 20	1,300	< 5	< 1 UJ	120,000	< 1	< 10	< 20 UJ	600
	08/20/03	1,200 J+	< 5	< 5	240	< 1	< 1	28,000	< 10	< 7	< 10	< 500 UJ	< 3	26,000	18	< 0.2	12	1,600	< 5	< 1	130,000	< 2	< 10	< 20	620 J
DUP0827021A	03/13/03	< 100	< 1	< 1	210	< 1	< 1	25,000	3.6	< 1	< 1	< 100	< 3	23,000	19	< 0.2	13	1,400	< 5	< 1 UJ	120,000 J-	< 1	< 10	< 10	540
	08/27/02	< 100	< 1	< 1	540	< 1	< 1	30,000	5.3 J	< 1	< 1	< 100	< 3	26,000	< 10	< 0.2	23	1,600	< 5	< 1 UJ	140,000	< 1	< 10	140	520
	08/27/02	< 100	< 1	< 1	270	< 1	< 1	29,000	5.1 J	< 1	< 1	< 100	< 3	26,000	< 10	< 0.2	22	1,500	< 5	< 1 UJ	140,000	< 1	< 10	19	580
	08/27/02	< 200	0.3 B	< 2	330	< 1	< 1	29,000	< 0.92 J,U	0.3 B	< 0.056 BJ,U	67 J	< 5	24,000	5.4	< 0.2	24	1,600	< 5	< 1	130,000	< 1	1.3 J	47	550 J
	03/12/02	< 100	< 1	< 1	430	< 1	< 1	28,000	4.9	< 1	1.1	< 100	< 3	25,000	< 10	< 0.2	16	1,800	< 5	< 1 UJ	130,000	< 1	< 10	140	490
	09/04/01	< 100	1.9	< 1	600 J+	< 1	< 1	31,000	8.8	< 1	1.2	200	< 3	26,000	14	< 0.2	59 J	1,400	< 5	< 1 UJ	140,000	< 1	< 10	160	NA ²
	05/16/01	< 100	1.8	< 1	670	< 1	< 1	< 500 R	9.7 J	< 1	1.1	300	< 3	24,000	20	< 0.2	71	1,700 J	< 5	< 1	130,000	< 1	< 10	180	530
	06/15/00	< 100	< 5	< 5	153	< 2	< 2	32,600	< 10 (U1)	< 10	< 10	< 100 (U1)	< 3	21,500	46.4	< 0.2	167	< 5,000	< 5	< 2	139,000	< 2	< 10	< 20	826
	01/12/00	< 100	< 5	< 5	167	< 2	< 2	26,900	< 10	< 10	< 10	130	< 3	19,800	10.8	< 0.2	164	< 5,000	< 5	< 2	127,000	< 2	< 10	< 20	532
	08/30/99	< 100	< 5	< 5	156	< 2	< 2	25,200	< 10	< 10	< 10	< 100	< 3	15,700	< 10	NA	75.5	< 5,000	< 5	< 2	136,000	< 2	< 10	< 20	501
	02/24/99	< 100	< 5	< 5	158	< 4	< 2	21,700	10.4	< 10	< 10	< 100	< 3	16,100	10.1	< 0.2	44.8	< 5,000	< 5	< 2	117,000	< 2	< 10	< 20	476
	08/19/98	< 100	< 5	< 5	129	< 4	< 2	21,500	< 10	< 10	12.8	< 100	< 3	14,100	12.6	< 0.2	136	< 5,000	< 5	< 2	118,000	< 2	< 10	< 20	445
06/02/98	< 100	< 5	< 5	137	< 4	< 2	22,900	< 10	< 10	10	< 100	< 3	14,300	< 10	< 0.2	85.2	< 5,000	< 5	< 2	127,000	< 2	< 10	26.9	502	
03/09/98	< 100	< 5	< 5	135	< 4	< 2	20,300	< 10	< 10	< 10	< 100	< 3	13,600	< 10	< 0.2	34.6	< 5,000	< 5	< 2	114,000	< 2	< 10	< 20	476	
12/11/97	< 100	< 5	< 5	141	< 4	< 2	18,000	< 10	< 10	< 10	< 100	< 3	16,300	< 10	< 0.2	94.1	< 5,000	< 5	< 2	101,000	< 2	< 10	< 20	429	
09/10/97	< 100	< 5	< 5	129	< 4	< 2	20,200	< 10	< 10	< 10	< 100	< 3	15,100	< 10	< 0.2	217	< 5,000	< 5	< 2	116,000	< 2	< 10	< 20	457	
06/25/97	< 100	< 5	< 5	130	< 4	< 2	22,000	< 10	< 10	< 10	< 100	< 3	14,600	< 10	< 0.2	267	< 5,000	< 5	< 2	124,000	< 2	< 10	212	416	
03/27/97	< 100	< 5	< 5	138	< 4	< 2	19,700	< 10	< 10	< 10	< 100	< 3	13,300	14.3	< 0.2	< 20	< 5,000	< 5	< 2	119,000	< 2	< 10	< 20	469	
12/20/96	< 100	< 5	< 5	168	< 4	< 2	17,800	< 10	< 10	< 10	< 100	< 3	18,700	33.5	< 0.2	< 20	< 5,000	< 5	< 2	95,300	< 2	< 10	< 20	431	
09/11/96	111	< 5	< 5	127	< 2	< 0.5	15,200	2.3	< 10	1.6	225	< 1	14,800	144	< 0.2	5	< 5,000	< 5	< 0.5	101,000	< 2	< 10	< 20	521	
06/03/96	< 100	< 5	< 5	18	< 2	< 0.5	41,700	50.7	< 10	< 1	< 100	< 1	30,400	< 10	< 0.2	< 5	< 5,000	< 5	< 0.5	36,900	< 2	< 10	32.8	480	
03/15/96	590	< 5																							

Table A-2-3
Results of Dissolved Metals Analyses
Landfill 8
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7470/ SW7470A	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
LF08GW02B	08/31/99	< 100	< 5	< 5	35.6	< 2	< 2	26,800	37.5	< 10	< 10	< 100	< 3	28,900	< 10	NA	< 20	< 5,000	< 5	< 2	34,200	< 2	< 10	< 20	323
	02/25/99	< 100	< 5	< 5	35.2	< 4	< 2	26,500	41.8	< 10	< 10	< 100	< 3	27,800	< 10	< 0.2	< 20	< 5,000	< 5	< 2	34,000	< 2	< 10	< 20	316
	08/20/98	< 100	< 5	< 5	33.4	< 4	< 2	26,900	34.8	< 10	11	< 100	< 3	25,100	< 10	< 0.2	< 20	< 5,000	< 5	< 2	35,600	< 2	< 10	< 20	303
	06/03/98	< 100	< 5	< 5	34.6	< 4	< 2	27,500	38.3	< 10	< 10	< 100	< 3	26,800	< 10	< 0.2	< 20	< 5,000	< 5	< 2	43,900	< 2	< 10	< 20	337
	03/10/98	< 100	< 5	< 5	39.7	< 4	< 2	29,100	50	< 10	< 10	< 100	< 3	30,000	< 10	< 0.2	< 20	5,500	< 5	< 2	34,000	< 2	< 10	< 20	346
	12/15/97	< 100	< 5	< 5	23.2	< 4	< 2	28,500	43.4	< 10	< 10	< 100	< 3	24,700	< 10	< 0.2	< 20	< 5,000	< 5	< 2	33,100	< 2	< 10	< 20	296
	09/11/97	< 100	< 5	< 5	29.6	< 4	< 2	30,400	38.5	< 10	< 10	< 100	< 3	27,100	< 10	< 0.2	< 20	< 5,000	< 5	< 2	31,500	< 2	< 10	< 20	343
	06/24/97	< 100	< 5	< 5	29.8	< 4	< 2	31,900	43.1	< 10	< 10	< 100	< 3	28,300	< 10	< 0.2	< 20	< 5,000	< 5	< 2	34,400	< 2	< 10	< 20	376
	03/25/97	< 100	< 5	< 5	18.5	< 4	< 2	33,400	44.7	< 10	< 10	< 100	< 3	24,700	< 10	< 0.2	< 20	< 5,000	< 5	< 2	34,600	< 2	< 10	< 20	349
	12/23/96	< 100	< 5	< 5	19.5	< 4	< 2	31,100	41.6	< 10	< 10	< 100	< 3	24,800	< 10	< 0.2	< 20	< 5,000	< 5	< 2	30,300	< 2	< 10	< 20	342
	09/11/96	< 100	< 5	< 5	< 10	< 2	< 0.5	35,600	29.2	< 10	< 1	< 100	< 1	20,900	< 10	< 0.2	< 5	< 5,000	< 5	< 0.5	35,600	< 2	< 10	< 20	334
	06/03/96	< 100	< 5	< 5	19.2	< 2	< 0.5	43,700	58.4	< 10	< 1	< 100	< 1	32,000	< 10	< 0.2	< 5	< 5,000	< 5	< 0.5	39,000	< 2	< 10	34.2	377
	03/15/96	< 100	< 5	< 5	< 10	< 2	< 0.5	32,600	35.7	< 10	1.1	< 100	1	17,800	< 10	< 0.2	< 5	< 5,000	< 5	< 0.5	34,400	< 2	< 10	< 20	299
	11/28/95	< 100	< 5	< 5	< 10	< 2	< 0.5	32,300	30	< 10	1.6	< 100	1.4	15,700	< 10	< 0.2	8.3	< 5,000	< 5	< 0.5	32,800	< 2	< 10	< 20	324
	09/19/95	< 100	< 60	< 5	< 10	< 2	< 5	39,300	26	< 10	< 20	< 100	< 1	20,500	< 10	< 0.2	< 40	< 5,000	< 5	< 10	40,200	< 2	< 10	< 20	372
	06/06/95	< 100	< 60	< 5	< 10	< 2	< 5	37,600	26	< 10	< 20	< 100	< 3.2	21,300	< 10	< 0.2	< 40	5,800	< 5 (U27)	< 10	45,000	< 5	< 10	< 20	320
	03/23/95	< 100	< 60	< 5	< 10	< 2	< 5	26,400	30	< 10	< 20	< 100	< 3.2	2,400	< 10	< 0.2	< 40	16,400	< 5	< 10	53,700	< 5 (U27)	21	< 20	214
12/16/94	< 100	< 60	5.4	< 10	< 2	< 5	30,400	23	< 10	< 20	< 100	< 5	4,700	< 10	< 0.2	< 40	10,700	< 5	< 10	57,300	< 5 (U27)	12	< 20	266	
09/26/94	< 100	NA	< 5	11	NA	NA	37,400	20	< 10	< 20	< 100	< 3.2	15,600	< 10	< 0.2	< 40	9,400	< 5	NA	56,200	< 5 (U27)	< 10	< 20	303	
LF08GW03	03/16/06	< 100 UJ	< 1	< 5	140	< 2	< 1	20,000	23	< 10	< 1	< 100	< 3	52,000	< 10	< 0.2	< 20	610	< 5	< 1	59,000 J	< 1	< 10	< 20	550 J
	03/18/05	< 100	< 1	< 5	140	< 2	< 1	20,000	22	< 10	< 1	< 100	< 3	51,000	< 10	< 0.2	< 20	630	< 5	< 1	61,000	< 1	< 10	< 20	470
	03/11/04	< 100	< 1	< 5	130	< 2	< 1	21,000	22	< 10	< 1	< 100	< 3	51,000	< 10	< 0.2	< 20	680	< 5	< 1 UJ	61,000	< 1	< 10	< 20	440
	08/20/03	< 100	< 1	< 5	130	< 2	< 1	19,000	22	< 10	< 1	150	< 3	54,000	< 10	0.25	< 20	500	< 5	< 1 UJ	62,000	< 1	< 10	< 20 UJ	520
	03/13/03	< 100	< 1	< 1	130	< 1	< 1	19,000	22	< 1	< 1	< 100	< 3	49,000	< 10	< 0.2	< 1	520	< 5	< 1 UJ	59,000 J-	< 1	< 10	< 10	460
	08/27/02	< 100	< 1	< 1	360	< 1	< 1	20,000	24 J	< 1	< 1	< 100	< 3	52,000	< 10	< 0.2	1.7	670	< 5	< 1 UJ	62,000	< 1	< 10	77	460
	03/12/02	< 100	< 1	1	590	< 1	< 1	22,000	23	< 1	< 1	< 100	< 3	56,000	< 10	< 0.2	< 1	740	< 5	< 1 UJ	65,000	< 1	< 10	150	430
	09/04/01	< 100	2.7	1.1	600 J+	< 1	< 1	24,000	27	< 1	1	120	< 3	60,000	< 10	< 0.2	3	610	< 5	< 1 UJ	67,000	< 1	< 10	120	NA ²
	05/16/01	< 100	1	1.2	< 21	< 1	< 1	< 500 R	28 J	< 1	< 1	270	< 3	< 10,000	< 10	< 0.2	1.4	770 J	< 5	< 1	< 10,000	< 1	< 10	120	450
	06/15/00	< 100	< 5	< 5	140	< 2	< 2	22,400	29.6	< 10	< 10 (U1)	< 100 (U1)	< 3	56,100	< 10	< 0.2	< 20	< 5,000	< 5 (U1)	< 2	62,200	< 2	< 10	< 20	507
	01/12/00	< 100	< 5	< 5</																					

Table A-2-3
Results of Dissolved Metals Analyses
Landfill 8
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7470/ SW7470A	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
LF08GW04 DUP0316064A	03/16/06	< 100 UJ	< 1	< 5	16	< 2	< 1	32,000	< 10	< 10	< 1	< 100	< 3	5,300	< 10	< 0.2	< 20	2,700	< 5	< 1	15,000 J	< 1	< 10	< 20	280 J
	03/16/06	< 100 UJ	< 1	< 5	17	< 2	< 1	32,000	< 10	< 10	< 1	< 100	< 3	5,300	< 10	< 0.2	< 20	2,700	< 5	< 1	16,000 J	< 1	< 10	< 20	140 J
	03/17/05	< 100	< 1	< 5	14	< 2	< 1	30,000	< 10	< 10	< 1	< 100	< 3	9,300	< 10	< 0.2	< 20	2,500	< 5	< 1	10,000	< 1	< 10	< 20	170 J-
DUP0317052A LF08GW04CL	03/17/05	< 100	< 1	< 5	15	< 2	< 1	31,000	< 10	< 10	< 1	< 100	< 3	9,500	< 10	< 0.2	< 20	2,500	< 5	< 1	10,000	< 1	< 10	< 20	170 J-
	03/17/05	< 100 U	< 2 U	< 2 U	15.3	< 1 U	< 1 U	31,200	< 10 U	< 1 U	< 2 U	< 100 U	< 1 U	9,340	< 10 U	< 0.2 U	2.86	< 5,000 UN	< 2 U	< 1 U	10,400 J	< 1 U	< 10 U	< 20 U	170
	03/11/04	< 100	< 1	< 5	21	< 2	< 1	46,000	< 10	< 10	< 1	140	< 3	6,600	< 10	< 0.2	< 20	3,500	< 5	< 1 UJ	12,000	< 1	< 10	< 20	130
DUP0313031A LF08GW04CL	08/20/03	< 100	< 1	< 5	35	< 2	< 1	31,000	< 10	< 10	< 1	250	< 3	16,000	< 10	< 0.2	< 20	1,800	< 5	< 1 UJ	26,000	< 1	< 10	< 20 UJ	320
	03/13/03	< 100	< 1	< 1	18	< 1	< 1	23,000	2.6	< 1	< 1	< 100	< 3	6,000	< 10	< 0.2	3.3	2,300	< 5	< 1 UJ	14,000 J-	< 1	< 10	< 10	200
	03/13/03	< 100	< 1	< 1	16	< 1	< 1	23,000	2.8	< 1	< 1	< 100	< 3	6,100	< 10	< 0.2	3.4	2,300	< 5	< 1 UJ	13,000 J-	< 1	< 10	< 10	190
DUP0904013A LF08GW04CL	03/13/03	< 100	< 5	3	17	< 1	< 1	24,000	6.6	< 1	< 5	< 500	< 3	6,100	< 5	< 0.2	< 5	2,800	< 5	< 1	17,000	< 2	< 10	23	170
	08/28/02	< 100	< 1	< 1	340	< 1	< 1	51,000	1.5 J	< 1	1.4	< 100	< 3	27,000	< 10	< 0.2	10	2,100	< 5	< 1 UJ	34,000	< 1	< 10	130	410
	03/14/02	< 100	1.8	< 1	470	< 1	< 1	39,000	2.7	< 1	1.1	130	< 3	5,400	< 10	< 0.2	3.4	2,600	< 5	< 1 UJ	14,000	< 1	< 10	150	170
LF08GW04CL	09/04/01	< 100	1.9	< 1	400 J+	< 1	< 1	50,000	2.8	< 1	1.8	220	< 3	23,000	< 10	< 0.2	15 J	1,500	< 5	< 1 UJ	29,000	< 1	< 10	230	NA
	09/04/01	< 100	1.2	< 1	180 J+	< 1	< 1	49,000	2.2	< 1	1.6	240	< 3	24,000	< 10	0.35	15 J	2,000	< 5	< 1 UJ	26,000	< 1	< 10	46	NA
	09/04/01	< 200	0.64 J	< 2	130	< 1	< 1	41,000	< 2	0.59 J	1.8 J	< 200	< 5	21,000	< 5	< 0.2	14	2,100	< 5	< 1	23,000	< 1	< 5	18	360
	05/16/01	< 100	1.6	< 1	2,500	< 1	< 1	< 500 R	< 1 UJ	< 1	1.4	230	< 3	9,200	< 10	< 0.2	4.6	1,000 J	< 5	< 1	18,000	< 1	< 10	< 210	180
	05/16/01	220	< 2	< 2	100	< 1	< 1	19,000	4.8	< 1	< 2	< 200	< 5	9,400	< 5	< 0.2	4.2	1,500	< 5	< 1	18,000	< 1	< 5	35	160
	06/19/00	< 100	< 5	< 5	< 10	< 2	< 2	8,350	< 10 (U1)	< 10	< 10	< 100 (U1)	< 3	3,990	< 10	< 0.2	< 20	< 5,000	< 5	< 2	32,900	< 2	< 10	160	102
	01/12/00	< 100	< 5	< 5	56.4	< 2	< 2	36,900	< 10	< 10	< 10	< 100	< 3	18,000	110	< 0.2	< 20	< 5,000	< 5	< 2	33,600	< 2	< 10	< 20	307
	08/31/99	< 100	< 5	< 5	52.1	< 2	< 2	31,700	< 10	10.7	< 10	< 100	< 3	15,300	1,740	NA	55.5	< 5,000	< 5	< 2	30,900	< 2	< 10	< 20	266
	02/24/99	< 100	< 5	< 5	29.9	< 4	< 2	54,000	< 10	< 10	< 10	< 100	< 3	8,580	837	< 0.2	< 20	< 5,000	< 5	< 2	20,400	< 2	< 10	< 20	270
	08/19/98	< 100	< 5	< 5	42.3	< 4	< 2	23,200	< 10	< 10	< 10	< 100	< 3	10,600	13.5	< 0.2	< 20	< 5,000	< 5	< 2	24,600	< 2	< 10	< 20	188
	06/02/98	< 100	< 5	< 5	24	< 4	< 2	26,500	< 10	< 10	< 10	< 100	< 3	7,090	< 10	< 0.2	< 20	< 5,000	< 5	< 2	14,700	< 2	< 10	< 20	297
	03/09/98	102	< 5	< 5	15.1	< 4	< 2	22,700	< 10	< 10	< 10	103	< 3	4,700	< 10	< 0.2	< 20	< 5,000	< 5	< 2	11,100	< 2	< 10	< 20	179
	12/11/97	< 100	< 5	< 5	83.1	< 4	< 2	111,000	< 10	< 10	< 10	< 100	< 3	29,800	< 10	< 0.2	< 20	5,600	< 5	< 2	23,700	< 2	< 10	< 20	439
	09/10/97	< 100	< 5	< 5	65.7	< 4	< 2	37,200	< 10	< 10	< 10	< 100	< 3	17,200	< 10	< 0.2	< 20	< 5,000	< 5	< 2	26,600	< 2	< 10	< 20	330
	06/23/97	280	< 5	< 5	47.4	< 4	< 2	26,100	< 10	< 10	< 10	< 100	< 3	11,000	< 10	< 0.2	< 20	< 5,000	< 5	< 2	23,600	< 2	< 10	< 20	235
	03/24/97	< 100	< 5	< 5	18.7	< 4	< 2	20,500	< 10	< 10	< 10	< 100	< 3	4,870	< 10	< 0.2	< 20	< 5,000	< 5	< 2 (U9)	13,800	< 2	< 10	< 20	125
	12/19/96	< 100	< 5	< 5	52.6	< 4	< 2	33,100	< 10	< 10	< 10	< 100	< 3	11,100	< 10	< 0.2	< 20	< 5,000	< 5	< 2	30,900	< 2	< 10	41.8	247
	09/10/96	< 100	< 5	< 5	135	<																			

Table A-2-3
Results of Dissolved Metals Analyses
Landfill 8
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7470/ SW7470A	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
LF08GW06	03/10/98	< 100	< 5	< 5	57.7	< 4	< 2	48,400	< 10	< 10	< 10	< 100	< 3	32,100	< 10	< 0.2	< 20	7,270	< 5	< 2	175,000	< 2	< 10	< 20	3,800
	09/10/97	< 100	< 5	< 5	33.1	< 4	< 2	61,500	< 10	< 10	< 10	< 100	< 3	33,000	57.8	< 0.2	< 20	5,350	< 5	< 2	178,000	< 2	< 10	24.4	NA
	03/27/97	< 100	< 5	< 5	69.9	< 4	< 2	50,300	< 10	< 10	< 10	< 100	< 3	38,400	< 10	< 0.2	< 20	8,790	< 5	< 2	206,000	< 2	< 10	< 20	878

Notes
1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.
mg/L - milligrams per liter
µg/L - micrograms per liter
NA - not analyzed
CL suffix denotes a quality control duplicate sample was sent to the control laboratory.
Groundwater samples collected from all site monitoring wells were field filtered and analyzed for dissolved metals.
Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.
Table 11 in the main report identifies current and historical data qualifiers.

Table A-2-4
Groundwater Elevation Summary
Landfill 8
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
LF08GW01	08/14/06	21.74	234.54	212.80	MW
	05/22/06	17.23	234.54	217.31	MW
	03/06/06	15.34	234.54	219.20	MW
	11/28/05	26.21	234.54	208.33	MW
	08/29/05	22.97	234.54	211.57	MW
	05/23/05	19.32	234.54	215.22	MW
	03/14/05	16.80	234.54	217.74	MW
	12/13/04	28.53	234.54	206.01	MW
	08/09/04	25.93	234.54	208.61	MW
	05/24/04	22.28	234.54	212.26	MW
	03/08/04	18.93	234.54	215.61	MW
	12/01/03	24.91	234.54	209.63	MW
	08/11/03	23.64	234.54	210.90	MW
	06/02/03	21.30	234.54	213.24	MW
	03/10/03	20.64	234.54	213.90	MW
	12/02/02	28.04	234.54	206.50	MW
	08/26/02	25.95	234.54	208.59	MW
	05/28/02	22.30	234.54	212.24	MW
	03/04/02	19.36	234.54	215.18	MW
	11/26/01	30.45	234.54	204.09	MW
	08/27/01	28.72	234.54	205.82	MW
	05/08/01	22.91	234.54	211.63	MW
LF08GW02B	08/14/06	47.70	225.27	177.57	MW
	05/22/06	44.75	225.27	180.52	MW
	03/06/06	49.58	225.27	175.69	MW
	11/28/05	50.72	225.27	174.55	MW
	08/29/05	49.70	225.27	175.57	MW
	05/23/05	49.30	225.27	175.97	MW
	03/14/05	51.95	225.27	173.32	MW
	12/13/04	52.24	225.27	173.03	MW
	08/09/04	50.59	225.27	174.68	MW
	05/24/04	49.51	225.27	175.76	MW
	03/08/04	51.60	225.27	173.67	MW
	12/01/03	51.94	225.27	173.33	MW
	08/11/03	51.07	225.27	174.20	MW
	06/02/03	50.87	225.27	174.40	MW
	03/10/03	52.13	225.27	173.14	MW
	12/02/02	52.49	225.27	172.78	MW
	08/26/02	51.60	225.27	173.67	MW
	05/28/02	51.30	225.27	173.97	MW
	03/04/02	52.76	225.27	172.51	MW
	11/26/01	52.73	225.27	172.54	MW
	08/27/01	51.94	225.27	173.33	MW
	05/08/01	51.98	225.27	173.29	MW
LF08GW03	08/14/06	37.24	230.41	193.17	MW
	05/22/06	33.42	230.41	196.99	MW
	03/06/06	35.32	230.41	195.09	MW
	11/28/05	39.39	230.41	191.02	MW
	08/29/05	38.34	230.41	192.07	MW
	05/23/05	36.50	230.41	193.91	MW
	03/14/05	35.41	230.41	195.00	MW
	12/13/04	40.65	230.41	189.76	MW
	08/09/04	39.47	230.41	190.94	MW

Table A-2-4
Groundwater Elevation Summary
Landfill 8
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
LF08GW03	05/24/04	38.13	230.41	192.28	MW
	03/08/04	36.00	230.41	194.41	MW
	12/01/03	39.34	230.41	191.07	MW
	08/11/03	38.54	230.41	191.87	MW
	06/02/03	37.52	230.41	192.89	MW
	03/10/03	37.34	230.41	193.07	MW
	12/02/02	40.18	230.41	190.23	MW
	08/26/02	39.23	230.41	191.18	MW
	05/28/02	37.92	230.41	192.49	MW
	03/04/02	37.15	230.41	193.26	MW
	11/26/01	41.04	230.41	189.37	MW
	08/27/01	40.26	230.41	190.15	MW
	05/08/01	38.34	230.41	192.07	MW
LF08GW04	08/14/06	36.2	234.70	198.50	MW
	05/22/06	31.54	234.70	203.16	MW
	03/06/06	31.09	234.70	203.61	MW
	11/28/05	37.53	234.70	197.17	MW
	08/29/05	37.17	234.70	197.53	MW
	05/23/05	33.48	234.70	201.22	MW
	03/14/05	31.02	234.70	203.68	MW
	12/13/04	34.8	234.70	199.90	MW
	08/09/04	37.57	234.70	197.13	MW
	05/24/04	35.8	234.70	198.90	MW
	03/08/04	32.15	234.70	202.55	MW
	12/01/03	37.35	234.70	197.35	MW
	08/11/03	37.40	234.70	197.30	MW
	06/02/03	35.60	234.70	199.10	MW
	03/10/03	34.52	234.70	200.18	MW
	12/02/02	37.37	234.70	197.33	MW
	08/26/02	37.47	234.70	197.23	MW
	05/28/02	35.48	234.70	199.22	MW
	03/04/02	33.23	234.70	201.47	MW
	11/26/01	36.36	234.70	198.34	MW
	08/27/01	37.65	234.70	197.05	MW
	05/08/01	35.67	234.70	199.03	MW
LF08GW06	08/14/06	20.62	234.31	213.69	MW
	05/22/06	15.84	234.31	218.47	MW
	03/06/06	15.12	234.31	219.19	MW
	11/28/05	24.39	234.31	209.92	MW
	08/29/05	21.1	234.31	213.21	MW
	05/23/05	17.34	234.31	216.97	MW
	03/14/05	14.93	234.31	219.38	MW
	12/13/04	24.73	234.31	209.58	MW
	08/09/04	24.25	234.31	210.06	MW
	05/24/04	20.65	234.31	213.66	MW
	03/08/04	15.84	234.31	218.47	MW
	12/01/03	23.47	234.31	210.84	MW
	08/11/03	21.87	234.31	212.44	MW
	06/02/03	19.31	234.31	215.00	MW
	03/10/03	18.96	234.31	215.35	MW
	12/02/02	24.75	234.31	209.56	MW
	08/26/02	23.76	234.31	210.55	MW

Table A-2-4
Groundwater Elevation Summary
Landfill 8
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
LF08GW06	05/28/02	19.69	234.31	214.62	MW
	03/04/02	17.52	234.31	216.79	MW
	11/26/01	24.75	234.31	209.56	MW
	08/27/01	24.71	234.31	209.60	MW
	05/08/01	20.47	234.31	213.84	MW
LF08PZ01	08/14/06	13.90	234.34	220.44	PZ
	05/22/06	8.65	234.34	225.69	PZ
	03/06/06	9.22	234.34	225.12	PZ
	11/28/05	20.09	234.34	214.25	PZ
	08/29/05	15.17	234.34	219.17	PZ
	05/23/05	NL ²	234.34	NA	PZ
	03/14/05	9.55	234.34	224.79	PZ
	12/13/04	18.67	234.34	215.67	PZ
	08/09/04	18.56	234.34	215.78	PZ
	05/24/04	12.22	234.34	222.12	PZ
	03/08/04	10.10	234.34	224.24	PZ
	12/01/03	18.77	234.34	215.57	PZ
	08/11/03	16.95	234.34	217.39	PZ
	06/02/03	12.48	234.34	221.86	PZ
	03/10/03	11.64	234.34	222.70	PZ
	12/02/02	21.77	234.34	212.57	PZ
	08/26/02	NL ²	234.34	NA	PZ
	05/28/02	NL ²	234.34	NA	PZ
	03/04/02	9.69	234.34	224.65	PZ
	11/26/01	21.82	234.34	212.52	PZ
	08/27/01	21.74	234.34	212.60	PZ
	05/08/01	13.53	234.34	220.81	PZ
LF08PZ02	08/14/06	26.85	234.62	207.77	PZ
	05/22/06	19.46	234.62	215.16	PZ
	03/06/06	23.29	234.62	211.33	PZ
	11/28/05	33.09	234.62	201.53	PZ
	08/29/05	29.06	234.62	205.56	PZ
	05/23/05	21.85	234.62	212.77	PZ
	03/14/05	23.87	234.62	210.75	PZ
	12/13/04	33.90	234.62	200.72	PZ
	08/09/04	32.24	234.62	202.38	PZ
	05/24/04	28.05	234.62	206.57	PZ
	03/08/04	25.40	234.62	209.22	PZ
	12/01/03	34.55	234.62	200.07	PZ
	08/11/03	31.43	234.62	203.19	PZ
	06/02/03	29.35	234.62	205.27	PZ
	03/10/03	29.50	234.62	205.12	PZ
	12/02/02	36.22	234.62	198.40	PZ
	08/26/02	32.26	234.62	202.36	PZ
	05/28/02	27.95	234.62	206.67	PZ

Table A-2-4
Groundwater Elevation Summary
Landfill 8
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
LF08PZ02	03/04/02	27.62	234.62	207.00	PZ
	11/26/01	37.19	234.62	197.43	PZ
	08/27/01	35.50	234.62	199.12	PZ
	05/08/01	30.88	234.62	203.74	PZ

Notes

1 - All depth to water measurements are an average of three measurements recorded in the field.

2 - Piezometer was covered in landscaping material and was not located during the survey.

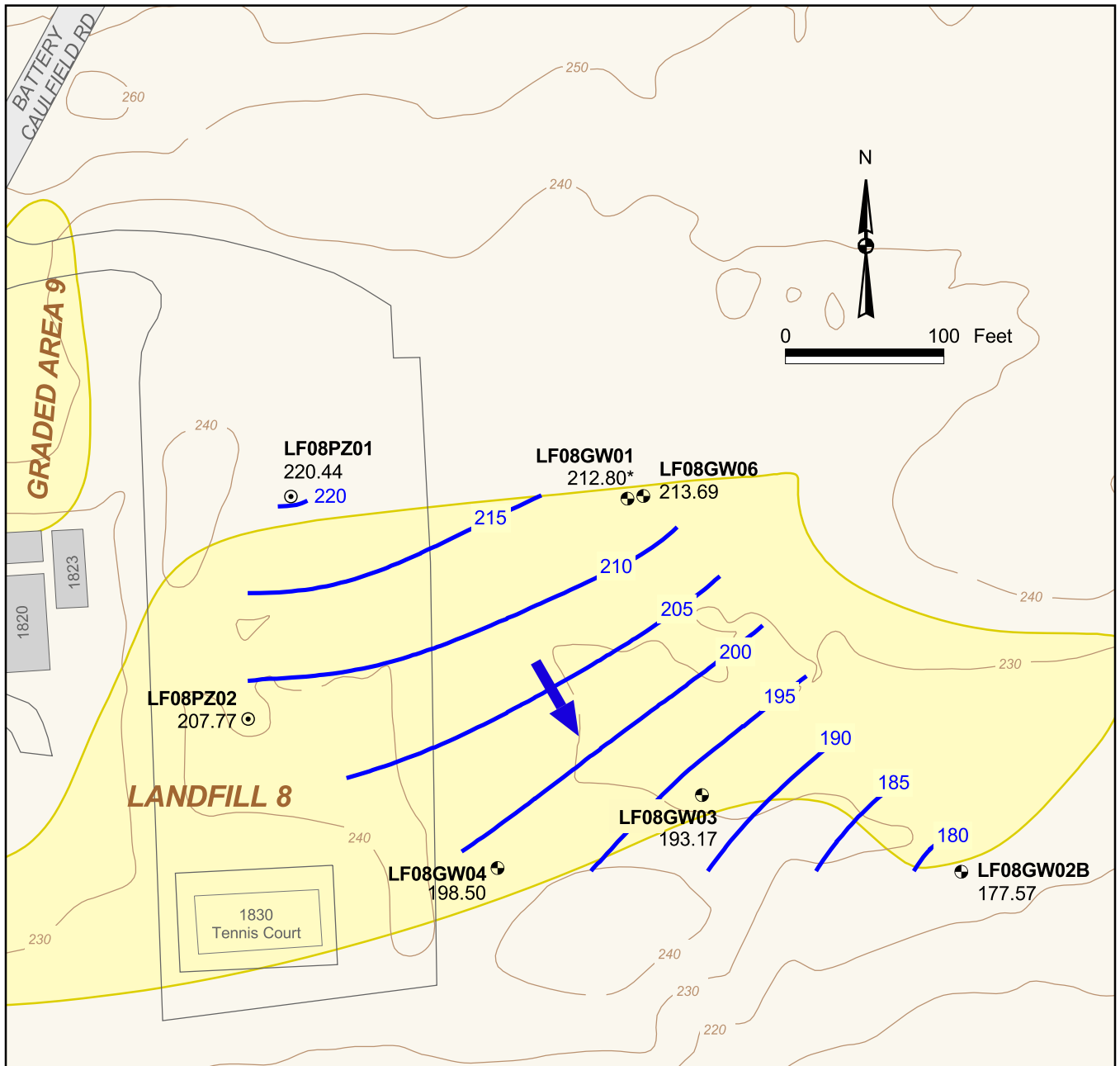
NL - not located

NA - not available

MW- Monitoring Well

PZ - Piezometer

feet PLLW - feet above Presidio Lower Low Water vertical datum



LEGEND

- LF08GW02B Groundwater Monitoring Well
177.57 August 2006 Groundwater Elevation
- ⊙ LF08PZ02 Piezometer
207.77 August 2006 Groundwater Elevation
- * Monitoring well not used in
contouring, screened in bedrock.
- ➔ Approximate Direction
of Groundwater Flow
- Groundwater Elevation Contour
(Contour Interval : 5 ft)

- Approximate Lateral
Extent of Landfill
- 1830 Previously Removed
Building
- Topographic Contour
(Contour Interval : 10 ft)

Notes:
Groundwater elevation data collected
on 14 August 2006.

Horizontal Datum: NAD 27, CA State
Plane Coordinates, Zone 3, feet

Vertical Datums: (groundwater) Presidio
Lower Low Water (ft. PLLW)
(topography) North American Vertical
Datum, NAVD88

LANDFILL 8 SITE PLAN AND 14 AUGUST 2006 GROUNDWATER ELEVATION MAP

Treadwell&Rollo



Presidio Trust

34 Graham Street
P.O. Box 29052
San Francisco, CA
94129-0052
415/561-5300
fax 561-5315
April 2007

FIGURE A-2-1

FILL SITE 6
APPENDIX SECTION A-3
SEMI-ANNUAL GROUNDWATER MONITORING REPORT
THIRD AND FOURTH QUARTERS 2006
Presidio of San Francisco, California

1.0 INTRODUCTION AND BACKGROUND

Fill Site 6 is located in the northeastern portion of the Presidio (Figure 1). The site elevation ranges from approximately 10 to 40 feet above the PLLW datum (Montgomery Watson, 1997a). Fill Site 6 is bounded by Lincoln Boulevard to the south, Halleck Street to the west, General Kennedy Avenue to the east, and Doyle Drive to the north (Figure A-3-1). The topography across Fill Site 6 is relatively flat and covered by buildings, streets, paved areas, and landscaping. Fill Site 6 is reported to contain building debris from the original Letterman Army Medical Center, which was demolished in 1975, as well as a variety of other buildings. During construction of the parking lot east of Building 1028 in the 1980s, some building debris was discovered (Dames & Moore, 1997). In the southwest corner of the site, a mounded area relative to the adjacent areas (Fill Site 6A), was formerly present and contained PCB-impacted soil (EKI, 2003).

The Trust installed four monitoring wells (LF6GW100, LF6GW101, LF6GW102, and LF6GW103) in July 2000 to investigate whether Fill Site 6 contains soluble concentrations of chemicals of concern that adversely affect groundwater quality, and to investigate the possibility that fill materials extend west of Girard Road (EKI, 2003).

Groundwater samples collected from Fill Site 6 monitoring wells (Figure A-3-1) have been analyzed for general chemistry, dissolved oxygen, TPHg, TPHd, PAHs, OCPs, PCBs, TDS, and 23 dissolved metals. Additionally, monitoring well 231GW09 was added to the Fill Site 6 monitoring plan to serve as a downgradient well for Fill Site 6A and sampled for general chemistry, dissolved oxygen, TDS, VOCs, MTBE, TPHg, TPHd, TPHfo, dissolved gases, TOC, and dissolved metals. Groundwater analytical results are presented in Tables A-3-1 through A-3-5.

Monitoring well LF6GW102 was abandoned prior to the Second Quarter 2005 in preparation for the Fill Site 6A remedial action, as discussed in Section 3.0 below.

Based on the availability of data associated with the Building 1065 Study Area, Fill Site 6 has been divided into two portions, Fill Site 6A (FS 6A) and Fill Site 6B (FS 6B) (Figure A-3-1). FS 6A addresses the portion of Fill Site 6 bounded by Lincoln Boulevard to the south, Girard Avenue to the east, the area just west of the buildings to the west of Halleck Street, and a sidewalk between Building 227 and 1030 to the north. In FS 6A, PCBs and mercury were present in soil above applicable cleanup

levels. FS 6B soil is currently undergoing further characterization so that remedial actions for FS 6B can be assessed (CDM, 2006).

2.0 SITE DESCRIPTION AND GEOLOGY

Fill Site 6 is located in the Northeastern Groundwater Area of the Marina Groundwater Basin (Figure 1). Depth to groundwater ranges from approximately 6 to 22 feet bgs within monitoring wells associated with Fill Site 6. Groundwater level data indicate groundwater flow is generally to the north, towards the San Francisco Bay.

During the drilling of the RI soil borings in the eastern portion of Fill Site 6, two lithologic units were encountered in the area. Underneath the paved areas west of Building 1028, the upper layer consists of fill material extending to a maximum depth of 7 feet bgs. The fill was found to include wood, bricks, concrete, ceramic tiles, asphalt roofing materials, and buckshot (Montgomery Watson, 1999b). The fill is believed to consist largely of building demolition debris. Below the fill is clayey silty sand to well-sorted sand with minor clay layers of the Colma Formation, which is consistent with geologic mapping of the area conducted by Schlocker (Schlocker, 1974). The Franciscan Formation is estimated to be present at approximately 175 feet bgs in this area.

Lithologic units encountered in the southwestern corner of Fill Site 6 include an upper layer of fill material extending to an approximate depth of 15 or more feet, underlain by slope debris, ravine fill, and Colma Formation deposits. The fill consists largely of building demolition debris in a sand matrix and ranges from minor debris to significant sand and concrete foundations and rubble.

3.0 REMEDIAL ACTION PLAN

The *Remedial Action Plan (RAP) for Fill Site 6A and Baker Beach Disturbed Areas 3 and 4*, selected excavation, recycling, and offsite disposal of impacted fill material and underlying soil, along with groundwater monitoring, as the remedial alternative for Fill Site 6A (Figure A-3-1). The goal of the remediation at Fill Site 6A was to remove all contaminated material, leaving in place soil that meets the established cleanup levels (Treadwell & Rollo, 2003b).

In accordance with the California Code of Regulations, Title 27, Subchapter 3, Section 20390, a site that has undergone clean closure (where all wastes and residues, contaminated subsoil, and other contaminated materials are removed or decontaminated at closure) must be shown to comply with the water quality protection standards or the cleanup levels presented in Section 3 of the RAP for three years. Tables A-3-1 through A-3-4 contain RAP groundwater cleanup levels applicable to FS 6A. These cleanup levels are based on the most stringent values for protecting drinking and surface waters. RAP-specified groundwater cleanup levels for some

analytes are slightly lower than their QAPP analytical reporting limits. Applicable RAP-specified cleanup levels are listed on site data tables.

Pre-excavation activities at FS 6A began in the winter of 2004 and excavation began in May 2005. Prior to remediation excavation activities, monitoring well LF6GW102 was abandoned.

The FS 6A remedial excavation was completed in September 2005. Following completion of excavation activities, three new wells (LF6GW104 through LF6GW106) were installed per the RAP and six new piezometers (LF6PZ101 through LF6PZ106) were installed to monitor groundwater levels related to stream restoration at locations shown on Figure A-3-1 (MACTEC, 2006b).

The installation of the new wells and piezometers completes the FS 6A RAP groundwater well monitoring network, which consists of both new and existing wells. The proposed groundwater monitoring program and rationale is presented in Table 10 of the RAP (Treadwell & Rollo, 2003b).

The six new piezometers were constructed using hand-held equipment and were installed directly into native soil. Because no sand pack or grout material was used in the construction of the piezometers, it was subsequently determined that development was not required. The piezometers were measured for groundwater elevation beginning in the First Quarter 2006.

The remainder of Fill Site 6, consisting of FS 6B, is currently being evaluated for potential remedial action alternatives in a future RAP (CDM, 2006).

4.0 GROUNDWATER MONITORING

During the Third and Fourth quarters 2006, six Fill Site 6 associated monitoring wells (LF6GW100, LF6GW101, and LF6GW103 through LF6GW106) and one Building 231/207 Area monitoring well (Figure A-3-1) were proposed for groundwater elevation measurements. Beginning with the Second Quarter 2003, the sampling frequency and analytical suite for monitoring well 231GW09 was modified to serve as a downgradient well for FS 6A (Tables 1A and 1B).

During the Third Quarter 2006, groundwater samples were collected from wells LF6GW103, LF6GW105, LF6GW106 and 231GW09 (Table 1A). Monitoring well LF6GW104 was scheduled for sampling during the Third Quarter 2006, but could not be located because landscaping material covered the area.

During the Fourth Quarter 2006, groundwater samples were collected from monitoring wells LF6GW103 through LF6GW106 and 231GW09, in accordance with Table 1B.

Water level meters were calibrated on 14 August and 4 December 2006 and the calibration logs can be found in Appendix B. Groundwater elevation field forms can be found in Appendix C.

4.1 Groundwater Elevation Measurements

Groundwater elevation measurements were collected from all Fill Site 6 monitoring wells and piezometers proposed, except LF6GW104, during the Third and Fourth Quarters 2006 on 14 August and 4 December 2006, respectively. Monitoring well LF6GW104 was covered during the Third Quarter 2006 and therefore, the groundwater elevation was not measured.

During the Third Quarter 2006, Fill Site 6 groundwater elevations ranged from 11.04 to 19.82 feet above PLLW in monitoring wells LF6GW103 and LF6GW105, respectively (Figure A-3-2). During the Fourth Quarter 2006, groundwater elevations ranged from 10.80 to 19.42 feet above PLLW in monitoring wells LF6GW103 and LF6GW105, respectively (Figure A-3-3). Groundwater elevations are presented in Table A-3-6.

The water level measurements from the six new piezometers (LF6PZ101 through LF6PZ106) ranged in elevation from 9.21 to 13.44 feet above PLLW, during the Third and Fourth Quarters 2006. These water levels are associated with surface stream water levels and are shallower than site groundwater levels, and therefore, they were not used to create groundwater contours.

Fill Site 6 groundwater elevations were evaluated with Building 231/207 and Building 1065/1027 shallow monitoring wells to better understand groundwater flow direction and gradients in this area. Groundwater elevation data for these adjacent sites can be found in Tables A-10-3 and A-11-4, respectively. A discussion of groundwater elevation trends in the Fill Site 6 and Building 1065 vicinity can be found in Appendix A-11.

During the Third and Fourth Quarters 2006, the groundwater flow direction in the Fill Site 6 and surrounding areas was generally north to northeast, towards the San Francisco Bay (Figures A-3-2 and A-3-3). The Third Quarter 2006 groundwater gradient was approximately 0.013 feet per foot. The Fourth Quarter 2006 groundwater gradient was approximately 0.011 feet per foot.

4.2 Monitoring Well Purging and Sampling

The Third Quarter 2006 sampling occurred on 15 and 16 August 2006. The Fourth Quarter 2006 sampling occurred on 5 and 6 December 2006. The Third and Fourth Quarter 2006 sampling at FS 6A was conducted in accordance with methods shown in Tables 1A and 1B of the main text and in accordance with procedures described in the FSP (Treadwell & Rollo, 2001a).

Purge equipment, purging volumes, purge water general chemistry parameters, and sampling equipment for each monitoring well are described in the purge records located at the conclusion of this section. Purge water was stored for future disposal in one of two 2,800-gallon aboveground polyethylene storage tanks, which are located at the Central Magazine.

4.3 Groundwater Analytical Program

All groundwater samples collected were submitted to the project laboratory for the analyses shown in Tables 1A and 1B of the main text.

The appropriate sampling containers, preservatives, and maximum holding times for each analytical method are shown in Table 5. Sample containers used for each well are described in the purge records located at the conclusion of this section.

QA/QC samples were collected as part of this program. Section 6.2 of the main text discusses the QA/QC sampling and analysis performed during the Third and Fourth Quarters 2006.

5.0 GROUNDWATER ANALYTICAL RESULTS

Groundwater samples collected from FS 6A monitoring well LF6GW103 were analyzed for TPHg, TPHd, PAHs, OCPs, PCBs, TDS, general chemistry parameters, and 23 dissolved metals, during the Third and Fourth Quarters 2006.

Monitoring well LF6GW105 and LF6GW106 samples were analyzed for TDS, general chemistry parameters and 23 dissolved metals during the Third and Fourth Quarters 2006. Samples from monitoring well LF6GW106 were also analyzed for PAHs, TPHd and TPHfo during the Third and Fourth Quarters 2006. Monitoring well LF6GW104 could not be located as material was covering the area during the Third Quarter 2006, but was sampled and analyzed for TDS, general chemistry parameters, PAHs, TPHd, TPHfo and 23 dissolved metals during the Fourth Quarter 2006.

Groundwater samples collected from monitoring well 231GW09 were analyzed for TPHg, TPHd, TPHfo, VOCs/MTBE, TDS, sulfide, general chemistry parameters, and 23 dissolved metals, during the Third and Fourth Quarters 2006.

The following sections discuss analytical results collected at Fill Site 6 during the Third and Fourth Quarters 2006.

5.1 Dissolved Oxygen Results

Dissolved oxygen was measured in all wells sampled during the Third and Fourth Quarters 2006. Dissolved oxygen results are presented in Table A-3-2.

During the Third Quarter 2006, dissolved oxygen was measured at concentrations ranging from 0.51 to 3.12 mg/L at monitoring wells 231GW09 and LF6GW103, respectively. Dissolved oxygen concentrations were within historical ranges for the Third Quarter 2006. During the Fourth Quarter 2006, dissolved oxygen was measured at concentrations ranging from 0.02 to 0.98 mg/L at monitoring wells LFGW105 and LF6GW104, respectively. The dissolved oxygen

concentration measured in monitoring well LF6GW105 during the Fourth Quarter 2006 was a new low concentration. Dissolved oxygen concentrations were generally within historical ranges for the Fourth Quarter 2006.

5.2 General Chemistry Results

Chloride was detected at a new low concentration of 35 mg/L in monitoring well LF6GW103 during the Third Quarter 2006. This low concentration was only slightly outside of the historical low and can be attributed to natural fluctuation. The remaining general chemistry results were within historical ranges during the Third and Fourth Quarters 2006.

5.3 TPH Results

As shown in Table A-3-1, no TPH compounds were detected within any Fill Site 6 associated wells sampled during either the Third or Fourth Quarters 2006. TPH has not exceeded RAP cleanup levels to date within any Fill Site 6 monitoring well samples.

5.4 OCP and PCB Results

Monitoring well LF6GW103 was the only Fill Site 6 monitoring well scheduled for OCP and PCB analysis during the Third and Fourth Quarters 2006. No OCPs or PCBs were detected in LF6GW103 during the Third and Fourth Quarters 2006 as shown in Table A-3-2.

Aldrin was detected, at a concentration of 0.05 µg/L, for the first time at Fill Site 6 in the sample collected from monitoring well LF6GW103 during the Third Quarter 2005. The detected concentration exceeded the RAP-specified cleanup level of 0.00013 µg/L. Based on the fact that aldrin had never been detected in the past and was not detected in the Fourth Quarter 2005 or during 2006, it appears this detection was an anomaly.

5.5 PAH Results

As shown in Table A-3-2, no PAHs were detected in samples from wells LF6GW103 through LF6GW106 during the Third and Fourth Quarters 2006. However, the laboratory detection limits for benzo(a)anthracene, benzo(b)fluoranthene, and chrysene are greater than the RAP-specified cleanup levels.

5.6 Dissolved Metals and TDS Results

Monitoring well samples from LF6GW103, LF6GW105, LF6GW106, and 231GW09 were analyzed for dissolved metals and TDS, during the Third and Fourth Quarters 2006. Monitoring well LF6GW104 could not be located as landscaping material was covering the area during the Third Quarter 2006, but was sampled and analyzed for 23 dissolved metals and TDS during the Fourth Quarter 2006.

The majority of the metal concentrations detected were generally within historical ranges. New high and low dissolved metals concentrations detected during the Third and Fourth Quarters 2006 are discussed below.

Chromium was detected at a new high concentration of 26 µg/L in monitoring well 231GW09 during the Third and Fourth Quarters 2006 and the Fourth Quarter QC duplicate sample had a detection of 30 µg/L. However, the new high concentrations were only slightly outside of the historical high and can be attributed to natural fluctuation.

In the Third Quarter 2006, silver was detected for the first time in the QC duplicate sample collected from LF6GW103 at a concentration of 4 µg/L. Silver was not detected in any of the LF6GW103 samples in the Fourth Quarter 2006.

The remaining dissolved metal results were within historical ranges during the Third and Fourth Quarters 2006 as shown in Table A-3-3. No dissolved metal concentrations were detected above their respective cleanup levels during the Third and Fourth Quarters 2006.

6.0 GROUNDWATER REDOX PARAMETERS

Several parameters were measured in the field and in the laboratory to help determine the redox state of groundwater at Fill Site 6.

The Trust has prepared a *Technical Memorandum: Arsenic and Other Metals in Groundwater at Three Corrective Action Sites, Presidio of San Francisco, California* to aid in evaluating groundwater conditions at CAP sites (MACTEC, 2006a). This technical memorandum discusses the reduction/oxidation (redox) state of groundwater at Fill Site 6 using data collected as part of the Presidio-wide Groundwater Monitoring Program in order to provide upgradient groundwater information for the Building 231/207 and Building 1065 Area CAP sites. Groundwater redox parameter results collected during the Third and Fourth Quarters 2006 were generally within the range of previously detected concentrations at Fill Site 6. Analytical results detected outside of historical bounds are summarized below.

- Dissolved oxygen was measured in monitoring well LF6GW105 during the Fourth Quarter 2006 at a new low concentration of 0.02 mg/L.

Modified redox diagrams were developed for each Fill Site 6 monitoring well sampled. The redox diagrams were generated using the Sequence™ program and concentrations of dissolved oxygen, nitrate, manganese, iron, sulfate and methane and are plotted on Figure A-3-4. Each redox diagram consists of multiple axes, with each individual axis representing one of the above analytes. Each redox diagram is associated with one monitoring well location. The relative shape of each redox diagram represents an approximation of the redox state within the well studied. In general, the larger the polygon the more oxidizing the groundwater environment is at the well location, conversely, the smaller the polygon the more reducing the environment.

Fill Site 6 and Building 1065 Area (shallow zone) redox diagrams are shown on Figure A-3-4 to illustrate the differing redox environments across the sites.

7.0 CONCLUSIONS & RECOMMENDATIONS

Groundwater elevations, gradients, and flow directions are consistent with historical values and interpretations. No significant trends or observations were identified at Fill Site 6 during the Third and Fourth Quarters 2006.

No applicable groundwater cleanup levels were exceeded at Fill Site 6 during either the Third or Fourth Quarters 2006.

Table A-3-1
Results of TPH Analyses
Fill Site 6
Presidio of San Francisco, California

Well Name	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		443	443	443
LF6GW100	03/17/06	< 50	< 50	NA
	04/04/05	< 50	< 50	NA
	03/15/04	< 50	NA	NA
	12/05/03	< 50	< 50	NA
	12/05/03	< 50	< 50	NA
	12/05/03	< 50	< 48 UJ	NA
	08/20/03	< 50	< 50	NA
	06/09/03	< 50	< 50	NA
	03/19/03	< 50	< 50	NA
	12/06/02	< 50	< 50	NA
DUP0905023A	09/05/02	< 50	< 50	NA
	09/05/02	< 50	< 50	NA
	06/05/02	< 50	< 50	NA
	03/12/02	< 50	< 50	NA
DUP0312022A	03/12/02	< 50	< 50	NA
LF6GW100CL	03/12/02	< 50	< 50 UJ	NA
DUP1204011A	12/04/01	< 50	< 50	NA
	12/04/01	< 50	< 50	NA
	12/04/01	< 50	< 50	NA
	08/29/01	< 50	60 ³ Y,NJ	NA
	05/17/01	< 50	< 50	NA
LF6GW101	07/19/00	< 50	< 50	NA
	03/17/06	< 50	< 50	NA
	04/04/05	< 50	< 50	NA
	03/15/04	< 50	NA	NA
	12/05/03	< 50	< 50	NA
	08/20/03	< 50	< 50	NA
	06/10/03	< 50	< 50	NA
	03/19/03	< 50	< 50	NA
	12/06/02	< 50	< 50	NA
	09/04/02	< 50	< 50	NA
DUP0605021A	06/05/02	< 50	< 50	NA
	06/05/02	< 50	< 50	NA
	03/13/02	< 50	< 50	NA
	12/04/01	< 50	< 50	NA
	08/29/01	< 50	< 50 ³	NA
	05/17/01	< 50	< 50	NA
	07/19/00	< 50	< 50	NA
	07/19/00	< 50	< 50	NA
LF6GW102	04/04/05	< 50	< 50	NA
	12/16/04	< 50	< 50	NA
	08/12/04	< 50	< 50	NA
	05/26/04	< 50	< 50	NA
	03/17/04	< 50	< 50	NA
	12/08/03	< 50	< 50	NA
	08/18/03	< 50	< 50	NA
	06/04/03	< 50	< 50	NA
	03/18/03	< 50	< 50	NA
	03/18/03	< 50	< 50	NA
DUP0318031A	03/18/03	< 50	< 50	NA
LF6GW102CL	03/18/03	< 50	< 50	NA

Table A-3-1
Results of TPH Analyses
Fill Site 6
Presidio of San Francisco, California

Well Name	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		443	443	443
LF6GW102 DUP0313021A DUP1203013A	12/11/02	< 50	< 50	NA
	09/05/02	< 50	< 50	NA
	06/06/02	< 50	< 50	NA
	03/13/02	< 50	< 50	NA
	03/13/02	< 50	< 50	NA
	12/03/01	< 50	< 50	NA
	12/03/01	< 50	< 50	NA
	09/07/01	< 50	57 ³ Y,NJ	NA
	05/18/01	< 50	< 50	NA
LF6GW103 DUP1205062A LF6GW103CL DUP0816061A LF6GW103CL DUP1130053B LF6GW103CL DUP0405053A LF6GW103CL DUP0812042A	12/05/06	< 50	< 50	NA
	12/05/06	< 50	< 50	NA
	12/05/06	< 50 U	< 48 U	NA
	08/16/06	< 50	< 50	NA
	08/16/06	< 50	< 50	NA
	08/16/06	< 50 U	< 50 U	NA
	05/23/06	< 50	76 Y	NA
	03/17/06	< 50	< 50	NA
	11/30/05	< 50	< 50	NA
	11/30/05	< 50	< 50	NA
	11/30/05	< 50 U	< 50 U	NA
	08/31/05	< 50	< 50	NA
	05/25/05	< 50	< 50	NA
	04/05/05	< 50	< 50	NA
	04/05/05	< 50	< 50	NA
	04/05/05	< 50 U	< 50 U	NA
	12/16/04	< 50	< 50	NA
	08/12/04	< 50	< 50	NA
	08/12/04	< 50	< 50	NA
	05/26/04	< 50	< 50	NA
	03/15/04	< 50	NA	NA
	12/09/03	< 50	< 50	NA
	08/14/03	< 50	< 50	NA
	06/10/03	< 50	< 50	NA
	03/19/03	< 50	< 50	NA
	12/06/02	< 50	< 50	NA
	09/05/02	< 50	< 50	NA
	06/05/02	< 50	< 50	NA
	03/13/02	< 50	< 50	NA
	12/04/01	< 50	< 50	NA
	08/29/01	< 50	< 50 ³	NA
	05/17/01	< 50	< 50	NA
	07/19/00	< 50	< 50	NA
LF6GW104	12/06/06	NA	< 50	< 300
	05/23/06	NA	< 50	< 300
	03/17/06	NA	< 50	< 300
	12/07/05	NA	< 50	< 300
LF6GW106	12/06/06	NA	< 50	< 300
	08/16/06	NA	< 50	< 300
	05/23/06	NA	< 50	< 300
	03/20/06	NA	< 50	< 300
	12/07/05	NA	< 50	< 300

Table A-3-1
Results of TPH Analyses
Fill Site 6
Presidio of San Francisco, California

Well Name	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		443	443	443
231GW09	12/05/06	< 50	< 50	< 300
DUP1205062B	12/05/06	< 50	< 50	< 300
231GW09CL	12/05/06	< 50 U	< 48 U	< 290 U
	08/15/06	< 50	< 50	< 300
	05/24/06	< 50	< 50	< 300
	03/15/06	< 50	< 50	< 300
	11/29/05	< 50	< 50	< 300
DUP1129052A	11/29/05	< 50	< 50	< 300
231GW09	08/31/05	< 50	< 50	< 300
	06/01/05	< 50	< 50	< 300
	04/04/05	< 50	< 50	< 300
	12/17/04	< 50	< 50	< 300
DUP1217042A	12/17/04	< 50	< 50	< 300
	08/12/04	< 50	< 50	< 300
	05/27/04	< 50	170 HY	< 300
DUP0527042C	05/27/04	< 50	< 50	< 300
231GW09CL	05/27/04	< 50	< 66	< 330
	03/18/04	< 50	< 50	< 300
	12/04/03	NA	NA	NA
	08/15/03	< 50	< 50	< 300
	06/10/03	NA	NA	NA

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - From Table 3 of the RAP (Treadwell & Rollo, 2003c).

3 - TPH analysis was not run using the silica gel cleanup method 3630A, although it was marked on the chain of custody.

µg/L - micrograms per liter

NA - Not analyzed

TPH - Total petroleum hydrocarbons

H - Heavier hydrocarbons contributed to the quantitation.

Y - Sample exhibits a fuel pattern that does not resemble the standard

Z - Sample exhibits unknown single peak or peaks.

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-3-2
Results of General Chemistry, PAH, OCP, PCB, and Dissolved Oxygen Analyses
Fill Site 6
Presidio of San Francisco, California

Well Name	Sample Date	General Chemistry										ORP	pH	Temperature	PAHs					OCPs and PCBs			
		Dissolved Oxygen	Alkalinity Total	Bicarbonate	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Sulfide					Benzo(a)-Anthracene	Benzo(b)-Fluoranthene	Chrysene	Fluoranthene	All Other PAHs	Aldrin	Dieldrin	Endosulfan I	All Other OCPs and PCBs
	Analytical Method ¹	Field	E310.1	E310.1	E300.0	E300.0	E300.0	E300.0	E300.0	E300.0/ SW9056		Field	Field	Field	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8081/ SW8081A	SW8081/ SW8081A	SW8081/ SW8081A	SW8081/ SW8081A/ SW8082
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mV)	pH units	C°		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	--	--	--	--	--	--	--	--	--	--	--	--	0.0044	0.0044	0.0044	300	--	0.00013	0.00014	110	--
LF6GW100	03/17/06	0.93	310	310	34	0.11	0.42	< 0.05	37	0.2 J-	205	6.95	12.7		< 0.09	< 0.19	< 0.09	< 0.38	ND	< 0.05	< 0.09 UJ	< 0.05	ND
	04/04/05	5.5	250	250	30	0.12	0.37	< 0.05	33	< 0.04 UJ	NR	NR	NR		< 0.1	< 0.19	< 0.1	< 0.38	ND	< 0.05	< 0.1	< 0.05	ND
	03/15/04	2.6	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.1	< 0.2	< 0.1	< 0.4	ND	< 0.05	< 0.1	< 0.05	ND
	12/05/03	2	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.1	< 0.19	< 0.1	< 0.38	ND	< 0.05	< 0.1	< 0.05	ND
	12/05/03	--	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.1	< 0.19	< 0.1	< 0.38	ND	< 0.05	< 0.1	< 0.05	ND
	12/05/03	--	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.049	< 0.097	< 0.049	< 0.097	ND	< 0.049	< 0.098 UJ	< 0.049	ND
	08/20/03	1.1	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.1	< 0.19	< 0.1	< 0.39	ND	< 0.05	< 0.09 UJ	< 0.05	ND
	06/09/03	4.7	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.1	< 0.19	< 0.1	< 0.38	ND	< 0.05	< 0.09 UJ	< 0.05	ND
	03/19/03	5.2	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.09	< 0.19	< 0.09	< 0.38	ND	< 0.05	0.1	< 0.05	ND
	12/06/02	3.9	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.09	< 0.19	< 0.09	< 0.38	ND	< 0.049	< 0.098 UJ	< 0.049	ND
DUP1205033A LF6GW100CL	09/05/02	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.09	< 0.19	< 0.09	< 0.38	ND	< 0.05 UJ	< 0.1	< 0.05 UJ	ND
	09/05/02	--	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.09	< 0.19	< 0.09	< 0.38	ND	< 0.05 UJ	< 0.1	< 0.05 UJ	ND
	06/05/02	1.7	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		0.11	0.26	0.17	0.17 J	ND	< 0.047	< 0.094	< 0.047	ND
	03/12/02	0.9	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.1	< 0.19	< 0.1	< 0.38	ND	< 0.048 UJ	< 0.096	< 0.048 UJ	ND
	03/12/02	--	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.1	< 0.19	< 0.1	< 0.38	ND	< 0.048 UJ	< 0.096	< 0.048 UJ	ND
	03/12/02	--	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.1	< 0.1	< 0.1	< 0.15	ND	< 0.05	0.073 J-	< 0.05	ND
	12/04/01	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.1	< 0.19	< 0.1	< 0.38	ND	< 0.048	< 0.096 UJ	< 0.048	ND
	12/04/01	--	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.1	< 0.19	< 0.1	< 0.38	ND	< 0.048	< 0.096 UJ	0.058	ND
	12/04/01	--	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.1	< 0.1	< 0.1	< 0.15	ND	< 0.06	< 0.06	< 0.06	ND
	08/29/01	2.8	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.09	< 0.19	< 0.09	< 0.38	ND	< 0.049	< 0.097 UJ	< 0.049	ND
DUP1204011A LF6GW100CL	05/17/01	6.1	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.09 UJ	< 0.19 UJ	< 0.09 UJ	< 0.38 UJ	ND	< 0.049	< 0.097 UJ	< 0.049	ND
	07/19/00	4.1	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 9.6	< 9.6	< 9.6	< 9.6	ND	< 0.094	< 0.094	< 0.094	ND
LF6GW101	03/17/06	4.15	420	420	44	< 0.1	0.64	< 0.05	50	< 0.04 R	-249.2	5.76	14.4		< 0.1	< 0.19	< 0.1	< 0.38	ND	< 0.05	< 0.1	< 0.05	ND
	04/04/05	5.1	320	320	43	< 0.1	0.59	< 0.05	48	< 0.04 UJ	NR	NR	NR		< 0.1	< 0.19	< 0.1	< 0.38	ND	< 0.05	< 0.1 UJ	< 0.05	ND
	03/15/04	2.2	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.1	< 0.19	< 0.1	< 0.39	ND	< 0.05	< 0.1 UJ	< 0.05	ND
	12/05/03	2.4	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.1	< 0.19	< 0.1	< 0.38	ND	< 0.05	< 0.1	< 0.05	ND
	08/20/03	0.7	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.09	< 0.19	< 0.09	< 0.38	ND	< 0.05	< 0.09 UJ	< 0.05	ND
	06/10/03	4.9	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.1	< 0.19	< 0.1	< 0.38	ND	< 0.05	< 0.09 UJ	< 0.05	ND
	03/19/03	5	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.09	< 0.19	< 0.09	< 0.38	ND	< 0.05	< 0.09	< 0.05	ND
	12/06/02	5.3	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.1	< 0.19	< 0.1	< 0.39	ND	< 0.049 UJ	< 0.098 UJ	< 0.049 UJ	ND
	09/04/02	1.4	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.09	< 0.19	< 0.09	< 0.38	ND	< 0.047 UJ	< 0.094	< 0.047 UJ	ND
	06/05/02	0.9	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.09	< 0.19	< 0.09	< 0.38	ND	< 0.047 UJ	< 0.094	< 0.047 UJ	ND
DUP0605021A	06/05/02	--	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.09	< 0.19	< 0.09	< 0.38	ND	< 0.047 UJ	< 0.094	< 0.047 UJ	ND
	03/13/02	4.2	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.1	< 0.19	< 0.1	< 0.38	ND	< 0.048 UJ	< 0.096	< 0.048 UJ	ND
	12/04/01	0.9	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.1	< 0.19	< 0.1	< 0.38	ND	< 0.048	< 0.096 UJ	< 0.048	ND
	08/29/01	4.1	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.1	< 0.2	< 0.1	< 0.41	ND	< 0.049 UJ	< 0.097 UJ	< 0.049 UJ	ND
	05/17/01	5.7	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.09 UJ	< 0.19 UJ	< 0.09 UJ	< 0.38 UJ	ND	< 0.049	< 0.097 UJ	< 0.049	ND
	07/19/00	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 9.5	< 9.5	< 9.5	< 9.5	ND	< 0.094	< 0.094	< 0.094	ND
	04/04/05	0.1	1,000	1,000	57	0.23	< 0.05	< 0.05	120	< 0.04 UJ	NR	NR	NR		< 0.1	< 0.19	< 0.1	< 0.38	ND	< 0.05 UJ	< 0.1 UJ	< 0.05 UJ	ND
	12/16/04	0.6	740	740	33	0.15	< 0.05	< 0.05	3	NA	NR	NR	NR		< 0.09	< 0.19	< 0.09	< 0.38	ND	< 0.05	< 0.1	< 0.05	ND
	08/12/04	0.29	660	660	30	0.15	0.05	< 0.05	6.3	NA	NR	NR	NR		< 0.09	< 0.19	< 0.09	< 0.38	ND	< 0.05	< 0.09	< 0.05	ND
	05/26/04	0.52	580	580	31	0.14	< 0.05	< 0.05	11	NA	NR	NR	NR		< 0.1	< 0.19	< 0.1	< 0.38	ND	< 0.05 UJ	< 0.09	< 0.05 UJ	ND
DUP0318031A LF6GW102CL	03/17/04	0.18	930	930	45	NA	< 0.05	< 0.05	68	NA	NR	NR	NR		< 0.1	< 0.19	< 0.1	< 0.38	ND	< 0.05	< 0.1 UJ	< 0.05	ND
	12/08/03	1.2	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.09	< 0.19	< 0.09	< 0.38	ND	< 0.05	< 0.09	< 0.05	ND
	08/18/03	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.1	< 0.2	< 0.1	< 0.39	ND	< 0.05	< 0.09	< 0.05	ND
	06/04/03	0.3	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.1	< 0.19	< 0.1 U	< 0.38	ND	< 0.05	< 0.1 UJ	< 0.05	ND
	03/18/03	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.1	< 0.19	< 0.1	< 0.38	ND	< 0.05 UJ	< 0.1	< 0.05 UJ	ND
	03/18/03	--	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.09	< 0.19	< 0.09	< 0.38	ND	< 0.05	< 0.09	< 0.05	ND
	03/18/03	--	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.05	< 0.1	< 0.05	< 0.1	ND	< 0.05 UJ	< 0.098 UJ	< 0.049	ND
	12/11/02	0.2	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.09	< 0.19	< 0.09	< 0.38	ND	< 0.047 UJ	< 0.094	< 0.047 UJ	ND
	09/05/02	1	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.09	< 0.19	< 0.09	< 0.38	ND	< 0.047 UJ	< 0.094	< 0.047 UJ	ND
	06/06/02	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.09	< 0.19	< 0.09	< 0.38	ND	< 0.047 UJ	< 0.094	< 0.047 UJ	ND
DUP0313021A	03/13/02	1.8	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR		< 0.1	< 0.19	< 0.1	< 0.38	ND	< 0.048 UJ	< 0.096	< 0.048 UJ	ND

Table A-3-2
Results of General Chemistry, PAH, OCP, PCB, and Dissolved Oxygen Analyses
Fill Site 6
Presidio of San Francisco, California

Well Name	Sample Date	General Chemistry									ORP	pH	Temperature	PAHs					OCPs and PCBs			
		Dissolved Oxygen	Alkalinity Total	Bicarbonate	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Sulfide				Benzo(a)-Anthracene	Benzo(b)-Fluoranthene	Chrysene	Fluoranthene	All Other PAHs	Aldrin	Dieldrin	Endosulfan I	All Other OCPs and PCBs
	Analytical Method ¹	Field	E310.1	E310.1	E300.0	E300.0	E300.0	E300.0	E300.0	E300.0/ SW9056	Field	Field	Field	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8081/ SW8081A	SW8081/ SW8081A	SW8081/ SW8081A	SW8081/ SW8081A/ SW8082
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mV)	pH units	C°	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	--	--	--	--	--	--	--	--	--	--	--	0.0044	0.0044	0.0044	300	--	0.00013	0.00014	110	--
LF6GW103	12/05/06	0.75	320	320	39	< 0.1	3.3	< 0.05	97	NA	193.7	7	15.2	< 0.09	< 0.19	< 0.09	< 0.38	ND	< 0.05	< 0.09	< 0.05	ND
	DUP1205062A	12/05/06	--	330	330	38	< 0.1	3.2	< 0.05	95	NA	--	--	< 0.09	< 0.19	< 0.09	< 0.38	ND	< 0.05	< 0.09	< 0.05	ND
LF6GW103CL	12/05/06	--	324	324	40	< 1 U	3	< 0.1 U	100	NA	--	--	--	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	ND	< 0.05 U	< 0.1 U	< 0.05 U	ND
DUP0816061A	08/16/06	3.12	300	300	35	< 0.1	3.8	< 0.05	100	NA	199.3	6.65	16.80	< 0.09	< 0.19	< 0.09	< 0.94	ND	< 0.05	< 0.1	< 0.05 # UJ	ND
	08/16/06	--	310	310	35	< 0.1	3.8	< 0.05	100	NA	--	--	--	< 0.09	< 0.19	< 0.09	< 0.94	ND	< 0.05	< 0.09	< 0.05 # UJ	ND
LF6GW103CL	08/16/06	--	317	317	35	< 2 U	3.8 J-	< 0.02 U	106	NA	--	--	--	< 0.2 U UJ	< 0.2 U UJ	< 0.2 U UJ	< 1 U UJ	ND	< 0.05 U	< 0.1 U UJ	< 0.05 U	ND
DUP1130053B	05/23/06	1.3	310	310	41	< 0.1	3.2	< 0.05	90	NA	51.3	6.7	16.2	< 0.09	< 0.19	< 0.09	< 0.38	ND	< 0.05	< 0.09	< 0.05	ND
	03/17/06	0.84	320	320	41	< 0.1	2.4	< 0.05	77	< 0.04 R	10.5	6.94	14.4	< 0.09	< 0.19	< 0.09	< 0.38	ND	< 0.05	< 0.09 UJ	< 0.05	ND
	11/30/05	3.1	370 J+	370	49	< 0.1	2.9	< 0.05	110	NA	NR	NR	NR	< 0.1	< 0.19	< 0.1	< 0.39	ND	< 0.05	< 0.1 UJ	< 0.05	ND
	11/30/05	--	350 J+	350	49	< 0.1	2.9	< 0.05	110	NA	NR	NR	NR	< 0.1	< 0.19	< 0.1	< 0.39	ND	< 0.05	< 0.1 UJ	< 0.05	ND
	11/30/05	--	321	321	48.2	< 1 U	2.98	< 0.1 U	109	NA	NR	NR	NR	NA	NA	NA	NA	ND	< 0.05 U	< 0.1 U UJ	< 0.05 U	ND
DUP0405053A	08/31/05	0.5	330	330	52	< 0.1	2.8	< 0.05	150	NA	NR	NR	NR	< 0.1	< 0.19	< 0.1	< 0.38	ND	0.05 b	< 0.1	< 0.05	ND
	05/25/05	0.9	330	330	52	< 0.1	2.8	< 0.05	150	NA	NR	NR	NR	< 0.1	< 0.19	< 0.1	< 0.39	ND	< 0.05	< 0.1	< 0.05	ND
	04/05/05	2.7	320	320	52	< 0.1	3	< 0.05	140	< 0.04	NR	NR	NR	< 0.1	< 0.19	< 0.1	< 0.38	ND	< 0.05	< 0.1 UJ	< 0.05	ND
	04/05/05	--	350	350	52	< 0.1	3.1	< 0.05	140	< 0.04	NR	NR	NR	< 0.1	< 0.19	< 0.1	< 0.38	ND	< 0.05	< 0.1 UJ	< 0.05	ND
	04/05/05	--	326	326	51	< 0.3 U	3.17	< 0.02 U	147	0.053	NR	NR	NR	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	ND	< 0.05	< 0.1 U	< 0.05 U	ND
DUP0812042A	12/16/04	0.7	330	330	71	< 0.1	3.8	< 0.05	150	NA	NR	NR	NR	< 0.09	< 0.19	< 0.09	< 0.38	ND	< 0.05	< 0.1	< 0.05	ND
	08/12/04	0.33	270	270	78	< 0.1	3.8	< 0.05	130	NA	NR	NR	NR	< 0.09	< 0.19	< 0.09	< 0.38	ND	< 0.05	< 0.1	< 0.05 UJ	ND
	08/12/04	--	320	320	77	< 0.1	3.8	< 0.05	130	NA	NR	NR	NR	< 0.09	< 0.19	< 0.09	< 0.38	ND	< 0.05 UJ	< 0.09	< 0.05	ND
	05/26/04	0.69	300	300	84	< 0.1	3.6	< 0.05	150	NA	NR	NR	NR	< 0.1	< 0.19	< 0.1	< 0.38	ND	< 0.05 UJ	< 0.09	< 0.05 UJ	ND
	03/15/04	2.1	320	320	88	< 0.1	3.9	< 0.05	160	NA	NR	NR	NR	< 0.1	< 0.2	< 0.1	< 0.39	ND	< 0.05	< 0.1	< 0.05	ND
	12/09/03	2.7	330	330.0	95	< 0.1	4.3	< 0.05	160	NA	NR	NR	NR	< 0.1	< 0.19	< 0.1	< 0.38	ND	< 0.05	< 0.1	< 0.05	ND
	08/14/03	3.3	320	320	71	< 0.1	3.8 b,J-	< 0.05 UJ	170	NA	NR	NR	NR	< 0.1	< 0.19	< 0.1	< 0.38	ND	< 0.05	< 0.1	< 0.05	ND
	06/10/03	2.8	320	320	64	< 0.1	4.3	< 0.05	170	NA	NR	NR	NR	< 0.1	< 0.19	< 0.1	< 0.38	ND	< 0.05	< 0.09 UJ	< 0.05	ND
	03/19/03	3.7	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR	< 0.09	< 0.19	< 0.09	< 0.38	ND	< 0.05	< 0.09	< 0.05	ND
	12/06/02	5.5	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR	< 0.1	< 0.19	< 0.1	< 0.39	ND	< 0.049	< 0.098	< 0.049	ND
	09/05/02	2.4	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR	< 0.09	< 0.19	< 0.09	< 0.38	ND	< 0.05 UJ	< 0.099	< 0.05 UJ	ND
	06/05/02	0.8	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR	< 0.09	< 0.19	< 0.09	< 0.38	ND	< 0.047 UJ	< 0.094	< 0.047 UJ	ND
	03/13/02	3.2	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR	< 0.1	< 0.19	< 0.1	< 0.38	ND	< 0.048 UJ	< 0.096	< 0.048 UJ	ND
	12/04/01	1.0	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR	< 0.1	< 0.19	< 0.1	< 0.38	ND	< 0.048	< 0.096 UJ	< 0.048	ND
	08/29/01	3.0	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR	< 0.09	< 0.19	< 0.09	< 0.38	ND	< 0.047 UJ	< 0.094 UJ	< 0.047 UJ	ND
	05/17/01	5.2	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR	< 0.09 UJ	< 0.19 UJ	< 0.09 UJ	< 0.38 UJ	ND	< 0.048	< 0.096 UJ	< 0.048	ND
	LF6GW104	07/19/00	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR	< 9.7	< 9.7	< 9.7	< 9.7	ND	< 0.094	< 0.094	< 0.094
12/06/06		0.98	220	220	31	< 0.1	5.5	< 0.05	200	NA	192.1	6.8	15.9	< 0.09	< 0.19	< 0.09	< 0.38	ND	NA	NA	NA	NA
05/23/06		0.42	230	230	31	< 0.1	5.7	< 0.05	210	NA	75.3	6.8	17.3	< 0.09	< 0.19	< 0.09	< 0.38	ND	NA	NA	NA	NA
03/17/06		2.41	260	260	33	< 0.1	6.9	< 0.05	270	< 0.04 R	240	5.75	15.8	< 0.1	< 0.19	< 0.1	< 0.38	ND	NA	NA	NA	NA
LF6GW105	12/07/05	0.7	330	330	82	< 0.1	20	< 0.05	190	NA	NR	NR	NR	< 0.1	< 0.19	< 0.1	< 0.38	ND	NA	NA	NA	NA
	12/06/06	0.02	290	290	86	< 0.1	4.7	< 0.05	110	NA	139.3	6.7	16.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/16/06	0.98	280	280	87	< 0.1	4.6	< 0.05	100	NA	92.1	6.70	18.60	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/23/06	0.54	280	280	89	< 0.1	4.8	< 0.05	110	NA	92.3	6.7	18.9	NA								

Table A-3-2
Results of General Chemistry, PAH, OCP, PCB, and Dissolved Oxygen Analyses
Fill Site 6
Presidio of San Francisco, California

Well Name	Sample Date	General Chemistry												PAHs					OCPs and PCBs			
		Dissolved Oxygen	Alkalinity Total	Bicarbonate	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Sulfide	ORP	pH	Temperature	Benzo(a)-Anthracene	Benzo(b)-Fluoranthene	Chrysene	Fluoranthene	All Other PAHs	Aldrin	Dieldrin	Endosulfan I	All Other OCPs and PCBs
	Analytical Method ¹	Field	E310.1	E310.1	E300.0	E300.0	E300.0	E300.0	E300.0	E300.0/ SW9056	Field	Field	Field	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8081/ SW8081A	SW8081/ SW8081A	SW8081/ SW8081A	SW8081/ SW8081A/ SW8082
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mV)	pH units	C°	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	--	--	--	--	--	--	--	--	--	--	--	0.0044	0.0044	0.0044	300	--	0.00013	0.00014	110	--
231GW09	06/01/05	1.9	210	210	48	0.11	5.5	< 0.05	77	0.04	NR	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
	04/04/05	2.1	180	180	51	< 0.1	5.5	< 0.05	79	0.11 J-	NR	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/17/04	0.9	120	120	52	< 0.1	5.8	< 0.05	81	NA	NR	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/17/04	--	190	190	51	< 0.1	5.6	< 0.05	79	NA	NR	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP1217042A	08/12/04	0.82	250	250	50	< 0.1	5.8	< 0.05	77	NA	NR	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/27/04	0.49	310	310	51	< 0.1	6	< 0.05	81	NA	NR	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP0527042C	05/27/04	NA	250	250	51	< 0.1	5.7	< 0.05	80	NA	NR	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/27/04	NA	210	210	52 D	0.11	7.1 D	< 0.05	83 D	NA	NR	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
231GW09CL	03/18/04	0.7	210	210	56	< 0.1	6.5	< 0.05	85	NA	NR	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/04/03	1.6	220	220	53	< 0.1	6.9	< 0.05	81	NA	NR	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/15/03	1.7	190	190	51	< 0.1	7.7 b,J-	< 0.05 UJ	91	NA	NR	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
	06/10/03	2.1	250	250	57	< 0.1	9.1	< 0.05	88	NA	NR	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/17/03	5	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/04/02	1.9	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/30/02	4.4	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/30/02	2.8	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/07/02	2.2	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/29/01	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/30/01	3.9	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/09/01	4.4	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
	04/14/99	4.5	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
	01/13/99	4.23	183	183	55.8	NA	33.6	NA	69	NA	NR	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/14/98	4.73	181	181	49	NA	28.2	NA	65	NA	NR	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
	07/15/98	6.62	210	210	49.9 D	NA	32.2 D	NA	68.6 D	NA	NR	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
	04/20/98	4.05	250	250	75.1 D	NA	45.6 D	NA	92.8 D	NA	NR	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
	01/28/98	3.47	190	190	62.4 D	NA	22.3 D	NA	73.8 D	NA	NR	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/23/97	2.08	< 165	< 165	47.5 D	NA	24.5 D	NA	67.4 D	NA	NR	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
	07/24/97	3.72	172	172	42.4 D	NA	29.1 D	NA	75.9 D	NA	NR	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
	04/22/97	3.96	195	195	49.8 D	NA	29.8 D	NA	69.2 D	NA	NR	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA
	01/28/97	1.39	197	197	53.9 D	NA	22.5 D	NA	67 D	NA	NR	NR	NR	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes
1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.
2 - From Table 3 of the RAP (Treadwell & Rollo, 2003c). RAP cleanup levels only apply to wells LF6GW103, LF6GW104, LF6GW105, and 231GW09.

µg/L - micrograms per liter
mg/L - milligrams per liter
C° - degrees centigrade
mV - millivolts
ND - Not detected
NR - Not reported
OCPs - Organochlorine pesticides
ORP - Oxidation-reduction potential
PAHs - Polycyclic aromatic hydrocarbons
PCBs - Polychlorinated biphenyls
Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.
Table 11 in the main report identifies current and historical data qualifiers.
Bold - indicates value above cleanup levels (see note 2 above).
-- Cleanup level not established
NA - Not analyzed
CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table A-3-3
Results of Dissolved Metals Analyses
Fill Site 6
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	1632M	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7470/ SW7470A	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Levels ²		--	6	10	10	1,000	4	1.1	--	50	--	11.8	--	3.2	--	--	0.012	100	--	5	4.1	--	1.7	--	106	--
LF6GW100	03/17/06	< 100	< 1	< 5	NA	18	< 2	< 1	31,000	< 10	< 10	1.3	< 100	< 3	41,000 J	< 10	< 0.2	< 20	810 J-	< 5	< 1	27,000	< 1	< 10	< 20	350
	04/04/05	< 100	< 1	< 5	0.792	16	< 2	< 1	31,000	< 10	< 10	1.5	130	< 3	43,000	< 10	< 0.2	< 20	660	< 5	< 1	32,000	5	< 10	< 20	330
	03/15/04	< 100	< 1	< 5	NA	21	< 2	< 1	39,000	< 10	< 10	2.3	< 100	< 3	55,000	< 10	< 0.2	< 20	710	< 5	< 1	37,000	< 1	14	< 20	510
	12/05/03	< 100	2.3	< 5	NA	18	< 2	< 1	29,000	< 10	< 10	1.1	100	< 3	50,000	< 10	< 0.2	< 20	570	< 5	< 1	30,000	< 1	11	< 20	450
DUP1205033A	12/05/03	< 100	< 1	< 5	NA	17	< 2	< 1	30,000	< 10	< 10	< 1	110	< 3	51,000	< 10	< 0.2	< 20	560	< 5	< 1	31,000	< 1	11	< 20	430
	12/05/03	< 1,000	< 5	5.9	NA	15	< 1	< 1	37,000	< 10	< 7	< 10	< 500	< 3	50,000	< 5	< 0.2	< 10	< 1,200	< 5	< 1	32,000	< 2	11	< 20	380
LF6GW100CL	08/20/03	< 100	< 1	< 5	NA	17	< 2	< 1	35,000	< 10	< 10	2.1	390	< 3	51,000	< 10	< 0.2	< 20	510	< 5	< 1 UJ	30,000	< 1	11	< 20 UJ	480
	06/09/03	< 100	1.2	< 5	NA	15	< 2	< 1	37,000	< 10	< 10	1.1	< 100	< 3	52,000	< 10	< 0.2	< 20	< 500	< 5	< 1	29,000	< 1	11	< 20	460
	03/19/03	< 100 UJ	< 1	< 1	NA	12	< 1	< 1	42,000 J	5.2 J	< 1	1.2	< 100	< 3	64,000 J	< 10 UJ	< 0.2	6	560	< 5	< 1 UJ	39,000 J	< 1	< 10	< 10	490
	12/06/02	< 100	< 1	< 1	NA	14	< 1	< 1	34,000	8.9	< 1	1.2	110	< 3	49,000	< 10 UJ	< 0.2	6.6	580	< 5	< 1 UJ	28,000	< 1	11	< 10	270
	09/05/02	< 100	1	1	NA	410	< 1	< 1	36,000	8.3	< 1	1.4	< 100	< 3	52,000	< 10	< 0.2	6.3	750	< 5	< 1 UJ	32,000	< 1	11	200	430 J-
	09/05/02	< 100	< 1	< 1	NA	250	< 1	< 1	35,000	8	< 1	1.3	< 100	< 3	52,000	< 10	< 0.2	6.1	670	< 5	< 1 UJ	31,000	< 1	11	65	400 J-
	06/05/02	< 100	< 1	1.2	NA	520	< 1	< 1	37,000	6.7	< 1	1.7	120	< 3	55,000	< 10	< 0.2	6.1	830	< 5	< 1	34,000	< 1	< 10	220	350
DUP0312022A	03/12/02	< 100	< 1	1.2	NA	450	< 1	< 1	37,000	4.2	< 1	1.7	< 100	< 3	57,000	< 10	< 0.2	6.2	720	< 5	< 1 UJ	37,000	< 1	< 10	170	400
	03/12/02	< 100	< 1	1.2	NA	240	< 1	< 1	35,000	4.5	< 1	1.7	< 100	< 3	55,000	< 10	< 0.2	6.4	730	< 5	< 1 UJ	36,000	< 1	< 10	48	390
LF6GW100CL	03/12/02	< 200	2.2	< 2	NA	490	< 2	< 1	32,000	3.2	0.2 J	2.3 B	< 200	< 5	46,000	< 5	NA	6.3	< 1,000	< 5	< 1	36,000	< 5	9.3	170	580 J-
	12/04/01	< 100	< 1	1.2	NA	290	< 1	< 1	47,000	9.4 J	< 1	2.8	< 100	< 3	71,000	< 10	< 0.2	9 J	1,400	< 5	< 1	40,000	< 1	< 10	71	510
DUP1204011A	12/04/01	< 100	< 1	1.4	NA	150	< 1	< 1	50,000	9.5 J	< 1	2.7	< 100	< 3	74,000	< 10	< 0.2	8.9 J	1,400	< 5	< 1	42,000	< 1	< 10	41	500
	12/04/01	< 200	1.1 J	1.9 BJ	NA	540	< 1	< 1	44,000	9.1 B	1.3	< 5	< 200	< 5	63,000	< 5	< 0.2	9.3	1,100	< 5	< 1	41,000	< 1	8.6	160	530
LF6GW100CL	08/29/01	110	1.9	1.7	NA	770 J+	< 1	< 1	39,000	6.2	< 1	2.2	310	< 3	62,000	< 10	< 0.2	7.3	< 500	< 5	< 1 UJ	37,000	< 1	< 10	330	450
	05/17/01	< 2,000	< 20	1.4	NA	40	< 20	< 20	< 500 R	7.2 J	< 20	1.3	360	< 60	230,000	13	< 0.2	7	820 J	< 5	< 20	120,000	< 20	11	20	430
	07/19/00	NA	< 60	< 5	NA	< 10	< 2	< 5	NA	< 10	< 20	< 10	NA	< 3	NA	NA	< 0.2	< 20	NA	< 5	< 5	NA	< 5	< 10	< 20	NA
	03/17/06	< 100	< 1	< 5	NA	28	< 2	< 1	39,000	17	< 10	< 1	< 100	< 3	57,000 J	< 10	< 0.2	< 20	< 500 UJ	< 5	< 1	52,000	< 1	11	< 20	600
	04/04/05	< 100	< 1	< 5	1.22	26	< 2	< 1	37,000	20	< 10	< 1	< 100	< 3	54,000	< 10	< 0.2	< 20	< 500	< 5	< 1	65,000	< 1	10	< 20	460
	03/15/04	< 100	< 1	< 5	NA	20	< 2	< 1	33,000	21	< 10	< 1	< 100	< 3	49,000	< 10	< 0.2	< 20	620	< 5	< 1	62,000	< 1	15	< 20	530
	12/05/03	< 100	2.4	< 5	NA	17	< 2	< 1	34,000	18	< 10	< 1	< 100	< 3	51,000	< 10	< 0.2	< 20	690	< 5	< 1	62,000	< 1	11	< 20	500
	08/20/03	< 100	1.6	< 5	NA	12	< 2	< 1	31,000	17	< 10	< 1	250	< 3	44,000	< 10	< 0.2	< 20	580	< 5	< 1 UJ	62,000	< 1	11	< 20 UJ	540
	06/10/03	< 100	< 1	< 5	NA	14	< 2	< 1	31,000	18	< 10	< 1	< 100	< 3	43,000	< 10	< 0.2	< 20	570	< 5	< 1	61,000	< 1	11	< 20	490
	03/19/03	< 100 UJ	< 1	1.3	NA	12	< 1	< 1	39,000 J	18 J	< 1	< 1	< 100	< 3	58,000 J	< 10 UJ	< 0.2	3.2	630	< 5	< 1 UJ	80,000 J	< 1	11	< 10	440
DUP0605021A	12/06/02	< 100	< 1	1.5	NA	< 10	< 1	< 1	29,000	16	< 1	1	< 100	< 3	40,000	< 10 UJ	< 0.2	3	760	< 5	< 1 UJ	55,000	< 1	12	< 10	400
	09/04/02	< 100	2	1.6	NA	580	< 1	< 1	32,000	15 J	< 1	1.2	< 100	< 3	44,000	< 10	< 0.2	3.1	1,100	< 5	< 1 UJ	64,000	< 1	11	250	410
	06/05/02	< 100	< 1	1.8	NA	300	< 1	< 1	30,000	22	< 1	1.1	110	< 3	41,0											

Table A-3-3
Results of Dissolved Metals Analyses
Fill Site 6
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	1632M	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7470/ SW7470A	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Levels ²		--	6	10	10	1,000	4	1.1	--	50	--	11.8	--	3.2	--	--	0.012	100	--	5	4.1	--	1.7	--	106	--
LF6GW102	08/18/03	< 100	< 1	< 5	0.851 J	200	< 2	< 1	66,000	< 10	< 10	< 1	11,000	< 3	74,000	4,500	< 0.2	< 20	1,800	< 5	< 1 UJ	48,000	< 1	< 10	< 20 UJ	560
	06/04/03	< 100	< 1	< 5	NA	170	< 2	< 1	58,000	< 10	< 10	< 1	9,800	< 3	69,000	3,900	< 0.2	< 20	1,700	< 5	< 1 UJ	43,000	< 1	< 10	< 20	560
	03/18/03	< 100 UJ	1.2	3.4	NA	300	1.1	1	110,000 J	4.5 J	1.1	1.2	12,000	< 3	110,000 J	5,800 J	< 0.2	3.7	2,500	< 5	< 1 UJ	86,000 J	< 1	< 10	< 10	690
DUP0318031A LF6GW102CL	03/18/03	< 100 UJ	< 1	2.7	NA	290	< 1	< 1	110,000 J	4.4 J	< 1	< 1	12,000	< 3	110,000 J	5,600 J	< 0.2	2.9	2,400	< 5	< 1 UJ	75,000 J	< 1	< 10	< 10	680
	03/18/03	< 100	< 5	< 2	NA	240	< 1	< 1	83,000	< 5	< 1	< 5	14,000	< 3	81,000	5,900	< 0.2 UJ	< 5	2,200	< 5	< 1	63,000	< 2	< 10	< 10	720
	12/11/02	< 100	< 1	2.9	NA	240 J+	< 1	< 1	81,000 J	< 1	< 1	< 1	14,000	< 3	81,000 J	6,300	< 0.2	2.7	2,500 J	< 5	< 1 UJ	53,000 J	< 1	< 10	< 10	620
DUP0313021A	09/05/02	< 100	< 1	3.3	NA	540	< 1	< 1	82,000	5.4	< 1	< 1	16,000	< 3	81,000	6,300	< 0.2	2.5	2,500	< 5	< 1 UJ	59,000	< 1	< 10	52	670 J-
	06/06/02	< 100	< 1	3.1	NA	520	< 1	< 1	99,000	4.1	< 1	< 1	14,000	< 3	76,000	5,800	< 0.2	1.9	2,500	< 5	< 1	58,000	< 1	< 10	61	680
	03/13/02	< 100	2.2	2.7	NA	870	< 1	< 1	110,000	1.5	< 1	< 1	10,000	< 3	99,000	6,200	< 0.2	4.1	2,600	< 5	< 1 UJ	88,000	< 1	< 10	190	820
DUP1203013A	03/13/02	< 100	< 1	2.6	NA	380	< 1	< 1	110,000	1.5	< 1	< 1	10,000	< 3	95,000	6,600	< 0.2	3.9	2,400	< 5	< 1 UJ	81,000	< 1	< 10	20	840
	12/03/01	< 100	< 1	2.8	NA	290	< 1	< 1	74,000	1.7	< 1	< 1	14,000	< 3	88,000	5,300	< 0.2	4.7	2,400	< 5	< 1	58,000	< 1	< 10	12	630
	12/03/01	< 100	< 1	2.8	NA	520	< 1	< 1	75,000	1.2	< 1	1.1	14,000	< 3	93,000	5,400	< 0.2	3.9	2,400	< 5	< 1	61,000	< 1	< 10	52	640
DUP1203013A	09/07/01	< 100	< 1	2.5	NA	560 J+	< 1	< 1	83,000	< 1	< 1	< 1	14,000	< 3	89,000	5,900	< 0.2	5	2,000	< 5	< 1 UJ	62,000	< 1	< 10	84	630
	05/18/01	< 100	1.5	2.9	NA	450	< 1	< 1	81,000	1	< 1	1.3	14,000	< 3	77,000	6,300	< 0.2	5.4	2,500	< 5	< 1 UJ	62,000	< 1	< 10	62	710
	07/19/00	NA	< 60	< 5	NA	110	< 2	< 5	NA	< 10	< 20	< 10	NA	< 3	NA	NA	< 0.2	< 20	NA	6.2	< 5	NA	< 5	< 10	< 20	NA
LF6GW103 DUP1205062A LF6GW103CL	12/05/06	< 100	< 1	< 5	NA	67	< 2	< 1	34,000	28	< 10	< 1	< 100	< 3	50,000	< 10	< 0.2	< 20	< 500 UJ	< 5	< 1	62,000	< 1	11	< 20	600 J+
	12/05/06	< 100	< 1	< 5	NA	69	< 2	< 1	36,000	29	< 10	< 1	< 100	< 3	52,000	< 10	< 0.2	< 20	< 500 UJ	< 5	< 1	62,000	< 1	10	< 20	590 J+
	12/05/06	< 100 U	< 2 U	< 2 U	NA	79	< 1 U	< 1 U	43,600	32	< 1 U	< 2 U	< 100 U	< 1 U	66,200	< 10 U	< 0.2 U	6.9	< 5000 U	< 2 U	< 1 U	75,000	< 1 U	13	< 20 U	547
DUP0816061A LF6GW103CL	08/16/06	< 100	< 1	< 5	NA	71	< 2	< 1	38,000	26	< 10	< 1	< 100	< 3	62,000	< 10	< 0.2 UJ	< 20	580	< 5	< 1	68,000	< 1	< 10	< 20	550
	08/16/06	< 100	< 1	< 5	NA	71	< 2	< 1	38,000	26	< 10	< 1	< 100	< 3	63,000	< 10	< 0.2 UJ	< 20	590	< 5	< 1	69,000	< 1	< 10	< 20	NA
	08/16/06	< 100 U	< 60 U	< 100 U	NA	73	< 2 U	< 5 U	38,400	28	< 10 U	< 20 U	< 100 U	< 50 U	61,000	< 10 U	< 0.2 U	< 40 U	< 5,000 U	< 200 U	4 B U	68,400	< 2000 U	12	7 B	590
DUP1130053B LF6GW103CL	05/23/06	< 100 UJ	< 1	< 5	NA	69	< 2	< 1	35,000	27	< 10	< 1	< 100	< 3	53,000	< 10	< 0.2	< 20	630	< 5	< 1	68,000	< 1	< 10	< 20	470
	03/17/06	< 100	< 1	< 5	NA	61	< 2	< 1	31,000	26	< 10	< 1	< 100	< 3	49,000 J	< 10	< 0.2	< 20	< 500 UJ	< 5	< 1	59,000	< 1	< 10	< 20	430
	11/30/05	< 100	< 1	< 5	NA	71	< 2	< 1	37,000	29 J	< 10	< 1	160	< 3	59,000	< 10	< 0.2	< 20	530	< 5	< 1	70,000	< 1	< 10	< 20	570
DUP1130053B LF6GW103CL	11/30/05	< 100	< 1	< 5	NA	73	< 2	< 1	40,000	28 J	< 10	< 1	160	< 3	66,000	< 10	< 0.2	< 20	570	< 5	< 1	79,000	< 1	< 10	< 20	560
	11/30/05	< 100 U	< 2 U	< 2 U	NA	82	< 1 U	< 1 U	45,000	37	< 1 U	< 2 U	< 100 U	< 1 U	65,000	< 10 U	< 0.2 U	5.7	< 5,000 UN	< 2 U	< 1 U	74,000	< 1 U	11	< 20 U	602
	08/31/05	< 100	< 1	< 5	NA	87	< 2	< 1	45,000	29	< 10	< 1	360	< 3	67,000	< 10	< 0.2	< 20	580 J	< 5	< 1	77,000	< 1	< 10	< 20	660
DUP0405053A LF6GW103CL	05/25/05	< 100 UJ	< 1	< 5	0.386 J	88 J	< 2	< 1	46,000	27	< 10	< 1	< 100	< 3	68,000	< 10	< 0.2	< 20	600	< 5	< 1	75,000	< 1	< 10	< 20	670
	04/05/05	< 100	< 1	< 5	NA	79	< 2	< 1	43,000 J	28	< 10	< 1	120	< 3	57,000	< 10 UJ	< 0.2	< 20	500	< 5	< 1	65,000	< 1	< 10	< 20	590
	04/05/05	< 100	< 1	< 5	0.387 J	82	< 2	< 1	45,000 J	28	< 10	< 1	150	< 3	59											

Table A-3-3
Results of Dissolved Metals Analysis
Fill Site 6
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids	
	Analytical Method ¹	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	1632M	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7470/ SW7470A	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1	
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	
Cleanup Levels ²		--	6	10	10	1,000	4	1.1	--	50	--	11.8	--	3.2	--	--	0.012	100	--	5	4.1	--	1.7	--	106	--	
LF6GW104	12/06/06	< 100	< 1	< 5	NA	40	< 2	< 1	34,000	13	< 10	< 1	< 100	< 3	59,000	< 10	< 0.2	< 20	< 500	< 5	< 1	60,000 J	< 1	< 10	< 20	540 J-	
	05/23/06	< 100 UJ	< 1	< 5	NA	37	< 2	< 1	36,000	12	< 10	2.9	< 100	< 3	56,000	13	< 0.2	< 20	610	< 5	< 1	69,000	< 1	< 10	< 20	700	
	03/17/06	< 100	< 1	< 5	NA	46	< 2	< 1	41,000	18	< 10	< 1	< 100	< 3	65,000 J	10	< 0.2	< 20	< 500 UJ	< 5	< 1	69,000	< 1	< 10	< 20	770	
	12/07/05	< 100	< 1	< 5	NA	33	< 2	< 1	49,000	32	< 10	< 1	320	< 3	85,000	19	< 0.2	< 20	1,800	< 5	< 1	84,000	< 1	< 10	< 20	810	
LF6GW105	12/06/06	< 100	< 1	< 5	NA	57	< 2	< 1	39,000	31	< 10	< 1	< 100	< 3	64,000	17	< 0.2	< 20	540	< 5	< 1	79,000 J	< 1	< 10	< 20	590 J-	
	08/16/06	< 100	< 1	< 5	NA	41	< 2	< 1	39,000	28	< 10	< 1	< 100	< 3	65,000	32	< 0.2 UJ	< 20	810	< 5	< 1	82,000	< 1	< 10	< 20	670	
	05/23/06	< 100 UJ	< 1	< 5	NA	46	< 2	< 1	40,000	34	< 10	< 1	< 100	< 3	61,000	< 10	< 0.2	< 20	780	< 5	< 1	85,000	< 1	< 10	< 20	750	
	03/20/06	< 100	< 1	< 5	NA	51	< 2	< 1	45,000	34	< 10	< 1	< 100	< 3	67,000	< 10	< 0.2	< 20	700	< 5	< 1	85,000	< 1	< 10	< 20	610	
LF6GW106	12/07/05	< 100	< 1	< 5	NA	43	< 2	< 1	41,000	40	< 10	< 1	280	< 3	65,000	< 10	< 0.2	< 20	1,100	< 5	< 1	88,000	< 1	< 10	< 20	690	
	12/06/06	< 100	< 1	< 5	NA	42	< 2	< 1	36,000	22	< 10	< 1	< 100	< 3	64,000	< 10	< 0.2	< 20	< 500	< 5	< 1	93,000 J	< 1	< 10	< 20	610 J-	
	08/16/06	< 100	< 1	< 5	NA	38	< 2	< 1	37,000	22	< 10	< 1	130	< 3	67,000	< 10	< 0.2 UJ	< 20	610	< 5	< 1	91,000	< 1	< 10	< 20	< 50	
	05/23/06	< 100 UJ	< 1	< 5	NA	32	< 2	< 1	35,000	21	< 10	< 1	< 100	< 3	57,000	< 10	< 0.2	< 20	730	< 5	< 1	82,000	< 1	< 10	< 20	480	
	03/20/06	< 100	< 1	< 5	NA	36	< 2	< 1	42,000	23	< 10	< 1	< 100	< 3	68,000	< 10	< 0.2	< 20	710	< 5	< 1	82,000	< 1	< 10	< 20	600	
	12/07/05	< 100	< 1	< 5	NA	22	< 2	< 1	29,000	24	< 10	< 1	230	< 3	54,000	11	< 0.2	< 20	900	< 5	< 1	64,000	< 1	< 10	< 20	770	
	231GW09	12/05/06	< 100	< 1	< 5	NA	58	< 2	< 1	25,000	26	< 10	< 1	< 100	< 3	41,000	< 10	< 0.2	< 20	< 500 UJ	< 5	< 1	64,000	< 1	< 10	< 20	520 J+
	DUP1205062B	12/05/06	< 100	< 1	< 5	NA	56	< 2	< 1	25,000	26	< 10	< 1	180	< 3	40,000	< 10	< 0.2	< 20	< 500 UJ	< 5	< 1	66,000	< 1	< 10	< 20	530 J+
231GW09CL	12/05/06	< 100 U	< 2 U	< 2 U	NA	63	< 1 U	< 1 U	30,200	30	< 1 U	< 2 U	< 100 U	< 1 U	51,000	< 10 U	< 1 U	18	< 5000 U	< 2 U	< 1 U	78,000	< 1 U	< 10 U	< 20 U	490	
	08/15/06	< 100	< 1	< 5	NA	52	< 2	< 1	27,000	26	< 10	< 1	< 100	< 3	42,000	< 10	< 0.2 UJ	23	< 500	< 5	< 1	68,000	< 1	< 10	< 20	490	
	05/24/06	< 100	< 1	< 5	NA	61	< 2	< 1	27,000	24	< 10	< 1	< 100	< 3	48,000	< 10	< 0.2	43	< 500	< 5	< 1	76,000	< 1	< 10	< 20	480	
	03/15/06	< 100	< 1	< 5	NA	31	< 2	< 1	15,000	15	< 10	< 1	< 100	< 3	24,000	< 10	< 0.2	29	< 500	< 5	< 1	42,000	< 1	< 10	< 20	320 J	
DUP1129052A	11/29/05	< 100	< 1	< 5	NA	49	< 2	< 1	22,000	23 J	< 10	< 1	< 100	< 3	39,000	< 10	< 0.2	< 20	< 500	< 5	< 1	63,000	< 1	< 10	< 20	470	
	11/29/05	< 100	< 1	< 5	NA	49	< 2	< 1	24,000	23 J	< 10	1.1	< 100	< 3	40,000	< 10	< 0.2	< 20	< 500	< 5	< 1	64,000	< 1	< 10	< 20	540	
	08/31/05 ³	NA	NA	NA	0.405 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.2	NA	NA	NA	NA	NA	NA	NA	NA	480	
	06/01/05	< 100	< 1	< 5	0.371	48 J	< 2	< 1	28,000	20	< 10	< 1	< 100	< 3	41,000	< 10	< 0.2	40	< 500 UJ	< 5	< 1	63,000	< 1	< 10	< 20	460	
DUP1217042A	04/04/05	< 100	< 1	< 5	0.344	46	< 2	< 1	25,000	19	< 10	< 1	< 100	< 3	41,000	< 10	< 0.2	85	< 500	< 5	< 1	62,000	1.2	< 10	< 20	450	
	12/17/04	< 100	< 1	< 5	NA	53	< 2	< 1	25,000	21	< 10	< 1	< 100	< 3	42,000	< 10	< 0.2	36	< 500	< 5	< 1	65,000	< 1	< 10	< 20	490	
	12/17/04	< 100	< 1	< 5	NA	54	< 2	< 1	26,000	22	< 10	< 1	< 100	< 3	43,000	< 10	< 0.2	36	< 500	< 5	< 1	67,000	< 1	< 10	< 20	470	
	08/12/04	< 100	< 1	< 5	NA	58	< 2	< 1	29,000	23	< 10	< 1 U	110	< 3	47,000	< 10	< 0.2	63	< 500	< 5	< 1	72,000	< 1	< 10	< 20	430	
DUP0527042C	05/27/04	< 100	< 1	< 5	NA	52	< 2	< 1	27,000	23	< 10	< 1	< 100	< 3	45,000	12	< 0.2	27	< 500	< 5	< 1	69,000	< 1	< 10	< 20	490	
	05/27/04	< 100	< 1	< 5	NA	53	< 2	< 1	28,000	24	< 10	< 1	< 100	< 3	47,000	12	< 0.2	27	< 500	< 5	< 1	71,000	< 1	< 10	< 20	510	
	05/27/04	< 50	< 5	< 5	NA	54	< 1	< 1	28,000	23	< 7	18	570	< 3	45,000	14	< 0.2	28	NA	NA	NA	NA	NA	NA	NA	420	
	03/18/04	< 100	< 1	< 5	NA	51	< 2	< 1	29,000	20	< 10	< 1	< 100	< 3	46,000	< 10	< 0.2	36	< 500	< 5	< 1 UJ	74,000	< 1	< 10	< 20	510 J	
231GW09CL	12/04/03	< 100	2.9	< 5	NA	57	< 2	< 1	22,000	22	< 10	< 1	< 100	< 3	46,000	< 10	< 0.2	29	< 500	< 5	< 1	67,000	1.2	< 10	< 20	490	
	08/15/03	< 100	1.1	< 5	NA	53	< 2	< 1	26,000	24	< 10	< 1	120	< 3	43,000	< 10	< 0.2	26	< 500	< 5	< 1 UJ	65,000	< 1	< 10	< 20 UJ	440	
	06/10/03	< 100	< 1	< 5	NA	51	< 2	< 1	28,000	22	< 10	< 1	< 100	< 3	47,000	< 10	< 0.2	24	< 500	< 5	< 1	67,000	< 1	< 10	< 20	470	
	01/13/99	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	19.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	566	
	10/14/98	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	18.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	530	
	07/15/98	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	544	
	04/20/98	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	19.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	790	
	01/28/98	166	NA	NA	NA	NA	NA	NA	60,200	< 1	< 10	< 1	8,640	NA	60,700	1,510	NA	< 5	< 5,000	NA	NA	129,000	NA	< 10	NA	542	

Table A-3-3
Results of Dissolved Metals Analyses
Fill Site 6
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	1632M	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7470/ SW7470A	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Levels ²		--	6	10	10	1,000	4	1.1	--	50	--	11.8	--	3.2	--	--	0.012	100	--	5	4.1	--	1.7	--	106	--
231GW09	10/23/97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	523
	07/24/97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	592
	04/22/97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 100 J	NA	NA	19	NA	NA	NA	NA	NA	NA	NA	NA	NA	584
	01/28/97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	11	NA	NA	NA	NA	NA	NA	NA	NA	NA	557

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - From Table 3 of the RAP (Treadwell & Rollo, 2003c).

3 - Due to computer/review error by the laboratory, sample 231GW09 was not analyzed by ICP-MS for the list of 22 metals. The sample had already been disposed of when the omission was discovered.

µg/L - micrograms per liter

mg/L - milligrams per liter

NA - Not analyzed

Groundwater samples collected from all site monitoring wells were field filtered and analyzed for dissolved metals.

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Bold numbers indicate concentrations that exceed cleanup levels.

-- Cleanup level not established.

Table A-3-4
Results of Arsenic Speciation Analyses
Fill Site 6
Presidio of San Francisco, California

Location ID	Sample Date	Inorganic Arsenic (As)	Arsenite (As III)	Arsenate (As V) ²	Percentage of As III	Percentage of As V
	Analytical Method ¹	1632M	1632M	1632M	--	--
		(µg/L)	(µg/L)	(µg/L)	%	%
Cleanup Levels ³		10	--	--	--	--
LF6GW100	04/04/05	0.792	< 0.025 U	0.792	0	100
LF6GW101	04/04/05	1.22	< 0.025 U	1.22	0	100
LF6GW102	04/04/05	0.851 J	0.483 J	0.368 J	57	43
LF6GW103	04/05/05	0.386 J	< 0.025 U	0.386 J	0	100
DUP0405053A	04/05/05	0.397 J	< 0.025 U	0.397 J	0	100
231GW09	08/31/05	0.405 J	< 0.025 JU	0.405 J	0	100
	06/01/05	0.371	< 0.025 U	0.371	0	100
	04/04/05	0.344	< 0.025 U	0.344	0	100

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001.

2 - The concentration of As V was determined by the laboratory by subtracting the As III concentration from the inorganic As concentration. As III has been detected at greater concentrations than inorganic As, due to analytical variability. As V is reported as non-detect when As III is detected at a greater concentration than inorganic As.

3 - From Table 3 of the RAP (Treadwell & Rollo, 2003c).

-- Cleanup level not established.

µg/L - micrograms per liter

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-3-5
Results of Dissolved Gas and TOC Analyses
Fill Site 6
Presidio of San Francisco, California

Location ID	Sample Date	Ethane	Ethene	Methane	TOC
	Analytical Method ¹	RSK 175	RSK 175	RSK 175	SW9060
		mg/L	mg/L	mg/L	mg/L
LF6GW100	03/17/06	NA	NA	NA	3.5
	04/04/05	< 0.005	< 0.005	<0.005	3.0
LF6GW101	03/17/06	NA	NA	NA	1.4
	04/04/05	< 0.005	< 0.005	<0.005	1.5
LF6GW102	04/04/05	< 0.005	< 0.005	0.52	14
LF6GW103	03/17/06	NA	NA	NA	1.5
	04/04/05	0.026	< 0.005	<0.005	1.4
DUP0405053A	04/05/05	< 0.005	< 0.005	< 0.005	1.4
LF6GW103CL	04/05/05	< 0.0005 U	< 0.0015 U	< 0.0005 U	1.4
LF6GW104	03/17/06	NA	NA	NA	3
LF6GW105	03/20/06	NA	NA	NA	1.9
LF6GW106	03/20/06	NA	NA	NA	3
231GW09 DUP1129052A	03/15/06	NA	NA	NA	0.88
	11/29/05	< 0.005	< 0.005	< 0.005	1.3
	11/29/05	< 0.005	< 0.005	< 0.005	0.99
	08/31/05	< 0.005	< 0.005	< 0.005	1.1
	06/01/05	< 0.005	< 0.005	< 0.005	1.2 J
	04/04/05	< 0.005	< 0.005	<0.005	1.3

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the First Quarter 2005.

mg/L - milligrams per liter

NA - Not analyzed

TOC - Total Organic Carbon

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-3-6
Groundwater Elevation Summary
Fill Site 6
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
LF6GW100	12/04/06	13.04	28.73	15.69	MW
	08/14/06	12.59	28.73	16.14	MW
	05/22/06	12.17	28.73	16.56	MW
	03/06/06	12.02	28.73	16.71	MW
	11/28/05	12.78	28.73	15.95	MW
	08/29/05	12.22	28.73	16.51	MW
	05/23/05	12.05	28.73	16.68	MW
	03/14/05	12.30	28.73	16.43	MW
	12/13/04	13.23	28.73	15.50	MW
	08/09/04	13.70	28.73	15.03	MW
	05/24/04	13.74	28.73	14.99	MW
	03/08/04	13.78	28.73	14.95	MW
	12/01/03	16.02	28.73	12.71	MW
	08/11/03	17.45	28.73	11.28	MW
	06/02/03	17.31	28.73	11.42	MW
	03/10/03	15.36	28.73	13.37	MW
	12/02/02	13.73	28.73	15.00	MW
	08/26/02	13.22	28.73	15.51	MW
	05/28/02	13.02	28.73	15.71	MW
	03/04/02	12.60	28.73	16.13	MW
	11/26/01	13.25	28.73	15.48	MW
	08/27/01	13.47	28.73	15.26	MW
	05/08/01	12.87	28.73	15.86	MW
LF6GW101	12/04/06	12.08	27.03	14.95	MW
	08/14/06	11.63	27.03	15.40	MW
	05/22/06	11.20	27.03	15.83	MW
	03/06/06	11.13	27.03	15.90	MW
	11/28/05	11.80	27.03	15.23	MW
	08/29/05	11.13	27.03	15.90	MW
	05/23/05	10.93	27.03	16.10	MW
	03/14/05	11.18	27.03	15.85	MW
	12/13/04	11.85	27.03	15.18	MW
	08/09/04	12.25	27.03	14.78	MW
	05/24/04	12.48	27.03	14.55	MW
	03/08/04	12.67	27.03	14.36	MW
	12/01/03	14.31	27.03	12.72	MW
	08/11/03	15.14	27.03	11.89	MW
	06/02/03	14.85	27.03	12.18	MW
	03/10/03	13.15	27.03	13.88	MW
	12/02/02	12.27	27.03	14.76	MW
	08/26/02	11.68	27.03	15.35	MW
	05/28/02	11.74	27.03	15.29	MW
	03/04/02	11.31	27.03	15.72	MW
	11/26/01	12.05	27.03	14.98	MW
	08/27/01	12.14	27.03	14.89	MW
	05/08/01	11.44	27.03	15.59	MW
LF6GW102 ²	05/23/05	NM	36.87	NM	MW
	03/14/05	19.75	36.87	17.12	MW
	12/13/04	21.70	36.87	15.17	MW
	08/09/04	22.35	36.87	14.52	MW
	05/24/04	21.86	36.87	15.01	MW
	03/08/04	20.50	36.87	16.37	MW
	12/01/03	23.06	36.87	13.81	MW
	08/11/03	23.22	36.87	13.65	MW
	06/02/03	22.72	36.87	14.15	MW

Table A-3-6
Groundwater Elevation Summary
Fill Site 6
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
LF6GW102 ²	03/10/03	21.53	36.87	15.34	MW
	12/02/02	22.23	36.87	14.64	MW
	08/26/02	21.87	36.87	15.00	MW
	05/28/02	21.60	36.87	15.27	MW
	03/04/02	20.86	36.87	16.01	MW
	11/26/01	21.93	36.87	14.94	MW
	08/27/01	22.15	36.87	14.72	MW
LF6GW103	05/08/01	21.62	36.87	15.25	MW
	12/04/06	7.61	18.41	10.80	MW
	08/14/06	7.37	18.41	11.04	MW
	05/22/06	7.15	18.41	11.26	MW
	03/06/06	7.09	18.41	11.32	MW
	11/28/05	7.25	18.41	11.16	MW
	08/29/05	6.10	18.41	12.31	MW
	05/23/05	5.50	18.41	12.91	MW
	03/14/05	6.08	18.41	12.33	MW
	12/13/04	6.53	18.41	11.88	MW
	08/09/04	6.78	18.41	11.63	MW
	05/24/04	6.68	18.41	11.73	MW
	03/08/04	6.40	18.41	12.01	MW
	12/01/03	7.70	18.41	10.71	MW
	08/11/03	7.73	18.41	10.68	MW
	06/02/03	7.52	18.41	10.89	MW
	03/10/03	6.36	18.41	12.05	MW
	12/02/02	6.46	18.41	11.95	MW
	08/26/02	6.23	18.41	12.18	MW
	05/28/02	6.18	18.41	12.23	MW
	03/04/02	5.82	18.41	12.59	MW
	11/26/01	6.57	18.41	11.84	MW
	08/27/01	6.56	18.41	11.85	MW
	05/08/01	6.26	18.41	12.15	MW
LF6GW104	12/04/06	10.12	25.74	15.62	MW
	08/14/06	NM	25.74	NM	MW
	05/22/06	9.35	25.74	16.39	MW
	03/06/06	9.23	25.74	16.51	MW
	11/28/05	10.25	25.74	15.49	MW
LF6GW105	12/04/06	22.55	41.97	19.42	MW
	08/14/06	22.15	41.97	19.82	MW
	05/22/06	21.33	41.97	20.64	MW
	03/06/06	21.70	41.97	20.27	MW
	11/28/05	22.68	41.97	19.29	MW
LF6GW106	12/04/06	10.33	25.69	15.36	MW
	08/14/06	10.07	25.69	15.62	MW
	05/22/06	9.65	25.69	16.04	MW
	03/06/06	9.72	25.69	15.97	MW
	11/28/05	10.47	25.69	15.22	MW
LF6PZ101 ⁴	12/04/06	1.06	10.44	9.38	PZ
	08/14/06	1.23	10.44	9.21	PZ
	05/22/06	0.92	10.44	9.52	PZ
	03/06/06	0.90	10.44	9.54	PZ
LF6PZ102 ⁴	12/04/06	0.45	11.59	11.14	PZ
	08/14/06	0.58	11.59	11.01	PZ
	05/22/06	0.00	11.59	11.59	PZ
	03/06/06	0.00	11.59	11.59	PZ

Table A-3-6
Groundwater Elevation Summary
Fill Site 6
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
LF6PZ103 ⁴	12/04/06	3.12	14.09	10.97	PZ
	08/14/06	3.16	14.09	10.93	PZ
	05/22/06	2.90	14.09	11.19	PZ
	03/06/06	2.70	14.09	11.39	PZ
LF6PZ104 ⁴	12/04/06	7.21	17.45	10.24	PZ
	08/14/06	7.17	17.45	10.28	PZ
	05/22/06	7.09	17.45	10.36	PZ
	03/06/06	6.82	17.45	10.63	PZ
LF6PZ105 ⁴	12/04/06	0.31	13.75	13.44	PZ
	08/14/06	0.87	13.75	12.88	PZ
	05/22/06	0.70	13.75	13.05	PZ
	03/06/06	0.67	13.75	13.08	PZ
LF6PZ106 ⁴	12/04/06	4.90	15.23	10.33	PZ
	08/14/06	4.90	15.23	10.33	PZ
	05/22/06	4.82	15.23	10.41	PZ
	03/06/06	4.45	15.23	10.78	PZ
231GW09	12/04/06	13.35	24.28	10.93	MW
	08/14/06	13.47	24.28	10.81	MW
	05/22/06	12.80	24.28	11.48	MW
	03/06/06	12.60	24.28	11.68	MW
	11/28/05	13.11	24.28	11.17	MW
	08/29/05	12.36	24.28	11.92	MW
	05/23/05	11.15	24.28	13.13	MW
	03/14/05	11.50	24.28	12.78	MW
	12/13/04	12.18	24.28	12.10	MW
	08/09/04	12.75	24.28	11.53	MW
	05/24/04	12.63	24.28	11.65	MW
	03/08/04	12.22	24.28	12.06	MW
	12/01/03	13.15	24.28	11.13	MW
	08/11/03	13.38	24.28	10.90	MW
	06/02/03	13.22	24.28	11.06	MW
	03/10/03	12.25	24.28	12.03	MW
	12/02/02	12.43	24.28	11.85	MW
	08/26/02	12.26	24.28	12.02	MW
	05/28/02	12.20	24.28	12.08	MW
	03/04/02	11.97	24.28	12.31	MW
	11/26/01	12.31 ³	24.28	11.97	MW
	08/27/01	12.65	24.28	11.63	MW
	05/08/01	12.06	24.28	12.22	MW

Notes

1 - All depth to water measurements are an average of three measurements recorded in the field.

2 - Well was abandoned during the Second Quarter 2005.

3 - The depth to water was improperly recorded as 2.31 feet rather than 12.31 feet on 26 November 2001.

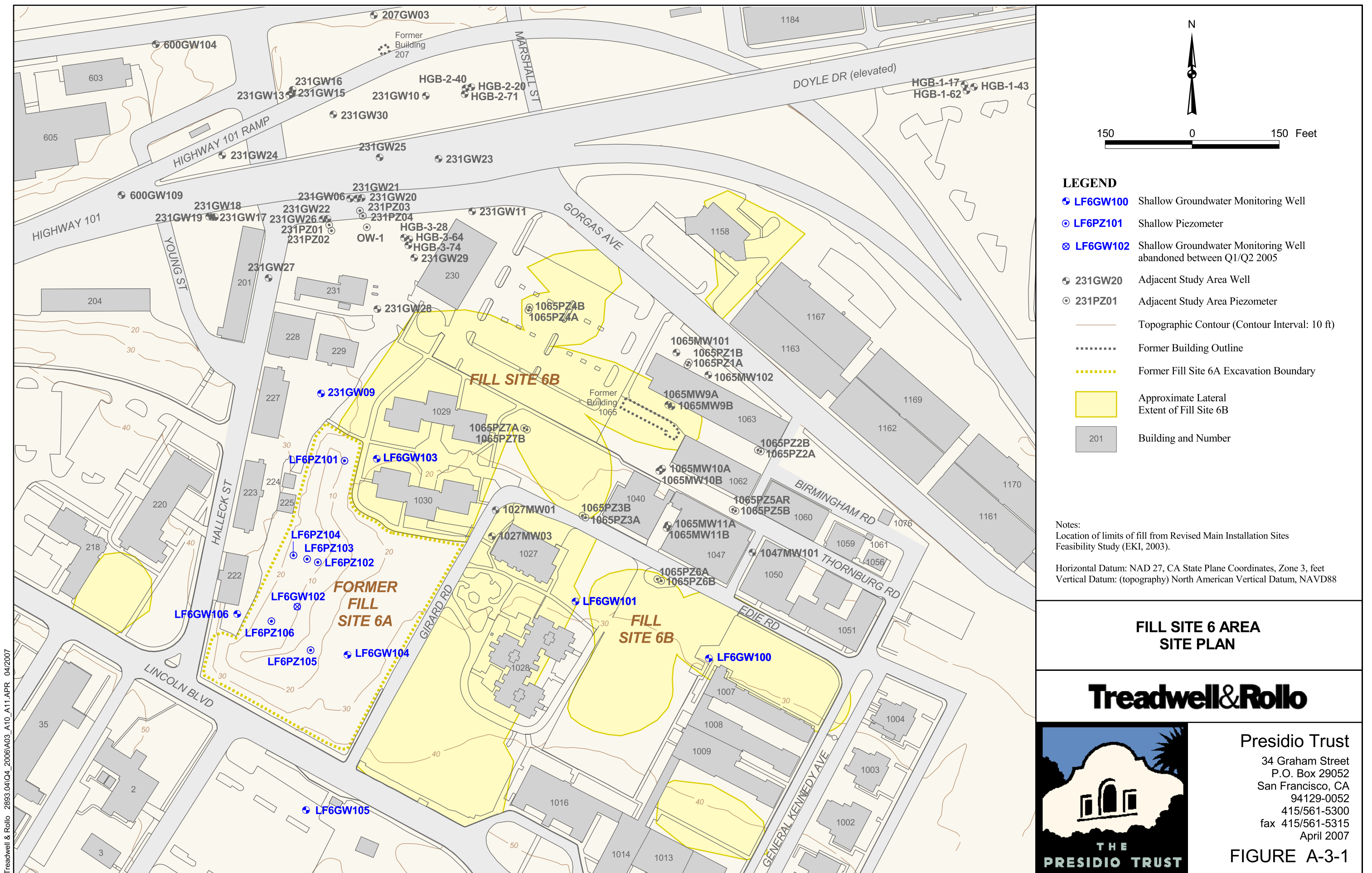
4 - Piezometer water levels are associated with local surface stream water levels.

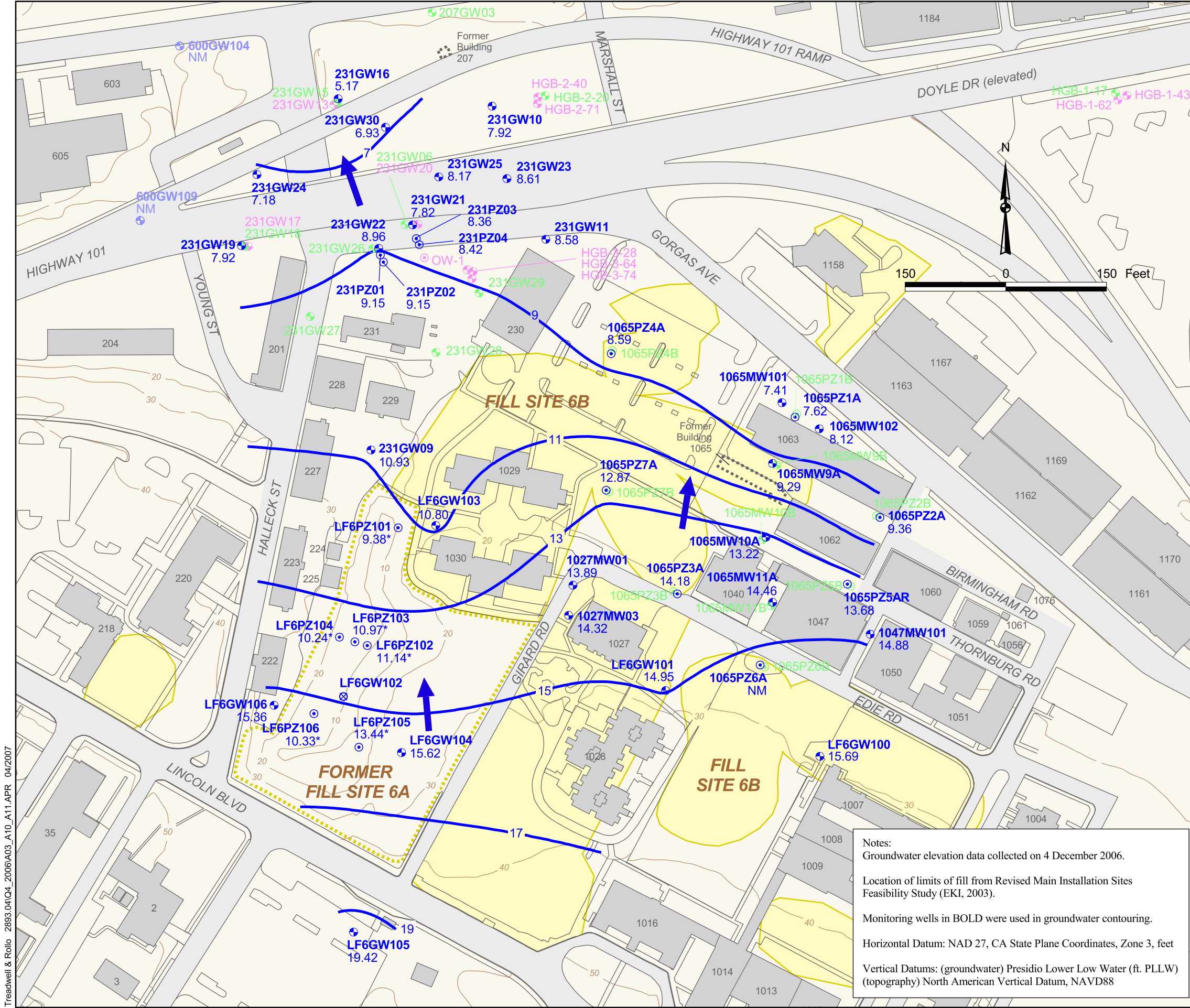
MW- Monitoring well

NM - Not measured

PZ - Piezometer

feet PLLW - feet above Presidio Lower Low Water vertical datum





LEGEND

LF6GW101

14.95

Shallow Groundwater Monitoring Well
December 2006 Groundwater Elevation

LF6PZ101

9.38*

Shallow Piezometer
December 2006 Groundwater Elevation

*

Shallow Piezometer not used for groundwater
contouring.

NM

Not measured

LF6GW102

Abandoned Shallow Groundwater Monitoring Well

600GW104

Adjacent Study Area Shallow Groundwater Well

231GW15

Intermediate Groundwater Monitoring Well

1065PZ1B

Intermediate Piezometer

231GW17

Deep Groundwater Monitoring Well

OW-1

Deep Piezometer

Approximate Direction of
Groundwater Flow

Groundwater Contour (Contour Interval: 2 ft)

Topographic Contour (Contour Interval: 10 ft)

Former Building Outline

Former Fill Site 6A Excavation Boundary

Approximate Lateral
Extent of Fill Site 6B

201

Building and Number

FILL SITE 6, BUILDINGS 231/207 AND
BUILDINGS 1065/1027
4 DECEMBER 2006
SHALLOW GROUNDWATER ELEVATION MAP

Treadwell&Rollo

Presidio Trust

34 Graham Street
P.O. Box 29052
San Francisco, CA
94129-0052
415/561-5300
fax 415/561-5315
April 2007

FIGURE A-3-3

Notes:
Groundwater elevation data collected on 4 December 2006.

Location of limits of fill from Revised Main Installation Sites
Feasibility Study (EKI, 2003).

Monitoring wells in BOLD were used in groundwater contouring.

Horizontal Datum: NAD 27, CA State Plane Coordinates, Zone 3, feet

Vertical Datums: (groundwater) Presidio Lower Low Water (ft. PLLW)
(topography) North American Vertical Datum, NAVD88

Third Quarter 2006

Date 8/16/06

Treadwell & Rollo
Environmental and Geotechnical Consultant

MONITORING WELL SAMPLING LOG (Normal, Low Flow, and Low Yield)

Site / Area F11 Site 6A

Well No. LFGGW106

Project Number 2893

Well Type ☒ Monitor ☐ Extraction ☐ Other

Recorded By DR

Sampled by DR

Date 8/16/06

WELL PURGING

PURGE VOLUME

Well casing diameter

☒ 2-inch ☐ 4-inch ☐ Other

Well Total Depth (TD, ft. below TOC): 24.64

Depth to Water (WL, ft. below TOC): 10.19

Depth to free phase (FP, ft. below TOC):

Number of borehole volumes to be purged

☐ 3 ☒ Not Applicable ☐ Other

PURGE VOLUME CALCULATION

14.45 x

N/A x

No. Vols

Total Purge Time

9 min.

Recharge Rate

Purge Rate

0.5 gpm

PURGE METHOD

☐ Low Flow ☒ Bailer \ Type Disp.
☐ Normal ☐ Pump \ Type
☒ Modified (max 5 gpm) ☐ Other

PUMP INTAKE

☐ Near top Depth (ft)
☐ Near Bottom Depth (ft)
☒ Other Modified

gals
 CALCULATED PURGE VOLUME
 gals
 ACTUAL PURGE VOLUME 4.6

GROUNDWATER PARAMETER MEASUREMENTS

Meter Type Ultrametric / YSI 550A / 290A ORP meter

Time	Liters or Gallons	pH	Temp °F	DO (mg/L)	Sp. COND (µS/cm)	ORP (mV)	Turbidity (NTU)	Comments
12:14	0.5	6.8	17.6	0.70	1026	—	112	
12:17	1.5	6.9	17.9	—	960	—	71000	orange color
12:20	3.0	6.9	17.6	—	933	—	71000	"
12:23	4.5	6.9	17.7	0.92	944	Post 193	71000	"
/								
/								
/								
/								
/								
/								
/								
/								
/								
/								
/								
/								
/								

Comments

Purge water storage/disposal

☐ Drummed onsite

☒ Other Baker Tank

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled

8/16/06 12:23

Purging

Equipment

Pump - Type

Bailer - Type

Disposable

Other

Sample Filtered:

☒ Yes ☐ No

Filtered Sample Analysis:

Dissolved Metals (23)

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments
LFGGW106	3X 1L NP Amber	CFT	2116	
	1X 1L NP Poly			
	1X 500 mL HNA2 Poly FF			

QUALITY CONTROL SAMPLES

Duplicate Samples

Blank Samples

Original Sample No.	Duplicate Sample No.

Type	Sample No.
Trip	
Rinsate	
Transfer	
Other:	

Site / Area Fill Site 6A
Project Number 2893
Recorded By DR

Well No. LF66W104
Well Type ☒ Monitor ☐ Extraction ☐ Other
Date 8/16/06

PURGE VOLUME

Well casing diameter ☐ 2-inch ☐ 4-inch ☐ Other

Well Total Depth (TD, ft. below TOC) :

Depth to Water (WL, ft. below TOC) :

Depth to free phase (FP, ft. below TOC) :

Number of borehole volumes to be purged ☒ 3 ☐ Not Applicable ☐ Other

PURGE VOLUME CALCULATION

Water Column Length

Water Volume/ft

No. Vols

Total Purge Time

Recharge Rate

Purge Rate

gals

CALCULATED PURGE VOLUME

gals

ACTUAL PURGE VOLUME

GROUNDWATER PARAMETER MEASUREMENTS

Meter Type

[illegible]

Comments

Purgē water storage/disposal

☐ Drummed onsite☐ Other

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled

Purging

Equipment	Pump - Type
-----------	-------------

Bailer - Type

Other

Sample Filtered: Yes / No

~~Filtered Sample Analysis:~~

SAMPLING PROGRAM

[illegible]

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.

Duplicate Sample No.

Blank Samples

Sample No.

Type

Trip

Binsate

Transfer

Other:

Fourth Quarter 2006

Treadwell & Rollo
Environmental and Geotechnical Consultant

**BATTERY HOWE/WAGNER
APPENDIX SECTION A-4
SEMI-ANNUAL GROUNDWATER MONITORING REPORT
THIRD AND FOURTH QUARTERS 2006
Presidio of San Francisco, California**

1.0 INTRODUCTION AND BACKGROUND

Battery Howe/Wagner is located in the northwestern portion of the Presidio (Figure 1). The site elevation is approximately 175 to 220 feet above the PLLW datum. The five-acre site is bounded by Battery Wagner Road on the north and east, Upton Avenue to the west, and Ruckman Avenue to the south (Figure A-4-1).

Battery Howe/Wagner was the first 12-inch mortar fortification established in San Francisco (Dames & Moore, 1997). The fortification was constructed in 1893. The date the Battery Howe/Wagner site was decommissioned is unknown, although aerial photographs indicate the site was covered with fill some time between 1963 and 1968. Potential sources of contamination reportedly exist within the debris fill (Montgomery Watson, 1997a).

Erler & Kalinowski, Inc. (EKI) installed three monitoring wells (HWGW100, HWGW101, and HWGW102) at Battery Howe/Wagner in July 2000 (Figure A-4-1). These groundwater monitoring wells were constructed between Building 1233 and existing monitoring wells BHWGW01, BHWGW04, and BHWGW05 to evaluate whether historical releases of carbon tetrachloride or other VOCs, formerly stored within Building 1233, have occurred (EKI, 2000a).

Monitoring wells HWGW100 and HWGW101 were installed, developed, and sampled using low-flow sampling methodologies in July 2000. Groundwater was not observed in monitoring well HWGW102 during drilling or construction. No groundwater samples have ever been collected from well HWGW102.

Groundwater sampling events have taken place at Battery Howe/Wagner since August 1992 and samples collected have been analyzed for VOCs, dissolved and total metals, hexavalent chromium, and general chemistry parameters. Summaries of previous dissolved oxygen, general chemistry, dissolved metals including hexavalent chromium, and VOC results can be found in Tables A-4-1 through A-4-3.

2.0 SITE DESCRIPTION AND GEOLOGY

Battery Howe/Wagner is in the Marina Groundwater Basin (Montgomery Watson, 1996b). Depth to groundwater ranges from approximately 11 to 30 feet bgs. Groundwater flow is generally toward the northeast, but has been reported as both to the east and north (Dames and Moore, 1997).

Artificial and debris fill material lie beneath the Battery Howe/Wagner site at depths ranging from approximately 2.5 to 25 feet bgs. The artificial fill material consists of poorly sorted clay, silt, sand, and gravel, with various types of rock. The debris fill consists mainly of clay and silt with varying amounts of building materials, including glass, wood, brick, concrete, metal strips, and wire. Colma Formation sediments are present below the fill materials and consist of two distinct units: a silty clay colluvium ranging from 0 to 16 feet thick, and a dune sand ranging up to 7 feet thick. Franciscan Formation bedrock underlies the Colma Formation.

3.0 GROUNDWATER MONITORING

Battery Howe/Wagner has six associated monitoring wells (Figure A-4-1). During the Third and Fourth Quarters 2006, groundwater elevation measurements were collected at all Battery Howe/Wagner monitoring wells, except HWGW102, which was dry.

During the Third and Fourth Quarters 2006, groundwater samples were collected from monitoring wells BHWGW01, BHWGW04, BHWGW05, HWGW100, and HWGW101, in accordance with Tables 1A and 1B. Monitoring well HWGW102 was scheduled for sampling during the Third and Fourth Quarters 2006, but was dry.

3.1 Groundwater-Level Measurements and Interpretation

Groundwater elevation measurements were collected on 14 August and 4 December 2006 at all site wells, except HWGW102 during the Third and Fourth Quarters 2006. Groundwater elevations are summarized in Table A-4-4. Water-level meters were calibrated on 14 August and 4 December 2006. The calibration logs can be found in Appendix B. Groundwater elevation field forms can be found in Appendix C.

During the Third Quarter 2006, groundwater elevations ranged from 158.14 to 188.74 feet above PLLW in monitoring wells BHWGW01 and HWGW101, respectively. Groundwater flow was in a northeasterly direction, which follows the general topographic trend (Figure A-4-1).

During the Fourth Quarter 2006, groundwater elevations ranged from 157.49 to 186.38 feet above PLLW in monitoring wells BHWGW01 and HWGW101, respectively. Groundwater flow was in a northeasterly direction during the Fourth Quarter 2006, which follows the general topographic trend (Figure A-4-2).

To get a more comprehensive understanding of groundwater flow patterns in this area, Third and Fourth Quarter 2006 Battery Howe/Wagner groundwater elevations were evaluated with the adjacent Mini-CAP monitoring wells (1213GW101, 1221GW101 through 1221GW104, and 1260GW101 through 1260GW103). The addition of these wells indicates that groundwater at the Battery Howe/Wagner site flows northeasterly while groundwater south of the Battery Howe/Wagner site flows to the east. A complete discussion of groundwater flow directions and gradients associated with the adjacent Mini-CAP monitoring wells can be found in Section A-12.

The groundwater elevations measured at the Battery Howe/Wagner site are generally within the range of historical elevations.

The Third and Fourth Quarters 2006 groundwater gradients averaged approximately 0.06 and 0.05 feet per foot, respectively. Monitoring well HWGW102 was not used in the groundwater contouring or gradient calculation during either the Third or Fourth Quarters 2006 because it was dry. Groundwater gradients and flow directions are consistent with previous findings at the site.

3.2 Monitoring Well Purging and Sampling

The Third Quarter 2006 sampling occurred on 15 August 2006. The Fourth Quarter 2006 sampling occurred on 7 December 2006. The Third and Fourth Quarter 2006 sampling at the Battery Howe/Wagner site was conducted in accordance with methods shown in Tables 1A and 1B of the main text and with procedures described in the FSP (Treadwell & Rollo, 2001a). Oxidation reduction potential (ORP), pH, and temperature were measured as part of the lowflow sampling methodology and results are presented in Table A-4-1.

Purge equipment, purging volumes, purge water general chemistry parameters, and sampling equipment for each monitoring well are described in the purge records located at the conclusion of this section. Purge water was stored for future disposal in one of two 2,800-gallon aboveground polyethylene storage tanks, which are located at the Central Magazine.

3.3 Groundwater Analytical Program

All groundwater samples collected were submitted to the project laboratory for the analyses shown in Tables 1A and 1B of the main text.

The appropriate sampling containers, preservatives, and maximum holding times for each analytical method are shown in Table 5. Sample containers used for each well are described in the purge records located at the conclusion of this section.

QA/QC samples were collected as part of this program. Section 6.2 of the main text discusses the QA/QC sampling and analysis performed during the Third and Fourth Quarters 2006.

4.0 GROUNDWATER ANALYTICAL RESULTS

Groundwater samples collected from the Battery Howe/Wagner site were analyzed for general chemistry and 22 dissolved metals, during the Third and Fourth Quarters 2006.

The following sections discuss analytical results collected at the Battery Howe/Wagner site during the Third and Fourth Quarters 2006.

4.1 Dissolved Oxygen Results

Dissolved oxygen was measured in all wells sampled during the Third and Fourth Quarters 2006. Dissolved oxygen results are presented in Table A-4-1.

During the Third Quarter 2006, dissolved oxygen was measured at concentrations ranging from 0.52 mg/L at wells BHWGW01 and BHWGW05 to 2.11 mg/L at well HWGW101.

During the Fourth Quarter 2006, dissolved oxygen was measured at concentrations ranging from 0.68 mg/L at well BHWGW05 to 2.35 mg/L at HWGW101.

All dissolved oxygen results in the Third and Fourth Quarters 2006 were the range of historical concentrations.

Dissolved oxygen concentrations will continue to be monitored during future sampling events.

4.2 General Chemistry Results

General chemistry results are presented in Table A-4-1. The majority of general chemistry results were within historical ranges during the Third and Fourth Quarters 2006.

The table below summarizes new high and low general chemistry analytical results from the Third and Fourth Quarters 2006 when compared to historical data, and provides the range and frequency of historical results. The total number of analyses may vary depending on the sampling frequency, the date of commencement of sampling, and the number of duplicate analyses performed. Only the new high or new low data are shown.

Location	Analyte	Detects / Samples	Historical Data		New High/Low Third & Fourth Quarter 2006		Units
			Minimum	Maximum	Minimum	Maximum	
General Chemistry							
BHWGW04	Chloride	16 / 16	86.1	110	85	--	mg/L
BHWGW05	Fluoride	14 / 15	0.11	0.25	< 0.1	--	mg/L
HWGW100	Nitrate	11 / 11	0.33	1.3	0.11	--	mg/L
HWGW101	Alkalinity, Total	16 / 16	460	640	410	--	mg/L

Location	Analyte	Detects / Samples	Historical Data		New High/Low Third & Fourth Quarter 2006		Units
			Minimum	Maximum	Minimum	Maximum	
General Chemistry							
	Bicarbonate	16 / 16	460	640	410	--	mg/L
	Sulfate	16 / 16	84	190	60	--	mg/L

An asterisk (*) indicates qualified data in the above table.

The majority of these detections are only slightly lower than previously detected concentrations and therefore, can be attributed to natural concentration fluctuations.

4.3 Dissolved Metals Results

Monitoring well samples from BHWGW01, BHWGW04, BHWGW05, HWGW100, and HWGW101 were analyzed for 22 dissolved metals during the Third and Fourth Quarters 2006.

The table below summarizes new high and low dissolved metals analytical results from the Third and Fourth Quarters 2006 when compared to historical data, and provides the range and frequency of historical results. The total number of analyses may vary depending on the sampling frequency, the date sampling commenced and the number of duplicate analyses performed. Only the new high or new low data are shown.

Location	Analyte	Detects / Samples	Historical Data		New High/Low Third & Fourth Quarter 2006		Units
			Minimum	Maximum	Minimum	Maximum	
Metals, Dissolved							
BHWGW05	Calcium	12 / 12	35,000	68,000	--	70,000	µg/L
	Magnesium	12 / 12	69,000	76,000	--	80,000	µg/L
HWGW100	Arsenic	3 / 3	7.8	7.8	5.7	--	µg/L
	Barium	2 / 3	< 10	< 10	--	12	µg/L
	Calcium	2 / 3	< 500 *	< 500 *	--	30,000	µg/L
	Chromium	7 / 7	24	49	13	--	µg/L
	Copper	2 / 3	1.4	1.4	< 1	1.8	µg/L
	Magnesium	3 / 3	49,000	49,000	--	140,000	µg/L
	Manganese	2 / 3	< 10	< 10	--	60	µg/L
	Potassium	3 / 3	2,900	2,900	1,700	--	µg/L
	Sodium	3 / 3	220,000	220,000	--	290,000 *	µg/L
HWGW101	Calcium	2 / 3	< 500 *	< 500 *	--	15,000	µg/L
	Chromium	8 / 8	22	35	15	--	µg/L
	Magnesium	3 / 3	26,000	26,000	25,000	--	µg/L
	Potassium	3 / 3	1,600	1,600	780	--	µg/L
	Sodium	3 / 3	260,000	260,000	210,000 *	--	µg/L

An asterisk (*) indicates qualified data in the above table.

Concentrations of barium, calcium, and manganese were significantly higher within monitoring well HWGW100, and the detected concentration of calcium was significantly higher within monitoring well HWGW101 during the Third Quarter 2006. However, Third and Fourth Quarters 2006 were only the second and third times, respectively, that dissolved metals have been analyzed for within these wells. Dissolved metals analysis will continue at these locations in future monitoring events determine if these are increasing trends.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Groundwater elevations, gradients, and flow directions during Third and Fourth Quarters 2006 are consistent with historical values and interpretations.

Dissolved oxygen and general chemistry results during the Third and Fourth Quarters 2006 were generally within historical ranges.

Third and Fourth Quarters 2006 were only the second and third times, respectively, that dissolved metals have been analyzed for in samples from wells HWGW100 and HWGW101. Therefore, analysis for dissolved metals will continue at these and remaining locations in future monitoring events to establish a baseline for HWGW100 and HWGW101 and to determine if metals concentrations are increasing or decreasing.

Table A-4-1
Results of General Chemistry Analyses
Battery Howe/Wagner
Presidio of San Francisco, California

Well Name	Sample Date	Total Alkalinity	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate	Total Dissolved Solids	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	Field	E300.0/ SW9056	E300.0/ SW9056	E300.0/ SW9056	E353.2	E300.0/ SW9056	E160.1	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mV)	pH units	C°
BHWGW01	12/07/06	530	530	200	0.87	< 0.1	5.9	< 0.05	NA	65	NA	54.3	7.8	16.58
	08/15/06	530	530	200	0.52	< 0.1	5.9	< 0.05	NA	68	NA	75.10	7.71	17.25
DUP0815062A	08/15/06	530	530	200	--	< 0.1	5.7	< 0.05	NA	66	NA	--	--	--
	05/25/06	520	520	200	0.92	< 0.1	5.6	< 0.05	NA	67	NA	158.6	7.8	17.42
DUP0525063A	05/25/06	530	530	200	NA	< 0.1	5.3	< 0.05	NA	66	NA	--	--	--
BHWGW01CL	05/25/06	512	NA	220	NA	< 1 U	6.49	< 0.02 U	NA	68	NA	--	--	--
	03/16/06	520	520	210	0.84	0.11	5.2	< 0.05	NA	66	NA	28.1	7.76	16.55
	03/15/05	560	560	240	0.5	0.1	5.5	< 0.05	NA	65	NA	--	--	--
	03/18/04	480	480	260	0.5	< 0.1	5.8	< 0.05	NA	69	NA	--	--	--
DUP0318041A	03/18/04	480	480	260	--	< 0.1	5.9	< 0.05	NA	68	NA	--	--	--
	12/04/03	520	520	240	0.5	< 0.1	5.5	< 0.05	NA	65	NA	--	--	--
	08/21/03	530	530	210	0.65	< 0.1	5.5	< 0.05	NA	63	NA	--	--	--
	06/10/03	500	500	240	0.62	< 0.1	6.5	< 0.05	NA	71	NA	--	--	--
	03/12/03	580	580	240	0.46	0.12	6.6	< 0.05	NA	61	NA	--	--	--
	12/09/02	500	500	250	0.84	0.12	6.3	< 0.05	NA	68	NA	--	--	--
	08/28/02	430	430	230	0.54	0.16	6.5	< 0.05	NA	74	NA	--	--	--
	06/05/02	520	520	250	0.49	0.15	6.9	< 0.05	NA	67	NA	--	--	--
DUP0605023A	06/05/02	520	520	250	--	0.14	7.4	< 0.05	NA	70	NA	--	--	--
	03/06/02	460	460	280	4.4	0.18	6.9	< 0.05	NA	72	NA	--	--	--
DUP0306023A	03/06/02	460	460	280	--	0.18	6.9	< 0.05	NA	72	NA	--	--	--
BHWGW01CL	03/06/02	430	430	270	--	< 1	7.2 ²	< 1	NA	75	NA	--	--	--
	11/28/01	480	480	310	1.6	0.14	6.7	< 0.05	NA	73	NA	--	--	--
DUP1128012A	11/28/01	480	480	300	--	0.14	6 J	< 0.05	NA	67	NA	--	--	--
BHWGW01CL	11/28/01	470	470	130	--	< 1	6.3 ²	< 1	NA	49	NA	--	--	--
	08/30/01	480	480	290	2.5	0.16	6.9	< 0.05	NA	73	NA	--	--	--
DUP0830011A	08/30/01	480	480	290	--	0.2	6.3	< 0.05	NA	76	NA	--	--	--
	05/10/01	520	520	290	3.2	0.18	6.6	< 0.05	NA	69	NA	--	--	--
	11/19/98	NA	NA	NA	3.3	NA	NA	NA	NA	NA	1,070	--	--	--
	01/12/98	499	499	297	1.8	NA	6.4	NA	NA	61	1,130	--	--	--
	02/11/97	NA	NA	NA	0.6	NA	NA	NA	NA	NA	NA	--	--	--
	11/07/94	647	647	289	NM	NA	11.1	NA	NA	88.7	1,020	--	--	--
	08/25/92	560	534	250	NM	NA	NA	NA	6.3	65	1,120	--	--	--
BHWGW04	12/07/06	310	310	85	0.70	< 0.1	4.7	< 0.05	NA	59	NA	158.1	7.3	16.11
DUP1207062A	12/07/06	310	310	85	--	< 0.1	4.7	< 0.05	NA	59	NA	--	--	--
	08/15/06	310	310	87	0.97	< 0.1	4.7	< 0.05	NA	59	NA	134.3	7.24	17.38
	05/25/06	310	310	89	1.06	< 0.1	4.6	< 0.05	NA	62	NA	129.2	7.17	16.4
	03/15/06	210	210	89	0.9	< 0.1	4.9	< 0.05	NA	62	NA	-47.3	7.39	16.66
	03/15/05	310	310	89	0.7	< 0.1	5.1	< 0.05	NA	57	NA	--	--	--
	03/18/04	310	310	95	0.8	< 0.1	5.1	< 0.05	NA	60	NA	--	--	--

Table A-4-1
Results of General Chemistry Analyses
Battery Howe/Wagner
Presidio of San Francisco, California

Well Name	Sample Date	Total Alkalinity	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate	Total Dissolved Solids	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	Field	E300.0/ SW9056	E300.0/ SW9056	E300.0/ SW9056	E353.2	E300.0/ SW9056	E160.1	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mV)	pH units	C°
BHWGW04	03/12/03	320	320	90	1.33	< 0.1	4.9	< 0.05	NA	58	NA	--	--	--
	12/05/02	330	330	87	1.63	< 0.1	5.1	< 0.05	NA	54	NA	--	--	--
	08/28/02	290	290	87	0.9	0.11	5	< 0.05	NA	62	NA	--	--	--
	06/04/02	310	310	98	1.01	0.27	5	< 0.05	NA	64	NA	--	--	--
	03/06/02	310	310	100	1.0	0.22	5.2	< 0.05	NA	68	NA	--	--	--
	11/28/01	320	320	98	1.2	0.21	5.7	< 0.05	NA	56	NA	--	--	--
	08/30/01	300	300	110	2.2	0.21	4.9	< 0.05	NA	66	NA	--	--	--
	05/10/01	330	330	94	5.0	0.18	4.9	<0.05	NA	60	NA	--	--	--
	01/13/98	316	316	86	1.3	NA	4.6	NA	NA	57	644	--	--	--
	02/11/97	NA	NA	NA	1.7	NA	NA	NA	NA	NA	NA	--	--	--
BHWGW05	12/07/06	730	730	100	0.68	0.12	< 0.05	< 0.05	NA	110	NA	91.2	7.2	16
	08/15/06	620	620	100	0.52	< 0.1	0.05	< 0.05	NA	84	NA	-82.90	7.08	17.36
	05/25/06	740	740	100	0.77	0.12	< 0.05	< 0.05	NA	84	NA	136.7	7.09	16.79
	03/16/06	790	790	100	0.78	0.13	< 0.05	< 0.05	NA	87	NA	130.1	6.96	16.98
	03/15/05	1,700	1,700	99	0.3	0.13	< 0.05	< 0.05	NA	53	NA	--	--	--
	03/18/04	730	730	100	0.7	0.14	< 0.05	< 0.05	NA	78	NA	--	--	--
	03/12/03	640	640	97	0.83	0.23	0.15	< 0.05	NA	93	NA	--	--	--
	12/09/02	620	620	96	0.22	0.11	< 0.05	< 0.05	NA	120	NA	--	--	--
	08/28/02	560	560	95	0.34	0.17	0.07	< 0.05	NA	95	NA	--	--	--
	08/28/02	590	590	97	--	0.18	< 0.05	< 0.05	NA	100	NA	--	--	--
DUP0828021A	06/05/02	660	660	110	0.75	0.25	0.08	< 0.05	NA	59	NA	--	--	--
	03/06/02	650	650	100	0.6	0.22	0.03 J	< 0.05	NA	34	NA	--	--	--
	11/28/01	640	640	110	1.3	0.24	< 0.05	< 0.05	NA	29	NA	--	--	--
	08/30/01	680	680	110	1.8	0.2	< 0.05	< 0.05	NA	31	NA	--	--	--
	05/10/01	720	720	100	6.1	0.2	0.22	< 0.05	NA	34	NA	--	--	--
	01/13/98	795	795	95	2.4	NA	< 0.5	NA	NA	36	1,070	--	--	--
	02/11/97	NA	NA	NA	2.6	NA	NA	NA	NA	NA	NA	--	--	--
HWGW100	12/07/06	900	900	140	1.19	< 0.1	0.11	< 0.05	NA	180	NA	83.3	7.6	15.25
	08/15/06	680	680	38	1.06	< 0.1	0.51	< 0.05	NA	73	NA	83.40	7.49	16.92
	05/25/06	590	590	23	2.39	< 0.1	1.3	< 0.05	NA	65	NA	150.1 NM	7.58	17.59
	03/15/06	700	700	37	0.52	0.11	0.71	< 0.05	NA	90	NA	-70.4	8.5	18.19
	03/15/05	1,200	1,200	57	0.2	< 0.1	0.33	< 0.05	NA	100	NA	--	--	--
	03/18/04	790	790	45	0.4	0.13	0.53	< 0.05	NA	110	NA	--	--	--
	08/21/03	NA	NA	NA	0.6	NA	NA	NA	NA	NA	NA	--	--	--
	06/10/03	770	770	46	1.42	< 0.1	0.5	< 0.05	NA	120	NA	--	--	--
	03/12/03	810	810	52	0.66	< 0.1	0.72	< 0.05	NA	120	NA	--	--	--
	06/04/02	820	820	54	1.21	0.32	0.56	< 0.05	NA	120	NA	--	--	--
	03/06/02	890	890	96	2.6	0.28	0.9	< 0.05	NA	130	NA	--	--	--
	05/10/01	880	880	130	5.3	0.27	0.51	< 0.05	NA	120	NA	--	--	--
	07/25/00	730	730	590	NM	NA	NA	NA	NA	300	2,040	--	--	--

Table A-4-1
Results of General Chemistry Analyses
Battery Howe/Wagner
Presidio of San Francisco, California

Well Name	Sample Date	Total Alkalinity	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate	Total Dissolved Solids	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	Field	E300.0/ SW9056	E300.0/ SW9056	E300.0/ SW9056	E353.2	E300.0/ SW9056	E160.1	Field	Field	Field
HWGW101		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mV)	pH units	C°
	12/07/06	410	410	55	2.35	< 0.1	1.5	< 0.05	NA	60	NA	105.9	7.6	15.08
	08/15/06	450	450	57	2.11	0.1	1.5	< 0.05	NA	81	NA	129.30	7.44	16.87
	05/25/06	520	520	54	1.87	0.12	1.5	< 0.05	NA	100	NA	138.7 NM	7.55	19.1
	03/15/06	510	510	52	1.78	0.1	1.5	< 0.05	NA	84	NA	-62.5	7.65	17.42
	03/15/05	530	530	58	0.9	< 0.1	1.9	< 0.05	NA	88	NA	--	--	--
	03/18/04	530	530	50	1	0.1	1.9	< 0.05	NA	100	NA	--	--	--
	08/21/03	640	640	48	1.33	0.1	1.7	< 0.05	NA	130	NA	--	--	--
	06/10/03	570	570	61	1.4	0.14	2.1	< 0.05	NA	140	NA	--	--	--
	03/12/03	550	550	90	1.47	0.15	2	< 0.05	NA	120	NA	--	--	--
	08/29/02	590	590	99	1.53	0.18	1.7	< 0.25	NA	150	NA	--	--	--
	06/04/02	460	460	100	1.31	0.28	1.8	< 0.05	NA	190	NA	--	--	--
	03/06/02	500	500	130	3.6	0.23	2.2	< 0.05	NA	120	NA	--	--	--
	11/28/01	520	520	150	3.2	0.27	2.1	< 0.05	NA	110	NA	--	--	--
	08/30/01	540	540	150	2.2	0.26	1.8	< 0.05	NA	140	NA	--	--	--
	05/10/01	590	590	130	4	0.23	1.9	< 0.05	NA	160	NA	--	--	--
	07/25/00	530	530	280	NM	NA	NA	NA	NA	160	1,200	--	--	--

Notes

- 1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.
- 2 - The QC laboratory nitrate results shown have been converted to nitrate as nitrogen (nitrate-N) as other laboratory results are reported. The QC laboratory reported nitrate as NO₃ concentrations (nitrate-NO₃) which are 4.43 times higher than nitrate-N concentrations.

mg/L - milligrams per liter

NA - not analyzed

NM - not measured

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

"--" dissolved oxygen measurements were not taken for duplicate and quality control samples.

Table 7 in the main report identifies all duplicate and split samples and associate them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

mV - millivolts

C° - degrees centigrade

ORP - Oxidation-reduction potential

Table A-4-2
Results of Dissolved Metals Analyses
Battery Howe/Wagner
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Hexavalent Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
	Analytical Method ¹	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW7196A	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
BHWGW01	12/07/06	< 100	< 1	< 5	48	< 2	< 1	18,000	120	NA	< 10	< 1	< 100	< 3	86,000	< 10	< 20	< 500	< 5	< 1	230,000 J	< 1	< 10	25
	08/15/06	< 100	< 1	< 5	46	< 2	< 1	18,000	120	NA	< 10	< 1	< 100	< 3	84,000	< 10	< 20	< 500	< 5	< 1	250,000	< 1	< 10	< 20
	08/15/06	< 100	< 1	< 5	47	< 2	< 1	18,000	110	NA	< 10	< 1	< 100	< 3	82,000	< 10	< 20	< 500	< 5	< 1	240,000	< 1	< 10	< 20
DUP0815062A	05/25/06	< 100 UJ	< 1	< 5	46	< 2	< 1	< 500 U	110	NA	< 10	< 1	< 100	< 3	75,000	< 10	< 20	< 500	< 5	< 1	230,000	< 1	< 10	< 20
	05/25/06	< 100 UJ	< 1	< 5	49	< 2	< 1	< 500 U	120	NA	< 10	< 1	< 100	< 3	79,000	< 10	< 20	< 500	< 5	< 1	240,000	< 1	< 10	< 20
DUP0525063A	05/25/06	< 100 U	< 2 U	< 2 U	53	< 1 U	< 1 U	19,600	128	NA	< 1 U	2.3	< 100 U	< 1 U	88,300	< 10 U	3.5	< 5,000 U	< 2 U	< 1 U	241,000	< 1 U	< 10 U	< 20 U
BHWGW01CL	03/16/06	< 100 UJ	NA	NA	NA	NA	NA	NA	110	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/15/05	< 100	NA	NA	NA	NA	NA	NA	110	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/18/04	< 100	NA	NA	NA	NA	NA	NA	110	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/18/04	< 100	NA	NA	NA	NA	NA	NA	110	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/04/03	< 100	NA	NA	NA	NA	NA	NA	120	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/21/03	< 100	NA	NA	NA	NA	NA	NA	110	NA	NA	NA	120	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	06/10/03	< 100	NA	NA	NA	NA	NA	NA	120	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/12/03	NA	NA	NA	NA	NA	NA	NA	NA	120	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/09/02	NA	NA	NA	NA	NA	NA	NA	NA	130	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/28/02	NA	NA	NA	NA	NA	NA	NA	NA	130	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP0605023A	06/05/02	NA	NA	NA	NA	NA	NA	NA	NA	120	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	06/05/02	NA	NA	NA	NA	NA	NA	NA	NA	120	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/06/02	NA	NA	NA	NA	NA	NA	NA	NA	130	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP0306023A	03/06/02	NA	NA	NA	NA	NA	NA	NA	NA	120	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BHWGW01CL	03/06/02	NA	NA	NA	NA	NA	NA	NA	NA	130	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP1128012A	11/28/01	NA	NA	NA	NA	NA	NA	NA	NA	140	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/28/01	NA	NA	NA	NA	NA	NA	NA	NA	140	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BHWGW01CL	11/28/01	NA	NA	NA	NA	NA	NA	NA	NA	130	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP0830011A	08/30/01	NA	NA	NA	NA	NA	NA	NA	NA	130	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/30/01	NA	NA	NA	NA	NA	NA	NA	NA	110	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/10/01	NA	NA	NA	NA	NA	NA	NA	NA	120	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/19/98	< 100	< 5	< 5	53	< 4	< 2	20,200	127	NA	< 10	21	< 100	< 3	96,200	< 10	< 20	< 5,000	< 5	< 2	250,000	< 2	< 10	24
	01/12/98	< 100	< 5	< 5	56	< 4	< 2	20,700	146	NA	< 10	< 10	< 100	< 3	98,200	< 10	< 20	< 5,000	< 5	< 2	261,000	< 2	< 10	< 20
	02/11/97	< 100	< 5	< 5	50	< 4	< 2	20,000	120	NA	< 10	< 10	< 100	< 3	99,000	< 10	< 20	< 5,000	< 5	< 2	240,000	< 2	< 10	< 20
	12/02/96	< 100	< 5	< 5	50	< 4	< 2	20,000	120	NA	< 10	< 10	< 100	< 3	97,000	< 10	< 20	< 5,000	11	< 2	270,000	< 2	< 10	< 20
	08/27/96	< 100	< 5	< 5	50	< 2	< 0.5	20,000	120	NA	< 10	< 1	< 100	< 1	94,000	< 10	< 5	< 5,000	18	< 0.5	230,000	< 2	< 10	< 20
	05/28/96	< 100	< 5	< 5	50	< 2	< 0.5	20,000	120	NA	< 10	< 1	< 100	< 1	98,000	< 10	6	< 5,000	< 5	< 0.5	240,000	< 2	< 10	20
	03/12/96	< 100	< 5	< 5	57	< 2	< 0.5	21,300	126	NA	< 10	< 1	< 100	< 1	103,000	< 10	< 5	< 5,000	< 5	< 0.5	273,000	4	< 10	< 20
	12/20/95	1,700	< 5	7	81	< 2	< 0.5	24,000	280	NA	35	9	5,260	2	126,000	402	534	< 5,000	< 5	< 0.5	284,000	< 2	< 10	64
	09/28/95	< 200	< 60	< 5	34	< 2	< 2	17,000	82	NA	< 20	< 10	< 100	< 3	69,000	< 10	< 20	< 500	< 5	< 5	210,000	< 5	< 10	< 20
	01/11/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/05/94	NA	NA	NA	NA	NA	NA	NA	150	161	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/07/94	49	NA	NA	NA	NA	NA	NA	118	220	NA	NA	100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/25/92	635	NA	NA	NA	NA	NA	NA	144	NA	NA	NA	1,920	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table A-4-2
Results of Dissolved Metals Analyses
Battery Howe/Wagner
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Hexavalent Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
	Analytical Method ¹	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW7196A	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
BHWGW04 DUP1207062A	12/07/06	< 100	< 1	< 5	40	< 2	< 1	17,000	< 10	NA	< 10	< 1	< 100	< 3	47,000	< 10	< 20	< 500	< 5	< 1	130,000 J	< 1	< 10	< 20
	12/07/06	< 100	< 1	< 5	40	< 2	< 1	17,000	< 10	NA	< 10	< 1	< 100	< 3	47,000	< 10	< 20	< 500	< 5	< 1	130,000 J	< 1	< 10	< 20
	08/15/06	< 100	< 1	< 5	39	< 2	< 1	18,000	< 10	NA	< 10	< 1	< 100	< 3	44,000	< 10	< 20	< 500	< 5	< 1	130,000	< 1	< 10	< 20
	05/25/06	< 100 UJ	< 1	< 5	37	< 2	< 1	< 500 U	< 10	NA	< 10	< 1	< 100	< 3	39,000	< 10	< 20	< 500	< 5	< 1	140,000	< 1	< 10	< 20
	03/15/06	< 100	NA	NA	NA	NA	NA	NA	< 10	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/15/05	< 100	NA	NA	NA	NA	NA	NA	< 10	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/18/04	< 500	NA	NA	NA	NA	NA	NA	< 50	NA	NA	NA	< 500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/12/03	NA	NA	NA	NA	NA	NA	NA	NA	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/05/02	NA	NA	NA	NA	NA	NA	NA	NA	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/28/02	NA	NA	NA	NA	NA	NA	NA	NA	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	06/04/02	NA	NA	NA	NA	NA	NA	NA	NA	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/06/02	NA	NA	NA	NA	NA	NA	NA	NA	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/28/01	NA	NA	NA	NA	NA	NA	NA	NA	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/30/01	NA	NA	NA	NA	NA	NA	NA	NA	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/10/01	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	01/13/98	< 100	< 5	< 5	35	< 4	< 2	17,800	16	NA	< 10	< 10	< 100	< 3	51,900	< 10	< 20	< 5,000	< 5	< 2	122,000	< 2	< 10	< 20
	02/11/97	< 100	< 5	< 5	40	< 4	< 2	21,000	< 10	NA	< 10	< 10	< 100	< 3	56,000	< 10	< 20	< 5,000	< 5	< 2	150,000	< 2	< 10	< 20
	12/02/96	< 100	< 5	< 5	40	< 4	< 2	19,000	10	NA	< 10	< 10	< 100	< 3	54,000	< 10	< 20	< 5,000	9	< 2	120,000	< 2	< 10	< 20
	08/27/96	< 100	< 5	< 5	40	< 2	< 0.5	20,000	7	NA	< 10	< 1	< 100	< 1	56,000	< 10	< 5	< 5,000	8	< 0.5	110,000	< 2	< 10	< 20
	05/29/96	< 100	< 5	< 5	30	< 2	< 0.5	19,000	13	NA	< 10	< 1	< 100	1	53,000	< 10	5	< 5,000	< 5	< 0.5	130,000	< 2	< 10	< 20
	03/12/96	< 100	< 5	< 5	40	< 2	< 0.5	20,600	14	NA	< 10	< 1	< 100	1	58,800	< 10	6	< 5,000	< 5	< 0.5	135,000	< 2	< 10	< 20
	12/20/95	< 100	< 5	< 5	40	< 2	< 0.5	18,100	18	NA	< 10	3	< 100	< 1	55,400	< 10	< 5	< 5,000	< 5	< 0.5	125,000	< 2	< 10	< 20
	09/29/95	< 200	< 60	< 5	28	< 2	< 2	16,000	15	NA	< 20	< 10	< 100	< 3	51,000	< 10	< 20	< 500	< 5	< 5	110,000	< 5	< 10	< 20
11/09/94	184 G	NA	NA	NA	NA	NA	NA	NA	33	36.6	NA	NA	205	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
08/25/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
BHWGW05	12/07/06	< 100	< 1	< 5	77	< 2	< 1	65,000	< 10	NA	< 10	< 1	< 100	< 3	80,000	380	26	3,000	< 5	< 1	220,000 J	< 1	< 10	< 20
	08/15/06	< 100	< 1	< 5	85	< 2	< 1	70,000	< 10	NA	< 10	< 1	< 100	< 3	79,000	430	27	3,200	< 5	< 1	230,000	< 1	< 10	< 20
	05/25/06	< 100 UJ	< 1	< 5	90	< 2	< 1	68,000	< 10	NA	< 10	< 1	< 100	< 3	75,000	560	31	3,700	< 5	< 1	230,000	< 1	< 10	< 20
	03/16/06	< 100 UJ	NA	NA	NA	NA	NA	NA	< 10	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/15/05	< 100	NA	NA	NA	NA	NA	NA	< 10	NA	NA	NA	150	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/18/04	< 100	NA	NA	NA	NA	NA	NA	< 10	NA	NA	NA	140	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/12/03	NA	NA	NA	NA	NA	NA	NA	NA	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/09/02	NA	NA	NA	NA	NA	NA	NA	NA	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/28/02	NA	NA	NA	NA	NA	NA	NA	NA	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/28/02	NA	NA	NA	NA	NA	NA	NA	NA	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	06/05/02	NA	NA	NA	NA	NA	NA	NA	NA	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/06/02	NA	NA	NA	NA	NA	NA	NA	NA	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/28/01	NA	NA	NA	NA	NA	NA	NA	NA	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/30/01	NA	NA	NA	NA	NA	NA	NA	NA	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/10/01	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	01/13/98	< 100	< 5	< 5	47	< 4	< 2	57,000	< 10	NA	< 10	< 10	100	< 3	71,900	461	34	5,020	< 5	< 2	230,000	< 2	< 10	< 20
	02/11/97	< 100	< 5	< 5	40	< 4	< 2	57,000	< 10	NA	< 10	< 10	< 100	< 3	76,000	150	20	< 5,000	8	< 2	230,000	< 2	< 10	< 20

Table A-4-2
Results of Dissolved Metals Analyses
Battery Howe/Wagner
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Hexavalent Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
	Analytical Method ¹	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW7196A	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
BHWGW05	12/02/96	< 100	< 5	< 5	40	< 4	< 2	52,000	< 10	NA	< 10	< 10	< 100	< 3	69,000	140	20	< 5,000	12	< 2	230,000	< 2	< 10	< 20
	08/27/96	< 100	< 5	< 5	40	< 2	< 0.5	58,000	1	NA	< 10	1	< 100	< 1	70,000	160	23	6,000	21	< 0.5	230,000	< 2	< 10	< 20
	05/29/96	< 100	< 5	< 5	40	< 2	< 0.5	58,000	< 1	NA	< 10	1	< 100	< 1	75,000	210	21	< 5,000	< 5	< 0.5	250,000	< 2	< 10	< 20
	03/12/96	< 100	< 5	< 5	52	< 2	< 0.5	66,900	2	NA	< 10	2	< 100	1	74,900	80	17	12,000	< 5	< 0.5	270,000	6	< 10	< 20
	12/20/95	< 100	< 5	5	31	< 2	< 0.5	50,000	< 5	NA	< 10	4	< 100	< 1	74,400	180	21	7,730	< 5	< 0.5	266,000	< 2	< 10	28
	09/27/95	< 200	< 60	< 5	18	< 2	< 2	35,000	< 10	NA	< 20	< 10	< 100	< 3	74,000	250	22	5,300	< 5	< 5	220,000	< 5	< 10	< 20
	11/09/94	1,480	NA	NA	NA	NA	NA	NA	27	16.1	NA	NA	2,020	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HWGW100	08/25/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/07/06	< 100	< 1	5.7	12	< 2	< 1	30,000	13	NA	< 10	< 1	< 100	< 3	140,000	60	< 20	1,700	< 5	< 1	290,000 J	< 1	< 10	< 20
	08/15/06	< 100	< 1	6.1	12	< 2	< 1	24,000	20	NA	< 10	1.8	< 100	< 3	81,000	36	< 20	2,000	< 5	< 1	240,000	< 1	< 10	< 20
	05/25/06	< 100 UJ	< 1	7.8	< 10	< 2	< 1	< 500 U	24	NA	< 10	1.4	< 100	< 3	49,000	< 10	< 20	2,900	< 5	< 1	220,000	< 1	< 10	< 20
	03/15/06	< 100	NA	NA	NA	NA	NA	NA	32	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/15/05	< 100	NA	NA	NA	NA	NA	NA	33	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/18/04	< 100	NA	NA	NA	NA	NA	NA	49	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	06/10/03	< 100	NA	NA	NA	NA	NA	NA	46	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/12/03	NA	NA	NA	NA	NA	NA	NA	NA	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	06/04/02	NA	NA	NA	NA	NA	NA	NA	NA	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/06/02	NA	NA	NA	NA	NA	NA	NA	NA	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HWGW101	05/10/01	NA	NA	NA	NA	NA	NA	NA	NA	< 10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	07/25/00	NA	NA	NA	NA	NA	NA	NA	NA	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/07/06	< 100	< 1	< 5	< 10	< 2	< 1	12,000	15	NA	< 10	< 1	< 100	< 3	25,000	< 10	< 20	780	< 5	< 1	210,000 J	< 1	< 10	< 20
	08/15/06	< 100	< 1	< 5	< 10	< 2	< 1	15,000	17	NA	< 10	< 1	< 100	< 3	25,000	< 10	< 20	900	< 5	< 1	230,000	< 1	< 10	< 20
	05/25/06	< 100 UJ	< 1	< 5	< 10	< 2	< 1	< 500 U	23	NA	< 10	< 1	< 100	< 3	26,000	< 10	< 20	1,600	< 5	< 1	260,000	< 1	< 10	< 20
	03/15/06	< 100	NA	NA	NA	NA	NA	NA	22	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/15/05	< 100	NA	NA	NA	NA	NA	NA	27	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/18/04	< 100	NA	NA	NA	NA	NA	NA	35	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/21/03	< 100	NA	NA	NA	NA	NA	NA	35	NA	NA	NA	130	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	06/10/03	< 100	NA	NA	NA	NA	NA	NA	35	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/12/03	NA	NA	NA	NA	NA	NA	NA	NA	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/29/02	NA	NA	NA	NA	NA	NA	NA	NA	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	06/04/02	NA	NA	NA	NA	NA	NA	NA	NA	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/06/02	NA	NA	NA	NA	NA	NA	NA	NA	130	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/28/01	NA	NA	NA	NA	NA	NA	NA	NA	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/30/01	NA	NA	NA	NA	NA	NA	NA	NA	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/10/01	NA	NA	NA	NA	NA	NA	NA	NA	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	07/25/00	NA	NA	NA	NA	NA	NA	NA	NA	40	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

µg/L - micrograms per liter

NA - not analyzed

ND - not detected

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Groundwater samples collected from all site monitoring wells were field filtered and analyzed for dissolved metals.

Table 7 in the main report identifies all duplicate and split samples and associate them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-4-3
Results of VOC Analyses
Battery Howe/Wagner
Presidio of San Francisco, California

Well Name	Sample Date	Volatile Organic Compounds (VOCs)						
		1,1-DCE	Benzene	Carbon Tetrachloride	Chloroform	MTBE	Toluene	All Other VOCs
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
BHWGW01	03/16/06	< 0.5	< 0.5	1.1	0.7	< 0.5	< 0.5	ND
	03/15/05	< 0.5	< 0.5	1.1	0.7	< 0.5	< 0.5	ND
	03/18/04	< 0.5	< 0.5	1.3	0.9	< 0.5	< 0.5	ND
DUP0318041A	03/18/04	< 0.5	< 0.5	1.3	0.9	< 0.5	< 0.5	ND
	12/04/03	< 0.5	< 0.5	1.3	0.8	< 0.5	< 0.5	ND
	08/21/03	< 0.5	< 0.5	1	0.7	< 0.5	< 0.5	ND
DUP0605023A	06/10/03	< 0.5	< 0.5	2.2	0.8	< 0.5	< 0.5	ND
	03/12/03	< 0.5	< 0.5	1.3	< 0.5	< 0.5	< 0.5	ND
	12/09/02	< 0.5	< 0.5	1.1	0.7	< 0.5 UJ	< 0.5	ND
DUP0306023A	08/28/02	< 0.5	< 0.5	1.1	0.7	< 0.5	< 0.5	ND
	06/05/02	< 0.5	< 0.5	1.4	0.7	< 0.5	< 0.5	ND
	06/05/02	< 0.5	< 0.5	1.4	0.7	< 0.5	< 0.5	ND
DUP0306023A	03/06/02	< 0.5	< 0.5	0.9	0.9	< 0.5	< 0.5	ND
	03/06/02	< 0.5	< 0.5	0.8	0.8	< 0.5	< 0.5	ND
	03/06/02	< 0.5	< 0.5	1.6	< 1	< 5	< 0.5	ND
BHWGW01CL	11/28/01	< 0.5	< 0.5	1.1	0.8	< 0.5	< 0.5	ND
	11/28/01	< 0.5	< 0.5	1.2	0.7	< 0.5	< 0.5	ND
	11/28/01	< 0.5	< 0.5	1.1	< 1	< 5	< 0.5	ND
DUP1128012A	08/30/01	< 0.5	< 0.5	1.4	0.9	< 0.5	< 0.5	ND
	08/30/01	< 0.5	< 0.5	1.3	0.9	< 0.5	< 0.5	ND
	05/10/01	< 0.5	< 0.5	1.4	1	< 0.5	< 0.5	ND
DUP0830011A	11/19/98	< 0.5	< 0.5	1.1	0.77	NA	< 0.5	ND
	01/12/98	< 0.5	< 0.5	1.3	0.77	NA	< 0.5	ND
	02/11/97	< 0.5	< 0.5	1.1	0.7	NA	< 0.5	ND
DUP0830011A	12/02/96	< 0.5	< 0.5	1.2	0.7	NA	< 0.5	ND
	08/27/96	< 0.5	< 0.5	0.8	0.6	NA	2.8	ND
	05/28/96	< 0.5	< 0.5	1.1	0.9	NA	< 0.5	ND
DUP0830011A	03/12/96	< 0.5	< 0.5	0.8	0.5	NA	< 0.5	ND
	12/20/95	< 0.5	< 0.5	0.9	< 0.5	NA	< 0.5	ND
	09/28/95	< 0.5	< 0.5	1.1	< 0.5	NA	< 0.5	ND
DUP0830011A	01/11/95	NA	NA	NA	0.68	NA	NA	ND
	12/05/94	NA	NA	NA	NA	NA	NA	NA
	11/07/94	NA	NA	NA	NA	NA	NA	NA
DUP0830011A	08/25/92	NA	NA	0.87	NA	NA	NA	NA
	03/15/06	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/15/05	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
BHWGW04	03/18/04	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/12/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/05/02	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
BHWGW04	08/28/02	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/04/02	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/06/02	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
BHWGW04	11/28/01	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/30/01	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND

Table A-4-3
Results of VOC Analyses
Battery Howe/Wagner
Presidio of San Francisco, California

Well Name	Sample Date	Volatile Organic Compounds (VOCs)						
		1,1-DCE	Benzene	Carbon Tetrachloride	Chloroform	MTBE	Toluene	All Other VOCs
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
BHWGW04	05/10/01	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	01/13/98	NA	NA	NA	NA	NA	NA	NA
	02/11/97	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	12/02/96	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	08/27/96	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	05/29/96	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	03/12/96	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	12/20/95	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	09/29/95	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	11/09/94	NA	NA	NA	NA	NA	NA	NA
	08/25/92	NA	NA	< 0.07	NA	NA	NA	NA
BHWGW05 DUP0828021A	03/16/06	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/15/05	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/18/04	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/12/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/09/02	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5 UJ	< 0.5	ND
	08/28/02	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/28/02	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/05/02	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/06/02	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	11/28/01	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/30/01	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/10/01	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	01/13/98	NA	NA	NA	NA	NA	NA	NA
	02/11/97	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	12/02/96	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	08/27/96	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	05/29/96	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	03/12/96	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	12/20/95	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	09/27/95	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	11/09/94	NA	NA	NA	NA	NA	NA	NA
	08/25/92	NA	NA	< 0.07	NA	NA	NA	NA
HWGW100	03/15/06	3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/15/05	2.3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/18/04	2.9	0.1 J	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/10/03	2.6	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/12/03	2.4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/04/02	1.8	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/06/02	1.6	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/10/01	1.7	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	07/25/00	< 5	< 5	< 1	< 1	< 0.5	< 1	ND

Table A-4-3
Results of VOC Analyses
Battery Howe/Wagner
Presidio of San Francisco, California

Well Name	Sample Date	Volatile Organic Compounds (VOCs)						
		1,1-DCE	Benzene	Carbon Tetrachloride	Chloroform	MTBE	Toluene	All Other VOCs
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
HWGW101	03/15/06	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/15/05	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/18/04	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/21/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/10/03	< 0.5	< 0.5	1.5	< 0.5	< 0.5	< 0.5	ND
	03/12/03	< 0.5	< 0.5	0.5	< 0.5	< 0.5	< 0.5	ND
	08/29/02	< 0.5	< 0.5	0.7	< 0.5	< 0.5	< 0.5	ND
	06/04/02	< 0.5	< 0.5	0.6	< 0.5	< 0.5	< 0.5	ND
	03/06/02	< 0.5	< 0.5	1.1	< 0.5	< 0.5	< 0.5	ND
	11/28/01	< 0.5	< 0.5	0.6	< 0.5	< 0.5	< 0.5	ND
	08/30/01	< 0.5	< 0.5	1	< 0.5	< 0.5	< 0.5	ND
	05/10/01	< 0.5	< 0.5	0.7	< 0.5	< 0.5	< 0.5	ND
	07/25/00	< 5	< 5	2.5	< 1	< 0.5	< 1	ND

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

µg/L - micrograms per liter

NA - not analyzed

ND - not detected

VOC - volatile organic compound

1,1-DCE - 1,1-dichloroethene

MTBE - methyl tert-butyl ether

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Groundwater samples collected from all site monitoring wells were field filtered and analyzed for dissolved metals.

Table 7 in the main report identifies all duplicate and split samples and associate them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-4-4
Groundwater Elevation Summary
Battery Howe/Wagner
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
BHWGW01	12/04/06	20.55	178.04	157.49	MW
	08/14/06	19.90	178.04	158.14	MW
	05/22/06	17.39	178.04	160.65	MW
	03/06/06	15.19	178.04	162.85	MW
	11/28/05	21.69	178.04	156.35	MW
	08/29/05	20.40	178.04	157.64	MW
	05/23/05	17.32	178.04	160.72	MW
	03/14/05	16.18	178.04	161.86	MW
	12/13/04	20.65	178.04	157.39	MW
	08/09/04	22.18	178.04	155.86	MW
	05/24/04	20.91	178.04	157.13	MW
	03/08/04	17.15	178.04	160.89	MW
	12/01/03	23.10	178.04	154.94	MW
	08/11/03	21.46	178.04	156.58	MW
	06/02/03	19.39	178.04	158.65	MW
	03/10/03	19.06	178.04	158.98	MW
	12/02/02	22.90	178.04	155.14	MW
	08/26/02	21.85	178.04	156.19	MW
	05/28/02	19.95	178.04	158.09	MW
	03/04/02	17.71	178.04	160.33	MW
	11/26/01	22.75	178.04	155.29	MW
	08/27/01	23.15	178.04	154.89	MW
	05/08/01	20.63	178.04	157.41	MW
BHWGW04	12/04/06	14.21	197.73	183.52	MW
	08/14/06	13.69	197.73	184.04	MW
	05/22/06	10.99	197.73	186.74	MW
	03/06/06	12.88	197.73	184.85	MW
	11/28/05	14.14	197.73	183.59	MW
	08/29/05	23.37	197.73	174.36	MW
	05/23/05	13.54	197.73	184.19	MW
	03/14/05	13.64	197.73	184.09	MW
	12/13/04	14.97	197.73	182.76	MW
	08/09/04	16.04	197.73	181.69	MW
	05/24/04	15.77	197.73	181.96	MW
	03/08/04	15.45	197.73	182.28	MW
	12/01/03	18.08	197.73	179.65	MW
	08/11/03	15.72	197.73	182.01	MW
	06/02/03	15.57	197.73	182.16	MW
	03/10/03	16.30	197.73	181.43	MW
	12/02/02	18.14	197.73	179.59	MW
	08/26/02	16.35	197.73	181.38	MW
	05/28/02	14.15	197.73	183.58	MW
	03/04/02	12.55	197.73	185.18	MW
	11/26/01	17.33	197.73	180.40	MW
	08/27/01	16.95	197.73	180.78	MW
	05/08/01	14.43	197.73	183.30	MW

Table A-4-4
Groundwater Elevation Summary
Battery Howe/Wagner
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
BHWGW05	12/04/06	28.35	202.95	174.60	MW
	08/14/06	27.69	202.95	175.26	MW
	05/22/06	27.85	202.95	175.10	MW
	03/06/06	27.58	202.95	175.37	MW
	11/28/05	28.35	202.95	174.60	MW
	08/29/05	28.01	202.95	174.94	MW
	05/23/05	26.58	202.95	176.37	MW
	03/14/05	27.06	202.95	175.89	MW
	12/13/04	28.05	202.95	174.90	MW
	08/09/04	29.35	202.95	173.60	MW
	05/24/04	29.27	202.95	173.68	MW
	03/08/04	28.46	202.95	174.49	MW
	12/01/03	29.66	202.95	173.29	MW
	08/11/03	29.19	202.95	173.76	MW
	06/02/03	29.18	202.95	173.77	MW
	03/10/03	29.39	202.95	173.56	MW
	12/02/02	30.13	202.95	172.82	MW
	08/26/02	29.25	202.95	173.70	MW
	05/28/02	28.10	202.95	174.85	MW
	03/04/02	27.33	202.95	175.62	MW
	11/26/01	30.11	202.95	172.84	MW
	08/27/01	29.56	202.95	173.39	MW
	05/08/01	28.20	202.95	174.75	MW
HWGW100	12/04/06	27.30	209.68	182.38	MW
	08/16/06	23.15	209.68	186.53	MW
	05/22/06	19.71	209.68	189.97	MW
	03/06/06	22.83	209.68	186.85	MW
	11/28/05	27.92	209.68	181.76	MW
	08/29/05	24.24	209.68	185.44	MW
	05/23/05	20.75	209.68	188.93	MW
	03/14/05	23.68	209.68	186.00	MW
	12/13/04	29.63	209.68	180.05	MW
	08/09/04	28.15	209.68	181.53	MW
	05/24/04	26.37	209.68	183.31	MW
	03/08/04	25.90	209.68	183.78	MW
	12/01/03	Dry	209.68	178.68 ²	MW
	08/11/03	28.13	209.68	181.55	MW
	06/02/03	27.32	209.68	182.36	MW
	03/10/03	26.78	209.68	182.90	MW
	12/02/02	Dry	209.68	178.68 ²	MW
	08/26/02	28.19	209.68	181.49	MW
	05/28/02	26.00	209.68	183.68	MW
	03/04/02	26.40	209.68	183.28	MW
	11/26/01	Dry	209.68	178.68 ²	MW
	08/27/01	Dry	209.68	178.68 ²	MW
	05/08/01	28.81	209.68	180.87	MW

Table A-4-4
Groundwater Elevation Summary
Battery Howe/Wagner
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
HWGW101	12/04/06	27.86	214.24	186.38	MW
	08/14/06	25.50	214.24	188.74	MW
	05/22/06	22.52	214.24	191.72	MW
	03/06/06	24.40	214.24	189.84	MW
	11/28/05	28.34	214.24	185.90	MW
	08/29/05	26.22	214.24	188.02	MW
	05/23/05	23.43	214.24	190.81	MW
	03/14/05	25.22	214.24	189.02	MW
	12/13/04	29.52	214.24	184.72	MW
	08/09/04	28.31	214.24	185.93	MW
	05/24/04	26.71	214.24	187.53	MW
	03/08/04	26.33	214.24	187.91	MW
	12/01/03	29.85	214.24	184.39	MW
	08/11/03	27.33	214.24	186.91	MW
	06/02/03	25.78	214.24	188.46	MW
	03/10/03	26.88	214.24	187.36	MW
	12/02/02	29.80	214.24	184.44	MW
	08/26/02	28.10	214.24	186.14	MW
	05/28/02	26.05	214.24	188.19	MW
	03/04/02	26.40	214.24	187.84	MW
	11/26/01	30.22	214.24	184.02	MW
	08/27/01	29.09	214.24	185.15	MW
	05/08/01	27.33	214.24	186.91	MW
HWGW102	12/04/06	Dry	211.44	174.44 ²	MW
	08/14/06	Dry	211.44	174.44 ²	MW
	05/22/06	Dry	211.44	174.44 ²	MW
	03/06/06	Dry	211.44	174.44 ²	MW
	11/28/05	Dry	211.44	174.44 ²	MW
	08/29/05	Dry	211.44	174.44 ²	MW
	05/23/05	Dry	211.44	174.44 ²	MW
	03/14/05	Dry	211.44	174.44 ²	MW
	12/13/04	Dry	211.44	174.44 ²	MW
	08/09/04	Dry	211.44	174.44 ²	MW
	05/24/04	Dry	211.44	174.44 ²	MW
	03/08/04	Dry	211.44	174.44 ²	MW
	12/01/03	Dry	211.44	174.44 ²	MW
	08/11/03	Dry	211.44	174.44 ²	MW
	06/02/03	Dry	211.44	174.44 ²	MW
	03/10/03	Dry	211.44	174.44 ²	MW
	12/02/02	Dry	211.44	174.44 ²	MW
	08/26/02	Dry	211.44	174.44 ²	MW
	05/28/02	Dry	211.44	174.44 ²	MW

Table A-4-4
Groundwater Elevation Summary
Battery Howe/Wagner
 Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
HWGW102	03/04/02	Dry	211.44	174.44 ²	MW
	11/26/01	Dry	211.44	174.44 ²	MW
	08/27/01	Dry	211.44	174.44 ²	MW
	05/08/01	Dry	211.44	174.44 ²	MW

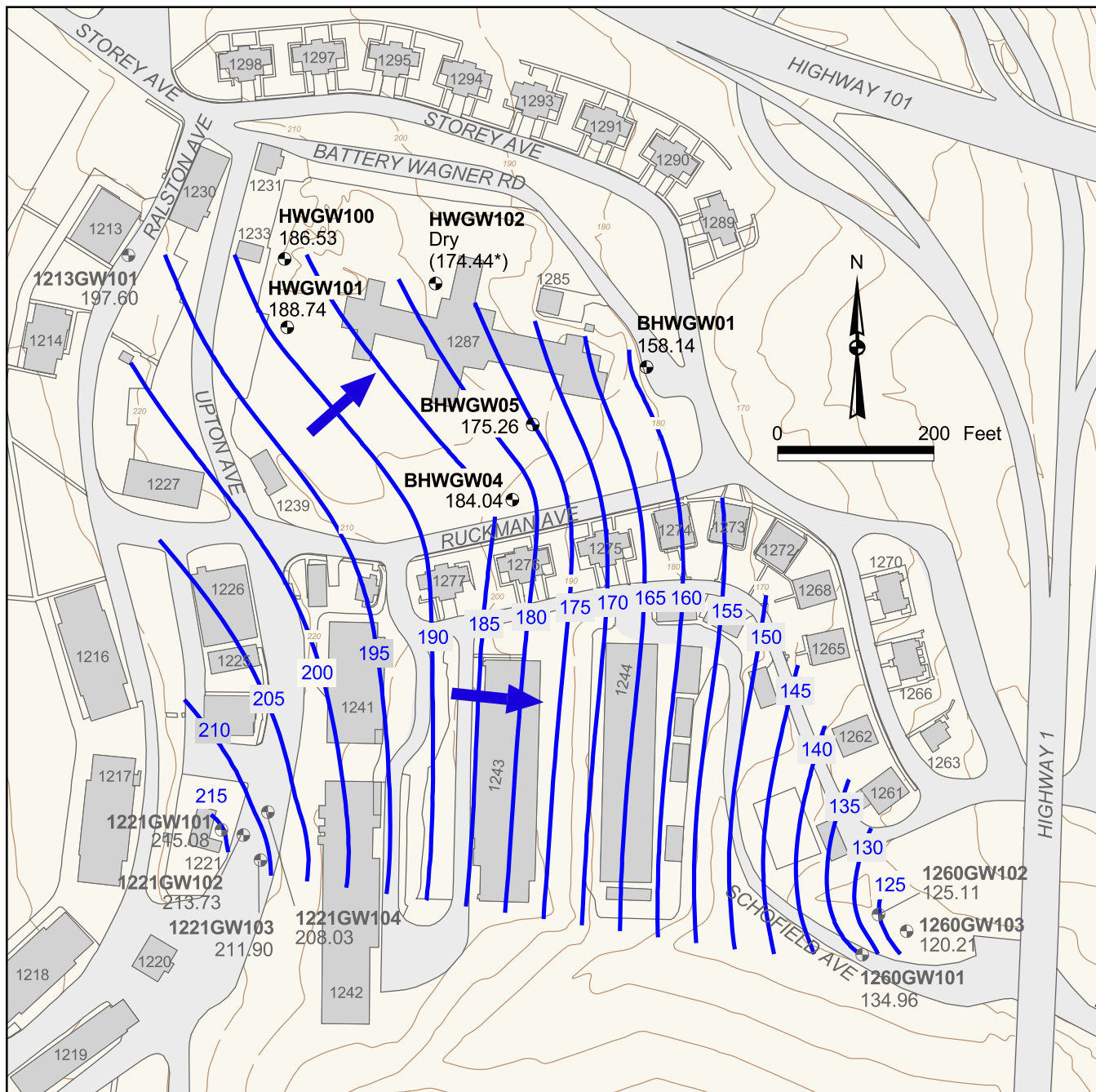
Notes

1 - All depth to water measurements are an average of three measurements recorded in the field.

2 - Elevation indicates bottom of casing elevation.

MW - Monitoring Well

feet PLLW - feet above Presidio Lower Low Water vertical datum.



LEGEND



Approximate Direction
of Groundwater Flow



Groundwater Contour
(Contour Interval : 5 ft)



Topographic Contour
(Contour Interval : 10 ft)



Building and Number



HWGW101
188.74

(174.44*)



1213GW101
197.60

Groundwater Monitoring Well
August 2006 Groundwater Elevation

Value Indicates Bottom of
Casing Elevation in Feet PLLW

Adjacent Study Area Well
August 2006 Groundwater Elevation

Notes:

Groundwater elevation data collected
on 14 August 2006.

Horizontal Datum: NAD 27, CA State
Plane Coordinates, Zone 3, feet

Vertical Datums: (groundwater) Presidio
Lower Low Water (ft. PLLW)
(topography) North American Vertical
Datum, NAVD88

BATTERY HOWE/WAGNER SITE PLAN AND 14 AUGUST 2006 GROUNDWATER ELEVATION MAP

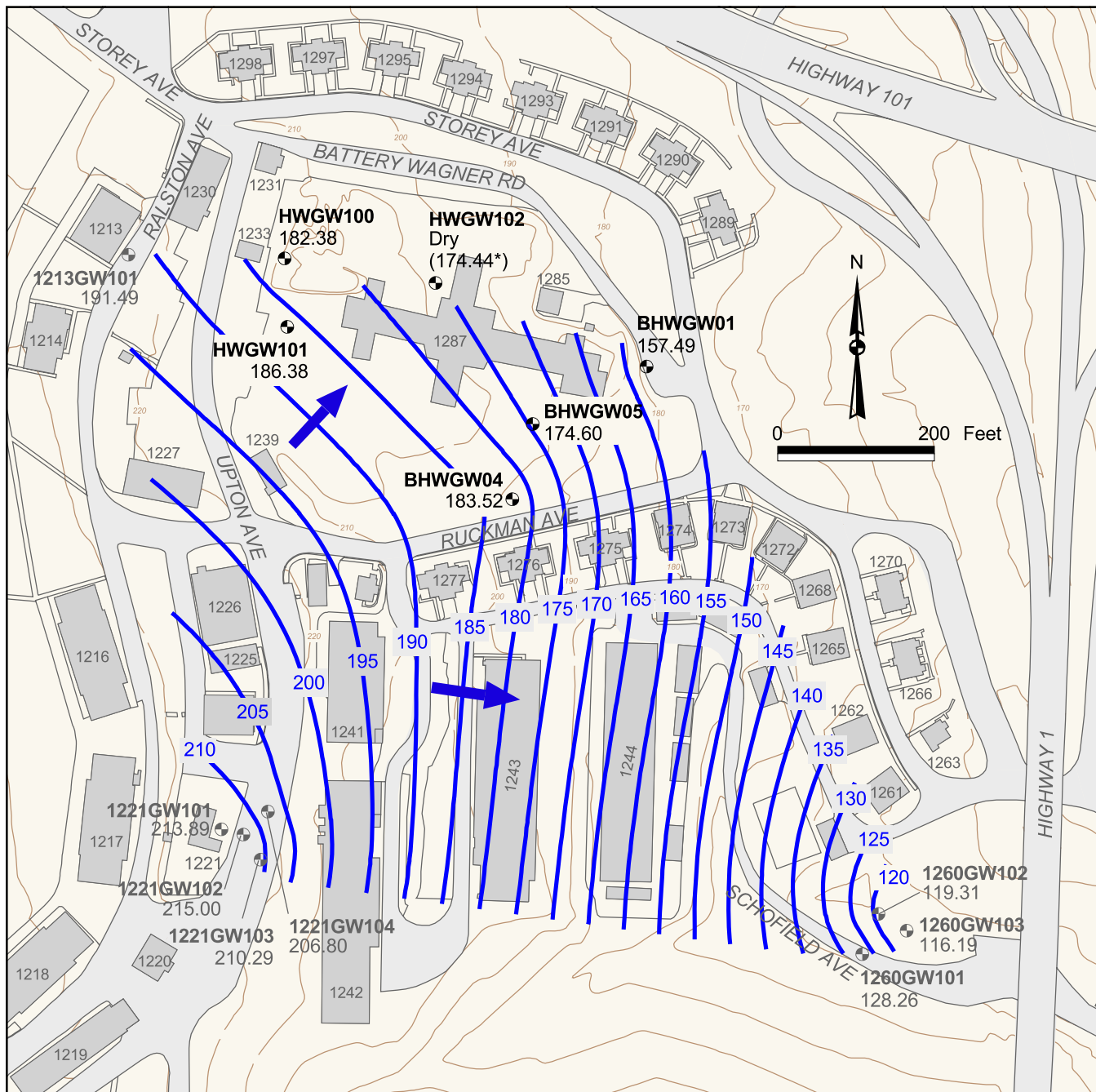
Treadwell&Rollo



Presidio Trust

34 Graham Street
P.O. Box 29052
San Francisco, CA
94129-0052
415/561-5300
fax 561-5315
April 2007

FIGURE A-4-1



LEGEND



Approximate Direction
of Groundwater Flow



Groundwater Contour
(Contour Interval : 5 ft)



Topographic Contour
(Contour Interval : 10 ft)



Building and Number



HWGW101
186.38
(174.44*)

Groundwater Monitoring Well
December 2006 Groundwater Elevation
Value Indicates Bottom of
Casing Elevation in Feet PLLW



1213GW101
191.49

Adjacent Study Area Well
December 2006 Groundwater Elevation

Notes:

Groundwater elevation data collected
on 4 December 2006.

Horizontal Datum: NAD 27, CA State
Plane Coordinates, Zone 3, feet

Vertical Datums: (groundwater) Presidio
Lower Low Water (ft. PLLW)
(topography) North American Vertical
Datum, NAVD88

BATTERY HOWE/WAGNER SITE PLAN AND 4 DECEMBER 2006 GROUNDWATER ELEVATION MAP

Treadwell&Rollo



Presidio Trust

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San Francisco, CA
94129-0052
415/561-5300
fax 561-5315
April 2007

FIGURE A-4-2

Third Quarter 2006

Site / Area Battery House/Wagner
Project Number 060814-PC-1-2893
Recorded By Will Crow

Well No. BHWGW04
Well Type ☒ Monitor ☐ Extraction ☐ Other
Will Grow Date 8/15/06

PURGE VOLUME

2 Well casing diameter ☒ 2-inch ☒ 4-inch ☐ Other

Well Total Depth (TD, ft. below TOC) :

Depth to Water (WL, ft. below TOC): 13.37

Depth to free phase (FP, ft. below TOC) :

Number of borehole volumes to be purged ☐ 3 ☒ Not Applicable ☐ Other

PURGE VOLUME CALCULATION

	X		X	
Water Column Length		Water Volume/ft		No. Vols
Total Purge Time	15 min			
Recharge Rate		Purge Rate	250 ml/min	

PURGE METHOD

☐ Low Flow	☐ Bailer \ Type
☐ Normal	☒ Pump \ Type
☐ Modified (max 5 gpm)	☐ Other

2^a red: A

PUMP INTAKE

Near top	Depth (ft)	
Near Bottom	Depth (ft)	
Other		325'

GROUNDWATER PARAMETER MEASUREMENTS

Meter Type **YSI 551**

[illegible]

Comments *Dedicated ~ 30' new PE tubing* ☒ Purg'd water storage/disposal ☐ Drilled onsite ☒ Other *Baker tank*

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled 8/15/06 1146

Purging Equipment: Pump - Type 2" red. flo Bailer - Type Disc metal Other ded. tubing (new)
Sample Filtered: (Yes) No Filtered Sample Analysis: Disc metal

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments
BHWGW04	HNO ₃ 500 mL	C87	2154	

QUALITY CONTROL SAMPLES

Duplicate Samples

Duplicate Samples	
Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.
Trip	
Rinsate	
Transfer	
Other:	

Site / Area Battery House/Wagner Well No. BHWGW05
Project Number ~~060811~~ ACT 2843 Well Type ☒ Monitor ☐ Extraction ☐ Other
Recorded By Will Crow Sampled by Will Crow Date 8/15/06

Treadwell & Rollo
Environmental and Geotechnical Consultant

Fourth Quarter 2006

Site / Area BHWC
Project Number 2893
Recorded By DR

Well No. Bitwagwal

Well Type ☒ Monitor ☐ Extraction ☐ Other

on Date 12/17/06

PURGE VOLUME

Well casing diameter
☐ 2-inch ☒ 4-inch ☐ Other

Well Total Depth (TD, ft. below TOC) : 28.45

Depth to Water (WL, ft. below TOC) : 20.59

Depth to free phase (FP, ft. below TOC) :

Number of borehole volumes to be purged ☒ 3 ☐ Not Applicable ☐ Other

PURGE VOLUME CALCULATION

7.86 x
Water Column Length

Total Purge Time

Recharge Rate

Water Volume/ft

No. Vals

gals

CALCULATED PURGE VOLUME

1.4 gal

ACTUAL PURGE VOLUME

GROUNDWATER PARAMETER MEASUREMENTS

Meter Type YSI 556 / Hach Turb.

[illegible]

Comments _____ Purgé water storage/disposal ☐ Drummed onsite ☒ Other *Baker Tanks*

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled 12/2/06 1 1200

Purging

Equipment

Pump - Type

Sample Filtered:

Yes / No

Filtered Sample Analysis:

Bailer - Type

Don.

Other

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments
BIHWG 01	1 X 1 L NP Poly 1 X 500 mL 11 No. Poly	CT	2124	

QUALITY CONTROL SAMPLES

Duplicate Samples

Blank Samples

Original Sample No.

Duplicate Sample No.

Type

Sample No.

Trip

Rinsate

Transfer

Other:

MONITORING WELL SAMPLING LOG (Normal, Low Flow, and Low Yield)

Site / Area BH64 Well No. BH6C W04
 Project Number 2893 Well Type ☒ Monitor ☐ Extraction ☐ Other
 Recorded By DA Sampled by DR Date 12/7/06

WELL PURGING

PURGE VOLUME

Well casing diameter
☐ 2-inch ☒ 4-inch ☐ Other
 Well Total Depth (TD, ft. below TOC): 27.86
 Depth to Water (WL, ft. below TOC): 14.15
 Depth to free phase (FP, ft. below TOC):

Liquid in a 1 Foot Section of a Boring (gallons)		
Borehole Size	Casing Size	Water Volume/Ft
8	2	0.9
10	4	1.68
12	4	2.22

PURGE METHOD

☒ Low Flow ☐ Bailor \ Type
☐ Normal ☒ Pump \ Type 2" Grunfos
☐ Modified (max 5 gpm) ☐ Other

PUMP INTAKE

☐ Near top Depth (ft) _____
☒ Near Bottom Depth (ft) _____
☐ Other

Number of borehole volumes to be purged
☐ 3 ☐ Not Applicable ☐ Other

PURGE VOLUME CALCULATION

Water Column Length _____ X Water Volume/ft _____ = _____ gals
 Total Purge Time _____
 Recharge Rate _____ Purge Rate 125 mL/min.
 CALCULATED PURGE VOLUME _____
 ACTUAL PURGE VOLUME 1.9 L gals

GROUNDWATER PARAMETER MEASUREMENTS

Meter Type YSI 536 / Hach Turb.

Time	W/Liters or Gallons	pH	Temp °F	DO (mg/L)	Sp. COND (uS/cm)	ORP (mV)	Turbidity (NTU)	DTW	Comments
Int 850 /	0	7.5	15.63	1.80	1208	180.3	3.5	14.82	
853 /	275	7.3	15.60	0.73	1031	148.6	13	15.01	
856 /	750	7.3	15.64	0.48	1012	154.5	9	15.14	
859 /	1125	7.3	15.73	1.05	994	136.5	8	15.31	
902 /	1500	7.3	16.02	0.82	980	157.7	6	15.46	
905 /	1875	7.3	16.11	0.50	977	158.1	6	15.53	
/									
/									
/									
/									
/									
/									
/									
/									
/									
/									

Comments _____ Purge water storage/disposal ☐ Drummed onsite ☒ Other Baker Tanks

WELL SAMPLING

SAMPLING METHOD _____ Date/Time Sampled 12/7/06 1 910
 Purging Equipment 2" Grunfos Bailer - Type Disp. Other _____
 Sample Filtered: ☒ Yes ☐ No Filtered Sample Analysis: 1HNO3

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments
BH6C W04	2x 1L NP Poly	CFI	2124	
	2x 500 mL 1HNO3			

QUALITY CONTROL SAMPLES

Duplicate Samples	
Original Sample No.	Duplicate Sample No.
	<u>DUP 120706 2A</u>

Time
720

Blank Samples	
Type	Sample No.
Trip	
Rinsate	<u>BH6C04RB BH6C W00</u>
Transfer	
Other:	

Well No. BIT WGW05

Well Type ☒ Monitor ☐ Extraction ☐ Other

DR Date 12/7/06

Treadwell & Rollo
Environmental and Geotechnical Consultant

MONITORING WELL SAMPLING LOG (Normal, Low Flow, and Low Yield)

Site / Area BHWG Well No. Hw6w100
 Project Number 2893 Well Type ☒ Monitor ☐ Extraction ☐ Other
 Recorded By DR Sampled by DR Date 12/7/06

WELL PURGING

PURGE VOLUME

Well casing diameter

☒ 2-inch ☐ 4-inch ☐ Other

Well Total Depth (TD, ft. below TOC): 30.20

Depth to Water (WL, ft. below TOC): 27.30

Depth to free phase (FP, ft. below TOC):

Liquid in a 1 Foot Section of a Boring (gallons)

Borehole Size	Casing Size	Water Volume/Ft
8	2	0.9
10	4	1.68
12	4	2.22

PURGE METHOD

☒ Low Flow ☐ Bailer \ Type
☐ Normal ☒ Pump \ Type 2" Grundfos
☐ Modified (max 5 gpm) ☐ Other

PUMP INTAKE

☐ Near top Depth (ft) _____
☒ Near Bottom Depth (ft) _____
☐ Other

PURGE VOLUME CALCULATION

2.9 x 150 mL/min = _____
 Water Column Length Water Volume/ft No. Vols

Total Purge Time

Recharge Rate

Purge Rate

gals
 CALCULATED PURGE VOLUME
13 L - gals -
 ACTUAL PURGE VOLUME

GROUNDWATER PARAMETER MEASUREMENTS

Meter Type YSI 556/Hach Turb.

Time	m Liters or Gallons	pH	Temp °F	DO (mg/L)	Sp. COND (µS/cm)	ORP (mV)	Turbidity (NTU)	DTW	Comments
9:57	0	7.7	14.06	10.93	2026	14.9	33	27.49	
10:00	450	7.6	15.09	1.43	1858	71.7	21	27.52	
10:03	900	7.6	15.16	1.29	1820	80.8	15	27.55	
10:06	1350	7.6	15.25	1.19	1815	83.3	12	27.59	
/									
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Comments _____ Purge water storage/disposal ☐ Drummed onsite ☒ Other Baker Tanks

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled

12/7/06 1 1015

Purging

Equipment

Pump - Type

2" Grundfos

Bailer - Type

Disp.

Other

Sample Filtered:

☒ Yes ☐ No

Filtered Sample Analysis:

1-No3

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments
Hw6w100	1 X 1 L NP Poly	CTI	2124	
	1 X 500ml 11-No3 Poly			

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.
Trip	
Rinsate	
Transfer	
Other:	

Site / Area BHWG
Project Number 2893
Recorded By DR

Well No. 14WG6W102
Well Type ☒ Monitor ☐ Extraction ☐ Other
Date 12/2/06

PURGE VOLUME

Well Total Depth (TD, ft. below TOC) :

Depth to Water (WL, ft. below TOC) :

Depth to free phase (FP, ft. below TOC) :

Number of borehole volumes to be purged
☒ 3 ☐ Not Applicable ☐ Other

PURGE VOLUME CALCULATION

	X		X
Water Column Length		Water Volume/ft	
Total Purge Time			
Recharge Rate		Purge Rate	

PURGE METHOD

☒ Low Flow	☐ Bailer \ Type
☐ Normal	☐ Pump \ Type
☐ Modified (max 5 gpm)	☐ Other

PUMP INTAKE

Near top	Depth (ft)	_____
Near Bottom	Depth (ft)	_____
Other		_____

GROUNDWATER PARAMETER MEASUREMENTS

Meter Type

[illegible]

Comments	Purgē water storage/disposal	☒ Drained onsite	☐ Other
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WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled /

Purging Equipment: Pump - Type Bailer - Type Other

Sample Filtered: Yes / No Filtered Sample Analysis:

SAMPLING PROGRAM

[illegible]

QUALITY CONTROL SAMPLES

Duplicate Samples

Blank Samples

Original Sample No.	Duplicate Sample No.

Type	Sample No.
Trip	
Rinsate	
Transfer	
Other:	

BUILDING 1349 STUDY AREA
APPENDIX SECTION A-5
SEMI-ANNUAL GROUNDWATER MONITORING REPORT
THIRD AND FOURTH QUARTERS 2006
Presidio of San Francisco, California

1.0 INTRODUCTION AND BACKGROUND

The Building 1349 Study Area is located in the western portion of the Presidio (Figure 1). Building 1349 is east of Washington Boulevard, west of Harrison Boulevard, and south of Kobbe Avenue (Figure A-5-1). The Building 1349 Area is approximately 310 to 320 feet above the PLLW datum.

Building 1349 was a 100,000-gallon steel aboveground storage tank (AST) built in the 1950s and used in the base-wide fuel distribution system (FDS). The Building 1349 location (Figure A-5-1) was previously occupied by an AST of similar volume, which was built in 1906. A network of pipelines distributed the fuel to various areas throughout the Presidio. Use of the FDS was stopped in the early 1960s and the pipelines were left in place. The Army began an FDS pipeline removal and abandonment project in 1996, which removed most of the FDS pipelines. After the FDS was taken out of service, the AST associated with the FDS was used to store diesel fuel, which was off-loaded to tanker trucks for transportation to various locations in the Presidio (Montgomery Watson, 1996b). The International Technology Corporation (IT) removed Building 1349 in 1996. The Building 1349 monitoring wells are associated with former fueling operations at the Building 1349 Area.

Since the Second Quarter 2001, existing Building 1349 wells have been sampled and analyzed for general chemistry parameters, TPH, VOCs, OCPs, PCBs, PAHs, TDS, chlorinated herbicides, and/or dissolved metals. Summaries of the analytical results are presented in Tables A-5-1 through A-5-7.

The *Final Corrective Action Plan, Building 1349 Study Area, Presidio of San Francisco* (CAP) (BBL, 2006) was submitted to the stakeholders in February 2006 and was approved by the RWQCB in February 2006. Groundwater sampling at the Building 1349 Area will be conducted in accordance with the Final CAP when the CAP is implemented. The recommended corrective actions for the Building 1349 Area are discussed in Section 4.0 of this appendix. Cleanup levels in the Final CAP are presented in Tables A-5-2 through A-5-7.

2.0 SITE DESCRIPTION AND GEOLOGY

The Building 1349 Area is located on a topographic high point on the boundary of the Marina Groundwater Basin and the Coastal Bluffs Groundwater Basin (Figures 1 and A-5-1). Surface and groundwater flow directions vary across the Building 1349 site. Building 1349 monitoring wells 1394MW103, 1349MW104 and 1349MW105 are located within the Marina Groundwater Basin. The six remaining Building 1349 wells are located within the Coastal Groundwater Basin.

Since the Second Quarter 2001, groundwater depths beneath the site have ranged from approximately 15 to 40 feet bgs. Groundwater flow at Building 1349 follows the general topographic trend. Previous groundwater elevation measurements indicate that groundwater beneath the western part of the site consistently flows to the west and southwest towards Fill Site 5 (FS 5) within the Coastal Groundwater Basin (Table A-5-8). Groundwater elevation measurements from wells 1349MW103, 1349MW104, and 1349MW105 indicate that groundwater in this area generally flows in a northeasterly direction within the Marina Groundwater Basin (Table A-5-8) though a northwesterly flow direction was present in the Fourth Quarter 2003, Third and Fourth Quarters 2004, and Third and Fourth Quarters 2006.

Soil units beneath most of the Building 1349 Area consist of Quaternary slope debris and ravine fill. Siltstone, sandstone, shale, and serpentinite of the Franciscan Formation underlie the Quaternary deposits. The slope debris and ravine fill layer is highly variable, consisting of differing combinations and percentages of silts, clays, sands, and gravels and varying in thickness from less than 5 to over 25 feet.

A high-resolution seismic reflection study was previously conducted by Montgomery Watson at the study area (Montgomery Watson, 1996a). The purpose of the study was to assess the depth to bedrock and whether seismic faults and fractures at the site could affect subsurface migration of contaminants. The study identified eight bedrock lineaments or weak zones that transect the site. Treadwell and Rollo conducted a two phase Site Investigation (SI) in 2002 and 2003. Based on the field observations from the first phase of the SI (Phase I SI) and previous boring logs, the underlying bedrock is highly fractured and weathered with varying degrees of hardness. In many of the fracture zones, particularly in the serpentinite units, clay and silt fault gouge with clasts or fragments of more competent rock were observed. Due to the lateral discontinuity and the varying elevations at which they were observed in the soil borings, the extent of these bedrock fractures appears to be limited (Treadwell & Rollo, 2003c). The lineaments and an inferred fault from the Montgomery Watson study are shown on Figure 4 of the *Draft Site Investigation Report (SI), Building 1349 Study Area, Presidio of San Francisco, California*, which was submitted to stakeholders in October 2003 (Treadwell & Rollo, 2003c).

Soil borings advanced during the Phase I SI generally encountered wet soil samples in the bedrock at depths ranging from approximately 30 to 40 feet bgs. After leaving the borings open for at most 48 hours, water levels were measured at depths ranging from 29 to 43 feet bgs,

depending on the boring location. In several of the Phase I SI borings drilled to 40 feet bgs and into the bedrock, groundwater was not present or only a few inches of water had accumulated in the borings after approximately 48 hours. Based on these findings, groundwater appears to be present only in particular locations within bedrock fractures and its occurrence is laterally discontinuous across the site. Groundwater movement likely follows the fractures within the bedrock and flows downslope following surface topography (Treadwell & Rollo, 2003c).

3.0 BUILDING 1349 STUDY AREA CAP

The Building 1349 Area CAP was submitted to the stakeholders in February 2006 and was approved in February 2006. The CAP identifies four Remedial Units (RUs). The RUs and their recommended alternatives are discussed below.

- Shallow Soil RU – The recommended alternative for the Shallow Soil RU is Excavation and Off-Site Disposal.
- Deep Soil RU – The recommended alternative for the Deep Soil RU is Excavation and Off-Site Disposal.
- Telecommunications Corridor Soil RU – The recommended alternative for the Telecommunications Corridor Soil RU is Excavation and Off-Site Disposal.
- Groundwater RU – The recommended alternative for the Groundwater RU is Groundwater Monitoring.

Groundwater sampling at the Building 1349 Area will be conducted in accordance with Table 5-2 of the CAP following the implementation of the CAP. CAP cleanup levels are presented in Tables A-5-2 through A-5-7.

4.0 GROUNDWATER MONITORING

Building 1349 currently has nine associated monitoring wells (Figure A-5-1). Groundwater elevations were collected at all nine Building 1349 monitoring wells during both the Third and Fourth Quarters 2006, except 1349MW102 during the Fourth Quarter 2006.

All four Building 1349 Area wells (1349MW03R, 1349MW100, 1349MW101, and 1349MW102) proposed for sampling were sampled during the Third Quarter 2006, in accordance with Table 1A. Well 1349MW100 was the only well sampled during the Fourth Quarter 2006, in accordance with Table 1B.

4.1 Groundwater-Level Measurements and Interpretation

Groundwater elevation measurements were collected within all Building 1349 Area monitoring wells on 14 August and 4 December 2006, except 1349MW102 during the Fourth Quarter 2006. Monitoring well 1349MW102 was covered with landscaping material during the Fourth Quarter 2006 and therefore, was not accessible. Groundwater elevations are presented in Table A-5-8. Groundwater elevations of nearby FS 5 wells can be found in Table A-9-8. Water level meters were calibrated on 14 August and 4 December 2006 and the calibration logs can be found in Appendix B. Groundwater elevation field forms can be found in Appendix C.

To provide a broader understanding of groundwater gradients and flow directions in the Building 1349 Area, FS 5 and Baker Beach Disturbed Area 3 groundwater elevations were evaluated with Building 1349 Area groundwater elevations. After having high groundwater elevations observed during the First and/or Second Quarters 2006, the elevations measured within the Building 1349 Area during the Third and Fourth Quarter 2006 are generally trending back to within historical ranges. The higher groundwater levels measured in the First and Second Quarters 2006 were likely due to the higher than normal precipitation in late 2005 and early 2006. Groundwater elevation maps showing the Third and Fourth Quarters 2006 groundwater contours and flow directions for the Building 1349/Fill Site 5 Area are included as Figures A-5-1 and A-5-2, respectively.

Third Quarter 2006 groundwater elevations ranged from 277.65 to 288.88 feet above PLLW in Building 1349 Area monitoring wells 1349MW01 and 1349MW101, respectively (Figure A-5-1). Fourth Quarter 2006 groundwater elevations ranged from 276.25 to 285.17 feet above PLLW in Building 1349 Area monitoring wells 1349MW01 and 1349MW105, respectively (Figure A-5-2).

Building 1349 Area groundwater was observed to flow in two distinct directions during the Third and Fourth Quarter 2006 depending on which side of the groundwater basin boundary the wells are located. Groundwater in the Coastal Bluffs Groundwater Basin (wells 1349MW01, 1349MW02, 1349MW03R, and 1349MW100 through 1349MW102) was measured to flow southwesterly during both the Third and Fourth Quarter 2006 while groundwater in the Marina Groundwater Basin (wells 1349MW103 through 1349MW105) was measured to flow west in the Third Quarter 2006 and northwesterly in the Fourth Quarter 2006.

During the Third and Fourth Quarters 2006, the southwesterly groundwater gradient at Building 1349 and FS 5 was calculated to be approximately 0.11 and 0.13 feet per foot, respectively. Groundwater elevations were not collected at FS 5 during the Fourth Quarter 2006. During the Third Quarter 2006 the groundwater gradient in the vicinity of monitoring wells 1349MW103 through 1349MW105 was estimated to be approximately 0.017 feet per foot. During the Fourth Quarter 2006, the groundwater gradient in the vicinity of monitoring wells 1349MW103 through 1349MW105 was estimated to be approximately 0.019 feet per foot. Groundwater flow directions and gradients are consistent with the majority of previously calculated flow directions

and gradients at the site, as the groundwater flow direction in the area of monitoring wells 1349MW103 through 1349MW105 has previously ranged from the northeast to the northwest.

4.2 Monitoring Well Purging and Sampling

All four Building 1349 Area monitoring wells scheduled for sampling during the Third Quarter 2006 (1349MW03R, 1349MW100, 1349MW101, and 1349MW102) were purged and sampled on 16 and 17 August 2006. Monitoring well 1349MW100, which was the only well scheduled to be sampled during the Fourth Quarter 2006, was purged and sampled on 5 December 2006. All Building 1349 Area monitoring wells were purged and sampled using methods shown in Tables 1A and 1B, and in accordance with procedures described in the FSP (Treadwell & Rollo, 2001a).

Purge equipment, volumes, and general chemistry parameters for each monitoring well are described in the purge records located at the conclusion of this section. Purge water was stored for future disposal in a 2,800-gallon polyethylene AST located at the Central Magazine.

4.3 Groundwater Analytical Program

All groundwater samples collected were submitted to the project laboratory for the analyses shown in Tables 1A and 1B of the main text. The appropriate sampling containers, preservatives, and maximum holding times for each analytical method are described in Table 5. Sample containers used for each well are described in the purge records located at the conclusion of this section.

QA/QC samples were collected as part of this program. Section 6.2 of the main report discusses the QA/QC sampling and analysis performed for the Third and Fourth Quarters 2006.

5.0 GROUNDWATER ANALYTICAL RESULTS

All groundwater samples collected from Building 1349 Area monitoring wells during the Third Quarter 2006 were analyzed for OCPs (Table 1A). In addition, samples from monitoring well 1349MW100 were also analyzed for general chemistry parameters, VOCs, PAHs, PCBs, TPHg, TPHd, TPHfo, TDS, and 23 dissolved metals (Table 1A).

Groundwater samples collected from Building 1349 Area monitoring well 1349MW100 during the Fourth Quarter 2006 were analyzed for general chemistry parameters, OCPs, VOCs, PAHs, TPHg, TPHd, TPHfo, TDS and 23 dissolved metals (Table 1B).

The TPHfo standard currently being used is a TPH as motor oil standard, as defined by the Presidio QAPP, with a carbon range of C₂₄ to C₃₆. Section 5.4.3.1 in the main report discusses the data compatibility issues associated with TPH analyses.

Potential contaminants of concern and their associated cleanup levels are listed in the CAP (BBL, 2006). Applicable cleanup levels are also listed in Tables A-5-1 through A-5-7, which present groundwater analytical results. Third and Fourth Quarter 2006 detected groundwater analytical results are summarized below and compared to the cleanup levels where applicable.

5.1 Dissolved Oxygen

Dissolved oxygen results are presented in Table A-5-1. Dissolved oxygen results measured during the Third and Fourth Quarters 2006 were within historical ranges. During the Third and Fourth Quarters 2006, dissolved oxygen was measured within historical ranges at 1349MW100 at concentrations of 0.81 and 1.6 mg/L respectively. However, the Fourth Quarter 2006 concentration of 1.6 mg/L within 1349MW100 is the highest measured in this well since the Second Quarter 2003.

5.2 General Chemistry Results

General chemistry results are presented in Table A-5-1. General chemistry results for the Third and Fourth Quarters 2006 within Building 1349 Area monitoring well 1349MW100 were generally within historical ranges, with the following exceptions.

Total alkalinity and bicarbonate were measured at new high concentrations of 1,000 mg/L in monitoring well 1349MW100 during the Fourth Quarter 2006. These new high concentrations were only slightly above the historical high (970 mg/L) and can be attributed to natural fluctuation. The remaining general chemistry results were within historical ranges during the Third and Fourth Quarters 2006.

5.3 TPH Results

Results of TPH analyses are presented in Table A-5-2 and on Figure A-5-3. TPHg was detected above its Building 1349 Area CAP cleanup level (770 µg/L) during the Third and Fourth Quarters 2006 at 1349MW100 at 820 and 1,200 µg/L, respectively. TPHd was also detected within this well above its Building 1349 Area CAP cleanup level (880 µg/L) during both the Third Quarter and Fourth Quarters 2006. The TPHd detection during the Third Quarter 2006 was the highest concentration detected to date in this well, 42,000 µg/L, and is significantly higher than the Second Quarter 2006 concentration of 5,400 µg/L. The Fourth Quarter 2006 TPHd concentration in 1349MW100 decreased to 13,000 µg/L. TPH concentrations at the site have generally been non-detect with the exception of TPHg and TPHd concentrations in 1349MW100. TPHd concentrations continue to exceed groundwater cleanup levels within monitoring well 1349MW100, and both TPHg and TPHd concentrations continue to fluctuate significantly from one sampling event to the next at this location.

TPHfo was not detected in 1349MW100 groundwater samples during the Third and Fourth Quarter 2006.

5.4 VOC Results

Results of VOC analyses are presented in Table A-5-3. VOC analyses were only performed in monitoring well 1349MW100 during the Third and Fourth Quarters 2006, in accordance with Tables 1A and 1B. VOCs were detected in monitoring well 1349MW100 during the Third and Fourth Quarter 2006 at concentrations discussed below.

Benzene was detected during the Third and Fourth Quarters 2006 within monitoring well 1349MW100 at concentrations of 23 and 18 µg/L, respectively. Both detected concentrations were above the CAP-specified cleanup level of 1 µg/L. These benzene concentrations are within the historical range of concentrations for 1349MW100.

Total xylenes were not detected above laboratory limits during the Third Quarter 2006; however, total xylenes were detected at a concentration of 2.3 µg/L during the Fourth Quarter 2006. This total xylenes concentration is within the historical range of concentrations for 1349MW100. No other VOCs were detected during the Third Quarter 2006. Ethylbenzene was not detected above reporting limits for the first time within monitoring well 1349MW100 during the Third Quarter 2006.

VOC concentrations at 1349MW100 continue to fluctuate. The potential for increasing or decreasing VOC concentration trends at the site will continue to be evaluated in future monitoring events, in accordance with the CAP.

5.5 OCP and PCB Results

OCP and PCB results are presented in Table A-5-4 and are illustrated on Figure A-5-3. PCBs were not detected in 1349MW100 during the Third Quarter 2006 and have not been detected within any Building 1349 Area monitoring wells to date.

No OCPs were detected in any wells sampled, other than 1349MW100 during the Third and Fourth Quarters 2006. Several OCPs were detected in monitoring well 1349MW100 during Third and Fourth Quarters 2006 and are discussed below.

- Endrin was detected at a new high concentration of 0.7 µg/L during the Third Quarter 2006, which is slightly higher than the previous high concentration of 0.2 µg/L detected in the Second Quarter 2004. However, these concentrations are below the CAP cleanup level of 2 µg/L.
- Gamma-BHC, 4,4'-DDT, heptachlor, and heptachlor epoxide were all detected within 1349MW100 at concentrations exceeding their respective CAP-specified cleanup levels during the Third Quarter 2006.

- During the Fourth Quarter 2006, 4,4'-DDE, dieldrin, and heptachlor were detected within 1349MW100 at concentrations of 0.3, 0.3 and 0.2 µg/L, respectively. The 4,4'-DDE and heptachlor detections are above their respective CAP-specified cleanup levels for these compounds.

OCPs have also been detected in the past in monitoring wells 1349MW03R, 1349MW101, and 1349MW102, which are generally downgradient of monitoring well 1349MW100, where OCPs have at times exceeded the applicable cleanup levels (BBL, 2006). However, OCPs have not been detected within any of these wells for six or more sampling events.

OCPs were not documented in the SI as potential contaminants of concern at the Building 1349 Area. Former Building 1349 operations involved fuel storage and distribution. The source of OCP concentrations is not currently known, therefore, the potential for increasing or decreasing OCP concentration trends at the site will continue to be evaluated in future monitoring events.

5.6 PAHs

PAH results are presented in Table A-5-5. Monitoring well 1349MW100 was the only well sampled for PAHs during the Third and Fourth Quarters 2006. Significant detections are discussed below.

Several PAHs were detected within monitoring well 1349MW100 during the Third and Fourth Quarters 2006. Of the PAHs detected, benzo(a)anthracene was detected at concentrations exceeding its CAP-specified cleanup level during both Third and Fourth Quarters 2006. Benzo(a)anthracene has historically been detected above its cleanup level within this well. Benzo(b)fluoranthene was detected at a concentration exceeding its CAP-specified cleanup level during the Fourth Quarter 2006. Fluoranthene was detected at a new high concentration of 41 µg/L during the Fourth Quarter 2006, which is significantly higher than the previously detected high concentration of 22 µg/L in the Fourth Quarter 2005 but does not exceed the CAP-specified cleanup level.

Acenaphthene, anthracene, benzo(k)fluoranthene, chrysene, fluorene, and pyrene were also detected below CAP cleanup levels during the Third and/or Fourth Quarters 2006.

With the exception of fluoranthene, the concentrations of PAHs detected within 1349MW100 were within historical ranges.

5.7 Dissolved Metals Results

Dissolved metals results are presented in Table A-5-7 and arsenic, chromium, and iron results are illustrated in Figure A-5-3. In accordance with the proposed sampling schedules, only groundwater samples collected from monitoring well 1349MW100 were analyzed for dissolved metals during the Third and Fourth Quarters 2006 (Tables 1A and 1B).

The majority of the dissolved metal concentrations detected during the Third and Fourth Quarter 2006 are within historical ranges.

- Arsenic was detected above the CAP-specified cleanup level of 10 µg/L during the Fourth Quarter 2006 at a concentration 12 µg/L in well 1349MW100. Arsenic concentrations continue to fluctuate within this well around the CAP-specified cleanup level.
- Sodium was detected at a new high concentration of 480,000 µg/L in the Third Quarter 2006.

Dissolved iron, manganese, and arsenic were detected within historic ranges during the Third and Fourth Quarters 2006. Typically, the concentration of these redox sensitive metals increase or decrease together depending on changing redox conditions. Future concentrations of these metals will continue to be evaluated.

6.0 CONCLUSIONS & RECOMMENDATIONS

Four Building 1349 monitoring wells were sampled during the Third Quarter 2006. Only well 1349MW100 was sampled during the Fourth Quarter 2006.

The Building 1349 Study Area Final CAP was submitted to the stakeholders in February 2006, and was approved by the RWQCB in February 2006. Groundwater sampling at the Building 1349 Area will be conducted in accordance with the Final CAP when the CAP is implemented. The recommended corrective actions for the Building 1349 Area are discussed in Section 4.0 of this appendix. Cleanup levels in the Final CAP are presented in Tables A-5-2 through A-5-7.

TPH, OCP, PAH and VOC concentrations continue to be detected in monitoring well 1349MW100 groundwater samples above CAP-specified cleanup levels. The majority of the dissolved metal concentrations detected during the Third and Fourth Quarter 2006 are within historical ranges. Arsenic was detected above the CAP-specified cleanup level of 10 µg/L during the Fourth Quarter 2006 at a concentration 12 µg/L in well 1349MW100. Arsenic concentrations continue to fluctuate within this well around the CAP-specified cleanup level.

Groundwater concentration trends, within both monitoring well 1349MW100 and the remaining wells associated with Building 1349 Study Area, will continue to be monitored and evaluated.

Table A-5-1
Results of General Chemistry Analyses
Building 1349 Area
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mV)	pH units	C°
1349MW01	03/16/06	310	310	850	0.54	< 0.1	1.7	< 0.1	NA	300	186.5	6.41	13.8
	03/21/05	270	270	690	0.3	< 0.1	2.1	< 0.1	NA	230	NR	NR	NR
	03/15/04	280	280	740	0.39	0.11	2.2	< 0.1	NA	250	NR	NR	NR
	12/02/03	310	310	690	1.1	0.14	2.2	< 0.05	NA	220	NR	NR	NR
	08/21/03	310	310	700	1.42	< 0.2	1.8	< 0.1	NA	220	NR	NR	NR
	06/10/03	380	380	740	1.29	< 0.2	2.1	< 0.1	NA	230	NR	NR	NR
	03/12/03	NA	NA	NA	1.59	NA	NA	NA	NA	NA	NR	NR	NR
	12/09/02	360	360	750	0.76	< 0.2	1.7	< 0.1	NA	210	NR	NR	NR
	12/09/02	350	350	750	--	< 0.2	1.8	< 0.1	NA	220	NR	NR	NR
	12/09/02	350	350	360	--	1	1.4 J-	< 0.05 UJ	1.4 J-	220	NR	NR	NR
DUP1209021A 1349MW01CL	08/28/02	270	270	740	1.34	0.13	1.7	< 0.05	NA	240	NR	NR	NR
	05/30/02	320	320	810	1.37	0.091 J	1.7	< 0.05	NA	230	NR	NR	NR
	03/06/02	290	290	830	2.13	0.13	1.8	< 0.05	NA	250	NR	NR	NR
	11/28/01	310	310	820	1.36	0.13	1.8	< 0.05	NA	240	NR	NR	NR
	08/30/01	420	420	740	0.61	0.24	1.3	< 2.5	NA	180	NR	NR	NR
	08/30/01	430	430	740	--	0.14	1.2	< 2.5	NA	180	NR	NR	NR
	08/30/01	340	340	760	--	< 0.05	1.4 ²	< 2.5	NA	210	NR	NR	NR
	05/10/01	330	330	760	1.45	0.19	1.4	< 0.05	NA	220	NR	NR	NR
	05/19/99	433	433	820	0.83	0.2	NA	NA	0.537	188	NR	NR	NR
	02/19/99	468	468	731	1.83	0.15	NA	NA	0.641	192	NR	NR	NR
DUP0830013A 1349MW01CL	11/18/98	361	361	666	1.59	0.17	NA	NA	0.62	205	NR	NR	NR
	08/18/98	574	574	701	2.24	0.11	NA	NA	0.404	161	NR	NR	NR
	04/16/98	377	377	679	2.89	0.12	NA	NA	0.715	221	NR	NR	NR
	01/22/98	509	509	673	1	0.124	NA	NA	0.416	159	NR	NR	NR
	10/30/97	527	527	726	0.37	< 0.05	0.478	NA	0.368	158	NR	NR	NR
	07/31/97	466	466	777	0.5	NA	0.532	NA	0.617	192	NR	NR	NR
	05/01/97	489	489	768	1.17	NA	0.451	NA	NA	190	NR	NR	NR
	02/10/97	374	374	888	1.26	NA	0.635	NA	< 0.05	262	NR	NR	NR
	08/08/95	NA	NA	NA	NM	NA	NA	NA	NA	NA	NR	NR	NR
	1349MW02	03/10/06	660	660	740	0.56	< 0.1	1.3	< 0.1	NA	78	-18.1	7.29
	08/31/05	710	710	770	0.8	< 0.1 UJ	1.2	< 0.1 UJ	NA	88	NR	NR	NR
	05/25/05	650	650	710	0.5	< 0.1	1.2	< 0.1	NA	68	NR	NR	NR
	03/21/05	630	630	860	0.1	< 0.1	1.3	< 0.1	NA	67	NR	NR	NR
	12/16/04	710	710	620	0.8	< 0.1	1.6	< 0.1	NA	66	NR	NR	NR
	08/12/04	700	700	600	0.4	< 0.1	1.5	< 0.1	NA	64	NR	NR	NR
	05/26/04	660	660	650	0.59	0.11	1.3	< 0.1	NA	64	NR	NR	NR
	03/15/04	630	630	670	0.44	< 0.1	1.4	< 0.1	NA	66	NR	NR	NR

Table A-5-1
Results of General Chemistry Analyses
Building 1349 Area
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mV)	pH units	C°
1349MW02	12/02/03	720	720	600	0.6	< 0.1	1.6	< 0.05	NA	64	NR	NR	NR
	08/13/03	710	710	550	1.6	< 1	1.3 b,J-	< 0.5 UJ	NA	73	NR	NR	NR
DUP0605032A	06/05/03	630	630	610	1.3	< 0.2	1.6	< 0.1	NA	62	NR	NR	NR
	06/05/03	620	620	610	--	< 0.2	1.6	< 0.1	NA	62	NR	NR	NR
	03/12/03	NA	NA	NA	0.3	NA	NA	NA	NA	NA	NR	NR	NR
DUP1204023A	12/04/02	660	660	580	1.8	< 0.2	1.7	< 0.1	NA	62	NR	NR	NR
	12/04/02	670	670	560	--	< 0.2	1.7	< 0.1	NA	63	NR	NR	NR
	08/28/02	670	670	570	1	0.12	1.6	< 0.05	NA	68	NR	NR	NR
	05/30/02	680	680	630	0.7	0.12	1.6	< 0.05	NA	60	NR	NR	NR
DUP0306022A	03/06/02	640	640	680	1.2	0.13	1.6	< 0.05	NA	58	NR	NR	NR
	03/06/02	640	640	670	--	0.13	1.6	< 0.05	NA	59	NR	NR	NR
	11/28/01	670	670	580	2.25	0.091 J	1.7	< 0.05	NA	60	NR	NR	NR
DUP1128011A	11/28/01	680	680	570	--	0.1 J	1.8	< 0.05	NA	56	NR	NR	NR
	08/30/01	660	660	570	NM	0.11	1.7	< 0.05	NA	64	NR	NR	NR
DUP0830012A	08/30/01	660	660	550	--	0.11	1.7	< 0.05	NA	63	NR	NR	NR
1349MW02CL	08/30/01	660	660	550	--	< 0.1	1.5 ²	< 0.05	NA	56	NR	NR	NR
	05/10/01	660	660	570	1.3	0.12	1.7	< 0.05	NA	62	NR	NR	NR
	05/19/99	680	680	724	0.51	< 0.1	NA	NA	1.58	76	NR	NR	NR
	02/19/99	706	706	766	0.6	< 0.1	NA	NA	1.29	80	NR	NR	NR
	11/18/98	694	694	690	0.71	< 0.1	NA	NA	1.22	69	NR	NR	NR
	08/18/98	688	688	637	0.39	< 0.1	NA	NA	1.24	69	NR	NR	NR
	04/16/98	629	629	555	0.9	< 0.1	NA	NA	1.23	64	NR	NR	NR
	01/22/98	689	689	586	1.34	< 0.1	NA	NA	1.12	60	NR	NR	NR
	10/30/97	700	700	653	0.33	< 0.05	1.3	NA	1.21	72	NR	NR	NR
	07/31/97	679	679	662	0.62	NA	1.29	NA	1.2	73	NR	NR	NR
	05/01/97	696	696	661	0.31	NA	1.18	NA	NA	61	NR	NR	NR
	02/10/97	548	548	501	0.5	NA	0.924	NA	1.3	52	NR	NR	NR
	08/08/95	NA	NA	NA	NM	NA	NA	NA	NA	NA	NR	NR	NR
1349MW03R	08/17/06	NA	NA	NA	NM	NA	NA	NA	NA	NA	NM	7.70	16.8
	03/16/06	440	440	860	1.1	< 0.1	6.3	< 0.1	NA	120	210	7.76	15.8
	11/30/05	NA	NA	NA	0.4	NA	NA	NA	NA	NA	NR	NR	NR
	08/31/05	390	390	170	0.4	< 0.1	5.9	< 0.05	NA	39	NR	NR	NR
	05/25/05	390	390	560	0.6	< 0.1	6.3	< 0.1	NA	84	NR	NR	NR
	03/21/05	350	350	960	7.7	< 0.1	5.4	< 0.1	NA	130	NR	NR	NR
	12/16/04	350	350	78	4.8	< 0.1	5.2	< 0.05	NA	29	NR	NR	NR
	08/10/04	350	350	68	3.94	< 0.1	4.6	< 0.05	NA	30	NR	NR	NR
	05/26/04	340	340	79	5.7	< 0.1	4.5	< 0.05	NA	31	NR	NR	NR

Table A-5-1
Results of General Chemistry Analyses
Building 1349 Area
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mV)	pH units	C°
1349MW03R	03/09/04	380	380	78	7.08	< 0.1	4.5	< 0.05	NA	33	NR	NR	NR
	12/02/03	350	350	72	5.2	< 0.1	4.8	< 0.05	NA	22	NR	NR	NR
	08/13/03	360	360	78	4.8	< 0.5	4.5 b,J-	< 0.25 UJ	NA	32	NR	NR	NR
	06/09/03	330	330	130	2.6	0.37	4.7	0.1	NA	33	NR	NR	NR
1349MW100 DUP0524063A 1349MW100CL	12/05/06	1,000	1,000	990	1.6	0.33	< 0.05	< 0.1	NA	< 0.5	-239	5.8	15
	08/16/06	850	850	810	0.81	0.2	< 0.05	< 0.1	NA	44	-118.2	6.40	16.8
	05/24/06	910	910	850	1.1	0.23	< 0.05	< 0.1	NA	60	-77.5	6.37	16.7
	05/24/06	860	860	830	NA	0.23	< 0.05	< 0.1	NA	65	NR	NR	NR
	05/24/06	820	NA	930	NA	< 1 U	< 0.02 U UJ	< 0.02 U	NA	55.9	NR	NR	NR
	03/16/06	930	930	760	0.33	0.24	< 0.05	< 0.1	NA	50	74.7	6.44	15.2
	11/30/05	940 J+	940	1,300	0.3	0.34	< 0.1	< 0.15	NA	< 1	NR	NR	NR
	08/31/05	860	860	1,500	0.3	0.31 J-	< 0.1	< 0.2 UJ	NA	8.7	NR	NR	NR
	05/25/05	910	910	810	0.3	0.2	< 0.05	< 0.1	NA	35	NR	NR	NR
	03/23/05	870	870	820	0.1	0.27	< 0.05	< 0.1	NA	37	NR	NR	NR
	12/16/04	940	940	1,200	0.2	0.28	< 0.05	< 0.25	NA	< 0.5	NR	NR	NR
	08/10/04	970	970	1,000	0.7	0.29	< 0.05	< 0.1	NA	0.51	NR	NR	NR
	05/27/04	940	940	1,100	0.55	0.28	< 0.05	< 0.1	NA	2	NR	NR	NR
	03/16/04	900	900	830	0.37	0.24	< 0.05	< 0.1	NA	10	NR	NR	NR
	12/02/03	890	890	1,200	1	0.24	< 0.1	< 0.1	NA	< 1	NR	NR	NR
	08/12/03	800	800	1,100	0.5	< 0.5	< 0.25	< 0.25	NA	< 2.5	NR	NR	NR
	06/09/03	860	860	890	1.8	< 0.5	< 0.25	< 0.25	NA	3.5	NR	NR	NR
	03/12/03	810	810	840	0.6	< 0.2	< 0.1	< 0.1	NA	7.7	NR	NR	NR
	12/10/02	660	660	1,300	0.9	< 0.2	< 0.1	< 0.1	NA	9.2	NR	NR	NR
1349MW101 DUP0525052A	08/17/06	NA	NA	NA	NM	NA	NA	NA	NA	NA	NM	8.10	18.3
	03/16/06	330	330	180	1.11	< 0.1	2.8	< 0.05	NA	16	160.7	8.06	16
	08/31/05	280	280	190	0.7	< 0.1	2.5	< 0.05	NA	15	NR	NR	NR
	05/25/05	290	290	200	0.4	< 0.1	2.3	< 0.05	NA	15	NR	NR	NR
	05/25/05	270	270	200	--	< 0.1	2.3	< 0.05	NA	15	NR	NR	NR
	03/21/05	280	280	210	0.2	< 0.1	3	< 0.05	NA	18	NR	NR	NR
	12/15/04	260	260	230	0.3	< 0.1	2.8	< 0.05	NA	17	NR	NR	NR
	03/09/04	260	260	210	3.52	0.13	3.5	< 0.05	NA	19	NR	NR	NR
	12/02/03	390	390	230	1.4	0.14	2.4	< 0.05	NA	19	NR	NR	NR
	08/19/03	280	280	260	1.7	0.25	2.5	< 0.05	NA	25	NR	NR	NR
	06/09/03	230	230	300	1.1	0.47	4.3	0.13	NA	38	NR	NR	NR

Table A-5-1
Results of General Chemistry Analyses
Building 1349 Area
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mV)	pH units	C°
1349MW102	08/17/06	NA	NA	NA	NM	NA	NA	NA	NA	NA	NM	6.50	18.2
	03/07/06	470	470	240	0.15	0.25	2	< 0.05	NA	140	-6.9	6.72	14.2
DUP0307063C	03/07/06	500	500	240	NA	0.24	2	< 0.05	NA	130	-6.9	6.72	14.2
1349MW102CL	03/07/06	416	416	220	NA	< 1 U	2.33	0.025	NA	156	-6.9	6.72	14.2
	08/31/05	420	420	210	0.9	0.19	1.7	< 0.05	NA	73	NR	NR	NR
DUP0831052A	08/31/05	450	450	200	--	0.19	1.7	< 0.05	NA	71	NR	NR	NR
	05/25/05	390	390	150	0.5	0.15	2.8	< 0.05	NA	95	NR	NR	NR
	03/21/05	500	500	340	0.4	0.24	1.8	< 0.05	NA	79	NR	NR	NR
DUP0321053A	03/21/05	520	520	330	--	0.23	2	< 0.05	NA	79	NR	NR	NR
	12/16/04	630	630	450	1.08	0.25	0.71	< 0.05	NA	47	NR	NR	NR
	08/10/04	580	580	400	1.54	0.24	0.8	< 0.05	NA	42	NR	NR	NR
DUP0810042A	08/10/04	570	570	420	--	0.24	0.54	< 0.05	NA	41	NR	NR	NR
	05/27/04	600	600	410	1.1	0.27	0.52	< 0.05	NA	44	NR	NR	NR
DUP0527041A	05/27/04	630	630	400	--	0.26	0.74	< 0.05	NA	47	NR	NR	NR
1349MW102CL	05/27/04	620	620	88	--	0.29	0.6	< 0.05	0.6	18	NR	NR	NR
	03/10/04	540	540	470	0.5	0.27	0.4	< 0.05	NA	48	NR	NR	NR
DUP0310041A	03/10/04	550	550	470	--	0.27	0.4	< 0.05	NA	47	NR	NR	NR
1349MW102CL	03/10/04	530	530	450	--	0.28	0.45 J	< 0.05 UJ	0.45 HT-04,J	44	NR	NR	NR
	12/10/03	690	690	480	2	0.29	0.09	< 0.05	NA	43	NR	NR	NR
DUP1210031A	12/10/03	670	670	480	--	0.28	0.1	< 0.05	NA	43	NR	NR	NR
	08/12/03	740	740	430	1.1	0.47	0.17 b,J	< 0.1 UJ	NA	47	NR	NR	NR
	06/09/03	660	660	560	1.9	0.35	0.14	< 0.1	NA	68	NR	NR	NR
DUP0609032A	06/09/03	650	650	570	--	0.34	0.11	< 0.1	NA	70	NR	NR	NR
1349MW102CL	06/09/03	670	670	490	--	0.6	0.13	< 0.05	0.13	59	NR	NR	NR
1349MW103	03/09/06	670	670	930	0.19	0.29	< 0.05	< 0.1	NA	110	-26.1	7.27	13.6
	03/23/05	600	600	830	0.1	0.31	< 0.05	< 0.1	NA	95	NR	NR	NR
	03/15/04	490	490	830	0.52	0.42	< 0.05	< 0.1	NA	100	NR	NR	NR
DUP1203032A	12/03/03	450	450	800	1.2	0.43	< 0.1	< 0.1	NA	97	NR	NR	NR
	12/03/03	450	450	800	--	0.41	< 0.1	< 0.1	NA	110	NR	NR	NR
	08/12/03	400	400	790	2.4	0.54	< 0.1	< 0.1	NA	110	NR	NR	NR
	06/05/03	310	310	830	1.8	0.66	< 0.1	< 0.1	NA	110	NR	NR	NR
1349MW104	03/09/06	710	710	860	0.08	< 0.1	0.13	< 0.1	NA	74	-83.1	7.5	13
	03/23/05	680	680	850	0.6	< 0.1	0.07	< 0.1	NA	60	NR	NR	NR
	03/15/04	670	670	820	0.32	0.16	0.35	< 0.1	NA	62	NR	NR	NR
	12/02/03	740	740	790	1	< 0.2	0.12	< 0.1	NA	58	NR	NR	NR
	08/12/03	690	690	770	1.3	< 0.2	< 0.1	< 0.1	NA	55	NR	NR	NR
	06/06/03	600	600	870	3	0.21	0.17	< 0.1	NA	67	NR	NR	NR

Table A-5-1
Results of General Chemistry Analyses
Building 1349 Area
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mV)	pH units	C°
1349MW105	03/20/06	300	300	450	0.19	0.29	< 0.05	< 0.05	NA	76	-151.1	0.02	13.5
	03/23/05	280	280	540	0.1	0.33	< 0.05	< 0.05	NA	130	NR	NR	NR
	03/15/04	240	240	590	0.31	0.41	< 0.05	< 0.1	NA	150	NR	NR	NR
	12/02/03	260	260	600	1.2	0.38	< 0.05	< 0.05	NA	150	NR	NR	NR
	08/12/03	280	280	600	3.1	0.48	< 0.1	< 0.1	NA	130	NR	NR	NR
	06/09/03	230	230	760	1.2	0.63	< 0.1	< 0.1	NA	130	NR	NR	NR

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in their respective quarterly report.

2 - The QC laboratory nitrate results shown have been converted to nitrate as nitrogen (nitrate-N) as other laboratory results are reported. The QC laboratory reported nitrate as NO₃ concentrations (nitrate-NO₃) which are 4.43 times higher than nitrate-N concentrations. Section 6.2.1.2 in the main report discusses this issue.

mg/L - milligrams per liter

mV - millivolts

NA - Not analyzed

NM - Not measured

NR - Not reported

ORP - oxidation reduction potential

°C - degrees centigrade

"--" dissolved oxygen measurements were not taken for duplicate and quality control samples.

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-5-2
Results of TPH Analyses
Building 1349 Area
Presidio of San Francisco, California

Well Name	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		770	880	1,200
1349MW01 DUP1209021A 1349MW01CL DUP0830013A 1349MW01CL	03/16/06	< 50	79 HY	< 300
	03/21/05	< 50	< 50	< 300
	03/15/04	< 50	< 50	< 300
	12/02/03	< 50	< 50	< 300
	08/21/03	< 50	< 50	< 300
	06/10/03	< 50	< 50	< 300
	03/12/03	NA	< 50	< 300
	12/09/02	< 50	< 50	< 300
	12/09/02	< 50	< 50	< 300
	12/09/02	< 50	< 50	< 250
	08/28/02	< 50	< 50	< 300
	05/30/02	< 50	< 50	< 300
	03/06/02	< 50	< 50	< 300
	11/28/01	< 50	< 50	< 300
	08/30/01	< 50	< 50 ³	< 300 ³
	08/30/01	< 50	57 ³ Y,NJ	< 300 ³
	08/30/01	< 50	< 50	< 300
	05/10/01	< 50	< 50	< 300
	05/19/99	NA	< 50	< 300
	02/19/99	NA	< 50	< 300
	11/18/98	NA	< 50	< 300
	08/18/98	NA	< 50 (U15)	< 300
	04/16/98	NA	< 50	< 300
	01/22/98	NA	< 50	< 300
	10/30/97	NA	< 50	< 300
	07/31/97	NA	< 50	< 300
	05/01/97	NA	< 50	< 300
	02/10/97	NA	< 50	< 300
	11/25/96	NA	< 50	< 300
	09/12/96	NA	< 50	< 300
	08/08/95	NA	< 50	NA
1349MW02 DUP0605032A	03/10/06	< 50	< 50	< 300
	08/31/05	< 50	< 50	< 300
	05/25/05	< 50	< 50	< 300
	03/21/05	< 50	< 50	< 300
	12/16/04	< 50	< 50	< 300
	08/12/04	< 50	< 50	< 300
	05/26/04	< 50	< 50	< 300
	03/15/04	< 50	< 50	< 300
	12/02/03	< 50	< 50	< 300
	08/13/03	< 50	290 HY	< 300
	06/05/03	< 50	< 50	< 300
	06/05/03	< 50	< 50	< 300
	03/12/03	NA	< 50	< 300

Table A-5-2
Results of TPH Analyses
Building 1349 Area
Presidio of San Francisco, California

Well Name	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		770	880	1,200
1349MW02	12/04/02	< 50	< 50	< 300
	DUP1204023A	< 50	< 50	< 300
DUP0306022A	08/28/02	< 50	< 50	< 300
	05/30/02	< 50	< 50	< 300
	03/06/02	< 50	< 50	< 300
	03/06/02	< 50	< 50	< 300
DUP1128011A	11/28/01	< 50	< 50	< 300
	11/28/01	< 50	< 50	< 300
DUP0830012A	08/30/01	< 50	57 ³ Y,NJ	< 300 ³
	08/30/01	< 50	67 ³ Y,NJ	< 300 ³
1349MW02CL 1349MW02	08/30/01	< 50	< 50	< 300
	05/10/01	< 50	< 50	< 300
	05/19/99	NA	< 50	< 300
	02/19/99	NA	< 50	< 300
	11/18/98	NA	< 50	< 300
	08/18/98	NA	< 50 (U15)	< 300
	04/16/98	NA	< 50	< 300
	01/22/98	NA	< 50	< 300
	10/30/97	NA	< 50	< 300
	07/31/97	NA	58 (R32)	< 300
	05/01/97	NA	< 50	< 300
	02/10/97	NA	< 50	< 300
	11/25/96	NA	< 50	< 300
	09/12/96	NA	< 50	< 300
	08/08/95	NA	< 50	NA
1349MW03R	03/16/06	< 50	< 50	< 300
	08/31/05	< 50	< 50	< 300
	05/25/05	< 50	< 50	< 300
	03/21/05	< 50	< 50	< 300
	12/16/04	< 50	< 50	< 300
	08/10/04	< 50	< 50	< 300
	05/26/04	< 50	< 50	< 300
	03/09/04	< 50	81 HY	770 Z
	12/02/03	< 50	< 50	< 300
	08/13/03	< 50	< 50	< 300
	06/09/03	< 50	< 50	< 300
1349MW100 DUP0524063A 1349MW100CL	12/05/06	1,200 H	13,000	< 300
	08/16/06	820 HY	42,000	< 1,500
	05/24/06	690 HY	3,600	< 300
	05/24/06	490 HY	5,200	< 300
	05/24/06	350	5,400	< 2,100 U
	03/16/06	1,300 HY	6,900	< 300
	11/30/05	450 HY	26,000	< 900
	08/31/05	630 HY	20,000	< 300
	05/25/05	690 H	5,100	< 300
	03/23/05	960 HY	24,000	< 600
	12/16/04	1,400 HY J+	6,300	< 300

Table A-5-2
Results of TPH Analyses
Building 1349 Area
Presidio of San Francisco, California

Well Name	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		770	880	1,200
	08/10/04	3,000 HY	5,000	< 300

Table A-5-2
Results of TPH Analyses
Building 1349 Area
Presidio of San Francisco, California

Well Name	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		770	880	1,200
1349MW100	05/27/04	920 HY	3,600	< 300
	03/16/04	930 H	31,000	< 600
	12/02/03	1,000 HY,J+	1,100 LY	< 300
	08/12/03	700 YH	9,000	< 300
	06/09/03	1,200 YH	5,100	< 300
	03/12/03	610 YH	1,800	< 300
	12/10/02	230 Y	1,500	< 300
1349MW101 DUP0525052A	03/16/06	< 50	< 50	< 300
	08/31/05	< 50	< 50	< 300
	05/25/05	< 50	< 50	< 300
	05/25/05	< 50	< 50	< 300
	03/21/05	< 50	< 50	< 300
	12/15/04	< 50	< 50	< 300
	03/09/04	< 50	< 50	< 300
	12/02/03	< 50	< 50	< 300
	08/19/03	< 50	< 50	< 300
1349MW102 DUP0307063C 1349MW102CL DUP0831052A DUP0321053A DUP0810042A DUP0527041A 1349MW102CL DUP0310041A 1349MW102CL DUP1210031A DUP0609032A 1349MW102CL 1349MW103 DUP1203032A	03/07/06	< 50	< 50	< 300
	03/07/06	< 50	< 50	< 300
	03/07/06	< 50 U	60 J+	< 300 U
	08/31/05	< 50	< 50	< 300
	08/31/05	< 50	< 50	< 300
	05/25/05	< 50	< 50	< 300
	03/21/05	< 50	< 50	< 300
	03/21/05	< 50	< 50	< 300
	12/16/04	< 50	< 50	< 300
	08/10/04	< 50	< 50	< 300
	08/10/04	< 50	< 50	< 300
	05/27/04	< 50	51 Y	< 300
	05/27/04	< 50	< 50	< 300
	05/27/04	< 50	54	< 240
	03/10/04	< 50	< 50	< 300
	03/10/04	< 50	< 50	< 300
	03/10/04	< 50	NA	NA
	12/10/03	< 50	< 50	< 300
	12/10/03	< 50	< 50	< 300
	08/12/03	< 50	< 50	< 300
	06/09/03	< 50	< 50	< 300
	06/09/03	< 50	< 50	< 300
	06/09/03	< 50	< 50	< 250
1349MW103 DUP1203032A	03/09/06	< 50	54 Y	< 300
	03/23/05	< 50	< 50	< 300
	03/15/04	< 50	< 50	< 300
	12/03/03	< 50	< 50	< 300
	12/03/03	< 50	< 50	< 300
	08/12/03	< 50	< 50	< 300
	06/05/03	< 50	< 50	< 300

Table A-5-2
Results of TPH Analyses
Building 1349 Area
Presidio of San Francisco, California

Well Name	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		770	880	1,200
1349MW104	03/09/06	< 50	55 Y	< 300
	03/23/05	< 50	< 50	< 300
	03/15/04	< 50	< 50	< 300
	12/02/03	< 50	< 50	< 300
	08/12/03	< 50	< 50	< 300
	06/06/03	< 50	< 50	< 300
1349MW105	03/20/06	< 50	< 50	< 300
	03/23/05	< 50	< 50	< 300
	03/15/04	< 50	< 50	< 300
	12/02/03	< 50	< 50	< 300
	08/12/03	< 50	< 50	< 300
	06/09/03	< 50	< 50	< 300

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - Groundwater cleanup levels were taken from the *Final Corrective Action Plan Building 1349 Study Area, Presidio of San Francisco, California* (BBL, 2006).

3 - TPH analysis was not run using the silica gel cleanup method 3630A, although it was marked on the chain-of-custody. Concentrations in **bold** indicate an exceedance of applicable cleanup levels (BBL, 2006).

µg/L - micrograms per liter

NA - Not analyzed

TPH - Total petroleum hydrocarbons

Y - Sample exhibits fuel pattern that does not resemble the standard.

CL suffix denotes a quality control duplicate sample was sent to control laboratory.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-5-3
Results of VOC Analyses
Building 1349 Area
Presidio of San Francisco, California

Well Name	Sample Date	1,2-DCA	2-Butanone	Acetone	Benzene	Bromo-form	Carbon Disulfide	Dibromo-chloro-methane	Ethyl-benzene	MTBE	Toluene	Total Xylenes	All Other VOCs
	Analytical Method ¹	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	--	--	1	--	--	--	700	--	150	1,750	--
1349MW01	03/16/06	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/21/05	< 0.5	< 10 UJ	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/15/04	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/02/03	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/21/03	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/10/03	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/12/03	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/09/02	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5 UJ	< 0.5	< 0.5	ND
	12/09/02	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5 UJ	< 0.5	< 0.5	ND
	12/09/02	< 0.5	< 5	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/28/02	< 0.5	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/30/02	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/06/02	< 0.5	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	11/28/01	< 0.5	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP1209021A 1349MW01CL	08/30/01	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/30/01	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/30/01	< 1	< 50	< 50	< 0.5	< 1	< 0.5	< 1	< 0.5	< 5	< 0.5	< 0.5	ND
	05/10/01	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5 UJ	< 0.5	< 0.5 UJ	< 0.5 UJ	ND
	02/19/99	NA	NA	NA	< 0.5	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	NA
	11/18/98	NA	NA	NA	< 0.5	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	NA
	08/18/98	NA	NA	NA	< 0.5 U18	NA	NA	NA	< 0.5 U18	NA	< 0.5 U18	< 0.5 U18	NA
	04/16/98	NA	NA	NA	< 0.5	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	NA
	01/22/98	NA	NA	NA	< 0.5	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	NA
	10/30/97	NA	NA	NA	< 0.5	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	NA
	07/31/97	NA	NA	NA	< 0.5	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	NA
	05/01/97	NA	NA	NA	< 0.5	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	NA
	02/10/97	NA	NA	NA	< 0.5	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	NA
	11/25/96	NA	NA	NA	< 0.5	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	NA
	09/12/96	NA	NA	NA	< 0.5	NA	NA	NA	< 0.5	NA	0.54	< 0.5	NA
	08/08/95	NA	NA	NA	< 0.5	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	NA

Table A-5-3
Results of VOC Analyses
Building 1349 Area
Presidio of San Francisco, California

Well Name	Sample Date	1,2-DCA	2-Butanone	Acetone	Benzene	Bromo-form	Carbon Disulfide	Dibromo-chloro-methane	Ethyl-benzene	MTBE	Toluene	Total Xylenes	All Other VOCs
	Analytical Method ¹	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	--	--	1	--	--	--	700	--	150	1,750	--
1349MW02	03/10/06	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	08/31/05	< 0.5	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	05/25/05	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/21/05	< 0.5	< 10 UJ	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/15/04	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/02/03	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/13/03	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/05/03	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/05/03	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/12/03	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP0605032A	12/04/02	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/04/02	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/28/02	< 0.5	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/30/02	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP1204023A	03/06/02	< 0.5	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/06/02	< 0.5	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/06/02	< 0.5	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	11/28/01	< 0.5	< 10	< 10 UJ	0.8	< 1	< 0.5	< 0.5	< 0.5	< 0.5	1.5	< 0.5	ND
DUP0306022A	11/28/01	< 0.5	< 10	< 10	1.1	< 1	< 0.5	< 0.5	< 0.5	< 0.5	2.3	0.7	ND
	08/30/01	< 0.5	< 10	< 10	< 0.5	< 1	1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP1128011A	08/30/01	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/30/01	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP0830012A	08/30/01	< 1	< 50	< 50	< 0.5	< 1	< 0.5	< 1	< 0.5	< 5	< 0.5	< 0.5	ND
	05/10/01	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
1349MW02CL	02/19/99	NA	NA	NA	< 0.5	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	NA
	11/18/98	NA	NA	NA	< 0.5	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	NA
	08/18/98	NA	NA	NA	< 0.5 U18	NA	NA	NA	< 0.5 U18	NA	< 0.5 U18	< 0.5 U18	NA
	04/16/98	NA	NA	NA	< 0.5	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	NA
	01/22/98	NA	NA	NA	< 0.5	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	NA
	10/30/97	NA	NA	NA	< 0.5	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	NA
	07/31/97	NA	NA	NA	< 0.5	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	NA

Table A-5-3
Results of VOC Analyses
Building 1349 Area
Presidio of San Francisco, California

Well Name	Sample Date	1,2-DCA	2-Butanone	Acetone	Benzene	Bromo-form	Carbon Disulfide	Dibromo-chloro-methane	Ethyl-benzene	MTBE	Toluene	Total Xylenes	All Other VOCs
	Analytical Method ¹	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		--	--	--	1	--	--	--	700	--	150	1,750	--
1349MW02	05/01/97	NA	NA	NA	< 0.5	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	NA
	02/10/97	NA	NA	NA	< 0.5	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	NA
	11/25/96	NA	NA	NA	< 0.5	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	NA
	09/12/96	NA	NA	NA	< 0.5	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	NA
	08/08/95	NA	NA	NA	< 0.5	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	NA
1349MW03R	03/16/06	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	08/31/05	< 0.5	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/21/05	< 0.5	< 10 UJ	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/09/04	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/02/03	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/13/03	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/09/03	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
1349MW100 DUP0524063A 1349MW100CL	12/05/06	< 0.5	< 10	< 10	18	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	2.3	ND
	08/16/06	< 0.5	< 10	< 10	23	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	05/24/06	< 0.5	< 10	< 10	29	< 1	0.7	< 0.5	0.8	< 0.5	< 0.5	3.8	ND
	05/24/06	< 0.5	< 10	< 10	28	< 1	0.8	< 0.5	0.8	< 0.5	< 0.5	3.7	ND
	05/24/06	< 0.5 U	< 10 U	< 10 U	30	< 1 U	< 5 U	< 0.5 U	0.9	< 2 U	< 0.5 U	4.2	ND
	03/16/06	< 0.5	< 10	< 10	22	< 1	< 0.5	< 0.5	0.8	< 0.5	< 0.5	0.8	ND
	11/30/05	< 0.5	< 10	< 10 UJ	18	< 1	< 0.5	< 0.5	0.6	< 0.5	< 0.5	1.5	ND
	08/31/05	< 0.5	< 10	< 10	20	< 1	< 0.5	< 0.5	0.6	< 0.5	< 0.5	< 1	ND
	05/25/05	1.5	< 10	< 10	39	< 1	< 0.5	< 0.5	0.9	< 0.5	< 0.5	2	ND
	03/23/05	< 0.5	< 10 UJ	< 10 UJ	27	< 1	< 0.5	< 0.5	1.5	< 0.5	< 0.5	2.9	ND
	03/16/04	< 0.5	< 10	< 10	24	< 1	< 0.5	< 0.5	2.5	< 0.5	< 0.5	5.5	ND
	12/02/03	< 0.5	< 10	< 10	7.8	< 1	< 0.5	< 0.5	2	0.5	0.5	3.8	ND
	08/12/03	< 0.5	< 10	< 10	9.1	< 1	< 0.5	< 0.5	1.1	< 0.5	0.5	3	ND
	06/09/03	< 0.5	< 10	< 10	27	< 1	1.3	< 0.5	7	< 0.5	0.7	12	ND
	03/12/03	< 0.5	< 10	< 10	25	< 1	< 0.5 UJ	< 0.5	5	< 0.5	0.6	9.8	ND
	12/10/02	< 0.5	< 10	< 10	2.6	< 1	< 0.5	< 0.5	1.3	< 0.5 UJ	0.8	3	ND

Table A-5-3
Results of VOC Analyses
Building 1349 Area
Presidio of San Francisco, California

Well Name	Sample Date	1,2-DCA	2-Butanone	Acetone	Benzene	Bromo-form	Carbon Disulfide	Dibromo-chloro-methane	Ethyl-benzene	MTBE	Toluene	Total Xylenes	All Other VOCs
	Analytical Method ¹	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		--	--	--	1	--	--	--	700	--	150	1,750	--
1349MW101	03/16/06	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	08/31/05	< 0.5	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/21/05	< 0.5	< 10 UJ	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/09/04	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/02/03	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/19/03	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/09/03	< 0.5	< 10	< 10	< 0.5	0.6 J	< 0.5	0.6	< 0.5	< 0.5	< 0.5	< 0.5	ND
1349MW102	03/07/06	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
DUP0307063C	03/07/06	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
1349MW102CL	03/07/06	< 0.5 U	< 10 U	< 10 U	< 0.5 U	< 1 U	< 5 U	< 0.5 U	< 0.5 U	< 2 U	< 0.5 U	< 1 U	ND
	08/31/05	< 0.5	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
DUP0831052A	08/31/05	< 0.5	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/21/05	< 0.5	< 10 UJ	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
DUP0321053A	03/21/05	< 0.5	< 10 UJ	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/10/04	< 0.5	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP0310041A	03/10/04	< 0.5	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
1349MW102CL	03/10/04	< 0.5	< 5	< 10 R	< 0.5	< 0.5	< 5 UJ	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/10/03	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP1210031A	12/10/03	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/12/03	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/09/03	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP0609032A	06/09/03	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
1349MW102CL	06/09/03	< 0.5	< 5	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
1349MW103	03/09/06	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/23/05	< 0.5	< 10 UJ	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/15/04	< 0.5	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/03/03	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP1203032A	12/03/03	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/12/03	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/05/03	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND

Table A-5-3
Results of VOC Analyses
Building 1349 Area
Presidio of San Francisco, California

Well Name	Sample Date	1,2-DCA	2-Butanone	Acetone	Benzene	Bromo-form	Carbon Disulfide	Dibromo-chloro-methane	Ethyl-benzene	MTBE	Toluene	Total Xylenes	All Other VOCs
	Analytical Method ¹	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	--	--	1	--	--	--	700	--	150	1,750	--
1349MW104	03/09/06	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/23/05	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/15/04	< 0.5	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/02/03	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/12/03	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/06/03	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
1349MW105	03/20/06	< 0.5	< 10	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/23/05	< 0.5	< 10 UJ	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/15/04	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/02/03	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/12/03	< 0.5	< 10	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/09/03	< 0.5	< 10	12	< 0.5	< 1	1.9	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - Groundwater cleanup levels were taken from the *Final Corrective Action Plan Building 1349 Study Area, Presidio of San Francisco, California* (BBL, 2006).

Concentrations in **bold** indicate an exceedance of applicable cleanup levels.

"--" cleanup level not established

µg/L - micrograms per liter

ND - Not detected

NA - Not analyzed

NS - Not sampled

VOC - Volatile organic compound

MTBE - Methyl tert-butyl ether

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-5-4
Results of OCP and PCB Analyses
Building 1349 Area
Presidio of San Francisco, California

Well Name	Sample Date	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	alpha-Chlordane	beta-BHC	delta-BHC	Dieldrin	Endosulfan II	Endrin	gamma-BHC	gamma-Chlordane	Heptachlor	Heptachlor Epoxide	Methoxy-chlor	All Other OCPs/PCBs
	Analytical Method ¹	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		0.15	0.10	0.10	0.002	0.1	0.3	--	0.5	42	2	0.2	0.1	0.01	0.01	40	--
1349MW02 DUP0306022A	03/06/02	< 0.095	< 0.095	< 0.095 UJ	< 0.048	< 0.048	< 0.048	< 0.048	< 0.095	< 0.095	< 0.095	< 0.048 UJ	< 0.048	< 0.048	< 0.048	< 0.48	ND
	03/06/02	< 0.095	< 0.095	< 0.095 UJ	< 0.048 UJ	< 0.048	< 0.048 UJ	< 0.048 UJ	< 0.095	< 0.095	< 0.095	< 0.048 UJ	< 0.048	< 0.048 UJ	< 0.048 UJ	< 0.48	ND
DUP1128011A	11/28/01	< 0.096	< 0.096	< 0.096	< 0.048	< 0.048	< 0.048	< 0.048	< 0.096	< 0.096	< 0.096	< 0.048	< 0.048	< 0.048	< 0.048	< 0.48	ND
	11/28/01	< 0.096 UJ	< 0.096 UJ	< 0.096 UJ	< 0.048	< 0.048 UJ	< 0.048	< 0.048	< 0.096 UJ	< 0.096 UJ	< 0.096 UJ	< 0.048	< 0.048 UJ	< 0.048	< 0.048	< 0.48 UJ	ND
DUP0830012A 1349MW02CL	08/30/01	< 0.098 UJ	< 0.098 UJ	< 0.098 UJ	< 0.049	< 0.049 UJ	< 0.049	< 0.049	< 0.098 UJ	< 0.098 UJ	< 0.098 UJ	< 0.049	< 0.049 UJ	< 0.049	< 0.049	< 0.49 UJ	ND
	08/30/01	< 0.097	< 0.097	< 0.097	< 0.049	< 0.049	< 0.049	< 0.049	< 0.097	< 0.097	< 0.097	< 0.049	< 0.049	< 0.049	< 0.049	< 0.49	ND
1349MW03R	08/30/01	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	ND
	05/10/01	< 0.094	< 0.094	< 0.094	< 0.047	< 0.047	< 0.047	< 0.047	< 0.094	< 0.094	< 0.094	< 0.047	< 0.047	< 0.047	< 0.047	< 0.47	ND
1349MW03R	08/17/06	< 0.09	< 0.09	< 0.09 # UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5 # UJ	ND / NA
	03/16/06	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	08/31/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	05/25/05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	03/21/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.05	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	12/16/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	08/10/04	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	05/26/04	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.5	ND
	03/09/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	0.08 C	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	12/02/03	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	08/13/03	< 0.09	< 0.09	< 0.09	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.09	< 0.09	< 0.09	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.5	ND
	06/09/03	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.5 UJ	ND
1349MW100 DUP0524063A 1349MW100CL	12/05/06	< 0.2	0.3	< 0.2 # UJ	< 0.1 UJ	< 0.1	< 0.1 UJ	< 0.1 UJ	0.3	< 0.2	< 0.2	< 0.2 UJ	< 0.1	0.2 J-	< 0.1 UJ	< 1	ND/NA
	08/16/06	< 0.3 UJ	< 0.3 UJ	0.4 J-	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.3 UJ	< 0.3 UJ	0.7 C J-	2.4 J-	< 0.1 UJ	2.2 C J-	0.4 C J-	< 1.4 UJ	ND
	05/24/06	< 0.5	< 0.5	0.8 C	< 0.2	< 0.2	< 0.5 # UJ	< 0.2 # UJ	< 0.5	< 0.5	< 0.5	< 0.2	< 0.2	< 0.2	0.4	< 2.4	ND
	05/24/06	< 0.5	< 0.5	0.8	0.3 C	0.8	< 0.5 # UJ	< 0.2 # UJ	< 0.5	< 0.5	< 0.5	< 0.2	< 0.2	< 0.2	0.3	< 2.4	ND
	05/24/06	< 0.1 U UJ	< 0.1 U UJ	< 0.1 U UJ	< 0.05 U	< 0.5 U UJ	< 0.05 U	< 0.05 U	< 0.1 U UJ	< 0.1 U UJ	< 0.1 U UJ	0.082	NA	< 0.05 U	< 0.05 U	< 0.5 U UJ	ND
	03/16/06	0.9 C J-	< 0.1 UJ	< 0.1 UJ	0.3	0.9 C J-	< 0.05	0.1 C	0.4 C J-	< 0.1 UJ	< 0.1 UJ	< 0.05	0.7 C J-	0.8 C	0.2	< 0.5 UJ	ND
	11/30/05	< 0.5	< 0.5	< 0.5	< 0.2	0.3 C	< 0.2	< 0.2	< 0.5	< 0.5	< 0.5	1.3	< 0.2	< 0.2	< 0.2	< 2.4	ND
	08/31/05	< 0.1	< 0.1	1 Cb J	< 0.05	0.2 C	< 0.5	0.08 b J	0.1	0.8 C	< 0.1	8.5 Cb J	0.2	< 0.05	0.2 C	< 0.5	ND
	05/25/05	< 1	< 1	< 1	< 0.5	< 0.5	< 1	< 0.5	< 1	< 1	< 1	4.5 #C	< 0.5	< 0.5	< 0.5	< 4.8	ND
	03/23/05	< 1	< 1	< 1 # UJ	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 5	ND
	12/16/04	< 1	< 1 #	< 1 # UJ	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 1	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 4.8 # UJ	ND
	08/10/04	0.9 C	1.1 C	0.4	0.2	0.1	< 0.05	0.1 C	0.5 C	< 0.1	0.1 C	3.7 C	< 0.05	1.6 C	< 0.05	< 0.5	ND
	05/27/04	< 0.2 UJ	< 0.2 UJ	0.5 C, J-	< 0.09	0.2 C, J-	< 0.09	0.2 C	0.3 J-	0.7 C, J-	0.2 J-	< 0.2	0.1 J-	0.8 C	0.2 C	< 0.9 UJ	ND
	03/16/04	< 0.09 UJ	0.7 Cb, J-	0.7 C, J-	< 0.05 UJ	0.2 J-	< 0.05 UJ	0.08 b, J-	0.3 J-	0.6 J-	0.2 J-	< 0.05 UJ	0.3 C, J-	0.8 Cb, J-	0.2 C, J-	1.2 b, J-	ND
	12/02/03	0.5 C	0.7 C	0.5 Cb, J-	< 0.05	< 0.05	3.9 C	0.06 C	0.1	< 0.09	< 0.09	2.3 C	< 0.05	< 0.05	0.2 C	< 0.5	ND
	08/12/03	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	0.2 C	0.1 J-	< 0.2	< 0.05	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	4.6 C	0.07 J-	2.6 Cb,J-	0.1	< 0.5 UJ	ND
	06/09/03	0.3 C, J-	0.3 C, J-	< 0.09 UJ	0.07 C	< 0.05 UJ	< 0.05	0.2 C	< 0.09 UJ	< 0.09 UJ	< 0.09 UJ	4.5 C	0.4 C, J-	< 0.05	< 0.05	< 0.5 UJ	ND
	03/12/03	0.3 Cb, J+	< 0.1 UJ	0.2 C, J-	0.3 C, J+	0.2 C, J-	6.1 C, J+	0.1 C, J+	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	2.2 C, J+	0.2 C, J-	0.8 C, J+	0.3 C J+	< 0.5 UJ	ND
	12/10/02	< 0.097	< 0.097	< 0.097	0.11 C,J-	< 0.049	1.5 C, J-	< 0.049 UJ	< 0.097	< 0.097	< 0.097	0.43 C, J-	< 0.049	0.83 C, J-	< 0.049 UJ	< 0.49	ND

Table A-5-4
Results of OCP and PCB Analyses
Building 1349 Area
Presidio of San Francisco, California

Well Name		Sample Date	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	alpha-Chlordane	beta-BHC	delta-BHC	Dieldrin	Endosulfan II	Endrin	gamma-BHC	gamma-Chlordane	Heptachlor	Heptachlor Epoxide	Methoxy-chlor	All Other OCPs/PCBs
		Analytical Method ¹	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082
			(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²			0.15	0.10	0.10	0.002	0.1	0.3	--	0.5	42	2	0.2	0.1	0.01	0.01	40	--
1349MW101 DUP0525052A	08/17/06	< 0.09	< 0.09	< 0.09 # UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5 # UJ	ND / NA
	03/16/06	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	08/31/05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	05/25/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	05/25/05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	03/21/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.05	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	12/15/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	03/09/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	0.06 C	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	12/02/03	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	08/19/03	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	06/09/03	< 0.09 UJ	< 0.09 UJ	< 0.09 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.05	< 0.09 UJ	< 0.09 UJ	< 0.09 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.09 UJ	ND
1349MW102 DUP0307063C 1349MW102CL DUP0831052A DUP0321053A DUP0310041A 1349MW102CL DUP0527041A DUP0527041A 1349MW102CL DUP1210031A DUP0609032A 1349MW102CL	08/17/06	< 0.09 UJ	< 0.09 UJ	< 0.09 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.05	< 0.09 UJ	< 0.09 UJ	< 0.09 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.5 UJ	ND / NA
	03/07/06	< 0.1	< 0.1	< 0.1 # UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	03/07/06	< 0.1	< 0.1	< 0.1 # UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	03/07/06	< 0.1 U R	< 0.1 U R	< 0.1 U R	< 0.05 U UJ	< 0.5 U R	< 0.05 U UJ	< 0.05 U UJ	< 0.05 U UJ	< 0.1 U R	< 0.1 U R	< 0.1 U R	< 0.05 U UJ	NA	< 0.05 U UJ	< 0.05 U UJ	< 0.5 U R	ND
	08/31/05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	08/31/05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	05/25/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	03/21/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.05	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	03/21/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.05	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	03/10/04	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.05 UJ	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.5	ND
	03/10/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	03/10/04	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05 UJ	NA	< 0.05 UJ	< 0.05 UJ	< 0.05 UJ	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05 UJ	< 0.5 UJ	< 0.05 UJ	< 0.05 UJ	< 0.5 UJ	ND
	12/16/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	08/10/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	08/10/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	05/27/04	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.05 UJ	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.5	ND
	05/27/04	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.05 UJ	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.5	ND
	05/27/04	< 0.098	< 0.098	< 0.098	< 0.049	NA	< 0.049	< 0.049	< 0.098	< 0.098	< 0.098	< 0.098	< 0.049	< 0.49	< 0.049	< 0.049	< 0.49	ND
	12/10/03	< 0.1	< 0.1	< 0.1 b,UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	0.07 C,J+	< 0.05	< 0.05 b,UJ	< 0.05	< 0.5 b,UJ	ND
	12/10/03	< 0.09	< 0.09	< 0.09 b,UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	0.07 J+	< 0.05	< 0.05 b,UJ	< 0.05	< 0.5 b,UJ	ND
	08/12/03	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05 UJ	< 0.05	< 0.5	ND
	06/09/03	< 0.09 UJ	< 0.09 UJ	< 0.09 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.05	< 0.09 UJ	< 0.09 UJ	< 0.09 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.5 UJ	ND
	06/09/03	< 0.09 UJ	< 0.09 UJ	< 0.09 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.05	< 0.09 UJ	< 0.09 UJ	< 0.09 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.5 UJ	ND
	06/09/03	< 0.095 UJ	< 0.095 UJ	< 0.095 UJ	< 0.048 UJ	NA	< 0.048 UJ	< 0.048 UJ	< 0.095 UJ	< 0.095 UJ	< 0.095 UJ	< 0.095 UJ	< 0.048 UJ	< 0.48 UJ	< 0.048 UJ	< 0.048 UJ	< 0.48 UJ	ND

Table A-5-4
Results of OCP and PCB Analyses
Building 1349 Area
Presidio of San Francisco, California

Well Name	Sample Date	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	alpha-Chlordane	beta-BHC	delta-BHC	Dieldrin	Endosulfan II	Endrin	gamma-BHC	gamma-Chlordane	Heptachlor	Heptachlor Epoxide	Methoxy-chlor	All Other OCPs/PCBs
	Analytical Method ¹	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		0.15	0.10	0.10	0.002	0.1	0.3	--	0.5	42	2	0.2	0.1	0.01	0.01	40	--
1349MW103 DUP1203032A	03/09/06	< 0.1	< 0.1	< 0.1 UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / NA
	03/23/05	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.1 UJ	< 0.05	< 0.1 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.5 # UJ	ND
	03/15/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	12/03/03	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.5	ND
	12/03/03	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	08/12/03	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.5	ND
	06/05/03	< 0.09 UJ	< 0.09 UJ	< 0.09 UJ	< 0.05 UJ	< 0.05 UJ	< 0.05 UJ	< 0.05 UJ	< 0.09 UJ	< 0.09 UJ	< 0.09 UJ	< 0.05 UJ	< 0.05 UJ	< 0.05 UJ	< 0.05 UJ	< 0.5 UJ	ND
1349MW104	03/09/06	< 0.1	< 0.1	< 0.1 UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / NA
	03/23/05	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.1 UJ	< 0.05	< 0.1 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.5 # UJ	ND
	03/15/04	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.5 UJ	ND
	12/02/03	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	08/12/03	< 0.09	< 0.09	< 0.09	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.09	< 0.09	< 0.09	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.5	ND
	06/06/03	< 0.09 UJ	< 0.09 UJ	< 0.09 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.09 UJ	< 0.09 UJ	< 0.09 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.5 UJ	ND
1349MW105	03/20/06	< 0.1	< 0.1	< 0.1 # UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5 # UJ	ND / NA
	03/23/05	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.1 UJ	< 0.05	< 0.1 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.5 # UJ	ND
	03/15/04	< 0.09 UJ	< 0.09 UJ	< 0.09 UJ	< 0.05 UJ	< 0.05 UJ	< 0.05 UJ	< 0.05 UJ	< 0.09 UJ	< 0.09 UJ	< 0.09 UJ	< 0.05 UJ	< 0.05 UJ	< 0.05 UJ	< 0.05 UJ	< 0.5 UJ	ND
	12/02/03	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	08/12/03	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.5	ND
	06/09/03	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05 UJ	< 0.05 UJ	< 0.05 UJ	< 0.05 UJ	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05 UJ	< 0.05 UJ	< 0.05 UJ	< 0.05 UJ	< 0.5 UJ	ND

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - Groundwater cleanup levels were taken from the *Final Corrective Action Plan Building 1349 Study Area, Presidio of San Francisco, California* (BBL, 2006).

Bold numbers indicate detected concentrations which exceed drinking water quality criteria.

µg/L - micrograms per liter

-- cleanup level not established

ND - Not detected

NA - Not analyzed

- The continuing calibration verification (CCV) drifted outside the limits although the average CCV drift was within method requirements.

OCPs - Organochlorine pesticides

PCBs - Polychlorinated biphenyls

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-5-5
Results of PAH Analyses
Building 1349 Area
Presidio of San Francisco, California

Well Name	Sample Date	Acenaphthene	Anthracene	Benzo(a)-Anthracene	Benzo(a)-Pyrene	Benzo(b)-Fluoranthene	Benzo(g,h,i)-Perylene	Benzo(k)-Fluoranthene	Chrysene	Dibenz(a,h)-Anthracene	Fluor-anthene	Fluorene	Indeno-(1,2,3-c,d)-Pyrene	Naph-thalene	Phen-anthrene	Pyrene	All Other PAHs
	Analytical Method ¹	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Level ²		420	770	0.1	0.2	0.2	150	2	20	0.0085	300	300	0.029	300	230	230	--
1349MW01	03/16/06	< 0.98	< 0.49	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.39	< 0.98	< 0.14	< 0.98	< 0.49	< 0.2	ND
	03/21/05	< 0.98	< 0.49	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.39	< 0.98	< 0.14	< 0.98	< 0.49	< 0.2	ND
	03/15/04	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	12/02/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	08/21/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	06/10/03	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
	03/12/03	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
	12/09/02	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	12/09/02	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	12/09/02	< 0.5	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.05	< 0.05	< 0.2	< 0.1	< 0.1	< 0.05	< 0.5	< 0.05	< 0.05	ND
	08/28/02	< 0.99	< 0.5	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.4	< 0.99	< 0.14	< 0.99	< 0.5	< 0.2	ND
	05/30/02	< 0.98	< 0.49	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.39	< 0.98	< 0.14	< 0.98	< 0.49	< 0.2	ND
	03/06/02	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	11/28/01	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
DUP1209021A 1349MW01CL	08/30/01	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	08/30/01	< 1.1	< 0.53	< 0.11	< 0.11	< 0.21	< 0.19	< 0.11	< 0.11	< 0.19	< 0.43	< 1.1	< 0.13	< 1.1	< 0.53	< 0.21	ND
	08/30/01	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.15	< 0.1	< 0.1	< 0.15	< 0.1	< 0.15	ND
	05/10/01	< 0.95 UJ	< 0.48 UJ	< 0.1 UJ	< 0.1 UJ	< 0.19 UJ	< 0.19 UJ	< 0.1 UJ	< 0.1 UJ	< 0.19 UJ	< 0.38 UJ	< 0.95 UJ	< 0.13 UJ	< 0.95 UJ	< 0.48 UJ	< 0.19 UJ	ND
1349MW02	03/10/06	< 0.98	< 0.49	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.39	< 0.98	< 0.14	< 0.98	< 0.49	< 0.2	ND
	08/31/05	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	05/25/05	< 0.99	< 0.5	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.4	< 0.99	< 0.14	< 0.99	< 0.5	< 0.2	ND
	03/21/05	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	03/15/04	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	12/02/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	08/13/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	06/05/03	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	06/05/03	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	03/12/03	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	12/04/02	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	12/04/02	< 0.98	< 0.49	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.39	< 0.98	< 0.14	< 0.98	< 0.49	< 0.2	ND
	08/28/02	< 0.98	< 0.49	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.39	< 0.98	< 0.14	< 0.98	< 0.49	< 0.2	ND
	05/30/02	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	03/06/02	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
DUP0306022A	03/06/02	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	11/28/01	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
	11/28/01	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
DUP1128011A	08/30/01	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	08/30/01	< 1	< 0.51	< 0.1	< 0.1	< 0.2	< 0.19	< 0.1	< 0.1	< 0.19	< 0.41	< 1	< 0.13	< 1	< 0.51	< 0.2	ND
	08/30/01	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.15	< 0.1	< 0.1	< 0.15	< 0.1	< 0.15	ND
DUP0830012A 1349MW02CL	08/30/01	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.15	< 0.1	< 0.1	< 0.15	< 0.1	< 0.15	ND
	05/10/01	< 0.97	< 0.49 UJ	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND

Table A-5-5
Results of PAH Analyses
Building 1349 Area
Presidio of San Francisco, California

Well Name	Sample Date	Acenaphthene	Anthracene	Benzo(a)-Anthracene	Benzo(a)-Pyrene	Benzo(b)-Fluoranthene	Benzo(g,h,i)-Perylene	Benzo(k)-Fluoranthene	Chrysene	Dibenz(a,h)-Anthracene	Fluor-anthene	Fluorene	Indeno-(1,2,3-c,d)-Pyrene	Naph-thalene	Phen-anthrene	Pyrene	All Other PAHs
	Analytical Method ¹	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Level ²		420	770	0.1	0.2	0.2	150	2	20	0.0085	300	300	0.029	300	230	230	--
1349MW03R	03/16/06	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	08/31/05	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	03/21/05	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	03/09/04	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	12/02/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	08/13/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	06/09/03	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
1349MW100 DUP0524063A 1349MW100CL	12/05/06	12	1.1	2.3	< 0.1	1.2	< 0.2	0.11	1.2	< 0.2	41	17	< 0.14	< 1	41	< 0.2	ND
	08/16/06	4.9	0.71	1.1	< 0.09 R	< 0.19	< 0.19	< 0.09	1.1	< 0.19	4.7	13	< 0.13	< 0.94 R	17	1.5 J-	ND
	05/24/06	3.6	0.2 J	0.11	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	1.6	7.5	< 0.14	< 1	4.9	0.38	ND
	05/24/06	4.3	0.28 J	0.14	< 0.1	< 0.2	< 0.2	< 0.1	0.1	< 0.2	1.8	8.4	< 0.14	< 0.98	5.8	0.48	ND
	05/24/06	5.6 P J-	0.24 P J-	0.48 P J-	< 0.2 U UJ	< 0.2 U UJ	< 0.2 U UJ	< 0.2 U UJ	< 0.2 U UJ	< 0.5 U UJ	0.38 P J-	4 J-	< 0.2 U UJ	< 5 U UJ	3.5 J-	0.44 P J-	ND
	03/16/06	6.6	0.36 J	0.35	< 0.1	< 0.19	< 0.19	< 0.1	0.29	< 0.19	2.3	10	< 0.13	< 0.96	9	0.75	ND
	11/30/05	12 J+	2.8 J+	3.7 J+	< 0.09	0.74 J+	< 0.19	0.31 J+	4.1 J+	< 0.19	22 J+	29 J+	< 0.13	< 0.94	63 J+	7.8 J+	ND
	08/31/05	10 J+	< 0.48	1.3 J+	< 0.1	< 0.19	< 0.19	< 0.1	0.74 J+	< 0.19	11 J+	< 0.95	< 0.13	< 0.95	9.2 J+	0.65 J+	ND
	05/25/05	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	0.78 J+	18 J+	< 0.13	< 0.94	8.4 J+	0.34 J+	ND
	03/23/05	< 0.95	< 0.48	< 0.1	0.63 J+	4.8 J+	< 0.19	0.85 J+	< 0.1	1.7 J+	5.4 J+	22	< 0.13	< 0.95	34	3.8 J+	ND
	03/16/04	< 19	< 9.4	6.2	< 1.9	< 3.8	< 3.8	< 1.9	2.7	< 3.8	14	46	< 2.6	< 19	86	< 3.8	ND
	12/02/03	< 0.95	0.59 J,J+	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	0.32 J+	< 0.19	0.96 J+	11 J+	< 0.13	< 0.95	9.6 J+	0.28 J+	ND
	08/12/03	< 0.95	1.1 J+	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	0.81 J+	< 0.19	1.7 J+	19 J+	< 0.13	< 0.95	18 J+	0.51 J+	ND
	06/09/03	< 0.94	< 0.47	0.53 J+	< 0.09	< 0.19	< 0.19	< 0.09	1 J+	< 0.19	2.4 J+	13 J+	< 0.13	7.5 J+	17 J+	0.75 J+	ND
	03/12/03	< 0.98	< 0.49	0.14	< 0.1	< 0.2	< 0.2	< 0.1	0.16	< 0.2	< 0.39	5.2	< 0.14	< 0.98	5.3	0.27	ND
	12/10/02	< 0.94	0.25 J	0.15	< 0.09	< 0.19	< 0.19	< 0.09	0.17	< 0.19	0.43	4	< 0.13	< 0.94	4.2	0.23	ND
1349MW101	03/16/06	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
	08/31/05	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	03/21/05	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	03/09/04	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	12/02/03	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	08/19/03	< 0.95 UJ	< 0.48 UJ	< 0.1 UJ	< 0.1 UJ	< 0.19 UJ	< 0.19 UJ	< 0.1 UJ	< 0.1 UJ	< 0.19 UJ	< 0.38 UJ	< 0.95 UJ	< 0.13 UJ	< 0.95 UJ	< 0.48 UJ	< 0.19 UJ	ND
	06/09/03	< 0.94 UJ	< 0.47 UJ	< 0.09 UJ	< 0.09 UJ	< 0.19 UJ	< 0.19 UJ	< 0.09 UJ	< 0.09 UJ	< 0.19 UJ	< 0.38 UJ	< 0.94 UJ	< 0.13 UJ	< 0.94 UJ	< 0.47 UJ	< 0.19 UJ	ND
1349MW102 DUP0307063C 1349MW102CL DUP0831052A DUP0321053A DUP0310041A 1349MW102CL	03/07/06	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	03/07/06	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
	03/07/06	< 5 U UJ	< 0.2 U UJ	< 0.2 U UJ	< 0.2 U UJ	< 0.2 U UJ	< 0.2 U UJ	< 0.2 U UJ	< 0.2 U UJ	< 0.5 U UJ	< 0.2 U UJ	< 1 U UJ	< 0.2 U UJ	< 5 U UJ	< 1 U UJ	< 0.2 U UJ	ND
	08/31/05	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	08/31/05	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	03/21/05	< 0.98	< 0.49	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.39	< 0.98	< 0.14	< 0.98	< 0.49	< 0.2	ND
	03/21/05	< 1	< 0.5	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.4	< 1	< 0.14	< 1	< 0.5	< 0.2	ND
	03/10/04	< 0.98	< 0.49	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.39	< 0.98	< 0.14	< 0.98	< 0.49	< 0.2	ND
	03/10/04	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	03/10/04	< 0.5	< 0.05	< 0.05	< 0.05 R	< 0.1 UJ	< 0.1 UJ	< 0.05 UJ	< 0.05	< 0.2 UJ	< 0.1	< 0.1	< 0.05 UJ	< 0.5	< 0.05	< 0.05	ND

Table A-5-5
Results of PAH Analyses
Building 1349 Area
Presidio of San Francisco, California

Well Name	Sample Date	Acenaphthene	Anthracene	Benzo(a)-Anthracene	Benzo(a)-Pyrene	Benzo(b)-Fluoranthene	Benzo(g,h,i)-Perylene	Benzo(k)-Fluoranthene	Chrysene	Dibenz(a,h)-Anthracene	Fluor-anthene	Fluorene	Indeno-(1,2,3-c,d)-Pyrene	Naph-thalene	Phen-anthrene	Pyrene	All Other PAHs
	Analytical Method ¹	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Level ²		420	770	0.1	0.2	0.2	150	2	20	0.0085	300	300	0.029	300	230	230	--
1349MW102 DUP1210031A	12/10/03	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	12/10/03	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	08/12/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	06/09/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	06/09/03	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
1349MW102CL	06/09/03	< 0.48	< 0.048	< 0.048	< 0.048	< 0.095	< 0.095	< 0.048	< 0.048	< 0.19	< 0.095	< 0.095	< 0.048	< 0.48	< 0.048	< 0.048	ND
1349MW103 DUP1203032A	03/09/06	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	03/23/05	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
	03/15/04	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	12/03/03	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	0.16	< 0.19	0.1 J	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	12/03/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	08/12/03	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
	06/05/03	< 0.95	0.1 J	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	0.16	< 0.19	0.25 J	< 0.95	< 0.13	< 0.95	0.84	< 0.19	ND
1349MW104	03/09/06	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
	03/23/05	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	03/15/04	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	12/02/03	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	08/12/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	06/06/03	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
1349MW105	03/20/06	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	03/23/05	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	03/15/04	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	12/02/03	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	08/12/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	06/09/03	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	0.02 J	< 0.95	< 0.13	< 0.96	< 0.48	< 0.19	ND

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - Groundwater cleanup levels were taken from the *Final Corrective Action Plan Building 1349 Study Area, Presidio of San Francisco, California* (BBL, 2006).

BOLD concentrations indicate an exceedance of applicable cleanup levels.

-- cleanup level not established

µg/L - micrograms per liter

ND - Not detected

NS - Not sampled

PAHs - Polycyclic aromatic hydrocarbons

CL suffix denotes a quality control duplicate sample was sent to control laboratory.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-5-6
Results of Chlorinated Herbicide Analyses
Building 1349 Area
Presidio of San Francisco, California

Well Name	Sample Date	2,4-D	2,4-DB	All Other Chlorinated Herbicides
	Analytical Method ¹	SW8151/ SW8151A	SW8151/ SW8151A	SW8151/ SW8151A
		(µg/L)	(µg/L)	(µg/L)
1349MW01	03/15/04	< 0.24 U	< 0.96 U	ND
	12/02/03	< 0.24 U	< 0.96 U	ND
	08/21/03	< 0.25	< 1	ND
	06/10/03	< 0.24	< 0.96	ND
1349MW02	08/31/05	< 0.25 U	< 1 U	ND
	03/21/05	< 0.25 U	< 1 U	ND
	12/16/04	< 0.25 U	< 1 U	ND
	08/12/04	< 0.24 U UJ	< 0.96 U UJ	ND
	05/26/04	< 0.24 U	< 0.96 U	ND
	03/15/04	< 0.24 U	< 0.96 U	ND
	12/02/03	< 0.24 U	< 0.96 U	ND
	08/13/03	< 0.24	< 0.96	ND
	06/05/03	< 0.24	< 0.96	ND
DUP0605032A	06/05/03	< 0.24	< 0.96	ND
1349MW03R	08/31/05	< 0.25 U	< 1 U	ND
	03/21/05	< 0.25 U	< 1 U	ND
	12/16/04	< 0.25 U UJ	< 1 U UJ	ND
	08/10/04	< 0.24 U	< 0.96 U	ND
	05/26/04	< 0.24 U	< 0.96 U	ND
	03/09/04	< 0.24 U	< 0.96 U	ND
	12/02/03	< 0.24 U	< 0.96 U	ND
	08/13/03	< 0.24	< 0.96	ND
1349MW100	06/09/03	< 0.24	< 0.96	ND
	08/31/05	< 0.25 U	< 1 U	ND
	03/23/05	< 0.25 U	< 1 U	ND
	12/16/04	< 0.25 U	< 1 U	ND
	08/10/04	< 0.24 U	< 0.96 U	ND
	05/27/04	< 0.24 U	< 0.96 U	ND
	03/16/04	< 0.24 U	< 0.96 U	ND
	12/02/03	< 0.24 U	< 0.96 U	ND
1349MW101	08/12/03	2.1	12	ND
	06/09/03	< 0.24	< 0.96	ND
	08/31/05	< 0.25 U	< 1 U	ND
	03/21/05	< 0.25 U	< 1 U	ND
	03/09/04	< 0.24 U	< 0.96 U	ND
	12/02/03	< 0.24 U	< 0.96 U	ND
1349MW101	08/19/03	< 0.24	< 0.96	ND
	06/09/03	< 0.24	< 0.96	ND

Table A-5-6
Results of Chlorinated Herbicide Analyses
Building 1349 Area
Presidio of San Francisco, California

Well Name	Sample Date	2,4-D	2,4-DB	All Other Chlorinated Herbicides
	Analytical Method ¹	SW8151/ SW8151A	SW8151/ SW8151A	SW8151/ SW8151A
		(µg/L)	(µg/L)	(µg/L)
1349MW102	08/31/05	< 0.25 U	< 1 U	ND
DUP0831052A	08/31/05	< 0.25 U	< 1 U	ND
	03/21/05	< 0.25 U	< 1 U	ND
DUP0321053A	03/21/05	< 0.25 U	< 1 U	ND
	12/16/04	< 0.25 U	< 1 U	ND
	08/10/04	< 0.24 U	< 0.96 U	ND
DUP0810042A	08/10/04	< 0.24 U	< 0.96 U	ND
	05/27/04	< 0.24 U	< 0.96 U	ND
DUP0527041A	05/27/04	< 0.24 U	< 0.96 U	ND
1349MW102CL	05/27/04	< 0.24	< 0.24	ND
	03/10/04	< 0.24 U	< 0.96 U	ND
1349MW102CL	03/10/04	< 0.25 UJ	< 0.25 UJ	ND
	12/10/03	< 0.24 U	< 0.96 U	ND
DUP1210031A	12/10/03	< 0.24 U	< 0.96 U	ND
	08/12/03	< 0.25	< 1	ND
	06/09/03	< 0.24	< 0.96	ND
DUP0609032A	06/09/03	< 0.24	< 0.96	ND
1349MW102CL	06/09/03	< 0.24 UJ	< 0.24 UJ	ND
1349MW103	03/15/04	< 0.24 U	< 0.96 U	ND
	12/03/03	< 0.24 U	< 0.96 U	ND
DUP1203032A	12/03/03	< 0.24 U	< 0.96 U	ND
	08/12/03	< 0.25	< 1	ND
	06/05/03	< 0.24	< 0.96	ND
1349MW104	03/15/04	< 0.24 U	< 0.96 U	ND
	12/02/03	< 0.24 U	< 0.96 U	ND
	08/12/03	< 0.25	< 1	ND
	06/06/03	< 0.24	< 0.96	ND
1349MW105	03/15/04	< 0.24 U	< 0.96 U	ND
	12/02/03	< 0.24 U	< 0.96 U	ND
	08/12/03	< 0.25	< 1	ND
	06/09/03	< 0.24	< 0.96	ND

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the second Quarter 2001. The analytical methods used during previous quarters are identified in the

respective quarterly reports

µg/L - micrograms per liter

ND - Not detected

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-5-7
Results of Dissolved Metals Analyses
Building 1349 Area
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Hexavalent Chromium ²	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids	
	Analytical Method ¹	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW7196/ SW7196A	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7470/ SW7470A	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1	
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	
Cleanup Level ³		--	6	10	1,000	4	5	--	50	140	1,000	21	--	15	--	--	2	100	--	50	50	--	2	15	5,000	--	
1349MW01	03/16/06	< 100	< 1	< 5	32	< 2	< 1	110,000	< 10	< 10	< 1	NA	< 100	< 3	230,000 J	< 10	< 0.2	< 20	1900 J-	< 5	< 1	250,000	< 1	< 10	< 20	2,040 J	
	03/21/05	< 100	< 1	< 5	34	< 2	< 1	92,000	< 10	< 10	1.1	NA	220	< 3	170,000	< 10	< 0.2	< 20	1,700	< 5	< 1	190,000	< 1	< 10	< 20	1,500	
	03/15/04	< 100	< 1	< 5	34 J-	< 2	< 1	110,000	< 10	< 10	3	NA	270	< 3	210,000	< 10	< 0.2	< 20	1,800	< 5	< 1	250,000	< 1	< 10	< 20	1,650	
	12/02/03	< 100	< 1	< 5	38	< 2	< 1	86,000	< 10	< 10	1.3	NA	370	< 3	180,000	< 10	< 0.2	< 20	1,900	< 5	< 1 UJ	200,000	< 1	< 10	< 20	1,240	
	08/21/03	< 100	< 1	< 5	39	< 2	< 1	94,000	< 10	< 10	< 1	NA	610	< 3	200,000	< 10	< 0.2	< 20	1,700	5.3	< 1 UJ	200,000	< 1	< 10	< 20 UJ	1,660	
	06/10/03	< 100	< 1	< 5	38	< 2	< 1	100,000	< 10	< 10	< 1	NA	150	< 3	180,000	12	< 0.2	< 20	1,900	< 5	< 1	170,000	< 1	< 10	< 20	1,650	
	12/09/02	< 100	< 1	< 1	44	< 1	< 1	100,000	8.2	< 1	< 1	< 10	330	< 3	210,000	10 J	0.22	6.9	2,100	< 5	< 1 UJ	200,000	< 1	< 10	< 10	1,490	
	12/09/02	< 100	< 1	< 1	46	< 1	< 1	100,000	10	< 1	< 1	< 10	320	< 3	210,000	12 J	< 0.2	11	2,100	< 5	< 1 UJ	190,000	< 1	< 10	< 10	1,580	
	12/09/02	< 300	< 5	14	46	< 1	< 1	110,000 J+	7.3	< 7	6.5	< 5	< 150	< 3	240,000	11	< 0.2	12	2,600	6.1	< 1	210,000	< 2	< 10	< 10	1,600	
	08/28/02	< 100	< 1	< 1	280	< 1	< 1	110,000	1.2 J	< 1	1.3	< 10	180	< 3	230,000	< 10	< 0.2	3.8	2,000	< 5	< 1 UJ	230,000	< 1	< 10	30	1,750	
1349MW01CL	05/30/02	< 100	< 1	< 1	42	< 1	< 1	100,000	3.2	< 1	1.2	< 10 UJ	200	< 3	210,000	< 10	< 0.2	4.3	2,000	< 5	< 1 UJ	210,000	< 1	< 10	< 10	1,670	
	03/06/02	< 100	1.1	1.1	450	< 1	< 1	130,000	3.8	< 1	1.4	< 10	480	< 3	270,000	< 10	< 0.2	5.6	2,200	< 5	1.8 J-	290,000	< 1	< 10	90	1,660	
	11/28/01	< 100	< 1	1.9	590	< 1	< 1	120,000	27 J	< 1	3.4	< 10	< 100	< 3	250,000	15	< 0.2	8.8	2,500	11	< 1	240,000	< 1	< 10	200	1,610	
	08/30/01	< 100	1.6	< 1	470 J+	< 1	< 1	98,000	16	< 1	2.7	< 10 UJ	300	< 3	260,000	15	< 0.2	14	2,300	< 5	< 1 UJ	210,000	< 1	< 10	98	NA	
	08/30/01	< 100	< 1	< 1	110 J+	< 1	< 1	98,000	15	< 1	2	< 10 UJ	300	< 3	260,000	15	< 0.2	17	1,800	< 5	< 1 UJ	210,000	< 1	< 10	13	NA	
	08/30/01	< 200	0.53 J	< 2	110	< 1	< 1	100,000	7.2	0.97 J	1.5 J	< 10	< 200	< 5	220,000	16	< 0.2	6.7	2,600	7.4	< 1	260,000	< 5	< 5	19	2,100	
	05/10/01	< 100	< 1	1.3	620	< 1	< 1	110,000	10 J	< 1	4.6 J	< 10 UJ	840	< 3	230,000	11	< 0.2	5.4 J	2,700	5.9	< 1 UJ	220,000	< 1	< 10	180 J	1,690 J	
	05/19/99	< 100	NA	NA	NA	NA	NA	107,000	NA	NA	< 10	NA	< 100	NA	240,000	< 10	NA	NA	< 5,000	NA	NA	203,000	NA	NA	NA	1,900	
	02/19/99	< 100	NA	NA	NA	NA	NA	101,000	NA	NA	< 10	NA	< 100	NA	234,000	< 10	NA	NA	< 5,000	NA	NA	193,000	NA	NA	NA	1,800	
	11/18/98	< 100	NA	NA	NA	NA	NA	96,900	NA	NA	< 10	NA	< 100	NA	237,000	< 10	NA	NA	< 5,000	NA	NA	190,000	NA	NA	NA	1,640	
DUP0830013A	08/18/98	< 100	NA	NA	NA	NA	NA	102,000	NA	NA	11.8	NA	< 100	NA	248,000	< 10	NA	NA	< 5,000	NA	NA	197,000	NA	NA	NA	1,900	
	04/16/98	< 100	NA	NA	NA	NA	NA	100,000	NA	NA	28.4	< 10 (U16)	< 100	NA	222,000	< 10	NA	NA	< 5,000	NA	NA	200,000	NA	NA	NA	1,980	
	01/22/98	< 100	NA	NA	NA	NA	NA	94,900	NA	NA	< 10	NA	< 100	NA	238,000	13.4	NA	NA	< 5,000	NA	NA	182,000	NA	NA	NA	1,830	
	10/30/97	< 100	NA	NA	NA	NA	NA	97,000	NA	NA	< 20	NA	< 100	NA	237,000	24.2	NA	NA	< 5,000	NA	NA	178,000	NA	NA	NA	1,950	
	07/31/97	< 100	NA	NA	NA	NA	NA	93,200	NA	NA	< 20	NA	< 100	NA	221,000	14.2	NA	NA	< 5,000	NA	NA	190,000	NA	NA	NA	1,650	
	05/01/97	< 100	NA	NA	NA	NA	NA	110,000	NA	NA	< 10	NA	< 100	NA	263,000	29	NA	NA	NA	3,040	NA	NA	191,000	NA	NA	NA	1,830
	02/10/97	< 100	NA	NA	NA	NA	NA	118,000	NA	NA	5.1	NA	< 100	NA	260,000	34	NA	NA	< 5,000	NA	NA	234,000	NA	NA	NA	2,090	
	1349MW02	03/10/06	< 100	< 1	< 5	230 J	< 2	1.1	80,000	75	< 10	1.2	NA	230 J	< 3	260,000	13	< 0.2	< 20	810 J	< 5	< 1	210,000	< 1	< 10	< 20	2,060
		08/31/05	< 100	< 1	< 5	210	< 2	< 1	75,000	60	< 10	1.1	NA	140	< 3	280,000	< 10	< 0.2	< 20	< 500	< 5	< 1	210,000	< 1	< 10	< 20	2,170
		05/25/05	< 100 UJ	< 1	< 5	250	< 2	< 1	95,000	56	< 10	< 1	NA	< 100	< 3	270,000	< 10	< 0.2	< 20	660	< 5	< 1	220,000	< 1	< 10	< 20	2,030
03/21/05		< 100	< 1	< 5	310	< 2	< 1	130,000	67	< 10	3	NA	350	< 3	210,000	< 10	< 0.2	< 20	660	< 5	< 1	190,000	< 1	< 10	< 20	1,780	
12/16/04		< 100	< 1	< 5	160	< 2	< 1	52,000	76	< 10	< 1	NA	190	< 3	250,000	< 10	< 0.2	< 20	< 500	< 5	< 1	200,000	< 1	< 10	< 20	1,690	
08/12/04		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,620	
05/26/04		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,620	
03/15/04		< 100	< 1	< 5	230 J-	< 2	< 1	85,000	83	< 10	1.8	NA	190	< 3	270,000	< 10	< 0.2	< 20	< 500	< 5	< 1	230,000	< 1	< 10	< 20	1,600	
12/02/03		< 100	1.3	< 5	170	< 2	< 1	57,000	75	< 10	1.1	NA	220	< 3	270,000	< 10	< 0.2	< 20	< 500	< 5	< 1 UJ	200,000	< 1	< 10	< 20	1,160	
08/13/03		< 100	1.7	< 5	180	< 2	< 1	61,000	87	< 10	< 1	NA	300	< 3	230,000	< 10	< 0.2	< 20	< 500	< 5	< 1 UJ	190,000	< 1	< 10	< 20	1,540	
DUP0605032A	06/05/03	< 100	1.3	< 5	180	< 2	< 1	59,000	80	< 10	1.2	NA	150	< 3	250,000	< 10	0.26	< 20	530	< 5	< 1	210,000	< 1	< 10	< 20	1,440	
	06/05/03	< 100	1.3	< 5	180	< 2	< 1	65,000	83	< 10	< 1	NA	100	< 3	240,000	< 10	< 0.2	< 20	< 500	< 5	< 1	190,000	< 1	< 10	< 20	1,500	
	12/04/02	< 100	< 1	< 1	160	< 1	< 1	53,000	92	< 1	< 1	80	160	< 3	220,000	< 10	< 0.2	6.3	< 500	< 5	< 1 UJ	180,000	< 1	< 10	< 10	1,600	
	DUP1204023A	12/04/02	< 100	< 1	< 1	160	< 1	< 1	52,000	94	< 1	1.1	80	160	< 3	220,000	< 10	< 0.2	6.6	< 500	< 5	< 1 UJ	180,000	< 1	< 10	< 10	1,400
08/28/02		< 100	1.2	< 1	510	< 1	< 1	55,000	82 J	< 1	1.4	90	< 100	< 3	240,000	< 10	< 0.2	6.2	660	< 5	< 1 UJ	210,000	< 1	< 10	68	1,500	
	05/30/02	< 100	< 1	< 1	460	< 1	< 1	61,000	79	< 1	1.4	70 J-	< 100	< 3	230,000	< 10	< 0.2	5.1	690	< 5	< 1 UJ	200,000	< 1	< 10	87	1,610	

Table A-5-7
Results of Dissolved Metals Analyses
Building 1349 Area
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Hexavalent Chromium ²	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids	
	Analytical Method ¹	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW7196/ SW7196A	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7470/ SW7470A	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1	
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)	
Cleanup Level ³		--	6	10	1,000	4	5	--	50	140	1,000	21	--	15	--	--	2	100	--	50	50	--	2	15	5,000	--	
1349MW02 DUP0306022A	03/06/02	< 100	< 1	< 1	340	< 1	< 1	90,000	95	< 1	< 1	90	310	< 3	270,000	< 10	< 0.2	7	580	< 5	< 1 UJ	240,000	< 1	< 10	< 10	1,610	
	03/06/02	< 100	< 1	< 1	390	< 1	< 1	96,000	97	< 1	< 1	90 J-	310	< 3	290,000	< 10	< 0.2	7.2	600	< 5	< 1 UJ	260,000	< 1	< 10	16	1,580	
DUP1128011A	11/28/01	< 100	< 1	1.2	760	< 1	< 1	51,000	130 J	< 1	2.7	100	< 100	< 3	260,000	< 10	< 0.2	8.2	1,100	5.1	< 1	220,000	< 1	< 10	190	1,510	
	11/28/01	< 100	< 1	1	350	< 1	< 1	52,000	130 J	< 1	2.1	100 J	< 100	< 3	260,000	< 10	< 0.2	8.4	900	< 5	< 1	220,000	< 1	< 10	30	1,470	
DUP0830012A	08/30/01	< 100	< 1	< 1	150 J+	< 1	< 1	45,000	110	< 1	1.8	< 10	150	< 3	250,000	< 10	< 0.2	6.9	< 500	< 5	< 1 UJ	210,000	< 1	< 10	< 10	1,550	
	08/30/01	< 100	< 1	< 1	160 J+	< 1	< 1	47,000	100	< 1	1.9	< 10	150	< 3	260,000	< 10	< 0.2	6.6	<500	< 5	< 1 UJ	210,000	< 1	< 10	15	1,470	
1349MW02CL	08/30/01	< 200	1.2 J	< 2	800	< 1	< 1	47,000	110	0.92 J	1.7 J	90	< 200	< 5	230,000	< 5	< 0.2	8.3	<1,000	7.9	< 1	280,000	< 1	< 5	170	1,900	
	05/10/01	< 100	< 1	1.1	560	< 1	< 1	49,000	98 J	< 1	4.2 J	70 J	390	< 3	250,000	< 10	< 0.2	9.3 J	780	< 5	< 1 UJ	210,000	< 1	< 10	160 J	1,620 J	
	05/19/99	< 100	NA	NA	NA	NA	NA	57,300	NA	NA	< 10	NA	< 100	NA	274,000	< 10	NA	NA	< 5,000	NA	NA	204,000	NA	NA	NA	1,900	
	02/19/99	< 100	NA	NA	NA	NA	NA	63,500	NA	NA	< 10	NA	< 100	NA	284,000	< 10	NA	NA	< 5,000	NA	NA	215,000	NA	NA	NA	1,840	
	11/18/98	< 100	NA	NA	NA	NA	NA	59,300	NA	NA	18.7	NA	< 100	NA	283,000	< 10	NA	NA	< 5,000	NA	NA	213,000	NA	NA	NA	1,770	
	08/18/98	< 100	NA	NA	NA	NA	NA	57,800	NA	NA	< 10	NA	< 100	NA	267,000	< 10	NA	NA	< 5,000	NA	NA	211,000	NA	NA	NA	1,900	
	04/16/98	< 100	NA	NA	NA	NA	NA	53,500	NA	NA	< 10	43 (J16)	< 100	NA	233,000	< 10	NA	NA	< 5,000	NA	NA	195,000	NA	NA	NA	1,760	
	01/22/98	< 100	NA	NA	NA	NA	NA	50,800	NA	NA	< 10	NA	< 100	NA	244,000	< 10	NA	NA	< 5,000	NA	NA	196,000	NA	NA	NA	1,750	
	10/30/97	< 100	NA	NA	NA	NA	NA	52,300	NA	NA	< 20	NA	< 100	NA	244,000	< 10	NA	NA	< 5,000	NA	NA	199,000	NA	NA	NA	1,750	
	07/31/97	< 100	NA	NA	NA	NA	NA	51,300	NA	NA	< 20	NA	< 100	NA	249,000	< 10	NA	NA	< 5,000	NA	NA	205,000	NA	NA	NA	1,810	
	05/01/97	< 100	NA	NA	NA	NA	NA	53,900	NA	NA	< 10	NA	< 100	NA	266,000	< 10	NA	NA	< 1,000	NA	NA	188,000	NA	NA	NA	1,700	
	02/10/97	< 100	NA	NA	NA	NA	NA	39,600	NA	NA	2.5	NA	< 100	NA	176,000	19.7	NA	NA	< 5,000	NA	NA	145,000	NA	NA	NA	1,490	
	1349MW03R	03/16/06	< 100	< 1	< 5	81	< 2	< 1	52,000	120	< 10	< 1	NA	< 100	< 3	220,000 J	< 10	< 0.2	< 20	1,300 J-	< 5	< 1	280,000	< 1	< 10	< 20	2,060
		11/30/05	< 100	< 1	< 5	23	< 2	< 1	23,000	100 J	< 10	< 1	NA	100	< 3	110,000	< 10	< 0.2	< 20	660	< 5	< 1	79,000	< 1	< 10	< 20	750
08/31/05		< 100	< 1	< 5	19	< 2	< 1	29,000	100	< 10	< 1	NA	< 100	< 3	110,000	< 10	< 0.2	< 20	870	< 5	< 1	85,000	< 1	< 10	< 20	710	
05/25/05		< 100 UJ	< 1	< 5	41 J	< 2	< 1	46,000	130	< 10	< 1	NA	< 100	< 3	190,000	< 10	< 0.2	< 20	1,700	< 5	< 1	190,000	< 1	< 10	< 20	1,460	
03/21/05		< 100	< 1	< 5	90	< 2	< 1	70,000	190	< 10	1.3	NA	180	< 3	230,000	< 10	< 0.2	< 20	4,100	< 5	< 1	300,000	< 1	< 10	< 20	1,980	
12/16/04		< 100	< 1	< 5	< 10	< 2	< 1	19,000	68	< 10	< 1	NA	< 100	< 3	78,000	< 10	< 0.2	< 20	2,200	< 5	< 1	57,000	< 1	< 10	< 20	530	
08/10/04		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	540	
05/26/04		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	580	
03/09/04		< 100	< 1	< 5	< 10	< 2	< 1	23,000	94	< 10	< 1	NA	< 100	< 3	84,000	< 10	< 0.2	< 20	3,000 J	< 5	< 1 UJ	67,000	< 1	< 10	< 20	550	
12/02/03		< 100	1.9	5.4	< 10	< 2	< 1	18,000	42	< 10	< 1	NA	< 100	< 3	68,000	< 10	< 0.2	< 20	4,400	< 5	< 1 UJ	56,000	< 1	< 10	< 20	360	
08/13/03		< 100	3.3	7.4	< 10	< 2	< 1	24,000	59	< 10	< 1	NA	120	< 3	70,000	< 10	< 0.2	< 20	6,100	< 5	< 1 UJ	63,000	< 1	< 10	< 20	510	
06/09/03		< 100	1.4	6.2	< 10	< 2	< 1	30,000	44	< 10	< 1	NA	< 100	< 3	60,000	< 10	< 0.2	< 20	9,700	< 5	< 1 UJ	100,000	< 1	< 10	< 20	690	
1349MW100 DUP0524063A 1349MW100CL	12/05/06	< 100	< 1	12	530	< 2	< 1	170,000	< 10	< 10	< 1	NA	58,000	< 3	240,000	14,000	< 0.2	< 20	2,500 J	< 5	< 1	420,000	< 1	<			

Table A-5-7
Results of Dissolved Metals Analyses
Building 1349 Area
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Hexavalent Chromium ²	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW7196/ SW7196A	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7470/ SW7470A	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Level ³		--	6	10	1,000	4	5	--	50	140	1,000	21	--	15	--	--	2	100	--	50	50	--	2	15	5,000	--
1349MW101 DUP0525052A	03/16/06	< 100	< 1	< 5	< 10	< 2	< 1	15,000	41	< 10	< 1	NA	< 100	< 3	58,000 J	< 10	< 0.2	< 20	1,700 J-	< 5	< 1	94,000	< 1	< 10	< 20	750
	08/31/05	< 100	< 1	< 5	< 10	< 2	< 1	16,000	25	< 10	< 1	NA	< 100	< 3	62,000	< 10	< 0.2	< 20	2,200	< 5	< 1	100,000	< 1	< 10	< 20	660
	05/25/05	< 100 UJ	< 1	5.5	< 10 UJ	< 2	< 1	19,000	25	< 10	< 1	NA	< 100	< 3	73,000	< 10	< 0.2	< 20	3,100	< 5	< 1	130,000	< 1	< 10	< 20	650
	05/25/05	< 100 UJ	< 1	5.5	< 10 UJ	< 2	< 1	19,000	25	< 10	< 1	NA	< 100	< 3	72,000	< 10	< 0.2	< 20	3,000	< 5	< 1	120,000	< 1	< 10	< 20	560
	03/21/05	< 100	< 1	5.7	< 10	< 2	< 1	19,000	33	< 10	1	NA	< 100	< 3	57,000	< 10	< 0.2	< 20	3,000	< 5	< 1	97,000	< 1	< 10	< 20	430
	12/15/04	< 100	< 1	5.1	< 10	< 2	< 1	19,000 J	24	< 10	< 1	NA	< 100	< 3	45,000	< 10	< 0.2	< 20	3,400	< 5	< 1	66,000	< 1 UJ	< 10	< 20	550
	03/09/04	< 100	1.3	5.2	< 10	< 2	< 1	23,000	45	< 10	< 1	NA	< 100	< 3	61,000	< 10	< 0.2	< 20	4,300 J	< 5	< 1 UJ	99,000	< 1	< 10	< 20	590
	12/02/03	< 100	1.8	< 5	< 10	< 2	< 1	20,000	15	< 10	< 1	NA	< 100	< 3	54,000	24	< 0.2	< 20	6,300	< 5	< 1 UJ	120,000	< 1	< 10	< 20	390
08/19/03	< 100	< 1	5.9	< 10	< 2	< 1	29,000	15	< 10	< 1	NA	120	< 3	57,000	19	< 0.2	< 20	7,500	< 5	< 1 UJ	150,000	< 1	< 10	< 20 UJ	660	
06/09/03	< 100	< 1	6.1	< 10	< 2	< 1	36,000	34	< 10	< 1	NA	< 100	< 3	56,000	< 10	< 0.2	< 20	9,800	< 5	< 1 UJ	160,000	< 1	< 10	< 20	890	
1349MW102 DUP0307063C	03/07/06	< 100	< 1	< 5	49	< 2	< 1	42,000 J	< 10	< 10	< 1	NA	190	< 3	98,000	140	NA	< 20	2,700	< 5	< 1	190,000	< 1	< 10	< 20	1,070
03/07/06	260	< 1	< 5	52	< 2	< 1	41,000 J	< 10	< 10	1.8	NA	530	< 3	96,000	150	NA	< 20	2,800	< 5	< 1	180,000	< 1	< 10	< 20	1,000	
1349MW102CL	03/07/06	< 100 U	< 2 U	< 2 U	57	< 1 U	< 1 U	52,000	< 10 U	< 1 U	2.7	NA	< 100 U	< 1 U	110,000	160	< 0.2 U	5.4	< 5000 U	2.3	< 1 U	230,000	< 1 U	< 10 U	< 20 U	1,070 J+
DUP0831052A	08/31/05	< 100	< 1	< 5	31	< 2	< 1	38,000	< 10	< 10	< 1	NA	< 100	< 3	57,000	< 10	< 0.2	< 20	2,800	< 5	< 1	150,000	< 1	< 10	< 20	850
	08/31/05	< 100	< 1	< 5	30	< 2	< 1	39,000	< 10	< 10	< 1	NA	< 100	< 3	56,000	10	< 0.2	< 20	2,800	< 5	< 1	150,000	< 1	< 10	< 20	820
	05/25/05	< 100 UJ	< 1	< 5	25 J	< 2	< 1	43,000	< 10	< 10	< 1	NA	< 100	< 3	59,000	< 10	< 0.2	< 20	3,600	< 5	< 1	190,000	< 1	< 10	28	680
DUP0321053A	03/21/05	< 100	< 1	< 5	55	< 2	< 1	62,000	< 10	< 10	< 1	NA	170	< 3	93,000	62	< 0.2	< 20	4,400	< 5	< 1	140,000	< 1	< 10	< 20	970
	03/21/05	< 100	< 1	< 5	49	< 2	< 1	62,000	< 10	< 10	4.8	NA	170	< 3	83,000	48	< 0.2	< 20	4,300	< 5	< 1	150,000	< 1	< 10	< 20	1,040
DUP0810042A	12/16/04	< 100	< 1	< 5	74	< 2	< 1	74,000	< 10	< 10	< 1	NA	210	< 3	160,000	410	< 0.2	< 20	3,700	< 5	< 1	180,000	< 1	< 10	< 20	1,280
	08/10/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,160
	08/10/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,260
DUP0527041A 1349MW102CL	05/26/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,270
	05/26/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,220
	05/26/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,100
DUP0310041A 1349MW102CL	03/10/04	< 100	< 1	< 5	83	< 2	< 1	73,000	< 10	< 10	< 1	NA	290	< 3	160,000	430	< 0.2	< 20	3,400	< 5	< 1 UJ	160,000	< 1	< 10	< 20	1,150
	03/10/04	< 100	< 1	< 5	81	< 2	< 1	77,000	< 10	< 10	< 1	NA	260	< 3	160,000	400	< 0.2	< 20	3,300	< 5	< 1 UJ	170,000	< 1	< 10	< 20	1,280
	03/10/04	< 100	< 5	5.6	77	< 1	< 1	76,000	< 10	< 7	< 10	NA	640	< 3	170,000	420	< 0.2	< 10	3,600	< 5	< 1	170,000	< 2	< 10	< 20	1,100 QB01
DUP1210031A	12/10/03	< 100	< 1	< 5	69	< 2	< 1	77,000	< 10	< 10	< 1	NA	420	< 3	160,000	550	< 0.2	< 20	3,800	< 5 R	< 1	160,000	< 1	< 10	< 20 UJ	1,260
	12/10/03	< 100	1.8	< 5	72	< 2	< 1	80,000	< 10	< 10	1	NA	460	< 3	170,000	600	< 0.2	< 20	4,000	< 5 R	< 1	170,000	< 1	< 10	< 20 UJ	1,090
	08/12/03	< 100	2.7	< 5 UJ	34	< 2	< 1	100,000	< 10 UJ	< 10	< 1	NA	390	< 3	180,000	550	< 0.2	< 20	6,400	< 5	< 1 UJ	190,000	< 1	< 10	< 20 UJ	1,430
DUP0609032A	06/09/03	< 100	< 1	< 5	31	< 2	< 1	100,000	< 10	< 10	< 1	NA	210	< 3	190,000	440	< 0.2	< 20	9,800	< 5	< 1 UJ	230,000	< 1	< 10	< 20	1,620
	06/09/03	< 100	2.9	< 5</																						

Table A-5-7
Results of Dissolved Metals Analyses
Building 1349 Area
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Hexavalent Chromium ²	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW7196/ SW7196A	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7470/ SW7470A	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Level ³		--	6	10	1,000	4	5	--	50	140	1,000	21	--	15	--	--	2	100	--	50	50	--	2	15	5,000	--
1349MW105	03/20/06	< 100	1.4	10	47	< 2	< 1	56,000	< 10	< 10	< 1	NA	130	< 3	140,000	210	< 0.2	< 20	9,100	< 5	< 1	110,000	< 1	< 10	< 20	960
	03/23/05	< 100	1.5	11	39	< 2	< 1	71,000	< 10	< 10	3.2	NA	420	< 3	160,000	210	< 0.2	< 20	8,900	< 5	< 1	120,000	< 1	< 10	< 20	1,410
	03/15/04	< 100	1.5	12	47 J-	< 2	< 1	86,000	< 10	< 10	1.1	NA	360	< 3	180,000	310	< 0.2	< 20	11,000	< 5	< 1	150,000	< 1	< 10	< 20	1,260
	12/02/03	< 100	1.7	10	36	< 2	< 1	75,000	11	< 10	< 1	NA	600	< 3	160,000	340	< 0.2	< 20	13,000	< 5	< 1 UJ	140,000	< 1	< 10	< 20	850
	08/12/03	< 100	2.5	12 J+	54	< 2	< 1	79,000	< 10 UJ	< 10	< 1	NA	590	< 3	150,000	380	< 0.2	< 20	15,000	< 5	< 1 UJ	160,000	< 1	< 10	< 20 UJ	920
	06/09/03	< 100	4.5	10	41	< 2	< 1	82,000	< 10	< 10	< 1	NA	440	< 3	180,000	350	< 0.2	< 20	16,000	< 5	< 1 UJ	200,000	< 1	< 10	< 20	1,480

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - Results of Army and Trust studies support the hypothesis that dissolved chromium and hexavalent chromium measured in groundwater in upland areas of the Presidio appear to be naturally occurring and derived from serpentinite.

Hexavalent chromium was not retained as a COC in the *Final CAP* (BBL, 2006).

3 - Groundwater cleanup levels were taken from the *Final Corrective Action Plan Building 1349 Study Area, Presidio of San Francisco, California* (BBL, 2006).

Groundwater samples collected from all site monitoring wells were field filtered and analyzed for dissolved metals.

-- cleanup level not established

µg/L - micrograms per liter

mg/L - milligrams per liter

NA - Not analyzed

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

A-5-8
Groundwater Elevation Summary
Building 1349 Area
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
1349MW01	12/04/06	24.19	300.44	276.25	MW
	08/14/06	22.79	300.44	277.65	MW
	05/22/06	21.54	300.44	278.90	MW
	03/06/06	23.25	300.44	277.19	MW
	11/28/05	26.34	300.44	274.10	MW
	08/29/05	24.94	300.44	275.50	MW
	05/23/05	24.47	300.44	275.97	MW
	03/14/05	25.16	300.44	275.28	MW
	12/13/04	29.14	300.44	271.30	MW
	08/09/04	28.88	300.44	271.56	MW
	05/24/04	27.78	300.44	272.66	MW
	03/08/04	26.84	300.44	273.60	MW
	12/01/03	29.38	300.44	271.06	MW
	08/11/03	27.91	300.44	272.53	MW
	06/02/03	28.33	300.44	272.11	MW
	03/10/03	28.19	300.44	272.25	MW
	12/02/02	29.61	300.44	270.83	MW
	08/26/02	28.69	300.44	271.75	MW
	05/28/02	28.38	300.44	272.06	MW
	03/04/02	27.70	300.44	272.74	MW
	11/26/01	29.76	300.44	270.68	MW
	08/27/01	30.17	300.44	270.27	MW
	05/08/01	29.45	300.44	270.99	MW
1349MW02	12/04/06	29.88	311.22	281.34	MW
	08/14/06	27.25	311.22	283.97	MW
	05/22/06	23.43	311.22	287.79	MW
	03/06/06	27.87	311.22	283.35	MW
	11/28/05	33.35	311.22	277.87	MW
	08/29/05	32.03	311.22	279.19	MW
	05/23/05	30.25	311.22	280.97	MW
	03/14/05	32.08	311.22	279.14	MW
	12/13/04	36.85	311.22	274.37	MW
	08/09/04	35.38	311.22	275.84	MW
	05/24/04	34.20	311.22	277.02	MW
	03/08/04	34.14	311.22	277.08	MW
	12/01/03	36.66	311.22	274.56	MW
	08/11/03	35.46	311.22	275.76	MW
	06/02/03	35.03	311.22	276.19	MW
	03/10/03	35.46	311.22	275.76	MW
	12/02/02	36.98	311.22	274.24	MW
	08/26/02	35.94	311.22	275.28	MW
	05/28/02	34.95	311.22	276.27	MW
	03/04/02	35.54	311.22	275.68	MW
	11/26/01	37.75	311.22	273.47	MW
	08/27/01	36.79	311.22	274.43	MW
	05/08/01	35.47	311.22	275.75	MW
1349MW03	08/26/02	28.63	300.54	271.91	MW
	05/28/02	26.64	300.54	273.90	MW
	03/04/02	25.20	300.54	275.34	MW
	11/26/01	30.67	300.54	269.87	MW
	08/27/01	29.65	300.54	270.89	MW
	05/08/01	26.56	300.54	273.98	MW

A-5-8
Groundwater Elevation Summary
Building 1349 Area
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
1349MW03R	12/04/06	26.50	304.13	277.63	MW
	08/14/06	24.67	304.13	279.46	MW
	05/22/06	20.40	304.13	283.73	MW
	03/06/06	22.56	304.13	281.57	MW
	11/28/05	29.81	304.13	274.32	MW
	08/29/05	28.52	304.13	275.61	MW
	05/23/05	25.29	304.13	278.84	MW
	03/14/05	23.29	304.13	280.84	MW
	12/13/04	32.69	304.13	271.44	MW
	08/09/04	30.88	304.13	273.25	MW
	05/24/04	29.40	304.13	274.73	MW
	03/08/04	28.43	304.13	275.70	MW
	12/01/03	33.33	304.13	270.80	MW
	08/11/03	31.69	304.13	272.44	MW
	06/02/03	30.48	304.13	273.65	MW
1349MW100	12/04/06	28.01	309.60	281.59	MW
	08/14/06	25.37	309.60	284.23	MW
	05/22/06	22.79	309.60	286.81	MW
	03/06/06	25.73	309.60	283.87	MW
	11/28/05	31.42	309.60	278.18	MW
	08/29/05	30.12	309.60	279.48	MW
	05/23/05	28.03	309.60	281.57	MW
	03/14/05	29.70	309.60	279.90	MW
	12/13/04	34.85	309.60	274.75	MW
	08/09/03	33.11	309.60	276.49	MW
	05/24/04	32.05	309.60	277.55	MW
	03/08/04	31.63	309.60	277.97	MW
	12/01/03	34.42	309.60	275.18	MW
	08/11/03	32.98	309.60	276.62	MW
	06/02/03	32.75	309.60	276.85	MW
1349MW101	03/10/03	33.30	309.60	276.30	MW
	12/02/02	34.67	309.60	274.93	MW
	12/04/06	27.49	311.63	284.14	MW
	08/14/06	22.75	311.63	288.88	MW
	05/22/06	19.51	311.63	292.12	MW
	03/06/06	24.59	311.63	287.04	MW
	11/28/05	31.66	311.63	279.97	MW
	08/29/05	30.78	311.63	280.85	MW
	05/23/05	28.65	311.63	282.98	MW
	03/14/05	23.87	311.63	287.76	MW
	12/13/04	33.44	311.63	278.19	MW
	08/09/04	32.10	311.63	279.53	MW
	05/24/04	32.23	311.63	279.40	MW
	03/08/04	32.90	311.63	278.73	MW
	12/01/03	35.25	311.63	276.38	MW
	08/11/03	34.14	311.63	277.49	MW
	06/02/03	33.59	311.63	278.04	MW

A-5-8
Groundwater Elevation Summary
Building 1349 Area
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
1349MW102	12/04/06	Buried	305.68	NM	MW
	08/14/06	17.90	305.68	287.78	MW
	05/22/06	15.12	305.68	290.56	MW
	03/06/06	19.66	305.68	286.02	MW
	11/28/05	25.02	305.68	280.66	MW
	08/29/05	23.67	305.68	282.01	MW
	05/23/05	23.33	305.68	282.35	MW
	03/14/05	23.95	305.68	281.73	MW
	12/13/04	28.35	305.68	277.33	MW
	08/09/04	26.89	305.68	278.79	MW
	05/24/04	25.68	305.68	280.00	MW
	03/08/04	25.62	305.68	280.06	MW
	12/01/03	28.17	305.68	277.51	MW
	08/11/03	26.96	305.68	278.72	MW
	06/02/03	26.51	305.68	279.17	MW
1349MW103	12/04/06	33.11	318.07	284.96	MW
	08/14/06	31.11	318.07	286.96	MW
	05/22/06	30.57	318.07	287.50	MW
	03/06/06	32.97	318.07	285.10	MW
	11/28/05	37.30	318.07	280.77	MW
	08/29/05	36.04	318.07	282.03	MW
	05/23/05	34.70	318.07	283.37	MW
	03/14/05	37.18	318.07	280.89	MW
	12/13/04	40.93	318.07	277.14	MW
	08/09/04	39.49	318.07	278.58	MW
	05/24/04	38.40	318.07	279.67	MW
	03/08/04	38.75	318.07	279.32	MW
	12/01/03	40.69	318.07	277.38	MW
	08/11/03	39.51	318.07	278.56	MW
	06/02/03	39.33	318.07	278.74	MW
1349MW104	12/04/06	30.74	314.58	283.84	MW
	08/14/06	28.19	314.58	286.39	MW
	05/22/06	24.50	314.58	290.08	MW
	03/06/06	29.33	314.58	285.25	MW
	11/28/05	34.07	314.58	280.51	MW
	08/29/05	32.83	314.58	281.75	MW
	05/23/05	31.42	314.58	283.16	MW
	03/14/05	33.73	314.58	280.85	MW
	12/13/04	37.65	314.58	276.93	MW
	08/09/04	36.23	314.58	278.35	MW
	05/24/04	35.18	314.58	279.40	MW
	03/08/04	35.76	314.58	278.82	MW
	12/01/03	37.43	314.58	277.15	MW
	08/11/03	36.27	314.58	278.31	MW
	06/02/03	35.96	314.58	278.62	MW
1349MW105	12/04/05	26.88	312.05	285.17	MW
	08/14/06	24.38	312.05	287.67	MW
	05/22/06	24.60	312.05	287.45	MW
	03/06/06	27.94	312.05	284.11	MW
	11/28/05	31.15	312.05	280.90	MW
	08/29/05	30.78	312.05	281.27	MW
	05/23/05	31.54	312.05	280.51	MW

A-5-8
Groundwater Elevation Summary
Building 1349 Area
Presidio of San Francisco, California

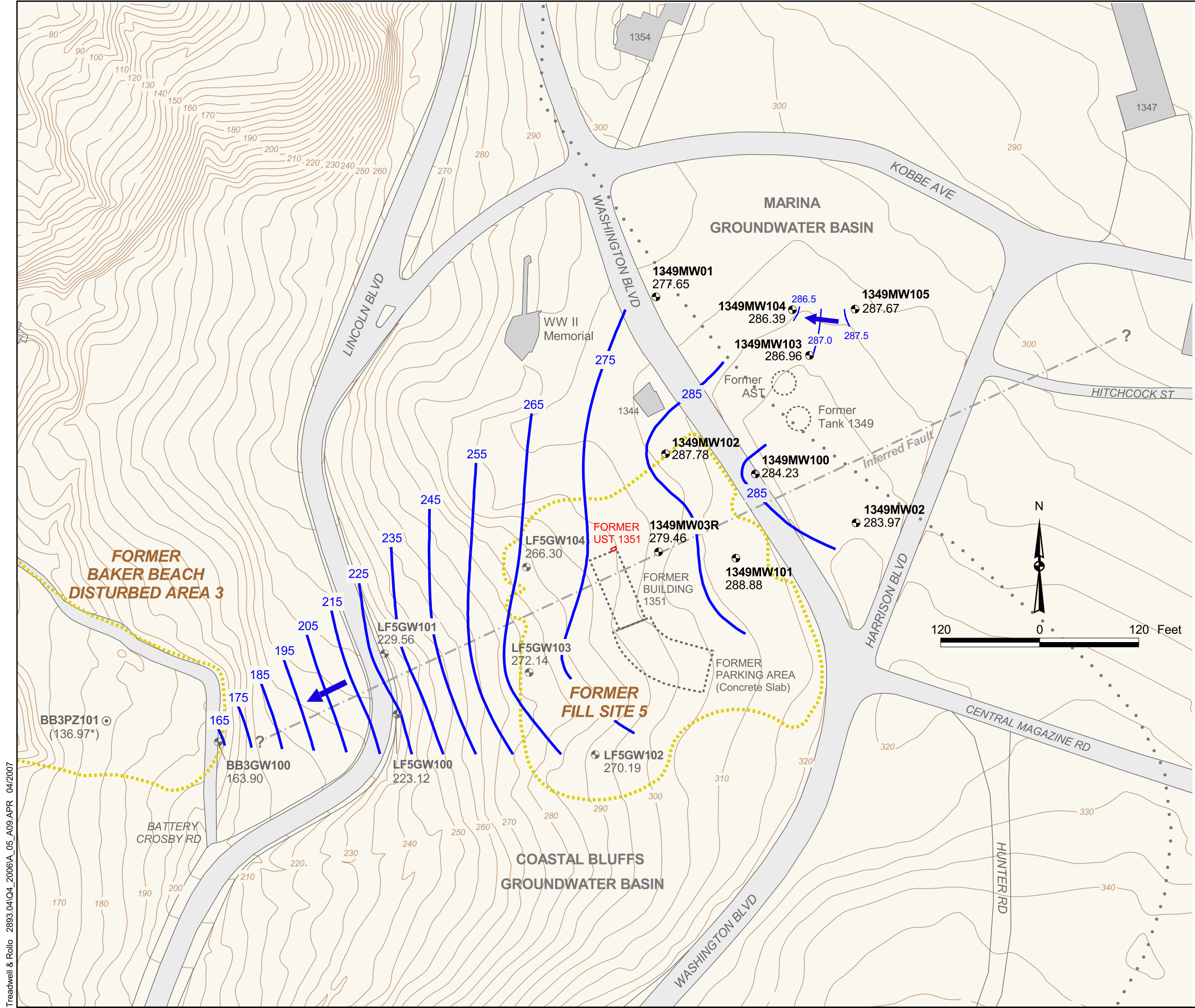
Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
1349MW105	03/15/05	33.25	312.05	278.80	MW
	12/13/04	34.71	312.05	277.34	MW
	08/09/04	33.33	312.05	278.72	MW
	05/24/04	33.20	312.05	278.85	MW
	03/08/04	33.71	312.05	278.34	MW
	12/01/03	34.38	312.05	277.67	MW
	08/11/03	33.77	312.05	278.28	MW
	06/02/03	34.20	312.05	277.85	MW

Notes

1 - All depth to water measurements are an average of three measurements recorded in the field.

MW - Monitoring well

feet PLLW - feet above Presidio lower low water vertical datum



LEGEND

- 1349MW103 286.96 Groundwater Monitoring Well
August 2006 Groundwater Elevation
- LF5GW101 229.56 Adjacent Study Area Well
August 2006 Groundwater Elevation
- ⊙ BB3PZ101 (136.97)* Adjacent Study Area Piezometer
August 2006 Groundwater Elevation
- (136.97)* Dry Well. Value Indicates Bottom of
Casing Elevation in Feet PLLW
- ➔ Approximate Direction of
Groundwater Flow
- Groundwater Elevation Contours
(Contour Interval : 10 ft)
— Groundwater Elevation Contours
(Contour Interval : 0.5 ft)
- Former Fill Site 5 and Baker Beach
Disturbed Area 3 Excavation Boundaries
- - - Inferred Fault
- ... Groundwater Basin Boundary
- Topographic Contour
(Contour Interval : 5 ft)
- 1354 Building and Number

Notes:
Groundwater elevation data collected on 14 August 2006.

AST - Above ground Storage Tank
UST - Underground Storage Tank

Location of inferred fault from Revised Feasibility Study Main
Installation Sites (EKI, 2003).

Horizontal Datum: NAD 27, CA State Plane Coordinates, Zone 3, feet
Vertical Datums: (groundwater) Presidio Lower Low Water (ft. PLLW)
(topography) North American Vertical Datum, NAVD88

BUILDING 1349 SITE PLAN
AND 14 AUGUST 2006
GROUNDWATER ELEVATION MAP

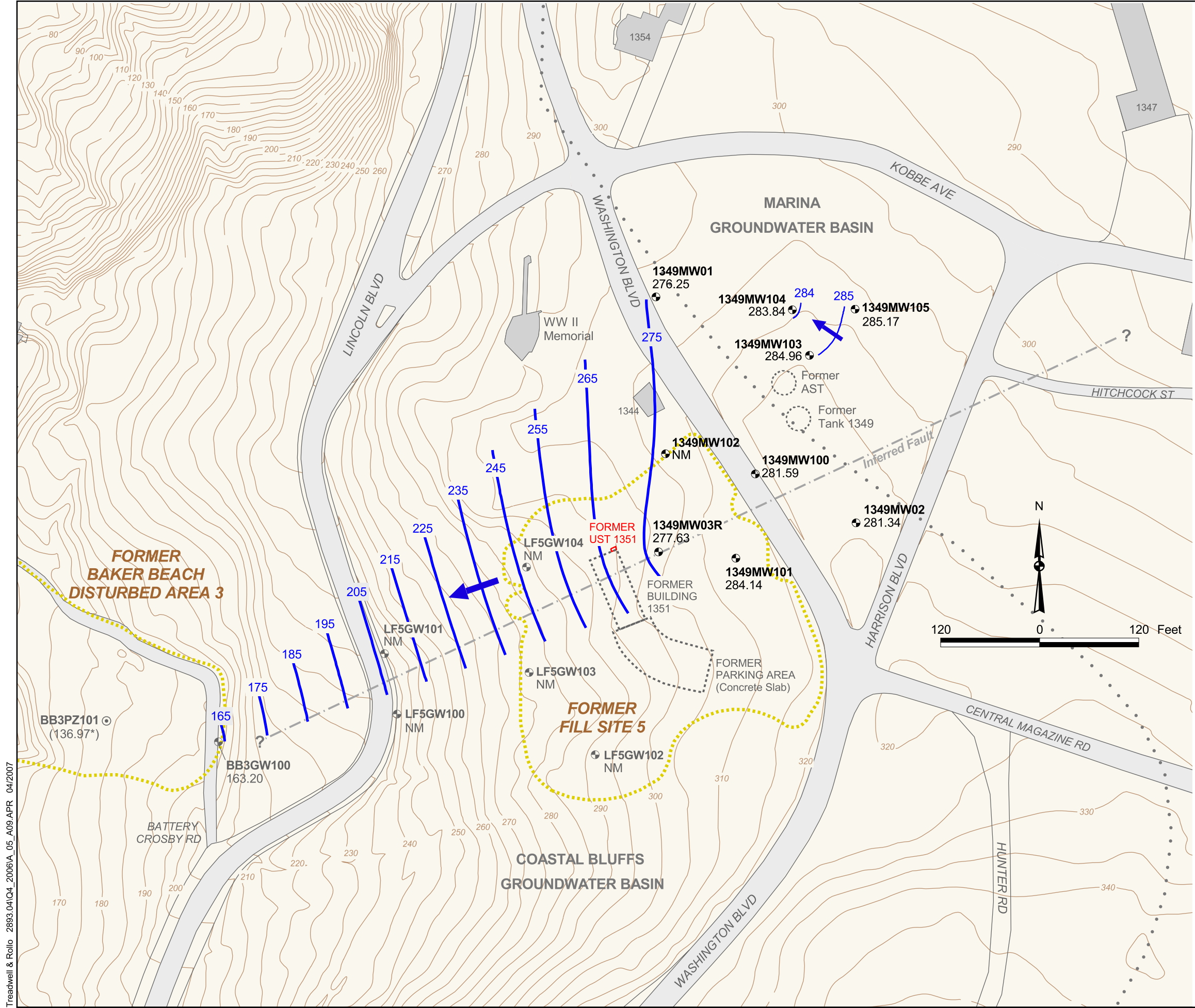
Treadwell&Rollo



Presidio Trust

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fax 415/561-5315
April 2007

FIGURE A-5-1



LEGEND

- **1349MW103** 286.96 Groundwater Monitoring Well
December 2006 Groundwater Elevation
- **BB3GW100** 163.20 Adjacent Study Area Well
December 2006 Groundwater Elevation
- **BB3PZ101** (136.97)* Adjacent Study Area Piezometer
December 2006 Groundwater Elevation
- (136.97)* Dry Well. Value Indicates Bottom of
Casing Elevation in Feet PLLW
- NM Not Measured
- ➔ Approximate Direction of
Groundwater Flow
- Groundwater Elevation Contours
(Contour Interval : 10 ft)
— Groundwater Elevation Contours
(Contour Interval : 1 ft)
- Former Fill Site 5 and Baker Beach
Disturbed Area 3 Excavation Boundaries
- - - Inferred Fault
- ... Groundwater Basin Boundary
- Topographic Contour
(Contour Interval : 5 ft)
- 1354 Building and Number

Notes:
Groundwater elevation data collected on 4 December 2006.

AST - Above ground Storage Tank
UST - Underground Storage Tank

Location of inferred fault from Revised Feasibility Study Main
Installation Sites (EKI, 2003).

Horizontal Datum: NAD 27, CA State Plane Coordinates, Zone 3, feet
Vertical Datums: (groundwater) Presidio Lower Low Water (ft. PLLW)
(topography) North American Vertical Datum, NAVD88

**BUILDING 1349 SITE PLAN
AND 4 DECEMBER 2006
GROUNDWATER ELEVATION MAP**

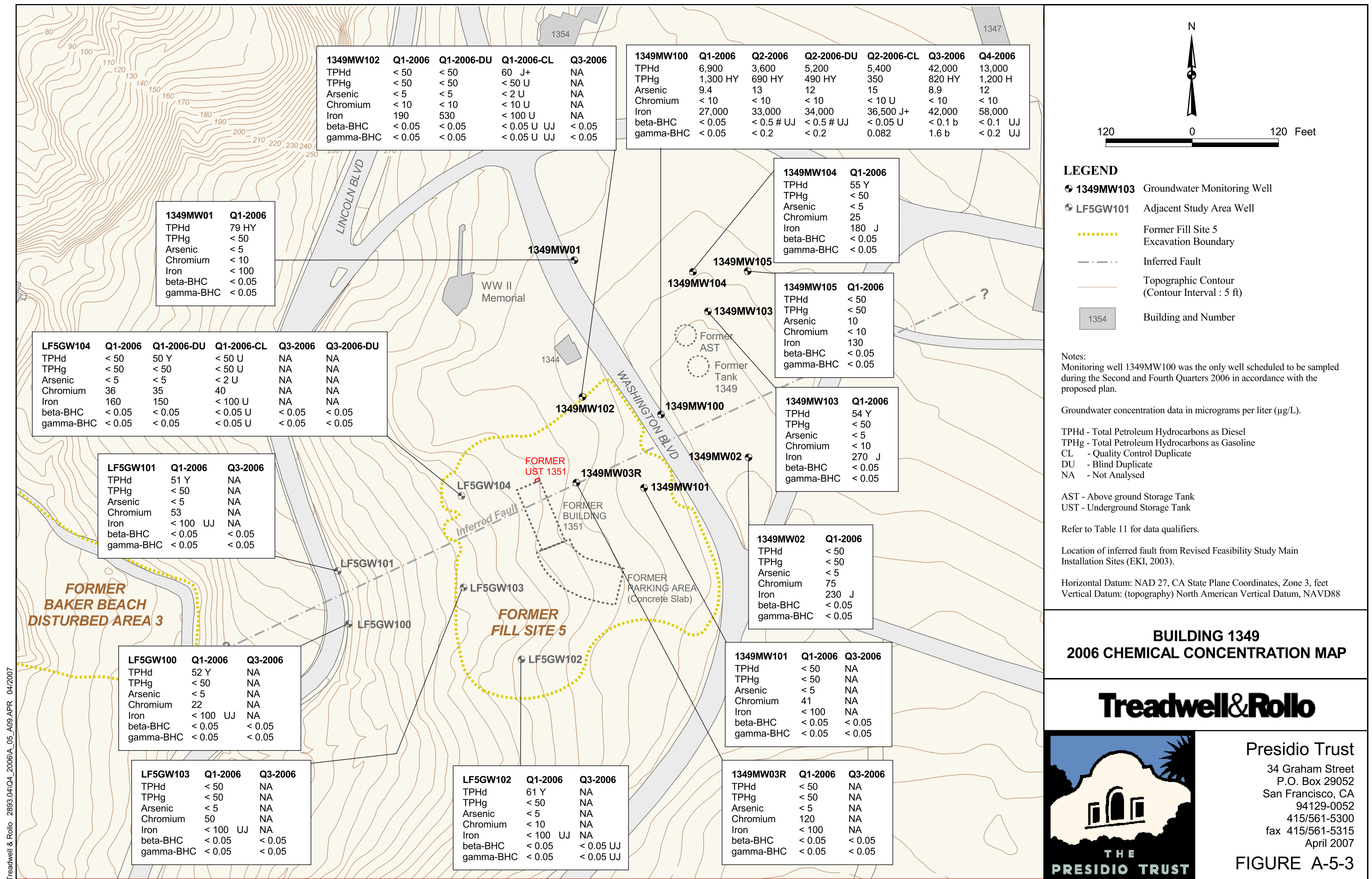
Treadwell&Rollo



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April 2007

FIGURE A-5-2



Third Quarter 2006

MONITORING WELL SAMPLING LOG (Normal, Low Flow, and Low Yield)

Site / Area 1349 Well No. 1349 MW 03R
 Project Number 2893 Well Type ☒ Monitor ☐ Extraction ☐ Other
 Recorded By DA Sampled by DA Date 8/17/06

WELL PURGING

PURGE VOLUME		PURGE METHOD													
Well casing diameter ☒ 2-inch ☐ 4-inch ☐ Other	Liquid in a 1 Foot Section of a Boring (gallons) <table border="1" style="width:100%"> <tr> <th>Borehole Size</th> <th>Casing Size</th> <th>Water Volume/Ft</th> </tr> <tr> <td>8</td> <td>2</td> <td>0.9</td> </tr> <tr> <td>10</td> <td>4</td> <td>1.68</td> </tr> <tr> <td>12</td> <td>4</td> <td>2.22</td> </tr> </table>	Borehole Size	Casing Size	Water Volume/Ft	8	2	0.9	10	4	1.68	12	4	2.22	☐ Low Flow ☒ Bailor \ Type <u>Drip</u> ☐ Normal ☐ Pump \ Type ☒ Modified (max 5 gpm) ☐ Other	
Borehole Size	Casing Size	Water Volume/Ft													
8	2	0.9													
10	4	1.68													
12	4	2.22													
Well Total Depth (TD, ft. below TOC): <u>3789</u>		PUMP INTAKE													
Depth to Water (WL, ft. below TOC): <u>24.73</u>		☐ Near top Depth (ft)													
Depth to free phase (FP, ft. below TOC):		☐ Near Bottom Depth (ft)													
Number of borehole volumes to be purged ☐ 3 ☒ Not Applicable ☐ Other		☒ Other <u>Modified</u>													

PURGE VOLUME CALCULATION		
Water Column Length <u>13.16</u> x	Water Volume/ft <u>N/A</u> x	No. Vols =
Total Purge Time <u>9 min</u>		
Recharge Rate	Purge Rate <u>0.5 gpm</u>	

gals
CALCULATED PURGE VOLUME
<u>4.5</u> gals
ACTUAL PURGE VOLUME

GROUNDWATER PARAMETER MEASUREMENTS								Meter Type <u>With remote / High Turbidity</u>
Time	Liters or Gallons	pH	Temp °F	DO (mg/L)	Sp. COND (µS/cm)	ORP (mV)	Turbidity (NTU)	Comments
Start 1039	0.3	7.4	16.8	—	2590	—	703	
1042	1.5	7.6	16.6	—	2497	—	513	
1045	3.0	7.6	16.7	—	2420	—	71000	Grey
1048	4.5	7.7	16.8	—	2357	—	71000	"
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/								
/								
/								
/								
/								
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/								
/								
/								

Comments _____ Purge water storage/disposal ☐ Drummed onsite ☒ Other Baker Tank

WELL SAMPLING

SAMPLING METHOD		Date/Time Sampled <u>8/17/06 1053</u>
Purging Equipment	Pump - Type	Bailer - Type <u>Disposable</u> Other _____
Sample Filtered: Yes ☒ No ☐	Filtered Sample Analysis: _____	

SAMPLING PROGRAM				
Sample No.	Container #/Volume	Laboratory	COC #	Comments
1349 MW 03R	2 x 1L NP Baiters	CHT	2118	

QUALITY CONTROL SAMPLES		Blank Samples	
Duplicate Samples		Type	Sample No.
Original Sample No.	Duplicate Sample No.	Trip	
		Rinsate	
		Transfer	
		Other:	

Site / Area 1349 Well No. 1349 MW 100
Project Number 2893 Well Type ☒ Monitor ☐ Extraction ☐ Other
Recorded By DR Sampled by DR Date 8/16/00

Blank Samples	
Type	Sample No.
Trip	
Rinsate	
Transfer	
Other:	

MONITORING WELL SAMPLING LOG (Normal, Low Flow, and Low Yield)

Site / Area 1349 Well No. 1349 MW101
 Project Number 2813 Well Type ☒ Monitor ☐ Extraction ☐ Other
 Recorded By DR Sampled by DR Date 8/17/06

WELL PURGING

PURGE VOLUME Well casing diameter ☒ 2-inch ☐ 4-inch ☐ Other Well Total Depth (TD, ft. below TOC): <u>44.76</u> Depth to Water (WL, ft. below TOC): <u>25.13</u> Depth to free phase (FP, ft. below TOC): Number of borehole volumes to be purged ☐ 3 ☒ Not Applicable ☐ Other		Liquid in a 1 Foot Section of a Boring (gallons) <table border="1"> <tr> <th>Borehole Size</th> <th>Casing Size</th> <th>Water Volume/Ft</th> </tr> <tr> <td>8</td> <td>2</td> <td>0.9</td> </tr> <tr> <td>10</td> <td>4</td> <td>1.68</td> </tr> <tr> <td>12</td> <td>4</td> <td>2.22</td> </tr> </table>	Borehole Size	Casing Size	Water Volume/Ft	8	2	0.9	10	4	1.68	12	4	2.22	PURGE METHOD ☐ Low Flow ☒ Bailor \ Type <u>Disp.</u> ☐ Normal ☐ Pump \ Type ☒ Modified (max 5 gpm) ☐ Other PUMP INTAKE ☐ Near top Depth (ft) ☐ Near Bottom Depth (ft) ☒ Other <u>Modified</u>
Borehole Size	Casing Size	Water Volume/Ft													
8	2	0.9													
10	4	1.68													
12	4	2.22													
PURGE VOLUME CALCULATION $\frac{\text{Water Column Length}}{\text{Water Volume/ft}} \times \text{No. Vols} = \text{CALCULATED PURGE VOLUME}$ Total Purge Time <u>9 min</u> Purge Rate <u>0.5 gpm</u> Recharge Rate		Meter Type <u>4 liter meter / 1 inch Turbidimeter</u> ACTUAL PURGE VOLUME <u>4.5</u> gals													

GROUNDWATER PARAMETER MEASUREMENTS

Time	Liters or Gallons	pH	Temp °F	DO (mg/L)	Sp. COND (µS/cm)	ORP (mV)	Turbidity (NTU)	Comments
Ent 11101	0.3	8.3	19.0	—	1648	—	121	
11131	1.5	8.0	18.8	—	1377	—	49	
11161	3.0	8.0	18.5	—	1226	—	231	Grey
11191	4.5	8.1	18.3	—	1178	—	518	"

Comments _____ Purge water storage/disposal ☐ Drummed onsite ☒ Other Baker Tanks

WELL SAMPLING

SAMPLING METHOD Date/Time Sampled 8/17/06 1125
 Purging Equipment Pump - Type Bailer - Type Disposable Other _____
 Sample Filtered: Yes ☒ No ☐ Filtered Sample Analysis: _____

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments
1349 MW 101	2 X 1 L RP Amber	CFT	2118	

QUALITY CONTROL SAMPLES

Original Sample No.	Duplicate Sample No.

Type	Blank Samples Sample No.
Trip	
Rinsate	
Transfer	
Other:	

MONITORING WELL SAMPLING LOG (Normal, Low Flow, and Low Yield)

Site / Area 1349 Well No. 1349MW 102
 Project Number 2893 Well Type ☒ Monitor ☐ Extraction ☐ Other
 Recorded By DR Sampled by DR Date 8/17/06

WELL PURGING

PURGE VOLUME

Well casing diameter
☒ 2-inch ☐ 4-inch ☐ Other
 Well Total Depth (TD, ft. below TOC): 35.24
 Depth to Water (WL, ft. below TOC): 15.65
 Depth to free phase (FP, ft. below TOC):
 Number of borehole volumes to be purged
☐ 3 ☒ Not Applicable ☐ Other

Liquid in a 1 Foot Section of a Boring (gallons)		
Borehole Size	Casing Size	Water Volume/Ft
8	2	0.9
10	4	1.68
12	4	2.22

PURGE METHOD

☐ Low Flow ☒ Bailor \ Type Disp.
☐ Normal ☐ Pump \ Type
☒ Modified (max 5 gpm) ☐ Other

PUMP INTAKE

☐ Near top Depth (ft)
☐ Near Bottom Depth (ft)
☒ Other Modified

PURGE VOLUME CALCULATION

16.59 x NA x — = — gals
 Water Column Length Water Volume/ft No. Vols
 Total Purge Time 9 min.
 Recharge Rate — Purge Rate 0.5 gpm

4.5 gals
 CALCULATED PURGE VOLUME
4.5 gals
 ACTUAL PURGE VOLUME

GROUNDWATER PARAMETER MEASUREMENTS

Meter Type Ultrasonic / Inch Turbidimeter

Time	Liters or Gallons	pH	Temp °C °F	DO (mg/L)	Sp. COND (µS/cm)	ORP (mV)	Turbidity (NTU)	Comments
<u>1135</u>	<u>0.9</u>	<u>6.6</u>	<u>19.1</u>	<u>—</u>	<u>1412</u>	<u>—</u>	<u>45</u>	
<u>1138</u>	<u>1.5</u>	<u>6.6</u>	<u>18.5</u>	<u>—</u>	<u>1390</u>	<u>—</u>	<u>257</u>	
<u>1141</u>	<u>3.0</u>	<u>6.5</u>	<u>18.1</u>	<u>—</u>	<u>1538</u>	<u>—</u>	<u>71000</u>	<u>Brown</u>
<u>1144</u>	<u>4.5</u>	<u>6.5</u>	<u>18.2</u>	<u>—</u>	<u>1587</u>	<u>—</u>	<u>71000</u>	<u>11</u>
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Comments — Purge water storage/disposal ☐ Drummed onsite ☒ Other Baker Tanks

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled 8/17/06 11:50

Purging Equipment — Pump - Type — Bailor - Type Disposable Other —
 Sample Filtered: Yes ☒ No ☐ Filtered Sample Analysis: —

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments
<u>1349 MW 102</u>	<u>2 X 1 L NP/mbks</u>	<u>GT</u>	<u>2118</u>	

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.
Trip	
Rinsate	
Transfer	
Other:	

Fourth Quarter 2006

Site / Area Building 1349 Wall No. 1349 mw-100
Project Number 2893 Well Type ☒ Monitor ☐ Extraction ☐ Other
Recorded By BR Sampled by BR Date 12-5-06

PURGE VOLUME

PURGE VOLUME CALCULATION

Water Column Length

Total Purge Time

Recharge Rate

Water Volume/ft

Purge Rate

No. Vals

PURGE METHOD

☐ Low Flow	☒ Bailer \ Type
☐ Normal	☐ Pump \ Type
☒ Modified (max 5 gpm)	☐ Other

PUMP INTAKE

Near top	Depth (ft)	
Near Bottom	Depth (ft)	
Other		

gals

CALCULATED PURGE VOLUME

4.5 gals

ACTUAL PURGE VOLUME

ACTUAL PURGE VOLUME Orton ORP YSI 650M
Meter Type *myron 6 ultrameter / Hach testmeter*

GROUNDWATER PARAMETER MEASUREMENTS

[illegible]

Comments _____ : Purgé water storage/disposal ☒ Drummed onsite ☒ Other on site tank

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled 12-8-06 / 1345

Purging

Equipment	Pump - Type
-----------	-------------

Bailer - Type

Other

Sample Filtered:

Yes/No

Filtered Sample Analysis:

Diss. metals

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments
1349 new 100	5 NP Ambers	C&T	2122	
	6 HCl vials			
	1 HNO ₃ poly			
	1 liter NP poly			

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.
Trip	
Rinsate	
Transfer	
Other:	

**FILL SITE 1, LANDFILL 2, EL POLIN SPRING
TENNESSEE HOLLOW, AND UPGRADIENT WELLS
APPENDIX SECTION A-6
SEMI-ANNUAL GROUNDWATER MONITORING REPORT
THIRD AND FOURTH QUARTERS 2006
Presidio of San Francisco, California**

1.0 INTRODUCTION AND BACKGROUND

The Fill Site 1, Landfill 2, El Polin Spring, Tennessee Hollow, and Upgradient Wells area monitoring wells are located in the southeastern portion of the Presidio (Figure 1). Fill Site 1 is north of the Julius Kahn Public Playground. The site vicinity includes the El Polin Spring picnic area and the El Polin Spring sampling location (Figure A-6-1). The elevation at Fill Site 1 ranges from approximately 100 to 150 feet above the PLLW datum (Montgomery Watson, 1996b). The elevation at Landfill 2 ranges from approximately 140 to 240 feet above the PLLW datum. The Tennessee Hollow and the Upgradient Wells area monitoring wells have surface elevations ranging from approximately 45 to 110 feet and 170 to 265 feet above the PLLW datum, respectively.

Debris fill materials were disposed in Fill Site 1 from 1948 until 1973. Landfill 2 was in operation from 1946 to 1973 and was used for disposal of building debris and other wastes (Dames and Moore, 1997; Ringden and Sitton, 1990). Potential sources of contamination exist in fill materials disposed at both Fill Site 1 and Landfill 2. The Upgradient Area and Tennessee Hollow wells are currently being used to monitor groundwater elevations only, and are not sampled.

Groundwater sampling began in November 1990 at Fill Site 1 and Landfill 2. Groundwater samples have been analyzed for some or all of the following: general chemistry parameters, VOCs, SVOCs, OCPs, PCBs, chlorinated herbicides, TPH, dissolved metals, and cyanide. No OCPs, PCBs or chlorinated herbicides have ever been detected in any of the monitoring wells currently being monitored at the site. A summary of historical groundwater analytical results can be found in Tables A-6-1 through A-6-4.

Prior to the Fourth Quarter 2006, the frequency of groundwater elevation measurements was reduced to annual, to occur during the First Quarter.

2.0 SITE DESCRIPTION AND GEOLOGY

Fill Site 1, Landfill 2, El Polin Spring, Tennessee Hollow, and Upgradient Wells Areas are located within the Northeastern Groundwater Area of the Marina Groundwater Basin (Figure 1). Groundwater generally flows northward across the site towards the Crissy Field Groundwater Area (Montgomery Watson, 1996b).

Fill Site 1 and Landfill 2 have 10 associated monitoring wells (LF01GW01 through LF01GW07, and LF02GW01, LF02GW02, and LF02GW04) and one surface water sampling location (EPSP01) (Figure A-6-1). The Tennessee Hollow Area has four monitoring wells (TH-1, TH-2, TH-3, and TH-4), and the Upgradient Wells Area has five monitoring wells (UBR01GW01, UBR02GW01, UBR02GW02, UBR03GW01, and UBR03GW02). Two additional monitoring wells (10GW100 and PGFGW100) located near Building 10 and Paul Goode Field are monitored for groundwater elevation on an annual basis in the First Quarter. Monitoring well 300GW01, located near the Presidio Golf Course, was approved for removal from the Presidio-wide Groundwater Monitoring Program during the Third Quarter 2005 and will no longer be measured. Two monitoring wells (100GW101 and 104GW101) were installed adjacent to Buildings 100 and 104 in October 2002. These two wells have had four consecutive quarters of non-detect sampling results and therefore were removed from the sampling schedule beginning with the Second Quarter 2004. Abandonment of these wells will be proposed in the Mini-CAP Group II document, which is currently being prepared.

The Northeastern Groundwater Area is covered with grasses, annual plants, and trees and is occupied by Presidio housing. Fill Site 1 and Landfill 2 are located in the Tennessee Hollow Valley. The Landfill 2 site is approximately 300 feet west of Fill Site 1 (Figure A-6-1). Landfill 2 is in a hilly, densely forested area. Fill Site 1 contains fill from the ground surface to approximately 34 feet bgs. The fill at Fill Site 1 consists of sand and gravel with varying amounts of construction debris. The fill layer at Landfill 2 extends from the ground surface to 20 feet bgs. The fill material found in Landfill 2 consists of glassware, hospital debris, wood, and general construction debris. The fill layer at both sites is underlain by laterally bedded, fine-grained, silty sand of the Colma Formation. Serpentinite rock of the Franciscan Formation lies beneath the Colma Formation and was encountered at depths ranging from 40 to 79 feet bgs (Montgomery Watson, 1996b). The five Upgradient wells (UBR01GW01, UBR02GW01, UBR02GW02, UBR03GW01, and UBR03GW02) are screened in Franciscan Formation bedrock.

3.0 GROUNDWATER MONITORING

Groundwater elevations were measured within all monitoring wells proposed during the Third Quarter 2006. No groundwater elevation measurements were taken during the Fourth Quarter 2006 as groundwater elevation measurements were reduced to annual after Third Quarter 2006 to match the sampling frequency at the site. Groundwater elevations will be measured during the First Quarter 2007.

3.1 Groundwater-Level Measurements and Interpretation

Groundwater elevation measurements were collected on August 14 2006 at all site wells proposed, except UBR01GW01. Monitoring well UBR01GW01 was covered in gravel during the Third Quarter 2006 and could not be located. Groundwater elevations are summarized in Table A-6-5. Groundwater elevations measured are consistent with historical values. Water level meters were calibrated on 14 August 2006 and the calibration forms can be found in Appendix B. Groundwater elevation field forms can be found in Appendix C.

Third Quarter 2006 groundwater elevations ranged from 34.09 to 244.68 feet above PLLW in monitoring wells 10GW100 and UBR02GW01, respectively. A Third Quarter 2006 groundwater elevation map showing groundwater contours and flow directions for Fill Site 1, Landfill 2, Tennessee Hollow, and Upgradient Wells is included as Figure A-6-2. During the Third Quarter 2006, groundwater flow was in northeasterly, northerly, and northwesterly directions, following the general topographic trend. The groundwater gradient was estimated to be approximately 0.16 feet per foot to the northeast, approximately 0.03 feet per foot to the north, and approximately 0.07 feet per foot to the northwest.

Upgradient well UBR02GW01 is adjacent to and screened deeper than UBR02GW02, and upgradient well UBR03GW01 is adjacent to and screened deeper than UBR03GW02. Groundwater elevations in wells UBR02GW01 and UBR03GW01 have a different potentiometric surface than the adjacent wells that are screened shallower and were not used in constructing groundwater contours or calculating groundwater gradients in the shallow aquifer.

The groundwater elevation within monitoring well 10GW100 was evaluated with nearby Commissary/PX Area monitoring wells during the Third Quarter 2006 as shown in Figure A-6-3. Groundwater flow was to the north in the Third Quarter 2006 and the gradient in the area was estimated to be 0.017 feet per foot. Groundwater elevation data associated with the Commissary/PX Area can be found in section A-16.

3.2 Monitoring Well Purging and Sampling

No groundwater samples were collected from Fill Site 1, Landfill 2, or El Polin Spring monitoring wells during the Third or Fourth Quarters 2006, in accordance with the proposed sampling plans Table 1A and 1B. Groundwater samples were last collected at Fill Site 1, Landfill 2, and El Polin Spring during the First Quarter 2006. Groundwater samples are not scheduled to be collected from Fill Site 1, Landfill 2, and El Polin Spring monitoring wells until the First Quarter 2007.

Historical groundwater analytical results for Fill Site 1, Landfill 2, and El Polin Spring are presented in Tables A-6-1 through A-6-4.

4.0 CONCLUSIONS & RECOMMENDATIONS

Groundwater elevations and flow directions measured during the Third Quarter 2006 were consistent with historical measurements. Groundwater sampling will continue at Fill Site 1, Landfill 2, and El Polin Spring during First Quarter 2007.

Table A-6-1
Results of General Chemistry and Cyanide Analyses
Fill Site 1, Landfill 2, El Polin Spring, Buildings 100 and 104
 Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Cyanide	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	E335.2/ SW9010/ SW9012	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
EPSP01	03/16/06	330	330	85	< 0.01	7.05	< 0.1	1.1	< 0.05	NA	17
	11/30/05	NA	NA	NA	< 0.01	1.91	NA	NA	NA	NA	NA
DUP1130052A	11/30/05	NA	NA	NA	< 0.01	--	NA	NA	NA	NA	NA
EPSP01CL	11/30/05	NA	NA	NA	< 0.01	--	NA	NA	NA	NA	NA
	08/30/05	NA	NA	NA	< 0.01	1.2	NA	NA	NA	NA	NA
DUP0830052C	08/30/05	NA	NA	NA	< 0.01	--	NA	NA	NA	NA	NA
EPSP01CL	08/30/05	NA	NA	NA	< 0.01	--	NA	NA	NA	NA	NA
	05/26/05	NA	NA	NA	< 0.01	0.9	NA	NA	NA	NA	NA
DUP0526052B	05/26/05	NA	NA	NA	< 0.01	--	NA	NA	NA	NA	NA
EPSP01CL	05/26/05	NA	NA	NA	< 0.010 U	--	NA	NA	NA	NA	NA
	03/15/05	460	460	89	< 0.01	NM	< 0.1	1.2	< 0.05	NA	17
	12/15/04	NA	NA	NA	< 0.01	0.90	NA	NA	NA	NA	NA
DUP1215042B	12/15/04	NA	NA	NA	< 0.01	--	NA	NA	NA	NA	NA
EPSP01CL	12/15/04	NA	NA	NA	< 0.01 U	--	NA	NA	NA	NA	NA
	08/11/04	NA	NA	NA	< 0.01	NM	NA	NA	NA	NA	NA
DUP0811041B	08/11/04	NA	NA	NA	< 0.01	--	NA	NA	NA	NA	NA
EPSP01CL	08/11/04	NA	NA	NA	< 0.01	--	NA	NA	NA	NA	NA
	05/28/04	NA	NA	NA	< 0.01	6.2	NA	NA	NA	NA	NA
DUP0528041B	05/28/04	NA	NA	NA	< 0.01	--	NA	NA	NA	NA	NA
EPSP01CL	05/28/04	NA	NA	NA	< 0.005	--	NA	NA	NA	NA	NA
	03/15/04	310	310	90	< 0.01	6.83	< 0.1	1.4	< 0.05	NA	18
	12/05/03	NA	NA	NA	< 0.01	5.7	NA	NA	NA	NA	NA
DUP1205031B	12/05/03	NA	NA	NA	< 0.01	--	NA	NA	NA	NA	NA
EPSP01CL	12/05/03	NA	NA	NA	< 0.005	--	NA	NA	NA	NA	NA
	08/14/03	NA	NA	NA	< 0.01	5.7	NA	NA	NA	NA	NA
	06/06/03	NA	NA	NA	< 0.01	6.9	NA	NA	NA	NA	NA
	03/13/03	310	310	82	< 0.01	5.1	< 0.1	1.6	< 0.05	NA	16
	12/03/02	290	290	82	< 0.01	9.3	< 0.1	1.4 ²	< 0.05	NA	17
	08/27/02	270	270	78	< 0.01	1.6	0.19	1.5	< 0.05	NA	16
	06/05/02	290	290	82	< 0.01 UJ	7	0.11	1.5	< 0.05	NA	17
	03/11/02	300	300	78	< 0.01	4.0	0.11	1.3	< 0.05	NA	17
	11/28/01	300	300	190	< 0.01	2.1	0.08 J	1.6 J	< 0.05 UJ	NA	18

Table A-6-1
Results of General Chemistry and Cyanide Analyses
Fill Site 1, Landfill 2, El Polin Spring, Buildings 100 and 104
 Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Cyanide	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	E335.2/ SW9010/ SW9012	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
EPSP01	08/29/01	290	290	81	< 0.01	3.5	0.081 J	1.6	< 0.05	NA	17
	05/18/01	290	290	82	< 0.01	3.9	0.076 J	1.7	< 0.05	NA	17
	05/13/99	301	301	97	< 0.05	8.0	< 0.1	NA	NA	1.38 (J12)	18.4
	02/10/99	287	287	103	< 0.05	NM	< 0.1	NA	NA	1.52	31
	12/04/98	290	290	96	< 0.05	NM	0.118	NA	NA	1.62	18.6
	04/17/98	280	280	78	< 0.01	4.4	< 0.1	1.43	NA	1.33	14.3
	03/09/98	270	270	72	< 0.01	5.7	< 0.1	NA	NA	1.28	14.4
	01/08/98	282	282	77	< 0.01	NM	< 0.1	1.59	NA	1.45	14.6
	11/09/94	NA	295	85.3	0.009	NM	NA	0.187	NA	NA	NA
	09/04/92	240	NA	70	NA	NM	NA	NA	NA	1.9	13.4
	02/06/91	NA	320	NA	NA	NM	NA	NA	NA	1.6	NA
	11/13/90	NA	NA	63	NA	NM	0.806	NA	NA	NA	18
LF01GW01	03/08/06	310	310	52	< 0.01	0.53	< 0.1	5.5	< 0.05	NA	48
DUP0308063C	03/08/06	300	300	53	< 0.01	--	< 0.1	5.6	< 0.05	NA	48
LF01GW01CL	03/08/06	290	290	54.4	NA	--	< 1 U	5.93	< 0.02 U	NA	46.7
	03/15/05	250	250	53	< 0.01	0.10	< 0.1	4.1	< 0.05	NA	37
DUP0317051A	03/15/05	290	290	53	< 0.01	--	< 0.1	4.2	< 0.05	NA	38
LF01GW01CL	03/15/05	259	259	51.6	< 0.01 U	--	< 0.3 U	4.34	< 0.1 U	NA	37
	03/16/04	230	230	48	< 0.01	0.2	< 0.1	5.8	< 0.05	NA	43
	03/13/03	200	200	25	< 0.01	0.2	< 0.1	1.2	< 0.05	NA	31
	12/09/02	190	190	47	< 0.01	2.2	< 0.1	7.2	< 0.05	NA	32
DUP1209022D	12/09/02	190	190	48	0.02	--	< 0.1	7.2	< 0.05	NA	33
LF01GW01CL	12/09/02	190	190	45	< 0.005	--	0.14	7.3 J-	< 0.05 UJ	7.3 J-	37
	08/27/02	210 J-	210 J-	49	< 0.01	0.9	0.2	2.1	< 0.05	NA	39
	05/29/02	220	220	44	< 0.01	1.3	0.077 J	0.09	< 0.05	NA	40
	03/11/02	260	260	35	< 0.01	1.2	0.087 J	1.4	< 0.05	NA	49
DUP0311022A	03/11/02	270	270	35	< 0.01	--	0.099 J	1.4	< 0.05	NA	49
LF01GW01CL	03/11/02	250	250	39	< 0.01	--	< 1	1.4	< 1	NA	51
	11/27/01	190	190	30	< 0.01	2.5	0.12	6 J	< 0.05 UJ	NA	31
	08/28/01	200	200	29	< 0.01	3.0	0.13	2	< 0.05	NA	33
	05/16/01	260	260	57	< 0.01	6.2	0.099 J	1.6	< 0.05	NA	46

Table A-6-1
Results of General Chemistry and Cyanide Analyses
Fill Site 1, Landfill 2, El Polin Spring, Buildings 100 and 104
 Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Cyanide	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	E335.2/ SW9010/ SW9012	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LF01GW01	05/10/99	263	263	34	< 0.05	2.6	0.105	NA	NA	3.28 (J23)	53
	02/08/99	233	233	42	< 0.05	1.6	0.1	NA	NA	7.28	42
	11/09/98	241	241	45	< 0.1	5.4	< 0.1	NA	NA	4.27	46
	08/11/98	234	234	299	< 0.05	5.1	0.121	NA	NA	6.24	33
	04/09/98	300	300	30	< 0.05	2.4	0.11	NA	NA	2.1	39
	01/05/98	222	222	56	< 0.01	4.6	< 0.1	10.4	NA	9.04	38.8
	11/05/97	190	190	57	< 0.05	5.2	< 0.1	NA	NA	8.7	38
	08/06/97	230	230	47	NA	3.8	0.19	NA	NA	NA	40
	05/07/97	280	280	35	NA	4.2	0.17	NA	NA	2.2	42
	02/06/97	270	270	52	NA	4.6	0.14	NA	NA	9.3	41
	10/29/96	230	230	41	NA	NM	0.13	NA	NA	5.2	43
	08/01/96	260	260	36	NA	NM	0.14	NA	NA	3	49
	05/23/96	330	330	28	NA	NM	0.14	NA	NA	3	56
	03/08/96	248	248	57	NA	NM	0.352	10	NA	NA	45
	12/15/95	214	214	54	NA	NM	0.3	5.8	NA	NA	46
	09/13/95	260	260	38	NA	NM	< 0.25	NA	NA	1.5	63
	11/08/94	240	240	466	NA	NM	NA	5.84	NA	NA	55.1
	08/26/92	319	262	46	NA	NM	NA	NA	NA	2.0	109
	11/30/90	NA	NA	43	NA	NM	0.6	NA	NA	10.9	42
LF01GW02	03/16/06	280	280	100	0.01	0.61	< 0.1	10	< 0.05	NA	50
	03/15/05	290	290	100	< 0.01	0.90	< 0.1	5.6	< 0.05	NA	42
	03/16/04	330	330	130	< 0.01	0.3	< 0.1	6.4	< 0.05	NA	49
	03/13/03	310	310	91	< 0.01	0.1	< 0.1	6.9	< 0.05	NA	42
	12/03/02	260	260	70	< 0.01	4.0	< 0.1	6.7	< 0.05	NA	42
	08/27/02	280 J-	280 J-	44	< 0.01	2.9	0.19	5.3	< 0.05	NA	39
	05/29/02	320	320	81	< 0.01	1	0.084 J	5.8	< 0.05	NA	44

Table A-6-1
Results of General Chemistry and Cyanide Analyses
Fill Site 1, Landfill 2, El Polin Spring, Buildings 100 and 104
 Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Cyanide	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	E335.2/ SW9010/ SW9012	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LF01GW02	03/11/02	320	320	88	< 0.01	3.2	0.086 J	6.1	< 0.05	NA	43
	11/27/01	310	310	90	< 0.01	4	0.12	7 J	< 0.05 UJ	NA	42
DUP0828012A	08/28/01	300	300	93	< 0.01	3	0.1	7.3	< 0.05	NA	43
	08/28/01	300	300	93	< 0.01	--	0.081 J	7.3	< 0.05	NA	43
	05/17/01	300	300	84	< 0.01 UJ	5.3	0.12	6.6	< 0.05	NA	38
DUP0517011A	05/17/01	310	310	82	< 0.01 UJ	--	0.076 J	6.2	< 0.05	NA	38
	05/11/99	259	259	78	< 0.05	5.1	< 0.1	NA	NA	7.99	41
LF01GW02	02/09/99	187	187	110	< 0.05	5	< 0.1	NA	NA	6.82	28
	11/10/98	240	240	57	< 0.1	5.3	< 0.1	NA	NA	17.4	59
	08/12/98	244	244	46	< 0.05	7.5	0.109	NA	NA	8.81	339
	04/10/98	240	240	77	< 0.05	5.4	0.12	NA	NA	16	49
	01/06/98	250	250	63	< 0.01	5.3	< 0.1	9.89	NA	8.93	37.6
	11/04/97	240	240	56	< 0.05	5.2	< 0.1	NA	NA	13	49
	08/05/97	240	240	56	NA	5.3	0.2	NA	NA	NA	49
	05/06/97	250	250	79	NA	5.7	< 0.1	NA	NA	12	49
	02/04/97	250	250	66	NA	5.3	< 0.1	NA	NA	9.8	56
	10/29/96	260	260	58	NA	NM	0.15	NA	NA	17	58
	08/01/96	250	250	66	NA	NM	< 0.1	NA	NA	21 (J10)	61
	05/23/96	240	240	71	NA	NM	< 0.1	NA	NA	28	58
	03/08/96	212	212	62	NA	NM	0.305	32	NA	NA	62
	12/15/95	217	217	53	NA	NM	0.3	22	NA	NA	55
	09/13/95	250	250	73	NA	NM	< 0.25	NA	NA	13	59
	08/26/92	379	311	65	NA	NM	NA	NA	NA	7.7	40
	11/30/90	NA	NA	65	NA	NM	0.8	NA	NA	8.3	49
LF01GW03	03/20/06	380	380	86	< 0.01	0.71	< 0.1	4.9	< 0.05	NA	37
	03/15/05	300	300	110	< 0.01	0.90	< 0.1	4.8	< 0.05	NA	38
	03/17/04	360	360	120	< 0.01	1	< 0.1	4.9	< 0.05	NA	47
	03/13/03	370	370	110	< 0.01	0.8	< 0.1	5.2	< 0.05	NA	42
	12/03/02	340	340	84	< 0.01	3.7	< 0.1	6	< 0.05	NA	34
	08/27/02	350 J-	350 J-	82	< 0.01	2.1	0.2	6	< 0.05	NA	33

Table A-6-1
Results of General Chemistry and Cyanide Analyses
Fill Site 1, Landfill 2, El Polin Spring, Buildings 100 and 104
 Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Cyanide	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	E335.2/ SW9010/ SW9012	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LF01GW03	05/29/02	360	360	99	< 0.01	1.2	0.12	5.7	< 0.05	NA	36
	03/12/02	360	360	120	< 0.01	2.2	< 0.1 U	5.4	< 0.05	NA	45
	11/27/01	360	360	88	< 0.01	3.1	0.11	6.1 J	< 0.05 UJ	NA	35
	08/29/01	350	350	88	< 0.01	2.6	0.12	6.2	< 0.05	NA	34
	05/17/01	370	370	99	< 0.01 UJ	5.4	0.07 J	5.7	< 0.05	NA	43
	05/10/99	374	374	108	< 0.05	1.8	< 0.1	NA	NA	5.58	34
	02/08/99	365	365	130	< 0.05	1.2	< 0.1	NA	NA	6.97	94
	11/09/98	353	353	130	< 0.1	1.8	< 0.5	NA	NA	4.75	40
	08/11/98	340	340	96	< 0.05	3.5	< 0.1	NA	NA	5	25
	04/09/98	350	350	120	< 0.05	2.2	< 0.1	NA	NA	5.9	35
	01/05/98	346	346	83	< 0.01	3	< 0.1	5.11	NA	4.6	34.1
	11/05/97	340	340	84	< 0.05	1.5	< 0.1	NA	NA	5.2	31
	08/06/97	340	340	83	NA	2.5	0.17	NA	NA	NA	30
	05/07/97	350	350	97	NA	1.7	0.13	NA	NA	4.2	29
	02/05/97	340	340	100	NA	3.8	0.11	NA	NA	6.8	31
	10/30/96	350	350	100	NA	NM	0.12	NA	NA	6.4	33
	08/05/96	330	330	86	NA	NM	0.1	NA	NA	7.6	31
	05/22/96	350	350	91	NA	NM	0.13	NA	NA	7.7	28
	03/08/96	326	326	92	NA	NM	0.363	5.5	NA	NA	28
	12/15/95	335	335	85	NA	NM	0.4	5.9	NA	NA	30
	09/13/95	340	340	100	NA	NM	< 0.25	NA	NA	5.5	34
	11/08/94	387	387	1,730	NA	NM	NA	5.6	NA	NA	34.5
	09/10/92	345	342	81	NA	NM	NA	NA	NA	4.2	32.6
	12/07/90	NA	480	81	NA	NM	0.8	NA	NA	17.6	39.7
LF01GW04 DUP0317043A LF01GW04CL DUP0313032A	03/20/06	160	160	71	< 0.01	4.21	< 0.1	9.2	< 0.05	NA	46
	03/17/05	95	95	94	< 0.01	0.80	< 0.1	4.1	< 0.05	NA	45
	03/17/04	210	210	61	< 0.01	0.8	< 0.1	13	< 0.05	NA	52
	03/17/04	210	210	60	< 0.01	--	< 0.1	13	< 0.05	NA	52
	03/17/04	200	200	57	< 0.005	--	< 0.1	13 J	< 0.05 UJ	13 J	49
	03/13/03	210	210	57	< 0.01	0.4	< 0.1	13	< 0.05	NA	47
	03/13/03	210	210	55	< 0.01	--	< 0.1	13	< 0.05	NA	47
	12/03/02	210	210	57	< 0.01	4.7	< 0.1	12	< 0.05	NA	49

Table A-6-1
Results of General Chemistry and Cyanide Analyses
Fill Site 1, Landfill 2, El Polin Spring, Buildings 100 and 104
 Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Cyanide	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	E335.2/ SW9010/ SW9012	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LF01GW04	08/27/02	210 J-	210 J-	58	< 0.01	1	0.2	13	< 0.05	NA	49
	05/30/02	190	190	61	< 0.01	1.4	0.096 J	12	0.03 J	NA	47
DUP0530021B	05/30/02	190	190	63	< 0.01	--	0.14	11	0.03 J	NA	47
	05/30/02	190	190	58	< 0.01	--	< 1	12	< 1	NA	49
LF01GW04CL	03/12/02	72	< 1	83	< 0.01	1.7	< 0.1 U	10	0.04 J	NA	42
	11/27/01	220	220	57	< 0.01	3.2	0.17	13	< 0.05 UJ	NA	49
DUP1127012A	11/27/01	210	210	58	< 0.01	--	0.17	14 J	< 0.05 UJ	NA	49
	11/27/01	220	220	66	NA	--	< 1	13 ²	< 1	NA	53
LF01GW04CL	08/29/01	210	210	57	< 0.01	3.2	0.15	13	< 0.05	NA	50
	05/17/01	220	220	55	< 0.01 UJ	7.2	0.14	13	< 0.05	NA	49
	05/11/99	229	229	36	< 0.05	5.3	< 0.1	NA	NA	12.4	53
	02/10/99	212	212	35	< 0.05	5.4	< 0.1	NA	NA	13	53
	11/10/98	222	222	27	< 0.1	6	< 0.1	NA	NA	13.1	54
	08/12/98	215	215	205	< 0.05	6.1	0.126	NA	NA	10	40
	04/10/98	230	230	27	< 0.05	5.2	0.11	NA	NA	11	61
	01/06/98	216	216	20	< 0.01	5.4	< 0.1	9.58	NA	8.06	46.5
	11/06/97	220	220	28	< 0.05	5.8	< 0.1	NA	NA	10	51
	08/07/97	230	230	20	NA	5.1	0.15	NA	NA	NA	52
	05/08/97	220	220	21	NA	5.1	0.13	NA	NA	6.2	51
	02/05/97	210	210	33	NA	5.1	0.12	NA	NA	12	49
	10/30/96	220	220	21	NA	NM	0.11	NA	NA	10	50
	08/05/96	220	220	21	NA	NM	0.11	NA	NA	14	50
	05/21/96	230	230	28	NA	NM	0.15	NA	NA	12	45
	03/11/96	214	214	35	NA	NM	0.355	13	NA	NA	46
	12/18/95	223	223	35	NA	NM	< 0.1	13	NA	NA	54
	09/14/95	230	230	39	NA	NM	< 250	NA	NA	12	62
	11/08/94	255	255	575	NA	NM	NA	10.9	NA	NA	51.8
	09/10/92	215	214	55	NA	NM	NA	NA	NA	10	53.5
	12/07/90	NA	300	51	NA	NM	0.6	NA	NA	34.6	55.6

Table A-6-1
Results of General Chemistry and Cyanide Analyses
Fill Site 1, Landfill 2, El Polin Spring, Buildings 100 and 104
 Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Cyanide	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	E335.2/ SW9010/ SW9012	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LF01GW05	03/20/06	240	240	65	< 0.01	0.49	< 0.1	1.8	< 0.05	NA	42
	03/15/05	230	230	72	< 0.01	0.60	< 0.1	1.4	< 0.05	NA	40
	03/16/04	220	220	58	< 0.01	0.9	< 0.1	0.84	< 0.05	NA	30
	03/12/03	280	280	71	< 0.01	0.2	< 0.1	0.63	< 0.05	NA	38
	12/03/02	250	250	61	< 0.01	0.9	< 0.1	1	< 0.05	NA	46
	08/27/02	250 J-	250 J-	66	< 0.01	0.8	0.2	0.82	< 0.05	NA	44
	05/29/02	250	250	67	< 0.01	1.6	0.1	0.42	< 0.05	NA	43
	03/11/02	140	110	19	< 0.01	3.8	0.067 J	2.7	< 0.05	NA	13
	11/27/01	250	250	54	< 0.01	4.1	0.095 J	0.79 J	0.04 J,J	NA	45
	08/28/01	260	260	61	< 0.01	0.4	0.085 J	0.25	< 0.05	NA	42
	05/16/01	260	260	58	< 0.01	3.6	0.084 J	0.03 J	< 0.05	NA	44
	05/13/99	262	262	78	< 0.05	0.9	< 0.1	NA	NA	< 0.081 (U4, U12)	50.7
	02/11/99	248	248	87	< 0.05	2.0	< 0.1	NA	NA	< 0.290 (U4)	54
	11/12/98	254	254	94	< 0.1	1.9	< 2	NA	NA	0.39	57
	08/11/98	253	253	66	< 0.05	26.0	< 0.1	NA	NA	0.45	33
	04/09/98	230	230	85	< 0.05	46.0	< 0.1	NA	NA	0.038	45
	01/05/98	247	247	66	< 0.01	2.5	< 0.1	0.115	NA	0.076	37.7
	11/06/97	250	250	86	< 0.05	1.2	< 0.1	NA	NA	3.8	46
	08/07/97	250	250	69	NA	0.8	0.15	NA	NA	NA	41
	05/08/97	250	250	72	NA	1.7	0.11	NA	NA	< 0.05	31
	02/06/97	240	240	65	NA	5.1	0.11	NA	NA	< 0.05	37
	10/31/96	240	240	61	NA	NM	0.11	NA	NA	< 0.05	29
	08/06/96	240	240	59	NA	NM	0.1	NA	NA	0.14	32
	05/22/96	240	240	58	NA	NM	0.14	NA	NA	0.13	35
	03/12/96	227	227	57	NA	NM	0.313	0.24	NA	NA	29
	12/19/95	214	214	54	NA	NM	0.3	0.9	NA	NA	32
	09/15/95	220	220	55	NA	NM	< 0.25	NA	NA	0.43	26
	11/08/94	262	262	527	NA	NM	NA	1.41	NA	NA	37.6
	09/10/92	243	241	46	NA	NM	NA	NA	NA	1.1	49.5
	11/29/90	NA	260	49	NA	NM	0.7	NA	NA	1.3	66.6

Table A-6-1
Results of General Chemistry and Cyanide Analyses
Fill Site 1, Landfill 2, El Polin Spring, Buildings 100 and 104
 Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Cyanide	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	E335.2/ SW9010/ SW9012	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LF01GW06	03/20/06	120	120	1.5	< 0.01	4.2	< 0.1	0.16	< 0.05	NA	1.2
	03/15/05	110	110	2.2	< 0.01	0.20	< 0.1	0.34	< 0.05	NA	1.3
	03/17/04	120	120	13	< 0.01	4.8	< 0.1	4.3	< 0.05	NA	18
DUP0827022A	03/13/03	240	240	11	< 0.01	1.3	< 0.1	2.4	< 0.05	NA	7.3
	12/03/02	200	200	31	< 0.01	4.1	< 0.1	11	< 0.05	NA	45
	08/27/02	190	190	31	< 0.01	1.2	0.19	11	< 0.05	NA	47
DUP0530021C	08/27/02	200	200	31	< 0.01	--	0.19	11	< 0.05	NA	46
	05/30/02	200	200	32	< 0.01	1.6	0.14	11	< 0.05	NA	48
	05/30/02	200	200	32	< 0.01	--	0.15	11	< 0.05	NA	49
	03/12/02	180	180	15	< 0.01	1.1	< 0.1 U	5.6	< 0.05	NA	22
	11/27/01	210	210	33	< 0.01	3.76	0.11	12 J	< 0.05 UJ	NA	47
	08/28/01	210	210	34	< 0.01	3.0	0.11	12	< 0.05	NA	48
	05/17/01	220	220	32	< 0.01 UJ	5.5	0.086 J	12	< 0.05	NA	48
	05/12/99	208	208	32	< 0.05	6.0	< 0.1	NA	NA	10.7 (J12)	48
	02/10/99	139	139	15	< 0.05	5.6	< 0.1	NA	NA	8.24	24
	11/11/98	220	220	32	< 0.05	6.1	< 0.1	NA	NA	11.2	47
	08/13/98	200	200	27	< 0.05	5.3	< 0.1	NA	NA	9.8	36
	04/13/98	220	220	35	< 0.05	5.6	0.1	NA	NA	11	52
	01/06/98	202	202	19	< 0.01 (U9)	6.0	< 0.1	6.58	NA	5.93	30.2
	11/05/97	200	200	25	< 0.05	4.2	< 0.1	NA	NA	8.1	42
	08/06/97	210	210	26	NA	5.7	0.16	NA	NA	NA	42
	05/07/97	210	210	28	NA	4.8	0.1	NA	NA	8.6	39
	02/05/97	200	200	32	NA	5.4	0.1	NA	NA	12	45
	10/30/96	200	200	26	NA	NM	0.13	NA	NA	11	44
	08/05/96	190	190	26	NA	NM	0.13	NA	NA	13	43
	05/23/96	200	200	22	NA	NM	0.13	NA	NA	11	35
	03/11/96	200	200	15	NA	NM	< 0.370 (U4)	1.2	NA	NA	< 7.6 (U4)
	12/18/95	152	152	21	NA	NM	0.5	5.4	NA	NA	26
	09/14/95	200	200	23	NA	NM	< 0.25	NA	NA	9.2	31
	11/08/94	260	260	335	NA	NM	NA	10.9	NA	NA	45.3
	08/28/92	195	193	25	NA	NM	NA	NA	NA	9.8	47.1

Table A-6-1
Results of General Chemistry and Cyanide Analyses
Fill Site 1, Landfill 2, El Polin Spring, Buildings 100 and 104
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Cyanide	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	E335.2/ SW9010/ SW9012	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LF01GW07	03/20/06	260	260	52	< 0.01	4.22	< 0.1	7.3	< 0.05	NA	45
	03/15/05	120	120	25	< 0.01	0.90	< 0.1	4.5	< 0.05	NA	21
	03/17/04	150	150	48	< 0.01	3.5	< 0.1	7.9	< 0.05	NA	36
	03/13/03	210	210	48	< 0.01	3.8	< 0.1	6.9	< 0.05	NA	35
	12/03/02	230	230	55	< 0.01	4.1	< 0.1	8	< 0.05	NA	48
	08/27/02	220 J-	220 J-	55	< 0.01	NM	0.21	8.3	< 0.05	NA	50
	05/29/02	210	210	54	< 0.01	1.4	0.13	7.5	< 0.05	NA	45
DUP0515013A LF01GW07CL	03/12/02	200	200	53	< 0.01	1.9	< 0.1 U	7.7	< 0.05	NA	40
	11/27/01	240	240	52	< 0.01	3.4	0.12	8.7 J	< 0.05 UJ	NA	49
	08/29/01	230	230	54	< 0.01	3.0	0.11	8.8	< 0.05	NA	49
	05/15/01	240	240	50	< 0.01	8.5	0.15	8.6 J	< 0.05 UJ	NA	53
	05/15/01	240	240	51	< 0.01	--	0.09 J	8.6 J	< 0.05 UJ	NA	53
	05/15/01	230	230	50	ND	--	< 1	39	< 1	NA	52
	05/10/99	259	259	58.4	< 0.05	7.8	< 0.1	NA	NA	7.77	58
	02/08/99	224	224	63.3	< 0.05	7.5 (J35)	< 0.1	NA	NA	8.9	60
	11/09/98	240	240	68.2	< 0.1	8 (J35)	< 0.1	NA	NA	6.92	58
	08/11/98	234	234	46	< 0.05	9.7	< 0.1	NA	NA	7.16	39
	04/09/98	220	220	56	< 0.05	4.9	< 0.1	NA	NA	8.6	59
	01/05/98	234	234	45	< 0.01	7.8	< 0.1	7.21	NA	6.68	46.4
	11/06/97	240	240	53	< 0.05	5.3	< 0.1	NA	NA	9.7	54
	08/07/97	240	240	50	NA	4.4	0.16	NA	NA	NA	53
	05/08/97	240	240	53	NA	4.2	0.11	NA	NA	7	53
	02/06/97	180	180	39	NA	4.5	0.11	NA	NA	9.6	38
	10/31/96	250	250	48	NA	NM	< 0.1	NA	NA	10	54
	08/06/96	240	240	48	NA	NM	0.1	NA	NA	11	63
	05/22/96	240	240	47	NA	NM	0.12	NA	NA	11	56
	03/12/96	242	242	48	NA	NM	0.289	11	NA	NA	64
	12/19/95	238	238	52	NA	NM	0.3	21	NA	NA	68
	09/15/95	250	250	55	NA	NM	< 0.25	NA	NA	12	83
LF02GW01	03/16/06	230	230	76	< 0.01	0.51	< 0.1	0.9	< 0.05	NA	17
	03/15/05	230	230	74	< 0.01	0.40	< 0.1	0.92	< 0.05	NA	16
	03/16/04	200	200	77	< 0.01	0.8	< 0.1	0.98	< 0.05	NA	16
	03/13/03	190	190	67	< 0.01	0.7	< 0.1	0.97	< 0.05	NA	15
	12/03/02	200	200	67	< 0.01	1.5	< 0.1	0.95	< 0.05	NA	14

Table A-6-1
Results of General Chemistry and Cyanide Analyses
Fill Site 1, Landfill 2, El Polin Spring, Buildings 100 and 104
 Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Cyanide	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	E335.2/ SW9010/ SW9012	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LF02GW01	08/27/02	190 J-	190 J-	69	< 0.01	1.2	0.17	0.94	< 0.05	NA	15
	05/29/02	190	190	70	< 0.01	1.4	0.13	0.87	< 0.05	NA	15
	03/11/02	190	190	68	< 0.01	0.8	0.087 J	0.97	< 0.05	NA	15
	11/28/01	200	200	73	< 0.01	1.5	0.11	1 J	< 0.05 UJ	NA	15
	08/28/01	200	200	69	< 0.01	0.9	0.086 J	0.97	< 0.05	NA	15
	05/17/01	210	210	68	< 0.01 UJ	2.3	0.082 J	0.94	< 0.05	NA	15
	05/11/99	214	214	78	< 0.05	0.7	< 0.1	NA	NA	0.552	15.1
	02/09/99	196	196	87	< 0.05	0.8	< 0.1	NA	NA	0.986	17
	11/10/98	201	201	85	< 0.1	3.15 (J35)	< 0.1	NA	NA	1	15.9
	08/12/98	196	196	63	< 0.05	1.1	0.108	NA	NA	1.03	11
	04/10/98	190	190	81	< 0.05	0.7 (J34)	0.1	NA	NA	1	16
	01/06/98	193	193	60	< 0.01	1.6	< 0.1	0.908	NA	0.862	13.2
	11/03/97	190	190	71	< 0.05	0.7	< 0.1	NA	NA	0.81	14
	08/04/97	200	200	66	NA	1.5	0.2	NA	NA	NA	14
	05/05/97	200	200	67	NA	1.6	< 0.1	NA	NA	0.71	12
	02/03/97	200 (J29)	200 (J29)	57	NA	0.8	< 0.1	NA	NA	< 0.05 (R9)	15
	10/28/96	200	200	64	NA	NM	< 0.1	NA	NA	1.1	44
	07/31/96	190	190	64	NA	NM	< 0.1	NA	NA	1.3	15
	05/21/96	< 2	< 2	64	NA	NM	< 0.1	NA	NA	1.8	13
	03/04/96	191	191	69	NA	NM	0.27	1.34	NA	NA	15
	12/11/95	208	208	52	NA	NM	< 0.1	7	NA	NA	47
	09/08/95	200	200	65	NA	NM	< 250	NA	NA	1.2	19
	11/09/94	234	234	69.4	<0.005	NM	NA	1.6	NA	NA	16.3
	08/28/92	190	189	60	NA	NM	NA	NA	NA	1.2	15.1
	11/28/90	NA	220	54.2	NA	NM	0.5	NA	NA	1.3	18.9
LF02GW02	03/20/06	480	480	160	< 0.01	0.4	< 0.1	< 0.05	< 0.05	NA	72
	03/15/05	460	460	170	< 0.01	0.90	< 0.1	< 0.05	< 0.05	NA	72
	03/16/04	460	460	190	< 0.01	0.1	< 0.1	< 0.05	< 0.05	NA	79
DUP0313032B	03/13/03	440	440	170	< 0.01	0.1	< 0.1	0.06	< 0.05	NA	71
	03/13/03	450	450	170	< 0.01	--	< 0.1	0.08	< 0.05	NA	82
DUP1203023A	12/03/02	480	480	180	< 0.01	0.6	< 0.1	< 0.05	< 0.05	NA	84
	12/03/02	490	490	180	< 0.01	--	< 0.1	< 0.05	< 0.05	NA	83

Table A-6-1
Results of General Chemistry and Cyanide Analyses
Fill Site 1, Landfill 2, El Polin Spring, Buildings 100 and 104
 Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Cyanide	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	E335.2/ SW9010/ SW9012	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LF02GW02	08/27/02	620 J-	620 J-	180	< 0.01	1.3	0.2	< 0.05	< 0.05	NA	84
	08/27/02	490 J-	490 J-	180	< 0.01	--	0.2	< 0.05	< 0.05	NA	84
DUP0827023A	05/29/02	490	490	180	< 0.01	1	0.086 J	< 0.05	< 0.05	NA	86
	03/11/02	520	520	200	< 0.01	0.8	0.045 J	< 0.05	< 0.05	NA	97
DUP0311022B	03/11/02	530	530	200	< 0.01	--	0.051 J	< 0.05	< 0.05	NA	96
	03/11/02	510	510	200	< 0.01	--	< 1	< 1	< 1	NA	93
LF02GW02CL	11/28/01	520	520	210	< 0.01	0.6	0.045 J	< 0.05	< 0.05	NA	96
	08/28/01	520	520	190	< 0.01	1.5	0.071 J	0.14	< 0.05	NA	94
	05/17/01	510	510	190	< 0.01 UJ	1.7	< 0.1	< 0.05	< 0.05	NA	99
	05/12/99	537	537	248	< 0.05	0.4	< 0.1	NA	NA	0.095 (J12)	120
	02/10/99	525	525	279	< 0.05	0.3	< 0.1	NA	NA	< 0.02	130
	11/11/98	540	540	311	< 0.05	1.6	< 0.1	NA	NA	0.059	130
	08/13/98	530	530	220	< 0.05	1.2	< 0.1	NA	NA	< 0.05	90
	04/13/98	510	510	290	< 0.05	0.6	< 0.1	NA	NA	< 0.05	130
	01/07/98	556	556	248	< 0.01	1.6	< 0.1	< 0.05	NA	< 0.05	117
	11/03/97	520	520	260	< 0.05	0.4	< 0.1	NA	NA	< 0.02	110
	08/04/97	610	610	270	NA	1.1	0.17	NA	NA	NA	130
	05/05/97	500	500	230	NA	0.8	< 0.1	NA	NA	< 0.05	85
	02/03/97	540 (J29)	540 (J29)	250	NA	1.7	< 0.1	NA	NA	< 0.05	110
	10/28/96	460	460	210	NA	NM	< 0.1	NA	NA	0.18	82
	07/31/96	470	470	220	NA	NM	0.11	NA	NA	< 0.5	81
	05/22/96	440	440	200	NA	NM	< 0.1	NA	NA	< 0.05	58
	03/04/96	412	412	209	NA	NM	0.46	< 0.05	NA	NA	64
	12/11/95	221	221	56	NA	NM	0.4	21	NA	NA	54
	09/06/95	370	370	160	NA	NM	< 250	NA	NA	< 0.04	46
	11/09/94	418	418	152	<0.005	NM	NA	1.6	NA	NA	52.7
	09/04/92	330	325	130	NA	NM	NA	NA	NA	0.025	54
	11/29/90	NA	440	114.5	NA	NM	0.9	NA	NA	0.3	54.7

Table A-6-1
Results of General Chemistry and Cyanide Analyses
Fill Site 1, Landfill 2, El Polin Spring, Buildings 100 and 104
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Cyanide	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	E335.2/ SW9010/ SW9012	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LF02GW04	03/20/06	150	150	46	< 0.01	1.11	< 0.1	8.2	< 0.05	NA	24
	03/15/05	150	150	68	< 0.01	0.80	< 0.1	8.8	< 0.05	NA	29
	03/16/04	260	260	92	< 0.01	0.3	< 0.1	9.5	< 0.05	NA	35
	03/13/03	350	350	98	< 0.01	0.2	< 0.1	2.9	< 0.05	NA	30
	12/03/02	340	340	99	< 0.01	0.3	< 0.1	5.3	< 0.05	NA	25
	08/27/02	360 J-	360 J-	100	< 0.01	1.1	0.19	4.9	0.04 J	NA	28
	05/29/02	360	360	100	< 0.01	1.1	0.13	2.4	< 0.05	NA	28
	03/11/02	190	190	61	< 0.01	0.8	0.11	1.4	< 0.05	NA	35
	11/28/01	350	350	110	< 0.01	0.3	0.073 J	5.4	0.07	NA	27
	08/28/01	340	340	100	< 0.01	1.8	0.091 J	5.9	< 0.05	NA	28
	05/15/01	350	350	100	< 0.01	2.5	0.16	4.5 J	0.08 J	NA	32
	05/12/99	365	365	126	< 0.05	0.4	< 0.1	NA	NA	4.99 (J12)	31
	02/11/99	363	363	140	< 0.05	1.5 (J35)	< 0.1	NA	NA	5.95	41.2
	11/11/98	373	373	148	< 0.05	0.3	< 0.1	NA	NA	5.54	34
	08/13/98	360	360	110	< 0.05	0.6	< 0.1	NA	NA	4.5	27
	04/13/98	400	400	170	< 0.05	2.2	< 0.1	NA	NA	4.8	47
	01/07/98	354	354	96	< 0.01	2.0	< 0.1	5.07	NA	4.76	25.8
	11/04/97	360	360	110	< 0.05	0.3	< 0.1	NA	NA	5.2	25
	08/05/97	390	390	130	NA	0.2	0.17	NA	NA	NA	45
	05/06/97	380	380	130	NA	0.8	< 0.1	NA	NA	3.8	28
	02/04/97	380	380	120	NA	0.7	< 0.1	NA	NA	4.3	30
	11/01/96	390	390	120	NA	NM	< 0.1	NA	NA	6.5	27
	08/01/96	390	390	110	NA	NM	< 0.1	NA	NA	4.7	31
	05/21/96	370	370	110	NA	NM	< 0.1	NA	NA	4.5	23
	03/06/96	373	373	100	NA	NM	0.5	5.5	NA	NA	26
	12/11/95	363	363	130	NA	NM	0.4	6.4	NA	NA	25
	09/11/95	360	360	100	NA	NM	< 250	NA	NA	5.6	30
100GW101	12/05/03	NA	NA	NA	NA	0.7	NA	NA	NA	NA	NA
	08/21/03	NA	NA	NA	NA	1.1	NA	NA	NA	NA	NA
	06/10/03	NA	NA	NA	NA	4.4	NA	NA	NA	NA	NA
	03/13/03	NA	NA	NA	NA	1.8	NA	NA	NA	NA	NA
	12/06/02	NA	NA	NA	NA	3.3	NA	NA	NA	NA	NA

Table A-6-1
Results of General Chemistry and Cyanide Analyses
Fill Site 1, Landfill 2, El Polin Spring, Buildings 100 and 104
 Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Cyanide	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	E335.2/ SW9010/ SW9012	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
104GW101	12/05/03	NA	NA	NA	NA	1	NA	NA	NA	NA	NA
	08/21/03	NA	NA	NA	NA	1.7	NA	NA	NA	NA	NA
	06/10/03	NA	NA	NA	NA	3.2	NA	NA	NA	NA	NA
	03/14/03	NA	NA	NA	NA	0.3	NA	NA	NA	NA	NA
	12/06/02	NA	NA	NA	NA	3.8	NA	NA	NA	NA	NA

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001.

The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - The QC laboratory nitrate results have been converted to nitrate as nitrogen (nitrate-N) as other laboratory results are reported.

The QC laboratory reported nitrate as NO3 concentrations (nitrate-NO3) which are 4.43 times higher than nitrate-N concentrations.

mg/L - milligrams per liter

NA - Not analyzed

NM - Not measured

"--" dissolved oxygen measurements were not taken for duplicate and quality control samples.

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-6-2
Results of SVOC, PAH, OCP, PCB, Chlorinated Herbicide, and VOC Analyses
Fill Site 1, Landfill 2, El Polin Spring, Buildings 100 and 104
Presidio of San Francisco, California

Well Name	Sample Date	SVOCs		All PAHs	All OCPs and PCBs	All Chlorinated Herbicides	VOCs							
		bis (2-Ethylhexyl)-phthalate	Phenol				Benzene	Bromo-dichloro-methane	Chloroform	Ethyl-benzene	MTBE	Toluene	Total Xylenes	All Other VOCs
	Analytical Method ¹	SW8310	SW8270	SW8310	SW8081A/ SW8082	SW8151	SW8020/ SW8021/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
EPSP01	05/13/99	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	1.3	1.3	ND
	02/10/99	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	12/04/98	< 10	< 10	ND	ND	ND	< 0.5	0.6	0.8	< 0.5	NA	< 0.5	< 0.5	ND
	04/17/98	< 10	< 10	ND (U15)	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	03/09/98	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	01/08/98	< 10	< 10	ND	ND	ND (U6)	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	11/09/94	17.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF01GW01	09/04/92	< 1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/29/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	08/01/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	05/23/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	03/08/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	12/15/95	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	09/13/95	< 10	< 10	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
LF01GW02	11/08/94	7.57	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/26/92	< 1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/29/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	08/01/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	05/23/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	0.7	< 0.5	ND
	03/08/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
LF01GW03	12/15/95	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	< 0.5	ND
	09/13/95	< 10	21	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	10/30/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	08/05/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	05/22/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	03/08/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	12/15/95	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	09/13/95	< 10	< 10	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	11/08/94	5.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	09/10/92	< 1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table A-6-2
Results of SVOC, PAH, OCP, PCB, Chlorinated Herbicide, and VOC Analyses
Fill Site 1, Landfill 2, El Polin Spring, Buildings 100 and 104
Presidio of San Francisco, California

Well Name	Sample Date	SVOCs		All PAHs	All OCPs and PCBs	All Chlorinated Herbicides	VOCs							
		bis (2-Ethylhexyl)-phthalate	Phenol				Benzene	Bromo-dichloro-methane	Chloroform	Ethyl-benzene	MTBE	Toluene	Total Xylenes	All Other VOCs
	Analytical Method ¹	SW8310	SW8270	SW8310	SW8081A/ SW8082	SW8151	SW8020/ SW8021/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
LF01GW04	10/30/96	46 (J30)	< 10	ND	ND	ND	< 0.5	< 0.5	1	< 0.5	NA	< 0.5	< 0.5	ND
	08/05/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	1.1	< 0.5	NA	< 0.5	< 0.5	ND
	05/21/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	0.8	< 0.5	NA	< 0.5	< 0.5	ND
	03/11/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	12/18/95	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	09/14/95	< 10	< 10	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	11/08/94	4.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF01GW05	09/10/92	< 1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/31/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	08/06/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	05/22/96	< 10	< 10	ND	ND	ND (U15)	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	03/12/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	12/19/95	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	09/15/95	< 10	< 10	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
LF01GW06	11/08/94	5.81	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	09/10/92	< 1.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/12/02	NA	NA	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/17/01	NA	NA	ND	ND	ND	< 0.5	< 0.5	0.7	< 0.5	< 0.5	< 0.5	< 0.5	ND
	02/10/99	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 10 U	< 0.5	< 0.93	NA
	01/06/98	< 10	< 10	ND	ND	ND	NA	< 0.5	0.74	NA	NA	< 0.5	< 0.5	NA
	10/30/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	0.8	< 0.5	NA	< 0.5	< 0.5	ND
	08/05/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	0.8	< 0.5	NA	< 0.5	< 0.5	ND
	05/23/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	0.9	< 0.5	NA	< 0.5	< 0.5	ND
	03/11/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	12/18/95	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
LF01GW06	09/14/95	21 (J30)	< 10	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	11/08/94	5.27	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/28/92	< 1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table A-6-2
Results of SVOC, PAH, OCP, PCB, Chlorinated Herbicide, and VOC Analyses
Fill Site 1, Landfill 2, El Polin Spring, Buildings 100 and 104
Presidio of San Francisco, California

Well Name	Sample Date	SVOCs		All PAHs	All OCPs and PCBs	All Chlorinated Herbicides	VOCs							
		bis (2-Ethylhexyl)-phthalate	Phenol				Benzene	Bromo-dichloro-methane	Chloroform	Ethyl-benzene	MTBE	Toluene	Total Xylenes	All Other VOCs
	Analytical Method ¹	SW8310	SW8270	SW8310	SW8081A/ SW8082	SW8151	SW8020/ SW8021/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
LF01GW07	10/31/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	08/06/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	05/22/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	03/12/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	12/19/95	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	09/15/95	< 10	< 10	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
LF02GW01	10/28/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	07/31/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	3.1	< 0.5	ND
	05/21/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	03/04/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	12/11/95	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	09/08/95	< 9.6	< 9.6	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	11/09/94	13.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/28/92	< 1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
LF02GW02	03/11/02	NA	NA	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP0311022B	03/11/02	NA	NA	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
LF02GW02CL	03/11/02	NA	NA	ND	ND	NA	< 0.5	< 0.5	< 1 UJ	< 0.5	< 5 R	< 0.5	< 1	ND
	05/17/01	NA	NA	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	02/10/99	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 10 U	< 0.5	< 0.93	ND
	01/07/98	< 10	< 10	ND	ND	ND	NA	< 0.5	< 0.5	NA	NA	< 0.5	< 0.5	ND
	10/28/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	07/31/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	05/22/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	03/04/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	12/11/95	14 (J30)	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	09/06/95	< 10	< 10	ND	ND (U6)	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	11/09/94	2.36	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	09/04/92	< 1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table A-6-2
Results of SVOC, PAH, OCP, PCB, Chlorinated Herbicide, and VOC Analyses
Fill Site 1, Landfill 2, El Polin Spring, Buildings 100 and 104
 Presidio of San Francisco, California

Well Name	Sample Date	SVOCs		All PAHs	All OCPs and PCBs	All Chlorinated Herbicides	VOCs							
		bis (2-Ethylhexyl)-phthalate	Phenol				Benzene	Bromo-dichloro-methane	Chloroform	Ethyl-benzene	MTBE	Toluene	Total Xylenes	All Other VOCs
	Analytical Method ¹	SW8310	SW8270	SW8310	SW8081A/ SW8082	SW8151	SW8020/ SW8021/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
LF02GW04	11/01/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	08/01/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	05/21/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	03/06/96	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	12/11/95	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
	09/11/95	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	< 0.5	ND
100GW101 DUP1205032A 100GW101CL	12/05/03	NA	NA	NA	NA	NA	< 0.5	NA	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	12/05/03	NA	NA	NA	NA	NA	< 0.5	NA	NA	< 0.5	2.5	< 0.5	< 0.5	NA
	12/05/03	NA	NA	NA	NA	NA	< 0.5	NA	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	08/21/03	NA	NA	NA	NA	NA	< 0.5	NA	NA	< 0.5	3.5 C	< 0.5	< 0.5	NA
	06/10/03	NA	NA	NA	NA	NA	< 0.5	NA	NA	< 0.5	< 2	< 0.5	1.2	NA
	03/13/03	NA	NA	NA	NA	NA	< 0.5	NA	NA	< 0.5	7.4	< 0.5	< 0.5	NA
	12/06/02	NA	NA	NA	NA	NA	< 0.5	NA	NA	< 0.5	< 2	< 0.5	< 0.5	NA
104GW101	10/10/02	NA	NA	NA	NA	NA	0.8	NA	NA	0.6	< 0.16	< 0.48	1.4	NA
	12/05/03	NA	NA	NA	NA	NA	< 0.5	NA	NA	< 0.5	2.6	< 0.5	< 0.5	NA
	08/21/03	NA	NA	NA	NA	NA	< 0.5	NA	NA	< 0.5	2.1 C	< 0.5	< 0.5	NA
	06/10/03	NA	NA	NA	NA	NA	< 0.5	NA	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	03/14/03	NA	NA	NA	NA	NA	< 0.5	NA	NA	< 0.5	5 C	< 0.5	< 0.5	NA
	12/06/02	NA	NA	NA	NA	NA	< 0.5	NA	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	10/10/02	NA	NA	NA	NA	NA	2.6	NA	NA	2.1	< 0.16	2.9	4.7	NA

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

µg/L - micrograms per liter

NA - Not analyzed

ND - Not detected

PAHs - Polycyclic aromatic hydrocarbons

OCPs - Organochlorine pesticides

PCBs - Polychlorinated biphenyls

VOC - Volatile organic compound

MTBE - Methyl tertiary-butyl ether

SVOCs - Semivolatile organic compounds

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-6-3
Results of Total and Dissolved Metals Analyses
Fill Site 1, Landfill 2, and El Polin Spring
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Hexavalent Chromium	Hexavalent Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7196	SW7199	SW6010/ SW6010B/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6010B/ SW6020	SW7470	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
EPSP01 (Total)	03/16/06	< 100 UJ	< 1	< 5	75	< 2	< 1	15,000	30	< 10	< 1	NA	NA	< 100	< 3	87,000	24	NA	< 20	< 500	< 5	< 1	31,000 J	< 1	< 10	< 20	420 J
	03/16/06	< 100	< 1	< 5	75	< 2	< 1	13,000	28	< 10	1.2	NA	NA	180	< 3	74,000 J	65	NA	< 20	< 500 UJ	< 5	< 1	27,000	< 1	< 10	< 20	NA
DUP1130052A	11/30/05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	490
	11/30/05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	370
EPSP01CL	11/30/05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	518
	08/30/05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	450
DUP0830052C	08/30/05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	460
	08/30/05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	510
DUP0526052B	05/26/05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	370
	05/26/05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	360
EPSP01CL	05/26/05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	558
	03/15/05	180	< 1	< 5	85	< 2	< 1	15,000	32	< 10	1.3	NA	NA	510	< 3	87,000	91	NA	24	< 500	< 5	< 1	32,000	< 1	< 10	< 20	230
(Total)	03/15/05	< 500	< 1	< 5	82	< 2	< 1	15,000	31	< 10	1.1	NA	NA	450	< 3	86,000	83	NA	22	< 500	< 5	< 1	31,000	< 1	< 10	< 20	NA
	12/15/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	690
DUP1215042B	12/15/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	560 J
	12/15/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	537
EPSP01CL	08/11/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	450
	08/11/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	480
DUP0811041B	08/11/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	584
	05/28/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	480
DUP0528041B	05/28/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	480
	05/28/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	480
EPSP01CL	03/15/04	< 100	< 1	< 5	79	< 2	< 1	15,000	30	< 10	< 1	NA	NA	230	< 3	83,000	68	NA	< 20	< 500	< 5	< 1	31,000	< 1	< 10	< 20	470
	12/05/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	520
DUP1205031B	12/05/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	500
	12/05/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	490
EPSP01CL	08/14/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	480
	06/06/03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	490
	03/13/03	< 100	< 1	< 1	79	< 1	< 1	15,000	29	< 1	< 1	NA	NA	< 100	< 3	81,000	23	NA	5.3	< 500	< 5	< 1 UJ	34,000 J-	< 1	< 10	< 10	440
	12/03/02	< 100	1.8	< 1	84	< 1	< 1	15,000	27 J	< 1	< 1	NA	NA	< 100	< 3	77,000	23	NA	3	< 500	< 5	< 1 UJ	30,000	< 1	< 10	< 10	570
	08/27/02	< 100	< 1	< 1	430	< 1	< 1	15,000	32 J	< 1	< 1	NA	NA	< 100	< 3	80,000	22	NA	3.3	< 500	< 5	< 1 UJ	32,000	< 1	< 10	79	400
	06/05/02	< 100	< 1	< 1	510	< 1	< 1	15,000	31	< 1	< 1	NA	NA	< 100	< 3	88,000	20	NA	4.7	510	< 5	< 1	35,000	< 1	< 10	78	420
	03/11/02	< 100	1.7	< 1	580	< 1	< 1	15,000	26	< 1	< 1	NA	NA	< 100	< 3	90,000	28	NA	10	520	< 5	< 1 UJ	36,000	< 1	< 10	78	450
	11/28/01	< 100	1.1	< 1	460	< 1	< 1	16,000	40 J	< 1	< 1	NA	NA	< 100	< 3	88,000	25	NA	4.2	810	< 5	< 1	35,000	< 1	< 10	77	460
	08/29/01	< 100	< 1	< 1	350 J+	< 1	< 1	15,000	36	< 1	7.4	NA	NA	120	< 3	91,000	28	NA	4.5	< 500	< 5	< 1 UJ	36,000	< 1	< 10	72	470
	05/18/01	< 100	1.7	< 1	280	< 1	< 1	< 500	36 J	< 1	1	NA	NA	170	< 3	83,000	25										

Table A-6-3
Results of Total and Dissolved Metals Analyses
Fill Site 1, Landfill 2, and El Polin Spring
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Hexavalent Chromium	Hexavalent Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7196	SW7199	SW6010/ SW6010B/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6010B/ SW6020	SW7470	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	E160.1	
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
LF01GW01 DUP1209022D LF01GW01CL	12/09/02	< 100	< 1	< 1	120	< 1	< 1	36,000	1.4	< 1	1.2	NA	NA	140	< 3	34,000	92 J	NA	12	8,900	< 5	< 1 UJ	29,000	< 1	< 10	13 J+	350
	12/09/02	< 100	< 1	< 1	120	< 1	< 1	37,000	1.7	< 1	< 1	NA	NA	120	< 3	35,000	67 J	NA	11	8,600	< 5	< 1 UJ	30,000	< 1	< 10	< 10	360
	12/09/02	< 100	< 1	< 2 U	130	< 1	< 1	42,000 J+	< 5	< 1	6.4	NA	NA	< 150	< 3	37,000	58	NA	11	9,800	< 5	< 1	34,000	< 1	< 10	< 10	320
DUP0311022A LF01GW01CL	08/27/02	< 100	< 1	< 1	390	< 1	< 1	39,000	2.5 J	< 1	< 1	NA	NA	< 100	< 3	35,000	22	NA	9.9	8,100	< 5	< 1 UJ	31,000	< 1	< 10	100	320
	05/29/02	< 100	< 1	< 1	510	< 1	< 1	39,000	< 1	< 1	< 1	NA	NA	< 100	< 3	39,000	45	NA	7.8	3,900	< 5	< 1 UJ	36,000	< 1	< 10	210	560
	03/11/02	< 100	< 1	< 1	280	< 1	< 1	45,000	< 1	< 1	1	NA	NA	110	< 3	54,000	< 10	NA	7.1	3,600	< 5	< 1 UJ	35,000	< 1	< 10	49	390
	03/11/02	< 100	< 1	< 1	250	< 1	< 1	45,000	< 1	< 1	< 1	NA	NA	110	< 3	54,000	< 10	NA	6.7	3,300	< 5	< 1 UJ	35,000	< 1	< 10	29	400
	03/11/02	< 200	0.34 J	< 2	240	< 2	0.13 J	42,000	< 2	0.62 J	4.2 B	NA	NA	18 J	< 5	48,000	9.7	NA	6.9	3,600	7.4	< 1	33,000	< 1	< 5	34 B	450 J-
	11/27/01	< 100	1.5	< 1	520	< 1	< 1	35,000	1.9	< 1	1.3	NA	NA	< 100	< 3	32,000	140	NA	13	8,500	< 5	< 1	32,000	< 1	< 10	170	340
	08/28/01	< 100	1.3	< 1	620	< 1	< 1	37,000	< 1	< 1	2.6	NA	NA	180	< 3	33,000	150	NA	14	7,900	< 5	< 1	35,000	< 1	< 10	170	320
	05/16/01	< 100	< 1	< 1	210	< 1	< 1	< 10,000 R	1.1 J	< 1	1.1	NA	NA	350	< 3	54,000	< 10	NA	7	4,000 J	< 5	< 1	36,000	< 1	< 10	33	420
	05/10/99	< 100	< 5	< 5	137	< 4	< 2	46,800	< 10	< 10	< 10	NA	NA	< 100	< 3	40,800	< 10	NA	< 20	7,320	< 5	< 2	30,100	< 2	< 10	< 20	418
	02/08/99	< 100	< 5	< 5	151	< 4	< 2	46,400	< 10	< 10	< 10	NA	NA	< 100	< 3	39,800	16.6	NA	< 20	7,520	< 5	< 2	27,100	< 2	< 10	< 20	421
	11/09/98	< 100	< 5	< 5	169	< 4	< 2	48,300	< 10	< 10	20.3	NA	NA	< 100	< 3	38,900	14.5	< 0.2	< 20	9,850	< 5	< 2	42,600	< 2	< 10	87.7	412
	08/11/98	< 100	< 10	< 5	140	< 2	< 2	44,400	< 5	< 5	< 10	NA	NA	< 50	< 5	40,100	8.7	< 0.5	12.1	7,650	< 10	< 10	32,200	< 10	< 10	11.9	417
	04/09/98	< 100	< 5	< 5	120	< 4	< 2	45,000	< 10	< 10	11	NA	NA	< 100	< 3	50,000	17	< 0.2	30	5,800	< 5	< 2	32,000	< 2	< 10	40	410
	01/05/98	< 100	< 5	< 5	132	< 4	< 2	48,200	< 10	< 10	< 10	< 10	1.3	< 100	< 3	43,700	< 10	< 0.2	< 20	7,800	< 5	< 2	33,600	< 2	< 10	< 20	466
	11/05/97	< 100	< 5	< 5	150	< 4	< 2	40,000	< 10	< 10	< 10	NA	NA	< 100	< 3	38,000	< 10	< 0.2	< 20	9,200	< 5	< 2	32,000	< 2	< 10	< 20	490
	08/06/97	< 100	< 5	< 5	150	< 4	< 2	46,000	< 10	< 10	< 10	NA	NA	< 100	< 3	40,000	< 10	< 0.2	< 20	8,800	< 5	< 2	31,000	< 2	< 10	< 20	400
	05/07/97	< 100	< 5	< 5	130	< 4	< 2	42,000	< 10	< 10	< 10	NA	NA	< 100	< 3	40,000	< 10	< 0.2	< 20	6,100	< 5	< 2	28,000	< 2	< 10	< 20	450
	02/06/97	< 100	< 5	< 5	140	< 4	< 2	53,000	< 10	< 10	< 10	NA	NA	< 100	3.6	48,000	< 10	< 0.2	< 20	8,000	< 5	< 2	31,000	< 2	< 10	20	400 (J29)
	10/29/96	< 100 U	< 5 U	5.8	150	< 4 U	< 2 U	48,000	< 10 U	< 10 U	< 10 U	NA	NA	< 100 U	< 3 U	40,000	33	< 0.2 U	< 20 U	9,300	< 5 U	< 2 U	32,000	< 2 U	< 10 U	< 20 U	NS
08/01/96	< 100 U	< 5 U	< 5 U	160	< 2 U	< 0.5 U	50,000	< 1 U	< 10 U	8	NA	NA	< 100 U	< 1 U	44,000	33	< 0.2 U	12	9,300	< 5 U	< 0.5 U	36,000	< 2 U	< 10 U	< 20 U	NS	
05/23/96	< 100 U	< 5 U	< 5 U	150	< 2 U	< 0.5 U	55,000	< 1 U	< 10 U	5	NA	NA	< 100 U	< 1 U	51,000	13	< 0.2 U	8	7,200	< 5 U	< 0.5 U	35,000	< 2 U	< 10 U	< 20 U	NS	
03/08/96	< 100 U	< 5 U	< 5 U	160	< 2 U	< 0.5 U	57,600	< 1 U	< 10 U	< 1 U	NA	NA	< 100 U	< 1 U	51,500	13	< 0.2 U	17	8,570	< 5 U	< 0.5 U	30,000	< 2 U	< 10 U	< 20 U	NS	
12/15/95	< 100	< 5	< 5	150	< 2	< 0.5	47,100	< 1	< 10	< 1	NA	NA	< 100	< 1	40,700	17	< 0.2	10	9,610	< 5	< 0.5	33,000	< 2	< 10	< 20	NS	
09/13/95	< 200 U	< 60 U	< 5 U	150	< 2 U	< 2 U	43,000	< 10 U	< 20 U	< 10 U	NA	NA	< 100 U	< 3 U	39,000	29	< 0.2 U	< 20 U	8,600	10	< 5 U	36,000	< 5 U	< 10 U	45	NS	
11/08/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	494
08/26/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Table A-6-3
Results of Total and Dissolved Metals Analyses
Fill Site 1, Landfill 2, and El Polin Spring
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Hexavalent Chromium	Hexavalent Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7196	SW7199	SW6010/ SW6010B/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6010B/ SW6020	SW7470	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	E160.1
LF01GW02		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
	08/05/97	< 100	< 5	< 5	53	< 4	< 2	32,000	20	< 10	< 10	NA	NA	< 100	< 3	63,000	< 10	< 0.2	< 20	5,000	< 5	< 2	40,000	< 2	< 10	< 20	470
	05/06/97	< 100	< 5	< 5	50	< 4	< 2	24,000	25	< 10	< 10	NA	NA	< 100	< 3	63,000	< 10	< 0.2	< 20	< 5,000	< 5	< 2	45,000	< 2	< 10	20	540
	02/04/97	< 100	< 5	< 5	46	< 4	< 2	25,000	24	< 10	< 10	NA	NA	< 100	< 3	62,000	< 10	< 0.2	< 20	< 5,000	< 5	< 2	50,000	< 2	< 10	< 20	510 (J29)
	10/29/96	< 100 U	< 5 U	< 5 U	57	< 4 U	< 2 U	30,000	26	< 10 U	< 10 U	NA	NA	< 100 U	< 3 U	72,000	< 10 U	< 0.2 U	< 20 U	< 5,000 U	< 5 U	< 2 U	53,000	< 2 U	< 10 U	< 20 U	NS
	08/01/96	< 100 U	< 5 U	< 5 U	59	< 2 U	< 0.5 U	32,000	19	< 10 U	4	NA	NA	< 100 U	< 1 U	81,000	< 10 U	< 0.2 U	11	< 5,000 U	< 5 U	< 0.5 U	54,000	< 2 U	< 10 U	< 20 U	NS
	05/23/96	< 100 U	< 5 U	< 5 U	60	< 2 U	< 0.5 U	32,000	21	< 10 U	4	NA	NA	< 100 U	< 1 U	83,000	< 10 U	< 0.2 U	9	< 5,000 U	< 5 U	< 0.5 U	50,000	< 2 U	< 10 U	< 20 U	NS
	03/08/96	< 100 U	< 5 U	< 5 U	55	< 2 U	< 0.5 U	36,100	21	< 10 U	< 1 U	NA	NA	< 100 U	1	87,000	< 10 U	< 0.2 U	10	< 5,000 U	< 5 U	< 0.5 U	41,000	< 2 U	< 10 U	< 20 U	NS
	12/15/95	< 100	< 5	< 5	56	< 2	2.9	37,300	14	< 10	1	NA	NA	< 100	< 1	70,100	< 10	< 0.2	11	< 5,000	< 5	< 0.5	43,000	< 2	< 10	< 20	NS
09/13/95	< 200 U	< 60 U	< 5 U	45	< 2 U	< 2 U	28,000	13	< 20 U	< 10 U	NA	NA	< 100 U	< 3 U	63,000	< 10 U	< 0.2 U	< 20 U	2,500	7.8	< 5 U	43,000	< 5 U	< 10 U	26	NS	
LF01GW03	03/20/06	< 100	< 1	< 5	130	< 2	< 1	20,000	43	< 10	< 1	NA	NA	< 100	< 3	84,000	< 10	NA	< 20	2,200	< 5	< 1	58,000	< 1	< 10	< 20	590
	03/15/05	< 100	< 1	< 5	150	< 2	< 1	21,000	31	< 10	< 1	NA	NA	< 100	< 3	89,000	< 10	NA	< 20	750	< 5	< 1	58,000	< 1	< 10	< 20	570
	03/17/04	< 100	< 1	< 5	130	< 2	< 1	26,000	33	< 10	< 1	NA	NA	< 100	< 3	100,000	< 10	NA	< 20	880	< 5	< 1 UJ	65,000	< 1	< 10	< 20	650
	03/13/03	< 100	< 1	2.2	140	< 1	< 1	24,000	33	< 1	< 1	NA	NA	< 100	< 3	95,000	< 10	NA	2.6	2,500	< 5	< 1 UJ	62,000 J-	< 1	< 10	< 10	550
	12/03/02	< 100	< 1	2.6	120	< 1	< 1	21,000	47 J	< 1	< 1	NA	NA	< 100	< 3	81,000	< 10	NA	2.2	670	< 5	< 1 UJ	56,000	< 1	< 10	< 10	530
	08/27/02	< 100	< 1	1.9	490	< 1	< 1	20,000	53 J	< 1	< 1	NA	NA	< 100	< 3	87,000	< 10	NA	2.7	920	< 5	< 1 UJ	58,000	< 1	< 10	120	500
	05/29/02	< 100	1	2.6	450	< 1	< 1	22,000	41	< 1	< 1	NA	NA	< 100	< 3	92,000	< 10	NA	1.5	1,400	< 5	< 1 UJ	64,000	< 1	< 10	110	650
	03/12/02	< 100	< 1	2.5	320	< 1	< 1	28,000	36	< 1	< 1	NA	NA	< 100	< 3	110,000	< 10	NA	2.9	2,200	< 5	< 1 UJ	70,000	< 1	< 10	23	590
	11/27/01	< 100	1.4	3.6	640	< 1	< 1	22,000	55 J	< 1	1.4	NA	NA	760	< 3	93,000	< 10	NA	2.8	1,300	< 5	< 1	65,000	< 1	< 10	120	550
	08/29/01	< 100	1.2	2.9	350 J+	< 1	< 1	21,000	50	< 1	1	NA	NA	< 100	< 3	94,000	< 10	NA	2.4	990	< 5	< 1 UJ	64,000	< 1	< 10	100	550
	05/17/01	< 100	1.4 J	3.3 J	570 J	< 1 UJ	< 1 UJ	27,000 J	47 J	< 1 UJ	1.4 J	NA	NA	< 100 UJ	< 3 UJ	120,000	< 10 UJ	NA	2.4 J	1,300 J	< 5 UJ	< 1 UJ	75,000	< 1 UJ	< 10 UJ	86 J	640
	05/10/99	< 100	< 5	< 5	113	< 4	< 2	23,900	45.5	< 10	< 10	NA	NA	< 100	< 3	83,500	< 10	NA	< 20	< 5,000	< 5	< 2	59,600	< 2	< 10	21.4	580
	02/08/99	< 100	< 5	< 5	123	< 4	< 2	24,000	42.6	< 10	< 10	NA	NA	< 100	< 3	85,300	< 10	NA	< 20	< 5,000	< 5	< 2	59,700	< 2	< 10	< 20	660
	11/09/98	< 100	< 5	< 5	131	< 4	< 2	26,100	43.3	< 10	12	NA	NA	122	6	88,400	< 10	< 0.2	< 20	< 5,000	< 5	4.9	66,500	< 12 (U1,U23)	< 10	26.5	3,790 (R23)
	08/11/98	< 100	< 5	< 5	120	< 4	< 2	23,000	42	< 10	< 10	NA	NA	< 100	3.2	87,000	< 10	< 0.2	< 20	< 5,000	< 5	< 2	60,000	< 2	< 10	< 20	560
	04/09/98	< 100	< 5	< 5	120	< 4	< 2	23,000	45	< 10	12	NA	NA	< 100	< 3	86,000	< 10	< 0.2	< 20	< 5,000	< 5	< 2	59,000	< 2	< 10	21	580
	01/05/98	< 100	< 5	< 5	97.7	< 4	< 2	21,800	47.1	< 10	< 10	45.0	38.9	< 100	< 3	81,400	< 10	< 0.2	< 20	< 5,000	< 5	< 2	54,600	< 2	< 10	161	601
	11/05/97	< 100	< 5	< 5	100	< 4	< 2	22,000	49	< 10	< 10	NA	NA	< 100	< 3	82,000	< 10	< 0.2	< 20	< 5,000	< 5	< 2	58,000	< 2	< 10	< 20	590
	08/06/97	< 100	< 5	< 5	110	< 4	< 2	24,000	46	< 10	< 10	NA	NA	< 100	< 3	82,000	< 10	< 0.2	< 20	< 5,000	< 5	< 2	53,000	< 2	< 10	< 20	520
	05/07/97	< 100	< 5	< 5	110	< 4	< 2	22,000	40	< 10	< 10	NA	NA	< 100	< 3	82,000	< 10	< 0.2	< 20	< 5,000	< 5	< 2	52,				

Table A-6-3
Results of Total and Dissolved Metals Analyses
Fill Site 1, Landfill 2, and El Polin Spring
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Hexavalent Chromium	Hexavalent Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7196	SW7199	SW6010/ SW6010B/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6010B/ SW6020	SW7470	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
LF01GW04 DUP0530021B LF01GW04CL	05/30/02	< 100	< 1	< 1	170	< 1	< 1	28,000	18	< 1	< 1	NA	NA	< 100	< 3	36,000	< 10	NA	4.5	18,000	< 5	< 1 UJ	57,000	< 1	< 10	40	450
	05/30/02	< 100	< 1	< 1	180	< 1	< 1	30,000	17	< 1	< 1	NA	NA	< 100	< 3	39,000	< 10	NA	4.3	16,000	< 5	< 1 UJ	56,000	< 1	< 10	71	440
	05/30/02	< 100	0.61 J	< 0.5	98 B	< 0.078	< 1 BJ,U	31,000	21 J+	0.4 J	1.7 BJ	NA	NA	< 100	< 5	39,000	< 5	NA	5.1 B	14,000	5.2	< 0.03	52,000	< 0.34	3.9 J	24	430 J-
DUP1127012A LF01GW04CL	03/12/02	< 100	< 1	< 1	280	< 1	< 1	34,000	15	< 1	1.2	NA	NA	< 100	< 3	15,000	< 10	NA	3.6	33,000	< 5	< 1 UJ	83,000	< 1	< 10	< 10	330
	11/27/01	< 100	< 1	< 1	260	< 1	< 1	40,000	23 J	< 1	1	NA	NA	< 100	< 3	53,000	< 10	NA	5.2	900	< 5	< 1	44,000	< 1	< 10	74	450
	11/27/01	< 100	< 1	< 1	310	< 1	< 1	40,000	24 J	< 1	1.2	NA	NA	< 100	< 3	53,000	< 10	NA	5.4	1,200	< 5	< 1	48,000	< 1	< 10	110	470
	11/27/01	< 200	0.26 J	< 2.0	310	< 1	< 1	36,000	21	0.19 J	1.2 BJ	NA	NA	< 200	< 200	48,000	< 5	NA	4	1,100	< 5	< 1	40,000	< 1	5.2	60 B	480
	08/29/01	< 100	1.7	< 1	690 J+	< 1	< 1	38,000	22	< 1	1.6	NA	NA	100	< 3	56,000	< 10	NA	4.7	< 500	< 5	< 1 UJ	50,000	< 1	< 10	180	450
	05/17/01	< 100	1.8 J	< 1 UJ	480 J	< 1 UJ	< 1 UJ	40,000 J	21 J	< 1 UJ	< 1 UJ	NA	NA	110 J	< 3 UJ	59,000	< 10 UJ	NA	4.5 J	1,100 J	< 5 UJ	< 1 UJ	45,000	< 1 UJ	< 10 UJ	200 J	520
	05/11/99	< 100	< 5	< 5	37.1	< 4	< 2	34,900	19.8	< 10	< 10	NA	NA	< 100	< 3	45,500	< 10	NA	< 20	< 5,000	< 5	< 2	36,000	< 2	< 10	< 20	484
	02/10/99	< 100	< 5	< 5	38.2	< 4	< 2	36,600	22.2	< 10	11.8	NA	NA	< 100	4.5	46,600	< 10	NA	< 20	< 5,000	< 5	< 2	36,400	< 2	< 10	20.3	370
	11/10/98	< 100	< 5	< 5	34.4	< 4	< 2	32,800	19.1	< 10	43.1	NA	NA	< 100	< 3	43,500	17.8	< 0.2	< 20	< 5,000	< 5	< 2	33,800	< 2	< 10	44	455
	08/12/98	< 100	< 5	< 5	34.4	< 4	< 2	33,700	21.9	< 10	< 10	NA	NA	< 100	< 3	45,000	< 10	< 0.2	< 20	< 5,000	< 5	< 2	34,900	< 2	< 10	< 20	393
	04/10/98	< 100	< 5	< 5	36	< 4	< 2	35,000	21	< 10	< 10	NA	NA	< 100	< 3	48,000	< 10	< 0.2	< 20	< 5,000	< 5	< 2	34,000	< 2	< 10	< 20	400
	01/06/98	< 100	< 5	< 5	31.8	< 4	< 2	35,200	22.9	< 10	< 10	18	18.9	< 100	< 3	45,600	< 10	< 0.2	< 20	< 5,000	< 5	< 2	34,300	< 2	< 10	< 20	441
	11/06/97	< 100	< 5	< 5	33	< 4	< 2	34,000	20	< 10	< 10	NA	NA	< 100	< 3	49,000	< 10	< 0.2	< 20	< 5,000	< 5	< 2	36,000	< 2	< 10	< 20	490
	08/07/97	< 100	< 5	< 5	36	< 4	< 2	37,000	19	< 10	< 10	NA	NA	< 100	< 3	47,000	< 10	< 0.2	< 20	< 5,000	< 5	< 2	34,000	< 2	< 10	< 20	410
	05/08/97	< 100	< 5	< 5	31	< 4	< 2	34,000	17	< 10	< 10	NA	NA	< 100	< 3	45,000	< 10	< 0.2	< 20	< 5,000	< 5	< 2	31,000	< 2	< 10	< 20	480
	02/05/97	< 100	< 5	< 5	27	< 4	< 2	29,000	17	< 10	11	NA	NA	< 100	3.5	39,000	< 10	< 0.2	< 20	< 5,000	< 5	< 2	34,000	< 2	< 10	37	380 (J29)
	10/30/96	< 100 U	< 5 U	< 5 U	29	< 4 U	< 2 U	35,000	19	< 10 U	< 10 U	NA	NA	< 100 U	< 3 U	45,000	< 10 U	< 0.2 U	< 20 U	< 5,000 U	< 5 U	< 2 U	33,000	< 2 U	< 10 U	< 20 U	NS
	08/05/96	< 100 U	< 5 U	< 5 U	27	< 2 U	< 0.5 U	35,000	18	< 10 U	6	NA	NA	< 100 U	< 1 U	43,000	< 10 U	< 0.2 U	7	< 5,000 U	< 5 U	< 0.5 U	35,000	< 2 U	< 10 U	< 20 U	NS
	05/21/96	< 100 U	< 5 U	< 5 U	27	< 2 U	< 0.5 U	36,000	16	< 10 U	2	NA	NA	< 100 U	< 1 U	46,000	< 10 U	< 0.2 U	< 5 U	< 5,000 U	< 5 U	< 0.5 U	36,000	< 2 U	< 10 U	< 20 U	NS
	03/11/96	510	5	< 5 U	39	< 2 U	< 0.5 U	37,400	24	< 10 U	< 1 U	NA	NA	1300	2	49,600	25	< 0.2 U	10	< 5,000 U	< 5 U	< 0.5 U	35,000	< 2 U	< 10 U	< 20 U	NS
	12/18/95	< 100	< 5	< 5	31	< 2	< 0.5	38,200	20	< 10	< 1	NA	NA	< 100	< 1	50,100	< 10	< 0.2	6	< 5,000	< 5	< 0.5	44,000	< 2	< 10	< 20	NS
	09/14/95	< 200 U	< 60 U	< 5 U	35	< 2 U	< 2 U	33,000	17	< 20 U	< 10 U	NA	NA	110	< 3 U	44,000	27	< 0.2 U	< 20 U	1,500	5.9	< 5 U	43,000	< 5 U	< 10 U	24	NS
	11/08/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	434
	09/10/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	502
LF01GW05	03/20/06	< 100	< 1	< 5	78	< 2	< 1	32,000	< 10	< 10	< 1	NA	NA	< 100	< 3	51,000	< 10	NA	< 20	< 500	< 5	< 1	37,000	< 1	< 10	< 20	390
	03/15/05	< 100	< 1	< 5	79	< 2	< 1	30,000	< 10	< 10	< 1	NA	NA	< 100	< 3	51,000	< 10	NA	< 20	< 500	< 5	< 1	37,000	< 1	< 10	< 20	400
	03/16/04	< 100	< 1	< 5	130 J-	< 2	< 1	38,000	< 10	< 10	2	NA	NA	< 100	< 3	47,000	< 10	NA	< 20	1,000	< 5	< 1	40,000	< 1	< 10	< 20	330
	03/12/03	< 100	< 1	< 1	83	< 1	< 1	33,000	2.3	< 1	< 1	NA	NA	< 100 UJ	< 3	56,000	11	NA	18	< 500	< 5	< 1 UJ	40,000	< 1	< 10	< 10	400
	12/03/02	< 100	< 1	< 1	84	< 1	< 1	34,000	3.2 J	< 1	< 1	NA	NA	< 100	< 3	51,000	< 10	NA	17	< 500	< 5	< 1 UJ	36,000	< 1	< 10	< 10	360
	08/27/02	< 100	< 1	< 1	420	< 1	< 1	36,000	5.2 J	< 1	< 1	NA	NA	< 100	< 3	56,000	13	NA	17	< 500	< 5	< 1 UJ	41,000	< 1	< 10	140	310
	05/29/02	< 100	< 1	< 1	410	< 1	1	35,000	1.1	< 1	< 1	NA	NA	< 100	< 3	57,000	15	NA	18	< 500	< 5	< 1 UJ	42,000	< 1	< 10	170	430
	03/11/02	100	< 1	< 1	370	< 1	41	38,000	2.1	< 1	4	NA	NA	210	< 3	13,000	< 10	NA	13	8,500	< 5	< 1 UJ	17,000	< 1	< 10	71	210
	11/27/01	< 100	1.3	< 1	510	< 1	1.4	36,000	4.5	< 1	1.7	NA	NA	< 100	< 3	58,000	16	NA	19	1,200	< 5	< 1	47,000	< 1	< 10	210	410
	08/28/01	< 100	2.8	< 1	770	< 1	< 1	35,000	1.6	< 1	3.8	NA	NA	180	< 3	58,000	19	NA	20	960	< 5	< 1	45,000	< 1	< 10	170	400
	05/16/01	< 100	1.2	< 1	550	< 1	< 1	< 500 R	1.5 J	< 1	< 1	NA	NA	1,500	< 3	56,000	63	NA	14	790 J	< 5	< 1	44,000	< 1	< 10	330	480
	05/13/99	< 100	< 5	< 5	78.5	< 4	< 2	34,500	< 10	< 10	< 10	NA	NA	< 100	< 3	54,400	15.8	NA	< 20	< 5,000	< 5	< 2	39,300	< 2	< 10	< 20	486
	02/11/99	< 100	< 5	< 5	84.9	< 4	< 2	36,200	< 10	< 10	< 10	NA	NA	< 100	< 3	54,500	13.5	NA	< 20	< 5,000	< 5	< 2	39,000	< 2	< 10	24.6	700
	11/12/98	< 100	< 5	< 5	74.6	< 4	< 2	33,000	< 10	< 10	< 10	NA	NA	< 100	< 3	50,900	15.9	< 0.2	< 20	< 5,000	< 5	< 2	32,900	< 2	< 10	< 20	485
	08/11/98	< 100	< 10	< 5	76.6	< 2	< 2	35,500	5.6	< 5	< 10	NA	NA	< 50	< 5	55,500	15.8	< 0.5	19.4	405	< 10	< 10	40,300	< 10	< 10	17.6	482
	04/09/98	< 100	< 5	< 5	90	< 4	14	33,000	< 10	< 10	27	NA	NA	< 100	< 3	49,000	13	< 0.2	< 20	< 5,000	< 5	< 2	35,000	< 2	< 10	86	400

Table A-6-3
Results of Total and Dissolved Metals Analyses
Fill Site 1, Landfill 2, and El Polin Spring
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Hexavalent Chromium	Hexavalent Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7196	SW7199	SW6010/ SW6010B/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6010B/ SW6020	SW7470	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	E160.1	
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
LF01GW05	12/19/95	< 100	< 5	< 5	62	< 2	< 0.5	30,700	12	< 10	1	NA	NA	< 100	< 1	48,300	< 10	< 0.2	14	< 5,000	< 5	< 0.5	40,000	< 2	< 10	< 20	NS
	09/15/95	< 200 U	< 60 U	< 5 U	58	< 2 U	< 2 U	24,000	10	< 20 U	< 10 U	NA	NA	< 100 U	< 3 U	40,000	< 10 U	< 0.2 U	< 20 U	< 500 U	7.2	< 5 U	39,000	< 5 U	< 10 U	27	NS
	11/08/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	464
	09/10/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	427
LF01GW06	03/20/06	< 100	< 1	< 5	22	< 2	3.3	19,000	< 10	< 10	4.2	NA	NA	< 100	< 3	3,100	< 10	NA	< 20	3,400	< 5	< 1	6,200	< 1	< 10	460	140
	03/15/05	< 100	< 1	< 5	24	< 2	6.6	28,000	< 10	< 10	6.2	NA	NA	< 100	< 3	4,700	< 10	NA	< 20	5,100	< 5	< 1	8,800	< 1	< 10	790	150
	03/17/04	< 100	< 1	< 5	28	< 2	5.7	30,000	11	< 10	2.6	NA	NA	< 100	< 3	28,000	< 10	NA	< 20	3,900	< 5	< 1 UJ	26,000	< 1	< 10	620	280
	03/13/03	< 100	1.4	< 1	31	< 1	23	31,000	5	< 1	6.4	NA	NA	110	< 3	11,000	< 10	NA	5.4	33,000	< 5	< 1 UJ	37,000 J-	< 1	< 10	1,800	190
DUP0827022A	12/03/02	< 100	1.1	< 1	36	< 1	< 1	31,000	18 J	< 1	< 1	NA	NA	< 100	< 3	42,000	< 10	NA	5.1	1,200	< 5	< 1 UJ	30,000	< 1	< 10	< 10	350
	08/27/02	< 100	< 1	< 1	260	< 1	< 1	30,000	21 J	< 1	< 1	NA	NA	< 100	< 3	43,000	< 10	NA	5	1,600	< 5	< 1 UJ	32,000	< 1	< 10	67	400
	08/27/02	< 100	< 1	< 1	480	< 1	< 1	32,000	21 J	< 1	< 1	NA	NA	< 100	< 3	46,000	< 10	NA	5.1	1,500	< 5	< 1 UJ	34,000	< 1	< 10	230	350
	05/30/02	< 100	< 1	< 1	160	< 1	< 1	34,000	19	< 1	< 1	NA	NA	< 100	< 3	48,000	< 10	NA	4.7	2,400	< 5	< 1 UJ	37,000	< 1	< 10	79	410
DUP0530021C	05/30/02	< 100	< 1	< 1	110	< 1	1	34,000	19	< 1	< 1	NA	NA	< 100	< 3	47,000	< 10	NA	5	2,500	< 5	< 1 UJ	37,000	< 1	< 10	48	410
	03/12/02	140	1.1	< 1	460	< 1	49	38,000	12	< 1	3.4	NA	NA	220	< 3	31,000	< 10	NA	5.7	7,200	< 5	< 1 UJ	30,000	< 1	< 10	1,600	260
	11/27/01	< 100	1.4	< 1	470	< 1	1.2	34,000	23 J	< 1	1.5	NA	NA	< 100	< 3	48,000	< 10	NA	6.3	4,700	< 5	< 1	42,000	< 1	< 10	200	410
	08/28/01	< 100	1.6	< 1	770	< 1	< 1	35,000	20	< 1	3.3	NA	NA	160	< 3	50,000	< 10	NA	6.4	4,200	< 5	< 1	42,000	< 1	< 10	200	390
	05/17/01	< 100	1.6 J	< 1 UJ	440 J	< 1 UJ	4.7 J	34,000 J	21 J	< 1 UJ	< 1 UJ	NA	NA	< 100 UJ	< 3 UJ	51,000	< 10 UJ	NA	5.8 J	2,800 J	< 5 UJ	< 1 UJ	37,000	< 1 UJ	< 10 UJ	680 J	480
	05/12/99	< 100	< 5	< 5	41.5	< 4	2.3	32,200	18.6	< 10	< 10	NA	NA	< 100	< 3	42,500	< 10	< 0.2	< 20	< 5,000	< 5	< 2	29,000	< 2	< 10	52 (J33)	429
	02/10/99	< 100	< 5	< 5	32.2	< 4	64.7	35,700	< 10	< 10	16.2	NA	NA	113	7.2 (J33)	8,310 (J33)	< 10	NA	< 20	8,650	< 5	< 2	14,200	< 2	< 10	1,610 (J33)	130 (J33)
	11/11/98	< 100	< 5	< 5	44	< 4	< 2	32,100	22.4	< 10	13.8	NA	NA	115	5.6	43,400	< 10	< 0.2	< 20	< 5,000	< 5	< 2	29,800	3.2	< 10	40.5	432
	08/13/98	< 100	< 5	< 5	42	< 4	< 2	32,000	18	< 10	< 10	NA	NA	< 100	< 3	44,000	< 10	< 0.2	< 20	< 5,000	< 5	< 2	32,000	< 2	< 10	33	450
	04/13/98	< 100	< 5	< 5	44	< 4	< 2	33,000	19	< 10	13	NA	NA	< 100	< 3	47,000	< 10	< 0.2	< 20	< 5,000	< 5	< 2	33,000	< 2	< 10	36	390
	01/06/98	< 100	< 5	< 5	39.9	< 4	4.9	33,500	17.7	< 10	< 10	7.9	10.7	< 100	< 3	43,900	< 10	< 0.2	< 20	< 5,000	< 5	< 2	32,900	< 2	< 10	162	405
	11/05/97	< 100	< 5	< 5	42	< 4	< 2	30,000	18	< 10	< 10	NA	NA	< 100	< 3	44,000	< 10	< 0.2	< 20	< 5,000	< 5	< 2	33,000	< 2	< 10	< 20	440
	08/06/97	< 100	< 5	< 5	44	< 4	< 2	33,000	19	< 10	< 10	NA	NA	< 100	< 3	45,000	< 10	< 0.2	< 20	< 5,000	< 5	< 2	32,000	< 2	< 10	< 20	390
	05/07/97	< 100	< 5	< 5	43	< 4	< 2	31,000 (J9)	17	< 10	< 10	NA	NA	< 100	< 3	43,000	< 10	< 0.2	< 20	< 5,000	< 5	< 2	31,000 (J9)	< 2	< 10	< 20	450
	02/05/97	< 100	< 5	< 5	41	< 4	< 2	29,000	18	< 10	31	NA	NA	< 100	21	41,000	15	< 0.2	< 20	< 5,000	< 5	< 2	33,000	< 2	< 10	96	370 (J29)
	10/30/96	< 100 U	< 5 U	< 5 U	44	< 4 U	< 2 U	33,000	18	< 10 U	< 10 U	NA	NA	< 100 U	< 3 U	44,000	< 10 U	< 0.2 U	< 20 U	< 5,000 U	< 5 U	< 2 U	32,000	< 2 U	< 10 U	< 20 U	NS
	08/05/96	< 100 U	< 5 U	< 5 U	45	< 2 U	< 0.5 U	32,000	18	< 10 U	7	NA	NA	< 100 U	< 1 U	44,000	< 10 U	< 0.2 U	9	< 5,000 U	< 5 U	< 0.5 U	32,000	< 2 U	<		

Table A-6-3
Results of Total and Dissolved Metals Analyses
Fill Site 1, Landfill 2, and El Polin Spring
 Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Hexavalent Chromium	Hexavalent Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7196	SW7199	SW6010/ SW6010B/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6010B/ SW6020	SW7470	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
LF01GW07	08/07/97	< 100	< 5	< 5	42	< 4	< 2	37,000	25	< 10	< 10	NA	NA	< 100	< 3	57,000	< 10	< 0.2	< 20	< 5,000	< 5	< 2	39,000	< 2	< 10	< 20	500
	05/08/97	< 100	< 5	< 5	40	< 4	< 2	33,000	22	< 10	< 10	NA	NA	< 100	< 3	53,000	< 10	< 0.2	< 20	< 5,000	< 5	< 2	36,000	< 2	< 10	< 20	540
	02/06/97	< 100	< 5	< 5	33	< 4	< 2	32,000	14	< 10	< 10	NA	NA	< 100	< 3	34,000	< 10	< 0.2	< 20	< 5,000	< 5	< 2	27,000	< 2	< 10	43	330 (J29)
	10/31/96	< 100 U	< 5 U	5	43	< 4 U	< 2 U	37,000	26	< 10 U	< 10 U	NA	NA	< 100 U	< 3 U	57,000	< 10 U	< 0.2 U	< 20 U	< 5,000 U	< 5 U	< 2 U	38,000	< 2 U	< 10 U	< 20 U	NS
	08/06/96	< 100 U	< 5 U	< 5 U	39	< 2 U	< 0.5 U	36,000	25	< 10 U	< 8	NA	NA	< 100 U	< 1 U	55,000	< 10 U	< 0.2 U	6	< 5,000 U	< 5 U	< 0.5 U	38,000	< 2 U	< 10 U	< 20 U	NS
	05/22/96	< 100 U	< 5 U	< 5 U	27	< 2 U	< 0.5 U	37,000	20	< 10 U	< 1 U	NA	NA	< 100 U	< 1 U	58,000	< 10 U	< 0.2 U	< 5 U	< 5,000 U	< 5 U	< 0.5 U	38,000	< 2 U	< 10 U	< 20 U	NS
	03/12/96	< 100 U	< 5 U	< 5 U	28	< 2 U	< 0.5 U	37,800	23	< 10 U	< 1 U	NA	NA	< 100 U	< 1 U	61,300	< 10 U	< 0.2 U	< 5 U	< 5,000 U	< 5 U	< 0.5 U	37,000	< 2 U	< 10 U	< 20 U	NS
	12/19/95	< 100	< 5	< 5	32	< 2	< 0.5	40,400	23	< 10	5	NA	NA	< 100	< 1	63,700	< 10	< 0.2	< 5	< 5,000	< 5	< 0.5	46,000	< 2	< 10	< 20	NS
	09/15/95	280	< 60 U	< 5 U	34	< 2 U	< 2 U	35,000	20	< 20 U	< 10 U	NA	NA	180	< 3 U	58,000	51	< 0.2 U	< 20 U	680	6.5	< 5 U	43,000	< 5 U	< 10 U	110	NS
LF02GW01	03/16/06	< 100 UJ	< 1	< 5	63	< 2	< 1	15,000	< 10	< 10	< 1	NA	NA	< 100	< 3	55,000	< 10	NA	< 20	540	< 5	< 1	28,000 J	< 1	< 10	< 20	450 J
	03/15/05	< 100	< 1	< 5	63	< 2	< 1	15,000	< 10	< 10	< 1	NA	NA	< 100	< 3	54,000	< 10	NA	< 20	< 500	< 5	< 1	28,000	< 1	< 10	< 20	360
	03/16/04	< 100	< 1	< 5	61 J-	< 2	< 1	17,000	< 10	< 10	3.8	NA	NA	< 100	< 3	58,000	< 10	NA	< 20	< 500	< 5	< 1	32,000	< 1	< 10	< 20	340
	03/13/03	< 100	< 1	< 1	58	< 1	< 1	15,000	8.3	< 1	< 1	NA	NA	< 100	< 3	49,000	< 10	NA	< 1	860	< 5	< 1 UJ	36,000 J-	< 1	< 10	81	350
	12/03/02	< 100	< 1	< 1	60	< 1	< 1	15,000	7.6 J	< 1	< 1	NA	NA	< 100	< 3	52,000	< 10	NA	< 1	< 500	< 5	< 1 UJ	27,000	< 1	< 10	< 10	330
	08/27/02	< 100	< 1	< 1	360	< 1	< 1	14,000	8.8 J	< 1	< 1	NA	NA	< 100	< 3	53,000	< 10	NA	< 1	550	< 5	< 1 UJ	28,000	< 1	< 10	94	350
	05/29/02	< 100	< 1	< 1	360	< 1	< 1	15,000	6.9	< 1	< 1	NA	NA	< 100	< 3	55,000	< 10	NA	< 1	< 500	< 5	< 1 UJ	29,000	< 1	< 10	100	310
	03/11/02	< 100	< 1	< 1	400	< 1	< 1	15,000	9.7	< 1	< 1	NA	NA	< 100	< 3	58,000	< 10	NA	< 1	520	< 5	< 1 UJ	31,000	< 1	< 10	98	340
	11/28/01	< 100	< 1	< 1	450	< 1	< 1	16,000	16 J	< 1	1.6	NA	NA	< 100	< 3	59,000	< 10	NA	1.1	760	< 5	< 1	31,000	< 1	< 10	85	310
	08/28/01	< 100	1.3	< 1	610	< 1	< 1	15,000	7.4	< 1	1.4	NA	NA	< 100	< 3	55,000	< 10	NA	< 1	510	< 5	< 1	31,000	< 1	< 10	110	340
	05/17/01	< 100	1.9 J	1.2 J	470 J	< 1 UJ	< 1 UJ	16,000 J	9 J	< 1 UJ	< 1 UJ	NA	NA	< 100 UJ	< 3 UJ	60,000	< 10 UJ	NA	< 1 UJ	600 J	< 5 UJ	< 1 UJ	31,000	< 1 UJ	< 10 UJ	160 J	350
	05/11/99	< 100	< 5	< 5	55.8	< 4	< 2	14,400	< 10	< 10	< 10	NA	NA	< 100	< 3	51,400	< 10	NA	< 20	< 5,000	< 5	< 2	26,600	< 2	< 10	< 20	334
	02/09/99	< 100	< 5	< 5	59.5	< 4	< 2	15,000	< 10	< 10	< 10	NA	NA	< 100	< 3	51,500	< 10	NA	< 20	< 5,000	< 5	< 2	26,600	< 2	< 10	< 20	681
	11/10/98	138	< 5	< 5	57.1	< 4	< 2	14,700	< 10	< 10	19.9	NA	NA	298	< 3	51,400	31.8	< 0.2	< 20	< 5,000	< 5	< 2	27,600	< 2	< 10	26.8	546
	08/12/98	< 100	< 5	< 5	56.4	< 4	< 2	14,000	< 10	< 10	10.5	NA	NA	< 100	< 3	50,200	< 10	< 0.2	< 20	< 5,000	< 5	< 2	27,100	< 2	< 10	< 20	357
	04/10/98	< 100	< 5	< 5	57	< 4	< 2	14,000	< 10	< 10	15 (J33)	NA	NA	< 100	< 3	55,000	< 10	< 0.2	< 20	< 5,000	< 5	< 2	27,000	< 2	< 10	< 20	330
	01/06/98	< 100	< 5	< 5	51.3	< 4	< 2	14,400	< 10	< 10	< 10	5	7.2	< 100	< 3	50,400	< 10	< 0.2	< 20	< 5,000	< 5	< 2	26,500	< 2	< 10	< 20	364
	11/03/97	< 100	< 5	< 5	55	< 4	< 2	15,000	14	< 10	< 10	NA	NA	< 100	< 3	53,000	< 10	< 0.2	< 20	< 5,000	< 5	< 2	28,000	< 2	< 10	< 20	370
	08/04/97	< 100	< 5	< 5	58	< 4	< 2	15,000	< 10	< 10	< 10	NA	NA	< 100	< 3	54,000	< 10	< 0.2	< 20	< 5,000	< 5	< 2	26,000	< 2	< 10	< 20	340
	05/05/97	< 10																									

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Results of Total and Dissolved Metals Analyses
Fill Site 1, Landfill 2, and El Polin Spring
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Hexavalent Chromium	Hexavalent Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7196	SW7199	SW6010/ SW6010B/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6010B/ SW6020	SW7470	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	E160.1
LF02GW02		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
	02/10/99	< 100	< 5	< 5	357	< 4	< 2	46,600	< 10	< 10	11.4	NA	NA	< 100	< 3	176,000	329	NA	< 20	< 5,000	< 5	< 2	69,100	< 2	< 10	22.5	914
	11/11/98	< 100	< 5	< 5	284	< 4	< 2	47,200	< 10	< 10	29.2	NA	NA	262	4.6	170,000	407	< 0.2	< 20	< 5,000	< 5	< 2	65,200	2.3	< 10	75	1,090
	08/13/98	< 100	< 5	< 5	360	< 4	< 2	44,000	< 10	< 10	10	NA	NA	< 100	< 3	170,000	400	< 0.2	< 20	< 5,000	< 5	< 2	67,000	< 2	< 10	< 20	860
	04/13/98	< 100	< 5	< 5	290	< 4	< 2	45,000	< 10	< 10	14	NA	NA	< 100	< 3	170,000	470	< 0.2	< 20	< 5,000	< 5	< 2	67,000	< 2	< 10	< 20	1,100
	01/07/98	< 100	< 5	< 5	341	< 4	< 2	50,700	< 10	< 10	< 10	< 10	< 0.5	110	< 3	186,000	406	< 0.2	< 20	< 5,000	< 5	< 2	71,200	< 2	< 10	< 20	1,200
	11/03/97	< 100	< 5	< 5	350	< 4	< 2	46,000	< 10	< 10	< 10	NA	NA	110	< 3	190,000	420	< 0.2	< 20	< 5,000	< 5	< 2	73,000	< 2	< 10	< 20	1,200
	08/04/97	< 100	< 5	< 5	320	< 4	< 2	56,000	< 10	< 10	< 10	NA	NA	390	< 3	210,000	490	< 0.2	< 20	< 5,000	< 5	< 2	75,000	< 2	< 10	< 20	1,100
	05/05/97	< 100	< 5	< 5	270	< 4	< 2	41,000	< 10	< 10	< 10	NA	NA	< 100	< 3	160,000	370	< 0.2	< 20	< 5,000	< 5	< 2	60,000	< 2	< 10	< 20	1,000
	02/03/97	< 100	< 5	< 5	250	< 4	< 2	39,000	< 10	< 10	< 10	NA	NA	< 100	< 3	150,000	330	< 0.2	< 20	< 5,000	< 5	< 2	61,000	< 2	< 10	< 20	1,100 (J29)
	10/28/96	< 100 U	< 5 U	11	320	< 4 U	< 2 U	42,000	< 10 U	< 10 U	< 10 U	NA	NA	< 100 U	< 3 U	160,000	310	< 0.2 U	< 20 U	< 5,000 U	< 5 U	< 2 U	63,000	< 2 U	< 10 U	< 20 U	NS
	07/31/96	< 100 U	< 5 U	< 5 U	280	< 2 U	< 0.5 U	43,000	< 1 U	< 10 U	6	NA	NA	< 100 U	< 1 U	160,000	340	< 0.2 U	< 5 U	< 5,000 U	< 5 U	< 0.5 U	68,000	< 2 U	< 10 U	< 20 U	NS
	05/22/96	< 100 U	< 5 U	< 5 U	270	< 2 U	< 0.5 U	36,000	< 1 U	< 10 U	5	NA	NA	< 100 U	< 1 U	140,000	230	< 0.2 U	< 5 U	< 5,000 U	< 5 U	< 0.5 U	58,000	< 2 U	< 10 U	< 20 U	NS
	03/04/96	< 100 U	< 5 U	< 5 U	251	< 2 U	< 0.5 U	36,900	1	< 10 U	< 1 U	NA	NA	< 100 U	< 1 U	143,000	348	< 0.2 U	< 5 U	< 5,000 U	< 5 U	< 0.5 U	56,000	< 2 U	< 10 U	< 20 U	NS
	12/11/95	< 100	< 5	< 5	54	< 2	1.9	37,700	12	< 10	3	NA	NA	< 100	< 1	65,300	< 10	< 0.2	< 5	5,480	< 5	< 0.5	45,000	< 2	< 10	27	NS
	09/06/95	< 200 U	< 60 U	< 5 U	220	< 2 U	< 2 U	27,000	< 10 U	< 20 U	< 10 U	NA	NA	< 100 U	< 3 U	110,000	180	< 0.2 U	< 20 U	< 500 U	< 5 U	< 5 U	52,000	< 5 U	< 10 U	< 20 U	NS
	11/09/94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
09/04/92	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	699
LF02GW04	03/20/06	190	< 1	< 5	76	< 2	< 1	48,000	< 10	< 10	6.2	NA	NA	300	< 3	14,000	24	NA	68	9,000	< 5	< 1	30,000	< 1	< 10	< 20	340
	03/15/05	150	< 1	< 5	87	< 2	< 1	52,000	< 10	< 10	4.2	NA	NA	440	< 3	21,000	14	NA	61	6,700	< 5	< 1	45,000	< 1	< 10	< 20	470
	03/16/04	< 100	< 1	< 5	110 J-	< 2	< 1	54,000	< 10	< 10	3	NA	NA	210	< 3	61,000	88	NA	29	6,700	< 5	< 1	73,000	< 1	< 10	< 20	540
	03/13/03	< 100	< 1	2.9	80	< 1	< 1	26,000	2.6	1.4	1.3	NA	NA	160	< 3	69,000	150	NA	16	3,200	< 5	< 1 UJ	59,000 J-	< 1	< 10	< 10	610
	12/03/02	< 100	< 1	4.4	88	< 1	< 1	19,000	< 1 J	1.8	< 1	NA	NA	< 100	< 3	80,000	78	NA	11	800	< 5	< 1 UJ	60,000	< 1	< 10	< 10	420
	08/27/02	< 100	< 1	4.3	400	< 1	< 1	21,000	3.7 J	< 1	< 1	NA	NA	< 100	< 3	88,000	130	NA	11	1,100	< 5	< 1 UJ	65,000	< 1	< 10	88	580
	05/29/02	< 100	1.1	3.4	440	< 1	< 1	23,000	< 1	1.1	1.7	NA	NA	130	< 3	84,000	170	NA	15	2,400	< 5	< 1 UJ	66,000	< 1	< 10	84	570
	03/11/02	< 100	1.2	2.4	460	< 1	< 1	23,000	3.6	1.2	1.9	NA	NA	200	< 3	55,000	78	NA	60	4,700	< 5	< 1 UJ	57,000	< 1	< 10	110	400
	11/28/01	< 100	1.4	4.7	710	< 1	< 1	22,000	11 J	3.1	1.1	NA	NA	< 100	< 3	98,000	110	NA	11	1,700	< 5	< 1	76,000	< 1	< 10	180	470
	08/28/01	< 100	2.6	4.3	790	< 1	< 1	19,000	< 1	1.2	2.9	NA	NA	< 100	< 3	87,000	51	NA	9.4	950	< 5	< 1	66,000	< 1	< 10	120	570
	05/15/01	< 100	< 1	4.4	110	< 1	< 1	< 500 R	1.7 J	2	< 1	NA	NA	180	< 3	< 10,000	90	NA	10	750 J	< 5	< 1	< 10,000	< 1	< 10	14	560
	05/12/99	< 100	< 5	< 5	113	< 4	< 2	21,600	< 10	< 10	< 10	NA	NA	< 100	< 3	83,800	131	< 0.2	< 20	< 5,000	< 5	< 2	64,800	< 2	< 10	< 20	619
	02/11/99	< 100	< 5	< 5	117	< 4	< 2	20,500	< 10	< 10	< 10	NA	NA	< 100	< 3	90,100	66.8	NA	< 20	< 5,000	< 5	< 2	64,100	< 2	< 10	< 20	931
	11/11/98	< 100	< 5	< 5	115	< 4	< 2	20,000	< 10	< 10	14.3	NA	NA	258	< 3	87,700	58.1	< 0.2	< 20	< 5,000	< 5	< 2	59,800	3.6	< 10	38.2	593
	08/13/98	< 100	< 5	5.6	120	< 4	< 2	21,000	< 10	< 10	< 10	NA	NA	< 100	< 3	93,000	52	< 0.2	< 20	< 5,000	< 5	< 2	67,000	< 2	< 10	<	

Table A-6-4
Results of TPH Analyses
Fill Site 1, Landfill 2, El Polin Spring, Buildings 10, 100, and 104
 Presidio of San Francisco, California

Well Name	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
EPSP01	05/13/99	< 50	81 (J25)	< 300
	02/10/99	< 50	< 50	< 300
	12/04/98	< 50	75 (J25)	< 300
	04/17/98	NA	< 50	< 300
	03/09/98	< 50	< 50	< 300
	01/08/98	< 50	2,300 (J25)	1,800 (J25)
	09/04/92	NA	< 50	NA
LF01GW01	02/08/99	NA	< 50	< 300
	10/29/96	< 50	< 50	< 300
	08/01/96	< 50	< 50	< 300
	05/23/96	< 50	< 50	< 300
	03/08/96	< 50	< 50	470 (J32)
	12/15/95	< 50	< 50	< 300
	09/13/95	< 50	< 50	< 1,300
	08/26/92	NA	< 50	NA
LF01GW02	02/09/99	NA	< 50	< 300
	10/29/96	< 50	< 50	< 300
	08/01/96	< 50	< 50	< 300
	05/23/96	< 50	< 50	< 300
	03/08/96	< 50	< 50	2,200 (J32)
	12/15/95	< 50	< 50	< 300
	09/13/95	< 50	< 50	< 1300
	08/26/92	NA	< 50	NA
LF01GW03	02/08/99	NA	< 50	< 300
	10/30/96	< 50	< 50	< 300
	08/05/96	< 50	< 50	< 300
	05/22/96	< 50	< 50	< 300
	03/08/96	< 50	< 50	3,030 (J32)
	12/15/95	< 50	< 50	< 300
	09/13/95	< 50	< 50	< 1,300
	09/10/92	< 50	NA	NA
LF01GW04	02/10/99	NA	59 (J25)	303 (J25)
	10/30/96	< 50	< 50	< 300
	08/05/96	< 50	< 50	< 300
	05/21/96	< 50	< 50	< 300
	03/11/96	< 50	< 50	586 (J32)
	12/18/95	< 50	< 50	< 300
	09/14/95	< 50	< 50	< 1,300
	09/10/92	< 50	NA	NA

Table A-6-4
Results of TPH Analyses
Fill Site 1, Landfill 2, El Polin Spring, Buildings 10, 100, and 104
 Presidio of San Francisco, California

Well Name	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
LF01GW05	02/11/99	NA	< 50	< 300
	10/31/96	< 50	< 50	< 300
	08/06/96	< 50	< 50	< 300
	05/22/96	< 50	< 50	< 300
	03/12/96	< 50	< 50	327 (J32)
	12/19/95	< 50	< 50	< 300
	09/15/95	< 50	< 50	< 1300
	09/10/92	< 50	NA	NA
LF01GW06	03/12/02	< 50	< 50	< 300
	05/17/01	< 50	< 50	< 300
	02/10/99	< 50	< 50	< 300
	01/06/98	< 50	< 50	< 300
	10/30/96	< 50	< 50	< 300
	08/05/96	< 50	< 50	< 300
	05/23/96	< 50	< 50	< 300
	03/11/96	< 50	< 50 (U6)	1,990 (J32, J6)
	12/18/95	< 50	< 50	< 300
	09/14/95	< 50	< 50	< 1,300
	08/28/92	< 50	NA	NA
LF01GW07	02/08/99	NA	< 50	< 300
	10/31/96	< 50	< 50	< 300
	08/06/96	< 50	< 50	< 300
	05/22/96	< 50	< 50	< 300
	03/12/96	< 50	< 50	< 300
	12/19/95	< 50	< 50	< 300
	09/15/95	< 50	< 50	< 1,300
LF02GW01	02/09/99	NA	< 50	< 300
	10/28/96	< 50	< 50	< 300
	07/31/96	< 50	< 50	< 300
	05/21/96	< 50	< 50	< 300
	03/04/96	< 50	80 (J32)	1,600 (J32)
	12/11/95	< 50	< 50	< 300
	09/08/95	< 50	< 50	< 1,300
	08/28/92	NA	70	NA
LF02GW02	03/11/02	< 50	< 50	< 300
DUP0311022B	03/11/02	< 50	< 50	< 300
LF02GW02CL	03/11/02	< 50	< 50	< 300
	05/17/01	< 50	< 50	< 300
	02/10/99	< 50	< 50	< 300
	01/07/98	< 50	< 50	< 300
	10/28/96	< 50	< 50	< 300
	07/31/96	< 50	< 50	< 300
	05/22/96	< 50	< 50	< 300

Table A-6-4
Results of TPH Analyses
Fill Site 1, Landfill 2, El Polin Spring, Buildings 10, 100, and 104
 Presidio of San Francisco, California

Well Name	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
LF02GW02	03/04/96	< 50	55 (J32)	1,200 (J32)
	12/11/95	< 50	< 50	< 300
	09/06/95	< 50	< 50	< 1,300
	09/04/92	NA	< 50	NA
LF02GW04	02/11/99	NA	< 50	< 300
	11/01/96	< 50	< 50	< 300
	08/01/96	< 50	< 50	< 300
	05/21/96	< 50	< 50	< 300
	03/06/96	< 50	< 50	310 (J32)
	12/11/95	< 50	< 50	< 300
	09/11/95	< 50	< 50	< 1,300
100GW101 DUP1205032A 100GW101CL	12/05/03	< 50	< 50	< 300
	12/05/03	< 50	< 50	< 300
	12/05/03	< 50	< 48	< 240
	08/21/03	< 50	< 50	NA
	06/10/03	< 50	< 50	< 300
	03/13/03	< 50	< 50	NA
	12/06/02	< 50	< 50	< 300
	10/10/02	< 27	< 20	< 360
104GW101	12/05/03	< 50	< 50	< 300
	08/21/03	< 50	< 50	NA
	06/10/03	< 50	< 50	< 300
	03/14/03	< 50	< 50	< 300
	12/06/02	< 50	< 50	< 300
	10/10/02	58	< 20	< 360

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

µg/L - micrograms per liter

NA - Not analyzed

TPH - Total petroleum hydrocarbons

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-6-5
Groundwater Elevation Summary
Fill Site 1, Landfill 2, El Polin Spring, Tennessee Hollow, Upgradient Wells, Buildings 10, 100, and 104
 Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
LF01GW01	08/14/06	7.09	105.31	98.22	MW
	05/22/06	5.42	105.31	99.89	MW
	03/06/06	3.17	105.31	102.14	MW
	11/28/05	9.95	105.31	95.36	MW
	08/29/05	7.94	105.31	97.37	MW
	05/23/05	5.81	105.31	99.50	MW
	03/14/05	5.17	105.31	100.14	MW
	12/13/04	9.04	105.31	96.27	MW
	08/09/04	8.72	105.31	96.59	MW
	05/24/04	6.86	105.31	98.45	MW
	03/08/04	5.33	105.31	99.98	MW
	12/01/03	10.55	105.31	94.76	MW
	08/11/03	8.48	105.31	96.83	MW
	06/02/03	6.37	105.31	98.94	MW
	03/10/03	5.57	105.31	99.74	MW
	12/02/02	11.08	105.31	94.23	MW
	08/26/02	9.79	105.31	95.52	MW
	05/28/02	6.76	105.31	98.55	MW
	03/04/02	5.49	105.31	99.82	MW
	11/26/01	10.30	105.31	95.01	MW
	08/27/01	10.12	105.31	95.19	MW
	05/08/01	3.88	105.31	101.43	MW
LF01GW02	08/14/06	20.55	98.98	78.43	MW
	05/22/06	22.12	98.98	76.86	MW
	03/06/06	26.00	98.98	72.98	MW
	11/28/05	27.37	98.98	71.61	MW
	08/29/05	26.75	98.98	72.23	MW
	05/23/05	28.81	98.98	70.17	MW
	03/14/05	31.38	98.98	67.60	MW
	12/13/04	32.75	98.98	66.23	MW
	08/09/04	31.45	98.98	67.53	MW
	05/24/04	31.04	98.98	67.94	MW
	03/08/04	31.83	98.98	67.15	MW
	12/01/03	32.04	98.98	66.94	MW
	08/11/03	30.74	98.98	68.24	MW
	06/02/03	30.03	98.98	68.95	MW
	03/10/03	30.53	98.98	68.45	MW
	12/02/02	31.15	98.98	67.83	MW
	08/26/02	29.78	98.98	69.20	MW
	05/28/02	29.34	98.98	69.64	MW
	03/04/02	30.68	98.98	68.30	MW
	11/26/01	31.73	98.98	67.25	MW
	08/27/01	30.28	98.98	68.70	MW
	05/08/01	29.32	98.98	69.66	MW

Table A-6-5
Groundwater Elevation Summary
Fill Site 1, Landfill 2, El Polin Spring, Tennessee Hollow, Upgradient Wells, Buildings 10, 100, and 104
 Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
LF01GW03	08/14/06	44.76	151.82	107.06	MW
	05/22/06	44.80	151.82	107.02	MW
	03/06/06	48.20	151.82	103.62	MW
	11/28/05	50.62	151.82	101.20	MW
	08/29/05	49.42	151.82	102.40	MW
	05/23/05	49.35	151.82	102.47	MW
	03/14/05	51.36	151.82	100.46	MW
	12/13/04	54.17	151.82	97.65	MW
	08/09/04	52.83	151.82	98.99	MW
	05/24/04	52.05	151.82	99.77	MW
	03/08/04	52.37	151.82	99.45	MW
	12/01/03	54.20	151.82	97.62	MW
	08/11/03	52.6	151.82	99.22	MW
	06/02/03	51.69	151.82	100.13	MW
	03/10/03	51.93	151.82	99.89	MW
	12/02/02	53.61	151.82	98.21	MW
	08/26/02	51.99	151.82	99.83	MW
	05/28/02	50.76	151.82	101.06	MW
	03/04/02	51.32	151.82	100.50	MW
	11/26/01	54.20	151.82	97.62	MW
	08/27/01	53.21	151.82	98.61	MW
	05/08/01	52.08	151.82	99.74	MW
LF01GW04	08/14/06	50.65	159.39	108.74	MW
	05/22/06	51.41	159.39	107.98	MW
	03/06/06	55.18	159.39	104.21	MW
	11/28/05	56.02	159.39	103.37	MW
	08/29/05	55.23	159.39	104.16	MW
	05/23/05	56.32	159.39	103.07	MW
	03/14/05	59.52	159.39	99.87	MW
	12/13/04	60.87	159.39	98.52	MW
	08/09/04	59.69	159.39	99.70	MW
	05/24/04	59.43	159.39	99.96	MW
	03/08/04	60.46	159.39	98.93	MW
	12/01/03	60.47	159.39	98.92	MW
	08/11/03	59.47	159.39	99.92	MW
	06/02/03	58.78	159.39	100.61	MW
	03/10/03	59.40	159.39	99.99	MW
	12/02/02	59.50	159.39	99.89	MW
	08/26/02	58.26	159.39	101.13	MW
	05/28/02	57.87	159.39	101.52	MW
	03/04/02	59.50	159.39	99.89	MW
	11/26/01	60.46	159.39	98.93	MW
	08/27/01	59.48	159.39	99.91	MW
	05/08/01	59.03	159.39	100.36	MW

Table A-6-5
Groundwater Elevation Summary
Fill Site 1, Landfill 2, El Polin Spring, Tennessee Hollow, Upgradient Wells, Buildings 10, 100, and 104
 Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
LF01GW05	08/14/06	7.83	83.72	75.89	MW
	05/22/06	12.85	83.72	70.87	MW
	03/06/06	8.82	83.72	74.90	MW
	11/28/05	13.54	83.72	70.18	MW
	08/29/05	11.43	83.72	72.29	MW
	05/23/05	10.96	83.72	72.76	MW
	03/14/05	11.64	83.72	72.08	MW
	12/13/04	17.46	83.72	66.26	MW
	08/09/04	15.20	83.72	68.52	MW
	05/24/04	12.38	83.72	71.34	MW
	03/08/04	11.42	83.72	72.30	MW
	12/01/03	17.08	83.72	66.64	MW
	08/11/03	13.39	83.72	70.33	MW
	06/02/03	11.17	83.72	72.55	MW
	03/10/03	10.75	83.72	72.97	MW
	12/02/02	16.67	83.72	67.05	MW
	08/26/02	13.72	83.72	70.00	MW
	05/28/02	11.22	83.72	72.50	MW
	03/04/02	11.25	83.72	72.47	MW
	11/26/01	18.35	83.72	65.37	MW
	08/27/01	15.30	83.72	68.42	MW
	05/08/01	11.23	83.72	72.49	MW
LF01GW06	08/14/06	59.65	145.23	85.58	MW
	05/22/06	60.98	145.23	84.25	MW
	03/06/06	50.80	145.23	94.43	MW
	11/28/05	66.31	145.23	78.92	MW
	08/29/05	65.43	145.23	79.80	MW
	05/23/05	67.50	145.23	77.73	MW
	03/14/05	70.34	145.23	74.89	MW
	12/13/04	71.61	145.23	73.62	MW
	08/09/04	70.20	145.23	75.03	MW
	05/24/04	69.95	145.23	75.28	MW
	03/08/04	70.90	145.23	74.33	MW
	12/01/03	70.87	145.23	74.36	MW
	08/11/03	69.76	145.23	75.47	MW
	06/02/03	69.11	145.23	76.12	MW
	03/10/03	69.60	145.23	75.63	MW
	12/02/02	69.93	145.23	75.30	MW
	08/26/02	68.69	145.23	76.54	MW
	05/28/02	68.36	145.23	76.87	MW
	03/04/02	69.87	145.23	75.36	MW
	11/26/01	70.69	145.23	74.54	MW
	08/27/01	69.51	145.23	75.72	MW
	05/08/01	68.88	145.23	76.35	MW

Table A-6-5
Groundwater Elevation Summary
Fill Site 1, Landfill 2, El Polin Spring, Tennessee Hollow, Upgradient Wells, Buildings 10, 100, and 104
 Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
LF01GW07	08/14/06	52.57	162.00	109.43	MW
	05/22/06	52.94	162.00	109.06	MW
	03/06/06	55.74	162.00	106.26	MW
	11/28/05	57.10	162.00	104.90	MW
	08/29/05	56.45	162.00	105.55	MW
	05/23/05	56.68	162.00	105.32	MW
	03/14/05	58.38	162.00	103.62	MW
	12/13/04	60.02	162.00	101.98	MW
	08/09/04	59.13	162.00	102.87	MW
	05/24/04	58.66	162.00	103.34	MW
	03/08/04	59.18	162.00	102.82	MW
	12/01/03	59.88	162.00	102.12	MW
	08/11/03	58.96	162.00	103.04	MW
	06/02/03	58.33	162.00	103.67	MW
	03/10/03	58.68	162.00	103.32	MW
	12/02/02	59.39	162.00	102.61	MW
	08/26/02	58.40	162.00	103.60	MW
	05/28/02	57.79	162.00	104.21	MW
	03/04/02	58.42	162.00	103.58	MW
	11/26/01	59.96	162.00	102.04	MW
	08/27/01	59.26	162.00	102.74	MW
	05/08/01	58.92	162.00	103.08	MW
EPSP01	08/14/06	flowing	--	--	Surface
	05/22/06	flowing	--	--	Surface
	03/06/06	flowing	--	--	Surface
	11/28/05	flowing	--	--	Surface
	08/29/05	flowing	--	--	Surface
	05/23/05	flowing	--	--	Surface
	03/14/05	flowing	--	--	Surface
	12/13/04	flowing	--	--	Surface
	08/09/04	flowing	--	--	Surface
	05/24/04	flowing	--	--	Surface
	03/08/04	flowing	--	--	Surface
	12/01/03	flowing	--	--	Surface
	08/11/03	flowing	--	--	Surface
	06/02/03	flowing	--	--	Surface
	03/10/03	--	--	--	Surface
	12/02/02	--	--	--	Surface
	08/26/02	--	--	--	Surface
	05/28/02	--	--	--	Surface
	03/04/02	--	--	--	Surface
	11/26/01	--	--	--	Surface
	08/27/01	--	--	--	Surface
	05/08/01	--	--	--	Surface

Table A-6-5
Groundwater Elevation Summary
Fill Site 1, Landfill 2, El Polin Spring, Tennessee Hollow, Upgradient Wells, Buildings 10, 100, and 104
 Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
LF02GW01	08/14/06	0.80	98.57	97.77	MW
	05/22/06	0.78	98.57	97.79	MW
	03/06/06	2.80	98.57	95.77	MW
	11/28/05	3.25	98.57	95.32	MW
	08/29/05	3.80	98.57	94.77	MW
	05/23/05	3.28	98.57	95.29	MW
	03/14/05	2.35	98.57	96.22	MW
	12/13/04	2.48	98.57	96.09	MW
	08/09/04	2.63	98.57	95.94	MW
	05/24/04	2.25	98.57	96.32	MW
	03/08/04	2.54	98.57	96.03	MW
	12/01/03	2.93	98.57	95.64	MW
	08/11/03	2.41	98.57	96.16	MW
	06/02/03	2.04	98.57	96.53	MW
	03/10/03	0.94	98.57	97.63	MW
	12/02/02	3.46	98.57	95.11	MW
	08/26/02	3.05	98.57	95.52	MW
	05/28/02	2.46	98.57	96.11	MW
	03/04/02	1.91	98.57	96.66	MW
	11/26/01	5.67	98.57	92.90	MW
	08/27/01	4.14	98.57	94.43	MW
	05/08/01	2.15	98.57	96.42	MW
LF02GW02	08/14/06	3.15	101.99	98.84	MW
	05/22/06	1.45	101.99	100.54	MW
	03/06/06	1.31	101.99	100.68	MW
	11/28/05	3.65	101.99	98.34	MW
	08/29/05	3.65	101.99	98.34	MW
	05/23/05	1.11	101.99	100.88	MW
	03/14/05	1.11	101.99	100.88	MW
	12/13/04	3.72	101.99	98.27	MW
	08/09/04	4.41	101.99	97.58	MW
	05/24/04	1.94	101.99	100.05	MW
	03/08/04	1.41	101.99	100.58	MW
	12/01/03	4.70	101.99	97.29	MW
	08/11/03	4.48	101.99	97.51	MW
	06/02/03	1.98	101.99	100.01	MW
	03/10/03	1.34	101.99	100.65	MW
	12/02/02	4.66	101.99	97.33	MW
	08/26/02	4.34	101.99	97.65	MW
	05/28/02	2.12	101.99	99.87	MW
	03/04/02	1.40	101.99	100.59	MW
	11/26/01	4.81	101.99	97.18	MW
	08/27/01	5.33	101.99	96.66	MW
	05/08/01	2.03	101.99	99.96	MW

Table A-6-5
Groundwater Elevation Summary
Fill Site 1, Landfill 2, El Polin Spring, Tennessee Hollow, Upgradient Wells, Buildings 10, 100, and 104
 Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
LF02GW04	08/14/06	19.24	172.60	153.36	MW
	05/22/06	15.10	172.60	157.50	MW
	03/06/06	14.78	172.60	157.82	MW
	11/28/05	20.82	172.60	151.78	MW
	08/29/05	19.68	172.60	152.92	MW
	05/23/05	17.69	172.60	154.91	MW
	03/14/05	14.93	172.60	157.67	MW
	12/13/04	20.38	172.60	152.22	MW
	08/09/04	20.96	172.60	151.64	MW
	05/24/04	19.90	172.60	152.70	MW
	03/08/04	17.08	172.60	155.52	MW
	12/01/03	21.49	172.60	151.11	MW
	08/11/03	20.89	172.60	151.71	MW
	06/02/03	19.38	172.60	153.22	MW
	03/10/03	18.30	172.60	154.30	MW
	12/02/02	21.51	172.60	151.09	MW
	08/26/02	20.89	172.60	151.71	MW
	05/28/02	19.27	172.60	153.33	MW
	03/04/02	17.65	172.60	154.95	MW
	11/26/01	21.44	172.60	151.16	MW
	08/27/01	21.72	172.60	150.88	MW
	05/08/01	19.90	172.60	152.70	MW
TH-1	08/14/06	15.48	80.76	65.28	MW
	05/22/06	14.55	80.76	66.21	MW
	03/06/06	15.47	80.76	65.29	MW
	11/28/05	20.11	80.76	60.65	MW
	08/29/05	19.11	80.76	61.65	MW
	05/23/05	18.51	80.76	62.25	MW
	03/14/05	18.62	80.76	62.14	MW
	12/13/04	23.12	80.76	57.64	MW
	08/09/04	23.58	80.76	57.18	MW
	05/24/04	23.20	80.76	57.56	MW
	03/08/04	21.75	80.76	59.01	MW
	12/01/03	25.20	80.76	55.56	MW
	08/11/03	23.67	80.76	57.09	MW
	06/02/03	22.60	80.76	58.16	MW
	03/10/03	22.24	80.76	58.52	MW
	12/02/02	24.52	80.76	56.24	MW
	08/26/02	23.52	80.76	57.24	MW
	05/28/02	22.47	80.76	58.29	MW
	03/04/02	21.54	80.76	59.22	MW
	11/26/01	24.59	80.76	56.17	MW
	08/27/01	23.69	80.76	57.07	MW
	05/08/01	21.98	80.76	58.78	MW

Table A-6-5
Groundwater Elevation Summary
Fill Site 1, Landfill 2, El Polin Spring, Tennessee Hollow, Upgradient Wells, Buildings 10, 100, and 104
 Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
TH-2	08/14/06	52.12	111.26	59.14	MW
	05/22/06	52.44	111.26	58.82	MW
	03/06/06	55.06	111.26	56.20	MW
	11/28/05	57.03	111.26	54.23	MW
	08/29/05	56.60	111.26	54.66	MW
	05/23/05	56.91	111.26	54.35	MW
	03/14/05	58.40	111.26	52.86	MW
	12/13/04	60.75	111.26	50.51	MW
	08/09/04	60.00	111.26	51.26	MW
	05/24/04	59.56	111.26	51.70	MW
	03/08/04	59.56	111.26	51.70	MW
	12/01/03	60.71	111.26	50.55	MW
	08/11/03	59.62	111.26	51.64	MW
	06/02/03	58.91	111.26	52.35	MW
	03/10/03	58.91	111.26	52.35	MW
	12/02/02	50.90	111.26	60.36	MW
	08/26/02	59.06	111.26	52.20	MW
	05/28/02	58.49	111.26	52.77	MW
	03/04/02	58.70	111.26	52.56	MW
	11/26/01	60.14	111.26	51.12	MW
	08/27/01	59.10	111.26	52.16	MW
	05/08/01	58.06	111.26	53.20	MW
TH-3	08/14/06	7.14	64.68	57.54	MW
	05/22/06	7.30	64.68	57.38	MW
	03/06/06	9.67	64.68	55.01	MW
	11/28/05	11.82	64.68	52.86	MW
	08/29/05	11.36	64.68	53.32	MW
	05/23/05	11.57	64.68	53.11	MW
	03/14/05	13.11	64.68	51.57	MW
	12/13/04	15.30	64.68	49.38	MW
	08/09/04	14.73	64.68	49.95	MW
	05/24/04	14.00	64.68	50.68	MW
	03/08/04	13.93	64.68	50.75	MW
	12/01/03	15.19	64.68	49.49	MW
	08/11/03	14.1	64.68	50.58	MW
	06/02/03	13.44	64.68	51.24	MW
	03/10/03	13.45	64.68	51.23	MW
	12/02/02	14.31	64.68	50.37	MW
	08/26/02	13.67	64.68	51.01	MW
	05/28/02	13.06	64.68	51.62	MW
	03/04/02	13.25	64.68	51.43	MW
	11/26/01	14.73	64.68	49.95	MW
	08/27/01	13.69	64.68	50.99	MW
	05/08/01	12.45	64.68	52.23	MW

Table A-6-5
Groundwater Elevation Summary
Fill Site 1, Landfill 2, El Polin Spring, Tennessee Hollow, Upgradient Wells, Buildings 10, 100, and 104
 Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
TH-4	08/14/06	0.48	44.59	44.11	MW
	05/22/06	0.15	44.59	44.44	MW
	03/06/06	0.56	44.59	44.03	MW
	11/28/05	2.31	44.59	42.28	MW
	08/29/05	2.09	44.59	42.50	MW
	05/23/05	1.90	44.59	42.69	MW
	03/14/05	2.30	44.59	42.29	MW
	12/13/04	3.88	44.59	40.71	MW
	08/09/04	4.11	44.59	40.48	MW
	05/24/04	3.69	44.59	40.90	MW
	03/08/04	3.02	44.59	41.57	MW
	12/01/03	4.21	44.59	40.38	MW
	08/11/03	3.95	44.59	40.64	MW
	06/02/03	3.32	44.59	41.27	MW
	03/10/03	2.92	44.59	41.67	MW
	12/02/02	3.72	44.59	40.87	MW
	08/26/02	3.32	44.59	41.27	MW
	05/28/02	2.82	44.59	41.77	MW
	03/04/02	2.43	44.59	42.16	MW
	11/26/01	3.60	44.59	40.99	MW
	08/27/01	3.50	44.59	41.09	MW
	05/08/01	2.69	44.59	41.90	MW
UBR01GW01	08/14/06	NM	164.71	NM	MW
	05/22/06	NM	164.71	NM	MW
	03/06/06	NM	164.71	NM	MW
	11/28/05	NM	164.71	NM	MW
	08/29/05	22.83	164.71	141.88	MW
	05/23/05	18.34	164.71	146.37	MW
	03/14/05	13.67	164.71	151.04	MW
	12/13/04	28.36	164.71	136.35	MW
	08/09/04	24.38	164.71	140.33	MW
	05/24/04	21.17	164.71	143.54	MW
	03/08/04	14.33	164.71	150.38	MW
	12/01/03	27.66	164.71	137.05	MW
	08/11/03	23.86	164.71	140.85	MW
	06/02/03	20.87	164.71	143.84	MW
	03/10/03	20.12	164.71	144.59	MW
	12/02/02	28.65	164.71	136.06	MW
	08/26/02	25.66	164.71	139.05	MW
	05/28/02	22.21	164.71	142.50	MW
	03/04/02	20.55	164.71	144.16	MW
	11/26/01	34.02	164.71	130.69	MW
	08/27/01	31.36	164.71	133.35	MW
	05/08/01	27.32	164.71	137.39	MW

Table A-6-5
Groundwater Elevation Summary
Fill Site 1, Landfill 2, El Polin Spring, Tennessee Hollow, Upgradient Wells, Buildings 10, 100, and 104
 Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
UBR02GW01	08/14/06	8.71	253.39	244.68	MW
	05/22/06	6.44	253.39	246.95	MW
	03/06/06	8.80	253.39	244.59	MW
	11/28/05	13.06	253.39	240.33	MW
	08/29/05	10.34	253.39	243.05	MW
	05/23/05	8.52	253.39	244.87	MW
	03/14/05	10.13	253.39	243.26	MW
	12/13/04	15.06	253.39	238.33	MW
	08/09/04	14.09	253.39	239.30	MW
	05/24/04	11.74	253.39	241.65	MW
	03/08/04	11.20	253.39	242.19	MW
	12/01/03	15.55	253.39	237.84	MW
	08/11/03	13.92	253.39	239.47	MW
	06/02/03	11.21	253.39	242.18	MW
	03/10/03	12.04	253.39	241.35	MW
	12/02/02	15.60	253.39	237.79	MW
	08/26/02	13.92	253.39	239.47	MW
	05/28/02	10.62	253.39	242.77	MW
	03/04/02	11.47	253.39	241.92	MW
	11/26/01	16.40	253.39	236.99	MW
	08/27/01	15.77	253.39	237.62	MW
	05/08/01	12.91	253.39	240.48	MW
UBR02GW02	08/14/06	8.91	253.56	244.65	MW
	05/22/06	6.61	253.56	246.95	MW
	03/06/06	9.00	253.56	244.56	MW
	11/28/05	13.30	253.56	240.26	MW
	08/29/05	10.53	253.56	243.03	MW
	05/23/05	8.73	253.56	244.83	MW
	03/14/05	10.33	253.56	243.23	MW
	12/13/04	15.27	253.56	238.29	MW
	08/09/04	14.38	253.56	239.18	MW
	05/24/04	11.95	253.56	241.61	MW
	03/08/04	11.41	253.56	242.15	MW
	12/01/03	15.75	253.56	237.81	MW
	08/11/03	14.1	253.56	239.46	MW
	06/02/03	11.39	253.56	242.17	MW
	03/10/03	12.22	253.56	241.34	MW
	12/02/02	15.77	253.56	237.79	MW
	08/26/02	14.09	253.56	239.47	MW
	05/28/02	10.75	253.56	242.81	MW
	03/04/02	11.65	253.56	241.91	MW
	11/26/01	16.57	253.56	236.99	MW
	08/27/01	15.94	253.56	237.62	MW
	05/08/01	13.10	253.56	240.46	MW

Table A-6-5
Groundwater Elevation Summary
Fill Site 1, Landfill 2, El Polin Spring, Tennessee Hollow, Upgradient Wells, Buildings 10, 100, and 104
 Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
UBR03GW01	08/14/06	33.45	171.22	137.77	MW
	05/22/06	30.25	171.22	140.97	MW
	03/06/06	33.51	171.22	137.71	MW
	11/28/05	38.37	171.22	132.85	MW
	08/29/05	35.54	171.22	135.68	MW
	05/23/05	35.52	171.22	135.70	MW
	03/14/05	41.09	171.22	130.13	MW
	12/13/04	45.14	171.22	126.08	MW
	08/09/04	43.58	171.22	127.64	MW
	05/24/04	44.16	171.22	127.06	MW
	03/08/04	46.21	171.22	125.01	MW
	12/01/03	46.92	171.22	124.30	MW
	08/11/03	46.52	171.22	124.70	MW
	06/02/03	46.33	171.22	124.89	MW
	03/10/03	46.92	171.22	124.30	MW
	12/02/02	47.22	171.22	124.00	MW
	08/26/02	46.44	171.22	124.78	MW
	05/28/02	46.32	171.22	124.90	MW
	03/04/02	46.93	171.22	124.29	MW
	11/26/01	47.64	171.22	123.58	MW
	08/27/01	46.83	171.22	124.39	MW
	05/08/01	46.45	171.22	124.77	MW
UBR03GW02	08/14/06	15.13	170.96	155.83	MW
	05/22/06	12.45	170.96	158.51	MW
	03/06/06	15.28	170.96	155.68	MW
	11/28/05	20.11	170.96	150.85	MW
	08/29/05	17.82	170.96	153.14	MW
	05/23/05	16.78	170.96	154.18	MW
	03/14/05	17.89	170.96	153.07	MW
	12/13/04	21.88	170.96	149.08	MW
	08/09/04	21.87	170.96	149.09	MW
	05/24/04	20.06	170.96	150.90	MW
	03/08/04	19.14	170.96	151.82	MW
	12/01/03	24.65	170.96	146.31	MW
	08/11/03	21.98	170.96	148.98	MW
	06/02/03	20.47	170.96	150.49	MW
	03/10/03	20.77	170.96	150.19	MW
	12/02/02	27.29	170.96	143.67	MW
	08/26/02	24.47	170.96	146.49	MW
	05/28/02	21.59	170.96	149.37	MW
	03/04/02	20.41	170.96	150.55	MW
	11/26/01	26.37	170.96	144.59	MW
	08/27/01	23.62	170.96	147.34	MW
	05/08/01	20.90	170.96	150.06	MW

Table A-6-5
Groundwater Elevation Summary
Fill Site 1, Landfill 2, El Polin Spring, Tennessee Hollow, Upgradient Wells, Buildings 10, 100, and 104
 Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
300GW01	03/06/06	NM	304.21	NM	MW
	11/28/05	29.48	304.21	274.73	MW
	03/14/05	24.99	304.21	279.22	MW
	12/13/04	32.03	304.21	272.18	MW
	08/09/04	28.56	304.21	275.65	MW
	05/24/04	26.92	304.21	277.29	MW
	03/08/04	27.04	304.21	277.17	MW
	12/01/03	32.34	304.21	271.87	MW
	08/11/03	29.77	304.21	274.44	MW
	06/02/03	28.80	304.21	275.41	MW
	03/10/03	28.41	304.21	275.80	MW
	12/02/02	32.03	304.21	272.18	MW
	08/26/02	29.73	304.21	274.48	MW
	05/28/02	27.53	304.21	276.68	MW
	03/04/02	26.78	304.21	277.43	MW
	11/26/01	33.44	304.21	270.77	MW
10GW100	08/14/06	42.79	76.88	34.09	MW
	05/22/06	41.96	76.88	34.92	MW
	03/06/06	43.49	76.88	33.39	MW
	11/28/05	44.45	76.88	32.43	MW
	08/29/05	43.92	76.88	32.96	MW
	05/23/05	43.27	76.88	33.61	MW
	03/14/05	44.17	76.88	32.71	MW
	12/13/04	45.50	76.88	31.38	MW
	08/09/04	45.81	76.88	31.07	MW
	05/24/04	45.44	76.88	31.44	MW
	03/08/04	45.30	76.88	31.58	MW
	12/01/03	46.21	76.88	30.67	MW
	08/11/03	45.85	76.88	31.03	MW
	06/02/03	45.40	76.88	31.48	MW
	03/10/03	44.62	76.88	32.26	MW
	12/02/02	45.00	76.88	31.88	MW
	08/26/02	45.24	76.88	31.64	MW
	05/28/02	44.60	76.88	32.28	MW
	03/04/02	43.87	76.88	33.01	MW
100GW101	05/24/04	NM	84.45	NM	MW
	03/08/04	58.17	84.45	26.28	MW
	12/01/03	58.93	84.45	25.52	MW
	08/11/03	58.57	84.45	25.88	MW
	06/02/03	58.08	84.45	26.37	MW
	03/10/03	57.53	84.45	26.92	MW
104GW101	05/24/04	NM	53.88	NM	MW
	03/08/04	35.41	53.88	18.47	MW
	12/01/03	36.65	53.88	17.23	MW
	08/11/03	36.33	53.88	17.55	MW
	06/02/03	35.97	53.88	17.91	MW

Table A-6-5
Groundwater Elevation Summary
Fill Site 1, Landfill 2, El Polin Spring, Tennessee Hollow, Upgradient Wells, Buildings 10, 100, and 104
 Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
	03/10/03	35.39	53.88	18.49	MW

Table A-6-5
Groundwater Elevation Summary
Fill Site 1, Landfill 2, El Polin Spring, Tennessee Hollow, Upgradient Wells, Buildings 10, 100, and 104
 Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
PGFGW100	08/14/06	34.50	133.71	99.21	MW
	05/22/06	33.89	133.71	99.82	MW
	03/06/06	37.23	133.71	96.48	MW
	11/28/05	39.28	133.71	94.43	MW
	08/29/05	37.96	133.71	95.75	MW
	05/23/05	37.41	133.71	96.30	MW
	03/14/05	38.82	133.71	94.89	MW
	12/13/04	41.89	133.71	91.82	MW
	08/09/04	40.61	133.71	93.10	MW
	05/24/04	39.60	133.71	94.11	MW
	03/08/04	40.10	133.71	93.61	MW
	12/01/03	41.64	133.71	92.07	MW
	08/11/03	40.64	133.71	93.07	MW
	06/02/03	39.81	133.71	93.90	MW
	03/10/03	39.57	133.71	94.14	MW
	12/02/02	41.22	133.71	92.49	MW
	08/26/02	40.10	133.71	93.61	MW
	05/28/02	39.13	133.71	94.58	MW
	03/04/02	39.06	133.71	94.65	MW

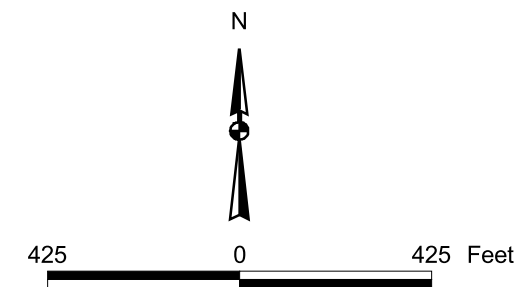
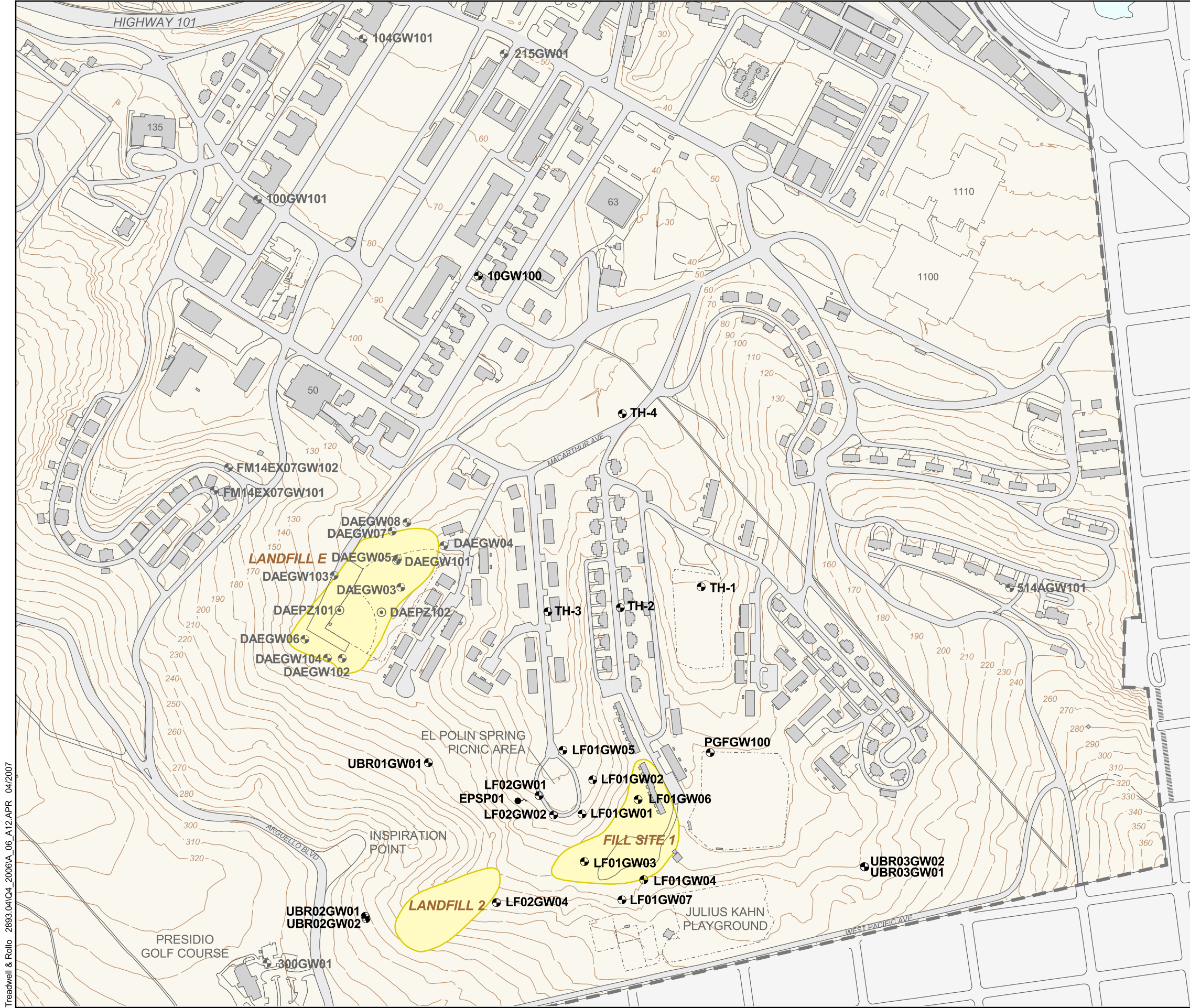
Notes

1 - All depth to water measurements are an average of three measurements recorded in the field.

MW- Monitoring well

feet PLLW - feet above Presidio lower low water vertical datum

NM - Not measured



- LEGEND**
- LF01GW05 Groundwater Monitoring Well
 - DAEGW03 Adjacent Groundwater Monitoring Well
 - DAEPZ101 Adjacent Piezometer
 - ~ EPSP01 Approximate Surface Water Sample Location
 - Presidio Boundary
 - - - Recreation Area
 - Topographic Contour (Contour Interval : 10 ft)
 - Approximate Lateral Extent of Landfill
 - 1100 Former Building and Number
 - 50 Building and Number

Notes:
Horizontal Datum: NAD 27, CA State Plane Coordinates, Zone 3, feet
Vertical Datum: (topography) North American Vertical Datum, NAVD88

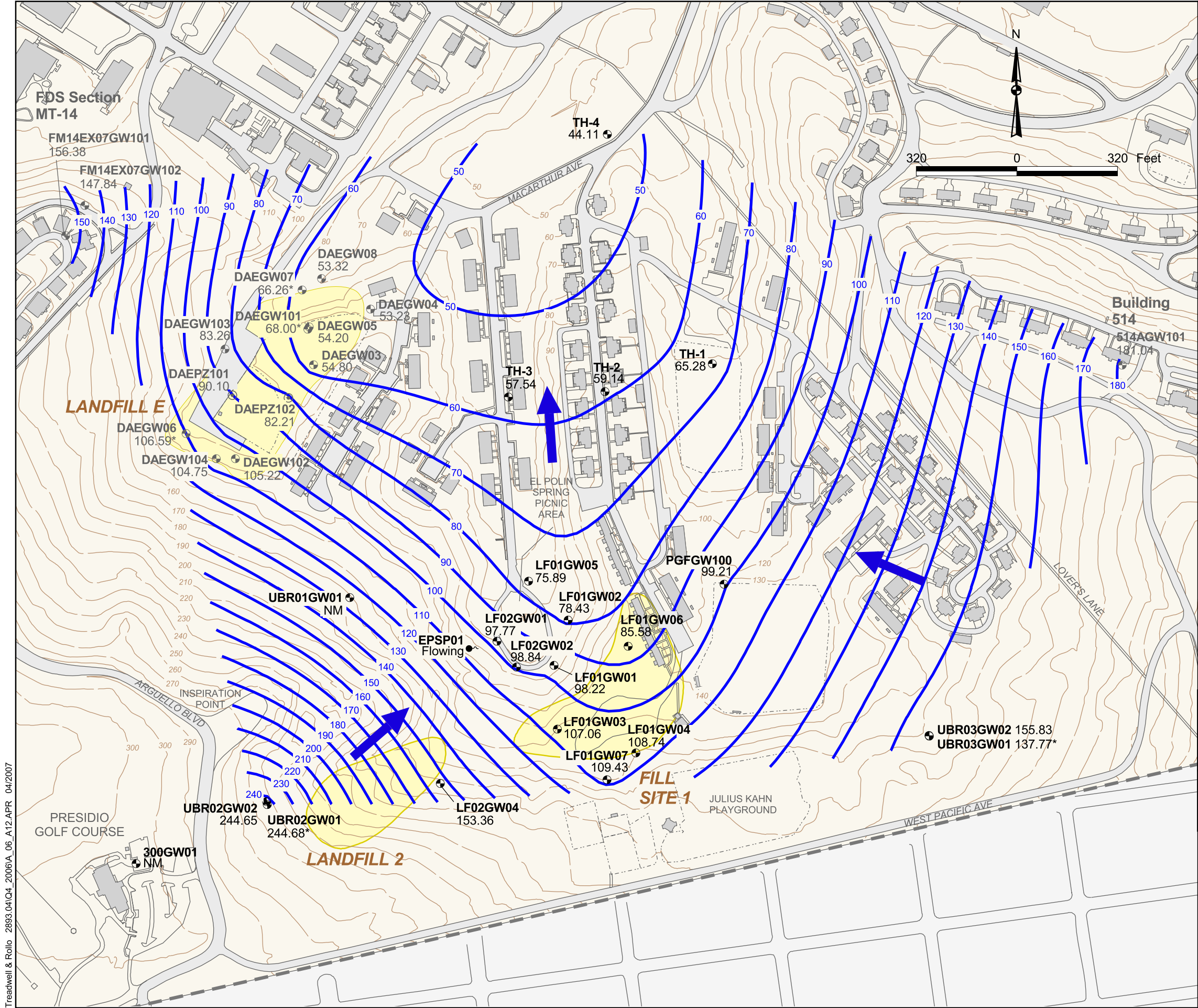
FILL SITE 1, LANDFILL 2, EL POLIN SPRING, TENNESSEE HOLLOW, UPGRADE, BUILDING 10 WELLS SITE PLAN

Treadwell&Rollo



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April 2007

FIGURE A-6-1



LEGEND

- **LF01GW05** Groundwater Monitoring Well
75.89
August 2006 Groundwater Elevation
- **DAEGW03** Adjacent Groundwater Monitoring Well
54.80
August 2006 Groundwater Elevation
- **DAEPZ101** Adjacent Piezometer
90.10
August 2006 Groundwater Elevation
- ~ **EPSP01** Approximate Surface Water Sample Location
- * Monitoring well not used for contouring.
- NM Not Measured
- ➔ Approximate Direction of Groundwater Flow
- Groundwater Contour (Contour Interval: 10 ft)
- - - Presidio Boundary
- - - Recreation Area
- Topographic Contour (Contour Interval: 10 ft)
- Approximate Lateral Extent of Landfill
- Building

Notes:
Groundwater elevation data collected on 14 August 2006.

Groundwater elevations for UBR02GW01 and UBR03GW01 were not used in groundwater contouring.

300GW01 was approved for removal from the groundwater monitoring program prior to the First Quarter 2006.

Landfill E wells DAEGW06 and DAEGW07 were not contoured, due to semi-confined and perched conditions, respectively. Whereas, well DAEGW101 was not contoured because it is screened in a deeper interval.

Horizontal Datum: NAD 27, CA State Plane Coordinates, Zone 3, feet
Vertical Datums: (groundwater) Presidio Lower Low Water (ft. PLLW)
(topography) North American Vertical Datum, NAVD88

**FILL SITE 1, LANDFILL 2, EL POLIN SPRING, TENNESSEE HOLLOW, AND UPGRAIDENT WELLS
14 AUGUST 2006
GROUNDWATER ELEVATION MAP**

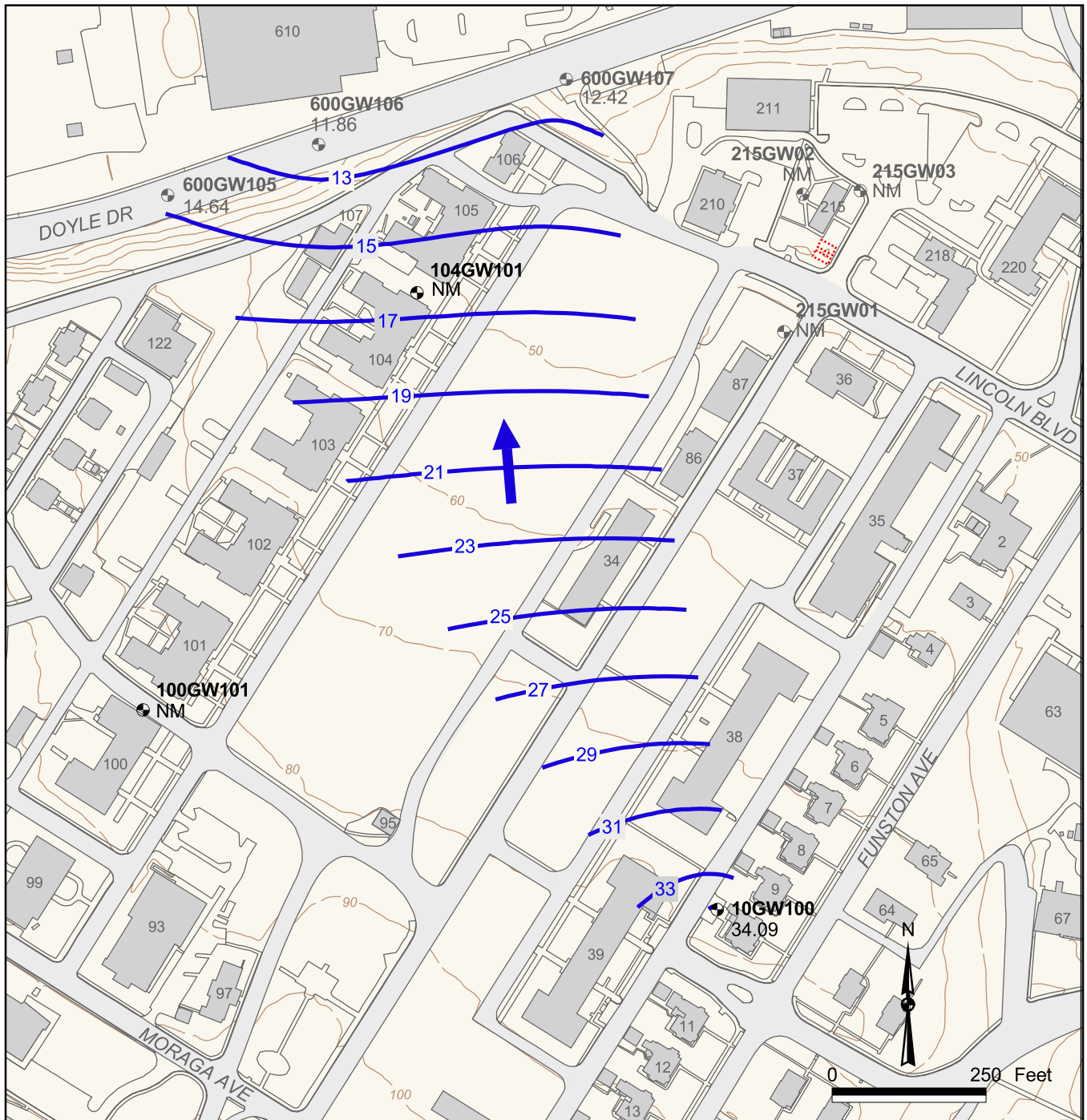
Treadwell & Rollo

THE PRESIDIO TRUST

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April 2007

FIGURE A-6-2



LEGEND

- Approximate Direction of Groundwater Flow
- Groundwater Contour (Contour Interval : 2 ft)
- Topographic Contour (Contour Interval : 10 ft)
- Building and Number

- 10GW100** 34.09 Groundwater Monitoring Well August 2006 Groundwater Elevation
- 600GW105** 14.64 Adjacent Groundwater Monitoring Well August 2006 Groundwater Elevation
- NM Not Measured. 100GW101 and 104GW101 were approved for removal from the groundwater monitoring program prior to the Second Quarter 2004.
- Approximate Location of Former Underground Storage Tanks (USTs)

Notes:
Groundwater elevation data collected on 14 August 2006.

Horizontal Datum: NAD 27, CA State Plane Coordinates, Zone 3, feet

Vertical Datums: (groundwater) Presidio Lower Low Water (ft. PLLW)
(topography) North American Vertical Datum, NAVD88

BUILDING 10 SITE PLAN AND 14 AUGUST 2006 GROUNDWATER ELEVATION MAP

Treadwell&Rollo



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FIGURE A-6-3

Third Quarter 2006

Fourth Quarter 2006

LANDFILL E
APPENDIX SECTION A-7
SEMI-ANNUAL GROUNDWATER MONITORING REPORT
THIRD AND FOURTH QUARTERS 2006
Presidio of San Francisco, California

1.0 INTRODUCTION AND BACKGROUND

Landfill E is located in the east-central portion of the Presidio (Figure 1). The site is bounded by hillsides to the west and south, housing to the east, Quarry Road to the southeast, and Hicks Road and Barnard Avenue to the northwest (Figure A-7-1). The site elevation ranges from approximately 70 to 140 feet above the PLLW vertical datum.

The ravine northeast of Landfill E operated as a firing range, the former Barnard Avenue Protected Target Range, from 1910 to the mid-1920s (Montgomery Watson, 1996c). The southern portion of the range is currently covered by Landfill E. Filling began at Landfill E prior to 1946 and was terminated between 1965 and 1973 (ANL, 1989). Pop Hicks baseball field was constructed in the landfill area in the late 1950s (Montgomery Watson, 1996c).

Since August 1992, groundwater samples from Landfill E have been analyzed for TPH, VOCs, PAHs, OCPs and PCBs, chlorinated herbicides, metals, TDS and general chemistry. No OCPs, PCBs or chlorinated herbicides have ever been detected in groundwater at the site. Landfill E monitoring well analytical results are present in Tables A-7-1 through A-7-4.

Monitoring wells DAEGW03, DAEGW05, and DAEGW08 were also sampled for perchlorate and polybrominated diphenyl ether (PBDE) as part of the Trust's Emergent Chemical Study conducted at the request of the RWQCB during the First Quarter 2004. No perchlorate or PBDE was detected above laboratory reporting limits during the Emergent Chemical Study (Treadwell & Rollo, 2004c).

2.0 SITE DESCRIPTION AND GEOLOGY

Landfill E is located at the edge of the Northeastern Groundwater Area of the Marina Groundwater Basin (Figure 1). Depth to groundwater beneath Landfill E has ranged from approximately 9 to 60 feet bgs. The groundwater flow direction around Landfill E is generally northeasterly, towards Crissy Field (Montgomery Watson, 1997a).

A fenced field and a paved parking lot currently occupy the majority of the site (Figure A-7-1). Soils in the area of Landfill E generally consist of fill materials underlain by the Colma Formation and serpentinite bedrock. The fill material under the Landfill E footprint extends to a maximum depth of approximately 38 feet bgs. The debris fill consists of glass, brick, tile, and

other general construction debris (Dames & Moore, 1997). The fill layer is underlain by Colma Formation clay, silt, and sand. The Colma Formation is at least 25 feet thick. Franciscan Formation bedrock lies beneath the Colma Formation. The bedrock consists of weathered serpentinite and is found at depths ranging from 40 to 79 feet bgs (Montgomery Watson, 1997a).

3.0 DRAFT LANDFILL E FEASIBILITY STUDY REPORT

A Draft Feasibility Study (FS) for Landfill E was completed in 2005 (CH2MHill, 2005). The preferred alternative selected by the FS is a landfill cover system with geosynthetic material, landfill gas collection and monitoring, groundwater monitoring and enhancement of the Tennessee Hollow corridor on the west side of the landfill by consolidation of some of the fill to the east. A RAP is scheduled to be completed in 2008.

4.0 GROUNDWATER MONITORING

Landfill E has 10 associated groundwater monitoring wells, two piezometers, and one seep (Figure A-7-1). During the Third Quarter 2006, groundwater elevation measurements were collected at all 12 wells and piezometers (Table A-7-5). No groundwater samples were proposed during the Third or Fourth Quarters 2006 from Landfill E monitoring wells, however, collecting a surface water sample from Landfill E seep (DAESP03) was proposed (Tables 1A and 1B). The proposed sampling frequency at Landfill E seep (DAESP03) was increased to quarterly beginning with the First Quarter 2006 to assess seasonal and variable conditions. This seep typically only flows during the First Quarter when rainfall is heavy. The approximate location of DAESP03 is presented on Figure A-7-1.

4.1 Groundwater-Level Measurements and Interpretation

Groundwater elevation measurements for the Third Quarter 2006 were collected on 14 August 2006 at all site wells and piezometers with the exception of monitoring well DAEGW101 which was measured on 23 August 2006. Groundwater elevations were not collected in the Fourth Quarter 2006, in accordance with Table 1B. Beginning in the Fourth Quarter 2006, the frequency of water level measurements was reduced to an annual basis to match the sampling frequency for groundwater wells at the site. The next water level measurements at Landfill E will be performed in the First Quarter 2007. Landfill E seep (DAESP03) was not flowing during the Third or Fourth Quarters 2006. Groundwater elevations are presented in Table A-7-5. Water level meters were calibrated on 14 August and 23 August 2006. The calibration logs can be found in Appendix B. Groundwater elevation field forms can be found in Appendix C.

During the Third Quarter 2006, groundwater elevations ranged from 53.23 feet above PLLW in monitoring well DAEGW04 to 106.59 feet above PLLW in monitoring well DAEGW06. Groundwater flow was to the northeast following the general topographic trend, which is consistent with previous interpretations. The groundwater gradient was calculated to be

approximately 0.12 feet per foot, which is consistent with previous quarters. A groundwater elevation map showing Third Quarter 2006 groundwater contours and flow directions for Landfill E is included as Figure A-7-1.

The groundwater elevations for the Third Quarter 2006 are generally within the range of historical elevations measured at the site. Groundwater elevations from wells DAEGW06, DAEGW07, and DAEGW101 have not been used in calculating groundwater gradients or determining flow directions during this quarter or previous quarters. Monitoring well DAEGW06 had a groundwater elevation of 106.59 feet above PLLW during the Third Quarter 2006. This well is located southwest of the other site wells and was previously interpreted as being installed in a semi-confined aquifer. Groundwater within well DAEGW07 was measured at 66.26 feet above PLLW during the Third Quarter 2006. This groundwater elevation represents perched groundwater conditions. DAEGW101 is screened in a shallower interval of the unconfined aquifer. Wells DAEGW03, DAEGW04, DAEGW05, DAEGW08, DAEGW102 through DAEGW104 and piezometers DAEPZ101 and DAEPZ102 are screened in an unconfined aquifer (Montgomery Watson, 1999d and EKI & Golder Associates, 2003).

4.2 Monitoring Well Purging and Sampling

In accordance with the proposed sampling schedules, groundwater samples were not collected in monitoring wells or piezometers at Landfill E in either the Third or the Fourth Quarters 2006. The collection of surface water samples from Landfill E seep DAESP03 was attempted in the Third and Fourth Quarters 2006, but was not possible because the seep was not flowing.

4.3 Groundwater Analytical Program

In accordance with the sampling schedule and due to non-flowing conditions at Landfill E seep DAESP03, no water samples were analyzed during either the Third or Fourth Quarter 2006.

5.0 GROUNDWATER ANALYTICAL RESULTS

In accordance with the proposed sampling schedule and due to non-flowing conditions at Landfill E seep DAESP03, water samples were not collected in either the Third or the Fourth Quarter 2006, thus there are no analytical results.

6.0 CONCLUSIONS & RECOMMENDATIONS

Groundwater elevations, gradients, and flow directions are consistent with historical values and interpretations. No significant trends or observations were identified at Landfill E during the Third Quarter 2006.

The proposed sampling frequency at Landfill E seep (DAESP03) was increased to quarterly beginning with the First Quarter 2006 to assess seasonal and variable conditions. All other site wells are sampled on an annual basis in the First Quarter of each year. Due to the non-flowing conditions in Landfill E seep DAESP03, no groundwater samples were collected, thus there were no analytical results for the Third and Fourth Quarters 2006.

A FS has been prepared for Landfill E (CH2MHill, 2005). The reduction to annual sampling at monitoring wells DAEGW03 through DAEGW08 until a Landfill E RAP have been finalized was approved by the stakeholders prior to First Quarter 2004. Sampling will be performed per the RAP once it has been finalized and implemented.

Table A-7-1
Results of General Chemistry and Cyanide Analyses
Landfill E
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Cyanide	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0	SW9012	Field	E300.0/ E340.2	E300.0/ E353.2	E300.0/ E353.2	E353.2	E300.0
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
DAEGW03 DUP0311043A DAEGW03CL	03/14/06	600	600	110	NA	1.76	< 0.1	0.53	< 0.05	NA	110
	03/16/05	800	800	110	NA	0.20	< 0.1	0.69	< 0.05	NA	110
	03/11/04	740	740	110	NA	0.9	< 0.1	0.68	< 0.05	NA	110
	03/11/04	740	740	110	NA	--	< 0.1	0.73	< 0.05	NA	110
	03/11/04	730	730	110	NA	--	< 0.1	0.86	< 0.05	0.86	110
	08/20/03	690	690	130	NA	0.53	0.14	0.75	< 0.05	NA	130
	03/13/03	700	700	150	NA	0.4	< 0.1	0.8	< 0.05	NA	130
	12/04/02	680	680	170	NA	1.8	< 0.1	0.6	< 0.05	NA	150
	09/03/02	750	750	180	NA	1.1	0.25	0.6	< 0.05	NA	160
	06/04/02	860	860	140	NA	2.1	0.14	0.25	< 0.05	NA	160
	03/12/02	740	740	170	NA	2.3	< 0.1 U	0.64	< 0.05	NA	160
	12/03/01	770	770	160	NA	1.4	0.14	0.41 J	< 0.05 UJ	NA	140
	08/28/01	720	720	200	NA	2.3	0.12	0.44	< 0.05	NA	180
	05/17/01	620	620	150	NA	1.5	0.18	0.36	< 0.05	NA	150
	05/17/99	811	811	190	NA	0.13	0.13	NA	NA	1.07	200
	02/15/99	852	852	180	NA	0.28	< 0.1	NA	NA	0.64	210
	11/16/98	871	871	180	NA	0.46	< 0.5	NA	NA	0.8	230
	08/14/98	845	845	84	NA	0.16	0.13	NA	NA	1.26	274
	04/14/98	860	860	140	NA	0.42	0.11	NA	NA	1	350
	01/13/98	820	820	160	NA	0.43	0.1	NA	NA	1.2 (J16)	200
	11/10/97	770	770	170	NA	0.5	0.1	NA	NA	1.2	230
	08/11/97	800	800	120	NA	0.01	0.1	NA	NA	1.5	300
	05/13/97	800	800	110	NA	0.1	0.1	NA	NA	1.2	280
	02/12/97	760	760	120	NA	0.08	0.1	NA	NA	1	230
	12/05/96	790	790	130	NA	NM	0.1	NA	NA	1.3	210
	08/28/96	780	780	160	NA	NM	0.1	NA	NA	1.4	340
	05/30/96	820	820	120	NA	NM	0.1	NA	NA	1.1	260
	03/05/96	879	879	113	NA	NM	1	0.75	NA	NA	172
	12/11/95	864	864	121	NA	NM	1.1	0.73	NA	NA	191
	09/11/95	610	610	73	NA	NM	< 0.25	NA	NA	0.6	200
	11/08/94	958	958	95	NA	NM	NA	2.8	NA	NA	219
	08/27/92	560	563	140	NA	NM	NA	NA	NA	0.014	240

Table A-7-1
Results of General Chemistry and Cyanide Analyses
Landfill E
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Cyanide	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0	SW9012	Field	E300.0/ E340.2	E300.0/ E353.2	E300.0/ E353.2	E353.2	E300.0
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
DAEGW04	03/14/06	370	370	140	NA	4.27	< 0.1	1.2	< 0.05	NA	56
	03/16/05	510	510	140	NA	0.1	< 0.1	1	< 0.05	NA	63
DUP1203011B	03/17/04	320	320	180	NA	0.7	< 0.1	1.3	< 0.05	NA	79
	08/20/03	280	280	190	NA	2	< 0.1	1.9	< 0.05	NA	82
	03/13/03	400	400	170	NA	0.9	< 0.1	3	< 0.05	NA	75
	12/04/02	290	290	160	NA	2.8	< 0.1	2.4	< 0.05	NA	67
	09/03/02	290	290	150	NA	0.8	0.23	2.4	< 0.05	NA	59
	06/04/02	720	720	150	NA	2.4	0.15	2.2	< 0.05	NA	64
	03/12/02	340	340	180	NA	3.2	< 0.1 U	4.7	< 0.05	NA	70
	12/03/01	320	320	170	NA	NM	0.078 J	3.5 J	< 0.05 UJ	NA	63
	12/03/01	320	320	170	NA	--	0.078 J	3.6 J	< 0.05 UJ	NA	62
	08/29/01	300	300	150	NA	2.8	0.08 J	3 J-	< 0.05 R	NA	60
	05/17/01	310	310	140	NA	6.1	0.12	2.9	< 0.05	NA	57
	05/17/99	361	361	152	NA	7.09	< 0.1	NA	NA	1.75	56
	02/15/99	286	286	117	NA	7.2	< 0.1	NA	NA	2.18	48
	11/16/98	227	227	79	NA	6.83	< 0.1	NA	NA	2.49	40
	08/14/98	229	229	66	NA	10.26	0.12	NA	NA	1.91	45
	04/14/98	270	270	110	NA	6.43	0.1	NA	NA	1.6	51
	01/13/98	290	290	100	NA	6.63	< 0.1	NA	NA	1.8 (J16)	43 (J8)
	11/10/97	290	290	80	NA	7.87	0.1	NA	NA	2.3	46
	08/11/97	170	170	50	NA	6.01	0.3	NA	NA	1.5	32
	05/13/97	240	240	60	NA	6.32	0.1	NA	NA	1.8	37
	02/12/97	360	360	90	NA	6.82	< 0.1	NA	NA	2	63
	12/05/96	300	300	66	NA	NM	< 0.1	NA	NA	3	45
	08/29/96	300	300	80	NA	NM	< 0.1	NA	NA	1.4	48
	06/10/96	310	310	80	NA	NM	< 0.1	NA	NA	1.9	46
	03/07/96	271	271	70	NA	NM	0.38	2.06	NA	NA	45
	12/11/95	176	176	44	NA	NM	0.3	2	NA	NA	31
	09/11/95	300	300	67	NA	NM	< 0.25	NA	NA	2.1	44
	11/09/94	374	374	71	NA	NM	NA	2.66	NA	NA	50.2
	11/02/92	360	359	96	NA	NM	NA	NA	NA	3.2	60.3

Table A-7-1
Results of General Chemistry and Cyanide Analyses
Landfill E
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Cyanide	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0	SW9012	Field	E300.0/ E340.2	E300.0/ E353.2	E300.0/ E353.2	E353.2	E300.0
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
DAEGW05	03/14/06	470	470	130	NA	0.67	0.1	1.9	< 0.05	NA	100
	03/16/05	460	460	130	NA	0.2	< 0.1	1.8	< 0.05	NA	110
	03/16/05	490	490	130	NA	--	< 0.1	1.8	< 0.05	NA	120
	03/11/04	550	550	110	NA	0.8	< 0.1	1.3	< 0.05	NA	130
	08/19/03	640	640	78	NA	0.6	< 0.1	0.8	< 0.05	NA	140
	03/13/03	570	570	120	NA	1.2	< 0.1	1.3	< 0.05	NA	120
DUP0316053A	12/04/02	560	560	100	NA	1.9	0.13	1.1	< 0.05	NA	120
	09/03/02	600	600	100	NA	1.1	0.25	1.1	< 0.05	NA	130
	06/04/02	540	540	140	NA	2.2	0.15	1.4	< 0.05	NA	140
	03/12/02	590	590	120	NA	1.5	< 0.1 U	1	< 0.05	NA	150
	03/12/02	600	600	120	NA	--	< 0.1 U	1	< 0.05	NA	150
	12/03/01	780	780	40	NA	1.2	0.15	0.13 J	< 0.05 UJ	NA	150
	08/28/01	600	600	130	NA	0.5	0.14	0.91	< 0.05	NA	160
	05/17/01	600	600	110	NA	3.2	0.16	0.84	< 0.05	NA	150
	05/18/99	460	460	161	NA	0.12	0.17	NA	NA	< 2.53 (U4)	110
	03/15/99	533	533	140	NA	1.74	0.13	NA	NA	1.14	140
	11/17/98	531	531	172	NA	0.51 (J34)	< 0.1	NA	NA	1.56	130
	08/17/98	511	511	107	NA	0.87	0.15	NA	NA	1.77 (J33)	95
	04/15/98	540	540	110	NA	0.27	0.14	NA	NA	1	110
	01/14/98	560	560	130	NA	0.37	0.1	NA	NA	2.1 (J16)	130
	11/11/97	550	550	120	NA	0.65	0.1	NA	NA	1.8	120
	08/12/97	550	550	110	NA	0.64	0.1	NA	NA	1.7	120
	05/14/97	480	480 (J4)	90	NA	0.52	0.1	NA	NA	1.7	92
	02/13/97	570	570	90	NA	0.54	0.1	NA	NA	2	110
	12/06/96	570	570	100	NA	NM	0.1	NA	NA	1.3 (J33)	120
	08/29/96	560	560	90	NA	NM	0.1	NA	NA	1.8	120
	05/30/96	530	530	100	NA	NM	0.1	NA	NA	2.6	100
	03/06/96	481	481	125	NA	NM	0.67	2.67	NA	NA	103
	12/11/95	770	770	90	NA	NM	0.8	1.4	NA	NA	149
	09/12/95	620	620	80	NA	NM	< 0.25	NA	NA	1.4	130
	11/08/94	557	545	138	NA	NM	NA	3.55	NA	NA	123
	11/02/92	353	352	200	NA	NM	NA	NA	NA	3.6	130

Table A-7-1
of General Chemistry and Cyanide
Landfill E
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Cyanide	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0	SW9012	Field	E300.0/ E340.2	E300.0/ E353.2	E300.0/ E353.2	E353.2	E300.0
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
DAEGW06	03/16/06	200	200	140	NA	0.74	0.24	< 0.05	< 0.05	NA	7.6
	03/16/05	210	210	150	NA	0.7	0.25	< 0.05	< 0.05	NA	7.8
	03/11/04	220	220	150	NA	0.4	0.23	< 0.05	< 0.05	NA	7.8
	08/20/03	220	220	140	NA	1.5	0.25	< 0.05	< 0.05	NA	7.7
	03/12/03	220	220	140	NA	1.1	0.24	< 0.05	< 0.05	NA	7.2
	12/04/02	220	220	140	NA	0.8	0.18	< 0.05	< 0.05	NA	8.2
	09/03/02	210	210	140	NA	0.9	0.35	0.22	< 0.05	NA	8.2
	06/04/02	210	210	140	NA	2.2	0.24	0.12	< 0.05	NA	8.5
	03/12/02	210	210	150	NA	1	< 0.1 U	0.04 J	< 0.05	NA	8.7
	12/03/01	230	230	150	NA	2.4	0.26	0.02 J,J	< 0.05 UJ	NA	9.5
	08/28/01	210	210	140	NA	1.4	0.27	0.06	< 0.05	NA	8.6
	05/17/01	210	210	140	NA	1.9	0.26	0.03 J	< 0.05	NA	8.3
DUP0517012A	05/17/01	220	220	140	NA	--	0.31	0.03 J	< 0.05	NA	8.4
	05/17/99	240	240	160	NA	3.12	0.27	NA	NA	0.057	< 20
	02/15/99	208	208	160	NA	0.64	0.19	NA	NA	0.49	< 25
	11/16/98	240	240	180	NA	3.75 (J35)	< 0.5	NA	NA	1.27	12
	08/14/98	248	248	120	NA	0.9	0.21	NA	NA	0.082	13.5
	04/14/98	230	230	160	NA	3.25	0.24	NA	NA	0.057	< 20
	01/13/98	240	240	140	NA	1.11	0.3	NA	NA	0.3 (J16)	10
	11/10/97	230	230	160	NA	0.65	0.3	NA	NA	< 0.1	9
	08/11/97	250	250	140	NA	2.37	0.2	NA	NA	0.2	18
	05/13/97	240	240	130	NA	2.02	0.3	NA	NA	0.25	9.6
	02/12/97	250	250	130	NA	0.63	0.3	NA	NA	0.13	9.7
	12/06/96	260	260	110	NA	NM	0.3	NA	NA	0.2	11
	08/28/96	260	260	120	NA	NM	0.3	NA	NA	0.22	13
	05/30/96	250	250	120	NA	NM	0.3	NA	NA	< 0.05	13
	03/06/96	309	309	130	NA	NM	0.56	0.16	NA	NA	30
	12/11/95	281	281	152	NA	NM	0.6	0.24	NA	NA	19
	09/12/95	270	270	130	NA	NM	0.3	NA	NA	0.24	< 25
	04/05/95	290	288	139	NA	NM	NA	0.2	NA	NA	28

Table A-7-1
Results of General Chemistry and Cyanide Analyses
Landfill E
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Cyanide	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0	SW9012	Field	E300.0/ E340.2	E300.0/ E353.2	E300.0/ E353.2	E353.2	E300.0
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
DAEGW07 DUP0317041A	03/15/06	130	130	26	NA	0.59	< 0.1	< 0.05	< 0.05	NA	16
	03/18/05	170	170	22	NA	0.2	< 0.1	< 0.05	< 0.05	NA	18
	03/17/04	170	170	21	NA	0.22	< 0.1	0.29	< 0.05	NA	15
	03/17/04	170	170	21	NA	--	< 0.1	0.25	< 0.05	NA	15
	03/19/03	220	220	22	NA	1.73	< 0.1	< 0.05	< 0.05	NA	13
	03/11/02	210	210	21	NA	2	< 0.1	0.45	< 0.05	NA	18
	05/18/99	229	229	247	NA	6.76 (J35)	< 0.1	NA	NA	0.45	19
	03/15/99	206	206	24	NA	1.57	< 0.1	NA	NA	0.21	24
	04/15/98	180	180	32	NA	0.71	< 0.1	NA	NA	< 0.05	24
	01/14/98	130	130	40	NA	NM	< 0.1	NA	NA	3.7 (J16)	27
	12/12/97	120	120	40 (J9)	NA	4.81	< 0.1	NA	NA	0.73	31
	02/13/97	200	200	30	NA	0.95	< 0.1	NA	NA	0.13	29
	03/07/96	183	183	29	NA	NM	< 0.1	< 0.05	NA	NA	23
	12/14/95	82	82	59	NA	NM	0.2	1.8	NA	NA	54
	04/04/95	184	184	34	NA	NM	NA	< 0.2	NA	NA	40.5
DAEGW08	03/14/06	640	640	150	NA	0.51	< 0.1	< 0.05	< 0.05	NA	170
	03/28/05	700	700	140	NA	3.1	< 0.1	< 0.05	< 0.05	NA	180
	03/17/04	740	740	140	NA	0.7	< 0.1	< 0.05	< 0.05	NA	180
	08/18/03	710	710	110	NA	0.3	< 0.1	0.47	< 0.05	NA	150
	03/19/03	690	690	120	NA	0.2	< 0.1	< 0.05	< 0.05	NA	150
	12/05/02	440	440	49	NA	0.3	< 0.1	0.99	< 0.05	NA	69
	09/04/02	580	580	98	NA	0.2	0.22	0.33	< 0.05	NA	130
	06/04/02	720	720	130	NA	1.4	0.12	< 0.05	< 0.05	NA	160
	03/11/02	720	720	130	NA	0.6	0.088 J	< 0.05	< 0.05	NA	170
	11/30/01	380	380	91	NA	1.8	0.061 J	2.4	< 0.05	NA	88
	08/29/01	460	460	100	NA	2	0.12	1.4	< 0.05	NA	120
	05/16/01	590	590	97	NA	2.9	0.18	0.86	< 0.05	NA	140
	05/18/99	501	501	102	NA	0.5	< 0.1	NA	NA	0.23	75
	02/16/99	489	489	76	NA	0.83	< 0.1	NA	NA	1.28	110
	11/17/98	444	444	95	NA	1.26	< 0.1	NA	NA	0.33	98
	08/17/98	406	406	69	NA	0.67	1.1	NA	NA	< 0.05	53
	04/15/98	400	400	64	NA	0.77	< 0.1	NA	NA	< 0.05	82
	01/14/98	430	430	< 60 (U4)	NA	0.88	< 0.1	NA	NA	< 0.6 (U16, U4)	91
	11/11/97	410	410	50	NA	1.51	< 0.1	NA	NA	0.4	86
	08/12/97	470	470	60	NA	1.5	< 0.1	NA	NA	< 0.05	77
	05/14/97	500	500	90	NA	0.39	< 0.1	NA	NA	0.54	94

Table A-7-1
Results of General Chemistry and Cyanide Analyses
Landfill E
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Cyanide	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0	SW9012	Field	E300.0/ E340.2	E300.0/ E353.2	E300.0/ E353.2	E353.2	E300.0
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
DAEGW08	02/13/97	520	520	100	NA	0.29	< 0.1	NA	NA	0.05	100
	12/06/96	500	500	60	NA	NM	< 0.1	NA	NA	0.18	120
	08/29/96	460	460	70	NA	NM	< 0.1	NA	NA	0.08	90
	06/10/96	690	690	100	NA	NM	0.2	NA	NA	0.08	170
	03/07/96	694	694	203	NA	NM	0.71	< 0.05	NA	NA	234
	12/14/95	527	527	60	NA	NM	0.6	0.07	NA	NA	96
	09/12/95	610	610	110	NA	NM	0.31	NA	NA	0.2	170
	04/03/95	562	560	68	NA	NM	NA	< 0.2	NA	NA	128
DAESP03 DUP0308063A DAESP03CL	03/08/06	89	89	28	NA	7.23	< 0.1	1.7	< 0.05	NA	16
	03/08/06	78	78	29	NA	NA	< 0.1	1.7	< 0.05	NA	16
	03/08/06	75	75	30	< 0.01 U	NA	< 1 U	1.62	0.027	NA	15.7
	03/22/05	61	61	20	< 0.01	9.8	< 0.1	1.6	< 0.05	NA	9.5
	12/28/01	41	41	22	< 0.01	NM	0.038 J	1	< 0.05	NA	7.8
	12/28/01	42	42	22	< 0.01	--	0.036 J	1	< 0.05	NA	7.8
	02/01/99	70.8	70.8	32	NA	11	< 0.1	NA	NA	1.93	18
DUP112801 ³ DAESP03 ²	02/24/98	81.1	81.1	20.9	NA	10	< 0.1	NA	NA	0.85	16.4
	01/23/98	229	229	20.6	NA	10	0.17	NA	NA	2	33.1
DAEGW101	03/16/06	870	870	19	NA	0.1	< 0.1	< 0.05	< 0.05	NA	87
	05/26/05	790	790	18	NA	0.3	0.1	< 0.05	< 0.05	NA	100
	03/16/05	780	780	17	NA	0.1	0.11	0.69	< 0.05	NA	100
	12/15/04	NA	NA	NA	NA	NM	NA	NA	NA	NA	NA
	08/12/04	NA	NA	NA	NA	0.25	NA	NA	NA	NA	NA
	05/27/04	840	840	21	NA	1.7	0.11	0.95	< 0.05	NA	100
	03/11/04	770	770	25	NA	0.3	0.14	1.7	0.28	NA	110
	08/20/03	800	800	63	NA	0.6	0.23	2.2	0.2	NA	130
	06/05/03	800	800	53	NA	0.8	0.22	1.3	< 0.05	NA	120
	03/13/03	840	840	73	NA	1	0.17	< 0.05	< 0.05	NA	120
DAEGW102	03/16/06	800	800	370	NA	0.1	0.56	0.11	< 0.05	NA	240
	05/26/05	1100	1100	380	NA	1.1	0.57	0.21	< 0.05	NA	290
	03/16/05	1,000	1,000	450	NA	3	0.68	0.22	< 0.05	NA	320
	12/15/04	820	820	520	NA	0.8	0.65	0.28	< 0.05	NA	260
	08/12/04	950	950	510	NA	2.7	0.53	0.37	< 0.05	NA	290
	05/27/04	1,000	1,000	520	NA	2.3	0.77	0.39	< 0.05	NA	320

Table A-7-1
Results of General Chemistry and Cyanide Analyses
Landfill E
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Cyanide	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0	SW9012	Field	E300.0/ E340.2	E300.0/ E353.2	E300.0/ E353.2	E353.2	E300.0
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
DAEGW102	03/15/04	880	880	580	NA	1.2	0.61	0.47	< 0.1	NA	300
	12/04/03	810	810	610	NA	0.8	0.66	0.64	< 0.1	NA	260
	08/19/03	900	900	630	NA	1.6	0.68	0.91 J-	< 0.1 UJ	NA	410
	06/04/03	880	880	770	NA	2	0.7	1	< 0.25	NA	340
	03/12/03	650	650	840	NA	2.4	0.64	0.96	< 0.1	NA	270
DAEGW103	03/14/06	110	110	59	NA	4.84	< 0.1	5.2	< 0.05	NA	35
	05/26/05	240	240	130	NA	5.5	0.15	4.1	< 0.05	NA	70
	03/17/05	260	260	140	NA	6.8	< 0.1	3.9	< 0.05	NA	71
DUP0317053A	03/17/05	240	240	130	NA	--	0.1	3.9	< 0.05	NA	69
DAEGW103CL	03/17/05	249	249	140	NA	--	< 0.3 U	4.09	< 0.1 U	NA	68
	12/15/04	240	240	150	NA	6	< 0.1	4.2	< 0.05	NA	72
DUP1215042A	12/15/04	250	250	140	NA	NA	< 0.1	4.2	< 0.05	NA	71
DAEGW103CL	12/15/04	234	234	132	NA	NA	< 0.3 U	NA	NA	4.14	71.8
	08/11/04	240	240	140	NA	6.92	< 0.1	3.9	< 0.05	NA	70
DUP0811042B	08/11/04	300	300	140	NA	--	< 0.1	3.9	< 0.05	NA	69
DAEGW103CL	08/11/04	270	270	130	NA	--	0.11	NA	NA	3.3 J-	66
	05/28/04	360	360	140	NA	4.8	< 0.1	3.8	< 0.05	NA	72
DUP0528041A	05/28/04	310	310	140	NA	NA	< 0.1	3.8	< 0.05	NA	73
DAEGW103CL	05/28/04	240	240	150	NA	NA	0.14	3.9	< 0.05	3.9	74
	03/10/04	230	230	150	NA	1.8	0.11	4	< 0.05	NA	77
DUP0310043B	03/10/04	230	230	150	NA	--	0.11	4	< 0.05	NA	77
DAEGW103CL	03/10/04	230	230	140	NA	--	0.13	4	0.068	4.1 HT-04	71
	12/04/03	250	250	140	NA	3.8	0.1	4	< 0.05	NA	72
DUP1204033A	12/04/03	250	250	140	NA	--	0.1	4.1	< 0.05	NA	72
DAEGW103CL	12/04/03	230	230	153	NA	--	< 0.1	4.5 J-	< 0.05	4.5 J-	75.2
	08/19/03	240	240	130	NA	2.2	0.11	3.9 J-	< 0.05 UJ	NA	89
DUP0819033B	08/19/03	250	250	140	NA	NA	0.12	3.9 J-	< 0.05 UJ	NA	91
DAEGW103CL	08/19/03	230	230	140	NA	NA	0.1 J+	4.2 J-	< 0.05	4.2 J-	70
	06/04/03	240	240	150	NA	4.8	0.14	4.2	< 0.05	NA	78
DUP0604033A	06/04/03	260	260	150	NA	--	0.15	4.2	< 0.05	NA	78
DAEGW103CL	06/04/03	230	< 20	140	NA	--	0.17	4.1 J-	< 0.05	4.1 HT-04,J-	65

Table A-7-1
Results of General Chemistry and Cyanide Analyses
Landfill E
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Cyanide	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0	SW9012	Field	E300.0/ E340.2	E300.0/ E353.2	E300.0/ E353.2	E353.2	E300.0
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
DAEGW103	03/13/03	300	300	140	NA	6.1	< 0.1	4.2	< 0.05	NA	76
DUP0313033A	03/13/03	230	230	140	NA	--	0.13	4.3	< 0.05	NA	72
DAEGW103CL	03/13/03	240	240	140	NA	--	0.13	3.8	0.082 J-	3.9	67
	11/25/02	230	230	140	NA	NM	NA	NA	NA	NA	74
DAEGW104	03/16/06	340	340	72	NA	0.08	0.27	< 0.05	< 0.05	NA	11
	05/26/05	270	270	77	NA	0.5	0.27	< 0.05	< 0.05	NA	26
DAEGW104CL	05/26/05	287	287	78	NA	NM	0.4	1	< 1 U	NA	25
DUP0526052A	05/26/05	270	270	76	NA	NM	0.26	< 0.05	< 0.05	NA	26
	03/16/05	340	340	73	NA	0.3	0.29	0.06	< 0.05	NA	14
	12/15/04	290	290	72	NA	0.9	0.28	0.07	< 0.05	NA	11
	08/12/04	270	270	69	NA	0.32	0.29	0.05	< 0.05	NA	10
	05/27/04	350	350	69	NA	1.4	0.29	0.07	< 0.05	NA	11
	03/15/04	280	280	73	NA	0.8	0.31	< 0.05	< 0.05	NA	11
	12/04/03	300	300	70	NA	0.9	0.3	0.13	< 0.05	NA	11
	08/19/03	280	280	66	NA	0.6	0.36	0.07 J-	< 0.05 UJ	NA	12
DUP0819033A	08/19/03	280	280	67	NA	NA	0.34	< 0.05 UJ	< 0.05 UJ	NA	11
	06/04/03	290	290	78	NA	1.1	0.35	0.19	< 0.05	NA	12
	03/12/03	370	370	79	NA	1.8	0.3	< 0.05	< 0.05	NA	12
	11/25/02	280	280	260	NA	NM	NA	NA	NA	NA	48

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in their respective quarterly reports.

2 - This sample was labeled LFE-GW on the chain of custody and was reported by the laboratory as LFE-GW. This sample ID (LFE-GW) has been changed within the text, tables and database to reflect the historic name of this seep (DAESP03).

3 - This sample was labeled LFE-GWD on the chain of custody and was reported by the laboratory as LFE-GWD. In accordance with the QAPP, this sample ID (LFE-GWD) was changed to DUP112801 within the text, tables and database.

mg/L - milligrams per liter

NA - Not analyzed

NM - Not measured

"--" dissolved oxygen measurements were not taken for duplicate and quality control samples.

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-7-2
Results of MBAS, Total Hardness, and TPH Analyses
Landfill E
Presidio of San Francisco, California

Well Name	Sample Date	MBAS	Total Hardness	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	E425.1	E130.2/ E310.1	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(mg/L)	(mg/L)	(µg/L)	(µg/L)	(µg/L)
DAEGW03 DUP0311043A DAEGW03CL	03/14/06	NA	NA	< 50	< 50	< 300
	03/16/05	NA	NA	< 50	< 50	< 300
	03/11/04	NA	NA	< 50	< 50	< 300
	03/11/04	NA	NA	< 50	140 HY	< 300
	03/11/04	NA	NA	< 50	< 50	< 250
	08/20/03	0.12 J	740	< 50	< 50	< 300
	03/13/03	NA	NA	< 50	< 50	< 300
	03/12/02	NA	NA	< 50	< 50	< 300
	05/17/01	NA	NA	< 50	< 50	< 300
	02/15/99	NA	NA	< 50	< 50	< 300
	01/13/98	NA	NA	< 50	< 50	< 300
	12/05/96	NA	NA	< 50	< 50	< 300
	08/28/96	NA	NA	< 50	< 50	< 300
	05/30/96	NA	NA	< 50	< 50	< 300 (U16)
	03/05/96	NA	NA	< 50	110 (J32)	3,000 (J32)
	12/11/95	NA	NA	< 50	< 50	< 300
	09/11/95	NA	NA	< 50	< 50	< 1,300
	11/08/94	NA	NA	< 50	NA	NA
	08/27/92	NA	NA	NA	70	NA
DAEGW04	03/14/06	NA	NA	NA	< 50	< 300
	03/16/05	NA	NA	NA	< 50	< 300
	03/17/04	NA	NA	NA	< 50	< 300
	08/20/03	< 0.1 UJ	500	NA	< 50	< 300
	03/13/03	NA	NA	NA	< 50	< 300
	03/12/02	NA	NA	NA	< 50	< 300
	05/17/01	NA	NA	NA	< 50	< 300
	02/15/99	NA	NA	< 50	77 J25	< 300
	01/13/98	NA	NA	< 50	< 50	< 300
	12/05/96	NA	NA	< 50	< 50	< 300
	08/29/96	NA	NA	< 50	< 50	< 300
	06/10/96	NA	NA	< 50	< 50 (U6)	< 300 (U6, U16)
	03/07/96	NA	NA	< 50	110 (J32)	2,700 (J32)
	12/11/95	NA	NA	< 50	< 50	< 300
	09/11/95	NA	NA	< 50	< 50	< 1,300
	11/09/94	NA	NA	< 50	NA	NA
	11/02/92	NA	NA	NA	< 50	NA
DAEGW05 DUP0316053A DUP0312023A	03/14/06	NA	NA	< 50	< 50	< 300
	03/16/05	NA	NA	< 50	< 50	< 300
	03/16/05	NA	NA	< 50	< 50	< 300
	03/11/04	NA	NA	< 50	< 50	< 300
	08/19/03	< 0.1	700	< 50	< 50	< 300
	03/13/03	NA	NA	< 50	< 50	< 300
	03/12/02	NA	NA	< 50	< 50	< 300
	03/12/02	NA	NA	< 50	< 50	< 300
	05/17/01	NA	NA	< 50	< 50	< 300
	03/15/99	NA	NA	< 50	< 50	< 300
	01/14/98	NA	NA	< 50	< 50	< 300
	12/06/96	NA	NA	< 50	< 50	< 300
	08/29/96	NA	NA	< 50	< 50	< 300
	05/30/96	NA	NA	< 50	< 50 (U6)	< 300 (U6, U16)
	03/06/96	NA	NA	< 50	120 (J32)	2,800 (J32)
	12/11/95	NA	NA	< 50	< 50 (U6)	< 300 (U6)

Table A-7-2
Results of MBAS, Total Hardness, and TPH Analyses
Landfill E
Presidio of San Francisco, California

Well Name	Sample Date	MBAS	Total Hardness	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	E425.1	E130.2/ E310.1	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(mg/L)	(mg/L)	(µg/L)	(µg/L)	(µg/L)
DAEGW05	09/12/95	NA	NA	< 50	< 50	< 1,300
	11/08/94	NA	NA	< 50	NA	NA
	11/02/92	NA	NA	NA	< 50	NA
DAEGW06 DUP0517012A	03/16/06	NA	NA	NA	< 50	< 300
	03/16/05	NA	NA	NA	< 50	< 300
	03/11/04	NA	NA	NA	< 50	< 300
	08/20/03	< 0.1 UJ	350	NA	< 50	< 300
	03/12/03	NA	NA	NA	< 50	< 300
	03/12/02	NA	NA	NA	< 50	< 300
	05/17/01	NA	NA	NA	< 50	< 300
	05/17/01	NA	NA	NA	< 50	< 300
	02/15/99	NA	NA	< 50	< 50	< 300
	01/13/98	NA	NA	< 50	< 50	< 300
	12/06/96	NA	NA	< 50	< 50	< 300
	08/28/96	NA	NA	< 50	< 50	< 300
	05/30/96	NA	NA	< 50	< 50	< 300 (U16)
	03/06/96	NA	NA	< 50	< 50	680 (J32)
	12/11/95	NA	NA	< 50	< 50	< 300
	09/12/95	NA	NA	< 50	< 50	< 1,300
	04/05/95	NA	NA	< 10	NA	NA
DAEGW07 DUP0317041A	03/15/06	NA	NA	< 50	< 50	< 300
	03/18/05	NA	NA	< 50	< 50	< 300
	03/17/04	NA	NA	< 50	< 50	< 300
	03/17/04	NA	NA	< 50	< 50	< 300
	03/19/03	NA	NA	< 50	< 50	< 300
	03/11/02	NA	NA	< 50	< 50	< 300
	05/18/99	NA	NA	< 50 U	< 50 U	< 300 U
	03/15/99	NA	NA	< 50	< 50	< 300
	04/15/98	NA	NA	< 50	< 50	< 300
	01/14/98	NA	NA	< 50	< 50	< 300
	12/12/97	NA	NA	< 50	< 50	1,500 (R32)
	02/13/97	NA	NA	< 50	< 50	< 300
	03/07/96	NA	NA	< 50	< 50	660 (J32)
	12/14/95	NA	NA	< 50	< 50	< 300
	04/04/95	NA	NA	< 10	NA	NA
DAEGW08	03/14/06	NA	NA	< 50	< 50	< 300
	03/28/05	NA	NA	< 50	< 50	< 300
	03/17/04	NA	NA	< 50	< 50	< 300
	08/18/03	< 0.1	740	< 50	< 50	< 300
	03/19/03	NA	NA	< 50	< 50	< 300
	03/11/02	NA	NA	< 50	< 50	< 300
	05/16/01	NA	NA	< 50	< 50	< 300
	05/18/99	NA	NA	< 50	< 50	< 300
	02/16/99	NA	NA	< 50	< 50	< 300
	01/14/98	NA	NA	< 50	< 50	< 300
	12/06/96	NA	NA	< 50	< 50	< 300
	08/29/96	NA	NA	< 50	< 50	< 300
	06/10/96	NA	NA	< 50	< 50 (U6, U9)	< 300 (U6, U16)
	03/07/96	NA	NA	< 50	260 (J32)	5,000 (J32)
	12/14/95	NA	NA	< 50	< 50	< 300
	09/12/95	NA	NA	< 50	< 50	< 1,300
	04/03/95	NA	NA	11	NA	NA

Table A-7-2
Results of MBAS, Total Hardness, and TPH Analyses
Landfill E
Presidio of San Francisco, California

Well Name	Sample Date	MBAS	Total Hardness	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	E425.1	E130.2/ E310.1	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(mg/L)	(mg/L)	(µg/L)	(µg/L)	(µg/L)
DAESP03	03/24/06	< 1	NA	NA	NA	NA
DUP0308063A	03/08/06	NA	120	< 50	55 Y	< 300
DAESP03CL	03/08/06	NA	110	< 50	63 Y	< 300
	03/08/06	0.05	107	< 50 U	58 J+	< 300 U
	03/22/05	< 0.1 R	95	< 50	< 50	< 300
DAEGW101	03/16/06	0.11	780	< 50	65 HY	< 300
	05/26/05	0.14	780	< 50	< 50	< 300
	03/16/05	0.14	800	< 50	< 50	< 300
	08/12/04	NA	800	< 50	< 50	< 300
	05/27/04	< 0.1	800	< 50	< 50	< 300
	03/11/04	< 0.1	790	< 50	< 50	< 300
	06/05/03	0.4 J-	780	< 50	< 50	< 300
	03/13/03	< 0.1	750	< 50	< 50	< 300
DAEGW102	03/16/06	< 0.1	1,300	< 50	< 50	< 300
	05/26/05	0.25	1600	< 50	< 50	< 300
	03/16/05	0.15	1,800	< 50	< 50	< 300
	12/15/04	< 0.1	300	< 50	< 50	< 300
	08/12/04	< 0.1	1,800	< 50	< 50	< 300
	05/27/04	< 0.1	1,900	< 50	< 50	< 300
	03/15/04	< 0.1	1,400	< 50	NA	NA
	12/04/03	< 0.1 UJ	1,500	< 50	< 50	< 300
	08/19/03	< 0.1	1,800	< 50	190 HY	< 300
	06/04/03	< 0.1 UJ	1,700	< 50	< 50	< 300
	03/12/03	< 0.1	1,600	< 50	< 50	< 300
	11/26/02	NA	NA	< 50	NA	NA
DAEGW103	03/14/06	< 0.1 UJ	210	< 50	< 50	< 300
	05/26/05	0.12	270	< 50	< 50	< 300
	03/17/05	0.15	270	< 50	< 50	< 300
DUP0317053A	03/17/05	0.17	270	< 50	< 50	< 300
DAEGW103CL	03/17/05	< 0.05 U UJ	341	< 50 U	< 50 U	< 300 U
	12/15/04	< 0.1	500	< 50	< 50	< 300
DUP1215042A	12/15/04	< 0.1	300	< 50	< 50	< 300
DAEGW103CL	12/15/04	< 0.1	300	< 50 U UJ	< 48 U	< 300 U
	08/11/04	< 0.1	300	< 50	< 50	< 300
DUP0811042B	08/11/04	< 0.1	290	< 50	< 50	< 300
DAEGW103CL	08/11/04	< 0.1	299	< 100	< 100 J-	< 400 UJ
	05/28/04	< 0.1	320	< 50	< 50	< 300
DUP0528041A	05/28/04	< 0.1	320	< 50	< 50	< 300
DAEGW103CL	05/28/04	NA	320	< 50	< 48	< 240
	03/10/04	< 0.1	300	< 50	< 50	< 300
DUP0310043B	03/10/04	< 0.1	310	< 50	< 50	< 300
DAEGW103CL	03/10/04	< 0.05	300	< 50	< 49	< 240
	12/04/03	< 0.1 UJ	290	< 50	< 50	< 300
DUP1204033A	12/04/03	< 0.1 UJ	290	< 50	< 50	< 300
DAEGW103CL	12/04/03	< 0.05	320	< 50	< 48 UJ	< 240 UJ
	08/19/03	< 0.1	300	< 50	54 HY	< 300
DUP0819033B	08/19/03	< 0.1	300	< 50	< 50	< 300
DAEGW103CL	08/19/03	< 0.05 UJ	300	< 50	< 50	< 250
	06/04/03	< 0.1	310	< 50	< 50	< 300
DUP0604033A	06/04/03	< 0.1	300	< 50	< 50	< 300
DAEGW103CL	06/04/03	< 0.4	270	< 50	< 50	< 250

Table A-7-2
Results of MBAS, Total Hardness, and TPH Analyses
Landfill E
Presidio of San Francisco, California

Well Name	Sample Date	MBAS	Total Hardness	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	E425.1	E130.2/ E310.1	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(mg/L)	(mg/L)	(µg/L)	(µg/L)	(µg/L)
DAEGW103	03/13/03	< 0.1	280	< 50	< 50	< 300
DUP0313033A	03/13/03	< 0.1	300	< 50	< 50	< 300
DAEGW103CL	03/13/03	< 0.05	300	< 50	< 50	< 250
	11/25/02	NA	310	< 50	< 59	< 590
DAEGW104	03/16/06	< 0.1	260	< 50	54 HY	< 300
	05/26/05	0.12	290	< 50	< 50	< 300
DAEGW104CL	05/26/05	< 0.03 U UJ	339	< 50 U	64	< 300 U
DUP0526052A	05/26/05	0.14	340	< 50	< 50	< 300
	03/16/05	< 0.1	300	< 50	< 50	< 300
	12/15/04	< 0.1	310	< 50	< 50	< 300
	08/12/04	0.14	310	< 50	< 50	< 300
	05/27/04	< 0.1	320	< 50	< 50	< 300
	03/15/04	< 0.1	300	< 50	NA	NA
	12/04/03	< 0.1 UJ	310	< 50	< 50	< 300
	08/19/03	< 0.1	290	< 50	< 50	< 300
DUP0819033A	08/19/03	< 0.1	300	< 50	< 50	< 300
	06/04/03	< 0.1	290	< 50	< 50	< 300
	03/12/03	< 0.1	360	< 50	< 50	< 300
	11/25/02	NA	560	< 50	< 50	< 500

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical method used during previous quarters are identified in the respective quarterly reports.

mg/L - milligrams per liter

µg/L - micrograms per liter

NA - Not analyzed

MBAS - Methylene Blue Active Substances

TPH - Total petroleum hydrocarbons

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-7-3
Results of SVOC, PAH, OCP, PCB, Chlorinated Herbicide, and VOC Analyses
Landfill E
Presidio of San Francisco, California

Well Name	Sample Date	SVOCs		PAHs			All OCPs and PCBs	All Chlorinated Herbicides	VOCs								
		bis(2-Ethylhexyl)-phthalate	All Other SVOCs	Benzo(a)-pyrene	Benzo(g,h,i)-perylene	All Other PAHs			1,2-Dichloro-ethane	Benzene	Bromo-dichloro-methane	Chloro-form	Chloro-methane	Dibromo-chloro-methane	MTBE	Toluene	All Other VOCs
	Analytical Method ¹	SW8270/ SW8270C	SW8270/ SW8270C	SW8270/ SW8270C/ SW8310	SW8270/ SW8270C/ SW8310	SW8270/ SW8270C/ SW8310	SW8081/ SW8081A/ SW8082/ SW8270	SW8270/ SW8151/ SW8151A	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M
DAEGW03 DUP0311043A DAEGW03CL		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
	03/14/06	NA	NA	< 0.1	< 0.19	ND	ND	NA	< 0.5	0.3 J	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/16/05	NA	NA	< 0.1	< 0.19	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	ND
	03/11/04	NA	NA	< 0.1	< 0.19	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/11/04	NA	NA	< 0.1	< 0.19	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/11/04	NA	NA	< 0.05 R	< 0.1 UJ	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/20/03	NA	NA	< 0.09	< 0.19	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/13/03	NA	NA	< 0.09	< 0.19	ND	ND	NA	< 0.5	0.2 J	< 0.5	< 0.5	< 1	< 0.5	3.2	< 0.5	ND
	03/12/02	NA	NA	< 0.1	< 0.19	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	05/17/01	NA	NA	< 0.1 UJ	< 0.19 UJ	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1 UJ	< 0.5	< 0.5 UJ	< 0.5	ND
	02/15/99	< 10	ND	NA	NA	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	01/13/98	< 10	ND	NA	NA	ND	ND (U6, U16)	ND (U12, U16)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	12/05/96	10 (J30)	ND	NA	NA	ND	ND (R12)	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	08/28/96	< 10	ND	NA	NA	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	05/30/96	< 10	ND	NA	NA	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	0.7	< 0.5	NA	< 0.5	ND
	03/05/96	ND	ND	NA	NA	ND	ND	ND	< 0.5	< 0.5	2.3	2.4	< 0.5	1	NA	< 0.5	ND
	12/11/95	< 10	ND	NA	NA	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	09/11/95	< 10	ND	NA	NA	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	11/08/94	3.69	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
	08/27/92	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DAEGW04	03/14/06	NA	NA	< 0.09	< 0.19	ND	ND	NA	< 0.5	0.2 J	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/16/05	NA	NA	< 0.1	< 0.19	ND	NA	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	ND
	03/17/04	NA	NA	< 0.1	< 0.19	ND	NA	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	08/20/03	NA	NA	< 0.1	< 0.19	ND	NA	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/13/03	NA	ND	< 0.09	< 0.19	ND	NA	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/12/02	NA	NA	< 0.1	< 0.19	ND	NA	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	05/17/01	NA	NA	< 0.1 UJ	< 0.19 UJ	ND	NA	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	02/15/99	< 10	ND	NA	NA	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	01/13/98	< 10	ND	NA	NA	ND	ND (U6)	ND (U16)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	12/05/96	< 10	ND	NA	NA	ND	ND (R6, R12)	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	08/29/96	< 10	ND	NA	NA	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	06/10/96	18 (J30, J33)	ND	NA	NA	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	0.6 (J33)	< 0.5	NA	< 0.5	ND
	03/07/96	< 10	ND	NA	NA	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	12/11/95	< 10	ND	NA	NA	ND	ND	ND (U9, U12)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	09/11/95	< 10	ND	NA	NA	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	11/09/94	8.95	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
	11/02/92	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DAEGW05 DUP0312023A	03/14/06	NA	NA	< 0.1	< 0.19	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/16/05	NA	NA	< 0.1	< 0.2	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	ND
	03/16/05	NA	NA	< 0.1	< 0.2	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	ND
	03/11/04	NA	NA	< 0.1	< 0.2	ND	ND	NA	< 0.5	0.2 J	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	08/19/03	NA	NA	< 0.1	< 0.19	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/13/03	NA	ND	< 0.09	< 0.19	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/12/02	NA	NA	< 0.1	< 0.19	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/12/02	NA	NA	< 0.1	< 0.19	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND

Table A-7-3
Results of SVOC, PAH, OCP, PCB, Chlorinated Herbicide, and VOC Analyses
Landfill E
Presidio of San Francisco, California

Well Name	Sample Date	SVOCs		PAHs			All OCPs and PCBs	All Chlorinated Herbicides	VOCs								
		bis(2-Ethylhexyl)-phthalate	All Other SVOCs	Benzo(a)-pyrene	Benzo(g,h,i)-perylene	All Other PAHs			1,2-Dichloro-ethane	Benzene	Bromo-dichloro-methane	Chloro-form	Chloro-methane	Dibromo-chloro-methane	MTBE	Toluene	All Other VOCs
	Analytical Method ¹	SW8270/ SW8270C	SW8270/ SW8270C	SW8270/ SW8270C/ SW8310	SW8270/ SW8270C/ SW8310	SW8270/ SW8270C/ SW8310	SW8081/ SW8081A/ SW8082/ SW8270	SW8270/ SW8151/ SW8151A	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M
DAEGW05		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
	05/17/01	NA	NA	< 0.1 UJ	< 0.19 UJ	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/15/99	< 10	ND	NA	NA	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.6	< 0.5	NA	< 0.5	ND
	01/14/98	< 10	ND	NA	NA	ND	ND (U6, U16, R, R6, R12)	ND (U16)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	12/06/96	< 10	ND	NA	NA	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	08/29/96	< 10	ND	NA	NA	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	05/30/96	13 (J30)	ND	NA	NA	ND	ND	ND (U15)	0.6	< 0.5	< 0.5	< 0.5	0.8	< 0.5	NA	< 0.5	ND
	03/06/96	< 10	ND	NA	NA	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	12/11/95	< 10	ND	NA	NA	ND	ND	ND (U9, U12)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	09/12/95	11 (J30)	ND	NA	NA	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
DAEGW06	11/08/94	10.1	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
	11/02/92	NA	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/16/06	NA	NA	< 0.1	< 0.19	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/16/05	NA	NA	< 0.1	< 0.2	ND	NA	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	ND
	03/11/04	NA	NA	< 0.1	< 0.19	ND	NA	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	08/20/03	NA	NA	< 0.1	< 0.19	ND	NA	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/12/03	NA	ND	< 0.09	< 0.19	ND	NA	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/12/02	NA	NA	< 0.1	< 0.19	ND	NA	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	05/17/01	NA	NA	< 0.1 UJ	< 0.19 UJ	ND	NA	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1 UJ	< 0.5	< 0.5 UJ	< 0.5	ND
	05/17/01	NA	NA	< 0.1	< 0.19	ND	NA	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	NA	< 0.5	ND
DUP0517012A	02/15/99	< 10	ND	NA	NA	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	01/13/98	< 10	ND	NA	NA	ND	ND (U6, U16)	ND (U16)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	12/06/96	< 10	ND	NA	NA	ND	ND (R12)	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	08/28/96	< 10	ND	NA	NA	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	0.6	ND
	05/30/96	< 10	ND	NA	NA	ND	ND	ND (U15)	0.6	< 0.5	< 0.5	< 0.5	1	< 0.5	NA	11	ND
	03/06/96	< 10	ND	NA	NA	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	12/11/95	< 10	ND	NA	NA	ND	ND	ND (U9, U12)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	09/12/95	< 10	ND	NA	NA	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 3.4 (U2)	ND
	04/05/95	< 20.7	ND	NA	NA	NA	NA	NA	< 0.5	NA	NA	NA	NA	NA	NA	NA	ND
DAEGW07	03/15/06	NA	NA	< 0.09	< 0.19	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/18/05	< 9.8	ND	< 0.1	< 0.19	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	ND
	03/17/04	< 9.8	ND	< 0.09	< 0.19	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/17/04	< 9.8	ND	< 0.1	< 0.19	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/19/03	< 9.8	ND	< 0.1	< 0.2	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/11/02	< 9.5	ND	< 0.1	< 0.2	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	05/18/99	< 10	ND	NA	NA	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	03/15/99	< 10	ND	NA	NA	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.6	< 0.5	NA	< 0.5	ND
	04/15/98	< 10	ND	NA	NA	ND	ND	ND (U16)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	01/14/98	< 10	ND	NA	NA	ND	ND (U6, U16)	ND (U16)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
DUP0317041A	12/12/97	20 (J30)	ND	NA	NA	ND (R12)	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	02/13/97	< 10	ND	NA	NA	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	03/07/96	< 10	ND	NA	NA	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	12/14/95	< 10	ND	NA	NA	ND	ND	ND (U9, U12)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	04/04/95	53.4	ND	NA	NA	NA	NA	NA	< 0.5	NA	NA	NA	NA	NA	NA	NA	ND

Table A-7-3
Results of SVOC, PAH, OCP, PCB, Chlorinated Herbicide, and VOC Analyses
Landfill E
Presidio of San Francisco, California

Well Name	Sample Date	SVOCs		PAHs			All OCPs and PCBs	All Chlorinated Herbicides	VOCs								
		bis(2-Ethylhexyl)-phthalate	All Other SVOCs	Benzo(a)-pyrene	Benzo(g,h,i)-perylene	All Other PAHs			1,2-Dichloro-ethane	Benzene	Bromo-dichloro-methane	Chloro-form	Chloro-methane	Dibromo-chloro-methane	MTBE	Toluene	All Other VOCs
	Analytical Method ¹	SW8270/ SW8270C	SW8270/ SW8270C	SW8270/ SW8270C/ SW8310	SW8270/ SW8270C/ SW8310	SW8270/ SW8270C/ SW8310	SW8081/ SW8081A/ SW8082/ SW8270	SW8270/ SW8151/ SW8151A	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M
DAEGW08		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
	03/14/06	NA	NA	< 0.09	< 0.19	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/28/05	NA	NA	< 0.1	< 0.19	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	ND
	03/17/04	NA	NA	< 0.1	< 0.19	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	08/18/03	NA	NA	< 0.1	< 0.19	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/19/03	NA	ND	< 0.1	< 0.19	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/11/02	NA	NA	0.12	0.2	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	05/16/01	NA	NA	< 0.1 UJ	< 0.19 UJ	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5 UJ	< 0.5	ND
	02/16/99	< 10	ND	NA	NA	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	01/14/98	< 10	ND	NA	NA	ND	ND (U6, U16)	ND (U16)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	12/06/96	< 10	ND	NA	NA	ND	ND (R6, R12)	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	08/29/96	< 10	ND	NA	NA	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	06/10/96	< 10	ND	NA	NA	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	0.7	< 0.5	NA	1.4	ND
	03/07/96	< 10	ND	NA	NA	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	12/14/95	< 10	ND	NA	NA	ND	ND	ND (U9, U12)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
DAEGW101	09/12/95	< 10	ND	NA	NA	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	ND
	04/03/95	< 20.8	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND
	03/16/06	NA	NA	< 0.1	< 0.19	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	05/26/05	NA	NA	< 0.1	< 0.2	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/16/05	NA	NA	< 0.09	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	ND
	08/12/04	NA	NA	< 0.1	< 0.2	ND	NA	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1 UJ	< 0.5	< 0.5	< 0.5	ND
	05/27/04	NA	NA	< 0.1	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
DAEGW102	03/11/04	NA	NA	< 0.1	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	06/05/03	NA	NA	< 0.09	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/13/03	< 9.4	ND	< 9.4	< 9.4	ND	NA	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/16/06	NA	NA	< 0.1	< 0.19	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	05/26/05	NA	NA	< 0.1	< 0.2	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/16/05	NA	NA	< 0.1	< 0.2	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	ND
	12/15/04	NA	NA	< 0.09	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
DAEGW103	08/12/04	NA	NA	< 0.1	< 0.19	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1 UJ	< 0.5	< 0.5	< 0.5	ND
	05/27/04	NA	NA	< 0.1	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/15/04	NA	NA	< 0.1	< 0.2	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	12/04/03	NA	NA	< 0.1	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	08/19/03	NA	NA	< 0.1	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	06/04/03	NA	NA	< 0.09	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/12/03	< 9.6	ND	< 9.6	< 9.6	ND	NA	NA	< 0.5	0.3 J	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
DUP0317053A DAEGW103CL	03/14/06	NA	NA	< 0.09	< 0.19	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	05/26/05	NA	NA	< 0.1	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/17/05	NA	NA	< 0.1	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	ND
DUP1215042A DAEGW103CL	03/17/05	NA	NA	< 0.1	< 0.2	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	ND
	03/17/05	NA	NA	< 0.2 U	< 0.2 U	ND	ND	ND	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U UJ	< 4.5 U	< 2 U	< 0.5 U	ND
	12/15/04	NA	NA	< 0.09	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
DUP0811042B DAEGW103CL	12/15/04	NA	NA	< 0.09	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	12/15/04	NA	NA	< 0.2 U UJ	< 0.2 U	ND	ND	ND	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.5 U	< 2 U	< 0.5 U	ND
	08/11/04	NA	NA	< 0.1	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1 UJ	< 0.5	< 0.5	< 0.5	ND
DUP0811042B DAEGW103CL	08/11/04	NA	NA	< 0.09	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1 UJ	< 0.5	< 0.5	< 0.5	ND
	08/11/04	NA	NA	< 0.5	< 0.5	ND	ND	ND	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	ND

Table A-7-3
Results of SVOC, PAH, OCP, PCB, Chlorinated Herbicide, and VOC Analyses
Landfill E
Presidio of San Francisco, California

Well Name	Sample Date	SVOCs		PAHs			All OCPs and PCBs	All Chlorinated Herbicides	VOCs								
		bis(2-Ethylhexyl)-phthalate	All Other SVOCs	Benzo(a)-pyrene	Benzo(g,h,i)-perylene	All Other PAHs			1,2-Dichloro-ethane	Benzene	Bromo-dichloro-methane	Chloro-form	Chloro-methane	Dibromo-chloro-methane	MTBE	Toluene	All Other VOCs
	Analytical Method ¹	SW8270/ SW8270C	SW8270/ SW8270C	SW8270/ SW8270C/ SW8310	SW8270/ SW8270C/ SW8310	SW8270/ SW8270C/ SW8310	SW8081/ SW8081A/ SW8082/ SW8270	SW8270/ SW8151/ SW8151A	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
DAEGW103	05/28/04	NA	NA	< 0.1	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
DUP0528041A	05/28/04	NA	NA	< 0.1	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
DAEGW103CL	05/28/04	NA	NA	< 0.048	< 0.095	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/10/04	NA	NA	< 0.1	< 0.2	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
DUP0310043B	03/10/04	NA	NA	< 0.1	< 0.2	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
DAEGW103CL	03/10/04	NA	NA	< 0.05 R	< 0.1	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/04/03	NA	NA	< 0.1	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
DUP1204033A	12/04/03	NA	NA	< 0.1	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
DAEGW103CL	12/04/03	NA	NA	< 0.049 UJ	< 0.097 UJ	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/19/03	NA	NA	< 0.1	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
DUP0819033B	08/19/03	NA	NA	< 0.1	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
DAEGW103CL	08/19/03	NA	NA	< 0.049	< 0.097	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/04/03	NA	NA	< 0.09	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
DUP0604033A	06/04/03	NA	NA	< 0.09	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	06/04/03	NA	NA	< 0.048	< 0.095	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/13/03	< 9.5	ND	< 9.5	< 9.5	ND	NA	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
DUP0313033A	03/13/03	< 9.5	ND	< 9.5	< 9.5	ND	NA	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
DAEGW103CL	03/13/03	< 10	ND	< 10	< 10	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.55	ND
	11/25/02	< 10	ND	< 2	< 2	ND	NA	NA	< 0.5	< 0.5	< 0.5	< 1	7.9	< 0.5	< 5	< 0.5	ND
DAEGW104	03/16/06	NA	NA	< 0.1	< 0.19	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	05/26/05	NA	NA	< 0.1	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
DUP0526052A	05/26/05	NA	NA	< 0.1	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
DAEGW104CL	05/26/05	NA	NA	NA	NA	ND	ND	ND	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.5 U	< 2 U	< 0.5 U	ND
	03/16/05	NA	NA	< 0.1	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	ND
	12/15/04	NA	NA	< 0.1	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	08/12/04	NA	NA	< 0.1	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	05/27/04	NA	NA	< 0.1	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/15/04	NA	NA	< 0.1	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	12/04/03	NA	NA	< 0.1	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	08/19/03	NA	NA	< 0.09	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
DUP0819033A	08/19/03	NA	NA	< 0.09	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	06/04/03	NA	NA	< 0.09	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	03/12/03	< 9.5	ND	< 9.5	< 9.5	ND	NA	NA	< 0.5	0.1 J	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
	11/25/02	< 10	ND	< 2	< 2	ND	NA	NA	< 0.5	< 0.5	< 0.5	< 1	< 1	< 0.5	< 5	< 0.5	ND
DAESP03	03/08/06	NA	NA	< 0.1 UJ	< 0.2	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
DUP0308063A	03/08/06	NA	NA	< 0.1	< 0.19	ND	ND	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	< 0.5	ND
DAESP03CL	03/08/06	NA	NA	< 0.2 U	< 0.2 U	ND	ND	NA	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.5 U	< 2 U	< 0.5 U	ND
	03/22/05	NA	NA	< 0.1	< 0.19	ND	ND	ND	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 4	< 0.5	< 0.5	ND

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

µg/L - micrograms per liter

NA - Not analyzed

ND - Not detected

PAHs - Polycyclic aromatic hydrocarbons

OCPs - Organochlorine pesticides

PCBs - Polychlorinated biphenyls

VOCs - Volatile organic compounds

SVOCs - Semi-volatile organic compounds

MTBE - Methyl tert-butyl ether

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-7-4
Results of Dissolved Metals Analyses
Landfill E
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Hexavalent Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW7196/ SW7196A	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7470/ SW7470A	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
DAEGW03	03/14/06	< 100	1.4	< 5	100	< 2	20	65,000	< 10	< 10	2.6	NA	170	< 3	130,000	2,900	NA	NA	35	1,500	< 5	< 1	140,000	< 1	< 10	110	1,090
	03/16/05	< 100	< 1	< 5	71	< 2	1.6	58,000	< 10	< 10	2.1	NA	140	< 3	140,000	91	NA	NA	< 20	1,300	< 5	< 1	130,000	< 1	< 10	< 20	920
	03/11/04	< 100	< 1	< 5	67	< 2	1.8	68,000	13	< 10	1.6	NA	200	< 3	140,000	49	NA	NA	< 20	< 500	< 5	< 1 UJ	140,000	< 1	< 10	< 20	1,010
DUP0311043A DAEGW03CL	03/11/04	< 100	< 1	< 5	69	< 2	2.6	67,000	12	< 10	1.7	NA	220	< 3	140,000	61	NA	NA	< 20	500	< 5	< 1 UJ	140,000	< 1	< 10	< 20	950
	03/11/04	< 100	< 5	< 5	62	< 1	2.8	68,000	10	< 7	< 10	NA	< 500	< 3	140,000	46	NA	NA	< 10	< 1,000	< 5	< 1	130,000	< 2	< 10	< 20	940
	08/20/03	< 100	< 1	< 5	60	< 2	< 1	67,000	14	< 10	< 1	NA	580	< 3	140,000	37	NA	< 5	< 20	600	< 5	< 1 UJ	140,000	< 1	< 10	< 20 UJ	1,130
	03/13/03	< 100	1.9	< 1	75	< 1	1.8	67,000	17	< 1	1.6	NA	170 J	< 3	140,000	24	NA	NA	8.7	710	< 5	< 1 UJ	150,000	< 1	< 10	< 10	1180
	12/04/02	< 100	< 1	< 1	76	< 1	< 1	67,000	17	< 1	2.1	NA	210	< 3	130,000	24	NA	NA	9.8	650	< 5	< 1 UJ	140,000	2.3	< 10	< 10	1,140
	09/03/02	< 100	< 1	< 1	400	< 1	< 1	78,000	11 J	< 1	1.6	NA	100	< 3	160,000	< 10	NA	NA	7.6	930	< 5	< 1 UJ	170,000	< 1	< 10	69	1,190
	06/04/02	< 100	< 1	1.2	490	< 1	1.4	77,000	16	< 1	2.4	NA	310	< 3	170,000	76	NA	NA	12	1,500	< 5	< 1	170,000	< 1	11	100	1,360
	03/12/02	< 100	1	< 1	370	< 1	2.4	86,000	19	< 1	1.5	NA	190	< 3	180,000	< 10	NA	NA	9.3	640	< 5	< 1 UJ	170,000	< 1	< 10	29	1,180
	12/03/01	< 100	1.8	1	550	< 1	1.5	84,000	22 J	< 1	2.8	NA	< 100	< 3	180,000	<10	NA	NA	12 J	1,000	< 5	< 1	150,000	< 1	< 10	230	1,230
	08/28/01	< 100	1.3	1.4	230	< 1	1.5	85,000	19	< 1	3.1	NA	420	< 3	180,000	< 10	NA	NA	7.4	1,200	< 5	< 1	150,000	< 1	< 10	49	1,280
	05/17/01	< 100	1.1 J	< 1 UJ	380 J	< 1 UJ	1.9 J	84,000 J	23 J	< 1 UJ	3.8 J	NA	200 J	< 3 UJ	170,000	< 10 UJ	NA	NA	10 J	690 J	< 5 UJ	< 1 UJ	160,000	< 1 UJ	< 10 UJ	79 J	1,150
	05/17/99	< 100	< 5	< 5	77	< 4	11.2	78,100	24.3	< 10	< 10	NA	< 100	< 3	154,000	92.3	NA	NA	< 20	< 5,000	< 5	< 2	167,000	< 2	< 10	54.8	1,320
	02/15/99	< 100	< 5	< 5	78.3	< 4	9.5	81,100	26.4	< 10	22	NA	< 100	< 3	168,000	45.5	NA	NA	< 20	< 5,000	< 5	< 2	166,000	< 2	< 10	61.8	1,770
	11/16/98	< 100	< 5	< 5	76.7	< 4	8.4	80,800	30	< 10	< 10	NA	< 100	5.7	169,000	32.1	NA	NA	< 20	< 5,000	5.4	< 2	177,000	2.4	< 10	48.2	1,350
	08/14/98	< 100	< 5	< 5	86.2	< 4	10.3	83,700	24.9	< 10	12.9	NA	< 100	< 3	167,000	31.2	NA	NA	< 20	< 5,000	< 5	< 2	202,000	< 2	< 10	43	1,360
	04/14/98	< 100	< 5	< 5	87	< 4	11	85,000	22	< 10	17	NA	< 100	< 3	180,000	77	NA	NA	< 20	< 5,000	< 5	< 2	190,000	< 2	< 10	46	1,200
	01/13/98	< 100	< 5	< 5	80	< 4	11	80,000	20	< 10	< 10	NA	< 100	3	170,000	140	NA	NA	< 20	< 5,000	11	< 2	140,000	< 2	< 10	60	1,400
	11/10/97	< 100	< 5	< 5	70	< 4	< 2	75,000	20	< 10	< 10	NA	< 100	< 3	160,000	60	NA	NA	< 20	< 5,000	10	< 2	150,000	< 2	< 10	< 20	1,400 (J29)
	08/11/97	< 100	< 5	6	80	< 4	< 2	77,000	20	< 10	< 10	NA	< 100	< 3	160,000	50	NA	NA	< 20	< 5,000	20	< 2	180,000	< 2	< 10	< 20	1,400
	05/13/97	< 100	< 20	6	80	< 4	< 2	77,000	20	< 10	< 10	NA	< 100	< 3	160,000	20	NA	NA	< 20	< 5,000	19	< 2	180,000	< 2	< 10	< 20	1,400
	02/12/97	< 100	< 5	< 5	80	< 4	< 2	73,000	20	< 10	< 10	NA	< 100	< 3	160,000	140	NA	NA	< 20	< 5,000	10	< 2	180,000	< 2	< 10	< 20	1,300 (J29)
	12/05/96	< 100	< 5	8	80	< 4	< 2	73,000	20	< 10	< 10	NA	< 100	< 3	150,000	20	< 0.2	NA	< 20	< 5,000	23	< 2	180,000	< 2	10	< 20	NA
	08/28/96	< 100	< 5	< 5	90	< 2	< 0.5	82,000	16	< 10	1	NA	< 100	3	170,000	40	< 0.2	NA	13	< 5,000	22	< 0.5	200,000	< 2	< 10	50	NA
	05/30/96	< 100	< 5	< 5	90	< 2	< 0.5	81,000	15	< 10	2	NA	< 100	1	170,000	40	< 0.2	NA	12	< 5,000	5	< 0.5	220,000	< 2	< 10	20	NA
	03/05/96	< 100 U	< 5 U	< 5 U	75	< 2 U	< 0.5 U	72,400	20	< 10 U	2	NA	< 100 U	< 1 U	159,000	62	< 0.2 U	NA	11	< 5,000 U	< 5 U	< 0.5 U	214,000	< 2 U	10	< 20 U	NA
	12/11/95	< 100	< 5	< 5	74	< 2	< 0.5	72,300	22	< 10	2	NA	< 100	< 1	158,000	42	< 0.2	NA	15	< 5,000	< 5	< 0.5	21,000	< 2	< 10	33	NA
	09/11/95	< 200 U	< 60 U	< 5 U	80	< 2 U	< 2 U	72,000	21	< 20 U	< 10 U	NA	< 100 U	< 3 U	170,000	36	< 0.2 U	< 20	< 20 U	< 500 U	10	< 5 U	180,000	< 5 U	< 10 U	< 20 U	NA
DAEGW04	03/14/06	< 100	< 1	< 5	27	< 2	< 1	38,000	12	< 10	2.3	NA	110	< 3	98,000	27	NA	NA	790	5,100	< 5	< 1	72,000	< 1	< 10	< 20	810
	03/16/05	< 100	< 1	< 5	47	< 2	< 1	36,000	< 10	50	3.1	NA	110	< 3	93,000	1,600	NA	NA	490	4,000	< 5	< 1	67,000	< 1	< 10	< 20	620
	03/17/04	< 100	< 1	< 5	37	< 2	< 1	47,000	31	< 10	1.7	NA	130	< 3	100,000	< 10	NA	NA	3,600 J+	14,000	< 5	< 1 UJ	81,000	< 1	< 10	< 20	770
DUP1203011B	08/20/03	< 100	1	< 5	30	< 2	< 1	46,000	13	< 10	3.3	NA	480	< 3	93,000	35	NA	< 5	5,100	10,000	< 5	< 1 UJ	68,000	< 1	< 10	< 20 UJ	780
	03/13/03	< 100	1.3	< 1	31	< 1	< 1	45,000	11	3	1.5	NA	140 J	< 3	91,000	54	NA	NA	4,000	13,000	< 5	< 1 UJ	67,000	< 1	< 10	< 10	710
	12/04/02	< 100	< 1	< 1	27	< 1	< 1	41,000	4.9	2.6	< 1	NA	150	< 3	74,000	19	NA	NA	3,800	4,300	< 5	< 1 UJ	53,000	< 1	< 10	< 10	680
	09/03/02	< 100	1.8	< 1	570	< 1	< 1	47,000	5 J	1.7	1.2	NA	< 100	< 3	85,000	18	NA	NA	2,100	1,800	< 5	< 1 UJ	64,000	< 1	< 10	260	610
	06/04/02	< 100	1	< 1	460	< 1	< 1	50,000	19	1.9	2	NA	190	< 3	91,000	19	NA	NA	520	3,800	< 5	< 1	65,000	< 1	< 10	170	660
	03/12/02	< 100	< 1	< 1	480	< 1	< 1	52,000	15	2	1.7	NA	150	< 3	97,000	23	NA	NA	510	10,000	< 5	< 1 UJ	68,000	< 1	< 10	150	710
	12/03/01	< 100	< 1	< 1	300	< 1	< 1	51,000	5.9	2.9	2.7	NA	< 100	< 3	91,000	16	NA	NA	4,100 J	14,000	< 5	1.2	76,000	< 1	< 10	45	690
	12/03/01	< 100	1.5	< 1	600	< 1	< 1	54,000	5.8	3	1.9	NA	< 100	< 3	93,000	17	NA	NA	4,100 J	13,000	< 5	< 1	82,000	< 1	< 10	200	710
	08/29/01	< 100	1.4	< 1	310 J+	< 1	< 1	46,000	18	1.8	1.8	NA	130	< 3	88,000	12	NA	NA	2,200	8,500	< 5	< 1 UJ	75,000	< 1	< 10	51	590
	05/17/01	< 100	1.5 J	< 1 UJ	430 J	< 1 UJ	< 1 UJ	43,000 J	14 J	2.4 J	1.3 J	NA	190 J	< 3 UJ	84,000	21 J	NA	NA	1,300 J	6,300 J	< 5 UJ	< 1 UJ	70,000	< 1 UJ	< 10 UJ	140 J	650
	05/17/99	< 100	< 5	< 5	46.1	< 4	< 2	43,300	15.5	< 10	< 10	NA	184	3.7	76,700	22.4	NA	NA	893	5,220	< 5	< 2	56,300	< 2	< 10	58	715
	02/15/99	< 100	< 5	< 5	28	< 4	< 2	34,000	14.8	< 10	< 10	NA	103	< 3	57,600	26.8	NA	NA	1,270	14,100	< 5	< 2	51,600	< 2	< 10	21.7	653
	11/16/98	< 100	< 5	< 5	22.9	< 4	< 2	27,300	23.4	< 10	19.5	NA	149	4.1	45,400	25.8	NA	NA	822	< 5,000</							

Table A-7-4
Results of Dissolved Metals Analyses
Landfill E
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Hexavalent Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW7196/ SW7196A	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7470/ SW7470A	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
DAEGW04	04/14/98	< 100	< 5	< 5	41	< 4	< 2	34,000	20	< 10	< 10	NA	< 100	< 3	70,000	17	NA	NA	350	< 5,000	< 5	< 2	53,000	< 2	< 10	< 20	420
	01/13/98	< 100	< 5	< 5	30	< 4	< 2	30,000	10	< 10	< 10	NA	< 100	< 3	58,000	10	NA	NA	420	9,000	< 5	< 2	51,000	< 2 (U9)	< 10	< 20	490
	11/10/97	< 100	< 5	< 5	20	< 4	< 2	23,000	20	< 10	< 10	NA	< 100	< 3	42,000	10	NA	NA	1,700	14,000	< 5	< 2	48,000	< 2 (U9)	< 10	< 20	< 440 (U1, U29)
	08/11/97	< 100	< 5	< 5	10	< 4	< 2	15,000	10	< 10	< 10	NA	< 100	< 3	19,000	10	NA	NA	790	13,000	< 5	< 2	28,000	< 2 (U9)	< 10	< 20	220
	05/13/97	< 100	< 5	< 5	20	< 4	< 2	27,000	10	< 10	< 10	NA	< 100	< 3	52,000	10	NA	NA	270	5,000	9 (J23)	< 2	48,000	< 2 (U9)	< 10	< 20	450
	02/12/97	100	< 5	< 5	30	< 4	< 2	31,000	10	< 10	< 10	NA	< 100	< 3	64,000	10	NA	NA	260	< 5,000	< 5	< 2	54,000	< 2 (U9)	< 10	< 20	490 (J29)
	12/05/96	< 100	< 5	< 5	30	< 4	< 2	30,000	20	< 10	< 10	NA	< 100	3	60,000	20	< 0.2	NA	460	9,000	9	< 2	52,000	< 2	< 10	< 20	NA
	08/29/96	< 100	< 5	< 5	30	< 2	< 0.5	33,000	11	< 10	1	NA	< 100	2	68,000	30	< 0.2	NA	420	7,000	6	< 0.5	55,000	< 2	< 10	< 20	NA
	06/10/96	< 100	< 5	< 5	30	< 2	< 0.5	32,000	14	< 10	1	NA	< 100	2	62,000	40	< 0.2	NA	730	7,000	< 5	< 0.5	58,000	< 2	< 10	< 20	NA
	03/07/96	< 100 U	< 5 U	< 5 U	27	< 2 U	< 0.5 U	32,600	12	< 10 U	2	NA	< 100 U	< 1 U	63,900	25	< 0.2 U	NA	956	9,390	< 5 U	< 0.5 U	51,000	< 2 U	< 10 U	< 20 U	NA
12/11/95	< 100	< 5	< 5	19	< 2	< 0.5	22,300	16	< 10	1	NA	< 100	< 1	44,100	22	< 0.2	NA	491	6,180	< 5	< 0.5	44,000	< 2	< 10	< 20	NA	
09/11/95	< 200 U	< 60 U	< 5 U	35	< 2 U	< 2 U	26,000	130	< 20 U	13	NA	2,600	< 3 U	57,000	76	< 0.2 U	< 20	340	1,500	< 5 U	< 5 U	47,000	< 5 U	< 10 U	< 20 U	NA	
DAEGW05	03/14/06	< 100	< 1	< 5	63	< 2	< 1	66,000	14	< 10	2.2	NA	190	< 3	100,000	20	NA	NA	100	790	< 5	< 1	84,000	< 1	< 10	< 20	210
	03/16/05	< 100	< 1	< 5	73	< 2	< 1	58,000	17	< 10	1.9	NA	210	< 3	95,000	14	NA	NA	72	800	< 5	< 1	74,000	< 1	< 10	< 20	910
	03/06/05	< 100	< 1	< 5	70	< 2	< 1	64,000	19	< 10	2.3	NA	230	< 3	120,000	13	NA	NA	69	900	< 5	< 1	83,000	< 1	< 10	< 20	680
	03/11/04	< 100	< 1	< 5	68	< 2	< 1	77,000	< 10	< 10	1.6	NA	240	< 3	120,000	10	NA	NA	40	710	< 5	< 1 UJ	86,000	< 1	< 10	< 20	770
	08/19/03	< 100	1.1	< 5	69	< 2	< 1	74,000	11	< 10	1.1	NA	430	< 3	120,000	11	NA	< 5	33	550	< 5	< 1 UJ	81,000	< 1	< 10	< 20 UJ	< 10
	03/13/03	< 100	< 1	< 1	68	< 1	< 1	71,000	12	< 1	1	NA	190 J	< 3	110,000	11	NA	NA	37	700	< 5	< 1 UJ	82,000	< 1	< 10	< 10	910
	12/04/02	< 100	< 1	< 1	67	< 1	< 1	73,000	15	< 1	1.1	NA	220	< 3	110,000	< 10	NA	NA	43	520	< 5	< 1 UJ	78,000	< 1	< 10	< 10	930
DUP0312023A	09/03/02	< 100	< 1	< 1	380	< 1	< 1	82,000	8.5 J	< 1	1.5	NA	110	< 3	130,000	10	NA	NA	50	760	< 5	< 1 UJ	89,000	< 1	< 10	110	930
	06/04/02	< 100	1.3	< 1	420	< 1	< 1	82,000	16	< 1	1.7	NA	330	< 3	130,000	12	NA	NA	49	960	< 5	< 1	91,000	< 1	< 10	140	1,040
	03/12/02	< 100	1.1	< 1	360	< 1	< 1	91,000	6.5	< 1	2.2	NA	220	< 3	150,000	11	NA	NA	48	910	< 5	< 1 UJ	100,000	< 1	< 10	31	950
	03/12/02	< 100	< 1	< 1	190	< 1	< 1	86,000	7	< 1	2.1	NA	210	< 3	140,000	11	NA	NA	49	850	< 5	< 1 UJ	96,000	< 1	< 10	13	980
	12/03/01	< 100	< 1	< 1	730	< 1	< 1	99,000	5.6	< 1	2.7	NA	< 100	< 3	82,000	13	NA	NA	27 J	1,400	< 5	< 1	100,000	< 1	< 10	250	1,060
	08/28/01	< 100	< 1	1.1	330	< 1	< 1	85,000	7.8	< 1	3.5	NA	440	< 3	130,000	< 10	NA	NA	33	720	< 5	< 1	89,000	< 1	< 10	61	1,010
	05/17/01	< 100	1.6 J	< 1 UJ	380 J	< 1 UJ	< 1 UJ	83,000 J	11 J	< 1 UJ	1.8 J	NA	250 J	< 3 UJ	140,000	< 10 UJ	NA	NA	36 J	890 J	< 5 UJ	< 1 UJ	110,000	< 1 UJ	< 10 UJ	34 J	1,000
	05/18/99	< 100	< 5	< 5	67.7	< 4	< 2	65,900	14.8	< 10	< 10	NA	< 100	5.5	92,300	< 10	NA	NA	48.5	< 5,000	< 5	< 2	92,700	< 2	< 10	< 20	825
	03/15/99	< 100	< 5	< 5	76.4	< 4	< 2	72,500	11.5	< 10	< 10	NA	< 100	< 3	109,000	< 10	NA	NA	51.9	< 5,000	< 5	< 2	91,200	< 2	< 10	< 20	948
	11/17/98	< 100	< 5	< 5	78.5	< 4	< 2	73,200	16.8	< 10	19.1	NA	< 100	5.4	108,000	11.9	NA	NA	82.4	< 5,000	5	< 2	93,700	< 2	< 10	< 20	893
	08/17/98	< 100	< 5	< 5	72.7	< 4	< 2	69,200	18	< 10	< 10	NA	< 100	< 3	101,000	< 10	NA	NA	74.6	< 5,000	< 5	< 2	95,700	< 2	< 10	< 20	908
	04/15/98	< 100	< 5	< 5	72	< 4	< 2	68,000	18	< 10	10	NA	< 100	< 3	100,000	11	NA	NA	80	< 5,000	&						

Table A-7-4
Results of Dissolved Metals Analyses
Landfill E
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Hexavalent Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW7196/ SW7196A	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7470/ SW7470A	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
DAEGW06	03/12/03	< 100	1.8	< 1	57	< 1	< 1	33,000	< 1	< 1	< 1	NA	< 100 UJ	< 3	66,000	800	NA	NA	2.5	920	< 5	< 1 UJ	37,000	< 1	< 10	< 10	430
	12/04/02	< 100	< 1	1.2	49	< 1	< 1	30,000	< 1	< 1	< 1	NA	130	< 3	56,000	330	NA	NA	1.9	890	< 5	< 1 UJ	31,000	< 1	< 10	< 10	440
DUP0517012A	09/03/02	< 100	< 1	1.3	380	< 1	< 1	34,000	< 1 UJ	< 1	< 1	NA	< 100	< 3	64,000	< 10	NA	NA	< 1	1,000	< 5	< 1 UJ	36,000	< 1	< 10	96	420
	06/04/02	< 100	< 1	1.3	650	< 1	< 1	34,000	2	< 1	1.2	NA	120	< 3	64,000	< 10	NA	NA	< 1	1,100	< 5	< 1	36,000	< 1	< 10	180	400
	03/12/02	< 100	< 1	1	250	< 1	< 1	31,000	< 1	< 1	2	NA	100	< 3	68,000	220	NA	NA	4	1,100	< 5	< 1 UJ	36,000	< 1	< 10	35	410
	12/03/01	< 100	2	1	940	< 1	< 1	42,000	3	< 1	1.9	NA	< 100	< 3	74,000	140	NA	NA	3.5	1,200	< 5	< 1	47,000	< 1	< 10	180	470
	08/28/01	< 100	1.5	1.6	380	< 1	< 1	37,000	< 1	< 1	5	NA	190	< 3	69,000	< 10	NA	NA	1.2	1,100	< 5	< 1	38,000	< 1	< 10	150	440
	05/17/01	< 100	< 1 UJ	1.5 J	71 J	< 1 UJ	< 1 UJ	39,000 J	< 1 UJ	< 1 UJ	1.2 J	NA	120 J	< 3 UJ	78,000	< 10 UJ	NA	NA	< 1 UJ	1,100 J	< 5 UJ	< 1 UJ	43,000	< 1 UJ	< 10 UJ	14 J	450
	05/17/01	< 100	1.3 J	1.4 J	85 J	< 1 UJ	< 1 UJ	37,000 J	< 1 UJ	< 1 UJ	1.3 J	NA	120 J	< 3 UJ	78,000	< 10 UJ	NA	NA	< 1 UJ	1,100 UJ	< 5 UJ	< 1 UJ	40,000	< 1 UJ	< 10 UJ	14 J	430
	05/17/99	< 100	< 5	< 5	30.2	< 4	< 2	35,400	< 10	< 10	< 10	NA	606	< 3	61,500	967	NA	NA	< 20	< 5,000	< 5	< 2	34,900	< 2	< 10	63.5	527
	02/15/99	< 100	< 5	< 5	21.8	< 4	< 2	34,300	< 10	< 10	13.3	NA	260	< 3	63,000	941	NA	NA	< 20	< 5,000	< 5	< 2	34,000	< 4.6 (U1)	< 10	< 20	457
	11/16/98	< 100	< 5	< 5	56.4	< 4	< 2	37,700	< 10	< 10	< 10	NA	715	< 3	63,500	1,190	NA	NA	< 20	< 5,000	< 5	< 2	39,300	3.9	< 10	< 20	547
	08/14/98	< 100	< 5	< 5	90.7	< 4	< 2	38,400	< 10	< 10	10.2	NA	< 100	< 3	60,500	360	NA	NA	< 20	< 5,000	< 5	< 2	51,400	< 2	< 10	< 20	449
	04/14/98	< 100	< 5	< 5	36	< 4	< 2	38,000	< 10	< 10	17	NA	< 100	< 3	64,000	42	NA	NA	< 20	< 5,000	< 5	< 2	37,000	< 2	< 10	< 20	510
	01/13/98	< 100	< 5	< 5	20	< 4	< 2	39,000	< 10	< 10	< 10	NA	< 100	< 3	61,000	160	NA	NA	< 20	< 5,000	< 5	< 2	36,000	< 2	< 10	< 20	480
	11/10/97	< 100	< 5	< 5	20	< 4	< 2	36,000	< 10	< 10	< 10	NA	300	< 3	60,000	910	NA	NA	< 20	< 5,000	< 5	< 2	35,000	< 2	< 10	< 20	420
	08/11/97	< 100	< 5	< 5	40	< 4	< 2	40,000	< 10	< 10	< 10	NA	< 100	< 3	62,000	< 10	NA	NA	< 20	< 5,000	6	< 2	44,000	< 2	< 10	< 20	500
	05/13/97	< 100	< 5	< 5	20	< 4	< 2	40,000	< 10	< 10	< 10	NA	< 100	< 3	60,000	110	NA	NA	< 20	< 5,000	5	< 2	35,000	< 2	< 10	< 20	460
	02/12/97	< 100	< 5	< 5	30	< 4	< 2	40,000	< 10	< 10	< 10	NA	< 100	< 3	63,000	270	NA	NA	< 20	< 5,000	< 5	< 2	38,000	< 2	< 10	< 20	430 (J29)
	12/06/96	< 100	< 5	< 5	20	< 4	< 2	45,000	< 10	< 10	< 10	NA	< 100	< 3	63,000	260	< 0.2	NA	< 20	< 5,000	7	< 2	38,000	< 2	< 10	< 20	NA
	08/28/96	< 100	< 5	< 5	20	< 2	< 0.5	47,000	< 1	< 10	< 1	NA	< 100	2	63,000	70	< 0.2	NA	< 5	< 5,000	7	< 0.5	37,000	< 2	< 10	< 20	NA
	05/30/96	< 100	< 5	< 5	30	< 2	< 0.5	45,000	< 1	< 10	1	NA	< 100	1	62,000	210	< 0.2	NA	6	< 5,000	< 5	< 0.5	45,000	< 2	< 10	20	NA
03/06/96	< 100 U	< 5 U	< 5 U	71	< 2 U	< 0.5 U	50,000	1	< 10 U	< 1 U	NA	< 100 U	1	68,100	43	< 0.2 U	NA	< 5 U	< 5,000 U	< 5 U	< 0.5 U	60,000	< 2 U	< 10 U	< 20 U	NA	
12/11/95	< 100	< 5	< 5	19	< 2	< 0.5	47,700	2	< 10	< 1	NA	< 100	2	70,900	614	< 0.2	NA	< 5	< 5,000	< 5	< 0.5	48,000	< 2	< 10	< 20	NA	
09/12/95	< 200 U	< 60 U	< 5 U	24	< 2 U	< 2 U	41,000	< 10 U	< 20 U	< 10 U	NA	< 100 U	< 3 U	63,000	110	< 0.2 U	< 20	< 20 U	2,000	< 5 U	< 5 U	41,000	< 5 U	< 10 U	< 20 U	NA	
DAEGW07	03/15/06	< 100	< 1	< 5	94	< 2	< 1	28,000	< 10	< 10	1.5	NA	180	< 3	19,000	54	NA	NA	< 20	1,200	< 5	< 1	22,000	< 1	< 10	< 20	300 J
	03/18/05	< 100	< 1	< 5	89	< 2	< 1	32,000	< 10	< 10	< 1	NA	260	< 3	22,000	30	NA	NA	< 20	650	< 5	< 1	18,000	< 1	< 10	< 20	330 J-
DUP0317041A	03/17/04	< 100	< 1	< 5	75	< 2	< 1	36,000	< 10	< 10	< 1	NA	130	< 3	28,000	40	NA	NA	< 20	< 500	< 5	< 1 UJ	23,000	< 1	< 10	< 20	300
	03/17/04	< 100	< 1	< 5	73	< 2	< 1	35,000	< 10	< 10	1	NA	< 100	< 3	27,000	18	NA	NA	< 20	< 500	< 5	< 1 UJ	22,000	< 1	< 10	< 20	310
	03/19/03	< 100 UJ	< 1	< 1	57	< 1	< 1	42,000 J	< 1 UJ	< 1	< 1	NA	< 100	< 3	41,000 J	< 10 UJ	NA	NA	11	< 500							

Table A-7-4
Results of Dissolved Metals Analyses
Landfill E
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Hexavalent Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW7196/ SW7196A	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7470/ SW7470A	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
DAEGW08	11/30/01	< 100	< 1	< 1	360	< 1	< 1	44,000	13	< 1	1.3	NA	1,100	< 3	78,000	32	NA	NA	22	580	< 5	< 1 UJ	60,000	< 1	< 10	120	690
	08/29/01	160	1.3	< 1	290 J+	< 1	< 1	51,000	8.8	< 1	2.8	NA	360	< 3	100,000	180	NA	NA	53	< 500	< 5	< 1 UJ	80,000	< 1	< 10	74	750
	05/16/01	< 100	1.2	< 1	120	< 1	< 1	< 500 R	6.3 J	< 1	1.5	NA	470	< 3	120,000	210	NA	NA	65	< 500	< 5	< 1	91,000	< 1	< 10	< 10	950
	05/18/99	< 100	< 5	< 5	105	< 4	< 2	50,500	< 10	< 10	< 10	NA	< 100	< 3	100,000	285	NA	NA	81.7	< 5,000	< 5	< 2	72,100	< 2	< 10	44.4	667
	02/16/99	< 100	< 5	< 5	68.8	< 4	< 2	48,500	< 10	< 10	21.1	NA	< 100	< 3	95,900	< 10	NA	NA	20.6	< 5,000	< 5	< 2	76,100	< 2	< 10	34.3	801
	11/17/98	< 100	< 5	< 5	78.9	< 4	< 2	45,200	< 10	< 10	< 10	NA	< 100	< 3	87,800	10	NA	NA	< 20	< 5,000	< 5	< 2	59,200	< 2	< 10	< 20	643
	08/17/98	< 100	< 5	< 5	93.3	< 4	< 2	45,300	< 10	< 10	12.1	NA	< 100	< 3	85,800	70	NA	NA	56.9	< 5,000	< 5	< 2	57,700	< 2	< 10	< 20	617
	04/15/98	< 100	< 5	< 5	90	< 4	< 2	41,000	< 10	< 10	12	NA	< 100	< 3	80,000	71	NA	NA	43	< 5,000	< 5	< 2	64,000	< 2	< 10	< 20	590
	01/14/98	< 100	< 5	< 5	60	< 4	< 2	40,000	< 10	< 10	< 10	NA	< 100	< 3	78,000	< 10	NA	NA	< 20	< 5,000	6	< 2	75,000	< 2	< 10	< 20	660
	11/11/97	< 100	< 5	< 5	50	< 4	< 2	38,000	< 10	< 10	< 10	NA	< 100	< 3	73,000	10	NA	NA	< 20	< 5,000	5	< 2	69,000	< 2	< 10	< 20	640
	08/12/97	< 100	< 7	< 5	70	< 4	< 2	42,000	< 10	< 10	< 10	NA	< 100	< 3	89,000	< 10	NA	NA	< 20	< 5,000	12	< 2	78,000	< 2	< 10	< 20	710
	05/14/97	< 100	< 10	< 5	90	< 4	< 2	54,000	< 10	< 10	< 10	NA	< 100	< 3	110,000	80	NA	NA	50	< 5,000	16	< 2	83,000	< 2	< 10	< 20	830
	02/13/97	< 100	< 5	< 5	80	< 4	< 2	51,000	< 10	< 10	< 10	NA	< 100	< 3	110,000	50	NA	NA	50	< 5,000	7	< 2	76,000	< 2	< 10	< 20	850
	12/06/96	< 100	< 5	6	70	< 4	< 2	48,000	< 10	< 10	< 10	NA	< 100	3	97,000	< 10	< 0.2	NA	< 20	< 5,000	18	< 2	90,000	< 2	< 10	< 20	NA
	08/29/96	< 100	< 5	< 5	80	< 2	< 0.5	55,000	4	< 10	1	NA	< 100	2	110,000	60	< 0.2	NA	35	< 5,000	20	< 0.5	84,000	< 2	< 10	< 20	NA
	06/10/96	< 100	< 5	< 5	80	< 2	< 0.5	68,000	1	< 10	< 1	NA	< 100	< 1	130,000	50	< 0.2	NA	35	< 5,000	9	< 0.5	120,000	< 2	< 10	< 20	NA
03/07/96	< 100 U	< 5 U	< 5 U	110	< 2 U	< 0.5 U	89,700	2	< 10 U	< 1 U	NA	< 100 U	< 1 U	187,000	30	< 0.2 U	NA	38	< 5,000 U	< 5 U	< 0.5 U	137,000	< 2 U	< 10 U	< 20 U	NA	
12/14/95	< 100	< 5	< 5	64	< 2	< 0.5	54,100	9	< 10	< 1	NA	< 100	< 1	109,000	36	< 0.2	NA	26	< 5,000	< 5	< 0.5	93,000	< 2	< 10	35	NA	
09/12/95	< 200 U	< 60 U	< 5 U	66	< 2 U	< 2 U	60,000	< 10 U	< 20 U	< 10 U	NA	< 100 U	< 3 U	130,000	24	< 0.2 U	< 20	28	< 500 U	10	< 5 U	97,000	< 5 U	< 10 U	75	NA	
DAESP03 (Total) DUP0308063A (Total) DAESP03CL (Total) (Total) DAESP03 ² DUP112801 ³	03/08/06	130	< 1	< 5	35	< 2	< 1	9,600	< 10	< 10	6.8	NA	450	< 3	17,000	23	< 0.2	NA	54	1,600	< 5	< 1	24,000	< 1	< 10	< 20	400
	03/08/06	6,500	< 1	< 5	85	< 2	< 1	12,000	70	< 10	17	NA	9,800	16	23,000	130	NA	NA	140	2,300	< 5	< 1	26,000	< 1	19	63	NA
	03/08/06	100	< 1	< 5	35	< 2	< 1	9,400	< 10	< 10	6.9	NA	500	< 3	16,000	26	< 0.2	NA	53	1,500	< 5	< 1	20,000	< 1	< 10	22	350
	03/08/06	5,400	< 1	< 5	77	< 2	< 1	11,000	52	< 10	15	NA	8,300	15	19,000	110	NA	NA	120	1,900	< 5	< 1	28,000	< 1	15	74	NA
	03/08/06	140	< 2 U	< 2 U	46	< 1 U	< 1 U	12,000	< 10 U	< 1 U	6.6	NA	430 J+	2.2	22,000	30	< 0.2 U UJ	< 20 U	51	< 5,000 U	< 2 U	< 1 U	26,000	< 1 U	< 10 U	< 20 U	326
	03/08/06	6,400	< 2 U	< 2 U	84	< 1 U	< 1 U	12,000	72	2.7	12	NA	9,700 J+	14	23,000	110	< 0.2 U	NA	98	< 5,000 U	< 2 U	< 1 U	26,000	< 1 U	23	51	NA
	03/22/05	< 100	< 1	< 5	33	< 2	< 1	8,100	< 10	< 10	7.3	NA	350	< 3	15,000	19	< 0.2	< 5	47	2,100	< 5	< 1	17,000	< 1	< 10	< 20	330
	03/22/05	11,000	< 1	< 5	86	< 2	< 1	9,200	94	< 10	19	NA	13,000	14	18,000	150	< 0.2	NA	150	2,900	< 5	< 1	17,000	< 1	25	47	NA
	12/28/01	< 1,000	< 1	< 1	34	< 1	< 1	7,600	15	< 1	18	NA	1,100	3.4	14,000	18	< 0.2 R	NA	67	< 5,000	< 5	< 1	17,000	2.8	< 10	35	NA
	12/28/01	< 1,000	< 1	< 1	32	< 1	< 1	7,300	13	< 1	24	NA	900	3.2	12,000	17	< 0.2	NA	70	4,500	< 5	< 1	15,000	< 1	< 10	56	NA
01/23/98	< 100	< 5	< 5	147	< 4	< 2	80,700	< 10	< 10	21.1	NA	< 100	8.9	20,100	< 10	< 0.2	NA	< 20	< 5,000	< 5	< 2	20,000	< 2	< 10	287	NA	
02/24/98	2,940	< 5																									

Table A-7-4
Results of Dissolved Metals Analyses
Landfill E
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Hexavalent Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW7196/ SW7196A	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7470/ SW7470A	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
DAEGW102	03/15/04	< 100	< 1	5.2	290	< 2	< 1	180,000	< 10	< 10	1.3	NA	380	< 3	240,000	< 10	< 0.2	< 5	< 20	3,700	< 5	< 1	130,000	< 1	< 10	< 20	2,120
	12/04/03	< 100	< 1	< 5	240	< 2	< 1	150,000	< 10	< 10	1.5	NA	720	< 3	270,000	48	< 0.2	< 5	< 20	3,500	< 5	< 1	140,000	< 1	< 10	< 20	1,820
	08/19/03	< 100	1.4	< 5	220	< 2	< 1	210,000	< 10	< 10	< 1	NA	1,300	< 3	300,000	130	< 0.2	< 5	< 20	3,800	5.8	< 1 UJ	160,000	< 1	< 10	< 20 UJ	2,240
	06/04/03	< 100	1.3	< 5	180	< 2	< 1	200,000	< 10	< 10	1.8	NA	390	< 3	300,000	320	< 0.2	< 5	< 20	5,200	< 5	< 1 UJ	190,000	< 1	< 10	< 20	2,170
	03/12/03	< 100	2.3	3.1	120	< 1	< 1	210,000	3.2	1.2	4.5	< 10	540 J	< 3	260,000	510	< 0.2	< 20	3.5	7,000	< 5	< 1 UJ	210,000	< 1	< 10	< 10	2,080
DAEGW103	03/14/06	< 100	< 1	< 5	100	< 2	< 1	39,000	< 10	< 10	14	NA	240	3.8	28,000	< 10	< 0.2	< 5	20	1,600	< 5	< 1	60,000	< 1	< 10	26	610
	05/26/05	< 100	< 1	< 5	150	< 2	< 1	39,000	15	< 10	< 1	NA	< 100	< 3	41,000 J	< 10	< 0.2	< 5	< 20	670	< 5	< 1	89,000 J	< 1	< 10	< 20	420
	03/17/05	< 100	< 1	< 5	150	< 2	< 1	39,000 J	13	< 10	< 1	NA	120	< 3	41,000	< 10	< 0.2	< 5	< 20	780	< 5	< 1	88,000	< 1	< 10	< 20	580 J-
DAEGW103CL DUP0317053A	03/17/05	< 100 U	< 2 U	< 2 U	168	< 1 U	< 1 U	44,600	17.1	< 1 U	< 2 U	NA	< 100 U	< 1 U	49,900	< 10 U	< 0.2 U	< 20 U	2.01	< 5,000 UN	< 2 U	< 1 U	109,000 J	< 1 U	< 10 U	< 20 U	612
	03/17/05	< 100	< 1	< 5	150	< 2	< 1	41,000 J	13	< 10	1.7	NA	120	< 3	41,000	< 10	< 0.2	< 5	< 20	770	< 5	< 1	89,000	< 1	< 10	< 20	640 J-
	12/15/04	< 100	< 1	< 5	160	< 2	< 1	37,000 J	16	< 10	< 1	NA	< 100	< 3	110,000	< 10	< 0.2	< 5	< 20	720	< 5	< 1	66,000	< 1 UJ	< 10	< 20	620
DUP1215042A	12/15/04	< 100	< 1	< 5	160	< 2	< 1	39,000 J	16	< 10	< 1	NA	110	< 3	50,000	< 10	< 0.2	< 5	< 20	730	< 5	< 1	110,000	< 1 UJ	< 10	< 20	650
DAEGW103CL	12/15/04	< 100 U	< 2 U	< 2 U	172	< 1 U	< 1 U	44,100	18.1	< 1 U	< 2 U	NA	< 100 U	< 1 U	50,600	< 10 U	< 0.2 U	< 20 U	< 2 U	< 5,000 U	< 2 U	< 1 U	106,000	< 1 U	< 10 U	< 20 U	624
	08/11/04	< 100	< 1	< 5	170 J	< 2	< 1	44,000	17	< 10	2.7	NA	< 100	< 3	46,000	< 10	< 0.2	< 5	< 20	750	< 5	< 1	99,000	< 1	< 10	< 20	590
DUP0811042B	08/11/04	< 100	< 1	< 5	160 J	< 2	< 1	42,000	16	< 10	< 1	NA	< 100	< 3	44,000	< 10	< 0.2	< 5	< 20	680	< 5	< 1	97,000	< 1	< 10	< 20	610
DAEGW103CL ⁴	08/11/04	< 11	< 10	< 40	120	< 10	< 10	1,400	17	< 10	< 10	NA	< 10	< 50	39,000	0.12 J	< 5	51	< 30	1,000	< 20	9 J	3,900	< 50	7.9 J	< 30	694
	05/28/04	< 100	< 1	< 5	160	< 2	< 1	44,000	17	< 10	< 1	NA	< 100	< 3	51,000	< 10	< 0.2	< 5	< 20	690	< 5	< 1	110,000	< 1	< 10	< 20	590
	05/28/04	< 100	< 1	< 5	160	< 2	< 1	45,000	16	< 10	< 1	NA	< 100	< 3	50,000	< 10	< 0.2	< 5	< 20	650	< 5	< 1	110,000	< 1	< 10	< 20	590
DUP0528041A	05/28/04	< 50	< 5	6	170	< 1	< 1	45,000	16	< 7	< 10	NA	850	< 3	50,000	< 5	< 0.2	< 20	< 10	NA	NA	NA	NA	NA	NA	NA	560
DAEGW103CL	03/10/04	< 100	< 1	< 5	170	< 2	< 1	44,000	15	< 10	< 1	NA	110	< 3	47,000	< 10	< 0.2	< 5	< 20	830	< 5	< 1 UJ	100,000	< 1	< 10	< 20	620
DUP0310043B	03/10/04	< 100	< 1	< 5	160	< 2	< 1	44,000	15	< 10	< 1	NA	110	< 3	47,000	< 10	< 0.2	< 5	< 20	830	< 5	< 1 UJ	100,000	< 1	< 10	< 20	620
DAEGW103CL	03/10/04	< 100	< 5	< 5	150	< 1	< 1	44,000	14	< 7	< 10	NA	< 500	< 3	47,000	< 5	< 0.2	< 20	< 10	< 1,000	< 5	< 1	100,000	< 2	< 10	< 20	620 QB01
	12/04/03	< 100	< 1	< 5	170	< 2	< 1	37,000	17	< 10	< 1	NA	140	< 3	49,000	< 10	< 0.2	< 5	< 20	730	< 5	< 1	100,000	< 1	< 10	< 20	600
DUP1204033A	12/04/03	< 100	2.1	< 5	160	< 2	< 1	37,000	17	< 10	< 1	NA	140	< 3	49,000	< 10	< 0.2	< 5	< 20	710	< 5	< 1	100,000	< 1	< 10	< 20	610
DAEGW103CL	12/04/03	< 1000	< 5	6.3	160	< 1	< 1	43,000	18	< 7	< 10	NA	< 500	< 3	46,000	< 5	< 0.2	< 20	< 10	< 1,200	< 5	< 1	110,000	< 2	< 10	< 20	610
	08/19/03	< 100	< 1	< 5	160	< 2	< 1	40,000	17	< 10	2.8	NA	210	< 3	48,000	< 10	< 0.2	< 5	< 20	620	< 5	< 1 UJ	99,000	< 1	< 10	< 20 UJ	640
DUP0819033B	08/19/03	< 100	< 1	< 5	160	< 2	< 1	41,000	17	< 10	< 1	NA	210	< 3	48,000	< 10	< 0.2	< 5	< 20	630	< 5	< 1 UJ	99,000	< 1	< 10	< 20 UJ	610
DAEGW103CL	08/19/03	< 100	< 5	< 5	160	< 1	< 1	42,000	18	< 7	< 10	NA	< 500 UJ	< 3	48,000	< 5	< 0.2	< 20	< 10	< 1,000	< 5	< 1	110,000	< 2	< 10	< 20	520
	06/04/03	< 100	< 1	< 5	150	< 2	< 1	43,000	17	< 10	< 1	NA	< 100	< 3	48,000	< 10	< 0.2	< 5	< 20	810	< 5	< 1 UJ	100,000	< 1	< 10	< 20	410
DUP0604033A	06/04/03	< 100	1.4	< 5	150	< 2	< 1	42,000	17	< 10	< 1	NA	< 100	< 3	48,000	< 10	< 0.2	< 5	< 20	800	< 5	< 1 UJ	100,000	< 1	< 10	< 20	510
DAEGW103CL	06/04/03	< 100	< 5	2.4	160	< 1	< 1	43,000	15	< 1	< 5	NA	< 500	< 3	47,000	< 5	< 0.2	< 20	< 5	< 1,000	< 5	< 1	110,000	< 2	< 10	< 20	640
	03/13/03	< 100	< 1	< 1	140	< 1	< 1	38,000	17	< 1	< 1	10	110 J	< 3	46,000	< 10	< 0.2	< 20	3.9	730	< 5	< 1 UJ	99,000	< 1	< 10	< 10	670
DUP0313033A	03/13/03	< 100	< 1	< 1	150	< 1	< 1	41,000	17	< 1	< 1	10	< 100 UJ	< 3	48,000	< 10	< 0.2	< 20	2.2	760	< 5	< 1 UJ	100,000	< 1	< 10	< 10	620
DAEGW103CL	03/13/03	< 100	< 5	4.4	150	< 1	< 1	42,000	23	< 1	< 5	15	< 500	< 3	47,000	< 5	< 0.2	< 20	< 5	1,000	< 5	< 1	140,000	< 2	< 10	17	580
	11/25/02	NA	< 5	< 5	150	< 5	4.2	46,000	79	25	25	< 10	42,000	6.7	53,000	920 J-	< 0.2	< 5	110	2,900	< 5	< 5	100,000	< 5	47	61	830 J-
DAEGW104	03/16/06	< 100	< 1	< 5	38	< 2	< 1	37,000	< 10	< 10	< 1	NA	< 100	< 3	41,000 J	43	< 0.2	< 5	< 20	960 J-	< 5	< 1	34,000	< 1	< 10	< 20	660 J
	05/26/05	< 100	< 1	< 5	40	< 2	< 1	43,000	< 10	< 10	< 1	NA	< 100	< 3	45,000 J	< 10	< 0.2	< 5	< 20	1,900	< 5	< 1	47,000 J	< 1	< 10	< 20	330
	05/26/05	< 100	< 1	< 5	40	< 2	< 1	50,000	< 10	< 10	< 1	NA	< 100	< 3	52,000 J	< 10	< 0.2	< 5	< 20	1,900	< 5	< 1	54,000 J	< 1	< 10	< 20	340
DUP0526052A DAEGW104CL	05/26/05	< 100 U	< 2 U	< 2 U	40.7	< 20 U	< 1 U	44,900	< 10 U	< 1 U	< 2 U	NA	< 100 U	< 1 U	52,700	< 10 U	< 0.2 U	< 20 U	< 2 U	< 5,000 U	< 2 U	< 1 U	54,300	< 1 U	< 10 U	< 20 U	438
	03/16/05	< 100	< 1	< 5	36	< 2	< 1	39,000	< 10	< 10	< 1	NA	120	< 3	48,000	< 10	< 0.2	< 5	< 20	1,700	< 5	< 1	40,000	< 1	< 10	< 20	430
	12/15/04	< 100	< 1	< 5	38	< 2	< 1	43,000 J	< 10	< 10	< 1	NA	< 100	< 3	48,000	260	< 0.2	< 5	< 20	1,600	< 5	< 1	41,000	1.1 J-	< 10	< 20	440
	08/12/04	< 100	< 1	< 5	28	< 2	< 1	44,000	< 10	< 10	< 1	NA	< 100	< 3	49,000	190	< 0.2	< 5	< 20	1,700	< 5	< 1	42,000	< 1	< 10	< 2	

Table A-7-4
Results of Dissolved Metals Analyses
Landfill E
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Hexavalent Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW7196/ SW7196A	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7470/ SW7470A	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
DAEGW104 DUP0819033A	08/19/03	< 100	< 1	< 5	20	< 2	< 1	40,000	< 10	< 10	< 1	NA	250	< 3	46,000	48	< 0.2	< 5	< 20	1,900	< 5	< 1 UJ	38,000	< 1	< 10	< 20 UJ	400
	08/19/03	< 100	1.5	< 5	23	< 2	< 1	41,000	< 10	< 10	< 1	NA	280	< 3	47,000	330	< 0.2	< 5	< 20	1,700	< 5	< 1 UJ	38,000	< 1	< 10	< 20 UJ	430
	06/04/03	< 100	1.4	< 5	22	< 2	< 1	42,000	< 10	< 10	3.5	NA	< 100	< 3	46,000	290	< 0.2	< 5	< 20	2,400	< 5	< 1 UJ	40,000	< 1	< 10	< 20	450
	03/12/03	< 100	1.5	1.9	27	< 1	< 1	43,000	< 1	< 1	< 1	< 10	120 J	< 3	50,000	190	< 0.2	< 20	1.1	3,100	< 5	< 1 UJ	49,000	< 1	< 10	< 10	420
	11/25/02	NA	< 5	11	320	< 5	12	74,000	250	57	140	< 10	130,000	37	100,000	1,900 J-	0.37	10	350	11,000	< 5	< 5	98,000	< 5	190	280	810 J-

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - This sample was labeled LFE-GW on the chain of custody and was reported by the laboratory as LFE-GW. This sample ID (LFE-GW) has been changed within the text, tables, and database to reflect the historical name of this seep (DAESP03).

3 - This sample was labeled LFE-GWD on the chain of custody and was reported by the laboratory as LFE-GWD. In accordance with the QAPP, this sample ID (LFE-GWD) was changed to DUP112801 within the text, tables, and database.

4 - Dissolved metals were analyzed by the quality control laboratory using method E200.7 on an Inductively Coupled Plasma (ICP) instrument. The primary laboratory analyzed dissolved metals by EPA Method 6020 on an ICP/Mass Spectrometry (ICP/MS) instrument. Although variability between these two methods is not expected, the variability in the data may be a result of different analytical methods used.

µg/L - micrograms per liter
mg/L - milligrams per liter
NA - Not analyzed

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Groundwater samples collected from all site monitoring wells were field filtered and analyzed for dissolved metals.

All metal results represent dissolved metals, unless indicated as "total" in the left-hand column, for total metal results.

Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-7-5
Groundwater Elevation Summary
Landfill E
Presidio of San Francisco, California

Location ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
DAEGW03	08/14/06	52.68	107.48	54.80	MW
	05/22/06	52.58	107.48	54.90	MW
	03/06/06	55.38	107.48	52.10	MW
	11/28/05	57.25	107.48	50.23	MW
	08/29/05	56.69	107.48	50.79	MW
	05/23/05	56.71	107.48	50.77	MW
	03/14/05	58.62	107.48	48.86	MW
	12/13/04	60.66	107.48	46.82	MW
	08/09/04	59.89	107.48	47.59	MW
	05/24/04	59.22	107.48	48.26	MW
	03/08/04	59.68	107.48	47.80	MW
	12/01/03	60.50	107.48	46.98	MW
	08/11/03	59.43	107.48	48.05	MW
	06/02/03	58.68	107.48	48.80	MW
	03/10/03	58.62	107.48	48.86	MW
	12/02/02	59.56	107.48	47.92	MW
	08/26/02	58.79	107.48	48.69	MW
	05/28/02	58.14	107.48	49.34	MW
	03/04/02	58.50	107.48	48.98	MW
	11/26/01	59.84	107.48	47.64	MW
	08/27/01	58.87	107.48	48.61	MW
	05/08/01	57.96	107.48	49.52	MW
DAEGW04	08/14/06	41.15	94.38	53.23	MW
	05/22/06	40.90	94.38	53.48	MW
	03/06/06	43.54	94.38	50.84	MW
	11/28/05	45.52	94.38	48.86	MW
	08/29/05	44.97	94.38	49.41	MW
	05/23/05	44.99	94.38	49.39	MW
	03/14/05	46.57	94.38	47.81	MW
	12/13/04	48.76	94.38	45.62	MW
	08/09/04	48.14	94.38	46.24	MW
	05/24/04	47.46	94.38	46.92	MW
	03/08/04	47.67	94.38	46.71	MW
	12/01/03	48.74	94.38	45.64	MW
	08/11/03	47.68	94.38	46.70	MW
	06/02/03	46.95	94.38	47.43	MW
	03/10/03	46.78	94.38	47.60	MW
	12/02/02	47.81	94.38	46.57	MW
	08/26/02	47.02	94.38	47.36	MW
	05/28/02	46.42	94.38	47.96	MW
	03/04/02	46.61	94.38	47.77	MW
	11/26/01	48.05	94.38	46.33	MW
	08/27/01	47.11	94.38	47.27	MW
	05/08/01	46.21	94.38	48.17	MW
DAEGW05	08/14/06	51.45	105.65	54.20	MW
	05/22/06	51.12	105.65	54.53	MW
	03/06/06	54.00	105.65	51.65	MW
	11/28/05	56.00	105.65	49.65	MW
	08/29/05	55.40	105.65	50.25	MW
	05/23/05	55.30	105.65	50.35	MW
	03/14/05	57.15	105.65	48.50	MW
	12/13/04	59.50	105.65	46.15	MW
	08/09/04	58.75	105.65	46.90	MW
	05/24/04	57.95	105.65	47.70	MW
	03/08/04	58.22	105.65	47.43	MW
	12/01/03	59.25	105.65	46.40	MW
	08/11/03	58.23	105.65	47.42	MW
	06/02/03	57.50	105.65	48.15	MW
	03/10/03	57.35	105.65	48.30	MW

Table A-7-5
Groundwater Elevation Summary
Landfill E
Presidio of San Francisco, California

Location ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
DAEGW05	12/02/02	58.31	105.65	47.34	MW
	08/26/02	57.64	105.65	48.01	MW
	05/28/02	56.96	105.65	48.69	MW
	03/04/02	57.19	105.65	48.46	MW
	11/26/01	58.71	105.65	46.94	MW
	08/27/01	57.71	105.65	47.94	MW
	05/08/01	56.80	105.65	48.85	MW
DAEGW06	08/14/06	12.67	119.26	106.59	MW
	05/22/06	9.89	119.26	109.37	MW
	03/06/06	11.71	119.26	107.55	MW
	11/28/05	22.65	119.26	96.61	MW
	08/29/05	15.81	119.26	103.45	MW
	05/23/05	12.00	119.26	107.26	MW
	03/14/05	13.89	119.26	105.37	MW
	12/13/04	26.40	119.26	92.86	MW
	08/09/04	23.69	119.26	95.57	MW
	05/24/04	17.73	119.26	101.53	MW
	03/08/04	17.22	119.26	102.04	MW
	12/01/03	25.78	119.26	93.48	MW
	08/11/03	21.64	119.26	97.62	MW
	06/02/03	15.69	119.26	103.57	MW
	03/10/03	16.68	119.26	102.58	MW
	12/02/02	25.15	119.26	94.11	MW
	08/26/02	21.68	119.26	97.58	MW
	05/28/02	15.12	119.26	104.14	MW
	03/04/02	17.34	119.26	101.92	MW
	11/26/01	26.88	119.26	92.38	MW
	08/27/01	25.25	119.26	94.01	MW
	05/08/01	20.39	119.26	98.87	MW
DAEGW07	08/14/06	9.40	75.66	66.26	MW
	05/22/06	5.01	75.66	70.65	MW
	03/06/06	1.75	75.66	73.91	MW
	11/28/05	9.60	75.66	66.06	MW
	08/29/05	9.59	75.66	66.07	MW
	05/23/05	8.14	75.66	67.52	MW
	03/14/05	3.20	75.66	72.46	MW
	12/13/04	9.44	75.66	66.22	MW
	08/09/04	9.60	75.66	66.06	MW
	05/24/04	9.56	75.66	66.10	MW
	03/08/04	4.31	75.66	71.35	MW
	12/01/03	Dry	75.66	67.66	MW
	08/11/03	9.61	75.66	66.05	MW
	06/02/03	9.37	75.66	66.29	MW
	03/10/03	8.39	75.66	67.27	MW
	12/02/02	9.59	75.66	66.07	MW
	08/26/02	9.60	75.66	66.50 ²	MW
	05/28/02	9.56	75.66	66.54 ²	MW
	03/04/02	6.06	75.66	69.60	MW
	11/26/01	9.58	75.66	66.52 ²	MW
	08/27/01	9.48	75.66	66.18	MW
	05/08/01	9.50	75.66	66.16	MW
DAEGW08	08/14/06	18.34	71.66	53.32	MW
	05/22/06	17.28	71.66	54.38	MW
	03/06/06	20.34	71.66	51.32	MW
	11/28/05	22.96	71.66	48.70	MW
	08/29/05	22.28	71.66	49.38	MW
	05/23/05	21.89	71.66	49.77	MW
	03/14/05	23.44	71.66	48.22	MW

Table A-7-5
Groundwater Elevation Summary
Landfill E
Presidio of San Francisco, California

Location ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
DAEGW08	12/13/04	26.21	71.66	45.45	MW
	08/09/04	25.51	71.66	46.15	MW
	05/24/04	24.82	71.66	46.84	MW
	03/08/04	24.78	71.66	46.88	MW
	12/01/03	26.12	71.66	45.54	MW
	08/11/03	25.08	71.66	46.58	MW
	06/02/03	24.26	71.66	47.40	MW
	03/10/03	24.06	71.66	47.60	MW
	12/02/02	25.23	71.66	46.43	MW
	08/26/02	24.41	71.66	47.25	MW
	05/28/02	23.68	71.66	47.98	MW
	03/04/02	23.81	71.66	47.85	MW
	11/26/01	25.49	71.66	46.17	MW
	08/27/01	24.51	71.66	47.15	MW
	05/08/01	23.42	71.66	48.58 ²	MW
DAEGW101	08/23/06	39.09	107.09	68.00	MW
	05/22/06	35.32	107.09	71.77	MW
	03/06/06	34.42	107.09	72.67	MW
	11/28/05	44.40	107.09	62.69	MW
	08/29/05	40.60	107.09	66.49	MW
	05/23/05	36.02	107.09	71.07	MW
	03/14/05	34.80	107.09	72.29	MW
	12/13/04	Dry	107.09	65.09 ²	MW
	08/09/04	42.56	107.09	64.53	MW
	05/24/04	36.93	107.09	70.16	MW
	03/08/04	35.78	107.09	71.31	MW
	12/01/03	Dry	107.09	65.09	MW
	08/11/03	42.35	107.09	64.74	MW
	06/02/03	39.29	107.09	67.80	MW
	03/10/03	35.51	107.09	71.58	MW
DAEGW102	08/14/06	11.50	116.72	105.22	MW
	05/22/06	11.09	116.72	105.63	MW
	03/06/06	17.01	116.72	99.71	MW
	11/28/05	19.62	116.72	97.10	MW
	08/29/05	19.12	116.72	97.60	MW
	05/23/05	24.72	116.72	92.00	MW
	03/14/05	17.33	116.72	99.39	MW
	12/13/04	22.17	116.72	94.55	MW
	08/09/04	20.39	116.72	96.33	MW
	05/24/04	20.02	116.72	96.70	MW
	03/08/04	19.07	116.72	97.65	MW
	12/01/03	21.37	116.72	95.35	MW
	08/11/03	19.08	116.72	97.64	MW
	06/02/03	17.38	116.72	99.34	MW
	03/10/03	18.41	116.72	98.31	MW
DAEGW103	08/14/06	28.47	111.73	83.26	MW
	05/22/06	29.07	111.73	82.66	MW
	03/06/06	29.43	111.73	82.30	MW
	11/28/05	29.68	111.73	82.05	MW
	08/29/05	29.89	111.73	81.84	MW
	05/23/05	30.03	111.73	81.70	MW
	03/14/05	30.10	111.73	81.63	MW
	12/13/04	30.06	111.73	81.67	MW
	08/09/04	29.88	111.73	81.85	MW
	05/24/04	29.73	111.73	82.00	MW
	03/08/04	29.64	111.73	82.09	MW

Table A-7-5
Groundwater Elevation Summary
Landfill E
Presidio of San Francisco, California

Location ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
DAEGW103	12/01/03	29.59	111.73	82.14	MW
	08/11/03	29.42	111.73	82.31	MW
	06/02/03	29.34	111.73	82.39	MW
	03/10/03	29.27	111.73	82.46	MW
DAEGW104	08/14/06	15.53	120.28	104.75	MW
	05/22/06	19.79	120.28	100.49	MW
	03/06/06	18.83	120.28	101.45	MW
	11/28/05	19.88	120.28	100.40	MW
	08/29/05	19.41	120.28	100.87	MW
	05/23/05	18.30	120.28	101.98	MW
	03/14/05	22.52	120.28	97.76	MW
	12/13/04	26.86	120.28	93.42	MW
	08/09/04	26.19	120.28	94.09	MW
	05/24/04	22.70	120.28	97.58	MW
	03/08/04	25.96	120.28	94.32	MW
	12/01/03	27.21	120.28	93.07	MW
	08/11/03	24.09	120.28	96.19	MW
	06/02/03	21.90	120.28	98.38	MW
	03/10/03	23.10	120.28	97.18	MW
DAEPZ101	08/14/06	23.73	113.83	90.10	PZ
	05/22/06	21.67	113.83	92.16	PZ
	03/06/06	22.14	113.83	91.69	PZ
	11/28/05	26.42	113.83	87.41	PZ
	08/29/05	24.90	113.83	88.93	PZ
	05/23/05	22.84	113.83	90.99	PZ
	03/14/05	21.47	113.83	92.36	PZ
	12/13/04	27.91	113.83	85.92	PZ
	08/09/04	26.62	113.83	87.21	PZ
DAEPZ102	05/24/04	25.43	113.83	88.40	PZ
	03/08/04	25.89	113.83	87.94	PZ
	08/14/06	27.88	110.09	82.21	PZ
	05/22/06	27.02	110.09	83.07	PZ
	12/01/03	28.30	110.09	81.79	PZ
	12/01/03	28.32	113.83	85.51	PZ
	08/11/03	27.47	113.83	86.36	PZ
	06/02/03	26.80	113.83	87.03	PZ
	03/10/03	26.27	113.83	87.56	PZ
	03/06/06	28.30	110.09	81.79	PZ
	11/28/05	28.93	110.09	81.16	PZ
	08/29/05	26.68	110.09	83.41	PZ
	05/23/05	28.31	110.09	81.78	PZ
	03/14/05	28.05	110.09	82.04	PZ
	12/13/04	29.29	110.09	80.80	PZ
	08/09/04	28.91	110.09	81.18	PZ
	05/24/04	28.61	110.09	81.48	PZ
DAESP03	03/08/04	28.85	110.09	81.24	PZ
	12/01/03	29.22	110.09	80.87	PZ
	08/11/03	28.72	110.09	81.37	PZ
	06/02/03	28.58	110.09	81.51	PZ
	03/10/03	28.69	110.09	81.40	PZ
	12/04/06	Not flowing	--	--	Surface
	08/14/06	Not flowing	--	--	Surface
	05/22/06	Not flowing	--	--	Surface
	03/06/06	Flowing	--	--	Surface
	11/28/05	Not flowing	--	--	Surface
	08/29/05	Not flowing	--	--	Surface
	05/23/05	Not flowing	--	--	Surface
	03/14/05	Not flowing	--	--	Surface
	12/13/04	Not flowing	--	--	Surface
	08/09/04	Not flowing	--	--	Surface

Table A-7-5
Groundwater Elevation Summary
Landfill E
Presidio of San Francisco, California

Location ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
DAESP03	05/24/04	Not flowing	--	--	Surface
	03/08/04	Not flowing	--	--	Surface
	12/01/03	Not flowing	--	--	Surface
	08/11/03	Not flowing	--	--	Surface
	06/02/03	Not flowing	--	--	Surface

Notes

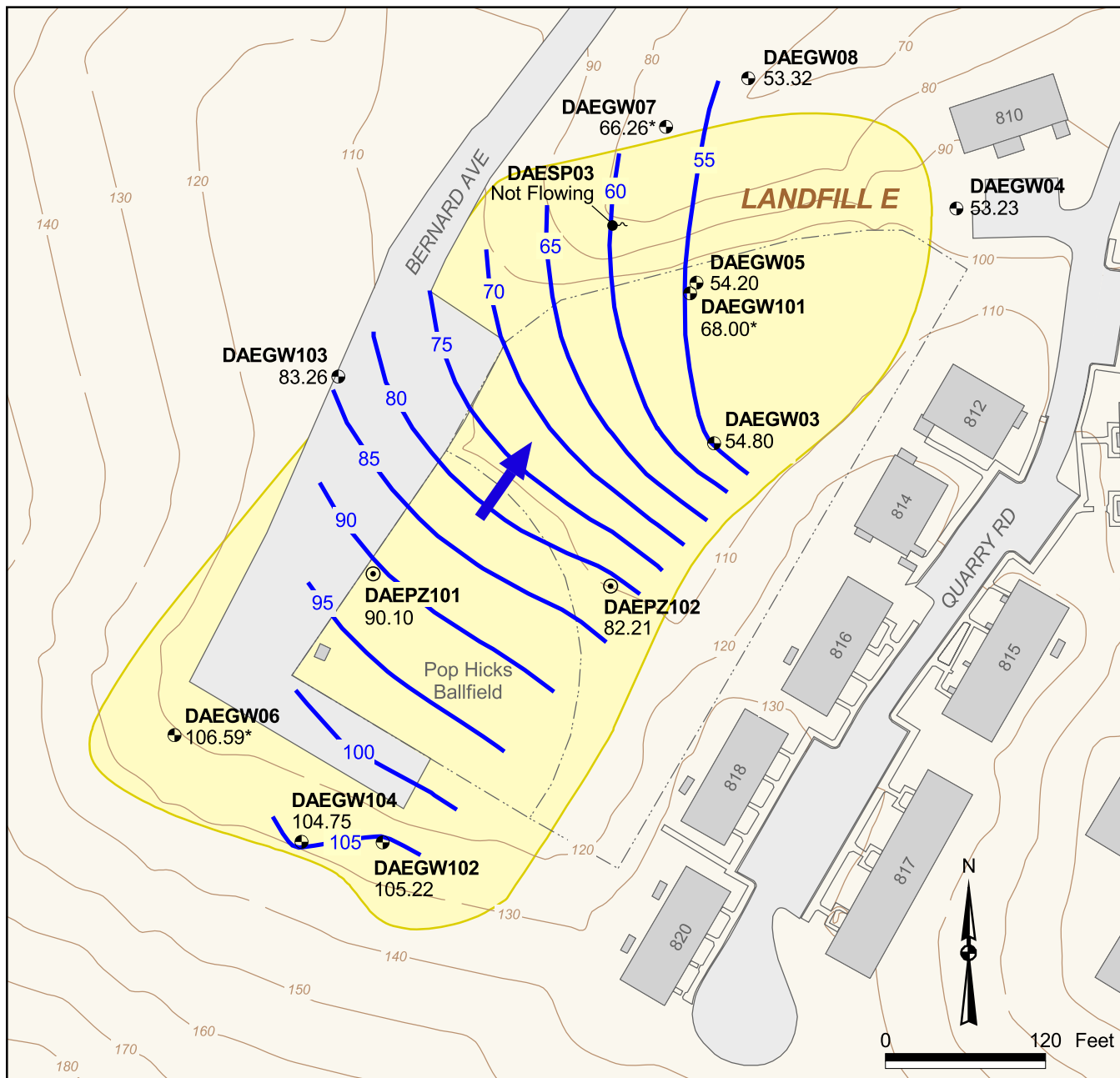
1 - All depth to water measurements are an average of three measurements recorded in the field.

2 - The limited amount of water observed within this well most likely represents water in the end cap not representative of the natural aquifer.

MW- Monitoring well

PZ - piezometer

feet PLLW - feet above Presidio lower low water vertical datum



LEGEND

- **DAEGW04** Groundwater Monitoring Well
53.23
August 2006 Groundwater Elevation
- ⊙ **DAEPZ101** Piezometer
90.10
August 2006 Groundwater Elevation
- ~ **DAESP03** Approximate Surface Water
Sample Location

* Wells DAEGW06 and DAEGW07 were not used in contouring, due to semi-confined and perched conditions, respectively. Whereas, well DAEGW101 was not used in contouring because it is screened in a shallower interval.

- Approximate Direction of Groundwater Flow
- Groundwater Elevation Contour
(Contour Interval : 5 ft)
- Topographic Contour
(Contour Interval : 10 ft)
- 810 Building and Number
- Approximate Lateral Extent of Landfill

Notes:
Groundwater elevation data collected on 14 August 2006.

Horizontal Datum: NAD 27, CA State Plane Coordinates, Zone 3, feet

Vertical Datums: (groundwater) Presidio Lower Low Water (ft. PLLW)
(topography) North American Vertical Datum, NAVD88

LANDFILL E SITE PLAN AND 14 AUGUST 2006 GROUNDWATER ELEVATION MAP

Treadwell&Rollo



Presidio Trust

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April 2007

FIGURE A-7-1

LANDFILL 4
APPENDIX SECTION A-8
SEMI-ANNUAL GROUNDWATER MONITORING REPORT
THIRD AND FOURTH QUARTERS 2006
Presidio of San Francisco, California

1.0 INTRODUCTION AND BACKGROUND

Landfill 4 (LF 4) is located in the west-central portion of the Presidio (Figure 1) between Central Magazine Road and Hitchcock Street. The site elevation ranges from 285 to 325 feet above the PLLW vertical datum (Figure A-8-1).

LF 4 operated between 1946 and 1981 and was used to dispose of debris and fill material. In 1981, Landfill 4 was closed and a 3-foot-thick soil cap was placed over the debris (ANL, 1989). The landfill contained up to 14 vertical feet of debris material, reportedly consisting of a variety of different materials that potentially include chemical wastes from various Presidio facilities. Fill materials also included brick, glassware, gravel, concrete, pipes, battery caps, and plastic (Dames & Moore, 1997). Figure A-8-1 shows the site and the approximate lateral extent of the former landfill.

Two monitoring wells, LF4GW100 and LF4GW101, were installed at the LF 4 site in July and August 2000 by the Trust (Figure A-8-1) to supplement existing monitoring well LF04GW03 (EKI, 2000a). Monitoring wells LF4GW100 and LF4GW101 were completed at 22.5 and 22.8 feet bgs, respectively. Monitoring well LF4GW100 is screened within silt, silty sand, and sand units and extends 0.5 feet into weathered bedrock. Monitoring well LF4GW101 is screened within a clay layer and does not extend into the weathered bedrock. Groundwater was not encountered in either well during or after construction. The occurrence of groundwater in monitoring well LF04GW03 is seasonal; the well does not typically contain adequate groundwater for sampling during the summer months (EKI, 2000a). Additional wells have been installed as part of the remedial action activities discussed in Section 3.0.

Well LF04GW03 has been sampled at irregular intervals from April 1995 to May 1999, which was the last time this well contained sufficient water to sample. Groundwater samples from well LF04GW03 have been analyzed for general chemistry parameters, TPH, metals, and TDS. Summaries of general chemistry, dissolved oxygen, TPH, PAH, chlorinated herbicides, OCP, PCB, VOCs, and metals results for LF 4 groundwater samples are presented in Tables A-8-1 through A-8-3.

2.0 SITE DESCRIPTION AND GEOLOGY

LF 4 is located in the southwestern portion of the Marina Groundwater Basin. Groundwater beneath LF 4 has ranged from approximately 12 to greater than 45 feet bgs. Groundwater flows in a north-northeasterly direction following the general topographic trend (Figures A-8-1 and A-8-2).

As outlined in Section 3.0, following remedial excavation, five new groundwater monitoring wells were installed in the vicinity of former LF 4. Materials encountered while drilling soil borings for installation of monitoring wells LF4GW102 through LF4GW106 generally consisted of dune sand to depths ranging between 6 to 14 feet bgs over silty sand of the Colma Formation to depths between 19 to 46.5 feet bgs. All borings were terminated in Franciscan complex shales and serpentinite to depths ranging between 40 and 48.5 feet bgs. Saturated soils were encountered at approximately 31.5 feet bgs in the boring for LF4GW106 and at a depth of 42.5 feet bgs in the soil boring for LF4GW105.

Well LF4GW102 is located upgradient of the excavated area, near the southern edge of Central Magazine Road (Figure A-8-1). Well LF4GW106 is located within the excavated portion of former LF 4. Wells LF4GW103, LF4GW104, and LF4GW105 are located downgradient of the excavated portion of former LF 4. At wells LF4GW102, LF4GW103, LF4GW104, and LF4GW106, the groundwater surface is located within the Franciscan complex bedrock. At well LF4GW105, the groundwater surface is located near the bottom of the Colma formation, above the Franciscan complex contact (Treadwell & Rollo, 2002e).

3.0 REMEDIAL ACTION

The *Remedial Action Plan and Evaluation of Alternatives (RAP) for Landfill 4 and Fill Site 5* selected excavation, recycling, and offsite disposal of impacted fill material and underlying soil, along with groundwater monitoring, as the remedial alternative for LF 4. The goal of the remediation at LF 4 was to remove all contaminated material, leaving in place soil that meets the established cleanup levels (Treadwell & Rollo, 2002e).

In accordance with the California Code of Regulations, Title 27, Subchapter 3, Section 20390, a site that has undergone clean closure (where all wastes and residues, contaminated subsoil, and other contaminated materials are removed or decontaminated at closure) must be shown to comply with the water quality protection standards or the cleanup levels presented in Section 3 of the RAP for three years.

Between 9 January and 14 February 2003, a total of 14,623 tons (approximately 11,698 yd³) of waste material was removed from former LF 4. The majority of the material (13,551 tons) was disposed as Class I California Hazardous Waste based on soluble lead concentrations. Soil confirmation sample concentrations determined that the majority of site conditions after the removal action meet the goals presented in the RAP (Treadwell & Rollo, 2002e).

Additional soil sampling to complete the soil cleanup activities at LF 4 has been completed and documented in the *Draft Construction Completion Report Landfill 4 and Fill Site 5 (CCR)* (Treadwell & Rollo, 2004f). Between 7 February and 25 April 2003, a total of 12,393 tons of waste material was removed from the former FS 5 site, with an approximate additional 40 cubic yards of Class II waste removed in September 2004. Approximately 90 percent of the fill material was disposed at Class II and Class III disposal sites and the remainder as Class I California Hazardous Waste. Soil confirmation sample concentrations or 95% UCL calculations for all compounds tested (both COC and non-COC compounds) determine that the site soil conditions meet the goals presented in the RAP and that the site is suitable for unrestricted use. Based on the remedial activities conducted, field observations, established cleanup levels, and a review and evaluation of the confirmation sampling results, LF 4 and FS 5 are recommended for construction completion. Groundwater monitoring will continue per the RAP to confirm that applicable cleanup levels are not exceeded (Treadwell & Rollo, 2002e).

Between 19 February and 5 March 2003, approximately 2,970 cubic yards of imported backfill material (Letterman Colma Backfill) was delivered to the site. The Letterman Colma backfill was used to buttress the northern side of Central Magazine Road and contour the slope for erosion control. The source for the LF 4 imported material was the Letterman redevelopment project Colma excavation spoils.

In May 2006, Treadwell & Rollo sampled the imported Letterman Colma Backfill Soil (Colma Fill) at LF 4 for OCPs in accordance with the *Field Sampling Plan to Evaluate Possible Chlordane in Letterman Colma Backfill Soil* dated 28 February 2006. The purpose of the soil sampling was to characterize the Colma Fill at LF 4 for the occurrence of chlordane above site specific soil cleanup levels. The analytical results of this sampling event are presented in the *Results of Colma Fill Sampling, Landfill 4, Fill Site 5, and Girard Street Ramp, Presidio of San Francisco, California* dated 20 February 2007 (Treadwell & Rollo, 2007).

The results of the Colma Fill sampling indicate soil cleanup level exceedances are present in Colma backfill soil at Landfill 4 at concentrations which below human health residential cleanup levels, but that significantly exceed the ecological special-status cleanup levels. The Trust will discuss these exceedances with DTSC to address the potential threat to ecological receptors (Treadwell & Rollo, 2007).

Following the removal action and subsequent soil import, five new monitoring wells (LF4GW102 through LF4GW106) were installed in February 2003 in the locations shown on Figure A-8-1. The new wells were added to the Presidio Quarterly Groundwater Monitoring Program beginning with the First Quarter 2003 and were to be sampled quarterly for a minimum of three years, in accordance with the RAP. Monitoring wells LF04GW03, LF4GW100, and LF4GW101 were to be monitored for the presence of water and sampled when sufficient water is present.

4.0 GROUNDWATER MONITORING

LF 4 has eight monitoring wells (LF04GW03 and LF4GW100 through LF4GW106) associated with the LF 4 groundwater monitoring program (Figure A-8-1). Third and Fourth Quarter 2006 groundwater elevations were collected at all LF 4 monitoring wells on 14 August and 4 December 2006, respectively (Table A-8-4). All LF 4 monitoring wells contained water during both quarters, except for LF4GW101, which was dry during the Fourth Quarter 2006.

Monitoring wells LF4GW103 and LF4GW104 were the only wells proposed for sampling during the Third and Fourth Quarters 2006 (Tables 1A and 1B, respectively).

4.1 Groundwater-Level Measurements and Interpretation

Groundwater elevation measurements were collected on 14 August and 4 December 2006 in all LF 4 monitoring wells with the exception of LF4GW101, which was dry during the Fourth Quarter 2006. Groundwater elevations are summarized in Table A-8-4. Water level meters were calibrated on 14 August and 4 December 2006, and the calibration logs can be found in Appendix B. Groundwater elevation field forms can be found in Appendix C.

During the Third Quarter 2006, the groundwater elevations ranged from 273.79 to 308.16 feet above PLLW in monitoring wells LF4GW105 and LF4GW102, respectively (Figure A-8-1).

During the Fourth Quarter 2006, groundwater elevations ranged from 269.95 to 300.45 feet above PLLW in monitoring wells LF4GW105 and LF4GW102, respectively (Figure A-8-2). LF4GW101 was dry during the Fourth Quarter 2006.

Groundwater gradients were calculated to be approximately 0.10 and 0.11 feet per foot in a northeasterly direction during the Third and Fourth Quarters 2006, respectively. Groundwater gradients observed during the Third and Fourth Quarters 2006 are consistent with previous monitoring events.

4.2 Monitoring Well Purging and Sampling

During the Third Quarter 2006, LF 4 monitoring wells LF4GW103 and LF4GW104 were sampled on 16 August 2006. During the Fourth Quarter 2006, monitoring wells LF4GW103 and LF4GW104 were sampled on 5 December 2006.

Purge equipment, purging volumes, and sampling equipment for each monitoring well are described in the purge records located at the conclusion of this section. Purge water was stored for future disposal in a 2,800-gallon aboveground polyethylene storage tank located at the Central Magazine.

4.3 Groundwater Analytical Program

All groundwater samples collected were submitted to the project laboratory for the analyses shown in Tables 1A and 1B of the main text. The appropriate sampling containers, preservatives, and maximum holding times for each analytical method are shown in Table 5. Sample containers used at each well are described in the purge records located at the conclusion of this section.

QA/QC samples were collected as part of this program. Section 6.2 of the main text discusses the QA/QC sampling and analysis performed during the Third and Fourth Quarters 2006.

5.0 GROUNDWATER ANALYTICAL RESULTS

Groundwater samples collected from LF 4 monitoring wells during the Third Quarter 2006 were analyzed for general chemistry, TDS, PCBs, and 14 dissolved metals. Groundwater samples collected from LF 4 monitoring wells during the Fourth Quarter 2006 were analyzed for general chemistry, TDS, and 14 dissolved metals.

Post-remediation groundwater monitoring requirements from the RAP have been met for TPH, PAHs, VOCs, OCPs, and chlorinated herbicides for the required frequency of monitoring and therefore, these analytical compounds are no longer included in the Groundwater Monitoring Program at Landfill 4.

5.1 Dissolved Oxygen

Dissolved oxygen results are presented in Table A-8-1. During the Third Quarter 2006, dissolved oxygen was measured at 0.47 and 0.2 mg/L in monitoring wells LF4GW103 and LF4GW104, respectively. During the Fourth Quarter 2006, dissolved oxygen was measured at 0.7 and 0.8 mg/L in monitoring wells LF4GW103 and LF4GW104, respectively. The dissolved oxygen concentrations measured during the Third Quarter 2006 are within the range of concentrations previously measured within Landfill 4 monitoring wells.

5.2 General Chemistry

The majority of the general chemistry parameter results measured during the Third and Fourth Quarters 2006 were within historical ranges.

Nitrate was detected at a high concentration of 0.09 mg/L in monitoring well LF4GW103 during the Third Quarter 2006. This concentration was only slightly higher than historical range and can be attributed to natural fluctuation. The remaining general chemistry results were within historical ranges during the Third and Fourth Quarters 2006.

5.3 PCB Results

PCB results, along with RAP-specified cleanup levels, are presented in Table A-8-2. No PCBs were detected above the laboratory's reporting limit within LF4GW103 or LF4GW104 during the Third Quarter 2006. One PCB (aroclor 1260) was detected above its RAP-specified cleanup level in the LF4GW104 during the Third Quarter 2005. No other PCB detections have occurred in any LF 4 groundwater samples.

5.4 Dissolved Metals Results

Dissolved metals results, along with RAP-specified cleanup levels, are presented in Table A-8-3.

The table below summarizes new high and low dissolved metal analytical results for the Third Quarter and Fourth Quarters 2006 within wells LF4GW103 and LF4GW104 when compared to historical data, and provides the range and frequency of historical results. The total number of analyses may vary depending on the sampling frequency, the commencement date of sampling, and the number of duplicate analyses performed.

Location	Analyte	Detects / Samples	Historical Data		New High/Low Third & Fourth Quarter 2006		Units
			Minimum	Maximum	Minimum	Maximum	
Metals, Dissolved							
LF4GW103	Arsenic	5 / 16	< 5	6	--	6.2	µg/L
	Copper	7 / 16	< 1	2.3	--	2.6	µg/L
	Manganese	16 / 16	37	170	16	--	µg/L
LF4GW104	Arsenic	2 / 17	< 2 *	3.1	--	5.3	µg/L
	Nickel	8 / 17	< 20	22	--	24	µg/L
	Sodium	17 / 17	4,500	98,000	--	100,000	µg/L

An asterisk (*) indicates qualified data in the above table.

The dissolved metals concentrations listed above were slightly outside of the range of previously reported concentrations and are therefore, not considered to be significant.

Dissolved metals concentrations at Landfill 4 have remained relatively stable in recent quarters. No dissolved metals exceeded the RAP-specified cleanup levels during the Third or Fourth Quarters 2006. However, dissolved nickel exceeded the RAP-specified cleanup level in six of the previous seven quarters within LF4GW103 and it was detected at the cleanup level of 100 µg/L within this well during the Third and Fourth Quarters 2006.

6.0 CONCLUSIONS & RECOMMENDATIONS

No significant trends were observed in the samples collected during the Third and Fourth Quarters 2006. The majority of the general chemistry parameter results measured during the Third and Fourth Quarters 2006 are within historical ranges and appear to be stable. No PCBs

were detected above the laboratory's reporting limit within LF4GW103 or LF4GW104 during the Third Quarter 2006.

Dissolved metals concentrations at Landfill 4 have remained relatively stable in recent quarters. No dissolved metals exceeded the RAP-specified cleanup levels during the Third or Fourth Quarters 2006. However, dissolved nickel was detected at the cleanup level of 100 µg/L within LF4GW103 during both the Third and Fourth Quarters 2006. Nickel has been detected at concentrations above its applicable cleanup level several times within LF4GW103 during recent monitoring events. Therefore, the potential for increasing or decreasing dissolved nickel concentrations within monitoring wells LF4GW103 and LF4GW104 will continue to be evaluated in future monitoring events, in accordance with the RAP.

Table A-8-1
Results of General Chemistry Analyses
Landfill 4
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N ²	Nitrate + Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0	Field	E300.0/ E340.2	E300.0/ E353.2	E300.0/ E353.2	353.2/ E353.2	E300.0
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LF04GW03	05/24/05	120	120	65	0.9	< 0.1	0.33	< 0.05	NA	39
	03/18/05	83	83	64	0.9	< 0.1	4	< 0.05	NA	37
	03/17/04	41	41	73	3.2	< 0.1	17	< 0.05	< 0.05	74
	05/13/99	58.8	58.8	71.4	9.11 (J35)	NA	NA	NA	2.83 (J12)	39.5
	08/12/98	54.9	54.9	61	7.4	0.146	NA	NA	< 0.05	18.8
	04/13/98	47	47	55	4.89	0.1	NA	NA	< 0.05	22
	01/12/98	25.3	25.3	172	NM	NA	NA	NA	2.3	47
	05/06/97	69	69	79	6.25	0.1	NA	NA	< 0.05	22
	02/04/97	73	73	57	6.41	0.1	NA	NA	1.5	31
	05/29/96	100	100	88	NM	NA	NA	NA	0.1	38
	03/12/96	99	99	41	NM	0.312	4.8	NA	NA	29
	04/04/95	107	107	63.6	NM	NA	18	NA	NA	56.6
LF4GW101	03/17/05	37	37	37	1.5	< 0.1	0.11	< 0.05	NA	12
LF4GW102	08/31/05	230	230	92	0.1	< 0.1	1.4	< 0.05	NA	61
DUP0831053A	08/31/05	230	230	90	--	< 0.1	1.4	< 0.05	NA	61
	03/17/05	250	250	130	0.1	< 0.1	1.2	< 0.05	NA	75
DUP0317053B	03/17/05	260	260	120	--	< 0.1	1.2	< 0.05	NA	72
LF4GW102CL	03/17/05	272	272	123	--	< 0.3 U	1.22	< 1 U	NA	71.9
	12/15/04	340	340	170	0.1	< 0.1	1.3	< 0.05	NA	85
DUP1215042C	12/15/04	340	340	170	--	< 0.1	1.2	< 0.05	NA	86
LF4GW102CL	12/15/04	334	334	160	--	< 0.3 U	NA	NA	1.22	96.7
	08/11/04	270	270	130	0.12	< 0.1	0.97	< 0.05	NA	75
DUP0811042A	08/11/04	280	280	130	--	< 0.1	0.96	< 0.05	NA	75
LF4GW102CL	08/11/04	274	274	130	--	< 0.1	NA	NA	0.81 J-	77
	05/25/04	260	260	130	0.69	< 0.1	0.92	< 0.05	NA	77
DUP0525042A	05/25/04	250	250	130	--	< 0.1	0.94	< 0.05	NA	75
	03/09/04	340	340	160	0.21	< 0.1	1.1	< 0.05	NA	79
DUP0309042A	03/09/04	340	340	160	--	< 0.1	1.1	< 0.05	NA	83

Table A-8-1
Results of General Chemistry Analyses
Landfill 4
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N ²	Nitrate + Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0	Field	E300.0/ E340.2	E300.0/ E353.2	E300.0/ E353.2	353.2/ E353.2	E300.0
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LF4GW102	12/04/03	370	370	160	0.6	< 0.1	1	< 0.05	NA	80
DUP1204031A	12/04/03	370	370	160	--	< 0.1	1	< 0.05	NA	80
LF4GW102CL	12/04/03	350	350	173	--	< 0.1	1.4 J-	< 0.05	1.4 J-	83.6
	08/21/03	280	280	120	1.2	< 0.1	1	< 0.05	NA	72
	06/09/03	290	290	120	0.4	< 0.1	1.1	< 0.05	NA	74
DUP0609033A	06/09/03	260	260	130	--	< 0.1	1.1	< 0.05	NA	79
LF4GW102CL	06/09/03	280	280	120	--	0.66	1	< 0.05	1	66
	03/20/03	300	300	130	0.5	< 0.1	1.2	< 0.05	NA	72
DUP0320031A	03/20/03	280	280	130	--	< 0.1	1.2	< 0.05	NA	73
LF4GW103	12/05/06	1,300	1,300	570	0.7	< 0.1	< 0.05	< 0.1	NA	380
	08/16/06	1,200	1,200	470	0.47	< 0.1	0.09	< 0.05	NA	350
	05/25/06	1,200	1,200	480	3.71	0.1	0.07	< 0.05	NA	390
	03/07/06	1,300	1,300	510	0.4	< 0.1	< 0.05	< 0.1	NA	410
DUP0307063A	03/07/06	1,300	1,300	500	--	< 0.1	< 0.05	< 0.1	NA	410
LF4GW103CL	03/07/06	1,190	1,190	601	--	< 1 U	0.046	< 0.02 U	NA	428
	08/31/05	1,100	1,100	300	0.2	< 0.1 UJ	0.06	< 0.05 UJ	NA	330
	03/15/05	290	290	140	0.1	< 0.1	< 0.05	< 0.05	NA	44
	12/14/04	630	630	170	0.2	0.11	< 0.05	< 0.05	NA	200
	08/10/04	330	330	140	0.27	0.12	< 0.05	< 0.05	NA	41
	05/25/04	280	280	140	0.92	0.13	< 0.05	< 0.05	NA	36
	03/09/04	380	380	160	0.29	0.15	< 0.05	< 0.05	NA	97
	12/02/03	530	530	180	0.7	0.15	< 0.05	< 0.05	NA	160
	08/13/03	340	340	140	0.1	< 0.5	< 0.25 UJ	< 0.25 UJ	NA	37
	06/09/03	260	260	170	0.5	< 0.1	< 0.05	< 0.05	NA	43
	03/20/03	240	240	240	0.4	0.32	< 0.05	< 0.05	NA	70

Table A-8-1
Results of General Chemistry Analyses
Landfill 4
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N ²	Nitrate + Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0	Field	E300.0/ E340.2	E300.0/ E353.2	E300.0/ E353.2	353.2/ E353.2	E300.0
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LF4GW104 DUP0830053B LF4GW104CL	12/05/06	620	620	320	0.8	< 0.1	0.64	< 0.05	NA	160
	08/16/06	630	630	340	0.2	< 0.1	0.59	< 0.05	NA	170
	05/25/06	650	650	350	2.4	< 0.1	0.62	< 0.05	NA	170
	03/07/06	670	670	360	0.11	< 0.1	0.53	< 0.05	NA	170
	08/30/05	690	690	320	0.2	< 0.1 UJ	0.69	< 0.05 UJ	NA	150
	08/30/05	680	680	320	--	< 0.1 UJ	0.69	< 0.05 UJ	NA	150
	08/30/05	670	670	308	--	< 0.3 U	1.20	< 1 U	NA	151
	03/15/05	650	650	290	0.1	< 0.1	0.6	< 0.05	NA	140
	12/14/04	720	720	290	0.1	< 0.1	0.41	< 0.05	NA	140
	08/10/04	690	690	260	0.15	< 0.1	0.32	< 0.05	NA	130
	05/25/04	580	580	260	0.33	< 0.1	0.31	< 0.05	NA	140
	03/09/04	630	630	250	0.07	< 0.1	0.34	< 0.05	NA	140
	12/02/03	680	680	250	0.2	< 0.1	0.3	< 0.05	NA	140
	08/13/03	640	640	240	0.3	< 0.5	< 0.25 UJ	< 0.25 UJ	NA	140
	06/09/03	640	640	250	0.5	0.15	0.37	< 0.05	NA	140
DUP0609031A	06/09/03	600	600	250	--	< 0.1	0.53	< 0.05	NA	140
	03/20/03	510	510	230	0.2	< 0.1	0.35	1.3	NA	140
LF4GW105	08/31/05	310	310	150	0.2	< 0.1	1.4	< 0.05	NA	66
	03/15/05	340	340	180	0.1	< 0.1	1.6	< 0.05	NA	73
	12/14/04	370	370	170	0.1	< 0.1	2.1	< 0.05	NA	73
	08/10/04	350	350	280	0.12	< 0.1	1.8	< 0.05	NA	84
	05/25/04	330	330	140	0.59	< 0.1	1.3	< 0.05	NA	60
	03/09/04	380	380	130	0.18	< 0.1	1.5	< 0.05	NA	55
	12/02/03	420	420	130	0.3	< 0.1	1.6	< 0.05	NA	51
	08/13/03	440	440	120	0.3	< 0.5	1.4 b,J-	< 0.25 UJ	NA	59
	06/09/03	410	410	140	0.5	0.32	1.7	< 0.05	NA	56
	03/20/03	390	390	130	2.2	< 0.1	1.5	< 0.05	NA	51

Table A-8-1
Results of General Chemistry Analyses
Landfill 4
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N ²	Nitrate + Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0	Field	E300.0/ E340.2	E300.0/ E353.2	E300.0/ E353.2	353.2/ E353.2	E300.0
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LF4GW106	08/31/05	500	500	130	0.2	< 0.1	0.81	< 0.05	NA	87
	03/15/05	500	500	150	0.1	< 0.1	0.88	< 0.05	NA	92
	12/14/04	540	540	150	0.2	< 0.1	0.85	< 0.05	NA	96
	08/10/04	560	560	140	0.06	< 0.1	0.8	< 0.05	NA	95
	05/25/04	520	520	150	0.33	< 0.1	0.74 J	< 0.05 UJ	NA	98
	03/09/04	600	600	150	0.31	< 0.1	0.7	< 0.05	NA	99
	12/02/03	680	680	140	0.4	< 0.1	0.56	< 0.05	NA	96
	08/13/03	700	700	140	0.3	< 0.5	0.42 b,J-	< 0.25 UJ	NA	100
	06/09/03	640	640	150	0.3	< 0.1	0.57	< 0.05	NA	100
	03/20/03	540	540	160	3.8	< 0.1	0.68	< 0.05	NA	99

Notes

mg/L - milligrams per liter

NA - not analyzed

NM - not measured

1 - The identified analytical method(s) are for analyses performed in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - Nitrite as N prior to May 2001 analysis includes nitrate as N.

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-8-2
Results of TPH, PAH, Chlorinated Herbicide, OCP, PCB, and VOC Analyses
Landfill 4
Presidio of San Francisco, California

Well Name	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)	PAHs			All Chlorinated Herbicides	OCPs and PCBs			Volatile Organic Compounds (VOCs)								
					Fluor-anthene	Phen-anthrene	All Other PAHs		beta-BHC	Chloro-diphenyl (PCB-1260)	All Other OCPs / PCBs	Acetone	Benzene	Carbon Disulfide	Chloro-benzene	Dibromo-chloro-methane	PCE	Toluene	TCE	All Other VOCs
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8270/ SW8270C/ SW8310	SW8270/ SW8270C/ SW8310	SW8270/ SW8270C/ SW8310	SW8150/ SW8151/ SW8151A	SW8080/ SW8081/ SW8081A/ SW8082	SW8082	SW8080/ SW8081/ SW8081A/ SW8082	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Level		770	880	1,200	1,500 ²	230 ³	--	--	0.037 ⁴	0.5	--	610 ²	1	1,000 ²	70	80 ³	5	150	5	--
LF04GW03	05/24/05	NA	NA	NA	< 0.39	< 0.49	ND	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/18/05	< 50	< 50	< 300	< 0.4	< 0.5	ND	ND	< 0.05	< 0.38 UJ	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/17/04	< 50	< 50	< 300	< 0.39	< 0.49	ND	ND	< 0.05	< 0.49	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/13/99	NA	180 (J25)	< 300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	02/11/99	< 50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.5	< 5	0.79 (J32)	< 0.5	0.87 (J32)	< 0.5	6.2 (J32)	ND
	08/12/98	< 50	51 (J25)	< 50	NA	NA	NA	NA	NA	NA	NA	NA	< 0.5	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	04/13/98	< 50	< 50	1,000 (J25)	< 10	< 10	ND	ND	< 0.05	< 1	ND	NA	< 0.5	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	01/12/98	< 50	< 50	< 300	< 10	< 10	ND	ND	< 0.05	< 1	ND	NA	< 0.5	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/06/97	< 50	< 50	< 300	< 10	< 10	ND	ND	< 0.05	< 1	ND	NA	0.4 (J28)	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	02/04/97	< 50	< 50	< 300	< 10	< 10	ND	ND	< 0.05	< 1	ND	NA	< 0.5	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
05/29/96	< 50	< 50	< 300	< 10	< 10	ND	ND	< 0.05	< 1	ND	< 10	< 0.5	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
03/12/96	< 50	< 50	< 300 (U16)	< 10	< 10	ND	ND	< 0.005	< 0.1	ND	< 10	< 0.5	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
LF4GW101	03/17/05	< 50	< 50	< 300	< 0.39	< 0.49	ND	ND	< 0.05	< 0.49	ND	< 10 UJ	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
LF4GW102	08/31/05	< 50	< 50	< 300	< 0.38	< 0.48	ND	ND	< 0.05	< 0.5	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP0831053A	08/31/05	< 50	< 50	< 300	< 0.38	< 0.48	ND	ND	< 0.05	< 0.49	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/17/05	< 50	< 50	< 300	< 0.38	< 0.48	ND	ND	< 0.05	< 0.38	ND	< 10 UJ	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP0317053B	03/17/05	< 50	< 50	< 300	< 0.39	< 0.49	ND	ND	< 0.05	< 0.39	ND	< 10 UJ	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
LF4GW102CL	03/17/05	< 50 U	< 50 U	< 300 U	< 0.2 U	< 1 U	ND	ND	< 0.05 U	< 1 U	ND	< 10 U	< 0.5 U	< 5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	ND
	12/15/04	NA	NA	NA	< 0.4	< 0.5	ND	ND	ND	NA	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP1215042C	12/15/04	NA	NA	NA	< 0.4	< 0.5	ND	ND	ND	NA	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
LF4GW102CL	12/15/04	NA	NA	NA	< 0.2 U	< 1 U	ND	ND	ND	NA	ND	< 10 U	< 0.5 U	< 5 U	< 0.5 U	< 0.5 U	< 0.5	< 0.5 U	< 0.5	ND
	08/11/04	< 50	< 50	< 300	< 0.38	< 0.48	ND	ND	< 0.05	< 0.48 UJ	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP0811042A	08/11/04	< 50	< 50	< 300	< 0.38	< 0.47	ND	ND	< 0.05	< 0.49 UJ	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
LF4GW102CL	08/11/04	< 100	< 100 J-	< 400 UJ	< 0.2	< 1	ND	ND	< 0.02	< 1 UJ	ND	NA	< 1	NA	< 1	< 1	< 1	< 1	< 2 UJ	ND
	05/25/04	< 50	< 50	< 300	< 0.38	< 0.47	ND	ND	< 0.05 UJ	< 0.47 UJ	ND	29	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP0525042A	05/25/04	< 50	< 50	< 300	< 0.38	< 0.48	ND	ND	< 0.05 UJ	< 0.48 UJ	ND	27	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/09/04	< 50	< 50	< 300	< 0.38	< 0.47	ND	ND	< 0.05 UJ	< 0.48 UJ	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP0309042A	03/09/04	< 50	< 50	< 300	< 0.38	< 0.47	ND	ND	< 0.05 UJ	< 0.47 UJ	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/04/03	< 50	< 50	< 300	< 0.38	< 0.48	ND	ND	< 0.05	< 0.48 UJ	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP1204031A	12/04/03	< 50	< 50	< 300	0.02 J	< 0.49	ND	ND	< 0.05	< 0.49 UJ	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
LF4GW102CL	12/04/03	< 50	< 48 UJ	< 240 UJ	< 0.095 UJ	0.24 J-	ND	ND	< 0.048 UJ	< 0.96 UJ	ND	< 10 R	< 0.5	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/21/03	< 50	< 50	< 300	0.04 J	< 0.47	ND	ND	< 0.05	< 0.49 UJ	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/09/03	< 50	< 50	< 300	0.02 J	< 0.48	ND	ND	< 0.05	< 0.48 UJ	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP0609033A	06/09/03	< 50	< 50	< 300	0.02 J	< 0.48	ND	ND	< 0.05 UJ	< 0.48	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
LF4GW102CL	06/09/03	< 50	< 50	< 250	< 0.096	0.11	ND	ND	0.062 J-	< 0.99 R	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/20/03	< 50	< 50	< 300	< 9.5	< 9.5	ND	ND	0.2	< 0.48	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP0320031A	03/20/03	< 50	< 50	< 300	< 9.5	< 9.5	ND	ND	0.1	< 0.48 UJ	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP0307063A LF4GW103CL	LF4GW103	08/16/06	NA	NA	NA	NA	NA	NA	NA	< 0.47	NA / ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
		03/07/06	NA	NA	NA	NA	NA	NA	NA	< 0.48	NA / ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
		03/07/06	NA	NA	NA	NA	NA	NA	NA	< 0.47	NA / ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
		03/07/06	NA	NA	NA	NA	NA	NA	NA	< 1 U UJ	NA / ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
		08/31/05	< 50	< 50	< 300	< 0.38	< 0.48	ND	ND	< 0.05	< 0.48	ND	< 10	< 0.5	< 0.5					

Table A-8-2
Results of TPH, PAH, Chlorinated Herbicide, OCP, PCB, and VOC Analyses
Landfill 4
Presidio of San Francisco, California

Well Name	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)	PAHs			All Chlorinated Herbicides	OCPs and PCBs			Volatile Organic Compounds (VOCs)								
					Fluor-anthene	Phen-anthrene	All Other PAHs		beta-BHC	Chloro-diphenyl (PCB-1260)	All Other OCPs / PCBs	Acetone	Benzene	Carbon Disulfide	Chloro-benzene	Dibromo-chloro-methane	PCE	Toluene	TCE	All Other VOCs
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8270/ SW8270C/ SW8310	SW8270/ SW8270C/ SW8310	SW8270/ SW8270C/ SW8310	SW8150/ SW8151/ SW8151A	SW8080/ SW8081/ SW8081A/ SW8082	SW8082	SW8080/ SW8081/ SW8081A/ SW8082	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Level		770	880	1,200	1,500 ²	230 ³	--	--	0.037 ⁴	0.5	--	610 ²	1	1,000 ²	70	80 ³	5	150	5	--
LF4GW104 DUP0830053B LF4GW104CL	08/16/06	NA	NA	NA	NA	NA	NA	NA	NA	< 0.47	NA / ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/07/06	NA	NA	NA	NA	NA	NA	NA	NA	< 0.48	NA / ND	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/30/05	< 50	< 50	< 300	< 0.38	< 0.48	ND	ND	< 0.05	< 0.48 UJ	ND	< 10 UJ	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/30/05	< 50	< 50	< 300	< 0.39	< 0.49	ND	ND	< 0.05	< 0.47 UJ	ND	< 10 UJ	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/30/05	< 50 U	< 50 U	< 300 U	< 0.2 U UJ	< 1 U UJ	ND	ND	< 0.05 U	1 J-	ND	< 10 U	< 0.5 U	< 5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 0.5 U	ND
	03/15/05	< 50	< 50	< 300	< 0.38	< 0.48	ND	ND	< 0.05	< 0.48	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/14/04	NA	NA	NA	< 0.39	< 0.49	ND	ND	ND	NA	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/10/04	< 50	< 50	< 300	< 0.38	< 0.47	ND	ND	< 0.05	< 0.47	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/25/04	< 50	< 50	< 300	< 0.38	< 0.47	ND	ND	< 0.05 UJ	< 0.48 UJ	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/09/04	< 50	< 50	< 300	< 0.38	< 0.48	ND	ND	< 0.05 UJ	< 0.47 UJ	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/02/03	< 50	< 50	< 300	< 0.38	< 0.48	ND	ND	< 0.05	< 0.48	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/13/03	< 50	< 50	< 300	< 0.38	< 0.48	ND	ND	< 0.05 UJ	< 0.47	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/09/03	< 50	< 50	< 300	< 0.38	< 0.48	ND	ND	< 0.05	< 0.49 UJ	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/09/03	< 50	< 50	< 300	< 0.38	< 0.48	ND	ND	< 0.05	< 0.48	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/20/03	< 50	< 50	< 300	< 9.5	< 9.5	ND	ND	< 0.05 UJ	< 0.47 UJ	ND	< 10	< 0.5	< 0.5	< 0.5	0.5	< 0.5	1.3	< 0.5	ND
DUP0609031A	08/31/05	< 50	< 50	< 300	< 0.38	< 0.48	ND	ND	< 0.05	< 0.48	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/15/05	< 50	< 50	< 300	< 0.38	< 0.47	ND	ND	< 0.05	< 0.56	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/14/04	NA	NA	NA	< 0.38	< 0.47	ND	ND	ND	NA	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/10/04	< 50	< 50	< 300	< 0.4	< 0.5	ND	ND	< 0.05	< 0.48	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/25/04	< 50	< 50	< 300	< 0.38	< 0.47	ND	ND	< 0.05 UJ	< 0.47	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/09/04	< 50	< 50	< 300	< 0.38	< 0.48	ND	ND	< 0.05	< 0.48	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/02/03	< 50	< 50	< 300	< 0.39	< 0.49	ND	ND	< 0.05	< 0.48	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/13/03	< 50	< 50	< 300	< 0.38	< 0.48	ND	ND	< 0.05	< 0.48	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/09/03	< 50	< 50	< 300	< 0.38	< 0.48	ND	ND	< 0.05	< 0.47	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
LF4GW105	08/31/05	< 50	< 50	< 300	< 0.38	< 0.48	ND	ND	< 0.05	< 0.48	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/15/05	< 50	< 50	< 300	< 0.38	< 0.47	ND	ND	< 0.05	< 0.56	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/14/04	NA	NA	NA	< 0.38	< 0.47	ND	ND	ND	NA	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/10/04	< 50	< 50	< 300	< 0.4	< 0.5	ND	ND	< 0.05	< 0.48	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/25/04	< 50	< 50	< 300	< 0.38	< 0.47	ND	ND	< 0.05 UJ	< 0.47	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/09/04	< 50	< 50	< 300	< 0.38	< 0.48	ND	ND	< 0.05	< 0.48	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/02/03	< 50	< 50	< 300	< 0.39	< 0.49	ND	ND	< 0.05	< 0.48	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/13/03	< 50	< 50	< 300	< 0.38	< 0.48	ND	ND	< 0.05	< 0.48	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/09/03	< 50	< 50	< 300	< 0.38	< 0.48	ND	ND	< 0.05	< 0.47	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
LF4GW106	08/31/05	< 50	< 50	< 300	< 0.38	< 0.48	ND	ND	< 0.05	< 0.48	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/15/05	< 50	< 50	< 300	< 0.39	< 0.49	ND	ND	< 0.05	< 0.48	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/14/04	NA	NA	NA	< 0.38	< 0.48	ND	ND	ND	NA	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/10/04	< 50	< 50	490	< 0.38	< 0.47	ND	ND	< 0.05	< 0.47	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/25/04	< 50	< 50	< 300	< 0.38	< 0.47	ND	ND	< 0.05	< 0.47	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/09/04	< 50	< 50	< 300	< 0.38	< 0.48	ND	ND	< 0.05	< 0.48	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/02/03	< 50	< 50	< 300	< 0.38	< 0.47	ND	ND	< 0.05	< 0.49	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/13/03	< 50	< 50	< 300	< 0.38	< 0.47	ND	ND	< 0.05	< 0.48 UJ	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/09/03	< 50	< 50	< 300	< 0.38	< 0.48	ND	ND	< 0.05	< 0.49	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/20/03	< 50	< 50	< 300	< 9.5	< 9.5	ND	ND	< 0.05	< 0.48	ND	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND

Notes

µg/L - micrograms per liter

NA - not analyzed

ND - not detected

1 - The identified analytical method(s) are for analyses performed in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - USEPA Region IX tap water preliminary remediation goal (PRG).

3 - From Table 7-6 of the Cleanup Levels Document.

4 - The RAP (Treadwell & Rollo, 2002e) does not list a cleanup level for beta-BHC; however, the RAP states that when chemicals are encountered in groundwater and cleanup levels are not listed, the default should be Tap Water PRGs. The Tap Water PRG for beta-BHC

VOC - volatile organic compound

PCBs - polychlorinated biphenyls

TPH - total petroleum hydrocarbons

PAHs - polycyclic aromatic hydrocarbons

PCE - tetrachloroethene

OCPs - organochlorine pesticides

TCE - trichloroethene

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-8-3
Results of Dissolved Metals Analyses
Landfill 4
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Hexavalent Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW7196/ SW7196A	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7470/ SW7470A	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Level		36,000 ²	6	50	1,000	4	5	--	50	730 ²	1,000	--	11,000 ²	15	--	880 ²	2	100	--	50	100	--	2	260 ²	5,000	--
LF04GW03	05/24/05	< 100 UJ	< 1	< 5	38	< 2	< 1	26,000	< 10	< 10	1.1	NA	< 100	< 3	25,000	23	< 0.2	21	1,800	< 5	< 1	60,000	< 1	< 10	< 20	340
	03/18/05	< 100	< 1	< 5	25	< 2	< 1	19,000	< 10	< 10	1.4	NA	100	< 3	17,000	< 10	< 0.2	< 20	2,400	< 5	< 1	33,000	< 1	< 10	< 20	250 J-
	03/17/04	< 100	< 1	< 5	39	< 2	< 1	34,000	< 10	< 10	1.2	NA	< 100	< 3	29,000	< 10	< 0.2	< 20	1,500	< 5	< 1 UJ	39,000	< 1	< 10	< 20	440
	05/13/99	< 100	< 5	< 5	22	< 4	< 2	11,600	< 10	< 10	< 10	NA	< 100	< 3	13,300	31	NA	< 20	< 5,000	< 5	< 2	49,400	< 2	< 10	< 20	307
	08/12/98	< 100	< 5	< 5	20	< 4	< 2	12,600	< 10	< 10	< 10	NA	442	< 3	13,800	394	< 0.2	< 20	< 5,000	< 5	< 2	41,300	< 2	< 10	< 20	248
	04/13/98	110	< 5	< 5	16	< 4	< 2	9,400	< 10	< 10	12	NA	< 100	< 3	13,000	27	< 0.2	23	< 5,000	< 5	< 2	32,000	< 2	< 10	< 20	220
	01/12/98	< 100	< 5	< 5	33	< 4	< 2	25,500	< 10	< 10	< 10	NA	< 100	< 3	26,800	12	< 0.2	< 20	< 5,000	< 5	< 2	68,900	< 2	< 10	< 20	523
	05/06/97	< 100	< 5	< 5	19	< 4	< 2	15,000	< 10	< 10	< 10	NA	< 100	< 3	16,000	70	< 0.2	< 20	< 5,000	< 5	< 2	43,000	< 2	< 10	< 20	320
	02/04/97	< 100	< 5	< 5	22	< 4	< 2	14,000	< 10	< 10	< 10	NA	< 100	< 3	18,000	< 10	< 0.2	< 20	< 5,000	< 5	< 2	47,000	< 2	< 10	< 20	330 (J29)
	05/29/96	< 100	< 5	< 5	30	< 2	< 0.5	22,000	2	< 10	2	NA	100	< 1	20,000	40	< 0.2	14	< 5,000	< 5	< 0.5	58,000	< 2	< 10	30	NA
	03/12/96	130	< 5	< 5	27	< 2	< 0.5	16,400	3	< 10	3	NA	167	2	17,300	< 10	< 0.2	19	< 5,000	< 5	< 0.5	47,000	< 2	< 10	< 20	NA
	04/04/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	274
LF4GW101	03/17/05	250	< 1	< 5	< 10	< 2	< 1	5,300	< 10	< 10	1.5	NA	880	< 3	7,200	140	< 0.2	30	890	< 5	< 1	25,000	< 1	< 10	< 20	220 J-
LF4GW102	08/31/05	< 100	< 1	< 5	66	< 2	< 1	22,000	< 10	< 10	< 1	NA	190	< 3	57,000	17	< 0.2	< 20	940 J	< 5	< 1	49,000	< 1	< 10	< 20	590
DUP0831053A	08/31/05	< 100	< 1	< 5	67	< 2	< 1	23,000	< 10	< 10	< 1	NA	190	< 3	63,000	16	< 0.2	< 20	970 J	< 5	< 1	53,000	< 1	< 10	< 20	580
DUP0317053B	03/17/05	< 100	< 1	< 5	36	< 2	< 1	21,000 J	< 10	< 10	2.9	NA	< 100	< 3	39,000	10	< 0.2	< 20	1,200	< 5	< 1	44,000	< 1	< 10	< 20	620 J-
	03/17/05	< 100	< 1	< 5	33	< 2	< 1	20,000 J	< 10	< 10	1.4	NA	< 100	< 3	38,000	< 10	< 0.2	< 20	1,100	< 5	< 1	44,000	< 1	< 10	< 20	540 J-
LF4GW102CL	03/17/05	< 100 U	< 2 U	< 2 U	40.1	< 1 U	< 1 U	24,500	10.6	< 1 U	< 2 U	NA	< 100 U	< 1 U	46,300	11.4	< 0.2 U	5.38	< 5,000 UN	< 2 U	< 1 U	52,900 J	< 1 U	< 10 U	< 20 U	587
DUP1215042C	12/15/04	< 100	< 1	< 5	110	< 2	< 1	17,000 J	11	< 10	< 1	NA	< 100	< 3	71,000	22	< 0.2	< 20	1,100	< 5	< 1	120,000	< 1 UJ	< 10	< 20	770
	12/15/04	< 100	< 1	< 5	110	< 2	< 1	38,000 J	12	< 10	< 1	NA	100	< 3	110,000	22	< 0.2	< 20	1,100	< 5	< 1	69,000	< 1 UJ	< 10	< 20	800
LF4GW102CL	12/15/04	< 100 U	< 2 U	< 2 U	121	< 1 U	< 1 U	42,900	11.6	< 1 U	< 2 U	NA	< 100 U	< 1 U	113,000	22.1	< 0.2 U	4.9	< 5,000 U	< 2 U	< 1 U	66,900	< 1 U	< 10 U	< 20 U	792
DUP0811042A	08/11/04	< 100	< 1	< 5	65 J	< 2	< 1	34,000	10	< 10	< 1	NA	< 100	< 3	78,000	79	< 0.2	< 20	1,200	< 5	< 1	56,000	< 1	< 10	< 20	590
	08/11/04	< 100	< 1	< 5	67 J	< 2	< 1	34,000	10	< 10	< 1	NA	< 100	< 3	77,000	96	< 0.2	< 20	1,200	< 5	< 1	54,000	< 1	< 10	< 20	610
LF4GW102CL ³	08/11/04	< 11	< 10	< 40	54	< 10	< 10	24,000	11	< 10	< 10	NA	< 10	< 50	67,000	68	< 5	< 30	1,100	< 20	< 10	53,000	< 50	< 10	< 30	749
DUP0525042A	05/25/04	< 100	< 1	< 5	80	< 2	< 1	36,000	12	< 10	< 1	NA	< 100	< 3	90,000	36	< 0.2	< 20	1,100	< 5	< 1	63,000	< 1	< 10	< 20	680
	05/25/04	< 100	< 1	< 5	82	< 2	< 1	36,000	12	< 10	< 1	NA	< 100	< 3	89,000	39	< 0.2	< 20	1,200	< 5	< 1	62,000	< 1	< 10	< 20	670
DUP0309042A	03/09/04	< 100	2.1	< 5	81	< 2	< 1	46,000	12	< 10	1.2	NA	< 100	< 3	110,000	43	< 0.2	< 20	1,400 J	< 5	< 1 UJ	65,000	< 1	< 10	< 20	730
	03/09/04	< 100	2.4	< 5	88	< 2	< 1	45,000	12	< 10	< 1	NA	< 100	< 3	110,000	36	< 0.2	< 20	1,300 J	< 5	< 1 UJ	65,000	< 1	< 10	< 20	690
DUP1204031A	12/04/03	< 100	< 1	< 5	110	< 2	< 1	35,000	12	< 10	< 1	NA	110	< 3	110,000	43	< 0.2	< 20	1,200	< 5	< 1	66,000	< 1	< 10	< 20	760
	12/04/03	< 100	< 1	< 5	100	< 2	< 1	36,000	12	< 10	< 1	NA	100	< 3	110,000	49	< 0.2	< 20	1,200	< 5	< 1	65,000	< 1	< 10	< 20	660
LF4GW102CL	12/04/03	< 1000	< 5	6.5	96	< 1	< 1	41,000	11	< 7	< 10	NA	< 500	< 3	100,000	41	< 0.2	< 10	1,500	< 5	< 1	63,000	< 2	< 10	< 20	710
DUP0609033A	08/21/03	< 100	2.3	< 5	53	< 2	< 1	35,000	11	< 10	< 1	NA	180	< 3	72,000	61	< 0.2	< 20	1,300	< 5	< 1 UJ	51,000	< 1	< 10	< 20 UJ	450
	06/09/03	< 100	< 1	< 5	48	< 2	< 1	34,000	12	< 10	< 1	NA	< 100	< 3	80,000	45	< 0.2	< 20	1,300	< 5	< 1 UJ	55,000	< 1	< 10	< 20	620
LF4GW102CL	06/09/03	< 100	< 1	< 5	48	< 2	< 1	34,000	12	< 10	< 1	NA	< 100	< 3	79,000	46	< 0.2	< 20	1,300	< 5	< 1 UJ	54,000	< 1	< 10	< 20	680
	06/09/03	< 100	< 5	2.3	45	< 1	< 1	35,000	8	1	< 5	NA	1,300	< 3	76,000	77	< 0.2	7.3	1,600	< 5	< 1	55,000	< 2	NA	26	820 J
DUP0320031A	03/20/03	< 100	< 1	< 1	68	< 1	< 1	34,000 J-	13	< 1	< 1	10	< 100	< 3	84,000	76	< 0.2	7.5	2,200	< 5	< 1	55,000	< 1	< 10	< 10	NA
	03/20/03	< 100	1.1	< 1	69	< 1	< 1	1,700 J-	12	< 1	< 1	10	< 100	< 3	4,400	73	< 0.2	7.3	2,100	< 5	< 1	2,800	< 1	< 10	< 10	NA

Table A-8-3
Results of Dissolved Metals Analyses
Landfill 4
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Hexavalent Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW7196/ SW7196A	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7470/ SW7470A	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Level		36,000 ²	6	50	1,000	4	5	--	50	730 ²	1,000	--	11,000 ²	15	--	880 ²	2	100	--	50	100	--	2	260 ²	5,000	--
LF4GW103 DUP0307063A LF4GW103CL	12/05/06	< 100	NA	< 5	NA	NA	< 1	160,000	< 10	NA	< 1	NA	< 100	< 3	420,000	79	NA	100	1,900 J	NA	NA	150,000	NA	NA	< 20	2,480 J+
	08/16/06	< 100	NA	6.2	NA	NA	< 1	150,000	< 10	NA	2.6	NA	240	< 3	410,000	16	NA	100	2,100	NA	NA	160,000	NA	NA	< 20	2,190
	05/25/06	< 100 UJ	NA	< 5	NA	NA	< 1	150,000	< 10	NA	2	NA	< 100	< 3	390,000	37	NA	140	1,900	NA	NA	160,000	NA	NA	< 20	2,640
	03/07/06	< 100	NA	< 5	NA	NA	< 1	140,000	< 10	NA	2.3	NA	510	< 3	390,000	85	NA	150	2,000	NA	NA	160,000	NA	NA	< 20	2,890
	03/07/06	< 100	NA	< 5	NA	NA	< 1	140,000	< 10	NA	2.1	NA	470	< 3	400,000	80	NA	150	1,900	NA	NA	160,000	NA	NA	< 20	2,600
	03/07/06	< 100 U	NA	2.9	NA	NA	< 1 U	160,000	< 10 U	NA	2.3	NA	< 100 U	< 1 U	470,000	79	NA	133	< 5,000 U	NA	NA	190,000	NA	NA	< 20 U	2,730 J+
	08/31/05	< 100	< 1	< 5	260	< 2	< 1	110,000	< 10	< 10	1.1	NA	870	< 3	330,000	170	< 0.2	220	3,200 J	< 5	< 1	130,000	< 1	< 10	52	1,900
	03/15/05	< 100	< 1	< 5	27	< 2	< 1	27,000	< 10	< 10	< 1	NA	< 100	< 3	81,000	48	< 0.2	46	2,000	< 5	< 1	61,000	< 1	< 10	< 20	510
	12/14/04	< 100	< 1	5.3	62	< 2	< 1	61,000 J	< 10	< 10	< 1	NA	160	< 3	160,000	140	< 0.2	120	3,000	< 5	< 1	97,000	< 1	< 10	< 20	370
	08/10/04	< 100	< 1	< 5	28 J	< 2	< 1	32,000	< 10	< 10	< 1	NA	< 100	< 3	84,000	49	< 0.2	39	2,400	< 5	< 1	63,000	< 1	< 10	< 20	640
	05/25/04	< 100	< 1	6	20	< 2	< 1	33,000	< 10	< 10	< 1	NA	< 100	< 3	86,000	52	< 0.2	26	2,500	< 5	< 1	65,000	< 1	< 10	< 20	620
	03/09/04	< 100	< 1	< 5	25	< 2	< 1	44,000	< 10	< 10	1.1	NA	< 100	< 3	110,000	78	< 0.2	38	3,300 J	< 5	< 1 UJ	76,000	< 1	< 10	< 20	750
	12/02/03	< 100	< 1	< 5	25	< 2	< 1	50,000	< 10	< 10	< 1	NA	230	< 3	140,000	110	< 0.2	45	4,000	< 5	< 1 UJ	86,000	< 1	< 10	< 20	850
	08/13/03	< 100	1	< 5	< 10	< 2	< 1	29,000	< 10	< 10	< 1	NA	150	< 3	75,000	52	< 0.2	< 20	3,700	< 5	< 1 UJ	57,000	< 1	< 10	< 20	490
	06/09/03	< 100	< 1	< 5	< 10	< 2	< 1	31,000	< 10	< 10	< 1	NA	< 100	< 3	78,000	46	< 0.2	< 20	4,400	< 5	< 1 UJ	63,000	< 1	< 10	< 20	670
	03/20/03	< 100	1.1	3.8	12	< 1	< 1	1,700 J-	< 1	< 1	< 1	< 10	< 100	< 3	4,100	50	< 0.2	17	8,300	< 5	< 1	4,700	< 1	< 10	< 10	NA
LF4GW104 DUP0830053B LF4GW104CL	12/05/06	< 100	NA	< 5	NA	NA	< 1	78,000	< 10	NA	< 1	NA	< 100	< 3	170,000	37	NA	24	1,500 J	NA	NA	82,000	NA	NA	< 20	1,280 J+
	08/16/06	< 100	NA	5.3	NA	NA	< 1	92,000	< 10	NA	1.1	NA	140	< 3	230,000	41	NA	22	1,700	NA	NA	100,000	NA	NA	< 20	1,320
	05/25/06	< 100 UJ	NA	< 5	NA	NA	< 1	84,000	< 10	NA	< 1	NA	< 100	< 3	210,000	48	NA	21	1,700	NA	NA	94,000	NA	NA	< 20	1,660
	03/07/06	< 100	NA	< 5	NA	NA	< 1	83,000	< 10	NA	1.2	NA	260	< 3	210,000	64	NA	22	1,700	NA	NA	87,000	NA	NA	< 20	1,800
	08/31/05	< 100 UJ	< 1	< 5	230	< 2	< 1	77,000	< 10	< 10	< 1	NA	400	< 3	220,000	63	< 0.2	21	1,800	< 5	< 1	81,000	< 1	< 10	20	1,220
	08/31/05	< 100 UJ	< 1	< 5	260	< 2	< 1	82,000	< 10	< 10	< 1	NA	370	< 3	200,000	72	< 0.2	21	1,700	< 5	< 1	86,000	< 1	< 10	29	1,340
	08/31/05	< 100 U	< 2 U	< 2 U	280	< 1 U	< 1 U	92,600	14.2	< 1 U	< 2 U	NA	< 100 U	< 1 U	234,000	67.7	< 0.2 U	18.7	< 5,000 U	< 2 U	< 1 U	98,000	< 1 U	14.3	< 20 U	1,360
	03/15/05	< 100	< 1	< 5	190	< 2	< 1	72,000	< 10	< 10	< 1	NA	130	< 3	180,000	56	< 0.2	< 20	1,700	< 5	< 1	78,000	< 1	< 10	< 20	1,360
	12/14/04	< 100	< 1	< 5	210	< 2	< 1	80,000 J	< 10	< 10	< 1	NA	190	< 3	200,000	63	< 0.2	< 20	1,800	< 5	< 1	88,000	< 1	< 10	< 20	1,210
	08/10/04	< 100	< 1	< 5	220 J	< 2	< 1	80,000	< 10	< 10	< 1	NA	170	< 3	200,000	64	< 0.2	< 20	1,800	< 5	< 1	87,000	< 1	< 10	< 20	980
	05/25/04	< 100	< 1	< 5	210	< 2	< 1	86,000	10	< 10	< 1	NA	210	< 3	220,000	57	< 0.2	< 20	1,900	< 5	< 1	93,000	< 1	< 10	< 20	1,250
	03/09/04	< 100	< 1	< 5	210	< 2	< 1	80,000	11	< 10	1	NA	120	< 3	200,000	47	< 0.2	< 20	2,000 J	< 5	< 1 UJ	86,000	< 1	< 10	< 20	1,200
	12/02/03	< 100	< 1	< 5	190	< 2	< 1	66,000	15	< 10	1	NA	290	< 3	170,000	40	< 0.2	< 20	2,100	< 5	< 1 UJ	77,000	< 1	< 10	< 20	950
	08/13/03	< 100	1.7	< 5	190	< 2	< 1	75,000	13	< 10	< 1	NA	340	< 3	180,000	34	< 0.2	< 20	2,400	< 5	< 1 UJ	80,000	< 1	< 10	< 20	1,070
DUP0609031A	06/09/03	< 100	< 1	< 5	160	< 2	< 1	71,000	16	< 10	< 1	NA	130	< 3	190,000	22	< 0.2	< 20	2,600	< 5	< 1 UJ	80,000	< 1	< 10	< 20	1,190
	06/09/03	< 100	1	< 5	170	< 2	< 1	69,000	15	< 10	< 1	NA	120	< 3	190,000	22	< 0.2	< 20	2,500	< 5	< 1 UJ	79,000	< 1	< 10	< 20	1,240
	03/20/03	< 100	< 1	3.1	130	< 1	< 1	4,100 J-	21	< 1	1.1	20	140	< 3	7,400	< 10	< 0.2	10	5,300	< 5	< 1	4,500	< 1	< 10	< 10	NA
LF4GW105	08/31/05	< 100	< 1	< 5	230	< 2	< 1	43,000	< 10	< 10	< 1	NA	320	< 3	93,000	< 10	< 0.2	< 20	670 J	< 5	< 1	61,000	< 1	< 10	22	790
	03/15/05	< 100	< 1	< 5	220	< 2	< 1	51,000	< 10	< 10	1.2	NA	< 100	< 3	100,000	14	< 0.2	< 20	970	< 5	< 1	54,000	< 1	< 10	30	770
	12/14/04	< 100	< 1	< 5	280	< 2	< 1	44,000 J	13	< 10	< 1	NA	< 100	< 3	100,000	< 10	< 0.2	< 20	670	< 5	< 1	66,000	< 1	< 10	< 20	760
	08/10/04	< 100	< 1	< 5	310 J	< 2	< 1	58,000	< 10	< 10	< 1	NA	110	< 3	130,000	< 10	< 0.2	< 20	830	< 5	< 1	73,000	< 1	< 10	< 20	1,220
	05/25/04	< 100	< 1	< 5	260	< 2	< 1	46,000	16	< 10	< 1	NA	120	< 3	110,000	< 10	< 0.2	< 20	830	< 5	< 1	69,000	< 1	< 10	< 20	710
	03/09/04	< 100	< 1	< 5	290	< 2	< 1	43,000	18	< 10	< 1	NA	< 100	< 3	100,000	< 10	< 0.2	< 20	670 J	< 5	< 1 UJ	65,000	< 1	< 10	< 20	630
	12/02/03	< 100	< 1	< 5	280	< 2	< 1	36,000	22	< 10	< 1	NA	130	< 3	93,000	< 10	< 0.2	< 20	700	< 5	< 1 UJ	58,000	< 1	< 10	< 20	540
	08/13/03	< 100	1.6	< 5	280	< 2	< 1	38,000	23	< 10	< 1	NA	180	< 3	100,000	< 10	< 0.2	< 20	720	< 5	< 1 UJ	64,000	< 1	< 10	< 20	610
	06/09/03	< 100	< 1	< 5	270	< 2	< 1	42,000	20	< 10	< 1	NA	< 100	< 3	110,000	< 10	< 0.2	< 20	700	< 5	< 1 UJ	62,000	< 1	< 10	< 20	840
	03/20/03	< 100	1.4	< 1	12	< 1	< 1	2,100 J-	20	< 1	< 1	20	< 100	< 3	5,200	11	< 0.2	8.5	1,000	< 5	< 1	3,200	< 1	< 10	< 10	NA

Table A-8-3
Results of Dissolved Metals Analyses
Landfill 4
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Hexavalent Chromium	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW7196/ SW7196A	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7470/ SW7470A	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Level		36,000 ²	6	50	1,000	4	5	--	50	730 ²	1,000	--	11,000 ²	15	--	880 ²	2	100	--	50	100	--	2	260 ²	5,000	--
LF4GW106	08/31/05	< 100	< 1	< 5	95	< 2	< 1	48,000	< 10	< 10	1.7	NA	340	< 3	130,000	17	< 0.2	< 20	1,400 J	< 5	< 1	58,000	< 1	< 10	< 20	910
	03/15/05	< 100	< 1	< 5	96	< 2	< 1	41,000	< 10	< 10	< 1	NA	< 100	< 3	140,000	15	< 0.2	< 20	1,400	< 5	< 1	56,000	< 1	< 10	< 20	900
	12/14/04	< 100	< 1	< 5	98	< 2	< 1	52,000 J	< 10	< 10	< 1	NA	110	< 3	140,000	65	< 0.2	< 20	1,500	< 5	< 1	65,000	< 1	< 10	< 20	900
	08/10/04	< 100	< 1	< 5	77 J	< 2	< 1	52,000	< 10	< 10	1.1	NA	100	< 3	140,000	< 10	< 0.2	< 20	1,700	< 5	< 1	61,000	< 1	< 10	< 20	1,210
	05/25/04	< 100	< 1	< 5	77	< 2	< 1	60,000	10	< 10	< 1	NA	150	< 3	170,000	< 10	< 0.2	< 20	1,700	< 5	< 1	70,000	< 1	< 10	< 20	980
	03/09/04	< 100	< 1	< 5	85	< 2	< 1	59,000	12	< 10	< 1	NA	< 100	< 3	170,000	17	< 0.2	< 20	1,600 J	< 5	< 1 UJ	68,000	< 1	< 10	< 20	890
	12/02/03	< 100	< 1	< 5	72	< 2	< 1	52,000	18	< 10	1.1	NA	200	< 3	160,000	13	< 0.2	< 20	1,800	< 5	< 1 UJ	62,000	< 1	< 10	< 20	750
	08/13/03	< 100	< 1	< 5	41	< 2	< 1	61,000	22	< 10	< 1	NA	280	< 3	170,000	13	0.39	< 20	2,100	< 5	< 1 UJ	67,000	< 1	< 10	< 20	970
	06/09/03	< 100	< 1	< 5	25	< 2	< 1	53,000	25	< 10	< 1	NA	< 100	< 3	170,000	16	< 0.2	< 20	2,500	< 5	< 1 UJ	61,000	< 1	< 10	< 20	1,040
	03/20/03	< 100	< 1	3.8	10	< 1	< 1	2,600 J-	29	< 1	1.8	30	< 100	< 3	7,300	< 10	< 0.2	4.9	5,500	< 5	< 1	3,400	< 1	< 10	< 10	NA

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - USEPA Region IX tap water preliminary remediation goal (PRG).

3 - Dissolved metals were analyzed by the quality control laboratory using method E200.7 on an Inductively Coupled Plasma (ICP) instrument.

The primary laboratory analyzed dissolved metals by EPA Method 6020 on an ICP/Mass Spectrometry (ICP/MS) instrument. Although variability between these two methods is not expected, the variability in the data may be a result of different instruments used.

NA - not analyzed

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Groundwater samples collected from all site monitoring wells were field filtered and analyzed for dissolved metals.

Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

-- - Cleanup criteria not established

µg/L - micrograms per liter

mg/L -milligrams per liter

Table A-8-4
Groundwater Elevation Summary
Landfill 4
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
LF04GW03	12/04/06	18.80	292.70	273.90	MW
	08/14/06	12.64	292.70	280.06	MW
	05/22/06	13.81	292.70	278.89	MW
	03/06/06	14.40	292.70	278.30	MW
	11/28/05	18.84	292.70	273.86	MW
	08/29/05	18.07	292.70	274.63	MW
	05/23/05	17.56	292.70	275.14	MW
	03/14/05	13.37	292.70	279.33	MW
	12/13/04	18.74	292.70	273.96	MW
	08/09/04	Dry	292.70	274.20 ²	MW
	05/24/04	18.10	292.70	274.60	MW
	03/08/04	15.75	292.70	276.95	MW
	12/01/03	Dry	292.70	274.20 ²	MW
	08/11/03	18.47	292.70	274.23	MW
	06/02/03	17.24	292.70	275.46	MW
	03/10/03	17.10	292.70	275.60	MW
	12/02/02	Dry	292.70	274.20 ²	MW
	08/26/02	Dry	292.70	274.20 ²	MW
	05/28/02	17.85	292.70	274.85	MW
	03/04/02	16.71	292.70	274.85	MW
	11/26/01	Dry	292.70	274.20 ²	MW
	08/27/01	Dry	292.70	274.20 ²	MW
	05/08/01	18.50	292.70	274.85	MW
LF4GW100 ³	12/04/06	20.29	299.84	279.55	MW
	08/14/06	16.89	299.84	282.95	MW
	05/22/06	16.05	299.84	283.79	MW
	03/06/06	21.21	299.84	278.63	MW
	11/28/05	23.40	299.84	276.44	MW
	08/29/05	23.24	299.84	276.60	MW
	05/23/05	Dry	299.84	275.30 ²	MW
	03/14/05	Dry	299.84	275.30 ²	MW
	12/13/04	Dry	299.84	275.30 ²	MW
	08/09/04	Dry	299.84	275.30 ²	MW
	05/24/04	Dry	299.84	275.30 ²	MW
	03/08/04	Dry	299.84	275.30 ²	MW
	12/01/03	Dry	299.84	275.30 ²	MW
	08/11/03	24.12	299.84	275.72	MW
	06/02/03	24.00	299.84	275.84	MW
	03/10/03	Dry	299.84	275.30 ²	MW
	12/02/02	Dry	299.84	275.30 ²	MW
	08/26/02	Dry	299.84	275.30 ²	MW
	05/28/02	Dry	299.84	275.30 ²	MW
	03/04/02	Dry	299.84	275.30 ²	MW
	11/26/01	Dry	299.84	275.30 ²	MW
	08/27/01	Dry	299.84	275.30 ²	MW
	05/08/01	Dry	299.84	275.30 ²	MW
LF4GW101	12/04/06	Dry	297.35	274.55 ²	MW
	08/14/06	19.86	297.35	277.49	MW
	05/22/06	15.13	297.35	282.22	MW
	03/06/06	15.27	297.35	282.08	MW
	11/28/05	20.52	297.35	276.83	MW
	08/29/05	Dry	297.35	274.55 ²	MW
	05/23/05	Dry	297.35	274.55 ²	MW
	03/14/05	14.78	297.35	282.57	MW

Table A-8-4
Groundwater Elevation Summary
Landfill 4
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
LF4GW101	12/13/04	Dry	297.35	274.55 ²	MW
	08/09/04	Dry	297.35	274.55 ²	MW
	05/24/04	Dry	297.35	274.55 ²	MW
	03/08/04	Dry	297.35	274.55 ²	MW
	12/01/03	20.00	297.35	277.35	MW
	08/11/03	Dry	297.35	274.55 ²	MW
	06/02/03	Dry	297.35	274.55 ²	MW
	03/10/03	23.00	297.35	274.35	MW
	12/02/02	Dry	297.35	274.55 ²	MW
	08/26/02	Dry	297.35	274.55 ²	MW
	05/28/02	Dry	297.35	274.55 ²	MW
	03/04/02	23.35	297.35	274.00	MW
	11/26/01	Dry	297.35	274.55 ²	MW
	08/27/01	Dry	297.35	274.55 ²	MW
	05/08/01	Dry	297.35	274.55 ²	MW
LF4GW102	12/04/06	29.04	329.49	300.45	MW
	08/14/06	21.33	329.49	308.16	MW
	05/22/06	17.11	329.49	312.38	MW
	03/06/06	23.24	329.49	306.25	MW
	11/28/05	32.25	329.49	297.24	MW
	08/29/05	27.55	329.49	301.94	MW
	05/23/05	24.29	329.49	305.20	MW
	03/14/05	30.07	329.49	299.42	MW
	12/13/04	38.75	329.49	290.74	MW
	08/09/04	35.62	329.49	293.87	MW
	05/24/04	33.76	329.49	295.73	MW
	03/08/04	36.85	329.49	292.64	MW
	12/01/03	38.99	329.49	290.50	MW
	08/11/03	35.74	329.49	293.75	MW
	06/02/03	34.53	329.49	294.96	MW
	03/10/03	36.58	329.49	292.91	MW
LF4GW103	12/04/06	18.79	304.26	285.47	MW
	08/14/06	17.62	304.26	286.64	MW
	05/22/06	17.33	304.26	286.93	MW
	03/06/06	21.33	304.26	282.93	MW
	11/28/05	26.79	304.26	277.47	MW
	08/29/05	25.12	304.26	279.14	MW
	05/23/05	32.20	304.26	272.06	MW
	03/14/05	34.11	304.26	270.15	MW
	12/13/04	36.66	304.26	267.60	MW
	08/09/04	34.80	304.26	269.46	MW
	05/24/04	34.65	304.26	269.61	MW
	03/08/04	34.67	304.26	269.59	MW
	12/01/03	36.90	304.26	267.36	MW
	08/11/03	33.49	304.26	270.77	MW
	06/02/03	33.76	304.26	270.50	MW
	03/10/03	35.60	304.26	268.66	MW
LF4GW104	12/04/06	19.05	297.75	278.70	MW
	08/14/06	15.63	297.75	282.12	MW
	05/22/06	13.99	297.75	283.76	MW
	03/06/06	18.45	297.75	279.30	MW
	11/28/05	22.59	297.75	275.16	MW
	08/29/05	21.19	297.75	276.56	MW
	05/23/05	20.64	297.75	277.11	MW
	03/14/05	25.81	297.75	271.94	MW
	12/13/04	29.97	297.75	267.78	MW
	08/09/04	27.95	297.75	269.80	MW

Table A-8-4
Groundwater Elevation Summary
Landfill 4
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
LF4GW104	05/24/04	27.90	297.75	269.85	MW
	03/08/04	29.73	297.75	268.02	MW
	12/01/03	30.00	297.75	267.75	MW
	08/11/03	28.75	297.75	269.00	MW
	06/02/03	29.60	297.75	268.15	MW
	03/10/03	30.87	297.75	266.88	MW
LF4GW105	12/04/06	30.62	300.57	269.95	MW
	08/14/06	26.78	300.57	273.79	MW
	05/22/06	25.11	300.57	275.46	MW
	03/06/06	31.05	300.57	269.52	MW
	11/28/05	35.60	300.57	264.97	MW
	08/29/05	33.63	300.57	266.94	MW
	05/23/05	35.45	300.57	265.12	MW
	03/14/05	40.59	300.57	259.98	MW
	12/13/04	44.17	300.57	256.40	MW
	08/09/04	42.58	300.57	257.99	MW
	05/24/04	43.20	300.57	257.37	MW
	03/08/04	44.76	300.57	255.81	MW
	12/01/03	45.35	300.57	255.22	MW
	08/11/03	44.30	300.57	256.27	MW
	06/02/03	45.57	300.57	255.00	MW
	03/10/03	46.81	300.57	253.76	MW
LF4GW106	12/04/06	13.96	311.36	297.40	MW
	08/14/06	11.00	311.36	300.36	MW
	05/22/06	8.91	311.36	302.45	MW
	03/06/06	13.54	311.36	297.82	MW
	11/28/05	21.88	311.36	289.48	MW
	08/29/05	17.72	311.36	293.64	MW
	05/23/05	17.31	311.36	294.05	MW
	03/14/05	23.85	311.36	287.51	MW
	12/13/04	30.31	311.36	281.05	MW
	08/09/04	28.20	311.36	283.16	MW
	05/24/04	28.30	311.36	283.06	MW
	03/08/04	31.65	311.36	279.71	MW
	12/01/03	31.40	311.36	279.96	MW
	08/11/03	28.14	311.36	283.22	MW
	06/02/03	28.59	311.36	282.77	MW
	03/10/03	31.09	311.36	280.27	MW

Notes

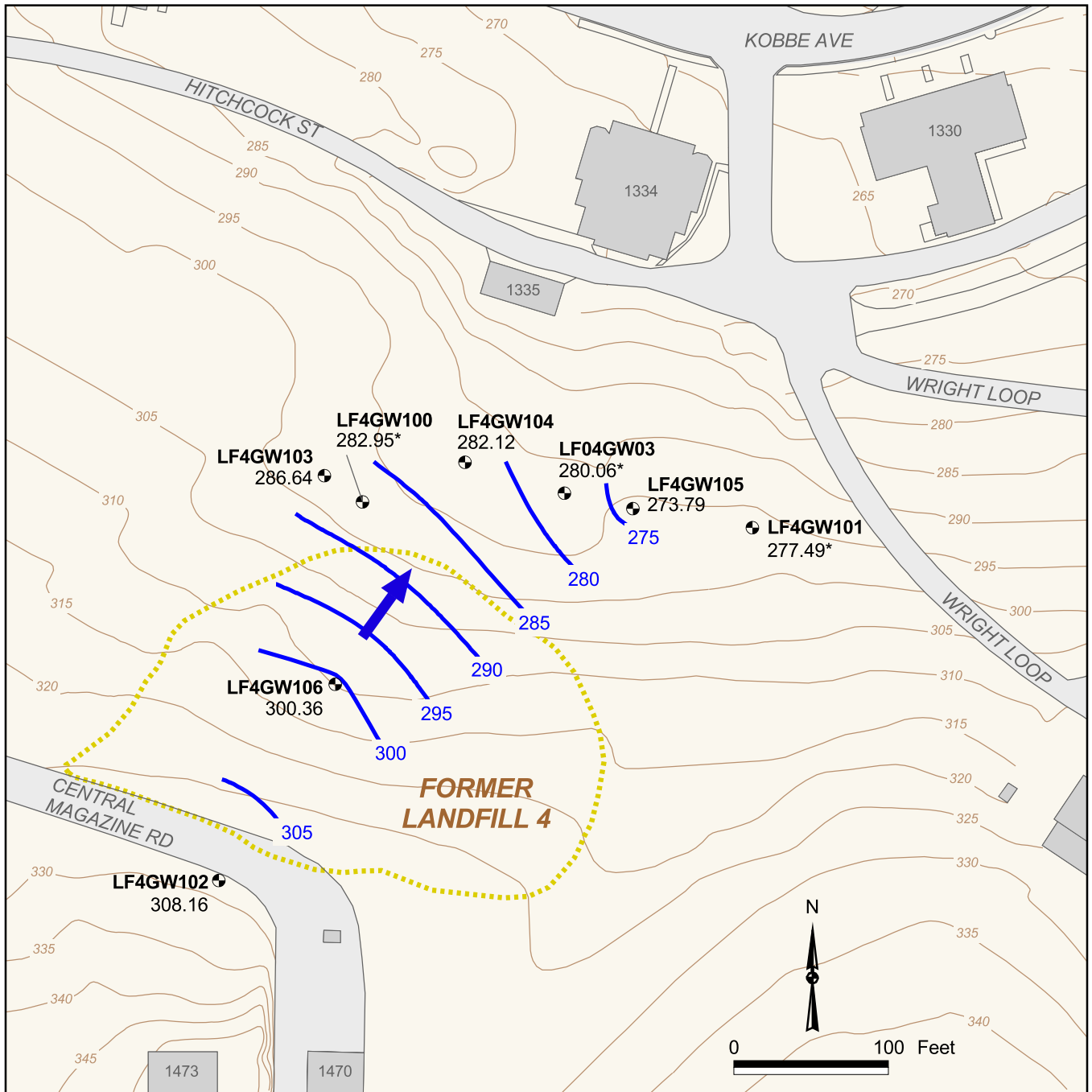
1 - All depth to water measurements are an average of three measurements recorded in the field.

2 - Elevation indicates bottom-of-casing elevation.

3 - The well construction details for this well indicate that the bottom of the casing is 22.5' from the ground surface; however, this well also has 2.04' of casing above grade. Therefore, the bottom of casing elevation has been recalculated for this well to be 24.54' from the top of casing elevation.

MW- monitoring well

feet PLLW - feet above Presidio lower low water vertical datum



LEGEND

- Approximate Direction of Groundwater Flow
- Groundwater Contour (Contour Interval : 5 ft)
- Former Landfill 4 Excavation Boundary
- Topographic Contour (Contour Interval : 5 ft)

LF4GW104 282.12 Groundwater Monitoring Well August 2006 Groundwater Elevations

* LF4GW100, LF4GW101 and LF04GW03 were not used for groundwater contouring because they are screened in shallower lithologic units.

1335 Building and Number

Notes:
Groundwater elevation data collected on 14 August 2006.

Horizontal Datum: NAD 27, CA State Plane Coordinates, Zone 3, feet

Vertical Datums: (groundwater) Presidio Lower Low Water (ft. PLLW) (topography) North American Vertical Datum, NAVD88

LANDFILL 4 SITE PLAN AND 14 AUGUST 2006 GROUNDWATER ELEVATION MAP

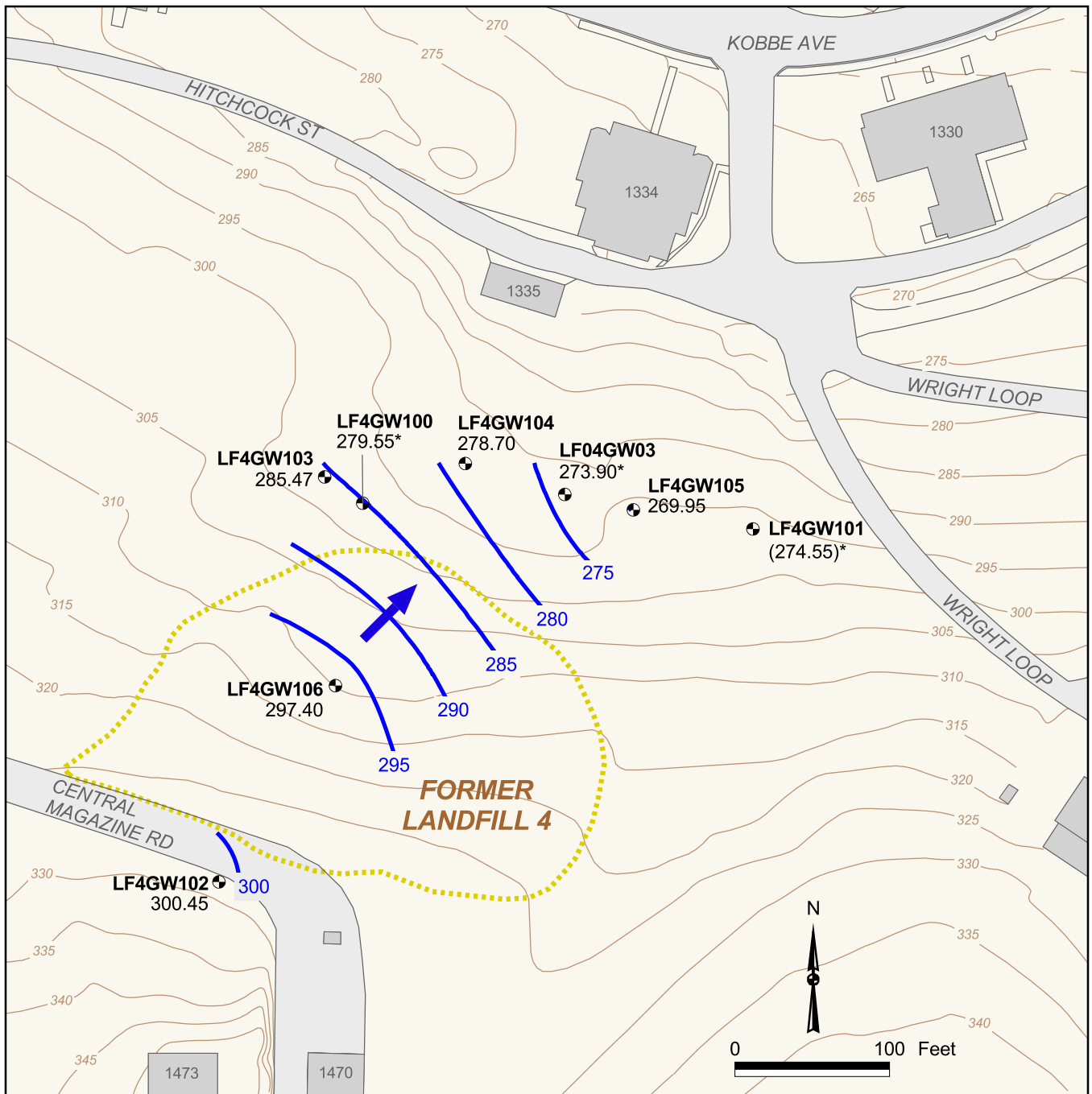
Treadwell&Rollo



Presidio Trust

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P.O. Box 29052
San Francisco, CA
94129-0052
415/561-5300
fax 561-5315
April 2007

FIGURE A-8-1



LEGEND



Approximate Direction
of Groundwater Flow



Groundwater Contour
(Contour Interval : 5 ft)



Former Landfill 4
Excavation Boundary



Topographic Contour
(Contour Interval : 5 ft)



LF4GW104

278.70

(274.55)

*

1335

Groundwater Monitoring Well
December 2006 Groundwater Elevations

Value indicates bottom of casing
elevation in feet PLLW

LF4GW100, LF4GW101 and LF04GW03 were
not used for groundwater contouring because
they are screened in shallower lithologic units.

Building and Number

Notes:

Groundwater elevation data
collected on 4 December 2006.

Horizontal Datum: NAD 27, CA
State Plane Coordinates, Zone 3, feet

Vertical Datums: (groundwater) Presidio
Lower Low Water (ft. PLLW)
(topography) North American Vertical
Datum, NAVD88

LANDFILL 4 SITE PLAN AND 4 DECEMBER 2006 GROUNDWATER ELEVATION MAP

Treadwell&Rollo



Presidio Trust

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415/561-5300
fax 561-5315
April 2007

FIGURE A-8-2

Third Quarter 2006

MONITORING WELL SAMPLING LOG (Normal, Low Flow, and Low Yield)

Site / Area Landfill 4

Well No. LF4GW103

Project Number 2893

Well Type ☒ Monitor ☐ Extraction ☐ Other

Recorded By WC

Sampled by WC

Date 8/16/06

WELL PURGING

PURGE VOLUME

Well casing diameter

☒ 2-inch ☐ 4-inch ☐ Other

Well Total Depth (TD, ft. below TOC): 47.30

Depth to Water (WL, ft. below TOC): 16.80

Depth to free phase (FP, ft. below TOC):

Number of borehole volumes to be purged

☐ 3 ☒ Not Applicable ☐ Other

PURGE VOLUME CALCULATION

Water Column Length

X

Water Volume/ft

X

No. Vols

=

gals

CALCULATED PURGE VOLUME

Total Purge Time 9 min

Recharge Rate

Purge Rate 0.5 gpm

4.5 gals

ACTUAL PURGE VOLUME

PURGE METHOD

☐ Low Flow ☒ Bailor \ Type

☐ Normal ☐ Pump \ Type

☒ Modified (max 5 gpm) ☐ Other

PUMP INTAKE

Near top Depth (ft)

Near Bottom Depth (ft)

Other

disp.

GROUNDWATER PARAMETER MEASUREMENTS

Meter Type Ultrameter

Time	Liters or Gallons	pH	Temp °F	DO (mg/L)	Sp. COND (µS/cm)	ORP (mV)	Turbidity (NTU)	Comments
1345	0	7.21	17.1		3601		28	clear / 14.46
1348	1.5	7.13	17.9		3608		31	14.46
1351	3.0	7.08	18.0		3625		35	25.13
1354	4.5	7.03	17.9		3624		42	29.28
Pre purge DO = 0.62 mg/L								
Post purge DO = 0.47 mg/L								

Comments

Purge water storage/disposal

☐ Drummed onsite

☒ Other Baker Tank

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled 8/16/06 1400

Purging

Equipment

Pump - Type

Bailer - Type

Other

Sample Filtered: ☒ Yes ☐ No

Filtered Sample Analysis: disc metals

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments
LF4GW103	1 HD03 500ml	C&T	2175	
↓	2 IL NP amber	↓	↓	
↓	1 IL NP poly	↓	↓	

QUALITY CONTROL SAMPLES

Duplicate Samples

Blank Samples

Original Sample No.	Duplicate Sample No.

Type	Sample No.
Trip	
Rinsate	
Transfer	
Other	

MONITORING WELL SAMPLING LOG (Normal, Low Flow, and Low Yield)

Site / Area Land Fill 4 Well No. LF4GW104
 Project Number 2893 Well Type ☒ Monitor ☐ Extraction ☐ Other
 Recorded By we Sampled by we Date 8/16/06

WELL PURGING

PURGE VOLUME

Well casing diameter
☒ 2-inch ☐ 4-inch ☐ Other
 Well Total Depth (TD, ft. below TOC): 42.80
 Depth to Water (WL, ft. below TOC): 16.15
 Depth to free phase (FP, ft. below TOC):

Liquid in a 1 Foot Section of a Boring (gallons)		
Borehole Size	Casing Size	Water Volume/Ft
8	2	0.9
10	4	1.68
12	4	2.22

PURGE METHOD

☐ Low Flow ☒ Bailer \ Type disp
☐ Normal ☐ Pump \ Type
☒ Modified (max 5 gpm) ☐ Other

PUMP INTAKE

☐ Near top Depth (ft) _____
☐ Near Bottom Depth (ft) _____
☐ Other

PURGE VOLUME CALCULATION

Water Column Length _____ X Water Volume/ft _____ No. Vols _____
 Total Purge Time 9 min
 Recharge Rate _____ Purge Rate 0.5 gpm

gals
CALCULATED PURGE VOLUME
<u>4.5</u> gals
ACTUAL PURGE VOLUME

GROUNDWATER PARAMETER MEASUREMENTS

Meter Type ultrasonic

Time	Liters or Gallons	pH	Temp °F	DO (mg/L)	Sp. COND (µS/cm)	ORP (mV)	Turbidity (NTU)	Comments
1415	0	7.32	14.8		2283		15	Clear / 16.15
1416	1.5	7.22	14.5		2264		36	↓ / 19.51
1421	3.0	7.17	14.4		2263		38	↓ / 22.38
1424	4.5	7.14	14.4		2265		35	↓ / 24.76
/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/

pre purge DO = 0.31 mg/L
 post purge DO = 0.20 mg/L

Comments _____ Purge water storage/disposal ☐ Drummed onsite ☒ Other Recharge

WELL SAMPLING

SAMPLING METHOD _____ Date/Time Sampled 8/16/06 1430
 Purging Equipment Pump - Type Bailer - Type disp Other _____
 Sample Filtered: Yes / No Filtered Sample Analysis: As needed

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments
LF4GW104	1 HNO ₃ 500-ml pl	CAT	2175	
↓	802 1L ambers NP	↓	↓	
	1 1L NP pl			

QUALITY CONTROL SAMPLES

Duplicate Samples

Blank Samples

Original Sample No.	Duplicate Sample No.

Type	Sample No.
Trip	
Rinsate	
Transfer	
Other:	

Fourth Quarter 2006

Well No. LF 46W103
Well Type ☒ Monitor ☐ Extraction ☐ Other
BR Date 12-5-06

Treadwell & Rollo
Environmental and Geotechnical Consultant

FILL SITE 5
APPENDIX SECTION A-9
SEMI-ANNUAL GROUNDWATER MONITORING REPORT
THIRD AND FOURTH QUARTERS 2006
Presidio of San Francisco, California

1.0 INTRODUCTION AND BACKGROUND

Fill Site 5 (FS 5) is located in the western portion of the Presidio (Figure 1) between Lincoln Boulevard and Washington Boulevard, adjacent to the World War II Memorial (Figure A-9-1). The FS 5 site is approximately 270 to 320 feet above the PLLW datum.

FS 5 was reportedly used by the Army for the disposal of debris and municipal waste from approximately 1946 to 1981 (Dames & Moore, 1997), although historical aerial photographs indicate that the area was disturbed (non-vegetated) as early as 1935. FS 5 was reportedly used when inclement weather rendered disposal at Landfill 4 difficult. The site was used for disposal of building debris, fill dirt, landscape waste, and municipal waste. However, filling activities at FS 5 may have ceased as early as 1948, when a structure (former Building 1351) was erected.

No groundwater was encountered during the Army's RI activities at FS 5; thus no groundwater monitoring wells were installed (Dames & Moore, 1997). Montgomery Watson installed three wells (1349MW01, 1349MW02, and 1349MW03) in 1995 as part of the Army's investigation at the nearby Building 1349 area. The locations of these wells are shown on Figure A-9-1.

In July 2000, the Trust constructed two new groundwater monitoring wells (LF5GW100 and LF5GW101) in the presumed downgradient groundwater flow direction from FS 5 (Figure A-9-1).

In accordance with the RAP (Treadwell & Rollo, 2002e) and the Building 1349 Site Investigation (SI) (Treadwell & Rollo, 2003d), six new (1349MW100 through 1349MW102 and LF5GW102 through LF5GW104) and one replacement (1349MW03R) groundwater monitoring wells were installed in the vicinity of former FS 5. The original well 1349MW03 was abandoned prior to the beginning of remedial excavation at former FS 5. The FS 5 remedial action and Building 1349 SI are detailed below in Section 3.0 and also in Appendix A, Section A-5. Monitoring wells 1349MW01, 1349MW02, 1349MW03R and 1349MW100 through 1349MW102 are either within the former footprint of FS 5 or upgradient of FS 5 and therefore, these wells are included in the FS 5 groundwater monitoring plan. Conversely, monitoring wells 1349MW103 through 1349MW105 are located on the opposite side, when compared to Fill Site 5, of the topographic high point associated with the Building 1349 Area within the Marina Groundwater Basin (Figure A-9-1). The groundwater flow direction in this area varies from the northeast to the northwest and away from FS 5, therefore, these wells (1349MW103 through 1349MW105) are not included in the FS 5 groundwater monitoring plan.

Since the Second Quarter 2001, all FS 5 and the associated Building 1349 wells, which are within or directly upgradient of the former FS 5 footprint, have been sampled and analyzed for general chemistry parameters, TPH, VOCs, OCPs, PCBs, PAHs, chlorinated herbicides, dissolved metals and TDS. Summaries of previous analytical results are presented in Tables A-9-1 through A-9-7.

2.0 SITE DESCRIPTION AND GEOLOGY

Materials encountered while drilling soil borings for installation of LF5GW103, LF5GW104, and 1349MW03R consisted of clayey to silty sand of the Colma Formation to depths ranging between 7.5 to 13.5 feet bgs over Franciscan complex serpentinite to the maximum explored depths ranging between 23.5 and 36 feet bgs. Materials encountered while drilling soil boring LF5GW102, although similar to the other soil borings, included dune sand from the ground surface to a depth of 5.5 feet bgs, and silty sand Colma Formation to a depth of 26 feet bgs over Franciscan complex serpentine to the maximum depth explored of 40 feet bgs. Saturated soils were encountered at approximately 11 feet bgs in the boring for LF5GW103 to 26 feet bgs in the soil boring for LF5GW102.

Well LF5GW102 is located near the southwestern boundary of the excavated area (Figure A-9-1). Wells LF5GW103 and LF5GW104 are located within the excavated portion of former FS 5 along the western border. In addition, previously existing well 1349MW03, which was located within the footprint of the FS 5 fill material, was abandoned prior to remedial excavation activities and was replaced with well 1349MW03R. The new location was approximately 60 feet south, further within the footprint of the excavated area, in close proximity to an inferred fault (Figure A-9-1). These wells are generally screened within the Franciscan complex serpentinite, as are wells 1349MW100 and 1349MW101.

Surface and groundwater at FS 5 flows in a southwesterly direction towards Baker Beach in the Coastal Bluffs Groundwater Basin. Depth to groundwater beneath FS 5 ranges from 5 to 33 feet bgs (Table A-9-8). All of the wells at FS 5 and monitoring wells 1349MW01, 1349MW02, 1349MW03R and 1349MW100 through 1349MW102 are located in the Coastal Bluffs Groundwater Basin.

Additionally, groundwater elevation measurements from wells 1349MW103 through 1349MW105 indicate that groundwater in this area flows northeasterly to northwesterly within the Marina Groundwater Basin. Monitoring wells 1349MW103 through 1349MW105 are discussed in Section A-5 and will not be discussed further in this section.

3.0 REMEDIAL ACTION

The *Remedial Action Plan and Evaluation of Alternatives for Landfill 4 and Fill Site 5* (RAP) was prepared and approved during Third Quarter 2002 (Treadwell & Rollo, 2002e). The RAP selected excavation, recycling, and offsite disposal of all fill material and impacted underlying soils, along with groundwater monitoring, as the FS 5 remedial alternative. Under the remedial alternative, all fill material and contaminated soil with constituent concentrations above the cleanup criteria was removed and disposed of offsite at an approved disposal facility. The removal action at FS 5 began in February 2003 and was completed in September 2004.

Additional soil sampling to complete the soil cleanup activities at FS 5 has been completed and documented in the *Draft Construction Completion Report Landfill 4 and Fill Site 5* (CCR) which was submitted for stakeholder review in the Fourth Quarter 2004 (Treadwell & Rollo, 2004f). Between 7 February and 25 April 2003, a total of 12,393 tons of waste material was removed from the former FS 5 site, with an approximate additional 40 cubic yards of Class II waste removed in September 2004. Approximately 90 percent of the fill material was disposed at Class II and Class III disposal sites and the remainder as Class I California Hazardous Waste. Soil confirmation sample concentrations or 95% UCL calculations for all compounds tested (both COC and non-COC compounds) determined that the site soil conditions meet the goals presented in the RAP. Based on the remedial activities conducted, field observations, established cleanup levels, and a review and evaluation of the confirmation sampling results, LF 4 and FS 5 are recommended for construction completion. Groundwater monitoring will continue per the RAP to confirm that applicable cleanup levels are not exceeded (Treadwell & Rollo, 2002f).

During remedial activities at FS 5, an underground storage tank (UST) was discovered, removed, and off-hauled (Figure A-9-1). The details of the UST removal can be found in the *Draft Underground Storage Tank Closure Report Former Building 1351*, which is included as an appendix to the CCR (Treadwell & Rollo, 2004f). Soil confirmation sample concentrations and/or 95% UCL calculations for compounds tested (both COC and non-COC compounds) indicated that the site conditions meet the goals presented in the RAP.

Based on discussions with DTSC on 19 February 2004 and the Trust's letter to DTSC regarding *Landfill 4 and Fill Site 5 Exceedance Follow-up* dated 17 May 2004 (Trust, 2004), the Trust performed additional sampling at FS 5 on 8 July 2004. The purpose of the additional sampling was to confirm the zinc cleanup level exceedance in the duplicate sample DUP031003A. Sample DUP031003A was collected at a depth of 0.5 feet adjacent to sample FS5EX112[0.5] and had a zinc exceedance as well as detectable levels of cadmium and silver. The previous FS5EX112[0.5] sample location was located using the Trust's Trimble GPS unit. Additional confirmation samples (FS5EX162) were collected at 0.5-, 1-, 1.5- and 2-foot depths. Confirmation sample results for FS5EX162[0.5] and duplicate sample DUP070804B (collected at 1-foot bgs), exceeded the cleanup level of 160 µg/kg.

Additional excavation was completed at sample location FS5EX162. This area was excavated to a depth of 1 foot bgs on 1 September 2004 and confirmation soil samples were collected on 2 September 2004 and submitted for zinc analysis. The additional confirmation sample results were all below the zinc cleanup level of 160 mg/kg indicating that the site is available for unrestricted land use. The results of this sampling are detailed in the CCR (Treadwell & Rollo, 2004f).

Between 9 and 23 April 2003, approximately 5,604 cubic yards (yd³) of imported backfill material was delivered to the site. The source for the FS 5 imported material was the Letterman redevelopment project Colma excavation spoils.

In accordance with the California Code of Regulations, Title 27, Subchapter 3, Section 20390, a site that has undergone clean closure (where all wastes, residues, contaminated subsoil, and other contaminated materials are removed or decontaminated at closure) must be shown to comply with the water quality protection standard or the cleanup levels presented in Section 3 of the RAP for three years. A complete table of cleanup levels for compounds in groundwater applicable to the FS 5 monitoring wells is presented in Table 3-11 of the RAP.

Treadwell & Rollo sampled the imported Letterman Colma Backfill Soil (Colma Fill) at Fill Site 5 for OCPs in accordance with the *Field Sampling Plan to Evaluate Possible Chlordane in Letterman Colma Backfill Soil* dated 28 February 2006. The purpose of the soil sampling was to characterize the Colma Fill at Fill Site 5 for the occurrence of chlordane above site specific soil cleanup levels. The analytical results of this sampling event are presented in the *Results of Colma Fill Sampling, Landfill 4, Fill Site 5, and Girard Street Ramp, Presidio of San Francisco, California* dated 20 February 2007 (Treadwell & Rollo, 2007).

At Fill Site 5, the reported results indicate that the Colma Fill does not contain chlordane above the ecological special-status cleanup level of 9 µg/kg nor other OCPs above applicable cleanup levels. Therefore, no additional action is required or recommended at this site (Treadwell & Rollo, 2007).

Following the removal action, four new monitoring wells (1349MW03R and LF5GW102 through LF5GW104) were installed and added to this groundwater monitoring program at locations shown on Figure A-9-1. The new FS 5 wells were first sampled in the Second Quarter 2003 and were to be sampled quarterly for a minimum of three years in accordance with the RAP.

During Phase 1 of the Building 1349 SI (Treadwell & Rollo, 2003d), monitoring well 1349MW100 was installed upgradient of FS 5. Phase 2 of the Building 1349 SI occurred during the FS 5 excavation activities and wells 1349MW101 and 1349MW102 were installed at the upgradient edge of the former FS 5 footprint to provide upgradient groundwater elevation and chemistry information for FS 5 and therefore, the cleanup levels specified in the RAP apply to wells 1349MW101 and 1349MW102.

Building 1349 monitoring wells 1349MW01, 1349MW02 and 1349MW100 are not located within, but are upgradient of the former FS 5 footprint. Therefore, the cleanup levels specified in the RAP do not apply to monitoring wells 1349MW01, 1349MW02 and 1349MW100.

4.0 GROUNDWATER MONITORING

During the Third Quarter 2006, groundwater elevations were measured at five FS 5 monitoring wells (LF5GW100 through LF5GW104) and six Building 1349 Area monitoring wells (1349MW01, 1349MW02, 1349MW03R and 1349MW100 through 1349MW102) associated with the FS 5 groundwater monitoring plan (Figure A-9-1). During the Fourth Quarter 2006, groundwater elevations were not proposed at the five FS 5 monitoring wells (LF5GW100 through LF5GW104), however, they were collected, as proposed, at the six Building 1349 Area monitoring wells (1349MW01, 1349MW02, 1349MW03R and 1349MW100 through 1349MW102) associated with the FS 5 groundwater monitoring plan (Figure A-9-2).

During the Third Quarter 2006, groundwater samples were collected from monitoring wells LF5GW100 through LF5GW104, 1349MW02, 1349MW03R, and 1349MW100 through 1349MW102, in accordance with Table 1A. During the Fourth Quarter 2006, groundwater samples were only collected from monitoring well 1349MW100, in accordance with Table 1B.

FS 5 seep location LF5SP100 was not flowing during the Third Quarter 2006 and, therefore, no samples were collected. Building 1349 monitoring well results are also discussed in Appendix A, Section A-5.

Water level meters were calibrated on 14 August and 4 December 2006 and the calibration logs can be found in Appendix B. Groundwater elevation field forms can be found in Appendix C.

4.1 Groundwater-Level Measurements and Interpretation

Groundwater elevation measurements were collected during the Third and Fourth Quarters 2006 on 14 August and 4 December 2006, respectively. During the Third Quarter 2006, Fill Site 5 and associated Building 1349 Area groundwater elevations ranged from 223.12 to 288.88 feet above PLLW in monitoring wells LF5GW100 and 1349MW101, respectively (Figure A-9-1). During the Fourth Quarter 2006, groundwater elevations ranged from 276.25 to 284.14 in monitoring wells 1349MW01 and 1349MW101, respectively (Figure A-9-2). Groundwater elevations are presented in Table A-9-8.

Groundwater elevations at Fill Site 5 were generally higher during the Third Quarter 2006 when compared to the Third Quarter 2005 at FS 5. During the Third Quarter 2006, the groundwater flow direction was generally southwest, towards the Pacific Ocean following the general topographic trend (Figure A-9-1). The Third Quarter 2006 groundwater gradient was approximately 0.13 feet per foot. Groundwater elevations were not collected for FS 5 during the Fourth Quarter 2006. However, based on the data collected at Building 1349 and downgradient

at BBDA 3, the groundwater flow direction was observed to be southwesterly across FS 5 (Figure A-9-2) with a gradient of approximately 0.20 feet/foot. The Third and Fourth Quarters 2006 groundwater elevations and gradients were similar to those observed previously at FS 5. ORP, pH, and temperature measurements were collected as part of the low-flow sampling methodology and are presented in Table A-9-1.

4.2 Monitoring Well Purging and Sampling

The Third Quarter 2006 sampling occurred on 16 and 17 August 2006. The Fourth Quarter 2006 sampling occurred on 5 December 2006. The Third and Fourth Quarter 2006 sampling at FS 5 was conducted in accordance with methods shown in Tables 1A and 1B of the main text and in accordance with procedures described in the FSP (Treadwell & Rollo, 2001a).

Purge equipment, purging volumes, purge water general chemistry parameters, and sampling equipment for each monitoring well are described in the purge records located at the conclusion of this section. Purge water was stored for future disposal in a 2,800-gallon polyethylene AST located at the Central Magazine.

4.3 Groundwater Analytical Program

All groundwater samples collected were submitted to the project laboratory for the analyses shown in Tables 1A and 1B of the main text. The appropriate sampling containers, preservatives, and maximum holding times for each analytical method are shown in Table 5. Sample containers used for each well are described in the purge records located at the conclusion of this section.

QA/QC samples were collected as part of this program. Section 6.2 of the main text discusses the QA/QC sampling and analysis performed during the Third and Fourth Quarters 2006.

5.0 GROUNDWATER ANALYTICAL RESULTS

Groundwater samples collected from FS 5 monitoring wells and associated Building 1349 Area monitoring wells 1349MW03R, and 1349MW100 through 1349MW102 were analyzed for OCPs and/or general chemistry parameters, during the Third Quarter 2006. Groundwater samples collected from monitoring well 1349MW100 were also analyzed for TPHg, TPHd, TPHfo, PAHs, VOCs, PCBs, TDS, general chemistry parameters and 23 dissolved metals, during the Third Quarter 2006.

Groundwater samples collected from monitoring well 1349MW100 were analyzed for TPHg, TPHd, TPHfo, PAHs, OCPs, VOCs, TDS, general chemistry parameters and 23 dissolved metals, during the Fourth Quarter 2006.

The TPHfo standard currently being used is a TPH as motor oil standard, as defined by the Presidio QAPP, with a carbon range of C₂₄ to C₃₆. Section 5.4.3.1 in the main text discusses the data compatibility issues associated with TPH analyses.

Analytical results are discussed below.

5.1 Dissolved Oxygen

Dissolved oxygen results are presented in Table A-9-1. Dissolved oxygen concentrations measured during the Third Quarter 2006 were similar to historical levels and ranged from 0.38 mg/L to 0.81 mg/L in LF5GW100 and 1349MW100, respectively. Dissolved oxygen was mistakenly not collected by the field team at monitoring wells LF5GW102 through LF5GW104, 1349MW03R, or 1349MW101 and 1349MW102. The dissolved oxygen concentration measured in 1349MW100 during the Fourth Quarter 2006 was 1.6 mg/L.

5.2 General Chemistry Results

General chemistry results are presented in Table A-9-1. General chemistry results for the Third and Fourth Quarters 2006 within Building 1349 Area monitoring well 1349MW100 were generally within historical ranges.

Total alkalinity and bicarbonate were measured at new high concentrations of 1,000 mg/L in monitoring well 1349MW100 during the Fourth Quarter 2006. These new high concentrations were only slightly outside of the historical high and can be attributed to natural fluctuation. The remaining general chemistry results were within historical ranges during the Third and Fourth Quarters 2006.

5.3 TPH Results

TPH results are summarized in Table A-9-2 and on Figure A-9-3. During the Third Quarter 2006, only upgradient well 1349MW100 was sampled for TPH analyses. TPHg and TPHd were detected in the 1349MW100 sample at concentrations of 820 and 42,000 µg/L, respectively. During the Fourth Quarter 2005, TPHg and TPHd were detected in FS 5 associated monitoring well 1349MW100 at concentrations of 1,200 and 13,000 µg/L, respectively.

Fill Site 5 RAP-specified cleanup levels do not apply to monitoring well 1349MW100. Building 1349 Area cleanup levels and exceedances associated with 1349MW100 are discussed in Section A-5.

TPHfo was not detected in 1349MW100 groundwater samples during the Third and Fourth Quarters 2006.

5.4 VOC Results

VOCs were only analyzed in samples collected from monitoring well 1349MW100 during the Third and Fourth Quarters 2006 (Table A-9-3). During the Third Quarter 2006, ethylbenzene was not detected above reporting limits for the first time within monitoring well 1349MW100. Ethylbenzene was also not detected during the Fourth Quarter 2006. Benzene was detected in monitoring well 1349MW100 during the Third and Fourth Quarters 2006 at concentrations of 23 and 18 µg/L, respectively. Total xylenes were not detected above laboratory limits during the Third Quarter 2006; however, total xylenes were detected at a concentration of 2.3 µg/L during the Fourth Quarter 2006 in this well.

Fill Site 5 RAP-specified cleanup levels do not apply to monitoring well 1349MW100. Building 1349 Area cleanup levels and exceedances associated with 1349MW100 are discussed in Section A-5.

5.5 OCP and PCB Results

Results of OCP and PCB analyses are presented in Table A-9-4 and beta-BHC and gamma-BHC results are illustrated on Figure A-9-3. PCBs were only analyzed in monitoring well 1349MW100 during the Third Quarter 2006. PCBs have not been detected within any FS 5 or associated Building 1349 Area monitoring well samples to date. OCPs were analyzed within all FS 5 monitoring wells and monitoring wells 1349MW03R and 1349MW100 through 1349MW102 during the Third Quarter 2006 and only in 1349MW100 during the Fourth Quarter 2006. Of these wells, OCPs were only detected within monitoring well 1349MW100 during the Third and Fourth Quarters 2006. Analytical results are discussed below.

Endrin was detected at a new high concentration of 0.7 µg/L during the Third Quarter 2006, which is significantly higher than the previous high concentration of 0.2 µg/L detected in the Second Quarter 2004. Additionally, 4,4'-DDT, gamma-BHC, heptachlor, and heptachlor epoxide were all detected within historical ranges in 1349MW100 during the Third Quarter 2006.

During the Fourth Quarter 2006, 4,4'-DDE, dieldrin, and heptachlor were detected within 1349MW100 at concentrations of 0.3, 0.3 and 0.2 µg/L, respectively.

Fill Site 5 RAP-specified cleanup levels do not apply to 1349MW100; however, Building 1349 Area CAP-specified cleanup levels and exceedances associated with 1349MW100 are discussed in Section A-5.

5.6 PAH Results

Several PAHs were detected within historical ranges in monitoring well 1349MW100 during the Third and/or Fourth Quarters 2006, including acenaphthene, anthracene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, fluoranthene, fluorene, phenanthrene, and pyrene. Analytical results are presented in Table A-9-5.

Fill Site 5 RAP-specified cleanup levels do not apply to monitoring well 1349MW100. Building 1349 Area cleanup levels and exceedances associated with 1349MW100 are discussed in Section A-5.

5.7 Dissolved Metals Results

Monitoring well 1349MW100 was the only well sampled for dissolved metals during the Third and Fourth Quarters 2006. Fill Site 5 RAP-specified cleanup levels do not apply to monitoring well 1349MW100. Building 1349 Area cleanup levels and exceedances associated with 1349MW100 are discussed in Section A-5.

Dissolved metals results are presented in Table A-9-7 and 2006 arsenic, chromium, and iron results are presented on Figure A-9-3. All dissolved metal concentrations detected in 1349MW100 during the Third and Fourth Quarters 2006 were within historical ranges and do not appear to be significant.

6.0 CONCLUSIONS & RECOMMENDATIONS

Groundwater elevations at Fill Site 5 were generally higher during the Third Quarter 2006 when compared to the Third Quarter 2005 at FS 5. Elevations, gradients and flow directions are consistent with historical values and interpretations. Groundwater monitoring well locations and groundwater elevations are illustrated on Figure A-9-1.

Samples collected from Fill Site 5 monitoring wells during the Third Quarter 2006 were analyzed for OCPs. No OCPs were detected within the Fill Site 5 monitoring wells sampled during the Third Quarter 2006.

Dissolved oxygen concentrations measured were within historical ranges.

TPHg, TPHd, several VOCs, OCPs, PAHs, and dissolved metals were detected in the upgradient Building 1349 monitoring well 1349MW100 samples during the Third and Fourth Quarters 2006. Fill Site 5 RAP cleanup levels do not apply to upgradient Building 1349 monitoring wells.

Table A-9-1
Results of General Chemistry Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mV)	pH units	°C
LF5GW100	08/17/06	NA	NA	NA	0.38	NA	NA	NA	NA	NA	0.20	8.05	16.63
	03/09/06	420	420	310	1.4	< 0.1	2.6	< 0.05	NA	34	55.1	6.24	14.1
	08/30/05	410	410	290	0.9	< 0.1 UJ	2.5	< 0.05 UJ	NA	33	NR	NR	NR
DUP0526051A	05/26/05	410	410	300	1.3	< 0.1	2.7	< 0.05	NA	33	NR	NR	NR
	05/26/05	420	420	300	--	< 0.1	2.7	< 0.05	NA	33	NR	NR	NR
	05/26/05	419	419	355	--	< 0.3 U	2.7	< 1 U	NA	31.2	NR	NR	NR
LF5GW100CL	03/28/05	390	390	320	1.1	< 0.1	2.7	< 0.05	NA	33	NR	NR	NR
	12/16/04	460	460	330	0.9	< 0.1	2.7	< 0.05	NA	33	NR	NR	NR
	12/16/04	480	480	330	--	< 0.1	2.7	< 0.05	NA	33	NR	NR	NR
DUP1216041A	08/12/04	440	440	320	0.5	< 0.1	2.6	< 0.05	NA	32	NR	NR	NR
	05/26/04	390	390	320	0.7	< 0.1	2.6	< 0.05	NA	33	NR	NR	NR
	03/15/04	410	410	330	0.8	< 0.1	2.7	< 0.05	NA	35	NR	NR	NR
	12/04/03	430	430	330	0.9	< 0.1	2.7	< 0.05	NA	34	NR	NR	NR
	08/14/03	430	430	310	0.35	< 0.1	2.6 b,J-	< 0.05 UJ	NA	35	NR	NR	NR
	06/05/03	430	430	330	0.7	< 0.1	2.8	< 0.05	NA	33	NR	NR	NR
	12/04/02	400	400	330	0.72	< 0.1	2.7	< 0.05	NA	32	NR	NR	NR
	08/29/02	410	380	330	0.45	< 0.1	2.8	< 0.25	NA	35	NR	NR	NR
	05/30/02	430	430	340	0.53	0.08 J	2.8	< 0.05	NA	35	NR	NR	NR
	03/06/02	420	420	340	0.88	0.082 J	2.8	< 0.05	NA	34	NR	NR	NR
	11/28/01	460	460	320	0.61	0.062 J	2.8	< 0.05	NA	34	NR	NR	NR
	08/30/01	440	440	340	0.83	0.08 J	2.8	< 0.05	NA	35	NR	NR	NR
LF5GW100CL	05/10/01	400	400	260	4.7	0.08 J	4.3	< 0.05	NA	28	NR	NR	NR
	05/10/01	380	NA	280	--	NA	4.3 ²	NA	NA	28	NR	NR	NR
	07/21/00	360	360	300	NM	NA	NA	NA	NA	30	NR	NR	NR
LF5GW101	08/17/06	NA	NA	NA	0.75	NA	NA	NA	NA	NA	23.20	8.17	15.25
	03/09/06	390	390	250	1.8	< 0.1	3.8	< 0.05	NA	29	218.8	6.08	13.9
	12/02/05	NA	NA	NA	1	NA	NA	NA	NA	NA	NR	NR	NR
	08/30/05	410	400	230	1	< 0.1 UJ	3.8	< 0.05 UJ	NA	29	NR	NR	NR
	05/26/05	400	400	240	0.7	< 0.1	4	< 0.05	NA	30	NR	NR	NR
	03/28/05	390	390	270	0.91	< 0.1	4.1	< 0.05	NA	27	NR	NR	NR
	12/16/04	420	420	270	0.7	< 0.1	4.2	< 0.05	NA	30	NR	NR	NR
	08/12/04	410	410	250	0.7	< 0.1	4.1	< 0.05	NA	29	NR	NR	NR
	05/26/04	370	370	260	0.4	< 0.1	3.9	< 0.05	NA	29	NR	NR	NR
	03/15/04	390	390	270	0.8	< 0.1	4.2	< 0.05	NA	30	NR	NR	NR
	12/04/03	410	410	260	0.9	< 0.1	4.2	< 0.05	NA	29	NR	NR	NR
	08/14/03	430	430	250	0.71	< 0.1	3.9 b,J-	< 0.05 UJ	NA	30	NR	NR	NR
	06/05/03	380	380	270	0.9	< 0.1	4.3	< 0.05	NA	29	NR	NR	NR

Table A-9-1
Results of General Chemistry Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mV)	pH units	°C
LF5GW101	12/04/02	360	360	260	0.66	< 0.1	4.1	< 0.05	NA	29	NR	NR	NR
	08/29/02	410	410	270	0.69	< 0.1	4.3	< 0.25	NA	30	NR	NR	NR
	05/30/02	390	390	290	0.83	0.081 J	4.3	0.02 J	NA	31	NR	NR	NR
	03/06/02	380	380	280	1.15	0.072 J	4.3	< 0.05	NA	27	NR	NR	NR
	11/28/01	390	390	270	1.01	0.08 J	4.3	< 0.05	NA	28	NR	NR	NR
	08/30/01	370	370	270	1.06	0.086 J	4.3	< 0.05	NA	27	NR	NR	NR
	05/10/01	430	430	340	4.5	0.33	2.7	< 0.05	NA	33	NR	NR	NR
	07/21/00	430	430	400	NM	NA	NA	NA	NA	42	NR	NR	NR
LF5GW102 DUP0830053A LF5GW102CL	08/17/06	NA	NA	NA	NM	NA	NA	NA	NA	NA	NM	9.05	14.20
	03/09/06	310	190	220	0.22	< 0.1	0.49	0.1	NA	22	NM	8.99	13.8
	08/30/05	310	190	210	0.9	< 0.1 UJ	0.25	< 0.05 UJ	NA	22	NR	NR	NR
	08/30/05	310	190	210	--	< 0.1 UJ	0.25	< 0.05 UJ	NA	22	NR	NR	NR
	08/30/05	322	322	200	--	< 0.3 U	0.78 J	< 1 U	NA	20.7	NR	NR	NR
	05/26/05	74	74	210	0.7	< 0.1	0.78	0.08	NA	24	NR	NR	NR
	03/21/05	280	120	230	0.1	< 0.1	0.48	0.15	NA	23	NR	NR	NR
	12/14/04	320	230	240	0.2	< 0.1	0.23	0.15	NA	22	NR	NR	NR
	08/11/04	310	190	220	0.45	< 0.1	0.41	0.11	NA	24	NR	NR	NR
	05/27/04	340	230	230	1.3	< 0.1	0.55	0.06	NA	27	NR	NR	NR
	03/10/04	300	230	240	0.37	< 0.1	0.25	0.09	NA	28	NR	NR	NR
	12/03/03	330	230	230	0.7	< 0.1	1.1	< 0.05	NA	26	NR	NR	NR
	12/03/03	330	210	240	--	< 0.1	0.62	< 0.05	NA	25	NR	NR	NR
	12/03/03	300	190	263	--	< 0.1	0.42	0.057	0.48	25.8	NR	NR	NR
DUP1203031A LF5GW102CL	08/13/03	300	120	320	0.6	< 0.5	< 0.25 UJ	< 0.25 UJ	NA	37	NR	NR	NR
	06/06/03	290	210	380	0.7	0.34	0.1	0.1	NA	37	NR	NR	NR
LF5GW103	08/17/06	NA	NA	NA	NM	NA	NA	NA	NA	NA	NM	8.05	14.90
	03/09/06	350	350	190	0.88	< 0.1	4.9	< 0.05	NA	27	NM	8.04	14
	08/30/05	360	360	180	0.8	< 0.1 UJ	4.8	< 0.05 UJ	NA	27	NR	NR	NR
	05/24/05	350	350	180	0.9	< 0.1	4.5	< 0.05	NA	27	NR	NR	NR
	03/15/05	330	330	190	0.8	< 0.1	5	< 0.05	NA	27	NR	NR	NR
	12/14/04	360	360	200	0.7	< 0.1	5.1	< 0.05	NA	28	NR	NR	NR
	08/11/04	360	360	200	0.49	< 0.1	4.9	< 0.05	NA	28	NR	NR	NR
	05/27/04	350	350	190	1.3	< 0.1	4.8	< 0.05	NA	27	NR	NR	NR
	03/10/04	340	340	210	0.7	< 0.1	4.8	< 0.05	NA	29	NR	NR	NR
	12/03/03	380	380	200	0.8	< 0.1	4.8	< 0.05	NA	29	NR	NR	NR

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Building 1349/Fill Site 5
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Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mV)	pH units	°C
LF5GW103 DUP0819032A LF5GW103CL	08/19/03	370	370	200	1	< 0.1	4.8	< 0.05	NA	31	NR	NR	NR
	08/19/03	320	320	200	--	< 0.1	4.8	< 0.05	NA	30	NR	NR	NR
	08/19/03	360	360	200	--	< 0.1	5 J-	< 0.05	5 J-	27	NR	NR	NR
	06/05/03	410	410	210	0.8	< 0.1	4.6	< 0.05	NA	29	NR	NR	NR
LF5GW104 DUP0307063B LF5GW104CL	08/17/06	NA	NA	NA	NM	NA	NA	NA	NA	NA	NM	7.29	14.8
	03/07/06	420	420	290	0.63	< 0.1	5.9	< 0.05	NA	73	NM	7.65	14.4
	03/07/06	370	370	290	--	< 0.1	6	< 0.05	NA	73	NR	NR	NR
	03/07/06	342	342	292	--	< 1 U	6.43	< 0.02 U	NA	73.3	NR	NR	NR
	08/30/05	360	360	270	0.6	< 0.1 UJ	5.9	< 0.05 UJ	NA	68	NR	NR	NR
	05/24/05	340	340	310	0.7	< 0.1	6.8	< 0.05	NA	81	NR	NR	NR
	03/15/05	370	370	280	0.9	< 0.1	7.1	< 0.05	NA	80	NR	NR	NR
	12/14/04	360	360	230	0.7	< 0.1	5.4	< 0.05	NA	46	NR	NR	NR
	08/11/04	380	380	220	0.47	< 0.1	5.2	< 0.05	NA	50	NR	NR	NR
	05/26/04	340	340	230	1.3	< 0.1	5.5	< 0.05	NA	56	NR	NR	NR
	03/10/04	350	350	290	0.7	< 0.1	7	< 0.05	NA	83	NR	NR	NR
	12/03/03	370	370	200	0.6	< 0.1	5.1	< 0.05	NA	49	NR	NR	NR
	08/13/03	420	420	200	0.7	< 0.5	5.7 b,J-	< 0.25 UJ	NA	66	NR	NR	NR
	06/05/03	360	360	260	0.6	< 0.1	7.5	< 0.05	NA	82	NR	NR	NR
LF5SP100 DUP1205031A LF5SP100CL	03/21/06	110	110	55	8.15	< 0.1	0.31	< 0.05	NA	24	NM	7.67	8.6
	06/01/05	NA	NA	NA	NM	NA	NA	NA	NA	NA	NR	NR	NR
	03/22/05	55	55	27	9.4	< 0.1	0.34	< 0.05	NA	14	NR	NR	NR
	12/05/03	88	88	97	8.9	0.18	1.4	< 0.05	NA	54	NR	NR	NR
	12/05/03	80	80	97	--	0.18	1.4	< 0.05	NA	54	NR	NR	NR
	12/05/03	72	72	99.6	--	0.13	1.5 J-	0.067	1.6 J-	54.4	NR	NR	NR
	08/14/03	NA	NA	NA	NM	NA	NA	NA	NA	NA	NR	NR	NR
	06/10/03	NA	NA	NA	NM	NA	NA	NA	NA	NA	NR	NR	NR
1349MW01	03/16/06	310	310	850	0.54	< 0.1	1.7	< 0.1	NA	300	186.5	6.41	13.8
	03/21/05	270	270	690	0.3	< 0.1	2.1	< 0.1	NA	230	NR	NR	NR
	03/15/04	280	280	740	0.39	0.11	2.2	< 0.1	NA	250	NR	NR	NR
	12/02/03	310	310	690	1.1	0.14	2.2	< 0.05	NA	220	NR	NR	NR
	08/21/03	310	310	700	1.42	< 0.2	1.8	< 0.1	NA	220	NR	NR	NR
	06/10/03	380	380	740	1.29	< 0.2	2.1	< 0.1	NA	230	NR	NR	NR
	03/12/03	NA	NA	NA	1.59	NA	NA	NA	NA	NA	NR	NR	NR

Table A-9-1
Results of General Chemistry Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mV)	pH units	°C
1349MW01	12/09/02	360	360	750	0.76	< 0.2	1.7	< 0.1	NA	210	NR	NR	NR
	DUP1209021A	350	350	750	--	< 0.2	1.8	< 0.1	NA	220	NR	NR	NR
1349MW01CL	12/09/02	350	350	360	--	1	1.4 J-	< 0.05 UJ	1.4 J-	220	NR	NR	NR
	08/28/02	270	270	740	1.34	0.13	1.7	< 0.05	NA	240	NR	NR	NR
DUP0830013A 1349MW01CL	05/30/02	320	320	810	1.37	0.091 J	1.7	< 0.05	NA	230	NR	NR	NR
	03/06/02	290	290	830	2.13	0.13	1.8	< 0.05	NA	250	NR	NR	NR
	11/28/01	310	310	820	1.36	0.13	1.8	< 0.05	NA	240	NR	NR	NR
	08/30/01	420	420	740	0.61	0.24	1.3	< 2.5	NA	180	NR	NR	NR
	08/30/01	430	430	740	--	0.14	1.2	< 2.5	NA	180	NR	NR	NR
	08/30/01	340	340	760	--	< 0.05	1.4 ²	< 2.5	NA	210	NR	NR	NR
	05/10/01	330	330	760	1.45	0.19	1.4	< 0.05	NA	220	NR	NR	NR
	05/19/99	433	433	820	0.83	0.2	NA	NA	0.537	188	NR	NR	NR
	02/19/99	468	468	731	1.83	0.15	NA	NA	0.641	192	NR	NR	NR
	11/18/98	361	361	666	1.59	0.17	NA	NA	0.62	205	NR	NR	NR
	08/18/98	574	574	701	2.24	0.11	NA	NA	0.404	161	NR	NR	NR
	04/16/98	377	377	679	2.89	0.12	NA	NA	0.715	221	NR	NR	NR
	01/22/98	509	509	673	1	0.124	NA	NA	0.416	159	NR	NR	NR
	10/30/97	527	527	726	0.37	< 0.05	0.478	NA	0.368	158	NR	NR	NR
	07/31/97	466	466	777	0.5	NA	0.532	NA	0.617	192	NR	NR	NR
	05/01/97	489	489	768	1.17	NA	0.451	NA	NA	190	NR	NR	NR
	02/10/97	374	374	888	1.26	NA	0.635	NA	< 0.05	262	NR	NR	NR
	08/08/95	NA	NA	NA	NM	NA	NA	NA	NA	NA	NR	NR	NR
1349MW02	03/10/06	660	660	740	0.56	< 0.1	1.3	< 0.1	NA	78	-18.1	7.29	13.2
	08/31/05	710	710	770	0.8	< 0.1 UJ	1.2	< 0.1 UJ	NA	88	NR	NR	NR
	05/25/05	650	650	710	0.5	< 0.1	1.2	< 0.1	NA	68	NR	NR	NR
	03/21/05	630	630	860	0.1	< 0.1	1.3	< 0.1	NA	67	NR	NR	NR
	12/16/04	710	710	620	0.8	< 0.1	1.6	< 0.1	NA	66	NR	NR	NR
	08/12/04	700	700	600	0.4	< 0.1	1.5	< 0.1	NA	64	NR	NR	NR
	05/26/04	660	660	650	0.59	0.11	1.3	< 0.1	NA	64	NR	NR	NR
	03/15/04	630	630	670	0.44	< 0.1	1.4	< 0.1	NA	66	NR	NR	NR
	12/02/03	720	720	600	0.6	< 0.1	1.6	< 0.05	NA	64	NR	NR	NR
	08/13/03	710	710	550	1.6	< 1	1.3 b,J-	< 0.5 UJ	NA	73	NR	NR	NR
	06/05/03	630	630	610	1.3	< 0.2	1.6	< 0.1	NA	62	NR	NR	NR
	DUP0605032A	620	620	610	--	< 0.2	1.6	< 0.1	NA	62	NR	NR	NR

Table A-9-1
Results of General Chemistry Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mV)	pH units	°C
1349MW02	03/12/03	NA	NA	NA	0.3	NA	NA	NA	NA	NA	NR	NR	NR
DUP1204023A	12/04/02	660	660	580	1.8	< 0.2	1.7	< 0.1	NA	62	NR	NR	NR
	12/04/02	670	670	560	--	< 0.2	1.7	< 0.1	NA	63	NR	NR	NR
	08/28/02	670	670	570	1	0.12	1.6	< 0.05	NA	68	NR	NR	NR
DUP0306022A	05/30/02	680	680	630	0.7	0.12	1.6	< 0.05	NA	60	NR	NR	NR
	03/06/02	640	640	680	1.2	0.13	1.6	< 0.05	NA	58	NR	NR	NR
	03/06/02	640	640	670	--	0.13	1.6	< 0.05	NA	59	NR	NR	NR
DUP1128011A	11/28/01	670	670	580	2.25	0.091 J	1.7	< 0.05	NA	60	NR	NR	NR
	11/28/01	680	680	570	--	0.1 J	1.8	< 0.05	NA	56	NR	NR	NR
	08/30/01	660	660	570	NM	0.11	1.7	< 0.05	NA	64	NR	NR	NR
DUP0830012A	08/30/01	660	660	550	--	0.11	1.7	< 0.05	NA	63	NR	NR	NR
1349MW02CL	08/30/01	660	660	550	--	< 0.1	1.5 ²	< 0.05	NA	56	NR	NR	NR
	05/10/01	660	660	570	1.3	0.12	1.7	< 0.05	NA	62	NR	NR	NR
	05/19/99	680	680	724	0.51	< 0.1	NA	NA	1.58	76	NR	NR	NR
	02/19/99	706	706	766	0.6	< 0.1	NA	NA	1.29	80	NR	NR	NR
	11/18/98	694	694	690	0.71	< 0.1	NA	NA	1.22	69	NR	NR	NR
	08/18/98	688	688	637	0.39	< 0.1	NA	NA	1.24	69	NR	NR	NR
	04/16/98	629	629	555	0.9	< 0.1	NA	NA	1.23	64	NR	NR	NR
	01/22/98	689	689	586	1.34	< 0.1	NA	NA	1.12	60	NR	NR	NR
	10/30/97	700	700	653	0.33	< 0.05	1.3	NA	1.21	72	NR	NR	NR
	07/31/97	679	679	662	0.62	NA	1.29	NA	1.2	73	NR	NR	NR
	05/01/97	696	696	661	0.31	NA	1.18	NA	NA	61	NR	NR	NR
	02/10/97	548	548	501	0.5	NA	0.924	NA	1.3	52	NR	NR	NR
	08/08/95	NA	NA	NA	NM	NA	NA	NA	NA	NA	NR	NR	NR
1349MW03R	08/17/06	NA	NA	NA	NM	NA	NA	NA	NA	NA	NM	7.70	16.8
	03/16/06	440	440	860	1.1	< 0.1	6.3	< 0.1	NA	120	210	7.76	15.8
	11/30/05	NA	NA	NA	0.4	NA	NA	NA	NA	NA	NR	NR	NR
	08/31/05	390	390	170	0.4	< 0.1	5.9	< 0.05	NA	39	NR	NR	NR
	05/25/05	390	390	560	0.6	< 0.1	6.3	< 0.1	NA	84	NR	NR	NR
	03/21/05	350	350	960	7.7	< 0.1	5.4	< 0.1	NA	130	NR	NR	NR
	12/16/04	350	350	78	4.8	< 0.1	5.2	< 0.05	NA	29	NR	NR	NR
	08/10/04	350	350	68	3.94	< 0.1	4.6	< 0.05	NA	30	NR	NR	NR
	05/26/04	340	340	79	5.7	< 0.1	4.5	< 0.05	NA	31	NR	NR	NR
	03/09/04	380	380	78	7.08	< 0.1	4.5	< 0.05	NA	33	NR	NR	NR

Table A-9-1
Results of General Chemistry Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mV)	pH units	°C
1349MW03R	12/02/03	350	350	72	5.2	< 0.1	4.8	< 0.05	NA	22	NR	NR	NR
	08/13/03	360	360	78	4.8	< 0.5	4.5 b,J-	< 0.25 UJ	NA	32	NR	NR	NR
	06/09/03	330	330	130	2.6	0.37	4.7	0.1	NA	33	NR	NR	NR
1349MW100 DUP0524063A 1349MW100CL	12/05/06	1,000	1,000	990	1.6	0.33	< 0.05	< 0.1	NA	< 0.5	-239	5.8	15
	08/16/06	850	850	810	0.81	0.2	< 0.05	< 0.1	NA	44	-118.2	6.40	16.8
	05/24/06	910	910	850	1.1	0.23	< 0.05	< 0.1	NA	60	-77.5 NM	6.37	NA
	05/24/06	860	860	830	NA	0.23	< 0.05	< 0.1	NA	65	NA	NA	NA
	05/24/06	820	NA	930	NA	< 1 U	< 0.02 U UJ	< 0.02 U	NA	55.9	NA	NA	NA
	03/16/06	930	930	760	0.33	0.24	< 0.05	< 0.1	NA	50	74.7	6.44	15.2
	11/30/05	940 J+	940	1,300	0.3	0.34	< 0.1	< 0.15	NA	< 1	NR	NR	NR
	08/31/05	860	860	1,500	0.3	0.31 J-	< 0.1	< 0.2 UJ	NA	8.7	NR	NR	NR
	05/25/05	910	910	810	0.3	0.2	< 0.05	< 0.1	NA	35	NR	NR	NR
	03/23/05	870	870	820	0.10	0.27	< 0.05	< 0.1	NA	37	NR	NR	NR
	12/16/04	940	940	1,200	0.2	0.28	< 0.05	< 0.25	NA	< 0.5	NR	NR	NR
	08/10/04	970	970	1,000	0.7	0.29	< 0.05	< 0.1	NA	0.51	NR	NR	NR
	05/27/04	940	940	1,100	0.55	0.28	< 0.05	< 0.1	NA	2	NR	NR	NR
	03/16/04	900	900	830	0.37	0.24	< 0.05	< 0.1	NA	10	NR	NR	NR
	12/02/03	890	890	1,200	1	0.24	< 0.1	< 0.1	NA	< 1	NR	NR	NR
	08/12/03	800	800	1,100	0.5	< 0.5	< 0.25	< 0.25	NA	< 2.5	NR	NR	NR
	06/09/03	860	860	890	1.8	< 0.5	< 0.25	< 0.25	NA	3.5	NR	NR	NR
	03/12/03	810	810	840	0.6	< 0.2	< 0.1	< 0.1	NA	7.7	NR	NR	NR
	12/10/02	660	660	1,300	0.9	< 0.2	< 0.1	< 0.1	NA	9.2	NR	NR	NR
1349MW101 DUP0525052A	08/17/06	NA	NA	NA	NM	NA	NA	NA	NA	NA	NM	8.10	18.3
	03/16/06	330	330	180	1.11	< 0.1	2.8	< 0.05	NA	16	160.7	8.06	16
	08/31/05	280	280	190	0.7	< 0.1	2.5	< 0.05	NA	15	NR	NR	NR
	05/25/05	290	290	200	0.4	< 0.1	2.3	< 0.05	NA	15	NR	NR	NR
	05/25/05	270	270	200	—	< 0.1	2.3	< 0.05	NA	15	NR	NR	NR
	03/21/05	280	280	210	0.20	< 0.1	3	< 0.05	NA	18	NR	NR	NR
	12/15/04	260	260	230	0.3	< 0.1	2.8	< 0.05	NA	17	NR	NR	NR
	03/09/04	260	260	210	3.52	0.13	3.5	< 0.05	NA	19	NR	NR	NR
	12/02/03	390	390	230	1.4	0.14	2.4	< 0.05	NA	19	NR	NR	NR
	08/19/03	280	280	260	1.7	0.25	2.5	< 0.05	NA	25	NR	NR	NR
	06/09/03	230	230	300	1.1	0.47	4.3	0.13	NA	38	NR	NR	NR

Table A-9-1
Results of General Chemistry Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mV)	pH units	°C
1349MW102	08/17/06	NA	NA	NA	NM	NA	NA	NA	NA	NA	NM	6.50	18.2
	03/07/06	470	470	240	0.15	0.25	2	< 0.05	NA	140	-6.9	6.72	14.2
DUP0307063C	03/07/06	500	500	240	--	0.24	2	< 0.05	NA	130	-6.9	6.72	14.2
1349MW102CL	03/07/06	416	416	220	--	< 1 U	2.33	0.025	NA	156	-6.9	6.72	14.2
	08/31/05	420	420	210	0.9	0.19	1.7	< 0.05	NA	73	NR	NR	NR
DUP0831052A	08/31/05	450	450	200	--	0.19	1.7	< 0.05	NA	71	NR	NR	NR
	05/25/05	390	390	150	0.5	0.15	2.8	< 0.05	NA	95	NR	NR	NR
	03/21/05	500	520	330	0.4	0.23	2	< 0.05	NA	79	NR	NR	NR
DUP0321053A	03/21/05	520	500	340	--	0.24	1.80	< 0.05	NA	79	NR	NR	NR
	12/16/04	630	630	450	1.08	0.25	0.71	< 0.05	NA	47	NR	NR	NR
	08/10/04	580	580	400	1.54	0.24	0.8	< 0.05	NA	42	NR	NR	NR
DUP0810042A	08/10/04	570	570	420	--	0.24	0.54	< 0.05	NA	41	NR	NR	NR
	05/27/04	600	600	410	1.1	0.27	0.52	< 0.05	NA	44	NR	NR	NR
DUP0527041A	05/27/04	630	630	400	--	0.26	0.74	< 0.05	NA	47	NR	NR	NR
1349MW102CL	05/27/04	620	620	88	--	0.29	0.6	< 0.05	0.6	18	NR	NR	NR
	03/10/04	540	540	470	0.5	0.27	0.4	< 0.05	NA	48	NR	NR	NR
DUP0310041A	03/10/04	550	550	470	--	0.27	0.4	< 0.05	NA	47	NR	NR	NR
1349MW102CL	03/10/04	530	530	450	--	0.28	0.45 J	< 0.05 UJ	0.45 HT-04,J	44	NR	NR	NR
	12/10/03	690	690	480	2	0.29	0.09	< 0.05	NA	43	NR	NR	NR
DUP1210031A	12/10/03	670	670	480	--	0.28	0.1	< 0.05	NA	43	NR	NR	NR
	08/12/03	740	740	430	1.1	0.47	0.17 b,J	< 0.1 UJ	NA	47	NR	NR	NR
	06/09/03	660	660	560	1.9	0.35	0.14	< 0.1	NA	68	NR	NR	NR
DUP0609032A	06/09/03	650	650	570	--	0.34	0.11	< 0.1	NA	70	NR	NR	NR
1349MW102CL	06/09/03	670	670	490	--	0.6	0.13	< 0.05	0.13	59	NR	NR	NR

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - The QC laboratory nitrate results shown have been converted to nitrate as nitrogen (nitrate-N) as other laboratory results are reported. The QC laboratory reported nitrate as NO₃ concentrations (nitrate-NO₃) which are 4.43 times higher than nitrate-N concentrations.

mg/L - milligrams per liter

NA - not analyzed

NM - not measured

"--" dissolved oxygen measurements were not taken for duplicate and quality control samples.

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

ORP - Oxidation Reduction Potential

mV - millivolts

°C - degrees centigrade

Table A-9-2
Results of TPH Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
Cleanup Levels³		443	880	1,200
LF5GW100	03/09/06	< 50	52 Y	< 300
	08/30/05	< 50	< 50	< 300
	05/26/05	< 50	< 50	< 300
DUP0526051A	05/26/05	< 50	< 50	< 300
LF5GW100CL	05/26/05	< 50 U	56	< 300 U
	03/28/05	< 50	< 50	< 300
DUP1216041A	12/16/04	< 50	< 50	< 300
	12/16/04	< 50	< 50	< 300
	08/12/04	< 50	< 50	< 300
	05/26/04	< 50	< 50	< 300
	03/15/04	< 50	< 50	< 300
	12/04/03	< 50	< 50	< 300
	08/14/03	< 50	< 50	< 300
	06/05/03	< 50	< 50	< 300
	12/04/02	< 50	< 50	< 300
	08/29/02	< 50	< 50	< 300
	05/30/02	< 50	< 50	< 300
	03/06/02	< 50	< 50	< 300
	11/28/01	< 50	< 50	< 300
	08/30/01	< 50	< 50 ²	< 300 ²
	05/10/01	< 50	< 50	< 300
LF5GW100CL	05/10/01	< 50	87 ndp	< 50
	07/21/00	< 50	< 50	NA
LF5GW101	03/09/06	< 50	51 Y	< 300
	08/30/05	< 50	< 50	< 300
	05/26/05	< 50	< 50	< 300
	03/28/05	< 50	< 50	< 300
	12/16/04	< 50	< 50	< 300
	08/12/04	< 50	< 50	< 300
	05/26/04	< 50	< 50	< 300
	03/15/04	< 50	< 50	< 300
	12/04/03	< 50	< 50	< 300
	08/14/03	< 50	< 50	450
	06/05/03	< 50	< 50	< 300
	12/04/02	< 50	< 50	< 300
	08/29/02	< 50	< 50	< 300
	05/30/02	< 50	< 50	< 300
	03/06/02	< 50	< 50	< 300
	11/28/01	< 50	< 50	< 300
	08/30/01	< 50	< 50 ²	< 300 ²
	05/10/01	< 50	< 50	< 300
	07/21/00	< 50	< 50	NA
LF5GW102	03/09/06	< 50	61 Y	< 300
	08/30/05	< 50	< 50	< 300
DUP0830053A	08/30/05	< 50	< 50	< 300
LF5GW102CL	08/30/05	< 50 U	< 50 U	< 300 U
	05/26/05	< 50	51 Y	< 300
	03/21/05	< 50	< 50	< 300
	12/14/04	< 50	< 50	< 300

Table A-9-2
Results of TPH Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
Cleanup Levels³		443	880	1,200
LF5GW102 DUP1203031A LF5GW102CL	08/11/04	< 50	< 50	< 300
	05/27/04	< 50	< 50	< 300
	03/10/04	< 50	< 50	< 300
	12/03/03	< 50	< 50	< 300
	12/03/03	< 50	< 50	< 300
	12/03/03	< 50	< 48	< 240
	08/13/03	< 50	< 50	< 300
	06/06/03	< 50	< 50	< 300
LF5GW103 DUP0819032A LF5GW103CL	03/09/06	< 50	< 50	< 300
	08/30/05	< 50	< 50	< 300
	05/24/05	< 50	< 50	< 300
	03/15/05	< 50	< 50	< 300
	12/14/04	< 50	< 50	< 300
	08/11/04	< 50	< 50	< 300
	05/27/04	< 50	< 50	< 300
	03/10/04	< 50	< 50	< 300
	12/03/03	< 50	< 50	< 300
	08/19/03	< 50	< 50	< 300
	08/19/03	< 50	< 50	< 300
	08/19/03	< 50	< 50	< 250
	06/05/03	< 50	< 50	< 300
LF5GW104 DUP0307063B LF5GW104CL	03/07/06	< 50	< 50	< 300
	03/07/06	< 50	50 Y	< 300
	03/07/06	< 50 U	< 50 U	< 300 U
	08/30/05	< 50	< 50	< 300
	05/24/05	< 50	< 50	< 300
	03/15/05	< 50	< 50	< 300
	12/14/04	< 50	< 50	< 300
	08/11/04	< 50	< 50	< 300
	05/26/04	< 50	< 50	< 300
	03/10/04	< 50	< 50	< 300
	12/03/03	< 50	< 50	< 300
	08/13/03	< 50	< 50	< 300
	06/05/03	< 50	< 50	< 300
	06/05/03	< 50	< 50	< 300
1349MW01 ⁴ DUP1209021A 1349MW01CL	03/16/06	< 50	79 HY	< 300
	03/21/05	< 50	< 50	< 300
	03/15/04	< 50	< 50	< 300
	12/02/03	< 50	< 50	< 300
	08/21/03	< 50	< 50	< 300
	06/10/03	< 50	< 50	< 300
	03/12/03	NA	< 50	< 300
	12/09/02	< 50	< 50	< 300
	12/09/02	< 50	< 50	< 300
	12/09/02	< 50	< 50	< 250
	08/28/02	< 50	< 50	< 300
	05/30/02	< 50	< 50	< 300
	03/06/02	< 50	< 50	< 300
	11/28/01	< 50	< 50	< 300

Table A-9-2
Results of TPH Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
Cleanup Levels³		443	880	1,200
1349MW01 ⁴ DUP0830013A 1349MW01CL	08/30/01	< 50	< 50 ³	< 300 ³
	08/30/01	< 50	57 ³ Y,NJ	< 300 ³
	08/30/01	< 50	< 50	< 300
	05/10/01	< 50	< 50	< 300
	05/19/99	NA	< 50	< 300
	02/19/99	NA	< 50	< 300
	11/18/98	NA	< 50	< 300
	08/18/98	NA	< 50 (U15)	< 300
	04/16/98	NA	< 50	< 300
	01/22/98	NA	< 50	< 300
	10/30/97	NA	< 50	< 300
	07/31/97	NA	< 50	< 300
	05/01/97	NA	< 50	< 300
	02/10/97	NA	< 50	< 300
	11/25/96	NA	< 50	< 300
	09/12/96	NA	< 50	< 300
	08/08/95	NA	< 50	NA
1349MW02 ⁴ DUP0605032A DUP1204023A DUP0306022A DUP1128011A DUP0830012A 1349MW02CL	03/10/06	< 50	< 50	< 300
	08/31/05	< 50	< 50	< 300
	05/25/05	< 50	< 50	< 300
	03/21/05	< 50	< 50	< 300
	12/16/04	< 50	< 50	< 300
	08/12/04	< 50	< 50	< 300
	05/26/04	< 50	< 50	< 300
	03/15/04	< 50	< 50	< 300
	12/02/03	< 50	< 50	< 300
	08/13/03	< 50	290 HY	< 300
	06/05/03	< 50	< 50	< 300
	06/05/03	< 50	< 50	< 300
	03/12/03	NA	< 50	< 300
	12/04/02	< 50	< 50	< 300
	12/04/02	< 50	< 50	< 300
	08/28/02	< 50	< 50	< 300
	05/30/02	< 50	< 50	< 300
	03/06/02	< 50	< 50	< 300
	03/06/02	< 50	< 50	< 300
	11/28/01	< 50	< 50	< 300
	11/28/01	< 50	< 50	< 300
	08/30/01	< 50	57 ³ Y,NJ	< 300 ³
	08/30/01	< 50	67 ³ Y,NJ	< 300 ³
	08/30/01	< 50	< 50	< 300
	05/10/01	< 50	< 50	< 300
	05/19/99	NA	< 50	< 300
	02/19/99	NA	< 50	< 300
	11/18/98	NA	< 50	< 300
	08/18/98	NA	< 50 (U15)	< 300
	04/16/98	NA	< 50	< 300
	01/22/98	NA	< 50	< 300
	10/30/97	NA	< 50	< 300
	07/31/97	NA	58 (R32)	< 300
	05/01/97	NA	< 50	< 300

Table A-9-2
Results of TPH Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
Cleanup Levels³		443	880	1,200
1349MW02 ⁴	02/10/97	NA	< 50	< 300
	11/25/96	NA	< 50	< 300
	09/12/96	NA	< 50	< 300
	08/08/95	NA	< 50	NA
1349MW03R	03/16/06	< 50	< 50	< 300
	08/31/05	< 50	< 50	< 300
	05/25/05	< 50	< 50	< 300
	03/21/05	< 50	< 50	< 300
	12/16/04	< 50	< 50	< 300
	08/10/04	< 50	< 50	< 300
	05/26/04	< 50	< 50	< 300
	03/09/04	< 50	81 HY	770 Z
	12/02/03	< 50	< 50	< 300
	08/13/03	< 50	< 50	< 300
	06/09/03	< 50	< 50	< 300
1349MW100 ⁴ DUP0524063A 1349MW100CL	12/05/06	1,200 H	13,000	< 300
	08/16/06	820 HY	42,000	< 1,500
	05/24/06	690 HY	3,600	< 300
	05/24/06	490 HY	5,200	< 300
	05/24/06	350	5,400	< 2,100 U
	03/16/06	1,300 HY	6,900	< 300
	11/30/05	450 HY	26,000	< 900
	08/31/05	630 HY	20,000	< 300
	05/25/05	690 H	5,100	< 300
	03/23/05	960 HY	24,000	< 600
	12/16/04	1,400 HY J+	6,300	< 300
	08/10/04	3,000 HY	5,000	< 300
	05/27/04	920 HY	3,600	< 300
	03/16/04	930 H	31,000	< 600
	12/02/03	1,000 HY,J+	1,100 LY	< 300
	08/12/03	700 YH	9,000	< 300
	06/09/03	1,200 YH	5,100	< 300
	03/12/03	610 YH	1,800	< 300
	12/10/02	230 Y	1,500	< 300
1349MW101 DUP0525052A	03/16/06	< 50	< 50	< 300
	08/31/05	< 50	< 50	< 300
	05/25/05	< 50	< 50	< 300
	05/25/05	< 50	< 50	< 300
	03/21/05	< 50	< 50	< 300
	12/15/04	< 50	< 50	< 300
	03/09/04	< 50	< 50	< 300
	12/02/03	< 50	< 50	< 300
	08/19/03	< 50	< 50	< 300
1349MW102 DUP0307063C 1349MW102CL DUP0831052A DUP0321053A	06/09/03	< 50	< 50	< 300
	03/07/06	< 50	< 50	< 300
	03/07/06	< 50	< 50	< 300
	03/07/06	< 50 U	60 J+	< 300 U
	08/31/05	< 50	< 50	< 300
	08/31/05	< 50	< 50	< 300
	05/25/05	< 50	< 50	< 300
	03/21/05	< 50	< 50	< 300
	03/21/05	< 50	< 50	< 300
	12/16/04	< 50	< 50	< 300
	08/10/04	< 50	< 50	< 300
	08/10/04	< 50	< 50	< 300
	08/10/04	< 50	< 50	< 300

Table A-9-2
Results of TPH Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
Cleanup Levels³		443	880	1,200
1349MW102	05/27/04	< 50	51 Y	< 300
DUP0527041A	05/27/04	< 50	< 50	< 300
1349MW102CL	05/27/04	< 50	54	< 240
	03/10/04	< 50	< 50	< 300
DUP0310041A	03/10/04	< 50	< 50	< 300
1349MW102CL	03/10/04	< 50	NA	NA
	12/10/03	< 50	< 50	< 300
DUP1210031A	12/10/03	< 50	< 50	< 300
	08/12/03	< 50	< 50	< 300
	06/09/03	< 50	< 50	< 300
DUP0609032A	06/09/03	< 50	< 50	< 300
1349MW102CL	06/09/03	< 50	< 50	< 250

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - TPH analysis was not run using the silica gel cleanup method 3630A, although it was marked on the chain of custody.

3 - Groundwater cleanup levels were taken from the *Remedial Action Plan and Evaluation of Alternatives for Landfill 4 and Fill Site 5, Presidio of San Francisco, California* (Treadwell & Rollo, 2002e).

4 - Monitoring wells 1349MW01, 1349MW02, and 1349MW100 are located upgradient of Fill Site 5, therefore, the cleanup levels do not apply to these wells.

µg/L - micrograms per liter

NA - not analyzed

TPH - total petroleum hydrocarbons

Bold numbers indicate concentrations which exceed cleanup criteria.

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-9-3
Results of VOC Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	2-Butanone	Benzene	Bromo-form	Carbon Disulfide	Dibromo-chloro-methane	1,2-DCA	Ethyl-benzene	MTBE	Toluene	Total Xylenes	All Other VOCs
	Analytical Method ¹	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	1	--	--	--	0.5	700	--	150	318	--
LF5GW100	03/09/06	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	08/30/05	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/28/05	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	08/12/04	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/26/04	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/15/04	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/04/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/14/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/05/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/04/02	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/29/02	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/30/02	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/06/02	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	11/28/01	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
08/30/01	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
LF5GW100CL	05/10/01	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/10/01	< 10	< 1	< 1	< 0.5	< 1	< 1	< 1	NA	< 1	< 1	ND
	07/21/00	< 10	< 5	< 5	< 5	< 5	< 5	< 5	NA	< 5	< 5	ND
LF5GW101	03/09/06	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	08/30/05	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/28/05	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	08/12/04	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/26/04	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/15/04	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/04/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/14/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/05/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/04/02	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/29/02	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/30/02	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/06/02	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	11/28/01	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/30/01	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/10/01	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
07/21/00	< 10	< 5	< 5	< 5	< 5	< 5	< 5	NA	< 5	< 5	ND	
LF5GW102	03/09/06	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	08/30/05	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
DUP0830053A	08/30/05	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	08/30/05	< 10 U	< 0.5 U	< 1 U	< 5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 0.5 U	< 1 U	ND
LF5GW102CL	03/21/05	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	08/11/04	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/27/04	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/10/04	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP1203031A	12/03/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/03/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
LF5GW102CL	12/03/03	< 5	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/13/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
06/06/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	
LF5GW103	03/09/06	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	08/30/05	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/15/05	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	08/11/04	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/27/04	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/10/04	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP0819032A	12/03/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/19/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/19/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/19/03	< 5	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/05/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND

Table A-9-3
Results of VOC Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	2-Butanone	Benzene	Bromo-form	Carbon Disulfide	Dibromo-chloro-methane	1,2-DCA	Ethyl-benzene	MTBE	Toluene	Total Xylenes	All Other VOCs
	Analytical Method ¹	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		--	1	--	--	--	0.5	700	--	150	318	--
LF5GW104 DUP0307063B LF5GW104CL	03/07/06	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/07/06	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/07/06	< 10 U	< 0.5 U	< 1 U	< 5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 0.5 U	< 1 U	ND
	08/30/05	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/15/05	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	08/11/04	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/26/04	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/10/04	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/03/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/13/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
LF5SP100	06/05/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/21/06	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/22/05	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	12/05/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/05/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP1205031A LF5SP100CL	12/05/03	< 5	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/05/03	< 5	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
1349MW01 ³	03/16/06	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/21/05	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/15/04	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/02/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/21/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/10/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/12/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/09/02	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5 UJ	< 0.5	< 0.5	ND
	12/09/02	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5 UJ	< 0.5	< 0.5	ND
	12/09/02	< 5	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/28/02	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/30/02	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/06/02	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	11/28/01	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/30/01	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/30/01	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/30/01	< 50	< 0.5	< 1	< 0.5	< 1	< 1	< 0.5	< 5	< 0.5	< 0.5	ND
	05/10/01	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5 UJ	< 0.5	< 0.5 UJ	< 0.5 UJ	ND
	02/19/99	NA	< 0.5	NA	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	ND
	11/18/98	NA	< 0.5	NA	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	ND
	08/18/98	NA	< 0.5 U18	NA	NA	NA	NA	< 0.5 U18	NA	< 0.5 U18	< 0.5 U18	ND
	04/16/98	NA	< 0.5	NA	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	ND
	01/22/98	NA	< 0.5	NA	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	ND
	10/30/97	NA	< 0.5	NA	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	ND
	07/31/97	NA	< 0.5	NA	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	ND
	05/01/97	NA	< 0.5	NA	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	ND
	02/10/97	NA	< 0.5	NA	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	ND
	11/25/96	NA	< 0.5	NA	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	ND
	09/12/96	NA	< 0.5	NA	NA	NA	NA	< 0.5	NA	0.54	< 0.5	ND
	08/08/95	NA	< 0.5	NA	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	ND
1349MW02 ³	03/10/06	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	08/31/05	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	05/25/05	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/21/05	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/15/04	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/02/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/13/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/05/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/05/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/12/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/04/02	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/04/02	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/04/02	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/04/02	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/04/02	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND

Table A-9-3
Results of VOC Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	2-Butanone	Benzene	Bromo-form	Carbon Disulfide	Dibromo-chloro-methane	1,2-DCA	Ethyl-benzene	MTBE	Toluene	Total Xylenes	All Other VOCs
	Analytical Method ¹	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		--	1	--	--	--	0.5	700	--	150	318	--
1349MW02 ³	08/28/02	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/30/02	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP0306022A	03/06/02	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/06/02	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP1128011A	11/28/01	< 10	0.8	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.5	< 0.5	ND
	11/28/01	< 10	1.1	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	2.3	0.7	ND
DUP0830012A	08/30/01	< 10	< 0.5	< 1	1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/30/01	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
1349MW02CL	08/30/01	< 50	< 0.5	< 1	< 0.5	< 1	< 1	< 0.5	< 5	< 0.5	< 0.5	ND
	05/10/01	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	02/19/99	NA	< 0.5	NA	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	ND
	11/18/98	NA	< 0.5	NA	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	ND
	08/18/98	NA	< 0.5 U18	NA	NA	NA	NA	< 0.5 U18	NA	< 0.5 U18	< 0.5 U18	ND
	04/16/98	NA	< 0.5	NA	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	ND
	01/22/98	NA	< 0.5	NA	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	ND
	10/30/97	NA	< 0.5	NA	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	ND
	07/31/97	NA	< 0.5	NA	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	ND
	05/01/97	NA	< 0.5	NA	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	ND
	02/10/97	NA	< 0.5	NA	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	ND
	11/25/96	NA	< 0.5	NA	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	ND
	09/12/96	NA	< 0.5	NA	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	ND
	08/08/95	NA	< 0.5	NA	NA	NA	NA	< 0.5	NA	< 0.5	< 0.5	ND
1349MW03R	03/16/06	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	08/31/05	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/21/05	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/09/04	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/02/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/13/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/09/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
1349MW100 ³	12/05/06	< 10	18	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	2.3	ND
	08/16/06	< 10	23	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
DUP0524063A	05/24/06	< 10	29	< 1	0.7	< 0.5	< 0.5	0.8	< 0.5	< 0.5	3.8	ND
	05/24/06	< 10	28	< 1	0.8	< 0.5	< 0.5	0.8	< 0.5	< 0.5	3.7	ND
1349MW100CL	05/24/06	< 10 U	30	< 1 U	< 5 U	< 0.5 U	< 0.5 U	0.9	< 2 U	< 0.5 U	4.2	ND
	03/16/06	< 10	22	< 1	< 0.5	< 0.5	< 0.5	0.8	< 0.5	< 0.5	0.8	ND
	11/30/05	< 10	18	< 1	< 0.5	< 0.5	< 0.5	0.6	< 0.5	< 0.5	1.5	ND
	08/31/05	< 10	20	< 1	< 0.5	< 0.5	< 0.5	0.6	< 0.5	< 0.5	< 1	ND
	05/25/05	< 10	39	< 1	< 0.5	< 0.5	1.5	0.9	< 0.5	< 0.5	2	ND
	03/23/05	< 10 UJ	27	< 1	< 0.5	< 0.5	< 0.5	1.5	< 0.5	< 0.5	2.9	ND
	03/16/04	< 10	24	< 1	< 0.5	< 0.5	< 0.5	2.5	< 0.5	< 0.5	5.5	ND
	12/02/03	< 10	7.8	< 1	< 0.5	< 0.5	< 0.5	2	0.5	0.5	3.8	ND
	08/12/03	< 10	9.1	< 1	< 0.5	< 0.5	< 0.5	1.1	< 0.5	0.5	3	ND
	06/09/03	< 10	27	< 1	1.3	< 0.5	< 0.5	7	< 0.5	0.7	12	ND
	03/12/03	< 10	25	< 1	< 0.5 UJ	< 0.5	< 0.5	5	< 0.5	0.6	9.8	ND
	12/10/02	< 10	2.6	< 1	< 0.5	< 0.5	< 0.5	1.3	< 0.5 UJ	0.8	3	ND
1349MW101	03/16/06	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	08/31/05	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/21/05	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/09/04	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/02/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/19/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/09/03	< 10	< 0.5	0.6 J	< 0.5	0.6	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
1349MW102	03/07/06	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
DUP0307063C	03/07/06	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
1349MW102CL	03/07/06	< 10 U	< 0.5 U	< 1 U	< 5 U	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 0.5 U	< 1 U	ND
	08/31/05	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
DUP0831052A	08/31/05	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/21/05	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
DUP0321053A	03/21/05	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND

Table A-9-3
Results of VOC Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	2-Butanone	Benzene	Bromo-form	Carbon Disulfide	Dibromo-chloro-methane	1,2-DCA	Ethyl-benzene	MTBE	Toluene	Total Xylenes	All Other VOCs
	Analytical Method ¹	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M	SW8260/ SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		--	1	--	--	--	0.5	700	--	150	318	--
1349MW102	03/10/04	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP0310041A	03/10/04	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
1349MW102CL	03/10/04	< 5	< 0.5	< 0.5	< 5 UJ	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/10/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP1210031A	12/10/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/12/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/09/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP0609032A	06/09/03	< 10	< 0.5	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
1349MW102CL	06/09/03	< 5	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - Groundwater cleanup levels were taken from the *Remedial Action Plan and Evaluation of Alternatives for Landfill 4 and Fill Site 5, Presidio of San Francisco, California* (Treadwell & Rollo, 2002e).

3 - Monitoring wells 1349MW01, 1349MW02 and 1349MW100 are located upgradient of Fill Site 5, therefore, the cleanup levels do not apply to these wells.

-- - cleanup level not established

µg/L - micrograms per liter

ND - not detected

NA - not analyzed

1,2-DCA - 1,2-dichloroethane

VOCs - volatile organic compounds

MTBE - methyl tert-butyl ether

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Bold numbers indicate concentrations which exceed cleanup criteria.

Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-9-4
Results of OCP and PCB Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	alpha-Chlordane	beta-BHC	delta-BHC	Dieldrin	Endosulfan II	Endrin	gamma-BHC	gamma-Chlordane	Heptachlor	Heptachlor Epoxide	Meth-oxychlor	All Other OCPs / PCBs
	Analytical Method ¹	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	--	--	--	--	0.037 ³	--	0.056	--	--	0.05	--	0.025	--	--	--
LF5GW100	08/17/06	< 0.09	< 0.09	< 0.09 # UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5 # UJ	ND / NA
	03/09/06	< 0.1	< 0.1	< 0.1 UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / NA
	08/30/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	05/26/05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
DUP0526051A	05/26/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	05/26/05	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U	< 0.5 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U	< 0.5 U	< 0.05 U	< 0.05 U	< 0.5 U	ND
	03/28/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05 # UJ	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	12/16/04	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.5 UJ	ND
DUP1216041A	12/16/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	08/12/04	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.5	ND
	05/26/04	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.5	ND
	03/15/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
LF5GW100CL	12/04/03	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.1 UJ	< 0.1 UJ	< 0.1 b,UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.5 UJ	ND
	08/14/03	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	06/05/03	< 0.1	< 0.1	< 0.1 UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	12/04/02	< 0.099	< 0.099	< 0.099	< 0.05	< 0.05	< 0.05	< 0.05	< 0.099	< 0.099	< 0.099	< 0.05	< 0.05	< 0.05	NA	< 0.5	ND
	08/29/02	< 0.099	< 0.099	< 0.099	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.099	< 0.099	< 0.099	< 0.05 UJ	< 0.05	< 0.05 UJ	NA	< 0.5	ND
	05/30/02	< 0.099	< 0.099	< 0.099	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.099	< 0.099	< 0.099	< 0.05 UJ	< 0.05	< 0.05 UJ	NA	< 0.5	ND
	03/06/02	< 0.098	< 0.098	< 0.098 UJ	< 0.049 UJ	< 0.049	< 0.049 UJ	< 0.049 UJ	< 0.098	< 0.098	< 0.098	< 0.049 UJ	< 0.049	< 0.049 UJ	NA	< 0.49	ND
	11/28/01	< 0.096	< 0.096	< 0.096	< 0.048	< 0.048	< 0.048	< 0.048	< 0.096	< 0.096	< 0.096	< 0.048	< 0.048	< 0.048	NA	< 0.48	ND
	08/30/01	< 0.098	< 0.098	< 0.098	< 0.049	< 0.049	< 0.049	< 0.049	< 0.098	< 0.098	< 0.098	< 0.049	< 0.049	< 0.049	NA	< 0.49	ND
	05/10/01	< 0.097 UJ	< 0.097 UJ	< 0.097 UJ	< 0.049 UJ	< 0.049 UJ	< 0.049 UJ	< 0.049 UJ	< 0.097 UJ	< 0.097 UJ	< 0.097 UJ	< 0.049 UJ	< 0.049 UJ	< 0.049 UJ	NA	< 0.49 UJ	ND
	05/10/01	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	ND
	07/21/00	< 0.094	< 0.094	< 0.094	< 0.094	NA	< 0.094	< 0.094	< 0.094	< 0.094	< 0.094	< 0.094	NA	< 0.094	< 0.094	< 0.094	ND
LF5GW101	08/17/06	< 0.1	< 0.1	< 0.1 # UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5 # UJ	ND / NA
	03/09/06	< 0.09	< 0.09	< 0.09 UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / NA
	08/30/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	05/26/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	03/28/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05 # UJ	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	12/16/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	08/12/04	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.5	ND
	05/26/04	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.5	ND
	03/15/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	12/04/03	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1 b,UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	08/14/03	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	06/05/03	< 0.1	< 0.1	< 0.1 UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	12/04/02	< 0.098	< 0.098	< 0.098	< 0.049	< 0.049	< 0.049	< 0.049	< 0.098	< 0.098	< 0.098	< 0.049	< 0.049	< 0.049	NA	< 0.49	ND
	08/29/02	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	NA	< 0.5	ND
	05/30/02	< 0.099	< 0.099	< 0.099	< 0.05	< 0.05	< 0.05	< 0.05	< 0.099	< 0.099	< 0.099	< 0.05	< 0.05	< 0.05	NA	< 0.5	ND
	03/06/02	< 0.098	< 0.098	< 0.098 UJ	< 0.049 UJ	< 0.049	< 0.049 UJ	< 0.049 UJ	< 0.098	< 0.098	< 0.098	< 0.049 UJ	< 0.049	< 0.049 UJ	NA	< 0.49	ND
	11/28/01	< 0.096	< 0.096	< 0.096	< 0.048	< 0.048	< 0.048	< 0.048	< 0.096	< 0.096	< 0.096	< 0.048	< 0.048	< 0.048	NA	< 0.48	ND
	08/30/01	< 0.097	< 0.097	< 0.097	< 0.049	< 0.049	< 0.049	< 0.049	< 0.097	< 0.097	< 0.097	< 0.049	< 0.049	< 0.049	NA	< 0.49	ND
	05/10/01	< 0.097 UJ	< 0.097 UJ	< 0.097 UJ	< 0.049 UJ	< 0.049 UJ	< 0.049 UJ	< 0.049 UJ	< 0.097 UJ	< 0.097 UJ	< 0.097 UJ	< 0.049 UJ	< 0.049 UJ	< 0.049 UJ	NA	< 0.49 UJ	ND
	07/21/00	< 0.094	< 0.094	< 0.094	< 0.094	NA	< 0.094	< 0.094	< 0.094	< 0.094	< 0.094	< 0.094	NA	< 0.094	< 0.094	< 0.094	ND

Table A-9-4
Results of OCP and PCB Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	alpha-Chlordane	beta-BHC	delta-BHC	Dieldrin	Endosulfan II	Endrin	gamma-BHC	gamma-Chlordane	Heptachlor	Heptachlor Epoxide	Methoxychlor	All Other OCPs / PCBs
	Analytical Method ¹	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	--	--	--	--	0.037 ³	--	0.056	--	--	0.05	--	0.025	--	--	--
LF5GW102 DUP0830053A LF5GW102CL	08/17/06	< 0.1	< 0.1	< 0.1 # UJ	< 0.05 # UJ	< 0.05 # UJ	< 0.05 UJ	< 0.05 # UJ	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 # UJ	< 0.05 # UJ	< 0.5 # UJ	ND / NA
	03/09/06	< 0.1	< 0.1	< 0.1 # UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / NA
	08/30/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	08/30/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	08/30/05	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U	< 0.5 U	< 0.05 U	< 0.05 U	< 0.1 U	< 0.1 U	< 0.1 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.05 U	< 0.5 U	ND
	05/26/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	03/21/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	12/14/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	08/11/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	05/27/04	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.5	ND
	03/10/04	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	12/03/03	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
DUP1203031A LF5GW102CL	12/03/03	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	12/03/03	< 0.097	< 0.097	< 0.097	< 0.049	NA	< 0.049	< 0.049	< 0.097	< 0.097	< 0.097	< 0.049	< 0.49	< 0.049	< 0.049	< 0.49	ND
	08/13/03	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	06/06/03	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.5 UJ	ND
	LF5GW103	08/17/06	< 0.1	< 0.1	< 0.1 # UJ	< 0.05 # UJ	< 0.05 # UJ	< 0.05	< 0.05 # UJ	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05 # UJ	< 0.05 # UJ	< 0.5 # UJ
03/09/06	< 0.1	< 0.1	< 0.1 # UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / NA	
08/30/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND	
05/24/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND	
03/15/05	< 0.1 UJ	< 0.1 UJ	< 0.1 # UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.5 # UJ	ND	
12/14/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND	
08/11/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND	
05/27/04	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.5	ND	
03/10/04	< 0.09	< 0.09	< 0.09	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.09	< 0.09	< 0.09	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.5	ND	
12/03/03	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND	
08/19/03	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND	
08/19/03	< 0.09	< 0.09	< 0.09	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.09	< 0.09	< 0.09	< 0.05 UJ	< 0.05	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.5	ND
08/19/03	< 0.095 UJ	< 0.095 UJ	< 0.095 UJ	< 0.048	NA	< 0.048	< 0.048	< 0.095 UJ	< 0.095 UJ	< 0.095 UJ	< 0.048	< 0.48 UJ	< 0.048	< 0.048	< 0.48 UJ	< 0.48 UJ	ND
06/05/03	< 0.09 UJ	< 0.09 UJ	< 0.09 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.09 UJ	< 0.09 UJ	< 0.09 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.5 UJ	< 0.5 UJ	ND
LF5GW104 DUP0817062A DUP0307063B LF5GW104CL	08/17/06	< 0.1	< 0.1	< 0.1 # UJ	< 0.05 # UJ	< 0.05 # UJ	< 0.05	< 0.05 # UJ	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05 # UJ	< 0.05 # UJ	< 0.5 # UJ	ND / NA
	08/17/06	< 0.1	< 0.1	< 0.1 # UJ	< 0.05 # UJ	< 0.05 # UJ	< 0.05	< 0.05 # UJ	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05 # UJ	< 0.05 # UJ	< 0.5 # UJ	ND / NA
	03/07/06	< 0.09	< 0.09	< 0.09 # UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / NA
	03/07/06	< 0.09	< 0.09	< 0.09 # UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / NA
	03/07/06	< 0.1 U UJ	< 0.1 U UJ	< 0.1 U UJ	< 0.05 U	< 0.5 U UJ	< 0.05 U	< 0.05 U	< 0.1 U UJ	< 0.1 U UJ	< 0.1 U UJ	< 0.05 U	NA	< 0.05 U	< 0.05 U	< 0.5 U UJ	ND / NA
	08/30/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	05/24/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	03/15/05	< 0.1 UJ	< 0.1 UJ	< 0.1 # UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.5 # UJ	ND
	12/14/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	08/11/04	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	05/26/04	< 0.09	< 0.09	< 0.09	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.09	< 0.09	< 0.09	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.5	ND
	03/10/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	0.07 C	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	12/03/03	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	08/13/03	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	06/05/03	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.5 UJ	ND

Table A-9-4
Results of OCP and PCB Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	alpha-Chlordane	beta-BHC	delta-BHC	Dieldrin	Endosulfan II	Endrin	gamma-BHC	gamma-Chlordane	Heptachlor	Heptachlor Epoxide	Meth-oxychlor	All Other OCPs / PCBs
	Analytical Method ¹	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	--	--	--	--	0.037 ³	--	0.056	--	--	0.05	--	0.025	--	--	--
LF5SP100	03/21/06	< 0.1	< 0.1	< 0.1 # UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5 # UJ	ND / NA
	03/22/05	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.5 UJ	ND
	12/05/03	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1 b,UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	DUP1205031A	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.1 UJ	< 0.1 UJ	< 0.1 b,UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.5 UJ	ND
	LF5SP100CL	< 0.098 UJ	< 0.098 UJ	< 0.098 UJ	< 0.049 UJ	NA	< 0.049 UJ	< 0.049 UJ	< 0.098 UJ	< 0.098 UJ	< 0.098 UJ	< 0.049 UJ	< 0.49 UJ	< 0.049 UJ	< 0.049 UJ	< 0.49 UJ	ND
1349MW01 ⁴	03/16/06	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / NA
	03/21/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	03/15/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	12/02/03	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.5 UJ	ND
	08/21/03	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	06/10/03	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND
	03/12/03	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	NA	< 0.5	ND
	12/09/02	< 0.097	< 0.097	< 0.097	< 0.049	< 0.049	< 0.049	< 0.049	< 0.097	< 0.097	< 0.097	< 0.049	< 0.049	< 0.049	NA	< 0.49	ND
	DUP1209021A	< 0.097	< 0.097	< 0.097	< 0.049	< 0.049	< 0.049	< 0.049	< 0.097	< 0.097	< 0.097	< 0.049	< 0.049	< 0.049	NA	< 0.49	ND
	1349MW01CL	< 0.1	< 0.1	< 0.1	< 0.05 UJ	NA	< 0.05 UJ	< 0.05 UJ	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.5	< 0.05 UJ	< 0.05 UJ	< 0.5	ND
	08/28/02	< 0.097	< 0.097	< 0.097	< 0.049 UJ	< 0.049	< 0.049 UJ	< 0.049 UJ	< 0.097	< 0.097	< 0.097	< 0.049 UJ	< 0.049	< 0.049 UJ	NA	< 0.49	ND
	05/30/02	< 0.098	< 0.098	< 0.098	< 0.049 UJ	< 0.049	< 0.049 UJ	< 0.049 UJ	< 0.098	< 0.098	< 0.098	< 0.049 UJ	< 0.049	< 0.049 UJ	NA	< 0.49	ND
	03/06/02	< 0.098	< 0.098	< 0.098 UJ	< 0.049 UJ	< 0.049	< 0.049 UJ	< 0.049 UJ	< 0.098	< 0.098	< 0.098	< 0.049 UJ	< 0.049	< 0.049 UJ	NA	< 0.49	ND
	11/28/01	< 0.096	< 0.096	< 0.096	< 0.048	< 0.048	< 0.048	< 0.048	< 0.096	< 0.096	< 0.096	< 0.048	< 0.048	< 0.048	NA	< 0.48	ND
	DUP0830013A	< 0.097 UJ	< 0.097 UJ	< 0.097 UJ	< 0.049	< 0.049 UJ	< 0.049	< 0.049	< 0.097 UJ	< 0.097 UJ	< 0.097 UJ	< 0.049	< 0.049 UJ	< 0.049	NA	< 0.49 UJ	ND
1349MW01CL	08/30/01	< 0.098	< 0.098	< 0.098	< 0.049	< 0.049	< 0.049	< 0.049	< 0.098	< 0.098	< 0.098	< 0.049	< 0.049	< 0.049	NA	< 0.49	ND
	08/30/01	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	ND
	05/10/01	< 0.094 UJ	< 0.094 UJ	< 0.094 UJ	< 0.047	< 0.047 UJ	< 0.047	< 0.047	< 0.094 UJ	< 0.094 UJ	< 0.094 UJ	< 0.047	< 0.047 UJ	< 0.047	NA	< 0.47 UJ	ND
1349MW02 ⁴	03/10/06	< 0.1	< 0.1	< 0.1 # UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	08/31/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	05/25/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	03/21/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	12/16/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	08/12/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	05/26/04	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	03/15/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	12/02/03	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	08/13/03	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	06/05/03	< 0.09	< 0.09	< 0.09 UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	DUP0605032A	< 0.09	< 0.09	< 0.09 UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	03/12/03	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	NA	< 0.5	ND / ND
	12/04/02	< 0.097	< 0.097	< 0.097	< 0.049	< 0.049	< 0.049	< 0.049	< 0.097	< 0.097	< 0.097	< 0.049	< 0.049	< 0.049	NA	< 0.49	ND / ND
	DUP1204023A	< 0.094 UJ	< 0.094 UJ	< 0.094 UJ	< 0.047	< 0.047 UJ	< 0.047	< 0.047	< 0.094 UJ	< 0.094 UJ	< 0.094 UJ	< 0.047	< 0.047 UJ	< 0.047	NA	< 0.47 UJ	ND / ND
	08/28/02	< 0.095	< 0.095	< 0.095	< 0.048	< 0.048	< 0.048	< 0.048	< 0.095	< 0.095	< 0.095	< 0.048	< 0.048	< 0.048	NA	< 0.48	ND / ND
	05/30/02	< 0.099	< 0.099	< 0.099	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.099	< 0.099	< 0.099	< 0.05 UJ	< 0.05	< 0.05 UJ	NA	< 0.5	ND / ND
	03/06/02	< 0.095	< 0.095	< 0.095 UJ	< 0.048	< 0.048	< 0.048	< 0.048	< 0.095	< 0.095	< 0.095	< 0.048 UJ	< 0.048	< 0.048	NA	< 0.48	ND / ND
	DUP0306022A	< 0.095	< 0.095	< 0.095 UJ	< 0.048 UJ	< 0.048	< 0.048 UJ	< 0.048 UJ	< 0.095	< 0.095	< 0.095	< 0.048 UJ	< 0.048	< 0.048 UJ	NA	< 0.48	ND / ND

Table A-9-4
Results of OCP and PCB Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	alpha-Chlordane	beta-BHC	delta-BHC	Dieldrin	Endosulfan II	Endrin	gamma-BHC	gamma-Chlordane	Heptachlor	Heptachlor Epoxide	Meth-oxychlor	All Other OCPs / PCBs
	Analytical Method ¹	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	--	--	--	--	0.037 ³	--	0.056	--	--	0.05	--	0.025	--	--	--
1349MW02 ⁴ DUP1128011A	11/28/01	< 0.096	< 0.096	< 0.096	< 0.048	< 0.048	< 0.048	< 0.048	< 0.096	< 0.096	< 0.096	< 0.048	< 0.048	< 0.048	NA	< 0.48	ND / ND
	11/28/01	< 0.096 UJ	< 0.096 UJ	< 0.096 UJ	< 0.048	< 0.048 UJ	< 0.048	< 0.048	< 0.096 UJ	< 0.096 UJ	< 0.096 UJ	< 0.048	< 0.048 UJ	< 0.048	NA	< 0.48 UJ	ND / ND
	08/30/01	< 0.098 UJ	< 0.098 UJ	< 0.098 UJ	< 0.049	< 0.049 UJ	< 0.049	< 0.049	< 0.098 UJ	< 0.098 UJ	< 0.098 UJ	< 0.049	< 0.049 UJ	< 0.049	NA	< 0.49 UJ	ND / ND
	08/30/01	< 0.097	< 0.097	< 0.097	< 0.049	< 0.049	< 0.049	< 0.049	< 0.097	< 0.097	< 0.097	< 0.049	< 0.049	< 0.049	NA	< 0.49	ND / ND
	08/30/01	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	ND / ND
1349MW02CL	05/10/01	< 0.094	< 0.094	< 0.094	< 0.047	< 0.047	< 0.047	< 0.047	< 0.094	< 0.094	< 0.094	< 0.047	< 0.047	< 0.047	NA	< 0.47	ND / ND
1349MW03R	08/17/06	< 0.09	< 0.09	< 0.09 # UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5 # UJ	ND / NA
	03/16/06	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	08/31/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	05/25/05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	03/21/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	12/16/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	08/10/04	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	05/26/04	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.5	ND / ND
	03/09/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	0.08 C	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	12/02/03	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	08/13/03	< 0.09	< 0.09	< 0.09	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.09	< 0.09	< 0.09	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.5	ND / ND
	06/09/03	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.5 UJ	ND / ND
1349MW100 ⁴ DUP0524063A 1349MW100CL	12/05/06	< 0.2	0.3	< 0.2 # UJ	< 0.1 UJ	< 0.1	< 0.1 UJ	< 0.1 UJ	0.3	< 0.2	< 0.2	< 0.2 UJ	< 0.1	0.2 J-	< 0.1 UJ	< 1	ND / NA
	08/16/06	< 0.3 UJ	< 0.3 UJ	0.4 J-	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.3 UJ	< 0.3 UJ	0.7 C J-	2.4 J-	< 0.1 UJ	2.2 C J-	0.4 C J-	< 1.4 UJ	ND / ND
	05/24/06	< 0.5	< 0.5	0.8 C	< 0.2	< 0.2	< 0.5 # UJ	< 0.2 # UJ	< 0.5	< 0.5	< 0.5	< 0.2	< 0.2	< 0.2	0.4	< 2.4	ND / ND
	05/24/06	< 0.5	< 0.5	0.8	0.3 C	0.8	< 0.5 # UJ	< 0.2 # UJ	< 0.5	< 0.5	< 0.5	< 0.2	< 0.2	< 0.2	0.3	< 2.4	ND / ND
	05/24/06	< 0.1 U UJ	< 0.1 U UJ	< 0.1 U UJ	< 0.05 U	< 0.5 U UJ	< 0.05 U	< 0.05 U	< 0.1 U UJ	< 0.1 U UJ	< 0.1 U UJ	0.082	NA	< 0.05 U	< 0.05 U	< 0.5 U UJ	ND / ND
	03/16/06	0.9 C J-	< 0.1 UJ	< 0.1 UJ	0.3	0.9 C J-	< 0.05	0.1 C	0.4 C J-	< 0.1 UJ	< 0.1 UJ	< 0.05	0.7 C J-	0.8 C	0.2	< 0.5 UJ	ND / ND
	11/30/05	< 0.5	< 0.5	< 0.5	< 0.2	0.3 C	< 0.2	< 0.2	< 0.5	< 0.5	< 0.5	1.3	< 0.2	< 0.2	< 0.2	< 2.4	ND / ND
	08/31/05	< 0.1	< 0.1	1 Cb J	< 0.05	0.2 C	< 0.5	0.08 b J	0.1	0.8 C	< 0.1	8.5 Cb J	0.2	< 0.05	0.2 C	< 0.5	ND / ND
	05/25/05	< 1	< 1	< 1	< 0.5	< 0.5	< 1	< 0.5	< 1	< 1	< 1	4.5 #C	< 0.5	< 0.5	< 0.5	< 4.8	ND / ND
	03/23/05	< 1	< 1	< 1 # UJ	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 1	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 5	ND / ND
	12/16/04	< 1	< 1 #	< 1 # UJ	< 0.5	< 0.5	< 0.5	< 0.5	< 1	< 1	< 1	< 0.5	< 0.5	< 0.5	< 0.5	< 4.8 # UJ	ND / ND
	08/10/04	0.9 C	1.1 C	0.4	0.2	0.1	< 0.05	0.1 C	0.5 C	< 0.1	0.1 C	3.7 C	< 0.05	1.6 C	< 0.05	< 0.5	ND / ND
	05/27/04	< 0.2 UJ	< 0.2 UJ	0.5 C, J-	< 0.09	0.2 C, J-	< 0.09	0.2 C	0.3 J-	0.7 C, J-	0.2 J-	< 0.2	0.1 J-	0.8 C	0.2 C	< 0.9 UJ	ND / ND
	03/16/04	< 0.09 UJ	0.7 Cb,J-	0.7 C,J-	< 0.05 UJ	0.2 J-	< 0.05 UJ	0.08 b,J-	0.3 J-	0.6 J-	0.2 J-	< 0.05 UJ	0.3 C,J-	0.8 Cb,J-	0.2 C,J-	1.2 b,J-	ND / ND
	12/02/03	0.5 C	0.7 C	0.5 Cb,J-	< 0.05	< 0.05	3.9 C	0.06 C	0.1	< 0.09	< 0.09	2.3 C	< 0.05	< 0.05	0.2 C	< 0.5	ND / ND
	08/12/03	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	0.2 C	0.1 J-	< 0.2	< 0.05	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	4.6 C	0.07 J-	2.6 Cb,J-	0.1	< 0.5 UJ	ND / ND
	06/09/03	0.3 C,J-	0.3 C,J-	< 0.09 UJ	0.07 C	< 0.05 UJ	< 0.05	0.2 C	< 0.09 UJ	< 0.09 UJ	< 0.09 UJ	4.5 C	0.4 C,J-	< 0.05	< 0.05	< 0.5 UJ	ND / ND
	03/12/03	0.3 Cb,J+	< 0.1 UJ	0.2 C,J-	0.3 C,J+	0.2 C,J-	6.1 C,J+	0.1 C,J+	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	2.2 C,J+	0.2 C,J-	0.8 C,J+	NA	< 0.5 UJ	ND / ND
	12/10/02	< 0.097	< 0.097	< 0.097	0.11 C,J-	< 0.049	1.5 C,J-	< 0.049 UJ	< 0.097	< 0.097	< 0.097	0.43 C,J-	< 0.049	0.83 C,J-	NA	< 0.49	ND / ND
1349MW101 DUP0525052A	08/17/06	< 0.09	< 0.09	< 0.09 # UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5 # UJ	ND / NA
	03/16/06	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	08/31/05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	05/25/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	05/25/05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	03/21/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	12/15/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	03/09/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	0.06 C	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND

Table A-9-4
Results of OCP and PCB Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	4,4'-DDD	4,4'-DDE	4,4'-DDT	Aldrin	alpha-Chlordane	beta-BHC	delta-BHC	Dieldrin	Endosulfan II	Endrin	gamma-BHC	gamma-Chlordane	Heptachlor	Heptachlor Epoxide	Meth-oxychlor	All Other OCPs / PCBs
	Analytical Method ¹	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082	SW8081/ SW8081A/ SW8082
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	--	--	--	--	0.037 ³	--	0.056	--	--	0.05	--	0.025	--	--	--
1349MW101	12/02/03	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	08/19/03	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	06/09/03	< 0.09 UJ	< 0.09 UJ	< 0.09 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.09 UJ	< 0.09 UJ	< 0.09 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.5 UJ	ND / ND
1349MW102	08/17/06	< 0.09 UJ	< 0.09 UJ	< 0.09 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.09 UJ	< 0.09 UJ	< 0.09 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.5 UJ	ND / NA
	03/07/06	< 0.1	< 0.1	< 0.1 # UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	03/07/06	< 0.1	< 0.1	< 0.1 # UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
DUP0307063C 1349MW102CL	03/07/06	< 0.1 U R	< 0.1 U R	< 0.1 U R	< 0.05 U UJ	< 0.5 U R	< 0.05 U UJ	< 0.05 U UJ	< 0.1 U R	< 0.1 U R	< 0.1 U R	< 0.05 U UJ	NA	< 0.05 U UJ	< 0.05 U UJ	< 0.5 U R	ND / ND
	08/31/05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	08/31/05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
DUP0321053A	05/25/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	03/21/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	03/21/05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
DUP0527041A 1349MW102CL	12/16/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	08/10/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	08/10/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
DUP0310041A 1349MW102CL	05/27/04	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.5	ND / ND
	05/27/04	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.5	ND / ND
	05/27/04	< 0.098	< 0.098	< 0.098	< 0.049	NA	< 0.049	< 0.049	< 0.098	< 0.098	< 0.098	< 0.049	< 0.49	< 0.049	< 0.049	< 0.49	ND / ND
DUP0310041A 1349MW102CL	03/10/04	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.1	< 0.1	< 0.1	< 0.05 UJ	< 0.05	< 0.05 UJ	< 0.05 UJ	< 0.5	ND / ND
	03/10/04	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.5	ND / ND
	03/10/04	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05 UJ	NA	< 0.05 UJ	< 0.05 UJ	< 0.1 UJ	< 0.1 UJ	< 0.1 UJ	< 0.05 UJ	< 0.5 UJ	< 0.05 UJ	< 0.05 UJ	< 0.5 UJ	ND / ND
DUP1210031A	12/10/03	< 0.1	< 0.1	< 0.1 b,UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	0.07 C,J+	< 0.05	< 0.05 b,UJ	< 0.05	< 0.5 b,UJ	ND / ND
	12/10/03	< 0.09	< 0.09	< 0.09 b,UJ	< 0.05	< 0.05	< 0.05	< 0.05	< 0.09	< 0.09	< 0.09	0.07 J+	< 0.05	< 0.05 b,UJ	< 0.05	< 0.5 b,UJ	ND / ND
	08/12/03	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.05 UJ	< 0.05	< 0.5	ND / ND
DUP0609032A 1349MW102CL	06/09/03	< 0.09 UJ	< 0.09 UJ	< 0.09 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.09 UJ	< 0.09 UJ	< 0.09 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.5 UJ	ND / ND
	06/09/03	< 0.09 UJ	< 0.09 UJ	< 0.09 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.09 UJ	< 0.09 UJ	< 0.09 UJ	< 0.05	< 0.05 UJ	< 0.05	< 0.05	< 0.5 UJ	ND / ND
	06/09/03	< 0.095 UJ	< 0.095 UJ	< 0.095 UJ	< 0.048 UJ	NA	< 0.048 UJ	< 0.048 UJ	< 0.095 UJ	< 0.095 UJ	< 0.095 UJ	< 0.048 UJ	< 0.48 UJ	< 0.048 UJ	< 0.048 UJ	< 0.48 UJ	ND / ND

Notes

- 1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.
- 2 - Groundwater cleanup levels were taken from the *Remedial Action Plan and Evaluation of Alternatives for Landfill 4 and Fill Site 5, Presidio of San Francisco, California* (Treadwell & Rollo, 2002e).
- 3 - The RAP does not list a cleanup level for beta-BHC; however, the RAP states that when chemicals are encountered in groundwater and cleanup levels are not listed, the default should be Tap Water PRGs. The Tap Water PRG for beta-BHC (HCH-beta) is 0.037 µg/L.
- 4 - Monitoring wells 1349MW01, 1349MW02, and 1349MW100 are located upgradient of Fill Site 5, therefore, the cleanup levels do not apply to these wells.
- - cleanup level not established
- µg/L - micrograms per liter
- ND - not detected
- NA - not analyzed
- # - The continuing calibration verification (CCV) drifted outside the limits although the average CCV drift was within method requirements.
- OCPs - organochlorine pesticides
- PCBs - polychlorinated biphenyls
- CL suffix denotes a quality control duplicate sample was sent to the control laboratory.
- Bold** numbers indicate detected concentrations which exceed cleanup criteria.
- Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.
- Table 11 in the main report identifies current and historical data qualifiers.

Table A-9-5
Results of PAH Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	Acena-phthene	Anthracene	Benzo(a)-anthracene	Benzo(a)-Pyrene	Benzo(b)-Fluoranthene	Benzo(g,h,i)-perylene	Benzo(k)-Fluoranthene	Chrysene	Dibenz(a,h)-anthracene	Fluor-anthene	Fluorene	Indeno-(1,2,3-c,d)-pyrene	Naph-thalene	Phen-anthrene	Pyrene	All Other PAHs
	Analytical Method ¹	SW8310/ SW8270	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	770	0.1	0.2	0.2	50	2	20	--	300	300	--	--	230	230	--
LF5GW100	03/09/06	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	08/30/05	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	03/28/05	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	08/12/04	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	05/26/04	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	03/15/04	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
	12/04/03	< 0.99	< 0.5	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.4	< 0.99	< 0.14	< 0.99	< 0.5	< 0.2	ND
	08/14/03	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	06/05/03	< 0.98	< 0.49	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.39	< 0.98	< 0.14	< 0.98	< 0.49	< 0.2	ND
	12/04/02	< 1	< 0.5	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.4	< 1	< 0.14	< 1	< 0.5	< 0.2	ND
	08/29/02	< 0.99	< 0.5	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.4	< 0.99	< 0.14	< 0.99	< 0.5	< 0.2	ND
	05/30/02	< 0.98	< 0.49	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.39	< 0.98	< 0.14	< 0.98	< 0.49	< 0.2	ND
	03/06/02	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	11/28/01	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
	08/30/01	< 1	< 0.52	< 0.1	< 0.1	< 0.21	< 0.21	< 0.1	< 0.1	< 0.21	< 0.42	< 1	< 0.15	< 1	< 0.52	< 0.21	ND
	05/10/01	< 0.96 UJ	< 0.48 UJ	< 0.1 UJ	< 0.1 UJ	< 0.19 UJ	< 0.19 UJ	< 0.1 UJ	< 0.1 UJ	< 0.19 UJ	< 0.38 UJ	< 0.96 UJ	< 0.13 UJ	< 0.96 UJ	< 0.48 UJ	< 0.19 UJ	ND
LF5GW100CL	05/10/01	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.15	< 0.1	< 0.1	< 0.15	< 0.1	< 0.15	ND
	07/21/00	< 9.5	< 9.5	< 9.5	< 9.5	< 9.5	< 9.5	< 9.5	< 9.5	< 9.5	< 9.5	< 9.5	< 9.5	< 9.5	< 9.5	< 9.5	ND
LF5GW101	03/09/06	< 1	< 0.5	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.4	< 1	< 0.14	< 1	< 0.5	< 0.2	ND
	08/30/05	< 0.98	< 0.49	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.39	< 0.98	< 0.14	< 0.98	< 0.49	< 0.2	ND
	03/28/05	< 0.99	< 0.5	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.4	< 0.99	< 0.14	< 0.99	< 0.5	< 0.2	ND
	08/12/04	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
	05/26/04	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
	03/15/04	< 1	< 0.5	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.4	< 1	< 0.14	< 1	< 0.5	< 0.2	ND
	12/04/03	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	08/14/03	< 0.98	< 0.49	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.39	< 0.98	< 0.14	< 0.98	< 0.49	< 0.2	ND
	06/05/03	< 0.98	< 0.49	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.39	< 0.98	< 0.14	< 0.98	< 0.49	< 0.2	ND
	12/04/02	< 1	< 0.5	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.4	< 1	< 0.14	< 1	< 0.5	< 0.2	ND
	08/29/02	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	05/30/02	< 0.98	< 0.49	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.39	< 0.98	< 0.14	< 0.98	< 0.49	< 0.2	ND
	03/06/02	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	11/28/01	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
	08/30/01	< 1.1	< 0.53	< 0.11	< 0.11	< 0.21	< 0.21	< 0.11	< 0.11	< 0.21	< 0.42	< 1.1	< 0.15	< 1.1	< 0.53	< 0.21	ND
	05/10/01	< 0.97	< 0.49 UJ	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	07/21/00	< 9.5	< 9.5	< 9.5	< 9.5	< 9.5	< 9.5	< 9.5	< 9.5	< 9.5	< 9.5	< 9.5	< 9.5	< 9.5	< 9.5	< 9.5	ND

Table A-9-5
Results of PAH Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	Acena-phthene	Anthracene	Benzo(a)-anthracene	Benzo(a)-Pyrene	Benzo(b)-Fluoranthene	Benzo(g,h,i)-perylene	Benzo(k)-Fluoranthene	Chrysene	Dibenz(a,h)-anthracene	Fluor-anthene	Fluorene	Indeno-(1,2,3-c,d)-pyrene	Naph-thalene	Phen-anthrene	Pyrene	All Other PAHs
	Analytical Method ¹	SW8310/ SW8270	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	770	0.1	0.2	0.2	50	2	20	--	300	300	--	--	230	230	--
LF5GW102 DUP0830053A LF5GW102CL DUP1203031A LF5GW102CL	03/09/06	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	08/30/05	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	08/30/05	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	08/30/05	< 5 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.5 U	< 0.2 U	< 1 U	< 0.2 U	< 5 U	< 1 U	< 0.2 U	ND
	03/21/05	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	08/11/04	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	05/27/04	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	03/10/04	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	12/03/03	< 0.95	< 0.49	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.39	< 0.98	< 0.14	< 0.98	< 0.49	< 0.2	ND
	12/03/03	< 0.98	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	12/03/03	< 0.48	< 0.048	< 0.048	< 0.048	< 0.095	< 0.095	< 0.048	< 0.048	< 0.19	0.14	< 0.095	< 0.048	< 0.48	0.094	0.12	ND
	08/13/03	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
	06/06/03	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
LF5GW103 DUP0819032A LF5GW103CL	03/09/06	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
	08/30/05	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
	03/15/05	< 1	< 0.5	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.4	< 1	< 0.14	< 1	< 0.5	< 0.2	ND
	08/11/04	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	05/27/04	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	03/10/04	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	12/03/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	08/19/03	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	08/19/03	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	08/19/03	< 0.48	< 0.048	< 0.048	< 0.048	< 0.095	< 0.095	< 0.048	< 0.048	< 0.19	< 0.095	< 0.095	< 0.048	< 0.48	< 0.048	< 0.048	ND
	06/05/03	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
LF5GW104 DUP0307063B LF5GW104CL	03/07/06	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	03/07/06	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	03/07/06	< 5 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.5 U	< 0.2 U	< 1 U	< 0.2 U	< 5 U	< 1 U	< 0.2 U	ND
	08/30/05	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	03/15/05	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
	08/11/04	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	05/26/04	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	03/10/04	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	12/03/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	08/13/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	06/05/03	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND

Table A-9-5
Results of PAH Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	Acena-phthene	Anthracene	Benzo(a)-anthracene	Benzo(a)-Pyrene	Benzo(b)-Fluoranthene	Benzo(g,h,i)-perylene	Benzo(k)-Fluoranthene	Chrysene	Dibenz(a,h)-anthracene	Fluor-anthene	Fluorene	Indeno-(1,2,3-c,d)-pyrene	Naph-thalene	Phen-anthrene	Pyrene	All Other PAHs
	Analytical Method ¹	SW8310/ SW8270	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	770	0.1	0.2	0.2	50	2	20	--	300	300	--	--	230	230	--
1349MW01 ³ DUP1209021A 1349MW01CL	03/16/06	< 0.98	< 0.49	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.39	< 0.98	< 0.14	< 0.98	< 0.49	< 0.2	ND
	03/21/05	< 0.98	< 0.49	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.39	< 0.98	< 0.14	< 0.98	< 0.49	< 0.2	ND
	03/15/04	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	12/02/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	08/21/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	06/10/03	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
	03/12/03	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
	12/09/02	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	12/09/02	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	12/09/02	< 0.5	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.05	< 0.05	< 0.2	< 0.1	< 0.1	< 0.05	< 0.5	< 0.05	< 0.05	ND
	08/28/02	< 0.99	< 0.5	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.4	< 0.99	< 0.14	< 0.99	< 0.5	< 0.2	ND
	05/30/02	< 0.98	< 0.49	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.39	< 0.98	< 0.14	< 0.98	< 0.49	< 0.2	ND
	03/06/02	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	11/28/01	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
	08/30/01	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
DUP0830013A 1349MW01CL	08/30/01	< 1.1	< 0.53	< 0.11	< 0.11	< 0.21	< 0.19	< 0.11	< 0.11	< 0.19	< 0.43	< 1.1	< 0.13	< 1.1	< 0.53	< 0.21	ND
	08/30/01	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.15	< 0.1	< 0.1	< 0.15	< 0.1	< 0.15	ND
	05/10/01	< 0.95 UJ	< 0.48 UJ	< 0.1 UJ	< 0.1 UJ	< 0.19 UJ	< 0.19 UJ	< 0.1 UJ	< 0.1 UJ	< 0.19 UJ	< 0.38 UJ	< 0.95 UJ	< 0.13 UJ	< 0.95 UJ	< 0.48 UJ	< 0.19 UJ	ND
1349MW02 DUP0605032A DUP1204023A DUP0306022A DUP1128011A DUP0830012A 1349MW02CL	03/10/06	< 0.98	< 0.49	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.39	< 0.98	< 0.14	< 0.98	< 0.49	< 0.2	ND
	08/31/05	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	05/25/05	< 0.99	< 0.5	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.4	< 0.99	< 0.14	< 0.99	< 0.5	< 0.2	ND
	03/21/05	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	03/15/04	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	12/02/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	08/13/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	06/05/03	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	06/05/03	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	03/12/03	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	12/04/02	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	12/04/02	< 0.98	< 0.49	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.39	< 0.98	< 0.14	< 0.98	< 0.49	< 0.2	ND
	08/28/02	< 0.98	< 0.49	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.39	< 0.98	< 0.14	< 0.98	< 0.49	< 0.2	ND
	05/30/02	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	03/06/02	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	03/06/02	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	11/28/01	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
	11/28/01	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
	08/30/01	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	08/30/01	< 1	< 0.51	< 0.1	< 0.1	< 0.2	< 0.19	< 0.1	< 0.1	< 0.19	< 0.41	< 1	< 0.13	< 1	< 0.51	< 0.2	ND
	08/30/01	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.15	< 0.1	< 0.1	< 0.15	< 0.1	< 0.15	ND
	05/10/01	< 0.97	< 0.49 UJ	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND

Table A-9-5
Results of PAH Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	Acena-phthene	Anthracene	Benzo(a)-anthracene	Benzo(a)-Pyrene	Benzo(b)-Fluoranthene	Benzo(g,h,i)-perylene	Benzo(k)-Fluoranthene	Chrysene	Dibenz(a,h)-anthracene	Fluor-anthene	Fluorene	Indeno-(1,2,3-c,d)-pyrene	Naph-thalene	Phen-anthrene	Pyrene	All Other PAHs
	Analytical Method ¹	SW8310/ SW8270	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	770	0.1	0.2	0.2	50	2	20	--	300	300	--	--	230	230	--
1349MW03R	03/16/06	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	08/31/05	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	03/21/05	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	03/09/04	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	12/02/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	08/13/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	06/09/03	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
1349MW100 ³ DUP0524063A 1349MW100CL	12/05/06	12	1.1	2.3	< 0.1	1.2	< 0.2	0.11	1.2	< 0.2	41	17	< 0.14	< 1	41	< 0.2	ND
	08/16/06	4.9	0.71	1.1	< 0.09 R	< 0.19	< 0.19	< 0.09	1.1	< 0.19	4.7	13	< 0.13	< 0.94 R	17	1.5 J-	ND
	05/24/06	3.6	0.2 J	0.11	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	1.6	7.5	< 0.14	< 1	4.9	0.38	ND
	05/24/06	4.3	0.28 J	0.14	< 0.1	< 0.2	< 0.2	< 0.1	0.1	< 0.2	1.8	8.4	< 0.14	< 0.98	5.8	0.48	ND
	05/24/06	5.6 P J-	0.24 P J-	0.48 P J-	< 0.2 U UJ	< 0.2 U UJ	< 0.2 U UJ	< 0.2 U UJ	< 0.2 U UJ	< 0.5 U UJ	0.38 P J-	4 J-	< 0.2 U UJ	< 5 U UJ	3.5 J-	0.44 P J-	ND
	03/16/06	6.6	0.36 J	0.35	< 0.1	< 0.19	< 0.19	< 0.1	0.29	< 0.19	2.3	10	< 0.13	< 0.96	9	0.75	ND
	11/30/05	12 J+	2.8 J+	3.7 J+	< 0.09	0.74 J+	< 0.19	0.31 J+	4.1 J+	< 0.19	22 J+	29 J+	< 0.13	< 0.94	63 J+	7.8 J+	ND
	08/31/05	10 J+	< 0.48	1.3 J+	< 0.1	< 0.19	< 0.19	< 0.1	0.74 J+	< 0.19	11 J+	< 0.95	< 0.13	< 0.95	9.2 J+	0.65 J+	ND
	05/25/05	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	0.78 J+	18 J+	< 0.13	< 0.94	8.4 J+	0.34 J+	ND
	03/23/05	< 0.95	< 0.48	< 0.1	0.63 J+	4.8 J+	< 0.19	0.85 J+	< 0.1	1.7 J+	5.4 J+	22	< 0.13	< 0.95	34	3.8 J+	ND
	03/16/04	< 19	< 9.4	6.2	< 1.9	< 3.8	< 3.8	< 1.9	2.7	< 3.8	14	46	< 2.6	< 19	86	< 3.8	ND
	12/02/03	< 0.95	0.59 J,J+	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	0.32 J+	< 0.19	0.96 J+	11 J+	< 0.13	< 0.95	9.6 J+	0.28 J+	ND
	08/12/03	< 0.95	1.1 J+	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	0.81 J+	< 0.19	1.7 J+	19 J+	< 0.13	< 0.95	18 J+	0.51 J+	ND
	06/09/03	< 0.94	< 0.47	0.53 J+	< 0.09	< 0.19	< 0.19	< 0.09	1 J+	< 0.19	2.4 J+	13 J+	< 0.13	7.5 J+	17 J+	0.75 J+	ND
	03/12/03	< 0.98	< 0.49	0.14	< 0.1	< 0.2	< 0.2	< 0.1	0.16	< 0.2	< 0.39	5.2	< 0.14	< 0.98	5.3	0.27	ND
	12/10/02	< 0.94	0.25 J	0.15	< 0.09	< 0.19	< 0.19	< 0.09	0.17	< 0.19	0.43	4	< 0.13	< 0.94	4.2	0.23	ND
1349MW101	03/16/06	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
	08/31/05	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	03/21/05	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	03/09/04	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	12/02/03	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	08/19/03	< 0.95 UJ	< 0.48 UJ	< 0.1 UJ	< 0.1 UJ	< 0.19 UJ	< 0.19 UJ	< 0.1 UJ	< 0.1 UJ	< 0.19 UJ	< 0.38 UJ	< 0.95 UJ	< 0.13 UJ	< 0.95 UJ	< 0.48 UJ	< 0.19 UJ	ND
	06/09/03	< 0.94 UJ	< 0.47 UJ	< 0.09 UJ	< 0.09 UJ	< 0.19 UJ	< 0.19 UJ	< 0.09 UJ	< 0.09 UJ	< 0.19 UJ	< 0.38 UJ	< 0.94 UJ	< 0.13 UJ	< 0.94 UJ	< 0.47 UJ	< 0.19 UJ	ND
1349MW102 DUP0307063C 1349MW102CL DUP0831052A DUP0321053A DUP0310041A 1349MW102CL DUP1210031A	03/07/06	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
	03/07/06	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
	03/07/06	< 5 U UJ	< 0.2 U UJ	< 0.2 U UJ	< 0.2 U UJ	< 0.2 U UJ	< 0.2 U UJ	< 0.2 U UJ	< 0.2 U UJ	< 0.5 U UJ	< 0.2 U UJ	< 1 U UJ	< 0.2 U UJ	< 5 U UJ	< 1 U UJ	< 0.2 U UJ	ND
	08/31/05	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	08/31/05	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	03/21/05	< 0.98	< 0.49	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.39	< 0.98	< 0.14	< 0.98	< 0.49	< 0.2	ND
	03/21/05	< 1	< 0.5	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.4	< 1	< 0.14	< 1	< 0.5	< 0.2	ND
	03/10/04	< 0.98	< 0.49	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.39	< 0.98	< 0.14	< 0.98	< 0.49	< 0.2	ND
	03/10/04	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.97	< 0.14	< 0.97	< 0.49	< 0.19	ND
	03/10/04	< 0.5	< 0.05	< 0.05	< 0.05 R	< 0.1 UJ	< 0.1 UJ	< 0.05 UJ	< 0.05	< 0.2 UJ	< 0.1	< 0.1	< 0.05 UJ	< 0.5	< 0.05	< 0.05	ND
	12/10/03	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	12/10/03	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.94	< 0.13	< 0.94	< 0.47	< 0.19	ND
	08/12/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND

Table A-9-5
Results of PAH Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	Acena-phthene	Anthracene	Benzo(a)-anthracene	Benzo(a)-Pyrene	Benzo(b)-Fluoranthene	Benzo(g,h,i)-perylene	Benzo(k)-Fluoranthene	Chrysene	Dibenz(a,h)-anthracene	Fluor-anthene	Fluorene	Indeno-(1,2,3-c,d)-pyrene	Naph-thalene	Phen-anthrene	Pyrene	All Other PAHs
	Analytical Method ¹	SW8310/ SW8270	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310	SW8310
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	770	0.1	0.2	0.2	50	2	20	--	300	300	--	--	230	230	--
1349MW102	06/09/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.95	< 0.13	< 0.95	< 0.48	< 0.19	ND
DUP0609032A	06/09/03	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.96	< 0.13	< 0.96	< 0.48	< 0.19	ND
1349MW102CL	06/09/03	< 0.48	< 0.048	< 0.048	< 0.048	< 0.095	< 0.095	< 0.048	< 0.048	< 0.19	< 0.095	< 0.095	< 0.048	< 0.48	< 0.048	< 0.048	ND

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - Groundwater cleanup levels were taken from the *Remedial Action Plan and Evaluation of Alternatives for Landfill 4 and Fill Site 5, Presidio of San Francisco, California* (Treadwell & Rollo, 2002e).

3 - Monitoring wells 1349MW01, 1349MW02, and 1349MW100 is located upgradient of Fill Site 5, therefore, the cleanup levels do not apply to these wells.

-- - cleanup level not established

Bold numbers indicate concentrations which exceed cleanup criteria.

µg/L - micrograms per liter

ND - not detected

NA - not analyzed

PAHs - polycyclic aromatic hydrocarbons

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-9-6
Results of Chlorinated Herbicide Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	2,4-D	2,4-DB	All Other Chlorinated Herbicides
	Analytical Method ¹	SW8151/ SW8151A	SW8151/ SW8151A	SW8151/ SW8151A
		(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		--	--	--
LF5GW100	08/30/05	< 0.25 U	< 1 U	ND
	03/28/05	< 0.25 U	< 1 U	ND
	08/12/04	< 0.24 U UJ	< 0.96 U UJ	ND
	05/26/04	< 0.24 U	< 0.96 U	ND
	03/15/04	< 0.24 U	< 0.96 U	ND
	12/04/03	< 0.24 U	< 0.96 U	ND
	08/14/03	< 0.24	< 0.96	ND
	06/05/03	< 0.24	< 0.96	ND
LF5GW101	08/30/05	< 0.25 U	< 1 U	ND
	03/28/05	< 0.25 U	< 1 U	ND
	08/12/04	< 0.24 U	< 0.96 U	ND
	05/26/04	< 0.24 U	< 0.96 U	ND
	03/15/04	< 0.24 U	< 0.96 U	ND
	12/04/03	< 0.24 U	< 0.96 U	ND
	08/14/03	< 0.24	< 0.96	ND
	06/05/03	< 0.24	< 0.96	ND
LF5GW102 DUP1203031A LF5GW102CL	08/30/05	< 0.25 U	< 1 U	ND
	08/30/05	< 0.25 U	< 1 U	ND
	08/30/05	< 1 U	< 1 U	ND
	03/21/05	< 0.25 U	< 1 U	ND
	08/11/04	< 0.24 U	< 0.96 U	ND
	05/27/04	< 0.24 U	< 0.96 U	ND
	03/10/04	< 0.24 U	< 0.96 U	ND
	12/03/03	< 0.24 U	< 0.96 U	ND
	12/03/03	< 0.24 U	< 0.96 U	ND
	12/03/03	< 0.24	< 0.24	ND
	08/13/03	< 0.24	< 0.96	ND
	06/06/03	< 0.24	< 0.96	ND
LF5GW103 DUP0819032A LF5GW103CL	08/30/05	< 0.25 U	< 1 U	ND
	03/15/05	< 0.24 U	< 0.96 U	ND
	08/11/04	< 0.24 U	< 0.96 U	ND
	05/27/04	< 0.24 U	< 0.96 U	ND
	03/10/04	< 0.24 U	< 0.96 U	ND
	12/03/03	< 0.24 U	< 0.96 U	ND
	08/19/03	< 0.25	< 1	ND
	08/19/03	< 0.24	< 0.96	ND
	08/19/03	< 0.24 UJ	< 0.24 UJ	ND
	06/05/03	< 0.24	< 0.96	ND

Table A-9-6
Results of Chlorinated Herbicide Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	2,4-D	2,4-DB	All Other Chlorinated Herbicides
	Analytical Method ¹	SW8151/ SW8151A	SW8151/ SW8151A	SW8151/ SW8151A
		(µg/L)	(µg/L)	(µg/L)
LF5GW104	08/30/05	< 0.25 U	< 1 U	ND
	03/15/05	< 0.24 U	< 0.96 U	ND
	08/11/04	< 0.24 U UJ	< 0.96 U UJ	ND
	05/26/04	< 0.24 U	< 0.96 U	ND
	03/10/04	< 0.24 U	< 0.96 U	ND
	12/03/03	< 0.24 U	< 0.96 U	ND
	08/13/03	< 0.24	< 0.96	ND
	06/05/03	< 0.24	< 0.96	ND
1349MW01 ³	03/15/04	< 0.24 U	< 0.96 U	ND
	12/02/03	< 0.24 U	< 0.96 U	ND
	08/21/03	< 0.25	< 1	ND
	06/10/03	< 0.24	< 0.96	ND
1349MW02 ³	08/31/05	< 0.25 U	< 1 U	ND
	03/21/05	< 0.25 U	< 1 U	ND
	12/16/04	< 0.25 U	< 1 U	ND
	08/12/04	< 0.24 U UJ	< 0.96 U UJ	ND
	05/26/04	< 0.24 U	< 0.96 U	ND
	03/15/04	< 0.24 U	< 0.96 U	ND
	12/02/03	< 0.24 U	< 0.96 U	ND
	08/13/03	< 0.24	< 0.96	ND
	06/05/03	< 0.24	< 0.96	ND
	06/05/03	< 0.24	< 0.96	ND
DUP0605032A				
1349MW03R	08/31/05	< 0.25 U	< 1 U	ND
	03/21/05	< 0.25 U	< 1 U	ND
	08/10/04	< 0.24 U	< 0.96 U	ND
	05/26/04	< 0.24 U	< 0.96 U	ND
	03/09/04	< 0.24 U	< 0.96 U	ND
	12/02/03	< 0.24 U	< 0.96 U	ND
	08/13/03	< 0.24	< 0.96	ND
	06/09/03	< 0.24	< 0.96	ND
1349MW100 ³	08/31/05	< 0.25 U	< 1 U	ND
	03/23/05	< 0.25 U	< 1 U	ND
	08/10/04	< 0.24 U	< 0.96 U	ND
	05/27/04	< 0.24 U	< 0.96 U	ND
	03/16/04	< 0.24 U	< 0.96 U	ND
	12/02/03	< 0.24 U	< 0.96 U	ND
	08/12/03	2.1	12	ND
	06/09/03	< 0.24	< 0.96	ND
1349MW101	08/31/05	< 0.25 U	< 1 U	ND
	03/21/05	< 0.25 U	< 1 U	ND
	03/09/04	< 0.24 U	< 0.96 U	ND
	12/02/03	< 0.24 U	< 0.96 U	ND
	08/19/03	< 0.24	< 0.96	ND
	06/09/03	< 0.24	< 0.96	ND

Table A-9-6
Results of Chlorinated Herbicide Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	2,4-D	2,4-DB	All Other Chlorinated Herbicides
	Analytical Method ¹	SW8151/ SW8151A	SW8151/ SW8151A	SW8151/ SW8151A
		(µg/L)	(µg/L)	(µg/L)
1349MW102	08/31/05	< 0.25 U	< 1 U	ND
	08/31/05	< 0.25 U	< 1 U	ND
	03/21/05	< 0.25 U	< 1 U	ND
	08/10/04	< 0.24 U	< 0.96 U	ND
	05/27/04	< 0.24 U	< 0.96 U	ND
DUP0527041A	05/27/04	< 0.24 U	< 0.96 U	ND
1349MW102CL	05/27/04	< 0.24	< 0.24	ND
	03/10/04	< 0.24 U	< 0.96 U	ND
DUP0310041A	03/10/04	< 0.24 U	< 0.96 U	ND
1349MW102CL	03/10/04	< 0.25 UJ	< 0.25 UJ	ND
	12/10/03	< 0.24 U	< 0.96 U	ND
	12/10/03	< 0.24 U	< 0.96 U	ND
DUP1210031A	08/12/03	< 0.25	< 1	ND
	06/09/03	< 0.24	< 0.96	ND
	06/09/03	< 0.24	< 0.96	ND
DUP0609032A	06/09/03	< 0.24	< 0.96	ND
1349MW102CL	06/09/03	< 0.24 UJ	< 0.24 UJ	ND

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - Groundwater cleanup levels were taken from the *Remedial Action Plan and Evaluation of Alternatives for Landfill 4 and Fill Site 5, Presidio of San Francisco, California* (Treadwell & Rollo, 2002e).

3 - Monitoring wells 1349MW01, 1349MW02, and 1349MW100 are located upgradient of Fill Site 5, therefore, the cleanup levels do not apply to these wells.

µg/L - micrograms per liter

ND - Not detected

NA - Not analyzed

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historic data qualifiers.

Table A-9-7
Results of Total and Dissolved Metals Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Hexavalent Chromium ²	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW7196/ SW7196A	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7040/ SW7470/ SW7470A	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Levels ³		--	6	50	1,000	4	1.1	250,000	50	--	11.8	11	--	3.2	--	--	0.012	100	--	5	4.1	--	2	--	106	--
LF5GW100	03/09/06	< 100	< 1	< 5	38 J	< 2	< 1	19,000	22	< 10	< 1	NA	< 100 UJ	< 3	140,000	< 10	< 0.2	< 20	870 J	< 5	< 1	130,000	< 1	< 10	< 20	1,040
	08/30/05	< 100 UJ	< 1	< 5	35	< 2	< 1	18,000	21	< 10	< 1	NA	130	< 3	140,000	< 10	< 0.2	< 20	870	< 5	< 1	130,000	< 1	< 10	< 20	920
	05/26/05	< 100	< 1	< 5	33	< 2	< 1	19,000	21	< 10	< 1	NA	< 100	< 3	140,000 J	< 10	< 0.2	< 20	860	< 5	< 1	130,000 J	< 1	< 10	< 20	740
	05/26/05	< 100	< 1	< 5	36	< 2	< 1	17,000	23	< 10	< 1	NA	< 100	< 3	140,000 J	< 10	< 0.2	< 20	760	< 5	< 1	130,000 J	< 1	< 10	< 20	770
DUP0526051A	05/26/05	< 100 U	< 2 U	< 2 U	34.9	< 1 U	< 1 U	17,900	24.3	< 1 U	< 2 U	NA	< 100 U	< 1 U	144,000	< 10 U	< 0.2 U	< 2 U	< 5,000 U	< 2 U	< 1 U	138,000	< 1 U	< 10 U	< 20 U	957
LF5GW100CL	03/28/05	< 100	< 1	< 5	35	< 2	< 1	17,000	18	< 10	< 1	NA	< 100	< 3	130,000	< 10	< 0.2	< 20	820	< 5	< 1	120,000	< 1	< 10	< 20	970
	12/16/04	< 100	< 1	< 5	31	< 2	< 1	18,000	22	< 10	< 1	NA	< 100	< 3	140,000	< 10	< 0.2	< 20	790	< 5	< 1	130,000	< 1	< 10	< 20	880
	12/16/04	< 101	< 1	< 5	32	< 2	< 1	18,000	22	< 10	< 1	NA	< 100	< 3	150,000	< 11	< 0.3	< 21	800	< 5	< 1	140,000	< 1	< 10	< 20	870
	08/12/04	< 100	< 1	< 5	31	< 2	< 1	18,000	19	< 10	< 1	NA	< 100	< 3	130,000	< 10	< 0.2	< 20	850	< 5	< 1	120,000	< 1	< 10	< 20	950
DUP1216041A	05/26/04	< 100	< 1	< 5	33	< 2	< 1	17,000	20	< 10	< 1	NA	< 100	< 3	140,000	< 10	< 0.2	< 20	820	< 5	< 1	140,000	< 1	< 10	< 20	850
	03/15/04	< 100	< 1	< 5	26 J-	< 2	< 1	18,000	16	< 10	5.2	NA	< 100	< 3	150,000	< 10	< 0.2	< 20	810	< 5	< 1	140,000	< 1	< 10	< 20	910
	12/04/03	< 100	< 1	< 5	36	< 2	< 1	15,000	19	< 10	< 1	NA	< 100	< 3	150,000	< 10	< 0.2	< 20	880	< 5	< 1	130,000	< 1	< 10	< 20	730
	08/14/03	< 100	1.6	< 5	28	< 2	< 1	16,000	17	< 10	< 1	NA	< 100	< 3	130,000	< 10	< 0.2	< 20	830	< 5	< 1 UJ	120,000	< 1	< 10	< 20	960
LF5GW100CL	06/05/03	< 100	< 1	< 5	31	< 2	< 1	18,000	25	< 10	< 1	NA	< 100	< 3	140,000	< 10	< 0.2	< 20	840	< 5	< 1 UJ	130,000	< 1	< 10	41	890
	12/04/02	< 100	< 1	< 1	31	< 1	< 1	16,000	16	< 1	< 1	10	< 100	< 3	130,000	< 10	< 0.2	2.2	890	< 5	< 1 UJ	120,000	< 1	< 10	< 10	910
	08/29/02	< 100	< 1	1.1	380	< 1	< 1	19,000	17 J	< 1	< 1	20	< 100	< 3	150,000	< 10	< 0.2	2.3	1,100	< 5	< 1 UJ	140,000	< 1	< 10	36	960
	05/30/02	< 100	1	1.1	490	< 1	< 1	18,000	20	< 1	< 1	20 J-	< 100	< 3	150,000	< 10	< 0.2	2	1,300	< 5	< 1 UJ	140,000	< 1	< 10	33	950
LF5GW100CL	03/06/02	< 100	1.9	1.3	580	< 1	< 1	17,000	19	< 1	< 1	20	< 100	< 3	190,000	< 10	< 0.2	2.5	1,300	< 5	< 1 UJ	150,000	< 1	< 10	22	910
	11/28/01	< 100	1.5	1.5	760	< 1	< 1	21,000	42 J	< 1	1.5	20	< 100	< 3	160,000	< 10	< 0.2	2.9	1,600	< 5	< 1	150,000	< 1	< 10	29	930
	08/30/01	< 100	2.8	1	530 J+	< 1	< 1	18,000	29	< 1	1.5	20	< 100	< 3	170,000	< 10	< 0.2	3.2	1,100	< 5	< 1 UJ	150,000	< 1	< 10	21	NA
	05/10/01	< 100	< 1	1.4	100	< 1	< 1	17,000	49 J	< 1	4.6 J	< 10	150	< 3	150,000	< 10	< 0.2	25 J	1,600	< 5	< 1 UJ	140,000	< 1	< 10	48 J	790
LF5GW100CL	05/10/01	200	< 2	< 2	670	< 1	< 1	19,000	49	< 1	< 2	40	< 200	< 5	120,000	5.9	< 0.2	25	2,100	< 5	< 1	120,000	< 1	< 5	50	730
	07/21/00	NA	< 60	5.4	< 10	< 2	< 5	NA	38	< 20	< 10	40	NA	< 3	NA	NA	< 0.2	< 20	NA	< 5	< 5	NA	< 5	< 10	< 20	890
LF5GW101	03/09/06	< 100	< 1	< 5	46 J	< 2	< 1	18,000	53	< 10	< 1	NA	< 100 UJ	< 3	130,000	< 10	< 0.2	< 20	1,300 J	< 5	< 1	120,000	< 1	< 10	< 20	1,090
	12/02/05	< 100	< 1	< 5	48	< 2	< 1	19,000	48	< 10	< 1	NA	120	< 3	110,000	< 10	< 0.2	< 20	1,100	< 5	< 1	110,000	< 1	< 10	< 20	NA
	08/30/05	< 100 UJ	< 1	< 5	52	< 2	< 1	20,000	53	< 10	< 1	NA	140	< 3	110,000	< 10	< 0.2	< 20	1,200	< 5	< 1	110,000	< 1	< 10	< 20	770
	05/26/05	< 100	< 1	< 5	49	< 2	< 1	18,000	52	< 10	< 1	NA	< 100	< 3	130,000 J	< 10	< 0.2	< 20	1,200	< 5	< 1	120,000 J	< 1	< 10	< 20	620
	03/28/05	< 100	< 1	< 5	48	< 2	< 1	18,000	51	< 10	< 1	NA	< 100	< 3	120,000	< 10	< 0.2	< 20	1,200	< 5	< 1	110,000	< 1	< 10	< 20	870
	12/16/04	< 100	< 1	< 5	49	< 2	< 1	19,000	54	< 10	1.2	NA	< 100	< 3	120,000	< 10	< 0.2	< 20	1,100	< 5	< 1	110,000	< 1	< 10	< 20	640
	08/12/04	< 100	1.4	< 5	51	< 2	< 1	18,000	52	< 10	2.5	NA	< 100	< 3	120,000	< 10	< 0.2	< 20	1,200	< 5	< 1	110,000	< 1	< 10	< 20	790
	05/26/04	< 100	< 1	< 5	46	< 2	< 1	19,000	51	< 10	< 1	NA	< 100	< 3	120,000	< 10	< 0.2	< 20	1100	< 5	< 1	120,000	< 1	< 10	< 20	740
	03/15/04	< 100	< 1	< 5	45 J-	< 2	< 1	21,000	50	< 10	< 1	NA	< 100	< 3	140,000	< 10	< 0.2	< 20	1,200	< 5	< 1	130,000	< 1	< 10	< 20	810
	12/04/03	< 100	1.3	< 5	48	< 2	< 1	17,000	50	< 10	< 1	NA	< 100	< 3	120,000	< 10	< 0.2	< 20	1,200	< 5	< 1	110,000	< 1	< 10	< 20	770
	08/14/03	< 100	1.2	< 5	47	< 2	< 1	19,000	53	< 10	< 1	NA	< 100	< 3	120,000	< 10	< 0.2	< 20	1,100	< 5	< 1 UJ	110,000	< 1	< 10	< 20	630
	06/05/03	< 100	< 1	< 5	41	< 2	< 1	19,000	48	< 10	< 1	NA	< 100	< 3	120,000	< 10	< 0.2	< 20	1,100	< 5	< 1 UJ	110,000	< 1	< 10	< 20	810
	12/04/02	< 100	< 1	1.3	45	< 1	< 1	20,000	51	< 1	< 1	40	< 100	< 3	110,000	< 10	< 0.2	4.8	1,200	< 5	< 1 UJ	100,000	< 1	< 10	< 10	780
	08/29/02	< 100	< 1	1.1	430	< 1	< 1	21,000	51 J	< 1	< 1	50	< 100	< 3	130,000	< 10	< 0.2	5.5	1,400	< 5	< 1 UJ	120,000	< 1	< 10	37	750
	05/30/02	< 100	1.7	1.1	400	< 1	< 1	20,000	46	< 1	< 1	50 J-	< 100	< 3	120,000	< 10	< 0.2	5.5	1,600	< 5	< 1 UJ	120,000	< 1	< 10	32	850
	03/06/02	< 100	1.2	1.7	460	< 1	< 1	18,000	53	< 1	< 1	50	< 100	< 3	160,000	< 10	< 0.2	3.8	1,500	< 5	1.7 J-	140,000	< 1	< 10	24	770
	11/28/01	< 100	< 1	1.8	42	< 1	< 1	20,000	58 J	< 1	< 1	50	< 100	< 3	130,000	< 10	< 0.2	6.9	1,500	< 5	< 1	130,000	< 1	< 10	< 10	790
	08/30/01	< 100	1.1	1.3	350 J+	< 1	< 1	19,000	57	< 1	1.7	< 10	< 100	< 3	140,000	< 10	< 0.2	7.5	1,600	< 5	< 1 UJ	130,000	< 1	< 10	23	NA
	05/10/01	< 100	< 1	1.2	680	< 1	< 1	19,000	44 J	< 1	6.3 J	< 10	170	< 3	140,000	< 10	< 0.2	5 J	1,700	< 5	< 1 UJ	140,000	< 1	< 10	69 J	1,290
	07/21/00	NA	< 60	5.2	12	< 2	< 5	NA	31	< 20	< 10	30	NA	< 3	NA	NA	< 0.2	< 20	NA	< 5	< 5	NA	< 5	< 10	< 20	1,060

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Table A-9-7
Results of Total and Dissolved Metals Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Hexavalent Chromium ²	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW7196/ SW7196A	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7040/ SW7470/ SW7470A	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Levels ³		--	6	50	1,000	4	1.1	250,000	50	--	11.8	11	--	3.2	--	--	0.012	100	--	5	4.1	--	2	--	106	--
LF5GW102 DUP0830053A LF5GW102CL	03/09/06	< 100	< 1	< 5	< 10 UJ	< 2	< 1	2,100	< 10	< 10	< 1	NA	< 100 UJ	< 3	100,000	< 10	< 0.2	< 20	4,300 J	< 5	< 1	100,000	< 1	< 10	< 20	850
	08/30/05	< 100 UJ	< 1	< 5	< 10	< 2	< 1	2,300	< 10	< 10	1.7	NA	< 100	< 3	89,000	< 10	< 0.2	< 20	4,900	< 5	< 1	100,000	< 1	< 10	< 20	560
	08/30/05	< 100 UJ	< 1	< 5	< 10	< 2	< 1	2,600	< 10	< 10	< 1	NA	230	< 3	97,000	< 10	< 0.2	< 20	5,000	< 5	< 1	110,000	< 1	< 10	< 20	580
	08/30/05	< 100 U	< 2 U	2.11	< 10 U	< 1 U	< 1 U	2,350	< 10 U	< 1 U	< 2 U	NA	< 100 U	< 1 U	99,300	< 10 U	< 0.2 U	< 2 U	< 5,000 U	< 2 U	< 1 U	109,000	< 1 U	< 10 U	< 20 U	652
	05/26/05	< 100	< 1	< 5	< 10	< 2	< 1	2,400	< 10	< 10	< 1	NA	< 100	< 3	98,000 J	< 10	< 0.2	< 20	4,500	< 5	< 1	100,000 J	< 1	< 10	< 20	390
	03/21/05	< 100	< 1	< 5	< 10	< 2	< 1	2,300	< 10	< 10	1	NA	< 100	< 3	91,000	< 10	< 0.2	< 20	4,900	< 5	< 1	100,000	< 1	< 10	< 20	610
	12/14/04	< 100	< 1	5.8	< 10	< 2	< 1	2,500 J	< 10	< 10	< 1	NA	< 100	< 3	93,000	< 10	< 0.2	< 20	6,000	< 5	< 1	110,000	< 1	< 10	< 20	640
	08/11/04	< 100	< 1	< 5	< 10 UJ	< 2	< 1	2,700	< 10	< 10	< 1	NA	< 100	< 3	91,000	< 10	< 0.2	< 20	5,800	< 5	< 1	110,000	< 1	< 10	< 20	660
	05/27/04	< 100	< 1	< 5	< 10	< 2	< 1	2,900	< 10	< 10	< 1	NA	< 100	< 3	110,000	< 10	< 0.2	< 20	6,000	< 5	< 1	130,000	< 1	< 10	< 20	670
	03/10/04	< 100	< 1	< 5	< 10	< 2	< 1	3,400	< 10	< 10	< 1	NA	< 100	< 3	97,000	< 10	< 0.2	< 20	5,600	< 5	< 1 UJ	120,000	< 1	< 10	< 20	640
	12/03/03	< 100	2.2	< 5	< 10	< 2	< 1	5,800	< 10	< 10	< 1	NA	< 100	< 3	76,000	< 10	< 0.2	< 20	8,500	< 5	< 1 UJ	140,000	< 1	14	< 20	610
	12/03/03	< 100	1.1	< 5	< 10	< 2	< 1	5,900	< 10	< 10	< 1	NA	< 100	< 3	78,000	< 10	< 0.2	< 20	8,500	< 5	< 1 UJ	150,000	< 1	14	< 20	700
	12/03/03	< 1,000	< 5	9.1	< 10	< 1	< 1	6,000	< 10	< 7	< 10	NA	< 500	< 3	83,000	12	< 0.2	< 10	8,800	< 5	< 1	140,000	< 2	17	< 20	680
	08/13/03	< 100	2.2	5.9	< 10	< 2	< 1	11,000	< 10	< 10	1.4	NA	< 100	< 3	51,000	21	< 0.2	< 20	11,000	< 5	< 1 UJ	230,000	< 1	< 10	< 20	750
LF5GW103 DUP1203031A LF5GW102CL	06/06/03	< 100	1.4	6.1	< 10	< 2	< 1	15,000	< 10	< 10	< 1	NA	< 100	< 3	54,000	20	< 0.2	< 20	12,000	< 5	< 1 UJ	260,000	< 1	< 10	< 20	1,070
	03/09/06	< 100	< 1	< 5	74 J	< 2	< 1	23,000	50	< 10	< 1	NA	< 100 UJ	< 3	95,000	< 10	< 0.2	< 20	1,200 J	< 5	< 1	96,000	< 20	< 10	< 20	700
	08/30/05	< 100 UJ	< 1	< 5	74	< 2	< 1	25,000	49	< 10	< 1	NA	140	< 3	93,000	< 10	< 0.2	< 20	1,200	< 5	< 1	97,000	< 1	< 10	< 20	640
	05/24/05	< 100 UJ	< 1	< 5	73	< 2	< 1	25,000	48	< 10	< 1	NA	< 100	< 3	98,000	< 10	< 0.2	< 20	1,200	< 5	< 1	100,000	< 1	< 10	< 20	840
	03/15/05	< 100	< 1	< 5	73	< 2	< 1	29,000	47	< 10	< 1	NA	200	< 3	120,000	< 10	< 0.2	< 20	1,200	< 5	< 1	120,000	< 1	< 10	< 20	630
	12/14/04	< 100	< 1	< 5	58	< 2	< 1	24,000 J	46	< 10	< 1	NA	< 100	< 3	99,000	< 10	< 0.2	< 20	1,200	< 5	< 1	100,000	< 1	< 10	< 20	730
	08/11/04	< 100	< 1	< 5	62 J	< 2	< 1	26,000	46	< 10	< 1	NA	< 100	< 3	93,000	< 10	< 0.2	< 20	1,200	< 5	< 1	92,000	< 1	< 10	< 20	650
	05/27/04	< 100	< 1	< 5	71	< 2	< 1	27,000	49	< 10	< 1	NA	< 100	< 3	110,000	< 10	< 0.2	< 20	1100	< 5	< 1	110,000	< 1	< 10	< 20	740
	03/10/04	< 100	< 1	< 5	70	< 2	< 1	26,000	45	< 10	< 1	NA	< 100	< 3	95,000	< 10	< 0.2	< 20	1,100	< 5	< 1 UJ	96,000	< 1	< 10	< 20	700
	12/03/03	< 100	2	< 5	67	< 2	< 1	26,000	47	< 10	< 1	NA	130	< 3	95,000	< 10	< 0.2	< 20	1,200	< 5	< 1 UJ	100,000	< 1	< 10	< 20	670
	08/19/03	< 100	< 1	< 5	57	< 2	< 1	25,000	48	< 10	< 1	NA	140	< 3	97,000	< 10	< 0.2	< 20	1,200	< 5	< 1 UJ	97,000	< 1	< 10	< 20 UJ	760
	08/19/03	< 100	1.5	< 5	56	< 2	< 1	25,000	47	< 10	< 1	NA	110	< 3	100,000	< 10	< 0.2	< 20	1,100	< 5	< 1 UJ	100,000	< 1	< 10	< 20 UJ	720
	08/19/03	< 100	< 5	< 5	51	< 1	< 1	25,000	56	< 7	< 10	NA	< 500 UJ	< 3	99,000	18	< 0.2	13	1,300	< 5	< 1	100,000	< 2	< 10	< 20	760
	06/05/03	< 100	1.2	< 5	44	< 2	< 1	25,000	45	< 10	< 1	NA	< 100	< 3	99,000	< 10	< 0.2	< 20	1,300	< 5	< 1 UJ	97,000	< 1	< 10	< 20	700
LF5GW104 DUP0307063B LF5GW104CL	03/07/06	< 100	< 1	< 5	110	< 2	< 1	31,000 J	36	< 10	< 1	NA	160	< 3	120,000	< 10	NA	< 20	930	< 5	< 1	130,000	< 1	< 10	< 20	970
	03/07/06	< 100	< 1	< 5	110	< 2	< 1	30,000 J	35	< 10	< 1	NA	150	< 3	110,000	< 10	NA	< 20	930	< 5	< 1	130,000	< 1	< 10	< 20	860
	03/07/06	< 100 U	< 2 U	< 2 U	130	< 1 U	< 1 U	38,000	40	< 1 U	< 2 U	NA	< 100 U	< 1 U	130,000	< 10 U	0.625	4.8	< 5000 U	2.9	< 1 U	150,000	< 1 U	< 10 U	< 20 U	982 J+
	08/30/05	< 100 UJ	< 1	< 5	110	< 2	< 1	32,000	35	< 10	< 1	NA	140	< 3	100,000	< 10	< 0.2	< 20	920	< 5	< 1	120,000	< 1	< 10	< 20	810
	05/24/05	< 100 UJ	< 1	< 5	120	< 2	< 1	41,000	37	< 10	< 1	NA	< 100	< 3	130,000	< 10	< 0.2	< 20	1,100	< 5	< 1	140,000	< 1	< 10	< 20	990
	03/15/05	< 100	< 1	< 5	100	< 2	< 1	41,000	31	< 10	< 1	NA	< 100	< 3	130,000	< 10	< 0.2	< 20	1,200	< 5	< 1	140,000	< 1	< 10	< 20	900
	12/14/04	< 100	< 1	< 5	72	< 2	< 1	28,000 J	33	< 10	< 1	NA	< 100	< 3	93,000	< 10	< 0.2	< 20	950	< 5	< 1	120,000	< 1	< 10	< 20	790
	08/11/04	< 100	< 1	< 5	64 J	< 2	< 1	32,000	34	< 10	1.1	NA	< 100	< 3	96,000	< 10	< 0.2	< 20	1,000	< 5	< 1	110,000	< 1	< 10	< 20	790
	05/26/04	< 100	< 1	< 5	92	< 2	< 1	67,000	35	< 10	< 1	NA	< 100	< 3	220,000	< 10	< 0.2	< 20	930	< 5	< 1	260,000	< 1	< 10	< 20	860
	03/10/04	< 100	< 1	< 5	99	< 2	< 1	39,000	33	< 10	< 1	NA	120	< 3	120,000	< 10	< 0.2	< 20	1,200	< 5	< 1 UJ	130,000	< 1	< 10	< 20	890
	12/03/03	< 100	2.7	< 5	75	< 2	< 1	30,000	34	< 10	< 1	NA	130	< 3	91,000	< 10	< 0.2	< 20	1,000	< 5	< 1 UJ	120,000	< 1	< 10	< 20	750
	08/13/03	< 100	2.4	< 5	52	< 2	< 1	29,000	36	< 10	< 1	NA	130	< 3	95,000	< 10	< 0.2	< 20	1,100	< 5	< 1 UJ	110,000	< 1	< 10	< 20	770
	06/05/03	< 100	1.4	< 5	45	< 2	< 1	35,000	35	< 10	< 1	NA	< 100	< 3	110,000	< 10	< 0.2	< 20	1,400	< 5	< 1 UJ	120,000	< 1	< 10	< 20	860

Table A-9-7
Results of Total and Dissolved Metals Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

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Table A-9-7
Results of Total and Dissolved Metals Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Hexavalent Chromium ²	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW7196/ SW7196A	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7040/ SW7470/ SW7470A	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Levels ³		--	6	50	1,000	4	1.1	250,000	50	--	11.8	11	--	3.2	--	--	0.012	100	--	5	4.1	--	2	--	106	--
1349MW02 ⁴	12/02/03	< 100	1.3	< 5	170	< 2	< 1	57,000	75	< 10	1.1	NA	220	< 3	270,000	< 10	< 0.2	< 20	< 500	< 5	< 1 UJ	200,000	< 1	< 10	< 20	1,160
	08/13/03	< 100	1.7	< 5	180	< 2	< 1	61,000	87	< 10	< 1	NA	300	< 3	230,000	< 10	< 0.2	< 20	< 500	< 5	< 1 UJ	190,000	< 1	< 10	< 20	1,540
DUP0605032A	06/05/03	< 100	1.3	< 5	180	< 2	< 1	59,000	80	< 10	1.2	NA	150	< 3	250,000	< 10	0.26	< 20	530	< 5	< 1	210,000	< 1	< 10	< 20	1,440
	06/05/03	< 100	1.3	< 5	180	< 2	< 1	65,000	83	< 10	< 1	NA	100	< 3	240,000	< 10	< 0.2	< 20	< 500	< 5	< 1	190,000	< 1	< 10	< 20	1,500
DUP1204023A	12/04/02	< 100	< 1	< 1	160	< 1	< 1	53,000	92	< 1	< 1	80	160	< 3	220,000	< 10	< 0.2	6.3	< 500	< 5	< 1 UJ	180,000	< 1	< 10	< 10	1,600
	12/04/02	< 100	< 1	< 1	160	< 1	< 1	52,000	94	< 1	1.1	80	160	< 3	220,000	< 10	< 0.2	6.6	< 500	< 5	< 1 UJ	180,000	< 1	< 10	< 10	1,400
DUP0306022A	08/28/02	< 100	1.2	< 1	510	< 1	< 1	55,000	82 J	< 1	1.4	90	< 100	< 3	240,000	< 10	< 0.2	6.2	660	< 5	< 1 UJ	210,000	< 1	< 10	68	1,500
	05/30/02	< 100	< 1	< 1	460	< 1	< 1	61,000	79	< 1	1.4	70 J-	< 100	< 3	230,000	< 10	< 0.2	5.1	690	< 5	< 1 UJ	200,000	< 1	< 10	87	1,610
DUP0306022A	03/06/02	< 100	< 1	< 1	340	< 1	< 1	90,000	95	< 1	< 1	90	310	< 3	270,000	< 10	< 0.2	7	580	< 5	< 1 UJ	240,000	< 1	< 10	< 10	1,610
	03/06/02	< 100	< 1	< 1	390	< 1	< 1	96,000	97	< 1	< 1	90 J-	310	< 3	290,000	< 10	< 0.2	7.2	600	< 5	< 1 UJ	260,000	< 1	< 10	16	1,580
DUP1128011A	11/28/01	< 100	< 1	1.2	760	< 1	< 1	51,000	130 J	< 1	2.7	100	< 100	< 3	260,000	< 10	< 0.2	8.2	1,100	5.1	< 1	220,000	< 1	< 10	190	1,510
	11/28/01	< 100	< 1	1	350	< 1	< 1	52,000	130 J	< 1	2.1	100 J	< 100	< 3	260,000	< 10	< 0.2	8.4	900	< 5	< 1	220,000	< 1	< 10	30	1,470
DUP0830012A	08/30/01	< 100	< 1	< 1	150 J+	< 1	< 1	45,000	110	< 1	1.8	< 10	150	< 3	250,000	< 10	< 0.2	6.9	< 500	< 5	< 1 UJ	210,000	< 1	< 10	< 10	1,550
	08/30/01	< 100	< 1	< 1	160 J+	< 1	< 1	47,000	100	< 1	1.9	< 10	150	< 3	260,000	< 10	< 0.2	6.6	< 500	< 5	< 1 UJ	210,000	< 1	< 10	15	1,470
1349MW02CL	08/30/01	< 200	1.2 J	< 2	800	< 1	< 1	47,000	110	0.92 J	1.7 J	90	< 200	< 5	230,000	< 5	< 0.2	8.3	< 1,000	7.9	< 1	280,000	< 1	< 5	170	1,900
	05/10/01	< 100	< 1	1.1	560	< 1	< 1	49,000	98 J	< 1	4.2 J	70 J	390	< 3	250,000	< 10	< 0.2	9.3 J	780	< 5	< 1 UJ	210,000	< 1	< 10	160 J	1,620 J
	05/19/99	< 100	NA	NA	NA	NA	NA	57,300	NA	NA	< 10	NA	< 100	NA	274,000	< 10	NA	NA	< 5,000	NA	NA	204,000	NA	NA	NA	1,900
	02/19/99	< 100	NA	NA	NA	NA	NA	63,500	NA	NA	< 10	NA	< 100	NA	284,000	< 10	NA	NA	< 5,000	NA	NA	215,000	NA	NA	NA	1,840
	11/18/98	< 100	NA	NA	NA	NA	NA	59,300	NA	NA	18.7	NA	< 100	NA	283,000	< 10	NA	NA	< 5,000	NA	NA	213,000	NA	NA	NA	1,770
	08/18/98	< 100	NA	NA	NA	NA	NA	57,800	NA	NA	< 10	NA	< 100	NA	267,000	< 10	NA	NA	< 5,000	NA	NA	211,000	NA	NA	NA	1,900
	04/16/98	< 100	NA	NA	NA	NA	NA	53,500	NA	NA	< 10	43 (J16)	< 100	NA	233,000	< 10	NA	NA	< 5,000	NA	NA	195,000	NA	NA	NA	1,760
	01/22/98	< 100	NA	NA	NA	NA	NA	50,800	NA	NA	< 10	NA	< 100	NA	244,000	< 10	NA	NA	< 5,000	NA	NA	196,000	NA	NA	NA	1,750
	10/30/97	< 100	NA	NA	NA	NA	NA	52,300	NA	NA	< 20	NA	< 100	NA	244,000	< 10	NA	NA	< 5,000	NA	NA	199,000	NA	NA	NA	1,750
	07/31/97	< 100	NA	NA	NA	NA	NA	51,300	NA	NA	< 20	NA	< 100	NA	249,000	< 10	NA	NA	< 5,000	NA	NA	205,000	NA	NA	NA	1,810
	05/01/97	< 100	NA	NA	NA	NA	NA	53,900	NA	NA	< 10	NA	< 100	NA	266,000	< 10	NA	NA	< 1,000	NA	NA	188,000	NA	NA	NA	1,700
	02/10/97	< 100	NA	NA	NA	NA	NA	39,600	NA	NA	2.5	NA	< 100	NA	176,000	19.7	NA	NA	< 5,000	NA	NA	145,000	NA	NA	NA	1,490
1349MW03R	03/16/06	< 100	< 1	< 5	81	< 2	< 1	52,000	120	< 10	< 1	NA	< 100	< 3	220,000 J	< 10	< 0.2	< 20	1,300 J-	< 5	< 1	280,000	< 1	< 10	< 20	2,060
	11/30/05	< 100	< 1	< 5	23	< 2	< 1	23,000	100 J	< 10	< 1	NA	100	< 3	110,000	< 10	< 0.2	< 20	660	< 5	< 1	79,000	< 1	< 10	< 20	750
	08/31/05	< 100	< 1	< 5	19	< 2	< 1	29,000	100	< 10	< 1	NA	< 100	< 3	110,000	< 10	< 0.2	< 20	870	< 5	< 1	85,000	< 1	< 10	< 20	710
	05/25/05	< 100 UJ	< 1	< 5	41 J	< 2	< 1	46,000	130	< 10	< 1	NA	< 100	< 3	190,000	< 10	< 0.2	< 20	1,700	< 5	< 1	190,000	< 1	< 10	< 20	1,460
	03/21/05	< 100	< 1	< 5	90	< 2	< 1	70,000	190	< 10	1.3	NA	180	< 3	230,000	< 10	< 0.2	< 20	4,100	< 5	< 1	300,000	< 1	< 10	< 20	1,980
	12/16/04	< 100	< 1	< 5	< 10	< 2	< 1	19,000	68	< 10	< 1	NA	< 100	< 3	78,000	< 10	< 0.2	< 20	2,200	< 5	< 1	57,000	< 1	< 10	< 20	530
	08/10/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	540
	05/26/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	580
	03/09/04	< 100	< 1	< 5	< 10	< 2	< 1	23,000	94	< 10	< 1	NA	< 100	< 3	84,000	< 10	< 0.2	< 20	3,000 J	< 5	< 1 UJ	67,000	< 1	< 10	< 20	550
	12/02/03	< 100	1.9	5.4	< 10	< 2	< 1	18,000	42	< 10	< 1	NA	< 100	< 3	68,000	< 10	< 0.2	< 20	4,400	< 5	< 1 UJ	56,000	< 1	< 10	< 20	360
	08/13/03	< 100	3.3	7.4	< 10	< 2	< 1	24,000	59	< 10	< 1	NA	120	< 3	70,000	< 10	< 0.2	< 20	6,100	< 5	< 1 UJ	63,000	< 1	< 10	< 20	510
	06/09/03	< 100	1.4	6.2	< 10	< 2	< 1	30,000	44	< 10	< 1	NA	< 100	< 3	60,000	< 10	< 0.2	< 20	9,700	< 5	< 1 UJ	100,000	< 1	< 10	< 20	690
1349MW100 ⁴	12/05/06	< 100	< 1	12	530	< 2	< 1	170,000	< 10	< 10	< 1	NA	58,000	< 3	240,000	14,000	< 0.2	< 20	2,500 J	< 5	< 1	420,000	< 1	< 10	< 20	2,320 J+
	08/16/06	< 100	< 1	8.9	560	< 2	< 1	160,000	< 10	< 10	< 1	NA	42,000	< 3	230,000	14,000	< 0.2 UJ	< 20	2,800	< 5	< 1	480,000	< 1	< 10	< 20	2,160
DUP0524063A	05/24/06	< 100	< 1	13	380	< 2	< 1	150,000	< 10	< 10	< 1	NA	33,000	< 3	200,000	14,000	< 0.2	< 20	3,800	< 5	< 1	460,000	< 1	< 10	< 20	2,550
	05/24/06	< 100	< 1	12	380	< 2	< 1	140,000	< 10	< 10	< 1	NA	34,000	< 3	200,000	14,000	< 0.2	< 20	3,500	< 5	< 1	450,000	< 1	< 10	< 20	2,460
1349MW100CL	05/24/06	< 100 U	< 2 U	15	425	< 10 U	< 1 U	165,000	< 10 U	5.1	4.3	NA	36,500 J+	< 1 U	226,000	14,800	< 0.2 U	15	< 5,000 U	< 2 U	< 1 U	502,000	< 1 U	< 10 U	< 20 U	2,110
	03/16/06	< 100	< 1	9.4	450	< 2	< 1	130,000	< 10	< 10	< 1	NA	27,000	< 3	180,000 J	14,000	< 0.2	< 20	2,700 J-	10	< 1	400,000	< 1	< 10	< 20	510

Table A-9-7
Results of Total and Dissolved Metals Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Hexavalent Chromium ²	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW7196/ SW7196A	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7040/ SW7470/ SW7470A	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Levels ³		--	6	50	1,000	4	1.1	250,000	50	--	11.8	11	--	3.2	--	--	0.012	100	--	5	4.1	--	2	--	106	--
1349MW100 ⁴	12/16/04	< 100	< 1	20	530	< 2	< 1	190,000	< 10	< 10	1.8	NA	39,000	< 3	280,000	18,000	< 0.2	< 20	3,300	< 5	< 1	390,000	< 1	< 10	< 20	2,870
	08/10/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2,450
	05/26/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2,490
	03/16/04	< 100	1.8	11	600 J-	< 2	< 1	150,000	< 10	< 10	1.3	NA	30,000	< 3	210,000	16,000	< 0.2	< 20	2,800	< 5	< 1	440,000	< 1	< 10	< 20	2,050
	12/02/03	< 100	2.6	23	530	< 2	< 1	170,000	16	< 10	1.3	NA	36,000	< 3	290,000	15,000	< 0.2	< 20	3,900	< 5	< 1 UJ	380,000	< 1	< 10	< 20	1,820
	08/12/03	< 100	< 1	15 J+	700	< 2	< 1	160,000	15 J	< 10	< 1	NA	21,000	< 3	250,000	160	< 0.2	< 20	3,400	< 5	< 1 UJ	350,000	< 1	< 10	< 20 UJ	2,450
	06/09/03	< 100	1.9	14	520	< 2	< 1	130,000	10	< 10	< 1	NA	25,000	< 3	190,000	14,000	< 0.2	< 20	2,900	< 5	< 1 UJ	370,000	< 1	< 10	< 20	2,200
	03/12/03	< 100	< 1	7.9	680	< 1	< 1	140,000	7.2	8.9	< 1	< 10	13,000	< 3	190,000	14,000	< 0.2	15	2,600	< 5	< 1 UJ	330,000 J-	< 1	< 10	< 10	2,100
	12/10/02	< 100	< 1	5.9	300	< 1	< 1	190,000	12	33	1.3	< 10	4,600	< 3	290,000	6,600 J	< 0.2	28	7,600	< 5	< 1 UJ	300,000	< 1	< 10	< 10	2,480
1349MW101	03/16/06	< 100	< 1	< 5	< 10	< 2	< 1	15,000	41	< 10	< 1	NA	< 100	< 3	58,000 J	< 10	< 0.2	< 20	1,700 J-	< 5	< 1	94,000	< 1	< 10	< 20	750
	08/31/05	< 100	< 1	< 5	< 10	< 2	< 1	16,000	25	< 10	< 1	NA	< 100	< 3	62,000	< 10	< 0.2	< 20	2,200	< 5	< 1	100,000	< 1	< 10	< 20	660
	05/25/05	< 100 UJ	< 1	5.5	< 10 UJ	< 2	< 1	19,000	25	< 10	< 1	NA	< 100	< 3	73,000	< 10	< 0.2	< 20	3,100	< 5	< 1	130,000	< 1	< 10	< 20	650
	05/25/05	< 100 UJ	< 1	5.5	< 10 UJ	< 2	< 1	19,000	25	< 10	< 1	NA	< 100	< 3	72,000	< 10	< 0.2	< 20	3,000	< 5	< 1	120,000	< 1	< 10	< 20	560
	03/21/05	< 100	< 1	5.7	< 10	< 2	< 1	19,000	33	< 10	1	NA	< 100	< 3	57,000	< 10	< 0.2	< 20	3,000	< 5	< 1	97,000	< 1	< 10	< 20	430
	12/15/04	< 100	< 1	5.1	< 10	< 2	< 1	19,000 J	24	< 10	< 1	NA	< 100	< 3	45,000	< 10	< 0.2	< 20	3,400	< 5	< 1	66,000	< 1 UJ	< 10	< 20	550
	03/09/04	< 100	1.3	5.2	< 10	< 2	< 1	23,000	45	< 10	< 1	NA	< 100	< 3	61,000	< 10	< 0.2	< 20	4,300 J	< 5	< 1 UJ	99,000	< 1	< 10	< 20	590
	12/02/03	< 100	1.8	< 5	< 10	< 2	< 1	20,000	15	< 10	< 1	NA	< 100	< 3	54,000	24	< 0.2	< 20	6,300	< 5	< 1 UJ	120,000	< 1	< 10	< 20	390
DUP0525052A	08/19/03	< 100	< 1	5.9	< 10	< 2	< 1	29,000	15	< 10	< 1	NA	120	< 3	57,000	19	< 0.2	< 20	7,500	< 5	< 1 UJ	150,000	< 1	< 10	< 20 UJ	660
	06/09/03	< 100	< 1	6.1	< 10	< 2	< 1	36,000	34	< 10	< 1	NA	< 100	< 3	56,000	< 10	< 0.2	< 20	9,800	< 5	< 1 UJ	160,000	< 1	< 10	< 20	890
	03/07/06	< 100	< 1	< 5	49	< 2	< 1	42,000 J	< 10	< 10	< 1	NA	190	< 3	98,000	140	NA	< 20	2700	< 5	< 1	190,000	< 1	< 10	< 20	1,070
	03/07/06	260	< 1	< 5	52	< 2	< 1	41,000 J	< 10	< 10	1.8	NA	530	< 3	96,000	150	NA	< 20	2800	< 5	< 1	180,000	< 1	< 10	< 20	1,000
	03/07/06	< 100 U	< 2 U	< 2 U	57	< 1 U	< 1 U	52,000	< 10 U	< 1 U	2.7	NA	< 100 U	< 1 U	110,000	160	< 0.2 U	5.4	< 5000 U	2.3	< 1 U	230,000	< 1 U	< 10 U	< 20 U	1,070 J+
	08/31/05	< 100	< 1	< 5	31	< 2	< 1	38,000	< 10	< 10	< 1	NA	< 100	< 3	57,000	< 10	< 0.2	< 20	2,800	< 5	< 1	150,000	< 1	< 10	< 20	850
	08/31/05	< 100	< 1	< 5	30	< 2	< 1	39,000	< 10	< 10	< 1	NA	< 100	< 3	56,000	10	< 0.2	< 20	2,800	< 5	< 1	150,000	< 1	< 10	< 20	820
	05/25/05	< 100 UJ	< 1	< 5	25 J	< 2	< 1	43,000	< 10	< 10	< 1	NA	< 100	< 3	59,000	< 10	< 0.2	< 20	3,600	< 5	< 1	190,000	< 1	< 10	28	680
DUP0831052A	03/21/05	< 100	< 1	< 5	55	< 2	< 1	62,000	< 10	< 10	< 1	NA	170	< 3	93,000	62	< 0.2	< 20	4,400	< 5	< 1	140,000	< 1	< 10	< 20	970
	03/21/05	< 100	< 1	< 5	49	< 2	< 1	62,000	< 10	< 10	4.8	NA	170	< 3	83,000	48	< 0.2	< 20	4,300	< 5	< 1	150,000	< 1	< 10	< 20	1,040
	12/16/04	< 100	< 1	< 5	74	< 2	< 1	74,000	< 10	< 10	< 1	NA	210	< 3	160,000	410	< 0.2	< 20	3,700	< 5	< 1	180,000	< 1	< 10	< 20	1,280
	08/10/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,160
	08/10/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,260
	05/27/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,270
	05/27/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,220
	05/26/04	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,100
DUP0321053A	03/10/04	< 100	< 1	< 5	83	< 2	< 1	73,000	< 10	< 10	< 1	NA	290	< 3	160,000	430	< 0.2	< 20	3,400	< 5	< 1 UJ	160,000	< 1	< 10	< 20	1,150
	03/10/04	< 100	< 1	< 5	81	< 2	< 1	77,000	< 10	< 10	< 1	NA	260	< 3	160,000	400	< 0.2	< 20	3,300	< 5	< 1 UJ	170,000	< 1	< 10	< 20	1,280
	03/10/04	< 100	< 5	5.6	77	< 1	< 1	76,000	< 10	< 7	< 10	NA	640	< 3	170,000	420	< 0.2	< 10	3,600	< 5	< 1	170,000	< 2	< 10	< 20	1,100 QB01
	12/10/03	< 100	< 1	< 5	69	< 2	< 1	77,000	< 10	< 10	< 1	NA	420	< 3	160,000	550	< 0.2	< 20	3,800	< 5 R	< 1	160,000	< 1	< 10	< 20 UJ	1,260
	12/10/03	< 100	1.8	< 5	72	< 2	< 1	80,000	< 10	< 10	1	NA	460	< 3	170,000	600	< 0.2	< 20	4,000	< 5 R	< 1	170,000	< 1	< 10	< 20 UJ	1,090
	08/12/03	< 100	2.7	< 5 UJ	34	< 2	< 1	100,000	< 10 UJ	< 10	< 1	NA	390	< 3	180,000	550	< 0.2	< 20	6,400	< 5	< 1 UJ	190,000	< 1	< 10	< 20 UJ	1,430
	06/09/03	< 100	< 1	< 5	31	< 2	< 1	100,000	< 10	< 10	< 1	NA	210	< 3	190,000	440	< 0.2	< 20	9,800	< 5	< 1 UJ	230,000	< 1	< 10	< 20	1,620
	06/09/03	< 100	2.9	< 5	32	< 2	< 1	98,000	< 10	< 10	< 1	NA	260	< 3	200,000	450	< 0.2	< 20	9,600	< 5	< 1 UJ	220,000	< 1	< 10	< 20	1,630
DUP0609032A	06/09/03	< 100	2.9	< 5	32	< 2	< 1	98,000	< 10	< 10	< 1	NA	260	< 3	200,000	450	< 0.2	< 20	9,600	< 5	< 1 UJ	220,000	< 1	< 10	< 20	1,630
	06/09/03	< 100	< 5	7.3	31	< 1	< 1	110,000	< 5	1.4	< 5	NA	530	< 3	180,000	340	< 0.2	7.4	11,000	< 5	< 1	240,000	< 2	< 10	23	1,900 J-
1349MW102CL	06/09/03	< 100	< 5	7.3	31	< 1	< 1	110,000	< 5	1.4	< 5	NA	530	< 3	180,000	340	< 0.2	7.4	11,000	< 5	< 1	240,000	< 2	< 10	23	1,900 J-

Table A-9-7
Results of Total and Dissolved Metals Analyses
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Hexavalent Chromium ²	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW7196/ SW7196A	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7040/ SW7470/ SW7470A	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Levels ³		--	6	50	1,000	4	1.1	250,000	50	--	11.8	11	--	3.2	--	--	0.012	100	--	5	4.1	--	2	--	106	--

Notes

All metal results represent dissolved metals, unless indicated as "total" in the left-hand column, for total metal results. RAP cleanup levels only apply to dissolved metals concentrations or whatever has been used on other metals tables.

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - Results of Army and Trust studies support the hypothesis that dissolved chromium and hexavalent chromium measured in groundwater in upland areas of the Presidio appear to be naturally occurring and derived from serpentinite. Hexavalent chromium was not retained as a COC (Treadwell and Rollo, 2002e).

3 - Groundwater cleanup levels were taken from the *Remedial Action Plan and Evaluation of Alternatives for Landfill 4 and Fill Site 5, Presidio of San Francisco, California* (Treadwell & Rollo, 2002e).

4 - Monitoring wells 1349MW01, 1349MW02, and 1349MW100 are located upgradient of Fill Site 5, therefore, the Fill Site 5 cleanup levels do not apply to these wells.

Surface water seep sample LF5SP100 is analyzed for total metals rather than dissolved, in accordance with the approved plan.

Groundwater samples collected from monitoring wells 1349MW03R through LF5GW104 were field filtered and analyzed for dissolved metals.

Bold numbers indicate concentrations which exceed cleanup criteria.

-- - Cleanup criteria not established

µg/L - micrograms per liter

mg/L - milligrams per liter

NA - not analyzed

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

A-9-8
Groundwater Elevation Summary
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
LF5GW100	08/14/06	6.62	229.74	223.12	MW
	05/22/06	8.54	229.74	221.20	MW
	03/06/06	6.27	229.74	223.47	MW
	11/28/05	9.03	229.74	220.71	MW
	08/29/05	9.67	229.74	220.07	MW
	05/23/05	9.38	229.74	220.36	MW
	03/14/05	9.10	229.74	220.64	MW
	12/13/05	9.10	229.74	220.64	MW
	08/09/04	9.20	229.74	220.54	MW
	05/24/04	9.05	229.74	220.69	MW
	03/08/04	9.10	229.74	220.64	MW
	12/01/03	9.30	229.74	220.44	MW
	08/11/03	6.71	229.74	223.03	MW
	06/02/03	6.98	229.74	222.76	MW
	03/10/03	9.10	229.74	220.64	MW
	12/02/02	7.17	229.74	222.57	MW
	08/26/02	5.05	229.74	224.69	MW
	05/28/02	6.31	229.74	223.43	MW
	03/04/02	5.25	229.74	224.49	MW
	11/26/01	6.73	229.74	223.01	MW
	08/27/01	11.09	229.74	218.65	MW
	05/08/01	6.32	229.74	223.42	MW
LF5GW101	08/14/06	4.80	234.36	229.56	MW
	05/22/06	5.14	234.36	229.22	MW
	03/06/06	4.59	234.36	229.77	MW
	11/28/05	6.78	234.36	227.58	MW
	08/29/05	6.53	234.36	227.83	MW
	05/23/05	6.10	234.36	228.26	MW
	03/14/05	3.84	234.36	230.52	MW
	12/13/04	7.10	234.36	227.26	MW
	08/09/04	7.42	234.36	226.94	MW
	05/24/04	4.95	234.36	229.41	MW
	03/08/04	3.97	234.36	230.39	MW
	12/01/03	5.15	234.36	229.21	MW
	08/11/03	5.95	234.36	228.41	MW
	06/02/03	5.78	234.36	228.58	MW
	03/10/03	6.85	234.36	227.51	MW
	12/02/02	9.19	234.36	225.17	MW
	08/26/02	5.84	234.36	228.52	MW
	05/28/02	8.65	234.36	225.71	MW
	03/04/02	6.77	234.36	227.59	MW
	11/26/01	8.38	234.36	225.98	MW
	08/27/01	6.66	234.36	227.70	MW
	05/08/01	2.00	234.36	232.36	MW

A-9-8
Groundwater Elevation Summary
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
LF5GW102	08/14/06	24.57	294.76	270.19	MW
	05/22/06	23.49	294.76	271.27	MW
	03/06/06	27.57	294.76	267.19	MW
	11/28/05	29.31	294.76	265.45	MW
	08/29/05	28.35	294.76	266.41	MW
	05/23/05	27.92	294.76	266.84	MW
	03/14/05	29.35	294.76	265.41	MW
	12/13/04	31.02	294.76	263.74	MW
	08/09/04	30.33	294.76	264.43	MW
	05/24/04	29.67	294.76	265.09	MW
	03/08/04	30.51	294.76	264.25	MW
	12/01/03	31.23	294.76	263.53	MW
	08/11/03	30.75	294.76	264.01	MW
	06/02/03	29.35	294.76	265.41	MW
LF5GW103	08/14/06	6.98	279.12	272.14	MW
	05/22/06	6.23	279.12	272.89	MW
	03/06/06	8.49	279.12	270.63	MW
	11/28/05	12.04	279.12	267.08	MW
	08/29/05	11.25	279.12	267.87	MW
	05/23/05	11.14	279.12	267.98	MW
	03/14/05	10.90	279.12	268.22	MW
	12/13/04	14.64	279.12	264.48	MW
	08/09/04	14.38	279.12	264.74	MW
	05/04/04	13.31	279.12	265.81	MW
	03/08/04	13.47	279.12	265.65	MW
	12/01/03	14.31	279.12	264.81	MW
	08/11/03	13.45	279.12	265.67	MW
	06/02/03	12.33	279.12	266.79	MW
LF5GW104	08/14/06	19.75	286.05	266.30	MW
	05/22/06	17.30	286.05	268.75	MW
	03/06/06	16.52	286.05	269.53	MW
	11/28/05	25.04	286.05	261.01	MW
	08/29/05	23.56	286.05	262.49	MW
	05/23/05	20.24	286.05	265.81	MW
	03/14/05	19.48	286.05	266.57	MW
	12/13/04	26.25	286.05	259.80	MW
	08/09/04	26.64	286.05	259.41	MW
	05/24/04	25.45	286.05	260.60	MW
	03/08/04	20.89	286.05	265.16	MW
	12/01/03	27.06	286.05	258.99	MW
	08/11/03	25.35	286.05	260.70	MW
	06/02/03	23.44	286.05	262.61	MW
LF5SP100	08/14/06	Not flowing	NM	NM	Seep
	05/22/06	Not flowing	NM	NM	Seep
	03/06/06	Flowing	NM	NM	Seep
	11/28/05	Not flowing	NM	NM	Seep
	08/29/05	Not flowing	NM	NM	Seep
	05/23/05	Flowing	NM	NM	Surface
	03/14/05	Not flowing	NM	NM	Surface
	12/13/04	Not flowing	NM	NM	Surface

A-9-8
Groundwater Elevation Summary
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
LF5SP100	08/09/04	Not flowing	NM	NM	Surface
	05/24/04	Not flowing	NM	NM	Surface
	03/08/04	Not flowing	NM	NM	Surface
	12/01/03	Flowing	NM	NM	Surface
1349MW01	12/04/06	24.19	300.44	276.25	MW
	08/14/06	22.79	300.44	277.65	MW
	05/22/06	21.54	300.44	278.90	MW
	03/06/06	23.25	300.44	277.19	MW
	11/28/05	26.34	300.44	274.10	MW
	08/29/05	24.94	300.44	275.50	MW
	05/23/05	24.47	300.44	275.97	MW
	03/14/05	25.16	300.44	275.28	MW
	12/13/04	29.14	300.44	271.30	MW
	08/09/04	28.88	300.44	271.56	MW
	05/24/04	27.78	300.44	272.66	MW
	03/08/04	26.84	300.44	273.60	MW
	12/01/03	29.38	300.44	271.06	MW
	08/11/03	27.91	300.44	272.53	MW
	06/02/03	28.33	300.44	272.11	MW
	03/10/03	28.19	300.44	272.25	MW
	12/02/02	29.61	300.44	270.83	MW
	08/26/02	28.69	300.44	271.75	MW
	05/28/02	28.38	300.44	272.06	MW
	03/04/02	27.70	300.44	272.74	MW
	11/26/01	29.76	300.44	270.68	MW
	08/27/01	30.17	300.44	270.27	MW
	05/08/01	29.45	300.44	270.99	MW
1349MW02	12/04/06	29.88	311.22	281.34	MW
	08/14/06	27.25	311.22	283.97	MW
	05/22/06	23.43	311.22	287.79	MW
	03/06/06	27.87	311.22	283.35	MW
	11/28/05	33.35	311.22	277.87	MW
	08/29/05	32.03	311.22	279.19	MW
	05/23/05	30.25	311.22	280.97	MW
	03/14/05	32.08	311.22	279.14	MW
	12/13/04	36.85	311.22	274.37	MW
	08/09/04	35.38	311.22	275.84	MW
	05/24/04	34.20	311.22	277.02	MW
	03/08/04	34.14	311.22	277.08	MW
	12/01/03	36.66	311.22	274.56	MW
	08/11/03	35.46	311.22	275.76	MW
	06/02/03	35.03	311.22	276.19	MW
	03/10/03	35.46	311.22	275.76	MW
	12/02/02	36.98	311.22	274.24	MW
	08/26/02	35.94	311.22	275.28	MW
	05/28/02	34.95	311.22	276.27	MW
	03/04/02	35.54	311.22	275.68	MW
	11/26/01	37.75	311.22	273.47	MW
	08/27/01	36.79	311.22	274.43	MW
	05/08/01	35.47	311.22	275.75	MW

A-9-8
Groundwater Elevation Summary
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
1349MW03	08/26/02	28.63	300.54	271.91	MW
	05/28/02	26.64	300.54	273.90	MW
	03/04/02	25.20	300.54	275.34	MW
	11/26/01	30.67	300.54	269.87	MW
	08/27/01	29.65	300.54	270.89	MW
	05/08/01	26.56	300.54	273.98	MW
1349MW03R	12/04/06	26.50	304.13	277.63	MW
	08/14/06	24.67	304.13	279.46	MW
	05/22/06	20.40	304.13	283.73	MW
	03/06/06	22.56	304.13	281.57	MW
	11/28/05	29.81	304.13	274.32	MW
	08/29/05	28.52	304.13	275.61	MW
	05/23/05	25.29	304.13	278.84	MW
	03/14/05	23.29	304.13	280.84	MW
	12/13/04	32.69	304.13	271.44	MW
	08/09/04	30.88	304.13	273.25	MW
	05/24/04	29.40	304.13	274.73	MW
	03/08/04	28.43	304.13	275.70	MW
	12/01/03	33.33	304.13	270.80	MW
	08/11/03	31.69	304.13	272.44	MW
	06/02/03	30.48	304.13	273.65	MW
1349MW100	12/04/06	28.01	309.60	281.59	MW
	08/14/06	25.37	309.60	284.23	MW
	05/22/06	22.79	309.60	286.81	MW
	03/06/06	25.73	309.60	283.87	MW
	11/28/05	31.42	309.60	278.18	MW
	08/29/05	30.12	309.60	279.48	MW
	05/23/05	28.03	309.60	281.57	MW
	03/14/05	29.70	309.60	279.90	MW
	12/13/04	34.85	309.60	274.75	MW
	08/09/04	33.11	309.60	276.49	MW
	05/24/04	32.05	309.60	277.55	MW
	03/08/04	31.63	309.60	277.97	MW
	12/01/03	34.42	309.60	275.18	MW
	08/11/03	32.98	309.60	276.62	MW
	06/02/03	32.75	309.60	276.85	MW
1349MW101	03/10/03	33.30	309.60	276.30	MW
	12/02/02	34.67	309.60	274.93	MW
	12/04/06	27.49	311.63	284.14	MW
	08/14/06	22.75	311.63	288.88	MW
	05/22/06	19.51	311.63	292.12	MW
	03/06/06	24.59	311.63	287.04	MW
	11/28/05	31.66	311.63	279.97	MW
	08/29/05	30.78	311.63	280.85	MW
	05/23/05	28.65	311.63	282.98	MW
	03/14/05	23.87	311.63	287.76	MW
	12/13/04	33.44	311.63	278.19	MW
	08/09/04	32.10	311.63	279.53	MW

A-9-8
Groundwater Elevation Summary
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
1349MW101	05/24/04	32.23	311.63	279.40	MW
	03/08/04	32.90	311.63	278.73	MW
	12/01/03	35.25	311.63	276.38	MW
	08/11/03	34.14	311.63	277.49	MW
	06/02/03	33.59	311.63	278.04	MW
1349MW102	12/04/06	covered	305.68	NM	MW
	08/14/06	17.90	305.68	287.78	MW
	05/22/06	15.12	305.68	290.56	MW
	03/06/06	19.66	305.68	286.02	MW
	11/28/05	25.02	305.68	280.66	MW
	08/29/05	23.67	305.68	282.01	MW
	05/23/05	23.33	305.68	282.35	MW
	03/14/05	23.95	305.68	281.73	MW
	12/13/04	28.35	305.68	277.33	MW
	08/09/04	26.89	305.68	278.79	MW
	05/24/04	25.68	305.68	280.00	MW
	03/08/04	25.62	305.68	280.06	MW
	12/01/03	28.17	305.68	277.51	MW
	08/11/03	26.96	305.68	278.72	MW
	06/02/03	26.51	305.68	279.17	MW
1349MW103	12/04/06	33.11	318.07	284.96	MW
	08/14/06	31.11	318.07	286.96	MW
	05/22/06	30.57	318.07	287.50	MW
	03/06/06	32.97	318.07	285.10	MW
	11/28/05	37.30	318.07	280.77	MW
	08/29/05	36.04	318.07	282.03	MW
	05/23/05	34.70	318.07	283.37	MW
	03/14/05	37.18	318.07	280.89	MW
	12/13/04	40.93	318.07	277.14	MW
	08/09/04	39.49	318.07	278.58	MW
	05/24/04	38.40	318.07	279.67	MW
	03/08/04	38.75	318.07	279.32	MW
	12/01/03	40.69	318.07	277.38	MW
1349MW104	12/04/06	30.74	314.58	283.84	MW
	08/14/06	28.19	314.58	286.39	MW
	05/22/06	24.50	314.58	290.08	MW
	03/06/06	29.33	314.58	285.25	MW
	11/28/05	34.07	314.58	280.51	MW
	08/29/05	32.83	314.58	281.75	MW
	05/23/05	31.42	314.58	283.16	MW
	03/14/05	33.73	314.58	280.85	MW
	12/13/04	37.65	314.58	276.93	MW
	08/09/04	36.23	314.58	278.35	MW
	05/24/04	35.18	314.58	279.40	MW
	03/08/04	35.76	314.58	278.82	MW
	12/01/03	37.43	314.58	277.15	MW

A-9-8
Groundwater Elevation Summary
Building 1349/Fill Site 5
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
1349MW105	12/04/06	26.88	312.05	285.17	MW
	08/14/06	24.38	312.05	287.67	MW
	05/22/06	24.60	312.05	287.45	MW
	03/06/06	27.94	312.05	284.11	MW
	11/28/05	31.15	312.05	280.90	MW
	08/29/05	30.78	312.05	281.27	MW
	05/23/05	31.54	312.05	280.51	MW
	03/14/05	33.25	312.05	278.80	MW
	12/13/04	34.71	312.05	277.34	MW
	08/09/04	33.33	312.05	278.72	MW
	05/24/04	33.20	312.05	278.85	MW
	03/08/04	33.71	312.05	278.34	MW
	12/01/03	34.38	312.05	277.67	MW

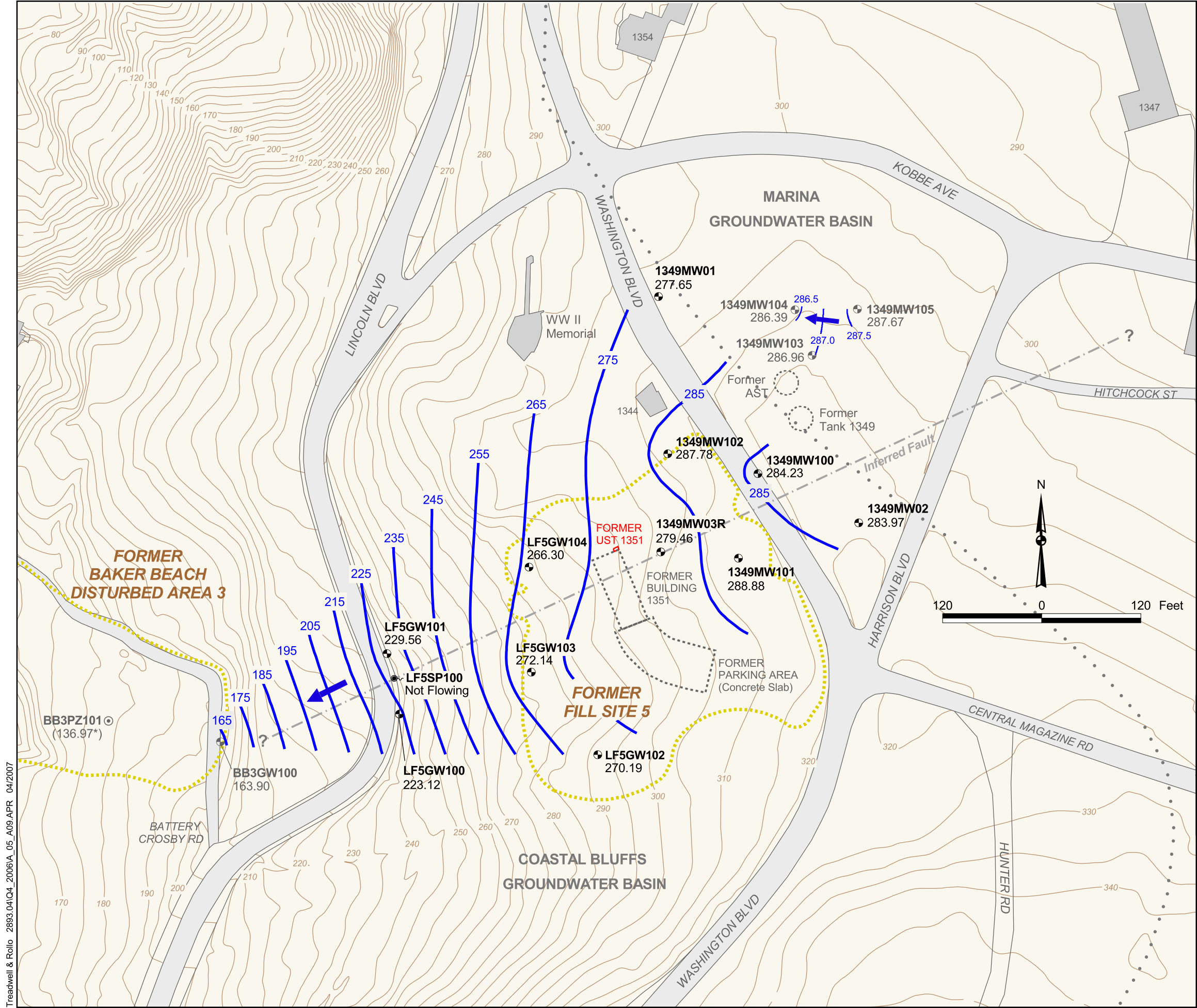
Notes

1 - All depth to water measurements are an average of three measurements recorded in the field.

MW - monitoring well

feet PLLW - feet above Presidio Lower Low Water vertical datum

NM - Not measured



LEGEND

- **LF5GW101** 229.56 Groundwater Monitoring Well
August 2006 Groundwater Elevation
- **1349MW103** 286.96 Adjacent Study Area Well
August 2006 Groundwater Elevation
- **BB3PZ101** (136.97*) Adjacent Study Area Piezometer
August 2006 Groundwater Elevation
(136.97*) Dry Well. Value Indicates Bottom of
Casing Elevation in Feet PLLW
- **LF5SP100** Approximate Surface Water Sample Location
- ➔ Approximate Direction of
Groundwater Flow
- Groundwater Elevation Contours
(Contour Interval : 10 ft)
— Groundwater Elevation Contours
(Contour Interval : 0.5 ft)
- Former Fill Site 5 and Baker Beach
Disturbed Area 3 Excavation Boundaries
- - - - Inferred Fault
- Groundwater Basin Boundary
- Topographic Contour
(Contour Interval : 5 ft)
- 1344 Building and Number

Notes:
Groundwater elevation data collected on 14 August 2006.

AST - Above ground Storage Tank
UST - Underground Storage Tank

Location of inferred fault from Revised Feasibility Study Main
Installation Sites (EKL, 2003).

Horizontal Datum: NAD 27, CA State Plane Coordinates, Zone 3, feet
Vertical Datums: (groundwater) Presidio Lower Low Water (ft. PLLW)
(topography) North American Vertical Datum, NAVD88

**FILL SITE 5 SITE PLAN
AND 14 AUGUST 2006
GROUNDWATER ELEVATION MAP**

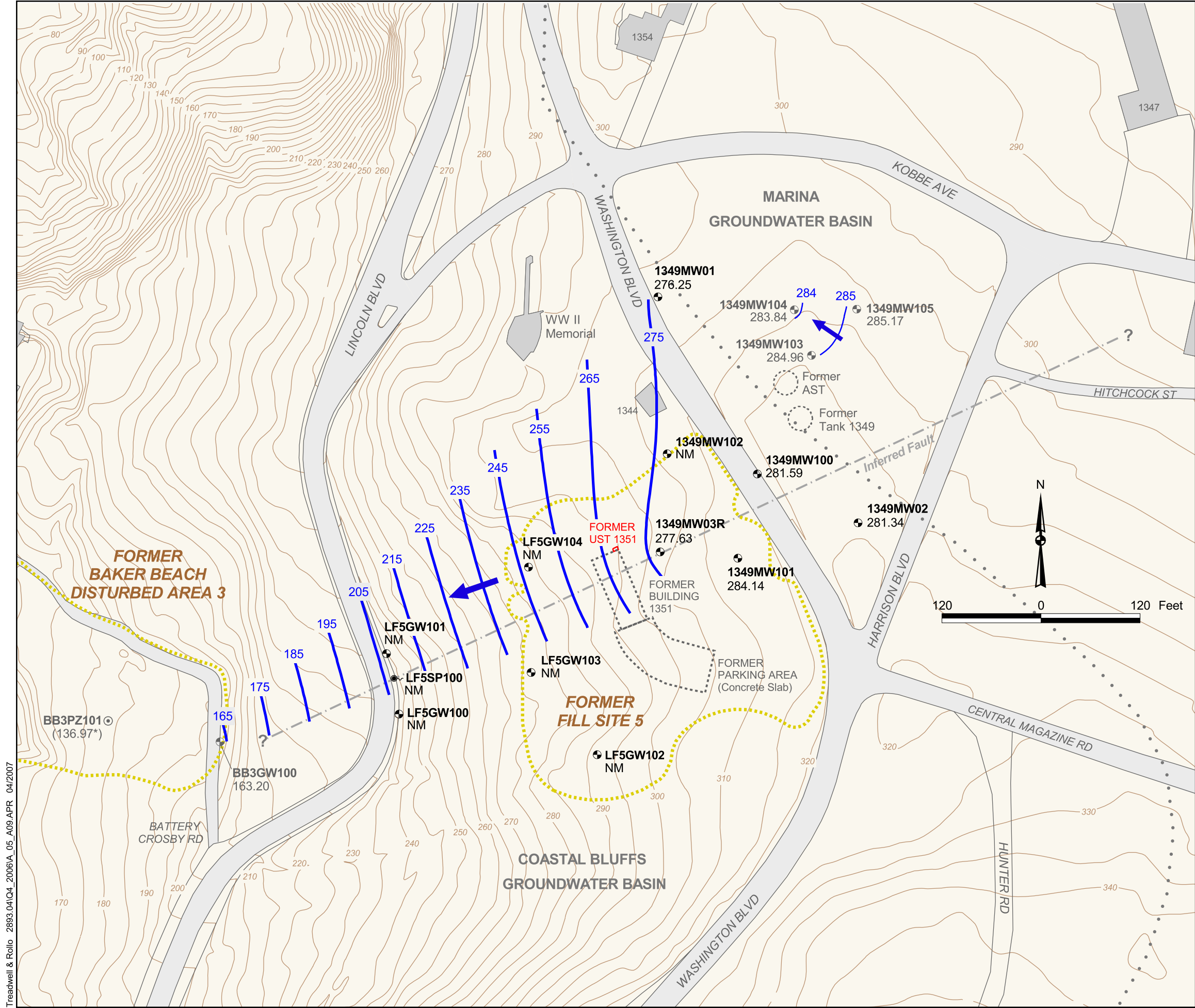
Treadwell&Rollo



Presidio Trust

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April 2007

FIGURE A-9-1



LEGEND

- LF5GW101 Groundwater Monitoring Well
- ~ LF5SP100 Approximate Surface Water Sample Location
- NM Not Measured.
- 1349MW103 Adjacent Study Area Well
284.96 December 2006 Groundwater Elevation
- ◎ BB3PZ101 Adjacent Study Area Piezometer
(136.97*) December 2006 Groundwater Elevation
- (136.97*) Dry Well. Value Indicates Bottom of Casing Elevation in Feet PLLW
- ➔ Approximate Direction of Groundwater Flow
- Groundwater Elevation Contours
(Contour Interval : 10 ft)
— Groundwater Elevation Contours
(Contour Interval : 0.5 ft)
- ... Former Fill Site 5 and Baker Beach Disturbed Area 3 Excavation Boundaries
- - - Inferred Fault
- ... Groundwater Basin Boundary
- Topographic Contour
(Contour Interval : 5 ft)
- 1344 Building and Number

Notes:
Groundwater elevation data collected on 4 December 2006.

AST - Above ground Storage Tank
UST - Underground Storage Tank

Location of inferred fault from Revised Feasibility Study Main Installation Sites (EKL, 2003).

Horizontal Datum: NAD 27, CA State Plane Coordinates, Zone 3, feet
Vertical Datums: (groundwater) Presidio Lower Low Water (ft. PLLW) (topography) North American Vertical Datum, NAVD88

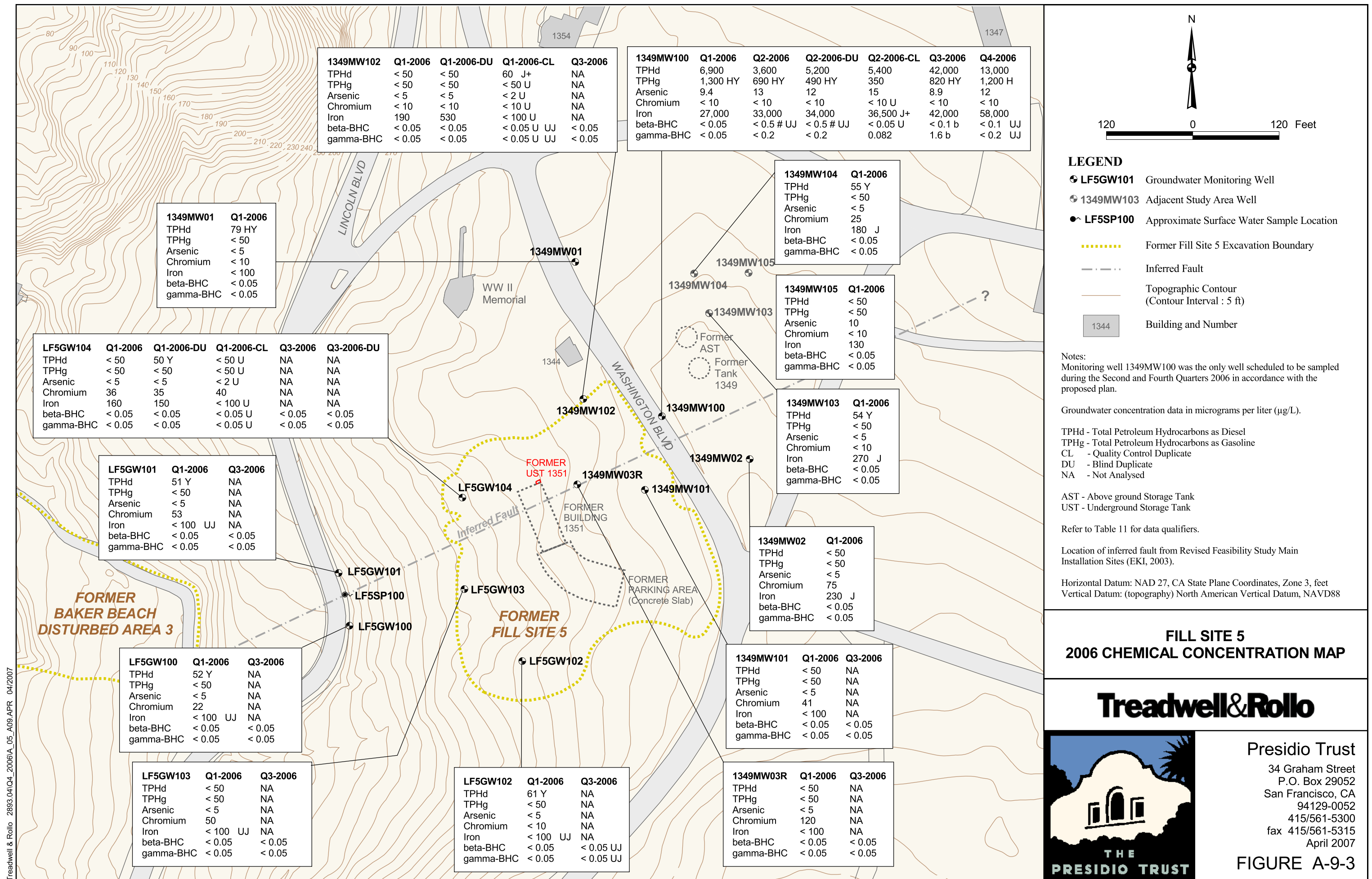
**FILL SITE 5 SITE PLAN
AND 4 DECEMBER 2006
GROUNDWATER ELEVATION MAP**

Treadwell&Rollo



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FIGURE A-9-2



Third Quarter 2006

Site / Area LFS Well No. 2F5 GW100
Project Number 2893 Well Type ☒ Monitor ☐ Extraction ☐ Other
Recorded By P-Cornish Sampled by P-Cornish Date 8/17/06

Treadwell & Rollo
Environmental and Geotechnical Consultant

MONITORING WELL SAMPLING LOG (Normal, Low Flow, and Low Yield)

Site / Area Land Fill 5
 Project Number 2893
 Recorded By WC

Well No. LF5GW104
 Well Type ☒ Monitor ☐ Extraction ☐ Other
 Sampled by WC Date 8/17/06

WELL PURGING

PURGE VOLUME

Well casing diameter
☒ 2-inch ☐ 4-inch ☐ Other
 Well Total Depth (TD, ft. below TOC): 34.67
 Depth to Water (WL, ft. below TOC): 20.53
 Depth to free phase (FP, ft. below TOC):

Liquid in a 1 Foot Section of a Boring (gallons)		
Borehole Size	Casing Size	Water Volume/Ft
8	2	0.9
10	4	1.68
12	4	2.22

PURGE METHOD

☐ Low Flow ☒ Bailer \ Type disp
☐ Normal ☐ Pump \ Type
☒ Modified (max 5 gpm) ☐ Other

PUMP INTAKE

☐ Near top Depth (ft) _____
☐ Near Bottom Depth (ft) _____
☐ Other

PURGE VOLUME CALCULATION

Water Column Length 9 ft $\times$ Water Volume/ft 1.5 gpm = 13.5 gals
 Total Purge Time 9 min
 Recharge Rate _____ Purge Rate 1.5 gpm
 CALCULATED PURGE VOLUME 13.5 gals
 ACTUAL PURGE VOLUME _____

GROUNDWATER PARAMETER MEASUREMENTS

Meter Type Ultrameter

Time	Liters or Gallons	pH	Temp °C / °F	DO (mg/L)	Sp. COND (µS/cm)	ORP (mV)	Turbidity (NTU)	Comments
1023	0	6.89	15.1		1597		33	clear / 20.53
1026	1.5	7.15	15.1		1523		68	↓ / 21.06
1029	3.0	7.24	14.8		1533		71	↓ / 22.38
1032	4.5	7.24	14.8		1539		89	↓ / 23.27

Comments _____ Purge water storage/disposal ☐ Drummed onsite ☒ Other Baker Tank

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled 8/17/06 11037

Purging Equipment Pump - Type Bailer - Type disp Other _____
 Sample Filtered: Yes (No) Filtered Sample Analysis: _____

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments
LF5GW104	(X) 6 L N Pamber	C&T	2155	MS/MSD

QUALITY CONTROL SAMPLES

Duplicate Samples		Blank Samples	
Original Sample No.	Duplicate Sample No.	Type	Sample No.
LF5GW104	DUPO@17062A @10417	Trip	
		Rinse	
		Transfer	
		Other:	

Site / Area LF5
Project Number 2893
Recorded By P. Cornish

Well No. LF55P100
Well Type ☒ Monitor ☐ Extraction ☐ Other
P. Cornish Date 8/17/00

PURGE VOLUME

☐ 2-inch ☐ 4-inch ☒ Other **feet**

Depth to free phase (FP, ft. below TOC) :

☐ 3 ☐ Not Applicable ☐ Other

Water Column Length

Water Volume/ft

Recharge Rate

Purge Rate

PURGE METHOD

☐ Modified (max 5 qpm)

☐ Other

Near Bottom	Depth (ft)
1	10
2	20
3	30
4	40
5	50
6	60
7	70
8	80
9	90
10	100
11	110
12	120
13	130
14	140
15	150
16	160
17	170
18	180
19	190
20	200
21	210
22	220
23	230
24	240
25	250
26	260
27	270
28	280
29	290
30	300
31	310
32	320
33	330
34	340
35	350
36	360
37	370
38	380
39	390
40	400
41	410
42	420
43	430
44	440
45	450
46	460
47	470
48	480
49	490
50	500
51	510
52	520
53	530
54	540
55	550
56	560
57	570
58	580
59	590
60	600
61	610
62	620
63	630
64	640
65	650
66	660
67	670
68	680
69	690
70	700
71	710
72	720
73	730
74	740
75	750
76	760
77	770
78	780
79	790
80	800
81	810
82	820
83	830
84	840
85	850
86	860
87	870
88	880
89	890
90	900
91	910
92	920
93	930
94	940
95	950
96	960
97	970
98	980
99	990
100	1000

☐ Other

gals

CALCULATED PURGE VOLUME

पत्र/स

ACTUAL PURGE VOLUME

Meter Type

[illegible]

Comments _____ : **Purge water storage/disposal** ☐ **Drummed onsite** ☐ **Other**

WELL SAMPLING

Date/Time Sampled

[illegible]**Bailer - Type**

Other

Sample Filtered: Yes / No

Filtered Sample Analysis:

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.

Duplicate Sample No.

Blank Samples

Sample No.

Type

Trip

Rinsate

Transfer

Other:

BUILDING 231/207 AREA
APPENDIX SECTION A-10
SEMI-ANNUAL GROUNDWATER MONITORING REPORT
THIRD AND FOURTH QUARTERS 2006
Presidio of San Francisco, California

1.0 INTRODUCTION AND BACKGROUND

The Building 231/207 Area is located in the northeast portion of the Presidio (Figure 1). The site elevation ranges from approximately 10 to 30 feet above PLLW datum.

Building 231 was built in 1950 and operated as an automobile service station for privately owned vehicles (Figure A-10-1). Building 231 was in operation until mid-1995 as an auto shop and tire store that performed a variety of automobile services. Building 228, located within the Building 231/207 Area, operated as a dry cleaner for an unknown period of time between 1950 and 1973 (Dames and Moore, 1995). Building 207 was the exchange service station and has a history of oil, fuel and gasoline station use (Harding ESE, 2003).

Samples have been collected from wells at the Building 231/207 Area since July 1993 and have been analyzed for general chemistry parameters, TPH, VOCs, and 23 dissolved metals. Groundwater samples were collected at some well locations prior to 1993, and the analytical data for that work is available in the RI Report (Dames & Moore, 1997). A summary of analytical results can be found in Tables A-10-1 through A-10-6 in this section.

The Draft Building 231/207 Area Corrective Action Plan (CAP) (MACTEC, 2005b), which documents the evaluation and selection of cleanup alternatives for soil and groundwater contamination at the site has recently been prepared. The CAP is discussed in greater detail in Section 3.0.

The well box elevations of monitoring wells and piezometers 231GW21, 231GW22, 231PZ03, and 231PZ04 were surveyed as part of the Data Gaps Investigation (MACTEC, 2004b). The survey results presented in Table C.1 of the Data Gaps Investigation Report were subsequently determined to be incorrect due to a surveying error. The top of casing elevations presented in this report were not affected by this surveying error and are correct.

To evaluate changing redox conditions, pH, temperature and ORP were added to the program in the First Quarter 2006. The Technical Memorandum, Evaluation of Arsenic and Other Metals in Groundwater at Three Corrective Action Plan Sites, Presidio of San Francisco, San Francisco, California (MACTEC, 2006a), concluded that ORP is a good indicator for evaluating changing redox conditions. The First Quarter 2006 pH, temperature and ORP data are presented in Table A-10-1 and will be used in the ongoing redox evaluations at CAP sites.

2.0 SITE DESCRIPTION AND GEOLOGY

The Building 231/207 Area is in the northeast portion of the Presidio on the border of the Northeastern and Crissy Field Groundwater Areas, both located within the Marina Groundwater Basin (Figure 1). Subsurface materials beneath the Building 231/207 Area consist of artificial debris fill, fine-grained estuarine deposits, and sand deposits. Groundwater studies conducted in the Building 231/207 Area identified three distinct water-bearing zones, designated as the shallow, intermediate, and deep zones. These three sandy water-bearing zones are separated by two less permeable clayey fine grained estuarine deposits (Harding ESE, 2003). The shallow zone exhibits unconfined conditions and extends to approximately 15 feet bgs. The intermediate zone is semi-confined and extends from approximately 15 to 25 feet bgs. The deep, confined zone extends from approximately 25 to 85 feet bgs. Groundwater flows northward towards the San Francisco Bay (Figures A-10-2 through A-10-5).

3.0 BUILDING 207/231 AREA CAP

The CAP (MACTEC, 2005b) was submitted to all stakeholders for public review on 15 July 2005. The following chemicals were identified by the CAP as chemicals of concern in soil: TPHg, TPHd, TPHfo, VOCs (BTEX, MTBE, PCE, TCE, bromobenzene, vinyl chloride, and methylene chloride), PAHs (acenaphthylene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, fluoranthene, phenanthrene, and pyrene), metals (arsenic, chromium, cobalt, lead, mercury, nickel, silver, and zinc), pesticides (4,4'-DDD), and PCBs (Arochlor 1016). Additionally, the following chemicals were identified by the CAP as chemicals of concern in groundwater; TPHg, TPHd, TPHfo, VOCs (BTEX, MTBE, bromobenzene, 1,2-DCA, PCE, TCE, and vinyl chloride), PAHs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(b)fluoranthene, benzo(k)fluoranthene, and chrysene, and indeno(1,2,3-cd)pyrene), metals (arsenic, lead, nickel, vanadium, and zinc), and PCBs (Arochlor 1016).

Based on cleanup level exceedances, five remedial units (RUs) or areas of contamination exceeding cleanup levels were identified, comprising seven areas of petroleum-related soil contamination and four areas of groundwater contamination.

The CAP recommends *Excavation and Offsite Disposal of Soil, and Groundwater Monitoring* as the preferred corrective action alternative for all RUs except the Historic Building 228 Area. The CAP recommends *Capping, Land Use Controls, In Situ Groundwater Treatment, and Groundwater Monitoring* as the preferred corrective action alternative for Historic Building 228 Area. This corrective action will be implemented by summer 2007 (MACTEC, 2005b).

Groundwater sampling at the Building 207/231 Area will be conducted in accordance with the CAP following CAP approval and implementation. Current and historical groundwater sampling

results are summarized in Table A-10-1 through A-10-6. Cleanup levels proposed in the CAP are presented in Tables A-10-2, A-10-3 and A-10-6.

4.0 GROUNDWATER MONITORING

During the Third and Fourth Quarters 2006, all 27 Building 231/207 Area groundwater monitoring wells and piezometers were measured for groundwater elevations. Monitoring wells associated with the Building 231/207 Area are screened within three distinct water-bearing units designated as the shallow, intermediate, and deep zones.

Only one monitoring well (231GW09) was proposed for sampling at the Building 231/207 Area during the Third and Fourth Quarters 2006. Beginning with the Second Quarter 2003, the sampling frequency and analytical suite for monitoring well 231GW09 was modified to serve as a downgradient well for Fill Site 6A (Tables 1A and 1B). This well was sampled as part of the Fill Site 6A monitoring program described in Appendix A, Section A-3.

Water-level meters were calibrated on 14 August 2006 and 4 December 2006 and the calibration logs can be found in Appendix B. Groundwater elevation field forms can be found in Appendix C.

4.1 Groundwater-Level Measurements and Interpretation

Groundwater elevation measurements were collected during the Third and Fourth Quarters 2006 on 14 August and 4 December 2006, respectively. Groundwater elevations are presented in Table A-10-7.

During the Third Quarter 2006, shallow zone groundwater elevations ranged from 5.10 to 10.81 feet above PLLW in monitoring wells 231GW16 and 231GW09, respectively (Figure A-10-2). Intermediate zone groundwater elevations ranged from 5.67 feet above PLLW in monitoring well 207GW03 to 9.57 feet above PLLW in monitoring wells 231GW18 and 231GW27 (Figure A-10-4). Deep zone groundwater elevations ranged from 10.89 feet above PLLW in monitoring well 231GW13 to 11.03 feet above PLLW in piezometer OW-1 (Figure A-10-6).

During the Fourth Quarter 2006, shallow zone groundwater elevations ranged from 5.17 to 10.93 feet above PLLW in monitoring wells 231GW16 and 231GW09, respectively (Figure A-10-3). Intermediate zone groundwater elevations ranged from 5.77 to 9.78 feet above PLLW in monitoring wells 207GW03 and 231GW27, respectively (Figure A-10-5). Deep zone groundwater elevations ranged from 10.90 to 11.05 feet above PLLW in piezometer OW-1 (Figure A-10-7).

Groundwater elevation measurements at the Building 231/207 Area shallow monitoring wells were evaluated with measurements collected at Building 1065/1027 and Fill Site 6 shallow

monitoring wells to better understand groundwater flow directions and gradients in this area. Groundwater elevation data for these adjacent sites can be found in Tables A-11-7 and A-3-6. During the Third and Fourth Quarters 2006, the shallow aquifer groundwater flow direction in the Building 231/207 Area was generally north-northwesterly towards the San Francisco Bay following the general topographic trend (Figures A-10-2 and A-10-3). The shallow groundwater gradient in the vicinity of Building 231 was approximately 0.009 feet per foot during both the Third and Fourth Quarters 2006. Groundwater gradients and flow directions are consistent with previous findings at the site.

Groundwater elevation measurements at the Building 231/207 intermediate aquifer monitoring wells were evaluated with Building 1065/1027 intermediate aquifer monitoring wells to better understand groundwater flow direction and gradient in the intermediate aquifer. These groundwater level data can be found in Tables A-10-7 and A-11-7. During the Third and Fourth Quarters 2006, the intermediate aquifer groundwater flow direction in the Building 231/207 and Building 1065/1027 Areas was generally north, towards the San Francisco Bay following the general topographic trend (Figures A-10-4 and A-10-5). However, a slight depression in the potentiometric surface was present east of Building 231. During the Third and Fourth Quarters 2006, the average intermediate groundwater gradient was calculated in the vicinity of Building 231 to be approximately 0.005 and 0.004 feet per foot, respectively. Groundwater gradients and flow directions are consistent with previous findings at the site.

The groundwater flow direction in the deep aquifer was generally north towards San Francisco Bay during both the Third and Fourth Quarters 2006 (Figures A-10-6 and A-10-7). The groundwater gradient within the deep aquifer was calculated to be approximately 0.0006 feet per foot and 0.0005 feet per foot during the Third and Fourth Quarters 2006, respectively. The deep groundwater flow direction has typically ranged from northeasterly to northwesterly since 2001. Building 231/207 Area vertical gradient estimates are presented in Table A-10-8.

Vertical groundwater gradients were calculated for four well clusters, WC-1, WC-2, WC-3, and WC-4. Clusters WC-1, WC-2, and WC-3 each have piezometers screened within the three distinct water-bearing zones. Cluster WC-4 has piezometers screened within the shallow and intermediate water-bearing zones. A description of which piezometers are contained in each well cluster can be found in Table A-10-8. Upward vertical gradients were present between all groundwater zones at well clusters WC-1, WC-2, WC-3, during the Third and Fourth Quarters 2006. An upward and downward vertical gradient was present at well cluster WC-4 during the Third and Fourth Quarters 2006, respectively. Both upward and downward vertical gradients have historically been measured in well cluster WC-4.

During the Third and Fourth Quarters 2006, Building 231/207 Area groundwater elevations within monitoring wells and piezometers were generally within the range of historical elevations measured at the site. The overall groundwater flow direction and gradients associated with the Building 231/207 Area are consistent with previous events.

4.2 Monitoring Well Purging and Sampling

Groundwater samples were only collected from monitoring well 231GW09 during the Third and Fourth Quarters 2006, in accordance with Tables 1A and 1B of the main text and procedures described in the FSP (Treadwell & Rollo, 2001a). Monitoring well 231GW09 was sampled on 15 August and 5 December 2006 during the Third and Fourth Quarters 2006, respectively.

Purge equipment, purging volumes, purge water general chemistry parameters, and sampling equipment for each monitoring well are described in the purge records located at the conclusion of this section. Purge water was stored for future disposal in one of two 2,800-gallon aboveground polyethylene storage tanks, which are located at the Central Magazine.

4.3 Groundwater Analytical Program

All groundwater samples collected were submitted to the project laboratory for the analyses shown in Tables 1A and 1B of the main text. The appropriate sampling containers, preservatives, and maximum holding times for each analytical method are shown in Table 5. Sample containers used for each well are described in the purge records located at the conclusion of this section.

QA/QC samples were collected as part of this program. Section 6.2 of the main text discusses the QA/QC sampling and analysis performed for the Third and Fourth Quarters 2006.

5.0 GROUNDWATER ANALYTICAL RESULTS

Groundwater samples collected from the Building 231/207 Area monitoring well 231GW09 were analyzed for TPHg, TPHd, TPHfo, VOCs/MTBE, TDS, sulfide, general chemistry parameters, and 23 dissolved metals, during the Third and Fourth Quarters 2006.

The following sections discuss analytical results collected from monitoring well 231GW09 during the Third and Fourth Quarters 2006.

5.1 Dissolved Oxygen

Dissolved oxygen was measured in monitoring well 231GW09 at concentrations of 0.51 and 0.67 mg/L during the Third Quarter and Fourth Quarters 2006, respectively. Both concentrations are within historical ranges. Dissolved oxygen results are presented in Table A-10-2.

5.2 General Chemistry Results

The general chemistry parameter results measured at 231GW09 during the Third and Fourth Quarters 2006 are within historical ranges. General chemistry results are presented in Table A-10-1.

5.3 TPH Results

As shown in Table A-10-2 and on Figure A-10-8, no TPH compounds were detected within monitoring well 231GW09 during either the Third or Fourth Quarters 2006.

TPHfo was detected at 231GW09 for the first time in the Second Quarter 2002 at a concentration of 610 µg/L, in exceedance of the RAP cleanup level of 443 µg/L. TPHfo has not been detected since, and therefore this detection can be considered an anomaly.

TPH_g and TPH_d have not exceeded RAP cleanup levels to date within 231GW09 monitoring well samples.

5.4 VOC, BTEX, and MTBE Results

As shown in Table A-10-3 and on Figure A-10-8, no VOC compounds (including BTEX and MTBE) were detected during either the Third or Fourth Quarters 2006 within 231GW09.

5.5 Dissolved Metals and TDS Results

Dissolved metals results are presented in Table A-10-6. Monitoring well 231GW09 was proposed and sampled for 23 dissolved metals analysis during the Third and Fourth Quarters 2006.

Chromium was detected at a new high concentration of 30 µg/L in the QC duplicate collected from monitoring well 231GW09 during the Fourth Quarter 2006. This new high concentration was only slightly outside of the historical high and can be attributed to natural fluctuation.

Nickel was detected at 18 µg/L, within historical ranges but above its CAP-specified cleanup level of 8.2 µg/L within the QC duplicate sample collected from 231GW09 during the Third and Fourth Quarters 2006.

As shown in Table A-10-6, the remaining dissolved metal results were within historical ranges during the Third and Fourth Quarters 2006.

6.0 GROUNDWATER REDOX PARAMETERS

Several parameters were measured in the field and in the laboratory to help determine the redox state of groundwater at the Building 231/207 Area.

The Trust has currently preparing a *Technical Memorandum: Arsenic and Other Metals in Groundwater at Three Corrective Action Sites, Presidio of San Francisco, California* (MACTEC, 2006a). This technical memorandum discusses the reduction/oxidation (redox) state of groundwater at the Building 231/207 Area using data collected as part of the Presidio-wide Groundwater Monitoring Program. Groundwater redox parameter results collected during the

Third and Fourth Quarters 2006 were generally within the range of previously detected concentrations at the Building 231/207 Area.

Building 231/207 Area monitoring well 231GW09 was included with the modified redox diagrams developed for associated Fill Site 6 monitoring wells. The redox diagrams were generated using the Sequence™ program and concentrations of dissolved oxygen, nitrate, manganese, iron, sulfate and methane and are plotted on Figure A-10-9. Each redox diagram consists of multiple axes, with each individual axis representing one of the above analytes. Each redox diagram is associated with one monitoring well location. The relative shape of each redox diagram represents an approximation of the redox state within the well studied. In general, the larger the polygon the more oxidizing the groundwater environment is at the well location, conversely, the smaller the polygon the more reducing the environment.

7.0 CONCLUSIONS & RECOMMENDATIONS

Building 231/207 Area monitoring well 231MW09 was purged and sampled during the Third and Fourth Quarter 2006 and was the only Building 231/207 monitoring well scheduled for sampling during these events. No TPH or VOC compounds were detected at or above their laboratory reporting limits.

The majority of detected analytes were within historical bounds during the Third and Fourth Quarters 2006. Dissolved nickel was detected at 231GW09 above its CAP-specified cleanup level during both the Third and Fourth Quarters 2006. However, both of these detections were within historical ranges. No other CAP-specified cleanup levels were exceeded during either the Third or Fourth Quarters 2006. There are no proposed changes to the groundwater sampling schedule or procedures at this site.

Table A-10-1
Results of General Chemistry Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Sulfide	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ SW9056	E300.0/ SW9056	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mV)	pH units	C°
207GW03 (intermediate)	03/16/06	460	460	150	0.29	< 0.05	< 0.05	1.7	3.4 J-	-181.2	7.8	16.1
	04/12/05	390	390	120	0.29	< 0.05	< 0.05	2.7	2.5	NR	NR	NR
	01/11/99	411	411	150	NA	< 2	NA	< 25	NA	NR	NR	NR
	10/12/98	432	432	160	NA	< 0.2	NA	2.66	NA	NR	NR	NR
	07/09/98	450	450	184 D	NA	0.017	NA	4.03	NA	NR	NR	NR
	05/04/98	420	420	159 D	NA	0.063	NA	9.38	NA	NR	NR	NR
	01/29/97	235	235	56.1 D	NA	2.5 D	NA	62.3 D	NA	NR	NR	NR
231GW06 (intermediate)	03/15/06	220	220	50	< 0.1	< 0.05	< 0.05	47	< 0.04	236	6.7	18
	04/04/05	290	290	57	< 0.1	0.1	< 0.05	76	< 0.04 UJ	NR	NR	NR
	01/20/99	260	260	95	NA	3.39	NA	74	NA	NR	NR	NR
	10/20/98	256	256	81.1	NA	3.1	NA	72	NA	NR	NR	NR
	07/21/98	240	240	64.1 D	NA	3.17 D	NA	67.5 D	NA	NR	NR	NR
	04/23/98	240	240	62.6 D	NA	2.72 D	NA	62.2 D	NA	NR	NR	NR
	01/27/98	236	236	67.2 D	NA	3.67 D	NA	69.9 D	NA	NR	NR	NR
	10/22/97	227	227	66.9 D	NA	3.62	NA	70.4 D	NA	NR	NR	NR
	07/23/97	239	239	62.3 D	NA	3.69 D	NA	67.3 D	NA	NR	NR	NR
	04/23/97	238	238	63.6 D	NA	3.09 D	NA	67.1 D	NA	NR	NR	NR
	01/28/97	197	197	53.9 D	NA	22.5 D	NA	67 D	NA	NR	NR	NR
231GW09 (shallow) DUP1205062B 231GW09CL DUP1129052A DUP1217042A	12/05/06	230	230	38	< 0.1	14	< 0.05	66	< 0.04	188.3	6.7	18.3
	12/05/06	240	240	37	< 0.1	14	< 0.05	66	< 0.04	--	--	--
	12/05/06	228	228	40	< 1 U	15	< 0.1 U	67.7	< 0.05	--	--	--
	08/15/06	220	220	38	< 0.1	12	< 0.05	64	< 0.04	163	6.6	17.5
	05/24/06	230	230	41	< 0.1	11	< 0.05	68	< 0.04 R	33.7	6.5	16.5
	03/15/06	110	110	22	< 0.1	4.6	< 0.05	35	< 0.04	204	6.22	16.2
	11/29/05	220 J+	220	48	< 0.1	6.6	< 0.05	75	< 0.04	NR	NR	NR
	11/29/05	210 J+	210	48	< 0.1	6.7	< 0.05	76	< 0.04	NR	NR	NR
	08/31/05	220	220	48	< 0.1 UJ	5.5	< 0.05 UJ	75	< 0.04	NR	NR	NR
	06/01/05	210	210	48	0.11	5.5	< 0.05	77	0.04	NR	NR	NR
	04/04/05	180	180	51	< 0.1	5.5	< 0.05	79	0.11 J-	NR	NR	NR
	12/17/04	120	120	52	< 0.1	5.8	< 0.05	81	NA	NR	NR	NR
	12/17/04	190	190	51	< 0.1	5.6	< 0.05	79	NA	NR	NR	NR

Table A-10-1
Results of General Chemistry Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Sulfide	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ SW9056	E300.0/ SW9056	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mV)	pH units	C°
231GW09 (shallow) DUP0527042C 231GW09CL	08/12/04	250	250	50	< 0.1	5.8	< 0.05	77	NA	NR	NR	NR
	05/27/04	310	310	51	< 0.1	6	< 0.05	81	NA	NR	NR	NR
	05/27/04	250	250	51	< 0.1	5.7	< 0.05	80	NA	NR	NR	NR
	05/27/04	210	210	52 D	0.11	7.1 D	< 0.05	83 D	NA	NR	NR	NR
	03/18/04	210	210	56	< 0.1	6.5	< 0.05	85	NA	NR	NR	NR
	12/04/03	220	220	53	< 0.1	6.9	< 0.05	81	NA	NR	NR	NR
	08/15/03	190	190	51	< 0.1	7.7 b,J-	< 0.05 UJ	91	NA	NR	NR	NR
	06/10/03	250	250	57	< 0.1	9.1	< 0.05	88	NA	NR	NR	NR
	01/13/99	183	183	55.8	NA	33.6	NA	69	NA	NR	NR	NR
	10/14/98	181	181	49	NA	28.2	NA	65	NA	NR	NR	NR
	07/15/98	210	210	49.9 D	NA	32.2 D	NA	68.6 D	NA	NR	NR	NR
	04/20/98	250	250	75.1 D	NA	45.6 D	NA	92.8 D	NA	NR	NR	NR
	01/28/98	190	190	62.4 D	NA	22.3 D	NA	73.8 D	NA	NR	NR	NR
	10/23/97	< 165	< 165	47.5 D	NA	24.5 D	NA	67.4 D	NA	NR	NR	NR
	07/24/97	172	172	42.4 D	NA	29.1 D	NA	75.9 D	NA	NR	NR	NR
	04/22/97	195	195	49.8 D	NA	29.8 D	NA	69.2 D	NA	NR	NR	NR
	01/28/97	197	197	53.9 D	NA	22.5 D	NA	67 D	NA	NR	NR	NR
231GW10 (shallow)	03/09/06	820	820	45	0.37	< 0.05	< 0.05	3.5	< 0.04 UJ	-130.7	5.46	15.78
	03/22/05	680	680	48	0.35	< 0.05	< 0.05	12	< 0.04	NR	NR	NR
	01/25/99	391	391	31.3	NA	< 0.2	NA	60.6	NA	NR	NR	NR
	10/19/98	683	683	67	NA	0.15	NA	0.751	NA	NR	NR	NR
	07/22/98	674	674	55.6 D	NA	0.018	NA	0.327	NA	NR	NR	NR
	04/23/98	648	648	52.6 D	NA	0.012	NA	14.1 D	NA	NR	NR	NR
	01/28/98	624	624	53 D	NA	0.011	NA	8.9	NA	NR	NR	NR
	10/22/97	663	663	62.1 D	NA	< 0.01	NA	< 0.387	NA	NR	NR	NR
	07/23/97	677	677	60.8 D	NA	0.041	NA	0.291	NA	NR	NR	NR
	04/23/97	676	676	63.5 D	NA	0.019	NA	0.158	NA	NR	NR	NR
	01/28/97	448	448	61.5 D	NA	< 0.01	NA	1.22	NA	NR	NR	NR
231GW11 (shallow)	03/15/06	420	420	53	0.15	< 0.05	< 0.05	4.8	< 0.04	-7.7	7.37	15.2
	04/05/05	410	410	50	0.15	< 0.05	< 0.05	7.3	0.3	NR	NR	NR
	01/11/99	439	439	70	NA	< 0.8	NA	10.3	NA	NR	NR	NR
	10/12/98	395	395	56.5	NA	< 0.04	NA	10.9	NA	NR	NR	NR
	07/13/98	380	380	48.8 D	NA	0.022	NA	5.01	NA	NR	NR	NR
	04/21/98	400	400	50.6 D	NA	0.037	NA	6.01	NA	NR	NR	NR

Table A-10-1
Results of General Chemistry Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Sulfide	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ SW9056	E300.0/ SW9056	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mV)	pH units	C°
231GW11 (shallow)	01/26/98	416	416	53.8 D	NA	0.019	NA	4	NA	NR	NR	NR
	10/21/97	446	446	59.6 D	NA	0.017	NA	2.14	NA	NR	NR	NR
	07/21/97	431	431	55 D	NA	0.013	NA	4.44	NA	NR	NR	NR
	04/21/97	443	443	60.3 D	NA	< 0.01	NA	2.08	NA	NR	NR	NR
	04/10/95	466	461	72.1	NA	< 0.2	NA	< 5	NA	NR	NR	NR
231GW13 (deep)	03/14/06	420	420	160	0.51	0.07	< 0.05	< 0.5	< 0.04	221	7.52	16.4
	04/05/05	410	410	150	0.45	< 0.05	< 0.05	< 0.5	< 0.04	NR	NR	NR
	01/14/99	434	434	180	NA	< 2	NA	< 25	NA	NR	NR	NR
	10/15/98	429	429	184	NA	< 0.08	NA	< 1	NA	NR	NR	NR
	07/16/98	432	432	157 D	NA	0.791	NA	0.361	NA	NR	NR	NR
	04/21/98	416	416	145 D	NA	0.043	NA	0.485	NA	NR	NR	NR
	01/26/98	400	400	133 D	NA	0.029	NA	0.242	NA	NR	NR	NR
	10/20/97	415	415	157 D	NA	0.163	NA	0.358	NA	NR	NR	NR
	07/21/97	423	423	150 D	NA	0.912	NA	0.505	NA	NR	NR	NR
	04/21/97	432	432	162 D	NA	0.067	NA	0.304	NA	NR	NR	NR
	01/27/97	430	430	160 D	NA	0.04	NA	0.44	NA	NR	NR	NR
231GW15 (intermediate)	04/07/95	272	269	58.8	NA	< 0.2	NA	9.98	NA	NR	NR	NR
	03/14/06	300	300	57	0.11	< 0.05	< 0.05	28	< 0.04	-125	7.54	13.4
	04/05/05	320	320	59	< 0.1	< 0.05	< 0.05	37	< 0.04	NR	NR	NR
	01/14/99	281	281	83.8	NA	< 0.5	NA	20	NA	NR	NR	NR
	10/15/98	254	254	79	NA	0.23	NA	12.7	NA	NR	NR	NR
	07/16/98	< 256	< 256	68.8 D	NA	0.25	NA	11.2	NA	NR	NR	NR
	04/21/98	276	276	59.9 D	NA	< 0.028	NA	4.79	NA	NR	NR	NR
	01/26/98	276	276	64.8 D	NA	0.057	NA	11.6	NA	NR	NR	NR
	10/20/97	255	255	74.3 D	NA	0.33	NA	15.2 D	NA	NR	NR	NR
	07/21/97	271	271	66.7 D	NA	0.014	NA	20.5 D	NA	NR	NR	NR
	04/21/97	279	279	70.4 D	NA	0.021	NA	16.6 D	NA	NR	NR	NR
231GW16 (shallow)	01/30/97	425	425	153 D	NA	< 0.01	NA	46.8 D	NA	NR	NR	NR
	01/27/97	265	265	65.7 D	NA	0.1	NA	9.9	NA	NR	NR	NR
	03/09/06	480	480	230	0.45	< 0.05	< 0.05	36	0.07 J-	-15.9	5.95	13.72
	03/22/05	430	430	150	0.32	< 0.05	< 0.05	16	0.19	NR	NR	NR
	01/14/99	516	516	400	NA	< 4	NA	< 50	NA	NR	NR	NR
	10/15/98	449	449	272	NA	< 0.16	NA	< 2	NA	NR	NR	NR
	07/16/98	374	374	407 D	NA	< 0.01	NA	42.4 D	NA	NR	NR	NR
	04/21/98	422	422	188 D	NA	< 0.01	NA	29 D	NA	NR	NR	NR

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Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Sulfide	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ SW9056	E300.0/ SW9056	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mV)	pH units	C°
231GW16 (shallow)	01/26/98	406	406	214 D	NA	0.016	NA	13.5	NA	NR	NR	NR
	10/20/97	432	432	566 D	NA	0.069	NA	30.2 D	NA	NR	NR	NR
	07/21/97	432	432	580 D	NA	< 0.01	NA	70.6 D	NA	NR	NR	NR
	04/24/97	474	474	297 D	NA	< 0.01	NA	39.9 D	NA	NR	NR	NR
	04/10/95	190	189	30.5	NA	6.83	NA	38.5	NA	NR	NR	NR
231GW17 (deep)	03/15/06	250	250	30	< 0.1	8.6	< 0.05	41	< 0.04	186.3	6.88	18.1
	04/05/05	220	220	31	< 0.1	9.2	< 0.05	42	< 0.04	NR	NR	NR
	01/13/99	207	207	45.8	NA	8.79	NA	44	NA	NR	NR	NR
	10/14/98	195	195	37	NA	7.2	NA	37	NA	NR	NR	NR
	07/15/98	202	202	38.7 D	NA	7.92 D	NA	38.7 D	NA	NR	NR	NR
	04/20/98	194	194	33.6 D	NA	6.88 D	NA	34.2 D	NA	NR	NR	NR
	01/27/98	184	184	35.5 D	NA	7.97 D	NA	39.2 D	NA	NR	NR	NR
	10/21/97	181	181	42.7 D	NA	7.48 D	NA	39.8 D	NA	NR	NR	NR
	07/22/97	187	187	32.4 D	NA	7.45 D	NA	35.4 D	NA	NR	NR	NR
	04/22/97	200	200	38 D	NA	7.36 D	NA	34.6 D	NA	NR	NR	NR
	01/28/97	187	187	37.9 D	NA	7.2 D	NA	37.6 D	NA	NR	NR	NR
	04/10/95	232	23.1	50.2	NA	6.91	NA	58.9	NA	NR	NR	NR
231GW18 (intermediate)	03/15/06	270	270	57	< 0.1	5.4	< 0.05	73	< 0.04	222	6.81	18.6
	04/05/05	240	240	49	< 0.1	6.4	< 0.05	58	< 0.04	NR	NR	NR
	01/13/99	242	242	69	NA	7.4	NA	66	NA	NR	NR	NR
	10/14/98	230	230	76	NA	8.3	NA	75	NA	NR	NR	NR
	07/15/98	224	224	60.2 D	NA	7.01 D	NA	65.2 D	NA	NR	NR	NR
	04/20/98	230	230	60.8 D	NA	7.13 D	NA	59.5 D	NA	NR	NR	NR
	01/27/98	226	226	57 D	NA	7.66 D	NA	68.8 D	NA	NR	NR	NR
	10/21/97	219	219	62.4 D	NA	7.31 D	NA	61.4 D	NA	NR	NR	NR
	07/22/97	276	276	56.7 D	NA	7.71 D	NA	62.1 D	NA	NR	NR	NR
	04/22/97	240	240	61.8 D	NA	7.56 D	NA	60.7 D	NA	NR	NR	NR
	01/28/97	225	225	61 D	NA	7 D	NA	61.1 D	NA	NR	NR	NR
	04/10/95	478	477	32.4	NA	0.357	NA	41.6	NA	NR	NR	NR
231GW19 (shallow)	03/16/06	270	270	32	0.17	< 0.05	< 0.05	38	0.06 J-	-116.7	7.01	16.4
	04/05/05	190	190	28	0.17	< 0.05	< 0.05	10	< 0.04	NR	NR	NR
	01/13/99	340	340	73	NA	0.12	NA	21	NA	NR	NR	NR
	10/14/98	234	234	59.8	NA	< 0.4	NA	27	NA	NR	NR	NR
	07/15/98	306	306	47.1 D	NA	0.071	NA	39.9 D	NA	NR	NR	NR
	04/20/98	320	320	52.5 D	NA	0.051	NA	65.8 D	NA	NR	NR	NR

Table A-10-1
Results of General Chemistry Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Sulfide	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ SW9056	E300.0/ SW9056	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mV)	pH units	C°
231GW19 (shallow)	01/27/98	334	334	52.5 D	NA	0.011	NA	3.22	NA	NR	NR	NR
	10/20/97	294	294	54.6 D	NA	0.011	NA	41.2 D	NA	NR	NR	NR
	07/22/97	254	254	41.1 D	NA	< 0.01	NA	43.8 D	NA	NR	NR	NR
	04/21/97	329	329	45.7 D	NA	0.046	NA	30.6 D	NA	NR	NR	NR
	01/27/97	245	245	36.3 D	NA	< 0.01	NA	7.48	NA	NR	NR	NR
	04/11/95	224	223	53.4	NA	1.56	NA	22.9	NA	NR	NR	NR
231GW20 (deep)	03/15/06	78	78	16	< 0.1	0.6	< 0.05	9.6	< 0.04	91.7	7.24	17.6
	04/06/05	140	140	39	< 0.1	0.91	< 0.05	12	< 0.04 UJ	NR	NR	NR
	01/20/99	222	222	67	NA	2.1	NA	23.6	NA	NR	NR	NR
	10/20/98	218	218	66.5	NA	1.9	NA	22	NA	NR	NR	NR
	07/21/98	216	216	57.4 D	NA	2.13 D	NA	25.4 D	NA	NR	NR	NR
	04/23/98	216	216	53.9 D	NA	2.25 D	NA	23.6 D	NA	NR	NR	NR
	01/29/98	208	208	57.6 D	NA	2.29 D	NA	25.5 D	NA	NR	NR	NR
	10/22/97	212	212	56.8 D	NA	2.25	NA	26.7 D	NA	NR	NR	NR
	07/23/97	232	232	57.2 D	NA	2.34 D	NA	25.5 D	NA	NR	NR	NR
	04/23/97	215	215	57.4 D	NA	2.08 D	NA	24.1 D	NA	NR	NR	NR
	01/29/97	NA	NA	NA	NA	NA	NA	NA	NA	NR	NR	NR
	04/12/95	58.8	584	49.5	NA	< 0.2	NA	7.13	NA	NR	NR	NR
231GW21 (shallow) DUP0308061A 231GW21CL DUP0331052D 231GW21CL	03/08/06	450	450	32	0.2	< 0.05	< 0.05	< 0.5	< 0.04	-62.5	6.56	17.9
	03/31/05	500	500	41	0.25	< 0.05	< 0.05	< 0.5	< 0.04	NR	NR	NR
	03/08/06	470	470	34	0.2	< 0.05	< 0.05	< 0.5	< 0.04	NR	NR	NR
	03/08/06	456	456	33.6	< 1 U	< 0.02 U	< 0.02 U	< 1 U	< 0.05 U UJ	NR	NR	NR
	03/31/05	440	440	33	0.23	< 0.05	< 0.05	< 0.5	< 0.04	NR	NR	NR
	03/31/05	516	516	39.7	0.39	< 0.1 U	< 0.02 U	< 1 U	< 0.04 U	NR	NR	NR
	01/20/99	650	650	65	NA	0.38	NA	< 1	NA	NR	NR	NR
	10/20/98	671	671	53.7	NA	0.42	NA	< 0.5	NA	NR	NR	NR
	07/23/98	722	722	49.9 D	NA	0.011	NA	0.17	NA	NR	NR	NR
	05/01/98	714	714	48.6 D	NA	0.014	NA	0.261	NA	NR	NR	NR
	01/28/98	708	708	52.6 D	NA	0.02	NA	0.12	NA	NR	NR	NR
	10/27/97	595	595	58.4 D	NA	0.012	NA	0.512	NA	NR	NR	NR
	07/24/97	713	713	51 D	NA	< 0.05 DU	NA	< 0.5 DU	NA	NR	NR	NR
	04/28/97	676	676	281 D	NA	0.153	NA	34.2 D	NA	NR	NR	NR
	04/24/97	695	695	53.2 D	NA	< 0.01	NA	< 0.1	NA	NR	NR	NR
	01/30/97	686	686	53.9 D	NA	0.02	NA	1.46	NA	NR	NR	NR

Table A-10-1
Results of General Chemistry Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Sulfide	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ SW9056	E300.0/ SW9056	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mV)	pH units	C°
231GW22 (shallow) DUP0309061A DUP0323052A	03/09/06	740	740	57	0.26	< 0.05	< 0.05	< 0.5	< 0.04 UJ	-92	6.77	17.6
	03/09/06	760	760	57	0.26	< 0.05	< 0.05	< 0.5	< 0.04 UJ	NR	NR	NR
	03/23/05	680	680	58	0.24	< 0.05	< 0.05	< 0.5	< 0.04	NR	NR	NR
	03/23/05	700	700	58	0.24	< 0.05	< 0.05	< 0.5	< 0.04	NR	NR	NR
	01/21/99	741	741	88	NA	0.54	NA	3	NA	NR	NR	NR
	10/21/98	705	705	101	NA	0.053	NA	1.5	NA	NR	NR	NR
	07/22/98	672	672	73 D	NA	0.021	NA	0.242	NA	NR	NR	NR
	04/27/98	692	692	79 D	NA	0.07	NA	0.252	NA	NR	NR	NR
	01/29/98	650	650	84.8 D	NA	0.051	NA	0.269	NA	NR	NR	NR
	10/28/97	645	645	98.1 D	NA	0.037	NA	0.536	NA	NR	NR	NR
231GW23 (shallow)	07/28/97	692	692	141 D	NA	0.075	NA	0.356	NA	NR	NR	NR
	04/29/97	456	456	60.6 D	NA	0.019	NA	0.681	NA	NR	NR	NR
	03/15/06	410	410	47	0.31	0.1	< 0.05	11	< 0.04	-134.7	6.84	12.5
	04/05/05	510	510	55	0.34	< 0.05	< 0.05	< 0.5	< 0.04	NR	NR	NR
	01/20/99	436	436	68	NA	0.11	NA	1	NA	NR	NR	NR
	10/22/98	447	447	59.1	NA	0.68	NA	9.5	NA	NR	NR	NR
	07/23/98	454	454	55.8 D	NA	< 0.013	NA	< 1.27	NA	NR	NR	NR
	04/28/98	422	422	52.8 D	NA	< 0.02	NA	< 0.536	NA	NR	NR	NR
	02/02/98	418	418	60.3 D	NA	< 0.01	NA	6.1	NA	NR	NR	NR
	10/23/97	445	445	56.5 D	NA	< 0.011	NA	< 0.561	NA	NR	NR	NR
231GW24 (shallow)	07/29/97	439	439	56.9 D	NA	< 0.01	NA	0.231	NA	NR	NR	NR
	04/30/97	299	299	33.9 D	NA	0.295	NA	19.6 D	NA	NR	NR	NR
	03/16/06	330	330	30	< 0.1	0.06	< 0.05	40	< 0.04 R	-57.5	7.3	13.1
	04/05/05	220	220	26	< 0.1	0.21	< 0.05	30	< 0.04	NR	NR	NR
	01/20/99	298	298	55.9	NA	< 0.04	NA	22	NA	NR	NR	NR
	10/19/98	245	245	43.7	NA	< 0.04	NA	25	NA	NR	NR	NR
	07/20/98	248	248	39.2 D	NA	0.016	NA	33.2 D	NA	NR	NR	NR
	04/22/98	286	286	51.8 D	NA	0.174 D	NA	30.2 D	NA	NR	NR	NR
	02/03/98	252	252	44 D	NA	2.11 D	NA	37.3 D	NA	NR	NR	NR
	10/29/97	274	274	39.6 D	NA	0.014	NA	16.8 D	NA	NR	NR	NR
	07/30/97	242	242	36.2 D	NA	0.026	NA	25.6 D	NA	NR	NR	NR
	04/30/97	520	520	91.1 D	NA	0.017	NA	27.2 D	NA	NR	NR	NR

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Well Name (water-bearing zone)	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Sulfide	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ SW9056	E300.0/ SW9056	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mV)	pH units	C°
231GW25 (shallow)	03/15/06	800	800	48	0.42	< 0.05	< 0.05	0.8	< 0.04	70.3	6.94	12.2
	04/06/05	690	690	50	0.46	< 0.05	< 0.05	2.4	< 0.04 UJ	NR	NR	NR
	01/21/99	700	700	73	NA	0.26	NA	5.4	NA	NR	NR	NR
	10/19/98	699	699	71	NA	0.22	NA	1.7	NA	NR	NR	NR
	07/20/98	794	794	64.8 D	NA	< 0.01	NA	< 1.12	NA	NR	NR	NR
	04/22/98	644	644	63.2 D	NA	< 0.031	NA	4.49	NA	NR	NR	NR
	02/03/98	678	678	69.2 D	NA	< 0.01	NA	30 D	NA	NR	NR	NR
	10/29/97	550	550	64.5 D	NA	< 0.01	NA	10.5	NA	NR	NR	NR
	07/30/97	490	490	64.8 D	NA	0.034	NA	15.8 D	NA	NR	NR	NR
	04/28/97	246	246	73.7 D	NA	3.63 D	NA	73.1 D	NA	NR	NR	NR
231GW26 (intermediate)	03/16/06	290	290	44	< 0.1	3.2	< 0.05	63	< 0.04 R	68.7	6.99	18.9
	04/06/05	260	260	63	< 0.1	2.2	< 0.05	73	< 0.04 UJ	NR	NR	NR
	01/21/99	242	242	94	NA	4.1	NA	85	NA	NR	NR	NR
	10/21/98	248	248	101	NA	3.4	NA	89	NA	NR	NR	NR
	07/22/98	242	242	70.2 D	NA	4.36 D	NA	71.5 D	NA	NR	NR	NR
	04/27/98	246	246	73 D	NA	4.07 D	NA	72.6 D	NA	NR	NR	NR
	01/29/98	222	222	64.6 D	NA	4.39 D	NA	62.5 D	NA	NR	NR	NR
	10/28/97	226	226	66.5 D	NA	4.09 D	NA	68.5 D	NA	NR	NR	NR
	07/28/97	248	248	75.6 D	NA	4.53 D	NA	75.2 D	NA	NR	NR	NR
	04/28/97	223	223	67.7 D	NA	6.39 D	NA	53.9 D	NA	NR	NR	NR
231GW27 (intermediate)	03/15/06	230	230	59	< 0.1	5.6	< 0.05	70	< 0.04	106.5	6.81	16.8
	04/06/05	270	270	60	< 0.1	5.5	< 0.05	68	< 0.04 UJ	NR	NR	NR
	01/21/99	48	48	< 9.62	NA	0.64	NA	< 7.6	NA	NR	NR	NR
	10/21/98	219	219	67.8	NA	6	NA	57	NA	NR	NR	NR
	07/22/98	200	200	52.1 D	NA	5.54 D	NA	54.4 D	NA	NR	NR	NR
	04/27/98	220	220	57.3 D	NA	6.54 D	NA	54.2 D	NA	NR	NR	NR
	01/29/98	176	176	41.4 D	NA	6.38 D	NA	49.7 D	NA	NR	NR	NR
	10/28/97	197	197	50.5 D	NA	6.47 D	NA	54.3 D	NA	NR	NR	NR
	07/28/97	222	222	55.8 D	NA	7.69 D	NA	57 D	NA	NR	NR	NR
	04/29/97	255	255	27.8 D	NA	4.4 D	NA	42.6 D	NA	NR	NR	NR
231GW28 (intermediate)	03/15/06	320	320	15	0.27	< 0.05	< 0.05	1.9	< 0.04	83.7	6.9	14.2
	04/06/05	320	320	18	0.27	0.46	< 0.05	13	0.05 J-	NR	NR	NR
	01/11/99	211	211	31	NA	4.2	NA	57	NA	NR	NR	NR
	10/22/98	212	212	32	NA	6.1	NA	76	NA	NR	NR	NR
	07/23/98	220	220	36.4 D	NA	6.32 D	NA	69.7 D	NA	NR	NR	NR

Table A-10-1
Results of General Chemistry Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Sulfide	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ SW9056	E300.0/ SW9056	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mV)	pH units	C°
231GW28 (intermediate)	04/28/98	178	178	32.4 D	NA	4.36 D	NA	48.5 D	NA	NR	NR	NR
	02/02/98	174	174	26.1 D	NA	5.5 D	NA	64.8 D	NA	NR	NR	NR
	10/27/97	170	170	30.7 D	NA	7.89 D	NA	67.4 D	NA	NR	NR	NR
	07/29/97	196	196	33.2 D	NA	6.8 D	NA	65.1 D	NA	NR	NR	NR
	04/29/97	267	267	51.8 D	NA	2.62 D	NA	60.3 D	NA	NR	NR	NR
231GW29 (intermediate)	03/16/06	300	300	53	< 0.1	1	< 0.05	69	< 0.04 R	-49	7.35	16.7
	04/06/05	280	280	54	< 0.1	2.5	< 0.05	66	< 0.04 UJ	NR	NR	NR
	01/21/99	274	274	68	NA	2.7	NA	80	NA	NR	NR	NR
	10/22/98	272	272	59.8	NA	2.6	NA	72	NA	NR	NR	NR
	07/23/98	270	270	53.8 D	NA	3.95 D	NA	64 D	NA	NR	NR	NR
	04/28/98	258	258	54.2 D	NA	3.72 D	NA	58.8 D	NA	NR	NR	NR
	02/02/98	260	260	54.8 D	NA	3.38 D	NA	66.1 D	NA	NR	NR	NR
	10/27/97	234	234	53.4 D	NA	4.89 D	NA	62.3 D	NA	NR	NR	NR
	07/29/97	247	247	52.6 D	NA	4.17 D	NA	58 D	NA	NR	NR	NR
	04/30/97	823	823	86.2 D	NA	0.018	NA	20.4 D	NA	NR	NR	NR
231GW30 (shallow)	03/09/06	480	480	42	0.39	0.13	< 0.05	17	< 0.04 UJ	-59.7	7.09	15.1
	03/22/05	440	440	33	0.35	0.16	< 0.05	27	< 0.04	NR	NR	NR
	01/19/99	802	802	64	NA	0.25	NA	13	NA	NR	NR	NR
	10/19/98	809	809	66.1	NA	0.09	NA	3.8	NA	NR	NR	NR
	07/20/98	800	800	55.9 D	NA	0.013	NA	3.62	NA	NR	NR	NR
	04/22/98	748	748	60.3 D	NA	0.054	NA	16.7 D	NA	NR	NR	NR
	02/03/98	656	656	54.4 D	NA	1.04 D	NA	131 D	NA	NR	NR	NR
	02/03/98	588	588	80.6 D	NA	0.034	NA	0.464	NA	NR	NR	NR
	10/29/97	857	857	66.2 D	NA	0.03	NA	2.16	NA	NR	NR	NR
	07/30/97	846	846	67.4 D	NA	0.015	NA	3.97	NA	NR	NR	NR
231PZ01 (shallow)	03/14/06	760	760	48	0.24	< 0.05	< 0.05	0.78	< 0.04	-92.9	16.73	17.22
	04/04/05	840	840	81	0.31	< 0.05	< 0.05	< 0.5	< 0.04 UJ	NR	NR	NR
	07/14/98	730	730	81.5 D	NA	0.216	NA	0.495	NA	NR	NR	NR
	04/30/98	728	728	87.1 D	NA	0.134	NA	0.201	NA	NR	NR	NR
	02/03/98	660	660	118 D	NA	< 0.01	NA	52.7 D	NA	NR	NR	NR
231PZ02 (shallow)	03/10/06	890	890	95	0.3	< 0.05	< 0.05	1.6	0.07 J-	-217.7	8.75	15.44
	04/04/05	760	760	72	0.3	< 0.05	< 0.05	4.6	0.11 J-	NR	NR	NR
	07/14/98	600	600	232 D	NA	0.029	NA	17.7 D	NA	NR	NR	NR
	04/30/98	494	494	153 D	NA	0.027	NA	27.9 D	NA	NR	NR	NR
	02/03/98	456	456	31.2 D	NA	< 0.01	NA	20.6 D	NA	NR	NR	NR

Table A-10-1
Results of General Chemistry Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Sulfide	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ SW9056	E300.0/ SW9056	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mV)	pH units	C°
231PZ03 (shallow)	03/14/06	520	520	32	0.21	< 0.05	< 0.05	< 0.5	< 0.04	-124.9	6.91	18.19
	04/04/05	490	490	38	0.21	< 0.05	< 0.05	< 0.5	0.08 J-	NR	NR	NR
	01/12/99	466	466	74	NA	< 1	NA	17.7	NA	NR	NR	NR
	10/13/98	465	465	66	NA	< 0.04	NA	6.84	NA	NR	NR	NR
	07/14/98	530	530	38.7 D	NA	< 0.01	NA	3.16	NA	NR	NR	NR
	04/30/98	570	570	34.3 D	NA	< 0.01	NA	3.71	NA	NR	NR	NR
	02/04/98	732	732	15.3 D	NA	< 0.01	NA	3.21	NA	NR	NR	NR
231PZ04 (shallow)	03/14/06	570	570	29	0.24	< 0.05	< 0.05	< 0.5	< 0.04	-110.1	6.92	17.6
	04/04/05	550	550	32	0.24	< 0.05	< 0.05	< 0.5	0.06 J-	NR	NR	NR
	01/11/99	488	488	80.2	NA	< 0.5	NA	7.32	NA	NR	NR	NR
	10/12/98	477	477	59	NA	< 0.2	NA	8	NA	NR	NR	NR
	07/13/98	570	570	36.7 D	NA	0.019	NA	4.74	NA	NR	NR	NR
	04/30/98	582	582	34.1 D	NA	0.017	NA	4.06	NA	NR	NR	NR

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

mg/L - milligrams per liter

°C - degree centigrade

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

mV - millivolts

NR - Not Reported

ORP - oxidation Reduction Potential

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-10-2
Summary of Dissolved Oxygen Measurements and Results of TPH Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Dissolved Oxygen	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	Field	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(mg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		--	443	443	443
207GW03 (intermediate)	03/16/06	0.16	< 50	55 HY	< 300
	04/12/05	0.2	< 50	< 50	< 300
	03/19/04	0.4	< 50	< 50	< 300
	08/21/03	0.4	< 50	< 50	< 300
	03/19/03	2.7	< 50	< 50	< 300
	12/10/02	0.5	< 50	< 50	< 300
	09/03/02	0.4	< 50	< 50	< 300
	06/03/02	0.9	< 50	< 50	< 300
	03/11/02	1.64	< 50	< 50	< 300
	11/30/01	0.8	< 50	< 50	< 300
	08/30/01	2.4	< 50	73 ³ Y,NJ	< 300 ³
	05/14/01	3.7	< 50	< 50	< 300
	04/13/99	0.34	< 50	63 (J25, J9)	< 300
	01/11/99	0.09	< 50	< 50	< 300
	10/12/98	0.62	< 50	< 50	< 300
	07/09/98	0.54	< 50	59 (J25)	< 300
	05/04/98	0.46	< 50	130 (J25)	< 300
	03/05/98	0.38	< 50	< 50	< 300
231GW06 (intermediate)	03/15/06	0.69	< 50	< 50	< 300
	04/04/05	0.1	< 50	< 50	< 300
	03/18/04	1.12	< 50	< 50	< 300
	08/14/03	0.2	< 50	66 Y	< 300
	03/17/03	0.4	< 50	< 50	< 300
	12/04/02	1.2	< 50	< 50	< 300
	09/03/02	0.3	< 50	< 50	< 300
	05/30/02	1.1	< 50	< 50	< 300
	03/05/02	0.8	< 50	55 Y	< 300
	11/29/01	3.5	< 50	< 50	370
	08/30/01	1.8	< 50	64 ³ Y,NJ	< 300 ³
	05/09/01	3.1	< 50	< 50	< 300
	04/20/99	0.28	< 50	< 50	< 300
	01/20/99	0.18	< 50	< 50 (J25)	< 300
	10/20/98	0.79	< 50	< 50	< 300
	07/21/98	0.82	< 50	< 50	< 300
	04/23/98	0.73	< 50	< 50	< 300
	01/27/98	0.23	< 50	< 50	< 300
	10/22/97	0.49	< 50	< 50	< 300
	07/23/97	0.29	< 50	< 50	< 300
	04/23/97	0.29	< 50	< 50	< 300
	01/29/97	0.26	< 50	< 50	< 300
	10/10/96	NM	< 50	< 50	< 300
	07/15/96	NM	150 (J25)	< 50	< 300
	05/02/96	NM	< 50	< 50	< 300 (U12)
	02/07/96	NM	< 50	< 50	< 300
	11/09/95	NM	< 50	56 (J25)	< 300
	08/10/95	NM	< 50	120 (J25)	< 300
	04/17/95	NM	< 50	200 (J25)	NA
	01/25/95	NM	< 50	< 50	NA
	11/09/94	NM	< 50	660 (J25)	NA
	08/16/94	NM	< 50	66 (J25)	NA

Table A-10-2
Summary of Dissolved Oxygen Measurements and Results of TPH Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Dissolved Oxygen	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	Field	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(mg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		--	443	443	443
231GW06 (intermediate)	04/25/94	NM	< 50	190 (J25)	NA
	01/28/94	NM	< 50	< 50	NA
	10/25/93	NM	< 50	< 50	NA
	07/27/93	NM	< 50	< 50	NA
231GW09 (shallow) DUP1205062B 231GW09CL	12/05/06	0.67	< 50	< 50	< 300
	12/05/06	--	< 50	< 50	< 300
	12/05/06	--	< 50 U	< 48 U	< 290 U
	08/15/06	0.51	< 50	< 50	< 300
DUP1129052A	05/24/06	2.64	< 50	< 50	< 300
	03/15/06	2.41	< 50	< 50	< 300
	11/29/05	0.3	< 50	< 50	< 300
	11/29/05	NA	< 50	< 50	< 300
	08/31/05	0.7	< 50	< 50	< 300
	06/01/05	1.9	< 50	< 50	< 300
	04/04/05	2.1	< 50	< 50	< 300
	12/17/04	0.9	< 50	< 50	< 300
DUP1217042A	12/17/04	--	< 50	< 50	< 300
	08/12/04	0.82	< 50	< 50	< 300
	05/27/04	0.49	< 50	170 HY	< 300
	05/27/04	--	< 50	< 50	< 300
DUP0527042C 231GW09CL	05/27/04	--	< 50	< 66	< 330
	03/18/04	0.7	< 50	< 50	< 300
	12/04/03	1.6	NA	NA	NA
	08/15/03	1.7	< 50	< 50	< 300
	06/10/03	2.1	NA	NA	NA
	03/17/03	5	< 50	< 50	< 300
	12/04/02	1.9	< 50	< 50	< 300
	08/30/02	4.4	< 50	< 50	< 300
	05/30/02	2.8	< 50	170 Y	610
	03/07/02	2.2	< 50	< 50 UJ	< 300 UJ
	11/29/01	2.5	< 50	< 50	< 300
	08/30/01	3.9	< 50	< 50 ³	< 300 ³
	05/09/01	4.4	< 50	< 50	< 300
	04/14/99	4.5 (J35)	< 50	< 50	< 300
	01/13/99	4.23	< 50	< 50	< 300
	10/14/98	4.73 (J35)	< 50	< 50	< 300
	07/15/98	6.62	< 50	< 50	< 300
	04/20/98	4.05	< 50	< 50	< 300
	01/28/98	3.47	< 50	< 50	< 300
	10/23/97	2.08	< 50	< 50	< 300
	07/24/97	3.72	< 50	< 50	< 300
	04/22/97	3.96	< 50	< 50	< 300
	01/28/97	1.39	< 50	< 50	< 300
	10/09/96	NM	< 50	< 50	< 300
	07/12/96	NM	< 50	< 50	< 300
	05/01/96	NM	< 50	< 50	< 300
	02/08/96	NM	< 50	< 50	< 300
	11/07/95	NM	< 50	< 50	< 300
	08/10/95	NM	< 50	< 50	< 300
	04/18/95	NM	< 50	< 50	NA
	01/23/95	NM	< 50	< 50	NA
	11/10/94	NM	< 50	< 50	NA

Table A-10-2
Summary of Dissolved Oxygen Measurements and Results of TPH Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Dissolved Oxygen	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	Field	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(mg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		--	443	443	443
231GW09 (shallow)	08/18/94	NM	< 50	< 50	NA
	04/27/94	NM	< 50	< 50	NA
	02/04/94	NM	< 50	< 50	NA
	10/27/93	NM	< 50	< 50	NA
	07/27/93	NM	< 50	< 50	NA
231GW10 (shallow)	03/09/06	0.5	< 50	< 50	< 300
	03/22/05	0.1	< 50	< 50	< 300
	03/16/04	0.15	< 50	< 50	< 300
	08/14/03	0.11	< 50	< 50	< 300
	03/14/03	0.1	< 50	< 50	< 300
	12/05/02	0.1	< 50	< 50	< 300
	08/29/02	0.1	< 50	< 50	< 300
	06/04/02	0.25	< 50	< 50	< 300
	03/07/02	0.15	< 50	< 50 UJ	< 300 UJ
	12/03/01	0.2	< 50	< 50 UJ	< 300 UJ
	08/30/01	2.0	< 50	190 ³ Y,NJ	< 300 ³
	05/11/01	3.4	< 50	< 50	< 300
	04/19/99	1.35	< 50	56	< 300
	01/25/99	0.72	< 50	< 50	< 300
	10/19/98	3.05 (J35)	< 50	< 50	< 300
	07/22/98	0.64	< 50	< 50	< 300
	04/23/98	0.26	< 50	< 50	< 300
	01/28/98	0.36	< 50	< 50	< 300
	10/22/97	0.31	< 50	< 50	< 300
	07/23/97	0.18	< 50	< 50	< 300
	04/23/97	0.4	< 50	< 50	< 300
	01/29/97	0.23	< 50	< 50	< 300
	10/10/96	NM	< 50	110 (J25)	< 300
	07/16/96	NM	< 50	< 50	300 (U6)
	05/03/96	NM	< 50	< 50	< 300 (U12)
	02/06/96	NM	< 50	< 50	< 300
	11/06/95	NM	< 50	< 50	< 300
	08/11/95	NM	< 50	< 50	< 300
	04/19/95	NM	< 50	< 50	NA
	01/24/95	NM	< 50	54 (J25)	NA
	11/11/94	NM	< 50	< 50	NA
	08/18/94	NM	< 50	56 (J25)	NA
	04/27/94	NM	< 50	< 50	NA
	01/31/94	NM	< 50	57 (J25)	NA
	10/27/93	NM	< 50	< 50	NA
	07/26/93	NM	< 50	< 50	NA
231GW11 (shallow)	03/15/06	1.85	< 50	< 50	< 300
	04/05/05	0.2	< 50	< 50	< 300
	03/18/04	0.1	< 50	< 50	< 300
	08/14/03	0.2	< 50	77 Y	< 300
	03/14/03	2.1	< 50	< 50	< 300
	12/04/02	0.4	< 50	< 50	< 300
	08/30/02	1.8	< 50	< 50	< 300
	05/30/02	0.7	< 50	< 50	< 300
	03/07/02	0.7	< 50	< 50	< 300
	11/29/01	1	< 50	< 50	< 300

Table A-10-2
Summary of Dissolved Oxygen Measurements and Results of TPH Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Dissolved Oxygen	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	Field	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(mg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		--	443	443	443
231GW11 (shallow)	08/30/01	1.8	< 50	< 50 ³	< 300 ³
	05/09/01	3.9	< 50	< 50	< 300
	04/13/99	1.01	< 50	< 50	< 300
	01/11/99	1.43 (J35)	< 50	< 50	< 300
	10/12/98	4.32 (J35)	< 50	< 50	< 300
	07/13/98	1.38	< 50	< 50	< 300
	04/21/98	1.19 (J35)	< 50	< 50	< 300
	01/26/98	1.03 (J35)	< 50	< 50	< 300
	10/21/97	0.41	< 50	< 50	< 300
	07/21/97	0.46	< 50	< 50	< 300
	04/21/97	0.43	< 50	< 50	< 300
	01/28/97	0.59	< 50	< 50	< 300
	10/08/96	NM	< 50	< 50	< 300 (U6)
	07/16/96	NM	< 50	< 50	< 300
	05/03/96	NM	< 50	< 50	< 300 (U12)
	02/13/96	NM	< 50	< 50	< 300
	11/08/95	NM	< 50	< 50	< 300
	08/14/95	NM	< 50	< 50	< 300
	04/19/95	NM	< 50	< 50	NA
	01/24/95	NM	< 50	< 50	NA
	11/11/94	NM	< 50	< 50	NA
	08/17/94	NM	< 50	< 50	NA
	04/26/94	NM	< 50	< 50	NA
	02/07/94	NM	< 50	< 50	NA
	10/28/93	NM	< 50	< 50	NA
	07/26/93	NM	< 50	< 50	NA
231GW13 (deep)	03/14/06	0.37	< 50	< 50	< 300
	04/05/05	0.1	< 50	< 50	< 300
	03/18/04	0.81	< 50	< 50	< 300
	08/14/03	0.2	< 50	< 50	< 300
	03/17/03	0.6	< 50	< 50	< 300
	12/05/02	0.7	< 50	< 50	< 300
	08/30/02	1	< 50	< 50	< 300
	05/30/02	0.8	< 50	< 50	< 300
	03/06/02	1	< 50	< 50	< 300
	11/28/01	1.5	< 50	< 50	< 300
	08/29/01	3.8	< 50	< 50 ³	< 300 ³
	05/09/01	4	< 50	< 50	< 300
	04/16/99	0.24	< 50	< 50	< 300 (U6)
	01/14/99	0.13	< 50	< 50	< 300
	10/15/98	0.93	< 50	< 50	< 300
	07/16/98	1.13	< 50	< 50	< 300
	04/21/98	0.74	< 50	< 50	< 300
	01/26/98	0.49	< 50	< 50	< 300
	10/20/97	0.09	< 50	< 50	< 300
	07/21/97	0.45	< 50	< 50	< 300
	04/21/97	0.51	< 50	< 50	< 300
	01/27/97	0.0	< 50	< 50	< 300
	10/07/96	NM	< 50	< 50	< 300 (U6)
	07/10/96	NM	< 50	< 50	< 300
	04/29/96	NM	< 50	< 50	< 300
	02/06/96	NM	< 50	< 50	< 300
	11/03/95	NM	< 50	< 50	< 300
	08/15/95	NM	< 50	< 50	< 300
	04/10/95	NM	NA	< 50	NA

Table A-10-2
Summary of Dissolved Oxygen Measurements and Results of TPH Analyses
Building 231/207 Area
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Well Name (water-bearing zone)	Sample Date	Dissolved Oxygen	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	Field	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(mg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		--	443	443	443
231GW15 (intermediate)	03/14/06	0.29	< 50	< 50	< 300
	04/05/05	0.3	< 50	< 50	< 300
	03/18/04	0.51	< 50	< 50	< 300
	08/14/03	0.1	< 50	< 50	< 300
	03/17/03	0.7	< 50	< 50	< 300
	12/04/02	0.4	< 50	< 50	< 300
	08/30/02	1.4	< 50	< 50	< 300
	05/30/02	0.9	< 50	< 50	< 300
	03/05/02	0.5	< 50	< 50	< 300
	11/28/01	1.2	< 50	< 50	< 300
	08/30/01	1.5	< 50	< 50 ³	< 300 ³
	05/09/01	4.2	< 50	< 50	< 300
	04/16/99	0.25	< 50	< 50	< 300
	01/14/99	0.19	< 50	< 50	< 300
	10/15/98	0.6	< 50	< 50	< 300
	07/16/98	0.34	< 50	< 50	< 300
	04/21/98	0.19	< 50	< 50	< 300
	01/26/98	0.71	< 50	< 50	< 300
	10/20/97	0.2	< 50	< 50	< 300
	07/21/97	0.35	< 50	< 50	< 300
	04/21/97	0.25	< 50	< 50	< 300
	01/27/97	0.15	< 50	< 50	< 300
	10/07/96	NM	< 50	< 50	< 300 (U6)
	07/10/96	NM	< 50	< 50	< 300
	04/29/96	NM	< 50	< 50	< 300
	02/06/96	NM	< 50	< 50	< 300
	11/03/95	NM	< 50	< 50	< 300
	08/16/95	NM	< 50	< 50	< 300
	04/07/95	NM	NA	< 50	NA
231GW16 (shallow) DUP0308023A	03/09/06	0.24	< 50	< 50	< 300
	03/22/05	0.1	< 50	< 50	< 300
	03/16/04	0.11	< 50	< 50	< 300
	08/14/03	0.06	< 50	< 50	< 300
	03/14/03	0.04	< 50	< 50	< 300
	12/05/02	0.11	< 50	< 50	< 300
	09/04/02	0.17	< 50	< 50	< 300
	06/04/02	0.2	< 50	< 50	< 300
	03/08/02	1.5	< 50	< 50	< 300
	03/08/02	--	< 50	< 50	< 300
	12/04/01	0.7	< 50	< 50	< 300
	09/04/01	0.98	< 50	99 ³ Y,NJ	< 300 ³
	05/14/01	1.53	< 50	< 50	< 300
	04/16/99	0.37	< 50	120 (J25)	< 300
	01/14/99	0.34	< 50	< 50	< 300
	10/15/98	0.82	< 50	< 50	< 300
	07/16/98	0.8	< 50	60 (J25)	< 300
	04/21/98	0.74	< 50	< 50	< 300
	01/26/98	3.27 (J35)	< 50	< 50	< 300
	10/20/97	0.08 (J35)	< 50	< 50	< 300
	07/21/97	0.28 (J35)	< 50	< 50	< 300
	04/24/97	0.44 (J35)	< 50	< 50	< 300

Table A-10-2
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Well Name (water-bearing zone)	Sample Date	Dissolved Oxygen	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	Field	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(mg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		--	443	443	443
231GW16 (shallow)	01/30/97	0.26 (J35)	< 50	< 50	< 300
	10/10/96	NM	< 50	< 50	< 300
	07/15/96	NM	< 50	< 50	< 300
	05/02/96	NM	< 50	< 50	< 300 (U6)
	02/13/96	NM	< 50	< 50	< 300 (U12)
	11/03/95	NM	< 50	< 50	< 300
231GW17 (deep)	03/15/06	0.87	< 50	< 50	< 300
	04/05/05	2.4	< 50	< 50	< 300
	03/18/04	0.8	< 50	< 50	< 300
	08/18/03	1.2	< 50	74 HY	< 300
	03/14/03	2.6	< 50	< 50	< 300
	12/06/02	4	< 50	< 50	< 300
	08/30/02	0.7	< 50	< 50	< 300
	05/31/02	3.1	< 50	< 50	< 300
	03/07/02	3	< 50	< 50 UJ	< 300 UJ
	11/29/01	6.4	< 50	< 50	< 300
	08/30/01	2.3	< 50	85 ³ Y,NJ	< 300 ³
	05/11/01	5.2	< 50	< 50	< 300
	04/15/99	4.06 (J35)	< 50	< 50	< 300
	04/15/99	--	< 50	< 50	NA
	01/13/99	4.27 (J35)	< 50	< 50	< 300
	10/14/98	NM	< 50	< 50	< 300
	07/15/98	6.66 (J35)	< 50	< 50	< 300
	04/20/98	3.86 (J35)	< 50	< 50	< 300
	01/27/98	4.22 (J35)	< 50	< 50	< 300
	10/21/97	3.18 (J35)	< 50	< 50	< 300
	07/22/97	3.92 (J35)	< 50	< 50	< 300
	04/22/97	3.12 (J35)	< 50	< 50	< 300
	01/28/97	3.65 (J35)	< 50	< 50	< 300
	10/08/96	NM	< 50	< 50	< 300 (U6)
	07/11/96	NM	< 50	< 50	< 300
	04/30/96	NM	< 50	< 50	< 300
	02/07/96	NM	< 50	< 50	< 300
	11/06/95	NM	< 50	< 50	< 300
	08/16/95	NM	< 50	< 50	< 300
	04/10/95	NM	< 50	< 50	NA
231GW18 (intermediate)	03/15/06	0.53	< 50	< 50	< 300
	04/05/05	0.9	< 50	< 50	< 300
	03/18/04	1	< 50	< 50	< 300
	08/14/03	0.4	< 50	< 50	< 300
	03/14/03	1.2	< 50	< 50	< 300
	12/05/02	1.9	< 50	< 50	< 300
	09/03/02	1.5	< 50	< 50	< 300
	05/31/02	1.7	< 50	< 50	< 300
	03/07/02	1.8	< 50	< 50	< 300
	11/29/01	4	< 50	< 50	< 300
	08/30/01	1.8	< 50	54 ³ Y,NJ	< 300 ³
	05/11/01	4.1	< 50	< 50	< 300
	04/15/99	3.27 (J35)	< 50	< 50	< 300
	01/13/99	3.46 (J35)	< 50	< 50	< 300
	10/14/98	4.99	< 50	< 50	< 300
	07/15/98	5.19	< 50	< 50	< 300

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Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Dissolved Oxygen	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	Field	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(mg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		--	443	443	443
231GW18 (intermediate)	04/20/98	3.25	< 50	< 50	< 300
	01/27/98	3.74	< 50	< 50	< 300
	10/21/97	2.92	< 50	< 50	< 300
	07/22/97	3.28	< 50	< 50	< 300
	04/22/97	3.58	< 50	< 50	< 300
	01/28/97	3.02	< 50	< 50	< 300
	10/08/96	NM	< 50	< 50	< 300
	07/11/96	NM	< 50	< 50	< 300
	04/30/96	NM	< 50	< 50	< 300
	02/07/96	NM	< 50	< 50	< 300
	11/06/95	NM	< 50	< 50	< 300
	08/17/95	NM	< 50	< 50	< 300
231GW19 (shallow)	04/10/95	NM	NA	< 50	NA
	03/16/06	0.37	< 50	65 HY	< 300
	04/05/05	0.2	< 50	< 50	< 300
	03/18/04	0.92	< 50	72 HY	370
	08/14/03	0.6	< 50	< 50	< 300
	03/14/03	0.1	< 50	< 50	< 300
	12/05/02	0.9	< 50	< 50	< 300
	08/30/02	0.8	< 50	< 50	< 300
	05/30/02	1.7	< 50	< 50	< 300
	03/07/02	1.5	< 50	< 50	< 300
	11/28/01	1	< 50	< 50	< 300
	08/29/01	1.4	< 50	59 ³ Y,NJ	< 300 ³
	05/09/01	1.5	< 50	< 50	< 300
	04/15/99	0.16	< 50	< 50	< 300
	01/13/99	0.39	< 50	< 50	< 300
	10/14/98	0.7	< 50	< 50	< 300
	07/15/98	0.26	< 50	< 50	< 300
	04/20/98	0.39	< 50	< 50	< 300
	01/27/98	0.29	< 50	< 50	< 300
	10/20/97	0.38	< 50	< 50	< 300
	07/22/97	0.15	< 50	< 50	< 300
	04/21/97	0.53	< 50	< 50	< 300
	01/27/97	0.16	< 50	< 50	< 300
	10/07/96	NM	< 50	< 50	< 300
	07/10/96	NM	< 50	< 50	< 300
	04/29/96	NM	< 50	< 50	< 300
	02/06/96	NM	< 50	< 50	< 300
	11/06/95	NM	< 50	< 50	< 300
	08/17/95	NM	< 50	< 50	< 300
	04/10/95	NM	NA	< 50	NA
231GW20 (deep)	03/15/06	0.28	< 50	< 50	< 300
	04/06/05	0.1	< 50	< 50	< 300
	03/18/04	1.02	< 50	< 50	< 300
	08/18/03	0.1	< 50	91 HY	< 300
	03/18/03	0.4	< 50	< 50	< 300
	12/06/02	0.5	< 50	< 50	< 300
	09/03/02	0.2	< 50	< 50	< 300
	05/31/02	0.9	< 50	< 50	< 300
	03/07/02	4	< 50	< 50	< 300

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Well Name (water-bearing zone)	Sample Date	Dissolved Oxygen	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	Field	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(mg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		--	443	443	443
231GW20 (deep)	11/29/01	5.8	< 50	< 50	< 300
	09/04/01	2.8	< 50	< 50 ³	< 300 ³
	05/11/01	5.8	< 50	< 50	< 300
	04/20/99	0.18	< 50	< 50	< 300
	01/20/99	1.4	< 50	< 50 (U12)	< 300
	10/20/98	0.51	< 50	< 50	< 300
	07/21/98	0.19	< 50	< 50	< 300
	04/23/98	0.33	< 50	< 50	< 300
	01/29/98	0.12	< 50	< 50	< 300
	10/22/97	0.4	< 50	68 (J25)	340 (J25)
	07/23/97	0.25	< 50	< 50	< 300
	04/23/97	0.2	< 50	< 50	< 300
	01/29/97	0.11	< 50	< 50	< 300
	10/09/96	NM	< 50	< 50	< 300 (U6)
	07/16/96	NM	< 50	< 50	< 300
	05/02/96	NM	< 50	< 50	< 300 (U12)
	02/13/96	NM	< 50	< 50	340 (J25, J32)
	11/08/95	NM	< 50	< 50	< 300
	08/17/95	NM	< 50	< 50	< 300
	04/11/95	NM	NA	100	NA
231GW21 (shallow) DUP0308061A 231GW21CL DUP0331052D 231GW21CL DUP0819031B DUP1206021A DUP0604023A	03/08/06	0.8	3,100	330 LY	< 300
	03/08/06	NA	3,400	1,300 HLY	5,400
	03/08/06	NA	3,600	1,200 J+	< 300 U
	03/31/05	0.2	2,900 Y	590 LY	< 300
	03/31/05	--	1,700 Y	420 LY	< 300
	03/31/05	--	1,500	1,800	430
	03/19/04	0.14	4,100	120 LY	< 300
	08/19/03	0.36	4,700 H	150 LY	< 300
	08/19/03	--	6,400 Z	180 LY	< 300
	03/14/03	0.12	3,400	130 YL	< 300
	12/06/02	0.2	6,100 Y	260 YL	< 300
	12/06/02	--	5,900 Y	210 YL	< 300
	09/04/02	0.44	5,500	170 YL	< 300
	06/04/02	0.18	3,700	200 YL	< 300
	06/04/02	--	3,800	160 YL	< 300
	03/08/02	0.36	2,100	91 YL	< 300
	11/29/01	0.11	2,700	130 YL	< 300
	09/06/01	1.17	6,100 Z	3,100³ YL,NJ	< 300 ³
	05/14/01	1.16	8,600	250 YL	< 300
	06/17/99	NM	8,000 (J25)	NA	NA
	04/20/99	0.42	< 50	470 (J25)	< 3,000
	01/20/99	0.91	4,400 (J25)	380 (J25, J12)	< 300
	10/20/98	0.68	9,800 (J25)	750 (J25)	< 300
	07/23/98	0.31	10,000 (J25)	560 (J25)	< 300
	05/01/98	0.43	6,600 (J25)	240 (J25)	< 300
	01/28/98	0.39	6,500 (J25)	620 (J25)	< 300
	10/27/97	1.26 (J35)	4,800 (J25)	280 (J25)	< 300
	07/24/97	0.19	19,000 (J25)	630 (J25)	< 300
	04/24/97	0.44	16,000 (J25)	1,100 (J25)	< 300
	01/30/97	0.24	5,800 (J25)	840 (J25)	< 300
	10/11/96	NM	11,000 (J25)	810 (J25)	< 300

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	Analytical Method ¹	Field	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(mg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		--	443	443	443
231GW21 (shallow)	07/17/96	NM	18,000 (J25)	570 (J25)	< 300
	05/06/96	NM	22,000	830 (J25)	< 300
	02/12/96	NM	13,000 (J25)	540 (J25)	< 300 (U12)
	11/10/95	NM	24,000 (J25)	970 (J25)	< 300
	08/16/95	NM	26,000 (J25)	1,100 (J25)	< 300
	04/24/95	NM	16,000 (J25)	1,100 (J25)	NA
	04/12/95	NM	NA	4,700	NA
231GW22 (shallow)	03/09/06	0.8	8,400	300 LY	< 300
DUP0309061A	03/09/06	NA	14,000 Z	330 LY	< 300
	03/23/05	0.20	18,000 Z	130 LY	< 300
DUP0323052A	03/23/05	--	16,000 Z	120 LY	300 Y
	03/19/04	0.2	25,000	89 LY	< 300
DUP0319041A	03/19/04	--	24,000 Z	100 LY	< 300
231GW22CL	03/19/04	--	4,700	< 48	< 240
	08/19/03	0.2	7,900 Z	110 LY	< 300
DUP0819031A	08/19/03	--	17,000 Z	150 LY	< 300
231GW22CL	08/19/03	--	7,600	< 50	< 250
	03/17/03	0.18	5,900	540 YL	< 300
DUP0317031A	03/17/03	NA	5,600 Z	350 YL	< 300
231GW22CL	03/17/03	NA	8,000	< 50	270
	12/06/02	0.14	3,400 YZ	170 YL	< 300
	09/04/02	0.29	6,700	70 YL	< 300
DUP0904021A	09/04/02	--	7,000	81 YL	< 300
231GW22CL	09/04/02	--	7,200 g	120 ndp	< 500
	06/05/02	0.29	2,400 Z	< 50	< 300
DUP0605023B	06/05/02	--	2,400 Z	51 YL	< 300
	03/08/02	1.4	6,400 Z	110 YL	< 300
DUP0308023B	03/08/02	--	6,600 Z	73 YL	< 300
231GW22CL	03/08/02	--	260	< 50 UJ	< 500 UJ
	12/04/01	0.42	9,000	110 YL	< 300
DUP1204013A	12/04/01	--	9,100	120 YL	< 300
	09/04/01	0.77	15,000 Z	5,800³ YL,NJ	740³ YL,NJ
	05/14/01	1.54	20,000	110 YL	< 300
DUP0514011A	05/14/01	--	19,000	110 YL	< 300
	04/21/99	0.52	15,000 (J25)	840 (J25)	< 1,500
	01/21/99	0.37	26,000 (J25)	550 (J25, J12)	< 1,500
	10/21/98	5.57 (J35)	14,000 (J25)	530 (J25, J13)	< 320
	07/22/98	0.36	21,000 (J25)	490 (J25)	< 300
	04/27/98	0.16	24,000 (J25)	760 (J25)	< 300
	01/29/98	0.25	29,000 (J25)	1,000 (J25)	340 (J25)
	10/28/97	0.44	19,000 (J25)	820 (J25)	< 300
	07/28/97	0.38	31,000 (J25)	700 (J25)	< 300
	04/28/97	0.33	36,000 (J25)	770 (J25)	< 300
231GW23 (shallow)	03/15/06	0.45	< 50	< 50	< 300
	04/05/05	0.4	< 50	< 50	< 300
	03/18/04	0.1	< 50	< 50	< 300
	08/18/03	0.2	< 50	< 50	< 300
	03/17/03	1.8	< 50	< 50	< 300
	12/05/02	0.3	< 50	< 50	< 300
	09/03/02	0.3	< 50	< 50	< 300
	05/31/02	1.2	< 50	< 50	< 300

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Summary of Dissolved Oxygen Measurements and Results of TPH Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Dissolved Oxygen	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	Field	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(mg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		--	443	443	443
231GW23 (shallow)	03/07/02	0.6	< 50	< 50 UJ	< 300 UJ
	11/29/01	2.2	< 50	< 50	< 300
	09/04/01	0.7	< 50	< 50 ³	< 300 ³
	05/14/01	1.1	< 50	< 50	< 300
	04/20/99	0.17	< 50	63	< 300
	01/20/99	0.19	< 50	< 50 (U12)	< 300
	10/22/98	0.74	< 50	< 57 (U13)	< 340
	07/23/98	0.32	680 (R32)	< 50	< 300
	04/28/98	0.13	< 50	< 50	< 300
	02/02/98	0.55	< 50	< 50	< 300
	10/23/97	0.13	< 50	< 50	< 300
	07/29/97	0.34	< 50	54 (R32)	< 300
	04/29/97	0.31	< 50	< 50	< 300
231GW24 (shallow)	03/16/06	0.47	< 50	55 HY	< 300
	04/05/05	0.6	< 50	< 50	< 300
	03/18/04	0.4	< 50	< 50	< 300
	08/14/03	0.3	< 50	< 50	< 300
	03/17/03	0.5	< 50	< 50	< 300
	12/05/02	0.6	< 50	< 50	< 300
	08/30/02	1.4	< 50	< 50	< 300
	05/30/02	0.9	< 50	< 50	< 300
	03/06/02	0.7	< 50	< 50	< 300
	11/29/01	1.4	< 50	< 50	< 300
	08/29/01	3.9	< 50	< 50 ³	< 300 ³
	05/09/01	3	< 50	< 50	< 300
	04/19/99	0.39	< 50	< 50	< 300
	01/20/99	0.34	< 50	< 50 (U12)	< 300
	10/19/98	1.78	< 50	< 50	< 300
	07/20/98	0.89	< 50	< 50	< 300
	04/22/98	0.13	< 50	< 50	< 300
	02/03/98	0.82	< 50	< 50	< 300
	10/29/97	0.47	< 50	< 50	< 300
	07/30/97	0.46	< 50	< 50	< 300
	04/30/97	0.41	< 50	< 50	< 300
231GW25 (shallow)	03/15/06	0.29	< 50	< 50	< 300
	04/06/05	0.5	< 50	< 50	< 300
	03/18/04	0.3	< 50	< 50	< 300
	08/18/03	0.1	< 50	64 Y	< 300
	03/17/03	4.3	< 50	< 50	< 300
	12/05/02	0.9	< 50	< 50	< 300
	09/03/02	0.4	< 50	< 50	< 300
	05/31/02	1.1	< 50	< 50	< 300
	03/07/02	1.5	< 50	< 50	< 300
	11/29/01	3.7	< 50	< 50	< 300
	09/04/01	0.9	< 50	200 ³ Y,NJ	< 300 ³
	05/14/01	1.6	< 50	< 50	< 300
	04/19/99	0.23	< 50	88 (J25)	< 300
	01/21/99	0.18	< 50	< 50 (U12)	< 300
	10/19/98	2.05	< 50	< 50	< 300
	07/20/98	1.28	< 50	< 50	< 300

Table A-10-2
Summary of Dissolved Oxygen Measurements and Results of TPH Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Dissolved Oxygen	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	Field	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(mg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		--	443	443	443
231GW25 (shallow)	04/22/98	0.49	< 50	< 50	< 300
	02/03/98	0.25	< 50	< 50	< 300
	10/29/97	0.48	< 50	< 50	< 300
	07/30/97	0.46	< 50	< 50	< 300
	04/30/97	0.59	< 50	< 50	< 300
231GW26 (intermediate)	03/16/06	0.39	< 50	< 50	< 300
	04/06/05	0.3	< 50	< 50	< 300
	03/18/04	1.05	< 50	< 50	< 300
	08/15/03	0.2	< 50	130 HY	< 300
	03/18/03	0.7	< 50	< 50	< 300
	12/06/02	0.6	< 50	< 50	< 300
	09/04/02	0.5	< 50	< 50	< 300
	06/03/02	1	< 50	< 50	< 300
	03/07/02	2.2	< 50	< 50	< 300
	11/29/01	4	< 50	< 50	< 300
	09/04/01	0.6	< 50	< 50 ³	< 300 ³
	05/10/01	4.8	< 50	< 50	< 300
	04/21/99	1.2	< 50	< 50 (U9)	< 300
	01/21/99	0.83	< 50	< 50 (U12)	< 300
	10/21/98	3.28	< 50	< 54 (U13)	< 310
	07/22/98	1.02	440 (R32)	< 50	< 300
	04/27/98	0.96	< 50	< 50	< 300
	01/29/98	1.27	< 50	< 50	< 300
	10/28/97	2.13	< 50	< 50	< 300
	07/28/97	0.65	< 50	< 50	< 300
	04/28/97	0.81	57 (J25)	< 50	< 300
231GW27 (intermediate) DUP0904012A 231GW27CL DUP0510011A 231GW27CL	03/15/06	0.43	< 50	< 50	< 300
	04/06/05	2.3	< 50	< 50	< 300
	03/19/04	0.9	< 50	< 50	< 300
	08/15/03	1	< 50	84 HY	< 300
	03/18/03	2.1	< 50	< 50	< 300
	12/10/02	2.8	< 50	< 50	< 300
	09/04/02	1.7	< 50	< 50	< 300
	06/03/02	1.6	< 50	< 50	< 300
	03/07/02	2.1	< 50	< 50 YH,J-	< 300 J-
	11/29/01	4	< 50	< 50	< 300
	09/04/01	1.7	< 50	3,100 ³ YH,NJ	1,400 ³ YL,NJ
	09/04/01	--	< 50	3,500 ³ YH,NJ	1,500 ³ YL,NJ
	09/04/01	--	< 50	85 ndp	< 300
	05/10/01	4.1	< 50	79 YH	460
	05/10/01	--	< 50	130 YH	740
	05/10/01	--	< 50	89 ndp	NA
	04/21/99	4.03	< 50	58 (J25)	< 300
	01/21/99	4.11	< 50	< 50 (U12)	< 300
	10/21/98	4.56	< 50	< 52 (U13)	< 310
	07/22/98	8.25	< 1,000	< 50	< 300
	04/27/98	4.66	< 50	< 50	< 300
	01/29/98	4.51	< 50	< 50	< 300
	10/28/97	4.77	< 50	< 50	< 300
	07/28/97	4.26	< 50	< 50	< 300
	04/28/97	5.77	< 50	< 50	< 300

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Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Dissolved Oxygen	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	Field	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(mg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		--	443	443	443
231GW28 (intermediate)	03/15/06	0.13	< 50	160 Y	< 300
	04/06/05	0.1	51 HY	< 50	< 300
	03/18/04	0.1	< 50	55 Y	< 300
	08/15/03	0.2	< 50	100 HY	< 300
	03/17/03	0.5	< 50	< 50	< 300
	12/06/02	0.5	< 50	< 50	< 300
	09/03/02	0.6	< 50	< 50	< 300
	05/31/02	1.2	< 50	< 50	< 300
	03/07/02	1.0	< 50	< 50	< 300
	12/04/01	1.94	< 50	< 50	< 300
	09/04/01	0.8	< 50	< 50 ³	< 300 ³
	05/09/01	1.6	< 50	< 50	< 300
	04/13/99	0.34	< 50	< 50	< 300
	01/11/99	0.17	< 50	< 50	< 300
	10/22/98	0.87	< 50	< 53 (U13)	< 310
	07/23/98	1.47	< 50	< 50	< 300
	04/28/98	1.52	< 50	< 50	< 300
	02/02/98	1.09	< 50	< 50	< 300
	10/27/97	1.5	< 50	< 50	< 300
	07/29/97	0.4	< 50	< 50	< 300
	04/29/97	0.51	< 50	< 50	< 300
231GW29 (intermediate) DUP0318043B 231GW29CL	03/16/06	0.58	< 50	57 HY	< 300
	04/06/05	0.2	< 50	< 50	< 300
	03/18/04	0.2	< 50	< 50	< 300
	03/18/04	--	< 50	< 50	< 300
	03/18/04	--	< 50	< 51	< 250
	08/15/03	0.2	< 50	99 HY	< 300
	03/18/03	0.4	< 50	< 50 UJ	< 300
	12/06/02	0.2	< 50	< 50	< 300
	09/03/02	0.4	< 50	< 50	< 300
	06/03/02	0.9	< 50	< 50	< 300
	03/07/02	0.8	< 50	< 50	< 300
	11/29/01	2.0	< 50	< 50	< 300
	09/04/01	0.5	< 50	< 50 ³	< 300 ³
	05/11/01	6.1	< 50	< 50	< 300
	04/21/99	0.23	< 50	< 50	< 300
	01/21/99	0.33	< 50	71 (J25, J12)	< 300
	10/22/98	0.45	< 50	< 54 (U13)	< 320
	07/23/98	0.44	76 (J25)	< 50	< 300
	04/28/98	0.22	< 50	< 50	< 300
	02/02/98	0.45	< 50	< 50	< 300
	10/27/97	0.87	< 50	< 50	< 300
	07/29/97	0.14	< 50	75 (R32)	< 300
	04/29/97	0.87	< 50	< 50	< 300
231GW30 (shallow)	03/09/06	0.4	< 50	< 50	< 300
	03/22/05	0.2	< 50	< 50	< 300
	03/19/04	0.2	< 50	< 50	< 300
	08/14/03	0.09	< 50	340 HY	3,500
	03/14/03	0.09	< 50	< 50	< 300
	12/06/02	0.13	< 50	< 50	< 300
	09/04/02	0.43	< 50	< 50	< 300

Table A-10-2
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Well Name (water-bearing zone)	Sample Date	Dissolved Oxygen	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	Field	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(mg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		--	443	443	443
231GW30 (shallow)	06/04/02	0.19	< 50	< 50	< 300
	03/08/02	0.8	< 50	< 50	< 300
	12/04/01	1.51	< 50	< 50	< 300
	09/04/01	1.11	< 50	300 ³ Y,NJ	< 300 ³
	05/14/01	1.26	< 50	< 50	< 300
	04/19/99	0.34	< 50	220 (J25)	< 300
	01/19/99	0.66	< 50	160 (J25, J12)	< 300
	10/19/98	7.88 (J35)	< 50	450 (J25)	< 300
	07/20/98	1.3	< 50	240 (J25)	< 300
	04/22/98	0.51	< 50	210 (J25)	< 300
	02/03/98	1.05	< 50	120 (J25)	< 300
	10/29/97	0.42	64 (J25)	340 (J25)	< 300
	07/30/97	0.15	< 50	380 (R32)	< 300
	04/30/97	0.81	< 50	250 (J25)	< 420
231PZ01 (shallow)	03/14/06	0.56	9,300	360 Y	< 300
	04/04/05	NM	15,000	430 LY	< 300
	03/19/04	0.3	24,000 Z	340 LY	< 300
	08/19/03	0.52	6,900 Z	370 LY	< 300
	03/17/03	0.12	8,300 Z	430 YL	< 300
	12/09/02	0.36	22,000	120 YL	< 300
	09/05/02	2.21	18,000 Z	180 YL	< 300
	06/05/02	0.27	6,900 Z	170 YL	< 300
	03/08/02	0.44	8,600 Z	340 YL	< 600
	11/30/01	0.7	20,000	220 YL	< 300
	09/06/01	0.8	23,000 Z	12,000³ YL,NJ	1,700³ YL,NJ
	05/15/01	1.68	7,000	230 YL	< 300
	04/14/99	NM	62,000 (J25)	9,600 (J25)	< 12,000
	01/12/99	9.18 (J35)	37,000 (J25)	800 (J25)	< 3,000
	10/13/98	5.98 (J35)	25,000 (J25)	3,700 (J25)	< 7,500
	07/14/98	NM	44,000 (J25)	930 (J25)	850 (J25)
	04/30/98	NM	45,000 (J25)	810 (J25)	< 300
	02/03/98	0.8	93,000 (J25, J29)	2,600 (J25)	650 (J25)
231PZ02 (shallow)	03/10/06	0.89	780	430 Y	< 300
	04/04/05	0.2	1,100	100 Y	< 300
	03/19/04	0.2	1,100	< 50	< 300
	08/19/03	0.35	800 LZ	< 50	< 300
	03/17/03	0.1	690	300 Y	< 300
	12/09/02	1.4	1,700	< 50	< 300
	09/05/02	2.5	1,400 YZ	< 50	< 300
	06/05/02	0.7	740 YL	< 50	< 300
	03/08/02	0.04	610	< 50	< 300
	11/30/01	1.11	460	< 50	< 300
	09/06/01	0.74	1,900 Z	22,000³ YH,NJ	8,300³ YL,NJ
	05/15/01	1.68	470	< 50	< 300
	04/14/99	0.49	1,500 (J25)	3,200 (J25)	760 (J25, J5)
	01/12/99	8.41 (J35)	1,400 (J25)	NA	NA
	10/13/98	7.81 (J35)	1,800 (J25, J5)	120 (J25)	660 (J25)
	07/14/98	11.6 (J35)	1,400 (J25)	310 (J25)	370 (J25)
	04/30/98	1.93	620 (J25)	750 (J25, J7)	< 300
	02/03/98	0.59	1,300 (J25)	< 50	< 300

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	Analytical Method ¹	Field	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(mg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		--	443	443	443
231PZ03 (shallow)	03/14/06	0.47	4,000	200 Y	< 300
	04/04/05	0.2	3,700	180 Y	< 300
	03/19/04	0.2	4,700	98 LY	< 300
	08/21/03	0.11	2,700	120 YL	< 300
	03/17/03	0.16	2,300	380 YL	< 300
	12/06/02	0.11	2,200 Y	87 YL	< 300
	09/04/02	0.28	2,500	98 YL	< 300
	06/06/02	0.3	2,300	68 YL	< 300
	03/11/02	0.14	3,200 Z	83 YL	< 300
	11/30/01	0.18	1,900	140 YLH	670
	09/06/01	0.98	1,900	2,100³ YL,NJ	< 300 ³
	05/15/01	1.8	4,000	99 YL	< 300
	01/12/99	0.44	2,900 (J25)	1,100 (J25)	< 300
	04/14/99	0.38	4,000 (J25)	390 (J25)	< 600
	10/13/98	0.94	3,000 (J25)	470 (J25, J5)	< 1,200
	07/14/98	0.23	6,600 (J25)	260 (J25)	< 300
	04/30/98	0.13	5,000 (J25)	610 (J25)	< 300
	02/03/98	2.21 (J35)	12,000 (J25, J29)	1,400 (J25)	< 1,500
231PZ04 (shallow)	03/14/06	0.53	5,300	350 Y	< 300
	04/04/05	0.2	6,100	290 LY	< 300
	03/19/04	0.2	7,000	140 LY	< 300
	08/21/03	0.1	3,000	160 YL	< 300
	03/17/03	0.08	4,700	240 YL	< 300
	12/06/02	0.2	4,500 Y	160 YL	< 300
	09/04/02	0.2	4,000	170 YL	< 300
	06/06/02	0.24	3,200	140 YL	< 300
	03/08/02	0.12	4,700	120 YL	< 300
	11/30/01	0.91	2,200	130 YL	< 300
	09/06/01	1.02	4,200 Z	2,200³ YL,NJ	< 300 ³
	05/15/01	2.6	7,600	190 YL	< 300
	04/14/99	2.27 (J35)	11,000 (J25)	710 (J25)	< 680
	01/11/99	8.71 (J35)	8,500 (J25)	370 (J25)	< 300
	10/12/98	8.03 (J35)	7,600 (J25)	< 50	< 300
	07/13/98	14.57 (J35)	9,700 (J25)	460 (J25)	< 300
	04/30/98	4.57 (J35)	14,000 (J25)	770 (J25)	< 300
	02/04/98	6.68 (J35)	28,000 (J25)	1,400 (J25)	< 300

Notes

- The identified analytical method(s) are for analyses performed beginning in the Second Quarter 200 during previous quarters are identified in the respective quarterly reports.
 - From Table 4 of the CAP.
 - TPH analysis was not run using the silica gel cleanup method 3630A, although it was marked on the chain of custody.
- µg/L - micrograms per liter
mg/L - milligrams per liter
NA - Not analyzed
NM - Not measured
TPH - Total petroleum hydrocarbons
g - Hydrocarbon reported in the gasoline range does not match the gasoline standard.
H - Heavier hydrocarbons contributed to the quantitation.
L - Lighter hydrocarbons contributed to the quantitation.
ndp - Hydrocarbon reported does not match the pattern of the diesel standard.
NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
Y - Sample exhibits a fuel pattern that does not resemble the standard
Z - Sample exhibits unknown single peak or peaks.
CL suffix denotes a quality control duplicate sample was sent to the control laboratory.
Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.
Table 11 in the main report identifies current and historical data qualifiers.
Bold numbers - indicate concentrations which exceed cleanup levels.

Table A-10-3
Results of VOC Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	1,2,4-TMB	1,2-DCA	1,3,5-TMB	2-Phenyl- butane	Acetone	Benzene	Bromo- methane	Carbon Disulfide	Chloro- form	Chloro- methane	Dichloro- methane	Ethyl- benzene	Isopropyl- benzene	MTBE	Naph- thalene	N-Butyl- Benzene	Propyl- benzene	Toluene	Total Xylenes	TCE	All Other VOCs
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	0.38	--	--	1,500	1	--	--	80	1.3	--	43	--	13	300	--	--	150	130	2.7	--
207GW03 (intermediate)	03/16/06	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	04/12/05	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	03/19/04	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	1.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/21/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/19/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	15	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	12/10/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	11	< 0.5	< 1	< 4	< 0.5	NA	< 0.5 UJ	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	09/03/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	06/03/02	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	1.3	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/11/02	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/30/01	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/30/01	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	05/14/01	< 0.5	NA	< 0.5	< 0.5	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	04/13/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 1	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/11/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	< 2	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/12/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	< 2	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/09/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	05/04/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	< 2	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/05/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	< 2	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
231GW06 (intermediate)	03/15/06	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	04/04/05	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	03/18/04	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/14/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/17/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	12/04/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	09/03/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	05/30/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/05/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1 UJ	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/29/01	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1 U	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/30/01	NA	< 0.5	NA	NA	< 10	0.4 J	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	1.4	1.3	< 0.5	ND
	05/09/01	< 0.5	NA	< 0.5	< 0.5	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 5	< 0.5	< 0.5	< 0.5 UJ	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	04/20/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 1	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/20/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/20/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/21/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/23/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/27/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/22/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/23/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/23/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/29/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/10/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/15/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	05/02/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	02/07/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/09/95	NA	< 0.5	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 UY	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5 U	ND
	08/10/95	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	NA	NA	NA	NA	< 2.9	< 0.5	< 0.5	ND
	04/17/95	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/25/95	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/09/94	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/16/94	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/25/94	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/28/94	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND

Table A-10-3
Results of VOC Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	1,2,4-TMB	1,2-DCA	1,3,5-TMB	2-Phenyl- butane	Acetone	Benzene	Bromo- methane	Carbon Disulfide	Chloro- form	Chloro- methane	Dichloro- methane	Ethyl- benzene	Isopropyl- benzene	MTBE	Naph- thalene	N-Butyl- Benzene	Propyl- benzene	Toluene	Total Xylenes	TCE	All Other VOCs
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	0.38	--	--	1,500	1	--	--	80	1.3	--	43	--	13	300	--	--	150	130	2.7	--
231GW09 (shallow) DUP1205062B 231GW09CL	12/05/06	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	12/05/06	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	12/05/06	NA	< 0.5 U	NA	NA	< 10 U	< 0.5 U	< 1 U	< 5 U	< 0.5 U	< 1 U	< 4.5 U	< 0.5 U	NA	< 2 U	NA	NA	NA	< 0.5 U	< 1 U	< 0.5 U	ND
	08/15/06	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
DUP1129052A	05/24/06	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	03/15/06	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	11/29/05	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	11/29/05	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
DUP1217042A	08/31/05	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1 UJ	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	06/01/05	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	04/04/05	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	12/17/04	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 1	ND
DUP0527042C 231GW09CL	12/17/04	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 1	ND
	08/12/04	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1 UJ	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	05/27/04	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	05/27/04	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	05/27/04	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	NA	< 0.5	ND
	03/18/04	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/15/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/17/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	0.6	< 0.5	< 0.5	ND
	12/04/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/30/02	NA	NA ³	NA	NA	NA ³	< 0.5	NA ³	NA ³	NA ³	NA ³	NA ³	< 0.5	NA	< 2	NA	NA	NA	< 0.5	< 0.5	NA ³	ND
	05/30/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/07/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/29/01	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 U	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/30/01	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 5	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	05/09/01	< 0.5	NA	< 0.5	< 0.5	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4.5	< 0.5	< 0.5	< 0.5 UJ	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	04/14/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 1	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/13/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/14/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/15/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/20/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/28/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/23/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/24/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/22/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/28/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/09/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/12/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	0.6	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	0.54	< 0.5	< 0.5	ND
	05/01/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	02/08/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	0.51	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/07/95	NA	< 0.5	NA	NA	< 10	< 0.5	< 0.5	< 5	0.68	< 0.5	< 4.5 UY	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5 U	ND
	08/10/95	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	0.57	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 2.7	< 0.5	< 0.5	ND
	04/18/95	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	0.53	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/23/95	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	0.52	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/10/94	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/18/94	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/27/94	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	1.3	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	02/04/94	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	0.64	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND

Table A-10-3
Results of VOC Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	1,2,4-TMB	1,2-DCA	1,3,5-TMB	2-Phenyl- butane	Acetone	Benzene	Bromo- methane	Carbon Disulfide	Chloro- form	Chloro- methane	Dichloro- methane	Ethyl- benzene	Isopropyl- benzene	MTBE	Naph- thalene	N-Butyl- Benzene	Propyl- benzene	Toluene	Total Xylenes	TCE	All Other VOCs
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	0.38	--	--	1,500	1	--	--	80	1.3	--	43	--	13	300	--	--	150	130	2.7	--
231GW10 (shallow)	03/09/06	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	03/22/05	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	03/16/04	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/14/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/14/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	12/05/02	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/29/02	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	06/04/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/07/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	12/03/01	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/30/01	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	05/11/01	< 0.5	NA	< 0.5	< 0.5	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4.5	< 0.5	< 0.5	< 0.5 UJ	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	04/19/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 1	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/25/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/19/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/22/98	NA	< 0.5	NA	NA	NA	0.25	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	0.88	< 0.5	ND
	04/23/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/28/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/22/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/23/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/23/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/29/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/10/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/16/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	0.7	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	05/03/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	02/06/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/06/95	NA	< 0.5	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 UY	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5 U	ND
	08/11/95	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 1.3	< 0.5	< 0.5	ND
	04/19/95	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/24/95	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/11/94	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/18/94	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/27/94	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/31/94	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
231GW11 (shallow)	03/15/06	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	04/05/05	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	03/18/04	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/14/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/14/03	NA	< 0.5	NA	NA	< 10	0.1 J	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	12/04/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/30/02	NA	NA ³	NA	NA	NA ³	< 0.5	NA ³	NA ³	NA ³	NA ³	NA ³	< 0.5	NA	< 2	NA	NA	NA	< 0.5	< 0.5	NA ³	ND
	05/30/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/07/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/29/01	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 U	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/30/01	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	05/09/01	< 0.5	NA	< 0.5	< 0.5	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 5	< 0.5	< 0.5	< 0.5 UJ	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	04/13/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 1	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/11/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/12/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/13/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/21/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/26/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/21/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND

Table A-10-3
Results of VOC Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	1,2,4-TMB	1,2-DCA	1,3,5-TMB	2-Phenyl- butane	Acetone	Benzene	Bromo- methane	Carbon Disulfide	Chloro- form	Chloro- methane	Dichloro- methane	Ethyl- benzene	Isopropyl- benzene	MTBE	Naph- thalene	N-Butyl- Benzene	Propyl- benzene	Toluene	Total Xylenes	TCE	All Other VOCs
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	0.38	--	--	1,500	1	--	--	80	1.3	--	43	--	13	300	--	--	150	130	2.7	--
231GW11 (shallow)	07/21/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/21/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/28/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/08/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	1.3	< 0.5	< 0.5	ND
	07/16/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	05/03/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	02/13/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/08/95	NA	< 0.5	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 UY	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5 U	ND
	08/14/95	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 2.8	< 0.5	< 0.5	ND
	04/19/95	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/24/95	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/11/94	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/17/94	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/26/94	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	02/07/94	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
231GW13 (deep)	03/14/06	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	04/05/05	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	03/18/04	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	NA ³	< 0.5	ND
	08/14/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/17/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	12/05/02	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	1.3	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/30/02	NA	NA ³	NA	NA	NA ³	< 0.5	NA ³	NA ³	NA ³	NA ³	NA ³	< 0.5	NA	< 2	NA	NA	NA	< 0.5	< 0.5	NA ³	ND
	05/30/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/06/02	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/28/01	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/29/01	NA	< 0.5	NA	NA	< 10	0.8	< 1	< 0.5	< 0.5	< 1	< 4	0.8	NA	< 0.5	NA	NA	NA	3.7	4.4	< 0.5	ND
	05/09/01	< 0.5	NA	< 0.5	< 0.5	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 5	< 0.5	< 0.5	< 0.5 UJ	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	04/16/99	NA	< 0.5	NA	NA ³	NA	< 0.5	< 0.5	< 5	< 1	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/14/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/15/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/16/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/21/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/26/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/20/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/21/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/21/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/27/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/07/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/10/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/29/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	02/06/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/03/95	NA	< 0.5	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 UY	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5 U	ND
	08/15/95	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 1.8	< 0.5	< 0.5	ND
231GW15 (intermediate)	03/14/06	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	04/05/05	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	03/18/04	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/14/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/17/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	12/04/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/30/02	NA	NA ³	NA	NA	NA ³	< 0.5	NA ³	NA ³	NA ³	NA ³	NA ³	< 0.5	NA	2.8	NA	NA	NA	< 0.5	< 0.5	NA ³	ND
	05/30/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/05/02	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/28/01	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND

Table A-10-3
Results of VOC Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	1,2,4-TMB	1,2-DCA	1,3,5-TMB	2-Phenyl- butane	Acetone	Benzene	Bromo- methane	Carbon Disulfide	Chloro- form	Chloro- methane	Dichloro- methane	Ethyl- benzene	Isopropyl- benzene	MTBE	Naph- thalene	N-Butyl- Benzene	Propyl- benzene	Toluene	Total Xylenes	TCE	All Other VOCs
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	0.38	--	--	1,500	1	--	--	80	1.3	--	43	--	13	300	--	--	150	130	2.7	--
231GW15 (intermediate)	08/30/01	NA	< 0.5	NA	NA	< 10	0.3 J	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	1.1	1	< 0.5	ND
	05/09/01	< 0.5	NA	< 0.5	< 0.5	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 5	< 0.5	< 0.5	< 0.5 UJ	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	04/16/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 1	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/14/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/15/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/16/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/21/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/26/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/20/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/21/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/21/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/27/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/07/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/10/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/29/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	02/06/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/03/95	NA	< 0.5	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 UY	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5 U	ND
	08/16/95	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 1.7	< 0.5	< 0.5	ND
231GW16 (shallow) DUP0308023A	03/09/06	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	03/22/05	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	03/16/04	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/14/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/14/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	12/05/02	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	09/04/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	06/04/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1.0	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/08/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/08/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	12/04/01	NA	< 0.5	NA	NA	< 10 UJ	0.3 J	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	09/04/01	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	05/14/01	< 0.5	NA	< 0.5	< 0.5	< 10	< 0.5	< 1	6.8	< 0.5	< 1	< 4.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	04/16/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 1	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/14/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/15/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/16/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.84	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/21/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/26/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/20/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/21/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/24/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/30/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/10/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/15/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	1.7	< 0.5	< 0.5	ND
	05/02/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	02/13/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/03/95	NA	< 0.5	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 UY	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5 U	ND
231GW17 (deep)	03/15/06	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 UJ	< 0.5	2.6 J+	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	04/05/05	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	2.6	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	03/18/04	NA	< 0.5	NA	NA	< 10	0.2 J	< 1	< 0.5	2.9	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/18/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 UJ	< 0.5	2.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/14/03	NA	< 0.5	NA	NA	< 10	0.1 J	< 1	< 0.5	3.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	12/06/02	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	< 0.5	3.2	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/30/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	3.1	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND

Table A-10-3
Results of VOC Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	1,2,4-TMB	1,2-DCA	1,3,5-TMB	2-Phenyl-butane	Acetone	Benzene	Bromo-methane	Carbon Disulfide	Chloro-form	Chloro-methane	Dichloro-methane	Ethyl-benzene	Isopropyl-benzene	MTBE	Naph-thalene	N-Butyl-Benzene	Propyl-benzene	Toluene	Total Xylenes	TCE	All Other VOCs
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	0.38	--	--	1,500	1	--	--	80	1.3	--	43	--	13	300	--	--	150	130	2.7	--
231GW17 (deep)	05/31/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	3.6	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/07/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	3.2	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/29/01	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 U	< 0.5	1.8	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/30/01	NA	< 0.5	NA	NA	< 10 UJ	0.4 J	< 1	< 0.5	1.3	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	1.2	< 0.5	< 0.5	ND
	05/11/01	< 0.5	NA	< 0.5	< 0.5	< 10	< 0.5	< 1 UJ	< 0.5	2.5	< 1	< 5	< 0.5	< 0.5	< 0.5 UJ	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	04/15/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	3.6	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/13/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	2.7	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/14/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	2.3	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/15/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	3.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/20/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	3.6	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/27/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	3.9	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/21/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	2.8	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/22/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	2.6	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/22/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	3.3	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/28/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	3.2	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/08/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	3.2	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/11/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	3.3	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/30/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	2.7	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	02/07/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	3.1	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/06/95	NA	< 0.5	NA	NA	< 10	< 0.5	< 0.5	< 5	2.9	< 0.5	< 4.5 UY	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5 U	ND
	08/16/95	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	2.2	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 2.1	< 0.5	< 0.5	ND
231GW18 (intermediate)	03/15/06	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 UJ	< 0.5	0.6 J+	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	04/05/05	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	0.6	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	03/18/04	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	0.8	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/14/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 UJ	< 0.5	0.6	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/14/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	0.7	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	12/05/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	0.8	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	09/03/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	0.8	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	05/31/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	1	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/07/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	0.9	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/29/01	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1 U	< 0.5	1	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/30/01	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	< 0.5	0.9	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	05/11/01	< 0.5	NA	< 0.5	< 0.5	< 10	< 0.5	< 1 UJ	< 0.5	0.7	< 1	< 5	< 0.5	< 0.5	< 0.5 UJ	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	04/15/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	1.2	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/13/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	0.99	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/14/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	0.75	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/15/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	1.1	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/20/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	1.1	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/27/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	1.2	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/21/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	0.98	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/22/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	1.2	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/22/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	1.3	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/28/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	1.3	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/08/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	1.4	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/11/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	1.3	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/30/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	1.4	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	02/07/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	1.6	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/06/95	NA	< 0.5	NA	NA	< 10	< 0.5	< 0.5	< 5	1.4	< 0.5	< 4.5 UY	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5 U	ND
	08/17/95	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	1.2	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 1.2	< 0.5	< 0.5	ND

Table A-10-3
Results of VOC Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	1,2,4-TMB	1,2-DCA	1,3,5-TMB	2-Phenyl-butane	Acetone	Benzene	Bromo-methane	Carbon Disulfide	Chloro-form	Chloro-methane	Dichloro-methane	Ethyl-benzene	Isopropyl-benzene	MTBE	Naph-thalene	N-Butyl-Benzene	Propyl-benzene	Toluene	Total Xylenes	TCE	All Other VOCs
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	0.38	--	--	1,500	1	--	--	80	1.3	--	43	--	13	300	--	--	150	130	2.7	--
231GW19 (shallow)	03/16/06	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	04/05/05	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	03/18/04	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/14/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/14/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	12/05/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/30/02	NA	NA ³	NA	NA	NA ³	0.65	NA ³	NA ³	NA ³	NA ³	NA ³	< 0.5	NA	2.6	NA	NA	NA	0.94	2	NA ³	ND
	05/30/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/07/02	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/28/01	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/29/01	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	05/09/01	< 0.5	NA	< 0.5	< 0.5	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 5	< 0.5	< 0.5	< 0.5 UJ	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	04/15/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 1	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/13/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/14/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/15/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/20/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/27/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/20/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/22/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/21/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/27/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/07/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/10/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/29/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	02/06/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/06/95	NA	< 0.5	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 UY	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5 U	ND
	08/17/95	NA	NA	NA	NA	< 10	2	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 2.3	< 0.5	< 0.5	ND
231GW20 (deep)	03/15/06	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	04/06/05	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1 UJ	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	03/18/04	NA	< 0.5	NA	NA	< 10	0.1 J	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/18/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/18/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	12/06/02	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	16	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	09/03/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	05/31/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/07/02	NA	< 0.5	NA	NA	< 10	0.2 J	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/29/01	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 U	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	09/04/01	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	05/11/01	< 0.5	NA	< 0.5	< 0.5	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 5	< 0.5	< 0.5	< 0.5 UJ	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	04/20/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 1	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/20/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/20/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/21/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	0.6	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/23/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/29/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/22/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/23/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/23/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/29/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND

Table A-10-3
Results of VOC Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	1,2,4-TMB	1,2-DCA	1,3,5-TMB	2-Phenyl- butane	Acetone	Benzene	Bromo- methane	Carbon Disulfide	Chloro- form	Chloro- methane	Dichloro- methane	Ethyl- benzene	Isopropyl- benzene	MTBE	Naph- thalene	N-Butyl- Benzene	Propyl- benzene	Toluene	Total Xylenes	TCE	All Other VOCs
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	0.38	--	--	1,500	1	--	--	80	1.3	--	43	--	13	300	--	--	150	130	2.7	--
231GW20 (deep)	10/09/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/16/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	3	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	05/02/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	02/13/96	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/08/95	NA	< 0.5	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 UY	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5 U	ND
	08/17/95	NA	NA	NA	NA	< 10	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 2.3	< 0.5	< 0.5	ND
231GW21 (shallow)	03/08/06	NA	< 1	NA	NA	< 20	89	< 2	< 1	< 1	< 2	< 8	4	NA	< 1	NA	NA	NA	3.4	1.8	< 1	ND
DUP0308061A	03/08/06	NA	< 1	NA	NA	< 20	96	< 2	< 1	< 1	< 2	< 8	4.3	NA	< 1	NA	NA	NA	3.5	1.9	< 1	ND
231GW21CL	03/08/06	NA	< 0.5 U	NA	NA	< 10 U	110 D	< 1 U UJ	< 5 U	2.7	< 1 U	< 4.5 U	4.8	NA	< 2 U	NA	NA	NA	3.7	3	< 0.5 U	ND
DUP0331052D	03/31/05	NA	< 0.5	NA	NA	< 10	100	< 1	< 0.5	< 0.5	< 1	< 4	6.2	NA	< 0.5	NA	NA	NA	2.8	2.4	< 0.5	ND
	03/31/05	NA	< 0.5	NA	NA	10 J-	45	< 1	< 0.5	< 0.5	< 1 UJ	< 4	3.0	NA	< 0.5	NA	NA	NA	1.3	1	< 0.5	ND
231GW21CL	03/31/05	NA	< 0.5 U	NA	NA	34	63 D	< 1 U	< 5 U	< 0.5 U	< 1 U	< 4.5 U	4.0	NA	< 2 U	NA	NA	NA	1.5	1.1	< 0.5 U	ND
DUP0819031B	03/19/04	NA	< 0.7	NA	NA	< 14	250	< 1.4	< 0.7	< 0.7	< 1.4	< 5.7	15	NA	< 0.7	NA	NA	NA	3.2	1.8	< 0.7	ND
	08/19/03	NA	< 1	NA	NA	< 20	460	< 2	< 1	< 1	< 2	< 8	8.1	NA	< 1	NA	NA	NA	4	5.5	< 1	ND
	08/19/03	NA	< 1.7	NA	NA	< 33	470	< 3.3 UJ	< 1.7	< 1.7	< 3.3	< 13	7.4	NA	< 1.7	NA	NA	NA	3.6	7.5	< 1.7	ND
	03/14/03	NA	< 1	NA	NA	< 20	320	< 2	< 1	< 1	< 2	< 8	15	NA	< 1	NA	NA	NA	3.1	2.7	< 1	ND
DUP1206021A	12/06/02	NA	< 1.7	NA	NA	< 33 UJ	400	< 3.3	< 1.7	< 1.7	< 3.3	< 13	12	NA	< 1.7	NA	NA	NA	3.6	1.8	< 1.7	ND
	12/06/02	NA	< 1.3	NA	NA	< 25 UJ	420	< 2.5	< 1.3	< 1.3	< 2.5	< 10	12	NA	< 1.3	NA	NA	NA	3.9	2	< 1.3	ND
DUP0604023A	09/04/02	NA	< 2.5	NA	NA	< 50	530	< 5	< 2.5	< 2.5	< 5	< 20	11	NA	< 2.5	NA	NA	NA	5.6	3.3	< 2.5	ND
	06/04/02	NA	< 1.7	NA	NA	< 33 UJ	430	< 3.3	< 1.7	< 1.7	< 3.3	< 13	9.4	NA	< 1.7	NA	NA	NA	3.5	< 1.7	< 1.7	ND
	06/04/02	NA	< 1.7	NA	NA	< 33 UJ	470	< 3.3	< 1.7	< 1.7	< 3.3	< 13	9.8	NA	< 1.7	NA	NA	NA	3.4	< 1.7	< 1.7	ND
	03/08/02	NA	< 0.5	NA	NA	< 10	130	< 1	< 0.5	< 0.5	< 1	< 4	6.7	NA	< 0.5	NA	NA	NA	1.5	1.1	< 0.5	ND
	11/29/01	NA	< 0.8	NA	NA	< 17	270	< 1.7	< 0.8	< 0.8	< 1.7	< 6.7	10	NA	< 0.8	NA	NA	NA	2	1	< 0.8	ND
	09/06/01	NA	< 3.6	NA	NA	< 71	1,100	< 7.1	< 3.6	< 3.6	< 7.1	< 29	28	NA	< 3.6	NA	NA	NA	4.8	< 3.6	< 3.6	ND
	05/14/01	< 4.2	NA	< 4.2	14	< 83 UJ	1,100	< 8.3 UJ	< 4.2	< 4.2	< 8.3	< 42	33	130	< 4.2 UJ	5.2	31	310	4.6	< 4.2	< 4.2	ND
	06/17/99	NA	60	NA	NA	NA	2,000	< 50	< 500	< 100	< 50	< 450 Y	63	NA	NA	NA	NA	NA	< 50	< 50	< 50	ND
	04/20/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 1	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/20/99	NA	< 25	NA	NA	NA	840	< 25	< 250	< 25	< 25	< 220 Y	< 25	NA	NA	NA	NA	NA	< 25	< 25	< 25	ND
	10/20/98	NA	84	NA	NA	NA	2,600	< 62	< 620	< 62	< 62	< 560 Y	120	NA	NA	NA	NA	NA	< 62	< 62	< 62	ND
	07/23/98	NA	81	NA	NA	NA	3,000	< 50	< 500	< 50	< 50	< 450 Y	< 50	NA	NA	NA	NA	NA	< 50	160	< 50	ND
	05/01/98	NA	89	NA	NA	NA	2,400	< 50	< 500	< 50	< 50	< 450 Y	340	NA	NA	NA	NA	NA	< 50	< 50	< 50	ND
	01/28/98	NA	< 50	NA	NA	NA	2,000	< 50	< 500	< 50	< 50	< 450 Y	310	NA	NA	NA	NA	NA	< 50	< 50	< 50	ND
	10/27/97	NA	< 50	NA	NA	NA	2,400	< 50	< 500	< 50	< 50	< 450 Y	160	NA	NA	NA	NA	NA	< 50	< 50	< 50	ND
	07/24/97	NA	< 120	NA	NA	NA	3,900	< 120	< 1,200	< 120	< 120	< 1,100 Y	400	NA	NA	NA	NA	NA	< 120	< 120	< 120	ND
231GW22 (shallow)	04/24/97	NA	< 120	NA	NA	NA	4,800	< 120	< 1,200	< 120	< 120	< 1,100 Y	780	NA	NA	NA	NA	NA	< 120	< 120	< 120	ND
	01/30/97	NA	< 0.5	NA	NA	NA	2,900	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	250	NA	NA	NA	NA	NA	6.6	43.6	< 0.5	ND
	10/11/96	NA	NA	NA	NA	< 200 R	6,200	< 10	< 100	< 10	< 10	< 90 Y	970	NA	NA	NA	NA	NA	17	130	< 10	ND
	07/17/96	NA	NA	NA	NA	< 2,500 R	6,200	< 120	< 1,200	< 120	< 120	< 1,100 Y	890	NA	NA	NA	NA	NA	< 120	180	< 120	ND
	05/06/96	NA	NA	NA	NA	< 2,500 R	4,700	< 120	< 1,200	< 120	< 120	< 1,100 Y	1,200	NA	NA	NA	NA	NA	< 120	450	< 120	ND
	02/12/96	NA	NA	NA	NA	< 1,000 R	2,000	< 50	< 500	< 50	< 50	< 450 Y	600	NA	NA	NA	NA	NA	< 50	350	< 50	ND
	11/10/95	NA	< 3	NA	NA	< 50	5,100	< 3	< 30	< 3	< 3	< 18 UY	1,700	NA	NA	NA	NA	NA	20	960	< 3 U	ND
	08/16/95	NA	NA	NA	NA	< 2,500 R	6,100	< 120	< 1,200	< 120	< 120	< 1,100 Y	2,200	NA	NA	NA	NA	NA	< 120	1,200	< 120	ND
	04/24/95	NA	NA	NA	NA	< 1,200 R	4,100	< 62	< 620	< 62	< 62	< 560 Y	990	NA	NA	NA	NA	NA	< 62	810	< 62	ND
231GW22 (shallow)	03/09/06	NA	< 31	NA	NA	< 630	4,400	< 63	< 31	< 31	< 63	< 250	230	NA	< 31	NA	NA	NA	60	550	< 31	ND
DUP0309061A	03/09/06	NA	< 31	NA	NA	< 630	4,300	< 63	< 31	< 31	< 63	< 250	180	NA	< 31	NA	NA	NA	49	400	< 31	ND
DUP0323052A	03/23/05	NA	< 31	NA	NA	< 630	4,200	< 63	< 31	< 31	< 63	< 250	210	NA	< 31	NA	NA	NA	75	480	< 31	ND
	03/23/05	NA	< 36	NA	NA	< 710	4,300	< 71	< 36	< 36	< 71	< 290	220	NA	< 36	NA	NA	NA	74	510	< 36	ND
DUP0319041A	03/19/04	NA	< 13	NA	NA	< 250	5,600	< 25	< 13	< 13	< 25	< 100	570	NA	< 13	NA	NA	NA	260	1,400	< 13	ND
	03/19/04	NA	< 20	NA	NA	< 400	5,200	< 40	< 20	< 20	< 40	< 160	530	NA	< 20	NA	NA	NA	280	1,300	< 20	ND
231GW22CL	03/19/04	NA	< 100	NA	NA	< 2,000 R	5,300	< 200	< 1,000	< 100	< 100	< 100	580	NA	< 100	NA	NA	NA	250	1,600	160	ND

Table A-10-3
Results of VOC Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	1,2,4-TMB	1,2-DCA	1,3,5-TMB	2-Phenyl- butane	Acetone	Benzene	Bromo- methane	Carbon Disulfide	Chloro- form	Chloro- methane	Dichloro- methane	Ethyl- benzene	Isopropyl- benzene	MTBE	Naph- thalene	N-Butyl- Benzene	Propyl- benzene	Toluene	Total Xylenes	TCE	All Other VOCs
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	0.38	--	--	1,500	1	--	--	80	1.3	--	43	--	13	300	--	--	150	130	2.7	--
231GW22 (shallow) DUP0819031A 231GW22CL DUP0317031A 231GW22CL DUP0904021A 231GW22CL DUP0605023B DUP0308023B 231GW22CL DUP1204013A DUP0514011A	08/19/03	NA	< 17	NA	NA	< 330	4,800	< 33	< 17	< 17	< 33	< 130	200	NA	< 17	NA	NA	NA	140	890	< 17	ND
	08/19/03	NA	< 17	NA	NA	< 330	4,300	< 33 UJ	< 17	< 17	< 33	< 130	160	NA	< 17	NA	NA	NA	120	760	< 17	ND
	08/19/03	NA	< 100	NA	NA	< 2,000 R	4,600	< 200	< 1,000	< 100	< 100	< 100	200	NA	< 100	NA	NA	NA	140	860	< 100	ND
	03/17/03	NA	< 8.3	NA	NA	< 170 UJ	3,900	< 17	< 8.3	< 17	< 17	< 67	370	NA	< 8.3	NA	NA	NA	150	1,100	< 8.3	ND
	03/17/03	NA	< 17	NA	NA	< 330	4,000	< 100	< 17	< 17	< 33	< 130	340	NA	< 17	NA	NA	NA	160	1,000	< 17	ND
	03/17/03	NA	< 50	NA	NA	< 1,000	3,800	< 33	< 500	< 50	< 50	< 50	350	NA	< 50	NA	NA	NA	170	1,100	< 50	ND
	12/06/02	NA	< 3.6	NA	NA	< 71 UJ	1,000	< 7.1	< 3.6	< 3.6	< 7.1	< 29	16	NA	< 3.6	NA	NA	NA	6.3	5.9	< 3.6	ND
	09/04/02	NA	< 6.3	NA	NA	< 130	1,800	< 40	< 6.3	< 6.3	< 13	< 50	71	NA	< 6.3	NA	NA	NA	13	16	7.9	ND
	09/04/02	NA	< 4.2	NA	NA	< 83 UJ	2,000	< 13	< 4.2	< 8.3	< 33	85	NA	NA	< 4.2	NA	NA	NA	12	15	< 4.2	ND
	09/04/02	NA	< 20	NA	NA	< 2,000	2,300	< 8.3	< 200 UJ	9.1 J	< 40	63 J	140	NA	< 200 UJ	NA	NA	NA	18 J	30 J	< 20	ND
	06/05/02	NA	< 7.1	NA	NA	< 140 UJ	2,000	< 14	< 7.1	< 7.1	< 14	< 57	82	NA	< 7.1	NA	NA	NA	22	41	< 7.1	ND
	06/05/02	NA	< 7.1	NA	NA	< 140 UJ	1,900	< 14	< 7.1	< 7.1	< 14	< 57	85	NA	< 7.1	NA	NA	NA	23	42	< 7.1	ND
	03/08/02	NA	< 7.1	NA	NA	< 140	2,500	< 40	< 7.1	< 7.1	< 14	< 57	430	NA	< 7.1	NA	NA	NA	240	830	< 7.1	ND
	03/08/02	NA	< 8.3	NA	NA	< 170 UJ	2,700	< 14	< 8.3	< 8.3	< 17	< 67	420	NA	< 8.3	NA	NA	NA	220	750	< 8.3	ND
	03/08/02	170	< 20	45	< 40	66 J,J+	2,900	< 17 UJ	< 200	16 J	< 40	13 J,J	500	65	< 200	130 J	< 40	140	270	1,000 J+	< 20	ND
	12/04/01	NA	< 8.3	NA	NA	< 170 UJ	2,000	< 17	< 8.3	< 8.3	< 17	< 67	240	NA	< 8.3	NA	NA	NA	95	269	< 8.3	ND
	12/04/01	NA	< 7.1	NA	NA	< 140 UJ	2,200	< 14	< 7.1	< 7.1	< 14	< 57	260	NA	< 7.1	NA	NA	NA	110	298	12	ND
	09/04/01	NA	< 13	NA	NA	< 250	3,600	< 25	< 13	< 13	< 25	< 100	400	NA	< 13	NA	NA	NA	57	156	< 13	ND
	05/14/01	45	<20	23	< 20	< 400	5,900	< 40	< 20	< 20	< 40	< 200	390	63	< 20	260	< 20	180	45	160	< 20	ND
	05/14/01	48	<20	25	< 20	< 400	5,800	< 40	< 20	< 20	< 40	< 200	410	64	NA	250	21	180	43	170	< 20	ND
	04/21/99	NA	170	NA	NA	NA	4,300	< 100	< 1,000	< 200	< 100	< 900 Y	710	NA	NA	NA	NA	NA	340	1,410	< 100	ND
	01/21/99	NA	< 120	NA	NA	NA	5,200	< 120	< 1,200	< 120	< 120	< 1,100 Y	1,100	NA	NA	NA	NA	NA	740	3,330	< 120	ND
	12/02/98	NA	140	NA	NA	NA	4,300	< 120	< 1,200	< 120	< 120	< 1,100 Y	710	NA	NA	NA	NA	NA	550	2,060	< 120	ND
	07/22/98	NA	120	NA	NA	NA	4,400	< 62	< 620	< 62	< 62	< 560 Y	770	NA	NA	NA	NA	NA	550	2,790	< 62	ND
	04/27/98	NA	140	NA	NA	NA	5,100	< 120	< 1,200	< 120	< 120	< 1,100 Y	980	NA	NA	NA	NA	NA	450	4,440	< 120	ND
	01/29/98	NA	190	NA	NA	NA	5,100	< 120	< 1,200	< 120	< 120	< 1,100 Y	1,000	NA	NA	NA	NA	NA	1,800	5,470	< 120	ND
	10/28/97	NA	100	NA	NA	NA	3,300	< 50	< 500	< 50	< 50	< 450 Y	840	NA	NA	NA	NA	NA	380	4,140	< 50	ND
	07/28/97	NA	< 120	NA	NA	NA	3,400	< 120	< 1,200	< 120	< 120	< 1,100 Y	910	NA	NA	NA	NA	NA	530	4,630	< 120	ND
	04/28/97	NA	130	NA	NA	NA	4,200	< 120	< 1,200	< 120	< 120	< 1,100 Y	880	NA	NA	NA	NA	NA	1,300	6,900	< 120	ND
231GW23 (shallow)	03/15/06	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	04/05/05	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	03/18/04	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/18/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/17/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	12/05/02	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	3.9	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	09/03/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	05/31/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/07/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/29/01	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	09/04/01	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	05/14/01	< 0.5	NA	< 0.5	< 0.5	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	04/20/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 1	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/20/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	12/02/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/23/98	NA	< 0.5	NA	NA	NA	4.4	< 0.5	< 5	< 0.5	< 0.59	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	1.3	< 0.5	ND
	04/28/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.65	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	02/02/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/23/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/29/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/29/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND

Table A-10-3
Results of VOC Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	1,2,4-TMB	1,2-DCA	1,3,5-TMB	2-Phenyl- butane	Acetone	Benzene	Bromo- methane	Carbon Disulfide	Chloro- form	Chloro- methane	Dichloro- methane	Ethyl- benzene	Isopropyl- benzene	MTBE	Naph- thalene	N-Butyl- Benzene	Propyl- benzene	Toluene	Total Xylenes	TCE	All Other VOCs
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	0.38	--	--	1,500	1	--	--	80	1.3	--	43	--	13	300	--	--	150	130	2.7	--
231GW24 (shallow)	03/16/06	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	04/05/05	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	03/18/04	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/14/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/17/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	12/05/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/30/02	NA	NA ³	NA	NA	NA ³	< 0.5	NA ³	NA ³	NA ³	NA ³	NA ³	< 0.5	NA	2.6	NA	NA	NA	< 0.5	< 0.5	NA ³	ND
	05/30/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/06/02	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/29/01	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/29/01	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	05/09/01	< 0.5	NA	< 0.5	< 0.5	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 5	< 0.5	< 0.5	< 0.5 UJ	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	04/19/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 1	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/20/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/19/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/20/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/22/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	02/03/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/29/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/30/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/30/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	0.56	< 0.5	ND
231GW25 (shallow)	03/15/06	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	04/06/05	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1 UJ	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	03/18/04	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/18/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/17/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	12/05/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	5.9	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	09/03/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	05/31/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/07/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/29/01	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	09/04/01	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	05/14/01	< 0.5	NA	< 0.5	< 0.5	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	04/19/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 1	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/21/99	NA	< 0.5	NA	NA	NA	2	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	0.67	< 0.5	ND
	10/19/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/20/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/22/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	02/03/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/29/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/30/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	1.6	< 0.5	ND
	04/30/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
231GW26 (intermediate)	03/16/06	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	04/06/05	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	< 0.5	1.4	< 1 UJ	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	03/18/04	NA	< 0.5	NA	NA	< 10	0.1 J	< 1	< 0.5	1.8	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/15/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 UJ	< 0.5	1.6	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/18/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	2.6	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	12/06/02	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	6.9	2	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	09/04/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	1.9	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	06/03/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	1.4	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/07/02	NA	< 0.5	NA	NA	< 10	0.2 J	< 1	< 0.5	0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/29/01	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	09/04/01	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	0.6	< 0.5	< 0.5	ND

Table A-10-3
Results of VOC Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	1,2,4-TMB	1,2-DCA	1,3,5-TMB	2-Phenyl- butane	Acetone	Benzene	Bromo- methane	Carbon Disulfide	Chloro- form	Chloro- methane	Dichloro- methane	Ethyl- benzene	Isopropyl- benzene	MTBE	Naph- thalene	N-Butyl- Benzene	Propyl- benzene	Toluene	Total Xylenes	TCE	All Other VOCs
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	0.38	--	--	1,500	1	--	--	80	1.3	--	43	--	13	300	--	--	150	130	2.7	--
231GW26 (intermediate)	05/10/01	< 0.5	NA	< 0.5	< 0.5	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	04/21/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 1	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/21/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/21/98	NA	< 0.5	NA	NA	NA	0.6	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	0.64	< 0.5	ND
	07/22/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.65	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/27/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	0.61	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/29/98	NA	< 0.5	NA	NA	NA	0.44	< 0.5	< 5	0.79	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	0.67	< 0.5	ND
	10/28/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	0.53	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/28/97	NA	< 0.5	NA	NA	NA	0.23	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
231GW27 (intermediate)	04/28/97	NA	< 0.5	NA	NA	NA	0.57	< 0.5	< 5	0.52	< 0.5	< 4.5 Y	0.72	NA	NA	NA	NA	NA	0.99	3.53	< 0.5	ND
	03/15/06	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 UJ	< 0.5	1.2 J+	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	04/06/05	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	< 0.5	1.4	< 1 UJ	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	03/19/04	NA	< 0.5	NA	NA	< 10	0.1 J	< 1	< 0.5	1.7	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/15/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 UJ	< 0.5	1	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/18/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	1.2	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	12/10/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	0.8	< 1	< 4	< 0.5	NA	< 0.5 UJ	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	09/04/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	1	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	06/03/02	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
DUP0904012A 231GW27CL	03/07/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/29/01	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 U	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	09/04/01	NA	< 0.5	NA	NA	27 J-	< 0.5	< 1	1.4	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	0.8	ND
	09/04/01	NA	< 0.5	NA	NA	27 J-	< 0.5	< 5	1.1	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	09/04/01	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	1.2	< 5	< 0.5	NA	< 5	< 1	NA	NA	< 0.5	< 0.5	< 1.0	ND
	05/10/01	< 0.5	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/10/01	< 0.5	< 0.5	< 0.5	< 0.5	< 10	< 0.5	< 5	< 0.5	< 0.5	< 1	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/10/01	< 1	< 1	< 1	< 1	< 50	< 1	< 1	< 5	< 1	< 1	< 5	< 1	< 1	< 5	< 1	< 1	< 1	NA	< 1	< 1	ND
	04/21/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 1	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
DUP0510011A 231GW27CL	01/21/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/21/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	1.2	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/22/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	0.99	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/27/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	1.5	0.61	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/29/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	0.92	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/28/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	1.3	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/28/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	0.85	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/28/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	1.3	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
231GW28 (intermediate)	03/15/06	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	2.4 J+	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	04/06/05	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	12	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	03/18/04	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/15/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/17/03	NA	< 0.5	NA	NA	< 10	0.3 J	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	1.6	NA	NA	NA	0.7	< 0.5	< 0.5	ND
	12/06/02	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	2.3	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	09/03/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	05/31/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/07/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	12/04/01	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	09/04/01	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	05/09/01	< 0.5	NA	< 0.5	< 0.5	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 5	< 0.5	< 0.5	< 0.5 UJ	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	04/13/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 1	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/11/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	12/02/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/23/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND

Table A-10-3
Results of VOC Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	1,2,4-TMB	1,2-DCA	1,3,5-TMB	2-Phenyl- butane	Acetone	Benzene	Bromo- methane	Carbon Disulfide	Chloro- form	Chloro- methane	Dichloro- methane	Ethyl- benzene	Isopropyl- benzene	MTBE	Naph- thalene	N-Butyl- Benzene	Propyl- benzene	Toluene	Total Xylenes	TCE	All Other VOCs
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	0.38	--	--	1,500	1	--	--	80	1.3	--	43	--	13	300	--	--	150	130	2.7	--
231GW28 (intermediate)	04/28/98	NA	< 0.5	NA	NA	NA	0.23	< 0.5	< 5	< 0.5	0.6	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	02/02/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/27/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/29/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/29/97	NA	< 0.5	NA	NA	NA	0.42	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	0.69	< 0.5	ND
231GW29 (intermediate) DUP0318043B 231GW29CL	03/16/06	NA	< 0.5	NA	NA	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	04/06/05	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1 UJ	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	03/18/04	NA	< 0.5	NA	NA	< 10	0.1 J	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/18/04	NA	< 0.5	NA	NA	< 10	0.1 J	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/18/04	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 5	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/15/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/18/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	12/06/02	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	1.3	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	09/03/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	06/03/02	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/07/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	11/29/01	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	09/04/01	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	05/11/01	< 0.5	NA	< 0.5	< 0.5	< 10	< 0.5	< 1 UJ	< 0.5	< 0.5	< 1	< 5	< 0.5	< 0.5	< 0.5 UJ	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	04/21/99	NA	< 0.5	NA	NA	NA	0.14	< 0.5	< 5	< 1	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/21/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	12/02/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/23/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	0.56	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/28/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	0.77	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	02/02/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/27/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/29/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/29/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
231GW30 (shallow)	03/09/06	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	03/22/05	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 1	< 0.5	ND
	03/19/04	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	08/14/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/14/03	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	12/06/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	09/04/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	06/04/02	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1.0	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	03/08/02	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	12/04/01	NA	< 0.5	NA	NA	< 10 UJ	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	09/04/01	NA	< 0.5	NA	NA	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	05/14/01	< 0.5	NA	< 0.5	< 0.5	< 10	< 0.5	< 1	< 0.5	< 0.5	< 1	< 5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	04/19/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 1	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	01/19/99	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/19/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	07/20/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/22/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	02/03/98	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	10/29/97	NA	< 0.5	NA	NA	NA	8.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	1.4	NA	NA	NA	NA	NA	1.5	6.5	< 0.5	ND
	07/30/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND
	04/30/97	NA	< 0.5	NA	NA	NA	< 0.5	< 0.5	< 5	< 0.5	< 0.5	< 4.5 Y	< 0.5	NA	NA	NA	NA	NA	< 0.5	< 0.5	< 0.5	ND

Table A-10-3
Results of VOC Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	1,2,4-TMB	1,2-DCA	1,3,5-TMB	2-Phenyl-butane	Acetone	Benzene	Bromo-methane	Carbon Disulfide	Chloro-form	Chloro-methane	Dichloro-methane	Ethyl-benzene	Isopropyl-benzene	MTBE	Naph-thalene	N-Butyl-Benzene	Propyl-benzene	Toluene	Total Xylenes	TCE	All Other VOCs
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	0.38	--	--	1,500	1	--	--	80	1.3	--	43	--	13	300	--	--	150	130	2.7	--
231PZ01 (shallow)	03/14/06	NA	< 31	NA	NA	< 630	4,500	< 63 UJ	< 31	< 31	< 63	< 250	310	NA	< 31	NA	NA	NA	< 31	< 63	< 31	ND
	04/04/05	NA	< 25	NA	NA	< 500	4,600	< 50	< 25	< 25	< 50	< 200	150	NA	< 25	NA	NA	NA	26	< 50	< 25	ND
	03/19/04	NA	< 20	NA	NA	< 400	5,800	< 40	< 20	< 20	< 40	< 160	410	NA	< 20	NA	NA	NA	37	72	< 20	ND
	08/19/03	NA	< 17	NA	NA	< 330	6,600	< 33	< 17	< 17	< 33	< 130	470	NA	< 17	NA	NA	NA	31	110	< 17	ND
	03/17/03	NA	< 17	NA	NA	< 330	6,500	< 33	< 17	< 17	< 33	< 130	600	NA	< 17	NA	NA	NA	42	140	< 17	ND
	12/09/02	NA	< 13	NA	NA	< 250	6,800	< 25	< 13	< 13	< 25	< 100	420	NA	< 13 UJ	NA	NA	NA	32	72	< 13	ND
	09/05/02	NA	< 20	NA	NA	< 400	6,000	< 40	< 20	< 20	< 40	< 160	570	NA	< 20	NA	NA	NA	37	130	< 20	ND
	06/05/02	NA	< 31	NA	NA	< 630 UJ	7,100	< 63	41	< 31	< 63	< 250	490	NA	< 31	NA	NA	NA	39	140	< 31	ND
	03/08/02	NA	< 25	NA	NA	< 500 UJ	8,000	< 50 UJ	< 25	< 25	< 50	< 200	900	NA	< 25	NA	NA	NA	53	330	< 25	ND
	11/30/01	NA	< 25	NA	NA	< 500	5,300	< 50	< 25	< 25	< 50	< 200	590	NA	< 25	NA	NA	NA	35	220	< 25	ND
	09/06/01	NA	< 25	NA	NA	< 500 UJ	6,900	< 50 UJ	< 25	< 25	< 50 UJ	< 200	560	NA	< 25	NA	NA	NA	39	220	< 25	ND
	05/15/01	71	NA	55	< 17	< 330 UJ	4,400	< 33 UJ	< 17	< 17	< 33	< 170	510	53	< 17 UJ	510	27	170	30	260	< 17	ND
	04/14/99	NA	210	NA	NA	NA	5,600	< 100	< 1,000	< 200	< 100	< 900 Y	1,900	NA	NA	NA	NA	NA	< 100	1,200	< 100	ND
	01/12/99	NA	330	NA	NA	NA	11,000	< 250	< 2,500	< 250	< 250	< 2,200 Y	2,200	NA	NA	NA	NA	NA	< 250	1,800	< 250	ND
	10/13/98	NA	280	NA	NA	NA	8,500	< 250	< 2,500	< 250	< 250	< 2,200 Y	1,800	NA	NA	NA	NA	NA	< 250	1,800	< 250	ND
	07/14/98	NA	260	NA	NA	NA	8,800	< 120	< 1,200	< 120	< 120	< 1,100 Y	1,900	NA	NA	NA	NA	NA	830	5,180	< 120	ND
	04/30/98	NA	260	NA	NA	NA	8,500	< 120	< 1,200	< 120	< 120	< 1,100 Y	3,100	NA	NA	NA	NA	NA	1,700	9,300	< 120	ND
	02/03/98	NA	< 250	NA	NA	NA	5,900	< 250	< 2,500	< 250	< 250	< 2,200 Y	4,100	NA	NA	NA	NA	NA	1,700	13,600	< 250	ND
231PZ02 (shallow)	03/10/06	NA	< 0.5	NA	NA	< 10	30	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	3.3	3.1	< 0.5	ND
	04/04/05	NA	< 0.5	NA	NA	< 10	19	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	3.5	2.8	< 0.5	ND
	03/19/04	NA	< 0.5	NA	NA	< 10	23	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	3.8	3.6	< 0.5	ND
	08/19/03	NA	< 0.5	NA	NA	< 10	290	< 1	< 0.5	< 0.5	< 1	< 4	1.7	NA	< 0.5	NA	NA	NA	3.1	3.9	< 0.5	ND
	03/17/03	NA	< 0.5	NA	NA	< 10 UJ	46	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	3.2	2.1	< 0.5	ND
	12/09/02	NA	< 1.7	NA	NA	< 33	650	< 3.3	< 1.7	< 1.7	< 3.3	< 13	< 1.7	NA	< 1.7 UJ	NA	NA	NA	7	3	< 1.7	ND
	09/05/02	NA	< 0.8	NA	NA	< 17	210	< 1.7	< 0.8	< 0.8	< 1.7	< 6.7	< 0.8	NA	< 0.8	NA	NA	NA	2.5	1.7	< 0.8	ND
	06/05/02	NA	< 1.3	NA	NA	< 25 UJ	390	< 2.5	< 1.3	< 1.3	< 2.5	< 10	2.0	NA	< 1.3	NA	NA	NA	3.8	3.6	< 1.3	ND
	03/08/02	NA	< 0.5	NA	NA	< 10	50	< 1	< 0.5	< 0.5	< 1	< 4	< 0.5	NA	< 0.5	NA	NA	NA	3.8	3.7	< 0.5	ND
	11/30/01	NA	< 1.3	NA	NA	< 25	300	< 2.5	< 1.3	< 1.3	< 2.5	< 10	2.5	NA	< 1.3	NA	NA	NA	3.9	3.4	1.3	ND
	09/06/01	NA	< 1.3	NA	NA	< 25 UJ	290	< 2.5 UJ	< 1.3	< 1.3	< 2.5 UJ	< 10	< 1.3	NA	< 1.3	NA	NA	NA	3.6	2.9	< 1.3	ND
	05/15/01	< 0.6	NA	0.8	0.8	22 J-	150	< 1.3 UJ	< 0.6	1.2	< 1.3	< 6.3	< 0.6	5.2	< 0.6 UJ	< 0.6	0.9	7.4	2.5	4.4	< 0.6	ND
	04/14/99	NA	11	NA	NA	NA	280	< 5	< 50	< 10	< 5	< 45 Y	< 5	NA	NA	NA	NA	NA	< 5	< 5	< 5	ND
	01/12/99	NA	11	NA	NA	NA	340	< 5	< 50	< 5	< 5	< 45 Y	< 5	NA	NA	NA	NA	NA	< 5	< 5	< 5	ND
	10/13/98	NA	17	NA	NA	NA	460	< 12	< 120	< 12	< 12	< 110 Y	< 12	NA	NA	NA	NA	NA	< 12	< 12	< 12	ND
	07/14/98	NA	< 25	NA	NA	NA	500	< 25	< 250	< 25	< 25	< 220 Y	< 25	NA	NA	NA	NA	NA	< 25	< 25	< 25	ND
	04/30/98	NA	18	NA	NA	NA	650	< 12	< 120	< 12	< 12	< 110 Y	< 12	NA	NA	NA	NA	NA	< 12	< 12	< 12	ND
	02/03/98	NA	22	NA	NA	NA	810	< 12	< 120	< 12	< 12	< 110 Y	< 12	NA	NA	NA	NA	NA	< 12	42	< 12	ND
231PZ03 (shallow)	03/14/06	NA	< 0.5	NA	NA	< 10	280	< 1 UJ	< 0.5	< 0.5	< 1	< 4	5.4	NA	< 0.5	NA	NA	NA	6.9	3	< 0.5	ND
	04/04/05	NA	< 3.1	NA	NA	< 63	370	< 6.3	< 3.1	< 3.1	< 6.3	< 25	3.7	NA	< 3.1	NA	NA	NA	5.4	< 6.3	< 3.1	ND
	03/19/04	NA	< 2	NA	NA	< 40	400	< 4	< 2	< 2	< 4	< 16	6.4	NA	< 2	NA	NA	NA	5.8	< 2	< 2	ND
	08/21/03	NA	< 0.5	NA	NA	< 10	26	< 1	< 0.5	< 0.5	< 1	< 4	1.5	NA	< 0.5	NA	NA	NA	4.1	2.6	< 0.5	ND
	03/17/03	NA	< 0.5	NA	NA	< 10 UJ	47	< 1	1.1	< 0.5	< 1	< 4	1.5	NA	< 0.5	NA	NA	NA	2.4	< 0.5	< 0.5	ND
	12/06/02	NA	< 0.5	NA	NA	< 10 UJ	21	< 1	< 0.5	< 0.5	< 1	< 4	2.7	NA	< 0.5	NA	NA	NA	3.7	2.9	< 0.5	ND
	09/04/02	NA	< 0.5	NA	NA	< 10	57	< 1	< 0.5	< 0.5	< 1	< 4	1.9	NA	< 0.5	NA	NA	NA	5.1	2.7	< 0.5	ND
	06/06/02	NA	< 1.0	NA	NA	< 20 UJ	250	< 2 UJ	< 1	< 1	< 2.0	< 8	2.2	NA	< 1.0	NA	NA	NA	3	< 1	< 1.0	ND
	03/11/02	NA	< 1	NA	NA	< 20 UJ	350	< 2 UJ	< 1	< 1	< 2	< 8	2.9	NA	< 1	NA	NA	NA	3.2	1.4	< 1	ND
	11/30/01	NA	< 0.5	NA	NA	< 10 UJ	21	< 1	< 0.5	< 0.5	< 1	< 4	2.1	NA	< 0.5	NA	NA	NA	3.5	2.6	< 0.5	ND
	09/06/01	NA	< 0.8	NA	NA	< 17	60	< 1.7	< 0.8	< 0.8	< 1.7	< 6.7	1.8	NA	< 0.8	NA	NA	NA	3.9	1.6	< 0.8	ND
	05/15/01	< 1	NA	< 1	8.9	< 20 UJ	240	< 2 UJ	< 1	< 1	< 2	< 10	11	45	< 1 UJ	5.5	19	95	2.8	2	< 1	ND
	04/14/99	NA	< 25	NA	NA	NA	620	< 25	< 250	< 50	< 25	< 220 Y	31	NA	NA	NA	NA	NA	< 25	< 25	< 25	ND
	01/12/99	NA	< 12	NA	NA	NA	240	< 12	< 120	< 12	< 12	< 110 Y	23	NA	NA	NA	NA	NA	< 12	< 12	< 12	ND
	10/13/98	NA	5.5	NA	NA	NA	140	< 5	< 50	< 5	< 5	< 45 Y	8.5	NA	NA	NA	NA	NA	< 5	< 5	< 5	ND
	07/14/98	NA	38	NA	NA	NA	1,300	< 25	< 250	< 25	< 25	< 220 Y	< 25	NA	NA	NA	NA	NA	< 25	< 25	< 25	ND
	04/30/98	NA	64	NA	NA	NA	2,200	< 50	< 500	< 50	< 50	< 450 Y	370	NA	NA	NA	NA	NA	< 50	87	< 50	ND
	02/03/98	NA	< 25	NA	NA	NA	1,600	< 25	< 250	< 25	< 25	< 220 Y	480	NA	NA	NA	NA	NA	< 25	280	< 25	ND

Table A-10-3
Results of VOC Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	1,2,4-TMB	1,2-DCA	1,3,5-TMB	2-Phenyl-butane	Acetone	Benzene	Bromo-methane	Carbon Disulfide	Chloro-form	Chloro-methane	Dichloro-methane	Ethyl-benzene	Isopropyl-benzene	MTBE	Naph-thalene	N-Butyl-Benzene	Propyl-benzene	Toluene	Total Xylenes	TCE	All Other VOCs
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8020/ SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	0.38	--	--	1,500	1	--	--	80	1.3	--	43	--	13	300	--	--	150	130	2.7	--
231PZ04 (shallow)	03/14/06	NA	< 3.6	NA	NA	< 71	440	< 7.1 UJ	< 3.6	< 3.6	< 7.1	< 29	19	NA	< 3.6	NA	NA	NA	6.4	< 7.1	< 3.6	ND
	04/04/05	NA	< 4.2	NA	NA	< 83	750	< 8.3	< 4.2	< 4.2	< 8.3	< 33	33	NA	< 4.2	NA	NA	NA	6.1	< 8.3	< 4.2	ND
	03/19/04	NA	< 3.1	NA	NA	< 63	710	< 6.3	< 3.1	< 3.1	< 6.3	< 25	26	NA	< 3.1	NA	NA	NA	6.1	< 3.1	< 3.1	ND
	08/21/03	NA	< 0.5	NA	NA	< 10	180	0.5 J	< 0.5	< 0.5	< 1	< 4	9.2	NA	< 0.5	NA	NA	NA	4.4	2.6	< 0.5	ND
	03/17/03	NA	< 2.5	NA	NA	< 50	740	< 5	< 2.5	< 2.5	< 5	< 20	35	NA	< 2.5	NA	NA	NA	3.2	< 2.5	< 2.5	ND
	12/06/02	NA	< 1	NA	NA	< 20 UJ	350	< 2	< 1	< 1	< 2	< 8	19	NA	< 1	NA	NA	NA	3.8	1.6	< 1	ND
	09/04/02	NA	< 2	NA	NA	< 40	490	< 4	< 2	< 2	< 4	< 16	19	NA	< 2	NA	NA	NA	4.5	< 2	< 2	ND
	06/06/02	NA	< 3.1	NA	NA	< 63 UJ	830	< 6.3 UJ	< 3.1	< 3.1	< 6.3	< 25	23	NA	< 3.1	NA	NA	NA	3.5	< 3.1	< 3.1	ND
	03/08/02	NA	< 3.1	NA	NA	< 63 UJ	820	< 6.3	< 3.1	< 3.1	< 6.3	< 25	20	NA	< 3.1	NA	NA	NA	3.6	< 3.1	< 3.1	ND
	11/30/01	NA	< 1.3	NA	NA	< 25	320	< 2.5 U	< 1.3	< 1.3	< 2.5	< 10	12	NA	< 1.3	NA	NA	NA	3.2	1.5	< 1.3	ND
	09/06/01	NA	< 1	NA	NA	< 20	660	< 2	< 1	< 1	< 2	< 8	16	NA	< 1	NA	NA	NA	4.1	1.4	1.1	ND
	05/15/01	< 5	NA	5.9	12	< 100 UJ	1,100	< 10 UJ	< 5	< 5	< 10	< 50	24	65	< 5 UJ	100	26	150	< 5	< 5	< 5	ND
	04/14/99	NA	65	NA	NA	NA	1,700	< 25	< 250	< 50	< 25	< 220 Y	540	NA	NA	NA	NA	NA	< 25	< 25	< 25	ND
	01/11/99	NA	27	NA	NA	NA	760	< 12	< 120	< 12	< 12	< 110 Y	610	NA	NA	NA	NA	NA	< 12	< 12	< 12	ND
	10/12/98	NA	< 25	NA	NA	NA	1,300	< 25	< 250	< 25	< 25	< 220 Y	780	NA	NA	NA	NA	NA	< 25	< 25	< 25	ND
	07/13/98	NA	43	NA	NA	NA	1,400	< 25	< 250	< 25	< 25	< 220 Y	490	NA	NA	NA	NA	NA	< 25	130	35	ND
	04/30/98	NA	84	NA	NA	NA	2,900	< 50	< 500	< 50	< 50	< 450 Y	1,300	NA	NA	NA	NA	NA	< 50	250	< 50	ND
	02/04/98	NA	< 50	NA	NA	NA	1,900	< 50	< 500	< 50	< 50	< 450 Y	1,300	NA	NA	NA	NA	NA	< 50	1,378	< 50	ND

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - From Table 4 of the CAP.

3 - These analytes were mistakenly not marked on the chain-of-custody by the field team during this sampling event.

µg/L - micrograms per liter

NA - Not analyzed

ND - Not detected

VOC - Volatile organic compound

1,3,5-TMB - 1,3,5-trimethylbenzene

1,2,4-TMB - 1,2,4-trimethylbenzene

1,2-DCA - 1,2-dichloroethane

MTBE - methyl tertiary-butyl ether

TCE - trichloroethene

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Bold numbers - indicate concentrations which exceed cleanup levels.

-- Cleanup level not established.

Table A-10-4
Results of Dissolved Gas and TOC Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Ethane	Ethene	Methane	TOC
	Analytical Method ¹	RSK 175	RSK 175	RSK 175	SW9060
		(mg/L)	(mg/L)	(mg/L)	(mg/L)
207GW03 (intermediate)	03/16/06	NA	NA	NA	2.9
	04/12/05	< 0.005	< 0.005	9	3.6
	01/11/99	< 0.003	< 0.003	1.32 E	NA
	01/11/99	< 0.6	< 0.6	3.2	NA
	10/12/98	< 0.6	< 0.6	7.5	NA
	07/09/98	< 0.06 DU	< 0.06 DU	2.33 D	NA
	05/04/98	< 0.13 DU	< 0.13 DU	0.82 D	NA
	03/05/98	< 0.13 DU	< 0.13 DU	3.66 D	NA
231GW06 (intermediate)	03/15/06	NA	NA	NA	1.5
	04/04/05	< 0.005	< 0.005	0.026	1.4
	01/20/99	< 0.003	< 0.003	0.003	NA
	10/20/98	< 0.003	< 0.003	0.006	NA
	07/21/98	< 0.0005	< 0.0005	0.0019	NA
	04/23/98	< 0.0005	< 0.0005	0.005	NA
	01/27/98	< 0.0005	< 0.0005	0.0047	NA
	10/22/97	< 0.0005	< 0.0005	0.0108	NA
	07/23/97	< 0.0005	< 0.0005	0.0031	NA
	04/23/97	< 0.0005	< 0.0005	0.0068	NA
231GW09 (shallow) DUP1129052A	03/15/06	NA	NA	NA	0.88
	11/29/05	< 0.005	< 0.005	< 0.005	1.3
	11/29/05	< 0.005	< 0.005	< 0.005	0.99
	08/31/05	< 0.005	< 0.005	< 0.005	1.1
	06/01/05	< 0.005	< 0.005	< 0.005	1.2 J+
	04/04/05	< 0.005	< 0.005	< 0.005	1.3
	01/13/99	< 0.003	< 0.003	0.0075	NA
	10/14/98	< 0.003	< 0.003	0.0085	NA
	07/15/98	< 0.0005	< 0.0005	0.0046	NA
	04/20/98	< 0.0005	< 0.0005	0.002	NA
	01/28/98	< 0.0025 DU	< 0.0025 DU	0.0305 D	NA
	10/23/97	< 0.0005	< 0.0005	0.0025	NA
	07/24/97	< 0.0005	< 0.0005	0.0068	NA
	04/22/97	< 0.0005	< 0.0005	0.0093	NA
231GW10 (shallow)	01/28/97	< 0.0005	< 0.0005	0.015	NA
	03/09/06	NA	NA	NA	8.4
	03/22/05	< 0.005	< 0.005	13	8.9
	01/25/99	< 0.003	< 0.003	1.440 E	NA
	01/25/99	< 0.6	< 0.6	7.2	NA
	10/19/98	< 0.3	< 0.3	4.4	NA
	07/22/98	< 0.25 DU	< 0.25 DU	5.5 D	NA
	04/23/98	< 0.25 DU	< 0.25 DU	4.63 D	NA
	01/28/98	< 0.5 DU	< 0.5 DU	12.1 D	NA
	10/22/97	< 0.5 DU	< 0.5 DU	9.7 D	NA
	07/23/97	< 0.5 DU	< 0.5 DU	4.7 D	NA
	04/23/97	< 2.5 DU	< 2.5 DU	14.4 D	NA
	01/29/97	< 0.5 DU	< 0.5 DU	11.2 D	NA

Table A-10-4
Results of Dissolved Gas and TOC Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Ethane	Ethene	Methane	TOC
	Analytical Method ¹	RSK 175	RSK 175	RSK 175	SW9060
		(mg/L)	(mg/L)	(mg/L)	(mg/L)
231GW11 (shallow)	03/15/06	NA	NA	NA	2
	04/05/05	< 0.005	< 0.005	5.7	2.7
	01/11/99	< 0.003	< 0.003	0.779 E	NA
	01/11/99	< 0.3	< 0.3	0.87	NA
	10/12/98	< 0.3	< 0.3	1.5	NA
	07/13/98	< 0.25 DU	< 0.25 DU	1.16 D	NA
	04/21/98	< 0.13 DU	< 0.13 DU	1.25 D	NA
	01/26/98	< 0.25 DU	< 0.25 DU	3.97 D	NA
	10/21/97	< 0.25 DU	< 0.25 DU	4.78 D	NA
	07/21/97	< 0.25 DU	< 0.25 DU	3.12 D	NA
	04/21/97	< 0.5 DU	< 0.5 DU	2.3 D	NA
	01/28/97	< 0.5 DU	< 0.5 DU	3.2 D	NA
231GW13 (deep)	03/14/06	NA	NA	NA	3.7
	04/05/05	< 0.005	< 0.005	0.012	3.4
	01/14/99	< 0.003	< 0.003	< 0.003	NA
	10/15/98	< 0.003	< 0.003	0.0071	NA
	07/16/98	< 0.0005	< 0.0005	< 0.0005	NA
	04/21/98	< 0.0005	< 0.0005	0.0094	NA
	01/26/98	< 0.0005	< 0.0005	< 0.0085	NA
	10/20/97	< 0.0005	< 0.0005	0.0053	NA
	07/21/97	< 0.0005	< 0.0005	0.0017	NA
	04/21/97	< 0.0025 DU	< 0.0025 DU	0.0193 D	NA
	01/27/97	< 0.0005	< 0.0005	0.0064	NA
231GW15 (intermediate)	03/14/06	NA	NA	NA	1.5
	04/05/05	< 0.005	< 0.005	0.079	1.2
	01/14/99	< 0.003	< 0.003	0.068	NA
	01/14/99	< 0.006	< 0.006	0.067	NA
	10/15/98	< 0.003	< 0.003	< 0.003	NA
	07/16/98	< 0.0005	< 0.0005	< 0.0005	NA
	04/21/98	< 0.005 DU	< 0.005 DU	0.091 D	NA
	01/26/98	< 0.0025 DU	< 0.0025 DU	0.055 D	NA
	10/20/97	< 0.0005	< 0.0005	0.0025	NA
	07/21/97	< 0.005 DU	< 0.005 DU	0.057 D	NA
	04/21/97	< 0.005 DU	< 0.005 DU	0.049 D	NA
	01/27/97	< 0.0025 DU	< 0.0025 DU	0.0208 D	NA
231GW16 (shallow)	03/09/06	NA	NA	NA	8.1
	03/22/05	< 0.005	< 0.005	5.2	5
	01/14/99	< 0.003	< 0.003	1.610	NA
	01/14/99	< 0.6	< 0.6	8.7	NA
	10/15/98	< 0.6	< 0.6	3.6	NA
	07/16/98	< 0.13 DU	< 0.13 DU	0.94 D	NA
	04/21/98	< 0.025 DU	< 0.025 DU	0.549 D	NA
	01/26/98	< 0.25 DU	< 0.25 DU	3.53 D	NA
	10/20/97	< 0.13 DU	< 0.13 DU	3.33 D	NA
	07/21/97	< 0.25 DU	< 0.25 DU	3.45 D	NA
	04/24/97	< 2.5 DU	< 2.5 DU	9.7 D	NA
	01/30/97	< 0.5 DU	< 0.5 DU	6.5 D	NA

Table A-10-4
Results of Dissolved Gas and TOC Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Ethane	Ethene	Methane	TOC
	Analytical Method ¹	RSK 175	RSK 175	RSK 175	SW9060
		(mg/L)	(mg/L)	(mg/L)	(mg/L)
231GW17 (deep)	03/15/06	NA	NA	NA	0.74
	04/05/05	< 0.005	< 0.005	0.008	< 0.5
	01/13/99	< 0.003	< 0.003	0.0063	NA
	10/14/98	< 0.003	< 0.003	0.004	NA
	07/15/98	< 0.0005	< 0.0005	0.0034	NA
	04/20/98	< 0.0005	< 0.0005	< 0.0005	NA
	01/27/98	< 0.0025 DU	< 0.0025 DU	0.0254 D	NA
	10/21/97	< 0.0005	< 0.0005	0.0058	NA
	07/22/97	< 0.0005	< 0.0005	0.0013	NA
	04/22/97	< 0.005 DU	< 0.005 DU	0.022 D	NA
	01/28/97	< 0.0025 DU	< 0.0025 DU	0.0242 D	NA
231GW18 (intermediate)	03/15/06	NA	NA	NA	1.1
	04/05/05	< 0.005	< 0.005	0.04	0.65
	01/13/99	< 0.003	< 0.003	0.003	NA
	10/14/98	< 0.003	< 0.003	0.003	NA
	07/15/98	< 0.0005	< 0.0005	0.002	NA
	04/20/98	< 0.0005	< 0.0005	< 0.0005	NA
	01/27/98	< 0.0005	< 0.0005	0.0114	NA
	10/21/97	< 0.0005	< 0.0005	0.0011	NA
	07/22/97	< 0.25 DU	< 0.25 DU	2.38 D	NA
	04/22/97	< 0.0005	< 0.0005	0.0081	NA
	01/28/97	< 0.0005	< 0.0005	0.0031	NA
231GW19 (shallow)	03/16/06	NA	NA	NA	5.5
	04/05/05	< 0.005	< 0.005	2.4	3.9
	01/13/99	< 0.003	< 0.003	1.6	NA
	01/13/99	< 0.6	< 0.6	8.8	NA
	10/14/98	< 0.3	< 0.3	4.1	NA
	07/15/98	< 0.25 DU	< 0.25 DU	1.05 D	NA
	04/20/98	< 0.25 DU	< 0.25 DU	0.53 D	NA
	01/27/98	< 0.25 DU	< 0.25 DU	3.96 D	NA
	10/20/97	< 0.25 DU	< 0.25 DU	6.35 D	NA
	07/22/97	< 0.25 DU	< 0.25 DU	4.7 D	NA
	04/21/97	< 0.5 DU	< 0.5 DU	9.1 D	NA
	01/27/97	< 0.5 DU	< 0.5 DU	2.8 D	NA
231GW20 (deep)	03/15/06	NA	NA	NA	1.7
	04/06/05	< 0.005	< 0.005	< 0.005	1
	01/20/99	< 0.003	< 0.003	< 0.003	NA
	10/20/98	< 0.003	< 0.003	< 0.003	NA
	07/21/98	< 0.0005	< 0.0005	< 0.0014	NA
	04/23/98	< 0.0005	< 0.0005	< 0.0005	NA
	01/29/98	< 0.0025 DU	< 0.0025 DU	< 0.0285 D	NA
	10/22/97	< 0.0005	< 0.0005	0.0037	NA
	07/23/97	< 0.0005	< 0.0005	0.0007	NA
	04/23/97	< 0.0005	< 0.0005	0.0024	NA

Table A-10-4
Results of Dissolved Gas and TOC Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Ethane	Ethene	Methane	TOC
	Analytical Method ¹	RSK 175	RSK 175	RSK 175	SW9060
		(mg/L)	(mg/L)	(mg/L)	(mg/L)
231GW21 (shallow) DUP0308061A 231GW21CL DUP0331052D 231GW21CL	03/08/06	NA	NA	NA	9.1
	03/08/06	NA	NA	NA	9.3
	03/08/06	NA	NA	NA	9.8
	03/31/05	0.005	< 0.005	8.3	29
	03/31/05	< 0.005	< 0.005	8.5	28
	03/31/05	0.0042	0.002	5.3	32.7
	01/20/99	< 0.003	< 0.003	1.28	NA
	01/20/99	< 0.6	< 0.6	3.9	NA
	10/20/98	< 0.3	< 0.3	5.1	NA
	07/23/98	< 0.25 DU	< 0.25 DU	3.73 D	NA
	05/01/98	< 0.13 DU	< 0.13 DU	2.46 D	NA
	01/28/98	< 0.25 DU	< 0.25 DU	6.03 D	NA
	10/27/97	< 0.25 DU	< 0.25 DU	2.56 D	NA
	07/24/97	< 0.25 DU	< 0.25 DU	3.88 D	NA
	04/24/97	< 2.5 DU	< 2.5 DU	13.9 D	NA
	01/30/97	< 0.5 DU	< 0.5 DU	3.2 D	NA
231GW22 (shallow) DUP0309061A DUP0323052A	03/09/06	NA	NA	NA	27
	03/09/06	NA	NA	NA	28
	03/23/05	< 0.005	< 0.005	12	25
	03/23/05	< 0.005	< 0.005	11	25
	01/21/99	0.004	< 0.003	1.330 E	NA
	01/21/99	< 0.6	< 0.6	4.7	NA
	10/21/98	< 0.3	< 0.3	4.5	NA
	07/22/98	< 0.13 DU	< 0.13 DU	0.84 D	NA
	04/27/98	< 0.13 DU	< 0.13 DU	0.28 D	NA
	01/29/98	< 0.25 DU	< 0.25 DU	5.13 D	NA
	10/28/97	< 0.25 DU	< 0.25 DU	5.83 D	NA
	07/28/97	< 0.25 DU	< 0.25 DU	6.42 D	NA
	04/28/97	< 0.5 DU	< 0.5 DU	2.3 D	NA
231GW23 (shallow)	03/15/06	NA	NA	NA	8.2
	04/05/05	< 0.005	< 0.005	15	6.9
	01/20/99	< 0.003	< 0.003	1.57	NA
	01/20/99	< 1.5	< 1.5	12	NA
	10/22/98	< 0.3	< 0.3	2.5	NA
	07/23/98	< 0.25 DU	< 0.25 DU	6.02 D	NA
	04/28/98	< 0.25 DU	< 0.25 DU	7.05 D	NA
	02/02/98	< 0.5 DU	< 0.5 DU	8.3 D	NA
	10/23/97	< 0.5 DU	< 0.5 DU	8.3 D	NA
	07/29/97	< 0.25 DU	< 0.25 DU	7.75 D	NA
	04/29/97	< 0.5 DU	< 0.5 DU	10.2 D	NA
231GW24 (shallow)	03/16/06	NA	NA	NA	2.1
	04/05/05	< 0.005	< 0.005	0.88	1.9
	01/20/99	< 0.003	< 0.003	0.871	NA

Table A-10-4
Results of Dissolved Gas and TOC Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Ethane	Ethene	Methane	TOC
	Analytical Method ¹	RSK 175	RSK 175	RSK 175	SW9060
		(mg/L)	(mg/L)	(mg/L)	(mg/L)
231GW24 (shallow)	01/20/99	< 0.3	< 0.3	1.2	NA
	10/19/98	< 0.3	< 0.3	1.3	NA
	07/20/98	< 0.25 DU	< 0.25 DU	1.05 D	NA
	04/22/98	< 0.13 DU	< 0.13 DU	0.76 D	NA
	02/03/98	< 0.25 DU	< 0.25 DU	1.99 D	NA
	10/29/97	< 0.25 DU	< 0.25 DU	2.2 D	NA
	07/30/97	< 0.25 DU	< 0.25 DU	4.07 D	NA
	04/30/97	< 0.5 DU	< 0.5 DU	5.5 D	NA
231GW25 (shallow)	03/15/06	NA	NA	NA	11
	04/06/05	< 0.005	< 0.005	12	12
	01/21/99	< 0.003	< 0.003	1.37 E	NA
	01/21/99	< 0.6	< 0.6	5.6	NA
	10/19/98	< 0.6	< 0.6	5.6	NA
	07/20/98	< 0.13 DU	< 0.13 DU	3.38 D	NA
	04/22/98	< 0.25 DU	< 0.25 DU	2.45 D	NA
	02/03/98	< 0.25 DU	< 0.25 DU	3.67 D	NA
	10/29/97	< 0.5 DU	< 0.5 DU	8.5 D	NA
	07/30/97	< 2.5 DU	< 2.5 DU	8.3 D	NA
	04/30/97	< 0.5 DU	< 0.5 DU	2.8 D	NA
231GW26 (intermediate)	03/16/06	NA	NA	NA	1.5
	04/06/05	< 0.005	< 0.005	0.04	1.5
	01/21/99	< 0.003	< 0.003	< 0.003	NA
	10/21/98	< 0.003	< 0.003	< 0.003	NA
	07/22/98	< 0.0005	< 0.0005	0.0008	NA
	04/27/98	< 0.001 DU	< 0.001 DU	0.0097 D	NA
	01/29/98	< 0.0025 DU	< 0.0025 DU	0.0402 D	NA
	10/28/97	< 0.005 DU	< 0.005 DU	0.044 D	NA
	07/28/97	< 0.0005	< 0.0005	0.0006	NA
	04/28/97	< 0.005 DU	< 0.005 DU	0.031 D	NA
231GW27 (intermediate)	03/15/06	NA	NA	NA	1.2
	04/06/05	< 0.005	< 0.005	0.032	0.81
	01/21/99	< 0.003	< 0.003	< 0.003	NA
	10/21/98	0.005	0.005	0.0095	NA
	07/22/98	< 0.0005	< 0.0005	0.0063	NA
	04/27/98	< 0.0025 DU	< 0.0025 DU	0.0233 D	NA
	01/29/98	< 0.0025 DU	< 0.0025 DU	0.058 D	NA
	10/28/97	< 0.005 DU	< 0.005 DU	0.031 D	NA
	07/28/97	< 0.0005	< 0.0005	0.0011	NA
	04/28/97	< 0.0025 DU	< 0.0025 DU	0.0205 D	NA
231GW28 (intermediate)	03/15/06	NA	NA	NA	8.4
	04/06/05	< 0.005	< 0.005	4.7	7.8
	01/11/99	< 0.003	< 0.003	0.224 E	NA
	01/11/99	< 0.03	< 0.03	0.23	NA
	10/22/98	< 0.003	< 0.003	< 0.003	NA
	07/23/98	< 0.0005	< 0.0005	0.0081	NA

Table A-10-4
Results of Dissolved Gas and TOC Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Ethane	Ethene	Methane	TOC
	Analytical Method ¹	RSK 175	RSK 175	RSK 175	SW9060
		(mg/L)	(mg/L)	(mg/L)	(mg/L)
231GW28 (intermediate)	04/28/98	< 0.025 DU	< 0.025 DU	0.703 D	NA
	02/02/98	< 0.250 DU	< 0.250 DU	6.130 D	NA
	10/27/97	< 0.005 DU	< 0.005 DU	0.077 D	NA
	07/29/97	< 0.025 DU	< 0.025 DU	0.067 D	NA
	04/29/97	< 0.5 DU	< 0.5 DU	2.1 D	NA
231GW29 (intermediate)	03/16/06	NA	NA	NA	0.88
	04/06/05	< 0.005	< 0.005	0.009	0.74
	01/21/99	< 0.003	< 0.003	0.0065	NA
	10/22/98	< 0.003	< 0.003	< 0.003	NA
	07/23/98	< 0.0005	< 0.0005	0.0011	NA
	04/28/98	< 0.0005	< 0.0005	0.001	NA
	02/02/98	< 0.0025 DU	< 0.0025 DU	0.0286 D	NA
	10/27/97	< 0.0005	< 0.0005	0.0005	NA
	07/29/97	< 0.0005	< 0.0005	0.0009	NA
231GW30 (shallow)	04/29/97	< 0.005 DU	< 0.005 DU	0.013 D	NA
	03/09/06	NA	NA	NA	5.9
	03/22/05	< 0.005	< 0.005	4.6	4.8
	01/19/99	< 0.003	< 0.003	1.44 E	NA
	01/19/99	< 0.6	< 0.6	6.1	NA
	10/19/98	< 0.3	< 0.3	5.7	NA
	07/20/98	< 0.25 DU	< 0.25 DU	3.74 D	NA
	04/22/98	< 0.13 DU	< 0.13 DU	2.99 D	NA
	02/03/98	< 0.25 DU	< 0.25 DU	3.1 D	NA
	10/29/97	< 0.25 DU	< 0.25 DU	7.04 D	NA
	07/30/97	< 2.5 DU	< 2.5 DU	7.8 D	NA
	04/30/97	< 0.5 DU	< 0.5 DU	3.2 D	NA
231PZ01 (shallow)	03/14/06	NA	NA	NA	45
	04/04/05	< 0.005	< 0.005	12	58
	01/12/99	0.004	< 0.003	1.54	NA
	01/12/99	< 0.6	< 0.6	7.4	NA
	10/13/98	< 0.6	< 0.6	9	NA
	07/14/98	< 0.25 DU	< 0.25 DU	5.96 D	NA
	04/30/98	< 0.13 DU	< 0.13 DU	1.45 D	NA
231PZ02 (shallow)	02/03/98	< 0.25 DU	< 0.25 DU	6.81 D	NA
	03/10/06	NA	NA	NA	45
	04/04/05	< 0.005	< 0.005	4.8	36
	01/12/99	0.0083	< 0.003	1.61	NA
	01/12/99	< 0.6	< 0.6	7.6	NA
	10/13/98	< 0.6	< 0.6	4.9	NA
	07/14/98	< 0.25 DU	< 0.25 DU	1.25 D	NA
	04/30/98	< 0.13 DU	< 0.13 DU	1.91 D	NA
	02/03/98	< 0.25 DU	< 0.25 DU	7.92 D	NA

Table A-10-4
Results of Dissolved Gas and TOC Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Ethane	Ethene	Methane	TOC
	Analytical Method ¹	RSK 175	RSK 175	RSK 175	SW9060
		(mg/L)	(mg/L)	(mg/L)	(mg/L)
231PZ03 (shallow)	03/14/06	NA	NA	NA	12
	04/04/05	< 0.005	< 0.005	8.3	14
	01/12/99	0.003	0.003	1.42	NA
	01/12/99	< 0.6	< 0.6	4.4	NA
	10/13/98	< 0.6	< 0.6	5.6	NA
	07/14/98	< 0.25 DU	< 0.25 DU	3.8 D	NA
	04/30/98	< 0.25 DU	< 0.25 DU	5.51 D	NA
	02/03/98	< 0.5 DU	< 0.5 DU	10.4 D	NA
231PZ04 (shallow)	03/14/06	NA	NA	NA	14
	04/04/05	0.005	< 0.005	9.1	18
	01/11/99	< 0.003	< 0.003	1.31 E	NA
	01/11/99	< 0.6	< 0.6	3.4	NA
	10/12/98	< 0.6	< 0.6	4.6	NA
	07/13/98	< 0.13 DU	< 0.13 DU	2.14 D	NA
	04/30/98	< 0.25 DU	< 0.25 DU	4.35 D	NA
	02/04/98	< 0.25 DU	< 0.25 DU	2.82 D	NA

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Fourth Quarter 2004.

mg/L - milligrams per liter

TOC - Total Organic Carbon

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-10-5
Results of Arsenic Speciation Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Inorganic Arsenic (As)	Arsenite (As III)	Arsenate (As V) ¹	Percentage of As III	Percentage of As V
	Analytical Method	1632M	1632M	1632M	--	--
		(µg/L)	(µg/L)	(µg/L)	%	%
Cleanup Levels²		10	--	--	--	--
207GW03 (intermediate)	04/12/05	0.249	0.09	0.159	36	64
231GW06 (intermediate)	04/04/05	5.52	0.168	5.36	3	97
231GW09 (shallow)	08/31/05	0.405 J	< 0.025 JU	0.405 J	<1	>99
	06/01/05	0.371	< 0.025 U	0.371	<1	>99
	04/04/05	0.344	< 0.025 U	0.344	<1	>99
231GW10 (shallow)	03/22/05	10.6	9.57	1.04	90	10
231GW11 (shallow)	04/05/05	0.894 J	0.647 J	0.247 J	72	28
231GW13 (deep)	04/05/05	30.2 J	1.02 J	29.2 J	3	97
231GW15 (intermediate)	04/05/05	0.322 J	0.159 J	0.164 J	49	51
231GW16 (shallow)	03/22/05	0.112	0.104	0.008 B	93	7
231GW17 (deep)	04/05/05	0.818 J	< 0.025 U	0.818 J	<1	>99
231GW18 (intermediate)	04/05/05	1.25 J	0.011 JB	1.24 J	1	99
231GW19 (shallow)	04/05/05	9.14 J	6.08 J	3.06 J	67	33
231GW20 (deep)	04/06/05	0.809	< 0.025 U	0.809	<1	>99
231GW21 (shallow)	03/31/05	18.2	16.6	1.68	91	9
DUP0331052D	03/31/05	19.1	15.9	3.15	83	17
231GW22 (shallow)	03/23/05	23.6	22.8	0.722 B	97	3
DUP0323052A	03/23/05	26.2	27.2	< 0.28 U	96	4
231GW23 (shallow)	04/05/05	5.66 J	4.01 J	1.65 J	71	29
231GW24 (shallow)	04/05/05	4.19 J	2.5 J	1.69 J	60	40
231GW25 (shallow)	04/06/05	14.2	10	4.11	71	29

Table A-10-5
Results of Arsenic Speciation Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Inorganic Arsenic (As)	Arsenite (As III)	Arsenate (As V) ¹	Percentage of As III	Percentage of As V
	Analytical Method	1632M	1632M	1632M	--	--
		(µg/L)	(µg/L)	(µg/L)	%	%
Cleanup Levels²		10	--	--	--	--
231GW26 (intermediate)	04/06/05	2.94	0.098	2.84	3	97
231GW27 (intermediate)	04/06/05	1.03	0.02 B	1.01	2	98
231GW28 (intermediate)	04/06/05	5.01	3.51	1.5	70	30
231GW29 (intermediate)	04/06/05	3.62	0.118	3.5	3	97
231GW30 (shallow)	03/22/05	6.97	7.58	< 0.28 U	>99	<1
231PZ01 (shallow)	04/04/05	7.43	4.63	2.8	62	38
231PZ02 (shallow)	04/04/05	0.387	0.342	0.045	88	12
231PZ03 (shallow)	04/04/05	2.31	1.13	1.19	49	51
231PZ04 (shallow)	04/04/05	6.64	5.44	1.19	82	18

Notes

1 - The concentration of As V was determined by the laboratory by subtracting the As III concentration from the inorganic As concentration. As III has been detected at greater concentrations than inorganic As, due to analytical variability. As V is reported as non-detect when As III is detected at a greater concentration than inorganic As.

2 - From Table 4 of the CAP.

µg/L - micrograms per liter

Bold numbers indicate concentrations which exceed cleanup levels.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-10-6
Results of Dissolved Metals Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Aluminum	Arsenic	Arsenic	Cadmium	Calcium	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Sodium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6010/ SW6020	1632M	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Levels ²		1,000	10	10	1.1	--	50	2.9	--	2.5	--	--	8.2	--	--	81	--
207GW03 (intermediate)	03/16/06	< 100 UJ	< 5	NA	< 1	20,000	< 10	< 1	< 100	< 3	35,000	< 10	< 20	21,000	170,000 J	< 20	880 J
	04/12/05	< 100	< 5	0.249	< 1	21,000	< 10	< 1	< 100	< 3	36,000	14	< 20	19,000	170,000	< 20	630
	01/11/99	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	45	NA	NA	NA	NA	724
	10/12/98	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	51.3	NA	NA	NA	NA	806
	03/05/98	< 100	NA	NA	NA	21,800	< 10	< 1	< 100	NA	36,700	15	< 5	23,600	223,000	NA	3,660
	05/04/98	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	43	NA	NA	NA	NA	819
231GW06 (intermediate)	07/09/98	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	27	NA	NA	NA	NA	739
	03/15/06	< 100	7.2	NA	< 1	23,000	< 10	1.4	150 J	< 3	35,000	21	< 20	8,100 J	58,000	< 20	440 J
	04/04/05	< 100	6.1	5.52	< 1	30,000	< 10	< 1	< 100	< 3	48,000	24	< 20	7,300	65,000	< 20	420
	01/20/99	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	< 10	NA	NA	NA	NA	510
	01/27/98	< 100	NA	NA	NA	23,000	< 10	< 1 B	< 100	NA	45,400	16	15	9,560	64,700	NA	487
	01/29/97	NA	NA	NA	NA	NA	NA	NA	< 50	NA	NA	23	NA	NA	NA	NA	464
	10/20/98	NA	NA	NA	NA	NA	NA	NA	113	NA	NA	27	NA	NA	NA	NA	537 B
	10/22/97	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	25	NA	NA	NA	NA	478
	04/23/97	NA	NA	NA	NA	NA	NA	NA	< 50	NA	NA	23	NA	NA	NA	NA	456
	04/23/98	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	25	NA	NA	NA	NA	415
231GW09 (shallow) DUP1205062B 231GW09CL (shallow) DUP1129052A DUP1217042A DUP0527042C 231GW09CL	07/21/98	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	29	NA	NA	NA	NA	347
	07/23/97	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	12	NA	NA	NA	NA	483
	12/05/06	< 100	< 5	NA	< 1	25,000	26	< 1	< 100	< 3	41,000	< 10	< 20	< 500 UJ	64,000	< 20	520 J+
	12/05/06	< 100	< 5	NA	< 1	25,000	26	< 1	180	< 3	40,000	< 10	< 20	< 500 UJ	66,000	< 20	530 J+
	12/05/06	< 100 U	< 2 U	NA	< 1 U	30,200	30	< 2 U	< 100 U	< 1 U	51,000	< 10 U	18	< 5,000 U	78,000	< 20 U	490
	08/15/06	< 100	< 5	NA	< 1	27,000	26	< 1	< 100	< 3	42,000	< 10	23	< 500	68,000	< 20	490
	05/24/06	< 100	< 5	NA	< 1	27,000	24	< 1	< 100	< 3	48,000	< 10	43	< 500	76,000	< 20	480
	03/15/06	< 100	< 5	NA	< 1	15,000	15	< 1	< 100	< 3	24,000	< 10	29	< 500	42,000	< 20	320 J
	11/29/05 ⁴	< 100	< 5	NA	< 1	22,000	23 J	< 1	< 100	< 3	39,000	< 10	< 20	< 500	63,000	< 20	470
	11/29/05 ⁴	< 100	< 5	NA	< 1	24,000	23 J	1.1	< 100	< 3	40,000	< 10	< 20	< 500	64,000	< 20	540
	08/31/05 ³	NA	NA	0.405 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	480
	06/01/05 ⁴	< 100	< 5	0.371	< 1	28,000	20	< 1	< 100	< 3	41,000	< 10	40	< 500 UJ	63,000	< 20	460
	04/04/05	< 100	< 5	0.344	< 1	25,000	19	< 1	< 100	< 3	41,000	< 10	85	< 500	62,000	< 20	450
	12/17/04	< 100	< 5	NA	< 1	25,000	21	< 1	< 100	< 3	42,000	< 10	36	< 500	65,000	< 20	490
	12/17/04	< 100	< 5	NA	< 1	26,000	22	< 1	< 100	< 3	43,000	< 10	36	< 500	67,000	< 20	470
	08/12/04	< 100	< 5	NA	< 1	29,000	23	< 1 U	110	< 3	47,000	< 10	63	< 500	72,000	< 20	430
	05/27/04	< 100	< 5	NA	< 1	27,000	23	< 1	< 100	< 3	45,000	12	27	< 500	69,000	< 20	490
	05/27/04	< 100	< 5	NA	< 1	28,000	24	< 1	< 100	< 3	47,000	12	27	< 500	71,000	< 20	510
	05/27/04	< 50	< 5	NA	< 1	28,000	23	18	570	< 3	45,000	14	28	NA	NA	NA	420
	03/18/04	< 100	< 5	NA	< 1	29,000	20	< 1	< 100	< 3	46,000	< 10	36	< 500	74,000	< 20	510 J
	12/04/03	< 100	< 5	NA	< 1	22,000	22	< 1	< 100	< 3	46,000	< 10	29	< 500	67,000	< 20	490
	08/15/03	< 100	< 5	NA	< 1	26,000	24	< 1	120	< 3	43,000	< 10	26	< 500	65,000	< 20 UJ	440
	06/10/03	< 100	< 5	NA	< 1	28,000	22	< 1	< 100	< 3	47,000	< 10	24	< 500	67,000	< 20	470
	01/13/99	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	19	NA	NA	NA	NA	566
	10/14/98	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	18	NA	NA	NA	NA	530
	07/15/98	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	< 10	NA	NA	NA	NA	544
	04/20/98	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	19	NA	NA	NA	NA	790
	01/28/98	166	NA	NA	NA	60,200	< 1	< 1	8,640	NA	60,700	1,510	< 5	< 5000	129,000	NA	542
	10/23/97	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	< 10	NA	NA	NA	NA	523
	07/24/97	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	< 10	NA	NA	NA	NA	592
	04/22/97	NA	NA	NA	NA	NA	NA	NA	< 100 J	NA	NA	19	NA	NA	NA	NA	584
	01/28/97	NA	NA	NA	NA	NA	NA	NA	< 50	NA	NA	11	NA	NA	NA	NA	557

Table A-10-6
Results of Dissolved Metals Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Aluminum	Arsenic	Arsenic	Cadmium	Calcium	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Sodium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6010/ SW6020	1632M	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Levels ²		1,000	10	10	1.1	--	50	2.9	--	2.5	--	--	8.2	--	--	81	--
231GW10 (shallow)	03/09/06	< 100	8.9	NA	< 1	58,000 J	< 10	< 1	13,000	< 3	66,000	1100	< 20	4,400	120,000	< 20	750
	03/22/05	< 100	10	10.6	< 1	53,000	< 10	< 1	15,000	< 3	68,000	780	< 20	5,400	130,000	< 20	690
	01/25/99	NA	NA	NA	NA	NA	NA	NA	12,400	NA	NA	1,550	NA	NA	NA	NA	734
	10/19/98	NA	NA	NA	NA	NA	NA	NA	6,720	NA	NA	437	NA	NA	NA	NA	852 B
	07/22/98	NA	NA	NA	NA	NA	NA	NA	6,910	NA	NA	443	NA	NA	NA	NA	813
	04/23/98	NA	NA	NA	NA	NA	NA	NA	7,640	NA	NA	912	NA	NA	NA	NA	767
	01/28/98	< 100	NA	NA	NA	28,000	15	1.2	< 100	NA	44,600	< 10	105	< 5000	73,200	NA	767
	10/22/97	NA	NA	NA	NA	NA	NA	NA	5,790	NA	NA	550	NA	NA	NA	NA	794
	07/23/97	NA	NA	NA	NA	NA	NA	NA	5,860	NA	NA	420	NA	NA	NA	NA	807
	04/23/97	NA	NA	NA	NA	NA	NA	NA	7,580	NA	NA	474	NA	NA	NA	NA	746
	01/29/97	NA	NA	NA	NA	NA	NA	NA	1,880	NA	NA	1,830	NA	NA	NA	NA	780
231GW11 (shallow)	03/15/06	< 100	< 5	NA	< 1	29,000	< 10	< 1	820 J	< 3	44,000	78	< 20	9,000 J	99,000	21	500 J
	04/05/05	< 100	< 5	0.894 J	< 1	32,000	< 10	< 1	4,500	< 3	57,000	180	< 20	11,000	92,000	< 20	510
	01/11/99	NA	NA	NA	NA	NA	NA	NA	3,980	NA	NA	200	NA	NA	NA	NA	550
	10/12/98	NA	NA	NA	NA	NA	NA	NA	1,570	NA	NA	119	NA	NA	NA	NA	551
	07/13/98	NA	NA	NA	NA	NA	NA	NA	1,060	NA	NA	102	NA	NA	NA	NA	492
	04/21/98	NA	NA	NA	NA	NA	NA	NA	3,540	NA	NA	167	NA	NA	NA	NA	509
	01/26/98	< 100	NA	NA	NA	32,300	< 10	< 1 B	5,210	NA	56,900	246	< 5	11,700	74,100	NA	524
	10/21/97	NA	NA	NA	NA	NA	NA	NA	4,340	NA	NA	192	NA	NA	NA	NA	542
	07/21/97	NA	NA	NA	NA	NA	NA	NA	1,550	NA	NA	101	NA	NA	NA	NA	565
	04/21/97	NA	NA	NA	NA	NA	NA	NA	3,610	NA	NA	164	NA	NA	NA	NA	547
	01/28/97	NA	NA	NA	NA	NA	NA	NA	2,410	NA	NA	162	NA	NA	NA	NA	546
231GW13 (deep)	03/14/06	< 100	35	NA	< 1	1,600	< 10	5.7	170	< 3	4,200	100	< 20	6,600	330,000	< 20	640
	04/05/05	< 100	32	30.2 J	< 1	1,700	< 10	5.5	220	< 3	4,100	82	< 20	6,600	280,000	< 20	690
	01/14/99	NA	NA	NA	NA	NA	NA	NA	733	NA	NA	92	NA	NA	NA	NA	802
	10/15/98	NA	NA	NA	NA	NA	NA	NA	480	NA	NA	87	NA	NA	NA	NA	772
	07/16/98	NA	NA	NA	NA	NA	NA	NA	852	NA	NA	19	NA	NA	NA	NA	673
	04/21/98	NA	NA	NA	NA	NA	NA	NA	755	NA	NA	91	NA	NA	NA	NA	714
	01/26/98	107	NA	NA	NA	1,670	< 10	7.8	1,020	NA	3,900	85	11	5,810	254,000	NA	653
	10/20/97	NA	NA	NA	NA	NA	NA	NA	1,030	NA	NA	75	NA	NA	NA	NA	750
	07/21/97	NA	NA	NA	NA	NA	NA	NA	892	NA	NA	16.6	NA	NA	NA	NA	778
	04/21/97	NA	NA	NA	NA	NA	NA	NA	999	NA	NA	85	NA	NA	NA	NA	786
	01/27/97	NA	NA	NA	NA	NA	NA	NA	568	NA	NA	96	NA	NA	NA	NA	818
	04/10/95	NA	NA	NA	NA	3,000	NA	NA	2,000	< 5	5,000	NA	NA	8,000	260,000	NA	920
231GW15 (intermediate)	03/14/06	< 100	< 5	NA	< 1	33,000	< 10	< 1	330	< 3	37,000	190	< 20	12000	51,000	< 20	510
	04/05/05	< 100	< 5	0.322 J	< 1	38,000	< 10	< 1	600	< 3	49,000	180	< 20	12,000	56,000	< 20	430
	01/14/99	NA	NA	NA	NA	NA	NA	NA	< 284	NA	NA	158	NA	NA	NA	NA	444
	10/15/98	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	16	NA	NA	NA	NA	402
	07/16/98	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	14	NA	NA	NA	NA	352
	04/21/98	NA	NA	NA	NA	NA	NA	NA	134	NA	NA	162	NA	NA	NA	NA	389
	01/26/98	< 100	NA	NA	NA	32,000	< 10	< 1 B	< 100	NA	40,200	71	< 5	10,600	50,300	NA	403
	10/20/97	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	< 10	NA	NA	NA	NA	419

Table A-10-6
Results of Dissolved Metals Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Aluminum	Arsenic	Arsenic	Cadmium	Calcium	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Sodium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6010/ SW6020	1632M	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Levels ²		1,000	10	10	1.1	--	50	2.9	--	2.5	--	--	8.2	--	--	81	--
231GW15 (intermediate)	07/21/97	NA	NA	NA	NA	NA	NA	NA	341	NA	NA	155	NA	NA	NA	NA	441
	04/21/97	NA	NA	NA	NA	NA	NA	NA	279	NA	NA	151	NA	NA	NA	NA	404
	01/27/97	NA	NA	NA	NA	NA	NA	NA	< 50	NA	NA	87	NA	NA	NA	NA	448
	04/07/95	NA	NA	NA	NA	34,000	NA	NA	500	< 5	41,000	NA	NA	11,000	60,000	NA	790
231GW16 (shallow)	03/09/06	< 100	< 5	NA	< 1	54,000 J	< 10	< 1	890	< 3	37,000	390	< 20	16,000	220,000	< 20	980
	03/22/05	< 100	< 5	0.112	< 1	69,000	< 10	< 1	1,300	< 3	37,000	380	< 20	14,000	150,000	< 20	750
	01/14/99	NA	NA	NA	NA	NA	NA	NA	1,110	NA	NA	402	NA	NA	NA	NA	939
	10/15/98	NA	NA	NA	NA	NA	NA	NA	561	NA	NA	414	NA	NA	NA	NA	791
	07/16/98	NA	NA	NA	NA	NA	NA	NA	1,000	NA	NA	525	NA	NA	NA	NA	1,370
	04/21/98	NA	NA	NA	NA	NA	NA	NA	1,260	NA	NA	355	NA	NA	NA	NA	809
	01/26/98	< 100	NA	NA	NA	50,400	< 10	< 1 B	432	NA	29,300	408	< 5	14,800	171,000	NA	990
	10/20/97	NA	NA	NA	NA	NA	NA	NA	1,290	NA	NA	295	NA	NA	NA	NA	124
	07/21/97	NA	NA	NA	NA	NA	NA	NA	2,190	NA	NA	516	NA	NA	NA	NA	1,270
	04/24/97	NA	NA	NA	NA	NA	NA	NA	407	NA	NA	347	NA	NA	NA	NA	819
	04/24/97	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,010
	01/30/97	NA	NA	NA	NA	NA	NA	NA	2,600	NA	NA	565	NA	NA	NA	NA	800
231GW17 (deep)	03/15/06	< 100	< 5	NA	< 1	15,000	19	< 1	< 100 UJ	< 3	48,000	< 10	< 20	790 J	43,000	< 20	480 J
	04/05/05	< 100	< 5	0.818 J	< 1	15,000	20	< 1	< 100	< 3	49,000	< 10	< 20	760	40,000	< 20	360
	01/13/99	NA	NA	NA	NA	NA	NA	NA	429	NA	NA	15	NA	NA	NA	NA	NA
	10/14/98	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	< 10	NA	NA	NA	NA	374
	07/15/98	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	< 10	NA	NA	NA	NA	369
	04/20/98	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	< 10	NA	NA	NA	NA	396
	01/27/98	< 100	NA	NA	NA	13,900	19	< 1 B	< 100	NA	42,800	< 10	< 5	< 5000	37,300	NA	387
	10/21/97	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	< 10	NA	NA	NA	NA	367
	07/22/97	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	< 10	NA	NA	NA	NA	372
	04/22/97	NA	NA	NA	NA	NA	NA	NA	451	NA	NA	< 10 J	NA	NA	NA	NA	352
	01/28/97	NA	NA	NA	NA	NA	NA	NA	< 50	NA	NA	< 10	NA	NA	NA	NA	400
	04/10/95	NA	NA	NA	NA	13,000	NA	NA	1,700	< 5	37,000	NA	NA	3,000	35,000	NA	410
231GW18 (intermediate)	03/15/06	< 100	< 5	NA	< 1	27,000	14	< 1	< 100 UJ	< 3	55,000	< 10	< 20	1,300 J	58,000	< 20	520 J
	04/05/05	< 100	< 5	1.25 J	< 1	23,000	15	< 1	150	< 3	50,000	< 10	< 20	1,200	44,000	< 20	430
	01/13/99	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	< 10	NA	NA	NA	NA	522
	10/14/98	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	< 10	NA	NA	NA	NA	466
	07/15/98	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	< 10	NA	NA	NA	NA	469
	04/20/98	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	< 10	NA	NA	NA	NA	484
	01/27/98	< 100	NA	NA	NA	23,400	14.1	< 1 B	< 100	NA	50,400	< 10	< 5	< 5000	45,800	NA	480
	10/21/97	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	< 10	NA	NA	NA	NA	475
	07/22/97	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	< 10	NA	NA	NA	NA	489
	04/22/97	NA	NA	NA	NA	NA	NA	NA	117	NA	NA	< 10 J	NA	NA	NA	NA	472
	01/28/97	NA	NA	NA	NA	NA	NA	NA	< 50	NA	NA	< 10	NA	NA	NA	NA	500
	04/10/95	NA	NA	NA	NA	22,000	NA	NA	2,200	< 5	46,000	NA	NA	2,000	52,000	NA	500

Table A-10-6
Results of Dissolved Metals Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Aluminum	Arsenic	Arsenic	Cadmium	Calcium	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Sodium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6010/ SW6020	1632M	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Levels ²		1,000	10	10	1.1	--	50	2.9	--	2.5	--	--	8.2	--	--	81	--
231GW19 (shallow)	03/16/06	< 100 UJ	9.2	NA	< 1	38,000	< 10	< 1	12,000	< 3	29,000	750	< 20	5,200	50,000 J	< 20	420 J
	04/05/05	< 100	8.2	9.14 J	< 1	26,000	< 10	< 1	8,400	< 3	19,000	460	< 20	4,300	46,000	< 20	260
	01/13/99	NA	NA	NA	NA	NA	NA	NA	15,100	NA	NA	792	NA	NA	NA	NA	484
	10/14/98	NA	NA	NA	NA	NA	NA	NA	7,740	NA	NA	506	NA	NA	NA	NA	482
	07/15/98	NA	NA	NA	NA	NA	NA	NA	9,790	NA	NA	636	NA	NA	NA	NA	437
	04/20/98	NA	NA	NA	NA	NA	NA	NA	6,250	NA	NA	657	NA	NA	NA	NA	529
	01/27/98	< 100	NA	NA	NA	49,100	< 10	< 1 B	4,170	NA	41,400	443	5.3	< 5000	52,700	NA	465
	10/20/97	NA	NA	NA	NA	NA	NA	NA	7,000	NA	NA	499	NA	NA	NA	NA	452
	07/22/97	NA	NA	NA	NA	NA	NA	NA	7,330	NA	NA	501	NA	NA	NA	NA	428
	04/21/97	NA	NA	NA	NA	NA	NA	NA	11,600	NA	NA	778	NA	NA	NA	NA	521
231GW20 (deep)	01/27/97	NA	NA	NA	NA	NA	NA	NA	1,740	NA	NA	267	NA	NA	NA	NA	376
	04/10/95	NA	NA	NA	NA	49,000	NA	NA	9,200	< 5	50,000	NA	NA	6,000	72,000	NA	650
	03/15/06	< 100	< 5	NA	< 1	15,000	< 10	2.8	< 100 UJ	< 3	9,100	< 10	< 20	2,400 J	14,000	< 20	240 J
	04/06/05	< 100	< 5	0.809	< 1	13,000	< 10	< 1	< 100	< 3	34,000	< 10	< 20	820	43,000	< 20	220
	01/20/99	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	< 10	NA	NA	NA	NA	372
	10/20/98	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	< 10	NA	NA	NA	NA	397 B
	07/21/98	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	< 10	NA	NA	NA	NA	354
	04/23/98	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	< 10	NA	NA	NA	NA	353
	01/29/98	< 100	NA	NA	NA	13,600	6	< 1	< 100	NA	42,900	< 10	< 5	< 5000	46,100	NA	390
	10/22/97	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	< 10	NA	NA	NA	NA	365
231GW21 (shallow) DUP0308061A 231GW21CL DUP0331052D 231GW21CL	07/23/97	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	< 10	NA	NA	NA	NA	385
	04/23/97	NA	NA	NA	NA	NA	NA	NA	< 100 J	NA	NA	< 10 J	NA	NA	NA	NA	342
	04/11/95	NA	NA	NA	NA	13,000	NA	NA	1,600	7	42,000	NA	NA	1,000	43,000	NA	350
	03/08/06	< 100	18	NA	< 1	60,000	< 10	< 1	21,000	4.6	49,000	970	< 20	4,000	47,000	< 20	580
	03/08/06	< 100	22	NA	< 1	62,000	< 10	< 1	20,000	6.3	57,000	820	< 20	5,100	54,000	< 20	570
	03/08/06	< 100 U	19	NA	< 1 U	68,000	< 10 U	< 2 U	24,000 J+	4.2	50,000	1100	3.6	< 5,000 U	48,000	< 20 U	530
	03/31/05	< 100	21	18.2	< 1	74,000 J	< 10	< 1	28,000	5.1	61,000	1600 J	< 20	5,700	60,000	< 20	540 J-
	03/31/05	< 100	23	19.1	< 1	76,000 J	< 10	< 1	25,000	6.4	57,000	1400 J	< 20	6,400	57,000	< 20	590 J-
	03/31/05	< 100 U	6.45	NA	< 1 U	85,600	< 10 U	< 2 U	1,720	< 1 U	40,500	3710	< 2 U	5,540	93,000	< 20 U	655
	01/20/99	NA	NA	NA	NA	NA	NA	NA	19,700	NA	NA	2,620	NA	NA	NA	NA	766
	10/20/98	NA	NA	NA	NA	NA	NA	NA	29,600	NA	NA	3,020	NA	NA	NA	NA	415 B
	07/23/98	NA	NA	NA	NA	NA	NA	NA	32,200	NA	NA	3,430	NA	NA	NA	NA	809
	05/01/98	NA	NA	NA	NA	NA	NA	NA	32,900	NA	NA	3,960	NA	NA	NA	NA	860
	01/28/98	< 100	NA	NA	NA	103,000	1.1	< 1	30,100	NA	85,500	3,230	25	5,200	69,000	NA	868
	10/27/97	NA	NA	NA	NA	NA	NA	NA	7,730	NA	NA	2,080	NA	NA	NA	NA	813
	07/24/97	NA	NA	NA	NA	NA	NA	NA	27,300	NA	NA	3,610	NA	NA	NA	NA	885
	04/24/97	NA	NA	NA	NA	NA	NA	NA	26,100	8.7	NA	3,910	NA	NA	NA	NA	751
	01/30/97	NA	NA	NA	NA	NA	NA	NA	8,780	NA	NA	2,680	NA	NA	NA	NA	776
	04/12/95	NA	NA	NA	NA	82,000	NA	NA	3,200	< 5	69,000	NA	NA	7,000	73,000	NA	470

Table A-10-6
Results of Dissolved Metals Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Aluminum	Arsenic	Arsenic	Cadmium	Calcium	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Sodium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6010/ SW6020	1632M	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Levels ²		1,000	10	10	1.1	--	50	2.9	--	2.5	--	--	8.2	--	--	81	--
231GW22 (shallow) DUP0309061A DUP0323052A	03/09/06	< 100	31	NA	< 1	69,000 J	< 10	< 1	31,000	< 3	85,000	1,300	< 20	37,000	83,000	< 20	1,030
	03/09/06	< 100	31	NA	< 1	71,000 J	< 10	< 1	31,000	< 3	86,000	1,400	< 20	38,000	85,000	21	1,170
	03/23/05	< 100	30	23.6	< 1	75,000	< 10	< 1	30,000	< 3	87,000	1,300	< 20	36,000	91,000	< 20	830
	03/23/05	< 100	30	26.2	< 1	78,000	< 10	< 1	33,000	< 3	87,000	1,300	< 20	39,000	92,000	< 20	830
	01/21/99	NA	NA	NA	NA	NA	NA	NA	17,200	NA	NA	1,470	NA	NA	NA	NA	915
	10/21/98	NA	NA	NA	NA	NA	NA	NA	15,800	NA	NA	1,610	NA	NA	NA	NA	936 B
	07/22/98	NA	NA	NA	NA	NA	NA	NA	8,380	NA	NA	1,330	NA	NA	NA	NA	829
	04/27/98	NA	NA	NA	NA	NA	NA	NA	7,180	NA	NA	1,380	NA	NA	NA	NA	917
	01/29/98	< 100	NA	NA	NA	64,600	1.4	< 1	4,350	NA	81,500	1,300	7.7	22,000	113,000	NA	908
	10/28/97	NA	NA	NA	NA	NA	NA	NA	4,470	NA	NA	1,420	NA	NA	NA	NA	899
231GW23 (shallow)	07/28/97	NA	NA	NA	NA	NA	NA	NA	6,220	NA	NA	1,660	NA	NA	NA	NA	995
	04/28/97	NA	NA	NA	NA	NA	NA	NA	1,260	4.9	NA	951	NA	NA	NA	NA	NA
	03/15/06	< 100	< 5	NA	< 1	46,000	< 10	1.1	22,000 J	< 3	52,000	2,000	< 20	16,000 J	63,000	< 20	600 J
	04/05/05	< 100	6.1	5.66 J	< 1	51,000	< 10	< 1	25,000	< 3	66,000	2,200	< 20	18,000	62,000	< 20	370
	01/20/99	NA	NA	NA	NA	NA	NA	NA	21,900	NA	NA	1,550	NA	NA	NA	NA	547
	10/22/98	NA	NA	NA	NA	NA	NA	NA	21,500	NA	NA	1,710	NA	NA	NA	NA	558
	07/23/98	NA	NA	NA	NA	NA	NA	NA	23,000	NA	NA	1,700	NA	NA	NA	NA	539
	04/28/98	NA	NA	NA	NA	NA	NA	NA	22,700	NA	NA	1,610	NA	NA	NA	NA	504
	02/02/98	< 100	NA	NA	NA	39,200	< 10	< 1	22,600	NA	58,100	1,640	< 5	20,600	57,700	NA	576
	10/23/97	NA	NA	NA	NA	NA	NA	NA	21,000	NA	NA	1,620	NA	NA	NA	NA	586
231GW24 (shallow)	07/29/97	NA	NA	NA	NA	NA	NA	NA	15,800	NA	NA	1,680	NA	NA	NA	NA	546
	04/29/97	NA	NA	NA	NA	NA	NA	NA	4,100	NA	NA	1,980	NA	NA	NA	NA	580
	03/16/06	< 100 UJ	< 5	NA	< 1	25,000	< 10	< 1	810	< 3	43,000	170	< 20	3,400	44,000 J	< 20	470 J
	04/05/05	< 100	< 5	4.19 J	< 1	18,000	< 10	< 1	1,700	< 3	39,000	130	< 20	3,600	45,000	< 20	320
	01/20/99	NA	NA	NA	NA	NA	NA	NA	1,890	NA	NA	58.3	NA	NA	NA	NA	443
	10/19/98	NA	NA	NA	NA	NA	NA	NA	1,270	NA	NA	60	NA	NA	NA	NA	419 B
	07/20/98	NA	NA	NA	NA	NA	NA	NA	1,090	NA	NA	66	NA	NA	NA	NA	407
	04/22/98	NA	NA	NA	NA	NA	NA	NA	953	NA	NA	73	NA	NA	NA	NA	405
	02/03/98	< 100	NA	NA	NA	27,800	< 10	< 1	682	NA	43,100	65	< 5	< 5000	42,000	NA	428
	10/29/97	NA	NA	NA	NA	NA	NA	NA	1,430	NA	NA	60	NA	NA	NA	NA	434
231GW25 (shallow)	07/30/97	NA	NA	NA	NA	NA	NA	NA	1,350	NA	NA	74	NA	NA	NA	NA	367
	04/30/97	NA	NA	NA	NA	NA	NA	NA	2,080	NA	NA	148	NA	NA	NA	NA	384
	03/15/06	< 100	14	NA	< 1	95,000	< 10	< 1	29,000 J	< 3	66,000	3,900	< 20	9,200 J	150,000	< 20	610 J
	04/06/05	< 100	14	14.2	< 1	77,000	< 10	< 1	18,000	< 3	58,000	3,000	< 20	8,900	120,000	< 20	730
	01/21/99	NA	NA	NA	NA	NA	NA	NA	13,700	NA	NA	3,120	NA	NA	NA	NA	819
	10/19/98	NA	NA	NA	NA	NA	NA	NA	11,600	NA	NA	2,420	NA	NA	NA	NA	824 B
	07/20/98	NA	NA	NA	NA	NA	NA	NA	9,900	NA	NA	3,270	NA	NA	NA	NA	783
	04/22/98	NA	NA	NA	NA	NA	NA	NA	10,400	NA	NA	3,340	NA	NA	NA	NA	863
	02/03/98	< 100	NA	NA	NA	86,400	< 10	< 1	8,140	NA	63,400	5,040	7.6	11,300	136,000	NA	889
	10/29/97	NA	NA	NA	NA	NA	NA	NA	5,060	NA	NA	2,580	NA	NA	NA	NA	928
	07/30/97	NA	NA	NA	NA	NA	NA	NA	1,770	NA	NA	2,330	NA	NA	NA	NA	630
	04/30/97	NA	NA	NA	NA	NA	NA	NA	1,660	NA	NA	1,780	NA	NA	NA	NA	750

Table A-10-6
Results of Dissolved Metals Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Aluminum	Arsenic	Arsenic	Cadmium	Calcium	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Sodium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6010/ SW6020	1632M	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Levels ²		1,000	10	10	1.1	--	50	2.9	--	2.5	--	--	8.2	--	--	81	--
231GW26 (intermediate)	03/16/06	< 100 UJ	< 5	NA	< 1	27,000	< 10	< 1	< 100	< 3	43,000	< 10	< 20	1600	60000 J	< 20	440 J
	04/06/05	< 100	< 5	2.94	< 1	31,000	< 10	< 1	< 100	< 3	47,000	13	< 20	1,800	67,000	< 20	480
	01/21/99	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	16	NA	NA	NA	NA	525
	10/21/98	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	30	NA	NA	NA	NA	578 B
	07/22/98	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	19	NA	NA	NA	NA	349
	04/27/98	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	19	NA	NA	NA	NA	545
	01/29/98	< 100	NA	NA	NA	29,700	< 1	< 1	< 100	NA	43,900	18	8.1	< 5000	56,700	NA	492
	10/28/97	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	20	NA	NA	NA	NA	493
	07/28/97	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	30	NA	NA	NA	NA	545
231GW27 (intermediate)	04/28/97	NA	NA	NA	NA	NA	NA	NA	< 50	1.1	NA	48	NA	NA	NA	NA	536
	03/15/06	< 100	< 5	NA	< 1	30,000	30	< 1	< 100 UJ	< 3	53,000	< 10	< 20	670 J	57,000	< 20	490 J
	04/06/05	< 100	< 5	1.03	< 1	29,000	23	< 1	< 100	< 3	55,000	< 10	< 20	600	51,000	< 20	440
	01/21/99	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	10	NA	NA	NA	NA	83
	10/21/98	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	< 10	NA	NA	NA	NA	498 B
	07/22/98	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	< 10	NA	NA	NA	NA	371
	04/27/98	NA	NA	NA	NA	NA	NA	NA	182	NA	NA	< 10	NA	NA	NA	NA	475
	01/29/98	< 100	NA	NA	NA	16,600	11.1	< 1	< 100	NA	25,800	< 10	< 5	< 5,000	25,500	NA	240
	10/28/97	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	< 10	NA	NA	NA	NA	473
231GW28 (intermediate)	07/28/97	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	< 10	NA	NA	NA	NA	445
	04/28/97	NA	NA	NA	NA	NA	NA	NA	< 50	NA	NA	15	NA	NA	NA	NA	452
	03/15/06	< 100	6.3	NA	< 1	53,000	< 10	< 1	16,000 J	< 3	32,000	1,400	< 20	3,100 J	26,000	< 20	370 J
	04/06/05	< 100	5.8	5.01	< 1	43,000	< 10	< 1	15,000	< 3	36,000	760	< 20	2,000	36,000	< 20	380
	01/11/99	NA	NA	NA	NA	NA	NA	NA	3,020	NA	NA	192	NA	NA	NA	NA	396
	10/22/98	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	19.2	NA	NA	NA	NA	426
	07/23/98	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	84	NA	NA	NA	NA	385
	04/28/98	NA	NA	NA	NA	NA	NA	NA	934	NA	NA	92	NA	NA	NA	NA	131
	02/02/98	< 100	NA	NA	NA	19,800	< 10	< 1	1,610	NA	31,600	128	7.7	< 5,000	49,600	NA	397
231GW29 (intermediate)	10/27/97	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	41	NA	NA	NA	NA	390
	07/29/97	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	71	NA	NA	NA	NA	409
	04/29/97	NA	NA	NA	NA	NA	NA	NA	315	NA	NA	370	NA	NA	NA	NA	424
	03/16/06	< 100 UJ	< 5	NA	< 1	29,000	< 10	< 1	< 100	< 3	58,000	130	< 20	4,400	51,000 J	< 20	590 J
	04/06/05	< 100	< 5	3.62	< 1	28,000	< 10	< 1	< 100	< 3	54,000	170	< 20	4,000	47,000	< 20	510
	01/21/99	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	150	NA	NA	NA	NA	486
	10/22/98	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	233	NA	NA	NA	NA	486
	07/23/98	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	22	NA	NA	NA	NA	461
	04/28/98	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	62	NA	NA	NA	NA	467
	02/02/98	< 100	NA	NA	NA	29,000	< 10	< 1	< 100	NA	54,800	177	< 5	< 5,000	48,100	NA	520
	10/27/97	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	25	NA	NA	NA	NA	485
	07/29/97	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	56	NA	NA	NA	NA	470
	04/29/97	NA	NA	NA	NA	NA	NA	NA	< 50	NA	NA	206	NA	NA	NA	NA	452

Table A-10-6
Results of Dissolved Metals Analyses
Building 231/207 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Aluminum	Arsenic	Arsenic	Cadmium	Calcium	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Sodium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6010/ SW6020	1632M	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Levels ²		1,000	10	10	1.1	--	50	2.9	--	2.5	--	--	8.2	--	--	81	--
231GW30 (shallow)	03/09/06	< 100	7.2	NA	< 1	88,000 J	< 10	< 1	3,800	< 3	28,000	1200	< 20	8,200	81,000	< 20	720
	03/22/05	< 100	6.8	6.97	< 1	71,000	< 10	1.2	3,400	< 3	22,000	920	< 20	8,400	83,000	< 20	540
	01/19/99	NA	NA	NA	NA	NA	NA	NA	5,750	NA	NA	1,980	NA	NA	NA	NA	946
	10/19/98	NA	NA	NA	NA	NA	NA	NA	6,150	NA	NA	2,000	NA	NA	NA	NA	1010 B
	07/20/98	NA	NA	NA	NA	NA	NA	NA	1,740	NA	NA	1,800	NA	NA	NA	NA	890
	04/22/98	NA	NA	NA	NA	NA	NA	NA	3,130	NA	NA	1,830	NA	NA	NA	NA	901
	02/03/98	< 100	NA	NA	NA	132,000	< 10	1.5	1,680	NA	50,000	1,550	8.9	17,100	137,000	NA	971
	10/29/97	NA	NA	NA	NA	NA	NA	NA	1,750	NA	NA	1,880	NA	NA	NA	NA	1,060
	07/30/97	NA	NA	NA	NA	NA	NA	NA	1,850	NA	NA	1,800	NA	NA	NA	NA	1,070
231PZ01 (shallow)	04/30/97	NA	NA	NA	NA	NA	NA	NA	692	NA	NA	1,560	NA	NA	NA	NA	1,050
	03/14/06	< 100	22	NA	< 1	130,000	< 10	1	41,000	6.3	79,000	3,000	< 20	38,000	86,000	22	1,120
	04/04/05	< 200	17	7.43	< 1	110,000	< 10	< 1	41,000	5.4	85,000	2,400	< 20	29,000	100,000	< 20	900
	01/12/99	NA	NA	NA	NA	NA	NA	NA	43,600	NA	NA	2,180	NA	NA	NA	NA	1,060
	10/13/98	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,080
	07/14/98	NA	NA	NA	NA	NA	NA	NA	25,000	NA	NA	1,080	NA	NA	NA	NA	961
	04/30/98	NA	NA	NA	NA	NA	NA	NA	14,600	NA	NA	1,340	NA	NA	NA	NA	894
231PZ02 (shallow)	02/03/98	< 100	NA	NA	NA	73,000	< 10	< 1	21,900	NA	78,500	1,230	< 5	24,500	87,500	NA	804
	03/10/06	< 100	< 5	NA	< 1	160,000 J	< 10	< 1	5,600	< 3	58,000	2,800	< 20	8,300	180,000	< 20	960
	04/04/05	< 200	< 5	0.387	< 1	140,000	< 10	< 1	3,300	< 3	55,000	2,700	< 20	7,600	130,000	< 20	900
	07/14/98	NA	NA	NA	NA	NA	NA	NA	796	NA	NA	1,320	NA	NA	NA	NA	1,200
	04/30/98	NA	NA	NA	NA	NA	NA	NA	1,310	NA	NA	1,670	NA	NA	NA	NA	882
231PZ03 (shallow)	02/03/98	< 100	NA	NA	NA	131,000	< 10	< 1	2,820	NA	65,800	3,580	9.3	8,380	125,000	NA	1,080
	03/14/06	< 100	< 5	NA	< 1	85,000	< 10	< 1	16,000	< 3	48,000	2,200	< 20	5100	48,000	< 20	790
	04/04/05	< 200	< 5	2.31	< 1	77,000	< 10	< 1	15,000	< 3	54,000	2,100	< 20	4,200	51,000	< 20	540
	01/12/99	NA	NA	NA	NA	NA	NA	NA	265	NA	NA	737	NA	NA	NA	NA	603
	10/13/98	NA	NA	NA	NA	NA	NA	NA	363	NA	NA	882	NA	NA	NA	NA	601
	07/14/98	NA	NA	NA	NA	NA	NA	NA	3,580	NA	NA	1,980	NA	NA	NA	NA	594
	04/30/98	NA	NA	NA	NA	NA	NA	NA	13,200	NA	NA	2,930	NA	NA	NA	NA	594
231PZ04 (shallow)	02/03/98	< 100	NA	NA	NA	42,100	< 10	< 1	2,020	NA	43,500	902	< 5	22,300	88,700	NA	584
	03/14/06	< 100	10	NA	< 1	94,000	< 10	< 1	20,000	< 3	54,000	2,400	< 20	6,000	51,000	< 20	710
	04/04/05	< 200	10	6.64	< 1	89,000	< 10	< 1	21,000	< 3	61,000	2,400	< 20	5,700	51,000	< 20	610
	01/11/99	NA	NA	NA	NA	NA	NA	NA	2,370	NA	NA	1,230	NA	NA	NA	NA	621
	10/12/98	NA	NA	NA	NA	NA	NA	NA	4,440	NA	NA	1,490	NA	NA	NA	NA	640
	07/13/98	NA	NA	NA	NA	NA	NA	NA	9,050	NA	NA	2,710	NA	NA	NA	NA	634
	04/30/98	NA	NA	NA	NA	NA	NA	NA	13,000	NA	NA	3,590	NA	NA	NA	NA	640
	02/04/98	< 100	NA	NA	NA	154,000	< 1	< 1	13,000	NA	61,800	5,630	7.9	< 5000	42,500	NA	854

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the First Quarter 2005.

2 - From Table 4 of the CAP.

3 - Due to computer/review error by the laboratory, sample 231GW09 was not analyzed by ICP-MS for the list of 22 metals. The sample had already been disposed of when the omission was discovered.

4 - Additional metals were analyzed as part of Fill Site 6 and are presented in Table A-3-3.

The analytical methods used during previous quarters are identified in the respective quarterly reports.

µg/L - micrograms per liter

mg/L - milligrams per liter

NA - Not analyzed

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historic data qualifiers.

Bold numbers - indicate concentrations which exceed cleanup levels.

-- Cleanup level not established.

Table A-10-7
Groundwater Elevation Summary
Building 231/207 Area
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
Shallow Zone Monitoring Wells					
231GW09	12/04/06	13.35	24.28	10.93	MW
	08/14/06	13.47	24.28	10.81	MW
	05/22/06	12.80	24.28	11.48	MW
	03/06/06	12.60	24.28	11.68	MW
	11/28/05	13.11	24.28	11.17	MW
	08/29/05	12.36	24.28	11.92	MW
	05/23/05	11.15	24.28	13.13	MW
	03/14/05	11.50	24.28	12.78	MW
	12/13/04	12.18	24.28	12.10	MW
	08/09/04	12.75	24.28	11.53	MW
	05/24/04	12.63	24.28	11.65	MW
	03/08/04	12.22	24.28	12.06	MW
	12/01/03	13.15	24.28	11.13	MW
	08/11/03	13.38	24.28	10.90	MW
	06/02/03	13.22	24.28	11.06	MW
	03/10/03	12.25	24.28	12.03	MW
	12/02/02	12.43	24.28	11.85	MW
	08/26/02	12.26	24.28	12.02	MW
	05/28/02	12.20	24.28	12.08	MW
	03/04/02	11.97	24.28	12.31	MW
	11/26/01	12.31 ²	24.28	11.97	MW
231GW10	08/27/01	12.65	24.28	11.63	MW
	05/08/01	12.06	24.28	12.22	MW
	12/04/06	3.45	11.37	7.92	MW
	08/14/06	3.87	11.37	7.50	MW
	05/22/06	3.28	11.37	8.09	MW
	03/06/06	2.96	11.37	8.41	MW
	11/28/05	3.24	11.37	8.13	MW
	08/29/05	3.51	11.37	7.86	MW
	05/23/05	2.83	11.37	8.54	MW
	03/14/05	3.05	11.37	8.32	MW
	12/13/04	3.36	11.37	8.01	MW
	08/09/04	3.95	11.37	7.42	MW
	05/24/04	3.62	11.37	7.75	MW
	03/08/04	2.88	11.37	8.49	MW
	12/01/03	3.48	11.37	7.89	MW
	08/11/03	3.53	11.37	7.84	MW
	06/02/03	3.77	11.37	7.60	MW
	03/10/03	2.74	11.37	8.63	MW
	12/02/02	3.41	11.37	7.96	MW
	08/26/02	3.30	11.37	8.07	MW
231GW11	05/28/02	3.31	11.37	8.06	MW
	03/04/02	2.81	11.37	8.56	MW
	11/26/01	3.50	11.37	7.87	MW
	08/27/01	3.80	11.37	7.57	MW
	05/08/01	3.44	11.37	7.93	MW
	12/04/06	2.53	11.11	8.58	MW
	08/14/06	2.84	11.11	8.27	MW
	05/22/06	3.01	11.11	8.10	MW
	03/06/06	2.35	11.11	8.76	MW
	11/28/05	2.63	11.11	8.48	MW

Table A-10-7
Groundwater Elevation Summary
Building 231/207 Area
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
231GW11	08/29/05	2.79	11.11	8.32	MW
	05/23/05	2.94	11.11	8.17	MW
	03/14/05	2.37	11.11	8.74	MW
	12/13/04	2.45	11.11	8.66	MW
	08/09/04	2.96	11.11	8.15	MW
	05/24/04	2.95	11.11	8.16	MW
	03/08/04	2.95	11.11	8.16	MW
	12/01/03	3.59	11.11	7.52	MW
	08/11/03	3.78	11.11	7.33	MW
	06/02/03	4.13	11.11	6.98	MW
	03/10/03	4.01	11.11	7.10	MW
	12/02/02	3.64	11.11	7.47	MW
	08/26/02	2.23	11.11	8.88	MW
	05/28/02	3.24	11.11	7.87	MW
	03/04/02	2.05	11.11	9.06	MW
	11/26/01	2.25	11.11	8.86	MW
	08/27/01	2.68	11.11	8.43	MW
	05/08/01	2.46	11.11	8.65	MW
231GW16	12/04/06	5.63	10.80	5.17	MW
	08/14/06	5.70	10.80	5.10	MW
	05/22/06	5.68	10.80	5.12	MW
	03/06/06	5.53	10.80	5.27	MW
	11/28/05	5.58	10.80	5.22	MW
	08/29/05	5.52	10.80	5.28	MW
	05/23/05	5.43	10.80	5.37	MW
	03/14/05	5.36	10.80	5.44	MW
	12/13/04	5.50	10.80	5.30	MW
	08/09/04	5.57	10.80	5.23	MW
	05/24/04	5.63	10.80	5.17	MW
	03/08/04	5.52	10.80	5.28	MW
	12/01/03	5.53	10.80	5.27	MW
	08/11/03	5.51	10.80	5.29	MW
	06/02/03	5.63	10.80	5.17	MW
	03/10/03	5.24	10.80	5.56	MW
	12/02/02	5.51	10.80	5.29	MW
	08/26/02	5.51	10.80	5.29	MW
	05/28/02	5.51	10.80	5.29	MW
	03/04/02	5.59	10.80	5.21	MW
	11/26/01	5.54	10.80	5.26	MW
	08/27/01	5.63	10.80	5.17	MW
	05/08/01	5.54	10.80	5.26	MW
231GW19	12/04/06	4.28	12.20	7.92	MW
	08/14/06	4.67	12.20	7.53	MW
	05/22/06	3.92	12.20	8.28	MW
	03/06/06	2.93	12.20	9.27	MW
	11/28/05	4.46	12.20	7.74	MW
	08/29/05	4.32	12.20	7.88	MW
	05/23/05	3.37	12.20	8.83	MW
	03/14/05	3.28	12.20	8.92	MW
	12/13/04	4.00	12.20	8.20	MW
	08/09/04	4.75	12.20	7.45	MW
	05/24/04	4.39	12.20	7.81	MW
	03/08/04	3.64	12.20	8.56	MW

Table A-10-7
Groundwater Elevation Summary
Building 231/207 Area
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
231GW19	12/01/03	4.72	12.20	7.48	MW
	08/11/03	4.71	12.20	7.49	MW
	06/02/03	4.28	12.20	7.92	MW
	03/10/03	3.59	12.20	8.61	MW
	12/02/02	4.47	12.20	7.73	MW
	08/26/02	4.49	12.20	7.71	MW
	05/28/02	4.14	12.20	8.06	MW
	03/04/02	3.71	12.20	8.49	MW
	11/26/01	4.28	12.20	7.92	MW
	08/27/01	4.56	12.20	7.64	MW
	05/08/01	4.11	12.20	8.09	MW
231GW21	12/04/06	5.68	13.50	7.82	MW
	08/14/06	5.69	13.50	7.81	MW
	05/22/06	5.28	13.50	8.22	MW
	03/06/06	5.20	13.50	8.30	MW
	11/28/05	5.62	13.50	7.88	MW
	08/29/05	5.41	13.50	8.09	MW
	05/23/05	4.75	13.50	8.75	MW
	03/14/05	4.75	13.50	8.75	MW
	12/13/04	5.33	13.50	8.17	MW
	08/09/04	5.63	13.50	7.87	MW
	05/24/04	5.29	13.50	8.21	MW
	03/08/04	4.91	13.50	8.59	MW
	12/01/03	5.86	13.50	7.64	MW
	08/11/03	5.67	13.50	7.83	MW
	06/02/03	5.35	13.50	8.15	MW
	03/10/03	5.13	13.50	8.37	MW
	12/02/02	5.58	13.50	7.92	MW
	08/26/02	5.40	13.50	8.10	MW
	05/28/02	5.33	13.50	8.17	MW
	03/04/02	5.19	13.50	8.31	MW
	11/26/01	5.48	13.50	8.02	MW
	08/27/01	5.39	13.50	8.11	MW
	05/08/01	5.23	13.50	8.27	MW
231GW22	12/04/06	6.92	15.88	8.96	MW
	08/14/06	6.80	15.88	9.08	MW
	05/22/06	6.31	15.88	9.57	MW
	03/06/06	6.44	15.88	9.44	MW
	11/28/05	6.89	15.88	8.99	MW
	08/29/05	6.53	15.88	9.35	MW
	05/23/05	5.51	15.88	10.37	MW
	03/14/05	6.03	15.88	9.85	MW
	12/13/04	6.82	15.88	9.06	MW
	08/09/04	6.85	15.88	9.03	MW
	05/24/04	6.54	15.88	9.34	MW
	03/08/04	6.31	15.88	9.57	MW
	12/01/03	7.23	15.88	8.65	MW
	08/11/03	6.88	15.88	9.00	MW
	06/02/03	6.47	15.88	9.41	MW
	03/10/03	6.22	15.88	9.66	MW
	12/02/02	6.86	15.88	9.02	MW
	08/26/02	6.60	15.88	9.28	MW
	05/28/02	6.40	15.88	9.48	MW

Table A-10-7
Groundwater Elevation Summary
Building 231/207 Area
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
231GW22	03/04/02	6.19	15.88	9.69	MW
	11/26/01	6.80	15.88	9.08	MW
	08/27/01	6.67	15.88	9.21	MW
	05/08/01	6.27	15.88	9.61	MW
231GW23	12/04/06	3.23	11.84	8.61	MW
	08/14/06	3.53	11.84	8.31	MW
	05/22/06	2.72	11.84	9.12	MW
	03/06/06	2.87	11.84	8.97	MW
	11/28/05	3.03	11.84	8.81	MW
	08/29/05	3.01	11.84	8.83	MW
	05/23/05	2.25	11.84	9.59	MW
	03/14/05	1.70	11.84	10.14	MW
	12/13/04	3.00	11.84	8.84	MW
	08/09/04	3.58	11.84	8.26	MW
	05/24/04	3.40	11.84	8.44	MW
	03/08/04	3.06	11.84	8.78	MW
	12/01/03	3.44	11.84	8.40	MW
	08/11/03	3.58	11.84	8.26	MW
	06/02/03	3.46	11.84	8.38	MW
	03/10/03	3.14	11.84	8.70	MW
	12/02/02	3.24	11.84	8.60	MW
	08/26/02	3.04	11.84	8.80	MW
	05/28/02	3.05	11.84	8.79	MW
	03/04/02	2.81	11.84	9.03	MW
	11/26/01	2.85	11.84	8.99	MW
	08/27/01	3.35	11.84	8.49	MW
	05/08/01	3.42	11.84	8.42	MW
231GW24	12/04/06	4.45	11.63	7.18	MW
	08/14/06	4.67	11.63	6.96	MW
	05/22/06	4.13	11.63	7.50	MW
	03/06/06	3.35	11.63	8.28	MW
	11/28/05	4.47	11.63	7.16	MW
	08/29/05	4.47	11.63	7.16	MW
	05/23/05	3.80	11.63	7.83	MW
	03/14/05	3.73	11.63	7.90	MW
	12/13/04	4.11	11.63	7.52	MW
	08/09/04	4.70	11.63	6.93	MW
	05/24/04	4.48	11.63	7.15	MW
	03/08/04	3.96	11.63	7.67	MW
	12/01/03	4.59	11.63	7.04	MW
	08/11/03	4.63	11.63	7.00	MW
	06/02/03	4.37	11.63	7.26	MW
	03/10/03	3.97	11.63	7.66	MW
	12/02/02	4.52	11.63	7.11	MW
	08/26/02	4.50	11.63	7.13	MW
	05/28/02	4.28	11.63	7.35	MW
	03/04/02	4.04	11.63	7.59	MW
	11/26/01	4.34	11.63	7.29	MW
	08/27/01	4.63	11.63	7.00	MW
	05/08/01	4.29	11.63	7.34	MW

Table A-10-7
Groundwater Elevation Summary
Building 231/207 Area
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
231GW25	12/04/06	4.28	12.45	8.17	MW
	08/14/06	4.56	12.45	7.89	MW
	05/22/06	4.14	12.45	8.31	MW
	03/06/06	3.49	12.45	8.96	MW
	11/28/05	4.13	12.45	8.32	MW
	08/29/05	4.11	12.45	8.34	MW
	05/23/05	3.38	12.45	9.07	MW
	03/14/05	3.48	12.45	8.97	MW
	12/13/04	3.75	12.45	8.70	MW
	08/09/04	4.47	12.45	7.98	MW
	05/24/04	4.21	12.45	8.24	MW
	03/08/04	3.70	12.45	8.75	MW
	12/01/03	3.98	12.45	8.47	MW
	08/11/03	4.44	12.45	8.01	MW
	06/02/03	4.56	12.45	7.89	MW
	03/10/03	3.67	12.45	8.78	MW
	12/02/02	3.83	12.45	8.62	MW
	08/26/02	4.01	12.45	8.44	MW
	05/28/02	3.98	12.45	8.47	MW
	03/04/02	3.87	12.45	8.58	MW
	11/26/01	3.65	12.45	8.80	MW
	08/27/01	4.43	12.45	8.02	MW
	05/08/01	4.09	12.45	8.36	MW
231GW30	12/04/06	5.75	12.68	6.93	MW
	08/14/06	5.73	12.68	6.95	MW
	05/22/06	5.83	12.68	6.85	MW
	03/06/06	5.10	12.68	7.58	MW
	11/28/05	5.53	12.68	7.15	MW
	08/29/05	5.38	12.68	7.30	MW
	05/23/05	4.97	12.68	7.71	MW
	03/14/05	5.35	12.68	7.33	MW
	12/13/04	5.33	12.68	7.35	MW
	08/09/04	5.60	12.68	7.08	MW
	05/24/04	6.00	12.68	6.68	MW
	03/08/04	5.55	12.68	7.13	MW
	12/01/03	5.88	12.68	6.80	MW
	08/11/03	5.35	12.68	7.33	MW
	06/02/03	6.08	12.68	6.60	MW
	03/10/03	5.06	12.68	7.62	MW
	12/02/02	5.87	12.68	6.81	MW
	08/26/02	5.30	12.68	7.38	MW
	05/28/02	5.61	12.68	7.07	MW
	03/04/02	5.70	12.68	6.98	MW
	11/26/01	5.37	12.68	7.31	MW
	08/27/01	6.04	12.68	6.64	MW
	05/08/01	5.82	12.68	6.86	MW
231PZ01	12/04/06	6.32	15.47	9.15	PZ
	08/04/06	6.38	15.47	9.09	PZ
	05/22/06	5.88	15.47	9.59	PZ
	03/06/06	5.88	15.47	9.59	PZ
	11/28/05	6.34	15.47	9.13	PZ
	08/29/05	5.97	15.47	9.50	PZ
	05/23/05	5.35	15.47	10.12	PZ

Table A-10-7
Groundwater Elevation Summary
Building 231/207 Area
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
231PZ01	03/14/05	5.48	15.47	9.99	PZ
	12/13/04	6.19	15.47	9.28	PZ
	08/09/04	6.37	15.47	9.10	PZ
	05/24/04	5.92	15.47	9.55	PZ
	03/08/04	5.70	15.47	9.77	PZ
	12/01/03	6.72	15.47	8.75	PZ
	08/11/03	6.42	15.47	9.05	PZ
	06/02/03	6.04	15.47	9.43	PZ
	03/10/03	5.61	15.47	9.86	PZ
	12/02/02	6.29	15.47	9.18	PZ
	08/26/02	6.10	15.47	9.37	PZ
	05/28/02	5.88	15.47	9.59	PZ
	03/04/02	5.59	15.47	9.88	PZ
	11/26/01	5.93	15.47	9.54	PZ
	08/27/01	6.44	15.47	9.03	PZ
231PZ02	05/08/01	5.28	15.47	10.19	PZ
	12/04/06	5.98	15.13	9.15	PZ
	08/14/06	6.12	15.13	9.01	PZ
	05/22/06	5.41	15.13	9.72	PZ
	03/06/06	5.40	15.13	9.73	PZ
	11/28/05	5.92	15.13	9.21	PZ
	08/29/05	5.60	15.13	9.53	PZ
	05/23/05	4.88	15.13	10.25	PZ
	03/14/05	4.90	15.13	10.23	PZ
	12/13/04	5.50	15.13	9.63	PZ
	08/09/04	5.93	15.13	9.20	PZ
	05/24/04	5.54	15.13	9.59	PZ
	03/08/04	5.12	15.13	10.01	PZ
	12/01/03	6.20	15.13	8.93	PZ
	08/11/03	6.14	15.13	8.99	PZ
231PZ03	06/02/03	5.79	15.13	9.34	PZ
	03/10/03	5.08	15.13	10.05	PZ
	12/02/02	5.77	15.13	9.36	PZ
	08/26/02	5.63	15.13	9.50	PZ
	05/28/02	5.40	15.13	9.73	PZ
	03/04/02	5.13	15.13	10.00	PZ
	11/26/01	5.60	15.13	9.53	PZ
	08/27/01	6.07	15.13	9.06	PZ
	05/08/01	5.78	15.13	9.35	PZ
	12/04/06	5.59	13.95	8.36	PZ
	08/14/06	5.75	13.95	8.20	PZ
	05/22/06	5.12	13.95	8.83	PZ
	03/06/06	4.92	13.95	9.03	PZ
	11/28/05	5.46	13.95	8.49	PZ
	08/29/05	5.38	13.95	8.57	PZ
	05/23/05	4.61	13.95	9.34	PZ
	03/14/05	4.55	13.95	9.40	PZ
	12/13/04	5.23	13.95	8.72	PZ
	08/09/04	5.67	13.95	8.28	PZ
	05/24/04	5.30	13.95	8.65	PZ
	03/08/04	4.58	13.95	9.37	PZ
	12/01/03	5.56	13.95	8.39	PZ
	08/11/03	5.67	13.95	8.28	PZ

Table A-10-7
Groundwater Elevation Summary
Building 231/207 Area
 Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
231PZ03	06/02/03	5.38	13.95	8.57	PZ
	03/10/03	4.86	13.95	9.09	PZ
	12/02/02	5.37	13.95	8.58	PZ
	08/26/02	5.27	13.95	8.68	PZ
	05/28/02	5.20	13.95	8.75	PZ
	03/04/02	4.90	13.95	9.05	PZ
	11/26/01	5.35	13.95	8.60	PZ
	08/27/01	5.43	13.95	8.52	PZ
231PZ04	05/08/01	5.00	13.95	8.95	PZ
	12/06/06	5.18	13.60	8.42	PZ
	08/14/06	5.42	13.60	8.18	PZ
	05/22/06	4.78	13.60	8.82	PZ
	03/06/06	4.57	13.60	9.03	PZ
	11/28/05	5.22	13.60	8.38	PZ
	08/29/05	5.04	13.60	8.56	PZ
	05/23/05	4.28	13.60	9.32	PZ
	03/14/05	4.19	13.60	9.41	PZ
	12/13/04	5.06	13.60	8.54	PZ
	08/09/04	5.32	13.60	8.28	PZ
	05/24/04	4.97	13.60	8.63	PZ
	03/08/04	4.41	13.60	9.19	PZ
	12/01/03	5.33	13.60	8.27	PZ
	08/11/03	5.35	13.60	8.25	PZ
	06/02/03	5.05	13.60	8.55	PZ
	03/10/03	4.67	13.60	8.93	PZ
	12/02/02	5.14	13.60	8.46	PZ
	08/26/02	5.04	13.60	8.56	PZ
	05/28/02	4.85	13.60	8.75	PZ
	03/04/02	4.56	13.60	9.04	PZ
	11/26/01	5.05	13.60	8.55	PZ
	08/27/01	5.57	13.60	8.03	PZ
	05/08/01	4.75	13.60	8.85	PZ
Intermediate Zone Monitoring Wells					
207GW03	12/04/06	4.21	9.98	5.77	MW
	08/14/06	4.31	9.98	5.67	MW
	05/22/06	3.48	9.98	6.50	MW
	03/06/06	3.45	9.98	6.53	MW
	11/28/05	3.62	9.98	6.36	MW
	08/29/05	4.28	9.98	5.70	MW
	05/23/05	2.88	9.98	7.10	MW
	03/14/05	3.37	9.98	6.61	MW
	12/13/04	3.38	9.98	6.60	MW
	08/09/04	4.95	9.98	5.03	MW
	05/24/04	3.93	9.98	6.05	MW
	03/08/04	5.43	9.98	4.55	MW
	12/01/03	4.66	9.98	5.32	MW
	08/11/03	4.19	9.98	5.79	MW
	06/02/03	5.20	9.98	4.78	MW
	03/10/03	2.93	9.98	7.05	MW
	12/02/02	3.82	9.98	6.16	MW
	08/26/02	4.62	9.98	5.36	MW

Table A-10-7
Groundwater Elevation Summary
Building 231/207 Area
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
207GW03	05/28/02	3.45	9.98	6.53	MW
	03/04/02	4.58	9.98	5.40	MW
	11/26/01	4.07	9.98	5.91	MW
	08/27/01	4.61	9.98	5.37	MW
	05/08/01	4.43	9.98	5.55	MW
231GW06	12/04/06	4.88	13.86	8.98	MW
	08/14/06	5.14	13.86	8.72	MW
	05/22/06	4.54	13.86	9.32	MW
	03/06/06	4.43	13.86	9.43	MW
	11/28/05	4.78	13.86	9.08	MW
	08/29/05	4.53	13.86	9.33	MW
	05/23/05	3.66	13.86	10.20	MW
	03/14/05	3.90	13.86	9.96	MW
	12/13/04	4.22	13.86	9.64	MW
	08/09/04	4.85	13.86	9.01	MW
	05/24/04	4.58	13.86	9.28	MW
	03/08/04	4.13	13.86	9.73	MW
	12/01/03	4.89	13.86	8.97	MW
	08/11/03	5.12	13.86	8.74	MW
	06/02/03	5.02	13.86	8.84	MW
	03/10/03	4.00	13.86	9.86	MW
	12/02/02	4.45	13.86	9.41	MW
	08/26/02	4.43	13.86	9.43	MW
	05/28/02	4.40	13.86	9.46	MW
	03/04/02	2.13	13.86	11.73	MW
	11/26/01	4.30	13.86	9.56	MW
	08/27/01	4.63	13.86	9.23	MW
	05/08/01	4.30	13.86	9.56	MW
231GW15	12/04/06	3.92	11.00	7.08	MW
	08/14/06	4.17	11.00	6.83	MW
	05/22/06	3.37	11.00	7.63	MW
	03/06/06	3.38	11.00	7.62	MW
	11/28/05	3.50	11.00	7.50	MW
	08/29/05	3.99	11.00	7.01	MW
	05/23/05	2.77	11.00	8.23	MW
	03/14/05	3.16	11.00	7.84	MW
	12/13/04	3.30	11.00	7.70	MW
	08/09/04	4.42	11.00	6.58	MW
	05/24/04	3.71	11.00	7.29	MW
	03/08/04	3.74	11.00	7.26	MW
	12/01/03	4.27	11.00	6.73	MW
	08/11/03	4.00	11.00	7.00	MW
	06/02/03	4.43	11.00	6.57	MW
	03/10/03	2.87	11.00	8.13	MW
	12/02/02	3.51	11.00	7.49	MW
	08/26/02	3.90	11.00	7.10	MW
	05/28/02	3.99	11.00	7.01	MW
	03/04/02	4.08	11.00	6.92	MW
	11/26/01	3.82	11.00	7.18	MW
	08/27/01	4.15	11.00	6.85	MW
	05/08/01	3.86	11.00	7.14	MW

Table A-10-7
Groundwater Elevation Summary
Building 231/207 Area
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
231GW18	12/04/06	2.63	12.30	9.67	MW
	08/14/06	2.73	12.30	9.57	MW
	05/22/06	1.70	12.30	10.60	MW
	03/06/06	2.09	12.30	10.21	MW
	11/28/05	2.43	12.30	9.87	MW
	08/29/05	2.28	12.30	10.02	MW
	05/23/05	1.57	12.30	10.73	MW
	03/14/05	1.71	12.30	10.59	MW
	12/13/04	2.27	12.30	10.03	MW
	08/09/04	2.81	12.30	9.49	MW
	05/24/04	2.42	12.30	9.88	MW
	03/08/04	2.72	12.30	9.58	MW
	12/01/03	3.00	12.30	9.30	MW
	08/11/03	2.97	12.30	9.33	MW
	06/02/03	2.67	12.30	9.63	MW
	03/10/03	2.64	12.30	9.66	MW
	12/02/02	2.37	12.30	9.93	MW
	08/26/02	2.35	12.30	9.95	MW
	05/28/02	2.24	12.30	10.06	MW
	03/04/02	1.98	12.30	10.32	MW
	11/26/01	2.50	12.30	9.80	MW
	08/27/01	2.56	12.30	9.74	MW
	05/08/01	2.21	12.30	10.09	MW
231GW26	12/04/06	7.03	16.13	9.10	MW
	08/14/06	7.33	16.13	8.80	MW
	05/22/06	6.73	16.13	9.40	MW
	03/06/06	6.51	16.13	9.62	MW
	11/28/05	6.98	16.13	9.15	MW
	08/29/05	6.72	16.13	9.41	MW
	05/23/05	5.87	16.13	10.26	MW
	03/14/05	5.93	16.13	10.20	MW
	12/15/04	6.41	16.13	9.72	MW
	08/09/04	7.01	16.13	9.12	MW
	05/24/04	6.74	16.13	9.39	MW
	03/08/04	6.37	16.13	9.76	MW
	12/01/03	7.12	16.13	9.01	MW
	08/11/03	7.29	16.13	8.84	MW
	06/02/03	7.22	16.13	8.91	MW
	03/10/03	6.33	16.13	9.80	MW
	12/02/02	6.61	16.13	9.52	MW
	08/26/02	6.60	16.13	9.53	MW
	05/28/02	6.57	16.13	9.56	MW
	03/04/02	6.31	16.13	9.82	MW
	11/26/01	6.54	16.13	9.59	MW
	08/27/01	6.78	16.13	9.35	MW
	05/08/01	6.41	16.13	9.72	MW
231GW27	12/04/06	10.54	20.32	9.78	MW
	08/14/06	10.75	20.32	9.57	MW
	05/22/06	10.12	20.32	10.20	MW
	03/06/06	9.97	20.32	10.35	MW
	11/28/05	10.47	20.32	9.85	MW
	08/29/05	9.95	20.32	10.37	MW
	05/23/05	9.38	20.32	10.94	MW
	03/14/05	9.50	20.32	10.82	MW

Table A-10-7
Groundwater Elevation Summary
Building 231/207 Area
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
231GW27	12/13/04	10.02	20.32	10.30	MW
	08/09/04	10.50	20.32	9.82	MW
	05/24/04	10.25	20.32	10.07	MW
	03/08/04	10.15	20.32	10.17	MW
	12/01/03	10.77	20.32	9.55	MW
	08/11/03	10.84	20.32	9.48	MW
	06/02/03	10.68	20.32	9.64	MW
	03/10/03	10.13	20.32	10.19	MW
	12/02/02	10.16	20.32	10.16	MW
	08/26/02	10.11	20.32	10.21	MW
	05/28/02	10.04	20.32	10.28	MW
	03/04/02	9.76	20.32	10.56	MW
	11/26/01	10.05	20.32	10.27	MW
	08/27/01	10.29	20.32	10.03	MW
	05/08/01	9.96	20.32	10.36	MW
231GW28	12/04/06	4.18	12.03	7.85	MW
	08/14/06	3.74	12.03	8.29	MW
	05/22/06	3.58	12.03	8.45	MW
	03/06/06	3.28	12.03	8.75	MW
	11/28/05	3.46	12.03	8.57	MW
	08/29/05	3.32	12.03	8.71	MW
	05/23/05	2.96	12.03	9.07	MW
	03/14/05	2.65	12.03	9.38	MW
	12/13/04	2.80	12.03	9.23	MW
	08/09/04	3.17	12.03	8.86	MW
	05/24/04	3.27	12.03	8.76	MW
	03/08/04	3.36	12.03	8.67	MW
	12/01/03	3.74	12.03	8.29	MW
	08/11/03	3.44	12.03	8.59	MW
	06/02/03	3.80	12.03	8.23	MW
	03/10/03	2.48	12.03	9.55	MW
	12/02/02	2.98	12.03	9.05	MW
	08/26/02	3.02	12.03	9.01	MW
	05/28/02	3.69	12.03	8.34	MW
	03/04/02	2.53	12.03	9.50	MW
	11/26/01	3.37	12.03	8.66	MW
	08/27/01	3.53	12.03	8.50	MW
	05/08/01	3.20	12.03	8.83	MW
231GW29	12/04/06	2.56	11.11	8.55	MW
	08/14/06	2.81	11.11	8.30	MW
	05/22/06	2.41	11.11	8.70	MW
	03/06/06	2.24	11.11	8.87	MW
	11/28/05	2.30	11.11	8.81	MW
	08/29/05	2.18	11.11	8.93	MW
	05/23/05	1.53	11.11	9.58	MW
	03/14/05	1.49	11.11	9.62	MW
	12/13/04	2.05	11.11	9.06	MW
	08/09/04	2.18	11.11	8.93	MW
	05/24/04	2.03	11.11	9.08	MW
	03/08/04	2.36	11.11	8.75	MW
	12/01/03	2.51	11.11	8.60	MW
	08/11/03	2.6	11.11	8.51	MW
	06/02/03	2.56	11.11	8.55	MW
	03/10/03	1.50	11.11	9.61	MW

Table A-10-7
Groundwater Elevation Summary
Building 231/207 Area
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
231GW29	12/02/02	2.02	11.11	9.09	MW
	08/26/02	1.95	11.11	9.16	MW
	05/28/02	1.94	11.11	9.17	MW
	03/04/02	1.84	11.11	9.27	MW
	11/26/01	1.81	11.11	9.30	MW
	08/27/01	2.13	11.11	8.98	MW
	05/08/01	2.31	11.11	8.80	MW
Deep Zone Monitoring Wells					
OW-1	12/04/06	2.23	13.28	11.05	PZ
	08/14/06	2.25	13.28	11.03	PZ
	05/22/06	1.84	NS	--	PZ
	03/06/06	1.97	NS	--	PZ
	11/28/05	2.15	NS	--	PZ
	08/29/05	1.65	NS	--	PZ
	05/23/05	1.21	NS	--	PZ
	03/14/05	1.23	NS	--	PZ
	12/13/04	2.00	NS	--	PZ
	08/09/04	2.31	NS	--	PZ
	05/24/01	2.14	NS	--	PZ
	03/08/04	1.78	NS	--	PZ
	12/01/03	2.82	NS	--	PZ
	08/11/03	3.09	NS	--	PZ
	06/02/03	2.98	NS	--	PZ
	03/10/03	NM	NS	--	PZ
	12/02/02	1.91	NS	--	PZ
231GW13	12/04/06	2.80	13.70	10.90	MW
	08/14/06	2.81	13.70	10.89	MW
	05/22/06	2.17	13.70	11.53	MW
	03/06/06	2.15	13.70	11.55	MW
	11/28/05	2.70	13.70	11.00	MW
	08/29/05	2.27	13.70	11.43	MW
	05/23/05	1.67	13.70	12.03	MW
	03/14/05	1.66	13.70	12.04	MW
	12/13/04	2.44	13.70	11.26	MW
	08/09/04	3.04	13.70	10.66	MW
	05/24/04	2.74	13.70	10.96	MW
	03/08/04	2.28	13.70	11.42	MW
	12/01/03	3.35	13.70	10.35	MW
	08/11/03	3.61	13.70	10.09	MW
	06/02/03	3.46	13.70	10.24	MW
	03/10/03	2.39	13.70	11.31	MW
	12/02/02	2.53	13.70	11.17	MW
	08/26/02	2.45	13.70	11.25	MW
	05/28/02	2.39	13.70	11.31	MW
	03/04/02	2.15	13.70	11.55	MW
	11/26/01	2.50	13.70	11.20	MW
	08/27/01	2.74	13.70	10.96	MW
	05/08/01	2.31	13.70	11.39	MW
231GW17	12/04/06	1.50	12.50	11.00	MW
	08/14/06	1.48	12.50	11.02	MW
	05/22/06	0.82	12.50	11.68	MW
	03/06/06	0.98	12.50	11.52	MW
	11/28/05	1.33	12.50	11.17	MW

Table A-10-7
Groundwater Elevation Summary
Building 231/207 Area
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
231GW17	08/29/05	0.73	12.50	11.77	MW
	05/23/05	0.24	12.50	12.26	MW
	03/14/05	0.37	12.50	12.13	MW
	12/13/04	1.18	12.50	11.32	MW
	08/09/04	1.68	12.50	10.82	MW
	05/24/04	1.38	12.50	11.12	MW
	03/08/04	1.42	12.50	11.08	MW
	12/01/03	1.98	12.50	10.52	MW
	08/11/03	1.98	12.50	10.52	MW
	06/02/03	1.60	12.50	10.90	MW
	03/10/03	0.95	12.50	11.55	MW
	12/06/02	1.31	12.50	11.19 ³	MW
	08/26/02	1.16	12.50	11.34	MW
	05/28/02	1.06	12.50	11.44	MW
	03/04/02	0.79	12.50	11.71	MW
	11/26/01	1.17	12.50	11.33	MW
	08/27/01	1.39	12.50	11.11	MW
	05/08/01	1.01	12.50	11.49	MW
231GW20	12/04/06	2.31	13.30	10.99	MW
	08/14/06	2.28	13.30	11.02	MW
	05/22/06	1.74	13.30	11.56	MW
	03/06/06	1.65	13.30	11.65	MW
	11/28/05	2.23	13.30	11.07	MW
	08/29/05	1.74	13.30	11.56	MW
	05/23/05	1.07	13.30	12.23	MW
	03/14/05	1.15	13.30	12.15	MW
	12/13/04	1.85	13.30	11.45	MW
	08/09/04	2.41	13.30	10.89	MW
	05/24/04	2.23	13.30	11.07	MW
	03/08/04	1.77	13.30	11.53	MW
	12/01/03	2.82	13.30	10.48	MW
	08/11/03	3.18	13.30	10.12	MW
	06/02/03	3.05	13.30	10.25	MW
	03/10/03	2.02	13.30	11.28	MW
	12/02/02	2.03	13.30	11.27	MW
	08/26/02	1.90	13.30	11.40	MW
	05/28/02	1.64	13.30	11.66	MW
	03/04/02	1.64	13.30	11.66	MW
	11/26/01	1.95	13.30	11.35	MW
	08/27/01	2.14	13.30	11.16	MW
	05/08/01	1.79	13.30	11.51	MW

Notes

1 - All depth to water measurements are an average of three measurements recorded in the field.

2 - The depth to water was improperly recorded as 2.31 feet rather than 12.31 feet on 26 November 2001.

3 - This depth to water was measured on 6 December 2002. The depth to water measured on 2 December 2002 (2.27 feet) was determined to be in error.

MW- Monitoring well

PZ - Piezometer

NS - Not Surveyed

feet PLLW - feet above Presidio Lower Low Water vertical datum

Table A-10-8
Summary of Vertical Gradients at Well Clusters
Building 231/207 Area
Presidio of San Francisco, California

Well Cluster (WC)	Well Name	Date	Groundwater Zone	Groundwater Elevation (feet PLLW)	Screen Midpoint Elevation (feet PLLW)	Shallow/Intermediate Vertical Gradient (feet/foot) ¹	Intermediate/Deep Vertical Gradient (feet/foot) ¹	Shallow/Deep Vertical Gradient (feet/foot) ¹
WC-1	231GW19	12/04/06	Shallow	7.92	5.90	-0.18	-0.10	-0.13
	231GW18	12/04/06	Intermediate	9.67	-3.85			
	231GW17	12/04/06	Deep	11.00	-17.20			
	231GW19	08/14/06	Shallow	7.53	5.90	-0.21	-0.11	-0.15
	231GW18	08/14/06	Intermediate	9.57	-3.85			
	231GW17	08/14/06	Deep	11.02	-17.20			
	231GW19	05/22/06	Shallow	8.28	5.90	-0.24	-0.08	-0.15
	231GW18	05/22/06	Intermediate	10.6	-3.85			
	231GW17	05/22/06	Deep	11.68	-17.20			
	231GW19	03/06/06	Shallow	9.27	5.90	-0.10	-0.10	-0.10
	231GW18	03/06/06	Intermediate	10.21	-3.85			
	231GW17	03/06/06	Deep	11.52	-17.20			
	231GW19	11/28/05	Shallow	7.74	5.90	-0.22	-0.10	-0.15
	231GW18	11/28/05	Intermediate	9.87	-3.85			
	231GW17	11/28/05	Deep	11.17	-17.20			
	231GW19	08/29/05	Shallow	7.88	5.90	-0.22	-0.13	-0.17
	231GW18	08/29/05	Intermediate	10.02	-3.85			
	231GW17	08/29/05	Deep	11.77	-17.20			
	231GW19	05/23/05	Shallow	8.83	5.90	-0.19	-0.11	-0.15
	231GW18	05/23/05	Intermediate	10.73	-3.85			
	231GW17	05/23/05	Deep	12.26	-17.20			
	231GW19	03/14/05	Shallow	8.92	5.90	-0.17	-0.12	-0.14
	231GW18	03/14/05	Intermediate	10.59	-3.85			
	231GW17	03/14/05	Deep	12.13	-17.20			
	231GW19	12/13/04	Shallow	8.2	5.90	-0.19	-0.10	-0.14
	231GW18	12/13/04	Intermediate	10.03	-3.85			
	231GW17	12/13/04	Deep	11.32	-17.20			
	231GW19	08/09/04	Shallow	7.45	5.90	-0.21	-0.10	-0.15
	231GW18	08/09/04	Intermediate	9.49	-3.85			
	231GW17	08/09/04	Deep	10.82	-17.20			
	231GW19	05/24/04	Shallow	7.81	5.90	-0.21	-0.09	-0.14
	231GW18	05/24/04	Intermediate	9.88	-3.85			
	231GW17	05/24/04	Deep	11.12	-17.20			

Table A-10-8
Summary of Vertical Gradients at Well Clusters
Building 231/207 Area
Presidio of San Francisco, California

Well Cluster (WC)	Well Name	Date	Groundwater Zone	Groundwater Elevation (feet PLLW)	Screen Midpoint Elevation (feet PLLW)	Shallow/Intermediate Vertical Gradient (feet/foot) ¹	Intermediate/Deep Vertical Gradient (feet/foot) ¹	Shallow/Deep Vertical Gradient (feet/foot) ¹
WC-1	231GW19	03/08/04	Shallow	8.56	5.90	-0.10	-0.11	-0.11
	231GW18	03/08/04	Intermediate	9.58	-3.85			
	231GW17	03/08/04	Deep	11.08	-17.20			
	231GW19	12/01/03	Shallow	7.48	5.90	-0.19	-0.09	-0.13
	231GW18	12/01/03	Intermediate	9.30	-3.85			
	231GW17	12/01/03	Deep	10.52	-17.20			
	231GW19	08/11/03	Shallow	7.49	5.90	-0.19	-0.09	-0.13
	231GW18	08/11/03	Intermediate	9.33	-3.85			
	231GW17	08/11/03	Deep	10.52	-17.20			
	231GW19	06/02/03	Shallow	7.92	5.90	-0.18	-0.10	-0.13
	231GW18	06/02/03	Intermediate	9.63	-3.85			
	231GW17	06/02/03	Deep	10.9	-17.20			
	231GW19	03/10/03	Shallow	8.61	5.90	-0.11	-0.14	-0.13
	231GW18	03/10/03	Intermediate	9.66	-3.85			
	231GW17	03/10/03	Deep	11.55	-17.20			
WC-2	231GW21	12/04/06	Shallow	7.82	7.30	-0.10	-0.12	-0.11
	231GW06	12/04/06	Intermediate	8.98	-3.82			
	231GW20	12/04/06	Deep	10.99	-21.20			
	231GW21	08/14/06	Shallow	7.81	7.30	-0.08	-0.13	-0.11
	231GW06	08/14/06	Intermediate	8.72	-3.82			
	231GW20	08/14/06	Deep	11.02	-21.20			
	231GW21	05/22/06	Shallow	8.22	7.30	-0.10	-0.13	-0.12
	231GW06	05/22/06	Intermediate	9.32	-3.82			
	231GW20	05/22/06	Deep	11.56	-21.20			
	231GW21	03/06/06	Shallow	8.30	7.30	-0.10	-0.13	-0.12
	231GW06	03/06/06	Intermediate	9.43	-3.82			
	231GW20	03/06/06	Deep	11.65	-21.20			
	231GW21	11/28/05	Shallow	7.88	7.30	-0.11	-0.11	-0.11
	231GW06	11/28/05	Intermediate	9.08	-3.82			
	231GW20	11/28/05	Deep	11.07	-21.20			
	231GW21	08/29/05	Shallow	8.09	7.30	-0.11	-0.13	-0.12
	231GW06	08/29/05	Intermediate	9.33	-3.82			
	231GW20	08/29/05	Deep	11.56	-21.20			

Table A-10-8
Summary of Vertical Gradients at Well Clusters
Building 231/207 Area
Presidio of San Francisco, California

Well Cluster (WC)	Well Name	Date	Groundwater Zone	Groundwater Elevation (feet PLLW)	Screen Midpoint Elevation (feet PLLW)	Shallow/Intermediate Vertical Gradient (feet/foot) ¹	Intermediate/Deep Vertical Gradient (feet/foot) ¹	Shallow/Deep Vertical Gradient (feet/foot) ¹
WC-2	231GW21	05/23/05	Shallow	8.75	7.30	-0.13	-0.12	-0.12
	231GW06	05/23/05	Intermediate	10.20	-3.82			
	231GW20	05/23/05	Deep	12.23	-21.20			
	231GW21	03/14/05	Shallow	8.75	7.30	-0.11	-0.13	-0.12
	231GW06	03/14/05	Intermediate	9.96	-3.82			
	231GW20	03/14/05	Deep	12.15	-21.20			
	231GW21	12/13/04	Shallow	8.17	7.30	-0.13	-0.10	-0.12
	231GW06	12/13/04	Intermediate	9.64	-3.82			
	231GW20	12/13/04	Deep	11.45	-21.20			
	231GW21	08/09/04	Shallow	7.87	7.30	-0.10	-0.11	-0.11
	231GW06	08/09/04	Intermediate	9.01	-3.82			
	231GW20	08/09/04	Deep	10.89	-21.20			
	231GW21	05/24/04	Shallow	8.21	7.30	-0.10	-0.10	-0.10
	231GW06	05/24/04	Intermediate	9.28	-3.82			
	231GW20	05/24/04	Deep	11.07	-21.20			
	231GW21	03/08/04	Shallow	8.59	7.30	-0.10	-0.10	-0.10
	231GW06	03/08/04	Intermediate	9.73	-3.82			
	231GW20	03/08/04	Deep	11.53	-21.20			
	231GW21	12/01/03	Shallow	7.64	7.30	-0.12	-0.09	-0.10
	231GW06	12/01/03	Intermediate	8.97	-3.82			
	231GW20	12/01/03	Deep	10.48	-21.20			
	231GW21	08/11/03	Shallow	7.83	7.30	-0.08	-0.08	-0.08
	231GW06	08/11/03	Intermediate	8.74	-3.82			
	231GW20	08/11/03	Deep	10.12	-21.20			
	231GW21	06/02/03	Shallow	8.15	7.30	-0.06	-0.08	-0.07
	231GW06	06/02/03	Intermediate	8.84	-3.82			
	231GW20	06/02/03	Deep	10.25	-21.20			
	231GW21	03/10/03	Shallow	8.37	7.30	-0.13	-0.08	-0.10
	231GW06	03/10/03	Intermediate	9.86	-3.82			
	231GW20	03/10/03	Deep	11.28	-21.20			

Table A-10-8
Summary of Vertical Gradients at Well Clusters
Building 231/207 Area
Presidio of San Francisco, California

Well Cluster (WC)	Well Name	Date	Groundwater Zone	Groundwater Elevation (feet PLLW)	Screen Midpoint Elevation (feet PLLW)	Shallow/Intermediate Vertical Gradient (feet/foot) ¹	Intermediate/Deep Vertical Gradient (feet/foot) ¹	Shallow/Deep Vertical Gradient (feet/foot) ¹
WC-3	231GW16	12/04/06	Shallow	5.17	5.00	-0.18	-0.18	-0.18
	231GW15	12/04/06	Intermediate	7.08	-5.50			
	231GW13	12/04/06	Deep	10.90	-27.1			
	231GW16	08/14/06	Shallow	5.10	5.00	-0.16	-0.19	-0.18
	231GW15	08/14/06	Intermediate	6.83	-5.50			
	231GW13	08/14/06	Deep	10.89	-27.1			
	231GW16	05/22/06	Shallow	5.12	5.00	-0.24	-0.18	-0.20
	231GW15	05/22/06	Intermediate	7.63	-5.50			
	231GW13	05/22/06	Deep	11.53	-27.1			
	231GW16	03/06/06	Shallow	5.27	5.00	-0.22	-0.18	-0.20
	231GW15	03/06/06	Intermediate	7.62	-5.50			
	231GW13	03/06/06	Deep	11.55	-27.1			
	231GW16	11/28/05	Shallow	5.22	5.00	-0.22	-0.16	-0.18
	231GW15	11/28/05	Intermediate	7.50	-5.50			
	231GW13	11/28/05	Deep	11.00	-27.1			
	231GW16	08/29/05	Shallow	5.28	5.00	-0.16	-0.20	-0.19
	231GW15	08/29/05	Intermediate	7.01	-5.50			
	231GW13	08/29/05	Deep	11.43	-27.1			
	231GW16	05/23/05	Shallow	5.37	5.00	-0.27	-0.18	-0.21
	231GW15	05/23/05	Intermediate	8.23	-5.50			
	231GW13	05/23/05	Deep	12.03	-27.1			
	231GW16	03/14/05	Shallow	5.44	5.00	-0.23	-0.19	-0.21
	231GW15	03/14/05	Intermediate	7.84	-5.50			
	231GW13	03/14/05	Deep	12.04	-27.1			
	231GW16	12/13/04	Shallow	5.3	5.00	-0.23	-0.16	-0.19
	231GW15	12/13/04	Intermediate	7.70	-5.50			
	231GW13	12/13/04	Deep	11.26	-27.1			
	231GW16	08/09/04	Shallow	5.23	5.00	-0.13	-0.19	-0.17
	231GW15	08/09/04	Intermediate	6.58	-5.50			
	231GW13	08/09/04	Deep	10.66	-27.1			
	231GW16	05/24/04	Shallow	5.17	5.00	-0.20	-0.17	-0.18
	231GW15	05/24/04	Intermediate	7.29	-5.50			
	231GW13	05/24/04	Deep	10.96	-27.1			

Table A-10-8
Summary of Vertical Gradients at Well Clusters
Building 231/207 Area
Presidio of San Francisco, California

Well Cluster (WC)	Well Name	Date	Groundwater Zone	Groundwater Elevation (feet PLLW)	Screen Midpoint Elevation (feet PLLW)	Shallow/Intermediate Vertical Gradient (feet/foot) ¹	Intermediate/Deep Vertical Gradient (feet/foot) ¹	Shallow/Deep Vertical Gradient (feet/foot) ¹
WC-3	231GW16	03/08/04	Shallow	5.28	5.00	-0.19	-0.19	-0.19
	231GW15	03/08/04	Intermediate	7.26	-5.50			
	231GW13	03/08/04	Deep	11.42	-27.1			
	231GW16	12/01/03	Shallow	5.27	5.00	-0.14	-0.17	-0.16
	231GW15	12/01/03	Intermediate	6.73	-5.50			
	231GW13	12/01/03	Deep	10.35	-27.1			
	231GW16	08/11/03	Shallow	5.29	5.00	-0.16	-0.14	-0.15
	231GW15	08/11/03	Intermediate	7.00	-5.50			
	231GW13	08/11/03	Deep	10.09	-27.1			
	231GW16	06/02/03	Shallow	5.17	5.00	-0.13	-0.17	-0.16
	231GW15	06/02/03	Intermediate	6.57	-5.50			
	231GW13	06/02/03	Deep	10.24	-27.1			
	231GW16	03/10/03	Shallow	5.56	5.00	-0.24	-0.15	-0.18
	231GW15	03/10/03	Intermediate	8.13	-5.50			
	231GW13	03/10/03	Deep	11.31	-27.10			
WC-4	231GW22	12/04/06	Shallow	8.96	9.67	-0.01	NC	NC
	231GW26	12/04/06	Intermediate	9.10	-1.99			
	231GW22	08/14/06	Shallow	9.08	9.67	0.02	NC	NC
	231GW26	08/14/06	Intermediate	8.80	-1.99			
	231GW22	05/22/06	Shallow	9.57	9.67	0.01	NC	NC
	231GW26	05/22/06	Intermediate	9.4	-1.99			
	231GW22	03/06/06	Shallow	9.44	9.67	-0.02	NC	NC
	231GW26	03/06/06	Intermediate	9.62	-1.99			
	231GW22	11/28/05	Shallow	8.99	9.67	-0.01	NC	NC
	231GW26	11/28/05	Intermediate	9.15	-1.99			
	231GW22	08/29/05	Shallow	9.35	9.67	-0.01	NC	NC
	231GW26	08/29/05	Intermediate	9.41	-1.99			
	231GW22	05/23/05	Shallow	10.37	9.67	0.01	NC	NC
	231GW26	05/23/05	Intermediate	10.26	-1.99			
	231GW22	03/14/05	Shallow	9.85	9.67	-0.03	NC	NC
	231GW26	03/14/05	Intermediate	10.2	-1.99			
	231GW22	12/13/04	Shallow	9.06	9.67	-0.06	NC	NC
	231GW26	12/13/04	Intermediate	9.72	-1.99			

Table A-10-8
Summary of Vertical Gradients at Well Clusters
Building 231/207 Area
Presidio of San Francisco, California

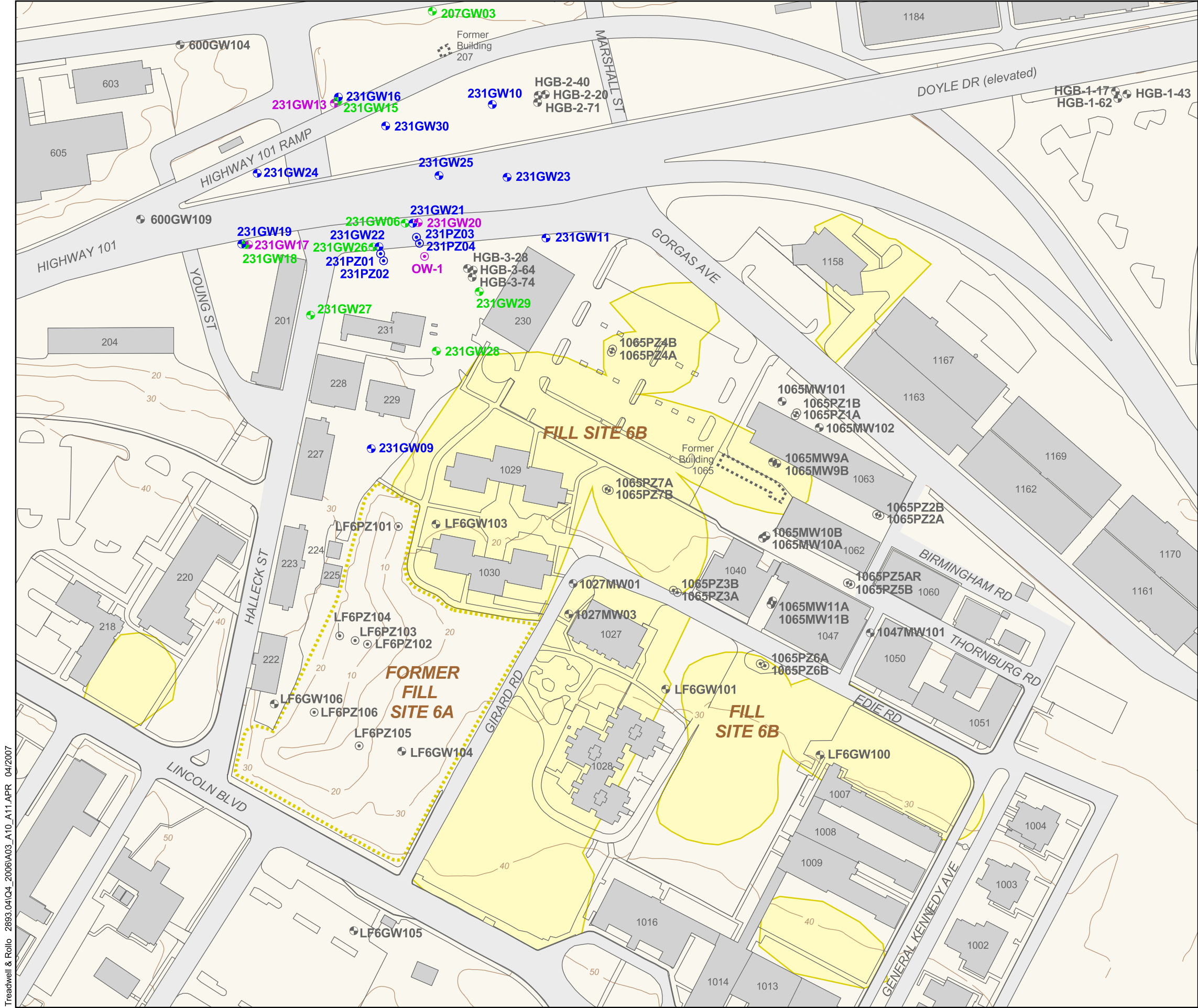
Well Cluster (WC)	Well Name	Date	Groundwater Zone	Groundwater Elevation (feet PLLW)	Screen Midpoint Elevation (feet PLLW)	Shallow/Intermediate Vertical Gradient (feet/foot) ¹	Intermediate/Deep Vertical Gradient (feet/foot) ¹	Shallow/Deep Vertical Gradient (feet/foot) ¹
WC-4	231GW22	08/09/04	Shallow	9.03	9.67	-0.01	NC	NC
	231GW26	08/09/04	Intermediate	9.12	-1.99			
	231GW22	05/24/04	Shallow	9.34	9.67	0.00	NC	NC
	231GW26	05/24/04	Intermediate	9.39	-1.99			
	231GW22	03/08/04	Shallow	9.57	9.67	-0.02	NC	NC
	231GW26	03/08/04	Intermediate	9.76	-1.99			
	231GW22	12/01/03	Shallow	8.65	9.67	-0.03	NC	NC
	231GW26	12/01/03	Intermediate	9.01	-1.99			
	231GW22	08/11/03	Shallow	9.00	9.67	0.01	NC	NC
	231GW26	08/11/03	Intermediate	8.84	-1.99			
	231GW22	06/02/03	Shallow	9.41	9.67	0.04	NC	NC
	231GW26	06/02/03	Intermediate	8.91	-1.99			
	231GW22	03/10/03	Shallow	9.66	9.67	-0.01	NC	NC
	231GW26	03/10/03	Intermediate	9.8	-1.99			

Notes

NC - not calculated

1 - Vertical gradients are calculated by dividing the distance in groundwater elevations between two adjacent wells screened in separate water-bearing zones by the vertical between the midpoint elevations of the two well screens (Table 3). In each case, the value for the shallower well is subtracted from that of the deeper well. A positive value indicates a downward vertical gradient, while a negative number indicates an upward vertical gradient.

feet PLLW - feet above Presidio Lower Low Water vertical datum



N

150

0

150

Feet

LEGEND

231GW21

Shallow Groundwater Monitoring Well

231PZ02

Shallow Piezometer

231GW15

Intermediate Groundwater Monitoring Well

231GW20

Deep Groundwater Monitoring Well

OW-1

Deep Piezometer

HGB-2-40

Adjacent Study Area Well

1065PZ1A

Adjacent Study Area Piezometer

Topographic Contour (Contour Interval: 10 ft)

Former Fill Site 6A Excavation Boundary

Former Building Outline

Approximate Lateral Extent of Fill Site 6B

Building and Number

Notes:

Location of limits of fill from Revised Main Installation Sites Feasibility Study (EKI, 2003).

Horizontal Datum: NAD 27, CA State Plane Coordinates, Zone 3, feet

Vertical Datum: (topography) North American Vertical Datum, NAVD88

BUILDING 231/207 AREA

SITE PLAN

Treadwell&Rollo

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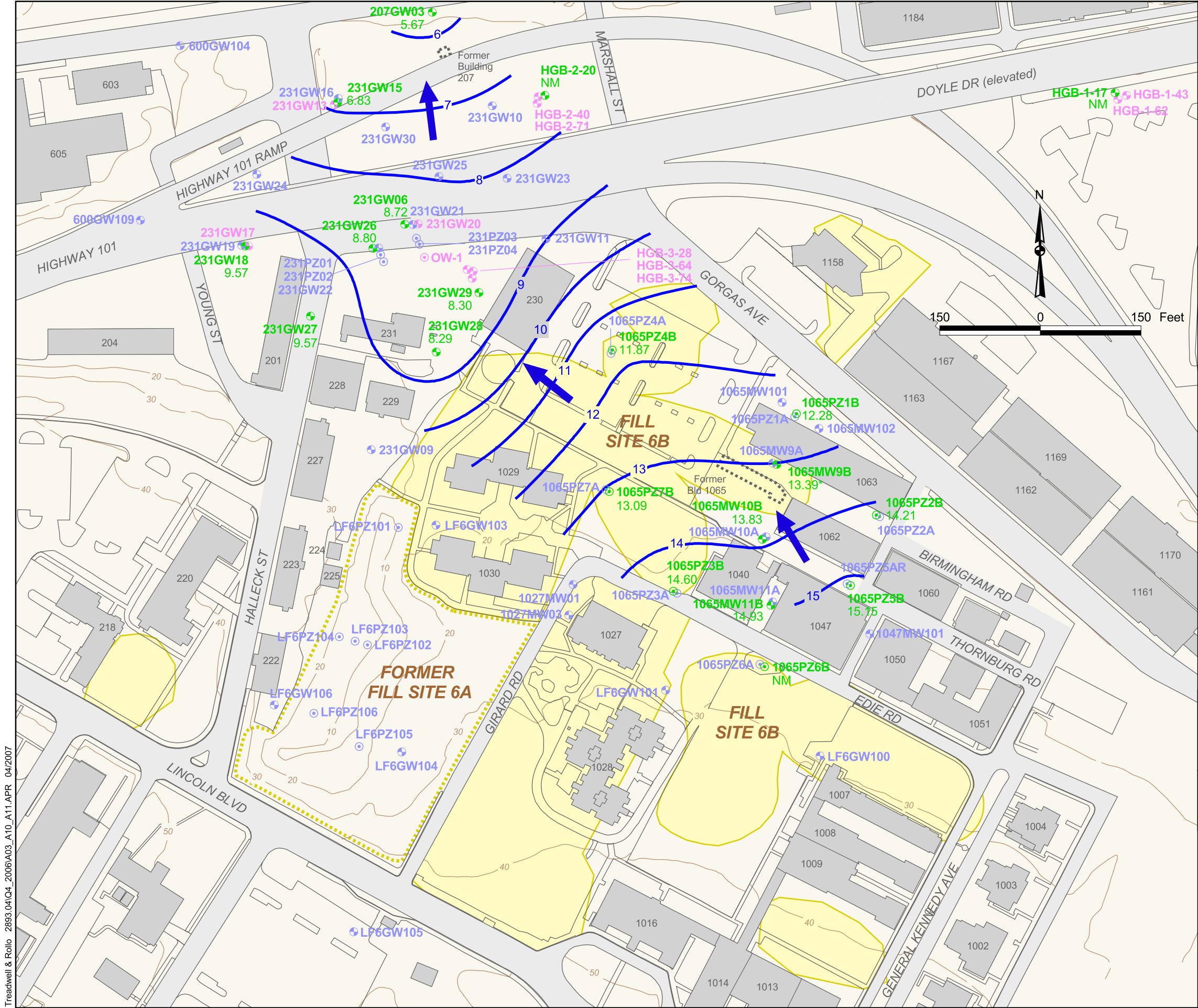
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FIGURE A-10-1

Treadwell & Rollo 2893.041Q4_2006/A03_A10_A11.APR 04/2007



LEGEND

- 231GW26 Intermediate Groundwater Monitoring Well
8.80 August 2006 Groundwater Elevation
- 1065PZ1B Intermediate Piezometer
12.28 August 2006 Groundwater Elevation
- NM Not Measured. Well approved for removal from the groundwater monitoring program.
- * Well not used in contouring because groundwater within it was at or above the top of casing. Value posted is top of casing elevation.
- 231GW21 Shallow Groundwater Monitoring Well
- 1065PZ1A Shallow Piezometer
- 231GW20 Deep Groundwater Monitoring Well
- OW-1 Deep Piezometer
- Approximate Direction of Groundwater Flow
- Groundwater Contour (Contour Interval: 1 ft)
- Topographic Contour (Contour Interval: 10 ft)
- Former Building Outline
- Former Fill Site 6A Excavation Boundary
- Approximate Lateral Extent of Fill Site 6B
- Building and Number

Notes:
Groundwater elevation data collected on 14 August 2006.

Monitoring wells in BOLD were used in groundwater contouring.

The HBG wells were approved for removal from the groundwater monitoring program prior to the Third Quarter 2005.

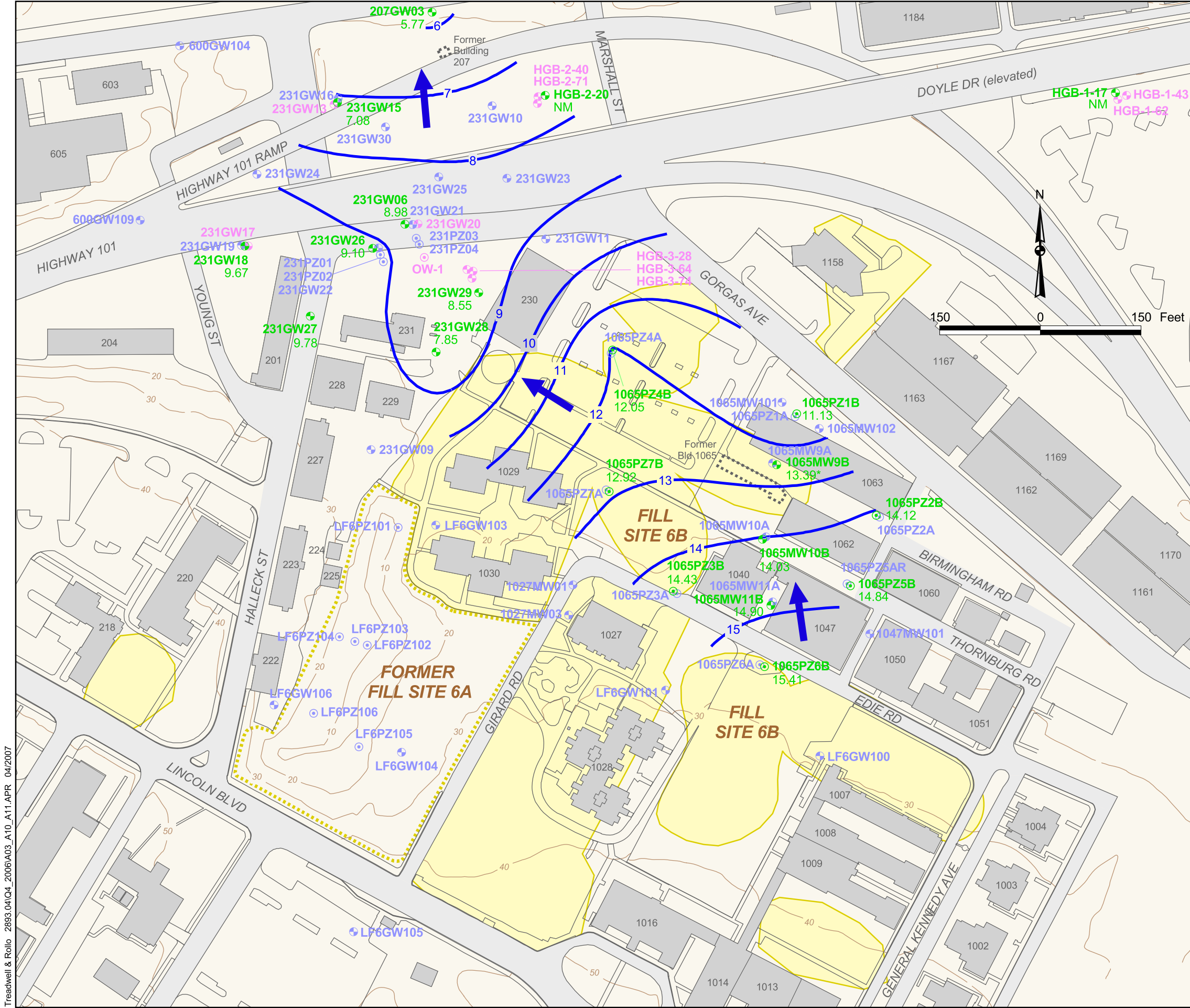
Horizontal Datum: NAD 27, CA State Plane Coordinates, Zone 3, feet
Vertical Datums: (groundwater) Presidio Lower Low Water (ft. PLLW)
(topography) North American Vertical Datum, NAVD88

**BUILDING 231/207 AND BUILDING 1065
14 AUGUST 2006
INTERMEDIATE GROUNDWATER
ELEVATION MAP**

Treadwell&Rollo



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FIGURE A-10-4



LEGEND

● 231GW26

Intermediate Groundwater Monitoring Well

December 2006 Groundwater Elevation

9.10

● 1065PZ1B

Intermediate Piezometer

December 2006 Groundwater Elevation

11.13

NM

Not Measured. Well approved for removal from the groundwater monitoring program.

*

Well not used in contouring because groundwater within it was at or above the top of casing. Value posted is top of casing elevation.

● 231GW21

Shallow Groundwater Monitoring Well

● 1065PZ1A

Shallow Piezometer

● 231GW20

Deep Groundwater Monitoring Well

● OW-1

Deep Piezometer

➡

Approximate Direction of Groundwater Flow

—

Groundwater Contour (Contour Interval: 1 ft)

—

Topographic Contour (Contour Interval: 10 ft)

Former Building Outline

.....

Former Fill Site 6A Excavation Boundary

Approximate Lateral Extent of Fill Site 6B

201

Building and Number

Notes:

Groundwater elevation data collected on 4 December 2006.

Monitoring wells in BOLD were used in groundwater contouring.

The HGB wells were approved for removal from the groundwater monitoring program prior to the Third Quarter 2005.

Horizontal Datum: NAD 27, CA State Plane Coordinates, Zone 3, feet
Vertical Datums: (groundwater) Presidio Lower Low Water (ft. PLLW)
(topography) North American Vertical Datum, NAVD88

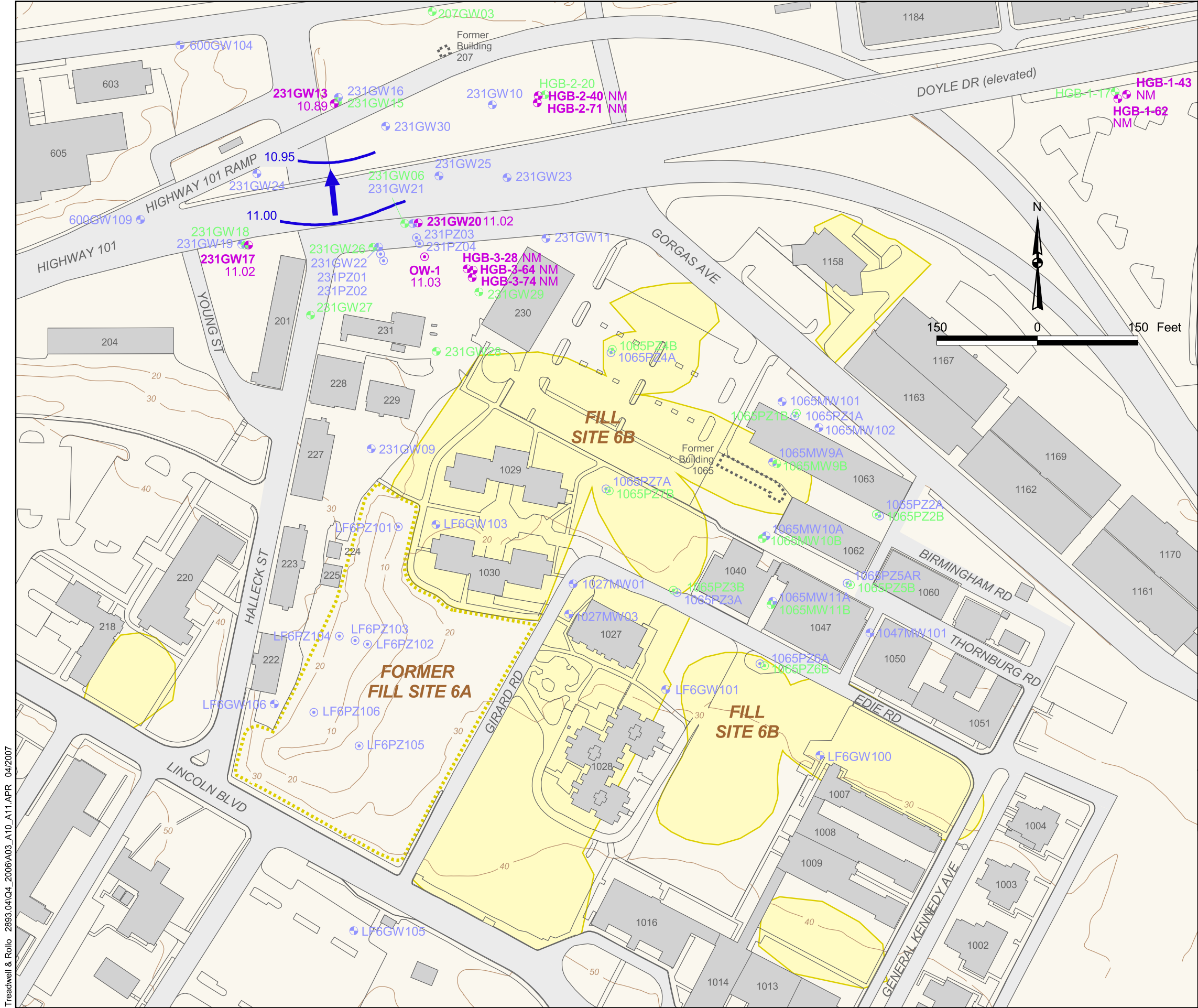
**BUILDING 231/207 AND BUILDING 1065
4 DECEMBER 2006
INTERMEDIATE GROUNDWATER
ELEVATION MAP**

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April 2007

FIGURE A-10-5



LEGEND

231GW20
11.02

Deep Groundwater Monitoring Well
August 2006 Groundwater Elevation

OW-1
11.03

Deep Piezometer
August 2006 Groundwater Elevation

NM

Not Measured. Well approved for removal
from the groundwater monitoring program.

231GW21

Shallow Groundwater Monitoring Well

1065PZ1A

Shallow Piezometer

1065MW9B

Intermediate Groundwater Monitoring Well

1065PZ1B

Intermediate Piezometer

Approximate Direction of
Groundwater Flow

Groundwater Contour
(Contour Interval: 0.05 ft)

Former Building Outline

Topographic Contour
(Contour Interval: 10 ft)

Former Fill Site 6A Excavation Boundary

Approximate Lateral
Extent of Fill Site 6B

201

Building and Number

Notes:
Groundwater elevation data collected on 14 August 2006.

Monitoring wells in BOLD were used in groundwater contouring.

The HBG wells were approved for removal from the groundwater monitoring program prior to the Third Quarter 2005.

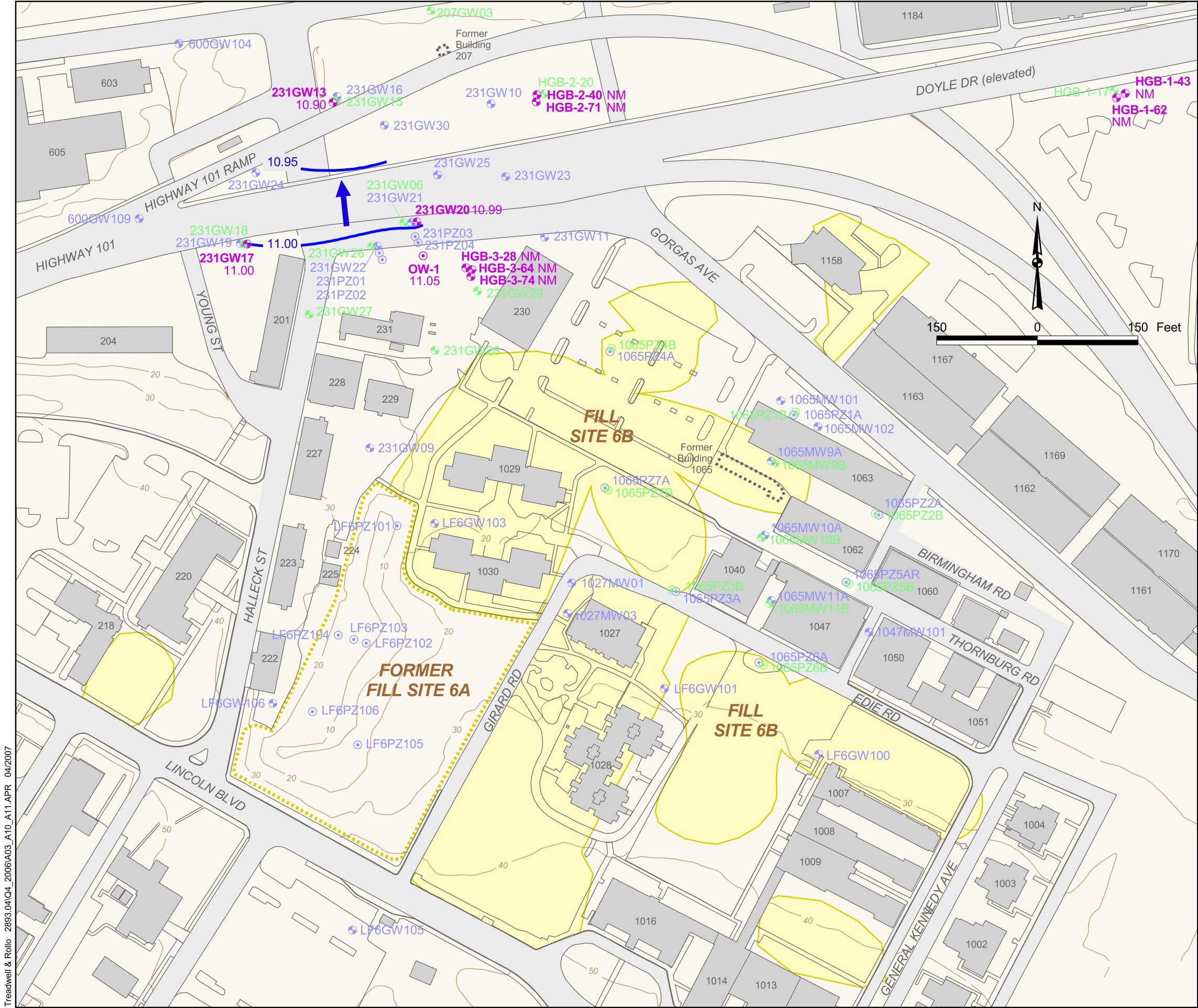
Horizontal Datum: NAD 27, CA State Plane Coordinates, Zone 3, feet
Vertical Datums: (groundwater) Presidio Lower Low Water (ft. PLLW)
(topography) North American Vertical Datum, NAVD88

**BUILDING 231/207
14 AUGUST 2006
DEEP GROUNDWATER
ELEVATION MAP**

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FIGURE A-10-6



LEGEND

- 231GW20 10.99 Deep Groundwater Monitoring Well
December 2006 Groundwater Elevation
- OW-1 11.05 Deep Piezometer
December 2006 Groundwater Elevation
- NM Not Measured. Well approved for removal
from the groundwater monitoring program.
- 231GW21 Shallow Groundwater Monitoring Well
- 1065PZ1A Shallow Piezometer
- 1065MW9B Intermediate Groundwater Monitoring Well
- 1065PZ1B Intermediate Piezometer
- Approximate Direction of
Groundwater Flow
- Groundwater Contour
(Contour Interval: 0.05 ft)
- Former Building Outline
- Topographic Contour
(Contour Interval: 10 ft)
- Former Fill Site 6A Excavation Boundary
- Approximate Lateral
Extent of Fill Site 6B
- 201 Building and Number

Notes:
Groundwater elevation data collected on 4 December 2006.

Monitoring wells in BOLD were used in groundwater contouring.

The HGB wells were approved for removal from the groundwater monitoring program prior to the Third Quarter 2005.

Horizontal Datum: NAD 27, CA State Plane Coordinates, Zone 3, feet
Vertical Datums: (groundwater) Presidio Lower Low Water (ft. PLLW)
(topography) North American Vertical Datum, NAVD88

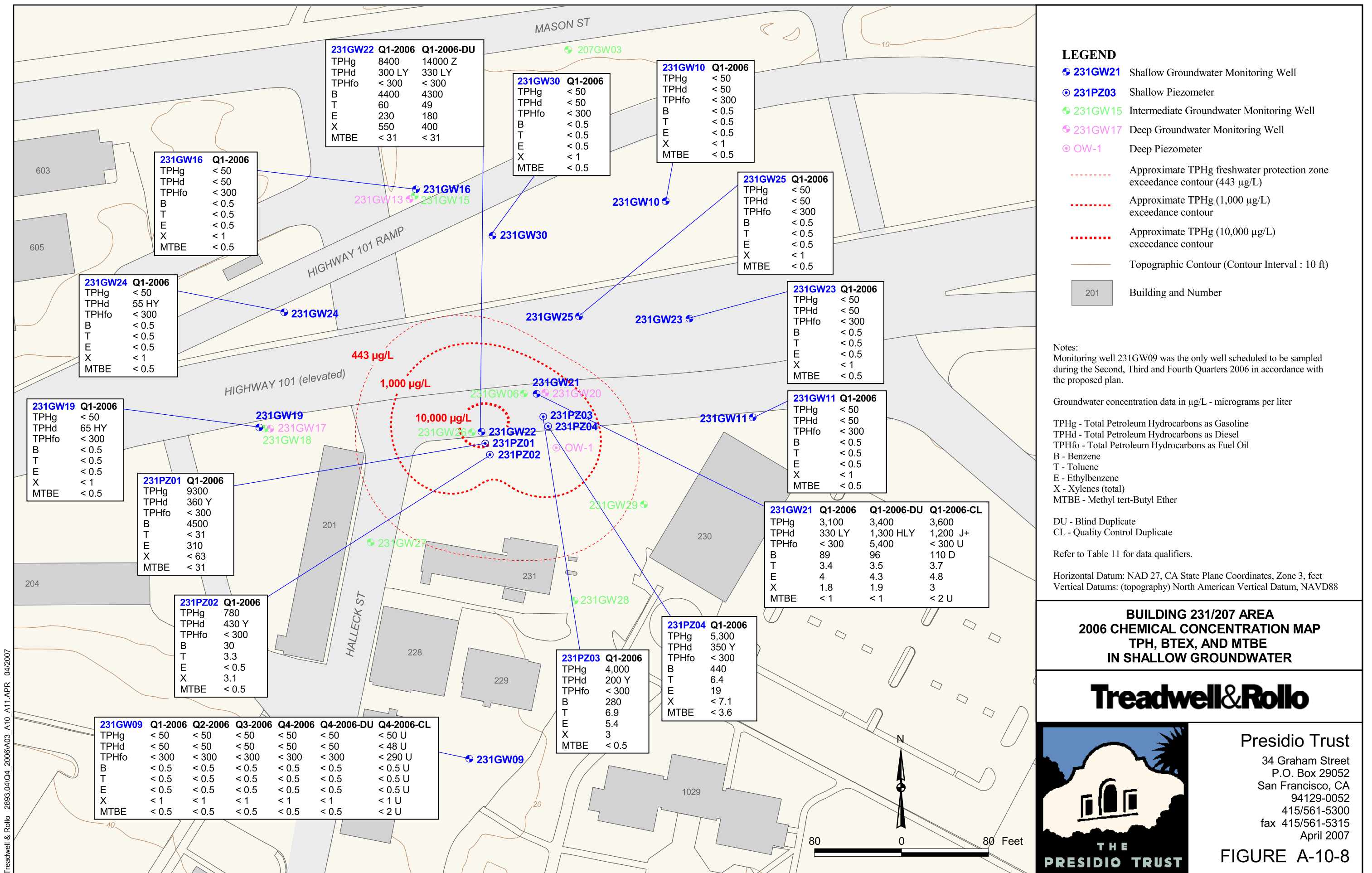
**BUILDING 231/207
4 DECEMBER 2006
DEEP GROUNDWATER
ELEVATION MAP**

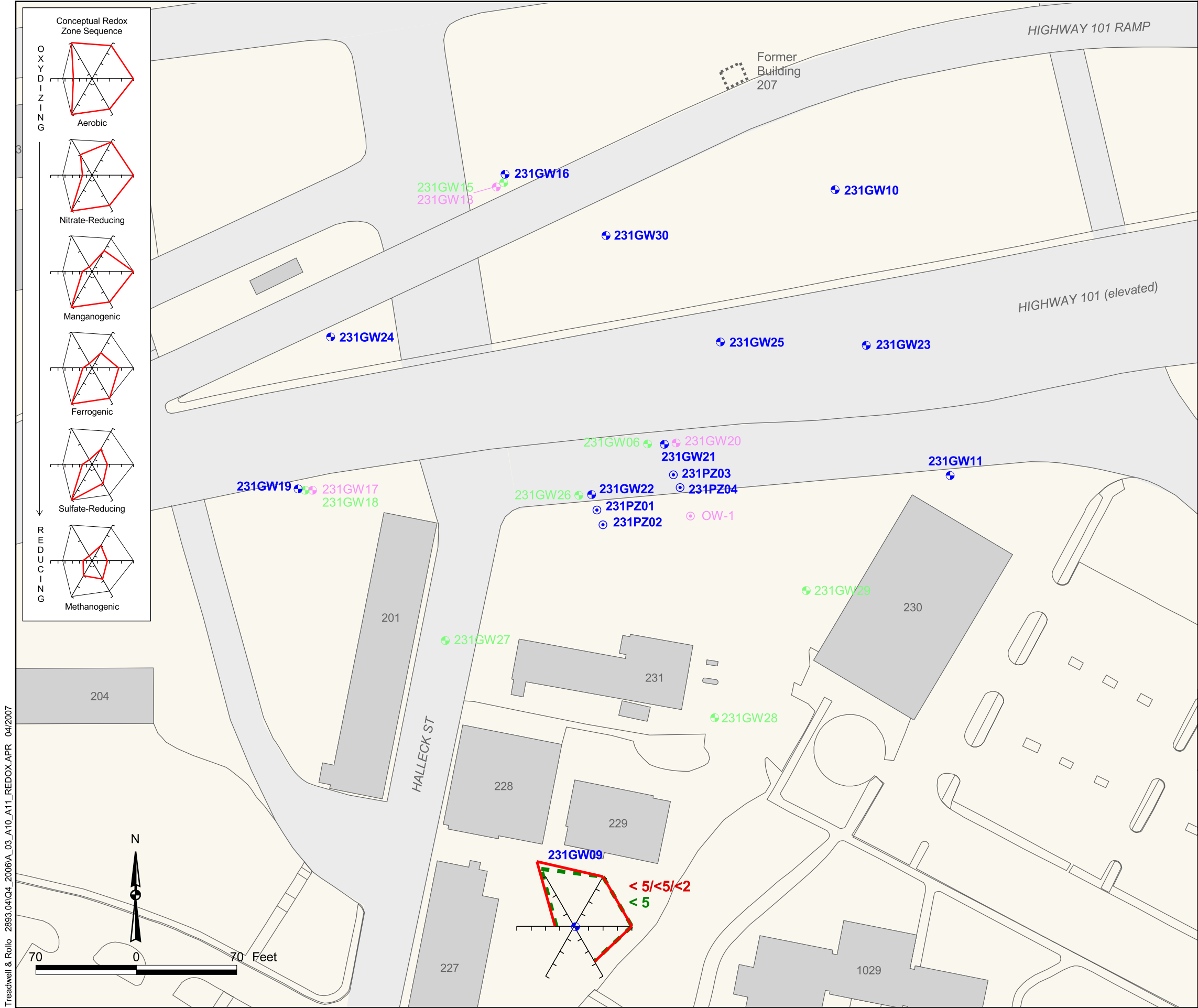


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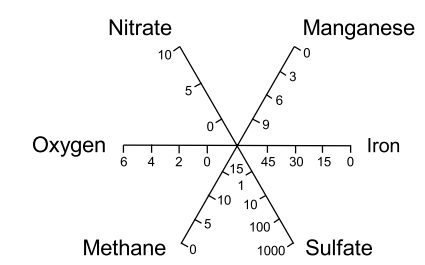
FIGURE A-10-7





LEGEND

- 231GW21 Shallow Groundwater Monitoring Well
- 231PZ03 Shallow Piezometer
- 231GW15 Intermediate Groundwater Monitoring Well
- 231GW17 Deep Groundwater Monitoring Well
- OW-1 Deep Piezometer
- 201 Building and Number



Note: All axes are in normal scale, groundwater concentrations are in milligrams per liter (mg/L).

- Q4-2006 Groundwater Concentrations
- Q4-2006 Dissolved Arsenic Concentration (µg/L) (EPA Method SW6010/SW6020)
Second value represents a blind duplicate.
Third value represents a quality control duplicate.
- Q3-2006 Groundwater Concentrations
- Q3-2006 Dissolved Arsenic Concentration (µg/L) (EPA Method SW6010/SW6020)

Notes:
Horizontal Datum: NAD 27, CA State Plane Coordinates, Zone 3, feet

**BUILDING 231/207 AREA
REDOX DIAGRAMS FOR
SHALLOW GROUNDWATER**

Treadwell&Rollo



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FIGURE A-10-9

Third Quarter 2006

Fourth Quarter 2006

BUILDING 1065/1027 AREA
APPENDIX SECTION A-11
SEMI-ANNUAL GROUNDWATER MONITORING REPORT
THIRD AND FOURTH QUARTERS 2006
Presidio of San Francisco, California

1.0 INTRODUCTION AND BACKGROUND

The Building 1065/1027 Area is located in the northeastern portion of the Presidio (Figure 1), between Gorgas Avenue to the north, General Kennedy Avenue to the east, Edie Road to the south, and a parking lot to the west. The site elevation ranges from approximately 13 to 26 feet above the PLLW datum (Montgomery Watson, 1997a).

The Building 1065/1027 Area consists of Buildings 1027, 1040, 1047, 1062, 1063, the former location of Building 1065, and areas near these buildings (Figure A-11-1). Building operations formerly associated with the Building 1065/1027 Area include a power house/steam plant, laundry, warehouse, exchange service station, post exchange auto shed/maintenance/paint shop, and a garage (Montgomery Watson, 1997a). A gas station shown on a 1921 map was also identified at a location just south of Building 1040 (Army, 1921).

Building 1027 formerly had a 10,000-gallon fuel oil underground storage tank (UST), which was removed in 1993. Following the tank removal, approximately 170 cubic yards of soil were removed and confirmation samples were collected. The analytical results of the confirmation samples indicated that TPHd was present in the soil at concentrations of 1.4 and 1.6 milligrams per kilogram (mg/kg). BTEX compounds were not detected in any soil confirmation samples (Montgomery Watson, 1996b).

During five sampling events conducted prior to May 1996, TPH was not detected in monitoring wells 1027MW01 and 1027MW03. Therefore, since May 1996, these wells have been used for groundwater elevation monitoring only. Beginning in September 1997, groundwater samples collected from the other site wells have been analyzed for TPH, BTEX, iron, manganese, general water chemistry, and natural attenuation parameters. Dissolved metals, general water chemistry, and natural attenuation parameters were eliminated from the groundwater monitoring program for the Building 1065/1027 Area in May 1999.

Summaries of dissolved oxygen, TPH, BTEX, MTBE, and dissolved metals results are presented in Tables A-11-1 through A-11-4.

An Interim Action Plan was prepared (MACTEC, 2003b) and was implemented by the Trust in November 2003. The interim action consisted of excavating and disposing of approximately 5,582 tons of petroleum impacted soil to Class II and Class III landfills for disposal. The extent

of the excavation was approximately 100 by 130 feet and ranged in depth from 8 to 12 feet (Figure A-11-1).

To evaluate changing redox conditions, pH, temperature and ORP were added to the program in the First Quarter 2006. The *Technical Memorandum, Evaluation of Arsenic and Other Metals in Groundwater at Three Corrective Action Plan Sites, Presidio of San Francisco, San Francisco, California* (MACTEC, 2006a), concluded that ORP is a good indicator for evaluating changing redox conditions. The First Quarter 2006 pH, temperature and ORP data are presented in Table A-11-1 and will be used in the ongoing redox evaluations at CAP sites.

The planned installation of a recycled water treatment and distribution system at the site is currently on hold.

2.0 SITE DESCRIPTION AND GEOLOGY

The Building 1065/1027 Area is located in the Northeastern Groundwater Area of the Marina Groundwater Basin (Figure 1). Results of a previous site investigation conducted at the Building 1065/1027 Area indicate that units, which had previously been identified as the shallow/intermediate, intermediate, and deep groundwater zones, appear to be in hydraulic connection. These units are therefore considered to be one hydrogeologic unit called the intermediate groundwater zone. Data presented in the *Interim Data Report, Building 1065 Area* indicate that there does not appear to be a continuous aquitard separating the shallow/intermediate sand and intermediate sand or an aquitard separating what was formerly identified as the “intermediate” and “deep” sand units (now referred to as “upper intermediate sand” and “lower intermediate sand”) (MACTEC, 2003a).

The shallow groundwater zone consists of saturated portions of the fill and, where present, the shallow sand. The intermediate zone consists of the intermediate/shallow sand, upper intermediate sand and lower intermediate sand (identified in previous reports as deep sand). Groundwater levels within wells screened in the intermediate sand unit indicate that it is confined to semi-confined. Comparison of water levels in adjacent shallow zone and intermediate zone well pairs shows that there is an upward vertical gradient between the intermediate and shallow groundwater zones in the northern and central portions of the site (MACTEC, 2003a). The shallow zone extends from approximately 6 to 12 feet bgs, and the intermediate zone extends from approximately 17 to 29 feet bgs. The depth of the deep zone was not defined during the Site Investigation (SI) conducted in 1997 (IT, 1997b). Groundwater flow follows the general northward topographic trend towards the San Francisco Bay (Figures A-11-2 through A-11-5).

Subsurface materials beneath the Building 1065/1027 Area consist of artificial fill, clayey silty sands, clayey silt, and sand. Building 1027 is underlain by silty sand to an approximate depth of 15 feet bgs. A brown, medium dense clayey sand is located beneath the silty sand (Montgomery Watson, 1996b). Fill material within the Building 1065/1027 Area ranges from 1 to 5.5 feet in

thickness. The fill is underlain by native clayey silty sand with an average thickness of 3 feet. The clayey silty sand is underlain by a 9-foot-thick clayey silt (Bay Mud) deposit. Beneath the Bay Mud, a sand layer is present to a depth of approximately 25 feet bgs in some areas and is underlain by a second layer of Bay Mud to depths of approximately 29 feet bgs. Dense sands underlie the second Bay Mud horizon (IT, 1997b, MACTEC, 2003a).

4.0 CORRECTIVE ACTION PLAN BUILDING 1065 AREA

The *Final Corrective Action Plan, Building 1065 Area* (CAP) (MACTEC, 2007) was submitted to all stakeholders for public review on 24 January 2007. The following chemicals were identified by the CAP as chemicals of concern in soil: TPHg, TPHd, TPHfo, VOCs (benzene, ethylbenzene, 2-hexanone, and toluene), PAHs (benzo(a)pyrene), and metals (arsenic, cadmium, lead and zinc). Additionally, the following chemicals were identified by the CAP as chemicals of concern in groundwater: TPHg, benzene, and arsenic.

Based on cleanup level exceedances, three Soil Remedial Units (RUs), Soil RUs A, B, and C, and one Groundwater RU, RU A, were identified in the CAP. The Soil RUs are described in more detail in the CAP. The Groundwater RU in the same location as Soil RU A and is believed to be associated with Soil RU A, therefore, these two RUs have been combined. The Groundwater RU A is comprised of shallow groundwater between 6 and 12 feet bgs beneath and adjacent to the south wall of Building 1063. The groundwater in this area contains TPHg and benzene above their applicable CAP cleanup levels (MACTEC, 2007).

The CAP recommends *Excavation and Offsite Disposal of Soil, Application of In Situ Oxygen Release Product as Necessary, Groundwater Monitoring* as the preferred corrective action alternative for Soil and Groundwater RU A.

Groundwater sampling at the Building 1065 Area will be conducted in accordance with the CAP following CAP approval and implementation. Cleanup levels proposed in the CAP are presented in Tables A-11-3 and A-11-6.

5.0 GROUNDWATER MONITORING

During the Third and Fourth Quarters 2006, 25 Building 1065/1027 Area monitoring wells and piezometers (Figure A-11-1) were measured for groundwater elevations.

During the Third and Fourth Quarters 2006 groundwater samples were collected from monitoring wells 1065MW9A, 1065MW9B, 1065MW101, 1065MW102, and 1047MW101 and piezometers 1065PZ1A, 1065PZ1B, 1065PZ2A, 1065PZ4A and 1065PZ5AR, in accordance with Tables 1A and 1B.

Water level meters were calibrated on 14 August and 4 December 2006 and the calibration logs can be found in Appendix B. Groundwater elevation field forms can be found in Appendix C.

5.1 Groundwater-Level Measurements and Interpretation

Groundwater elevation measurements were collected during the Third and Fourth Quarters on 14 August and 4 December 2006, respectively.

During the Third Quarter 2006, shallow groundwater elevations ranged from 7.34 to 15.52 feet above PLLW in monitoring wells 1065MW101 and 1047MW101, respectively (Figure A-11-2). Intermediate groundwater elevations ranged from 11.87 to 15.15 feet above PLLW in monitoring well 1065PZ4B and piezometer 1065PZ5B, respectively (Figure A-11-4).

During the Fourth Quarter 2006, shallow groundwater elevations ranged from 7.41 to 14.88 feet above PLLW in monitoring wells 1065MW101 and 1047MW101, respectively (Figure A-11-3). Intermediate groundwater elevations ranged from 12.05 to 15.41 feet above PLLW in monitoring well 1065PZ4B and piezometer 1065PZ5B, respectively (Figure A-11-5).

Building 1065/1027 Area shallow aquifer monitoring wells groundwater elevations were evaluated with Building 231/207 and Fill Site 6 shallow monitoring wells to better understand groundwater flow direction and gradients in this area. Monitoring well data for these adjacent sites can be found in Tables A-10-7 and A-3-6, respectively.

During the Third and Fourth Quarters 2006, the shallow aquifer groundwater flow direction in the Building 1065/1027 Area was generally northeast, towards the San Francisco Bay following the general topographic trend (Figures A-11-2 and A-11-3). The Third Quarter 2006 shallow groundwater gradient was calculated to be approximately 0.021 feet per foot. The Fourth Quarter 2006 shallow groundwater gradient was calculated to be approximately 0.014 feet per foot.

Building 1065/1027 Area intermediate aquifer monitoring wells groundwater elevations were evaluated with Building 231/207 intermediate aquifer monitoring wells to better understand groundwater flow direction and gradients in this area. Monitoring well data for the Building 231/207 Area site can be found in Table A-10-3.

During the Third Quarter 2006, the intermediate aquifer groundwater flow direction in the Building 1065/1027 Area was generally to the northwest. During the Fourth Quarter 2006, the intermediate aquifer groundwater flow direction was generally to the northwest, towards the San Francisco Bay following the general topographic trend (Figures A-11-4 and A-11-5). The Third and Fourth Quarter 2006 intermediate groundwater gradients were calculated to be approximately 0.009 and 0.006 feet per foot, respectively. Groundwater gradients and flow directions remain consistent with previous findings at the site. Flow directions and gradients are consistent with previous findings.

5.2 Monitoring Well Purging and Sampling

The Third Quarter 2006 sampling occurred between 15 and 17 August 2006. The Fourth Quarter 2006 sampling occurred between 5 and 7 December 2006. The Third and Fourth Quarter 2006 sampling at the Building 1065/1027 Area was conducted in accordance with methods shown in Tables 1A and 1B of the main text and in accordance with procedures described in the FSP (Treadwell & Rollo, 2001a).

Purge equipment, purging volumes, purge water general chemistry parameters, and sampling equipment for each monitoring well are described in the purge records located at the conclusion of this section. Purge water was stored for future disposal in one of two 2,800-gallon aboveground polyethylene storage tanks, which are located at the Central Magazine.

5.3 Groundwater Analytical Program

The groundwater samples collected during the Third and Fourth Quarters 2006 were submitted to the project laboratory for the analyses shown in Tables 1A and 1B of the main text.

The appropriate sampling containers, preservatives, and maximum holding times for each analytical method are shown in Table 5. Sample containers used for each well are described in the purge records located at the conclusion of this Appendix A subsection.

QA/QC samples were collected as part of this program. Section 6.2 of the main text discusses the QA/QC sampling and analysis performed for the Third and Fourth Quarters 2006.

6.0 GROUNDWATER ANALYTICAL RESULTS

Building 1065 Area groundwater samples collected from 1065PZ1A, 1065PZ1B, 1065PZ2A, 1065PZ4A, 1065PZ5AR, 1065MW9A, 1065MW9B, 1065MW101, and 1065MW102 were analyzed for some or all of the following parameters during the Third and Fourth Quarters 2006; general chemistry parameters, TDS, VOCs, MTBE, BTEX, total sulfide, TPHg, TPHd, TPHf, and dissolved metals. Groundwater samples collected from monitoring well 1047MW101 were analyzed for TPHg, TPHss, VOCs and MTBE, during the Third and Fourth Quarters 2006. Specific monitoring wells and piezometer samples were analyzed for parameters detailed in Tables 1A and 1B.

The following sections discuss analytical results collected at the Building 1065/1027 Area during the Third and Fourth Quarters 2006.

6.1 Dissolved Oxygen

Dissolved oxygen was measured in all wells sampled during the Third Quarter 2006 and within all wells sampled in Fourth Quarter 2006, with the exception of 1047MW101. Dissolved oxygen results are presented in Table A-11-1.

During the Third Quarter 2006, dissolved oxygen was measured at concentrations ranging from 0.24 mg/L in piezometer 1065PZ2A to 6.53 mg/L at piezometer 1065PZ4A. Dissolved oxygen was measured at new high concentrations of 6.53 mg/L within piezometer 1065PZ4A and 3.81 mg/L within monitoring well 1047MW101, respectively, during the Third Quarter 2006. The detection within piezometer 1065PZ4A was significantly higher than historical concentrations and will be monitored in future quarterly events to assess whether it is an anomalous concentration. The remaining concentrations were only just above the previous high dissolved oxygen concentrations and can be attributed to natural fluctuations. Dissolved oxygen concentrations were within historical ranges for the other Building 1065 Area wells and piezometers during the Third Quarter 2006.

During the Fourth Quarter 2006, dissolved oxygen was measured at concentrations ranging from 0.52 mg/L in piezometer 1065PZ2A to 3.80 mg/L in monitoring well 1065MW9B. Dissolved oxygen concentrations were generally within historical ranges for the Fourth Quarter 2006, but new high levels were found at 3.8 and 1.1 mg/L in wells 1065MW9B and 1065MW101, respectively.

6.2 General Chemistry Parameter Results

The majority of the general chemistry parameter results measured during the Third and Fourth Quarters 2006 are within historical ranges. General chemistry results are presented in Table A-11-2.

The following table summarizes new high and low general chemistry analytical results for the Third and Fourth Quarters 2006 within Building 1065 Area monitoring wells and piezometers when compared to historical data, and provides the range and frequency of historical results. The total number of analyses may vary depending on the sampling frequency, the date of commencement of sampling, and the number of duplicate analyses performed. Only the new high or new low concentrations are shown.

Location	Analyte	Detects / Samples	Historical Data		New High/Low Third & Fourth Quarter 2006		Units
			Minimum	Maximum	Minimum	Maximum	
General Chemistry							
1065PZ1B	Alkalinity, Total	18 / 18	230	406	--	440	mg/L
	Bicarbonate	18 / 18	230	406	--	440	mg/L
1065PZ4A	Alkalinity, Total	8 / 8	500	640	440	680	mg/L
	Bicarbonate	15 / 15	364	640	--	680	mg/L
1065MW9A	Fluoride	14 / 18	< 0.3 *	0.18	--	0.19	mg/L
1065MW9B	Alkalinity, Total	9 / 9	240	360	170	--	mg/L
	Bicarbonate	9 / 9	240	360	170	--	mg/L
	Chloride	9 / 9	48	55	--	130	mg/L
	Nitrate	9 / 9	5	5.9	--	14	mg/L
	Sulfate	9 / 9	64	75	--	180	mg/L
1065MW102	Alkalinity, Total	7 / 7	64 *	330	--	460	mg/L
	Bicarbonate	7 / 7	64	330	--	460	mg/L
	Chloride	7 / 7	15	66	--	100	mg/L
	N as Nitrite	1 / 7	< 0.05	< 0.05	--	0.36	mg/L
	Sulfate	7 / 7	11	33	8.7	37	mg/L

An asterisk (*) indicates qualified data in the above table.

The majority of the new high and low concentration from the Third and Fourth Quarters 2006 can be attributed to natural fluctuations and are not considered significant. Significant new high and low general chemistry results are discussed below.

During the Third Quarter 2006, total alkalinity and bicarbonate, were detected at concentrations significantly lower than previous concentrations measured in 1065MW9B. Additionally, chloride, nitrate, and sulfate were detected in 1065MW9B at concentrations significantly higher than historically reported in this well. The RPD between the primary and duplicate samples for chloride, nitrate, and sulfate exceeded the 50% criteria specified in the QAPP (Tetra Tech, 2001). However, the effect on the quality of the data due to RPD failure of QC split duplicate samples was not known and therefore data was not qualified by DataVal, as described in the Third Quarter 2006 DataVal report.

General chemistry concentrations will continue to be monitored during future quarterly sampling events to determine if any trends are developing.

6.3 TPH Results

All groundwater samples collected from the Building 1065 Area were analyzed for TPHg, TPHd, and TPHfo during the Third and Fourth Quarter 2006, except for the samples from monitoring well 1047MW101. Monitoring well 1047MW101 was only analyzed for TPHg and TPHss

during the Third and Fourth Quarters 2006, as proposed on Tables 1A and 1B. TPH results are presented in Table A-11-3.

TPHg was detected in piezometer 1065PZ1A during the Third and Fourth Quarters 2006 at concentrations of 230 µg/L and 260 µg/L, respectively, which is within the range of historical concentrations detected in this well.

TPHd was detected in the Third Quarter 2006 for the first time since the Third Quarter 2001 within piezometer 1065PZ4A at 90 µg/L.

Piezometer 1065PZ4A had the only detection and a new high concentration of TPHfo at 390 µg/L during the Third Quarter 2006. TPHfo has not previously been detected in 1065PZ4A. TPHfo concentrations will continue to be monitored to determine if this trend continues.

No TPHg, TPHd and TPHfo concentrations detected were in excess of CAP-specified cleanup levels.

6.4 Dissolved Metals and TDS Results

Dissolved metals results are presented in Table A-11-4. All Building 1065/1027 Area monitoring well and piezometer samples collected were analyzed for the 15 dissolved metals list defined in Tables 1A and 1B during the Third and Fourth Quarters 2006, except for monitoring well 1047MW101 which was not analyzed for dissolved metals during the Third or Fourth Quarter 2006.

The majority of the dissolved metal concentrations measured during the Third and Fourth Quarters 2006 are within historical ranges. The table below summarizes new high and low dissolved metal and TDS analytical results from the Third and Fourth Quarters 2006 when compared to historical data, and provides the range and frequency of historical results. The total number of analyses may vary depending on the sampling frequency, the date of commencement of sampling, and the number of duplicate analyses performed. Only the new high or new low data are shown.

Location	Analyte	Detects / Samples	Historical Data		New High/Low Third & Fourth Quarter 2006		Units
			Minimum	Maximum	Minimum	Maximum	
Metals, Dissolved							
1065PZ1B	Potassium	10 / 10	38,000	50,000	35,000	--	µg/L
	Total Dissolved Solids	23 / 23	500	800	--	890	mg/L
1065PZ2A	Potassium	9 / 9	750	1,200	740	--	µg/L
1065PZ4A	Calcium	8 / 8	40,000 *	51,000	--	60,000	µg/L
	Iron	15 / 15	12,800	29,000	--	30,000	µg/L
	Potassium	8 / 8	5,200 *	6,000	--	7,700	µg/L

Location	Analyte	Detects / Samples	Historical Data		New High/Low Third & Fourth Quarter 2006		Units
			Minimum	Maximum	Minimum	Maximum	
Metals, Dissolved							
1065PZ5AR	Manganese	7 / 7	2,000	2,800 *	1,900	--	µg/L
	Potassium	7 / 7	5,800	6,900	--	7,500	µg/L
	Total Dissolved Solids	10 / 10	760	950	730	--	mg/L
1065MW9A	Arsenic	21 / 23	< 5	10	--	27	µg/L
	Sodium	18 / 18	59,000	74,000	--	75,000	µg/L
1065MW9B	Calcium	12 / 12	32,000	38,000	--	40,100	µg/L
	Copper	1 / 18	< 1	< 1	--	1	µg/L
	Magnesium	12 / 12	41,000	53,000	--	57,000	µg/L
	Potassium	12 / 12	670	740	--	1,110 *	µg/L
	Sodium	9 / 9	47,000	59,000	--	60,800	µg/L
1065MW101	Arsenic	16 / 16	17	30	--	31	µg/L
1065MW102	Calcium	7 / 7	14,000	25,000	--	29,000	µg/L
	Manganese	7 / 7	14	220	--	460	µg/L
	Potassium	7 / 7	2,300	7,800	--	7,900	µg/L
	Total Dissolved Solids	7 / 7	170	560	--	680	mg/L

An asterisk (*) indicates qualified data in the above table.

Significant dissolved metals results are discussed below.

- Dissolved arsenic was detected at concentrations exceeding its CAP-specified cleanup level (10 µg/L) within 1065PZ1A, 1065PZ2A, 1065PZ4A, 1065PZ5AR, 1065MW9A, and 1065MW101 during the Third and/or Fourth Quarters 2006. The dissolved arsenic concentrations detected within 1065MW9A (27 µg/L) and 1065MW101 (31 µg/L) were detected at new high concentrations.
- Copper was detected for the first time in 1065MW9B during the Third Quarter 2006, at a concentration of 1 µg/L. Copper was not detected above laboratory limits within 1065MW9B during the Fourth Quarter 2006.
- Manganese was detected within monitoring well 1065MW102 at a new high concentration of 460 µg/L during the Fourth Quarter 2006. This concentration was over twice as high as the previous high concentration for this location.

During the Fourth Quarter 2006, within monitoring well 1065MW9A, arsenic was detected at concentrations of 27 and 16 µg/L within the primary and QC duplicate samples, respectively. The RPD between the primary and QA/QC split duplicate samples for arsenic exceeded the 50% criteria specified in the QAPP (Tetra Tech, 2001). However, the effect on the quality of the data due to RPD failure of QC split duplicate samples was not known and therefore data was not qualified by DataVal, as described in the Third Quarter 2006 DataVal report.

With the exception of arsenic, no other dissolved metals were detected above CAP-specified cleanup levels for the Building 1065/1027 Area during either the Third or Fourth Quarters 2006.

6.5 VOCs, BTEX and MTBE Results

During the Third and Fourth Quarters 2006, piezometers 1065PZ1A and 1065PZ1B and monitoring wells 1065MW101, 1065MW102 and 1047MW101 were analyzed for VOCs and MTBE. Piezometers 1065PZ2A, 1065PZ4A and 1065PZ5AR and monitoring wells 1065MW9A and 1065MW9B were analyzed for BTEX and MTBE. VOC, BTEX, and MTBE analytical results are presented in Table A-11-3.

The table below summarizes new high and low VOC, BTEX, and MTBE results from the Third and Fourth Quarters 2006 when compared to historical data, and provides the range and frequency of historical results. The total number of analyses may vary depending on the sampling frequency, the date of commencement of sampling, and the number of duplicate analyses performed. Only the new high or new low data are shown.

Location	Analyte	Detects / Samples	Historical Data		New High/Low Third & Fourth Quarter 2006		Units
			Minimum	Maximum	Minimum	Maximum	
BTEX							
1065MW9B	Toluene	1 / 23	< 0.2	< 0.5	--	0.61	µg/L
	Total Xylenes	1 / 23	< 0.5 *	< 1	--	0.6 *	µg/L
1065MW102	Benzene	1 / 10	< 0.5	< 0.5	--	0.04 *	µg/L
Volatile Organic Compounds							
1065PZ4A	MTBE	2 / 20	< 2	5.9	--	7 *	µg/L
1065PZ5AR	MTBE	2 / 14	< 2 *	3.5 *	--	3.9 *	µg/L
1065MW9B	MTBE	2 / 23	< 0.5	< 2.5	--	3.4 *	µg/L

An asterisk (*) indicates qualified data in the above table.

Significant VOC, BTEX, and MTBE results are discussed below.

During the Third Quarter 2006, benzene was detected (below the typical reporting limit for benzene) for the first time within monitoring well 1065MW102 at a concentration of 0.04 µg/L. The concentration of benzene at monitoring well 1065MW102 is below the CAP-specified cleanup level of 1 µg/L for benzene at the Building 1065 Area.

MTBE was detected at a new high concentration of 3.9 µg/L within piezometer 1065PZ5AR and at 2.3 and 3.4 µg/L in the primary and duplicate samples collected from monitoring well 1065MW9B, respectively. The MTBE concentrations were below the CAP-specified cleanup level of 13 µg/L for MTBE at the Building 1065 Area.

During the Fourth Quarter 2006, toluene and total xylenes were detected in monitoring well 1065MW9B at concentrations of 0.61 and 0.6 µg/L, respectively. The concentrations of

toluene and total xylenes are well below the cleanup level of 150 µg/L for toluene and 1,750 µg/L for total xylenes at the Building 1065 Area. MTBE was detected at a new high concentration of 7 µg/L within piezometer 1065PZ4A. The concentration of MTBE was below the CAP-specified cleanup level of 13 µg/L for MTBE at the Building 1065 Area.

No other VOC, MTBE or BTEX compounds were detected during the Fourth Quarter 2006. VOC, MTBE and BTEX concentrations will continue to be monitored, in accordance with the CAP.

7.0 GROUNDWATER REDOX PARAMETERS

Several parameters were measured in the field and in the laboratory to help determine the redox state of groundwater at the Building 1065 Area.

The Trust has currently preparing a *Technical Memorandum: Arsenic and Other Metals in Groundwater at Three Corrective Action Sites, Presidio of San Francisco, California* (MACTEC, 2006a). This technical memorandum discusses the reduction/oxidation (redox) state of groundwater at the Building 1065 Area using data collected as part of the Presidio-wide Groundwater Monitoring Program. Groundwater redox parameter results collected during the Third and Fourth Quarters 2006 were generally within the range of previously detected concentrations at the Building 1065 Area.

Building 1065 Area monitoring wells and piezometers sampled during the Third and Fourth Quarters 2006 are included with modified redox diagrams developed for this site and the associated Fill Site 6 monitoring wells on Figures A-11-6 and A-11-7, respectively. The redox diagrams were generated using the Sequence™ program and concentrations of dissolved oxygen, nitrate, manganese, iron, sulfate and methane and are plotted on Figures A-11-6 and A-11-7. Each redox diagram consists of multiple axes, with each individual axis representing one of the above analytes. Each redox diagram is associated with one monitoring well location. The relative shape of each redox diagram represents an approximation of the redox state within the well studied. In general, the larger the polygon the more oxidizing the groundwater environment is at the well location, conversely, the smaller the polygon the more reducing the environment.

8.0 CONCLUSIONS AND RECOMMENDATIONS

TPHd was detected within piezometer 1065PZ4A in the Third Quarter 2006 at 90 µg/L, for the first time since the Third Quarter 2001, however, no TPHg, TPHd and TPHfo concentrations detected were in excess of CAP-specified cleanup levels.

Dissolved arsenic continues to be detected at concentrations exceeding the CAP-specified cleanup level (10 µg/L) within 1065PZ1A, 1065PZ2A, 1065PZ4A, 1065PZ5AR, 1065MW9A,

and 1065MW101. The dissolved arsenic concentrations detected within 1065MW9A and 1065MW101 were detected at new high concentrations.

Several new high concentrations of MTBE were detected during the Third and Fourth Quarters 2006 within the Building 1065 Area, but the concentrations are all under the CAP-specified cleanup level of 13µg/L for MTBE at the Building 1065 Area.

Groundwater sampling frequency was reduced to annual within all Building 1065/1027 Area wells and piezometers, except 1065PZ1A, 1065PZ1B, 1065PZ2A, 1065PZ4A, 1065PZ5AR, 1065MW9A, 1065MW9B, 1065MW101, 1065MW102, and 1047MW101 until the Building 1065/1027 Area CAP is approved and implemented, at which time the groundwater monitoring program will be conducted in accordance with the CAP.

Table A-11-1
Summary of Dissolved Oxygen Measurements
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Dissolved Oxygen	ORP	pH	Temperature
	Analytical Method	Field	Field	Field	Field
		(mg/L)	(mV)	pH units	C°
1065PZ1A (shallow)	12/05/06	0.75	-82	7.02	15.29
	08/17/06	0.32	-106.40	6.87	20.27
	05/24/06	0.38	-124.1	7	17.68
	03/14/06	1.23	3.5	6.88	12.67
	12/01/05	0.7	NR	NR	NR
	08/31/05	0.5	NR	NR	NR
	06/02/05	0.29	NR	NR	NR
	03/29/05	0.4	NR	NR	NR
	12/17/04	0.9	NR	NR	NR
	08/11/04	0.1	NR	NR	NR
	05/26/04	0.2	NR	NR	NR
	03/19/04	0.2	NR	NR	NR
	12/05/03	0.3	NR	NR	NR
	08/19/03	0.14	NR	NR	NR
	06/11/03	0.5	NR	NR	NR
	03/17/03	0.09	NR	NR	NR
	12/06/02	0.13	NR	NR	NR
	09/05/02	0.79	NR	NR	NR
	05/30/02	1.1	NR	NR	NR
	03/07/02	0.53	NR	NR	NR
	11/29/01	0.17	NR	NR	NR
	09/06/01	0.28	NR	NR	NR
	05/11/01	0.36	NR	NR	NR
	05/27/99	6.83 (J25)	NR	NR	NR
	03/08/99	0.56	NR	NR	NR
	11/30/98	2.98	NR	NR	NR
	08/26/98	1.75	NR	NR	NR
	06/10/98	1.31	NR	NR	NR
	03/16/98	2.99	NR	NR	NR
	12/18/97	0.61	NR	NR	NR
	09/17/97	0.87	NR	NR	NR
1065PZ1B (intermediate)	12/05/06	1.21	211	6.82	14.8
	08/15/06	1.97	-33	6.90	17.20
	05/24/06	2.7	2.2	7.68	18.13
	03/07/06	0.05	-0.2	7.7	16.9
	11/29/05	0.91	NR	NR	NR
	08/30/05	0.7	NR	NR	NR
	05/24/05	0.7	NR	NR	NR
	04/05/05	0.9	NR	NR	NR
	12/17/04	0.7	NR	NR	NR
	08/13/04	0.8	NR	NR	NR
	05/27/04	0.56	NR	NR	NR
	03/10/04	1	NR	NR	NR
	12/03/03	0.9	NR	NR	NR
	08/13/03	1	NR	NR	NR
	06/03/03	1	NR	NR	NR
	03/17/03	0.2	NR	NR	NR
	12/09/02	0.7	NR	NR	NR
	09/03/02	0.7	NR	NR	NR
	06/03/02	1.1	NR	NR	NR
	03/13/02	0.8	NR	NR	NR
	12/03/01	4	NR	NR	NR

Table A-11-1
Summary of Dissolved Oxygen Measurements
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Dissolved Oxygen	ORP	pH	Temperature
	Analytical Method	Field	Field	Field	Field
		(mg/L)	(mV)	pH units	C°
1065PZ1B (intermediate)	09/05/01	0.6	NR	NR	NR
	05/16/01	3.22	NR	NR	NR
	05/27/99	0.59	NR	NR	NR
	03/08/99	0.19	NR	NR	NR
	11/30/98	0.21	NR	NR	NR
	08/26/98	0.16	NR	NR	NR
	06/10/98	0.14	NR	NR	NR
	03/16/98	0.51	NR	NR	NR
	12/18/97	0.29	NR	NR	NR
1065PZ2A (shallow)	09/17/97	0.6	NR	NR	NR
	12/06/06	0.52	-123.7	6.91	16.65
	08/17/06	0.24	-108.8	6.81	23.28
	05/24/06	0.14	-116.8	7.12	19.66
	03/13/06	0.43	-104.1	7.02	15.75
	12/01/05	0.4	NR	NR	NR
	08/30/05	0.3	NR	NR	NR
	05/24/05	0.2	NR	NR	NR
	04/01/05	0.2	NR	NR	NR
	12/15/04	0.2	NR	NR	NR
	08/11/04	0.1	NR	NR	NR
	05/25/04	0.1	NR	NR	NR
	03/15/04	0.2	NR	NR	NR
	12/05/03	0.15	NR	NR	NR
	08/19/03	0.2	NR	NR	NR
	06/04/03	0.2	NR	NR	NR
	03/17/03	0.06	NR	NR	NR
	12/05/02	0.1	NR	NR	NR
	09/05/02	0.52	NR	NR	NR
	05/29/02	1.1	NR	NR	NR
	03/07/02	0.11	NR	NR	NR
	11/29/01	0.18	NR	NR	NR
	09/05/01	0.38	NR	NR	NR
	05/11/01	0.25	NR	NR	NR
	05/25/99	6.78 (J25)	NR	NR	NR
	03/03/99	0.79	NR	NR	NR
	11/24/98	1.02 (J25)	NR	NR	NR
	08/25/98	0.34	NR	NR	NR
	06/09/98	0.39	NR	NR	NR
	03/12/98	1.02	NR	NR	NR
	12/17/97	0.47	NR	NR	NR
	09/16/97	1	NR	NR	NR
1065PZ2B (intermediate)	03/07/06	0.12	-0.9	7.25	17.9
	04/05/05	0.9	NR	NR	NR
	03/10/04	0.23	NR	NR	NR
	12/03/03	1	NR	NR	NR
	08/13/03	0.9	NR	NR	NR
	06/06/03	0.97	NR	NR	NR
	03/17/03	0.4	NR	NR	NR

Table A-11-1
Summary of Dissolved Oxygen Measurements
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Dissolved Oxygen	ORP	pH	Temperature
	Analytical Method	Field	Field	Field	Field
		(mg/L)	(mV)	pH units	C°
1065PZ2B (intermediate)	12/09/02	0.8	NR	NR	NR
	09/04/02	0.8	NR	NR	NR
	06/03/02	1.1	NR	NR	NR
	03/13/02	0.6	NR	NR	NR
	12/04/01	1.5	NR	NR	NR
	09/05/01	0.7	NR	NR	NR
	05/16/01	5.82	NR	NR	NR
	05/25/99	1.87	NR	NR	NR
	03/03/99	0.77	NR	NR	NR
	11/24/98	0.61	NR	NR	NR
	08/25/98	0.53	NR	NR	NR
	06/09/98	0.53	NR	NR	NR
	03/12/98	0.59	NR	NR	NR
	12/17/97	0.71	NR	NR	NR
	09/16/97	0.31	NR	NR	NR
1065PZ3A (shallow)	03/13/06	1.77	223.1	6.87	14.93
	04/05/05	3.4	NR	NR	NR
	03/15/04	3.8	NR	NR	NR
	12/08/03	NM	NR	NR	NR
	08/19/03	NM	NR	NR	NR
	06/02/03	NM	NR	NR	NR
	03/14/03	NM	NR	NR	NR
	12/05/02	3.7	NR	NR	NR
	09/05/02	3.5	NR	NR	NR
	05/29/02	2.5	NR	NR	NR
	03/07/02	2.75	NR	NR	NR
	11/29/01	3.44	NR	NR	NR
	09/05/01	8.56	NR	NR	NR
	05/11/01	1.62	NR	NR	NR
	05/24/99	8.59	NR	NR	NR
	03/01/99	7.59	NR	NR	NR
	11/23/98	NM	NR	NR	NR
	08/24/98	7.52	NR	NR	NR
	06/08/98	5.6	NR	NR	NR
	03/11/98	4.69	NR	NR	NR
	12/16/97	5.03	NR	NR	NR
1065PZ3B (intermediate)	03/09/06	0.72	286.2	7.21	16.9
	04/06/05	2.2	NR	NR	NR
	03/10/04	0.69	NR	NR	NR
	12/03/03	1	NR	NR	NR
	08/14/03	1.1	NR	NR	NR

Table A-11-1
Summary of Dissolved Oxygen Measurements
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Dissolved Oxygen	ORP	pH	Temperature
	Analytical Method	Field	Field	Field	Field
		(mg/L)	(mV)	pH units	C°
1065PZ3B (intermediate)	06/03/03	3.3	NR	NR	NR
	03/18/03	2.6	NR	NR	NR
	12/10/02	2.9	NR	NR	NR
	09/03/02	1	NR	NR	NR
	06/04/02	3.7	NR	NR	NR
	03/13/02	0.8	NR	NR	NR
	12/04/01	5	NR	NR	NR
	09/05/01	4	NR	NR	NR
	05/17/01	7.33	NR	NR	NR
	05/24/99	2.4	NR	NR	NR
	03/01/99	2.09	NR	NR	NR
	11/23/98	1.96	NR	NR	NR
	08/24/98	2.51	NR	NR	NR
	06/08/98	2.31	NR	NR	NR
	03/11/98	2.7	NR	NR	NR
	12/16/97	3.02	NR	NR	NR
	09/15/97	3.09	NR	NR	NR
1065PZ4A (shallow)	12/06/06	0.7	-134.7	6.79	19.17
	08/17/06	6.53	-116.6	6.70	21.00
	05/24/06	0.74	-125.9	6.85	19.04
	03/09/06	0.51	-112.8	5.19	16.59
	11/29/05	0.3	NR	NR	NR
	08/30/05	0.2	NR	NR	NR
	06/02/05	0.28	NR	NR	NR
	04/01/05	0.1	NR	NR	NR
	03/15/04	0.3	NR	NR	NR
	12/05/03	0.2	NR	NR	NR
	08/19/03	0.12	NR	NR	NR
	06/11/03	0.35	NR	NR	NR
	03/14/03	0.09	NR	NR	NR
	12/05/02	0.15	NR	NR	NR
	09/05/02	0.31	NR	NR	NR
	06/04/02	0.25	NR	NR	NR
	03/07/02	2.53	NR	NR	NR
	11/29/01	0.11	NR	NR	NR
	09/05/01	0.36	NR	NR	NR
	05/11/01	0.27	NR	NR	NR
	05/27/99	0.62	NR	NR	NR
	03/08/99	0.17	NR	NR	NR
	12/01/98	0.21	NR	NR	NR
	08/27/98	0.17	NR	NR	NR
	06/11/98	1.99 (J25)	NR	NR	NR
	03/17/98	0.63	NR	NR	NR
	12/22/97	0.31	NR	NR	NR
	09/18/97	0.39	NR	NR	NR

Table A-11-1
Summary of Dissolved Oxygen Measurements
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Dissolved Oxygen	ORP	pH	Temperature
	Analytical Method	Field	Field	Field	Field
		(mg/L)	(mV)	pH units	C°
1065PZ4B (intermediate)	03/13/06	1.79	146	6.9	16.3
	04/05/05	3.2	NR	NR	NR
	12/17/04	NM	NR	NR	NR
	03/17/04	0.33	NR	NR	NR
	12/05/03	1.6	NR	NR	NR
	08/14/03	1.2	NR	NR	NR
	06/06/03	1.7	NR	NR	NR
	03/17/03	1.3	NR	NR	NR
	12/09/02	2.5	NR	NR	NR
	09/04/02	1.7	NR	NR	NR
	06/04/02	2.2	NR	NR	NR
	03/13/02	2.8	NR	NR	NR
	12/04/01	4	NR	NR	NR
	09/05/01	0.96	NR	NR	NR
	05/09/01	2.1	NR	NR	NR
	05/27/99	1.47	NR	NR	NR
	03/08/99	1.22	NR	NR	NR
	12/01/98	1.17	NR	NR	NR
	08/27/98	1.9	NR	NR	NR
	06/11/98	2.13	NR	NR	NR
	03/17/98	1.2	NR	NR	NR
	12/22/97	1.22	NR	NR	NR
	09/18/97	1.5	NR	NR	NR
1065PZ5AR (shallow)	12/07/06	3.66	-128.1	6.64	15.6
	08/16/06	0.42	-176.50	NA	21.9
	05/24/06	4.21	-88.3 NM	7.11	15.5
	03/07/06	0.41	12	7.13	12.9
	11/29/05	0.72	NR	NR	NR
	08/30/05	0.8	NR	NR	NR
	05/24/05	0.5	NR	NR	NR
	04/11/05	0.1	NR	NR	NR
	03/10/04	0.11	NR	NR	NR
	12/08/03	1	NR	NR	NR
	08/14/03	1	NR	NR	NR
	06/09/03	NM	NR	NR	NR
	03/17/03	0.2	NR	NR	NR
1065PZ5B (intermediate)	03/13/06	3.98	122	7	14.4
	04/11/05	3	NR	NR	NR
	03/10/04	0.21	NR	NR	NR
	12/08/03	1.5	NR	NR	NR
	08/14/03	1.2	NR	NR	NR
	06/04/03	2	NR	NR	NR
	03/17/03	1.8	NR	NR	NR
	12/10/02	2.3	NR	NR	NR
	09/03/02	1	NR	NR	NR
	06/04/02	3	NR	NR	NR
	03/13/02	3.2	NR	NR	NR
	12/03/01	3.8	NR	NR	NR
	09/05/01	1.4	NR	NR	NR
	05/16/01	4.35	NR	NR	NR

Table A-11-1
Summary of Dissolved Oxygen Measurements
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Dissolved Oxygen	ORP	pH	Temperature
	Analytical Method	Field	Field	Field	Field
		(mg/L)	(mV)	pH units	C°
1065PZ5B (intermediate)	05/25/99	2.51	NR	NR	NR
	03/03/99	2.46	NR	NR	NR
	11/24/98	2.62	NR	NR	NR
	08/25/98	3.46	NR	NR	NR
	06/09/98	2.65	NR	NR	NR
	03/12/98	2.22	NR	NR	NR
	12/17/97	2.59	NR	NR	NR
	09/16/97	2.1	NR	NR	NR
1065PZ6A (shallow)	04/06/05	2.3	NR	NR	NR
	03/17/04	0.32	NR	NR	NR
	12/08/03	0.2	NR	NR	NR
	08/14/03	1.3	NR	NR	NR
	06/10/03	4.2	NR	NR	NR
	03/17/03	3.8	NR	NR	NR
	12/10/02	4.1	NR	NR	NR
	09/04/02	1.2	NR	NR	NR
	06/04/02	5.1	NR	NR	NR
	03/13/02	3.8	NR	NR	NR
	12/04/01	3.8	NR	NR	NR
	09/05/01	1.49	NR	NR	NR
	05/17/01	5.61	NR	NR	NR
	05/24/99	5.36	NR	NR	NR
	03/01/99	5.35	NR	NR	NR
	11/23/98	4.63	NR	NR	NR
	08/24/98	5.09	NR	NR	NR
	06/08/98	4.28	NR	NR	NR
	03/11/98	5.17	NR	NR	NR
	12/16/97	4.44	NR	NR	NR
	09/15/97	3.51	NR	NR	NR
1065PZ6B (intermediate)	03/10/06	1.27	137.1	6.69	17.9
	04/05/05	1.1	NR	NR	NR
	03/09/04	0.91	NR	NR	NR
	12/03/03	1.1	NR	NR	NR
	08/13/03	1.1	NR	NR	NR
	06/03/03	0.9	NR	NR	NR
	03/17/03	1.6	NR	NR	NR
	12/09/02	2.8	NR	NR	NR
	09/03/02	1.1	NR	NR	NR
	06/04/02	3.5	NR	NR	NR
	03/13/02	0.9	NR	NR	NR
	12/04/01	2	NR	NR	NR

Table A-11-1
Summary of Dissolved Oxygen Measurements
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Dissolved Oxygen	ORP	pH	Temperature
	Analytical Method	Field	Field	Field	Field
		(mg/L)	(mV)	pH units	C°
1065PZ6B (intermediate)	09/05/01	1.8	NR	NR	NR
	05/11/01	6.8	NR	NR	NR
	05/24/99	3.09	NR	NR	NR
	03/01/99	2.67	NR	NR	NR
	11/23/98	2.8	NR	NR	NR
	08/24/98	2.9	NR	NR	NR
	06/08/98	2.77	NR	NR	NR
	03/11/98	2.87	NR	NR	NR
	12/16/97	2.57	NR	NR	NR
1065PZ7A (shallow)	09/15/97	2.21	NR	NR	NR
	03/15/06	4.47	270	6.29	14.8
	04/06/05	1.1	NR	NR	NR
	03/17/04	0.1	NR	NR	NR
	12/08/03	2.2	NR	NR	NR
	08/13/03	0.8	NR	NR	NR
	06/10/03	0.5	NR	NR	NR
	03/17/03	0.1	NR	NR	NR
	12/09/02	1.1	NR	NR	NR
	09/04/02	1.2	NR	NR	NR
	06/04/02	1.3	NR	NR	NR
	03/13/02	1.5	NR	NR	NR
	12/03/01	0.7	NR	NR	NR
	09/05/01	1.71	NR	NR	NR
	05/09/01	2.5	NR	NR	NR
	05/27/99	5.58 (J25)	NR	NR	NR
	03/08/99	2.27	NR	NR	NR
	12/01/98	2.21	NR	NR	NR
	08/26/98	1.61	NR	NR	NR
	06/10/98	0.99	NR	NR	NR
	03/16/98	2.89	NR	NR	NR
	12/18/97	1.5	NR	NR	NR
	09/17/97	1.22	NR	NR	NR
1065PZ7B (intermediate)	03/15/06	0.9	180.3	6.98	14.5
	04/06/05	1.3	NR	NR	NR
	03/17/04	2.2	NR	NR	NR
	12/08/03	3.2	NR	NR	NR
	08/13/03	0.5	NR	NR	NR
	06/10/03	2.8	NR	NR	NR
	03/17/03	2	NR	NR	NR
	12/09/02	5.1	NR	NR	NR
	09/04/02	1.2	NR	NR	NR

Table A-11-1
Summary of Dissolved Oxygen Measurements
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Dissolved Oxygen	ORP	pH	Temperature
	Analytical Method	Field	Field	Field	Field
		(mg/L)	(mV)	pH units	C°
1065PZ7B (intermediate)	06/04/02	2.7	NR	NR	NR
	03/13/02	2.4	NR	NR	NR
	12/03/01	0.8	NR	NR	NR
	09/05/01	1.91	NR	NR	NR
	05/09/01	4.5	NR	NR	NR
	05/27/99	3.66	NR	NR	NR
	03/08/99	3	NR	NR	NR
	12/01/98	3.65	NR	NR	NR
	08/26/98	3.11	NR	NR	NR
	06/10/98	2.45	NR	NR	NR
	03/16/98	3.91	NR	NR	NR
	12/18/97	2.31	NR	NR	NR
	09/17/97	2.14	NR	NR	NR
1065TMW03 (shallow)	06/02/03	NM	NR	NR	NR
	03/14/03	NM	NR	NR	NR
	12/09/02	NM	NR	NR	NR
	09/06/02	NM	NR	NR	NR
	06/06/02	NM	NR	NR	NR
	03/11/02	NM	NR	NR	NR
	11/29/01	NM	NR	NR	NR
	09/06/01	NM	NR	NR	NR
	05/18/01	6.47	NR	NR	NR
	05/27/99	3.66	NR	NR	NR
	03/08/99	3	NR	NR	NR
	12/01/98	3.65	NR	NR	NR
	08/26/98	3.11	NR	NR	NR
	06/10/98	2.45	NR	NR	NR
	03/16/98	3.91	NR	NR	NR
	12/18/97	2.31	NR	NR	NR
	09/17/97	2.14	NR	NR	NR
1065MW9A (shallow)	12/05/06	0.93	177.3	6.9	19.1
	08/16/06	1.74	-103	6.66	19.90
	05/24/06	2.13	-112	6.81	18.2
	03/09/06	0.59	121.3	6.9	15.5
	11/30/05	0.77	NR	NR	NR
	08/31/05	0.7	NR	NR	NR
	05/24/05	0.7	NR	NR	NR
	04/06/05	1.1	NR	NR	NR
	12/17/04	0.85	NR	NR	NR
	08/11/04	0.3	NR	NR	NR
	05/27/04	0.5	NR	NR	NR
	03/10/04	0.39	NR	NR	NR
	12/08/03	1.6	NR	NR	NR
	08/14/03	0.9	NR	NR	NR
	06/09/03	3.1	NR	NR	NR
	03/18/03	1.4	NR	NR	NR

Table A-11-1
Summary of Dissolved Oxygen Measurements
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Dissolved Oxygen	ORP	pH	Temperature
	Analytical Method	Field	Field	Field	Field
		(mg/L)	(mV)	pH units	C°
1065MW9B (intermediate)	12/07/06	3.8	191	6.6	15.5
	08/16/06	1.82	197.40	6.89	17.70
	05/25/06	0.36	57.7	6.8	17.3
	03/09/06	0.61	200.1	7.51	15.5
	11/29/05	0.9	NR	NR	NR
	05/24/05	0.7	NR	NR	NR
	04/06/05	2.1	NR	NR	NR
	12/17/04	0.6	NR	NR	NR
	08/11/04	1.6	NR	NR	NR
	05/27/04	0.76	NR	NR	NR
	03/10/04	0.37	NR	NR	NR
	12/08/03	3	NR	NR	NR
	08/13/03	0.9	NR	NR	NR
	06/09/03	2.1	NR	NR	NR
	03/18/03	1.4	NR	NR	NR
1065MW10A (shallow)	03/16/06	0.5	-120.3	6.65	14.8
	04/11/05	0.8	NR	NR	NR
	03/10/04	0.24	NR	NR	NR
	12/08/03	0.8	NR	NR	NR
	08/14/03	0.8	NR	NR	NR
	06/06/03	0.6	NR	NR	NR
1065MW10B (intermediate)	03/18/03	1.2	NR	NR	NR
	03/09/06	NM	NM	7.06	15.3
	04/11/05	2.6	NR	NR	NR
	03/10/04	1.7	NR	NR	NR
	12/03/03	2.6	NR	NR	NR
	08/13/03	1	NR	NR	NR
1065MW11A (shallow)	06/03/03	0.9	NR	NR	NR
	03/18/03	1.9	NR	NR	NR
	03/09/06	0.52	112.1	7.69	14.3
	04/11/05	1.2	NR	NR	NR
	03/17/04	0.92	NR	NR	NR
	12/08/03	5.8	NR	NR	NR
1065MW11B (intermediate)	08/14/03	0.8	NR	NR	NR
	06/06/03	7.7	NR	NR	NR
	03/18/03	0.4	NR	NR	NR
	03/07/06	NM	NM	7	12.9
	04/11/05	2.2	NR	NR	NR
	03/09/04	1.91	NR	NR	NR
1065MW101 (shallow)	12/04/03	2.91	NR	NR	NR
	08/13/03	1.2	NR	NR	NR
	06/03/03	1.2	NR	NR	NR
	03/18/03	1.1	NR	NR	NR
	12/06/06	1.1	-97.1	6.79	15.76
	08/16/06	0.47	-97.40	6.71	22.00
	05/24/06	0.22	-101.4	6.87	18.98
	03/13/06	0.82	-95.5	6.88	14.46
	11/29/05	0.8	NR	NR	NR
	08/31/05	0.7	NR	NR	NR
	05/26/05	0.3	NR	NR	NR
	03/29/05	0.2	NR	NR	NR
	12/17/04	0.3	NR	NR	NR
	08/13/04	0.2	NR	NR	NR

Table A-11-1
Summary of Dissolved Oxygen Measurements
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Dissolved Oxygen	ORP	pH	Temperature
	Analytical Method	Field	Field	Field	Field
		(mg/L)	(mV)	pH units	C°
1065MW102 (shallow)	12/06/06	1.01	-100.8	7.06	14.09
	08/16/06	0.66	-88.50	6.77	20.77
	05/24/06	0.25	-40.6	6.73	17.89
	03/14/06	4.87	91.1	6.72	11.69
	11/29/05	0.6	NR	NR	NR
	08/30/05	0.2	NR	NR	NR
	05/24/05	1.3	NR	NR	NR
	03/29/05	1	NR	NR	NR
	12/15/04	0.2	NR	NR	NR
	08/11/04	0.2	NR	NR	NR
1047MW101 (shallow) (shallow)	12/07/06	NM	NM	6.3	14.1
	08/16/06	3.81	204.10	6.93	18.10
	05/25/06	1.21	137.1	6.94	15.9
	03/07/06	1	181.7	7.5	13.8
	11/30/05	0.7	NR	NR	NR
	08/30/05	0.9	NR	NR	NR
	05/26/05	0.6	NR	NR	NR
	04/06/05	1.1	NR	NR	NR
	12/16/04	0.7	NR	NR	NR
	08/13/04	2.8	NR	NR	NR
	05/27/04	0.91	NR	NR	NR
	03/11/04	3.39	NR	NR	NR
	12/10/03	1.5	NR	NR	NR

Notes

mg/L - milligrams per liter

NM - Not measured

NR - Not reported

Table 11 in the main report identifies current and historical data qualifiers.

Table A-11-2
Results of General Chemistry Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Sulfide
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ SW9056	E300.0/ SW9056
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
1065PZ1A (shallow)	12/05/06	590	590	71	0.23	< 0.05	< 0.05	< 0.5	< 0.04
	08/17/06	560	560	72	0.22	< 0.05	< 0.05	< 0.5	< 0.04 UJ
	05/24/06	590	590	75	0.2	< 0.05	< 0.05	0.88	< 0.04 R
	03/14/06	500	500	64	0.19	0.76	< 0.05	14	< 0.04
	12/01/05	590	590	75	0.24	< 0.05	< 0.05	0.58	< 0.04
	08/31/05	580	580	63	0.24	< 0.05	< 0.05	< 0.5	< 0.04
	06/02/05	580	580	63	0.27	< 0.05	< 0.05	4.7	< 0.04
	03/29/05	480	480	42	0.19	0.37	< 0.05	32	< 0.04
	03/08/99	551	551	64.4	NA	1.7	NA	15	NA
	11/30/98	602	602	89	NA	0.46	NA	< 0.5	NA
	08/26/98	550	550	63	NA	< 0.4	NA	< 5	NA
	06/10/98	572	572	56.4	NA	0.995	NA	9.18	NA
	03/16/98	518	518	48.6	NA	2.84	NA	27.9	NA
1065PZ1B (intermediate) DUP1205061A 1065PZ1BCL DUP0524052A	12/18/97	588	588	79.3	NA	0.013	NA	1.08	NA
	09/17/97	272	272	18.4 D	NA	0.678	NA	38.6	NA
	12/05/06	360	360	160	< 0.1	0.22	< 0.05	72	< 0.04
	12/05/06	340	340	160	< 0.1	0.22	< 0.05	70	< 0.04
	12/05/06	335	335	174	< 1 U	0.27	< 0.1 U	82.2	< 0.05
	08/15/06	440	440	180	< 0.1	< 0.05	< 0.05	60	0.05
	05/24/06	230	230	98	< 0.1	0.42	< 0.05	43	< 0.04 R
	03/07/06	390	390	180	< 0.1	< 0.05	< 0.05	55	0.06
	11/29/05	350 J+	350	160	< 0.1	0.24	< 0.05	62	< 0.04
	08/30/05	310	310	120	< 0.1 UJ	0.26	< 0.05 UJ	75	< 0.04
	05/24/05	350	350	170	< 0.1	< 0.05	< 0.05	55	0.05
	05/24/05	370	370	170	< 0.1	0.05	< 0.05	57	< 0.04
	04/05/05	380	380	170	< 0.1	0.09	< 0.05	57	< 0.04
	03/08/99	391	391	65	NA	< 0.08	NA	67	NA
	11/30/98	389	389	87.7	NA	0.12	NA	82	NA
	08/26/98	390	390	58	NA	< 0.5	NA	66	NA
	08/26/98	390	390	58	NA	< 0.5	NA	66	NA
	06/10/98	406	406	59	NA	0.051	NA	62.7	NA
	03/16/98	384	384	57.8 D	NA	0.02	NA	63.8 D	NA
	12/18/97	393	393	65.9 D	NA	< 0.01	NA	71.4 D	NA
	09/17/97	372	372	61.7 D	NA	0.09	NA	72 D	NA

Table A-11-2
Results of General Chemistry Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Sulfide
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ SW9056	E300.0/ SW9056
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
1065PZ2A (shallow)	12/06/06	340	340	57	0.26	< 0.05	< 0.05	2.4	< 0.04 UJ
	08/17/06	300	300	50	0.29	< 0.05	< 0.05	1.4	< 0.04 UJ
	05/24/06	340	340	59	0.26	< 0.05	< 0.05	5.5	< 0.04 R
	03/13/06	270	270	90	0.29	< 0.05 UJ	< 0.05 UJ	18	< 0.04 UJ
	12/01/05	340	340	37	0.28	< 0.05	< 0.05	2.9	< 0.04
	08/30/05	350	350	37	0.28 J-	< 0.05	< 0.05 UJ	< 0.5	< 0.04
	05/24/05	330	330	39	0.24	< 0.05	< 0.05	< 0.5	< 0.04
	04/01/05	300	300	30	0.28	0.13	< 0.05	33	< 0.04
	04/01/05	290	290	30	0.32	0.16	< 0.05	35	< 0.04
	03/03/99	353	353	63.7	NA	< 0.04	NA	12	NA
	11/24/98	368	368	99.7	NA	1.1	NA	26	NA
	08/25/98	350	350	57	NA	< 1	NA	< 13	NA
	08/25/98	NA	350	NA	NA	NA	NA	NA	NA
	06/09/98	383	383	62.9	NA	0.074	NA	2.22	NA
	03/12/98	358	358	67.3 D	NA	0.012	NA	1.67	NA
1065PZ2B (intermediate)	12/17/97	385	385	81.8 D	NA	0.01	NA	1.84	NA
	09/16/97	358	358	77.2 D	NA	< 0.01	NA	4.34	NA
	03/07/06	200	200	36	< 0.1	2.8	< 0.05	55	< 0.04
	04/05/05	180	180	35	< 0.1	2.6	0.06	50	< 0.04
	03/03/99	NA	156	51.5	NA	5.2	NA	52	NA
	11/24/98	NA	162	60.6	NA	5.1	NA	58	NA
	08/25/98	NA	150	38	NA	3.9	NA	43	NA
	06/09/98	NA	156	43.5	NA	4.56	NA	48.5	NA
1065PZ3A (shallow) DUP0405052A 1065PZ3ACL	03/12/98	NA	162	54 D	NA	4.57 D	NA	51.2 D	NA
	12/17/97	NA	165	58.4 D	NA	4.82	NA	61.8 D	NA
	09/16/97	NA	160	57.5 D	NA	4.46 D	NA	61.1 D	NA
	03/13/06	280	280	32	0.28	0.17 J-	< 0.05 UJ	20	< 0.04 UJ
	04/05/05	430	430	71	0.26	1	< 0.05	78	< 0.04
	04/05/05	420	420	71	0.27	1	< 0.05	78	< 0.04
	04/05/05	435	435	73	0.39	1.03	< 0.02 U	79	< 0.04 U
	03/01/99	NA	245	35	NA	1	NA	32	NA
	11/23/98	NA	245	36	NA	3.2	NA	38	NA
	08/24/98	NA	240	15	NA	1	NA	19	NA
	06/08/98	NA	280	9.19 D	NA	1.42	NA	14.3	NA
	03/11/98	NA	370	34.2 D	NA	1.1 D	NA	26.4 D	NA
	12/16/97	NA	563	41.9 D	NA	2.06	NA	43.2 D	NA

Table A-11-2
Results of General Chemistry Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Sulfide
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ SW9056	E300.0/ SW9056
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
1065PZ3B (intermediate)	03/09/06	250	250	67	< 0.1	2.4	< 0.05	83	< 0.04 UJ
	04/06/05	270	270	69	< 0.1	2.1	< 0.05	83	< 0.04 UJ
	03/01/99	NA	263	111	NA	3.7	NA	100	NA
	11/23/98	NA	261	41	NA	1.3	NA	36	NA
	08/24/98	NA	260	82	NA	3.1	NA	78	NA
	06/08/98	NA	250	93.6 D	NA	3.82 D	NA	89.5 D	NA
	03/11/98	NA	238	91.8 D	NA	3.54 D	NA	76.2 D	NA
	12/16/97	NA	475	95.3 D	NA	4.02	NA	85.2 D	NA
	09/15/97	NA	226	70 D	NA	3.68 D	NA	64.4 D	NA
1065PZ4A (shallow)	12/06/06	680	680	65	< 0.1	< 0.05	< 0.05	< 0.5	< 0.04 UJ
	08/17/06	440	440	67	< 0.1	< 0.05	< 0.05	< 0.5	< 0.04 UJ
	05/24/06	580	580	68	0.16	< 0.05	< 0.05	4.7	< 0.04 R
	03/09/06	640	640	65	< 0.1	< 0.05	< 0.05	< 0.5	< 0.04 UJ
	11/29/05	570 J+	570	61	0.12	< 0.05	< 0.05	< 0.5	< 0.04
	08/30/05	550	550	62	0.12 J-	< 0.05	< 0.05 UJ	< 0.5	< 0.04
	06/02/05	530	530	57	< 2.5	< 1.3	< 1.3	< 13	< 0.04
	04/01/05	500	500	62	0.13	< 0.05	< 0.05	< 0.5	< 0.04
	03/08/99	NA	364	58.7	NA	< 0.04	NA	34	NA
	12/01/98	NA	456	76.9	NA	< 0.04	NA	18	NA
	08/27/98	NA	410	52	NA	< 0.5	NA	33	NA
	06/11/98	NA	380	52.3	NA	< 0.05	NA	38.9	NA
	03/17/98	NA	368	54.9 D	NA	0.01	NA	39.3 D	NA
	12/22/97	NA	475	66.7 D	NA	0.015	NA	25.8 D	NA
	09/18/97	NA	517	72.7 D	NA	0.034	NA	31.7 D	NA
1065PZ4B (intermediate)	03/13/06	280	280	50	< 0.1	4	< 0.05	60	< 0.04 UJ
	04/05/05	270	270	50	< 0.1	4.7	< 0.05	59	< 0.04
	03/08/99	NA	225	55.7	NA	4.2	NA	64	NA
	12/01/98	NA	225	68.2	NA	5.1	NA	71	NA
	08/27/98	NA	210	46	NA	4.3	NA	58	NA
	06/11/98	NA	224	49.2	NA	4.51	NA	59.9	NA
	03/17/98	NA	222	49.5 D	NA	4.56 D	NA	60.2 D	NA
	12/22/97	NA	225	55 D	NA	5.04 D	NA	71.7 D	NA
	09/18/97	NA	216	53.4 D	NA	4.6 D	NA	64.2 D	NA

Table A-11-2
Results of General Chemistry Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Sulfide
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ SW9056	E300.0/ SW9056
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
1065PZ5AR (shallow) DUP0307062B 1065PZ5ARCL	12/07/06	720	720	66	0.23	< 0.05	< 0.05	< 0.5	< 0.04 UJ
	08/16/06	730	730	66	0.26	< 0.05	< 0.05	< 0.5	< 0.04
	05/24/06	700	700	64	0.25	< 0.05	< 0.05	0.6	< 0.04 R
	03/07/06	780	780	68	0.2	< 0.05	< 0.05	< 0.5	< 0.04
	03/07/06	780	780	68	0.2	< 0.05	< 0.05	< 0.5	< 0.04
	03/07/06	776	776	71.1	< 1 U	< 0.02 U	< 0.02 U	0.5	< 0.05 U UJ
	11/29/05	780 J+	780	68	0.25	< 0.05	< 0.05	< 0.5	< 0.04
	08/30/05	780	780	70	0.27 J-	0.33	0.07 J-	0.67	< 0.04
	05/24/05	670	670	63	0.23	< 0.05	< 0.05	5.3	< 0.04
1065PZ5B (intermediate)	04/11/05	790	790	76	0.27	< 0.05	< 0.05	< 0.5	< 0.04
	03/13/06	230	230	40	< 0.1	3.5	< 0.05	80	< 0.04 UJ
	04/11/05	160	160	41	< 0.1	3.5	< 0.05	75	< 0.04
	03/03/99	NA	174	40.5	NA	4.3	NA	54	NA
	11/24/98	NA	163	44.2	NA	4.4	NA	48	NA
	08/25/98	140	140	26	NA	3.2	NA	33	NA
	06/09/98	NA	150	28.1	NA	3.49	NA	35.3	NA
	03/12/98	NA	154	29.7 D	NA	3.49 D	NA	39.7 D	NA
	12/17/97	NA	153	32.7 D	NA	4.3	NA	46.9 D	NA
1065PZ6A (shallow)	09/16/97	NA	153	33.9 D	NA	4.48 D	NA	49.4 D	NA
	04/06/05	240	240	85	< 0.1	4	< 0.05	100	< 0.04
	03/01/99	NA	255	72.4	NA	5.4	NA	95	NA
	03/01/99	NA	NA	72.4	NA	5.4	NA	95	NA
	11/23/98	251	251	85.8	NA	5.9	NA	110	NA
	08/24/98	240	240	56	NA	4.2	NA	75	NA
	08/24/98	NA	NA	56	NA	4.2	NA	75	NA
	06/08/98	NA	202	65.6 D	NA	18.2 D	NA	92.7 D	NA
	06/08/98	NA	NA	65.6 D	NA	18.2 D	NA	92.7 D	NA
	03/11/98	NA	254	65.8 D	NA	4.63 D	NA	87 D	NA
	03/11/98	NA	NA	65.8 D	NA	4.63 D	NA	87 D	NA
	12/16/97	NA	363	70.1 D	NA	6 D	NA	93.9 D	NA
	09/15/97	250	250	71.2 D	NA	5.58 D	NA	97.5 D	NA
	09/15/97	NA	NA	71.2 D	NA	5.58 D	NA	97.5 D	NA

Table A-11-2
Results of General Chemistry Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Sulfide
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ SW9056	E300.0/ SW9056
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
1065PZ6B (intermediate)	03/10/06	230	230	88	< 0.1	4.3	< 0.05	97	< 0.04 UJ
	04/05/05	230	230	98	< 0.1	3.6	< 0.05	94	< 0.04
	03/01/99	224	224	56.8	NA	5	NA	66	NA
	11/23/98	227	227	64	NA	4.9	NA	70	NA
	08/24/98	220	220	46	NA	4.1	NA	57	NA
	06/08/98	228	228	54.4 D	NA	5.01 D	NA	72.5 D	NA
	03/11/98	230	230	58.6 D	NA	4.9 D	NA	72 D	NA
	12/16/97	500	500	62 D	NA	5.58 D	NA	81 D	NA
	09/15/97	216	216	58.4 D	NA	5.11 D	NA	80.7 D	NA
1065PZ7A (shallow)	03/15/06	240	240	76	< 0.1	2.5	< 0.05	95	< 0.04
	04/06/05	410	410	37	0.14	2.9	< 0.05	62	< 0.04 UJ
	03/08/99	279	279	16	NA	0.24	NA	35	NA
	03/08/99	NA	NA	16	NA	0.24	NA	35	NA
	12/01/98	269	269	19.6	NA	0.42	NA	31	NA
	12/01/98	NA	NA	19.6	NA	0.42	NA	31	NA
	08/26/98	260	260	14	NA	0.33	NA	32	NA
	08/26/98	NA	NA	14	NA	0.33	NA	32	NA
	06/10/98	282	282	18.7 G	NA	0.717	NA	38.8	NA
	06/10/98	NA	NA	18.7 G	NA	0.717	NA	38.8	NA
	03/16/98	276	276	19 D	NA	0.744 D	NA	38.2 D	NA
	03/16/98	NA	NA	19 D	NA	0.744 D	NA	38.2 D	NA
	12/18/97	270	270	18.2 D	NA	0.633	NA	41.1 D	NA
	09/17/97	599	599	82.1 D	NA	0.011	NA	1.69	NA
	09/17/97	NA	NA	82.1 D	NA	0.011	NA	1.69	NA
1065PZ7B (intermediate)	03/15/06	440	440	30	0.13	3.8	< 0.05	61	< 0.04
	04/06/05	240	240	120	< 0.1	3.2	< 0.05	110	0.06 J-
	03/08/99	260	260	46.6	NA	2.6	NA	57	NA
	12/01/98	235	235	56	NA	2.5	NA	61	NA
	08/26/98	240	240	48	NA	2.9	NA	58	NA
	06/10/98	288	288	53.4	NA	2.79	NA	66.3	NA
	03/16/98	270	270	54.8 D	NA	3.28 D	NA	71.2 D	NA
	12/18/97	260	260	63.9 D	NA	3.27	NA	81.8 D	NA
	09/17/97	264	264	57.3 D	NA	3.42 D	NA	72.3 D	NA

Table A-11-2
Results of General Chemistry Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Sulfide
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ SW9056	E300.0/ SW9056
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
1065MW9A (shallow)	12/05/06	450	450	170	0.15	< 0.05	< 0.05	20	< 0.04
DUP1205062C	12/05/06	450	450	170	0.11	< 0.05	< 0.05	19	< 0.04
1065MW9ACL	12/05/06	433	433	192	< 1 U	< 0.1 U	< 0.1 U	19.3	< 0.05
	08/16/06	440	440	160	0.19	< 0.05	< 0.05	16	< 0.04
	05/24/06	430	430	170	0.12	< 0.05	< 0.05	21	< 0.04 R
DUP0524063B	05/24/06	430	430	170	0.12	< 0.05	< 0.05	21	< 0.04 R
1065MW9ACL	05/24/06	436	436	170	< 1 U	< 0.02 U UJ	< 0.02 U	17.3	0.17 J-
	03/09/06	460	460	170	0.12	< 0.05	< 0.05	22	0.07 J-
DUP0309062B	03/09/06	420	420	170	0.11	< 0.05	< 0.05	21	< 0.04 UJ
	11/30/05	450 J+	450	190	0.16	< 0.05	< 0.05	19	< 0.04
DUP1130052B	11/30/05	450 J+	450	180	0.14	< 0.05	< 0.05	19	< 0.04
1065MW9ACL	11/30/05	422	422	202	< 1 U	< 0.1 U UJ	< 0.1 U UJ	18.7	< 0.05 U
	08/30/05	430	430	180	0.13 J-	< 0.05	< 0.05 UJ	22	< 0.04
DUP0830052B	08/30/05	420	420	170	0.13 J-	< 0.05	< 0.05 UJ	22	< 0.04
1065MW9ACL	08/30/05	432	432	159	< 0.3 U	< 0.1 U	< 1 U	22.7	0.05 J-
	05/24/05	410	410	180	0.11	< 0.05	< 0.05	21	< 0.04
	04/06/05	430	430	190	0.18	< 0.05	< 0.05	17	< 0.04 UJ
DUP0406052A	04/06/05	450	450	180	0.17	< 0.05	< 0.05	15	< 0.04 UJ
1065MW9B (intermediate)	12/07/06	260	260	53	< 0.1	6.1	< 0.05	76	< 0.04 UJ
	08/16/06	170	170	130	< 0.1	14	< 0.05	180	< 0.04
DUP0816062A	08/16/06	250	250	52	< 0.1	5.7	< 0.05	72	< 0.04
1065MW9BCL	08/16/06	253	253	53	< 2 U	6 J-	< 0.02 U	76	< 0.05
	05/25/06	250	250	55	< 0.1	5.4	< 0.05	75	< 0.04
	03/09/06	240	240	55	< 0.1	5.4	< 0.05	73	< 0.04 UJ
	11/29/05	240 J+	240	55	< 0.1	5.9	< 0.05	71	< 0.04
	08/30/05	240	240	50	< 0.1 UJ	5.4	< 0.05 UJ	64	< 0.04
	05/24/05	360	360	48	< 0.1	5	< 0.05	65	< 0.04
	04/06/05	250	250	53	< 0.1	5.3	< 0.05	67	< 0.04 UJ
1065MW10A (shallow)	03/16/06	260	260	55	< 0.1	< 0.05	< 0.05	45	< 0.04 R
	04/11/05	220	220	58	0.11	< 0.05	< 0.05	46	< 0.04
1065MW10B (intermediate)	03/09/06	230	230	51	< 0.1	4.5	< 0.05	65	< 0.04 UJ
	04/11/05	240	240	55	< 0.1	4.9	< 0.05	67	< 0.04
1065MW11A (shallow)	03/09/06	120	120	20	0.13	2.8	< 0.05	34	< 0.04 UJ
	04/11/05	240	240	58	0.12	2.9	< 0.05	84	< 0.04

Table A-11-2
Results of General Chemistry Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Sulfide
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ SW9056	E300.0/ SW9056
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
1065MW11B (intermediate)	03/07/06	190	190	77	< 0.1	3.8	< 0.05	78	< 0.04
	04/11/05	250	250	72	< 0.1	3.6	< 0.05	82	< 0.04
1065MW101 (shallow) DUP0526051B 1065MW101CL	12/06/06	670	670	45	0.25	< 0.05	< 0.05	< 0.5	< 0.04 UJ
	08/16/06	690	690	51	0.28	< 0.05	< 0.05	< 0.5	< 0.04
	05/24/06	660	660	44	0.27	< 0.05	< 0.05	< 0.5	< 0.04 R
	03/13/06	600	600	43	0.25	< 0.05	< 0.05	< 0.5	< 0.04 UJ
	11/29/05	680 J+	680	46	0.26	< 0.05	< 0.05	0.5	< 0.04
	08/31/05	730	730	51	0.29 J-	< 0.05	< 0.05 UJ	< 0.5	0.06
	05/26/05	740	740	54	0.35	< 0.05	< 0.05	< 0.5	< 0.04
	05/26/05	780	780	55	0.35	< 0.05	< 0.05	< 0.5	< 0.04
	05/26/05	724	724	52	0.3	< 0.1 U	< 1 U	< 1 U	0.140 J-
	03/29/05	670	670	54	0.28	< 0.05	< 0.05	0.98	0.06
1065MW102 (shallow)	12/06/06	220	220	42	0.22	< 0.05	< 0.05	37	< 0.04 UJ
	08/16/06	460	460	100	0.42	0.08	0.36	8.7	0.1
	05/24/06	330	330	66	0.54	< 0.05	< 0.05	11	0.04 J-
	03/14/06	150	150	26	0.25	0.13	< 0.05	16	0.04
	11/29/05	64 J+	64	15	0.15	0.32	< 0.05	24	< 0.04
	05/24/05	330	330	46	0.4	0.07	< 0.05	31	2.4
1047MW101 DUP0307062A 1047MW101CL	03/29/05	220	220	25	0.46	0.2	< 0.05	33	0.11
	03/07/06	30	30	2.9	< 0.1	0.12	< 0.05	2.1	< 0.04
	03/07/06	29	29	2.9	< 0.1	0.12	< 0.05	2.0	< 0.04
	03/07/06	31	31	3.4	< 1 U	0.111	< 0.02 U	2.3	< 0.05 U UJ
	04/06/05	95	95	8.9	0.12	0.13	< 0.05	5.1	< 0.04 UJ

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

mg/L - milligrams per liter

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-11-3
Results of BTEX, MTBE, VOCs, and TPH Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Carbon Disulfide	All Other VOCs	Stoddard Solvent (Carbon Range C ₇ -C ₁₂)	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8260M	SW8260M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	--	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Tables²		1	150	300	1,750/318	13	--	--	--	770/443	--	--
1065PZ1A (shallow)	12/05/06	< 0.5	< 0.5	< 0.5	0.9	< 0.5	< 0.5	ND	NA	260 Y	< 50	< 300
	08/17/06	0.06 J	< 0.5	< 0.5	0.7	< 0.5	< 0.5	ND	NA	230	< 50	< 300
	05/24/06	0.09 J	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	160 Y	< 50	< 300
	03/14/06	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	86	58 Y	< 300
	12/01/05	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	160	< 50	< 300
	08/31/05	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	160	< 80	< 480
	06/02/05	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	170	< 50	< 300
	03/29/05	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	56	< 50	< 300
	12/17/04	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
	08/11/04	< 0.5	< 0.5	1.2	< 0.5	3	NA	NA	NA	200	< 50	< 300
	05/26/04	< 0.5	1.9	< 0.5	0.76	2.8 C	NA	NA	NA	220	< 50	< 300
	03/19/04	< 0.5	< 0.5	< 0.5	0.78	< 2	NA	NA	NA	230	< 50	< 300
	12/05/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	170	< 50	< 300
	08/19/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	310 H	< 50	< 300
	06/11/03	< 0.5	< 0.5	< 0.5	0.68	< 2	NA	NA	NA	170 Y	< 50	< 300
DUP0905021A	03/17/03	< 0.5	1.2 C	0.86	0.77	< 2	NA	NA	NA	140	< 50	< 300
	12/06/02	< 0.5	2.2	< 0.5	1.2	< 2	NA	NA	NA	200 Y	< 50	< 300
	09/05/02	< 0.5	< 0.5	< 0.5	0.92	< 2	NA	NA	NA	180 Y	< 50	< 300
	09/05/02	< 0.5	< 0.5	< 0.5	0.79	< 2	NA	NA	NA	160 Y	< 50	< 300
	05/30/02	< 0.5	1.6	0.52	1	< 2	NA	NA	NA	120	< 50	< 300
	03/07/02	< 0.5	1.4	< 0.5	0.58	< 2	NA	NA	NA	97	< 50	< 300
	11/29/01	< 0.5	< 0.5	< 0.5	0.96	< 2	NA	NA	NA	190	< 50	< 300
	09/06/01	< 0.5	1.4	< 0.5	0.64	< 2	NA	NA	NA	150	450 ³ Y,NJ	< 300 ³
	09/06/01	< 0.5	2.4	< 0.5	0.61	< 2	NA	NA	NA	140	440 ³ Y,NJ	< 300 ³
	09/06/01	< 0.5	< 0.5	< 0.5	< 0.5	< 5	NA	NA	NA	100 g	< 50	< 300
DUP0906013A 1065PZ1ACL	05/11/01	< 0.5	< 0.5	< 0.5	0.7	< 2	NA	NA	NA	190 Y	< 50	< 300
	07/18/00	NA	NA	NA	NA	NA	NA	NA	NA	120	< 50	NA
	05/27/99	< 0.5	< 0.5	< 0.5	0.93	NA	NA	NA	NA	110 (J25)	94 (J25)	< 300
	03/08/99	< 0.5	< 0.5	< 0.5	0.91	NA	NA	NA	NA	120 (J25)	< 50	< 300
	11/30/98	< 0.5 (U29)	< 0.5 (U29)	< 0.5 (U29)	0.89 (J29)	NA	NA	NA	NA	180 (J25, J29)	< 76 (U12)	< 310
	08/26/98	< 0.5 (U18)	< 0.5 (U18)	< 0.5 (U18)	< 2 (U18)	NA	NA	NA	NA	130 (J18, J25)	< 50	< 300
	06/10/98	< 0.5	< 0.5	< 0.5	< 1	NA	NA	NA	NA	76 (J25)	65	< 300

Table A-11-3
Results of BTEX, MTBE, VOCs, and TPH Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Carbon Disulfide	All Other VOCs	Stoddard Solvent (Carbon Range C ₇ -C ₁₂)	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8260M	SW8260M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	--	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Tables²		1	150	300	1,750/318	13	--	--	--	770/443	--	--
1065PZ1A (shallow)	03/16/98	< 0.5	< 0.5	< 0.5	1	NA	NA	NA	NA	77 (J25)	< 50	< 300
	12/18/97	< 0.5	< 0.5	0.67	< 1	NA	NA	NA	NA	150 (J25)	< 50	< 300
	09/17/97	< 0.5	< 0.5	< 0.5	< 1	NA	NA	NA	NA	190 (J25)	< 50	< 300
1065PZ1B (intermediate) DUP1205061A 1065PZ1BCL	12/05/06	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
	12/05/06	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
	12/05/06	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 2 U	< 5 U	ND	NA	< 50 U	< 48 U	< 290 U
DUP0524052A	08/15/06	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
	05/24/06	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
	03/07/06	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
	11/29/05	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	< 50	< 50	350 YZ
	08/30/05	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
	05/24/05	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
	05/24/05	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
	04/05/05	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
	12/17/04	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
	12/17/04	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
DUP1217042B	08/13/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2 U	NA	NA	NA	< 50	< 50	< 300
	05/27/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	03/10/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2 C,U	NA	NA	NA	< 50	< 50	< 300
	12/03/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	08/13/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	06/03/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	03/17/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	12/09/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	12/09/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	12/09/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	NA	NA	NA	< 50	< 50	< 250
DUP1209023A 1065PZ1BCL	09/03/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	06/03/02	< 0.5	< 0.5	< 0.5	< 0.5	2.4	NA	NA	NA	< 50	< 50	< 300
	03/13/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	12/03/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	09/05/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50 ³	< 300 ³
	05/16/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	05/27/99	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300

Table A-11-3
Results of BTEX, MTBE, VOCs, and TPH Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	Carbon Disulfide	All Other VOCs	Stoddard Solvent (Carbon Range C ₇ -C ₁₂)	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8260M	SW8260M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	--	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Tables ²		1	150	300	1,750/318	13	--	--	--	770/443	--	--
	03/08/99	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300

Table A-11-3
of BTEX, MTBE, VOCs, and TPH
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	Carbon Disulfide	All Other VOCs	Stoddard Solvent (Carbon Range C ₇ -C ₁₂)	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8260M	SW8260M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	--	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Tables ²		1	150	300	1,750/318	13	--	--	--	770/443	--	--
1065PZ1B (intermediate)	11/30/98	< 0.5 (U29)	< 0.5 (U29)	< 0.5 (U29)	< 0.5 (U29)	NA	NA	NA	NA	< 50 (U29)	< 55 (U12)	< 330
	08/26/98	< 0.5 (U18)	< 0.5 (U18)	< 0.5 (U18)	< 1 (U18)	NA	NA	NA	NA	< 50 (U18)	< 50	< 300
	06/10/98	< 0.5	< 0.5	< 0.5	< 1	NA	NA	NA	NA	< 50	< 50	< 300
	03/16/98	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	12/18/97	< 0.5	< 0.5	< 0.5	< 1	NA	NA	NA	NA	< 50	< 50	< 300
	09/17/97	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
1065PZ2A (shallow)	12/06/06	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 100	< 600
	08/17/06	< 0.5	< 0.5	< 0.5	< 1	2.7 C U	NA	NA	NA	< 50	< 50	< 300
	05/24/06	< 0.5	< 0.5	< 0.5	< 1	7.1	NA	NA	NA	< 50	< 50	< 300
	03/13/06	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	12/01/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
DUP0401052A	08/30/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	05/24/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	04/01/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	04/01/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	12/15/04	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	< 50	< 50	< 50	< 300
	08/11/04	< 0.5	< 0.5	< 0.5	< 0.5	5	NA	NA	NA	< 50	< 50	< 300
	05/25/04	< 0.5	< 0.5	< 0.5	< 0.5	2.4 C	NA	NA	< 50	< 50	< 50	< 300
	03/15/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	12/05/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	08/19/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	06/04/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	03/17/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	12/05/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	09/05/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	05/29/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
DUP0511013A	03/07/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50 UJ	< 300 UJ
	11/29/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	09/05/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50 ³	< 300 ³
	05/11/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	05/11/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	05/25/99	< 0.5	0.74	< 0.5	1.1	NA	NA	NA	NA	< 50	68 (U12)	< 300
	03/03/99	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300

Table A-11-3
Results of BTEX, MTBE, VOCs, and TPH Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	Carbon Disulfide	All Other VOCs	Stoddard Solvent (Carbon Range C ₇ -C ₁₂)	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8260M	SW8260M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	--	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Tables²		1	150	300	1,750/318	13	--	--	--	770/443	--	--
1065PZ2A (shallow)	11/24/98	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 51	< 310
	08/25/98	< 0.5 (U18)	< 0.5 (U18)	< 0.5 (U18)	< 0.5 (U18)	NA	NA	NA	NA	< 50	< 50 (U18)	< 300
	06/09/98	< 0.5	< 0.5	< 0.5	< 1	NA	NA	NA	NA	< 50	< 50	< 300
	03/12/98	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	12/17/97	< 0.5	< 0.5	< 0.5	< 1	NA	NA	NA	NA	< 50	< 50	< 300
	09/16/97	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	66 (R32)	< 300
1065PZ2B (intermediate) DUP0813032A	03/07/06	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	04/05/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	03/10/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	12/03/03	< 0.5	< 0.5	< 0.5	< 0.5	2.6	NA	NA	NA	< 50	< 50	< 300
	08/13/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	08/13/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	06/06/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	03/17/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	12/09/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	09/04/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	06/03/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	03/13/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	12/04/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	09/05/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50 ³	< 300 ³
	05/16/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	05/25/99	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	03/03/99	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	11/24/98	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 52	< 310
	08/25/98	< 0.5	< 0.5 (U18)	< 0.5 (U18)	< 0.5 (U18)	NA	NA	NA	NA	< 50 (U18)	< 50	< 300
	06/09/98	< 0.5	< 0.5	< 0.5	< 1	NA	NA	NA	NA	< 50	< 50	< 300
	03/12/98	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	12/17/97	< 0.5	< 0.5	< 0.5	< 1	NA	NA	NA	NA	< 50	< 50	< 300
	09/16/97	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300

Table A-11-3
Results of BTEX, MTBE, VOCs, and TPH Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Carbon Disulfide	All Other VOCs	Stoddard Solvent (Carbon Range C ₇ -C ₁₂)	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8260M	SW8260M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	--	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Tables²		1	150	300	1,750/318	13	--	--	--	770/443	--	--
1065PZ3A (shallow) DUP0405052A 1065PZ3ACL	03/13/06	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	04/05/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	04/05/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	04/05/05	< 1 U	< 1 U	< 1 U	< 2 U	< 5 U	NA	NA	NA	< 50 U	< 50 U	< 300 U
	03/15/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	12/05/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	09/05/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	05/29/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	03/07/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	11/29/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	09/05/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50 ³	< 300 ³
	05/11/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	05/24/99	< 0.5	0.82	< 0.5	1.1	NA	NA	NA	NA	< 50	59 (J25)	< 300
	03/01/99	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	11/23/98	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 61	< 370
	08/24/98	< 0.5 (U18)	< 0.5 (U18)	< 0.5 (U18)	< 0.5 (U18)	NA	NA	NA	NA	< 50 (U18)	< 50	< 300
1065PZ3B (intermediate) DUP0814032A 1065PZ3BCL	06/08/98	< 0.5	< 0.5	< 0.5	< 1	NA	NA	NA	NA	< 50	< 50	< 300
	03/11/98	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	12/16/97	< 0.5	< 0.5	< 0.5	< 1	NA	NA	NA	NA	< 50	< 50	< 300
	03/09/06	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	04/06/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	03/10/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2 C,U	NA	NA	NA	< 50	< 50	< 300
	12/03/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	08/14/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	08/14/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	08/14/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	NA	NA	NA	< 50	< 48	< 240
	06/03/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	03/18/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	12/10/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	09/03/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	06/04/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300

Table A-11-3
Results of BTEX, MTBE, VOCs, and TPH Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Carbon Disulfide	All Other VOCs	Stoddard Solvent (Carbon Range C ₇ -C ₁₂)	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8260M	SW8260M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	--	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Tables²		1	150	300	1,750/318	13	--	--	--	770/443	--	--
1065PZ3B (intermediate) DUP0905012A 1065PZ3BCL DUP0517014A 1065PZ3BCL	03/13/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	12/04/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	09/05/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	110 ³ Y,NJ	< 300 ³
	09/05/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	110 ³ Y,NJ	< 300 ³
	09/05/01	< 0.5	< 0.5	< 0.5	< 0.5	< 5	NA	NA	NA	< 50	< 50	< 300
	05/17/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	05/17/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	05/17/01	< 0.5	< 0.5	< 0.5	< 0.5	< 5	NA	NA	NA	< 50	< 50	< 500
	05/24/99	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	67 (J25)	< 300
	03/01/99	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	11/23/98	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 54	< 320
	08/24/98	< 0.5 (U18)	< 0.5 (U18)	< 0.5 (U18)	< 0.5 (U18)	NA	NA	NA	NA	< 50 (U18)	< 50	< 300
	06/08/98	< 0.5	< 0.5	< 0.5	< 1	NA	NA	NA	NA	< 50	< 50	< 300
	03/11/98	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	12/16/97	< 0.5	< 0.5	< 0.5	< 1	NA	NA	NA	NA	< 50	< 50	< 300
	09/15/97	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
1065PZ4A ⁴ (shallow)	12/06/06	< 0.5	< 0.5	< 0.5	< 1	7 C	NA	NA	NA	< 50	< 100	< 600
	08/17/06	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	90 HY	390
	05/24/06	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	03/09/06	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	11/29/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	08/30/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	06/02/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	04/01/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	03/15/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	12/05/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	08/19/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	06/11/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	03/14/03	< 0.5	< 0.5	< 0.5	< 0.5	5.9	NA	NA	NA	< 50	< 50	< 300
	12/05/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	09/05/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	06/04/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	03/07/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50 UJ	< 300 UJ

Table A-11-3
Results of BTEX, MTBE, VOCs, and TPH Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	Carbon Disulfide	All Other VOCs	Stoddard Solvent (Carbon Range C ₇ -C ₁₂)	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8260M	SW8260M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	--	(µg/L)	(µg/L)	(µg/L)	(µg/L)
	Cleanup Tables²	1	150	300	1,750/318	13	--	--	--	770/443	--	--
1065PZ4A ⁴ (shallow)	11/29/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	09/05/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	140 ³ YH,NJ	< 300 ³
	05/11/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 300	< 50	< 300
	05/27/99	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	03/08/99	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	12/01/98	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 54 (U12)	< 310
	08/27/98	< 0.5 (U18)	< 0.5 (U18)	< 0.5 (U18)	< 1 (U18)	NA	NA	NA	NA	< 50 (U18)	< 50	< 300
	06/11/98	< 0.5	< 0.5	< 0.5	< 1	NA	NA	NA	NA	< 50	56 (J25)	< 300
	03/17/98	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
1065PZ4B ⁴ (intermediate) DUP0509012A	12/22/97	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	09/18/97	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	03/13/06	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	04/05/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	03/17/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	12/05/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	08/14/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	06/06/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	03/17/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	12/09/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	09/04/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	06/04/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	03/13/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	12/04/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	09/05/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50 ³	< 300 ³
	05/09/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 300	< 50	< 300
	05/09/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	05/27/99	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	03/08/99	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	12/01/98	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 53 (U12)	< 310
	08/27/98	< 0.5	< 0.5	< 0.5	< 1	NA	NA	NA	NA	< 50	< 50	< 300
	06/11/98	< 0.5	< 0.5	< 0.5	< 1	NA	NA	NA	NA	< 50	< 50	< 300

Table A-11-3
Results of BTEX, MTBE, VOCs, and TPH Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Carbon Disulfide	All Other VOCs	Stoddard Solvent (Carbon Range C ₇ -C ₁₂)	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8260M	SW8260M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	--	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Tables²		1	150	300	1,750/318	13	--	--	--	770/443	--	--
1065PZ4B ⁴ (intermediate)	03/17/98	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	12/22/97	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	09/18/97	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50 (U29)	< 300
1065PZ5AR (shallow) DUP0307062B 1065PZ5ARCL	12/07/06	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	< 50	< 50	< 50	< 300
	08/16/06	< 0.5	< 0.5	< 0.5	< 1	3.9 C	NA	NA	NA	< 50	< 50	< 300
	05/24/06	< 0.5	< 0.5	< 0.5	< 1	3.5 C	NA	NA	NA	< 50	< 50	< 300
	03/07/06	< 0.5	0.54 C	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	03/07/06	< 0.5	< 0.5	< 0.5	< 1	< 2.5 U	NA	NA	NA	< 50	< 50	< 300
	03/07/06	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 2	NA	NA	NA	< 50 U	72 J+	< 300 U
	11/29/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	08/30/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	05/24/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	04/11/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	03/10/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2 C,U	NA	NA	NA	< 50	< 50	< 300
	12/08/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	08/14/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	06/09/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	03/17/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
1065PZ5B (intermediate) DUP0604032B 1065PZ5BCL	03/13/06	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	04/11/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	03/10/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	12/08/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	08/14/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	06/04/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	06/04/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	06/04/03	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 250
	03/17/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	12/10/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	09/03/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	06/04/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	03/13/02	< 0.5	0.62 C	< 0.5	0.75	< 2	NA	NA	NA	< 50	< 50	< 300
	12/03/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300

Table A-11-3
Results of BTEX, MTBE, VOCs, and TPH Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Carbon Disulfide	All Other VOCs	Stoddard Solvent (Carbon Range C ₇ -C ₁₂)	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8260M	SW8260M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	--	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Tables²		1	150	300	1,750/318	13	--	--	--	770/443	--	--
1065PZ5B (intermediate)	09/05/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50 ³	< 300 ³
	05/16/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 300	< 50	< 300
	05/25/99	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	66 (J25)	< 300
	03/03/99	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	11/24/98	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	08/25/98	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	06/09/98	< 0.5	< 0.5	< 0.5	< 1	NA	NA	NA	NA	< 50	< 50	< 300
	03/12/98	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	12/17/97	< 0.5	< 0.5	< 0.5	< 1	NA	NA	NA	NA	< 50	< 50	< 300
	09/16/97	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
1065PZ6A (shallow)	04/06/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	03/17/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	12/08/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	08/14/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	06/10/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	03/17/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	12/10/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	09/04/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	06/04/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	03/13/02	< 0.5	< 0.5	< 0.5	0.78	< 2	NA	NA	NA	< 50	< 50	< 300
	12/04/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	09/05/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50 ³	< 300 ³
	05/17/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 300	< 50	< 300
	05/24/99	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	51 (J25)	< 300
	03/01/99	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	480 (J25)	430 (J25)
	11/23/98	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 320
	08/24/98	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	06/08/98	< 0.5	< 0.5	< 0.5	< 1	NA	NA	NA	NA	< 50	< 50	< 300
	03/11/98	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	12/16/97	< 0.5	< 0.5	< 0.5	< 1	NA	NA	NA	NA	< 50	< 50	< 300
	09/15/97	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300

Table A-11-3
Results of BTEX, MTBE, VOCs, and TPH Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	Carbon Disulfide	All Other VOCs	Stoddard Solvent (Carbon Range C ₇ -C ₁₂)	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8260M	SW8260M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	--	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Tables²		1	150	300	1,750/318	13	--	--	--	770/443	--	--
1065PZ6B (intermediate)	03/10/06	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	04/05/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	03/09/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	12/03/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	08/13/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	06/03/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	03/17/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	12/09/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	09/03/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	06/04/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	03/13/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	12/04/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	09/05/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50 ³	< 300 ³
	05/11/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 300	< 50	< 300
	05/11/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 300	< 50	< 300
	05/24/99	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	03/01/99	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	11/23/98	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 52	< 310
	08/24/98	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	06/08/98	< 0.5	< 0.5	< 0.5	< 1	NA	NA	NA	NA	< 50	< 50	< 300
	03/11/98	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	12/16/97	< 0.5	< 0.5	< 0.5	< 1	NA	NA	NA	NA	< 50	< 50	< 300
	09/15/97	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
1065PZ7A ⁴ (shallow)	03/15/06	< 0.5	< 0.5	< 0.5	< 1	16	NA	NA	NA	< 50	< 50	< 300
	04/06/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	03/17/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	12/08/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	08/13/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	06/10/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	03/17/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300

Table A-11-3
Results of BTEX, MTBE, VOCs, and TPH Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	Carbon Disulfide	All Other VOCs	Stoddard Solvent (Carbon Range C ₇ -C ₁₂)	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8260M	SW8260M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	--	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Tables²		1	150	300	1,750/318	13	--	--	--	770/443	--	--
1065PZ7A ⁴ (shallow)	12/09/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	09/04/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	06/04/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	03/13/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	12/03/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	09/05/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50 ³	< 300 ³
	05/09/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 300	< 50	< 300
	05/27/99	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	03/08/99	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	12/01/98	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 53 (U12)	< 300
	08/26/98	< 0.5 (U18)	< 0.5 (U18)	< 0.5 (U18)	< 1 (U18)	NA	NA	NA	NA	< 50 (U18)	< 50	< 300
	06/10/98	< 0.5	< 0.5	< 0.5	< 1	NA	NA	NA	NA	< 50	< 50	< 300
	03/16/98	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
1065PZ7B ⁴ (intermediate)	12/18/97	< 0.5	< 0.5	< 0.5	< 1	NA	NA	NA	NA	< 50	< 50	< 300
	09/17/97	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50 (U29)	< 300
	03/15/06	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	04/06/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	03/17/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	12/08/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	08/13/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	06/10/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	03/17/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	12/09/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	09/04/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	06/04/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	03/13/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	12/03/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	09/05/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50 ³	< 300 ³
	05/09/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	05/27/99	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300

Table A-11-3
Results of BTEX, MTBE, VOCs, and TPH Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Carbon Disulfide	All Other VOCs	Stoddard Solvent (Carbon Range C ₇ -C ₁₂)	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8260M	SW8260M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	--	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Tables²		1	150	300	1,750/318	13	--	--	--	770/443	--	--
1065PZ7B ⁴ (intermediate)	03/08/99	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	12/01/98	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 55 (U12)	< 330
	08/26/98	< 0.5 (U18)	< 0.5 (U18)	< 0.5 (U18)	< 1 (U18)	NA	NA	NA	NA	< 50 (U18)	< 50	< 300
	06/10/98	< 0.5	< 0.5	< 0.5	< 1	NA	NA	NA	NA	< 50	< 50	< 300
	03/16/98	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50	< 300
	12/18/97	< 0.5	< 0.5	< 0.5	< 1	NA	NA	NA	NA	< 50	< 50	< 300
	09/17/97	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	NA	< 50	< 50 (U18)	< 300
1065TMW03 (shallow)	09/06/02	1,200	95	290	200	< 10	NA	NA	NA	6,200	NA	NA
	06/06/02	660	38	150	99	< 20	NA	NA	NA	4,100	< 50	< 300
	03/11/02	170	14	38	19	52 C	NA	NA	NA	860	53 YL	< 300
	11/30/01	3.4 C	< 0.5	8.8	6.5	< 2	NA	NA	NA	740	91 YL	< 300
	09/06/01	520	18	110	109.9	< 10	NA	NA	NA	3,300 Z	3,900 ³ YL,NJ	< 3,100 ³
	05/18/01	25	1.9	29	28.3	< 2	NA	NA	NA	870	< 50	< 300
	05/27/99	730	43	220	232	NA	NA	NA	NA	18,000 (J25)	< 50	< 300
	03/09/99	270	39	240	400	NA	NA	NA	NA	13,000	< 50	< 300
	12/01/98	4,300	1,400	11,000	20,000	NA	NA	NA	NA	910,000 (J25)	< 50	< 300
	08/27/98	1,900 (J18)	200 (J18)	1,700 (J18)	2,400 (J18)	NA	NA	NA	NA	56,000 (J18, J25)	< 50	< 300
	06/11/98	2,000	280	1,100	2,100	NA	NA	NA	NA	90,000 (J25)	< 50	< 300
	03/17/98	1,800	160	810	1,500	NA	NA	NA	NA	110,000 (J14, J25, J29)	< 50	< 300
	12/22/97	1,800	210	1,000	2,900	NA	NA	NA	NA	32,000 (J25)	< 50	< 300
	09/18/97	1,900	< 250	830	2,000	NA	NA	NA	NA	23,000 (J25)	< 50	< 300
1065MW9A (shallow) DUP1205062C 1065MW9ACL DUP0524063B 1065MW9ACL DUP0309062B	12/05/06	< 0.5	0.57	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	12/05/06	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	12/05/06	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 2.5 U UJ	NA	NA	NA	< 50 U	< 65 U	< 390 U
	08/16/06	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	05/24/06	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	05/24/06	< 0.5	< 0.5	< 0.5	< 1	< 2 U	NA	NA	NA	< 50	< 50	< 300
	05/24/06	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 2	NA	NA	NA	< 50 U	< 530 U UJ	< 1,000 U UJ
	03/09/06	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	03/09/06	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300

Table A-11-3
Results of BTEX, MTBE, VOCs, and TPH Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Carbon Disulfide	All Other VOCs	Stoddard Solvent (Carbon Range C ₇ -C ₁₂)	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8260M	SW8260M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	--	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Tables²		1	150	300	1,750/318	13	--	--	--	770/443	--	--
1065MW9A (shallow)	11/30/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	61 Y	< 300
DUP0816062A	11/30/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
1065MW9ACL	11/30/05	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 2.5 U UJ	NA	NA	NA	< 50 U	< 50 U	< 300 U
DUP0830052B	08/30/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
1065MW9ACL	08/30/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	08/30/05	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 2.5 U	NA	NA	NA	< 50 U	< 50 U	< 300 U
	05/24/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	04/06/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
DUP0406052A	04/06/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	12/17/04	< 0.5	< 0.5	< 0.5	< 1	< 0.5	NA	NA	NA	< 50	< 50	< 300
	08/11/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	05/27/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	03/10/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2 C,U	NA	NA	NA	53	< 50	< 300
DUP0310042A	03/10/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2 C,U	NA	NA	NA	< 50	< 50	< 300
	12/08/03	0.9	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	120	< 50	< 300
DUP1208031A	12/08/03	0.7	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA	130	< 50	< 300
	08/14/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	06/09/03	33	< 0.5	< 0.5	5	< 2	NA	NA	NA	350	< 50	< 300
DUP0609032C	06/09/03	25	< 0.5	< 0.5	5	< 2	NA	NA	NA	310	< 50	< 300
	03/18/03	5	0.59 C	< 0.5	1	< 2 U	NA	NA	NA	160	< 50	< 300
	11/05/02	3.5	< 0.5	< 0.5	0.6	< 0.5	< 0.5	ND	NA	150 YL	< 50	< 300
	10/07/02	2.66	< 0.2	< 0.2	2.152	< 1	< 0.5	ND	NA	370	480	< 250
1065MW9B (intermediate)	12/07/06	< 0.5	0.61	< 0.5	0.6 C	< 2	NA	NA	< 50	< 50	< 50	< 300
DUP0816062A	08/16/06	< 0.5	< 0.5	< 0.5	< 1	3.4 C	NA	NA	NA	< 50	< 50	< 300
	08/16/06	< 0.5	< 0.5	< 0.5	< 1	2.3 C	NA	NA	NA	< 50	< 50	< 300
1065MW9BCL	08/16/06	< 0.5 U UJ	< 0.5 U	< 0.5 U	< 1 U	< 2.5 U	NA	NA	NA	< 50 U	< 50 U	< 300 U
	05/25/06	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	03/09/06	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	11/29/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	08/30/05	< 0.5	< 0.5	< 0.5	< 1	< 0.5	NA	NA	NA	< 50	< 50	< 300
	05/24/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300

Table A-11-3
Results of BTEX, MTBE, VOCs, and TPH Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	Carbon Disulfide	All Other VOCs	Stoddard Solvent (Carbon Range C ₇ -C ₁₂)	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8260M	SW8260M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	--	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Tables²		1	150	300	1,750/318	13	--	--	--	770/443	--	--
1065MW9B (intermediate) DUP0813041A DUP0527042A DUP0609032B 1065MW9BCL	12/17/04	< 0.5	< 0.5	< 0.5	< 1	< 0.5	NA	NA	NA	< 50	< 50	< 300
	08/13/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	08/13/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	05/27/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	05/27/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	03/10/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2 C,U	NA	NA	NA	< 50	< 50	< 300
	12/08/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	08/13/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	06/09/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	06/09/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	06/09/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	NA	NA	NA	< 50	< 50	< 250
	03/18/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2 U	NA	NA	NA	< 50	< 50	< 300
	11/05/02	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	NA	120 YL	< 50	< 300
	10/07/02	< 0.2	< 0.2	< 0.2	< 0.5	< 1	< 0.5	ND	NA	340	< 50	< 250
1065MW10A (shallow)	03/16/06	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	55 HY	< 300
	04/11/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	03/10/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2 C,U	NA	NA	NA	< 50	< 50	< 300
	12/08/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	08/14/03	< 0.5	< 0.5	< 0.5	< 0.5	2.4	NA	NA	NA	< 50	< 50	< 300
	06/06/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	03/18/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2 U	NA	NA	NA	< 50	< 50	< 300
	11/05/02	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
	10/07/02	< 0.2	< 0.2	< 0.2	< 0.5	< 1	< 0.5	ND	NA	< 50	< 50	< 250
1065MW10B (intermediate)	03/09/06	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	04/11/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	03/10/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2 C,U	NA	NA	NA	< 50	< 50	< 300
	12/03/03	< 0.5	< 0.5	< 0.5	< 0.5	7.5	NA	NA	NA	< 50	< 50	< 300
	08/13/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300

Table A-11-3
Results of BTEX, MTBE, VOCs, and TPH Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Carbon Disulfide	All Other VOCs	Stoddard Solvent (Carbon Range C ₇ -C ₁₂)	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8260M	SW8260M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	--	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Tables²		1	150	300	1,750/318	13	--	--	--	770/443	--	--
1065MW10B (intermediate) DUP0318032A 1065MW10BCL	06/03/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	03/18/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2 C,U	NA	NA	NA	< 50	< 50	< 300
	03/18/03	< 0.5	< 0.5	< 0.5	< 0.5	4.6	NA	NA	NA	NA	NA	NA
	03/18/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	NA	NA	NA	< 50	< 50	< 250
	11/05/02	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
	10/07/02	< 0.2	< 0.2	< 0.2	< 0.5	< 1	< 0.5	ND	NA	< 50	< 50	< 250
1065MW11A (shallow) DUP0317042B	03/09/06	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	04/11/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	03/17/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	03/17/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	12/08/03	< 0.5	< 0.5	< 0.5	< 0.5	3.7	NA	NA	NA	< 50	< 50	< 300
DUP0318032B	08/14/03	< 0.5	< 0.5	< 0.5	< 0.5	19	NA	NA	NA	< 50	< 50	< 300
	06/06/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	03/18/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2 U	NA	NA	NA	< 50	< 50	< 300
	03/18/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	11/05/02	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
	10/07/02	< 0.2	< 0.2	< 0.2	< 0.5	< 1	< 0.5	ND	NA	< 50	< 50	< 250
1065MW11B (intermediate)	03/07/06	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	190 YZ	< 50	< 300
	04/11/05	< 0.5	< 0.5	< 0.5	< 1	< 2	NA	NA	NA	< 50	< 50	< 300
	03/09/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	12/04/03	< 0.5	< 0.5	< 0.5	< 0.5	3.1 C	NA	NA	NA	< 50	< 50	< 300
	08/13/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	06/03/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA	< 50	< 50	< 300
	03/18/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2 U	NA	NA	NA	< 50	< 50	< 300
	11/05/02	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	NA	< 50	96 Y	< 300
	10/07/02	< 0.2	< 0.2	< 0.2	< 0.5	< 1	< 0.5	ND	NA	< 50	< 50	< 250
1065MW101 (shallow)	12/06/06	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
	08/16/06	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
	05/24/06	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
	03/13/06	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
	11/29/05	< 0.5	< 0.5	< 0.5	1	< 0.5	0.8	ND	NA	< 50	< 50	< 300

Table A-11-3
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Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE	Carbon Disulfide	All Other VOCs	Stoddard Solvent (Carbon Range C ₇ -C ₁₂)	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8260M	SW8260M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	--	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Tables²		1	150	300	1,750/318	13	--	--	--	770/443	--	--
1065MW101 (shallow) DUP0526051B 1065MW101CL	08/31/05	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
	05/26/05	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
	05/26/05	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
	05/26/05	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 2 U	< 5 U	ND	NA	< 50 U	130	< 300 U
	03/29/05	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
	12/17/04	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
	08/13/04	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
1065MW102 (shallow)	12/06/06	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
	08/16/06	0.04 J	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	< 50	NA	NA
	05/24/06	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
	03/14/06	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
	11/29/05	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
	09/01/05	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	< 50	NA	NA
	05/24/05	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
	03/29/05	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	NA	< 50	< 50	< 300
1027MW01	12/15/04	< 0.5	< 0.5	< 0.5	< 1	< 2	< 0.5	ND	NA	< 50	< 50	< 300
	08/11/04	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	2	ND	NA	< 50	< 50	< 300
	05/06/96	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 47	< 280
	02/13/96	NA	NA	NA	NA	NA	NA	NA	NA	< 50	< 51	< 310
	11/10/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 50	< 1,300
1027MW03	08/16/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 50	< 1,300
	06/13/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/06/96	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 49	< 290
	02/14/96	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 52	< 310
	11/10/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 50	< 1,300
	08/18/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 50	< 1,300
	06/13/95	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table A-11-3
Results of BTEX, MTBE, VOCs, and TPH Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	Carbon Disulfide	All Other VOCs	Stoddard Solvent (Carbon Range C ₇ -C ₁₂)	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8260M	SW8260M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	--	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Tables²		1	150	300	1,750/318	13	--	--	--	770/443	--	--
1047MW101	12/07/06	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	< 50	< 50	NA	NA
	08/16/06	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	< 50	< 50	NA	NA
	05/25/06	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	< 50	< 50	NA	NA
DUP0307062A	03/07/06	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	< 50	51 YZ	NA	NA
	03/07/06	< 0.5	< 0.5	< 0.5	< 1	< 2 U	< 5 U	ND	< 50	< 50	NA	NA
	03/07/06	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 0.5	< 0.5	ND	< 100 U	< 50 U	NA	NA
1047MW101CL	11/30/05	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	< 50	< 50	NA	NA
	11/30/05	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	< 50	< 50	NA	NA
	11/30/05	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 2 U	< 5 U	ND	< 100 U	< 50 U	NA	NA
DUP1130052C	08/30/05	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	< 50	< 50	NA	NA
	08/30/05	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	< 50	< 50	NA	NA
	08/30/05	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	< 50	< 50	NA	NA
DUP0830052A	05/26/05	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	< 50	< 50	NA	NA
	05/26/05	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	< 50	< 50	NA	NA
	05/26/05	< 0.5 U	< 0.5 U	< 0.5 U	< 1 U	< 2 U	< 5 U	ND	< 100 U	67	NA	NA
DUP0526052C	04/06/05	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	< 50	< 50	NA	NA
	12/16/04	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	< 50	< 50	NA	NA
	12/16/04	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	< 50	< 50	NA	NA
DUP1216042A	12/16/04	< 0.5	< 0.5	< 0.5	< 1	< 0.5	< 0.5	ND	< 50	< 50	NA	NA
	12/16/04	< 0.5 U	< 0.5 U	< 0.5 U	< 1	< 2 U	< 0.5 U	ND	< 1,000 U	< 50 U	NA	NA
	08/13/04	NA	NA	NA	NA	NA	NA	NA	< 50	< 50	NA	NA
DUP0527042B	05/27/04	NA	NA	NA	NA	NA	NA	NA	< 50	< 50	NA	NA
	05/27/04	NA	NA	NA	NA	NA	NA	NA	< 50	< 50	NA	NA
	05/27/04	NA	NA	NA	NA	NA	NA	NA	NA	< 50	NA	NA
1047MW101CL	03/11/04	NA	NA	NA	NA	NA	NA	NA	< 50	< 50	NA	NA
	03/11/04	NA	NA	NA	NA	NA	NA	NA	< 50	< 50	NA	NA
	03/11/04	NA	NA	NA	NA	NA	NA	NA	NA	< 50	NA	NA
DUP0311042A	12/10/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND	< 50	< 50	NA	NA

Table A-11-3
Results of BTEX, MTBE, VOCs, and TPH Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	Carbon Disulfide	All Other VOCs	Stoddard Solvent (Carbon Range C ₇ -C ₁₂)	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260M	SW8260M	SW8260M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	--	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Tables²		1	150	300	1,750/318	13	--	--	--	770/443	--	--

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - Cleanup levels taken from Table 6 of the Building 1065 Area CAP (MACTEC, 2005b). The MTBE cleanup level listed is equal to the California Maximum Contaminant Level (EKI, 2002). Total xylenes and TPHg have two different cleanup levels dependent on if the location is inside or outside of the Ecological Buffer Zone. In both cases, the higher cleanup level applies to wells outside of the Ecological Buffer Zone (e.g. the total xylenes cleanup level for wells outside of the Ecological Buffer Zone is 1,750 µg/L, whereas the cleanup level for wells inside the Ecological Buffer Zone is 318 µg/L). Piezometers 1065PZ7A, 1065PZ7B, 1065PZ4A, and 1065PZ4B are the only Building 1065 monitoring locations located inside the Ecological Buffer Zone.

3 - TPH analysis was not run using the silica gel cleanup method 3630A, although it was marked on the chain of custody.

4 - Piezometers 1065PZ4A, 1065PZ4B, 1065PZ7A, and 1065PZ7B are located within the Ecological Buffer Zone and therefore, the lower cleanup level applies per the CAP.

-- Cleanup level not established

Bold numbers indicate concentrations that exceed cleanup levels.

µg/L - micrograms per liter

NA - Not analyzed

ND - Not detected

TPH - Total petroleum hydrocarbons

BTEX - Benzene, toluene, ethylbenzene, and total xylenes

MTBE - Methyl tert-butyl ether

H - Heavier hydrocarbons contributed to the quantitation.

L - Lighter hydrocarbons contributed to the quantitation.

Y - Sample exhibits a fuel pattern that does not resemble the standard.

Z - Sample exhibits unknown single peak or peaks.

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-11-4
Results of Dissolved Metals Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Aluminum	Antimony	Arsenic	Arsenic	Cadmium	Calcium	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Sodium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	1632M	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Levels ²		--	6	10	10	--	--	--	--	--	--	--	--	--	--	--	--	--
1065PZ1A (shallow)	12/05/06	< 100	< 1	16	NA	< 1	20,000	< 10	2.2	13,000	< 3	43,000	91	< 20	880 J	180,000	< 20	790 J+
	08/17/06	< 100	< 1	24	NA	< 1	21,000 J	< 10	< 1	16,000	< 3	50,000	64	< 20	1,600	220,000	< 20	810
	05/24/06	< 100	< 1	21	NA	< 1	30,000	< 10	2.6	23,000	< 3	51,000	98	< 20	1,800	220,000	40	740
	03/14/06	< 100	< 1	11	NA	< 1	54,000	< 10	1.2	11,000	< 3	43,000	120	< 20	1,700	140,000	< 20	750
	12/01/05	< 100	< 1	17	NA	< 1	22,000	< 10	< 1	15,000	< 3	49,000	110	< 20	680	190,000	< 20	760
	08/31/05	< 100 UJ	< 1	26	20 J	< 1	20,000	< 10	< 1	19,000	< 3	40,000	110	< 20	1,200	170,000	< 20	710
	06/02/05	< 100	< 1	30	35.7	< 1	36,000	< 10	< 1	25,000	< 3	49,000	160	< 20	1,900 J	190,000	< 20	720
	03/29/05	< 100	< 1	31	3.23	< 1	61,000	< 10	2.1	10,000	< 3	42,000	54	< 20	2,300	110,000	< 20	560
	12/17/04	NA	NA	< 5	NA	< 1	NA	< 10	< 1 U	280	< 3	NA	NA	< 20	NA	NA	< 20	710
	08/11/04	NA	NA	23	NA	< 1	NA	< 10	< 1	18,000	< 3	NA	NA	< 20	NA	NA	< 20	640
	05/26/04	NA	NA	20	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	780
	03/19/04	NA	NA	16	NA	< 1	NA	< 10	1.1	NA	< 3	NA	NA	< 20	NA	NA	< 20	1,490 J
	07/18/00	NA	NA	18	NA	< 5	NA	< 10	< 10	NA	< 3	NA	NA	< 20	NA	NA	< 20	NA
	03/08/99	NA	NA	NA	NA	NA	NA	NA	NA	7,990	NA	NA	NA	NA	NA	NA	NA	754
	11/30/98	NA	NA	NA	NA	NA	NA	NA	NA	14,200	NA	NA	NA	NA	NA	NA	NA	807
	08/26/98	NA	NA	NA	NA	NA	NA	NA	NA	6,360	NA	NA	NA	NA	NA	NA	NA	800
	06/10/98	NA	NA	NA	NA	NA	NA	NA	NA	10,700	NA	NA	NA	NA	NA	NA	NA	766
	03/16/98	NA	NA	NA	NA	NA	NA	NA	NA	1,340	NA	NA	NA	NA	NA	NA	NA	695
	12/18/97	NA	NA	NA	NA	NA	NA	NA	NA	9,740	NA	NA	NA	NA	NA	NA	NA	783
	09/17/97	NA	NA	NA	NA	NA	NA	NA	NA	9,480	NA	NA	NA	NA	NA	NA	NA	819 B
1065PZ1B (intermediate) DUP1205061A 1065PZ1BCL	12/05/06	< 100	< 1	< 5	NA	< 1	48,000	< 10	< 1	210	< 3	67,000	78	< 20	38,000 J	82,000	< 20	750 J+
	12/05/06	< 100	< 1	< 5	NA	< 1	45,000	< 10	< 1	110	< 3	64,000	68	< 20	36,000 J	78,000	< 20	770 J+
	12/05/06	< 100 U	< 2 U	< 2 U	NA	< 1 U	57,800	< 10 U	< 2 U	138	< 1 U	85,500	80	< 2 U	43,900	96,700	< 20 U	725
	08/15/06	< 100	< 1	< 5	NA	< 1	52,000	< 10	< 1	270	< 3	77,000	86	< 20	35,000	96,000	< 20	890
	05/24/06	< 100	< 1	< 5	NA	< 1	50,000	< 10	< 1	120	< 3	75,000	91	< 20	38,000	87,000	< 20	500
	03/07/06	< 100	< 1	< 5	NA	< 1	48,000	< 10	< 1	410	< 3	75,000	86	< 20	38,000	91,000	< 20	800
	11/29/05	< 100	< 1	< 5	NA	< 1	51,000	< 10 UJ	< 1	350	< 3	74,000	73	< 20	40,000	91,000	20	640
	08/30/05	< 100 UJ	< 1	< 5	NA	< 1	43,000	< 10	< 1	190	< 3	49,000	79	< 20	50,000	60,000	< 20	630
	05/24/05	< 100 UJ	< 1	< 5	NA	< 1	52,000	< 10	< 1	270	< 3	76,000	86	< 20	40,000	97,000	< 20	750
	05/24/05	< 100 UJ	< 1	< 5	NA	< 1	53,000	< 10	< 1	240	< 3	78,000	87	< 20	41,000	99,000	< 20	760
	04/05/05	< 100	< 1	< 5	NA	< 1	48,000	< 10	< 1	430	< 3	66,000	80	< 20	38,000	86,000	< 20	690
	12/17/04	NA	NA	< 5	NA	< 1	NA	< 10	< 1 U	< 100 U	< 3	NA	NA	< 20	NA	NA	< 20	780
	12/17/04	NA	NA	< 5	NA	< 1	NA	< 10	< 1 U	< 100 U	< 3	NA	NA	< 20	NA	NA	< 20	770
	08/13/04	NA	NA	< 5	NA	< 1	NA	< 10	< 1	310	< 3	NA	NA	< 20	NA	NA	< 20	730
	05/27/04	NA	NA	< 5	NA	< 1	NA	< 10	< 1	330	< 3	NA	NA	< 20	NA	NA	< 20	730
	03/10/04	NA	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	680
	03/08/99	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	645
DUP0524052A	11/30/98	NA	NA	NA	NA	NA	NA	NA	NA	141	NA	NA	NA	NA	NA	NA	NA	628
	08/26/98	NA	NA	NA	NA	NA	NA	NA	NA	119	NA	NA	NA	NA	NA	NA	NA	603
	08/26/98	NA	NA	NA	NA	NA	NA	NA	NA	119	NA	NA	NA	NA	NA	NA	NA	603
	06/10/98	NA	NA	NA	NA	NA	NA	NA	NA	118	NA	NA	NA	NA	NA	NA	NA	655
	03/16/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	633
	12/18/97	NA	NA	NA	NA	NA	NA	NA	NA	105	NA	NA	NA	NA	NA	NA	NA	648
	09/17/97	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	568 B

Table A-11-4
Results of Dissolved Metals Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Aluminum	Antimony	Arsenic	Arsenic	Cadmium	Calcium	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Sodium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	1632M	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Levels ²		--	6	10	10	--	--	--	--	--	--	--	--	--	--	--	--	--
1065PZ2A (shallow) 	12/06/06	< 100	< 1	14	NA	< 1	25,000	< 10	< 1	13,000	< 3	48,000	1,500	< 20	840	65,000 J	< 20	390 J-
	08/17/06	< 100	< 1	16	NA	< 1	23,000 J	< 10	< 1	13,000	< 3	46,000	880	< 20	740	65,000	< 20	450
	05/24/06	< 100	< 1	14	NA	< 1	28,000	< 10	< 1	16,000	< 3	53,000	1,700	< 20	970	76,000	< 20	420
	03/13/06	< 100	< 1	17	NA	< 1	28,000	< 10	< 1	19,000	< 3	52,000	1,900	< 20	930	70,000	< 20	440
	12/01/05	< 100	< 1	14	NA	< 1	22,000	< 10	2.1	15,000	< 3	44,000	1,400	< 20	750	57,000	21	440
	08/30/05	< 100 UJ	< 1	19	16.8	< 1	25,000	< 10	< 1	16,000	< 3	44,000	1,200	< 20	830	60,000	< 20	380
	05/24/05	< 100 UJ	< 1	21	19.2	< 1	31,000	< 10	< 1	17,000	< 3	53,000	1,000	< 20	990	67,000	< 20	450
	04/01/05	< 100	< 1	10	8.88	< 1	32,000 J	< 10	1.1	9,600	< 3	39,000	560 J	< 20	1,200	51,000	< 20	440
	04/01/05	< 100	< 1	9	9.02	< 1	32,000 J	< 10	< 1	8,600	< 3	38,000	590 J	< 20	1,100	52,000	< 20	410
	12/15/04	NA	NA	6.8	NA	< 1	NA	< 10	< 1	3,300	< 3	NA	NA	< 20	NA	NA	88	410
	08/11/04	NA	NA	19	NA	< 1	NA	< 10	< 1	16,000	< 3	NA	NA	< 20	NA	NA	< 20	380
	05/25/04	NA	NA	18	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	940
	03/15/04	NA	NA	16	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	430
	07/18/00	NA	NA	25	NA	< 5	NA	< 10	< 10	NA	< 3	NA	NA	< 20	NA	NA	< 20	NA
	03/03/99	NA	NA	NA	NA	NA	NA	NA	NA	8,800	NA	NA	NA	NA	NA	NA	NA	514
	11/24/98	NA	NA	NA	NA	NA	NA	NA	NA	13,700	NA	NA	NA	NA	NA	NA	NA	533 B
	08/25/98	NA	NA	NA	NA	NA	NA	NA	NA	8,580	NA	NA	NA	NA	NA	NA	NA	3,720
	06/09/98	NA	NA	NA	NA	NA	NA	NA	NA	14,400	NA	NA	NA	NA	NA	NA	NA	572
	03/12/98	NA	NA	NA	NA	NA	NA	NA	NA	13,900	NA	NA	NA	NA	NA	NA	NA	472
	12/17/97	NA	NA	NA	NA	NA	NA	NA	NA	15,100	NA	NA	NA	NA	NA	NA	NA	555
09/16/97	NA	NA	NA	NA	NA	NA	NA	NA	11,400	NA	NA	NA	NA	NA	NA	NA	598	
1065PZ2B (intermediate) 	03/07/06	< 100	< 1	< 5	NA	< 1	22,000	13	< 1	140	< 3	35,000	< 10	< 20	1,000	47,000	< 20	350
	04/05/05	< 100	< 1	< 5	NA	< 1	23,000	10	< 1	150	< 3	31,000	< 10	< 20	930	46,000	21	330
	03/10/04	NA	NA	< 5	NA	< 1	NA	11	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	340
	03/03/99	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	355
	11/24/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	365 B
	08/25/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	353
	06/09/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	372
	03/12/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	359
	12/17/97	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	405
09/16/97	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	410	
1065PZ3A (shallow) DUP0405052A 1065PZ3ACL	03/13/06	< 100	< 1	< 5	NA	< 1	35,000	< 10	2.6	120	< 3	42,000	< 10	< 20	1,700	24,000	< 20	310
	04/05/05	< 100	< 1	< 5	NA	< 1	65,000	< 10	2	430	< 3	72,000	< 10	< 20	2,200	55,000	< 20	640
	04/05/05	< 100	< 1	< 5	NA	< 1	63,000	< 10	2.1	410	< 3	70,000	< 10	< 20	2,200	52,000	< 20	580
	04/05/05	< 100 U	< 2 U	< 2 U	NA	< 1 U	66,700	< 10 U	< 2 U	< 100 U	< 1 U	79,200	< 10 U	8.4	< 5,000 U	60,700	< 20 U	704
	03/15/04	NA	NA	< 5	NA	< 1	NA	23	1.3	NA	< 3	NA	NA	< 20	NA	NA	< 20	560
	07/18/00	NA	NA	< 5	NA	< 5	NA	13	< 10	NA	< 3	NA	NA	< 20	NA	NA	< 20	NA
	03/01/99	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	328
	11/23/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	365 B
	08/24/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	325
	06/08/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	341
	03/11/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	491
	12/16/97	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	410

Table A-11-4
Results of Dissolved Metals Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Aluminum	Antimony	Arsenic	Arsenic	Cadmium	Calcium	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Sodium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	1632M	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Levels ²		--	6	10	10	--	--	--	--	--	--	--	--	--	--	--	--	--
1065PZ3B (intermediate)	03/09/06	< 100	< 1	< 5	NA	< 1	34,000	34	1	240	< 3	51,000	< 10	< 20	< 500 UJ	67,000	< 20	1,930
	04/06/05	< 100	< 1	< 5	NA	< 1	35,000	29	< 1	< 100	< 3	47,000	< 10	< 20	< 500	63,000	< 20	480
	03/10/04	NA	NA	< 5	NA	< 1	NA	33	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	490
	03/01/99	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	610
	11/23/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	608 B
	08/24/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	595
	06/08/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	612
	03/11/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	485
	12/16/97	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	553
	09/15/97	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	533
1065PZ4A (shallow)	12/06/06	< 100	< 1	14	NA	< 1	60,000	< 10	< 1	30,000	< 3	77,000	2,000	< 20	7,700	120,000 J	< 20	660 J-
	08/17/06	< 100	< 1	12	NA	< 1	45,000 J	< 10	< 1	23,000	< 3	64,000	1,700	< 20	6,800	120,000	< 20	740
	05/24/06	< 100	< 1	7.9	NA	< 1	43000	< 10	1.7	21,000	< 3	48000	1800	< 20	5400	150,000	26	580
	03/09/06	< 100	< 1	8.9	NA	< 1	47,000	< 10	< 1	29,000	< 3	89,000	1,700	< 20	5,700 J	100,000	< 20	780
	11/29/05	< 100	< 1	13	NA	< 1	51,000	< 10 UJ	< 1	28,000	< 3	72,000	1,900	< 20	6,000	110,000	< 20	650
	08/30/05	< 100 UJ	< 1	13	11.9	< 1	45,000	< 10	< 1	22,000	< 3	58,000	1600	< 20	5,700	100,000	< 20	550
	06/02/05	< 100	< 1	9.6	9.33	< 1	44,000	< 10	< 1	23,000	< 3	58,000	1,600	< 20	5,200 J	99,000	< 20	590
	04/01/05	< 100	< 1	7.6	6.7	< 1	40,000 J	< 10	< 1	20,000	< 3	58,000	1,400 J	< 20	5,300	83,000	< 20	540
	03/15/04	NA	NA	14	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	670
	07/17/00	NA	NA	14	NA	< 5	NA	< 10	< 10	NA	< 3	NA	NA	< 20	NA	NA	< 20	NA
	03/08/99	NA	NA	NA	NA	NA	NA	NA	NA	12,800	NA	NA	NA	NA	NA	NA	NA	522
	12/01/98	NA	NA	NA	NA	NA	NA	NA	NA	23,700	NA	NA	NA	NA	NA	NA	NA	556
	08/27/98	NA	NA	NA	NA	NA	NA	NA	NA	16,500	NA	NA	NA	NA	NA	NA	NA	3,620
	06/11/98	NA	NA	NA	NA	NA	NA	NA	NA	14,300	NA	NA	NA	NA	NA	NA	NA	577
	03/17/98	NA	NA	NA	NA	NA	NA	NA	NA	14,700	NA	NA	NA	NA	NA	NA	NA	528
	12/22/97	NA	NA	NA	NA	NA	NA	NA	NA	25,600	NA	NA	NA	NA	NA	NA	NA	587
	09/18/97	NA	NA	NA	NA	NA	NA	NA	NA	22,800	NA	NA	NA	NA	NA	NA	NA	608 B
1065PZ4B (intermediate)	03/13/06	< 100	< 1	< 5	NA	< 1	25,000	25	1.8	< 100	< 3	57,000	< 10	< 20	880	59,000	< 20	240
	04/05/05	< 100	< 1	< 5	NA	< 1	24,000	25	< 1	150	< 3	51,000	< 10	< 20	800	55,000	< 20	470
	03/17/04	NA	NA	< 5	NA	< 1	NA	24 J	2.3	NA	< 3	NA	NA	< 20	NA	NA	< 20	480
	03/08/99	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	482
	12/01/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	468
	08/27/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	4,160
	06/11/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	458
	03/17/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	450
	12/22/97	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	451
	09/18/97	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	434 B
1065PZ5AR (shallow) DUP0307062B 1065PZ5ARCL	12/07/06	< 100	< 1	32	NA	< 1	79,000	< 10	< 1	26,000	< 3	81,000	2,000	< 20	6,700	87,000 J	< 20	730
	08/16/06	< 100	< 1	40	NA	< 1	87,000	< 10	< 1	24,000	< 3	85,000	1,900	< 20	7,500	94,000	< 20	830
	05/24/06	< 100	< 1	26	NA	< 1	74,000	< 10	< 1	19,000	< 3	77,000	2,100	< 20	6500	91,000	< 20	770
	03/07/06	< 100	< 1	24	NA	< 1	70,000	< 10	< 1	23,000	< 3	77,000	2,000	< 20	5,800	83,000	< 20	820
	03/07/06	< 100	< 1	21	NA	< 1	69,000	< 10	< 1	19,000	< 3	81,000	2,000	< 20	6,100	86,000	< 20	950
	03/07/06	< 100 U	< 2 U	15	NA	< 1 U	80,000	< 10 U	< 2 U	13,000	< 1 U	86,000	2,100	5.5	6,000	99,000	< 20 U	1,170 J+
	11/29/05	< 100	< 1	34 J	NA	< 1	88,000 J	< 10	< 1	27,000 J	< 3	87,000	2,800 J	< 20	6,600	91,000 J	< 20	930
	08/30/05	NA	NA	NA	42	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	760
	05/24/05	NA	NA	NA	24.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	820

Table A-11-4
Results of Dissolved Metals Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Aluminum	Antimony	Arsenic	Arsenic	Cadmium	Calcium	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Sodium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	1632M	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Levels ²		--	6	10	10	--	--	--	--	--	--	--	--	--	--	--	--	--
1065PZ5AR (shallow)	04/11/05	< 100	< 1	33	26.4	< 1	90,000	< 10	< 1	32,000	< 3	89,000	2,600	< 20	6,900	95,000	< 20	930
	03/10/04	NA	NA	22	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	850
1065PZ5B (intermediate)	03/13/06	< 100	< 1	< 5	NA	< 1	31,000	21	1	110	< 3	44,000	< 10	< 20	500	60,000	23	430
	04/11/05	< 100	< 1	< 5	NA	< 1	27,000	17	< 1	< 100	< 3	36,000	< 10	< 20	530	58,000	< 20	800
	03/10/04	NA	NA	< 5	NA	< 1	NA	14	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	370
	03/03/99	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	368
	11/24/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	331 B
	08/25/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	320
	06/09/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	323
	03/12/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	300
	12/17/97	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	321
	09/16/97	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	348
1065PZ6A (shallow)	04/06/05	< 100	< 1	< 5	NA	< 1	40,000	37	< 1	< 100	< 3	53,000	< 10	< 20	510	81,000	< 20	630
	03/17/04	NA	NA	< 5	NA	< 1	NA	30 J	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	570
	07/17/00	NA	NA	< 5	NA	< 5	NA	43	< 10	NA	< 3	NA	NA	< 20	NA	NA	< 20	NA
	03/01/99	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	576
	11/23/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	555 B
1065PZ6A (shallow)	08/24/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	539
	06/08/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	554
	03/11/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	557
	12/16/97	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	556
	09/15/97	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	579
1065PZ6B (intermediate)	03/10/06	< 100	< 1	< 5	NA	< 1	38,000	40	< 1	200	< 3	54,000	< 10	< 20	700 J	68,000	< 20	660
	04/05/05	< 100	< 1	< 5	NA	< 1	43,000	38	< 1	260	< 3	51,000	< 10	< 20	530	59,000	< 20	490
	03/09/04	NA	NA	< 5	NA	< 1	NA	42	< 1	< 100	< 3	NA	NA	< 20	NA	NA	27	510
	03/01/99	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	465
	11/23/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	457 B
	08/24/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	491
	06/08/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	475
	03/11/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	484
	12/16/97	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	517
	09/15/97	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	511
1065PZ7A (shallow)	03/15/06	< 100	< 1	< 5	NA	1.1	44,000	19	< 1	< 100	< 3	54,000	< 10	< 20	850	63,000	< 20	370 J
	04/06/05	< 100	< 1	< 5	NA	< 1	45,000	< 10	1.1	< 100	< 3	81,000	< 10	< 20	< 500	38,000	< 20	530
	03/17/04	NA	NA	< 5	NA	< 1	NA	< 10 UJ	2.1	NA	< 3	NA	NA	< 20	NA	NA	< 20	540
	07/17/00	NA	NA	< 5	NA	< 5	NA	< 10	< 10	NA	< 3	NA	NA	< 20	NA	NA	< 20	NA
	03/08/99	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	391
	12/01/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	375
	08/26/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	374
	06/10/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	472
	03/16/98	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	373
	12/18/97	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	374
	09/17/97	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	358 B

Table A-11-4
Results of Dissolved Metals Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Aluminum	Antimony	Arsenic	Arsenic	Cadmium	Calcium	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Sodium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	1632M	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Levels ²		--	6	10	10	--	--	--	--	--	--	--	--	--	--	--	--	--
1065PZ7B (intermediate)	03/15/06	< 100	< 1	< 5	NA	< 1	42,000	< 10	< 1	< 100	< 3	95,000	< 10	< 20	< 500	40,000	< 20	650 J
	04/06/05	< 100	< 1	< 5	NA	< 1	43,000	26	< 1	< 100	< 3	60,000	< 10	< 20	< 500	74,000	< 20	570
	03/17/04	NA	NA	< 5	NA	< 1	NA	31 J	3.3	120	< 3	NA	NA	< 20	NA	NA	< 20	540
	03/08/99	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	460
	12/01/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	434
	08/26/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	487
	06/10/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	575
	03/16/98	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	508
	12/18/97	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	505
	09/17/97	NA	NA	NA	NA	NA	NA	NA	NA	< 100	NA	NA	NA	NA	NA	NA	NA	493 B
1065MW9A (shallow)	12/05/06	< 100	< 1	27	NA	< 1	55,000	< 10	< 1	3,700	< 3	78,000	460	< 20	16,000 J	67,000	< 20	760 J+
DUP1205062C	12/05/06	< 100	< 1	23	NA	< 1	56,000	< 10	< 1	2,800	< 3	78,000	450	< 20	16,000 J	64,000	< 20	750 J+
1065MW9ACL	12/05/06	< 100 U	< 2 U	16	NA	< 1 U	67,600	< 10 U	< 2 U	4,480	< 1 U	99,800	498	2.6	19,600	79,400	< 20 U	743
	08/16/06	< 100	< 1	10	NA	< 1	58,000	< 10	< 1	5,100	< 3	94,000	460	< 20	18,000	75,000	< 20	710
	05/24/06	< 100	< 1	6.8	NA	< 1	61,000	< 10	< 1	5,900	< 3	93,000	540	< 20	17,000	68,000	< 20	770
DUP0524063B	05/24/06	< 100	< 1	6.9	NA	< 1	65,000	< 10	< 1	6,200	< 3	99,000	550	< 20	18,000	72,000	< 20	890
1065MW9ACL	05/24/06	< 100 U	< 2 U	7.5	NA	< 1 U	69,900	< 10 U	< 2 U	7,160 J+	< 1 U	102,000	563	2.6	17,800	76,100	< 20 U	694
	03/09/06	< 100	< 1	5.3	NA	< 1	54,000	< 10	< 1	5,400	< 3	90,000	570	< 20	13,000 J	69,000	< 20	870
DUP0309062B	03/09/06	< 100	< 1	6.3	NA	< 1	53,000	< 10	< 1	6,100	< 3	90,000	600	< 20	12,000 J	69,000	< 20	790
	11/30/05	< 100	< 1	< 5	NA	< 1	57,000	< 10	< 1	3,100	< 3	80,000	460	< 20	14,000	64,000	< 20	820
DUP1130052B	11/30/05	< 100	< 1	< 5	NA	< 1	61,000	< 10	< 1	3,000	< 3	87,000	500	< 20	14,000	70,000	< 20	760
1065MW9ACL	11/30/05	< 100 U	< 2 U	4.4	NA	< 1 U	70,000	< 10 U	< 2 U	3,400	< 1 U	96,000	580	< 2 U	17,000 N	74,000	< 20 U	805
	08/30/05	< 100 UJ	< 1	7.4	8.5	< 1	53,000	< 10	< 1	5,400	< 3	75,000	470	< 20	15,000	59,000	< 20	730
DUP0830052B	08/30/05	< 100 UJ	< 1	8.2	6.9	< 1	56,000	< 10	< 1	5,700	< 3	79,000	520	< 20	14,000	64,000	< 20	730
1065MW9ACL	08/30/05	< 100 U	< 2 U	6.32	NA	< 1 U	63,900	< 10 U	< 2 U	4,840	< 1 U	93,300	564	< 2 U	16,100	72,800	< 20 U	779
	05/24/05	< 100 UJ	< 1	8.5	2.23	< 1	64,000	< 10	< 1	3,500	< 3	91,000	540	< 20	14,000	70,000	< 20	810
	04/06/05	< 100	< 1	10	8.23	< 1	58,000	< 10	< 1	6,100	< 3	85,000	500	< 20	15,000	66,000	< 20	770
DUP0406052A	04/06/05	< 100	< 1	7.1	4.36	< 1	62,000	< 10	< 1	3,600	< 3	91,000	450	< 20	17,000	70,000	< 20	670
	12/17/04	NA	NA	8.6	NA	< 1	NA	< 10	19	5,700	< 3	NA	NA	< 20	NA	NA	< 20	810
	08/11/04	NA	NA	7.7	NA	< 1	NA	< 10	< 1	5,400	< 3	NA	NA	< 20	NA	NA	< 20	810
	05/27/04	NA	NA	7.1	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	730
DUP0310042A	03/10/04	NA	NA	7.9	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	720
	03/10/04	NA	NA	6.9	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	700
	11/05/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 3 J	NA	NA	NA	NA	NA	NA	NA
	10/07/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.4 J	NA	NA	NA	NA	NA	NA	NA

Table A-11-4
Results of Dissolved Metals Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Aluminum	Antimony	Arsenic	Arsenic	Cadmium	Calcium	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Sodium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	1632M	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Levels ²		--	6	10	10	--	--	--	--	--	--	--	--	--	--	--	--	--
1065MW9B (intermediate) DUP0816062A 1065MW9BCL	12/07/06	< 100	< 1	< 5	NA	< 1	38,000	36	< 1	< 100	< 3	54,000	< 10	< 20	780	55,000 J	< 20	500
	08/16/06	< 100	< 1	< 5	NA	< 1	37,000	34	1	< 100	< 3	54,000	< 10	< 20	750	56,000	< 20	490
	08/16/06	< 100	< 1	< 5	NA	< 1	38,000	33	< 1	< 100	< 3	56,000	< 10	< 20	710	60,000	< 20	490
	08/16/06	< 100 U	< 60 U	< 100 U	NA	< 5 U	40,100	38	< 20 U	< 100 U	< 50 U	57,000	< 10 U	< 40 U	1110 B	60,800	9 B	505
	05/25/06	< 100 UJ	< 1	< 5	NA	< 1	37,000	38	< 1	< 100	< 3	50,000	< 10	< 20	730	55,000	< 20	430
	05/25/06	< 100 UJ	< 1	< 5	NA	< 1	37,000	38	< 1	< 100	< 3	50,000	< 10	< 20	730	55,000	< 20	430
	03/09/06	< 100	< 1	< 5	NA	< 1	34,000	36	< 1	220	< 3	53,000	< 10	< 20	720 J	59,000	25	570
	11/29/05	< 100	< 1	< 5	NA	< 1	35,000	31 J	< 1	120	< 3	48,000	< 10	< 20	690	52,000	< 20	110
	11/29/05	< 100	< 1	< 5	NA	< 1	35,000	31 J	< 1	120	< 3	48,000	< 10	< 20	690	52,000	< 20	110
	08/30/05	< 100 UJ	< 1	< 5	NA	< 1	32,000	30	< 1	160	< 3	41,000	< 10	< 20	740	47,000	85	470
	05/24/05	< 100 UJ	< 1	< 5	NA	< 1	38,000	34	< 1	< 100	< 3	48,000	< 10	< 20	740	54,000	< 20	490
	04/06/05	< 100	< 1	< 5	NA	< 1	36,000	32	< 1	< 100	< 3	46,000	< 10	< 20	670	51,000	< 20	480
	12/17/04	NA	NA	< 5	NA	< 1	NA	33	< 1	< 100	< 3	NA	NA	< 20	NA	NA	< 20	500
	08/13/04	NA	NA	< 5	NA	< 1	NA	31	< 1	< 100	< 3	NA	NA	< 20	NA	NA	< 20	500
	08/13/04	NA	NA	< 5	NA	< 1	NA	32	< 1	< 100	< 3	NA	NA	< 20	NA	NA	< 20	460
	05/27/04	NA	NA	< 5	NA	< 1	NA	32	< 1	< 100	< 3	NA	NA	< 20	NA	NA	< 20	450
	05/27/04	NA	NA	< 5	NA	< 1	NA	31	< 1	< 100	< 3	NA	NA	< 20	NA	NA	< 20	450
	03/10/04	NA	NA	< 5	NA	< 1	NA	29	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	480
	11/05/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 3 J	NA	NA	NA	NA	NA	NA	NA
	10/07/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 3	NA	NA	NA	NA	NA	NA	NA
1065MW10A (shallow)	03/16/06	< 100 UJ	< 1	< 5	NA	< 1	29,000	< 10	< 1	13,000	< 3	35,000	520	< 20	1,900	57,000 J	< 20	520 J
	04/11/05	< 100	< 1	< 5	NA	< 1	31,000	< 10	< 1	16,000	< 3	36,000	560	< 20	2,000	60,000	< 20	430
	03/10/04	NA	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	380
	11/05/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 3 J	NA	NA	NA	NA	NA	NA	NA
	10/07/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 3	NA	NA	NA	NA	NA	NA	NA
1065MW10B (intermediate)	03/09/06	< 100	< 1	< 5	NA	< 1	32,000	37	< 1	190	< 3	47,000	< 10	< 20	550 J	57,000	< 20	510
	04/11/05	< 100	< 1	< 5	NA	< 1	38,000	36	< 1	< 100	< 3	48,000	< 10	< 20	560	60,000	< 20	470
	03/10/04	NA	NA	< 5	NA	< 1	NA	26	1.2	NA	< 3	NA	NA	< 20	NA	NA	< 20	520
	11/05/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 3 J	NA	NA	NA	NA	NA	NA	NA
	10/07/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 3	NA	NA	NA	NA	NA	NA	NA
1065MW11A (shallow) DUP0317042B	03/09/06	< 100	< 1	< 5	NA	< 1	16,000	12	< 1	120	< 3	18,000	< 10	< 20	< 500 UJ	31,000	< 20	860
	04/11/05	< 100	< 1	< 5	NA	< 1	36,000	32	< 1	< 100	< 3	45,000	< 10	< 20	750	66,000	< 20	500
	03/17/04	NA	NA	< 5	NA	< 1	NA	10 J	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	190
	03/17/04	NA	NA	< 5	NA	< 1	NA	12 J	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	250
	11/05/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 3 J	NA	NA	NA	NA	NA	NA	NA
	10/07/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 3	NA	NA	NA	NA	NA	NA	NA
1065MW11B (intermediate)	03/07/06	< 100	< 1	< 5	NA	< 1	43,000	38	2.5	200	< 3	47,000	< 10	< 20	700	54,000	< 20	860
	04/11/05	< 100	< 1	< 5	NA	< 1	54,000	38	< 1	< 100	< 3	46,000	< 10	< 20	790	61,000	< 20	600
	03/09/04	NA	NA	< 5	NA	< 1	NA	40	< 1	< 100	< 3	NA	NA	< 20	NA	NA	< 20	510
	11/05/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 3 J	NA	NA	NA	NA	NA	NA	NA
	10/07/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 3	NA	NA	NA	NA	NA	NA	NA

Table A-11-4
Results of Dissolved Metals Analyses
Building 1065/1027 Area
Presidio of San Francisco, California

Well Name (water-bearing zone)	Sample Date	Aluminum	Antimony	Arsenic	Arsenic	Cadmium	Calcium	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Sodium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	1632M	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6010B/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Levels ²		--	6	10	10	--	--	--	--	--	--	--	--	--	--	--	--	--
1065MW101 (shallow) DUP0526051B 1065MW101CL	12/06/06	< 100	< 1	28	NA	< 1	23,000	< 10	< 1	19,000	< 3	43,000	53	< 20	6,600	230,000 J	< 20	690 J-
	08/16/06	< 100	< 1	31	NA	< 1	22,000	< 10	< 1	18,000	< 3	42,000	64	< 20	7,300	230,000	< 20	910
	05/24/06	< 100	< 1	26	NA	< 1	23,000	< 10	< 1	22,000	< 3	43,000	66	< 20	7,300	230,000	< 20	830
	03/13/06	< 100	< 1	24	NA	< 1	19,000	< 10	< 1	19,000	< 3	38,000	51	< 20	5,700	200,000	< 20	660
	11/29/05	< 100	< 1	28	NA	< 1	20,000	< 10 UJ	< 1	19,000	< 3	38,000	59	< 20	6,000	240,000	< 20	1,020
	08/31/05	< 100 UJ	< 1	30	24.8 J	< 1	19,000	< 10	< 1	18,000	< 3	35,000	79	< 20	7,200	240,000	< 20	960
	05/26/05	< 100	< 1	26	22.9	< 1	20,000	< 10	< 1	19,000	< 3	46,000 J	100	< 20	6,700	300,000 J	< 20	720
	05/26/05	< 100	< 1	26	21.3	< 1	24,000	< 10	< 1	19,000	< 3	41,000 J	100	< 20	6,800	280,000 J	< 20	670
	05/26/05	< 100 U	< 2 U	24	NA	< 10 U	20,500	< 10 U	< 2 U	17,700	< 1 U	40,000	86.8	11.9	7,510	272,000	< 20 U	965
	03/29/05	< 100	< 1	23	17	< 1	22,000	< 10	3.7	19,000	< 3	45,000	130	< 20	6,400	260,000	< 20	900
	12/17/04	NA	NA	21	NA	< 1	NA	< 10	< 1 U	13,000	< 3	NA	NA	< 20	NA	NA	< 20	NA
	08/13/04	NA	NA	25	NA	< 1	NA	< 10	1.1	4,000	< 3	NA	NA	25	NA	NA	< 20	NA
1065MW102 (shallow)	12/06/06	< 100	< 1	6.3	NA	< 1	28,000	< 10	< 1	1,400	< 3	25,000	460	< 20	5,800	130,000 J	< 20	320 J-
	08/16/06	< 100	< 1	9.6	NA	< 1	29,000	< 10	1.3	130	< 3	24,000	390	< 20	7,900	190,000	< 20	680
	05/24/06	< 100	< 1	11	NA	< 1	25,000	< 10	< 1	9,500	< 3	41,000	150	33	3,600	200,000	< 20	560
	03/14/06	< 100	< 1	6.8	NA	< 1	14,000	< 10	< 1	1,300	< 3	14,000	180	< 20	4,800	120,000	< 20	450
	11/29/05	< 100	< 1	< 5	NA	< 1	18,000	< 10 UJ	7.8	< 100	< 3	5,900	14	< 20	2,300	23,000	< 20	170
	05/24/05	< 100 UJ	< 1	8.2	4.32	< 1	17,000	< 10	< 1	550	< 3	14,000	220	< 20	7,800	140,000	< 20	470
	03/29/05	< 100	< 1	6.5	5.8	< 1	22,000	< 10	6.9	370	< 3	15,000	220	< 20	6,800	130,000	< 20	340
	12/15/04	NA	NA	11	NA	< 1	NA	< 10	< 1	570	< 3	NA	NA	< 20	NA	NA	< 20	NA
	08/11/04	NA	NA	16	NA	< 1	NA	< 10	11	150	< 3	NA	NA	< 20	NA	NA	25	NA
1027MW01	07/17/00	NA	NA	< 5	NA	< 5	NA	11	< 10	NA	< 3	NA	NA	< 20	NA	NA	< 20	NA
1027MW03	07/17/00	NA	NA	< 5	NA	< 5	NA	12	< 10	NA	< 3	NA	NA	< 20	NA	NA	< 20	NA
1047MW101 DUP0307062A 1047MW101CL DUP0311042A 1047MW101CL	03/07/06	< 100	< 1	< 5	NA	< 1	4,300	< 10	2.3	< 100	< 3	4,500	< 10	< 20	1,300	3,100	< 20	180
	03/07/06	< 100	< 1	< 5	NA	< 1	4,400	< 10	2.5	< 100	< 3	4,700	< 10	< 20	1,300	3,200	< 20	130
	03/07/06	< 100 U	< 2 U	< 2 U	NA	< 1 U	5,000	< 10 U	< 2 U	< 100 U	< 1 U	4,700	< 10 U	< 2 U	< 5,000 U	< 5,000 U	< 20 U	186 J+
	04/06/05	< 100	< 1	< 5	NA	< 1	5,700	< 10	1.7	< 100	< 3	5,200	< 10	< 20	1,200	< 500 U	< 20	110
	03/11/04	NA	NA	< 5	NA	< 1	NA	< 10	1	100	< 3	NA	NA	< 20	NA	NA	< 20	350
	03/11/04	NA	NA	< 5	NA	< 1	NA	< 10	1.1	< 100	< 3	NA	NA	< 20	NA	NA	< 20	310
	03/11/04	NA	NA	< 5	NA	< 1	NA	< 10	< 10	< 500	< 3	NA	NA	< 10	NA	NA	< 20	150 HT-04,J

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - From Table 6 of the CAP (MACTEC, 2005b).

µg/L - micrograms per liter

mg/L - milligrams per liter

NA - Not analyzed

-- Cleanup level not established

Bold concentrations indicate cleanup level exceedances.

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historic data qualifiers.

Table A-11-5
Results of Dissolved Gas and TOC Analyses
Building 1065 Area
Presidio of San Francisco, California

Location ID	Sample Date	Ethane	Ethene	Methane	TOC
	Analytical Method ¹	RSK 175	RSK 175	RSK 175	SW9060
		(mg/L)	(mg/L)	(mg/L)	(mg/L)
1065PZ1A (shallow)	03/14/06	NA	NA	NA	11
	12/01/05	< 0.005	< 0.005	14 J-	25
	08/31/05	< 0.005	< 0.005	13	24
	06/02/05	< 0.005	< 0.005	10	20
	03/29/05	< 0.005	< 0.005	4	11
	03/08/99	< 0.003	< 0.003	7	NA
	11/30/98	< 1.5	< 1.5	10	NA
	08/26/98	< 0.003	< 0.003	8.6	NA
	06/10/98	< 0.25	< 0.25	4.4	NA
	03/16/98	< 0.25 DU	< 0.25 DU	3.3	NA
	12/18/97	< 0.5 DU	< 0.5 DU	13.4	NA
	09/17/97	< 0.5 DU	< 0.5 DU	15.5 D	NA
1065PZ1B (intermediate)	03/08/99	< 0.003	< 0.003	< 0.003	NA
	11/30/98	< 0.006	< 0.006	0.079	NA
	08/26/98	< 0.003	< 0.003	0.0097	NA
	08/26/98	< 0.003	< 0.003	0.0097	NA
	06/10/98	< 0.0005	< 0.0005	0.0017	NA
	03/16/98	< 0.0025 DU	< 0.0025 DU	0.0284 D	NA
	12/18/97	< 0.025 DU	< 0.025 DU	0.196 D	NA
	09/17/97	< 0.0025 DU	< 0.0025 DU	0.0559 D	NA
1065PZ2A (shallow) DUP0401052A	03/13/06	NA	NA	NA	8.2
	12/01/05	< 0.005	< 0.005	8.9 J-	10
	08/30/05	< 0.005	< 0.005	11	8.8
	05/24/05	< 0.005	< 0.005	12	12
	04/01/05	< 0.005	< 0.005	4.8	7.8
	04/01/05	< 0.005	< 0.005	4.3	7.8
	03/03/99	< 0.003	< 0.003	7	NA
	11/24/98	< 0.6	< 0.6	6.6	NA
	08/25/98	< 1.5	< 1.5	12	NA
	06/09/98	< 0.6 DU	< 0.6 DU	9.000 D	NA
	03/12/98	< 0.25 DU	< 0.25 DU	4.290 D	NA
	12/17/97	< 2.5 DU	< 2.5 DU	18.1 D	NA
	09/16/97	< 0.5 DU	< 0.5 DU	8.4 D	NA
1065PZ2B (intermediate)	03/03/99	< 0.003	< 0.003	< 0.003	NA
	11/24/98	< 0.003	< 0.003	< 0.003	NA
	08/25/98	< 0.003	< 0.003	0.0041	NA
	06/09/98	< 0.0005	< 0.0005	0.0008	NA
	03/12/98	< 0.0005	< 0.0005	< 0.0005	NA
	12/17/97	< 0.0005	< 0.0005	0.0007	NA
	09/16/97	< 0.001 DU	< 0.001 DU	0.0214 D	NA
1065PZ3A (shallow)	03/01/99	< 0.003	< 0.003	< 0.003	NA
	11/23/98	< 0.003	< 0.003	< 0.003	NA
	08/24/98	< 0.003	< 0.003	< 0.003	NA
	06/08/98	< 0.0005	< 0.0005	0.0006	NA
	03/11/98	< 0.0005	< 0.0005	< 0.0005	NA
	12/16/97	< 0.0005	< 0.0005	< 0.0005	NA

Table A-11-5
Results of Dissolved Gas and TOC Analyses
Building 1065 Area
Presidio of San Francisco, California

Location ID	Sample Date	Ethane	Ethene	Methane	TOC
	Analytical Method ¹	RSK 175	RSK 175	RSK 175	SW9060
		(mg/L)	(mg/L)	(mg/L)	(mg/L)
1065PZ3B (intermediate)	03/01/99	< 0.003	< 0.003	< 0.003	NA
	11/23/98	< 0.003	< 0.003	< 0.003	NA
	08/24/98	< 0.003	< 0.003	< 0.003	NA
	06/08/98	< 0.0005	< 0.0005	< 0.0005	NA
	03/11/98	< 0.0005	< 0.0005	< 0.0005	NA
	12/16/97	< 0.0005	< 0.0005	< 0.0005	NA
	09/15/97	< 0.0005	< 0.0005	0.0063	NA
1065PZ4A (shallow)	03/09/06	NA	NA	NA	12
	11/29/05	< 0.005	< 0.005	16	8.5
	08/30/05	< 0.005	< 0.005	14	9.1
	06/02/05	< 0.005	< 0.005	12	9.3 J+
	04/01/05	< 0.005	< 0.005	11	6.2
	03/08/99	< 0.003	< 0.003	3.4	NA
	12/01/98	< 0.6	< 0.6	6.9	NA
	08/27/98	< 1.5	< 1.5	9.6	NA
	06/11/98	< 0.25 DU	< 0.25 DU	3.3 D	NA
	03/17/98	< 0.25 DU	< 0.25 DU	2.47 D	NA
	12/22/97	< 1.3 DU	< 1.3 DU	14 D	NA
	09/18/97	< 0.5 DU	< 0.5 DU	13.5 D	NA
1065PZ4B (intermediate)	03/08/99	< 0.3	< 0.3	0.057	NA
	12/01/98	< 0.015	< 0.015	0.14	NA
	08/27/98	< 0.003	< 0.003	0.036	NA
	06/11/98	< 0.0005	< 0.0005	0.001	NA
	03/17/98	< 0.0005	< 0.0005	< 0.0005	NA
	12/22/97	< 0.0025 DU	< 0.0025 DU	0.0721 D	NA
	09/18/97	< 0.005 D	< 0.005 D	0.133 D	NA
1065PZ5AR (shallow) DUP0307062B 1065PZ5ARCL	03/07/06	NA	NA	NA	42
	03/07/06	NA	NA	NA	42
	03/07/06	NA	NA	NA	43.5
	11/29/05	< 0.005	< 0.005	12	49
	08/30/05	< 0.005	< 0.005	3.2	37
	05/24/05	< 0.005	< 0.005	6.9	57
	04/11/05	< 0.005	< 0.005	12	47
	03/12/98	NA	NA	2.710 D	NA
	09/16/97	NA	NA	0.0645 D	NA
1065PZ5B (intermediate)	03/03/99	< 0.003	< 0.003	< 0.003	NA
	11/24/98	< 0.003	< 0.003	< 0.003	NA
	08/25/98	< 0.003	< 0.003	< 0.003	NA
	06/09/98	< 0.0005	< 0.0005	< 0.0008	NA
	03/12/98	< 0.0005	< 0.0005	< 0.0005	NA
	12/17/97	< 0.0005	< 0.0005	0.0005	NA
	09/16/97	< 0.0005	< 0.0005	0.0148	NA

Table A-11-5
Results of Dissolved Gas and TOC Analyses
Building 1065 Area
Presidio of San Francisco, California

Location ID	Sample Date	Ethane	Ethene	Methane	TOC
	Analytical Method ¹	RSK 175	RSK 175	RSK 175	SW9060
		(mg/L)	(mg/L)	(mg/L)	(mg/L)
1065PZ6A (shallow)	03/01/99	< 0.003	< 0.003	< 0.003	NA
	11/23/98	< 0.003	< 0.003	< 0.003	NA
	08/24/98	< 0.003	< 0.003	< 0.003	NA
	06/08/98	< 0.0005	< 0.0005	< 0.0005	NA
	03/11/98	< 0.0005	< 0.0005	< 0.0005	NA
	12/16/97	< 0.0005	< 0.0005	< 0.0005	NA
	09/15/97	< 0.0005	< 0.0005	0.0006	NA
	09/15/97	NA	NA	0.0006	NA
1065PZ6B (intermediate)	03/01/99	< 0.003	< 0.003	< 0.003	NA
	11/23/98	< 0.003	< 0.003	< 0.003	NA
	08/24/98	< 0.003	< 0.003	< 0.003	NA
	06/08/98	< 0.0005	< 0.0005	0.0009	NA
	03/11/98	< 0.0005	< 0.0005	< 0.0005	NA
	12/16/97	< 0.0005	< 0.0005	0.0008	NA
	09/15/97	< 0.0005	< 0.0005	0.0109	NA
1065PZ7A (shallow)	03/08/99	< 0.003	< 0.003	< 0.003	NA
	12/01/98	< 0.003	< 0.003	< 0.003	NA
	08/26/98	< 0.003	< 0.003	< 0.003	NA
	06/10/98	< 0.0005	< 0.0005	< 0.0005	NA
	03/16/98	< 0.0005	< 0.0005	< 0.0005	NA
	12/18/97	< 0.0005	< 0.0005	< 0.0005	NA
	09/17/97	< 0.0005	< 0.0005	< 0.0005	NA
1065PZ7B (intermediate)	03/08/99	< 0.003	< 0.003	< 0.003	NA
	12/01/98	< 0.003	< 0.003	< 0.003	NA
	08/26/98	< 0.003	< 0.003	< 0.003	NA
	06/10/98	< 0.0005	< 0.0005	0.0007	NA
	03/16/98	< 0.0005	< 0.0005	< 0.0005	NA
	12/18/97	< 0.0005	< 0.0005	0.0033	NA
	09/17/97	< 0.0005	< 0.0005	0.0166	NA
1065MW9A (shallow)	03/09/06	NA	NA	NA	2.1
DUP0309062B	03/09/06	NA	NA	NA	2.5
	11/30/05	< 0.005	< 0.005	8.4	2.9
DUP1130052B	11/30/05	< 0.005	< 0.005	7.1	2.8
1065MW9ACL	11/30/05	< 0.005 UU	< 0.015 UU	3.7	3
	08/30/05	< 0.005	< 0.005	5.6	3
DUP0830052B	08/30/05	< 0.005	< 0.005	5.1	2.8
1065MW9ACL	08/30/05	0.0013 J-	0.00072 J J-	3 J-	2.9
	05/24/05	< 0.005	< 0.005	4.7	3
	04/06/05	< 0.005	< 0.005	9.2	2.9
DUP0406052A	04/06/05	< 0.005	< 0.005	9.2	2.7
1065MW101 (shallow)	03/13/06	NA	NA	NA	28
	11/29/05	< 0.005	< 0.005	17	33
	08/31/05	< 0.005	< 0.005	12	41
	05/26/05	< 0.005	< 0.005	14	51
DUP0526051B	05/26/05	< 0.005	< 0.005	13	51
1065MW101CL	05/26/05	0.00077	< 0.0015 U	10	34.7
	03/29/05	< 0.005	< 0.005	15	34

Table A-11-5
Results of Dissolved Gas and TOC Analyses
Building 1065 Area
Presidio of San Francisco, California

Location ID	Sample Date	Ethane	Ethene	Methane	TOC
	Analytical Method ¹	RSK 175	RSK 175	RSK 175	SW9060
		(mg/L)	(mg/L)	(mg/L)	(mg/L)
1065MW102 (shallow)	03/14/06	NA	NA	NA	4.8
	11/29/05	< 0.005	< 0.005	1.4	7.8
	09/01/05	< 0.005	< 0.005	4.3 J-	17
	05/24/05	< 0.005	< 0.005	2.9	12
	03/29/05	< 0.005	< 0.005	1.5	8.3

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Fourth Quarter 2004.

mg/L - milligrams per liter

TOC - Total Organic Carbon

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-11-6
Results of Arsenic Speciation Analyses
Building 1065 Area
Presidio of San Francisco, California

Location ID	Sample Date	Inorganic Arsenic (As)	Arsenite (As III)	Arsenate (As V) ²	Percentage of As III ³	Percentage of As V ³
	Analytical Method ¹	1632M	1632M	1632M	--	--
		(µg/L)	(µg/L)	(µg/L)	%	%
Cleanup Levels⁴		10	--	--	--	--
1065PZ1A (shallow)	08/31/05	20 J	22.1 J	< 1 JU	>99	<1
	06/02/05	35.7	30	5.7	84	16
	03/29/05	3.23	2.55	0.678 B	79	21
1065PZ2A (shallow)	08/31/05	16.8	17.1	< 1 U	>99	<1
	05/24/05	19.2	15	4.2	78	22
	04/01/05	8.88	6.15	2.73	69	31
DUP0401052A	04/01/05	9.02	5.78	3.25	64	36
1065PZ4A (shallow)	08/31/05	11.9	12.9	< 1 U	>99	<1
	06/02/05	9.33	8.44	0.89	90	10
	04/01/05	6.7	6.4	0.306 B	95	5
1065PZ5AR (shallow)	08/31/05	42	41	< 10 U	>99	<1
	05/24/05	24.5	20	4.5	82	18
	04/11/05	26.4	19	7.39	72	28
1065MW9A (shallow)	08/30/05	8.5	8.3	< 1 U	>99	<1
DUP0830052B	08/30/05	6.9	7	< 0.5 U	>99	<1
DUP0406052A	05/24/05	2.23	1.14	1.09	51	49
	04/06/05	8.23	5.67	2.56	69	31
	04/06/05	4.36	4.1	0.259	94	6
1065MW101 (shallow)	08/31/05	24.8 J	26.2 J	< 1 JU	>99	<1
	05/26/05	22.9	18.1	4.8	79	21
	05/26/05	21.3	17.8	3.5	84	16
DUP0526051B	03/29/05	17	20.1	< 0.14 U	>99	<1
1065MW102 (shallow)	05/24/05	4.32	1.48	2.84	34	66
	03/29/05	5.8	4.47	1.34	77	23

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001.

2 - The concentration of As V was determined by the laboratory by subtracting the As III concentration from the inorganic As concentration.

3 - Relative percentages of As III and As V were calculated by dividing the As III and As V concentrations by the As concentration and multiplying by 100.

4 - From Table 6 of the Building 1065 CAP (MACTEC, 2007)

µg/L - micrograms per liter

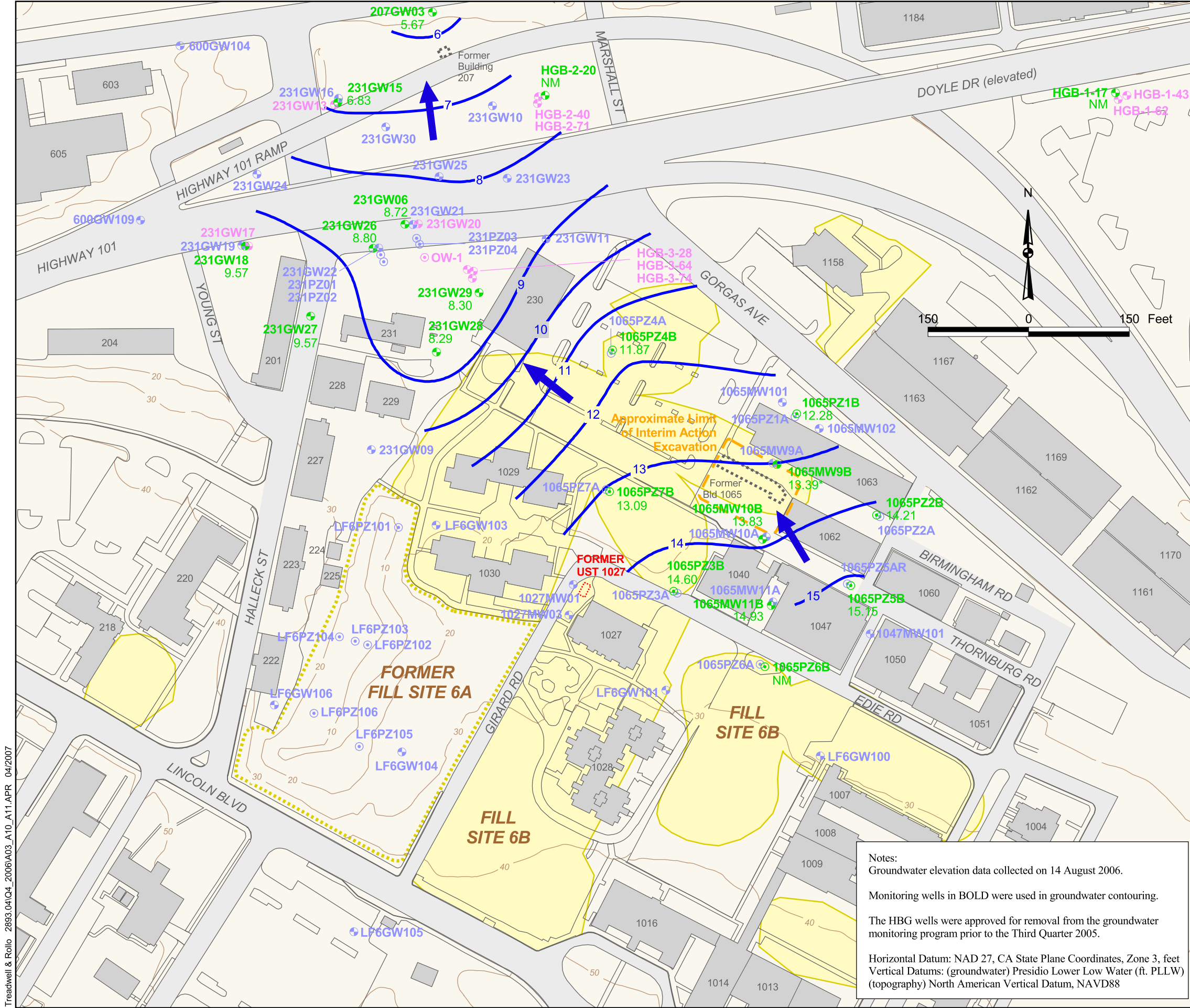
-- Cleanup level not established

Bold concentrations indicate cleanup level exceedances.

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.



LEGEND

1065MW10B

13.83

Intermediate Groundwater Monitoring Well
August 2006 Groundwater Elevation

1065PZ1B

12.28

Intermediate Piezometer
August 2006 Groundwater Elevation

NM

Not Measured. Well approved for removal from the groundwater monitoring program.

*

Well not used in contouring because groundwater within it was at or above the top of casing. Value posted is top of casing elevation.

231GW21

Shallow Groundwater Monitoring Well

1065PZ1A

Shallow Piezometer

231GW20

Deep Groundwater Monitoring Well

OW-1

Deep Piezometer

Approximate Direction of Groundwater Flow

Groundwater Contour (Contour Interval: 1 ft)

Location of Building 1065 Interim Action Area Boundary provided by MACTEC. The Interim Action took place in November 2003.

Topographic Contour (Contour Interval: 10 ft)

Building 1027 10,000 Gallon Fuel Oil Underground Storage Tank (UST) (Montgomery Watson, 1996c)

Former Building Outline

Former Fill Site 6A Excavation Boundary

Approximate Lateral Extent of Fill Site 6B

Building and Number

**BUILDING 1065 AND BUILDING 231/207
14 AUGUST 2006
INTERMEDIATE GROUNDWATER
ELEVATION MAP**

Presidio Trust

34 Graham Street
P.O. Box 29052
San Francisco, CA
94129-0052
415/561-5300
fax 415/561-5315
April 2007

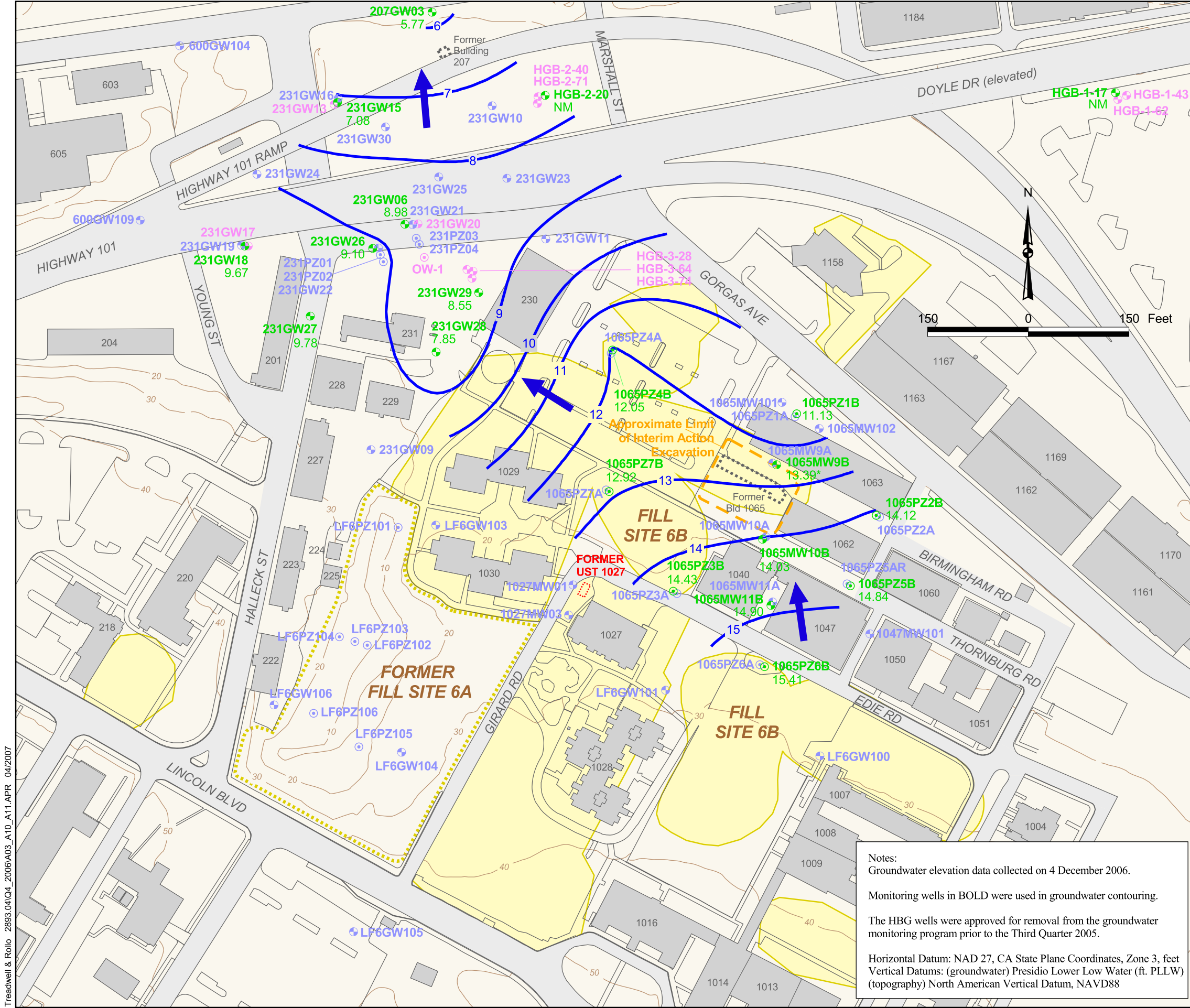
FIGURE A-11-4

Notes:
Groundwater elevation data collected on 14 August 2006.

Monitoring wells in BOLD were used in groundwater contouring.

The HBG wells were approved for removal from the groundwater monitoring program prior to the Third Quarter 2005.

Horizontal Datum: NAD 27, CA State Plane Coordinates, Zone 3, feet
Vertical Datums: (groundwater) Presidio Lower Low Water (ft. PLLW)
(topography) North American Vertical Datum, NAVD88



LEGEND

1065MW10B
Intermediate Groundwater Monitoring Well
December 2006 Groundwater Elevation
14.03

1065PZ1B
Intermediate Piezometer
December 2006 Groundwater Elevation
11.13

NM
Not Measured. Well approved for removal from the groundwater monitoring program.

Well not used in contouring because groundwater within it was at or above the top of casing. Value posted is top of casing elevation.

231GW21
Shallow Groundwater Monitoring Well

1065PZ1A
Shallow Piezometer

231GW20
Deep Groundwater Monitoring Well

OW-1
Deep Piezometer

Approximate Direction of Groundwater Flow

Groundwater Contour (Contour Interval: 1 ft)

Location of Building 1065 Interim Action Area Boundary provided by MACTEC. The Interim Action took place in November 2003.

Topographic Contour (Contour Interval: 10 ft)

Building 1027 10,000 Gallon Fuel Oil Underground Storage Tank (UST) (Montgomery Watson, 1996c)

Former Building Outline

Former Fill Site 6A Excavation Boundary

Approximate Lateral Extent of Fill Site 6B

201
Building and Number

**BUILDING 1065 AND BUILDING 231/207
4 DECEMBER 2006
INTERMEDIATE GROUNDWATER
ELEVATION MAP**

Presidio Trust
34 Graham Street
P.O. Box 29052
San Francisco, CA
94129-0052
415/561-5300
fax 415/561-5315
April 2007

FIGURE A-11-5

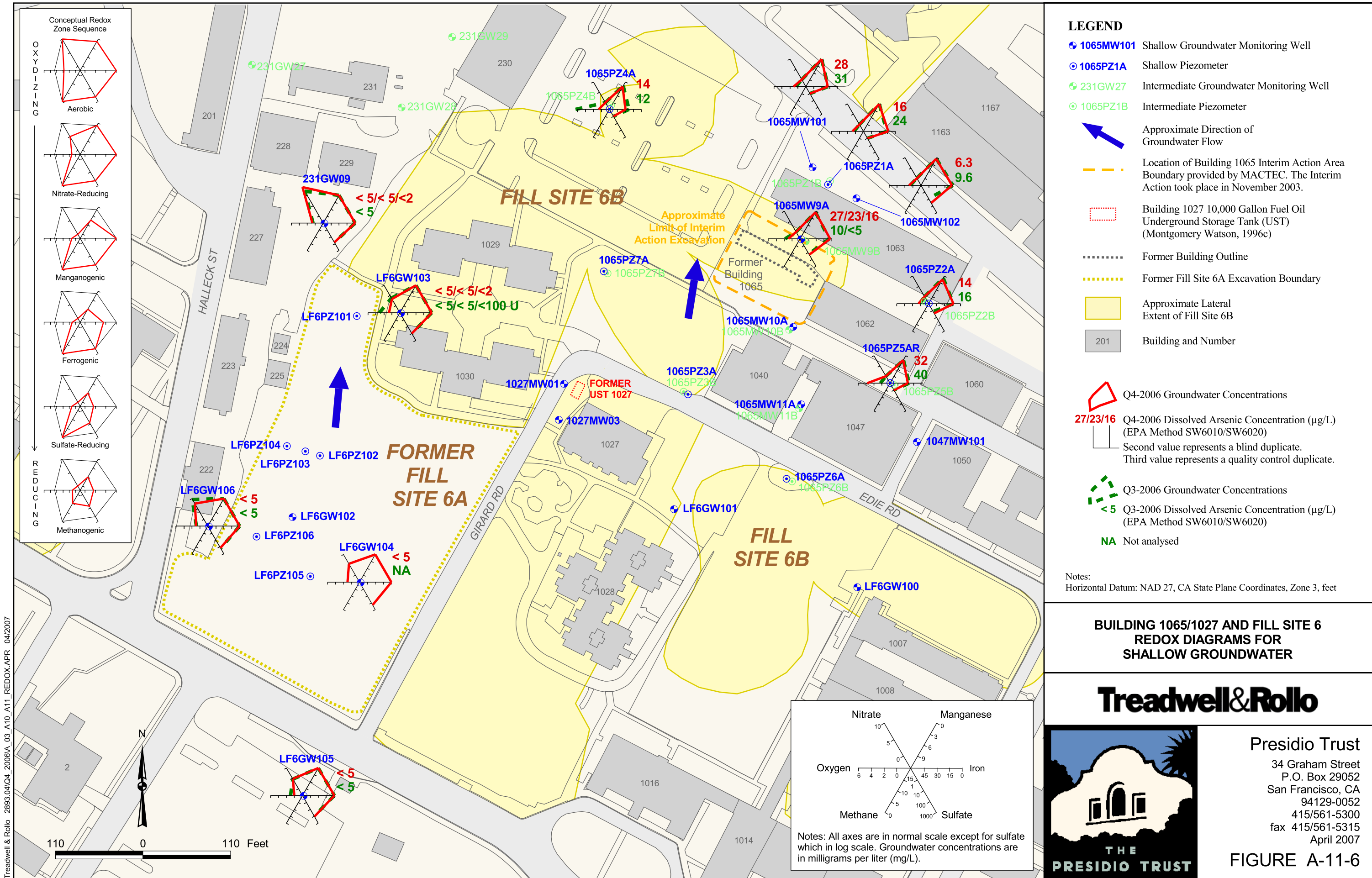
Treadwell & Rollo 2893.041Q4_2006A03_A10_A11.APR 04/2007

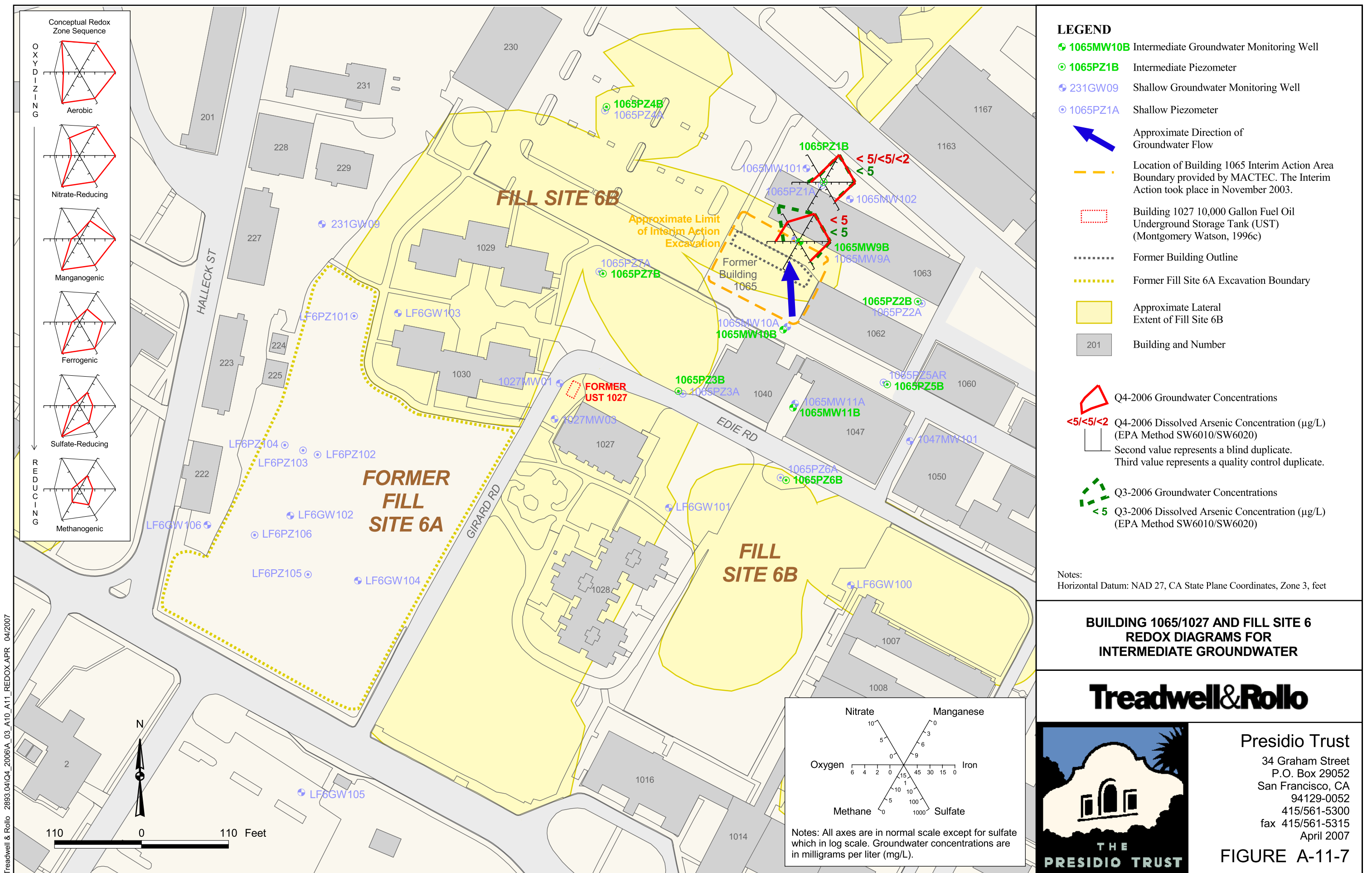
Notes:
Groundwater elevation data collected on 4 December 2006.

Monitoring wells in BOLD were used in groundwater contouring.

The HBG wells were approved for removal from the groundwater monitoring program prior to the Third Quarter 2005.

Horizontal Datum: NAD 27, CA State Plane Coordinates, Zone 3, feet
Vertical Datums: (groundwater) Presidio Lower Low Water (ft. PLLW)
(topography) North American Vertical Datum, NAVD88





Third Quarter 2006

Site / Area Bldg 1065
Project Number 2893
Recorded By WE

Well No. 1065 MW 9A
Well Type ☒ Monitor ☐ Extraction ☐ Other
WC Date 8/16/06

PURGE VOLUME

Well casing diameter ☒ 2-inch ☐ 4-inch ☐ Other we

Well Total Depth (TD, ft. below TOC) : 13.89 45

Depth to Water (WL, ft. below TOC) : 3.89

Depth to free phase (FP, ft. below TOC) :

Number of borehole volumes to be purged ☒ 3 ☐ Not Applicable ☐ Other

PURGE VOLUME CALCULATION

$$\frac{9.56}{\text{Water Column Length}} \times \frac{0.9}{\text{Water Volume/ft}} \times \frac{3}{\text{No. Vols}}$$

Total Purge Time 6 min

Recharge Rate

Purge Rate 4.5 gpm

GROUNDWATER PARAMETER MEASUREMENTS

PURGE METHOD

☐ Low Flow	☐ Bailer \ Type
☒ Normal	☒ Pump \ Type
☐ Modified (max 5 gpm)	☐ Other

PUMP INTAKE

☒ Near top	Depth (ft)	4.5'
☒ Near Bottom	Depth (ft)	
☐ Other		

25.8	gals
CALCULATED PURGE VOLUME	
2.7	gals
ACTUAL PURGE VOLUME	

Meter Type Ultrasonic/sonprobe

[illegible]

Comments _____ ☒ Purge water storage/disposal ☐ Drilled onsite ☒ Other Bake Tank

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled 8/16/06, 1240.

Purging Equipment	Pump - Type
----------------------	-------------

Sample Filtered: ☒ Yes / ☐ No

Filtered Sample Analysis: *disc nitrate*

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments
1065.MW9A	x6 HCl vials	CAT	2175	
	1L amber NA			
	1L poly NA			
	1500 mL HNO ₃			

QUALITY CONTROL SAMPLES 1500 ml of NaOH/2.0N

Duplicate Samples

Duplicate Samples	
Original Sample No.	Duplicate Sample No.
	DUP 0516062A

01250

Blank Samples

Type	Sample No.
Trip	
Rinsate	
Transfer	
Other:	

Site / Area Bldg 1065
Project Number 2893
Recorded By WPC

Well No. 1065 MW9B
Well Type ☒ Monitor ☐ Extraction ☐ Other _____
we Date 8/16/06

PURGE VOLUME

Well casing diameter
☒ 2-inch ☐ 4-inch ☐ Other

Well Total Depth (TD, ft. below TOC) : 31.85

Depth to Water (WL, ft. below TOC): 0.60

Depth to free phase (FP, ft. below TOC) :

Number of borehole volumes to be purged
☒ 3 ☐ Not Applicable ☐ Other

PURGE VOLUME CALCULATION

$$\frac{31.85}{\text{Water Column Length}} \times \frac{0.9}{\text{Water Volume/ft}}$$

Total Purge Time 19 min

Recharge Rate

Purge Rate 5 GPM

GROUNDWATER PARAMETER MEASUREMENTS

PURGE METHOD

☐ Low Flow
☒ Normal
☐ Modified (max 5 gpm)

PUMP INTAKE

☒ Near top	Depth (ft)	2.5'
☒ Near Bottom	Depth (ft)	
☐ Other		

92.4 gals
CALCULATED PURGE VOLUME
9.3 gals
ACTUAL PURGE VOLUME

Meter Type Ultrameter / OGD meter

[illegible]

Comments Artesian well : Purge water storage/disposal ☐ Drummed onsite ☒ Other Baker Tank

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled 8/16/06 1115

Purging Equipment	Pump - Type
----------------------	-------------

Sample Filtered: ☒ Yes/ No

Filtered Sample Analysis:

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments
1065 mwg 9B	HNO ₃ 500 ml Pl,	EAT	2175	
	11L ply			
	11L canister			
	476 HCl 1000s			

QUALITY CONTROL SAMPLES N₂O H₂ / 2 AL 500 ml ph.

Duplicate Samples *Columbin Split*

Blank Samples

Original Sample No.

Duplicate Sample No.

1065 MW9B	065 MW9BCL (same collect)
-----------	---------------------------

Type	Sample No.
Trips	
Pinsate	1065 MW9B RB9A @ 1210
Transfer	
Other:	

MONITORING WELL SAMPLING LOG (Normal, Low Flow, and Low Yield)

Site / Area Bldg 1065
 Project Number 2893
 Recorded By LJC

Well No. 1047mw101
 Well Type ☒ Monitor ☐ Extraction ☐ Other
 Sampled by WE Date 8/16/06

WELL PURGING

PURGE VOLUME

Well casing diameter
☒ 2-inch ☐ 4-inch ☐ Other
 Well Total Depth (TD, ft. below TOC): 14.70
 Depth to Water (WL, ft. below TOC): 4.39
 Depth to free phase (FP, ft. below TOC):

Liquid in a 1 Foot Section of a Boring (gallons)		
Borehole Size	Casing Size	Water Volume/Ft.
8	2	0.9
10	4	1.68
12	4	2.22

PURGE METHOD

☐ Low Flow ☐ Bailor \ Type
☒ Normal ☐ Pump \ Type 2" red fl.
☐ Modified (max 5 gpm) ☐ Other

PUMP INTAKE

☒ Near top Depth (ft) ~5'
☒ Near Bottom Depth (ft)
☐ Other

Number of borehole volumes to be purged
☒ 3 ☐ Not Applicable ☐ Other

PURGE VOLUME CALCULATION

10.31 x 0.9 x 3 = 27.8 gals
 Water Column Length Water Volume/ft No. Vols
 Total Purge Time 7 min
 Recharge Rate Purge Rate 46 gpm
 CALCULATED PURGE VOLUME
27.9 gals
 ACTUAL PURGE VOLUME

GROUNDWATER PARAMETER MEASUREMENTS

Meter Type Ultrameter / orp meter

Time	Liters or Gallons	pH	Temp °F	DO mg/L	Sp. COND µS/cm	ORP (mV)	Turbidity (NTU)	Comments
0952	0	7.18	17.7		475		107	cleaning
0956	9.3	6.89	17.9		466		26	
0958	18.6	6.65	18.0		465		15	
1000	27.9	6.93	18.1		466		11	
								DTW = 4.45
								Post purge DO = 3.81 mg/L
								Post purge ORP = 204.1 mV

Comments _____ Purge water storage/disposal ☐ Drummed onsite ☒ Other Baker tank

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled 8/16/06 11005

Purging Equipment Pump - Type Bailer - Type disp. Other _____
 Sample Filtered: Yes ☒ No ☐ Filtered Sample Analysis: _____

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments
1047MW101	27 HCL Vials	CAT	2175	MS/MSD

QUALITY CONTROL SAMPLES

Duplicate Samples

Blank Samples

Original Sample No.	Duplicate Sample No.
	MS/MSD taken re

Type	Sample No.
Trip	
Final	
Transfer	
Other:	

Environmental and Geotechnical Consultant

MONITORING WELL SAMPLING LOG (Normal, Low Flow, and Low Yield)

Site / Area 1065 Well No. 1065P24A
 Project Number 2893 Well Type ☒ Monitor ☐ Extraction ☐ Other
 Recorded By P. Cornish Sampled by P. Cornish Date 8/17/06

WELL PURGING

PURGE VOLUME

Well casing diameter
☒ 2-inch ☐ 4-inch ☐ Other

Well Total Depth (TD, ft. below TOC):

Depth to Water (WL, ft. below TOC):

Depth to free phase (FP, ft. below TOC):

Number of borehole volumes to be purged

☐ 3 ☐ Not Applicable ☐ Other

PURGE VOLUME CALCULATION

Water Column Length

Water Volume/ft

No. Vols

Total Purge Time

Recharge Rate

Purge Rate 200ml/min

PURGE METHOD

☒ Low Flow ☐ Bailer \ Type
☐ Normal ☒ Pump \ Type Peristaltic
☐ Modified (max 5 gpm) ☐ Other

PUMP INTAKE

Near top Depth (ft)

Near Bottom Depth (ft)

Other

gals
 CALCULATED PURGE VOLUME
1.86 gals
 ACTUAL PURGE VOLUME

GROUNDWATER PARAMETER MEASUREMENTS

Meter Type YSI 556

Time	Depth or Gallons	pH	Temp °F	DO (mg/L)	Sp. COND (µS/cm)	ORP (mV)	Turbidity (NTU)	DTL: (ft)	Comments
905	1 surf	6.7	20.40	0.65	133	-115.3	47	6.90	
908	1 600	6.7	20.53	0.61	1322	-115.8	19	6.95	
911	1 1200	6.7	20.66	0.55	1318	-116.4	12	9.98	
914	1 1800	6.70	21.00	0.53	1318	-116.6	12	7.02	
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Comments _____ Purge water storage/disposal ☐ Drilled onsite ☒ Other onsite Baker Tech

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled 8/17/06 1 920

Purging

Equipment

Pump - Type

Peristaltic

Bailer - Type

Other

Sample Filtered:

☒ Yes ☐ No

Filtered Sample Analysis:

metals

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments
1065P24A	1 x 1L Poly NP	CET	2140	
	1 x 500ml HNO ₃ Poly			
	3 x 40ml Van H ₂ O			
	1 x 1L Amber NP			

QUALITY CONTROL SAMPLES

1 x 500ml poly Zn Acet NaOH

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.
Trip	
Rinsate	
Transfer	
Other:	

MONITORING WELL SAMPLING LOG (Normal, Low Flow, and Low Yield)

Site / Area 1065 Well No. 1065 PZ SAR
 Project Number 2893 Well Type ☒ Monitor ☐ Extraction ☐ Other
 Recorded By DR Sampled by DR Date 8/16/06

WELL PURGING

PURGE VOLUME

Well casing diameter
☒ 2-inch ☐ 4-inch ☐ Other
 Well Total Depth (TD, ft. below TOC): 9.38
 Depth to Water (WL, ft. below TOC): 3.48
 Depth to free phase (FP, ft. below TOC):

Liquid in a 1 Foot Section of a Boring (gallons)

Borehole Size	Casing Size	Water Volume/Ft
8	2	0.9
10	4	1.68
12	4	2.22

PURGE METHOD

☐ Low Flow ☒ Bailer \ Type Disp.
☐ Normal ☐ Pump \ Type
☒ Modified (max 5 gpm) ☐ Other

PUMP INTAKE

☐ Near top Depth (ft)
☐ Near Bottom Depth (ft)
☒ Other Mech. Fract

Number of borehole volumes to be purged
☐ 3 ☒ Not Applicable ☐ Other

PURGE VOLUME CALCULATION

5.9 x NA x — = —
 Water Column Length Water Volume/ft No. Vols

Total Purge Time 9 min.

Recharge Rate — Purge Rate 0.5 gpm

gals
 CALCULATED PURGE VOLUME
gals
 ACTUAL PURGE VOLUME 4.6

GROUNDWATER PARAMETER MEASUREMENTS

Meter Type Uttramer/451 SS0A/290A ORP/Am

Time	Liters or Gallons	pH	Temp (°F)	DO (mg/L)	Sp. COND (µS/cm)	ORP (mV)	Turbidity (NTU)	Comments
Inst. 1353	0.3	7.0	21.3	Pr 0.29	1283	—	173	
1356	1.5	6.9	21.7	—	1381	—	370	
1359	3.0	6.9	21.9	—	1433	—	492	
1402	4.5	6.9	21.9	Post 0.42	1445	Post -17.8	607	
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Comments — Purge water storage/disposal ☐ Drummed onsite ☒ Other Baker Tank

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled 8/16/06 1 1410

Purging Equipment — Pump - Type — Bailer - Type Dispensable Other —
 Sample Filtered: ☒ Yes / No ☐ Filtered Sample Analysis: Dissolved Metals (15)

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments
1065 PZ SAR	1X 1L NP Amber	CFT	2116	
	1X 1L 4P Poly			
	3X 40 ml HCL Vials			
	1X 500 ml HNO3 FF Poly			

QUALITY CONTROL SAMPLES

1X 500 ml H2O11 + 2mic

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.
Trip	
Rinse	
Transfer	
Other:	

Fourth Quarter 2006

Environmental and Geotechnical Consultant

Treadwell & Rollo
Environmental and Geotechnical Consultant

Site / Area 1065
Project Number 2893
Recorded By DR

Well No. 1065 MW 9A
Well Type ☒ Monitor ☐ Extraction ☐ Other
Date 12/15/06

PURGE VOLUME

Well casing diameter

☒ 2-inch ☐ 4-inch ☐ Other

Well Total Depth (TD, ft. below TOC): 13.50

Depth to Water (WL, ft. below TOC) : 384

Depth to free phase (FP, ft. below TOC) :

Number of borehole volumes to be purged
☒ 3 ☐ Not Applicable ☐ Other

PURGE VOLUME CALCULATION

9.66	x	6.9
Water Column Length		Water Volume/ft

Total Purge Time

Recharge Rate

GROUNDWATER PARAMETER MEASUREMENTS

PURGE METHOD

☐ Low Flow ☐ Bailer \ Type
☒ Normal ☒ Pump \ Type
☐ Modified (max 5 gpm) ☐ Other

PUMP INTAKE

X	Near top	Depth (ft)	4.50'
0	Near Bottom	Depth (ft)	12.50'
	Other		

76.08	gals
CALCULATED PURGE VOLUME	
261.3	gals
ACTUAL PURGE VOLUME	

Meter Type W/handler/DO/ORP/Hach Turb.

[illegible]

Comments * Low volume. 1 Amber only 3/4 full ☐ Purge water storage/disposal ☐ Drummed onsite ☒ Other Baker Tank

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled 12/9/06 1 1450

Purging

Equipment	Pump - Type
-----------	-------------

2" Round Rod

Bailer - Type

Other

Sample Filtered: ☒ Yes ☐ No

Filtered Sample Analysis:

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	CDC #	Comments
1065 MW GA	2 KIL NP Polys	C+T	2128	
	2 x 500 ml H ₂ O Polys			
	2 x 500 ml NaCl + Zwitter Polys			
	3 NP Ambers			

QUALITY CONTROL SAMPLES

6 17CL vers

Duplicate Samples

Original Sample No.	Duplicate Sample No.
1065 AW9A	DUP 1205062C

Blank Samples

Type	Sample No.
Trip	
Rinsate	
Transfer	
Other:	

Treadwell & Rollo
Environmental and Geotechnical Consultant

1500
1 L NPP Poly
1 HNO₃ P-1
1 NaCl + Zinc Po.
2 NPP Antis

3 FCC was

Site / Area 1065
Project Number 2893
Recorded By BR

Well No. 1065 MW 9B
Well Type ☒ Monitor ☐ Extraction ☐ Other
BR Date 12-7-06

PURGE VOLUME

Well casing diameter ☒ 2-inch ☐ 4-inch ☐ Other

Well Total Depth (TD, ft. below TOC) : 31.82

Depth to Water (WL, ft. below TOC): 0.05

Depth to free phase (FP, ft. below TOC) :

☒ Number of borehole volumes to be purged
☒ 3 ☐ Not Applicable ☐ Other

PURGE VOLUME CALCULATION

31.77 x
Water Column Length

Total Purge Time 86 min.

Recharge Rate

Liquid in a 1 Foot Section of a Boring (gallons)

Borehole Size	Casing Size	Water Volume/Ft
8	2	0.9
10	4	1.68
12	4	2.22

PURGE METHOD

☐ Low Flow
☒ Normal
☐ Modified (max 5 gpm)

☐ Bailer \ Type
☒ Pump \ Type
☐ Other

pos. air disp.

PUMP INTAKE

Near top	Depth (ft)	
Near Bottom	Depth (ft)	
Other		

85.8	gals
CALCULATED PURGE VOLUME	
86.0	gals
ACTUAL PURGE VOLUME	

GROUNDWATER PARAMETER MEASUREMENTS

Meter Type myrml / Hach turb / YSI 550A DO Orion CRP

[illegible]

Comments _____ : Purgé water storage/disposal ☐ Drilled onsite ☒ Other On site tank

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled 12-7-66 / 1150

Purging Equipment: Pump - Type _____ Bailer - Type disp. Other _____
Sample Filtered: Yes / No Filtered Sample Analysis: dis. metals

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments
1065mw9B	1KIP 4 Liter Poly	C+T	OP 2079	
	1 HN03 poly			
	1 NaOH / zinc acetate			
	1 Amber / NO litr /			

QUALITY CONTROL SAMPLES

3 HCl vocs

Duplicate Samples

Duplicate Samples	
Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.
Trips	
Rinsate	1047mw101RB1665mw98 @ 1000
Transfer	
Other:	

Well No. 1047mw101
Well Type ☒ Monitor ☐ Extraction ☐ Other _____
BR Date 12-2-06

MINI-CAP AREAS
APPENDIX SECTION A-12
SEMI-ANNUAL GROUNDWATER MONITORING REPORT
THIRD AND FOURTH QUARTERS 2006
Presidio of San Francisco, California

1.0 INTRODUCTION AND BACKGROUND

The Mini-Corrective Action Plans (Mini-CAP) document addresses, individually, the environmental concerns associated with USTs at 13 areas, including 12 buildings and one FDS area at the Presidio. Of the 13 sites listed in the *Mini-CAPs Site Reviews and Recommendations to Address Former Petroleum Release Sites* (Mini-CAP Report) prepared by Geo/Resource Consultants Inc. (GRC) in March 2004, only five are included in the Presidio-wide Groundwater Monitoring Program. The Mini-CAP Areas associated with the Presidio-wide Groundwater Monitoring Program include Buildings 514, 1221, 1213 and 1260 that formerly used USTs for fuel oil heating in residences and offices and gasoline fuel storage for services stations. Additionally, the Mini-CAP Areas also include one section of the former FDS pipelines associated with the Infantry Terrace/Sibert Residential loop (MT-14) (GRC, 2004). Each of the five Mini-CAP Areas included in the groundwater monitoring program are discussed in more detail below.

The five Mini-CAP Areas included in the Presidio-wide monitoring program have been divided into two areas (Area 1 and Area 2), based on location, in order to minimize the number of figures associated with this section and to simplify the reporting. Mini-CAP Area 1 includes Building 1213, Building 1221, and Building 1260 and their locations and groundwater elevation contours are illustrated on Figures A-12-1 and A-12-2. Mini-CAP Area 2 includes Building 514 and FDS Section MT-14. Building 514 is located on the east side of the Tennessee Hollow valley and FDS Section MT-14 is located on the west side of the Tennessee Hollow valley. The site plans, well locations, and groundwater elevation contours associated with Mini-CAP Area 2 are illustrated on Figures A-12-3 and A-12-4.

From 1993 until 1996, Montgomery Watson (MW) removed the USTs and associated piping from 15 buildings that historically used USTs. MW prepared the *Draft Mini-CAPs* in 1999 detailing subsurface investigation results at all 15 sites. In May 1999, International Technologies (IT) Corporation summarized FDS removal activities in the report titled *FDS Closure Report, Presidio of San Francisco, California* (FDS Closure Report). In this report, a CAP was recommended for FDS Sections MT-13 and MT-14. The portion of the FDS associated with MT-14 was subsequently incorporated into the Mini-CAP document.

In March 2003, the Trust requested a review of the Mini-CAP and CAP reports completed by MW and IT Corporation. The Mini-CAP Report recommended additional site investigations and groundwater monitoring for Buildings 514, 1221, 1213, 1260, and the FDS Section MT-14 (GRC, 2004).

In August 2004, GRC installed 11 monitoring wells at the five Mini-CAP Areas. These wells were sampled by GRC for the first time in September 2005 (Third Quarter 2005), but were not added to the Presidio-wide Groundwater Monitoring Program until the Fourth Quarter 2005. Groundwater samples collected from the Mini-CAP wells in September 2005 were analyzed for TPHg, TPHd, TPHfo, VOCs, dissolved metals, PCBs and/or PAHs. The report associated with the September 2005 sampling event is currently being prepared and the associated groundwater analytical data will be presented as part of this groundwater monitoring program upon approval. Groundwater samples collected from mini-CAP wells in the Fourth Quarter 2005 were analyzed for DO, TPHg, TPHd, TPHfo, BTEX, and MTBE (Table A-12-2 through A-12-5).

Cleanup of the Mini-CAP Areas must adhere to Site Cleanup Requirements (SCRs) per *Order No. R2-2003-0080, Revised Site Cleanup Requirements and Rescission of Order No. 91-082 and Order No. 96-070* (RWQCB, 2003). The SCRs are applicable soil and groundwater cleanup levels that protect human health, ecological receptors, and water quality.

1.1 Building 1213

Building 1213 is three story stucco house located in Mini-CAP Area 1 in the western upland portion of the Presidio on Ralston Avenue west of Battery-Howe Wagner (Figure A-12-1). The site elevation is approximately 222 feet above the PLLW datum.

Building 1213 reportedly contained an outdoor 500-gallon fuel oil UST that was removed in 1993. However, the presence of TPHg and benzene above the applicable respective SCRs of 1,030 and 0.6 mg/kg in soil confirmation samples indicated that the UST was used for a gasoline generator. TPHg and benzene were detected in soil confirmation samples at concentrations of 1,500 and 2.8 mg/kg, respectively (GRC, 2004).

In 1999, MW drilled four soil borings 1213SB1 through 1213SB4. Groundwater was not sampled during this investigation. Soil borings, sample locations and chemical data tables, are documented in GRC's 2004 Mini-CAP Report. Soil samples from the borings were analyzed for TPHg, TPHd, BTEX, and VOCs. Of the compounds analyzed, TPHg, benzene, ethylbenzene, and total xylenes were detected at concentrations exceeding their applicable cleanup levels.

GRC installed one monitoring well (1213GW101) at Building 1213 as part of the Mini-CAP, which is currently included in the Presidio-wide Groundwater Monitoring Program.

1.2 Building 1221

Building 1221 is located in Mini-CAP Area 1 in the western upland portion of the Presidio within Fort Winfield Scott (Figure A-12-1) and lies at approximately 224 feet above the PLLW datum.

Four USTs (1221.1, 1221.2, 1221.3, and 1221.4) at Building 1221 were formerly associated with a gasoline service station. The three 6,000-gallon and one 10,000-gallon gasoline USTs were removed between June and September 1993. All the tanks reportedly contained gasoline; however, during removal activities the residual liquid in UST 1221.1 was a mixture of water and waste oil, indicating that the USTs may have been used for automotive waste oil storage.

A total of nine soil confirmation samples were collected from beneath the USTs and were analyzed for TPHg, TPHd, BTEX, and SVOCs. None of these compounds exceeded SCRs. It is unknown if soil was removed from the excavations (GRC, 2004).

In 1999, MW drilled eight exploratory soil and one grab groundwater boring adjacent to and within the former UST excavations. Soil samples were collected and analyzed for TPHg, TPHd, oil and grease, BTEX, and PAHs. PAHs were the only compounds detected above the SCRs. Benzo(a) anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and benzo(k)fluoranthene were all detected at concentrations exceeding their applicable SCRs in soil. Two grab groundwater samples were collected from soil boring 1221HP2 at depths of 10 and 20 feet bgs. Groundwater samples were analyzed for TPHg, oil and grease, BTEX, and VOCs. Compounds detected included benzene, 1,2-DCE, PCE, TCE, and bis(2-ethylhexyl)phthalate. Bis(2-ethylhexyl)phthalate was the only compound detected that exceeded its applicable groundwater cleanup level of 4 µg/L. Detailed results are presented in the Mini-CAP Report (GRC, 2004).

Building 1221's Mini-CAP groundwater monitoring program includes four monitoring wells; 1221GW101, 1221GW102, 1221GW103, and 1221GW104 (Figure A-12-1).

1.3 Building 1260

Building 1260 is located in Mini-CAP Area 1 in the upland area of the Presidio in Fort Winfield Scott within the Special Status Ecological Cleanup Level area (Figure A-12-1). Schofield Avenue is west of the site and Veterans Boulevard (Highway 1) is to the east. The site elevation is approximately 142 feet PLLW (GRC, 2004).

Building 1260 formerly had a 10,000 gallon fuel oil UST that was used in conjunction with a fuel oil pump station. Both Building 1260 and the UST were removed from the site in 1993. Approximately 150 cubic yards of contaminated soil were excavated during the removal (GRC, 2004).

There are three applicable SCRs for Building 1260: recreational human health SCRs, protection of groundwater quality SCRs (>5 feet above the highest groundwater), and Protection of Ecological Receptors SCRs (Table 7-5 EKI, 2002).

Soil samples collected, as part of a subsequent subsurface investigation at the Building 1260 site, were analyzed for TPHd and BTEX compounds. TPHd was detected above the human health SCR of 1,380 mg/kg in two locations at concentrations of 3,100 and 2,300 mg/kg. TPHd was also detected above the ecological receptors SCR of 700 mg/kg at one location at a concentration of 7,100 mg/kg. No other detected compounds were found to exceed applicable SCRs during this investigation.

The groundwater monitoring program at Building 1260 includes monitoring wells 1260GW101, 1260GW102, and 1260GW103 (Figure A-12-1).

1.4 Building 514

Building 514 is located in Mini-CAP Area 2 in the eastern upland portion of the Presidio at the southwest corner of Simonds Loop and Rawles Street (Figure A-12-3). Building 514 is approximately 200 feet above the PLLW datum.

In 1993, a 1,000 gallon fuel oil UST was removed from the site. Following the tank removal, approximately 30 cubic yards of soil were removed and sidewall confirmation samples were collected. Unknown TPH compounds were detected in one soil confirmation sample at a concentration of 3,800 mg/kg. No TPHd, BTEX and SVOCs were detected above laboratory reporting limits. During tank removal activities, no confirmation samples were collected from beneath the former UST; therefore, MW recommended an additional subsurface investigation at Building 514. A soil boring, grab groundwater boring and monitoring well were recommended to further characterize soil and groundwater at the site, but only soil borings were completed during this investigation (GRC, 2004).

In 1994, MW drilled three soil borings 514ASB1 through 514ASB3 to approximately 15 feet bgs. Soil samples were analyzed for TPHd, BTEX, and SVOCs. TPHd, BTEX and SVOCs were not detected above laboratory reporting limits in any of the soil borings.

The groundwater monitoring program for Building 514 includes one monitoring well, 514AGW101 (Figure A-12-3).

1.5 FDS Section MT-14 – Infantry Terrace/Sibert Loop

The Infantry Terrace/Sibert Loop FDS pipeline (Section MT-14) is located in Mini-CAP Area 2 and served residences on both sides of Sibert Loop, entering the area near Building 334, across Sibert Loop and running northeast through the Infantry Terrace area. The residences were served fuel oil through lateral piping extending from a primary pipeline. IT removed or

abandoned in place approximately 1,410 feet of FDS and lateral piping between October 1996 and February 1997. Of the 1,410 feet of piping approximately 699 feet were removed. Due to existing buildings and other features that prevented removal, approximately 711 feet of piping were abandoned in place (GRC, 2004).

During the pipeline removal, overexcavation occurred between Buildings 333 and 334 (59 cubic yards) and also between Buildings 340 and 341 (1,667 cubic yards). The excavations were backfilled with soil treated in the Low Temperature Thermal Desorption (LTTD) unit.

Several confirmation samples collected during the removal action were found to exceed applicable SCRs for either TPH or PAHs. As a result, additional subsurface investigation and monitoring well installation was recommended (GRC, 2004).

The groundwater monitoring program for FDS MT-14 Area consists of two monitoring wells FM14EX07GW101 and FM14EX07GW102 (Figure A-12-3).

2.0 SITE DESCRIPTION AND GEOLOGY

Mini-CAP Areas currently included in the Presidio-wide Groundwater Monitoring Program are described below.

2.1 Building 1213

Building 1213 is situated in the Marina Groundwater Basin. Since Fourth Quarter 2005, the depth to groundwater beneath Building 1213, has ranged between 18 to 30 feet bgs within monitoring well 1213GW101. Groundwater flow in this area has historically followed the general topographic trend towards the east and northeast (Figures A-12-1 and A-12-2).

Regional geology is characterized by unconsolidated deposits consisting of Quaternary slope debris and ravine fill. The unconsolidated sediments are underlain by Franciscan complex bedrock. Based on cross sections by completed by MW in 1999, surface soils (less than 5 feet below grade) are characterized by clayey gravels and clayey sands. Serpentine bedrock is encountered beneath these materials at depths of approximately 23.5 feet (GRC, 2004).

2.2 Building 1221

Building 1221 is in the Marina Groundwater Basin (Figure 1). Since Fourth Quarter 2005, the depth to groundwater beneath Building 1221 has ranged between 7 to 17 feet bgs. Groundwater flow has historically followed the general topographic trend towards the east and northeast (Figures A-12-1 and A-12-2).

Geology at the site is a combination of Quaternary slope debris, ravine fill and Franciscan complex bedrock. Serpentine bedrock from the Franciscan Formation is overlain by unconsolidated dune sand, clays and silty clay deposits (GRC, 2004).

2.3 Building 1260

Building 1260 is located in the West Valley Groundwater Area within the Marina Groundwater Basin. Since Fourth Quarter 2005, the depth the groundwater in Building 1260 monitoring wells has ranged from 7 and 30 feet bgs. Groundwater flow has historically followed the general topographic trend towards the east (Figures A-12-1 and A-12-2).

Regional geology at the Site consists of Franciscan Formation bedrock overlain by unconsolidated deposits of dune sands and clays. In borings completed by MW, clay was observed up to 14 feet bgs and was underlain by serpentine bedrock (GRC, 2004).

2.4 Building 514

Building 514 is located within an uplands area of the Marina Groundwater Basin (Figure 1). Since Fourth Quarter 2005, the depth to groundwater beneath Building 514 has ranged between 20 to 22 feet bgs within monitoring well 514AGW101. Groundwater flow has historically followed the general topographic trend towards the west and northwest (Figures A-12-3 and A-12-4).

Geology at the site consists of the Franciscan complex bedrock to depths of approximately 16 feet bgs overlain by unconsolidated clays and silts (GRC, 2004).

2.5 FDS Section MT-14

FDS Section MT-14 is located in the Marina Groundwater Basin (Figure 1). Since Fourth Quarter 2005, the depth to groundwater has ranged between 23 to 30 feet bgs within site monitoring wells. Groundwater flow has historically followed the general topographic trend towards the east (Figures A-12-3 and A-12-4).

Geology at the site consists of the Franciscan complex bedrock, consisting primarily of sandstone, overlain by undifferentiated slope debris. The surface deposits overlie the bedrock at depths ranging from 1.5 to 17 feet bgs (GRC, 2004).

3.0 GROUNDWATER MONITORING

The Mini-CAP Areas have 11 associated monitoring wells (Figures A-12-1 through A-12-4). Groundwater elevations were collected at all 11 wells in the Third and Fourth Quarters 2006.

All of the Mini-CAP monitoring wells were sampled in accordance with Tables 1A and 1B during the Third and Fourth Quarters 2006, respectively.

Water level meters were calibrated on 14 August and 4 December 2006 for the Third and Fourth Quarters 2006, respectively. The calibration logs can be found in Appendix B. Groundwater elevation field forms can be found in Appendix C.

3.1 Groundwater-Level Measurements and Interpretation

Groundwater elevation measurements were manually collected on 4 December and 14 August 2006 at all Mini-CAP monitoring wells and are summarized in Table A-12-5. Mini-CAP wells are located in two separate areas at the Presidio, and groundwater elevation maps are presented for Mini-CAP Area 1 (Figures A-12-1 and A-12-2) and Mini-Cap Area 2 (Figures A-12-3 and A-12-4).

In Mini-CAP Area 1, groundwater elevations during the Third Quarter 2006 ranged from 120.21 to 215.08 feet above PLLW in monitoring wells 1260GW103 and 1221GW101, respectively (Figure A-12-1). Mini-CAP Area 2 groundwater elevations during the Third Quarter 2006 ranged from 147.84 to 181.04 feet above PLLW in monitoring wells FM14EX07GW102 and 514AGW101, respectively (A-12-3). These groundwater elevations are on the west and east sides of the Tennessee Hollow valley, respectively.

Fourth Quarter 2006 groundwater elevations in Mini-CAP Area 1 ranged from 116.19 to 215.00 feet above PLLW in monitoring wells 1260GW103 and 1221GW102, respectively (Figure A-12-2). Mini-CAP Area 2 groundwater elevations during the Fourth Quarter 2006 ranged from 145.99 to 179.94 feet above PLLW in monitoring wells FM14EX07GW102 and 514AGW101, respectively (Figure A-12-4).

In order to better understand groundwater flow directions, data from Mini-CAP Area 1 were evaluated with groundwater elevations from Battery Howe/Wagner wells (Section A-4). Groundwater gradients were calculated for both the northerly and southerly portions of Mini-CAP Area 1. Data from monitoring wells 1213GW101 and BHWGW01 were used for the northern portion and data from monitoring wells 1221GW101 and 1260GW103 were used for the southern portion of Mini-CAP Area 1. Similarly, data from Mini-CAP Area 2 were evaluated with groundwater elevations from adjacent sites (Sections A-6 and A-7). Groundwater gradients in Mini-CAP Area 2 were calculated for the eastern and western portion of the area. Groundwater elevation data for study areas adjacent to Mini-CAP Areas 1 and 2 can be found in Tables A-4-3, A-6-5 and A-7-5, respectively.

Mini-CAP Area 1 groundwater flow directions were northeasterly in the northern portion of the area and easterly in the southern portion of the area, during the Third and Fourth Quarters 2006 (Figures A-12-1 and A-12-2). During the Third Quarter 2006, the groundwater gradient in the northern portion of Mini-CAP Area 1 was approximately 0.06 feet per foot. The groundwater

gradient in the southern portion of Mini-CAP Area 1 was approximately 0.09 feet per foot. Groundwater flow directions and gradients in Mini-CAP Area 1 during the Fourth Quarter 2006 were similar to those observed during the Third Quarter.

Mini-CAP Area 2 groundwater flow direction during the Third Quarter 2006 was generally from the higher elevations of Landfill E, Landfill 2, Fill Site 1 and Building 514, northerly, towards the lower elevation of Tennessee Hollow. During the Third Quarter 2006, the western groundwater gradient was estimated to be approximately 0.11 feet per foot. The eastern groundwater gradient was approximately 0.08 feet per foot. Mini-CAP Area 2 groundwater elevations during the Fourth Quarter 2006 were slightly lower than those observed during the Third Quarter and groundwater flow was northeasterly in the western portion of the site and likely was northwesterly following the topographic trend. However, groundwater gradients could not be estimated because groundwater elevation measurements were not collected from adjacent sites (Tennessee Hollow and Landfill E).

3.2 Monitoring Well Purging and Sampling

In the Third and Fourth Quarters 2006, five of the 11 Mini-CAP monitoring wells were sampled. All Mini-CAP wells were sampled using methods shown in Tables 1A and 1B and in accordance with procedures described in the FSP (Treadwell & Rollo, 2001a). In addition to the primary samples collected during the Third Quarter 2006, duplicate sample DUP0816063A and QC duplicate 1213GW101CL were collected from monitoring well 1213GW101, and duplicate sample DUP0815063A was collected from monitoring well 1221GW104. During the Fourth Quarter 2006, duplicate sample DUP1206063A was collected from 1221GW104.

Purge equipment, purging volumes, purge water parameters, and sampling equipment for each monitoring well are described in the purge records at the conclusion of this subsection. Purge water was stored, for future disposal, in one of two 2,800-gallon aboveground polyethylene storage tanks, which are located at the Central Magazine.

3.3 Groundwater Analytical Program

In the Third Quarter 2006, groundwater samples were collected from five monitoring wells on 15 and 16 August 2006 (FM14EX07GW101, FM14EX07GW102, 1213GW101, 1221GW104, and 514AGW101). These samples were analyzed for various combinations of TPHg, TPHd, TPHfo, BTEX, MTBE, PAHs, general chemistry parameters, and dissolved metals. A groundwater sample from well 1213GW101 was also analyzed for VOCs. Fourth Quarter 2006 groundwater samples were collected from the same five monitoring wells on 5 and 6 December 2006 and were analyzed for the same constituents as the Third Quarter 2006.

All groundwater samples collected during the Third and Fourth Quarters 2006, were submitted to the project laboratory for the analyses shown on Table 1A and Table 1B of the main text. The appropriate sampling containers, preservatives, and maximum holding times for each analytical

method are shown in Table 5. Sample containers used for each well are described in the purge records at the conclusion of this section.

QA/QC samples were collected as part of this program. Section 6.2 of the main report discusses the QA/QC sampling and analysis performed during the Third and Fourth Quarters 2006.

4.0 GROUNDWATER ANALYTICAL RESULTS

Groundwater analytical results are presented in Table A-12-1 through A-12-4 and are discussed below.

4.1 General Chemistry Results

General chemistry results are presented in Table A-12-1. Samples from wells 1213GW101 and 1221GW104 were analyzed for general chemistry parameters for the first and second times in the Third and Fourth Quarters 2006. General chemistry results will be evaluated once a baseline of data has been established.

4.2 Dissolved Oxygen

Dissolved oxygen results for the Third and Fourth Quarters 2006, are presented in Table A-12-2. Dissolved oxygen meters are calibrated prior to sampling each day.

During the Third Quarter 2006, the concentrations of dissolved oxygen within the Mini-CAP Area monitoring wells ranged from 0.59 mg/L in FM14EX07GW102 to 0.92 mg/L in 514AGW101. Dissolved oxygen was inadvertently not measured within 1221GW104 during the Third Quarter 2006.

During the Fourth Quarter 2006, the concentrations of dissolved oxygen within the Mini-CAP Area monitoring wells ranged from 0.4 mg/L in 1221GW104 to 0.9 mg/L in 1213GW101.

4.3 TPH Results

During the Third and Fourth Quarters 2006, four Mini-CAP monitoring wells (1213GW101, 514AGW101, FM14EX07GW101 and FM14EX07GW102) had groundwater samples analyzed for TPHg, TPHd, and TPHfo. The TPH results are included in Table A-12-2 and detected results are discussed below. For comparison purposes, cleanup levels presented in Table 7-6 of the Cleanup Levels Document have been added to Table A-12-2.

During the Third Quarter 2006, TPHg was detected only in monitoring well 1213GW101. TPHg was detected at concentrations of 150, 340 and 55 µg/L within the primary, duplicate and QC duplicate samples, respectively. The RPD between the duplicate and QC duplicate samples exceeds the 50% criteria specified in the QAPP (Tetra Tech, 2001). However, as described in

the Third Quarter 2006 DataVal report (Appendix D), the data was considered usable and did not require qualification. These detected concentrations were both well below the 770 µg/L cleanup level. TPHd and TPHfo were not detected above laboratory reporting limits during the Third Quarter 2006.

No TPH compounds were detected above laboratory reporting limits during the Fourth Quarter 2006 within any Mini-CAP Area wells sampled.

4.4 BTEX and MTBE Results

In the Third and Fourth Quarters 2006, samples collected from three monitoring wells (514AGW101, FM14EX07GW101 and FM14EX07GW102) were analyzed for BTEX and MTBE by EPA Method 8021B and samples collected from monitoring well 1213GW101 were analyzed for VOCs by EPA Method 8260, in accordance with Tables 1A and 1B. The BTEX, MTBE, and VOC results are presented in Table A-12-2. Cleanup levels presented in Table 7-6 of the Cleanup Levels Document have been added to Table A-12-2 for comparison purposes.

During the Third Quarter 2006, 1,2-dichloroethane and benzene were detected above their associated cleanup levels (Table A-12-2). Benzene was detected in the primary, the duplicate and the QC duplicate samples collected from monitoring well 1213GW101 at concentrations of 24, 36, and 29 µg/L, respectively. 1,2-dichloroethane was detected during the Third Quarter 2006 in the primary, duplicate and QC duplicate samples collected from monitoring well 1213GW101 at concentrations of 6.9, 9.7, and 8.2 µg/L, respectively. The benzene and 1,2-dichloroethane concentrations (36 and 9.7 µg/L, respectively) detected in the duplicate sample from 1213GW101 are the highest concentrations of these analytes detected to date within this well.

Toluene, ethylbenzene and total xylenes were detected above laboratory reporting limits in monitoring well 1213GW101 in the Third Quarter 2006; however, none of these detections were above their associated cleanup levels. Ethylbenzene was detected in the primary, the duplicate and the QC duplicate samples collected from 1213GW101 at concentrations of 1.9, 3.2, and 0.56 µg/L, respectively. The RPD between the duplicate and QC duplicate samples exceeds the 50% criteria specified in the QAPP (Tetra Tech, 2001). However, the data was considered usable and did not require qualification by DataVal, as described in the Third Quarter 2006 DataVal report.

Toluene was detected in the duplicate sample collected from 1213GW101 at a concentration of 0.7 µg/L during the Third Quarter 2006. Toluene was not detected in the primary or the QC duplicate samples collected from this well. Total xylenes were detected in the primary and the duplicate samples collected from 1213GW101 at concentrations of 0.5 and 0.9 µg/L, respectively. Total xylenes were not detected in the QC duplicate above the QC laboratory's reporting limit of 1 µg/L.

No other VOCs (including BTEX compounds) were detected in any groundwater samples analyzed in the Third Quarter 2006.

During the Fourth Quarter 2006, benzene and 1,2-dichloroethane were detected within 1213GW101 at concentrations of 0.8 and 1.3 µg/L, respectively. Both detected concentrations exceed their associated cleanup levels (Table A-12-2). No other VOCs were detected within this well.

MTBE was detected during the Fourth Quarter 2006 within FM14EX07GW101 and FM14EX07GW102 at new high concentrations of 3.3 and 3.1 µg/L, respectively. Both detected concentrations are below the MTBE cleanup level of 13 µg/L. No BTEX compounds were detected within samples from these two wells or 514AGW101 during the Fourth Quarter 2006.

4.5 PAH Results

In the Third and Fourth Quarters 2006, four monitoring wells had samples analyzed for PAHs (Table A-12-3). PAHs were not detected in any samples collected from 1213GW101 or FM14EX07GW102 during either the Third or Fourth Quarters 2006.

Fluoranthene was detected within 514AGW101 at concentrations of 0.03 and 0.07 µg/L during the Third and Fourth Quarters 2006, respectively. Fluoranthene was also detected within FM14EX07GW101 at a concentration of 0.05 µg/L during the Fourth Quarter 2006. No other PAHs were detected within either 514AGW101 or FM14EX07GW101 during either the Third or Fourth Quarters 2006.

4.6 Dissolved Metal Results

During the Third and Fourth Quarters 2006, samples from wells 1213GW101 and 1221GW104 were analyzed for 23 dissolved metals. Dissolved metals results are presented in Table A-12-4.

The tables below summarize new high and low dissolved metal analytical results for the Third and Fourth Quarters 2006 within monitoring wells 1213GW101 and 1221GW104 samples when compared to historical data, and provides the range and frequency of historical results. The total number of analyses may vary depending on the sampling frequency, the date sampling commenced, and the number of duplicate analyses performed. Only the new high or the new low is shown.

Location	Analyte	Detects / Samples	Historical Data		New High/Low Third & Fourth Quarter 2006		Units
			Minimum	Maximum	Minimum	Maximum	
Metals, Dissolved							
1213GW101	Aluminum	1 / 6	< 100	< 100	--	56 *	µg/L
	Arsenic	4 / 6	5.8	6.3	< 5	7.2	µg/L
	Barium	6 / 6	10	11	--	33	µg/L

Location	Analyte	Detects / Samples	Historical Data		New High/Low Third & Fourth Quarter 2006		Units
			Minimum	Maximum	Minimum	Maximum	
Metals, Dissolved							
1213GW101	Calcium	6 / 6	19,000	19,000	15,000	19,100	µg/L
	Chromium	6 / 6	23	54	22	75	µg/L
	Copper	1 / 6	< 1	< 1	--	1	µg/L
	Magnesium	6 / 6	71,000	72,000	64,000	88,000	µg/L
	Manganese	4 / 6	< 10	29	--	40	µg/L
	Nickel	1 / 6	< 20	< 20	--	13 *	µg/L
	Potassium	6 / 6	2,500	2,600	560 *	--	µg/L
	Vanadium	1 / 6	< 10	< 10	--	5 *	µg/L
1221GW104	Barium	1 / 5	11	11	< 10	--	µg/L
	Calcium	5 / 5	63,000	63,000	44,000	--	µg/L
	Magnesium	5 / 5	94,000	94,000	81,000	--	µg/L
	Manganese	5 / 5	28	28	13	33	µg/L
	Potassium	5 / 5	2,400	2,400	1,600	--	µg/L
	Sodium	5 / 5	70,000	70,000	60,000 *	--	µg/L

Qualified data in the table above is indicated with an asterisk (*).

Significant new high and low dissolved metal results are discussed below.

- Aluminum was detected for the first time within the QC duplicate collected from 1213GW101 during the Third Quarter 2006. The detected concentration is lower than the typical reporting limit used by the primary laboratory. Dissolved aluminum concentrations in groundwater are often associated with filter breakthrough; however, the majority of metals concentrations detected within this well are within or below historical ranges.
- Barium was detected at a concentration nearly double the previous high within 1213GW101 during the Fourth Quarter 2006. The detected concentration is significantly below the cleanup level for barium.
- In the Fourth Quarter 2006, chromium was detected in monitoring well 1213GW101 at a new high concentration of 75 µg/L, which exceeds the cleanup level of 50 µg/L. The new high concentration of dissolved chromium detected in monitoring well 1213GW101 during the Fourth Quarter 2006 is only the second detected concentration exceeding the cleanup level of 50 µg/L.

Monitoring well 1213GW101 is screened in serpentinite. Based on the *Technical Memorandum Regarding the Hexavalent Chromium in Serpentinite Bedrock and Groundwater in Upland Areas* (Montgomery Watson, 1999o) and the *Memorandum Regarding the Natural Occurrence of Hexavalent Chromium in Surface Water and Groundwater at the Presidio of San Francisco, California* (EKI, 2000c), hexavalent chromium and dissolved chromium in groundwater in

upland areas of the Presidio can be naturally occurring and derived from serpentinite. There is no known anthropogenic chromium source associated with Building 1213, which would indicate that the dissolved chromium concentrations detected are naturally occurring at Building 1213. However, additional samples should be collected and analyzed during future quarterly monitoring events to determine if this new high detection is anomalous or a new increasing trend.

No other metals were detected above their associated cleanup levels during either the Third or Fourth Quarters 2006.

5.0 CONCLUSIONS & RECOMMENDATIONS

TPHg continues to be detected in monitoring well 1213GW101 at concentrations below its cleanup level. Benzene and 1,2-dichloroethane were detected in monitoring well 1213GW101 at concentrations above their groundwater cleanups during both the Third and Fourth Quarters 2006. Chromium was detected above its cleanup level within 1213GW101 during the Fourth Quarter 2006; though the elevated chromium concentration is thought to be from naturally occurring chromium found in the serpentinite rock in which this well is screened. No other compounds were detected in Mini-CAP groundwater samples above their associated cleanup levels during the Third and Fourth Quarters 2006.

Table A-12-1
Results of General Chemistry Analyses
Mini-CAP Areas
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E353.2	E300.0/ SW9056
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
1213GW101	12/05/06	430	380	600	< 0.1	1.8	< 0.1	NA	130
	08/16/06	420	420	310	< 0.1	0.83	< 0.05	NA	110
DUP0816063A	08/16/06	420	420	310	< 0.1	0.92	< 0.05	NA	110
1213GW101CL	08/16/06	435	435	288	< 50 U	7.1 J-	< 0.02 U	NA	1,050
1221GW104	12/06/06	470	470	58	< 0.1	0.05	< 0.05	NA	66
DUP1206063A	12/06/06	470	470	57	< 0.1	0.06	< 0.05	NA	66
	08/15/06	440	440	61	< 0.1	< 0.05	< 0.05	NA	70
DUP0815063A	08/15/06	440	440	61	< 0.1	< 0.05	< 0.05	NA	68

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - The QC laboratory nitrate results shown have been converted to nitrate as nitrogen (nitrate-N) as other laboratory results are reported. The QC laboratory reported nitrate as NO3 concentrations (nitrate-NO3) which are 4.43 times higher than nitrate-mg/L - milligrams per liter

NA - not analyzed

NM - not measured

"--" dissolved oxygen measurements were not taken for duplicate and quality control samples.

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-12-2
Results of TPH, VOCs, and Dissolved Oxygen Analyses
Mini-CAP Areas
Presidio of San Francisco, California

Well Name	Sample Date	Dissolved Oxygen	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)	1,2-Dichloro-ethane	Acetone	Benzene	Ethylbenzene	Toluene	Total Xylenes	MTBE	All Other VOCs
	Analytical Method ¹	field	SW8015M	SW8015M	SW8015M	SW8260M	SW8260M	SW8021B / SW8260M	SW8021B / SW8260M	SW8021B / SW8260M	SW8021B / SW8260M	SW8021B / SW8260M	8260M
		(mg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	--
Cleanup Levels ²		--	770	880	1,200	0.5	--	1	700	150	1,750	13	--
1213GW101	12/05/06	0.9	< 50	< 50	< 300	0.8	< 10	1.3	< 0.5	< 0.5	< 1	< 0.5	ND
	08/16/06	0.88	150 LY	< 50	< 300	6.9	< 10	24	1.9	< 0.5	0.5	< 0.5	ND
DUP0816063A 1213GW101CL	08/16/06	--	340 LY	< 50	< 300	9.7	< 10	36	3.2	0.7	0.9	< 0.5	ND
	08/16/06	--	55	< 50 U	< 300 U	8.2	< 10 U	29	0.56	< 0.5 U	< 1 U	< 2 U	ND
DUP05242006 1213GW101CL	05/24/06	0.36	68 LY	< 50	< 300	6.6	< 10	8.5	< 0.5	< 0.5	< 1	< 0.5	ND
	05/24/06	NM	140 LY	< 50	< 300	9.6	< 10	34	2.7	0.8	0.9	< 0.5	ND
DUP0317062A	05/24/06	NM	< 50 U	< 500 U	< 1,000 U	8	< 10 U	11	0.63	< 0.5 U	< 1 U	< 2 U	ND
	03/17/06	0.63	87 LY	61 Y	< 300	8.9	< 10	1.5	< 0.5	< 0.5	< 1	< 0.5	ND
	03/17/06	--	61 LY	57 Y	< 300	5.8	< 10	0.8	< 0.5	< 0.5	< 1	< 0.5	ND
	11/29/05	1.7	240	< 50	< 300	NA	NA	12 C	2.9	< 0.5	2.3 C	< 2	NA
1221GW101	03/17/06	0.24	< 50	< 50	< 300	NA	NA	< 0.5	< 0.5	< 0.5	< 1	< 2	NA
	11/29/05	0.2	< 50	< 50	< 300	NA	NA	< 0.5	< 0.5	< 0.5	< 1	< 2	NA
1221GW102	03/17/06	0.41	230 LY	53 Y	< 300	NA	NA	< 0.5	< 0.5	< 0.5	< 1	< 2	NA
	11/29/05	0.2	70	< 50	< 300	NA	NA	< 0.5	< 0.5	< 0.5	< 1	< 2	NA
1221GW103	03/10/06	0.71	< 50	< 50	< 300	NA	NA	< 0.5	< 0.5	< 0.5	< 1	< 2	NA
	11/29/05	0.3	< 50	< 50	< 300	NA	NA	< 0.5	< 0.5	< 0.5	< 1	< 2	NA
DUP0815063A 1221GW104	12/06/06	0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/15/06	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/15/06	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/24/06	NM	< 50	< 50	< 300	NA	NA	< 0.5	< 0.5	< 0.5	< 1	< 2	NA
	03/24/06	0.47	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/10/06	0.61	< 50	< 50	< 300	NA	NA	< 0.5	< 0.5	< 0.5	< 1	< 2	NA
1260GW101	11/29/05	1.7	< 50	< 50	< 300	NA	NA	< 0.5	< 0.5	< 0.5	< 1	< 2	NA
	03/24/06	0.61	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/10/06	0.49	< 50	< 50	< 300	NA	NA	< 0.5	< 0.5	< 0.5	< 1	< 2	NA
1260GW102 DUP0309063A	11/29/05	2.4	< 50	< 50	< 300	NA	NA	< 0.5	< 0.5	< 0.5	< 1	< 2	NA
	03/09/06	0.12	< 50	< 50	< 300	NA	NA	< 0.5	< 0.5	< 0.5	< 1	< 2	NA
1260GW103	03/09/06	--	< 50	88 Y	< 300	NA	NA	< 0.5	< 0.5	< 0.5	< 1	< 2	NA
	03/24/06	0.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/10/06	0.17	< 50	< 50	< 300	NA	NA	< 0.5	< 0.5	< 0.5	< 1	< 2	NA
514AGW101	11/29/05	0.6	< 50	< 50	< 300	NA	NA	< 0.5	< 0.5	< 0.5	< 1	< 2	NA
	12/06/06	0.76	< 50	< 50	< 300	NA	NA	< 0.5	< 0.5	< 0.5	< 1	< 2	NA
	08/15/06	0.92	< 50	< 50	< 300	NA	NA	< 0.5	< 0.5	< 0.5	< 1	< 2	NA
	05/25/06	0.47	< 50	< 50	< 300	NA	NA	< 0.5	< 0.5	< 0.5	< 1	< 2	NA
	03/17/06	0.13	< 50	< 50	< 300	NA	NA	< 0.5	< 0.5	< 0.5	< 1	3.6	NA
	11/29/05	0.6	< 50	< 50	< 300	NA	NA	< 0.5	< 0.5	< 0.5	< 1	< 2	NA

Table A-12-2
Results of TPH, VOCs, and Dissolved Oxygen Analyses
Mini-CAP Areas
Presidio of San Francisco, California

Well Name	Sample Date	Dissolved Oxygen	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)	1,2-Dichloroethane	Acetone	Benzene	Ethylbenzene	Toluene	Total Xylenes	MTBE	All Other VOCs
	Analytical Method ¹	field	SW8015M	SW8015M	SW8015M	SW8260M	SW8260M	SW8021B / SW8260M	SW8021B / SW8260M	SW8021B / SW8260M	SW8021B / SW8260M	SW8021B / SW8260M	8260M
		(mg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	--
Cleanup Levels²		--	770	880	1,200	0.5	--	1	700	150	1,750	13	--
FM14EX07GW101	12/06/06	0.84	< 50	< 50	< 300	NA	NA	< 0.5	< 0.5	< 0.5	< 1	3.3 C	NA
	08/15/06	0.88	< 50	< 50	< 300	NA	NA	< 0.5	< 0.5	< 0.5	< 1	< 2	NA
	05/24/06	0.56	< 50	< 50	< 300	NA	NA	< 0.5	< 0.5	< 0.5	< 1	< 2	NA
	03/17/06	0.19	< 50	< 50	< 300	NA	NA	< 0.5	< 0.5	< 0.5	< 1	< 2	NA
	11/30/05	0.2	9	< 50	< 300	NA	NA	< 0.5	< 0.5	< 0.5	< 1	< 2	NA
DUP1130053C	11/30/05	--	< 50	< 50	< 300	NA	NA	< 0.5	< 0.5	< 0.5	< 1	< 2	NA
FM14EX07GW102	12/06/06	0.41	< 50	< 50	< 300	NA	NA	< 0.5	< 0.5	< 0.5	< 1	3.1 C	NA
	08/15/06	0.59	< 50	< 50	< 300	NA	NA	< 0.5	< 0.5	< 0.5	< 1	< 2	NA
	05/24/06	0.58	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/17/06	0.87	< 50	< 50	< 300	NA	NA	< 0.5	< 0.5	< 0.5	< 1	2.3	NA
	11/29/05	0.8	< 50	< 50	< 300	NA	NA	< 0.5	< 0.5	< 0.5	< 1	< 2	NA

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - Cleanup levels taken from Table 7-6 in the *Development of Presidio-wide Cleanup Levels for Soil, Sediment, Groundwater, and Surface Water* (EKI, 2002).

-- Cleanup level not established

Bold numbers indicate concentrations that exceed cleanup levels.

mg/L - milligrams per liter

µg/L - micrograms per liter

TPH - Total petroleum hydrocarbons

MTBE - Methyl tert-butyl ether

1,2-DCA - 1,2-Dichloroethane

VOCs - volatile organic compounds

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

NA - Not analyzed

NM - Not measured

Table A-12-3
Results of PCBs and PAH Analyses
Mini-CAP Areas
Presidio of San Francisco, California

Well Name	Sample Date	All PCBs	Fluoranthene	All Other PAHs
	Analytical Method ¹	SW8082	SW8310	SW8270
		(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		--	300	--
1213GW101	12/05/06	NA	< 0.4	ND
	08/16/06	NA	< 0.38	ND
DUP0816063A	08/16/06	NA	< 0.38	ND
1213GW101CL	08/16/06	NA	< 0.2 U	ND
	05/24/06	NA	NA	ND
DUP-05242006	05/24/06	NA	NA	ND
1213GW101CL	05/24/06	NA	NA	ND
	03/17/06	NA	< 0.38	ND
DUP0317062A	03/17/06	NA	< 0.38	ND
1221GW101	03/17/06	ND	< 9.7	ND
	09/13/05	ND	< 0.38	ND
1221GW102	03/17/06	ND	< 0.38	ND
	09/13/05	ND	< 9.9	ND
1221GW103	03/10/06	NA	< 0.38	ND
	09/13/05	ND	< 10	ND
DUP-5091205	09/13/05	ND	< 9.8	ND
1221GW104	05/24/06	NA	NA	NA
	03/24/06	NA	< 0.38	ND
	09/13/05	ND	< 9.9	ND
1260GW101	03/24/06	NA	< 0.38	ND
	09/12/05	NA	< 9.5	ND
1260GW102 DUP0309063A 1260GW102CL	03/09/06	NA	< 0.38	ND
	03/09/06	NA	< 0.39	ND
	03/09/06	NA	< 0.2 U	ND
	09/12/05	NA	< 9.6	ND
1260GW103	03/24/06	NA	< 0.38	ND
	09/12/05	NA	< 9.9	ND
DUP-6-091205	09/12/05	NA	< 9.5	ND
514AGW101	12/06/06	NA	0.07 J	ND
	08/15/06	NA	0.03 J	ND
	03/17/06	NA	0.12 J	ND
	09/12/05	NA	< 9.7	ND
DUP-1-091205	09/12/05	NA	< 9.7	ND
FM14EX07GW101	12/06/06	NA	0.05 J	ND
	08/15/06	NA	< 0.38	ND
	03/17/06	NA	< 0.39	ND
	09/12/05	NA	< 9.7	ND
DUP-4-091205	09/12/05	NA	< 9.5	ND
FM14EX07GW102	12/06/06	NA	< 0.38	ND
	08/15/06	NA	< 0.38	ND
	03/17/06	NA	0.09 J	ND
	09/12/05	NA	< 9.6	ND

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001.

The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - Cleanup levels taken from Table 7-6 in the *Development of Presidio-wide Cleanup Levels for Soil, Sediment, Groundwater, and Surface Water* (EKI, 2002).

-- Cleanup level not established

Bold numbers indicate concentrations that exceed cleanup levels.

µg/L - micrograms per liter

PCBs - Polychlorinated biphenyls

PAHs - Polycyclic aromatic hydrocarbons

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-12-4
Results of Dissolved Metals Analyses
Mini-CAP Areas
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc
	Analytical Method ¹	SW6010	SW6010	SW6010	SW6010	SW6010	SW6010	SW6010	SW6010	SW6010	SW6010	SW6010	SW6010	SW6010	SW6010	SW6010	SW6010	SW6010	SW6010	SW6010	SW6010	SW6010	SW6010
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		--	6	10	1,000	4	5	--	50	--	1,000	--	15	--	--	100	--	50	50	--	2	--	5,000
1213GW101	12/05/06	< 100	< 1	< 5	33	< 2	< 1	15,000	75	< 10	< 1	< 100	< 3	64,000	< 10	< 20	560 J	< 5	< 1	310,000	< 1	< 10	< 20
	08/16/06	< 100	< 1	6	17	< 2	< 1	17,000	22	< 10	1	< 100	< 3	87,000	33	< 20	1,500	< 5	< 1	310,000	< 1	< 10	< 20
DUP0816063A	08/16/06	< 100	< 1	7.2	17	< 2	< 1	17,000	24	< 10	< 1	< 100	< 3	88,000	28	< 20	1,500	< 5	< 1	310,000	< 1	< 10	< 20
1213GW101CL	08/16/06	56 B	< 60 U	< 100 U	14	< 2 U	< 5 U	19,100	22	< 10 U	< 20 U	< 100 U	< 50 U	84,200	40	13 B	2,070 B	< 200 U	< 10 U	331,000	< 2000 U	5 B	10 B
DUP-05242006	05/24/06	< 100	< 1	6.3	10	< 2	< 1	19,000	54	< 10	< 1	< 100	< 3	72,000	< 10	< 20	2,600	< 5	< 1	340,000	< 1	< 10	< 20
	05/24/06	< 100	< 1	5.8	11	< 2	< 1	19,000	23	< 10	< 1	< 100	< 3	71,000	29	< 20	2,500	< 5	< 1	300,000	< 1	< 10	21
1213GW101CL	05/24/06	< 100 U	< 2 U	6.1	17	< 1 U	< 1 U	21,100	44	< 1 U	3	< 100 U	< 1 U	80,800	18	4.7	< 5,000 U	2.1	< 1 U	341,000	< 1 U	< 10 U	< 20 U
DUP0317062A	03/17/06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/17/06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1221GW101	03/17/06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	09/13/05	NA	NA	NA	NA	NA	< 5	NA	< 10	NA	NA	NA	< 3	NA	NA	< 20	NA	NA	NA	NA	NA	NA	< 20
1221GW102	03/17/06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	09/13/05	NA	NA	NA	NA	NA	< 5	NA	< 10	NA	NA	NA	< 3	NA	NA	< 20	NA	NA	NA	NA	NA	NA	< 20
1221GW103	03/10/06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	09/13/05	NA	NA	NA	NA	NA	< 5	NA	< 10	NA	NA	NA	< 3	NA	NA	< 20	NA	NA	NA	NA	NA	NA	< 20
DUP-5091205	09/13/05	NA	NA	NA	NA	NA	< 5	NA	< 10	NA	NA	NA	< 3	NA	NA	< 20	NA	NA	NA	NA	NA	NA	< 20
1221GW104	12/06/06	< 100	< 1	< 5	< 10	< 2	< 1	47,000	< 10	< 10	< 1	< 100	< 3	89,000	16	< 20	1,800	< 5	< 1	63,000 J	< 1	< 10	< 20
DUP1206063A	12/06/06	< 100	< 1	< 5	< 10	< 2	< 1	44,000	< 10	< 10	< 1	< 100	< 3	85,000	13	< 20	1,700	< 5	< 1	60,000 J	< 1	< 10	< 20
	08/15/06	< 100	< 1	< 5	< 10	< 2	< 1	51,000	< 10	< 10	< 1	< 100	< 3	84,000	33	< 20	1,600	< 5	< 1	62,000	< 1	< 10	< 20
DUP0815063A	08/15/06	< 100	< 1	< 5	< 10	< 2	< 1	49,000	< 10	< 10	< 1	< 100	< 3	81,000	27	< 20	1,700	< 5	< 1	63,000	< 1	< 10	< 20
	05/24/06	< 100	< 1	< 5	11	< 2	< 1	63,000	< 10	< 10	< 1	< 100	< 3	94,000	28	< 20	2,400	< 5	< 1	70,000	< 1	< 10	< 20
	03/24/06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	09/13/05	NA	NA	NA	NA	NA	< 5	NA	15	NA	NA	NA	< 3	NA	NA	< 20	NA	NA	NA	NA	NA	NA	< 20
1260GW101	03/24/06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	09/12/05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1260GW102	03/09/06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/09/06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP0309063A	03/09/06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1260GW102CL	09/12/05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1260GW103	03/24/06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	09/12/05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP-6-091205	09/12/05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
514AGW101	03/17/06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	09/12/05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP-1-091205	09/12/05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FM14EX07GW101	03/17/06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	09/12/05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP-4-091205	09/12/05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FM14EX07GW102	03/17/06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	09/12/05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001.

The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - Cleanup levels taken from Table 7-6 in the *Development of Presidio-wide Cleanup Levels for Soil, Sediment, Groundwater, and Surface Water* (EKI, 2002).

-- Cleanup level not established

Bold numbers indicate concentrations that exceed cleanup levels.

µg/L - micrograms per liter

Table 7 in the main report identifies all duplicate and split samples and the well from

Table 11 in the main report identifies current and historical data qualifiers.

Table A-12-5
Groundwater Elevation Summary
Mini-CAP Areas
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
FM14EX07GW101	12/04/06	30.04	183.43	153.39	MW
	08/14/06	27.05	183.43	156.38	MW
	05/22/06	23.21	183.43	160.22	MW
	03/06/06	23.90	183.43	159.53	MW
	11/28/05	27.79	183.43	155.64	MW
FM14EX07GW102	12/04/06	27.30	173.29	145.99	MW
	08/14/06	25.45	173.29	147.84	MW
	05/22/06	24.60	173.29	148.69	MW
	03/06/06	24.11	173.29	149.18	MW
	11/28/05	25.86	173.29	147.43	MW
1213GW101	12/04/06	29.86	221.35	191.49	MW
	08/14/06	23.75	221.35	197.60	MW
	05/22/06	18.34	221.35	203.01	MW
	03/06/06	22.01	221.35	199.34	MW
	11/28/05	29.27	221.35	192.08	MW
1221GW101	12/04/06	9.70	223.59	213.89	MW
	08/14/06	8.51	223.59	215.08	MW
	05/22/06	6.92	223.59	216.67	MW
	03/06/06	10.28	223.59	213.31	MW
	11/28/05	14.79	223.59	208.80	MW
1221GW102	12/04/06	8.46	223.46	215.00	MW
	08/14/06	9.73	223.46	213.73	MW
	05/22/06	7.86	223.46	215.60	MW
	03/06/06	6.80	223.46	216.66	MW
	11/28/05	8.89	223.46	214.57	MW
1221GW103	12/04/06	13.05	223.34	210.29	MW
	08/14/06	11.44	223.34	211.90	MW
	05/22/06	9.68	223.34	213.66	MW
	03/06/06	10.20	223.34	213.14	MW
	11/28/05	14.21	223.34	209.13	MW
1221GW104	12/04/06	16.59	223.39	206.80	MW
	08/14/06	15.36	223.39	208.03	MW
	05/22/06	12.47	223.39	210.92	MW
	03/06/06	12.00	223.39	211.39	MW
	11/28/05	16.52	223.39	206.87	MW
1260GW101	12/04/06	17.50	145.76	128.26	MW
	08/14/06	10.80	145.76	134.96	MW
	05/22/06	6.46	145.76	139.30	MW
	03/06/06	10.24	145.76	135.52	MW
	11/28/05	17.35	145.76	128.41	MW
1260GW102	12/04/06	26.60	145.91	119.31	MW
	08/16/06	20.80	145.91	125.11	MW
	05/22/06	19.49	145.91	126.42	MW
	03/06/06	21.15	145.91	124.76	MW
	11/28/05	26.47	145.91	119.44	MW

Table A-12-5
Groundwater Elevation Summary
Mini-CAP Areas
Presidio of San Francisco, California

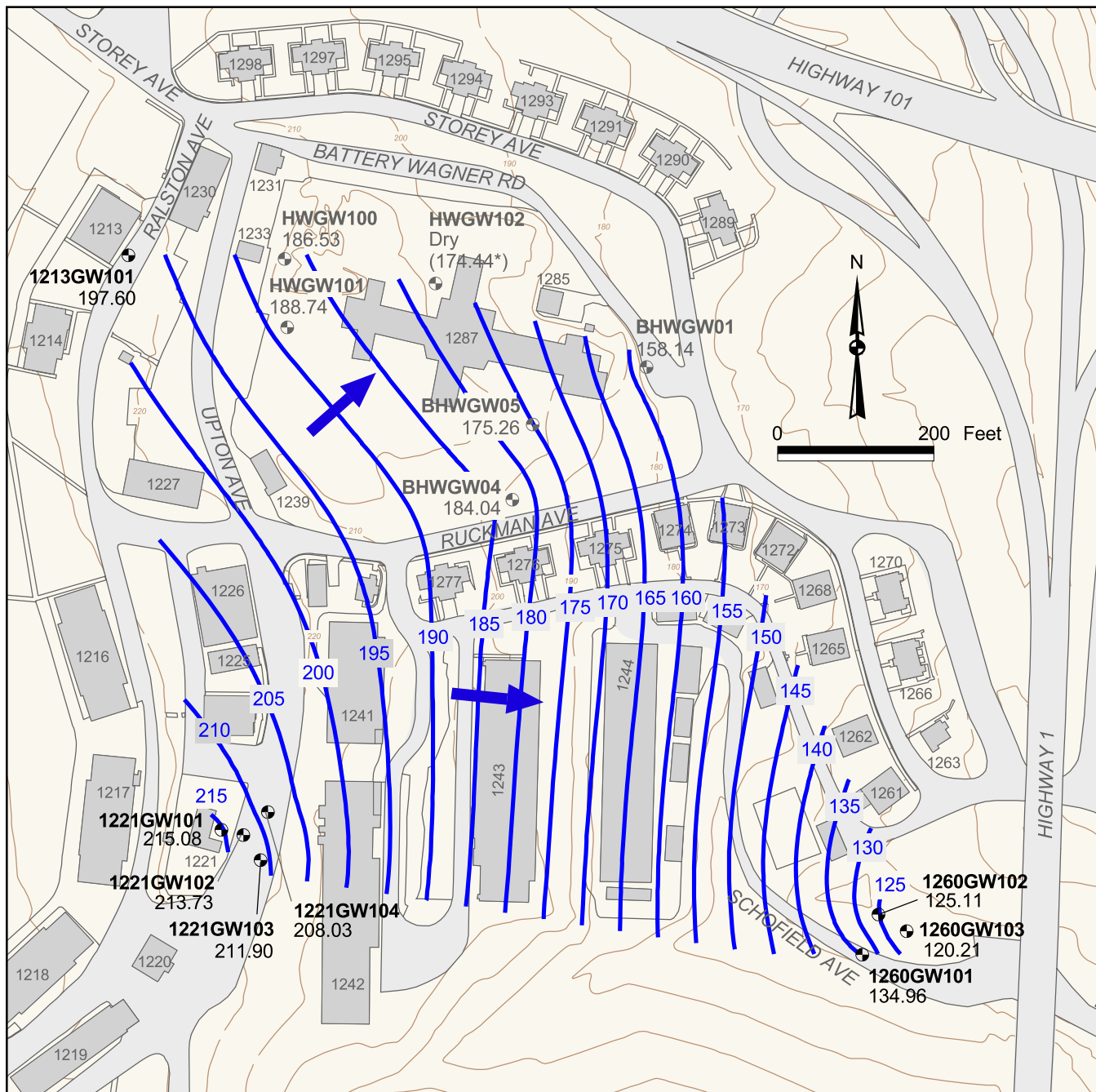
Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
1260GW103	12/04/06	29.70	145.89	116.19	MW
	08/14/06	25.68	145.89	120.21	MW
	05/22/06	21.64	145.89	124.25	MW
	03/06/06	25.15	145.89	120.74	MW
	11/28/05	29.49	145.89	116.40	MW
514AGW101	12/04/06	21.40	201.34	179.94	MW
	08/14/06	20.30	201.34	181.04	MW
	05/22/06	20.09	201.34	181.25	MW
	03/06/06	20.23	201.34	181.11	MW
	11/28/05	21.46	201.34	179.88	MW

Notes

1 - All depth to water measurements are an average of three measurements recorded in the field.

MW - Monitoring well

feet PLLW - feet above Presidio lower low water vertical datum



LEGEND



Approximate Direction
of Groundwater Flow



Groundwater Contour
(Contour Interval : 5 ft)



Topographic Contour
(Contour Interval : 10 ft)



Building and Number



1221GW101 Groundwater Monitoring Well
215.08 August 2006 Groundwater Elevation



HWGW101 Adjacent Study Area Well
188.74 August 2006 Groundwater Elevation

(174.44*)

Value Indicates Bottom of
Casing Elevation in Feet PLLW

Notes:

Groundwater elevation data collected
on 14 August 2006.

Horizontal Datum: NAD 27, CA State
Plane Coordinates, Zone 3, feet

Vertical Datums: (groundwater) Presidio
Lower Low Water (ft. PLLW)
(topography) North American Vertical
Datum, NAVD88

MINI-CAP AREA 1 SITE PLAN AND 14 AUGUST 2006 GROUNDWATER ELEVATION MAP

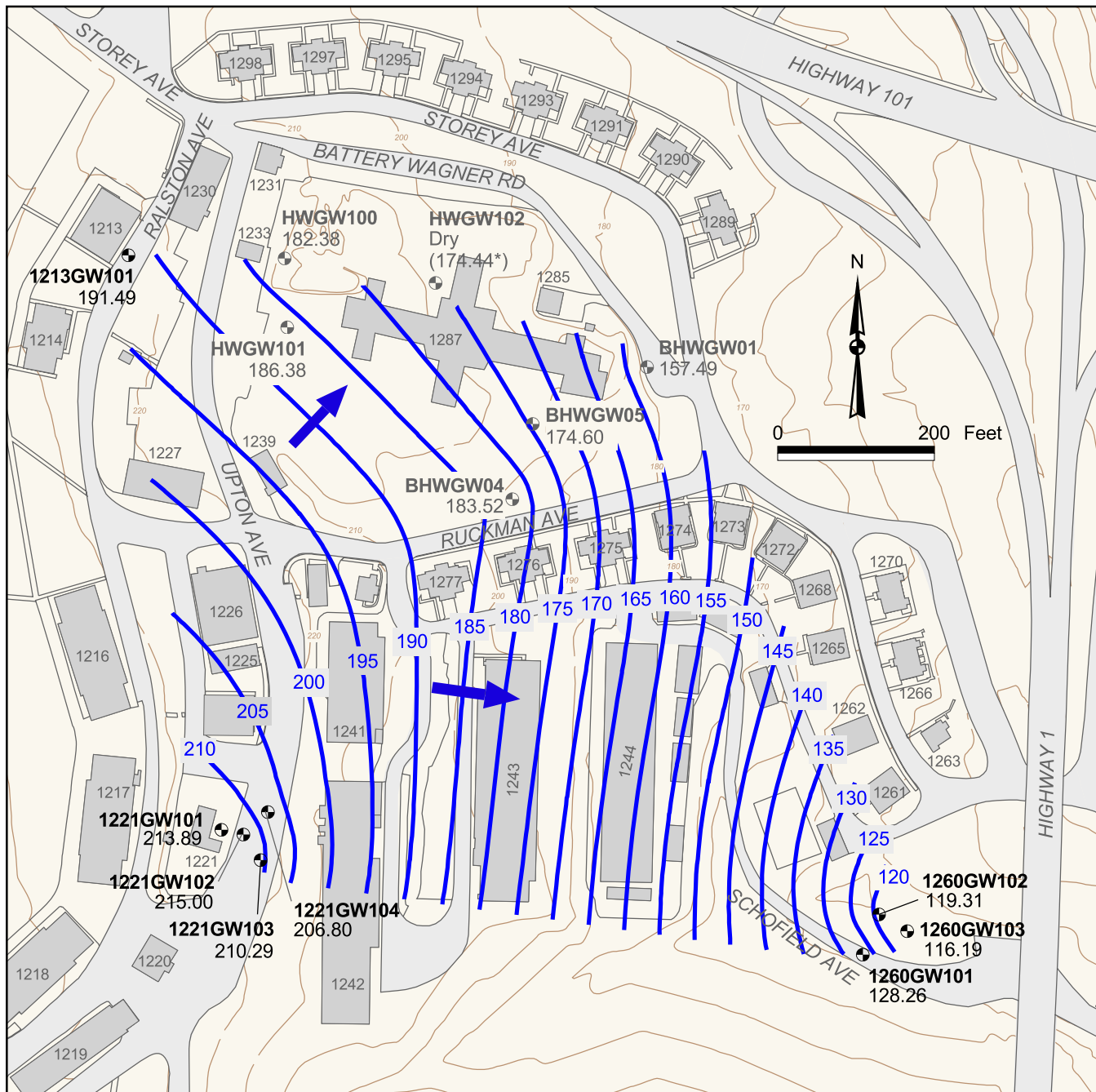
Treadwell&Rollo



Presidio Trust

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94129-0052
415/561-5300
fax 561-5315
April 2007

FIGURE A-12-1



LEGEND



Approximate Direction
of Groundwater Flow



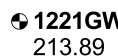
Groundwater Contour
(Contour Interval : 5 ft)



Topographic Contour
(Contour Interval : 10 ft)



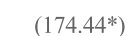
Building and Number



1221GW101 Groundwater Monitoring Well
213.89 December 2006 Groundwater Elevation



HWGW101 Adjacent Study Area Well
186.38 December 2006 Groundwater Elevation



(174.44*) Value Indicates Bottom of
Casing Elevation in Feet PLLW

Notes:

Groundwater elevation data collected
on 4 December 2006.

Horizontal Datum: NAD 27, CA State
Plane Coordinates, Zone 3, feet

Vertical Datums: (groundwater) Presidio
Lower Low Water (ft. PLLW)
(topography) North American Vertical
Datum, NAVD88

MINI-CAP AREA 1 SITE PLAN AND 4 DECEMBER 2006 GROUNDWATER ELEVATION MAP

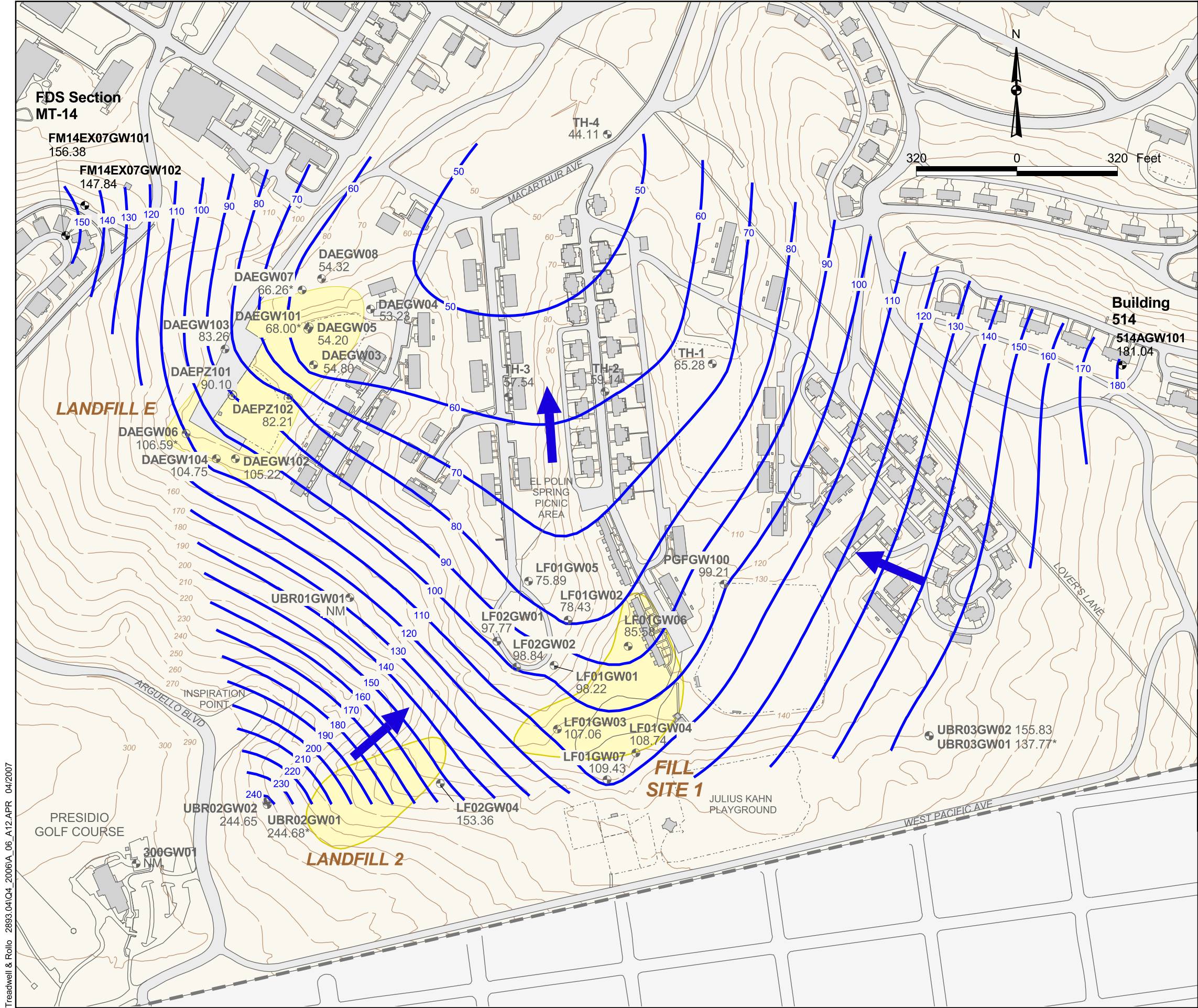
Treadwell&Rollo



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FIGURE A-12-2



LEGEND

- 514AGW101 181.04 August 2006 Groundwater Elevation
- DAEGW03 54.80 Adjacent Groundwater Monitoring Well August 2006 Groundwater Elevation
- DAEPZ101 90.10 Adjacent Piezometer August 2006 Groundwater Elevation
- * Monitoring well not used for contouring.
- NM Not Measured
- Approximate Direction of Groundwater Flow
- Groundwater Contour (Contour Interval: 10 ft)
- Presidio Boundary
- Recreation Area
- Topographic Contour (Contour Interval: 10 ft)
- Approximate Lateral Extent of Landfill
- Building

Notes:
Groundwater elevation data collected on 14 August 2006.

Groundwater elevations for UBR02GW01 and UBR03GW01 were not used in groundwater contouring.

300GW01 was approved for removal from the groundwater monitoring program prior to the First Quarter 2006.

Landfill E wells DAEGW06 and DAEGW07 were not contoured, due to semi-confined and perched conditions, respectively. Whereas, well DAEGW101 was not contoured because it is screened in a deeper interval.

Horizontal Datum: NAD 27, CA State Plane Coordinates, Zone 3, feet
Vertical Datums: (groundwater) Presidio Lower Low Water (ft. PLLW)
(topography) North American Vertical Datum, NAVD88

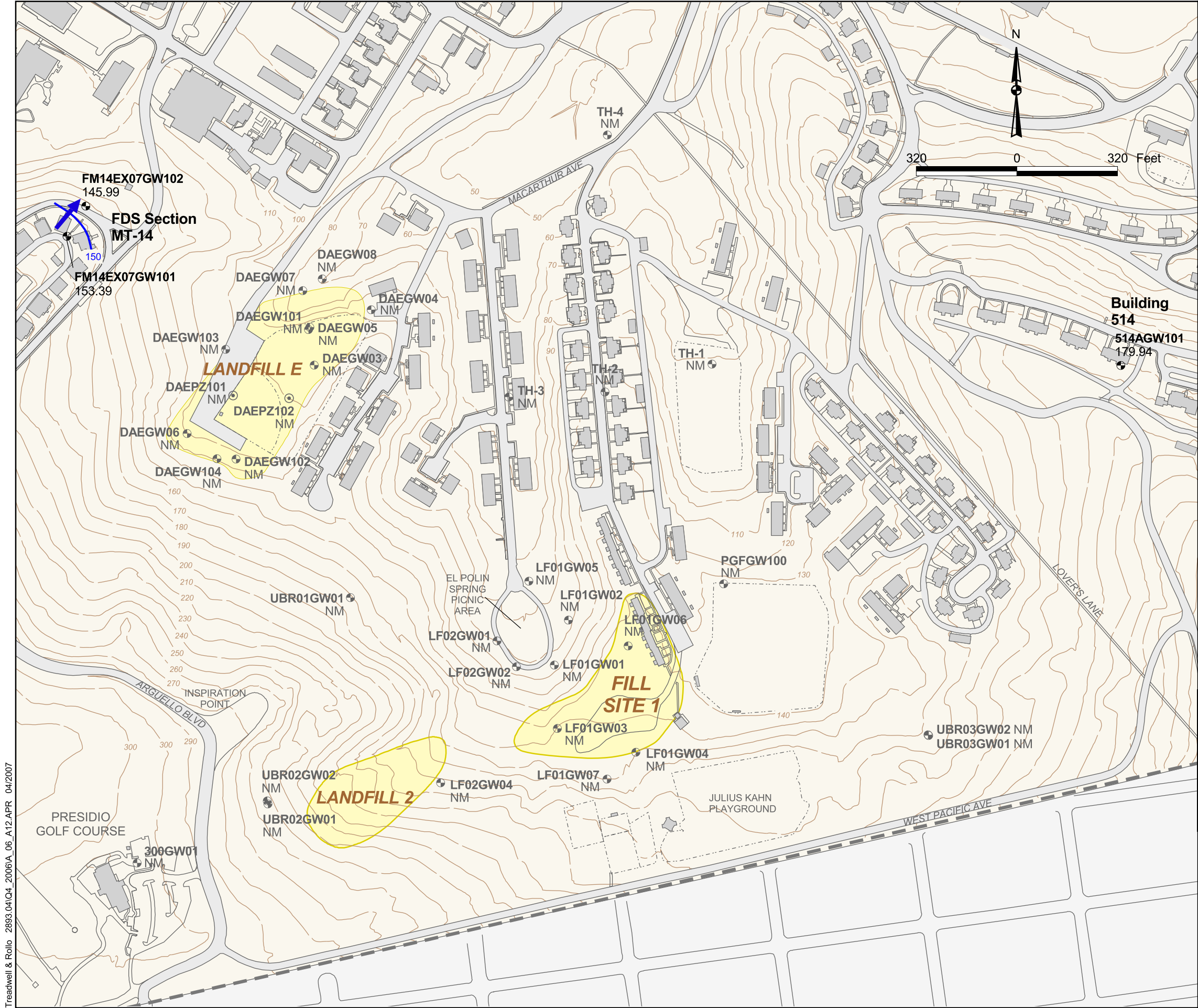
MINI-CAP AREA 2 SITE PLAN
AND 14 AUGUST 2006
GROUNDWATER ELEVATION MAP

Treadwell&Rollo



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fax 415/561-5315
April 2007

FIGURE A-12-3



LEGEND

514AGW101
179.94

Groundwater Monitoring Well
December 2006 Groundwater Elevation

NM

Not Measured

DAEGW03

Adjacent Groundwater Monitoring Well

DAEPZ101

Adjacent Piezometer

Approximate Direction of
Groundwater Flow

Groundwater Contour

Presidio Boundary

Recreation Area

Topographic Contour (Contour Interval: 10 ft)

Approximate Lateral
Extent of Landfill

Building

Notes:
Groundwater elevation data collected on 4 December 2006.

Horizontal Datum: NAD 27, CA State Plane Coordinates, Zone 3, feet
Vertical Datums: (groundwater) Presidio Lower Low Water (ft. PLLW)
(topography) North American Vertical Datum, NAVD88

**MINI-CAP AREA 2 SITE PLAN
AND 4 DECEMBER 2006
GROUNDWATER ELEVATION MAP**

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fax 415/561-5315
April 2007

FIGURE A-12-4

Third Quarter 2006

MONITORING WELL SAMPLING LOG (Normal, Low Flow, and Low Yield)

Site / Area Mini Can (1213)

Well No. 12136w101

Project Number 2893

Well Type ☒ Monitor ☐ Extraction ☐ Other

Recorded By DA

Sampled by DA

Date 8/16/06

WELL PURGING

PURGE VOLUME

Well casing diameter

☒ 2-inch ☐ 4-inch ☐ Other

Well Total Depth (TD, ft. below TOC) 40.02

Depth to Water (WL, ft. below TOC) 21.04

Depth to free phase (FP, ft. below TOC):

Number of borehole volumes to be purged

☐ 3 ☒ Not Applicable ☐ Other

PURGE VOLUME CALCULATION

15.98 x

1/1 x

No. Vols

Total Purge Time 9 min.

Recharge Rate

Purge Rate 0.5 gpm

PURGE METHOD

☐ Low Flow

☐ Normal

☒ Modified (max 5 gpm)

☒ Bailer \ Type

☐ Pump \ Type

☐ Other

PUMP INTAKE

☐ Near top Depth (ft)

☐ Near Bottom Depth (ft)

☒ Other Modified

gals

CALCULATED PURGE VOLUME

gals

ACTUAL PURGE VOLUME 4.5

GROUNDWATER PARAMETER MEASUREMENTS

Meter Type U11111111 / 451550A 20

Time	Liters or Gallons	pH	Temp °F	DO (mg/L)	Sp. COND (µS/cm)	ORP (mV)	Turbidity (NTU)	Comments
Int. 1013 /	0.3	7.9	16.2	Pa 0.61	1822	—	52	
1016 /	1.5	7.9	16.8	—	1847	—	100	
1019 /	3.0	7.9	16.8	—	1867	—	112	
1022 /	4.5	7.9	16.8	Post 0.88	1872	—	120	
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Comments

Purge water storage/disposal

☐ Drummed onsite

☒ Other Baker Tank

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled 8/16/06 1 1030

Purging

Equipment Pump - Type

Bailer - Type Disposible

Other

Sample Filtered: ☒ Yes ☐ No

Filtered Sample Analysis:

Disposible Metals (22)

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments
1213 6W 101	8X 1L NP Amber	CFT/CL	2116	
	3X 1L NP Polys			
	3X 500 ml 1100g FF Polys			
	18X 40 ml 1100g vass			

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.
1213 6W 101	DUP 081606 3A

Time
1040

Blank Samples

Type	Sample No.
Trip	
Rinsate	
Transfer	
Other:	

Treadwell & Rollo
Environmental and Geotechnical Consultant

Split Sample Time
12136W101CL 1050

MONITORING WELL SAMPLING LOG (Normal, Low Flow, and Low Yield)

Site / Area Mini Kay (Bldg 512) Well No. 5146W101
 Project Number 2893 Well Type ☒ Monitor ☐ Extraction ☐ Other
 Recorded By DR Sampled by DR Date 8/15/06

WELL PURGING

PURGE VOLUME

Well casing diameter
☒ 2-inch ☐ 4-inch ☐ Other
 Well Total Depth (TD, ft. below TOC): 38.07
 Depth to Water (WL, ft. below TOC): 20.40
 Depth to free phase (FP, ft. below TOC):

Number of borehole volumes to be purged
☐ 3 ☒ Not Applicable ☐ Other

PURGE VOLUME CALCULATION

17.67 X

NA X

No. Vols

Total Purge Time 9 min.

Recharge Rate

Purge Rate 0.5 gpm

PURGE METHOD

☐ Low Flow ☒ Bailer \ Type Drig.
☐ Normal ☐ Pump \ Type
☒ Modified (max 5 gpm) ☐ Other

PUMP INTAKE

Near top Depth (ft)
 Near Bottom Depth (ft)
☒ Other Modified

gals
 CALCULATED PURGE VOLUME
 gals
 ACTUAL PURGE VOLUME 4.5

Meter Type Ultrasonic / YSI 550A DO

GROUNDWATER PARAMETER MEASUREMENTS

Time	Liters or Gallons	pH	Temp °F	DO (mg/L)	Sp. COND (µS/cm)	ORP (mV)	Turbidity (NTU)	Comments
Int. 1230 /	0.5	6.9	16.5	0.80	623	—	71000	
1233 /	1.5	6.9	16.5	—	677	—	71000	
1236 /	3.0	6.9	16.4	—	670	—	71000	
1239 /	4.5	6.9	16.5	0.92	672	—	71000	
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Comments _____ Purge water storage/disposal ☐ Drilled onsite ☒ Other Baker Tank

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled 8/15/06 / 1245

Purging Equipment Pump - Type Bailer - Type Disposable Other _____
 Sample Filtered: Yes ☒ Filtered Sample Analysis: _____

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments
<u>5146W101</u>	<u>3x40ml IRL vials</u>	<u>ITT</u>	<u>2115</u>	
	<u>3x1L Amber (MP)</u>			

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.
Trip	
Rinsate	
Transfer	
Other:	

Fourth Quarter 2006

MONITORING WELL SAMPLING LOG (Normal, Low Flow, and Low Yield)

Site / Area 10418 Mini Cap

Well No. PM14 BX07 GW101

Project Number 2893

Well Type ☒ Monitor ☐ Extraction ☐ Other

Recorded By DR

Sampled by DR

Date 12/6/06

WELL PURGING

PURGE VOLUME

Well casing diameter

☒ 2-inch ☐ 4-inch ☐ Other

Well Total Depth (TD, ft. below TOC): 45.40

Depth to Water (WL, ft. below TOC): 30.06

Depth to free phase (FP, ft. below TOC):

Liquid in a 1 Foot Section of a Boring (gallons)

Borehole Size	Casing Size	Water Volume/Ft
8	2	0.9
10	4	1.68
12	4	2.22

Number of borehole volumes to be purged

☐ 3 ☐ Not Applicable ☐ Other

PURGE VOLUME CALCULATION

15.34 x Water Column Length

Water Volume/ft

No. Vols

Total Purge Time 10 min.

Recharge Rate

Purge Rate 0.5 gpm

PURGE METHOD

☐ Low Flow ☒ Bailor \ Type Disp.
☐ Normal ☐ Pump \ Type
☒ Modified (max 5 gpm) ☐ Other

PUMP INTAKE

☐ Near top Depth (ft)
☐ Near Bottom Depth (ft)
☒ Other Modified

gals
CALCULATED PURGE VOLUME

4.3 gals

ACTUAL PURGE VOLUME

GROUNDWATER PARAMETER MEASUREMENTS

Meter Type Myron Ultrameter/Hach Tust

Time	Liters or Gallons	pH	Temp °F	DO (mg/L)	Sp. COND (µS/cm)	ORP (mV)	Turbidity (NTU)	Comments
1119 /	0	7.1	14.8	0.31	692	—	389	cloudy
1122 /	1.5	7.1	15.3	—	713	—	21000	"
1125 /	3.0	6.8	15.7	—	712	—	71000	"
1128 /	4.5	6.8	15.9	0.84	726	—	21000	"
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Comments

Purge water storage/disposal

☐ Drilled onsite

☒ Other Baker Pumps

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled 12/6/06 1150

Purging

Equipment Pump - Type N/A

Bailer - Type Disp.

Other

Sample Filtered: Yes/No

☒ No

Filtered Sample Analysis:

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments
PM14 BX07 GW101	3 X 16 N/Ambros	CTT	2123	
	3 16L vials			

QUALITY CONTROL SAMPLES

Duplicate Samples

Blank Samples

Original Sample No.

Duplicate Sample No.

Type

Sample No.

Trip

Rinsate

Transfer

Other:

MONITORING WELL SAMPLING LOG (Normal, Low Flow, and Low Yield)

Site / Area Muni. Cap
 Project Number 2893
 Recorded By DR

Well No. 514AGW101
 Well Type ☒ Monitor ☐ Extraction ☐ Other
 Sampled by DR Date 12/6/06

WELL PURGING

PURGE VOLUME

Well casing diameter
☒ 2-inch ☐ 4-inch ☐ Other
 Well Total Depth (TD, ft. below TOC): 37.88
 Depth to Water (WL, ft. below TOC): 21.65
 Depth to free phase (FP, ft. below TOC):

Liquid in a 1 Foot Section of a Boring (gallons)		
Borehole Size	Casing Size	Water Volume/Ft
8	2	0.9
10	4	1.68
12	4	2.22

PURGE METHOD

☐ Low Flow ☒ Bailor \ Type Disp.
☐ Normal ☐ Pump \ Type
☒ Modified (max 5 gpm) ☐ Other

PUMP INTAKE

☐ Near top Depth (ft) _____
☐ Near Bottom Depth (ft) _____
☐ Other

Number of borehole volumes to be purged
☐ 3 ☐ Not Applicable ☐ Other

PURGE VOLUME CALCULATION

16.23 x 0.5 = 8.115
 Water Column Length Water Volume/ft No. Vols

Total Purge Time 10 min.

Recharge Rate - Purge Rate 0.5 gpm

gals
CALCULATED PURGE VOLUME
<u>4.5</u> gals
ACTUAL PURGE VOLUME

GROUNDWATER PARAMETER MEASUREMENTS

Meter Type Hydramat Ultrasonic/Hack Turb.

Time	Liters or Gallons	pH	Temp °F	DO (mg/L)	Sp. COND (µm/cm)	ORP (mV)	Turbidity (NTU)	Comments
<u>1322</u>	<u>0</u>	<u>6.9</u>	<u>15.7</u>	<u>0.33</u>	<u>263</u>	<u>-</u>	<u>581</u>	<u>cloudy</u>
<u>1324</u>	<u>1.5</u>	<u>6.9</u>	<u>15.7</u>	<u>-</u>	<u>704</u>	<u>-</u>	<u>21000</u>	<u>"</u>
<u>1327</u>	<u>3.0</u>	<u>6.9</u>	<u>15.7</u>	<u>-</u>	<u>695</u>	<u>-</u>	<u>71000</u>	<u>"</u>
<u>1330</u>	<u>4.5</u>	<u>6.9</u>	<u>15.9</u>	<u>0.76</u>	<u>690</u>	<u>-</u>	<u>71000</u>	<u>"</u>
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Comments * Collected MS/MSD Purge water storage/disposal ☐ Drilled onsite ☒ Other Baker Tanks

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled 12/6/06 1:1355

Purging Equipment Pump - Type N/A Bailer - Type Disp. Other _____

Sample Filtered: Yes ☒ No ☐ Filtered Sample Analysis: _____

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments
<u>514AGW101</u>	<u>9 X 1L NP Ambers</u>	<u>CTT</u>	<u>2123</u>	
	<u>9 HCL vials</u>			

QUALITY CONTROL SAMPLES

Duplicate Samples	
Original Sample No.	Duplicate Sample No.

Blank Samples	
Type	Sample No.
Trip	
Rinsate	
Transfer	
Other:	

**NIKE MISSILE FACILITY
APPENDIX SECTION A-13
SEMI-ANNUAL GROUNDWATER MONITORING REPORT
THIRD AND FOURTH QUARTERS 2006
Presidio of San Francisco, California**

1.0 INTRODUCTION AND BACKGROUND

The Nike Missile Facility is located in the southwest portion of the Presidio (Figure 1) and consists of two terraced areas: the Building 1450/1451 area and the Silo/Magazine area (Dames & Moore, 1997). The Building 1450/1451 area is located on the northern, upland portion of the site. The Silo/Magazine area consists of three abandoned underground missile silos located southeast and downhill from the Building 1450/1451 area. Silo/Magazine #1 is on the middle terrace, and Silo/Magazines #2 and #3 are south of Silo/Magazine #1 (Figure A-13-1).

The Nike Missile Facility opened in 1956 and was taken out of service in 1965. Building 1450 functioned as the missile-launch room, the missile-battery maintenance area, an administration office, and living quarters. Building 1451 was used as an operational support and maintenance facility for the Nike Missile Facility. Hydraulic oil, hydraulic oil storage tanks, hydraulic oil equipment, standing water, and debris (including damaged asbestos-containing material, deteriorated lead-based paint, hydrocarbon-affected soil, sludge, and miscellaneous debris) associated with the three missile silos were removed by the International Technology Corporation (IT) between December 1998 and February 1999. In addition to the removal of these hazardous materials, all mechanisms left in place within the silo/magazines were power-washed. The recovered materials and debris were classified and appropriately disposed (IT, 1999).

Since September 1992, monitoring well samples at the Nike Missile Facility site have been analyzed for TPH, PAHs, cyanide, VOCs, and dissolved metals. Analytical result summaries are presented in Tables A-13-1 through A-13-4.

Perchlorate and N-nitrosodimethylamine (NDMA) analyses were performed as part of the Trust's Emergent Chemical Study, requested by the RWQCB, during the First Quarter 2004 within all Nike Missile Facility monitoring wells. The results of the Emergent Chemical Study were detailed in the *Draft Technical Report: Emergent Chemical Study, First Quarter 2004* (Treadwell & Rollo, 2004b) and are briefly summarized in Section 3.0 below.

2.0 SITE DESCRIPTION AND GEOLOGY

The Nike Missile Facility is located in the Lobos Creek Groundwater Basin (Figure 1). Groundwater at the site is generally present between 10 and 40 feet bgs. Groundwater flow at the Nike Missile Facility is reported to follow the general topographic trend towards the south-southeast (Montgomery Watson, 1997a).

Subsurface materials beneath the Nike Missile Facility consist of engineered fill, dune sand, fine-grained deposits of the Colma Formation, and Franciscan Complex bedrock. Engineered fill was imported and graded for construction in the 1950s. Engineered fill is present at the surface and to depths ranging from 10 to 24.5 feet bgs. Beneath the fill, either dune sand or the Colma Formation is present to depths of 20 feet bgs in the northern portion of the site and 42 feet in the south. The Colma Formation is underlain by serpentinite bedrock (Montgomery Watson, 1997a).

3.0 EMERGENT CHEMICAL STUDY

The Trust, at the request of the RWQCB, identified potential source areas for emergent chemical releases and developed a groundwater monitoring plan to address potential source areas at the Presidio. The sampling program was requested by the RWQCB in a letter to the Trust dated 23 June 2003. The emergent chemical groundwater sampling program was developed to determine if past uses at the Presidio resulted in groundwater contamination associated with emergent chemicals identified as perchlorate, NDMA, 1,4-dioxane, 1,2,3-trichloropropane (TCP), hexavalent chromium, and polybrominated diphenyl ether (PBDE).

The Trust transmitted the results of their source area evaluation in a letter to the RWQCB, entitled *Preliminary Evaluation of Potential Emergent Chemical Use Areas and Locations at the Presidio of San Francisco* (Source Evaluation Report), dated 25 November 2003. The potential emergent chemical source areas were evaluated by the Trust considering the following information: 1) the existing environmental data currently contained within the Trust's database; 2) the potential for an emergent chemical or a material containing an emergent chemical to have been used and released in a significant quantity at the Presidio; and 3) locations of sensitive groundwater use areas at the Presidio (Trust, 2003).

Based on the Source Evaluation Report, a follow up groundwater monitoring program concerning potential releases of emergent chemicals at the Presidio was implemented during the First Quarter 2004. NDMA was the only emergent chemical detected above laboratory detection limits during the First Quarter 2004. 1,4-dioxane, perchlorate, and PBDE were not detected above laboratory detection limits within any samples analyzed during the First Quarter 2004 (Treadwell & Rollo, 2004b).

NDMA is a decomposition product of Aerozine 50, a component used in the production of rocket fuel. NDMA has contaminated surface and groundwater at missile and other rocket fuel sites.

NDMA has also been formed through other industrial processes, such as the chlorination of drinking water and the treatment of sewage for wastewater recycling. NDMA is considered by health experts to be a carcinogen (RWQCB, 2003).

The following remedial goals and action levels for NDMA have been established.

- The EPA's Preliminary Remedial Goal (PRG) for tap water is 0.0013 µg/L.
- The California Department of Health Services (CDHS) notification level (formerly action level) for NDMA is 0.01 µg/L.

The Source Evaluation Report identifies the Nike Missile Facility and former Army explosive testing areas as potential NDMA source areas. All Nike Missile Facility monitoring wells had samples collected and analyzed for NDMA during the First Quarter 2004. The discussion below relates to the NDMA sampling which took place during the First Quarter 2004 at the Nike Missile Facility.

Groundwater samples collected from monitoring wells NKGW01 through NKGW05 were analyzed for NDMA by EPA Method 1625 during the First Quarter 2004. NDMA analysis was also completed on the duplicate sample (DUP0317042A) collected from NKGW01.

In 2004, NDMA was detected at concentrations of 0.0048, 0.0016J, 0.0025, and 0.0009J µg/L within NKGW01, DUP0317042A, NKGW04 and NKGW05, respectively. The detected concentrations below the practical quantitation limit of 0.002 µg/L and above the method detection limit of 0.0005 µg/L were estimated and therefore qualified with a 'J'. The Relative Percent Difference (RPD) between the primary and the duplicate samples collected from NKGW01 exceeds the 50% criteria specified in the *Presidio-wide Quality Assurance Project Plan Sampling and Analysis Plan* (QAPP) (Tetra Tech, 2001). However, the data was considered usable and did not require qualification by DataVal, as described in the First Quarter 2004 DataVal report. NDMA was not detected in NKGW02 or NKGW03 samples above laboratory detection limits during the First Quarter 2004. Detection limits and detected concentrations were well below the CDHS action level of 0.01 µg/L. However, the detected concentrations of NDMA within NKGW01 and NKGW04 in the First Quarter 2004 exceeded the EPA's Region 9 Tap Water PRG (0.0013 µg/L).

NDMA was sampled within all Nike Missile Facility monitoring wells during the Third Quarter 2004 and will continue to be sampled within all Nike Missile Facility monitoring wells until the *Remedial Action Plan* (RAP), which is currently being prepared for the Nike Missile Facility, is finalized. A revised groundwater monitoring plan will be implemented at the Nike Missile Facility, in accordance with the RAP when it is approved by the RWQCB and the stakeholders.

4.0 GROUNDWATER MONITORING

The Nike Missile Facility has five associated monitoring wells (Figure A-13-1). Groundwater elevations were collected at all five wells during the Third Quarter 2006. Groundwater elevations were not collected during the Fourth Quarter 2006 as the frequency of water level measurements was reduced to match the sampling frequency at the site. The next groundwater elevations will be collected during the First Quarter 2007.

Groundwater samples were collected at four of the five Nike Missile Facility monitoring wells during the Third Quarter 2006 and analyzed for dissolved oxygen and NDMA, in accordance with the proposed sampling schedule (Table 1A). All five Nike Missile Facility monitoring wells were scheduled to be sampled during the Third Quarter 2006 (Table 1A); however, monitoring well NKGW03 did not have sufficient groundwater for a sample to be collected. No groundwater samples were scheduled for collection during the Fourth Quarter 2006, in accordance with the proposed sampling schedule (Table 1B).

4.1 Groundwater-Level Measurements and Interpretation

Groundwater elevation measurements were collected on 14 August 2006 during the Third Quarter 2006. Groundwater elevation maps showing groundwater contours and flow directions for the Nike Missile Facility are included on Figure A-13-1. Water level meters were calibrated on 14 August 2006 and the calibration logs can be found in Appendix B. Groundwater elevation field forms can be found in Appendix C. Groundwater elevations are presented in Table A-13-5. Groundwater elevations were not measured during the Fourth Quarter 2006.

Groundwater elevations at the Nike Missile Facility during the Third Quarter 2006 ranged from 249.27 to 320.06 feet above PLLW in monitoring wells NKGW01 and NKGW03, respectively (Figure A-13-1). The Third Quarter 2006 groundwater elevations are consistent with historical elevations measured at the site.

During the Third Quarter 2006, groundwater flow was determined to be in a south-southeasterly direction following the general topographic trend. During the Third Quarter 2006, the groundwater gradient was calculated to be approximately 0.11 feet per foot.

4.2 Monitoring Well Purging and Sampling

During the Third Quarter 2006, four of the five Nike Missile Facility monitoring wells (NKGW01, NKGW02, NKGW04, and NKGW05) were purged and sampled on 17 August 2006 in accordance with methods shown in Table 1A and procedures described in the FSP (Treadwell & Rollo, 2001a). Monitoring well NKGW03 was scheduled to be sampled during the Third Quarter 2006, but did not contain enough groundwater for sample collection. No Nike Missile Facility monitoring wells were proposed for sampling during the Fourth Quarter 2006.

Purging equipment, purging volumes, purge water parameters, and sampling equipment for each monitoring well are described in the purge records at the conclusion of this section. Dissolved Oxygen meters are calibrated prior to sampling each day. Purge water was stored for future disposal in one of two 2,800-gallon aboveground polyethylene storage tanks, which are located at the Central Magazine.

4.3 Groundwater Analytical Program

All groundwater samples were submitted to the project laboratory for the analyses shown in Tables 1A and 1B of the main text. The appropriate sampling containers, preservatives, and maximum holding times for each analytical method are shown in Table 5. Sample containers used for each well are described in the purge records located at the conclusion of this section.

In the Third Quarter 2006, groundwater samples were collected from four monitoring wells on 17 August 2006 (NKGW01, NKGW02, NKGW04, and NKGW05) and analyzed for NDMA.

5.0 GROUNDWATER ANALYTICAL RESULTS

Groundwater analytical results are presented in Tables A-13-1 through A-13-4 and are discussed below.

5.1 Dissolved Oxygen

Dissolved oxygen results for the Third Quarter 2006, are presented in Table A-13-1.

During the Third Quarter 2006, the dissolved oxygen concentrations within Nike Missile Facility monitoring wells ranged from 0.31 to 3.51 mg/L in monitoring wells NKGW01 and NKGW02, respectively. These detections were within historical concentrations for dissolved oxygen.

5.2 NDMA

NDMA results for the Third Quarter 2006, are presented in Table A-13-1. During the Third Quarter 2006, NDMA was not detected above laboratory limits within any of the groundwater samples. This is the first sampling event where NDMA was not detected in groundwater

samples from NKGW01, NKGW04, and NKGW05. NDMA was detected above laboratory limits within three of the four Nike Missile Facility monitoring wells during the First Quarter 2006.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Groundwater elevations, gradients, and flow directions during the Third Quarter 2006 are consistent with historical values and interpretations.

NDMA was not detected within any of the Third Quarter 2006 groundwater samples. This is the first sampling event where NDMA was not detected above laboratory detection limits in groundwater samples from NKGW01, NKGW04, and NKGW05. NDMA was detected above laboratory limits within three of the four Nike Missile Facility monitoring wells during the First Quarter 2006.

A RAP is currently being prepared for the Nike Missile Facility and a revised groundwater monitoring plan will be implemented, in accordance with the RAP, when it is approved by the DTSC, RWQCB, and other stakeholders. There are no proposed changes to the groundwater monitoring program at this site.

Table A-13-1
Summary of Cyanide and NDMA Analyses and Dissolved Oxygen Measurement Results
Nike Missile Facility
Presidio of San Francisco, California

Well Name	Sample Date	Dissolved Oxygen	Cyanide	NDMA
	Analytical Method ¹	Field	SW9012	E1625
		(mg/L)	(mg/L)	(µg/L)
NKGW01	08/17/06	0.31	NA	< 0.002
	03/20/06	0.91	< 0.01	0.0045
DUP0031605A	09/01/05	1.1	NA	0.005 J
	03/16/05	0.5	< 0.01	0.005
	03/16/05	--	< 0.01	0.005
DUP0813042A	08/13/04	0.50	NA	0.0007
	08/13/04	--	NA	0.0009
	03/17/04	0.52	< 0.01	0.0048
DUP0317042A NKGW01CL	03/17/04	--	< 0.01	0.0016 J
	03/17/04	--	NA	NA
	03/18/03	0.7	< 0.01	NA
	03/12/02	1	< 0.01	NA
	05/17/01	3.4	< 0.01	NA
	02/24/99	0.55	< 0.01	NA
	08/18/98	0.79	< 0.01	NA
	01/20/98	0.61	< 0.01	NA
	11/14/97	0.69	NA	NA
	08/13/97	0.16	< 0.01	NA
	05/19/97	1.5	< 0.01	NA
	02/17/97	1.62	NA	NA
NKGW02	08/17/06	3.51	NA	< 0.002
	03/20/06	5.95	< 0.01	< 0.002
	09/01/05	1	NA	< 0.002
	03/16/05	0.6	< 0.01	0.005
	08/13/04	0.60	NS	NS
	03/17/04	4.72	< 0.01	< 0.002
	03/18/03	5.7	< 0.01	NA
	03/12/02	5	< 0.01	NA
	05/16/01	5.7	< 0.01	NA
	02/23/99	7.9	< 0.01	NA
	01/21/98	9.32	< 0.01	NA
	05/20/97	1.28	< 0.01	NA
	02/18/97	6.32	NA	NA
	04/05/95	NM	< 0.004	NA
NKGW03	03/10/06	5.39	< 0.01	< 0.002
	03/18/05	2.8	< 0.01	0.0024
	08/13/04	2.80	NS	NS
	03/17/04	3.1	< 0.01	< 0.002
	03/14/03	NM	NS	NS
	03/12/02	2.1	< 0.01	NA
	05/16/01	NM	NS	NS
	02/23/99	NM	< 0.01	NA
	02/23/99	9.14	NA	NA
	04/16/98	10.88 (J25)	NA	NA
	01/20/98	8.02 (J25)	< 0.01	NA
	02/18/97	9.14	NA	NA
	04/06/95	NM	< 0.004	NA

Table A-13-1
Summary of Cyanide and NDMA Analyses and Dissolved Oxygen Measurement Results
Nike Missile Facility
Presidio of San Francisco, California

Well Name	Sample Date	Dissolved Oxygen	Cyanide	NDMA
	Analytical Method ¹	Field	SW9012	E1625
		(mg/L)	(mg/L)	(µg/L)
NKGW04	08/16/06	0.59	NA	< 0.002
	03/20/06	3.13	< 0.01	0.003
DUP0320061A	03/20/06	--	< 0.01	0.0019
	09/01/05	0.6	NA	0.0013 J
DUP0901052A	09/01/05	--	NA	0.0012 J
	03/16/05	0.6	< 0.01	0.004
	08/13/04	0.60	NA	0.0009
	03/17/04	0.87	< 0.01	0.0025
	03/18/03	5.8	< 0.01	NA
	03/12/02	3.2	< 0.01	NA
	05/17/01	1.6	< 0.01	NA
	02/22/99	2.95	< 0.01	NA
	01/20/98	0.76	< 0.01	NA
	11/13/97	0.7	< 0.01	NA
	08/13/97	0.7	< 0.01	NA
	05/19/97	0.49	< 0.01	NA
	02/17/97	1.12	NA	NA
	04/05/95	NM	< 0.004	NA
NKGW05	08/17/06	0.45	NA	< 0.002
	03/20/06	0.76	0.01	0.0032
	09/01/05	0.9	NA	0.005 J
	03/16/05	0.8	< 0.01	0.0036
	08/13/04	0.80	NA	0.001
	03/17/04	0.1	< 0.01	0.0009 J
	03/18/03	5.1	< 0.01	NA
	03/12/02	1	< 0.01	NA
	05/17/01	1.4	< 0.01	NA
	02/22/99	0.86	< 0.01	NA
	01/21/98	0.28	< 0.01	NA
	11/14/97	0.4	NA	NA
	05/19/97	0.56	< 0.01	NA
	02/17/97	1.85	NA	NA
	04/05/95	NM	0.00628	NA

Notes

1 - The identified analytical method is for samples performed beginning the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

µg/L - micrograms per liter

mg/L - milligrams per liter

NA - Not analyzed

NM - Not measured

NS - Not sampled

NDMA - N-nitrosodimethylamine

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-13-2
Results of TPH Analyses
Nike Missile Facility
Presidio of San Francisco, California

Well Name	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
NKGW01 DUP0031605A DUP0317042A NKGW01CL	03/20/06	< 50	< 50	< 300
	03/16/05	< 50	< 50	< 300
	03/16/05	< 50	< 50	< 300
	03/17/04	< 50	< 50	< 300
	03/17/04	< 50	< 50	< 300
	03/17/04	< 50	< 48	< 240
	03/18/03	< 50	< 50	< 300
	03/12/02	< 50	< 50	< 300
	05/17/01	< 50	< 50	< 300
	02/24/99	< 50	65 (J25)	< 300
	01/20/98	< 50	< 50	< 300
	11/14/97	< 50	< 50	< 300
	05/19/97	< 50	240 (J25)	< 300
	02/17/97	< 50	< 50	< 300
	12/11/96	< 50	< 50	< 300
	09/03/96	< 50	51 (J25)	< 300
	06/05/96	< 50	< 50	< 300
	03/20/96	< 50	< 50	< 300 (U6)
	11/30/95	< 50	< 50	< 300
	09/21/95	< 50	68 (J25)	< 300
	11/10/94	< 50	NA	NA
NKGW02	03/20/06	< 50	< 50	< 300
	03/16/05	< 50	< 50	< 300
	03/17/04	< 50	< 50	< 300
	03/18/03	< 50	< 50	< 300
	03/12/02	< 50	< 50	< 300
	05/16/01	< 50	< 50	< 300
	02/23/99	< 50	< 50 (U13)	< 300
	01/21/98	< 50	< 50	< 300
	11/14/97	< 50	< 50	< 300
	02/18/97	< 50 (U15)	< 50	< 300
	06/05/96	< 50	< 50	< 300
	03/19/96	< 50	< 50	< 300 (U6)
	09/22/95	< 50	< 50	< 300
	04/05/95	< 10	NA	NA
NKGW03	03/10/06	< 50	< 50	< 300
	03/18/05	< 50	< 50	< 300
	03/17/04	< 50	< 50	< 300
	03/12/02	< 50	< 50	< 300
	05/16/01	NS	NS	NS
	02/23/99	< 50	< 50 (U13)	< 300
	01/20/98	< 50	< 50	< 300
	02/18/97	< 50 (U15)	< 50	< 300
	04/06/95	11	NA	NA

Table A-13-2
Results of TPH Analyses
Nike Missile Facility
Presidio of San Francisco, California

Well Name	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
NKGW04 DUP0320061A	03/20/06	< 50	< 50	< 300
	03/20/06	< 50	< 50	< 300
	03/16/05	< 50	< 50	< 300
	03/17/04	< 50	< 52	< 310
	03/18/03	< 50	< 50	< 300
	03/12/02	< 50	< 50	< 300
	05/17/01	< 50	< 50	< 300
	02/22/99	< 50	< 50 (U13)	< 300
	01/20/98	< 50	< 50	< 300
	11/13/97	< 50	< 50	< 300
	08/13/97	360 (J32)	< 50	< 300
	05/19/97	< 50	130 (J32)	< 300
	02/17/97	< 50	< 50	< 300
	12/11/96	< 50	< 50	< 300
	11/30/95	< 50	< 50	< 300
NKGW05	04/05/95	< 10	NA	NA
	03/20/06	< 50	< 50	< 300
	03/16/05	< 50	< 50	< 300
	03/17/04	< 50	< 50	< 300
	03/18/03	< 50	< 50	< 300
	03/12/02	< 50	< 50	< 300
	05/17/01	< 50	< 50	< 300
	02/22/99	< 50	< 50 (U10, U13)	< 300
	01/21/98	< 50	< 50	< 300
	11/14/97	< 50	< 50	< 300
	05/19/97	< 50	110 (J32)	< 300
	02/17/97	< 50	< 50	< 300
	12/11/96	< 50	< 50	< 300
	09/03/96	< 50	< 50	< 300
	06/05/96	< 50	< 50	< 300
	03/20/96	< 50	< 50	< 300 (U6)
	11/30/95	< 50	< 50	< 300
	09/22/95	< 50	< 50	< 300
	04/05/95	< 10	NA	NA

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

µg/L - micrograms per liter

NA - Not analyzed

TPH - Total petroleum hydrocarbons

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-13-3
Results of VOC Analyses
Nike Missile Facility
Presidio of San Francisco, California

Well Name	Sample Date	Benzene	MTBE	Toluene	Total Xylenes	All Other VOCs
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
NKGW01 DUP0031605A DUP0317042A NKGW01CL	03/20/06	< 0.5	< 0.5	< 0.5	< 1	ND
	03/16/05	< 0.5	< 0.5	< 0.5	< 1	ND
	03/16/05	< 0.5	< 0.5	< 0.5	< 1	ND
	03/17/04	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/17/04	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/17/04	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/18/03	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/12/02	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/17/01	< 0.5	< 0.5 UJ	< 0.5	NA	ND
	02/24/99	< 0.5	NA	< 0.5	< 0.5	ND
	08/18/98	NA	NA	NA	NA	NA
	01/20/98	< 0.5	NA	< 0.5	< 0.5	ND
	08/13/97	NA	NA	NA	NA	NA
	05/19/97	< 0.5	NA	12	< 0.5	ND
	02/17/97	< 0.5	NA	< 0.5	< 0.5	ND
	12/11/96	< 0.5	NA	< 0.5	< 0.5	ND
	09/03/96	< 0.5	NA	2.4	< 0.5	ND
	06/05/96	< 0.5	NA	< 0.5	< 0.5	ND
	03/20/96	< 0.5	NA	< 0.5	< 0.5	ND
	11/30/95	< 0.5	NA	< 0.5	< 0.5	ND
	09/21/95	< 0.5	NA	< 0.5	< 0.5	ND
	01/09/95	NA	NA	NA	NA	NA
NKGW02	03/20/06	< 0.5	< 0.5	< 0.5	< 1	ND
	03/16/05	< 0.5	< 0.5	< 0.5	< 1	ND
	03/17/04	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/18/03	0.3 J	< 0.5	< 0.5	< 0.5	ND
	03/12/02	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/16/01	< 0.5	< 0.5 UJ	< 0.5	NA	ND
	02/23/99	NA	NA	NA	NA	NA
	01/21/98	NA	NA	NA	NA	NA
	05/20/97	NA	NA	NA	NA	NA
	02/18/97	< 0.5	NA	< 0.5	< 0.5	ND
	06/05/96	< 0.5	NA	< 0.5	< 0.5	ND
	03/19/96	< 0.5	NA	< 0.5	< 0.5	ND
	09/22/95	< 0.5	NA	< 0.87	< 0.5	ND
	04/05/95	NA	NA	NA	NA	NA
NKGW03	03/10/06	< 0.5	< 0.5	< 0.5	< 1	ND
	03/18/05	< 0.5	< 0.5	< 0.5	< 1	ND
	03/17/04	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/12/02	< 0.5	< 0.5	< 0.5	< 0.5	ND
	02/23/99	< 0.5	NA	< 0.5	< 0.5	ND
	01/20/98	< 0.5	NA	< 0.5	< 0.5	ND
	02/18/97	< 0.5	NA	< 0.5	< 0.5	ND
	04/06/95	NA	NA	NA	NA	NA
NKGW04 DUP0320061A	03/20/06	< 0.5	< 0.5	< 0.5	< 1	ND
	03/20/06	< 0.5	< 0.5	< 0.5	< 1	ND
	03/16/05	< 0.5	< 0.5	< 0.5	< 1	ND
	03/17/04	< 0.5	< 0.5	< 0.5	< 0.5	ND

Table A-13-3
Results of VOC Analyses
Nike Missile Facility
Presidio of San Francisco, California

Well Name	Sample Date	Benzene	MTBE	Toluene	Total Xylenes	All Other VOCs
	Analytical Method ¹	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M	SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
NKGW04	03/18/03	0.4 J	< 0.5	0.6	< 0.5	ND
	03/12/02	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/17/01	< 0.5	< 0.5 UJ	< 0.5	NA	ND
	02/22/99	< 0.5	NA	< 0.5	< 0.5	ND
	01/20/98	< 0.5	NA	< 0.5	< 0.5	ND
	11/13/97	< 0.5	NA	< 0.5	< 0.5	ND
	08/13/97	< 0.5	NA	< 0.5	< 0.5	ND
	05/19/97	< 0.5	NA	< 0.5	< 0.5	ND
	02/17/97	< 0.5	NA	< 0.5	< 0.5	ND
	12/11/96	< 0.5	NA	< 0.5	< 0.5	ND
	11/30/95	< 0.5	NA	< 0.5	< 0.5	ND
	04/05/95	NA	NA	NA	NA	NA
NKGW05	03/20/06	< 0.5	< 0.5	< 0.5	< 1	ND
	03/16/05	< 0.5	< 0.5	< 0.5	< 1	ND
	03/17/04	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/18/03	0.5	< 0.5	0.8	< 0.5	ND
	03/12/02	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/17/01	< 0.5	< 0.5 UJ	< 0.5	NA	ND
	02/22/99	< 0.5	NA	< 0.5	< 0.5	ND
	01/21/98	< 0.5	NA	< 0.5	< 0.5	ND
	05/19/97	< 0.5	NA	< 0.5	< 0.5	ND
	02/17/97	< 0.5	NA	< 0.5	< 0.5	ND
	12/11/96	< 0.5	NA	< 0.5	< 0.5	ND
	09/03/96	< 0.5	NA	2.3	< 0.5	ND
	06/05/96	< 0.5	NA	0.85	< 0.5	ND
	03/20/96	< 0.5	NA	< 0.5	< 0.5	ND
	11/30/95	< 0.5	NA	< 0.5	NA	ND
	09/22/95	< 0.5	NA	< 0.5	< 0.5	ND
	04/05/95	NA	NA	NA	NA	NA

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001.

The analytical methods used during previous quarters are identified in the respective quarterly reports.

µg/L - micrograms per liter

NA - Not analyzed

ND - Not detected

VOCs - Volatile organic compounds

MTBE - Methyl tert-butyl ether

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.

Table 11 in the main report identifies current historical data qualifiers.

Table A-13-4
Results of Dissolved Metals Analyses
Nike Missile Facility
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese
	Analytical Method ¹	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
NKGW01	03/20/06	< 100	< 1	< 5	120	< 2	< 1	31,000	< 10	< 10	1.1	< 100	< 3	68,000	< 10
	03/16/05	< 100	< 1	9.3	89	< 2	2	26,000	< 10	< 10	2.6	< 100	< 3	60,000	13
DUP0031605A	03/16/05	< 100	< 1	7.6	95	< 2	1.8	27,000	< 10	< 10	2.2	< 100	< 3	63,000	11
	03/17/04	< 100	< 1	< 5	100	< 2	< 1	34,000	11	< 10	1	< 100	< 3	69,000	< 10
DUP0317042A	03/17/04	< 100	< 1	< 5	110	< 2	< 1	35,000	11	< 10	1.1	< 100	< 3	69,000	< 10
	03/17/04	< 100	< 5	6.2	93	< 1	1	31,000	11	< 7	< 10	< 500	< 3	66,000	7.2
NKGW01CL	03/18/03	< 100 UJ	< 1	< 1	110	< 1	< 1	40,000 J	10 J	< 1	< 1	< 100	< 3	94,000 J	13 J
	03/12/02	< 100	1.5	2.2	550	< 1	< 1	28,000	6	< 1	1.3	< 100	< 3	63,000	< 10
	05/17/01	< 100	2.5 J	< 1 UJ	130 J	< 1 UJ	< 1 UJ	24,000 J	5.6 J	< 1 UJ	1.2 J	< 100 UJ	< 3 UJ	69,000	18 J
	02/24/99	NA	< 5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/18/98	NA	< 5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	01/20/98	NA	< 5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/13/97	NA	< 5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/19/97	< 100	< 10	< 5	130	< 4	< 2	35,000	< 10	< 10	< 10	700	< 3	75,000	90
	02/17/97	< 100	< 5	< 5	116	< 4	< 2	32,800	< 10	< 10	< 10	< 100	< 3	71,400	14.7
	12/11/96	< 100	< 5	< 5	97.4	< 4	< 2	30,600	< 10	18.6	< 10	113	< 3	66,300	279
	09/03/96	< 100	< 5	< 5	126	< 2	< 0.5	34,900	2.5	< 10	1.1	< 100	< 1	79,100	32.1
	06/05/96	< 100	< 5	< 5	120	< 2	< 0.5	34,600	3.4	< 10	< 1	< 100	< 1	75,900	28.2
	03/20/96	< 100	< 5	< 5	102	< 2	< 0.5	31,700	4.1	< 10	1.7	< 100	1.7	67,000	< 10
	11/30/95	< 100	< 5	< 5	100	< 2	< 0.5	29,900	3.8	< 10	1.2	< 100	< 1	68,300	< 10
	09/21/95	< 100	< 60	< 5	110	< 2	< 5	32,000	< 10	< 10	< 20	100	< 1	70,900	10
NKGW02	03/20/06	< 100	< 1	< 5	42	< 2	< 1	13,000	< 10	< 10	< 1	< 100	< 3	23,000	< 10
	03/16/05	< 100	< 1	< 5	37	< 2	< 1	12,000	< 10	< 10	< 1	< 100	< 3	21,000	< 10
	03/17/04	< 100	< 1	< 5	37	< 2	< 1	14,000	< 10	< 10	< 1	< 100	< 3	22,000	< 10
	03/18/03	< 100 UJ	1	< 1	35	< 1	< 1	12,000 J	4.7 J	< 1	< 1	< 100	< 3	30,000 J	< 10 UJ
	03/12/02	< 100	< 1	< 1	440	< 1	< 1	12,000	4	< 1	< 1	< 100	< 3	25,000	< 10
	05/16/01	< 100	1.2 J	< 1 UJ	230 J	< 1 UJ	< 1 UJ	9,700 J	17 J	< 1 UJ	< 1 UJ	< 100 UJ	< 3 UJ	42,000	< 10 UJ
	02/23/99	NA	< 5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table A-13-4
Results of Dissolved Metals Analyses
Nike Missile Facility
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese
	Analytical Method ¹	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
	01/21/98	NA	< 5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/20/97	< 100	< 5	< 5	< 10	< 4	2	17,000	20	< 10	< 10	< 100	< 3	48,000	70
	02/18/97	< 100	< 5	< 5	43	< 4	< 2	15,400	< 10	< 10	< 10	< 100	< 3	27,100	< 10
	06/05/96	< 100	< 5	< 5	15.8	< 2	< 0.5	16,200	11.3	< 10	< 1	< 100	< 1	35,800	14.1
	03/19/96	< 100	< 5	< 5	38.7	< 2	< 0.5	14,100	5.9	< 10	1.9	< 100	< 1	24,300	< 10
	09/22/95	< 100	< 60	< 5	< 10	< 2	< 5	22,100	< 10	< 10	< 20	< 100	< 1	46,300	96
NKGW03	03/10/06	< 100	< 1	< 5	27	< 2	< 1	6,400	< 10	< 10	< 1	< 100	< 3	9,300	< 10
	03/18/05	< 100	< 1	< 5	30	< 2	< 1	9,200	< 10	< 10	< 1	< 100	< 3	14,000	< 10
	03/17/04	< 100	< 1	< 5	27	< 2	< 1	11,000	< 10	< 10	< 1	< 100	< 3	20,000	< 10
	03/12/02	< 100	< 1	< 1	230	< 1	< 1	9,700	1	< 1	< 1	< 100	< 3	14,000	< 10
	02/23/99	< 100	< 5	< 5	< 10	< 2	< 2	5,610	< 10	< 10	< 10	< 100	< 3	10,300	< 10
	01/20/98	970	< 5	< 5	22.6	< 4	< 2	6,480	< 10	< 10	< 10	1,640	< 3	7,510	38
	02/18/97	312	< 5	< 5	11.6	< 4	< 2	10,000	< 10	< 10	< 10	362	< 3	16,900	< 10

Table A-13-4
Results of Dissolved Metals Analyses
Nike Missile Facility
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese
	Analytical Method ¹	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
NKGW04 DUP0320061A	03/20/06	< 100	< 1	< 5	45	< 2	18	31,000	< 10	< 10	1.7	< 100	< 3	22,000	< 10
	03/20/06	< 100	< 1	< 5	41	< 2	16	29,000	< 10	< 10	2.6	< 100	< 3	21,000	< 10
	03/16/05	< 100	< 1	< 5	37	< 2	< 1	15,000	< 10	< 10	< 1	< 100	< 3	26,000	< 10
	03/17/04	< 100	< 1	< 5	45	< 2	< 1	22,000	< 10	< 10	2.2	< 100	< 3	30,000	< 10
	03/18/03	< 100 UJ	1	< 1	39	< 1	2.3	28,000 J	2.9 J	< 1	1.4	< 100	< 3	44,000 J	< 10 UJ
	03/12/02	< 100	2.5	< 1	550	< 1	1.2	22,000	3.7	< 1	1.1	< 100	< 3	32,000	< 10
	05/17/01	< 100	2.2 J	< 1 UJ	95 J	< 1 UJ	< 1 UJ	24,000 J	4.4 J	< 1 UJ	1.7 J	100 J	< 3 UJ	45,000	26 J
	02/22/99	NA	< 5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	01/20/98	< 100	< 5	< 5	66.1	< 4	< 2	32,300	< 10	< 10	< 10	< 100	< 3	47,200	93.2
	11/13/97	< 100	< 5	< 5	22.1	< 4	< 2	22,300	< 10	< 10	< 10	< 100	< 3	41,500	208
	08/13/97	< 100	< 5	< 5	29.1	< 4	< 2	23,200	< 10	< 10	< 10	< 100	< 3	41,800	346
	05/19/97	< 100	< 5	< 5	30	< 4	< 2	23,000	< 10	< 10	< 10	< 100	< 3	39,000	110
	02/17/97	< 100	< 5	< 5	41.7	< 4	< 2	24,400	< 10	< 10	< 10	< 100	< 3	37,000	33.4
	12/11/96	< 100	< 5	< 5	28.7	< 4	< 2	26,900	< 10	< 10	< 10	< 100	< 3	45,300	203
	11/30/95	< 100	5.1	< 5	19	< 2	< 0.5	25,000	4.2	< 10	1.3	< 100	< 1	36,500	130
NKGW05	03/20/06	< 100	< 1	< 5	91	< 2	1.6	27,000	< 10	< 10	< 1	< 100	< 3	52,000	140
	03/16/05	< 100	< 1	< 5	120	< 2	1.1	29,000	< 10	< 10	< 1	150	< 3	44,000	1,400
	03/17/04	< 100	< 1	< 5	78	< 2	< 1	29,000	< 10	< 10	1.1	< 100	< 3	45,000	35
	03/18/03	< 100 UJ	1.8	< 1	83	< 1	< 1	37,000 J	2.4 J	< 1	1.4	< 100	< 3	73,000 J	45 J
	03/12/02	< 100	1.9	< 1	620	< 1	< 1	29,000	3.4	< 1	< 1	< 100	< 3	49,000	24
	05/17/01	< 100	1.4 J	< 1 UJ	100 J	< 1 UJ	< 1 UJ	18,000 J	3.3 J	< 1 UJ	3.6 J	< 100 UJ	< 3 UJ	48,000	33 J
	02/22/99	NA	< 5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	01/21/98	NA	< 5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/19/97	< 100	< 5	< 5	50	< 4	< 2	19,000	< 10	< 10	< 10	< 100	< 3	38,000	10
	02/17/97	< 100	< 5	< 5	59.7	< 4	< 2	19,800	< 10	< 10	< 10	< 100	< 3	42,100	34.7
	12/11/96	< 100	< 5	< 5	48.7	< 4	< 2	18,200	< 10	< 10	< 10	< 100	< 3	36,800	57.3
	09/03/96	1,510 (J8)	< 5	< 5	62.5	< 2	< 0.5	20,000	23	< 10	2.5	3,750 (J8)	1.2	40,400	150
	06/05/96	< 100	< 5	< 5	53.3	< 2	< 0.5	18,600	4.8	< 10	< 1	< 100	< 1	39,100	35.6
	03/20/96	< 100	< 5	< 5	48.7	< 2	< 0.5	19,200	9.9	< 10	2.8	< 100	< 1	38,600	39.3
	11/30/95	< 100	< 5	< 5	46	< 2	< 0.5	18,100	6.8	< 10	1.8	< 100	< 1	37,900	32

Table A-13-4
Results of Dissolved Metals Analyses
Nike Missile Facility
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese
	Analytical Method ¹	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
	09/22/95	140	< 60	< 5	42	< 2	< 5	19,400	< 10	< 10	< 20	120	< 1	41,000	39

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective Groundwater samples collected from all site monitoring wells were field filtered and analyzed for dissolved metals.

µg/L - micrograms per liter

mg/L - milligrams per liter

NA - Not analyzed

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-13-4
Results of Dissolved Metals Analyses
Nike Missile Facility
Presidio of San Francisco, California

Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
SW7470/ SW7470A	SW6020	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	E160.1
(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
< 0.2	39	800	< 5	< 1	72,000	< 1	< 10	< 20	540
< 0.2	49	1,700	< 5	< 1	49,000	< 1	< 10	50	440
< 0.2	51	1,400	< 5	< 1	52,000	< 1	< 10	35	500
< 0.2	52	1,100	< 5	< 1 UJ	69,000	< 1	< 10	< 20	400
< 0.2	51	1,100	< 5	< 1 UJ	71,000	< 1	< 10	< 20	450
< 0.2 UJ	55	1,900	< 5	< 1	60,000	< 2	< 10	210 J+	420 HT-04,J
< 0.2	55	1,100	< 5	< 1 UJ	92,000 J	< 1	< 10	< 10	500
0.26	51	2,600	< 5	< 1 UJ	65,000	< 1	< 10	170	480
1.6	66 J	< 500 UJ	< 5 UJ	< 1 UJ	77,000	< 1 UJ	< 10 UJ	22 J	550
0.26	NA	NA	NA	NA	NA	NA	NA	NA	NA
< 0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
0.84	NA	NA	NA	NA	NA	NA	NA	NA	NA
3.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
< 0.2	70	< 5,000	13	< 2	86,000	< 2	< 10	< 20	NA
2.1	64.4	< 5,000	< 5	< 2	96,100	< 2	< 10	25.6	NA
< 0.2	96.5	< 5,000	< 5	< 2	72,300	< 2	< 10	< 20	NA
3.1	80.3	< 5,000	< 5	< 0.5	99,400	< 2	< 10	< 20	NA
1.9	71.2	< 5,000	< 5	< 0.5	95,600	< 2	< 10	< 20	NA
2.1	71.7	< 5,000	< 5	< 0.5	85,300	< 2	< 10	27.9	NA
< 0.2	77	< 5,000	< 5	< 0.5	70,900	< 2	< 10	< 20	NA
3.1	66	< 5,000	< 5	< 10	77,600	< 2	< 10	39	NA
< 0.2	< 20	< 500	< 5	< 1	41,000	< 1	< 10	< 20	330
< 0.2	< 20	< 500	< 5	< 1	38,000	< 1	< 10	< 20	250
< 0.2	< 20	< 500	< 5	< 1 UJ	42,000	< 1	< 10	< 20	220
< 0.2	5.1	< 500	< 5	< 1 UJ	49,000 J	< 1	< 10	< 10	260
< 0.2	5.6	< 500	< 5	< 1 UJ	42,000	< 1	< 10	160	230
< 0.2	6.5 J	590 J	< 5 UJ	< 1 UJ	44,000	< 1 UJ	< 10 UJ	120 J	320
< 0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table A-13-4
Results of Dissolved Metals Analyses
Nike Missile Facility
Presidio of San Francisco, California

Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
SW7470/ SW7470A	SW6020	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	E160.1
(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
< 0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
< 0.2	< 20	< 5,000	5	< 2	54,000	< 2	< 10	20	NA
0.25	< 20	< 5,000	< 5	< 2	46,900	< 2	< 10	23.2	NA
< 0.2	6	< 5,000	< 5	< 0.5	47,700	< 2	< 10	< 20	NA
< 0.2	8.6	< 5,000	< 5	< 0.5	41,900	< 2	< 10	< 20	NA
< 0.2	< 40	< 5,000	< 5	< 10	43,300	< 2	< 10	< 20	NA
< 0.2	< 20	1,000	< 5	< 1	12,000	< 1	< 10	< 20	280
< 0.2	< 20	620	< 5	< 1	19,000	< 1	< 10	< 20	220 J-
< 0.2	< 20	< 500	< 5	< 1 UJ	30,000	< 1	< 10	< 20	300
< 0.2	6.5	< 500	< 5	< 1 UJ	12,000	< 1	< 10	120	170
< 0.2	< 20	< 5,000	< 5	< 2	7,080	< 2	< 10	< 20	NA
< 0.2	< 20	< 5,000	< 5	< 2	13,100	< 2	< 10	< 20	NA
0.28	< 20	< 5,000	< 5	< 2	7,440	< 2	< 10	< 20	NA

Table A-13-4
Results of Dissolved Metals Analyses
Nike Missile Facility
Presidio of San Francisco, California

Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
SW7470/ SW7470A	SW6020	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	E160.1
(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
< 0.2	< 20	1,500	< 5	< 1	23,000	< 1	< 10	950	420
< 0.2	< 20	1,400	< 5	< 1	23,000	< 1	< 10	860	760
< 0.2	< 20	510	< 5	< 1	33,000	< 1	< 10	< 20	240
< 0.2	< 20	590	< 5	< 1 UJ	40,000	< 1	< 10	< 20	260
< 0.2	8.1	750	< 5	< 1 UJ	52,000 J	< 1	< 10	58	330
< 0.2	10	980	< 5	< 1 UJ	36,000	< 1	< 10	220	290
< 0.2	13 J	890 J	< 5 UJ	< 1 UJ	48,000	< 1 UJ	< 10 UJ	32 J	360
< 0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
< 0.2	27.3	< 5,000	< 5	< 2	51,900	< 2	< 10	< 20	NA
NA	21.8	< 5,000	< 5	< 2	47,700	< 2	< 10	< 20	NA
< 0.2	27.9	< 5,000	< 5	< 2	47,200	< 2	< 10	< 20	NA
< 0.2	20	< 5,000	5	< 2	44,000	< 2	< 10	< 20	NA
< 0.2	20	< 5,000	< 5	< 2	50,600	< 2	< 10	< 20	NA
< 0.2	< 20	< 5,000	< 5	< 2	51,700	< 2	< 10	< 20	NA
< 0.2	15	< 5,000	< 5	< 0.5	41,700	< 2	< 10	27	NA
< 0.2	29	1,800	< 5	< 1	50,000	< 1	< 10	< 20	1,030
< 0.2	33	3,300	< 5	< 1	47,000	< 1	< 10	< 20	320
< 0.2	20	510	< 5	< 1 UJ	47,000	< 1	< 10	< 20	370
< 0.2	22	< 500	< 5	< 1 UJ	59,000 J	< 1	< 10	< 10	430
< 0.2	15	830	< 5	< 1 UJ	52,000	< 1	< 10	220	400
< 0.2	17 J	< 500 UJ	< 5 UJ	< 1 UJ	47,000	< 1 UJ	< 10 UJ	22 J	400
< 0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
< 0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
< 0.2	< 20	< 5,000	< 5	< 2	40,000	< 2	< 10	< 20	NA
< 0.2	< 20	< 5,000	< 5	< 2	46,200	< 2	< 10	< 20	NA
< 0.2	< 20	< 5,000	< 5	< 2	40,200	< 2	< 10	< 20	NA
< 0.2	54.2	< 5,000	< 5	< 0.5	43,700	< 2	10.7	< 20	NA
< 0.2	17.5	< 5,000	< 5	< 0.5	42,100	< 2	< 10	< 20	NA
< 0.2	28.9	< 5,000	< 5	< 0.5	41,100	< 2	< 10	< 20	NA
< 0.2	16	< 5,000	< 5	< 0.5	38,800	< 2	< 10	< 20	NA

Table A-13-4
Results of Dissolved Metals Analyses
Nike Missile Facility
 Presidio of San Francisco, California

Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
SW7470/ SW7470A	SW6020	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	E160.1
(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
< 0.2	< 40	< 5,000	< 5	< 10	42,500	< 2	< 10	25	NA

tive quarterly reports.

Table A-13-4
Results of Dissolved Metals Analyses
Nike Missile Facility
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW7470/ SW7470A	SW6020	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
NKGW01	03/20/06	< 100	< 1	< 5	120	< 2	< 1	31,000	< 10	< 10	1.1	< 100	< 3	68,000	< 10	< 0.2	39	800	< 5	< 1	72,000	< 1	< 10	< 20	540
	03/16/05	< 100	< 1	9.3	89	< 2	2	26,000	< 10	< 10	2.6	< 100	< 3	60,000	13	< 0.2	49	1,700	< 5	< 1	49,000	< 1	< 10	50	440
DUP0031605A	03/16/05	< 100	< 1	7.6	95	< 2	1.8	27,000	< 10	< 10	2.2	< 100	< 3	63,000	11	< 0.2	51	1,400	< 5	< 1	52,000	< 1	< 10	35	500
DUP0317042A NKGW01CL	03/17/04	< 100	< 1	< 5	100	< 2	< 1	34,000	11	< 10	1	< 100	< 3	69,000	< 10	< 0.2	52	1,100	< 5	< 1 UJ	69,000	< 1	< 10	< 20	400
	03/17/04	< 100	< 1	< 5	110	< 2	< 1	35,000	11	< 10	1.1	< 100	< 3	69,000	< 10	< 0.2	51	1,100	< 5	< 1 UJ	71,000	< 1	< 10	< 20	450
	03/17/04	< 100	< 5	6.2	93	< 1	1	31,000	11	< 7	< 10	< 500	< 3	66,000	7.2	< 0.2 UJ	55	1,900	< 5	< 1	60,000	< 2	< 10	210 J+	420 HT-04,J
	03/18/03	< 100 UJ	< 1	< 1	110	< 1	< 1	40,000 J	10 J	< 1	< 1	< 100	< 3	94,000 J	13 J	< 0.2	55	1,100	< 5	< 1 UJ	92,000 J	< 1	< 10	< 10	500
	03/12/02	< 100	1.5	2.2	550	< 1	< 1	28,000	6	< 1	1.3	< 100	< 3	63,000	< 10	0.26	51	2,600	< 5	< 1 UJ	65,000	< 1	< 10	170	480
	05/17/01	< 100	2.5 J	< 1 UJ	130 J	< 1 UJ	< 1 UJ	24,000 J	5.6 J	< 1 UJ	1.2 J	< 100 UJ	< 3 UJ	69,000	18 J	1.6	66 J	< 500 UJ	< 5 UJ	< 1 UJ	77,000	< 1 UJ	< 10 UJ	22 J	550
	02/24/99	NA	< 5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.26	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/18/98	NA	< 5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
	01/20/98	NA	< 5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.84	NA	NA	NA	NA	NA	NA	NA	NA	NA
	08/13/97	NA	< 5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/19/97	< 100	< 10	< 5	130	< 4	< 2	35,000	< 10	< 10	< 10	700	< 3	75,000	90	< 0.2	70	< 5,000	13	< 2	86,000	< 2	< 10	< 20	NA
	02/17/97	< 100	< 5	< 5	116	< 4	< 2	32,800	< 10	< 10	< 10	< 100	< 3	71,400	14.7	2.1	64.4	< 5,000	< 5	< 2	96,100	< 2	< 10	25.6	NA
	12/11/96	< 100	< 5	< 5	97.4	< 4	< 2	30,600	< 10	18.6	< 10	113	< 3	66,300	279	< 0.2	96.5	< 5,000	< 5	< 2	72,300	< 2	< 10	< 20	NA
	09/03/96	< 100	< 5	< 5	126	< 2	< 0.5	34,900	2.5	< 10	1.1	< 100	< 1	79,100	32.1	3.1	80.3	< 5,000	< 5	< 0.5	99,400	< 2	< 10	< 20	NA
	06/05/96	< 100	< 5	< 5	120	< 2	< 0.5	34,600	3.4	< 10	< 1	< 100	< 1	75,900	28.2	1.9	71.2	< 5,000	< 5	< 0.5	95,600	< 2	< 10	< 20	NA
	03/20/96	< 100	< 5	< 5	102	< 2	< 0.5	31,700	4.1	< 10	1.7	< 100	1.7	67,000	< 10	2.1	71.7	< 5,000	< 5	< 0.5	85,300	< 2	< 10	27.9	NA
	11/30/95	< 100	< 5	< 5	100	< 2	< 0.5	29,900	3.8	< 10	1.2	< 100	< 1	68,300	< 10	< 0.2	77	< 5,000	< 5	< 0.5	70,900	< 2	< 10	< 20	NA
	09/21/95	< 100	< 60	< 5	110	< 2	< 5	32,000	< 10	< 10	< 20	100	< 1	70,900	10	3.1	66	< 5,000	< 5	< 10	77,600	< 2	< 10	39	NA
NKGW02	03/20/06	< 100	< 1	< 5	42	< 2	< 1	13,000	< 10	< 10	< 1	< 100	< 3	23,000	< 10	< 0.2	< 20	< 500	< 5	< 1	41,000	< 1	< 10	< 20	330
	03/16/05	< 100	< 1	< 5	37	< 2	< 1	12,000	< 10	< 10	< 1	< 100	< 3	21,000	< 10	< 0.2	< 20	< 500	< 5	< 1	38,000	< 1	< 10	< 20	250
	03/17/04	< 100	< 1	< 5	37	< 2	< 1	14,000	< 10	< 10	< 1	< 100	< 3	22,000	< 10	< 0.2	< 20	< 500	< 5	< 1 UJ	42,000	< 1	< 10	< 20	220
	03/18/03	< 100 UJ	1	< 1	35	< 1	< 1	12,000 J	4.7 J	< 1	< 1	< 100	< 3	30,000 J	< 10 UJ	< 0.2	5.1	< 500	< 5	< 1 UJ	49,000 J	< 1	< 10	< 10	260
	03/12/02	< 100	< 1	< 1	440	< 1	< 1	12,000	4	< 1	< 1	< 100	< 3	25,000	< 10	< 0.2	5.6	< 500	< 5	< 1 UJ	42,000	< 1	< 10	160	230
	05/16/01	< 100	1.2 J	< 1 UJ	230 J	< 1 UJ	< 1 UJ	9,700 J	17 J	< 1 UJ	< 1 UJ	< 100 UJ	< 3 UJ	42,000	< 10 UJ	< 0.2	6.5 J	590 J	< 5 UJ	< 1 UJ	44,000	< 1 UJ	< 10 UJ	120 J	320
	02/23/99	NA	< 5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
	01/21/98	NA	< 5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/20/97	< 100	< 5	< 5	< 10	< 4	2	17,000	20	< 10	< 10	< 100	< 3	48,000	70	< 0.2	< 20	< 5,000	5	< 2	54,000	< 2	< 10	20	NA
	02/18/97	< 100	< 5	< 5	43	< 4	< 2	15,400	< 10	< 10	< 10	< 100	< 3	27,100	< 10	0.25	< 20	< 5,000	< 5	< 2	46,900	< 2	< 10	23.2	NA
	06/05/96	< 100	< 5	< 5	15.8	< 2	< 0.5	16,200	11.3	< 10	< 1	< 100	< 1	35,800	14.1	< 0.2	6	< 5,000	< 5	< 0.5	47,700	< 2	< 10	< 20	NA
	03/19/96	< 100	< 5	< 5	38.7	< 2	< 0.5	14,100	5.9	< 10	1.9	< 100	< 1	24,300	< 10	< 0.2	8.6	< 5,000	< 5	< 0.5	41,900	< 2	< 10	< 20	NA
	09/22/95	< 100	< 60	< 5	< 10	< 2	< 5	22,100	< 10	< 10	< 20	< 100	< 1	46,300	96	< 0.2	< 40	< 5,000	< 5	< 10	43,300	< 2	< 10	< 20	NA
NKGW03	03/10/06	< 100	< 1	< 5	27	< 2	< 1	6,400	< 10	< 10	< 1	< 100	< 3	9,300	< 10	< 0.2	< 20	1,000	< 5	< 1	12,000	< 1	< 10	< 20	280
	03/18/05	< 100	< 1	< 5	30	< 2	< 1	9,200	< 10	< 10	< 1	< 100	< 3	14,000	< 10	< 0.2	< 20	620	< 5	< 1	19,000	< 1	< 10	< 20	220 J-
	03/17/04	< 100	< 1	< 5	27	< 2	< 1	11,000	< 10	< 10	< 1	< 100	< 3	20,000	< 10	< 0.2	< 20	< 500	< 5	< 1 UJ	30,000	< 1	< 10	< 20	300
	03/12/02	< 100	< 1	< 1	230	< 1	< 1	9,700	1	< 1	< 1	< 100	< 3	14,000	< 10	< 0.2	6.5	< 500	< 5	< 1 UJ	12,000	< 1	< 10	120	170
	02/23/99	< 100	< 5	< 5	< 10	< 2	< 2	5,610	< 10	< 10	< 10	< 100	< 3	10,300	< 10	< 0.2	< 20	< 5,000	< 5	< 2	7,080	< 2	< 10	< 20	NA
	01/20/98	970	< 5	< 5	22.6	< 4	< 2	6,480	< 10	< 10	< 10	1,640	< 3	7,510	38	< 0.2	< 20	< 5,000	< 5	< 2	13,100	< 2	< 10	< 20	NA
	02/18/97	312	< 5	< 5	11.6	< 4	< 2	10,000	< 10	< 10	< 10	362	< 3	16,900	< 10	0.28	< 20	< 5,000	< 5	< 2	7,440	< 2	< 10	< 20	NA

Table A-13-4
Results of Dissolved Metals Analyses
Nike Missile Facility
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW7470/ SW7470A	SW6020	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
NKGW04 DUP0320061A	03/20/06	< 100	< 1	< 5	45	< 2	18	31,000	< 10	< 10	1.7	< 100	< 3	22,000	< 10	< 0.2	< 20	1,500	< 5	< 1	23,000	< 1	< 10	950	420
	03/20/06	< 100	< 1	< 5	41	< 2	16	29,000	< 10	< 10	2.6	< 100	< 3	21,000	< 10	< 0.2	< 20	1,400	< 5	< 1	23,000	< 1	< 10	860	760
	03/16/05	< 100	< 1	< 5	37	< 2	< 1	15,000	< 10	< 10	< 1	< 100	< 3	26,000	< 10	< 0.2	< 20	510	< 5	< 1	33,000	< 1	< 10	< 20	240
	03/17/04	< 100	< 1	< 5	45	< 2	< 1	22,000	< 10	< 10	2.2	< 100	< 3	30,000	< 10	< 0.2	< 20	590	< 5	< 1 UJ	40,000	< 1	< 10	< 20	260
	03/18/03	< 100 UJ	1	< 1	39	< 1	2.3	28,000 J	2.9 J	< 1	1.4	< 100	< 3	44,000 J	< 10 UJ	< 0.2	8.1	750	< 5	< 1 UJ	52,000 J	< 1	< 10	58	330
	03/12/02	< 100	2.5	< 1	550	< 1	1.2	22,000	3.7	< 1	1.1	< 100	< 3	32,000	< 10	< 0.2	10	980	< 5	< 1 UJ	36,000	< 1	< 10	220	290
	05/17/01	< 100	2.2 J	< 1 UJ	95 J	< 1 UJ	< 1 UJ	24,000 J	4.4 J	< 1 UJ	1.7 J	100 J	< 3 UJ	45,000	26 J	< 0.2	13 J	890 J	< 5 UJ	< 1 UJ	48,000	< 1 UJ	< 10 UJ	32 J	360
	02/22/99	NA	< 5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
	01/20/98	< 100	< 5	< 5	66.1	< 4	< 2	32,300	< 10	< 10	< 10	< 100	< 3	47,200	93.2	< 0.2	27.3	< 5,000	< 5	< 2	51,900	< 2	< 10	< 20	NA
	11/13/97	< 100	< 5	< 5	22.1	< 4	< 2	22,300	< 10	< 10	< 10	< 100	< 3	41,500	208	NA	21.8	< 5,000	< 5	< 2	47,700	< 2	< 10	< 20	NA
	08/13/97	< 100	< 5	< 5	29.1	< 4	< 2	23,200	< 10	< 10	< 10	< 100	< 3	41,800	346	< 0.2	27.9	< 5,000	< 5	< 2	47,200	< 2	< 10	< 20	NA
	05/19/97	< 100	< 5	< 5	30	< 4	< 2	23,000	< 10	< 10	< 10	< 100	< 3	39,000	110	< 0.2	20	< 5,000	5	< 2	44,000	< 2	< 10	< 20	NA
	02/17/97	< 100	< 5	< 5	41.7	< 4	< 2	24,400	< 10	< 10	< 10	< 100	< 3	37,000	33.4	< 0.2	20	< 5,000	< 5	< 2	50,600	< 2	< 10	< 20	NA
	12/11/96	< 100	< 5	< 5	28.7	< 4	< 2	26,900	< 10	< 10	< 10	< 100	< 3	45,300	203	< 0.2	< 20	< 5,000	< 5	< 2	51,700	< 2	< 10	< 20	NA
	11/30/95	< 100	5.1	< 5	19	< 2	< 0.5	25,000	4.2	< 10	1.3	< 100	< 1	36,500	130	< 0.2	15	< 5,000	< 5	< 0.5	41,700	< 2	< 10	27	NA
NKGW05	03/20/06	< 100	< 1	< 5	91	< 2	1.6	27,000	< 10	< 10	< 1	< 100	< 3	52,000	140	< 0.2	29	1,800	< 5	< 1	50,000	< 1	< 10	< 20	1,030
	03/16/05	< 100	< 1	< 5	120	< 2	1.1	29,000	< 10	< 10	< 1	150	< 3	44,000	1,400	< 0.2	33	3,300	< 5	< 1	47,000	< 1	< 10	< 20	320
	03/17/04	< 100	< 1	< 5	78	< 2	< 1	29,000	< 10	< 10	1.1	< 100	< 3	45,000	35	< 0.2	20	510	< 5	< 1 UJ	47,000	< 1	< 10	< 20	370
	03/18/03	< 100 UJ	1.8	< 1	83	< 1	< 1	37,000 J	2.4 J	< 1	1.4	< 100	< 3	73,000 J	45 J	< 0.2	22	< 500	< 5	< 1 UJ	59,000 J	< 1	< 10	< 10	430
	03/12/02	< 100	1.9	< 1	620	< 1	< 1	29,000	3.4	< 1	< 1	< 100	< 3	49,000	24	< 0.2	15	830	< 5	< 1 UJ	52,000	< 1	< 10	220	400
	05/17/01	< 100	1.4 J	< 1 UJ	100 J	< 1 UJ	< 1 UJ	18,000 J	3.3 J	< 1 UJ	3.6 J	< 100 UJ	< 3 UJ	48,000	33 J	< 0.2	17 J	< 500 UJ	< 5 UJ	< 1 UJ	47,000	< 1 UJ	< 10 UJ	22 J	400
	02/22/99	NA	< 5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
	01/21/98	NA	< 5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 0.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/19/97	< 100	< 5	< 5	50	< 4	< 2	19,000	< 10	< 10	< 10	< 100	< 3	38,000	10	< 0.2	< 20	< 5,000	< 5	< 2	40,000	< 2	< 10	< 20	NA
	02/17/97	< 100	< 5	< 5	59.7	< 4	< 2	19,800	< 10	< 10	< 10	< 100	< 3	42,100	34.7	< 0.2	< 20	< 5,000	< 5	< 2	46,200	< 2	< 10	< 20	NA
	12/11/96	< 100	< 5	< 5	48.7	< 4	< 2	18,200	< 10	< 10	< 10	< 100	< 3	36,800	57.3	< 0.2	< 20	< 5,000	< 5	< 2	40,200	< 2	< 10	< 20	NA
	09/03/96	1,510 (J8)	< 5	< 5	62.5	< 2	< 0.5	20,000	23	< 10	2.5	3,750 (J8)	1.2	40,400	150	< 0.2	54.2	< 5,000	< 5	< 0.5	43,700	< 2	10.7	< 20	NA
	06/05/96	< 100	< 5	< 5	53.3	< 2	< 0.5	18,600	4.8	< 10	< 1	< 100	< 1	39,100	35.6	< 0.2	17.5	< 5,000	< 5	< 0.5	42,100	< 2	< 10	< 20	NA
	03/20/96	< 100	< 5	< 5	48.7	< 2	< 0.5	19,200	9.9	< 10	2.8	< 100	< 1	38,600	39.3	< 0.2	28.9	< 5,000	< 5	< 0.5	41,100	< 2	< 10	< 20	NA
	11/30/95	< 100	< 5	< 5	46	< 2	< 0.5	18,100	6.8	< 10	1.8	< 100	< 1	37,900	32	< 0.2	16	< 5,000	< 5	< 0.5	38,800	< 2	< 10	< 20	NA
	09/22/95	140	< 60	< 5	42	< 2	< 5	19,400	< 10	< 10	< 20	120	< 1	41,000	39	< 0.2	< 40	< 5,000	< 5	< 10	42,500	< 2	< 10	25	NA

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

Groundwater samples collected from all site monitoring wells were field filtered and analyzed for dissolved metals.

µg/L - micrograms per liter

mg/L - milligrams per liter

NA - Not analyzed

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-13-5
Groundwater Elevation Summary
Nike Missile Facility
 Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
NKGW01	08/14/06	29.11	278.38	249.27	MW
	05/22/06	26.21	278.38	252.17	MW
	03/06/06	26.80	278.38	251.58	MW
	11/28/05	36.35	278.38	242.03	MW
	09/01/05	29.83 ²	278.38	248.55	MW
	05/23/05	Not located ³	278.38	--	MW
	03/14/05	26.35	278.38	252.03	MW
	12/13/04	39.00	278.38	239.38	MW
	08/09/04	38.73	278.38	239.65	MW
	05/24/04	34.05	278.38	244.33	MW
	03/08/04	29.20	278.38	249.18	MW
	12/01/03	39.05	278.38	239.33	MW
	08/11/03	34.18	278.38	244.20	MW
	06/02/03	Not located ³	278.38	--	MW
	03/10/03	30.66	278.38	247.72	MW
	12/02/02	38.88	278.38	239.50	MW
	08/26/02	36.20	278.38	242.18	MW
	05/28/02	31.37	278.38	247.01	MW
	03/04/02	30.15	278.38	248.23	MW
	11/26/01	40.46	278.38	237.92	MW
	08/27/01	Not located ³	278.38	--	MW
	05/17/01	37.07 ⁴	278.38	241.31	MW
NKGW02	08/14/06	17.34	312.00	294.66	MW
	05/22/06	12.60	312.00	299.40	MW
	03/06/06	10.02	312.00	301.98	MW
	11/28/05	19.99	312.00	292.01	MW
	08/29/05	18.37	312.00	293.63	MW
	05/23/05	13.95	312.00	298.05	MW
	03/14/05	11.15	312.00	300.85	MW
	12/13/04	15.10	312.00	296.90	MW
	08/09/04	19.75	312.00	292.25	MW
	05/24/04	16.45	312.00	295.55	MW
	03/08/04	12.25	312.00	299.75	MW
	12/01/03	20.07	312.00	291.93	MW
	08/11/03	17.73	312.00	294.27	MW
	06/02/03	16.20	312.00	295.80	MW
	03/10/03	14.58	312.00	297.42	MW
	12/02/02	Dry	312.00	291.5 ⁵	MW
	08/26/02	19.07	312.00	292.93	MW
	05/28/02	16.34	312.00	295.66	MW
	03/04/02	13.11	312.00	298.89	MW
	11/26/01	20.06	312.00	291.94	MW
	08/27/01	Dry	312.00	291.5 ⁵	MW
	05/08/01	16.51	312.00	295.49	MW
NKGW03	08/14/06	14.54	334.60	320.06	MW
	05/22/06	13.90	334.60	320.70	MW
	03/06/06	13.85	334.60	320.75	MW
	11/28/05	14.54	334.60	320.06	MW

Table A-13-5
Groundwater Elevation Summary
Nike Missile Facility
 Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
NKGW03	08/29/05	14.58	334.60	320.02	MW
	05/23/05	14.39	334.60	320.21	MW
	03/14/05	12.80	334.60	321.80	MW
	12/13/04	14.65	334.60	319.95	MW
	08/09/04	14.68	334.60	319.92	MW
	05/24/04	14.66	334.60	319.94	MW
	03/08/04	13.21	334.60	321.39	MW
	12/01/03	14.65	334.60	319.95	MW
	08/11/03	14.60	334.60	320.00	MW
	06/02/03	14.55	334.60	320.05	MW
	03/10/03	14.53	334.60	320.07	MW
	12/02/02	14.50	334.60	320.10	MW
	08/26/02	14.47	334.60	320.13	MW
	05/28/02	14.47	334.60	320.13	MW
	03/04/02	13.58	334.60	321.02	MW
	11/26/01	Dry	334.60	320.7 ⁵	MW
	08/27/01	Dry	334.60	320.7 ⁵	MW
	05/08/01	14.53	334.60	320.07	MW
NKGW04	08/14/06	8.82	299.60	290.78	MW
	05/22/06	NM	299.60	NM	MW
	03/06/06	5.97	299.60	293.63	MW
	11/28/05	11.33	299.60	288.27	MW
	08/29/05	9.24	299.60	290.36	MW
	05/23/05	6.00	299.60	293.60	MW
	03/14/05	6.22	299.60	293.38	MW
	12/13/04	10.65	299.60	288.95	MW
	08/09/04	10.85	299.60	288.75	MW
	05/24/04	7.45	299.60	292.15	MW
	03/08/04	6.55	299.60	293.05	MW
	12/01/03	Not located ³	299.60	--	MW
	08/11/03	Not located ³	299.60	--	MW
	06/02/03	Not located ³	299.60	--	MW
	03/10/03	7.52	299.60	292.08	MW
	12/02/02	10.59	299.60	289.01	MW
	08/26/02	9.90	299.60	289.70	MW
	05/28/02	7.90	299.60	291.70	MW
	03/04/02	8.81	299.60	290.79	MW
	11/26/01	12.34	299.60	287.26	MW
	08/27/01	11.88	299.60	287.72	MW
	05/08/01	11.10	299.60	288.50	MW
NKGW05	08/14/06	21.78	284.20	262.42	MW
	05/22/06	18.71	284.20	265.49	MW
	03/06/06	20.23	284.20	263.97	MW
	11/28/05	27.05	284.20	257.15	MW
	09/01/05	23.40 ²	284.20	260.80	MW
	05/23/05	Not located ³	284.20	--	MW
	03/14/05	19.82	284.20	264.38	MW
	12/13/04	27.15	284.20	257.05	MW

Table A-13-5
Groundwater Elevation Summary
Nike Missile Facility
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
NKGW05	08/09/04	27.55	284.20	256.65	MW
	05/24/04	26.07	284.20	258.13	MW
	03/08/04	22.80	284.20	261.40	MW
	12/01/03	27.50	284.20	256.70	MW
	08/11/03	Not located ³	284.20	--	MW
	06/02/03	21.14	284.20	263.06	MW
	03/10/03	23.13	284.20	261.07	MW
	12/02/02	26.33	284.20	257.87	MW
	08/26/02	24.96	284.20	259.24	MW
	05/28/02	23.06	284.20	261.14	MW
	03/04/02	22.16	284.20	262.04	MW
	11/26/01	27.39	284.20	256.81	MW
	08/27/01	27.91	284.20	256.29	MW
	05/08/01	25.64	284.20	258.56	MW

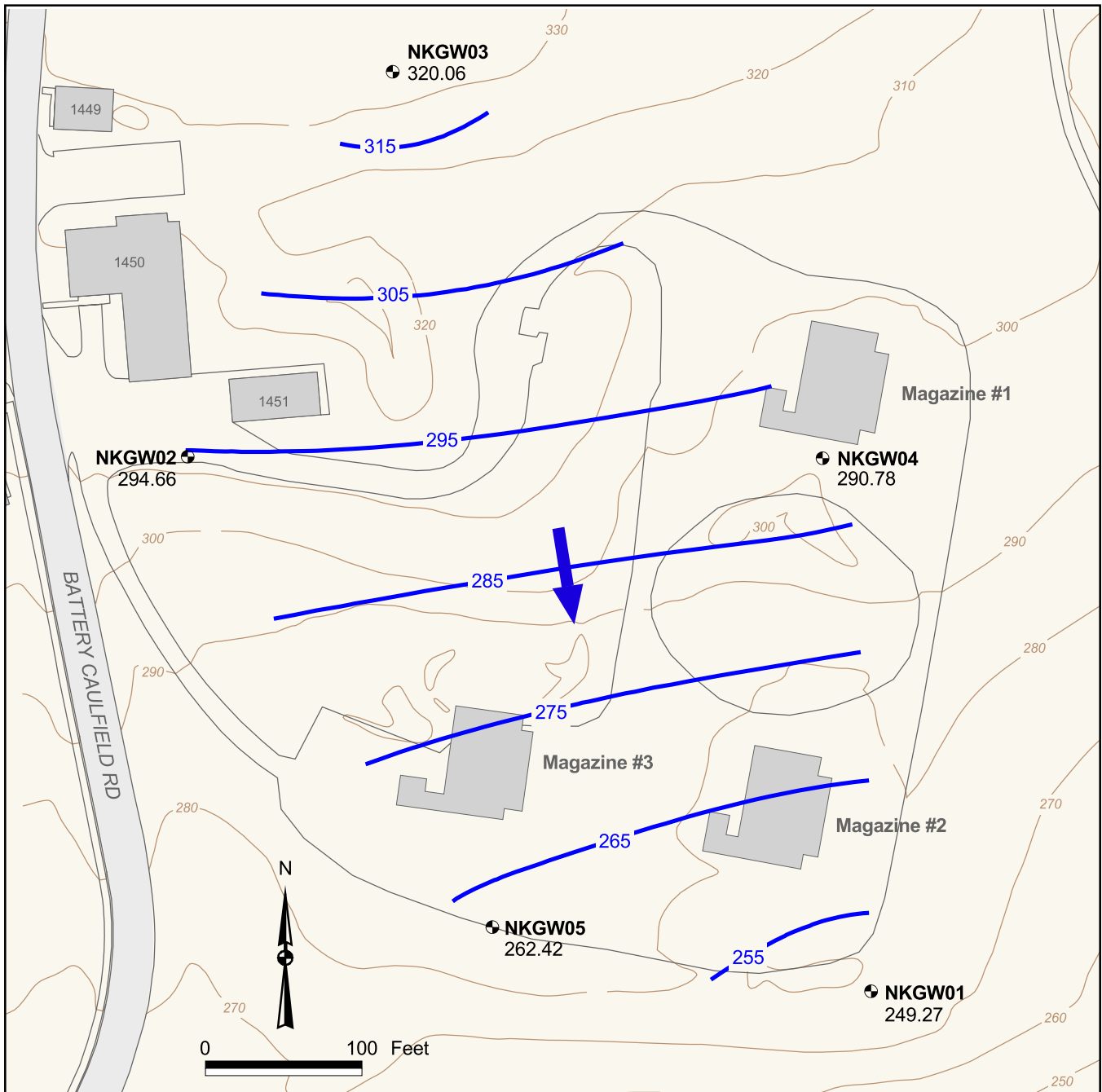
Notes

- 1 - All depth to water measurements are an average of three measurements recorded in the field.
- 2 - NKGW01 and NKGW05 were not located during the water level survey. Both wells were measured during sampling on 1 September 2005.
- 3 - Value represents the bottom of casing elevation in feet PLLW.
- 4 - Monitoring well was not located during the water level survey.
- 5 - NKGW01 was not located during the water level survey on 8 May 2001. The groundwater elevation was measured on 17 May 2001.

MW - Monitoring well

NM - Not measured

feet PLLW - feet above Presidio Lower Low Water vertical datum



LEGEND



Approximate Direction
of Groundwater Flow



Groundwater Contour
(Contour Interval : 10 ft)



Topographic Contour
(Contour Interval : 10 ft)



NKGW01
249.27

Groundwater Monitoring Well
August 2006 Groundwater Elevation



Former Subsurface Nike Magazine



Building and Number

Notes:

Groundwater elevation data
collected on 14 August 2006.

Horizontal Datum: NAD 27, CA State
Plane Coordinates, Zone 3, feet

Vertical Datums: (groundwater) Presidio
Lower Low Water (ft. PLLW)
(topography) North American Vertical
Datum, NAVD88

NIKE MISSILE FACILITY SITE PLAN AND 14 AUGUST 2006 GROUNDWATER ELEVATION MAP

Treadwell&Rollo



Presidio Trust

34 Graham Street
P.O. Box 29052
San Francisco, CA
94129-0052
415/561-5300
fax 561-5315
April 2007

FIGURE A-13-1

Third Quarter 2006

MONITORING WELL SAMPLING LOG (Normal, Low Flow, and Low Yield)

Site / Area Nike Facility

Well No. NK6W01

Project Number 2893

Well Type ☒ Monitor ☐ Extraction ☐ Other

Recorded By WC

Sampled by WC Date 8/17/06

WELL PURGING

PURGE VOLUME

Well casing diameter

☐ 2-inch ☒ 4-inch ☐ Other

Well Total Depth (TD, ft. below TOC): 48.33

Depth to Water (WL, ft. below TOC): 29.27

Depth to free phase (FP, ft. below TOC):

Number of borehole volumes to be purged

☐ 3 ☒ Not Applicable ☐ Other

PURGE VOLUME CALCULATION

Water Column Length

Water Volume/ft

No. Vols

Total Purge Time

Recharge Rate

Purge Rate

PURGE METHOD

☐ Low Flow

☐ Normal

☒ Modified (max 5 gpm)

☒ Bailer \ Type

☐ Pump \ Type

☐ Other

PUMP INTAKE

Near top Depth (ft)

Near Bottom Depth (ft)

☐ Other

gals

CALCULATED PURGE VOLUME

gals

ACTUAL PURGE VOLUME

GROUNDWATER PARAMETER MEASUREMENTS

Meter Type Ultrameter

Time	Liters or Gallons	pH	Temp °F	DO (mg/L)	Sp. COND (µS/cm)	ORP (mV)	Turbidity (NTU)	Comments
1241	0.5	6.73	16.5	1027			13	clear / 29.27
1244	1.5	6.73	16.2	1030			11	↓ / 30.54
1247	2.0	6.68	16.1	1030			10	↓ / 32.08
1250	4.5	6.70	16.1	1030			8	↓ / 33.92
pre purge DO = 0.62 mg/L								
post purge DO = 0.31 mg/L								

Comments _____ Purge water storage/disposal ☐ Drummed onsite ☒ Other Baker Tank

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled 8/17/06 1254

Purging

Equipment Pump - Type

Bailer - Type

Other

Sample Filtered: Yes ☒ No ☐

Filtered Sample Analysis:

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments
NK6W01	(2) 16 NP Amber	CET	2155	

QUALITY CONTROL SAMPLES

Duplicate Samples

Blank Samples

Original Sample No.	Duplicate Sample No.

Type	Sample No.
Trip	
Rinsate	
Transfer	
Other:	

MONITORING WELL SAMPLING LOG (Normal, Low Flow, and Low Yield)

Site / Area Nike facility

Well No. NK6W02

Project Number 2893

Well Type ☒ Monitor ☐ Extraction ☐ Other

Recorded By WC

Sampled by WC

Date 8/17/06

WELL PURGING

PURGE VOLUME

Well casing diameter

☐ 2-inch ☒ 4-inch ☐ Other

Well Total Depth (TD, ft. below TOC): 20.14

Depth to Water (WL, ft. below TOC): 17.59

Depth to free phase (FP, ft. below TOC):

Number of borehole volumes to be purged

☐ 3 ☒ Not Applicable ☐ Other

PURGE VOLUME CALCULATION

Water Column Length

Water Volume/ft

No. Vols

Total Purge Time

9 min

Recharge Rate

Purge Rate

5 gpm

PURGE METHOD

☐ Low Flow

☐ Normal

☒ Modified (max 5 gpm)

☒ Bailer \ Type

☐ Pump \ Type

☐ Other

PUMP INTAKE

Near top Depth (ft)

Near Bottom Depth (ft)

☐ Other

disp.

gals

CALCULATED PURGE VOLUME

45 gals

ACTUAL PURGE VOLUME

GROUNDWATER PARAMETER MEASUREMENTS

Meter Type Ultrameter

Time	Liters or Gallons	pH	Temp °F	DO (mg/L)	Sp. COND (µS/cm)	ORP (mV)	Turbidity (NTU)	Comments
1120	8	7.79	15.8		560.4		10	Clear / 17.59
1123	15	7.23	16.0		544.2		12	/ 17.76
1126	30	7.19	15.9		544.0		16	/ 18.03
1129	45	7.04	15.9		535.3		24	/ 18.20
pre purge DO = 2.99 mg/L								
post purge DO = 3.51 mg/L								

Comments

Purge water storage/disposal

☐ Drilled onsite

☒ Other Baker Tank

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled

8/17/06 1133

Purging

Equipment

Pump - Type

Bailer - Type

Other

Sample Filtered:

Yes ☒ No

Filtered Sample Analysis:

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments
NK6W02	002 1L Namber	CAT	2155	

QUALITY CONTROL SAMPLES

Duplicate Samples

Blank Samples

Original Sample No.

Duplicate Sample No.

Type

Sample No.

Trip

Rinsate

Transfer

Other:

Ireadwell & Rollo

Environmental and Geotechnical Consultant

MONITORING WELL SAMPLING LOG (Normal, Low Flow, and Low Yield)

Site / Area Nike facility

Well No. NKGW05

Project Number 2893

Well Type ☒ Monitor ☐ Extraction ☐ Other

Recorded By WC

Sampled by WC Date 8/17/06

WELL PURGING

PURGE VOLUME

Well casing diameter

☐ 2-inch ☒ 4-inch ☐ Other

Well Total Depth (TD, ft. below TOC): 33.16

Depth to Water (WL, ft. below TOC): 21.92

Depth to free phase (FP, ft. below TOC):

Number of borehole volumes to be purged

☐ 3 ☐ Not Applicable ☐ Other

PURGE VOLUME CALCULATION

Water Column Length

Water Volume/ft

Total Purge Time

Recharge Rate

Purge Rate

PURGE METHOD

☐ Low Flow

☐ Normal

☒ Modified (max 5 gpm)

☒ Bailer \ Type

☐ Pump \ Type

☐ Other

PUMP INTAKE

Near top Depth (ft)

Near Bottom Depth (ft)

☐ Other

gals

CALCULATED PURGE VOLUME

gals

ACTUAL PURGE VOLUME

GROUNDWATER PARAMETER MEASUREMENTS

Meter Type Ultrameter

Time	Liters or Gallons	pH	Temp °F	DO (mg/L)	Sp. COND (µS/cm)	ORP (mV)	Turbidity (NTU)	Comments
1159	0	7.04	16.5		818		9	Clear / 21.92
1202	1.5	6.72	16.5		823		8	↓ / 22.67
1205	3.0	6.67	16.4		824		7	↓ / 23.49
1208	4.5	6.62	16.5		829		7	↓ / 24.81
Pre purge DO = 0.55 mg/L								
Post purge DO = 0.45 mg/L								

Comments _____ Purge water storage/disposal ☐ Drummed onsite ☒ Other Baker Tank

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled 8/17/06 1212

Purging

Equipment Pump Type

Bailer Type disp

Other

Sample Filtered: Yes/No

Filtered Sample Analysis:

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments
NKGW05	(K) 2 IL NP amber	CET	2155	

QUALITY CONTROL SAMPLES

Duplicate Samples

Blank Samples

Original Sample No.

Duplicate Sample No.

Type

Sample No.

Trip

Rinsate

Transfer

Other:

Treadwell & Rollo

Environmental and Geotechnical Consultant

MONITORING WELL SAMPLING LOG (Normal, Low Flow, and Low Yield)

Site / Area Nike

Well No. NK6W03

Project Number 2893

Well Type ☒ Monitor ☐ Extraction ☐ Other

Recorded By P. Cornish

Sampled by P. Cornish

Date 8/15/06

WELL PURGING

PURGE VOLUME

Well casing diameter

☐ 2-inch ☒ 4-inch ☐ Other

Well Total Depth (TD, ft. below TOC): 15.15

Depth to Water (WL, ft. below TOC): 14.55

Depth to free phase (FP, ft. below TOC):

Number of borehole volumes to be purged

☒ 3 ☐ Not Applicable ☐ Other

Liquid in a 1 Foot Section of a Boring (gallons)

Borehole Size	Casing Size	Water Volume/Ft
8	2	0.9
10	4	1.68
12	4	2.22

PURGE METHOD

☒ Low Flow ☐ Bailer \ Type
☐ Normal ☐ Pump \ Type
☐ Modified (max 5 gpm) ☐ Other

PUMP INTAKE

Near top Depth (ft) _____
 Near Bottom Depth (ft) _____
 Other _____

PURGE VOLUME CALCULATION

Water Column Length _____ X Water Volume/Ft _____

No. Vols _____

gals
CALCULATED PURGE VOLUME
gals
ACTUAL PURGE VOLUME

Total Purge Time _____

Recharge Rate _____

Purge Rate _____

GROUNDWATER PARAMETER MEASUREMENTS

Meter Type _____

Time	Liters or Gallons	pH	Temp °C °F	DO (mg/L)	Sp. COND (mS/cm)	ORP (mV)	Turbidity (NTU)	Comments
/								
/								
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/								

Insufficient Water
 Began Low Flow Purge w/ Per' pump
 & well de-aerated after ~500 ml
 No Sample

Comments _____ Purge water storage/disposal ☐ Drummed onsite ☐ Other

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled _____

Purging

Equipment

Pump - Type

Bailer - Type

Other

Sample Filtered: Yes / No

Filtered Sample Analysis:

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments

QUALITY CONTROL SAMPLES

Duplicate Samples

Blank Samples

Original Sample No.

Duplicate Sample No.

Type

Sample No.

Trip

Rinsate

Transfer

Other:

**BAKER BEACH DISTURBED AREA 3
APPENDIX SECTION A-14
SEMI-ANNUAL GROUNDWATER MONITORING REPORT
THIRD AND FOURTH QUARTERS 2006
Presidio of San Francisco, California**

1.0 INTRODUCTION AND BACKGROUND

Baker Beach Disturbed Area 3 (BBDA 3) is located along the western edge of the Presidio within the ravine south of Battery Crosby. The site is bordered on the west by the Pacific Ocean and on the east by Lincoln Boulevard. Battery Crosby is north of the site, and the access road for the battery off Lincoln Boulevard bisects the site (Figure 1). The site elevation ranges from approximately 50 to 250 feet above PLLW.

Based on a review of aerial photographs, BBDA 3 received fill material intermittently between 1948 and 1973. Fill material was initially placed in BBDA 3 for erosion control along Lincoln Boulevard and along the access road to Battery Crosby (Figure A-14-1). This area was used for additional dumping of debris until approximately 1973 (Treadwell & Rollo, 2004a).

On 6 February 2004, two temporary piezometers were installed and developed using surge and purge methods in general accordance with the FSP (Treadwell & Rollo, 2001a). At the time of the installation, the piezometers were identified as BB3PZ1A and BB3PZ1B. Subsequently, the piezometers were designated as BB3PZ100A and BB3PZ100B to adhere to QAPP naming conventions.

On 22 June 2004, both BBDA 3 temporary piezometers were abandoned following the Second Quarter 2004 sampling and prior to commencement of remedial construction activities described below in Section 3.0. BBDA 3 excavation activities were conducted between July and December 2004. Following the excavation activities, two monitoring wells, one piezometer and three fixed surface water sampling points were installed and quarterly groundwater monitoring began. An additional fixed surface water monitoring point, BB3SW104, and piezometer, BB3PZ102, were installed in the First Quarter 2006 as requested by DTSC.

2.0 SITE DESCRIPTION AND GEOLOGY

BBDA 3 is located near the southern boundary of the Coastal Groundwater Basin (Figure 1). Based upon hydrogeologic information from adjacent areas, groundwater may be present in limited areas of the landslide deposits, dune sands, and the weathered serpentinite bedrock formations. Groundwater has been encountered within the BBDA 3 footprint in the eastern portion of the site at depths of 18 to 29 feet bgs (Treadwell & Rollo, 2003b). Groundwater flow

follows the general topographic trend to the west toward the Pacific Ocean (Figures A-14-1 and A-14-2).

Battery Crosby is north of the site, and, prior to remedial activities, the access road for the battery off Lincoln Boulevard bisected the site (Figure A-14-1) (Treadwell & Rollo, 2005a). The fill material in BBDA 3 was composed primarily of soil and debris fill containing concrete, asphalt, and metal debris. Buttress fill material, consisting mainly of sand (fill sand) was initially placed in BBDA 3 along Lincoln Boulevard and along the access road to Battery Crosby. This area was used for additional dumping of debris (waste fill) until approximately 1973 (Dames & Moore, 1997).

The area in the vicinity of BBDA 3 is a steeply sloping bluff with a narrow beach (Baker Beach) at its base. Surface drainage in the area is to the west, toward the Pacific Ocean. Vegetation in the area consists of grasses, shrubs, and trees.

BBDA 3 lies at the boundary of two geologic regimes. The northern portion is predominantly Franciscan Formation overlain by landslide deposits, which generally consist of unstratified mixtures of bedrock fragments, sand, silt, and clay. The southern portion is covered almost entirely by Quaternary dune sand (Schlocker, 1974).

At the request of DTSC, the Trust performed a slope stability analysis at BBDA 3 to determine whether excavation of the waste fill material at the site might undermine the structural fill buttress supporting Lincoln Boulevard east of Battery Crosby Road. The findings of this investigation are documented in the *Slope Stability Evaluation Report, Baker Beach Disturbed Area 3* (Treadwell & Rollo, 2004d). As recommended in that report, the stability of the slope supporting Lincoln Boulevard was monitored during excavation of waste materials at BBDA 3.

A pair of temporary piezometers were installed and monitored as part of the slope stability evaluation. Groundwater was found to be present in the dune sands and weathered serpentinite bedrock formations (Treadwell & Rollo, 2004d). Surface water drainage and groundwater flow appears to follow the general topographic trend, to the west and toward the Pacific Ocean. As documented in the RAP, it was anticipated that removal of the fill material could alter the location(s) of the freshwater seep(s) located at the western boundary of BBDA 3.

3.0 REMEDIAL ACTION PLAN

The *Remedial Action Plan (RAP) for Fill Site 6A and Baker Beach Disturbed Areas 3 and 4* selected excavation, recycling, and offsite disposal of impacted fill material and underlying soil, along with groundwater monitoring, as the remedial alternative for BBDA 3. The goal of the remediation at BBDA 3 was to remove all contaminated material, leaving in place soil that meets the established cleanup levels (Treadwell & Rollo, 2003b).

In accordance with the California Code of Regulations, Title 27, Subchapter 3, Section 20390, a site that has undergone clean closure (where all wastes and residues, contaminated subsoil, and other contaminated materials are removed or decontaminated at closure) must be shown to comply with the water quality protection standards or the cleanup levels presented in Section 3 of the RAP for three years. Tables A-14-1 through A-14-3 include groundwater cleanup levels applicable to BBDA 3 (Treadwell & Rollo, 2005a). These cleanup levels are based on the most stringent values for protecting drinking and freshwater seeps. RAP-specified groundwater cleanup levels for some analytes are slightly lower than their QAPP analytical reporting limits.

Prior to remediation excavation activities, existing temporary piezometers BB3PZ100A and BB3PZ100B were abandoned. Following completion of excavation activities, two new groundwater monitoring wells (BB3GW100 and BB3GW101) and four seep monitoring locations: one new piezometer (BB3PZ101) and three new fixed water monitoring points (BB3SW100 through BB3SW102) were installed to monitor groundwater quality in the area of BBDA 3. The new well, piezometer and fixed water monitoring point sampling locations are located near or within the former impacted area of BBDA 3 as shown on Figure A-14-1.

The monitoring well, piezometer and fixed water monitoring point sampling locations were installed in December 2004 after the completion of all excavation activities, but prior to the start of revegetation activities. Treadwell & Rollo supervised the drilling of the soil borings performed by Gregg Drilling and Testing, Inc. (Gregg Drilling) of Martinez, California. A track-driven, limited access drill rig equipped with 8-inch-diameter hollow-stem augers was used for drilling at the site. Soil borings were advanced below the water table to total depths of 37 feet bgs and 32 feet bgs for installation of wells BB3GW100 and BB3GW101, respectively. On 13 December 2004, piezometer BB3PZ101 was installed in a hand-auger boring to a total depth of 18 feet. Three fixed water monitoring point installations were also installed at former BBDA 3 on 8 December 2004. Treadwell & Rollo performed the hand-augering and installation of the fixed water monitoring points. The boring and well completion logs are included in the *Draft Construction Completion Report Baker Beach Disturbed Areas 3 and 4, Appendix I* (Treadwell & Rollo, 2005a).

At the request of the DTSC, a fixed water monitoring point (BB3PZ102) was installed and added to the monitoring program in March 2006, approximately 30 feet southeast of BB3SW100. BB3PZ102 was also installed at former BBDA 3 on 8 December 2004. The fixed water monitoring point was installed in a hand-auger boring to a total depth of 6.5 feet. Treadwell & Rollo performed the hand-augering and installation of the fixed water monitoring point on 11 March 2006. An additional seep location (BB3SW104) was identified and added to the program in February 2006.

4.0 GROUNDWATER MONITORING

Baker Beach Disturbed Area 3 has two monitoring wells (BB3GW100 and BB3GW101), two piezometers (BB3PZ101 and BB3PZ102), three fixed monitoring points (BB3SW100 through BB3SW102), and one surface water sampling location (BB3SW104) (Figure A-14-1).

Groundwater elevation measurements were attempted at all five locations during the Third and Fourth Quarters 2006. However, not all sampling locations contained enough water to measure.

Piezometer BB3PZ101, fixed water monitoring point BB3SW102, and surface water location BB3SW104 were either dry or were not flowing during both the Third and Fourth Quarters 2006. The groundwater elevation at piezometer BB3PZ102 was only measured during the Third Quarter 2006 and not measured in the Fourth Quarter 2006 because the piezometer was dry.

Groundwater samples were scheduled to be collected from all BBDA 3 monitoring wells, piezometers, and fixed water monitoring points during the Third and Fourth Quarters 2006. However, due to an insufficient amount of water, samples were only collected from monitoring well BB3GW100 during the Third and Fourth Quarters 2006. The proposed sampling schedules for the Third and Fourth Quarters 2006 are presented in Tables 1A and 1B, respectively.

4.1 Groundwater-Level Measurements and Interpretation

Groundwater elevation measurements during the Third and Fourth Quarters 2006 were collected on 14 August and 4 December 2006 and are summarized on Table A-14-4. A groundwater elevation map showing groundwater contours and flow direction for BBDA 3 during the Third Quarter 2006 is included as Figure A-14-1. The groundwater surface was not contoured during the Fourth Quarter 2006 because a sufficient amount of groundwater data was not available (A-14-2). Data associated with the fixed monitoring points are not used in contouring. Water level meters were calibrated on 14 August and 4 December 2006 and the calibration logs can be found in Appendix B. Groundwater elevation field forms can be found in Appendix C.

During the Third Quarter 2006, groundwater elevations at BBDA 3 ranged from 62.49 to 163.90 feet above PLLW in fixed water monitoring point BB3SW100 and monitoring well BB3GW100, respectively. To gain a broader understanding of groundwater gradients and flow directions in the BBDA 3 area, the groundwater elevations were evaluated with measurements from Fill Site 5. Groundwater flow direction was observed to be in a west-southwest direction toward the Pacific Ocean following the general topographic trend. The groundwater gradient was estimated to be approximately 0.22 feet per foot. The Third Quarter 2006 groundwater contours and flow direction for BBDA 3 is included as Figure A-14-1. Groundwater gradients and flow directions are consistent with previous findings at the site.

During the Fourth Quarter 2006 groundwater elevations at BBDA 3 ranged from 63.24 to 163.20 feet above PLLW in fixed water monitoring point BB3SW100 and monitoring well BB3GW100, respectively.

Since groundwater elevation measurements were not collected from Fill Site 5 during the Fourth Quarter 2006 and both BBDA piezometers were dry, the groundwater gradient and flow direction were not calculated.

4.2 Monitoring Well Purging and Sampling

Groundwater samples were scheduled to be collected from all BBDA 3 monitoring wells, piezometers, and fixed water monitoring points during the Third and Fourth Quarters 2006. However, due to an insufficient amount of water, samples were only collected from monitoring well BB3GW100 during the Third and Fourth Quarters 2006. During the Third and Fourth Quarters 2006, groundwater sampling at BB3GW100 was performed on 15 August and 6 December 2006, respectively. Monitoring well BB3GW100 samples were collected in accordance with methods shown in Tables 1A and 1B, and in accordance with procedures described in the FSP (Treadwell & Rollo, 2001a).

Purge equipment, volumes, and general chemistry parameters, for BB3GW100 are described in the purge records located at the conclusion of this section. Purge water was stored for future disposal in a 2,800-gallon polyethylene AST located at the Central Magazine.

4.3 Groundwater Analytical Program

All groundwater samples collected were submitted to the project laboratory for the analyses shown in Tables 1A and 1B of the main text. The appropriate sampling containers, preservatives, and maximum holding times for each analytical method are shown in Table 5. Sample containers used for each well are described in the purge records located at the conclusion of this section.

QA/QC samples were collected as part of this program. Section 6.2 of the main text discusses the QA/QC sampling and analysis performed for the Third and Fourth Quarters 2006.

5.0 GROUNDWATER ANALYTICAL RESULTS

Groundwater samples collected from monitoring well boring BB3GW100, during the Third and Fourth Quarters 2006, were analyzed for general chemistry parameters, TDS, and 22 dissolved metals. In addition to these analyses, TPHg, TPHd, and TPHfo were also analyzed within the sample collected from BB3GW100 during the Third Quarter 2006. All analyses were conducted in accordance with the groundwater sampling schedule (Tables 1A and 1B).

The TPHfo standard currently being used is a TPH as motor oil standard, as defined by the Presidio QAPP, with a carbon range of C₂₄ to C₃₆. Section 5.4.3.1 in the main report discusses the data compatibility issues associated with TPH analyses.

5.1 Dissolved Oxygen

Dissolved oxygen results are presented in Table A-14-1. During the Third and Fourth Quarters 2006, dissolved oxygen was measured in BB3GW100 at concentrations of 0.65 and 0.2 mg/L, respectively. Dissolved oxygen concentrations were within the historical range for monitoring well BB3GW100 during the Third and Fourth Quarters 2006.

5.2 General Chemistry Results

General chemistry results are presented in Table A-14-1. General chemistry results for the Third and Fourth Quarters 2006 within BBDA 3 monitoring well BB3GW100 were generally within historical ranges.

Nitrate was detected at a new low concentration of 4.9 mg/L within BB3GW100 during the Third Quarter 2006. Sulfate was detected at a new high concentration of 66 mg/L within BB3GW100 during the Third Quarter 2006. These new low and high concentrations were only slightly outside of the historical lows and highs and can be attributed to natural fluctuation. The remaining general chemistry results were within historical ranges during the Third and Fourth Quarters 2006.

5.3 TPH Results

The analytical results for TPHg, TPHd, and TPHfo, along with the RAP-specified cleanup levels, are presented in Table A-14-2. TPH was not detected above laboratory limits during the Third Quarters 2006 at BB3GW100.

5.4 Dissolved and Total Metals Results

Dissolved and total metals results for Third and Fourth Quarters 2006, along with RAP-specified cleanup levels, are presented in Table A-14-3.

Dissolved metal concentrations within BBDA 3 monitoring well BB3GW100 during the Third and Fourth Quarters 2006 are generally within historical ranges.

Nickel was detected at a new high concentration of 25 µg/L within both the primary and duplicate sample from BB3GW100 during the Third Quarter 2006. The new concentration is only slightly higher than the previous high concentration within this well of 22 µg/L and can be attributed to natural fluctuations. In addition, the new high concentration does not exceed the RAP-specified cleanup level of 100 µg/L for nickel.

During the Third Quarter 2006, manganese was detected in monitoring well BB3GW100 at a concentration of 24 µg/L within the primary sample and not detected above the laboratory's reporting limit of 10 µg/L in the primary duplicate sample. The RPD between these two samples

exceeds the QAPP-specified 50% criteria. However, the effect on the quality of the data was not known and therefore the data was not qualified for field duplicate failure by DataVal, as described in the Third Quarter 2006 DataVal report (Appendix D).

Future total and dissolved metals results will be collected at BBDA 3 in accordance with the RAP and trends will be identified as they become apparent.

6.0 Conclusions and Recommendations

The Third and Fourth Quarters 2006 were the eighth and ninth monitoring events, respectively, conducted at BBDA 3 since the groundwater monitoring network was installed. Future detections and concentration trends will continue to be monitored and evaluated in accordance with the RAP.

Table A-14-1
Results of Dissolved Oxygen Measurements and General Chemistry Analyses
Baker Beach Disturbed Area 3
Presidio of San Francisco, California

Location ID	Sample Date	Alkalinity, Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0	Field	E300.0	E300.0	E300.0	E300.0
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Cleanup Levels⁴		--	--	250,000	--	--	--	--	--
BB3GW100	12/06/06	230	230	250	0.65	< 0.1	5.5	< 0.05	61
	08/15/06	280	280	250	0.2	< 0.1	4.9	< 0.05	66
DUP0815061A	08/15/06	230	230	250	--	< 0.1	5.2	< 0.05	61
DUP0523063A	05/23/06	200	200	200	1.17	< 0.1	7.9	< 0.05	49
	05/23/06	200	200	200	--	< 0.1	7.8	< 0.05	48
DUP1130053A	03/16/06	250	250	220	0.56	< 0.1	8.1	< 0.05	49
	11/30/05	310 J+	310	260	1.6	< 0.1	5.4	< 0.05	58
BB3GW100CL	11/30/05	310 J+	310	260	--	< 0.1	5.2	< 0.05	60
	11/30/05	287	287	292	--	< 1 U	5.26 J	< 0.1 U UJ	54.8
DUP0322053A	08/31/05	250	250	240	0.9	< 0.1	6	< 0.05	52
	05/24/05	220	220	210	0.2	< 0.1	7.4	< 0.05	50
	03/22/05	260	260	190	0.9	< 0.1	12	< 0.05	47
	03/22/05	220	220	190	--	< 0.1	12	< 0.05	48
	12/14/04	330	330	260	2.2	< 0.1	7.3	< 0.05	56
BB3GW101	12/01/05	NA	NA	NA	NM	NA	NA	NA	NA
	03/22/05	440	440	350	6.9	0.31	17	< 0.05	93
BB3PZ101 ³	03/16/06	150	150	91	8.11	< 0.1	14	< 0.05	43
	03/22/05	190	190	140	1.3	< 0.1	25	< 0.05	71
	12/16/04	490	490	120	5.8	< 0.1	17	< 0.05	89
BB3PZ102	03/15/06	180	180	82	3.71	0.12	4.3	< 0.05	28
BB3SW100	03/15/06	NA	NA	NA	2	NA	NA	NA	NA
	12/01/05	110	110	160	NM	< 0.1	8.6	< 0.05	37
	03/22/05	60	60	75	2.3	0.15	1.7	< 0.05	30
BB3SW101	03/15/06	NA	NA	NA	4.56	NA	NA	NA	NA
	12/01/05	88	88	82	NM	0.1	7.5	< 0.05	30
	05/24/05	44	44	67	2.9	< 0.1	8.9	< 0.05	31
	04/14/05	80	80	75	5.12	< 0.1	8.7	< 0.05	33
	03/22/05	44	44	83	4.9	< 0.1	9.1	< 0.05	36
BB3SW102	12/17/04	NA	NA	NA	8	NA	NA	NA	NA
	05/23/06	270	270	150	6.3	< 0.1	4.4	< 0.05	40
	03/15/06	250	250	180	4.6	< 0.1	3.6	< 0.05	42
	05/24/05	260	260	150	5.9	< 0.1	4.7	< 0.05	38
	04/14/05	180	180	140	5.84	< 0.1	5.3	< 0.05	36
	03/22/05	170	170	100	8.6	< 0.1	5.8	< 0.05	26
BB3SW104	12/17/04	370	370	130	6.7	< 0.1	25	< 0.05	77
	05/23/06	180	180	95	9.84	0.1	2.8	< 0.05	29
	03/08/06	160	160	71	8.32	< 0.1	4.5	< 0.05	25
	03/08/06	140	140	72	--	< 0.1	4.5	< 0.05	25
BB3SW104CL	03/08/06	131	131	75.7	--	< 1 U	5.02	< 0.02 U	24.2

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001.

2 - Piezometer was abandoned prior to the remedial action following Second Quarter 2004 in preparation for the remedial action.

3 - BB3PZ101 was formerly named BB3SW103.

4 - Groundwater cleanup levels were taken from the *Remedial Action Plan for Fill Site 6A and Baker Beach Disturbed Areas 3 and 4, Presidio of San Francisco, California* (Treadwell & Rollo, 2003c).

mg/L - milligrams per liter

NA - not analyzed

NM - not measured

Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-14-2
Results of TPH Analyses
Baker Beach Disturbed Area 3
Presidio of San Francisco, California

Location ID	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		443	880	1,200
BB3GW100	08/15/06	< 50	< 50	< 300
DUP0815061A	08/15/06	< 50	< 50	< 300
	05/23/06	< 50	< 50	< 300
DUP0523063A	05/23/06	< 50	< 50	< 300
	03/16/06	< 50	78 HY	< 300
	11/30/05	< 50	< 50	< 300
DUP1130053A	11/30/05	< 50	< 50	< 300
BB3GW100CL	11/30/05	< 50 U	< 50 U	< 300 U
	08/31/05	< 50	< 50	< 300
	05/24/05	< 50	< 50	< 300
	03/22/05	< 50	< 50	< 300
DUP0322053A	03/22/05	< 50	< 50	< 300
	12/14/04	< 50	< 50	< 300
BB3GW101	05/24/05	< 50	< 50	< 300
	03/22/05	< 50	< 50	< 300
BB3PZ101 ³	03/16/06	78 YZ	81 HY	< 300
	03/22/05	< 50	< 50	< 300
	12/16/04	< 50	< 50	< 300
BB3PZ102	03/15/06	< 50	< 50	< 300
BB3SW100	03/15/06	< 50	< 50	< 300
	12/01/05	< 50	< 56	< 330
BB3SW101	03/15/06	< 50	< 50	< 300
	12/01/05	< 50	< 50	< 300
	03/22/05	< 50	< 50	< 300
	12/17/04	< 50	NA	NA
BB3SW102	03/15/06	< 50	< 50	< 300
	05/24/05	< 50	< 50	< 300
	03/22/05	< 50	< 50	< 300
	12/17/04	< 50	< 50	< 300
BB3SW104	05/23/06	< 50	< 50	< 300
	03/08/06	< 50	< 50	< 300
DUP0308063B	03/08/06	< 50	< 50	< 300
BB3SW104CL	03/08/06	< 50 U	< 50 U	< 300 U

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001.

2 - Groundwater cleanup levels were taken from the *Remedial Action Plan for Fill Site 6A and Baker Beach Disturbed Areas 3 and 4, Presidio of San Francisco, California* (Treadwell & Rollo, 2003c).

3 - BB3PZ101 was formerly named BB3SW103.

µg/L - micrograms per liter

TPH - total petroleum hydrocarbons

NA - not analyzed

Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-14-3
Results of Total and Dissolved Metals Analyses
Baker Beach Disturbed Area 3
Presidio of San Francisco, California

Location ID	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6020	SW6010	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Target Effective Cleanup Levels ² (Dissolved)		--	6	10	1,000	4	1.1	--	50	--	11.8	--	3.2	--	--	--	100	--	5	4.1	--	2	--	106	--
Target Effective Cleanup Levels ² (Total)		--	14	--	--	--	1.1	--	--	--	--	--	--	--	--	--	--	--	5	--	--	--	--	--	--
BB3GW100	12/06/06	< 100	< 1	< 5	92	< 2	< 1	28,000	< 10	< 10	< 1	< 100	< 3	94,000	< 10	NA	21	800	< 5	< 1	120,000 J	< 1	< 10	< 20	710 J-
	08/15/06	< 100	< 1	< 5	96	< 2	< 1	30,000	< 10	< 10	< 1	< 100	< 3	90,000	24	NA	25	750	< 5	< 1	120,000	< 1	< 10	< 20	800
DUP0815061A	08/15/06	< 100	< 1	< 5	96	< 2	< 1	29,000	< 10	< 10	< 1	< 100	< 3	90,000	< 10	NA	25	710	< 5	< 1	120,000	< 1	< 10	< 20	860
DUP0523063A	05/23/06	< 100	< 1	< 5	81	< 2	< 1	22,000	< 10	< 10	1.1	< 100	< 3	74,000	< 10	NA	< 20	600	< 5	< 1	97,000	< 1	< 10	< 20	640
	05/23/06	< 100	< 1	< 5	77	< 2	< 1	21,000	< 10	< 10	1.6	< 100	< 3	72,000	< 10	NA	< 20	640	< 5	< 1	95,000	< 1	< 10	< 20	660
DUP1130053A	03/16/06	< 100 UJ	< 1	< 5	89	< 2	< 1	24,000	< 10	< 10	< 1	< 100	< 3	81,000	< 10	NA	< 20	700	< 5	< 1	100,000 J	< 1	< 10	< 20	890 J
	11/30/05	< 100	< 1	< 5	93	< 2	< 1	29,000	11 J	< 10	1	160	< 3	97,000	27	NA	< 20	980	< 5	< 1	120,000	< 1	< 10	< 20	810
BB3GW100CL	11/30/05	< 100	< 1	< 5	91	< 2	< 1	31,000	< 10 UJ	< 10	< 1	100	< 3	100,000	22	NA	< 20	970	< 5	< 1	130,000	< 1	< 10	< 20	860
	11/30/05	< 100 U	< 2 U	< 2 U	100	< 1 U	< 1 U	33,000	13	< 1 U	2	< 100 U	< 1 U	100,000	18	NA	19	< 5,000 UN	3.7	< 1 U	120,000	< 1 U	< 10 U	< 20 U	831
DUP0322053A	08/31/05	< 100	< 1	< 5	< 10	< 2	< 1	16,000	29	< 10	< 1	160	< 3	70,000	< 10	NA	< 20	2,500 J	< 5	< 1	120,000	< 1	< 10	< 20	910
	05/24/05	< 100 UJ	< 1	< 5	82	< 2	< 1	26,000	< 10	< 10	1.6	< 100	< 3	80,000	< 10	NA	20	670	< 5	< 1	110,000	< 1	< 10	< 20	810
DUP0322053A	03/22/05	< 100	< 1	< 5	73	< 2	< 1	22,000	< 10	< 10	1.1	100	< 3	78,000	< 10	NA	< 20	670	< 5	< 1	110,000	< 1	< 10	< 20	330
	03/22/05	< 100	< 1	< 5	70	< 2	< 1	20,000	< 10	< 10	1.1	100	< 3	73,000	< 10	NA	< 20	630	< 5	< 1	100,000	< 1	< 10	< 20	770
BB3GW101	12/14/04	< 100	< 1	< 5	68	< 2	< 1	32,000 J	14	< 10	< 1	< 100	< 3	98,000	< 10	NA	22	1,400	< 5	< 1	130,000	< 1	< 10	< 20	2,280
	03/22/05	< 100	< 1	5.1	18	< 2	< 1	63,000	46	< 10	4.9	310	< 3	120,000	< 10	NA	< 20	6,500	< 5	< 1	160,000	< 1	< 10	22	1,180
BB3PZ101 ³	03/16/06	< 100 UJ	< 1	< 5	43	< 2	< 1	26,000	< 10	< 10	1.8	< 100	< 3	41,000	< 10	NA	< 20	2,400	< 5	< 1	65,000 J	< 1	< 10	< 20	600 J
	03/22/05	< 100	< 1	< 5	68	< 2	< 1	45,000	< 10	< 10	2.7	240	< 3	59,000	< 10	NA	< 20	3,900	< 5	< 1	83,000	< 1	< 10	< 20	560
(Total)	12/16/04	< 100	< 1	< 5	74	< 2	< 1	31,000	< 10	< 10	3.3	260	< 3	87,000	49	NA	< 20	1,500	< 5	< 1	92,000	< 1	< 10	< 20	870
	12/16/04	8,400	< 1	7.5	190	< 2	< 1	32,000	< 100	10	17	17,000	11	98,000	440	NA	59	2,400	< 5	< 1	100,000	< 1	38	41	NA
BB3PZ102 (Total)	03/15/06	< 2,000	< 1	< 5	19	< 2	< 1	20,000	< 10	< 10	2.6	310	< 3	30,000	54	NA	< 20	1,800	< 5	< 1	52,000	< 1	< 10	< 20	540 J
	03/15/06	65,000	1.8	39	790	< 2	3.5	35,000	440	190	96	120,000	86	56,000	22,000	NA	1,200	5,100	< 5	< 1	52,000	< 1	300	480	NA
BB3SW100 (Total)	12/01/05	170	< 1	< 5	11	< 2	< 1	7,200	< 10	< 10	4.5	860	< 3	9,100	340	NA	31	2,800	< 5	< 1	100,000	< 1	< 10	< 20	430
	12/01/05	7,600	< 1	10	92	< 2	< 1	14,000	46	22	23	19,000	40	13,000	1,200	NA	99	3,500	< 5	< 1	110,000	< 1	58	290	NA
BB3SW101 (Total)	03/22/05	380	< 1	< 5	< 10	< 2	< 1	4,700	< 10	< 10	5.2	890	< 3	4,000	210	NA	54	2,100	< 5	< 1	70,000	< 1	< 10	< 20	1,500
	05/23/06	< 100	< 1	< 5	13	< 2	< 1	6,500	< 10	< 10	3.2	< 100	< 3	9,700	78	NA	< 20	1,000	< 5	< 1	33,000	< 1	< 10	< 20	NA
(Total)	05/23/06	5,600	< 1	< 5	92	< 2	< 1	9,300	25	12	11	8,400	10	14,000	380	NA	51	1,400	< 5	< 1	34,000	< 1	26	61	NA
	12/01/05	< 100	< 1	< 5	17	< 2	< 1	13,000	< 10	< 10	1.4	< 1,000	< 3	16,000	790	NA	< 20	1,700	< 5	< 1	38,000	< 1	< 10	< 20	200
(Total)	12/01/05	< 1,000	< 1	< 5	29	< 2	< 1	13,000	< 10	< 10	7.5	2,000	8.2	18,000	960	NA	< 20	1,800	< 5	< 1	49,000	< 1	17	< 20	NA
	05/24/05	< 100 UJ	< 1	< 5	23	< 2	< 1	11,000	< 10	< 10	2.9	170	< 3	15,000	20	NA	< 20	1,400	< 5	< 1	45,000	< 1	< 10	< 20	330
(Total)	05/24/05	13,000	< 1	5.3	130	< 2	< 1	16,000	62	26	18	16,000	24	21,000	940	NA	88	2,500	< 5	< 1	46,000	< 1	43	94	NA
	04/14/05	< 100	< 1	< 5	17	< 2	< 1	13,000	< 10	< 10	3.8	< 100	< 3	18,000	40	NA	< 20	1,400	< 5	< 1	49,000	< 1	< 10	< 20	NA
(Total)	04/14/05	6,000	< 1	< 5	59	< 2	< 1	17,000	29	< 10	8.8	8,200	12	20,000	290	NA	39	2,300	< 5	< 1	48,000	< 1	18	49	NA
	03/22/05	< 100	< 1	< 5	19	< 2	< 1	15,000	< 10	< 10	2.7	110	< 3	22,000	63	NA	< 20	1,700	< 5	< 1	52,000	< 1	< 10	< 20	400
BB3SW102 (Total)	05/23/06	< 100	< 1	< 5	56	< 2	< 1	15,000	64	< 10	1	< 100	< 3	83,000	< 10	NA	< 20	890	< 5	< 1	76,000	< 1	< 10	< 20	470
	05/23/06	2,200	< 1	< 5	120	< 2	< 1	15,000	64	< 10	8.9	3,600	6.9	79,000	380	NA	31	1,200	< 5	< 1	73,000	< 1	16	36	NA
(Total)	03/15/06	< 100	< 1	< 5	55	< 2	< 1	16,000	60	< 10	< 1	< 100	< 3	91,000	< 10	NA	< 20	760	< 5	< 1	84,000	< 1	< 10	< 20	780 J
	03/15/06	22,000	< 1	11	210	< 2	< 1	17,000	170	24	30	30,000	31	98,000	990	NA	120	2,600	< 5	< 1	83,000	< 1	79	85	NA
(Total)	05/24/05	< 100 UJ	< 1	< 5	43	< 2	< 1	18,000	52	< 10	2.1	< 100	< 3	81,000	< 10	NA	< 20	970	< 5	< 1	76,000	< 1	< 10	< 20	660
	05/24/05	4,600	< 1	< 5	220	< 2	< 1	22,000	56	37	29	5,900	26	89,000	1,300	NA	130	1,300	< 5	< 1	74,000	< 1	45	65	NA
(Total)	04/14/05	< 100	< 1	< 5	35	< 2	< 1	22,000	46	< 10	1.2	< 100	< 3	62,000	< 10	NA	< 20	1,200	< 5	< 1	62,000	< 1	< 10	< 20	NA
	04/14/05	10,000	< 1	5.5	280	< 2	< 1	32,000	93	46	40	15,000	31	76,000	2,000	NA	150	2,400	< 5	< 1	64,000	< 1	58	93	NA
(Total)	03/22/05	< 100	< 1	< 5	25	< 2	< 1	20,000	30	< 10	1.3	160	< 3	45,000	< 10	NA	< 20	1,200	< 5	< 1	47,000	< 1	< 10	< 20	420
	12/17/04	< 100	< 1	< 5	37	< 2	< 1	24,000	36	< 10	2.6	< 100	< 3	83,000	18	NA	< 20	1,100	< 5	< 1	59,000	< 1	< 10	35	< 20
(Total)	12/17/04	9,600	< 1	6.3	140	< 2	< 1	23,000	100	24	30	16,000	23	95,000	780	NA	150	1,700	< 5	< 1	61,000	< 1	49	63	NA

Table A-14-3
Results of Total and Dissolved Metals Analyses
Baker Beach Disturbed Area 3
Presidio of San Francisco, California

Location ID	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6020	SW6010	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Target Effective Cleanup Levels ² (Dissolved)		--	6	10	1,000	4	1.1	--	50	--	11.8	--	3.2	--	--	--	100	--	5	4.1	--	2	--	106	--
BB3SW104 (Total) (Total) DUP0308063B (Total) BB3SW104CL (Total)	05/23/06	< 100	< 1	< 5	31	< 2	< 1	24,000	< 10	< 10	2.4	< 100	< 3	41,000	16	NA	< 20	970	< 5	< 1	55,000	< 1	< 10	< 20	370
	05/23/06	2,700	< 1	< 5	160	< 2	< 1	28,000	19	11	8.9	3,100	11	41,000	360	NA	37	1,200	< 5	< 1	51,000	< 1	22	50	NA
	03/08/06	< 100	< 1	< 5	18	< 2	< 1	18,000	< 10	< 10	2.5	< 100	< 3	32,000	< 10	NA	< 20	1,200	< 5	< 1	44,000	< 1	< 10	24	400
	03/08/06	3,200	< 1	< 5	100	< 2	< 1	23,000	26	11	13	5,400	14	40,000	320	NA	43	1,600	< 5	< 1	44,000	< 1	21	58	NA
	03/08/06	< 100	< 1	< 5	19	< 2	< 1	18,000	< 10	< 10	2.7	< 100	< 3	33,000	10	NA	< 20	1,100	< 5	< 1	45,000	< 1	< 10	< 20	380
	03/08/06	4,000	< 1	< 5	110	< 2	< 1	24,000	29	12	12	6,400	16	41,000	360	NA	45	1,500	< 5	< 1	44,000	< 1	24	62	NA
	03/08/06	< 100 U	< 2 U	< 2 U	21	< 1 U	< 1 U	21,000	12	< 1 U	3.0	< 100 U	< 1 U	36,000	11	NA	10	< 5,000 U	< 2 U	< 1 U	49,000	< 1 U	< 10 U	< 20 U	348
	03/08/06	5,300	< 2 U	2.5	130	< 1 U	< 1 U	28,000	42	9	8.4	7,300 J+	8.4	42,000	370	NA	38	< 5,000 U	< 2 U	< 1 U	54,000	< 1 U	29	54	NA

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001.

2 - Groundwater cleanup levels were taken from the *Remedial Action Plan for Fill Site 6A and Baker Beach Disturbed Areas 3 and 4, Presidio of San Francisco, California* (Treadwell & Rollo, 2003c).

3 - BB3PZ101 was formerly named BB3SW103.

Bold numbers indicate concentrations of metals which exceed cleanup criteria.

All metals results represent dissolved metals, unless indicated as "total" in the left-hand column for total metal results. The target effective cleanup levels are presented for dissolved and total metals concentrations, as applicable.

mg/L - milligrams per liter

µg/L - micrograms per liter

NA - not analyzed

Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-14-4
Groundwater Elevation Summary
Baker Beach Disturbed Area 3
Presidio of San Francisco, California

Location ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
BB3GW100	12/04/06	30.64	193.84	163.20	MW
	08/14/06	29.94	193.84	163.90	MW
	05/22/06	25.40	193.84	168.44	MW
	03/06/06	24.85	193.84	168.99	MW
	11/28/05	32.47	193.84	161.37	MW
	08/29/05	30.82	193.84	163.02	MW
	05/23/05	27.35	193.84	166.49	MW
	03/14/05	23.40	193.84	170.44	MW
	12/13/04	32.80	193.84	161.04	MW
BB3GW101	12/04/06	27.39	158.28	130.89	MW
	08/14/06	27.39	158.28	130.89	MW
	05/22/06	26.05	158.28	132.23	MW
	03/06/06	26.68	158.28	131.60	MW
	11/28/05	27.25	158.28	131.03	MW
	08/29/05	27.25	158.28	131.03	MW
	05/23/05	26.60	158.28	131.68	MW
	03/14/05	26.40	158.28	131.88	MW
	12/13/04	Dry	158.28	130.63 ²	MW
BB3PZ101 ³	12/04/06	Dry	156.97	136.97 ²	PZ
	08/14/06	Dry	156.97	136.97 ²	PZ
	05/22/06	Dry	156.97	136.97 ²	PZ
	03/06/06	17.32	156.97	139.65	PZ
	11/28/05	Dry	156.97	136.97 ²	PZ
	08/29/05	Dry	156.97	136.97 ²	PZ
	05/23/05	Dry	156.97	136.97 ²	PZ
	03/14/05	16.23	156.97	140.74	PZ
	12/13/04	16.80	156.97	140.17	PZ
BB3PZ102	12/04/06	Dry	73.18	65.18 ²	PZ
	08/14/06	6.97	73.18	66.21	PZ
	05/22/06	Dry	73.18	65.18 ²	PZ
	03/06/06	6.15	73.18	67.03	PZ
BB3SW100	12/04/06	4.10	67.34	63.24	FMP
	08/14/06	4.85	67.34	62.49	FMP
	05/22/06	3.96	67.34	63.38	FMP
	03/06/06	3.04	67.34	64.30	FMP
	11/28/05	4.15	67.34	63.19	FMP
	08/29/05	4.19	67.34	63.15	FMP
	05/23/05	4.10	67.34	63.24	FMP
	03/14/05	3.62	67.34	63.72	FMP
	12/13/04	Dry	67.34	--	FMP
BB3SW101	12/04/06	2.90	78.98	76.08	FMP
	08/14/06	3.00	78.98	75.98	FMP
	05/22/06	2.36	78.98	76.62	FMP
	03/06/06	1.94	78.98	77.04	FMP
	11/28/05	2.86	78.98	76.12	FMP
	08/29/05	3.00	78.98	75.98	FMP
	05/23/05	1.75	78.98	77.23	FMP
	03/14/05	1.85	78.98	77.13	FMP
	12/13/04	3.22	78.98	75.76	FMP

Table A-14-4
Groundwater Elevation Summary
Baker Beach Disturbed Area 3
Presidio of San Francisco, California

Location ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
BB3SW102	12/04/06	Dry	115.39	110.39 ⁶	FMP
	08/14/06	Dry	115.39	110.39 ⁶	FMP
	05/22/06	1.93	115.39	113.46	FMP
	03/06/06	2.00	115.39	113.39	FMP
	11/28/05	Dry	115.39	110.39 ⁶	FMP
	08/29/05	Dry	115.39	110.39 ⁶	FMP
	05/23/05	2.33	115.39	113.06	FMP
	03/14/05	1.68	115.39	113.71	FMP
	12/13/04	2.73	115.39	112.66	FMP
BB3SW104	12/04/06	Not flowing	66.07	NM	Surface
	08/14/06	Not flowing	66.07	NM	Surface
	05/22/06	Flowing	66.07	66.07	Surface
	03/06/06	Flowing	66.07	66.07	Surface

Notes

1 - All depth to water measurements are an average of three measurements recorded in the field.

2 - Value indicates bottom of casing elevation in PLLW.

3 - BB3PZ101 was formerly named BB3SW103. Additionally, the depth to water measurement (14.45 feet) during the Fourth Quarter 2004 was measured from the ground surface. Subsequently, the ground and the top of casing elevations were surveyed and the depth to water measurement was converted to a top of casing measurement (16.80 feet).

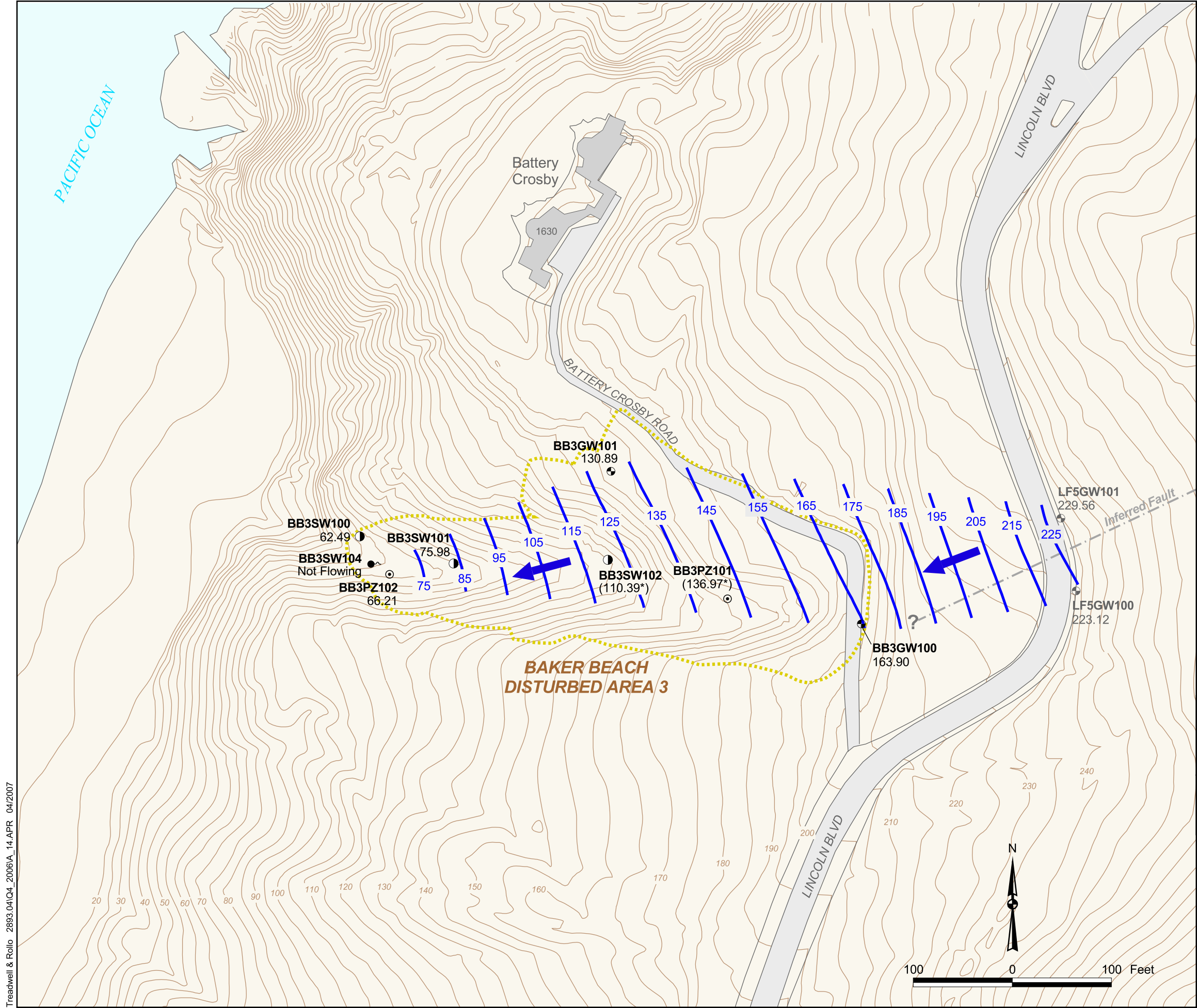
FMP - Fixed Water Monitoring Point

NM - Not measured

MW - Monitoring Well

PZ - Piezometer

feet PLLW - feet above Presidio lower low water vertical datum



LEGEND

- **BB3GW100** 163.90 Groundwater Monitoring Well
August 2006 Groundwater Elevation
- **BB3PZ101** (136.97*) Piezometer
August 2006 Groundwater Elevation
(136.97*) Dry Well. Value Indicates Bottom of Casing Elevation in Feet PLLW
- **BB3SW100** 62.49 Fixed Water Monitoring Point
August 2006 Groundwater Elevation
- **BB3SW104** Surface Water Seep
- **LF5GW100** 223.12 Adjacent Study Area Well
August 2006 Groundwater Elevation
- ➔ Approximate Direction of Groundwater Flow
- Groundwater Elevation Contour
(Contour Interval : 10 ft)
- Limits of Excavated Fill
- - - - - Inferred Fault
- Topographic Contour
(Contour Interval : 5 ft)
- 1630 Building and Number

Notes:
Groundwater elevation data collected 14 August 2006.

The Fixed Water Monitoring Points were not used in groundwater contouring.

Location of inferred fault from Revised Feasibility Study Main Installation Sites (EKI, 2003).

Post-excavation topography within limits of excavation fill surveyed by R.W. Davis & Associates on 2 December 2004.

Base map provided by the Presidio Trust in June 2003.

Horizontal Datum: NAD 27, CA State Plane Coordinates, Zone 3, feet

Vertical Datums: (groundwater) Presidio Lower Low Water (ft. PLLW)
(topography) North American Vertical Datum, NAVD88

**BAKER BEACH DISTURBED AREA 3 SITE PLAN
AND 14 AUGUST 2006
GROUNDWATER ELEVATION MAP**

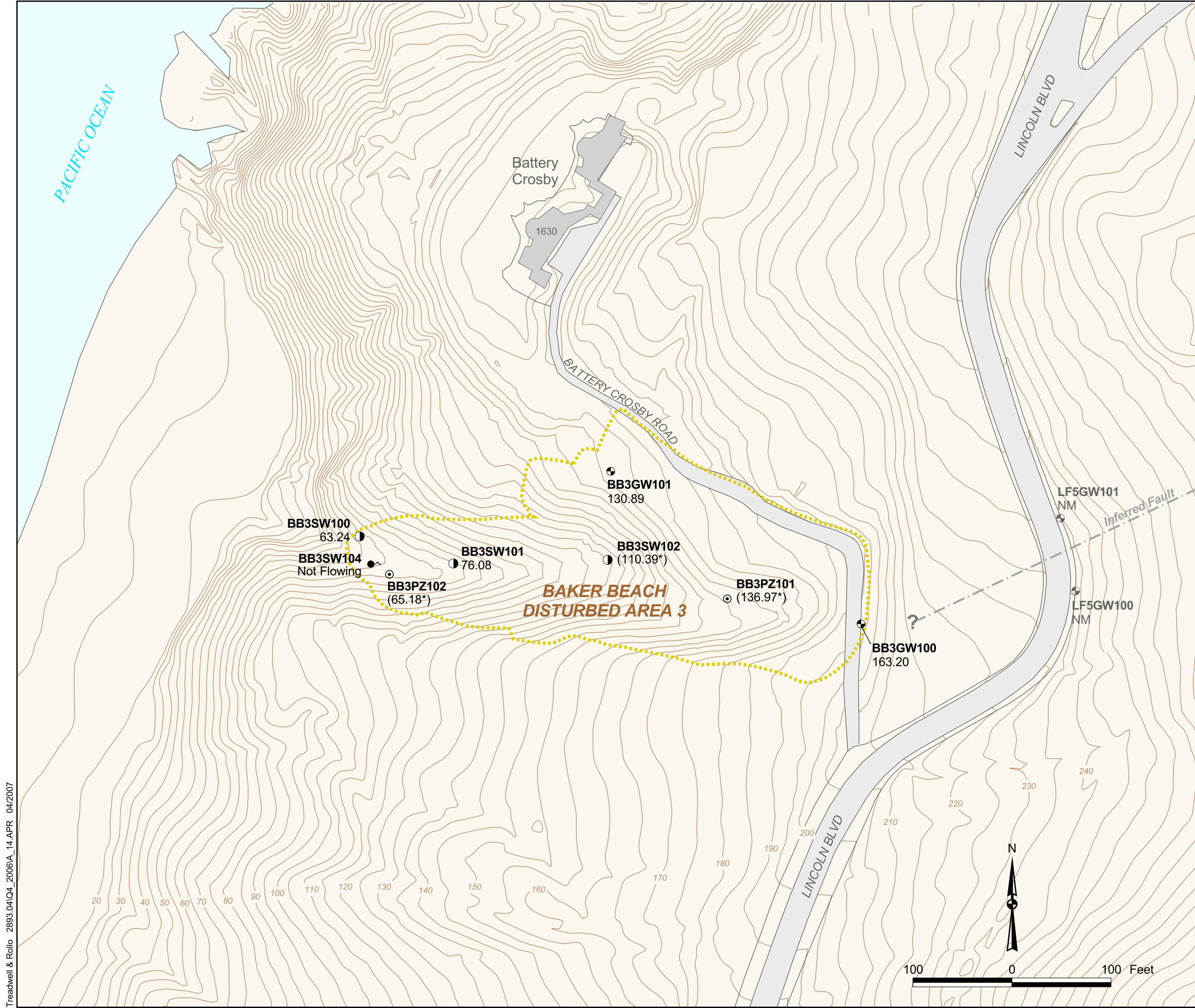
Treadwell&Rollo



Presidio Trust

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P.O. Box 29052
San Francisco, CA
94129-0052
415/561-5300
fax 415/561-5315
April 2007

FIGURE A-14-1



LEGEND

- **BB3GW100** 163.20 Groundwater Monitoring Well
December 2006 Groundwater Elevation
- **BB3PZ101** (136.97*) Piezometer
December 2006 Groundwater Elevation
- (136.97*) Dry Well. Value Indicates Bottom of Casing Elevation in Feet PLLW
- NM Not Measured
- **BB3SW100** 63.24 Fixed Water Monitoring Point
December 2006 Groundwater Elevation
- **BB3SW104** Surface Water Seep
- **LF5GW100** Adjacent Study Area Well
- Limits of Excavated Fill
- - - - Inferred Fault
- Topographic Contour
(Contour Interval : 5 ft)
- 1630 Building and Number

Notes:

Groundwater elevation data collected 4 December 2006.

The Fixed Water Monitoring Points were not used in groundwater contouring.

Location of inferred fault from Revised Feasibility Study Main Installation Sites (EKI, 2003).

Post-excavation topography within limits of excavation fill surveyed by R.W. Davis & Associates on 2 December 2004.

Base map provided by the Presidio Trust in June 2003.

Horizontal Datum: NAD 27, CA State Plane Coordinates, Zone 3, feet

Vertical Datums: (groundwater) Presidio Lower Low Water (ft. PLLW) (topography) North American Vertical Datum, NAVD88

BAKER BEACH DISTURBED AREA 3 SITE PLAN
AND 4 DECEMBER 2006
GROUNDWATER ELEVATION MAP

Treadwell&Rollo



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FIGURE A-14-2

Third Quarter 2006

Fourth Quarter 2006

MONITORING WELL SAMPLING LOG (Normal, Low Flow, and Low Yield)

Site / Area BB3PZ101

Well No. BB3PZ101

Project Number 2843

Well Type

☒ Monitor ☐ Extraction ☐ Other

Recorded By P. Lornish

Sampled by —

Date 12/6/06

WELL PURGING

PURGE VOLUME

Well casing diameter

☒ 2-inch ☐ 4-inch ☐ Other

Well Total Depth (TD, ft. below TOC): 1802

Depth to Water (WL, ft. below TOC): Dry

Depth to free phase (FP, ft. below TOC):

Number of borehole volumes to be purged

☐ 3 ☐ Not Applicable ☐ Other

PURGE VOLUME CALCULATION

Water Column Length

X

Water Volume/ft

X

No. Vols

= gals

CALCULATED PURGE VOLUME

gals

ACTUAL PURGE VOLUME

PURGE METHOD

☐ Low Flow

☐ Bailer \ Type

☐ Normal

☐ Pump \ Type

☐ Modified (max 5 gpm)

☐ Other

PUMP INTAKE

Near top Depth (ft)

Near Bottom Depth (ft)

Other

GROUNDWATER PARAMETER MEASUREMENTS

Meter Type

Time	Liters or Gallons	pH	Temp °C °F	DO (mg/L)	Sp. COND (mS/cm)	ORP (mV)	Turbidity (NTU)	Comments
/								
/								
/								
/								
/								
/								
/								
/								
/								
/								
/								
/								
/								
/								
/								
/								
/								
/								
/								
/								

Comments Well Dry - No Purge or Sample

Purge water storage/disposal

☐ Drummed onsite

☐ Other

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled

Purging

Equipment

Pump - Type

Bailer - Type

Other

Sample Filtered: Yes / No

Filtered Sample Analysis:

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments

QUALITY CONTROL SAMPLES

Duplicate Samples

Blank Samples

Original Sample No.

Duplicate Sample No.

Type

Sample No.

Trip

Rinsate

Transfer

Other:

Site / Area BB3 Well No. BB3PE102
Project Number 2593 Well Type ☒ Monitor ☐ Extraction ☐ Other
Recorded By P. Cornish Sampled by _____ Date 12/6/06

PURGE VOLUME

Number of borehole volumes to be purged ☐ 3 ☐ Not Applicable ☐ Other

Borehole Size	Casing Size	Water Volume/Ft
8	2	0.9
10	4	1.68
12	4	2.22

☐ Low Flow	☐ Bailer \ Type
☐ Normal	☐ Pump \ Type
☐ Modified (max 5 gpm)	☐ Other

Near top	Depth (ft)	
Near Bottom	Depth (ft)	
Other		

Purge Rate

gals
CALCULATED PURGE VOLUME
gals
ACTUAL PURGE VOLUME

[illegible]

Comments	Purge water storage/disposal	☐ Drilled onsite	☐ Other
----------	------------------------------	---	--------------------------------

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled . / .

Purging Equipment	Pump - Type	Bailer - Type	Other

Sample Filtered: Yes / No **Filtered Sample Analysis:**

SAMPLING PROGRAM

[illegible]

QUALITY CONTROL SAMPLES

Duplicate Samples

Blank Samples

Original Sample No.	Duplicate Sample No.

Type	Sample No.
Trip	
Rinsate	
Transfer	
Other:	

LANDFILL 10
APPENDIX SECTION A-15
SEMI-ANNUAL GROUNDWATER MONITORING REPORT
THIRD AND FOURTH QUARTERS 2006
Presidio of San Francisco, California

1.0 INTRODUCTION AND BACKGROUND

Landfill 10 is located in the southwestern portion of the Presidio within the former U.S. Public Health Services Hospital (PHSH) area (Figure 1). The site elevation is between approximately 110 and 190 feet above the PLLW datum (Figure A-15-1).

In 1874, the War Department established the area as a full-service U.S. Merchant Marine Hospital (USACE, 1990; ANL, 1989). Hospital operations were transferred in 1927 to the former PHSH. In the 1930s, the hospital was demolished and replaced by the existing site structure. Demolition debris from the first hospital is believed to have been placed in Landfill 10. The hospital was closed in 1981.

Since September 1994, monitoring wells at Landfill 10 have been analyzed for BTEX, TPH, dissolved metals, TDS and/or general chemistry parameters. A summary of analytical results are presented in Tables A-15-1 through A-15-3.

Beginning in the Fourth Quarter 2003, sampling frequency was reduced from quarterly to annual at Landfill 10 monitoring wells LF10GW01, LF10GW02, and LF10GW03. Beginning in the Third Quarter 2005, sampling frequency was reduced from quarterly to annual at the remaining Landfill 10 monitoring well (LF10GW100) and at the Landfill 10 seep (LF10SP01).

The *Five Year Review and Field Investigation Report for Landfills 8 and 10* (FYR) was submitted to the regulatory agencies and RAB in January 2004 (URS, 2004). A Feasibility Study (FS) for Landfills 8 and 10 has been prepared (EKI, 2005). Additionally, the Trust is currently writing a RAP and designing new remedial actions for the two landfill sites. The RAP is scheduled to be completed in 2008.

2.0 SITE DESCRIPTION AND GEOLOGY

Landfill 10 is located in the Lobos Creek Groundwater Area of the Lobos Creek Groundwater Basin (Figure 1). The depth to groundwater ranges from approximately 5 to 43 feet bgs and groundwater flow follows the general topographic trend toward the southwest (Montgomery Watson, 1996b).

The approximately two-acre site consists of a former helipad and parking lot (Stollar, 1993). The site is underlain by landfill debris consisting mainly of sand with construction debris and varying amounts of rock, clay, and silt. The landfill debris is underlain by dune sand. Beneath the sand is the Colma Formation, which in turn, overlies the Franciscan Formation bedrock (Montgomery Watson, 1996b).

3.0 PUBLIC HEALTH SERVICE HOSPITAL RECORD OF DECISION

In early 1995, the U.S. Army completed the Record of Decision (ROD) for the Former PHS Area (PHS ROD). The PHS ROD addressed three remediation sites within the PHS Area, including Landfill 10. The PHS ROD proposed both soil and groundwater sampling at Landfill 10 to confirm that the fill material does not pose any threat to human health and the environment. In addition, the PHS ROD required the installation of two monitoring wells downgradient of the fill material (LF10GW01 and LF10GW02) and one monitoring well upgradient of Lobos Creek (LF10GW03). These monitoring well locations are presented on Figure A-15-1. Following the installation of the wells, the PHS ROD required quarterly groundwater monitoring for a minimum of one year to confirm that chemicals are not leaching from the fill material to the groundwater (Montgomery Watson, 1996b).

4.0 GROUNDWATER MONITORING

Landfill 10 has four associated monitoring wells and one surface water seep (Figure A-15-1). During the Third Quarter 2006, groundwater elevations were measured at three of the four Landfill 10 wells only. Monitoring well LF10GW02 and seep LF10SP01 were not measured due to inaccessibility and overgrown brush.

During the Fourth Quarter 2006, the overgrown brush had been cleared from around monitoring well LF10GW02 and groundwater elevations were measured at all four Landfill 10 wells. Additionally, the surface water seep, LF10SP01, was observed to be flowing during the Fourth Quarter 2006. Water level meters were calibrated on 14 August and 4 December 2006 and the calibration logs can be found in Appendix B. Groundwater elevation field forms can be found in Appendix C.

4.1 Groundwater-Level Measurements and Interpretation

Groundwater elevation measurements were collected on 14 August and 4 December 2006 at Landfill 10 monitoring wells. During the Third Quarter 2006, all locations, except LF10GW02 and LF10SP01, were measured. Well LF10GW02 and seep LF10SP02 were inaccessible during the Third Quarter 2006 due to overgrown vegetation. During the Fourth Quarter 2006, groundwater elevations were measured at all four Landfill 10 wells and the seep.

During the Third Quarter 2006, groundwater elevations ranged from 108.44 to 140.45 feet above PLLW in LF10GW01 and LF10GW03, respectively (Figure A-15-1). During the Fourth Quarter 2006, groundwater elevations ranged from 101.47 to 138.80 feet above PLLW in LF10GW02 and LF10GW03, respectively (Figure A-15-2).

In addition to the groundwater monitoring wells, the approximate location of LF10SP01 is posted on Figures A-15-1 and A-15-2. The groundwater elevations during the Third and Fourth Quarters 2006 are consistent with historical elevations measured at Landfill 10. Groundwater elevations are summarized in Table A-15-4.

Groundwater was determined to flow to the southwest following the general topographic trend during both quarters. The groundwater gradient was calculated to be approximately 0.09 feet per foot during the Third Quarter and 0.12 feet per foot during the Fourth Quarter 2006. Groundwater elevation maps showing groundwater contours and flow directions for Landfill 10 are included as Figures A-15-1 and A-15-2. Groundwater elevations, gradients, and flow directions are consistent with previous findings.

4.2 Monitoring Well Purging and Sampling

During the Third Quarter 2006, three of the four Landfill 10 monitoring wells were sampled on 14 August 2006. Monitoring well LF10GW02 and seep LF10SP01 were not sampled as they were inaccessible. During the Fourth Quarter 2006, all four monitoring wells and seep LF10SP01 were sampled on 6 December 2006.

Purge equipment, purging volumes, and sampling equipment for each monitoring well are described in the purge records located at the conclusion of this section. Purge water was stored for future disposal in a 2,800-gallon aboveground polyethylene storage tank located at the Central Magazine.

4.3 Groundwater Analytical Program

All groundwater samples collected were submitted to the project laboratory for the analyses shown in Tables 1A and 1B of the main text. The appropriate sampling containers, preservatives, and maximum holding times for each analytical method are shown in Table 5. Sample containers used at each well are described in the purge records located at the conclusion of this section.

QA/QC samples were collected as part of this program. Section 6.2 of the main text discusses the QA/QC sampling and analysis performed during the Third and Fourth Quarters 2006.

5.0 GROUNDWATER ANALYTICAL RESULTS

Groundwater samples collected from Landfill 10 monitoring wells during the Third and Fourth Quarters 2006 were analyzed for TPH. Groundwater samples collected from Landfill 10 monitoring well LF10GW02 and seep LF10SP01 during the Fourth Quarter 2006, were also analyzed for general chemistry, BTEX, TDS, and 23 dissolved metals. Seep LF10SP01 was also analyzed for total metals.

5.1 Dissolved Oxygen

Dissolved oxygen results are presented in Table A-15-1.

Dissolved oxygen was mistakenly not measured by the field team during the Third Quarter 2006. During the Fourth Quarter 2006, dissolved oxygen was only measured in monitoring well LF10GW02 at a concentration of 0.5 mg/L. The dissolved oxygen concentration measured during the Fourth Quarter 2006 was within the range of concentrations previously measured within monitoring well LF10GW02.

Dissolved oxygen was not measured in the majority of the wells at Landfill 10 during the Third and Fourth Quarters 2006 because it was not proposed on Tables 1A and 1B. This error has been corrected and dissolved oxygen measurements will resume at Landfill 10 during the First Quarter 2007.

5.2 General Chemistry

General chemistry parameters were not measured during the Third Quarter 2006. General chemistry parameters were measured in LF10GW02 and LF10SP01 during the Fourth Quarter 2006 and were within historical ranges, with the exception of total alkalinity and bicarbonate in LF10SP01 which were detected at concentrations slightly higher than historical results (Table A-15-1).

5.3 TPH Results

TPH results are presented in Table A-15-2. TPH was not detected in any monitoring well samples collected during either the Third or Fourth Quarters 2006.

During the Fourth Quarter 2006, TPHd and TPHfo were detected in seep LF10SP01 at concentrations of 2,700 µg/L and 1,100 µg/L, respectively. The concentration of TPHd was almost 20 times higher than the previous recorded high concentration and was the first detection of TPHd at this location since the Second Quarter 2003. TPHfo was detected for the first time at this location. These detected concentrations exceed the applicable cleanup level for TPHd and TPHfo in surface water of 50 µg/L (EKI, 2002).

TPH will continue to be monitored within Landfill 10 monitoring wells and seep LF10SP01 during future sampling events to see if apparent trends develop or if the Fourth Quarter 2006 results at LF10SP01 are an anomaly.

5.4 BTEX and MTBE Results

BTEX and MTBE results are presented in Table A-15-2. No samples were analyzed for BTEX and MTBE during the Third Quarter 2006.

During the Fourth Quarter 2006, BTEX and MTBE were analyzed in the groundwater sample collected from LF10GW02 and the surface water sample from LF10SP01. BTEX were not detected in any samples during the Fourth Quarter 2006. MTBE was detected at a new high concentration of 18 µg/L in LF10GW02. MTBE was not detected in the seep sample. The Presidio-wide cleanup level for MTBE in groundwater is 13 µg/L (EKI, 2002).

5.5 Dissolved and Total Metals Results

Total and dissolved metals results are presented in Table A-15-3. No samples were analyzed for dissolved or total metals during the Third Quarter 2006. Dissolved metals were only analyzed in samples collected from LF10GW02 and LF10SP01 during the Fourth Quarter 2006. Total metals were only analyzed within LF10SP01 during the Fourth Quarter 2006.

Dissolved metals concentrations during the Fourth Quarter 2006 were within historical bounds at LF10GW02. Dissolved metals at LF10SP01 were generally within historical bounds or slightly outside of the range of previously reported concentrations and are therefore, not considered to be significant.

During the Fourth Quarter 2006, total metals were analyzed in the groundwater sample collected from LF10SP01. Iron and potassium were detected at new high concentrations of 2,200 µg/L and 4,300 µg/L, respectively. Vanadium was detected for the first time during Fourth Quarter 2006 at a concentration of 13 µg/L. The remainder of the total metals concentrations detected in LF10SP01 during the Fourth Quarter 2006 are within historical ranges and do not appear to be significant.

Dissolved metal and total metal concentrations will continue to be measured at LF10SP01 to see if trends develop.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Groundwater elevations, gradients, and flow directions during Third and Fourth Quarters 2006 are consistent with historical values and interpretations.

During the Fourth Quarter 2006, TPHd and TPHfo were detected in seep LF10SP01 at new high concentrations of 2,700 µg/L and 1,100 µg/L, respectively. The concentration of TPHd was almost 20 times higher than the previous recorded high concentration and was the first detection of TPHd at this location since the Second Quarter 2003. TPHfo was detected for the first time at this location. TPH will continue to be monitored within Landfill 10 monitoring wells and seep LF10SP01 during future sampling events to see if apparent trends develop or if the Fourth Quarter 2006 results at LF10SP01 are an anomaly.

MTBE was detected at a new high concentration of 18 µg/L within monitoring well LF10GW02 during the Fourth Quarter 2006. MTBE will continue to be measured at LF10GW02.

Total vanadium was detected for the first time during Fourth Quarter 2006 at a concentration of 13µg/L. Dissolved metal and total metal concentrations will continue to be measured at LF10SP01 to see if apparent trends develop.

Table A-15-1
Results of General Chemistry Analyses
Landfill 10
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0	Field	E300.0/ E340.2	E300.0/ E353.2	E300.0/ E353.2	E353.2	E300.0
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LF10GW01	03/20/06	250	250	86	3.4	< 0.1	8.8	< 0.05	NA	49
	03/16/05	140	140	82	3.3	< 0.1	11	< 0.05	NA	49
	03/10/04	120	120	69	3.4	< 0.1	11	< 0.05	NA	46
	08/19/03	150	150	94	2.6	< 0.1	7.6 J-	< 0.05 UJ	NA	59
	06/10/03	170	170	97	3.9	< 0.1	9.9	< 0.05	NA	58
	03/19/03	190	190	79	3.2	< 0.1	8	< 0.05	NA	67
	12/05/02	150	150	94	2.3	< 0.1	7.3	< 0.05	NA	46
	09/04/02	140	140	96	1.4	0.28	8	< 0.05	NA	56
	06/04/02	150	150	96	3.3	0.25	7.5	< 0.05	NA	49
	03/11/02	160	160	86	4.1	0.18	6.9	< 0.05	NA	55
	11/30/01	160	160	98	4.5	0.11	6.8	< 0.05	NA	46
	08/31/01	150	150	95	4.4	0.19	7.1	< 0.05	NA	46
	05/18/01	150	150	91	4.7	0.12	7	< 0.05	NA	48
	02/19/97	153	153	77	NM	0.13	NA	NA	8.74	53.2
	12/13/96	161	161	88	NM	< 0.1	NA	NA	7.27	56.7
	09/05/96	172	172	88	NM	0.12	NA	NA	8.5	54.8
	03/22/96	162	162	81	NM	0.1	NA	NA	9.8	54
	12/04/95	170	170	89	NM	< 0.1	NA	NA	8.3	53
	09/26/95	174	174	87	NM	< 0.1	NA	NA	10	62
	06/09/95	172	172	87	NM	< 0.1	NA	NA	10	62
	03/21/95	160	160	77	NM	0.12	NA	NA	9.7	57
	12/13/94	161	161	84	NM	0.13	NA	NA	8.6	55
	09/09/94	175	175	143	NM	0.36	NA	NA	8.1	66
LF10GW02	12/06/06	380	380	47	0.5	0.12	< 0.05	< 0.05	NA	50
	03/17/05	230	230	77	0.1	< 0.1	< 0.05	< 0.05	NA	17
	03/10/04	240	240	76	0.07	0.1	< 0.05	< 0.05	NA	12
	08/19/03	390	390	40	0.4	0.12	0.45 J-	< 0.05 UJ	NA	94
	06/10/03	280	280	66	0.3	0.15	< 0.05	< 0.05	NA	44
	03/19/03	250	250	79	0.3	0.11	< 0.05	< 0.05	NA	12
	12/05/02	360	360	42	0.5	< 0.1	< 0.05	< 0.05	NA	71
	09/04/02	360	360	37	0.2	0.26	0.4	< 0.05	NA	100
	06/04/02	400	400	45	1.3	0.1	0.28	0.03 J	NA	130
	03/11/02	210	210	71	0.7	0.15	< 0.05	< 0.05	NA	16
	11/30/01	360	360	44	4	0.25	< 0.05 UJ	< 0.05 UJ	NA	160

Table A-15-1
Results of General Chemistry Analyses
Landfill 10
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0	Field	E300.0/ E340.2	E300.0/ E353.2	E300.0/ E353.2	E353.2	E300.0
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LF10GW02	08/31/01	320	320	40	2.4	0.17	0.04 J	< 0.05	NA	120
	02/19/97	494	494	61	0.22	0.14	NA	NA	< 0.05	74
	12/13/96	440	440	37	NM	0.12	NA	NA	0.063	64
	09/05/96	547	547	36	NM	0.13	NA	NA	< 0.05	127
	08/30/96	NA	NA	NA	NM	NA	NA	NA	NA	NA
	03/22/96	524	524	57	NM	0.14	NA	NA	< 0.05	72
	12/04/95	453	453	47	NM	0.14	NA	NA	< 0.05	99
	09/25/95	481	481	55	NM	0.12	NA	NA	0.058	167
	06/08/95	615	615	56	NM	0.12	NA	NA	< 0.05	169
	03/16/95	588	588	51	NM	0.13	NA	NA	< 0.05	39
	12/12/94	606	606	46	NM	0.18	NA	NA	< 0.05	48
	09/12/94	592	592	47	NM	0.16	NA	NA	< 0.05	45
LF10GW03	03/17/06	250	250	64	0.77	< 0.1	8.1	< 0.05	NA	83
	03/16/05	260	260	63	0.6	< 0.1	7.1	< 0.05	NA	75
	03/18/04	240	240	67	1.4	< 0.1	7.4	< 0.05	NA	80
	08/20/03	300	300	63	2.1	< 0.1	7	< 0.05	NA	75
	06/10/03	240	240	66	1.7	NA	8.2	< 0.05	NA	81
	03/19/03	270	270	62	3.5	< 0.1	7.8	< 0.05	NA	74
	12/06/02	250	250	65	2.2	0.1	8.2	< 0.05	NA	79
	09/04/02	240	240	68	0.4	0.2	7.9	< 0.05	NA	80
	06/05/02	240	240	66	1.3	0.21	7.8	< 0.05	NA	80
	03/12/02	230	230	68	4.8	< 0.1 U	8.6	< 0.05	NA	82
	11/30/01	240	240	67	2.8	0.17	8.5 J	< 0.05 UJ	NA	78
	08/31/01	240	240	68	NM	0.16	8	< 0.05	NA	79
	05/17/01	240	240	68	3.3	0.21	8.2	< 0.05	NA	78
	02/18/97	239	239	60	NM	0.15	NA	NA	10	76
	12/12/96	243	243	61	NM	< 0.1	NA	NA	7.91	74
	09/04/96	237	237	64	NM	0.13	NA	NA	9.4	73
	06/06/96	244	244	58	NM	0.1	NA	NA	8.3	75
	03/21/96	255	255	52	NM	< 0.1	NA	NA	8	73
	12/01/95	242	242	46	NM	< 0.1	NA	NA	4.6	66
	09/26/95	253	253	48	NM	0.12	NA	NA	7.6	77

Table A-15-1
Results of General Chemistry Analyses
Landfill 10
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0	Field	E300.0/ E340.2	E300.0/ E353.2	E300.0/ E353.2	E353.2	E300.0
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LF10GW03	06/09/95	259	259	37	NM	0.13	NA	NA	6.8	72
	03/16/95	252	252	37	NM	0.14	NA	NA	4.9	74
	12/13/94	290	290	37	NM	0.15	NA	NA	4.1	78
	09/09/94	387	387	219	NM	0.42	NA	NA	7.8	111
LF10GW100	03/17/06	450	450	44	0.89	< 0.1	36	< 0.05	NA	280
	05/26/05	400	400	31	0.9	0.16	29	< 0.05	NA	220
	03/17/05	360	360	19	0.4	0.1	29	< 0.05	NA	200
	03/17/05	350	350	19	--	0.11	27	< 0.05	NA	200
DUP0317051B	03/17/05	320	320	17.8	--	0.51	31	< 0.1 U	NA	206
LF10GW100CL	12/14/04	510	510	64	1.8	< 0.1	41	< 0.05	NA	290
	08/12/04	480	480	50	2.4	< 0.1	41	< 0.05	NA	280
	05/28/04	360	360	20	0.59	0.11	25	0.86	NA	210
	05/28/04	380	380	20	--	0.11	25	0.86	NA	210
DUP0528042A	03/18/04	340	340	19	1.3	0.11	27	< 0.05	NA	220
	03/18/04	350	350	19	--	0.11	27	< 0.05	NA	220
	12/09/03	490	490	52	1.1	0.15	28	< 0.05	NA	260
	08/20/03	420	420	39	1.9	0.14	26	< 0.05	NA	250
DUP0318043A	06/10/03	350	350	25	1.6	0.14	27	< 0.05	NA	220
	03/19/03	460	460	68	NM	0.12	42	< 0.05	NA	280
	12/23/02	510	510	110	NM	0.0075 J-	NA	0.000069	0.04	300
	12/23/02	510	510	110	--	0.0094 J-	NA	0.000057	0.03	310
LF10122302-DUP1	12/23/02	510	510	110	--	0.0094 J-	NA	0.000057	0.03	310
LF10SP01	12/06/06	250	250	75	NM	< 0.1	0.42	< 0.05	NA	36
	03/17/05	210	210	70	4.9	< 0.1	0.61	< 0.05	NA	24
	12/14/04	220	220	95	4.8	< 0.1	0.2	< 0.05	NA	28
	05/26/04	220	220	85	7.2	< 0.1	0.28	< 0.05	NA	22
DUP1203031B	03/10/04	190	190	77	4.8	< 0.1	0.49	< 0.05	NA	24
	12/03/03	240	240	90	6.9	< 0.1	0.16	< 0.05	NA	18
	12/03/03	230	230	90	--	< 0.1	0.15	0.1	NA	18
	12/03/03	240	240	89.8	--	< 0.1	0.24	< 0.05	0.24	19
LF10SP01CL	08/19/03	230	230	87	4.5	< 0.1	0.2 J-	< 0.05 UJ	NA	21

Table A-15-1
Results of General Chemistry Analyses
Landfill 10
Presidio of San Francisco, California

Well Name	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite as N	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0	Field	E300.0/ E340.2	E300.0/ E353.2	E300.0/ E353.2	E353.2	E300.0
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
LF10SP01	06/10/03	220	220	88	6.9	< 0.1	0.28	< 0.05	NA	22
	12/05/02	230	230	94	NM	0.11	NA	< 0.05	0.15	23

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

mg/L - milligrams per liter

NA - Not analyzed

NM - Not measured

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-15-2
Results of BTEX, MTBE, and TPH Analyses
Landfill 10
Presidio of San Francisco, California

Well Name	Sample Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8020/ SW8021	SW8020/ SW8021	SW8020/ SW8021	SW8020/ SW8021	SW8020/ SW8021	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
LF10GW01	12/06/06	NA	NA	NA	NA	NA	< 50	< 50	< 300
	08/18/06	NA	NA	NA	NA	NA	< 50	< 50	< 300
	05/25/06	NA	NA	NA	NA	NA	< 50	< 50	< 300
	03/20/06	< 0.5	< 0.5	< 0.5	< 1	3.6 C	NA	NA	NA
	03/16/05	< 0.5	< 0.5	< 0.5	< 1	8	NA	NA	NA
	03/10/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2 C,U	NA	NA	NA
	08/19/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA
	06/10/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA
	03/19/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA
	12/05/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 50	< 50	< 300
	09/04/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 50	< 50	< 300
	06/04/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 50	< 50	< 300
	03/11/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 50	< 63	< 380
	11/30/01	< 0.5	< 0.5	< 0.5	< 0.5	2.7	< 50	< 50	< 300
	08/31/01	< 0.5 R	< 0.5 R	< 0.5 R	< 0.5 R	< 2 R	< 50 R	< 50 ²	< 300 ²
	05/18/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 50	< 50	< 300
	02/19/97	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50 (U15)	< 50	< 300
	12/13/96	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50	< 50	< 300
	09/05/96	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50	< 50	< 300
	03/22/96	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50	< 50	< 300
	12/04/95	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50	< 50	< 300
	09/26/95	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50	< 50	< 300
	06/09/95	< 5	< 5	< 5	< 5	NA	< 50	< 50	NA
	03/21/95	< 5	< 5	< 5	< 5	NA	< 50	< 50	NA
	12/13/94	< 5	< 5	< 5	< 5	NA	< 50	< 50	NA
	09/09/94	< 5	< 5	< 5	< 5	NA	< 50	65 (J25)	NA
LF10GW02	12/06/06	< 0.5	< 0.5	< 0.5	< 1	18	< 50	< 50	< 300
	03/17/05	< 0.5	< 0.5	< 0.5	< 1	2.8	NA	NA	NA
	03/10/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA
	08/19/03	< 0.5	< 0.5	< 0.5	< 0.5	2.4	NA	NA	NA
	06/10/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA

Table A-15-2
Results of BTEX, MTBE, and TPH Analyses
Landfill 10
Presidio of San Francisco, California

Well Name	Sample Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8020/ SW8021	SW8020/ SW8021	SW8020/ SW8021	SW8020/ SW8021	SW8020/ SW8021	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
LF10GW02	03/19/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA
	12/05/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 50	< 50	< 300
	09/04/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 50	< 50	< 300
	06/04/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 50	< 50	< 300
	03/11/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 50	< 50	< 300
	11/30/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 50	< 50	< 300
	08/31/01	< 0.5 R	< 0.5 R	< 0.5 R	< 0.5 R	< 2 R	< 50 R	< 50 ²	< 300 ²
	02/19/97	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50	< 50	NA
	12/13/96	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50	< 50	NA
	09/05/96	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50	< 50	NA
	03/22/96	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50	< 50	NA
	12/04/95	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50	< 50	NA
	09/25/95	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50	< 50	NA
	06/08/95	< 5	< 5	< 5	< 5	NA	< 50	< 50	NA
	03/16/95	< 5	< 5	< 5	< 5	NA	< 50	79 (J25)	NA
	12/12/94	< 5	< 5	< 5	< 5	NA	< 50	< 50	NA
	09/12/94	4.5 (J28)	23	6.6	40	NA	1,500 (J25)	< 50	NA
LF10GW03	12/06/06	NA	NA	NA	NA	NA	< 50	< 50	< 300
	08/17/06	NA	NA	NA	NA	NA	< 50	< 50	< 300
	05/25/06	NA	NA	NA	NA	NA	< 50	< 50	< 300
	03/17/06	< 0.5	< 0.5	< 0.5	< 1	2.4	NA	NA	NA
	03/16/05	< 0.5	< 0.5	< 0.5	< 1	8.5	NA	NA	NA
	03/18/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA
	08/20/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA
	06/10/03	< 0.5	< 0.5	< 0.5	< 0.5	2.8	NA	NA	NA
	03/19/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	NA	NA	NA
	12/06/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 50	< 50	< 300
	09/04/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 50	< 50	< 300
	06/05/02	< 0.5	< 0.5	< 0.5	< 0.5	3.5	< 50	< 50	< 300
	03/12/02	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 50	< 50	< 300
	11/30/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 50	< 50	< 300
	08/31/01	< 0.5 R	< 0.5 R	< 0.5 R	< 0.5 R	< 2 R	< 50 R	< 50 ²	< 300 ²

Table A-15-2
Results of BTEX, MTBE, and TPH Analyses
Landfill 10
Presidio of San Francisco, California

Well Name	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8020/ SW8021	SW8020/ SW8021	SW8020/ SW8021	SW8020/ SW8021	SW8020/ SW8021	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
LF10GW03	05/17/01	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 50	< 50	< 300
	02/18/97	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50 (U15)	< 50	< 300
	12/12/96	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50	< 50	< 300
	09/04/96	< 0.5	1.5	< 0.5	< 0.5	NA	< 50	< 50	< 300
	06/06/96	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50	< 50	< 300
	03/21/96	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50	< 50	< 300
	12/01/95	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50	< 50	< 300
	09/26/95	< 0.5	< 0.5	< 0.5	< 0.5	NA	< 50	< 50	440 (J25)
	06/09/95	< 5	< 5	< 5	< 5	NA	< 50	< 50	NA
	03/16/95	< 5	< 5	< 5	< 5	NA	< 50	< 50	NA
	12/13/94	< 5	< 5	< 5	< 5	NA	< 50	< 50	NA
	09/09/94	0.74 (J28)	< 5	< 5	5.9	NA	98 (J25)	76 (J25)	NA
LF10GW100 DUP0317051B LF10GW100CL DUP0528042A DUP0318043A LF10122302-DUP1	12/06/06	NA	NA	NA	NA	NA	< 50	< 50	< 300
	08/18/06	NA	NA	NA	NA	NA	< 50	< 50	< 300
	03/17/06	< 0.5	< 0.5	< 0.5	< 1	2.1	< 50	< 50	< 300
	05/26/05	< 0.5	< 0.5	< 0.5	< 1	< 2	< 50	< 50	710 Y
	03/17/05	< 0.5	< 0.5	< 0.5	< 1	2.9	< 50	< 50	< 300
	03/17/05	NA	NA	NA	NA	NA	NA	< 50	< 300
	03/17/05	< 1 U	< 1 U	< 1 U	< 2 U	< 5 U	< 50 U	54	< 300 U
	12/14/04	< 0.5	< 0.5	< 0.5	< 1	< 2	< 50	< 50	< 300
	08/12/04	< 0.5	< 0.5	< 0.5	< 0.5	2.3 C	< 50	< 50	< 300
	05/28/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 50	< 50	< 300
	05/28/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 50	< 50	< 300
	03/18/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 50	< 50	< 300
	03/18/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 50	< 50	< 300
	12/09/03	< 0.5	< 0.5	< 0.5	< 0.5	5.1 C	< 50	< 50	< 300
	08/20/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 50	< 50	< 300
	06/10/03	< 0.5	< 0.5	< 0.5	< 0.5	3.2	< 50	< 50	< 300
	03/19/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 50	< 50	< 300
	12/23/02	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 50	120 A-02	< 250
	12/23/02	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 50	< 50	< 250

Table A-15-2
Results of BTEX, MTBE, and TPH Analyses
Landfill 10
Presidio of San Francisco, California

Well Name	Sample Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8020/ SW8021	SW8020/ SW8021	SW8020/ SW8021	SW8020/ SW8021	SW8020/ SW8021	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
LF10SP01	12/06/06	< 0.5	< 0.5	< 0.5	< 1	< 2	< 50	2,700 Y J-	1,100 Y
	03/17/05	< 0.5	< 0.5	< 0.5	< 1	11	< 50	< 50	< 300
	12/14/04	< 0.5	< 0.5	< 0.5	< 1	<2	< 50	< 50	< 300
	05/26/04	< 0.5	< 0.5	< 0.5	< 0.5	11 C	< 50	< 50	< 300
	03/10/04	< 0.5	< 0.5	< 0.5	< 0.5	< 2 C,U	< 50	< 50	< 300
DUP1203031B	12/03/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 50	< 50	< 300
	12/03/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 50	< 50	< 300
	12/03/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 50	< 48	< 240
	08/19/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 50	< 50	< 300
	06/10/03	< 0.5	< 0.5	< 0.5	< 0.5	< 2	< 50	140 YZ	< 300
LF10SP01CL	12/05/02	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 50	< 50	< 250

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - TPH analysis was not run using the silica gel cleanup method 3630A, although it was marked on the chain-of-custody.

µg/L - micrograms per liter

NA - Not analyzed

Y - Sample exhibits a fuel pattern that does not resemble the standard.

Z - Sample exhibits unknown single peak or peaks.

MTBE - Methyl tertiary butyl ether

BTEX - benzene, toluene, ethylbenzene, and xylenes

TPH - Total petroleum hydrocarbons

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-15-3
Results of Total and Dissolved Metals and TDS Analyses
Landfill 10
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7040/ SW7470A	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
LF10GW01	03/20/06	< 100	< 1	< 5	56	< 2	< 1	13,000	79	< 10	< 1	< 100	< 3	57,000	< 10	< 0.2	< 20	< 500	< 5	< 1	38,000	< 1	< 10	< 20	520
	03/16/05	< 100	< 1	< 5	48	< 2	< 1	13,000 J	63	< 10	< 1	< 100	< 3	50,000	< 10	< 0.2	< 20	< 500	< 5	< 1	35,000	< 1	< 10	< 20	470 J
	03/10/04	< 100	1.1	< 5	43	< 2	< 1	11,000	42	< 10	< 1	< 100	< 3	46,000	< 10	< 0.2	< 20	< 500	< 5	< 1 UJ	37,000	< 1	< 10	< 20	340
	08/19/03	< 100	< 1	< 5	51	< 2	< 1	13,000	77	< 10	< 1	< 100	< 3	59,000	< 10	< 0.2	< 20	< 500	< 5	< 1 UJ	38,000	< 1	< 10	< 20 UJ	440
	06/10/03	< 100	3	< 5	50	< 2	< 1	14,000	63	< 10	1.5	< 100	< 3	62,000	< 10	< 0.2	< 20	< 500	< 5	< 1	39,000	< 1	< 10	< 20	460
	03/19/03	< 100 UJ	< 1	1	49	< 1	< 1	13,000 J	54 J	< 1	< 1	< 100	< 3	77,000 J	< 10 UJ	< 0.2	12	< 500	< 5	< 1 UJ	59,000 J	< 1	< 10	< 10	440
	12/05/02	< 100	< 1	< 1	55	< 1	< 1	13,000	81	< 1	< 1	< 100	< 3	52,000	< 10	< 0.2	5.8	< 500	< 5	< 1 UJ	33,000	< 1	< 10	< 10	410
	09/04/02	< 100	< 1	1	380	< 1	< 1	14,000	81 J	< 1	< 1	< 100	< 3	63,000	< 10	< 0.2	7.7	< 500	< 5	< 1 UJ	40,000	< 1	< 10	95	430
	06/04/02	< 100	< 1	1.1	370	< 1	< 1	14,000	84	< 1	< 1	< 100	< 3	65,000	< 10	< 0.2	6.3	< 500	< 5	< 1	41,000	< 1	< 10	100	420
	03/11/02	< 100	< 1	1.4	320	< 1	< 1	15,000	70	< 1	< 1	< 100	< 3	65,000	< 10	< 0.2	6.9	< 500	< 5	< 1 UJ	46,000	< 1	< 10	64	430
	11/30/01	140	1.8	1.2	440	< 1	< 1	14,000	91	< 1	1.6	530	< 3	55,000	< 10	< 0.2	4.7	< 500	< 5	< 1 UJ	35,000	< 1	< 10	110	440
	08/31/01	170	2.5	1.4	250 J+	< 1	< 1	15,000	91	< 1	1.3	250	< 3	67,000	< 10	< 0.2	5.1	550	< 5	< 1 UJ	46,000	< 1	< 10	150	460
	05/18/01	< 100	1.9 J	1.2 J	390 J	< 1 UJ	< 1 UJ	14,000 J	80 J	< 1 UJ	1.1 J	< 100 UJ	< 3 UJ	67,000 b	< 10 UJ	< 0.2	8.3 J	< 500 UJ	< 5 UJ	< 1 UJ	43,000	< 1 UJ	< 10 UJ	170 J	460
	02/19/97	< 100	< 5	< 5	45.9	< 4	< 2	14,100	83	< 10	< 10	< 100	< 3	60,800	< 10	< 0.2	< 20	< 5,000	< 5	< 2	42,100	< 2	< 10	< 20	496
	12/13/96	< 100	< 5	< 5	52.7	< 4	< 2	14,600	80.8	< 10	< 10	< 100	< 3	60,700	< 10	< 0.2	< 20	< 5,000	< 5	< 2	38,900	< 2	< 10	< 20	474
	09/05/96	< 100	< 5	< 5	52.6	< 2	< 0.5	15,500	89.1	< 10	< 1	< 100	1.7	64,900	< 10	< 0.2	6.5	< 5,000	< 5	< 0.5	41,800	< 2	< 10	< 20	483
	03/22/96	< 100	< 5	< 5	38.3	< 2	< 0.5	13,800	71.5	< 10	< 1	< 100	< 1	59,100	< 10	< 0.2	6	< 5,000	< 5	< 0.5	39,300	< 2	< 10	< 20	464
	12/04/95	< 100	< 5	< 5	50	< 2	< 0.5	16,300	93	< 10	< 1	< 100	< 1	66,100	< 10	< 0.2	< 5	< 5,000	< 5	< 0.5	38,500	< 2	< 10	26	515
	09/26/95	< 100	< 60	< 5	25	< 2	< 5	15,100	89	< 10	< 20	< 100	< 1	61,900	< 10	< 0.2	< 40	< 5,000	< 5	< 10	36,800	< 2	< 10	< 20	523
	06/09/95	< 100	< 60	< 5	19	< 2	< 5	16,200	92	< 10	< 20	< 100	< 3.2	68,800	< 10	< 0.2	< 40	< 5,000	< 5	< 10	42,300	< 5 (U27)	< 10	< 20	524
	03/21/95	< 100	< 60	< 5	11	< 2	< 5	16,700	77	< 10	< 20	< 100	< 3.2	63,300	< 10	< 0.2	< 40	< 5,000	< 5 (U27)	< 10	42,700	< 25 (U9)	< 10	< 20	473
	12/13/94	< 100	< 60	< 5	15	< 2	< 5	17,300	95	< 10	< 20	< 100	< 3.2	64,700	< 10	< 0.2	< 40	< 5,000	< 5 (U27, U9)	< 10	42,600	< 25 (U27, U9)	< 10	< 20	508
	09/09/94	< 100	NA	7.4	< 10	NA	NA	40,100	110	< 10	< 20	< 100	< 3.2	56,100	< 10	< 0.2	< 40	6,400	< 5	NA	68,700	< 25 (U27)	< 10	< 20	609
LF10GW02	12/06/06	< 100	< 1	< 5	73	< 2	< 1	84,000	< 10	< 10	< 1	1,800	< 3	46,000	770	< 0.2	< 20	4,500	< 5	< 1	32,000 J	< 1	< 10	< 20	410 J-
	03/17/05	< 100	< 1	< 5	65	< 2	< 1	72,000 J	< 10	< 10	1.6	2,700	< 3	27,000	760	< 0.2	< 20	4,500	< 5	< 1	24,000	< 1	< 10	< 20	430 J-
	03/10/04	< 100	< 1	< 5	63	< 2	< 1	70,000	< 10	< 10	< 1	3,100	< 3	29,000	780	< 0.2	< 20	4,600	< 5	< 1 UJ	27,000	< 1	< 10	< 20	360
	08/19/03	< 100	< 1	< 5	88	< 2	< 1	89,000	< 10	< 10	< 1	2,400	< 3	36,000	820	< 0.2	< 20	5,300	< 5	< 1 UJ	64,000	< 1	< 10	< 20 UJ	570
	06/10/03	< 100	< 1	< 5	55	< 2	< 1	64,000	< 10	< 10	< 1	1,600	< 3	24,000	710	< 0.2	< 20	4,600	< 5	< 1	54,000	< 1	< 10	< 20	430
	03/19/03	< 100 UJ	< 1	< 1	64	< 1	< 1	94,000 J	1.1 J	< 1	< 1	2,100	< 3	37,000 J	920 J	< 0.2	2.6	4,900	< 5	< 1 UJ	36,000 J	< 1	< 10	< 10	420
	12/05/02	< 100	< 1	< 1	95	< 1	< 1	99,000	2.1	< 1	< 1	3,400	< 3	37,000	950	< 0.2	2.8	5,700	< 5	< 1 UJ	28,000	< 1	< 10	10	510
	09/04/02	< 100	< 1	< 1	410	15	< 1	110,000	< 1 UJ	< 1	< 1	2,900	< 3	43,000	1,100	< 0.2	2.9	6,000	< 5	< 1 UJ	36,000	< 1	< 10	78	540
	06/04/02	< 100	<																						

Table A-15-3
Results of Total and Dissolved Metals and TDS Analyses
Landfill 10
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7040/ SW7470A	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
LF10GW03	03/17/06	< 100	< 1	< 5	84	< 2	< 1	28,000	< 10	< 10	1.1	< 100	< 3	57,000 J	< 10	< 0.2	37	< 500 UJ	< 5	< 1	51,000	< 1	< 10	< 20	600
	03/16/05	< 100	< 1	< 5	81	< 2	< 1	29,000 J	< 10	< 10	1.3	< 100	< 3	55,000	< 10	< 0.2	37	< 500	< 5	< 1	46,000	< 1	< 10	< 20	570 J-
	03/18/04	< 100	< 1	< 5	87	< 2	< 1	33,000	< 10	< 10	1.1	< 100	< 3	67,000	< 10	< 0.2	39	< 500	< 5	< 1 UJ	59,000	< 1	< 10	< 20	550 J
	08/20/03	< 100	1.7	< 5	81	< 2	< 1	30,000	< 10	< 10	14	230	< 3	64,000	< 10	0.2	40	< 500	< 5	< 1 UJ	50,000	< 1	< 10	< 20 UJ	560
	06/10/03	< 100	< 1	< 5	83	< 2	< 1	30,000	< 10	< 10	< 1	< 100	< 3	64,000	11	0.41	38	< 500	< 5	< 1	49,000	< 1	< 10	< 20	560
	03/19/03	< 100 UJ	< 1	< 1	83	< 1	< 1	39,000 J	2.9 J	< 1	< 1	< 100	< 3	86,000 J	< 10 UJ	0.48	38	< 500	< 5	< 1 UJ	71,000 J	< 1	< 10	< 10	490
	12/06/02	< 100	< 1	< 1	74	< 1	< 1	29,000	4.3	< 1	< 1	< 100	< 3	63,000	< 10 UJ	0.35	27	< 500	< 5	< 1 UJ	52,000	< 1	< 10	< 10	NA
	09/04/02	< 100	< 1	< 1	420	< 1	< 1	30,000	2.3 J	< 1	< 1	< 100	< 3	66,000	11	0.72	42	< 500	< 5	< 1 UJ	53,000	< 1	< 10	110	510
	06/05/02	< 100	< 1	< 1	90	< 1	< 1	31,000	5.7	< 1	< 1	110	< 3	66,000	20	0.56	41	< 500	< 5	< 1	53,000	< 1	< 10	< 10	490
	03/12/02	< 100	< 1	< 1	380	< 1	< 1	30,000	5.8	< 1	< 1	< 100	< 3	68,000	< 10	0.54	35	< 500	< 5	< 1 UJ	55,000	< 1	< 10	67	480
	11/30/01	< 100	3.1	< 1	500	< 1	< 1	31,000	9.2	< 1	1.8	540	< 3	67,000	< 10	< 0.2	29	< 500	< 5	< 1 UJ	53,000	< 1	< 10	250	550
	08/31/01	< 100	3.8	< 1	280 J+	< 1	< 1	30,000	7.7	< 1	3.3	< 100	< 3	72,000	< 10	0.21	35	< 500	< 5	< 1 UJ	61,000	< 1	< 10	270	540
	05/17/01	< 100	3	< 1	670	< 1	< 1	< 500 R	4.4 J	< 1	1.6	290	< 3	64,000	13	0.33	36	730 J	< 5	< 1	55,000	< 1	< 10	220	540
	02/18/97	< 100	< 5	< 5	87.2	< 4	< 2	31,200	< 10	< 10	< 10	< 100	< 3	67,800	< 10	0.3	38.1	< 5,000	< 5	< 2	58,000	< 2	< 10	< 20	569
	12/12/96	< 100	< 5	< 5	70.4	< 4	< 2	28,900	< 10	< 10	< 10	< 100	< 3	60,600	< 10	< 0.2	29.7	< 5,000	< 5	< 2	49,300	< 2	< 10	< 20	529
	09/04/96	< 100	< 5	< 5	75.9	< 2	< 0.5	29,400	3.4	< 10	< 1	< 100	2.1	63,400	< 10	0.23	39	< 5,000	< 5	< 0.5	55,100	< 2	< 10	< 20	524
	06/06/96	< 100	< 5	< 5	71.6	< 2	< 0.5	28,800	3.6	< 10	< 1	< 100	< 1	61,200	< 10	< 0.2	31.3	< 5,000	< 5	< 0.5	52,000	< 2	< 10	< 20	577
	03/21/96	< 100	< 5	< 5	64.9	< 2	< 0.5	29,700	2.1	< 10	< 1	< 100	< 1	60,500	< 10	0.54	31.2	< 5,000	< 5	< 0.5	53,800	< 2	< 10	< 20	518
	12/01/95	< 100	< 5	< 5	55	< 2	< 0.5	27,200	5.9	< 10	1.8	100	< 1	59,800	< 10	0.3	38	< 5,000	< 5	< 0.5	47,600	< 2	< 10	< 20	512
	09/26/95	< 100	< 60	< 5	41	< 2	< 5	26,200	< 10	< 10	< 20	< 100	1.4	55,700	< 10	< 0.2	< 40	< 5,000	< 5	< 10	46,200	< 2	< 10	< 20	528
	06/09/95	< 100	< 60	< 5	44	< 2	< 5	28,200	< 10	< 10	< 20	< 100	< 3.2	61,900	14	1.5	< 40	< 5,000	< 5	< 10	53,900	< 5	< 10	< 20	508
	03/16/95	< 100	< 60	< 5	18	< 2	< 5	29,500	< 10	< 10	< 20	< 100	< 3.2	60,000	54	< 0.2	< 40	< 5,000	< 5 (U27)	< 10	56,100	< 25 (U27)	< 10	55	498
	12/13/94	< 100	< 60	< 5	17	< 2	< 5	35,600	< 10	< 10	< 20	< 100	< 3.2	59,700	39	< 0.2	< 40	< 5,000	< 5 (U27)	< 10	62,300	< 5 (U27)	< 10	< 20	525
	09/09/94	< 100	NA	9.9	15	NA	NA	68,700	14	< 10	< 20	< 100	< 3.2	84,500	< 10	< 0.2	< 40	11,200	< 5 (U27)	NA	136,000	< 5 (U27)	< 10	< 20	989
LF10GW100 DUP0317051B LF10GW100CL DUP0528042A DUP0318043A (Total) DUP021003 (Total) (Total) LF10122302-DUP1 (Total)	03/17/06	< 100	< 1	< 5	130	< 2	< 1	49,000	< 10	< 10	< 1	< 100	< 3	87,000 J	16	< 0.2	< 20	< 500 UJ	< 5	< 1	180,000	< 1	< 10	< 20	1,140
	05/26/05	< 100	< 1	< 5	67	< 2	< 1	53,000	< 10	< 10	1.6	120	< 3	77,000 J	< 10	< 0.2 UJ	< 20	1,300	< 5	< 1	170,000 J	< 1	< 10	< 20	750
	03/17/05	< 100	< 1	< 5	47	< 2	< 1	40,000 J	< 10	< 10	1.7	120	< 3	55,000	< 10	< 0.2	< 20	1,300	< 5	< 1	140,000	< 1	< 10	< 20	820 J-
	03/17/05	< 100	< 1	< 5	50	< 2	< 1	40,000 J	< 10	< 10	1.6	130	< 3	55,000	< 10	< 0.2	< 20	1,400	< 5	< 1	140,000	< 1	< 10	< 20	830 J-
	03/17/05	< 100 U	< 2 U	< 2 U	51.1	< 1 U	< 1 U	40,800	< 10 U	< 1 U	< 2 U	< 100 U	< 1 U	61,800	< 10 U	< 0.2 U	5.99	< 5,000 UN	< 2 U	< 1 U	157,000 J	< 1 U	< 10 U	< 20 U	817
	12/14/04	< 100	< 1	< 5	140	< 2	< 1	60,000 J	< 10	< 10	1.1	130	< 3	100,000	< 10	< 0.2	< 20	760	< 5	< 1	190,000	< 1	11	< 20	1,220
	08/12/04	< 100	< 1	< 5	150	< 2	< 1	54,000	< 10	< 10	2	< 100	< 3	94,000	33	< 0.2	< 20	810	< 5	< 1	170,000	< 1	11	< 20	1,300
	05/28/04	< 100	< 1	< 5	43	< 2	< 1	46,000	< 10	< 10	< 1	< 100	< 3	66,000	18	< .2	< 20	1,600	< 5	< 1	160,000	< 1	< 10	< 20	830
	05/28/04	< 100	< 1	< 5	42	< 2	< 1	45,000	< 10	< 10	1.1	< 100	< 3	65,000	16	< .2	< 20	1,700	< 5	< 1	150,000	< 1	< 10	< 20	840
	03/18/04	< 100	< 1	< 5	40	< 2	< 1	47,000	< 10	< 10	1.6	100	< 3	68,000	< 10	< 0.2	< 20	1,600	< 5	< 1 UJ	160,000	< 1	< 10	< 20	830 J
	03/18/04	< 100	< 1	< 5	40	< 2	< 1	45,000	< 10	< 10	2.1	< 100	< 3	67,000	< 10	< 0.2	< 20	1,700	< 5	< 1 UJ	160,000	< 1	< 10	< 20	890 J
	12/09/03	< 100	1.5	< 5	37	< 2	< 1	61,000	< 10	< 10	2.7	280	< 3	90,000	< 10	< 0.2	< 20	2,100	< 5	< 1 UJ	190,000	< 1	< 10	< 20	940
	08/20/03	< 100	< 1	< 5	26	< 2	< 1	55,000	< 10	< 10	< 1	450	< 3	84,000	< 10	< 0.2	< 20	2,000	< 5	< 1 UJ	180,000	< 1	< 10	< 20 UJ	1,090
	06/10/03	< 100	< 1	< 5	31	< 2	< 1	48,000	< 10	< 10	1.6	< 100	< 3	66,000	11	< 0.2	< 20	2,300	< 5	< 1	140,000	< 1	< 10	< 20	830
	03/19/03	< 100 UJ	< 1	2.2	47	< 1	< 1	83,000 J	4.9 J	< 1	1.5	< 100	< 3	140,000 J	16 J	< 0.2	4.9	1,900	< 5	< 1 UJ	260,000 J	< 1	< 10	< 10	1,170
	02/10/03	NA	< 60	8.7	47	< 1	< 10	NA	< 10	< 7	< 10	< 300	< 3	120,000	29	< 0.2	< 30	NA	< 5	< 7	NA	< 2	< 10	< 20	NA
	02/10/03	NA	< 60	10	44	< 1	< 10	NA	< 10	< 7	< 10	< 300	< 3	120,000	26	< 0.2	< 30	NA	< 5	< 7	NA	< 2	< 10	< 20	NA
	12/23/02	NA	< 60	13 J-	29	< 1	< 10	NA	< 10	< 7	< 10	480	< 3	120,000	96	< 0.2	38	NA	5.6	< 7	NA	< 2	< 10	< 20	1,300
	12/23/02	NA	< 60	< 5 UJ	26	< 1	< 10	NA	12	< 7	< 10	< 300	< 3	130,000	60	< 0.2	< 30	NA	7.7	< 7	NA	< 2	11	< 20	1,300

Table A-15-3
Results of Total and Dissolved Metals and TDS Analyses
Landfill 10
Presidio of San Francisco, California

Well Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6020	SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW7040/ SW7470A	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	SW6020	SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
LF10SP01 ² (Total)	12/06/06	< 100	< 1	< 5	15	< 2	< 1	33,000	< 10	< 10	< 1	670	< 3	37,000	150	< 0.2	< 20	4,400	< 5	< 1	48,000 J	< 1	< 10	< 20	350 J-
	12/06/06	< 100	< 1	9.6	60	< 2	< 1	39,000 J	< 10	< 10	3.1	22,000	4.8	39,000	360	< 0.2	< 20	4,300	< 5	< 1	50,000 J	< 1	13	< 20	NA
(Total)	03/17/05	< 100	< 1	< 5	12	< 2	< 1	34,000 J	< 10	< 10	< 1	450	< 3	35,000	170	< 0.2	< 20	3,000	< 5	< 1	45,000	< 1	< 10	< 20	360 J-
	03/17/05	< 100	< 1	< 5	14	< 2	< 1	33,000	< 10	< 10	< 1	1,000	< 3	35,000	180	< 0.2	< 20	3,000	< 5	< 1	46,000	< 1	< 10	< 20	NA
(Total)	12/14/04	< 100	< 1	< 5	14	< 2	< 1	37,000 J	< 10	< 10	< 1	290	< 3	41,000	170	< 0.2	< 20	3,400	< 5	< 1	57,000	< 1	< 10	< 20	430
	12/14/04	100	< 1	6	23	< 2	< 1	39,000 J	< 10	< 10	1.3	3,400	6.8	44,000	260	< 0.2	< 20	3,400	< 5	< 1	59,000	< 1	< 10	< 20	NA
(Total)	05/26/04	< 100	< 1	< 5	12	< 2	< 1	36,000	< 10	< 10	< 1	210	< 3	40,000	200	< 0.2	< 20	3,500	< 5	< 1	53,000	< 1	< 10	< 20	460
	05/26/04	< 100	< 1	9.4	40	< 2	< 1	39,000	< 10	< 10	2.9	13,000	12	40,000	540	< 0.2	< 20	3,400	< 5	< 1	52,000	< 1	< 10	22	--
(Total)	03/10/04	120	< 1	< 5	74	< 2	< 1	39,000	< 10	< 10	1.3	9,700	32	38,000	470	< 0.2	< 20	3,100	< 5	< 1	50,000	1.8	10	74	360
(Total)	12/03/03	< 100	< 60	7.7	50	< 2	< 5	35,000	< 10	< 20	< 10	12,000	4.4	42,000	1,400	< 0.2	< 20	3,600	< 5	< 5	58,000	< 5	< 10	< 20	420
DUP1203031B (Total)	12/03/03	< 100	< 60	< 5	18	< 2	< 5	31,000	< 10	< 20	< 10	2,500	< 3	40,000	240	< 0.2	< 20	3,500	< 5	< 5	56,000	< 5	< 10	140	350
LF10SP01CL (Total)	12/03/03	< 1000	< 5	12	34	< 1	< 1	41,000	< 10	< 7	< 10	7,900	3.2	39,000	560	< 0.2	< 10	3,800	< 5	< 1	57,000	< 2	< 10	< 20	390
(Total)	08/19/03	< 100	< 1	< 5	16	< 2	< 1	37,000	< 10	< 10	< 1	1,200	< 3	42,000	200	< 0.2	< 20	3,100	< 5	< 1 UJ	58,000	< 1	< 10	< 20 UJ	360
	06/10/03	< 100	< 1	< 5	10	< 2	< 1	36,000	< 10	< 10	< 1	< 100	< 3	38,000	75	< 0.2	< 20	2,900	< 5	< 1	50,000	< 1	< 10	< 20	360
	12/05/02	NA	< 60	< 5	40	< 1	< 10	NA	< 10	< 7	< 10	< 300	< 3	40,000	200	< .2	< 30	NA	< 5	< 7	NA	< 2	< 10	< 20	400

Notes
All metal results represent dissolved metals, unless indicated as "total" in the left-hand column, for total metal results.
1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in their respective quarterly report.
2 - Beginning with the Second Quarter 2003, the Trust requested that all surface water seep samples be analyzed for total metals instead of dissolved metals. During Second Quarter 2003, the project laboratory filtered the metals sample for LF10SP01 and, therefore, the results are dissolved metals. Beginning with the Second Quarter 2004, the Trust requested that all surface water seep samples be analyzed for dissolved and total metals. Samples analyzed for total metals are not filtered in the field.
Groundwater samples collected from monitoring wells LF10GW01 through LF10GW100 were field filtered and analyzed for dissolved metals, except for samples collected from LF10GW100 during December 2002 and February 2003, which were analyzed for total metals.
CL suffix denotes a quality control duplicate sample was sent to the control laboratory.
Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.
Table 11 in the main report identifies current and historical data qualifiers.
µg/L - micrograms per liter
mg/L - milligrams per liter
NA - Not analyzed

Table A-15-4
Groundwater Elevation Summary
Landfill 10
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
LF10GW01	12/04/06	9.25	115.59	106.34	MW
	08/14/06	7.15	115.59	108.44	MW
	05/22/06	5.69	115.59	109.90	MW
	03/06/06	5.45	115.59	110.14	MW
	11/28/05	10.75	115.59	104.84	MW
	08/29/05	8.15	115.59	107.44	MW
	05/23/05	6.60	115.59	108.99	MW
	03/14/05	5.90	115.59	109.69	MW
	12/13/04	10.41	115.59	105.18	MW
	08/09/04	10.70	115.59	104.89	MW
	05/24/04	8.20	115.59	107.39	MW
	03/08/04	7.05	115.59	108.54	MW
	12/01/03	12.15	115.59	103.44	MW
	08/11/03	10.94	115.59	104.65	MW
	06/02/03	8.55	115.59	107.04	MW
	03/10/03	7.43	115.59	108.16	MW
	12/02/02	11.98	115.59	103.61	MW
	08/26/02	10.69	115.59	104.90	MW
	05/28/02	7.59	115.59	108.00	MW
	03/04/02	7.23	115.59	108.36	MW
	11/26/01	12.80	115.59	102.79	MW
	08/27/01	11.94	115.59	103.65	MW
	05/08/01	10.59	115.59	105.00	MW
LF10GW02	12/04/06	4.20	105.67	101.47	MW
	08/14/06	NM	105.67	NM	MW
	05/22/06	NM	105.67	NM	MW
	03/06/06	2.89	105.67	102.78	MW
	11/28/05	4.98	105.67	100.69	MW
	08/29/05	4.25	105.67	101.42	MW
	05/23/05	3.45	105.67	102.22	MW
	03/14/05	3.60	105.67	102.07	MW
	12/13/04	5.20	105.67	100.47	MW
	08/09/04	4.80	105.67	100.87	MW
	05/24/04	4.47	105.67	101.20	MW
	03/08/04	4.57	105.67	101.10	MW
	12/01/03	5.43	105.67	100.24	MW
	08/11/03	5.00	105.67	100.67	MW
	06/02/03	4.71	105.67	100.96	MW
	03/10/03	4.59	105.67	101.08	MW
	12/02/02	5.07	105.67	100.60	MW
	08/26/02	4.38	105.67	101.29	MW
	05/28/02	3.91	105.67	101.76	MW
	03/04/02	4.10	105.67	101.57	MW
	11/26/01	5.25	105.67	100.42	MW
	08/27/01	4.70	105.67	100.97	MW
	05/08/01	Not Located	105.67	--	MW
LF10GW03	12/04/06	42.00	180.80	138.80	MW
	08/14/06	40.35	180.80	140.45	MW
	05/22/06	36.35	180.80	144.45	MW
	03/06/06	37.74	180.80	143.06	MW
	11/28/05	42.85	180.80	137.95	MW
	08/29/05	41.4	180.80	139.40	MW
	05/23/05	38.75	180.80	142.05	MW
	03/14/05	37.73	180.80	143.07	MW
	12/13/04	43.5	180.80	137.30	MW
	08/09/04	41.98	180.80	138.82	MW

Table A-15-4
Groundwater Elevation Summary
Landfill 10
Presidio of San Francisco, California

Well ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
LF10GW03	05/24/04	41.45	180.80	139.35	MW
	03/08/04	39.15	180.80	141.65	MW
	12/01/03	43.6	180.80	137.20	MW
	08/11/03	42.43	180.80	138.37	MW
	06/02/03	41.30	180.80	139.50	MW
	03/10/03	40.55	180.80	140.25	MW
	12/02/02	43.39	180.80	137.41	MW
	08/26/02	41.91	180.80	138.89	MW
	05/28/02	40.45	180.80	140.35	MW
	03/04/02	38.55	180.80	142.25	MW
	11/26/01	43.37	180.80	137.43	MW
	08/27/01	42.45	180.80	138.35	MW
	05/08/01	40.75	180.80	140.05	MW
LF10GW100 ²	12/04/06	39.30	175.30	136.00	MW
	08/14/06	38.73	175.30	136.57	MW
	05/22/06	40.39	175.30	134.91	MW
	03/06/06	38.29	175.30	137.01	MW
	11/28/05	41.16	175.30	134.14	MW
	08/29/05	41.2	175.30	134.10	MW
	05/23/05	39.25	175.30	136.05	MW
	03/14/05	39.68	175.30	135.62	MW
	12/13/04	42.6	175.30	132.70	MW
	08/09/04	41.74	175.30	133.56	MW
	05/24/04	40.05	175.30	135.25	MW
	03/08/04	39.91	175.30	135.39	MW
	12/01/03	42.88	175.30	132.42	MW
	08/11/03	41.55	175.30	133.75	MW
	06/02/03	39.20	175.30	136.10	MW
	03/10/03	39.65	175.30	135.65	MW
LF10SP01	12/04/06	Flowing	--	109.0 ³	Seep
	08/14/06	NM	--	NM	Seep
	05/22/06	NM	--	NM	Seep
	03/06/06	Flowing	--	109.0 ³	Seep
	11/28/05	Flowing	--	109.0 ³	Seep
	08/29/05	Not flowing	--	109.0 ³	Seep
	05/23/05	Not flowing	--	109.0 ³	Seep
	03/14/05	Flowing	--	109.0 ³	Seep
	12/13/04	Flowing	--	109.0 ³	Seep
	08/09/04	Not flowing	--	109.0 ³	Seep
	05/24/04	Flowing	--	109.0 ³	Seep
	03/08/04	Flowing	--	109.0 ³	Seep
	12/01/03	Flowing	--	109.0 ³	Seep
	08/11/03	Not flowing	--	109.0 ³	Seep

Notes

1 - All depth to water measurements are an average of three measurements recorded in the field.

2 - The lid of monitoring well LF10GW100 has been surveyed by the Trust (175.60 feet PLLW). The elevation difference between the monitoring well lid and the top of casing was measured in the field and has been verified to be 0.30 feet. Therefore, the LF10GW100 top of casing elevation is approximately 175.30 feet PLLW.

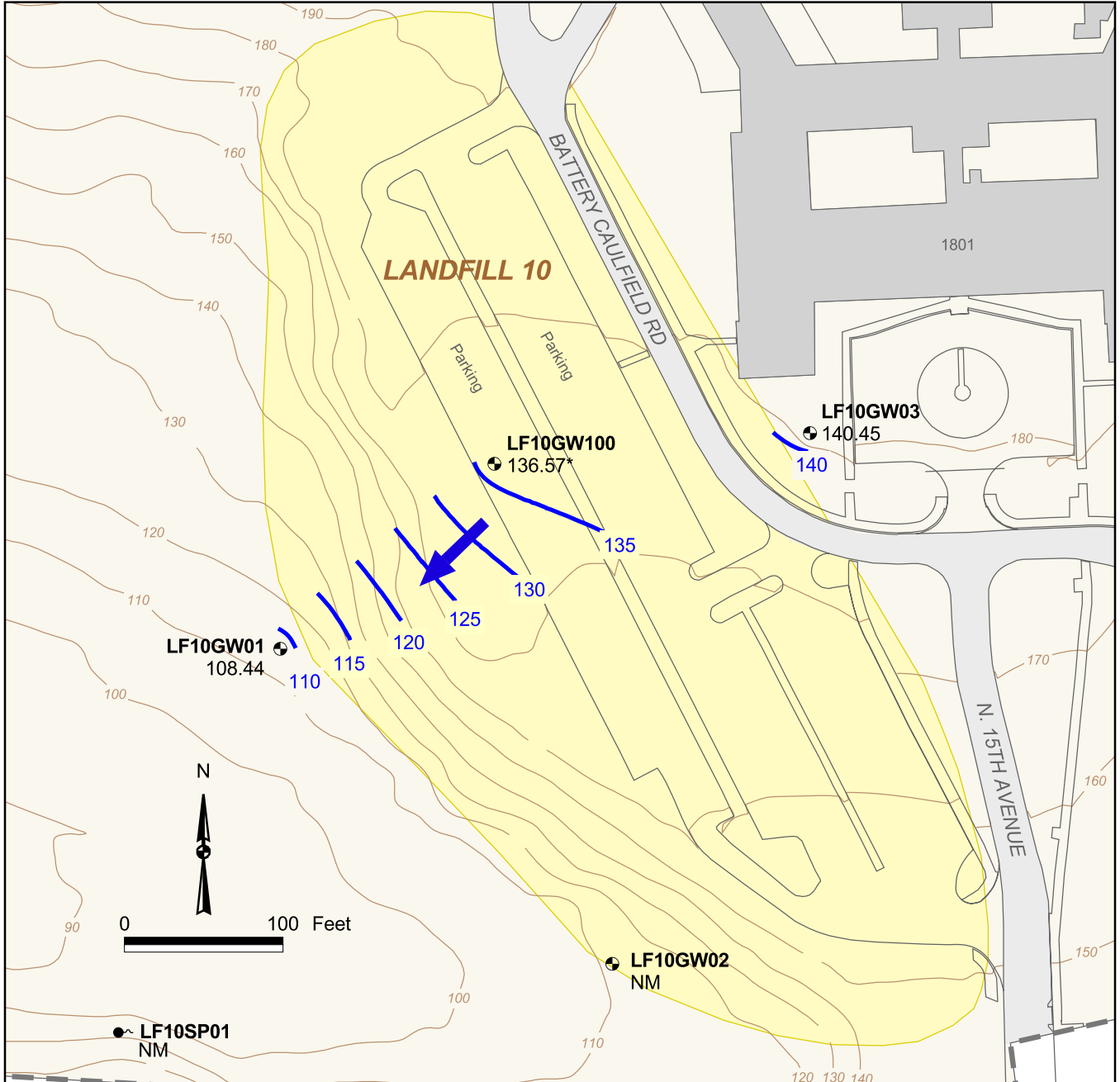
3 - Approximate elevation.

MW- Monitoring well

NM - Not measured, location was not accessible

feet PLLW - feet above Presidio Lower Low Water vertical datum

Treadwell & Rollo 2893.04\Q4_2006A_15.APR 04/2007



LEGEND

- | | | | | |
|--|--|--|------------------------|---|
| | Approximate Direction of Groundwater Flow | | LF10GW03 140.45 | Groundwater Monitoring Well |
| | Groundwater Contour (Contour Interval : 5 ft) | | LF10SP01 | Surface Water Seep at the headwater of Lobos Creek; location is approximate |
| | Presidio Boundary | | * | Groundwater elevation used for contouring is considered approximate (refer to Table A-15-4 for details) |
| | Topographic Contour (Contour Interval : 10 ft) | | NM | Not Measured. Inaccessible due to overgrown vegetation. |
| | 1801 Building and Number | | | |
| | Approximate Extent of Landfill | | | |

Notes:
Groundwater elevation data collected on 14 August 2006.

Horizontal Datum: NAD 27, CA State Plane Coordinates, Zone 3, feet

Vertical Datums: (groundwater) Presidio Lower Low Water (ft. PLLW)
(topography) North American Vertical Datum, NAVD88

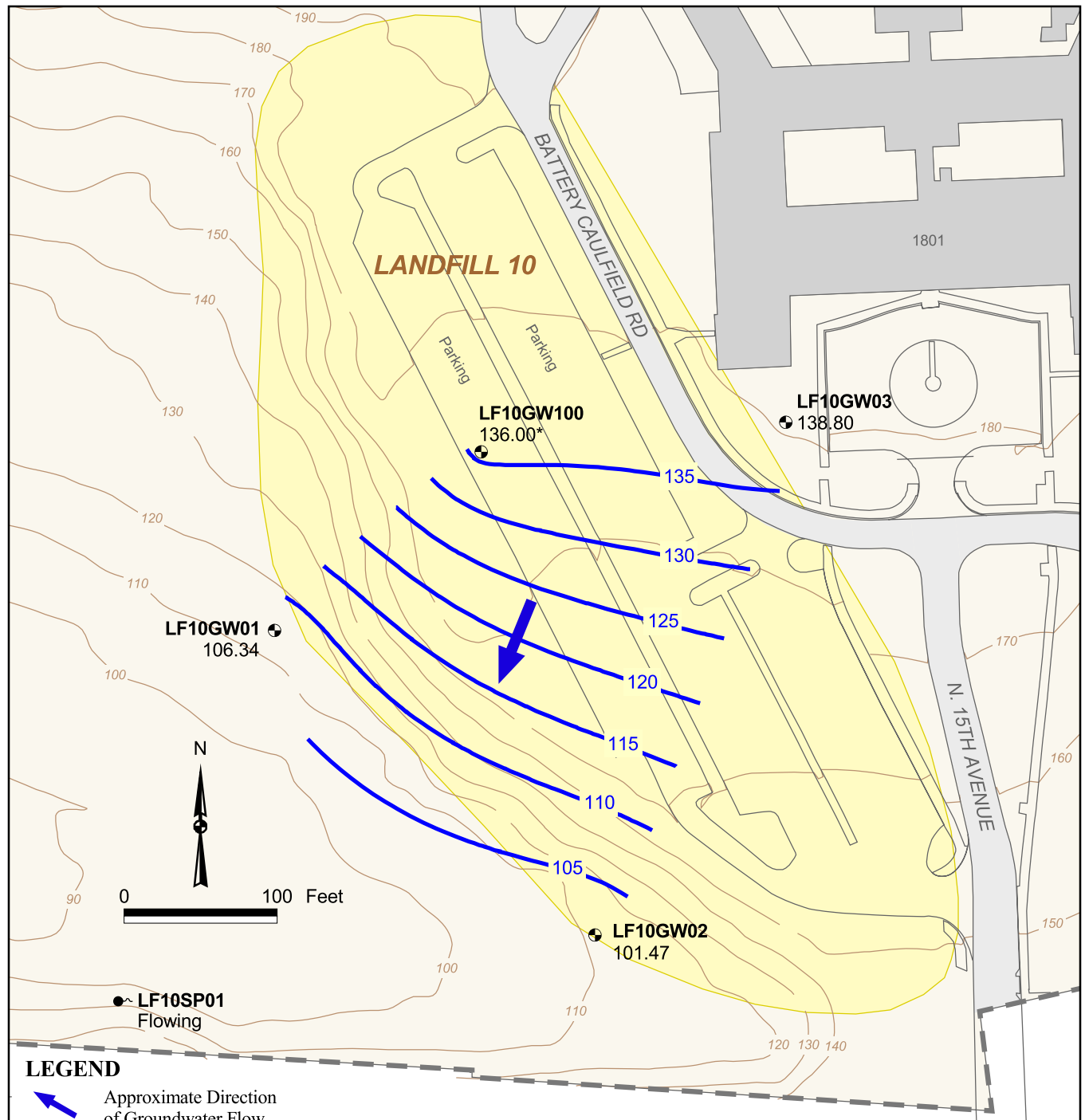
**LANDFILL 10 SITE PLAN
AND 14 AUGUST 2006
GROUNDWATER ELEVATION MAP**

Treadwell&Rollo



Presidio Trust
34 Graham Street
P.O. Box 29052
San Francisco, CA 94129-0052
415/561-5300
fax 561-5315
April 2007

FIGURE A-15-1



LEGEND

- Approximate Direction of Groundwater Flow
- Groundwater Contour (Contour Interval : 5 ft)
- Presidio Boundary
- Topographic Contour (Contour Interval : 10 ft)
- 1801 Building and Number
- Approximate Extent of Landfill

- LF10GW03** 138.80 Groundwater Monitoring Well December 2006 Groundwater Elevations
- LF10SP01** Surface Water Seep at the headwater of Lobos Creek; location is approximate
- * Groundwater elevation used for contouring is considered approximate (refer to Table A-15-4 for details)

Notes:
Groundwater elevation data collected on 4 December 2006.

Horizontal Datum: NAD 27, CA State Plane Coordinates, Zone 3, feet

Vertical Datums: (groundwater) Presidio Lower Low Water (ft. PLLW)
(topography) North American Vertical Datum, NAVD88

LANDFILL 10 SITE PLAN AND 4 DECEMBER 2006 GROUNDWATER ELEVATION MAP

Treadwell&Rollo



Presidio Trust

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April 2007

FIGURE A-15-2

Third Quarter 2006

MONITORING WELL SAMPLING LOG (Normal, Low Flow, and Low Yield)

Site / Area Landfill 10
 Project Number 2893
 Recorded By DA

Well No. LF10GW03
 Well Type ☒ Monitor ☐ Extraction ☐ Other
 Sampled by DA Date 8/17/06

WELL PURGING

PURGE VOLUME

Well casing diameter
☐ 2-inch ☒ 4-inch ☐ Other
 Well Total Depth (TD, ft. below TOC): 37.88
 Depth to Water (WL, ft. below TOC): 40.48
 Depth to free phase (FP, ft. below TOC):
 Number of borehole volumes to be purged
☐ 3 ☒ Not Applicable ☐ Other

Liquid in a 1 Foot Section of a Boring (gallons)		
Borehole Size	Casing Size	Water Volume/Ft
8	2	0.9
10	4	1.68
12	4	2.22

PURGE METHOD

☐ Low Flow ☐ Bailor \ Type
☐ Normal ☐ Pump \ Type
☐ Modified (max 5 gpm) ☐ Other

PUMP INTAKE

Near top Depth (ft) _____
 Near Bottom Depth (ft) _____
 Other _____

PURGE VOLUME CALCULATION

11.4 x NA x _____ = _____
 Water Column Length Water Volume/Ft No. Vols

Total Purge Time 9 min

Recharge Rate _____

Purge Rate 0.5 gpm

_____ gals
CALCULATED PURGE VOLUME
 _____ gals
ACTUAL PURGE VOLUME 4.5

GROUNDWATER PARAMETER MEASUREMENTS

Meter Type 111 hammer / 11 inch Turbidimeter

Time	Liters or Gallons	pH	Temp °F	DO (mg/L)	Sp. COND (µS/cm)	ORP (mV)	Turbidity (NTU)	Comments
Init. 1339	0.3	6.5	20.1	—	1220	—	31	
1342	1.5	6.4	20.4	—	1016	—	28	
1345	3.0	6.4	20.1	—	980	—	53	
1348	4.5	6.4	20.2	✓	907	—	43	
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Comments _____ Purge water storage/disposal ☐ Drilled onsite ☒ Other Baker Tanks

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled 8/17/06, 1358

Purging Equipment Pump - Type _____ Bailer - Type Disposable Other _____
 Sample Filtered: Yes ☒ Filtered Sample Analysis: _____

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments
LF10GW03	1X12 NP Amber 31.40 ml IKL was	CFI	248	

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.
Trip	
Rinse	
Transfer	
Other:	

MONITORING WELL SAMPLING LOG (Normal, Low Flow, and Low Yield)

Site / Area Landfill 10
 Project Number 2893
 Recorded By DR

Well No. LF10 GW 100
 Well Type ☒ Monitor ☐ Extraction ☐ Other
 Sampled by WJ Date 8/17/06

WELL PURGING

PURGE VOLUME

Well casing diameter
☐ 2-inch ☒ 4-inch ☐ Other
 Well Total Depth (TD, ft. below TOC): 54.66
 Depth to Water (WL, ft. below TOC): 37.93
 Depth to free phase (FP, ft. below TOC):

Number of borehole volumes to be purged
☒ 3 ☐ Not Applicable ☐ Other

Liquid in a 1 Foot Section of a Boring (gallons)

Borehole Size	Casing Size	Water Volume/Ft
6	4	1.1
10	4	1.68
12	4	2.22

PURGE METHOD

☐ Low Flow ☐ Bailor \ Type
☒ Normal ☐ Pump \ Type
☐ Modified (max 5 gpm) ☐ Other

PUMP INTAKE

☒ Near top Depth (ft) 40'
☒ Near Bottom Depth (ft) 53'
☐ Other

PURGE VOLUME CALCULATION

11.83 x 1.1 x 3 = 58.5 gals
 Water Column Length Water Volume/Ft No. Vols

Total Purge Time 3 min

Recharge Rate

Purge Rate 5 gpm

CALCULATED PURGE VOLUME

37.02 gals

ACTUAL PURGE VOLUME 37

GROUNDWATER PARAMETER MEASUREMENTS

Meter Type Ultrasonic / In situ Turbidity

Time	Liters or Gallons	pH	Temp (C) °F	DO (mg/L)	Sp. COND (µS/cm)	ORP (mV)	Turbidity (NTU)	Comments
1303	18.51	7.0	19.9	—	1790	—	54	
1307	37.02	6.8	19.8	—	1781	—	89	
* Well dewatered at 38 gal.								
0851	—	6.6	17.7	—	1834	—	2	DTW = 38.02
/								
/								
/								
/								
/								
/								
/								
/								
/								
/								
/								
/								
/								
/								
/								
/								

Comments well dewatered Purge water storage/disposal ☐ Drilled onsite ☒ Other Baker Tank

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled 8/18/06 1055

Purging Equipment Pump - Type

Bailer - Type disp

Other

Sample Filtered: Yes ☒ No ☐

Filtered Sample Analysis:

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments
LF10 GW 100	3x40 ml 16L Vials	CT	2155	
↓	1X1L NP Amber	↓		

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.
Trip	
Rinsate	
Transfer	
Other:	

Fourth Quarter 2006

Environmental and Geotechnical Consultant

Site / Area LF10
Project Number 2893
Recorded By BR

Well No. LF106W02
Well Type ☒ Monitor ☐ Extraction ☐ Other _____
PER Pete Date 12/6/06

PURGE VOLUME

Well casing diameter ☐ 2-inch ☒ 4-inch ☐ Other

Well Total Depth (TD, ft. below TOC) : 13.10

Depth to Water (WL, ft. below TOC) : 3.96

Depth to free phase (FP, ft. below TOC) :

Number of borehole volumes to be purged
☐ 3 ☒ Not Applicable ☐ Other

PURGE VOLUME CALCULATION

Water Column Length _____ X _____ X _____
 Water Volume/ft _____
 Total Purge Time _____
 Recharge Rate _____ Purge Rate 32 1.5/3 min

PURGE METHOD

☐ Low Flow	☒ Bailer \ Type
☐ Normal	☐ Pump \ Type
☒ Modified (max 5 gpm)	☐ Other

PUMP INTAKE

Near top	Depth (ft)	_____
Near Bottom	Depth (ft)	_____
Other		_____

GROUNDWATER PARAMETER MEASUREMENTS

Meter Type M-9000L YSI DO/Hack Turb.

[illegible]

Comments	Purge water storage/disposal	☒ Drilled onsite	☒ Other <i>on site tank</i>
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WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled 12-6-06 / 1350

Purging Equipment: Pump - Type _____ Bailer - Type dispe Other _____
Sample Filtered: ☒ No Filtered Sample Analysis: dis. metals

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments
LF106WOL	Np 1 x 1 Liter poly	Q&T	2078	XXXXXXXXXX
	1 x HNO3 poly			
	3 x HCl vials			
	1 Np Amber			

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.
Trip	
Pinstate	
Transfer	
Other:	

Site / Area CT10
Project Number 2893
Recorded By BR

Well No. LF10SP01
Well Type ☒ Monitor ☐ Extraction ☐ Other
Peter Date 12-6-06

PURGE VOLUME

Well casing diameter ☐ 2-inch ☐ 4-inch ☒ Other

Borehole Size	Casing Size	Water Volume/Ft
8	2	0.9
10	4	1.68
12	4	2.22

Number of borahole volumes to be purged
☐ 3 ☒ Not Applicable ☐ Other

PURGE VOLUME CALCULATION

	X		X
Water Column Length		Water Volume/ft	
Total Purge Time			
Recharge Rate		Purge Rate	

PURGE METHOD

☐ Low Flow ☐ Bailer \ Type _____
☐ Normal ☐ Pump \ Type _____
☐ Modified (max 5 gpm) ☒ Other *Surface*

PUMP INTAKE

Near top	Depth (ft)	_____
Near Bottom	Depth (ft)	_____
Other		_____

GROUNDWATER PARAMETER MEASUREMENTS

Meter Type mylon L / Hach Turb /

[illegible]

Comments	Purge water storage/disposal	☒ Drummed onsite	☒ Other on site tank
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WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled 12-8-06 / 1405

Purging Equipment Pump - Type Bailer - Type DISP - for fill Other
Sample Filtered: Yes / No Filtered Sample Analysis: DISP metal

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments
LF10SP01	3 NP 11.2 poly	C&T	2078	MS/MSD
	6x HNO3 poly			
	8 HCl vials			
	3 NP Amb. 1/10			

QUALITY CONTROL SAMPLES

Duplicate Samples

Original Sample No.	Duplicate Sample No.

Blank Samples

Type	Sample No.
Trip	
Pinstate	
Transfer	
Other:	

**COMMISSARY/POST EXCHANGE AREA
APPENDIX SECTION A-16
SEMI-ANNUAL GROUNDWATER MONITORING REPORT
THIRD AND FOURTH QUARTERS 2006
Presidio of San Francisco, California**

1.0 INTRODUCTION AND BACKGROUND

The Commissary/Post Exchange (PX) Area is located in the north-central portion of the Presidio (Figure 1), in the area surrounding the Commissary (Building 610) and the PX (Building 605). Site elevations range from approximately 9 to 15 feet above the PLLW datum and the ground surface slopes gently to the north-northwest, towards San Francisco Bay.

Prior to the construction of the Commissary and Crissy Field Tidal Marsh, the area was part of the Motor Pool used by the Army for vehicle fueling and maintenance and included aboveground gasoline storage tanks (ASTs), underground fuel and waste oil storage tanks (USTs), a pump shed and an auto shop. The area was also used for the loading and unloading of railroad tank cars and was crossed by now abandoned underground fuel distribution pipelines.

Three wells (610GW101 through 610GW103) were installed at the site in 2001 as part of an interim removal action. These wells have been sampled quarterly since August 2001. Samples from these wells were analyzed for TPH, BTEX and general water chemistry. Additional monitoring wells were installed as part of Site Investigation (SI) activities in 2002 and 2003. Metals and TDS analyses, sampling of the additional wells, and two surface water seep sampling locations (610SP01 and 610SP02) were added to the groundwater monitoring program beginning in the Third Quarter 2002.

To evaluate changing redox conditions, pH, temperature and oxygen-reduction potential (ORP) were added to the program in the First Quarter 2006. The *Technical Memorandum, Evaluation of Arsenic and Other Metals in Groundwater at Three Corrective Action Plan Sites, Presidio of San Francisco, San Francisco, California* (MACTEC, 2006a), concluded that ORP is a good indicator for evaluating changing redox conditions. The pH, temperature and ORP data are presented in Table A-16-1 and will be used in the ongoing redox evaluations at CAP sites.

Summaries of analytical results are presented in Tables A-16-1 through A-16-7.

2.0 SITE DESCRIPTION AND GEOLOGY

Based on historical groundwater level measurements, groundwater beneath the Commissary/PX Area does not appear to be tidally influenced and is typically present from approximately 3 to 6 feet bgs (Treadwell & Rollo, 2003a). Groundwater beneath the site generally flows northward towards the San Francisco Bay.

The Commissary and Crissy Field Tidal Marsh are located in an area of former tidal marshland. This marshland was filled in 1915 with hydraulically placed sand obtained from offshore sources (referred to as “the 1915 sand”). More recently, additional fill material was placed on top of the 1915 sand. The 1915 sand is laterally continuous over Crissy Field and locally ranges between 3 to 6 feet thick. The 1915 sand is underlain by native, highly plastic clay (Bay Mud) (Treadwell & Rollo, 2003a).

3.0 COMMISSARY/PX CORRECTIVE ACTION PLAN

The Revised Final CAP (Treadwell & Rollo, 2006) was approved by the Trust, NPS and all stakeholders.

Phase I of the CAP is currently ongoing (Geomatrix, 2006). Once Phase I of the CAP is completed, groundwater monitoring will be conducted in accordance with the Revised Final CAP.

4.0 GROUNDWATER MONITORING

Prior to Third Quarter 2006, the Commissary/PX Area had twelve associated groundwater monitoring wells and two surface water seep locations (Figure A-16-1), however, monitoring well 600GW101 was approved for removal from the program reducing the number of associated wells to eleven. During the Third Quarter 2006, groundwater elevations were collected at all eleven site wells. Both seeps were observed to be flowing during the Third Quarter 2006.

Water level meters were calibrated on 14 August and the calibration logs can be found in Appendix B. Groundwater elevation field forms can be found in Appendix C.

No groundwater elevations were collected from the Commissary/PX Area during the Fourth Quarter 2006 due to CAP implementation.

4.1 Groundwater-Level Measurements and Interpretation

During the Third Quarter 2006, the Commissary/PX Area monitoring wells were gauged between 11:50 PM and 1:04 PM on 14 August 2006. Observed low tide on 14 August 2006 was at 4:42 AM with a magnitude of 0.79 feet above PLLW.

Although groundwater does not appear to be tidally influenced at the Commissary/PX Area, as a precaution, an attempt was made during the Third Quarter 2006 to gauge the Commissary/PX monitoring well water levels within a period of approximately one hour so that any potential tidal effects on groundwater elevation were minimal. Predicted and observed tidal times and magnitudes during the Third Quarter 2006 are presented in Table 2A and Figure 2A of the main text, respectively. Tidal predictions and observations are taken from the National Oceanic and Atmospheric Administration's (NOAA) Center for Operational Oceanographic Products and Services (CO-Ops) website. The Third Quarter 2006 Commissary/PX Area groundwater elevations are presented in Table A-16-8. A groundwater elevation map for the Commissary/PX Area during the Third Quarter 2006 is illustrated on Figure A-16-2.

During the Third Quarter 2006, groundwater elevations at the Commissary/PX Area ranged from 5.96 to 14.64 feet above PLLW in monitoring wells 600GW102 and 600GW105, respectively (Figure A-16-2). The groundwater elevation measured in 600GW108 was the lowest to date within this well. Surface water seeps 610SP01 and 610SP02 were flowing during the Third Quarter 2006.

Groundwater generally flowed north towards the Crissy Field Marsh and San Francisco Bay (Figure A-16-2) during the Third Quarter 2006. However, the new low groundwater elevation measured in 600GW108, changes the groundwater contours in the area of this well to depict more of a westerly flow direction than normally observed in this area. During the Third Quarter 2006, groundwater gradients in the Commissary/PX Area were estimated to be approximately 0.012 feet per foot in the western half and 0.016 feet per foot in the eastern half of the area.

Groundwater elevations, gradients, and flow directions are generally consistent with historical values and interpretations, with the exception of the new low elevation in 600GW108. No significant trends or observations were identified at the Commissary/PX Area during the Third Quarter 2006.

4.2 Monitoring Well Purging and Sampling

No Commissary/PX Area monitoring wells or seeps were scheduled to be sampled during Third or Fourth Quarters 2006, however, seep 610SP01 was sampled during the Third Quarter because a petroleum-like sheen was noted on the water in the area of that sample location.

All samples were collected using methods shown in Tables 1A and in accordance with procedures described in the FSP (Treadwell & Rollo, 2001a).

Purge equipment, purging volumes, purge water parameters, and sampling equipment for each monitoring well are described in the purge records at the conclusion of this subsection. Purge water was stored, for future disposal, in one of two 2,800-gallon aboveground polyethylene storage tanks, which are located at the Central Magazine.

4.3 Groundwater Analytical Program

All groundwater samples collected from Commissary/PX Area seep 610SP01 were submitted to the project laboratory and analyzed for general chemistry, 14 dissolved metals, total metals, TDS, sulfide, TPHg, TPHd, and TPHfo. The appropriate sampling containers, preservatives, and maximum holding times for each analytical method are shown in Table 5. Sample containers used for each well are described in the purge records at the conclusion of this section.

5.0 GROUNDWATER ANALYTICAL RESULTS

During the Third Quarters 2006, groundwater samples collected from the Commissary/PX Area Seep 610SP01 were analyzed for general chemistry, 14 dissolved metals, total metals, TDS, sulfide, TPHg, TPHd, and TPHfo.

The TPHfo standard currently being used is a TPH as motor oil standard, as defined by the QAPP, with a carbon range of C₂₄ to C₃₆.

Groundwater analytical results are presented in Tables A-16-1 through A-16-7.

5.1 Dissolved Oxygen

Dissolved oxygen results are presented in Table A-16-1. Dissolved oxygen meters are calibrated prior to sampling each day, as described in Section 5.4.1.1 of the main text.

During the Third Quarter 2006, the concentration of dissolved oxygen measured within 610SP01 was 1.37 mg/L, this dissolved oxygen concentration was within the range of previously measured concentrations at this location.

5.2 General Chemistry Results

General chemistry results are presented in Table A-16-1. General chemistry results measured in 610SP01 during the Third Quarter 2006 were within the range of concentrations previously detected at this location.

5.3 TPH Results

The results of the TPH analyses are included in Table A-16-2. TPHg, THPd and TPHfo were not detected within the sample from 610SP01 during the Third Quarter 2006, which indicates that the “petroleum” sheen observed may have been biological.

5.4 BTEX and MTBE Results

The results of the BTEX and MTBE analyses are included in Table A-16-3. MTBE was detected at a new high concentration of 4.3 within the sample from 610SP01 during the Third Quarter 2006. MTBE has not been detected within 610SP01 since Third Quarter 2001.

BTEX were not detected within 610SP01 during the Third Quarter 2006.

5.5 Total and Dissolved Metals Results

Total and dissolved metals results are presented in Table A-16-5. Total results are identified as such in the leftmost column.

The majority of dissolved metal concentrations detected within seep 610SP01 were within historical ranges and were also below their applicable CAP-specified cleanup levels. Dissolved arsenic was detected at 7.7 µg/L, below the 10 µg/L cleanup level. Dissolved magnesium and manganese were the only metals detected outside of historical bounds. Both were detected at concentrations higher than previously reported, neither have a CAP-specified cleanup level.

The table below summarize new high and low total metal analytical results for the Third Quarter 2006 within Commissary/PX Area surface water seep 610SP01 sample when compared to historical data, and provides the range and frequency of historical results. The total number of analyses may vary depending on the sampling frequency, the date of commencement of sampling, and the number of duplicate analyses performed. Only the new high or the new low is shown.

Location	Analyte	Detects / Samples	Historical Data		New High/Low Third & Fourth Quarter 2006		Units
			Minimum	Maximum	Minimum	Maximum	
Metals, Total							
610SP01	Aluminum	4 / 4	170 *	16,000	--	29,000	µg/L
	Calcium	4 / 4	52,000	230,000	--	270,000 *	µg/L
	Magnesium	4 / 4	40,000	360,000	--	460,000	µg/L
	Manganese	5 / 5	550	2,800	--	4,800	µg/L
	Sodium	4 / 4	140,000	3,500,000	--	3,800,000	µg/L

An asterisk (*) indicates qualified data in the above table.

CAP-specified cleanup levels do not apply to total metals concentrations.

Total metal results are generally significantly higher than their associated dissolved metals results because soil particles present in the samples likely contributed to the total metals concentrations. The total metals data collected to date at the Commissary/PX Area do not exhibit specific upward or downward concentration trends.

6.0 GROUNDWATER REDOX PARAMETERS

In addition to the above evaluation, a modified redox diagram was developed for seep 610SP01. The redox diagram was generated using the Sequence™ program and concentrations of dissolved oxygen, nitrate, manganese, iron, sulfate and methane and is plotted on Figure A-16-3. The redox diagram consists of multiple axes, with each individual axis representing one of the above analytes and is associated with the seep location. The relative shape of each redox diagram represents an approximation of the redox state within the well studied. In general, the larger the polygon the more oxidizing the groundwater environment is at the well location, conversely, the smaller the polygon the more reducing the environment.

7.0 CONCLUSIONS & RECOMMENDATIONS

No CAP-specified cleanup levels were exceeded during either the Third Quarter 2006. No other significant findings or data trends were observed during the Third Quarter 2006.

Groundwater monitoring will not be performed within Commissary/PX Area monitoring wells until the CAP is finalized and implemented at which point groundwater monitoring will be conducted in accordance with the Revised Final CAP.

Table A-16-1
Results of General Chemistry Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Sulfide	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ SW9056	E300.0/ SW9056	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	mV	pH units	°C
600GW101 DUP0601053A	05/23/06	660	660	90	0.24	0.37	< 0.05	< 0.05	1.1	0.14	-125.9	7.03	16.75
	03/08/06	610	610	74	1.19	0.35	< 0.05	< 0.05	11	0.13	-122.9	7.37	13.37
	12/01/05	660	660	99	0.3	0.42	< 0.05	< 0.05	0.63	< 0.04	NR	NR	NR
	09/01/05	680	680	97	0.4	0.38	< 0.05	< 0.05	< 0.5	< 0.04	NR	NR	NR
	06/01/05	800	800	96	0.3	0.49	< 0.05	< 0.05	0.65	0.07	NR	NR	NR
	06/01/05	740	740	95	--	0.51	< 0.05	< 0.05	0.63	< 0.04	NR	NR	NR
	03/21/05	720	720	110	0.10	0.33	< 0.05	< 0.05	6.3	0.12	NR	NR	NR
	12/22/04	NA	NA	NA	0.17	NA	NA	NA	NA	NA	NR	NR	NR
	12/16/04	830	830	130	0.2	0.39	< 0.05	< 0.05	0.51	0.07	NR	NR	NR
	08/10/04	690	690	120	0.1	0.37	< 0.05	< 0.05	< 0.5	< 0.04	NR	NR	NR
	05/26/04	660	660	110	NM	0.42	< 0.05	< 0.05	0.91	NA	NR	NR	NR
	03/09/04	710	710	110	0.3	0.4	< 0.05	< 0.05	0.9	NA	NR	NR	NR
	12/02/03	660	660	98	0.7	0.44	< 0.05	< 0.05	< 0.5	NA	NR	NR	NR
	08/13/03	720	720	100	0.1	0.63	< 0.25 UJ	< 0.25 UJ	< 2.5	NA	NR	NR	NR
	06/09/03	680	680	97	0.4	0.57	< 0.05	< 0.05	< 0.5	NA	NR	NR	NR
	03/11/03	650	650	120	0.2	0.37	< 0.05	< 0.05	32	NA	NR	NR	NR
	12/04/02	670	670	100	0.8	0.46	< 0.05	< 0.05	0.83	NA	NR	NR	NR
	09/10/02	670	670	100	0.8	0.52	< 0.05	< 0.05	< 1	NA	NR	NR	NR
600GW102	03/15/06	450	450	330	1.59	0.16	0.48	< 0.05	22	< 0.04	-39	6.5	14.5
	04/06/05	550	550	150	1.2	0.18	0.46	< 0.05	35	< 0.04 UJ	NR	NR	NR
	03/09/04	630	630	230	0.7	0.16	0.55	< 0.05	24	NA	NR	NR	NR
	12/02/03	310	310	200	1	0.18	2	< 0.05	51	NA	NR	NR	NR
	08/13/03	570	570	870	1.1	< 1	< 0.5 UJ	< 0.5 UJ	59	NA	NR	NR	NR
	06/09/03	650	650	440	0.6	< 0.2	< 0.1	< 0.1	16	NA	NR	NR	NR
	03/11/03	480	480	170	0.5	0.2	0.11	< 0.05	26	NA	NR	NR	NR
	12/04/02	350	350	460	1	0.23	0.15	< 0.05	58	NA	NR	NR	NR
600GW103	09/10/02	400	400	220	0.7	0.37	1.1	< 0.05	38	NA	NR	NR	NR
	03/15/06	550	550	100	0.91	0.26	< 0.05	< 0.05	< 0.5	< 0.04	-100	6.6	11.1
	04/11/05	470	470	93	0.6	0.33	< 0.05	< 0.05	< 0.5	< 0.04	NR	NR	NR
	03/09/04	520	520	110	0.6	0.28	< 0.05	< 0.05	< 0.5	NA	NR	NR	NR

Table A-16-1
Results of General Chemistry Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Sulfide	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ SW9056	E300.0/ SW9056	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	mV	pH units	°C
600GW103 DUP0813033A	12/02/03	540	540	100	1.8	0.27	< 0.05	< 0.05	< 0.5	NA	NR	NR	NR
	08/13/03	550	550	97	0.3	< 0.5	< 0.25 UJ	< 0.25 UJ	< 2.5	NA	NR	NR	NR
	08/13/03	540	540	98	--	0.5	< 0.25 UJ	< 0.25 UJ	< 2.5	NA	NR	NR	NR
	06/09/03	550	550	130	0.7	0.36	< 0.05	< 0.05	< 0.5	NA	NR	NR	NR
	03/11/03	530	530	120	0.2	0.22	< 0.05	< 0.05	< 0.5	NA	NR	NR	NR
	12/04/02	500	500	97	0.9	0.22	< 0.05	< 0.05	2.9	NA	NR	NR	NR
	09/10/02	550	550	110	0.7	0.35	< 0.05	< 0.05	1.5	NA	NR	NR	NR
600GW104 DUP1202033A	03/15/06	470	470	22	2.07	0.35	0.1	< 0.05	110	< 0.04	-59	6.9	12.9
	04/11/05	480	480	24	0.9	0.39	0.08	< 0.05	160	< 0.04	NR	NR	NR
	03/09/04	290	290	43	2.1	0.39	< 0.05	< 0.05	110	NA	NR	NR	NR
	12/02/03	330	330	42	1.8	0.29	0.13 J-	< 0.05 UJ	71	NA	NR	NR	NR
	12/02/03	310	310	43	--	0.3	0.2	< 0.05	72	NA	NR	NR	NR
	08/18/03	410	410	38	0.4	0.35	0.35	< 0.05	99	NA	NR	NR	NR
	06/05/03	350	350	48	0.6	0.29	0.69	< 0.05	130	NA	NR	NR	NR
DUP0311032A 600GW104CL	03/11/03	390	390	59	0.3	0.2	0.64	< 0.05	280	NA	NR	NR	NR
	03/11/03	440	440	59	--	0.22	0.63	< 0.05	300	NA	NR	NR	NR
	03/11/03	400	400	54	--	0.24 J-	0.55	< 0.05 UJ	280	NA	NR	NR	NR
	12/04/02	420	420	55	2.2	0.18	< 0.05	< 0.05	170	NA	NR	NR	NR
DUP0910021A	09/10/02	450	450	59	1.0	0.24	0.17	< 0.05	180	NA	NR	NR	NR
	09/10/02	450	450	58	--	0.22	0.17	< 0.05	180	NA	NR	NR	NR
600GW105	05/23/06	370	370	86	0.24	0.29	0.79	< 0.05	56	< 0.04	-26.8	6.96	14.53
	03/08/06	320	320	84	0.4	0.25	1.3	< 0.05	68	< 0.04	-23.3	7.35	13
	12/01/05	380	380	96	0.5	0.31	0.9	< 0.05	68	< 0.04	NR	NR	NR
	09/01/05	320	320	98	0.4	0.27	0.9	< 0.05	65	< 0.04	NR	NR	NR
	06/01/05	710	710	89	0.7	< 5	< 2.5	< 2.5	60	< 0.04	NR	NR	NR
	03/22/05	310	310	86	0.2	0.25	1.9	< 0.05	67	< 0.04	NR	NR	NR
	12/22/04	NA	NA	NA	0.14	NA	NA	NA	NA	NA	NR	NR	NR
	12/16/04	350	350	88	0.2	0.27	1.6	< 0.05	69	< 0.04	NR	NR	NR
	08/12/04	340	340	93	0.6	0.28	1	< 0.05	61	< 0.04	NR	NR	NR

Table A-16-1
Results of General Chemistry Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Sulfide	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ SW9056	E300.0/ SW9056	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	mV	pH units	°C
600GW105 DUP0605033A	03/10/04	340	340	90	0.2	0.3	0.58	< 0.05	62	NA	NR	NR	NR
	12/02/03	320	320	86	0.7	0.28	1.4	< 0.05	63	NA	NR	NR	NR
	08/13/03	370	370	86	0.2	< 0.5	1.1 b,J-	< 0.25 UJ	64	NA	NR	NR	NR
	06/05/03	370	370	90	0.4	0.28	2.7	0.07	74	NA	NR	NR	NR
	06/05/03	320	320	90	--	0.28	2.6	0.07	77	NA	NR	NR	NR
	03/12/03	290	290	83	0.3	0.25	2.5	< 0.05	76	NA	NR	NR	NR
	12/04/02	370	370	88	0.6	0.24	2.3	< 0.05	78	NA	NR	NR	NR
	09/11/02	260	260	99	1.0	< 0.1 U	3.8	< 0.05	79	NA	NR	NR	NR
600GW106	05/23/06	230	230	37	0.17	0.17	4.8	0.11	86	0.07	-71.9	6.94	14.24
	03/08/06	210	210	47	1.61	0.16	5.6	0.06	92	< 0.04	124.9	6.94	12.76
	12/01/05	170	170	46	0.4	0.19	6.6	0.08	83	< 0.04	NR	NR	NR
	09/01/05	210	210	28	0.3	0.18	3.8	0.16	48	< 0.04	NR	NR	NR
	06/01/05	650	650	28	0.44	0.24	3.3	0.17	42	< 0.04	NR	NR	NR
	03/29/05	250	250	33	0.2	0.2	3.1	< 0.05	40	< 0.04	NR	NR	NR
	12/22/04	NA	NA	NA	0.19	NA	NA	NA	NA	NA	NR	NR	NR
	12/17/04	240	240	35	0.2	0.2	3.5	0.08	46	< 0.04	NR	NR	NR
	08/10/04	210	210	30	0.1	0.19	2.8	0.19	39	< 0.04	NR	NR	NR
	03/10/04	190	190	34	0.6	0.2	2.8	0.09	40	NA	NR	NR	NR
	12/02/03	210	210	36	0.7	0.21	3.1	0.15	50	NA	NR	NR	NR
	08/13/03	240	240	33	0.2	< 0.5	2.7 b,J-	< 0.25 UJ	48	NA	NR	NR	NR
	06/05/03	220	220	37	0.4	0.22	2.5	0.07	46	NA	NR	NR	NR
	03/12/03	240	240	39	0.2	0.19	3.3	0.09	44	NA	NR	NR	NR
	12/04/02	200	200	42	1.0	0.19	3.9	0.1	56	NA	NR	NR	NR
	09/11/02	250	250	44	0.9	< 0.1 U	2.7	0.089	44	NA	NR	NR	NR
600GW107	03/20/06	590	590	39	1.05	< 0.1	0.29	< 0.05	29	< 0.04 R	101.9	6.93	14.5
	04/11/05	550	550	40	0.3	0.11	0.24	< 0.05	46	< 0.04	NR	NR	NR
	03/10/04	590	590	43	0.3	0.13	< 0.05	< 0.05	14	NA	NR	NR	NR
	12/03/03	NA	NA	NA	0.7	NA	NA	NA	NA	NA	NR	NR	NR
	08/13/03	600	600	45	0.1	< 0.5	< 0.25 UJ	0.76 b,J-	3.2	NA	NR	NR	NR
	06/06/03	540	540	53	0.6	0.17	0.1	0.5	4.8	NA	NR	NR	NR
	03/11/03	520	520	54	1.6	0.13	0.05	< 0.05	12	NA	NR	NR	NR
	12/04/02	NA	NA	NA	0.9	NA	NA	NA	NA	NA	NR	NR	NR

Table A-16-1
Results of General Chemistry Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Sulfide	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ SW9056	E300.0/ SW9056	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	mV	pH units	°C
600GW108	05/23/06	190	190	18	0.51	0.65	0.43	< 0.05	22	0.07	-104.2	7.06	5.49
DUP0307061B	03/07/06	310	310	82	0.68	0.55	0.97	< 0.05	28	< 0.04	-50.5	7.64	12.94
	03/07/06	300	300	74	--	0.54	1.2	< 0.05	33	< 0.04	NR	NR	NR
DUP1130051A	11/30/05	200 J+	200	92	0.5	0.62	0.32	< 0.05	33	< 0.04	NR	NR	NR
	11/30/05	180 J+	180	92	--	0.63	0.33	< 0.05	33	< 0.04	NR	NR	NR
600GW108CL	11/30/05	191	191	91.7	--	< 1 U	0.38	< 0.1 U	32.7	< 0.05 U	NR	NR	NR
DUP0321052B	09/01/05	180	180	48	0.4	0.66	4	0.24	51	< 0.04	NR	NR	NR
	06/01/05	200	200	49	0.37	0.67	6.7	0.24	55	< 0.04	NR	NR	NR
	03/21/05	310	310	47	0.3	0.61	8.3	0.15	90	< 0.04	NR	NR	NR
	03/21/05	260	260	46	--	0.64	8.3	0.15	88	< 0.04	NR	NR	NR
	12/22/04	NA	NA	NA	0.12	NA	NA	NA	NA	NA	NR	NR	NR
	12/17/04	170	170	51	0.2	0.8	7.8	0.08	52	NA	NR	NR	NR
	08/10/04	190	190	25	0.2	1.1	3.4	0.12	26	NA	NR	NR	NR
	05/26/04	110	110	35	0.78	1.1	4.8	< 0.05	38	NA	NR	NR	NR
	03/10/04	150	150	48	0.8	0.75	7.3	< 0.05	55	NA	NR	NR	NR
	12/03/03	150	150	46	0.7	0.82	7.4	< 0.05	52	NA	NR	NR	NR
	08/13/03	160	160	29	0.3	1.4	3.8 b,J-	< 0.25 UJ	35	NA	NR	NR	NR
	06/05/03	230	230	45	0.6	1	6.9	< 0.05	50	NA	NR	NR	NR
	03/12/03	260	260	46	1.0	0.75	7.5	< 0.05	52	NA	NR	NR	NR
	12/09/02	160	160	48	1.0	0.89	7.6	< 0.05	56	NA	NR	NR	NR
	12/09/02	160	160	47	--	0.94	7.6	< 0.05	52	NA	NR	NR	NR
	12/09/02	160	160	46	--	1	7.2 J-	0.18 J-	55	NA	NR	NR	NR
	09/10/02	140	140	42	1.0	1.1	5.7	< 0.05	46	NA	NR	NR	NR
600GW109	03/14/06	380	380	44	0.43	< 0.1	0.52	< 0.05	41	< 0.04	-61	6.8	13.2
	04/01/05	290	290	39	0.7	< 0.1	0.74	< 0.05	47	< 0.04	NR	NR	NR
	03/09/04	300	300	42	0.4	< 0.1	0.26	< 0.05	51	NA	NR	NR	NR
	12/03/03	310	310	38	0.8	< 0.1	< 0.05	< 0.05	16	NA	NR	NR	NR
	08/13/03	440	440	55	0.2	< 0.5	< 0.25 UJ	< 0.25 UJ	20	NA	NR	NR	NR
	06/05/03	310	310	46	0.7	< 0.1	0.39	< 0.05	30	NA	NR	NR	NR
	03/11/03	430	430	51	0.4	< 0.1	1	< 0.05	44	NA	NR	NR	NR
	12/04/02	280	280	44	1.6	< 0.1	0.33	< 0.05	51	NA	NR	NR	NR
	09/10/02	290	290	45	1.0	0.12	0.54	< 0.05	50	NA	NR	NR	NR

Table A-16-1
Results of General Chemistry Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Sulfide	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ SW9056	E300.0/ SW9056	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	mV	pH units	°C
610GW101	05/23/06	460	460	43	0.4	0.2	< 0.05	< 0.05	0.63	< 0.04	-133	7.21	18.8
	03/07/06	400	400	32	0.9	0.19	< 0.05	< 0.05	7.5	< 0.04	-218.6	9.62	12.1
	12/01/05	500	500	46	0.79	0.18	< 0.05	< 0.05	4	< 0.04	NR	NR	NR
	08/31/05	490	490	43	0.2	0.18	< 0.05	< 0.05	2.6	< 0.04	NR	NR	NR
DUP0831051A	08/31/05	480	480	42	--	0.18	< 0.05	< 0.05	2.4	< 0.04	NR	NR	NR
	06/02/05	440	440	44	0.28	0.29	< 0.05	< 0.05	< 0.5	< 0.04	NR	NR	NR
	03/21/05	480	480	42	0.2	0.12	0.06	< 0.05	11	< 0.04	NR	NR	NR
	03/21/05	420	420	43	--	0.12	< 0.05	< 0.05	10	< 0.04	NR	NR	NR
DUP0321052A	12/21/04	NA	NA	NA	1.29	NA	NA	NA	NA	NA	NR	NR	NR
	12/15/04	390	390	37	0.2	0.17	< 0.05	< 0.05	10	< 0.04	NR	NR	NR
	12/15/04	390	390	39	--	0.17	< 0.05	< 0.05	10	< 0.04	NR	NR	NR
	12/15/04	352	352	35.4	--	< 0.3 U	0.027 ²		9.88	NA	NR	NR	NR
610GW101CL	08/10/04	490	490	47	0.1	0.19	< 0.05	< 0.05	4.9	< 0.04	NR	NR	NR
	05/26/04	450	450	52	0.62	0.22	< 0.05	< 0.05	1.2	NA	NR	NR	NR
	03/10/04	450	450	45	0.2	0.17	< 0.05	< 0.05	4.6	NA	NR	NR	NR
	03/10/04	440	440	43	--	0.16	< 0.05	< 0.05	5.1	NA	NR	NR	NR
DUP0310043A	03/10/04	430	430	45	--	0.18	< 0.1 UJ	< 0.05 UJ	5.3	NA	NR	NR	NR
	12/02/03	390	390	28	1.0	0.19	< 0.05	< 0.05	7.7	NA	NR	NR	NR
	08/14/03	560	560	46	0.3	0.25	< 0.05 UJ	< 0.05 UJ	3.1	NA	NR	NR	NR
	08/14/03	510	510	48	--	0.28	< 0.05 UJ	< 0.05 UJ	2.5	NA	NR	NR	NR
610GW101CL	08/14/03	470	470	55	--	0.27 J+	< 0.1 UJ	< 0.05	2.1	NA	NR	NR	NR
	06/04/03	460	460	51	0.6	0.26	< 0.05	< 0.05	1.8	NA	NR	NR	NR
	06/04/03	450	450	51	--	0.29	< 0.05	< 0.05	1.9	NA	NR	NR	NR
	06/04/03	450	450	58	--	0.27	< 0.1 R	< 0.05	1.6	NA	NR	NR	NR
DUP0604033B	03/11/03	450	450	48	0.9	0.2	< 0.05	< 0.05	6.7	NA	NR	NR	NR
	12/03/02	490	490	57	1	0.2	< 0.05	< 0.05	< 0.5	NA	NR	NR	NR
	08/29/02	490	490	56	1.1	0.3	< 0.25	< 0.25	0.72	NA	NR	NR	NR
	05/29/02	460	460	52	0.8	0.3	< 0.05	< 0.05	9.3	NA	NR	NR	NR
610GW101CL	03/05/02	450	450	53	0.6	0.35	< 0.05	< 0.05	6.3	NA	NR	NR	NR
	12/03/01	450	450	48	0.6	0.29	< 0.5 UJ	< 0.5 UJ	50	NA	NR	NR	NR
	08/29/01	460	460	52	0.6	0.38	< 0.05	< 0.05	6.7	NA	NR	NR	NR

Table A-16-1
Results of General Chemistry Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Sulfide	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ SW9056	E300.0/ SW9056	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	mV	pH units	°C
610GW102	05/23/06	350	350	45	0.36	0.22	0.57	< 0.05	46	< 0.04	-101.7	7.21	17.6
	03/07/06	420	420	38	0.49	0.25	< 0.05	< 0.05	68	0.14	-114.9	7.98	13.91
	12/01/05	440	440	90	0.65	0.22	< 0.05	< 0.05	< 0.5	< 0.04	NR	NR	NR
	08/31/05	390	390	55	0.2	0.23	< 0.05	< 0.05	< 0.5	< 0.04	NR	NR	NR
	06/02/05	400	400	47	0.16	0.24	< 0.05	< 0.05	20	0.09	NR	NR	NR
	03/31/05	330	330	50	0.1	0.25	< 0.05	< 0.05	160	0.06	NR	NR	NR
	03/31/05	320	320	49	--	0.26	< 0.05	< 0.05	160	0.08	NR	NR	NR
	03/31/05	354	354	46.4	--	0.35	< 0.1 U	< 0.02 U	134	< 0.04 U	NR	NR	NR
	12/21/04	NA	NA	NA	0.32	NA	NA	NA	NA	NA	NR	NR	NR
	12/15/04	450	450	63	0.2	0.2	< 0.05	< 0.05	39	0.14	NR	NR	NR
DUP0331052C 610GW102CL	08/11/04	360	360	51	0.1	0.23	< 0.05	< 0.05	< 0.5	< 0.04	NR	NR	NR
	08/11/04	370	370	51	--	0.22	< 0.05	< 0.05	< 0.5	< 0.04	NR	NR	NR
	08/11/04	374	374	48	--	0.23	< 0.5 R ³	< 0.5 R ³	< 0.5 J	< 0.1	NR	NR	NR
DUP0811041A 610GW102CL	05/26/04	630	630	45	0.6	0.24	< 0.05	< 0.05	2.4	NA	NR	NR	NR
	03/09/04	420	420	57	0.2	0.23	< 0.05	< 0.05	51	NA	NR	NR	NR
	12/02/03	450	450	62	0.9	0.2	< 0.05	< 0.05	2	NA	NR	NR	NR
	08/18/03	400	400	66	0.2	0.27	< 0.05	< 0.05	2.2	NA	NR	NR	NR
	06/05/03	390	390	74	0.6	0.24	< 0.05	< 0.05	13	NA	NR	NR	NR
	03/11/03	350 J-	350 J-	61	1.8	0.21	< 0.05	< 0.05	66	NA	NR	NR	NR
	03/11/03	370	370	64	--	0.18	< 0.05	< 0.05	67	NA	NR	NR	NR
	12/03/02	420	420	55	0.6	0.19	< 0.05	< 0.05	7.4	NA	NR	NR	NR
	08/29/02	360	360	49	0.9	0.23	< 0.25	< 0.25	19	NA	NR	NR	NR
	05/29/02	360	360	43	0.7	0.3	< 0.05	< 0.05	34	NA	NR	NR	NR
	03/05/02	420	420	54	0.5	0.31	< 0.05	< 0.05	37	NA	NR	NR	NR
	12/03/01	460	460	74	0.7	0.35	< 0.05 UJ	< 0.05 UJ	70	NA	NR	NR	NR
	08/29/01	420	420	57	0.4	0.34	< 0.05	< 0.05	39	NA	NR	NR	NR
DUP0311033A	05/23/06	740	740	47	0.3	0.24	< 0.05	< 0.05	67	0.05	-79	7.16	18.7
	05/23/06	410	410	47	NA	0.24	< 0.05	< 0.05	68	0.08	NA	--	--
	03/07/06	430	430	51	1	0.23	< 0.05	< 0.05	74	< 0.04	-74.6	7.78	14.7
	03/07/06	420	420	50	--	0.23	< 0.05	< 0.05	74	< 0.04	NR	NR	NR
	03/07/06	398	398	54.5	--	< 1 U	< 0.02 U	< 0.02 U	75.1	< 0.05 U UJ	NR	NR	NR
	12/01/05	500	500	170	0.66	0.23	< 0.05	< 0.05	28	< 0.04	NR	NR	NR
610GW103	05/23/06	740	740	47	0.3	0.24	< 0.05	< 0.05	67	0.05	-79	7.16	18.7
DUP0523061A	05/23/06	410	410	47	NA	0.24	< 0.05	< 0.05	68	0.08	NA	--	--
	03/07/06	430	430	51	1	0.23	< 0.05	< 0.05	74	< 0.04	-74.6	7.78	14.7
DUP0307061A	03/07/06	420	420	50	--	0.23	< 0.05	< 0.05	74	< 0.04	NR	NR	NR
610GW103CL	03/07/06	398	398	54.5	--	< 1 U	< 0.02 U	< 0.02 U	75.1	< 0.05 U UJ	NR	NR	NR
	12/01/05	500	500	170	0.66	0.23	< 0.05	< 0.05	28	< 0.04	NR	NR	NR

Table A-16-1
Results of General Chemistry Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Sulfide	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ SW9056	E300.0/ SW9056	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	mV	pH units	°C
610GW103 DUP0901051A	09/01/05	490	490	67	0.3	0.23	< 0.05	< 0.05	1.5	< 0.04	NR	NR	NR
	09/01/05	460	460	67	--	0.24	< 0.05	< 0.05	1.4	< 0.04	NR	NR	NR
	06/02/05	470	470	120	0.2	0.26	< 0.05	< 0.05	55	0.06	NR	NR	NR
	03/22/05	400	400	93	0.7	0.22	0.08	< 0.05	140	< 0.04	NR	NR	NR
	12/21/04	NA	NA	NA	0.33	NA	NA	NA	NA	NA	NR	NR	NR
	12/16/04	530	530	270	0.2	0.2	< 0.05	< 0.05	47	< 0.04	NR	NR	NR
	08/10/04	480	480	72	0.2	0.2	< 0.05	< 0.05	5.5	< 0.04	NR	NR	NR
	05/26/04	430	430	60	0.5	0.23	< 0.05	< 0.05	26	NA	NR	NR	NR
DUP1203033A 610GW103CL	03/09/04	440	440	60	0.5	0.21	< 0.05	< 0.05	83	NA	NR	NR	NR
	12/03/03	510	510	78	1.1	0.16	< 0.05	< 0.05	13	NA	NR	NR	NR
	12/03/03	510	510	77	--	0.19	< 0.05	< 0.05	14	NA	NR	NR	NR
	12/03/03	490	490	86	--	0.11	< 0.1	< 0.05	14.9	NA	NR	NR	NR
	08/18/03	470	470	64	0.2	0.28	< 0.05	< 0.05	9.6	NA	NR	NR	NR
	08/18/03	470	470	67	--	0.28	< 0.05	< 0.05	10	NA	NR	NR	NR
	06/05/03	460	460	62	1	0.23	< 0.05	< 0.05	30	NA	NR	NR	NR
	03/11/03	490	490	76	0.6	0.26	< 0.05	< 0.05	93	NA	NR	NR	NR
DUP1203022A	12/03/02	460	460	67	2.1	0.23	< 0.05	< 0.05	25	NA	NR	NR	NR
	12/03/02	460	460	69	--	0.23	< 0.05	< 0.05	24	NA	NR	NR	NR
	08/29/02	450	450	61	1.8	0.32	< 0.25	< 0.25	18	NA	NR	NR	NR
	05/30/02	460	460	62	0.8	0.24	< 0.05	< 0.05	27	NA	NR	NR	NR
	05/30/02	470	470	65	--	0.3	< 0.05	< 0.05	26	NA	NR	NR	NR
	05/30/02	450	450	57	--	< 1	< 1	< 1	26	NA	NR	NR	NR
	03/05/02	430	430	71	0.8	0.33	< 0.05	< 0.05	110	NA	NR	NR	NR
	03/05/02	420	420	69	--	0.29	< 0.05	< 0.05	110	NA	NR	NR	NR
DUP0305023A 610GW103CL	03/05/02	410	410	65	--	< 1	< 1	< 1	110	NA	NR	NR	NR
	12/03/01	320	320	46	0.2	0.33	0.04 J,J	< 0.05 UJ	260	NA	NR	NR	NR
	12/03/01	330	330	47	--	0.35	0.05 J,J	< 0.05 UJ	240	NA	NR	NR	NR
	12/03/01	310	310	49	--	< 1.0	< 1.0	< 1.0	300	NA	NR	NR	NR
	08/29/01	460	460	110	0.5	0.32	< 0.05	< 0.05	40	NA	NR	NR	NR

Table A-16-1
Results of General Chemistry Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Sulfide	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ SW9056	E300.0/ SW9056	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	mV	pH units	°C
610SP01 DUP1209031A 610SP01CL	08/17/06	410	410	6,000	1.37	< 1	< 0.5	< 1	830	0.22 J-	78.5	6.20	17.2
	03/21/06	470	470	99	1.27	0.24	< 0.05	< 0.05	62	< 0.04 R	-84	7.37	14.2
	09/01/05	440	440	7,300	0.4	< 1	< 0.5	< 1	930	< 0.04	NR	NR	NR
	06/01/05	430	430	350	1.6	0.21	< 0.05	< 0.05	130	< 0.04	NR	NR	NR
	12/21/04	NA	NA	NA	NM	NA	NA	NA	NA	NA	NR	NR	NR
	12/17/04	580	580	2,300	1.1	< 0.5	< 0.25	< 0.25	350	< 0.04	NR	NR	NR
	08/13/04	610	610	4,400	0.74	< 1	0.5	< 0.5	560	0.44	NR	NR	NR
	05/28/04	530	530	62	1.6	0.49	< 0.05	< 0.05	33	NA	NR	NR	NR
	03/16/04	460	460	79	1.45	0.26	0.16	< 0.05	160	NA	NR	NR	NR
	12/09/03	800	800	1,800	6.2	0.38	< 0.15	< 0.15	250	NA	NR	NR	NR
	12/09/03	570	570	1,700	--	0.34	< 0.15	< 0.15	220	NA	NR	NR	NR
	12/09/03	620	620	1,280	--	0.23	< 0.1	< 0.05	225	NA	NR	NR	NR
	08/21/03	570	570	1,400	0.2	1.3	< 0.25	< 0.25	180	NA	NR	NR	NR
	06/11/03	380	380	5,800	0.8	< 2	< 1	< 1	780	NA	NR	NR	NR
	03/20/03	580	580	2,200	0.8	< 0.5	< 0.25	< 0.25	360	NA	NR	NR	NR
610SP02	12/11/02	370	370	5,500	0.8	< 1	< 0.5	< 0.5	820	NA	NR	NR	NR
	09/05/02	NA	NA	NA	0.4	NA	NA	NA	NA	NA	NR	NR	NR
	03/21/06	450	450	120	0.39	0.26	< 0.05	< 0.05	73	< 0.04 R	-84	7.29	13.7
	09/01/05	530	530	1200	0.8	0.21	< 0.1	< 0.15	140	< 0.04	NR	NR	NR
	06/01/05	510	510	170	1.7	0.33	< 0.05	< 0.05	37	< 0.04	NR	NR	NR
	12/21/04	NA	NA	NA	NM	NA	NA	NA	NA	NA	NR	NR	NR
	12/17/04	560	560	580	NM	0.29	< 0.05	< 0.05	89	< 0.04	NR	NR	NR
	08/13/04	420	420	12,000	0.84	< 2.5	< 1.3	< 1.3	1,700	0.08	NR	NR	NR
	05/28/04	620	620	220	NM	0.47	0.12	< 0.05	49	NA	NR	NR	NR
	03/16/04	490	490	480	0.99	0.44	< 0.05	< 0.05	130	NA	NR	NR	NR
	12/09/03	550	550	3,300	4.5	< 0.5	< 0.25	< 0.25	440	NA	NR	NR	NR
	08/21/03	450	450	7,700	0.4	< 2.5	< 1.3	< 1.3	1,100	NA	NR	NR	NR
	06/11/03	570	570	2,700	0.7	< 2	< 1	< 1	360	NA	NR	NR	NR

Table A-16-1
Results of General Chemistry Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	Alkalinity Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Sulfate	Sulfide	ORP	pH	Temperature
	Analytical Method ¹	E310.1	E310.1	E300.0/ SW9056	Field	E300.0/ E340.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ E353.2/ SW9056	E300.0/ SW9056	E300.0/ SW9056	Field	Field	Field
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	mV	pH units	°C
610SP02	03/20/03	460	460	3,700	0.9	< 1	< 0.5	< 0.5	500	NA	NR	NR	NR
	12/11/02	390	390	5,300	1	< 1	< 0.5	< 0.5	740	NA	NR	NR	NR
	09/05/02	NA	NA	NA	1	NA	NA	NA	NA	NA	NR	NR	NR

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - The QC laboratory reported results for Nitrogen as Nitrate and Nitrite combined.

3 - The QC laboratory reported results for Nitrogen as Nitrate and Nitrite combined. However, the combined Nitrogen as Nitrate and Nitrite result (< 0.5 mg/L) was rejected during data validation.

mg/L - milligrams per liter

NA - Not analyzed

NM - Not measured

"--" dissolved oxygen measurements were not taken for duplicate and quality control samples.

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-16-2
Results of TPH Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		770	880	1,200
600GW101 DUP0601053A	05/23/06	390 Y	< 50	< 300
	03/08/06	140 Y	< 50	< 300
	12/01/05	270 Y	< 50	< 300
	09/01/05	290 Y	< 80	< 480
	06/01/05	270 Y	< 50	< 300
	06/01/05	280 Y	< 50	< 300
	03/21/05	390 HY J+	< 50	< 300
	12/16/04	460 HY	< 50	< 300
	08/10/04	390 Y	< 50	< 300
	05/26/04	570 Y	< 50	< 300
	03/09/04	600 HY	< 50	< 300
	12/02/03	340 Y	< 50	< 300
	08/13/03	370 Y	< 50	< 300
	06/09/03	470 Y	< 50	< 300
	03/11/03	630 Y	< 50	< 300
600GW102	12/04/02	310 Y	< 50	< 300
	09/10/02	230 J-	< 100 UJ	< 300 UJ
	03/15/06	< 50	< 50	< 300
	04/06/05	< 50	< 50	< 300
	03/09/04	< 50	< 50	< 300
	12/02/03	< 50	< 50	< 300
	08/13/03	< 50	< 50	< 300
	06/09/03	< 50	< 50	< 300
	03/11/03	< 50	< 50	< 300
600GW103 DUP0813033A	12/04/02	< 50	< 50	< 300
	09/10/02	< 50 UJ	< 100 UJ	< 300 UJ
	03/15/06	< 50	< 50	< 300
	04/11/05	< 50	< 50	< 300
	03/09/04	< 50	< 50	< 300
	12/02/03	< 50	< 50	< 300
	08/13/03	< 50	< 50	< 300
	08/13/03	< 50	< 50	< 300
	06/09/03	< 50	< 50	< 300
600GW104 DUP1202033A DUP0311032A 600GW104CL DUP0910021A	03/11/03	< 50	< 50	< 300
	03/11/03	< 50	< 50	< 300
	03/11/03	< 50	< 50 UJ	< 250
	12/04/02	< 50	< 50	< 300
	09/10/02	< 50 UJ	< 100 UJ	< 300 UJ
	09/10/02	< 50 UJ	< 100 UJ	< 300 UJ
	05/23/06	< 50	< 50	< 300
	03/08/06	< 50	< 50	< 300
	12/01/05	< 50	< 50	< 300
600GW105	09/01/05	< 50	< 50	< 300
	06/01/05	< 50	< 50	< 300
	03/22/05	< 50	< 50	< 300
	12/16/04	< 50	< 50	< 300
	08/12/04	< 50	< 50	< 300
	03/10/04	< 50	< 50	< 300
	12/02/03	< 50	< 50	< 300
	08/13/03	< 50	< 50	< 300

Table A-16-2
Results of TPH Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		770	880	1,200
600GW105 DUP0605033A	06/05/03	< 50	< 50	< 300
	06/05/03	< 50	< 50	< 300
	03/12/03	< 50	< 50	< 300
	12/04/02	< 50	< 50	< 300
	09/11/02	< 50 UJ	< 100 UJ	< 300 UJ
600GW106	05/23/06	< 50	< 50	< 300
	03/08/06	< 50	< 50	< 300
	12/01/05	< 50	< 50	< 300
	09/01/05	< 50	< 50	< 300
	06/01/05	< 50	< 50	< 300
	03/29/05	< 50	< 50	< 300
	12/17/04	< 50	< 50	< 300
	08/10/04	< 50	< 50	< 300
	03/10/04	< 50	< 50	< 300
	12/02/03	< 50	< 50	< 300
	08/13/03	< 50	< 50	< 300
	06/05/03	< 50	< 50	< 300
	03/12/03	< 50	< 50	< 300
	12/04/02	< 50	< 50	< 300
	09/11/02	< 50 UJ	< 100 UJ	< 300 UJ
600GW107	03/20/06	< 50	< 50	< 300
	04/11/05	< 50	< 50	< 300
	03/10/04	< 50	< 50	< 300
	12/03/03	< 50	< 50	< 300
	08/13/03	< 50	170 HY	< 300
	06/06/03	< 50	< 50	< 300
	03/11/03	< 50	85 YH	< 300
	12/04/02	< 50	< 50	< 300
	09/11/02	< 50 UJ	NA	NA
600GW108 DUP0307061B DUP1130051A 600GW108CL DUP0321052B DUP1209022C 600GW108CL	05/23/06	< 50	< 50	< 300
	03/07/06	< 50	< 50	< 300
	03/07/06	< 50	< 50	< 300
	11/30/05	< 50	< 50	< 300
	11/30/05	< 50	< 50	< 300
	11/30/05	< 50 U	< 50 U	< 300 U
	09/01/05	< 50	< 50	< 300
	06/01/05	< 50	< 50	< 300
	03/21/05	< 50	< 50	< 300
	03/21/05	< 50	< 50	< 300
	12/17/04	< 50	< 50	< 300
	08/10/04	< 50	< 50	< 300
	05/26/04	< 50	< 50	< 300
	03/10/04	< 50	< 50	< 300
	12/03/03	< 50	< 50	< 300
	08/13/03	< 50	< 50	< 300
	06/05/03	< 50	< 50	< 300
	03/12/03	< 50	< 50	< 300
	12/09/02	< 50	< 50	< 300
	12/09/02	< 50	< 50	< 300
	12/09/02	< 50	< 50	< 250
	09/10/02	< 50 UJ	< 100 UJ	< 300 UJ
600GW109	03/14/06	< 50	< 50	< 300
	04/01/05	< 50	< 50	< 300
	03/09/04	< 50	< 50	< 300
	12/03/03	< 50	< 50	< 300
	08/13/03	< 50	< 50	< 300
	06/05/03	< 50	< 50	< 300
	03/11/03	< 50	< 50	< 300
	12/04/02	< 50	< 50	< 300
	09/10/02	< 50 UJ	< 100 UJ	< 300 UJ

Table A-16-2
Results of TPH Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		770	880	1,200
610GW101	05/23/06	< 50	< 50	< 300
	03/07/06	< 50	< 50	< 300
	12/01/05	< 50	< 50	< 300
DUP0831051A	08/31/05	< 50	< 50	< 300
	08/31/05	< 50	< 50	< 300
	06/02/05	< 50	< 50	< 300
DUP0321052A	03/21/05	< 50	< 50	< 300
	03/21/05	< 50	< 50	< 300
	12/15/04	< 50	< 50	< 300
DUP1215041A	12/15/04	< 50	< 50	< 300
610GW101CL	12/15/04	< 50 U	< 50 U	< 300 U
DUP0310043A	08/10/04	< 50	< 50	< 300
	05/26/04	< 50	< 50	< 300
	03/10/04	< 50	< 50	< 300
610GW101CL	03/10/04	< 50	< 50	< 300
	03/10/04	< 50	< 48	< 240
	12/02/03	< 50	< 50	< 300
DUP0814033A	08/14/03	< 50	< 50	450
	08/14/03	< 50	< 50	< 300
	08/14/03	< 50	< 48	< 240
610GW101CL	06/04/03	< 50	< 50	< 300
	06/04/03	< 50	< 50	< 300
	06/04/03	< 50	< 50	< 250
DUP0604033B	03/11/03	< 50	380 YH	1,400
	12/03/02	< 50	< 50	< 300
	08/29/02	< 50	< 50	< 300
610GW101CL	05/29/02	< 50	< 50	< 300
	03/05/02	< 50	< 50	< 300
	12/03/01	< 50	< 50	< 300
DUP0811041A	08/29/01	< 50	NA	NA
	05/23/06	50 LY	< 50	< 300
	03/07/06	< 50	< 50	< 300
610GW102	12/01/05	62	< 50	< 300
	08/31/05	55	< 50	< 300
	06/02/05	52	< 50	< 300
DUP0331052C	03/31/05	51	< 50	< 300
	03/31/05	< 50	< 50	< 300
	03/31/05	< 50 U	< 50 U	< 300 U
610GW102CL	12/15/04	64	< 50	< 300
	08/11/04	< 50	< 50	< 300
	08/11/04	50	< 50	< 300
DUP0811041A	08/11/04	< 100	< 100 J-	< 400 UJ
	05/26/04	58 Y	< 50	< 300
	03/09/04	67	< 50	< 300
610GW102CL	12/02/03	83	< 50	< 300
	08/18/03	73 Y	< 50	< 300
	06/05/03	67	< 50	< 300
DUP0311033A	03/11/03	< 50	< 50	< 300
	03/11/03	< 50	< 50	< 300
	12/03/02	55 Y	< 50	< 300
610GW102CL	08/29/02	67	< 50	< 300
	05/29/02	< 50	< 50	< 300
	03/05/02	72	< 50	< 300
DUP0311033A	12/03/01	< 50	< 50	< 300
	08/29/01	230	NA	NA

Table A-16-2
Results of TPH Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
Cleanup Levels ²		770	880	1,200
610GW103	05/23/06	< 50	< 50	< 300
	DUP0523061A	< 50	< 50	< 300
DUP0307061A	03/07/06	< 50	< 50	< 300
	03/07/06	< 50	< 50	< 300
610GW103CL	03/07/06	< 50 U	< 50 U	< 300 U
	12/01/05	< 50	< 50	< 300
DUP0901051A	09/01/05	60 Y	< 50	< 300
	09/01/05	< 50	< 50	< 300
	06/02/05	< 50	< 50	< 300
	03/22/05	< 50	< 50	< 300
	12/16/04	52 HY	< 50	< 300
	08/10/04	61 Y	< 50	< 300
	05/26/04	< 50	< 50	< 300
	03/09/04	69	< 50	< 300
DUP1203033A	12/03/03	64	< 50	< 300
	12/03/03	60	< 50	< 300
610GW103CL	12/03/03	< 50	< 48 A-01,U	< 240
	08/18/03	110 Y	< 50	< 300
DUP0818033A	08/18/03	110 Y	62 Y	< 300
	06/05/03	96	< 50	< 300
	03/11/03	< 50	< 50	< 300
	12/03/02	< 50	< 50	< 300
DUP1203022A	12/03/02	54 Y	< 50	< 300
	08/29/02	59	< 50	< 300
DUP0530022A	05/30/02	88	< 50	< 300
	05/30/02	88	< 50	< 300
610GW103CL	05/30/02	110 g	< 50	< 300
	03/05/02	100	< 50	< 300
610GW103	03/05/02	110	< 50	< 300
	DUP0305023A	110	< 50	< 300
610GW103CL	03/05/02	95 g	< 50 UJ	< 300
	12/03/01	< 50	< 50	< 300
DUP1203011A	12/03/01	< 50	< 50	< 300
	12/03/01	< 50	< 50	< 500
610GW103CL	08/29/01	430	NA	NA
	08/17/06	< 50	< 50	< 300
610SP01	03/21/06	83 Y	< 50	< 300
	09/01/05	67 Y	< 50	< 300
	06/01/05	99 Y	< 50	< 300
	12/17/04	85 HY	< 50	< 300
	08/13/04	51	< 50	< 300
	05/28/04	54	< 50	< 300
	03/16/04	< 50	< 50	< 300
	12/09/03	100 Y	< 50	< 300
DUP1209031A	12/09/03	100 Y	< 50	< 300
	12/09/03	58	< 48	< 240
610SP01CL	08/21/03	< 50	< 50	< 300
	06/11/03	56 Y	< 50	< 300
	03/20/03	81	< 50	< 300
	12/11/02	< 50	< 50	< 300
	09/05/02	< 50	< 50	< 300
	02/14/02	88	< 50	< 300
	08/30/01	80	< 50	< 300
	07/19/01	130 Y	130 Y	< 300
	05/25/01	87	< 50	< 300
	04/05/01	150 Y	80 Y	< 300
	12/27/00	NA	< 50	NA
	08/02/00	450	NA	NA
	06/27/00	170	NA	NA
	05/09/00	480 Y	NA	NA
	04/06/00	460 Y	NA	NA

Table A-16-2
Results of TPH Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		770	880	1,200
610SP01	02/09/00	440 Y	NA	NA
	01/04/00	810	NA	NA
	12/03/99	660 Y	NA	NA
	11/18/99	570	< 50	< 300
610SP02	03/21/06	66 Y	< 50	< 300
	09/01/05	110 Y	< 50	< 300
	06/01/05	120 Y	< 50	< 300
	12/17/04	150 HY	< 50	< 300
	08/13/04	< 50	< 50	< 300
	05/28/04	56	< 50	< 300
	03/16/04	81	< 50	< 300
	12/09/03	240 Y	< 50	< 300
	08/21/03	85	< 50	< 300
	06/11/03	71 Y	< 50	< 300
	03/20/03	97	< 50	< 300
	12/11/02	130 Y	< 50	< 300
	09/05/02	120 Y	< 50	< 300
	02/14/02	140	< 50	< 300
	08/30/01	190	< 50	< 300
	07/19/01	57 Y	250 Y	< 300
	05/25/01	110	170 Y	< 300
	04/05/01	150 Y	63 Y	< 300
	12/27/00	NA	< 50	NA
	08/02/00	67	NA	NA
	06/27/00	73	NA	NA
	05/09/00	280 Y	NA	NA
	04/06/00	110 Y	NA	NA
	02/09/00	210 Y	NA	NA
	12/03/99	95 Y	NA	NA

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - Groundwater cleanup levels were taken from the *Revised Final Corrective Action Plan for the Commissary/Post Exchange Study Area, Presidio of San Francisco, California* (Treadwell & Rollo, 2006)

Concentrations in **BOLD** indicate an exceedance of applicable cleanup levels.

µg/L - micrograms per liter

TPH - Total petroleum hydrocarbons

NA - Not analyzed

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-16-3
Results of VOC Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	Benzene	Chloroform	Ethylbenzene	MTBE	Toluene	Total Xylenes	All Other VOCs
	Analytical Method ¹	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		1	--	43	13	150	130	--
600GW101 DUP0601053A	05/23/06	< 0.5	NA	< 0.5	3.3 C	< 0.5	< 1	NA
	03/08/06	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA
	12/01/05	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA
	09/01/05	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA
	06/01/05	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA
	06/01/05	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA
	03/21/05	< 0.5	NA	< 0.5	2.3	< 0.5	0.54 C	NA
	12/16/04	< 0.5	NA	< 0.5	< 2	< 0.5	2 C	NA
	08/10/04	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	05/26/04	< 0.5	NA	2.2	3.5 C	< 0.5	3.1	NA
	03/09/04	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	12/02/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/13/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/09/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/11/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
600GW102	12/04/02	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	09/10/02	< 0.5	< 0.5	< 0.5	< 2.0	< 0.5	< 1.0	ND
	03/15/06	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	04/06/05	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/09/04	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/02/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/13/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/09/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
600GW103 DUP0813033A	03/11/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/04/02	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	09/10/02	< 0.5	< 0.5	< 0.5	< 2.0	< 0.5	< 1.0	ND
	03/15/06	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	04/11/05	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/09/04	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/02/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/13/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
600GW104 DUP1202033A	08/13/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/09/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/11/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/04/02	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	09/10/02	< 0.5	< 0.5	< 0.5	< 2.0	< 0.5	< 1.0	ND
	03/15/06	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	04/11/05	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/09/04	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP0311032A 600GW104CL DUP0910021A	12/02/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/18/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/05/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/11/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/11/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/11/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/04/02	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	09/10/02	< 0.5	< 0.5	< 0.5	< 2.0	< 0.5	< 1.0	ND
DUP0910021A	09/10/02	< 0.5	< 0.5	< 0.5	< 2.0	< 0.5	< 1.0	ND

Table A-16-3
Results of VOC Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	Benzene	Chloroform	Ethylbenzene	MTBE	Toluene	Total Xylenes	All Other VOCs
	Analytical Method ¹	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		1	--	43	13	150	130	--
600GW105 DUP0605033A	03/08/06	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/22/05	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/10/04	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/02/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/13/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/05/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/05/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/12/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/04/02	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
600GW106	09/11/02	< 0.5	< 0.5	< 0.5	< 2	< 0.5	< 1	ND
	03/08/06	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/29/05	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/10/04	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/02/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/13/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/05/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/12/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/04/02	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
600GW107	09/11/02	< 0.5	< 0.5	< 0.5	< 2	< 0.5	< 1	ND
	03/20/06	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	04/11/05	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/10/04	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/03/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/13/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/06/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/11/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/04/02	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
600GW108 DUP0307061B DUP1130051A 600GW108CL	09/11/02	< 0.5	< 0.5	< 0.5	< 2	< 0.5	< 1	ND
	03/07/06	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/07/06	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	11/30/05	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	11/30/05	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	11/30/05	< 0.5 U	< 0.5 U	< 0.5 U	< 2 U	< 0.5 U	< 1 U	ND
	09/01/05	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	06/01/05	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/21/05	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
DUP0321052B	03/21/05	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	12/17/04	< 0.5	0.7	< 0.5	< 0.5	< 0.5	< 1	ND
	08/10/04	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	05/26/04	< 0.5	11	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/10/04	< 0.5	4.6	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/03/03	< 0.5	7.9	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/13/03	< 0.5	1.3	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/05/03	< 0.5	4.7	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/12/03	< 0.5	3.7	< 0.5	< 0.5	< 0.5	< 0.5	ND
DUP1209022C 600GW108CL	12/09/02	< 0.5	2.7	< 0.5	< 0.5 UJ	< 0.5	< 0.5	ND
	12/09/02	< 0.5	3	< 0.5	< 0.5 UJ	< 0.5	< 0.5	ND
	12/09/02	< 0.5	2.6	< 0.5	< 0.5	< 0.5	< 0.5	ND
	09/10/02	< 0.5	< 0.5	< 0.5	< 2.0	< 0.5	< 1.0	ND

Table A-16-3
Results of VOC Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	Benzene	Chloroform	Ethylbenzene	MTBE	Toluene	Total Xylenes	All Other VOCs
	Analytical Method ¹	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		1	--	43	13	150	130	--
600GW109	03/14/06	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	04/01/05	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 1	ND
	03/09/04	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/03/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	08/13/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	06/05/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	03/11/03	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
	12/04/02	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	ND
610GW101	09/10/02	< 0.5	< 0.5	< 0.5	< 2.0	< 0.5	< 1.0	ND
	05/23/06	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA
	03/07/06	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA
	12/01/05	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA
	08/31/05	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA
	08/31/05	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA
	06/02/05	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA
	03/21/05	< 0.5	NA	< 0.5	2.2	< 0.5	< 1	NA
DUP0831051A	03/21/05	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA
	12/15/04	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA
DUP0321052A	12/15/04	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA
DUP1215041A	12/15/04	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA
610GW101CL	12/15/04	< 0.5 U	NA	< 0.5 U	< 2.5 U	< 0.5 U	< 1 U	NA
DUP0310043A	08/10/04	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	05/26/04	< 0.5	NA	< 0.5	4.3 C	< 0.5	< 0.5	NA
	03/10/04	< 0.5	NA	< 0.5	< 2 C,U	< 0.5	< 0.5	NA
	03/10/04	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	03/10/04	< 0.5	NA	< 0.5	< 2.5	< 0.5	< 0.5	NA
	12/02/03	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	08/14/03	< 0.5	NA	< 0.5	3	< 0.5	< 0.5	NA
	08/14/03	< 0.5	NA	< 0.5	2.9	< 0.5	< 0.5	NA
DUP0814033A	08/14/03	< 0.5	NA	< 0.5	< 2.5	0.81	0.71	NA
610GW101CL	06/04/03	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
DUP0604033B	06/04/03	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
610GW101CL	06/04/03	< 0.5	NA	< 0.5	< 2.5	< 0.5	< 0.5	NA
610GW101CL	03/11/03	< 0.5	NA	< 0.5	2.7	< 0.5	< 0.5	NA
	12/03/02	< 0.5	NA	< 0.5	2.2	< 0.5	< 0.5	NA
	08/29/02	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	05/29/02	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	03/05/02	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	12/03/01	< 0.5	NA	< 0.5	< 2	< 0.5	NA	NA
	08/29/01	< 0.5	NA	< 0.5	< 2	< 0.5	NA	NA
	08/29/01	< 0.5	NA	< 0.5	< 2	< 0.5	NA	NA
610GW102	05/23/06	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA
	03/07/06	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA
	12/01/05	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA
	08/31/05	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA
	06/02/05	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA
	03/31/05	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA
	03/31/05	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA
	03/31/05	< 1 U	NA	< 1 U	< 5 U	< 1 U	< 2 U	NA
	12/15/04	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA

Table A-16-3
Results of VOC Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	Benzene	Chloroform	Ethylbenzene	MTBE	Toluene	Total Xylenes	All Other VOCs
	Analytical Method ¹	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		1	--	43	13	150	130	--
610GW102 DUP0811041A 610GW102CL	08/11/04	< 0.5	NA	< 0.5	2.1	< 0.5	< 0.5	NA
	08/11/04	< 0.5	NA	< 0.5	4.4	< 0.5	< 0.5	NA
	08/11/04	< 1	NA	< 1	< 1 UJ	< 1	< 1	NA
	05/26/04	< 0.5	NA	< 0.5	4.8	< 0.5	< 0.5	NA
	03/09/04	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	12/02/03	0.53	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	08/18/03	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	06/05/03	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	03/11/03	< 0.5	NA	< 0.5	2.4	< 0.5	< 0.5	NA
	03/11/03	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	12/03/02	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	08/29/02	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	05/29/02	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	03/05/02	< 0.5	NA	0.78	< 2	< 0.5	< 0.5	NA
	12/03/01	< 0.5	NA	< 0.5	< 2	< 0.5	NA	NA
	08/29/01	< 0.5	NA	< 0.5	< 2	< 0.5	NA	NA
610GW103 DUP0523061A DUP0307061A 610GW103CL03/07	05/23/06	< 0.5	NA	< 0.5	3.2 C	< 0.5	< 1	NA
	05/23/06	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA
	03/07/06	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA
	03/07/06	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA
	03/07/06	< 0.5 U	NA	< 0.5 U	< 2.5 U	< 0.5 U	< 1 U	NA
	12/01/05	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA
	09/01/05	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA
	09/01/05	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA
	06/02/05	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA
	03/22/05	< 0.5	NA	< 0.5	2.1	< 0.5	< 1	NA
	12/16/04	< 0.5	NA	< 0.5	< 2	< 0.5	< 1	NA
	08/10/04	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	05/26/04	< 0.5	NA	< 0.5	3.9 C	< 0.5	< 0.5	NA
	03/09/04	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	12/03/03	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
DUP1203033A 610GW103CL DUP0818033A DUP1203022A 610GW103CL DUP0305023A 610GW103CL DUP1203011A 610GW103CL	12/03/03	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	12/03/03	< 0.5	NA	< 0.5	< 2	< 0.5	0.64	NA
	08/18/03	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	08/18/03	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	06/05/03	< 0.5	NA	0.69 C	< 2	< 0.5	< 0.5	NA
	03/11/03	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	12/03/02	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	12/03/02	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	08/29/02	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	05/30/02	< 0.5	NA	1.0	< 2	< 0.5	< 0.5	NA
	05/30/02	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	05/30/02	< 0.5	NA	< 0.5	< 5	< 0.5	< 0.5	NA
	03/05/02	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	03/05/02	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	03/05/02	< 0.5	NA	< 0.5	NA	< 0.5	< 0.5	NA
	12/03/01	< 0.5	NA	< 0.5	< 2	< 0.5	NA	NA
	12/03/01	< 0.5	NA	< 0.5	< 2	< 0.5	NA	NA
	12/03/01	< 0.5	NA	< 0.5	< 5	< 0.5	< 0.5	NA
	08/29/01	< 0.5	NA	4.9	< 2	< 0.5	NA	NA

Table A-16-3
Results of VOC Analyses
Commissary/PX Area
Presidio of San Francisco, California

[illegible]

Table A-16-3
Results of VOC Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	Benzene	Chloroform	Ethylbenzene	MTBE	Toluene	Total Xylenes	All Other VOCs
	Analytical Method ¹	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M	SW8020/ SW8021/ SW8021B/ SW8260/ SW8260B/ SW8260M
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		1	--	43	13	150	130	--
610SP02	04/05/01	< 0.5	NA	< 0.5	< 2.0	< 0.5	< 0.5	NA
	08/02/00	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	06/27/00	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	05/09/00	< 0.5	NA	1.3	< 2	0.69 C	0.71	NA
	04/06/00	< 0.5	NA	< 0.5	< 2	< 0.5	< 0.5	NA
	02/09/00	< 0.5	NA	2.1	< 2.0	< 0.5	0.53	NA
	12/03/99	< 0.5	NA	0.82 C	NA	< 0.5	< 0.5	NA

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - Groundwater cleanup levels were taken from the *Revised Final Corrective Action Plan for the Commissary/Post Exchange Study Area, Presidio of San Francisco, California* (Treadwell & Rollo, 2006).

Concentrations in **BOLD** indicate an exceedance of applicable cleanup levels.

µg/L - micrograms per liter

MTBE - Methyl tertiary butyl ether

VOC - Volatile organic compound

NA - Not analyzed

ND - Not detected

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

-- - cleanup level not established

Table A-16-4
Results of PAH Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	Acenaph-thene	Anthracene	Benzo(a)-Anthracene	Benzo(a)-Pyrene	Benzo(b)-Fluoranthene	Benzo(g,h,i)-Perylene	Benzo(k)-Fluoranthene	Chrysene	Dibenz(a,h)-Anthracene	Fluor-anthene	Indeno (1,2,3-c,d) Pyrene	Phen-anthrene	Pyrene	All Other PAHs
	Analytical Method ¹	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		--	770	0.1	0.2	0.2	150	2	20	--	300	--	230	230	--
600GW101	12/02/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.13	< 0.48	< 0.19	ND
	08/13/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.13	< 0.48	< 0.19	ND
	06/09/03	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.13	< 0.47	< 0.19	ND
	03/11/03	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.13	< 0.48	< 0.19	ND
	12/04/02	< 1	< 0.5	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.4	< 0.14	< 0.5	< 0.2	ND
	09/10/02	< 5.0	< 0.2	< 0.1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2	< 1.0	< 0.2	ND
600GW102	03/15/06	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.13	< 0.47	< 0.19	ND
	04/06/05	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.14	< 0.49	< 0.19	ND
	03/09/04	< 0.98	< 0.49	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.39	< 0.14	< 0.49	< 0.2	ND
	12/02/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.13	< 0.48	< 0.19	ND
	08/13/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.13	< 0.48	< 0.19	ND
	06/09/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.13	< 0.48	< 0.19	ND
	03/11/03	< 0.96	< 0.48	< 0.1	0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.13	< 0.48	< 0.19	ND
	12/04/02	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.14	< 0.49	< 0.19	ND
600GW103	09/10/02	< 5.0	< 0.2	< 0.1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2	< 1.0	< 0.2	ND
	03/15/06	7.4	0.02 J	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	0.02 J	< 0.13	< 0.47	< 0.19	ND
	04/11/05	7.7	< 0.49	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.39	< 0.14	< 0.49	< 0.2	ND
	03/09/04	7.3	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.13	< 0.48	< 0.19	ND
	12/02/03	7.3	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.13	< 0.48	< 0.19	ND
	08/13/03	9	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.13	< 0.47	< 0.19	ND
	08/13/03	7.4	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.13	< 0.48	< 0.19	ND
	06/09/03	8.9	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.13	< 0.48	< 0.19	ND
	03/11/03	5.6	< 0.48	< 0.1	0.18	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.13	< 0.48	< 0.19	ND
DUP0813033A	12/04/02	6.4	< 0.47	< 0.09	0.34	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.13	< 0.47	< 0.19	ND
	09/10/02	< 5.0	< 0.2	< 0.1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2	< 1.0	< 0.2	ND
	03/15/06	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.13	< 0.47	< 0.19	ND
	04/11/05	< 0.98	< 0.49	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.39	< 0.14	< 0.49	< 0.2	ND
	03/09/04	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.13	< 0.48	< 0.19	ND
	12/02/03	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.13	< 0.47	< 0.19	ND
	12/02/03	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.13	< 0.47	< 0.19	ND
	08/18/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.13	< 0.48	< 0.19	ND
	06/05/03	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.13	< 0.47	< 0.19	ND
DUP1202033A	03/11/03	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	0.14	< 0.19	< 0.39	< 0.14	< 0.49	< 0.19	ND
	03/11/03	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.13	< 0.48	< 0.19	ND
	03/11/03	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.13	< 0.48	< 0.19	ND
DUP0311032A	03/11/03	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.13	< 0.48	< 0.19	ND
600GW104CL	03/11/03	< 0.5	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.05	< 0.05	< 0.2	< 0.1	< 0.05	< 0.05	< 0.05	ND

Table A-16-4
Results of PAH Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	Acenaph-thene	Anthracene	Benzo(a)-Anthracene	Benzo(a)-Pyrene	Benzo(b)-Fluoranthene	Benzo(g,h,i)-Perylene	Benzo(k)-Fluoranthene	Chrysene	Dibenz(a,h)-Anthracene	Fluor-anthene	Indeno (1,2,3-c,d) Pyrene	Phen-anthrene	Pyrene	All Other PAHs
	Analytical Method ¹	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		--	770	0.1	0.2	0.2	150	2	20	--	300	--	230	230	--
600GW104	12/04/02	< 0.94 UJ	< 0.47 UJ	< 0.09 UJ	< 0.09 UJ	< 0.19 UJ	< 0.19 UJ	< 0.09 UJ	< 0.09 UJ	< 0.19 UJ	< 0.38 UJ	< 0.13 UJ	< 0.47 UJ	< 0.19 UJ	ND
	09/10/02	< 5.0	< 0.2	< 0.1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2	< 1.0	< 0.2	ND
DUP0910021A	09/10/02	< 5.0	< 0.2	< 0.1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2	< 1.0	< 0.2	ND
600GW105	03/08/06	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.13	< 0.47	< 0.19	ND
	03/22/05	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.14	< 0.49	< 0.19	ND
DUP0605033A	03/10/04	< 1.1	< 0.56	< 0.11	< 0.11	< 0.22	< 0.22	< 0.11	< 0.11	< 0.22	< 0.44	< 0.16	< 0.56	< 0.22	ND
	12/02/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.13	< 0.48	< 0.19	ND
	08/13/03	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.13	< 0.48	< 0.19	ND
	06/05/03	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.13	< 0.47	< 0.19	ND
	06/05/03	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.13	< 0.47	< 0.19	ND
	03/12/03	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.14	< 0.49	< 0.19	ND
	12/04/02	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.13	< 0.47	< 0.19	ND
	09/11/02	< 5	< 0.2	< 0.1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2	< 1	< 0.2	ND
	03/08/06	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.13	< 0.47	< 0.19	ND
600GW106	03/29/05	< 0.98	< 0.49	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.39	< 0.14	< 0.49	< 0.2	ND
	03/10/04	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.13	< 0.48	< 0.19	ND
	12/02/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.13	< 0.48	< 0.19	ND
	08/13/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.13	< 0.48	< 0.19	ND
	06/05/03	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.13	< 0.47	< 0.19	ND
	03/12/03	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.14	< 0.49	< 0.19	ND
	12/04/02	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.13	< 0.47	< 0.19	ND
	09/11/02	< 5	< 0.2	< 0.1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2	< 1	< 0.2	ND
	03/20/06	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	0.03 J	< 0.13	< 0.48	< 0.19	ND
600GW107	04/11/05	< 0.98	< 0.49	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.39	< 0.14	< 0.49	< 0.2	ND
	03/10/04	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.14	< 0.49	< 0.19	ND
	08/13/03	< 1	< 0.5	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	0.05 J	< 0.14	< 0.5	< 0.2	ND
	06/06/03	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	0.1	< 0.19	0.07 J	< 0.13	< 0.47	< 0.19	ND
	03/11/03	< 0.95	0.19 J	0.24	0.22	0.34	0.4	0.15	0.62	0.4	0.49	0.21	0.51	0.53	ND
	12/04/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	09/11/02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	03/07/06	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.13	< 0.47	< 0.19	ND
	03/07/06	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.14	< 0.49	< 0.19	ND
DUP0307061B	11/30/05	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.14	< 0.49	< 0.19	ND
	11/30/05	< 0.98	< 0.49	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.39	< 0.14	< 0.49	< 0.2	ND
	11/30/05	< 5 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.2 U	< 0.5 U	< 0.2 U	< 0.2 U	< 1 U	< 0.2 U	ND
600GW108CL	09/01/05	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.14	< 0.49	< 0.19	ND

Table A-16-4
Results of PAH Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	Acenaph-thene	Anthracene	Benzo(a)-Anthracene	Benzo(a)-Pyrene	Benzo(b)-Fluoranthene	Benzo(g,h,i)-Perylene	Benzo(k)-Fluoranthene	Chrysene	Dibenz(a,h)-Anthracene	Fluor-anthene	Indeno (1,2,3-c,d) Pyrene	Phen-anthrene	Pyrene	All Other PAHs
	Analytical Method ¹	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310	SW8270/ SW8310
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
Cleanup Levels²		--	770	0.1	0.2	0.2	150	2	20	--	300	--	230	230	--
600GW108 DUP0321052B	06/01/05	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.13	< 0.48	< 0.19	ND
	03/21/05	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.14	< 0.49	< 0.19	ND
	03/21/05	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.14	< 0.49	< 0.19	ND
	12/17/04	< 0.97	< 0.49	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.39	< 0.14	< 0.49	< 0.19	ND
	08/10/04	< 0.98	< 0.49	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.39	< 0.14	< 0.49	< 0.2	ND
	05/26/04	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.13	< 0.47	< 0.19	ND
	03/10/04	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.13	< 0.48	< 0.19	ND
	12/03/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.13	< 0.48	< 0.19	ND
	08/13/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.13	< 0.48	< 0.19	ND
	06/05/03	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.13	< 0.47	< 0.19	ND
DUP1209022C 600GW108CL	03/12/03	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.13	< 0.48	< 0.19	ND
	12/09/02	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.13	< 0.47	< 0.19	ND
	12/09/02	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.13	< 0.47	< 0.19	ND
	12/09/02	< 0.5	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1	< 0.05	< 0.05	< 0.2	< 0.1	< 0.05	< 0.05	< 0.05	ND
600GW109	09/10/02	< 5.0	< 0.2	< 0.1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2	< 1.0	< 0.2	ND
	03/14/06	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.13	< 0.47	< 0.19	ND
	04/01/05	< 0.96	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.13	< 0.48	< 0.19	ND
	03/09/04	< 1	< 0.5	< 0.1	< 0.1	< 0.2	< 0.2	< 0.1	< 0.1	< 0.2	< 0.4	< 0.14	< 0.5	< 0.2	ND
	12/03/03	< 0.94	< 0.47	< 0.09	< 0.09	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.13	< 0.47	< 0.19	ND
	08/13/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.13	< 0.48	< 0.19	ND
	06/05/03	< 0.95	< 0.48	< 0.1	< 0.1	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.13	< 0.48	< 0.19	ND
	03/11/03	< 0.96	< 0.48	< 0.1	0.11	< 0.19	< 0.19	< 0.1	< 0.1	< 0.19	< 0.38	< 0.13	< 0.48	< 0.19	ND
600GW109	12/04/02	< 0.94	< 0.47	< 0.09	0.15	< 0.19	< 0.19	< 0.09	< 0.09	< 0.19	< 0.38	< 0.13	< 0.47	< 0.19	ND
	09/10/02	< 5.0	< 0.2	< 0.1	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.5	< 0.2	< 0.2	< 1.0	< 0.2	ND

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in the respective quarterly reports.

2 - Groundwater cleanup levels were taken from the *Revised Final Corrective Action Plan for the Commissary/Post Exchange Study Area, Presidio of San Francisco, California* (Treadwell & Rollo, 2006).

Concentrations in **BOLD** indicate an exceedance of applicable cleanup levels.

-- cleanup level not established

µg/L - micrograms per liter

PAHs - Polycyclic aromatic hydrocarbons

NA - Not analyzed

ND - Not detected

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-16-5
Results of Total and Dissolved Metals Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	Aluminum	Arsenic	Arsenic	Cadmium	Calcium	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Sodium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6010/ SW6020	1632M	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Levels ²		--	10	10	5	--	50	2.9	--	5.6	--	--	7.1	--	--	58	--
600GW101	05/23/06	< 100	< 5	NA	< 1	99,000	< 10	2.1	9,600	< 3	56,000	1,400	< 20	15,000	150,000	< 20	880
	03/08/06	< 100	5.1	NA	< 1	87,000	< 10	< 1	7,000	< 3	44,000	900	< 20	10,000	110,000	< 20	800
DUP0601053A	12/01/05	< 100	< 5	NA	< 1	77,000	< 10	< 1	11,000	< 3	43,000	1,200	< 20	13,000	140,000	< 20	850
	09/01/05	< 100	< 5	1.3 J	< 1	81,000	< 10	< 1	11,000	< 3	47,000	970	< 20	16,000 J	190,000	< 20	740
	06/01/05	< 100	< 5	2.12	< 1	90,000	< 10	< 1	10,000	< 3	49,000	1,200	< 20	15,000 J	150,000	< 20	860
	06/01/05	< 100	< 5	2.34	< 1	100,000	< 10	< 1	10,000	< 3	55,000	1,300	< 20	15,000 J	170,000	< 20	930
	03/21/05	< 100	< 5	3.16	< 1	100,000	< 10	< 1	9,200	< 3	48,000	1,300	< 20	13,000	120,000	< 20	870
	12/22/04	NA	NA	2.46	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/16/04	NA	< 5	NA	< 1	NA	< 10	< 1	350	< 3	NA	NA	< 20	NA	NA	< 20	930
	08/10/04	NA	< 5	NA	< 1	NA	< 10	< 1	10,000	< 3	NA	NA	< 20	NA	NA	< 20	900
	05/26/04	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	890
	03/09/04	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	890
	12/02/03	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	730
	08/13/03	NA	< 5	NA	< 1	NA	< 10	2.3	NA	< 3	NA	NA	< 20	NA	NA	< 20	790
	06/09/03	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	980
	03/11/03	NA	5.8	NA	< 1	NA	4.7	< 1	NA	< 3	NA	NA	3.4	NA	NA	< 20	950
	12/04/02	NA	1.7	NA	< 1	NA	6.3	< 1	NA	< 3	NA	NA	2.2	NA	NA	< 20	890
09/10/02	NA	< 5.0	NA	< 5.0	NA	< 10	< 20	NA	< 15	NA	NA	< 50	NA	NA	88	NA	
600GW102	03/15/06	< 100	< 5	NA	< 1	180,000	< 10	1.1	2,500 J	< 3	54,000	370	< 20	12,000 J	180,000	< 20	1,110 J
	04/06/05	< 100	< 5	1.14	< 1	150,000	< 10	< 1	3,000	< 3	46,000	270	< 20	9,900	140,000	< 20	810
	03/09/04	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	910
	12/02/03	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	590
	08/13/03	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	1,990
	06/09/03	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	1,400
	03/11/03	NA	3.4	NA	< 1	NA	2	< 1	NA	< 3	NA	NA	4.3	NA	NA	< 20	720
	12/04/02	NA	3	NA	< 1	NA	1.9	< 1	NA	< 3	NA	NA	4.3	NA	NA	< 20	1,450
	09/10/02	NA	6.2	NA	< 5.0	NA	< 10	< 20	NA	< 15	NA	NA	< 50	NA	NA	140	NA
600GW103	03/15/06	< 100	< 5	NA	< 1	130,000	< 10	< 1	13,000 J	< 3	35,000	4,000	< 20	13,000 J	86,000	< 20	790 J
	04/11/05	< 100	5.4	3.21	< 1	110,000	< 10	< 1	11,000	< 3	31,000	3,200	< 20	13,000	84,000	< 20	780
	03/09/04	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	680
	12/02/03	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	580
	08/13/03	NA	7.2	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	620
	08/13/03	NA	9.7	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	670
	06/09/03	NA	7.6	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	770
	03/11/03	NA	4	NA	< 1	NA	1.2	< 1	NA	< 3	NA	NA	2.9	NA	NA	< 20	670
	12/04/02	NA	4.2	NA	< 1	NA	3.1	< 1	NA	< 3	NA	NA	3.3	NA	NA	< 20	660
09/10/02	NA	6.7	NA	< 5.0	NA	< 10	< 20	NA	< 15	NA	NA	< 50	NA	NA	120	NA	
600GW104	03/15/06	< 100	< 5	NA	< 1	130,000	< 10	1.4	2,200 J	< 3	50,000	420	< 20	5,500 J	44,000	< 20	510 J
	04/11/05	< 100	< 5	2.18	< 1	120,000	< 10	< 1	1,100	< 3	52,000	330	< 20	6,500	48,000	< 20	440
DUP1202033A	03/09/04	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	500
	12/02/03	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	370
	12/02/03	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	330
	08/18/03	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20 UJ	530

Table A-16-5
Results of Total and Dissolved Metals Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	Aluminum	Arsenic	Arsenic	Cadmium	Calcium	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Sodium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6010/ SW6020	1632M	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Levels ²		--	10	10	5	--	50	2.9	--	5.6	--	--	7.1	--	--	58	--
600GW107	03/10/04	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	630
	12/03/03	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	NA
	08/13/03	NA	7.1	NA	< 1	NA	< 10	1.2	NA	< 3	NA	NA	< 20	NA	NA	< 20	570
	06/06/03	NA	< 5	NA	< 1	NA	< 10	2.3	NA	< 3	NA	NA	< 20	NA	NA	< 20	630
	03/11/03	NA	2.4	NA	< 1	NA	1	< 1	NA	< 3	NA	NA	3.8	NA	NA	< 20	640
600GW108	05/23/06	< 100	< 5	NA	< 1	23,000	< 10	< 1	< 100	< 3	25,000	45	< 20	2,200	33,000	< 20	280
	03/07/06	< 100	< 5	NA	< 1	40,000	< 10	3.1	160	< 3	41,000	20	< 20	3,800	70,000	< 20	530
DUP0307061B	03/07/06	< 100	< 5	NA	< 1	40,000	< 10	1.5	150	< 3	40,000	15	< 20	3,700	68,000	< 20	480
	11/30/05	< 100	< 5	NA	< 1	35,000	< 10	< 1	190	< 3	38,000	18	< 20	2,700	35,000	< 20	360
DUP1130051A	11/30/05	< 100	< 5	NA	< 1	35,000	< 10	< 1	190	< 3	38,000	18	< 20	2,800	35,000	< 20	360
600GW108CL	11/30/05	< 100 U	< 2 U	NA	< 1 U	40,000	< 10 U	< 2 U	< 100 U	< 1 U	43,000	20	3.2	< 5,000 UN	38,000	< 20 U	419
	09/01/05	< 100	< 5	NA	< 1	27,000	< 10	< 1	230	< 3	37,000	19	< 20	2,800 J	37,000	24	300
	06/01/05	< 100	< 5	NA	< 1	35,000	< 10	< 1	< 100	< 3	35,000	12	< 20	2,500 J	35,000	< 20	380
	03/21/05	< 100	< 5	NA	< 1	50,000	< 10	< 1	140	< 3	43,000	16	< 20	3,200	31,000	< 20	450
DUP0321052B	03/21/05	< 100	< 5	NA	< 1	52,000	< 10	< 1	140	< 3	42,000	17	< 20	3,300	30,000	< 20	460
	12/22/04	NA	NA	0.446	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/17/04	NA	< 5	NA	< 1	NA	< 10	< 1	< 100	< 3	NA	NA	< 20	NA	NA	< 20	300
	08/10/04	NA	< 5	NA	< 1	NA	< 10	< 1	< 100	< 3	NA	NA	< 20	NA	NA	< 20	230
	05/26/04	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	290
	03/10/04	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	360
	12/03/03	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	330
	08/13/03	NA	< 5	NA	< 1	NA	< 10	1.3	NA	< 3	NA	NA	< 20	NA	NA	< 20	250
	06/05/03	NA	< 5	NA	< 1	NA	< 10	1.1	NA	< 3	NA	NA	< 20	NA	NA	< 20	280
	03/12/03	NA	< 1	NA	< 1	NA	< 1	< 1	NA	< 3	NA	NA	4.2	NA	NA	< 20	310
	12/09/02	NA	< 1	NA	< 1	NA	1.2	< 1	NA	< 3	NA	NA	5.4	NA	NA	< 20	360
	12/09/02	NA	< 1	NA	< 1	NA	< 1	< 1	NA	< 3	NA	NA	4.4	NA	NA	< 20	350
DUP1209022C 600GW108CL	12/09/02	NA	< 2 U	NA	< 1	NA	< 5	< 5	NA	< 3	NA	NA	< 5	NA	NA	< 10	330
	09/10/02	NA	< 5	NA	< 5	NA	< 10	< 20	NA	< 15	NA	NA	< 50	NA	NA	140	NA
600GW109	03/14/06	< 100	< 5	NA	< 1	37,000	< 10	< 1	2,900	< 3	51,000	170	< 20	2,800	46,000	< 20	620
	04/01/05	< 100	< 5	NA	< 1	28,000 J	< 10	2.4	2,800	< 3	49,000	190 J	< 20	2,700	39,000	< 20	450
	03/09/04	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	430
	12/03/03	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	350
	08/13/03	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	480
	06/05/03	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	440
	03/11/03	NA	< 1	NA	< 1	NA	2.9	< 1	NA	< 3	NA	NA	3.5	NA	NA	< 20	490
	12/04/02	NA	< 1	NA	< 1	NA	1.7	< 1	NA	< 3	NA	NA	2.2	NA	NA	< 20	450
610GW101	05/23/06	< 100	< 5	NA	< 1	59,000	< 10	< 1	4,500	< 3	43,000	390	< 20	6,500	79,000	< 20	590
	03/07/06	< 100	< 5	NA	< 1	48,000	< 10	< 1	4,000	< 3	41,000	320	< 20	5,500	65,000	< 20	590
	12/01/05	< 100	< 5	NA	< 1	58,000	< 10	< 1	4,500	< 3	45,000	380	< 20	5,800	77,000	< 20	620
	08/31/05	< 100 UJ	5.1	3.6 J	< 1	55,000	< 10	< 1	4,300	< 3	39,000	250	< 20	7,000	69,000	< 20	830
DUP0831051A	08/31/05	< 100 UJ	< 5	4.4 J	< 1	58,000	< 10	< 1	4,500	< 3	42,000	260	< 20	7,200	74,000	< 20	550

Table A-16-5
Results of Total and Dissolved Metals Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	Aluminum	Arsenic	Arsenic	Cadmium	Calcium	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Sodium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6010/ SW6020	1632M	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Levels ²		--	10	10	5	--	50	2.9	--	5.6	--	--	7.1	--	--	58	--
610GW101	06/02/05	< 100	< 5	3.34	< 1	62,000	< 10	1.9	4,300	< 3	43,000	280	< 20	6,400 J	80,000	< 20	580
	03/21/05	< 100	< 5	1.51	< 1	63,000	< 10	< 1	4,200	< 3	37,000	280	< 20	5,200	70,000	< 20	530
DUP0321052A	03/21/05	< 100	< 5	1.68	< 1	62,000	< 10	< 1	4,000	< 3	37,000	280	< 20	5,100	70,000	< 20	480
	12/21/04	NA	NA	2.60	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/21/04	NA	NA	2.46	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DUP1215041A	12/15/04	NA	< 5	NA	< 1	NA	< 10	< 1	3,100	< 3	NA	240	< 20	NA	NA	< 20	440
	12/15/04	NA	< 5	NA	< 1	NA	< 10	< 1	3,200	< 3	NA	260	< 20	NA	NA	< 20	2190
	12/15/04	NA	2.1	NA	< 1 U	NA	< 10 U	< 2 U	3,540	< 1 U	NA	256	< 2 U	NA	NA	< 20 U	488
610GW101CL	08/10/04	NA	< 5	NA	< 1	NA	< 10	< 1	4,400	< 3	NA	NA	< 20	NA	NA	< 20	600
	05/26/04	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	600
	03/10/04	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	560
DUP0310043A	03/10/04	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	550
	03/10/04	NA	< 5	NA	< 1	NA	< 10	< 10	NA	< 3	NA	NA	< 10	NA	NA	< 20	540 QB01
	12/02/03	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	540
DUP0814033A	08/14/03	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20 UJ	540
	08/14/03	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20 UJ	500
	08/14/03	NA	7.3	NA	< 1	NA	< 10	< 10	NA	< 3	NA	NA	< 10	NA	NA	< 20	580
DUP0604033B	06/04/03	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	640
	06/04/03	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	550
	06/04/03	NA	4.6	NA	< 1	NA	< 5	< 5	NA	< 3	NA	NA	< 5	NA	NA	< 20	520
610GW101CL	03/11/03	NA	1.1	NA	< 1	NA	2.9	< 1	NA	< 3	NA	NA	1.5	NA	NA	< 20	520
	12/03/02	NA	1.4	NA	< 1	NA	1.8 J	< 1	NA	< 3	NA	NA	1.1	NA	NA	< 20	600
610GW102	05/23/06	< 100	< 5	NA	< 1	57,000	< 10	< 1	1,400	< 3	30,000	2,300	< 20	4,300	80,000	< 20	570
	03/07/06	< 100	5.9	NA	< 1	66,000	< 10	< 1	1,800	< 3	36,000	2,800	< 20	4,700	83,000	30	570
DUP0331052C	12/01/05	< 100	6.8	NA	< 1	71,000	< 10	< 1	2,400	< 3	36,000	3,600	< 20	4,700	85,000	< 20	590
	08/31/05	< 100 UJ	7.7	7.4 J	< 1	59,000	< 10	< 1	2,300	< 3	30,000	2,800	< 20	4,900	75,000	< 20	520
	06/02/05	< 100	6.5	6.39	< 1	71,000	< 10	< 1	1,700	< 3	34,000	3,300	< 20	5,100 J	79,000	< 20	520
610GW102CL	03/31/05	< 100	6.9	6.52	< 1	86,000 J	< 10	< 1	2,000	< 3	37,000	3,700 J	< 20	5,100	83,000	< 20	590 J-
	03/31/05	< 100 U	6.5	6.01	< 1	78,200	< 10	< 1	1,800	< 3	67,300	3,500 J	< 20	6,810	70,100	< 20	540 J-
	03/31/05	< 100	22.1	NA	< 1 U	79,000 J	< 10 U	< 2 U	27,600	5.89	33,000	1,350	< 2 U	4,600	73,000	< 20 U	667
DUP0811041A	12/21/04	NA	NA	4.96	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/15/04	NA	6.1	NA	< 1	NA	< 10	< 1	2,700	< 3	NA	4,100	< 20	NA	NA	29	630
	08/11/04	NA	7.3	NA	< 1	NA	< 10	< 1	2,000	< 3	NA	NA	< 20	NA	NA	< 20	500
	08/11/04	NA	7.3	NA	< 1	NA	< 10	< 1	2,100	< 3	NA	NA	< 20	NA	NA	< 20	470
	08/11/04	NA	< 40	NA	< 10	NA	< 10	< 10	1,100	< 50	NA	NA	< 30	NA	NA	< 30	571
	05/26/04	NA	11	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	500
	03/09/04	NA	6.9	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	570
	12/02/03	NA	9.9	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	430
	08/18/03	NA	13	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20 UJ	340
	06/05/03	NA	11	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	500

Table A-16-5
Results of Total and Dissolved Metals Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	Aluminum	Arsenic	Arsenic	Cadmium	Calcium	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Sodium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6010/ SW6020	1632M	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Levels ²		--	10	10	5	--	50	2.9	--	5.6	--	--	7.1	--	--	58	--
610GW102 DUP0311033A	03/11/03	NA	8.6	NA	< 1	NA	2.7	1	NA	< 3	NA	NA	6.1	NA	NA	< 20	580
	03/11/03	NA	8.9	NA	< 1	NA	1.1	< 1	NA	< 3	NA	NA	5.8	NA	NA	< 20	530
	12/03/02	NA	11	NA	< 1	NA	2.8 J	< 1	NA	< 3	NA	NA	5.2	NA	NA	< 20	390
610GW103 DUP0523061A	05/23/06	< 100	5.9	NA	< 1	63,000	< 10	< 1	3,500	< 3	41,000	2,400	< 20	6,900	76,000	< 20	520
	05/23/06	< 100	6.3	NA	< 1	65,000	< 10	< 1	3,400	< 3	42,000	2,500	< 20	7,100	77,000	< 20	490
	03/07/06	< 100	5.4	NA	< 1	66,000	< 10	1.5	580	< 3	46,000	810	< 20	8,500	89,000	< 20	720
DUP0307061A	03/07/06	< 100	5.7	NA	< 1	66,000	< 10	1.3	670	< 3	45,000	870	< 20	8,400	99,000	< 20	660
610GW103CL	03/07/06	< 100 U	4.7	NA	< 1 U	77,000	< 10 U	2.2	410	< 1 U	52,000	960	8.3	9,000	100,000	< 20 U	698 J+
	12/01/05	< 100	9.1	NA	< 1	82,000	< 10	< 1	3,400	< 3	52,000	3,800	< 20	7,600	130,000	< 20	760
	09/01/05	< 100	8.4	7.41 J	< 1	62,000	< 10	< 1	3,600	< 3	43,000	4,000	< 20	6,600 J	110,000	< 20	520
DUP0901051A	09/01/05	< 100	8.9	8 J	< 1	73,000	< 10	< 1	4,000	< 60	49,000	4,500	< 20	6,900 J	100,000	< 20	530
	06/02/05	< 100	10	9.43	< 1	84,000	< 10	< 1	3,900	< 3	51,000	2,900	< 20	8,000 J	120,000	< 20	670
	03/22/05	< 100	5.2	4.60	< 1	64,000	< 10	1.9	650	< 3	46,000	790	< 20	9,400	130,000	< 20	770
	12/21/04	NA	NA	10.00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/16/04	NA	5.1	NA	< 1	NA	< 10	< 1	240	< 3	NA	3,000	< 20	NA	NA	< 20	880
	08/10/04	NA	9.8	NA	< 1	NA	< 10	< 1	3,000	< 3	NA	NA	< 20	NA	NA	< 20	620
	05/26/04	NA	12	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	640
	03/09/04	NA	7.8	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	21	640
	12/03/03	NA	7.5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	580
DUP1203033A	12/03/03	NA	7.2	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	600
	12/03/03	NA	13	NA	< 1	NA	< 10	< 10	NA	< 3	NA	NA	< 10	NA	NA	< 20	560
	08/18/03	NA	7.4	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20 UJ	570
DUP0818033A	08/18/03	NA	7.1	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20 UJ	530
	06/05/03	NA	7.3	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	560
	03/11/03	NA	6.3	NA	< 1	NA	2.2	< 1	NA	< 3	NA	NA	7.7	NA	NA	< 20	690
DUP1203022A	12/03/02	NA	4.7	NA	< 1	NA	3.3 J	< 1	NA	< 3	NA	NA	1.9	NA	NA	< 20	2,880
	12/03/02	NA	4.6	NA	< 1	NA	3.1 J	< 1	NA	< 3	NA	NA	2	NA	NA	< 20	3,080
610SP01 (Total)	08/17/06	< 100	7.7	NA	< 1	230,000 J	< 10	1.4	4200	< 3	400,000	3,900	< 20	90,000	3,400,000	< 20	10,900
	08/17/06	29,000	6.4	NA	< 1	270,000 J	110	35	57,000	55	460,000	4,800	170	88,000	3,800,000	110	NA
	03/21/06	< 100 UJ	< 5	NA	< 1	52,000	< 10	< 1	780	< 3	40,000	1,600	< 20	11,000	140,000	< 20	880 b J-
(Total)	03/21/06	170 J	< 5	NA	< 1	52,000	< 10	< 1	1,800	< 3	40,000	1,600	< 20	11,000	140,000	< 20	NA
	09/01/05	< 100	10	7.4 J	< 1	240,000	< 10	2.1	9,500	< 3	360,000	2,400	< 20	110,000 J	4,100,000	37	12,700
	09/01/05	16,000	19	NA	< 1	230,000	120	28	37,000	100	360,000	2,800	230	98,000	3,500,000	150	NA
(Total)	06/01/05	< 100	8.7	7.6	< 1	64,000	< 10	< 1	280	< 3	74,000	350	< 20	37,000 J	250,000	< 20	1,220
	06/01/05	7,800	13	NA	< 1	67,000	38	12	17,000	41	77,000	550	63	36,000	230,000	58	NA
	12/21/04	NA	NA	5.72	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
(Total)	12/21/04	NA	NA	11.10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/17/04	NA	8	NA	< 1	NA	< 10	< 1	210	< 3	NA	540	< 20	NA	NA	< 20	4,240
	12/17/04	NA	34	NA	< 1	NA	180	44	59,000	70	NA	1,100	270	NA	NA	130 J+	NA
(Total)	08/13/04	NA	15	NA	< 1	NA	< 10	< 1 U	1,000	< 3	NA	NA	< 20	NA	NA	< 20	9,260
	08/13/04	NA	17	NA	< 1	NA	110	36	41,000	45	NA	NA	130	NA	NA	74	NA

Table A-16-5
Results of Total and Dissolved Metals Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	Aluminum	Arsenic	Arsenic	Cadmium	Calcium	Chromium	Copper	Iron	Lead	Magnesium	Manganese	Nickel	Potassium	Sodium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6010/ SW6020	SW6010/ SW6020	1632M	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Cleanup Levels ²		--	10	10	5	--	50	2.9	--	5.6	--	--	7.1	--	--	58	--
610SP01 (Total) DUP1209031A (Total) 610SP01CL (Total) (Total)	05/28/04	NA	8.6	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	890
	03/16/04	NA	11	NA	< 1	NA	11	1.3	NA	24	NA	NA	37	NA	NA	76	800
	12/09/03	NA	6.6	NA	< 1	NA	21	2.4	NA	15	NA	NA	65	NA	NA	110 J+	6,850
	12/09/03	NA	< 5	NA	< 1	NA	23	< 1	NA	9.7	NA	NA	81	NA	NA	110 J+	2,660
	12/09/03	NA	220	NA	5.5	NA	1,000	320	NA	300	NA	NA	1,400	NA	NA	920	2,800 QB-01
	08/21/03	NA	23	NA	1.2	NA	87	18	NA	190	NA	NA	330	NA	NA	300	2,580
	06/11/03	NA	16	NA	< 1	NA	< 10	1.1	NA	< 3	NA	NA	< 20	NA	NA	< 20	8,860
	03/20/03	NA	9.9	NA	< 1	NA	1.2	< 1	NA	< 3	NA	NA	3.6	NA	NA	< 10	4,480
	12/11/02	NA	19	NA	< 1	NA	3.2	1.4	NA	< 3	NA	NA	3.3	NA	NA	< 20	12,200
610SP02 (Total) (Total) (Total) (Total) (Total) (Total) (Total) (Total) (Total) (Total) (Total) (Total) (Total) (Total) (Total) (Total) (Total)	03/21/06	< 100 UJ	< 5	NA	< 1	67,000	< 10	1.4	370	< 3	47,000	860	< 20	9,400	140,000	< 20	680
	03/21/06	1,900 J	< 5	NA	< 1	72,000	< 10	22	6,700	< 3	49,000	1,000	< 20	10,000	140,000	26	NA
	09/01/05	< 100	5.4	3.6 J	< 1	110,000	< 10	< 1	1,600	< 3	100,000	2,900	< 20	22,000 J	540,000	< 20	1,880
	09/01/05	3,000	7.4	NA	< 1	120,000	14	5.0	7,500	9.9	110,000	3,300	21	23,000	590,000	28	NA
	06/01/05	< 100	6.9	6.82	< 1	83,000	< 10	< 1	230	< 3	55,000	1,100	< 20	11,000 J	170,000	< 20	810
	06/01/05	6,500	9.8	NA	< 1	93,000	29	9.1	15,000	20	58,000	1,400	34	11,000	160,000	49	NA
	12/21/04	NA	NA	7.47	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/21/04	NA	NA	10.20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/17/04	NA	5.9	NA	< 1	NA	< 10	< 1	210	< 3	NA	2,100	< 20	NA	NA	< 20	1,550
	12/17/04	NA	20	NA	< 1	NA	48	14	26,000	25	NA	2,500	56	NA	NA	72 J+	NA
	08/13/04	NA	< 5	NA	< 1	NA	< 10	< 1 U	15,000	< 3	NA	NA	< 20	NA	NA	< 20	23,700
	08/13/04	NA	< 5	NA	< 1	NA	74	29	50,000	19	NA	NA	77	NA	NA	26	NA
	05/28/04	NA	< 5	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	970
	03/16/04	NA	5.4	NA	< 1	NA	23	1.4	NA	8.8	NA	NA	48	NA	NA	85	1,400
	12/09/03	NA	< 5	NA	< 1	NA	12	2.3	NA	16	NA	NA	25	NA	NA	74 J+	5,720
	08/21/03	NA	< 5	NA	< 1	NA	< 10	< 1	NA	6.4	NA	NA	< 20	NA	NA	< 20	11,900
	06/11/03	NA	9	NA	< 1	NA	< 10	< 1	NA	< 3	NA	NA	< 20	NA	NA	< 20	4,070
	03/20/03	NA	11	NA	< 1	NA	1.2	1.1	NA	< 3	NA	NA	3.9	NA	NA	< 10	5,730
	12/11/02	NA	11	NA	< 1	NA	3	1.3	NA	< 3	NA	NA	3.3	NA	NA	< 20	8,240

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001. The analytical methods used during previous quarters are identified in their respective quarterly report.

2 - Groundwater cleanup levels were taken from the *Revised Final Corrective Action Plan for the Commissary/Post Exchange Study Area, Presidio of San Francisco, California* (Treadwell & Rollo, 2006).

All metal results represent dissolved metals, unless indicated as "total" in the left-hand column, for total metal results.

Concentrations in **BOLD** indicate dissolved metals concentrations which exceed applicable cleanup levels. CAP cleanup levels apply only to dissolved concentrations.

-- cleanup level not established

µg/L - micrograms per liter

mg/L - milligrams per liter

NA - Not analyzed

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-16-6
Results of Dissolved Gas and TOC Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	Ethane	Ethene	Methane	TOC
	Analytical Method ¹	RSK 175	RSK 175	RSK 175	SW9060
		mg/L	mg/L	mg/L	mg/L
600GW101 DUP0601053A	12/01/05	< 0.005	< 0.005	14 J-	23
	09/01/05	< 0.005	< 0.005	11 J-	12
	06/01/05	< 0.005	< 0.005	10	5.6 J+
	06/01/05	< 0.005	< 0.005	10	9.6 J+
	03/21/05	< 0.005	< 0.005	10	11
	12/16/04	< 0.005	< 0.005	15	NA
600GW102	04/06/05	< 0.005	< 0.005	4.6	8.8
600GW104	04/11/05	< 0.005	< 0.005	0.052	3.9
600GW105	12/01/05	< 0.005	< 0.005	0.46	6.1
	09/01/05	< 0.005	< 0.005	0.69	6
	06/01/05	< 0.005	< 0.005	0.85	5.9
	03/22/05	< 0.005	< 0.005	0.75	4.6
	12/16/04	< 0.005	< 0.005	0.49	NA
600GW106	12/01/05	< 0.005	< 0.005	0.1	2.3
	09/01/05	< 0.005	< 0.005	0.061	2.1
	06/01/05	< 0.005	< 0.005	0.008	2.1
	03/29/05	< 0.005	< 0.005	0.29	2.4
600GW108 DUP1130051A 600GW108CL DUP0321052B	11/30/05	< 0.005	< 0.005	0.09	1.4
	11/30/05	< 0.005	< 0.005	0.095	1.2
	11/30/05	< 0.0005 UU	< 0.0015 UU	0.045	1.6
	09/01/05	< 0.005	< 0.005	0.093	1.3
	06/01/05	< 0.005	< 0.005	< 0.005	< 0.5
	03/21/05	< 0.005	< 0.005	< 0.005	2.2
	03/21/05	< 0.005	< 0.005	< 0.005	2.3
	12/17/04	< 0.005	< 0.005	< 0.005	NA
600GW109	04/01/05	< 0.005	< 0.005	0.47	2.1
610GW101 DUP0831051A DUP1215041A 610GW101CL	12/01/05	< 0.005	< 0.005	11 J-	4.7
	08/31/05	< 0.005	< 0.005	10	3.5
	08/31/05	< 0.005	< 0.005	10	3
	06/02/05	< 0.005	< 0.005	9.5	3.4 J+
	03/21/05	< 0.005	< 0.005	7.3	3.8
	12/15/04	< 0.005	< 0.005	8.4	3.5
	12/15/04	< 0.005	< 0.005	9	3.4
	12/15/04	0.00071	< 0.0015 U	5.9	3.8
610GW102 DUP0331052C	12/01/05	< 0.005	< 0.005	12 J-	3.8
	08/31/05	< 0.005	< 0.005	11	4.7
	06/02/05	< 0.005	< 0.005	7.9	4.9 J+
	03/31/05	< 0.005	< 0.005	3.8	5.3
	03/31/05	< 0.005	< 0.0015 U	2.5	1.3
	12/15/04	< 0.005	< 0.005	14	6.2

Table A-16-6
Results of Dissolved Gas and TOC Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	Ethane	Ethene	Methane	TOC
	Analytical Method ¹	RSK 175	RSK 175	RSK 175	SW9060
		mg/L	mg/L	mg/L	mg/L
610GW103 DUP0901051A	12/01/05	< 0.005	< 0.005	1.8	4.8
	09/01/05	< 0.005	< 0.005	5.6 J-	4.5
	09/01/05	< 0.005	< 0.005	5.5 J-	4.2
	06/02/05	< 0.005	< 0.005	3.3	5 J+
	03/22/05	< 0.005	< 0.005	0.097	5.6
	12/16/04	< 0.005	< 0.005	2.2	4.9
610SP01	09/01/05	< 0.005	< 0.005	0.37	4.7
	06/01/05	< 0.005	< 0.005	0.23	5.7 J+
	12/17/04	< 0.005	< 0.005	0.29	4
610SP02	09/01/05	< 0.005	< 0.005	1.9	4.2
	06/01/05	< 0.005	< 0.005	0.57	5.2 J+
	12/17/04	< 0.005	< 0.005	0.67	4

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Fourth Quarter 2004.

mg/L - milligrams per liter

NA - Not analyzed

TOC - Total Organic Carbon

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Table 11 in the main report identifies current and historical data qualifiers.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table A-16-7
Results of Arsenic Speciation Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	Inorganic Arsenic (As)	Arsenite (As III)	Arsenate (As V) ²	Percentage of As III	Percentage of As V
	Analytical Method ¹	1632M	1632M	1632M	--	--
		(µg/L)	(µg/L)	(µg/L)	%	%
Cleanup Levels ³		10	--	--	--	--
600GW101 DUP0601053A	09/01/05	1.3 J	0.8 J	0.5 J	62	38
	06/01/05	2.12	1.72	0.4 B	81	19
	06/01/05	2.34	1.74	0.6	74	26
	03/21/05	3.16	3.66	< 0.025 U	>99	<1
	12/22/04	2.46	2.29	0.17	93	7
600GW102	04/06/05	1.14	0.162	0.978	14	86
600GW103	04/11/05	3.21	2.19	1.02	68	32
600GW104	04/11/05	2.18	0.791	1.39	36	64
600GW105	09/01/05	NA	NA	NA	NA	NA
	03/22/05	NA	NA	NA	NA	NA
	12/22/04	0.931	0.591	0.34	63	37
600GW106	09/01/05	NA	NA	NA	NA	NA
	03/29/05	NA	NA	NA	NA	NA
	12/22/04	0.441	< 0.03 U	0.41	7	93
600GW107	04/11/05	NA	NA	NA	NA	NA
600GW108	09/01/05	NA	NA	NA	NA	NA
	03/21/05	NA	NA	NA	NA	NA
	12/22/04	0.446	< 0.03 B U	0.446	6	94
600GW109	04/01/05	NA	NA	NA	NA	NA
610GW101 DUP0831051A	08/31/05	3.6 J	3.8 J	< 1 JU	>99	<1
	08/31/05	4.4 J	4.2 J	< 1 JU	>99	<1
	06/02/05	3.34	2.76	0.58	83	17
DUP0321052A	03/21/05	1.51	1.21	0.302	80	20
	03/21/05	1.68	1.67	< 0.025 U	99	1
	12/21/04	2.60	1.86	0.739	72	28
DUP1221043A	12/21/04	2.46	2.03	0.43	83	17
610GW102 DUP0331052C	08/31/05	7.4 J	8.3 J J-	< 1 JU	>99	<1
	06/02/05	6.39	5.95	0.44 B	93	7
	03/31/05	6.52	4.14	2.38	63	37
	03/31/05	6.01	5.04	0.973	99	1
	12/21/04	4.96	3.82	1.14	77	23
610GW103 DUP0901051A	09/01/05	7.41 J	6.85 J	0.56 J	92	8
	09/01/05	8 J	7.72 J	0.28 BJ	97	3
	06/02/05	9.43	8.57	0.86	91	9
	03/22/05	4.60	2.12	2.48	46	54
	12/21/04	10.00	8.26	1.75	83	17
610SP01 (Total)	09/01/05	7.4 J	6.15 J	1.25 J	82	17
	06/01/05	7.6	6.28	1.32	83	17
	12/21/04	5.72	5.38	0.338	94	6
	12/21/04	11.10	10.5	0.559	95	5

Table A-16-7
Results of Arsenic Speciation Analyses
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Sample Date	Inorganic Arsenic (As)	Arsenite (As III)	Arsenate (As V) ²	Percentage of As III	Percentage of As V
	Analytical Method ¹	1632M	1632M	1632M	--	--
		(µg/L)	(µg/L)	(µg/L)	%	%
610SP02 (Total)	09/01/05	3.6 J	3.7 J J-	< 0.5 JU	>99	<1
	06/01/05	6.82	5.37	1.45	79	21
	12/21/04	7.47	7.63	< 0.007	>99	<1
	12/21/04	10.20	8.02	2.16	79	21

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2001.

2 - The concentration of As V was determined by the laboratory by subtracting the As III concentration from the inorganic As concentration. As III has been detected at greater concentrations than inorganic As, due to analytical variability. As V is reported as non-detect when As III is detected at a greater concentration than inorganic As.

3 - Groundwater cleanup levels were taken from the *Revised Final Corrective Action Plan for the Commissary/Post Exchange Study Area, Presidio of San Francisco, California* (Treadwell & Rollo, 2006).

µg/L - micrograms per liter

mV - millivolts

NA - Not analyzed

All Third Quarter 2005 arsenic speciation results were qualified as estimated (J) by the laboratory because the samples were received at a temperature slightly higher than the required 4 degrees Celsius. Additionally, Third Quarter 2005 As III results from 610GW102 and 610SP02 were qualified with a J- by DataVal because the continuing calibration verification percent difference failed QC limits, which indicates the sample result is biased low. Several other Third Quarter 2005 results were qualified by DataVal with either a (U) or (J) in addition to the (J) qualifier applied by the laboratory. These qualifiers are defined in Table 11 of the main text.

Concentrations in **BOLD** indicate an exceedance of applicable cleanup levels.

CL suffix denotes a quality control duplicate sample was sent to the control laboratory.

Analytical results represent dissolved arsenic, unless indicated as "total" in the left-hand column, for total arsenic results.

Table 7 in the main report identifies all duplicate and split samples and the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-16-8
Groundwater Elevation Summary
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
600GW101	08/14/06	NM	10.66	NM ²	MW
	05/22/06	4.09	10.66	6.57	MW
	03/06/06	3.25	10.66	7.41	MW
	11/28/05	4.00	10.66	6.66	MW
	08/29/05	4.54	10.66	6.12	MW
	05/23/05	3.52	10.66	7.14	MW
	03/14/05	3.94	10.66	6.72	MW
	12/13/04	3.73	10.66	6.93	MW
	08/09/04	4.65	10.66	6.01	MW
	05/24/04	4.43	10.66	6.23	MW
	03/08/04	4.04	10.66	6.62	MW
	12/01/03	4.38	10.66	6.28	MW
	08/11/03	4.52	10.66	6.14	MW
	06/02/03	4.51	10.66	6.15	MW
	03/10/03	3.21	10.66	7.45	MW
	12/02/02	4.62	10.66	6.04	MW
600GW102	08/14/06	4.14	10.10	5.96	MW
	05/22/06	3.71	10.10	6.39	MW
	03/06/06	3.14	10.10	6.96	MW
	11/28/05	3.73	10.10	6.37	MW
	08/29/05	4.18	10.10	5.92	MW
	05/23/05	2.90	10.10	7.20	MW
	03/14/05	3.67	10.10	6.43	MW
	12/13/04	3.64	10.10	6.46	MW
	08/09/04	4.35	10.10	5.75	MW
	05/24/04	3.39	10.10	6.71	MW
	03/08/04	3.88	10.10	6.22	MW
	12/01/03	4.12	10.10	5.98	MW
	08/11/03	4.12	10.10	5.98	MW
	06/02/03	4.21	10.10	5.89	MW
	03/10/03	2.75	10.10	7.35	MW
	12/02/02	4.21	10.10	5.89	MW
600GW103	08/14/06	3.05	10.31	7.26	MW
	05/22/06	3.23	10.31	7.08	MW
	03/06/06	2.46	10.31	7.85	MW
	11/28/05	3.17	10.31	7.14	MW
	08/29/05	2.81	10.31	7.50	MW
	05/23/05	2.50	10.31	7.81	MW
	03/14/05	2.95	10.31	7.36	MW
	12/13/04	2.96	10.31	7.35	MW
	08/09/04	2.94	10.31	7.37	MW
	05/24/04	2.90	10.31	7.41	MW
	03/08/04	3.03	10.31	7.28	MW
	12/01/03	3.41	10.31	6.90	MW
	08/11/03	2.86	10.31	7.45	MW
	06/02/03	2.95	10.31	7.36	MW
	03/10/03	2.79	10.31	7.52	MW
	12/02/02	3.37	10.31	6.94	MW
600GW104	08/14/06	4.21	10.48	6.27	MW
	05/22/06	3.58	10.48	6.90	MW
	03/06/06	2.24	10.48	8.24	MW
	11/28/05	3.45	10.48	7.03	MW

Table A-16-8
Groundwater Elevation Summary
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
600GW104	08/29/05	3.72	10.48	6.76	MW
	05/23/05	2.93	10.48	7.55	MW
	03/14/05	3.25	10.48	7.23	MW
	12/13/04	3.00	10.48	7.48	MW
	08/09/04	3.35	10.48	7.13	MW
	05/24/04	3.94	10.48	6.54	MW
	03/08/04	3.20	10.48	7.28	MW
	12/01/03	3.51	10.48	6.97	MW
	08/11/03	3.08	10.48	7.40	MW
	06/02/03	2.98	10.48	7.50	MW
	03/10/03	2.95	10.48	7.53	MW
600GW105	12/02/02	3.58	10.48	6.90	MW
	08/14/06	3.00	17.64	14.64	MW
	05/22/06	3.17	17.64	14.47	MW
	03/06/06	3.48	17.64	14.16	MW
	11/28/05	3.91	17.64	13.73	MW
	08/29/05	3.45	17.64	14.19	MW
	05/23/05	3.20	17.64	14.44	MW
	03/14/05	3.15	17.64	14.49	MW
	12/13/04	4.24	17.64	13.40	MW
	08/09/04	4.15	17.64	13.49	MW
	05/24/04	4.29	17.64	13.35	MW
	03/08/04	3.47	17.64	14.17	MW
	12/01/03	4.83	17.64	12.81	MW
	08/11/03	4.87	17.64	12.77	MW
	06/02/03	5.55	17.64	12.09	MW
600GW106	03/10/03	3.30	17.64	14.34	MW
	12/02/02	4.60	17.64	13.04	MW
	08/14/06	4.18	16.04	11.86	MW
	05/22/06	4.15	16.04	11.89	MW
	03/06/06	3.34	16.04	12.70	MW
	11/28/05	3.70	16.04	12.34	MW
	08/29/05	3.58	16.04	12.46	MW
	05/23/05	3.35	16.04	12.69	MW
	03/14/05	3.45	16.04	12.59	MW
	12/13/04	4.37	16.04	11.67	MW
	08/09/04	3.88	16.04	12.16	MW
	05/24/04	4.00	16.04	12.04	MW
	03/08/04	3.45	16.04	12.59	MW
	12/01/03	4.51	16.04	11.53	MW
	08/11/03	4.41	16.04	11.63	MW
600GW107	06/02/03	4.51	16.04	11.53	MW
	03/10/03	3.22	16.04	12.82	MW
	12/02/02	4.50	16.04	11.54	MW
	08/14/06	4.34	16.76	12.42	MW
	05/22/06	3.59	16.76	13.17	MW
	03/06/06	3.29	16.76	13.47	MW
	11/28/05	4.72	16.76	12.04	MW
	08/29/05	4.47	16.76	12.29	MW
	05/23/05	3.80	16.76	12.96	MW
	03/14/05	3.62	16.76	13.14	MW
	12/13/04	4.58	16.76	12.18	MW

Table A-16-8
Groundwater Elevation Summary
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
600GW107	08/09/04	5.19	16.76	11.57	MW
	05/24/04	4.72	16.76	12.04	MW
	03/08/04	4.94	16.76	11.82	MW
	12/01/03	5.23	16.76	11.53	MW
	08/11/03	4.98	16.76	11.78	MW
	06/02/03	4.48	16.76	12.28	MW
	03/10/03	4.08	16.76	12.68	MW
	12/02/02	4.82	16.76	11.94	MW
600GW108	08/14/06	5.35	12.29	6.94	MW
	05/22/06	4.88	12.29	7.41	MW
	03/06/06	3.46	12.29	8.83	MW
	11/28/05	5.11	12.29	7.18	MW
	08/29/05	5.20	12.29	7.09	MW
	05/23/05	3.98	12.29	8.31	MW
	03/14/05	3.90	12.29	8.39	MW
	12/13/04	4.20	12.29	8.09	MW
	08/09/04	4.79	12.29	7.50	MW
	05/24/04	4.72	12.29	7.57	MW
	03/08/04	4.41	12.29	7.88	MW
	12/01/03	4.12	12.29	8.17	MW
	08/11/03	4.72	12.29	7.57	MW
	06/02/03	4.39	12.29	7.90	MW
	03/10/03	3.82	12.29	8.47	MW
	12/02/02	4.23	12.29	8.06	MW
600GW109	08/14/06	4.35	11.67	7.32	MW
	05/22/06	3.96	11.67	7.71	MW
	03/06/06	3.40	11.67	8.27	MW
	11/28/05	4.30	11.67	7.37	MW
	08/29/05	4.44	11.67	7.23	MW
	05/23/05	3.70	11.67	7.97	MW
	03/14/05	3.54	11.67	8.13	MW
	12/13/04	4.05	11.67	7.62	MW
	08/09/04	4.71	11.67	6.96	MW
	05/24/04	4.46	11.67	7.21	MW
	03/08/04	3.90	11.67	7.77	MW
	12/01/03	4.87	11.67	6.80	MW
	08/11/03	4.65	11.67	7.02	MW
	06/02/03	4.31	11.67	7.36	MW
610GW101	03/10/03	3.85	11.67	7.82	MW
	12/02/02	4.52	11.67	7.15	MW
	08/14/06	3.37	9.91	6.54	MW
	05/22/06	2.97	9.91	6.94	MW
	03/06/06	1.95	9.91	7.96	MW
	11/28/05	3.07	9.91	6.84	MW
	08/29/05	3.54	9.91	6.37	MW
	05/23/05	2.61	9.91	7.30	MW
	03/14/05	2.90	9.91	7.01	MW
	12/13/04	2.93	9.91	6.98	MW
	08/09/04	5.21	9.91	4.70	MW
	05/24/04	3.40	9.91	6.51	MW
	03/08/04	3.17	9.91	6.74	MW
	12/01/03	3.28	9.91	6.63	MW

Table A-16-8
Groundwater Elevation Summary
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
610GW101	08/11/03	3.49	9.91	6.42	MW
	06/02/03	3.55	9.91	6.36	MW
	03/10/03	2.39	9.91	7.52	MW
	12/02/02	3.44	9.91	6.47	MW
	08/26/02	3.68	9.91	6.23	MW
	05/28/02	3.59	9.91	6.32	MW
	05/28/02	3.63	9.91	6.28	MW
	03/04/02	3.85	9.91	6.06	MW
	03/04/02	3.32	9.91	6.59	MW
	11/26/01	3.25	9.91	6.66	MW
	11/26/01	3.25	9.91	6.66	MW
	08/27/01	3.60	9.91	6.31	MW
	08/27/01	3.64	9.91	6.27	MW
610GW102	08/14/06	3.84	10.29	6.45	MW
	05/22/06	3.38	10.29	6.91	MW
	03/06/06	2.44	10.29	7.85	MW
	11/28/05	3.50	10.29	6.79	MW
	08/29/05	4.00	10.29	6.29	MW
	05/23/05	3.00	10.29	7.29	MW
	03/14/05	3.30	10.29	6.99	MW
	12/13/04	3.42	10.29	6.87	MW
	08/09/04	4.13	10.29	6.16	MW
	05/24/04	3.86	10.29	6.43	MW
	03/08/04	3.69	10.29	6.60	MW
	12/01/03	3.82	10.29	6.47	MW
	08/11/03	3.92	10.29	6.37	MW
	06/02/03	4.10	10.29	6.19	MW
	03/10/03	2.75	10.29	7.54	MW
	12/02/02	3.94	10.29	6.35	MW
	08/26/02	4.16	10.29	6.13	MW
	05/28/02	4.08	10.29	6.21	MW
	05/28/02	4.12	10.29	6.17	MW
	03/04/02	5.02	10.29	5.27	MW
	03/04/02	3.83	10.29	6.46	MW
	11/26/01	3.72	10.29	6.57	MW
	11/26/01	3.74	10.29	6.55	MW
	08/27/01	4.11	10.29	6.18	MW
	08/27/01	4.13	10.29	6.16	MW
610GW103	08/14/06	4.95	11.13	6.18	MW
	05/22/06	4.46	11.13	6.67	MW
	03/06/06	3.51	11.13	7.62	MW
	11/28/05	4.27	11.13	6.86	MW
	08/29/05	5.13	11.13	6.00	MW
	05/23/05	4.00	11.13	7.13	MW
	03/14/05	4.30	11.13	6.83	MW
	12/13/04	4.45	11.13	6.68	MW
	08/09/04	3.65	11.13	7.48	MW
	05/24/04	4.85	11.13	6.28	MW
	03/08/04	4.78	11.13	6.35	MW
	12/01/03	4.67	11.13	6.46	MW
	08/11/03	4.88	11.13	6.25	MW
	06/02/03	4.19	11.13	6.94	MW

Table A-16-8
Groundwater Elevation Summary
Commissary/PX Area
Presidio of San Francisco, California

Location ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Groundwater Elevation (feet PLLW)	Well Type
610GW103	03/10/03	3.20	11.13	7.93	MW
	12/02/02	4.79	11.13	6.34	MW
	08/26/02	5.26	11.13	5.87	MW
	05/28/02	5.13	11.13	6.00	MW
	05/28/02	5.11	11.13	6.02	MW
	03/04/02	3.37	11.13	7.76	MW
	03/04/02	4.94	11.13	6.19	MW
	11/26/01	4.83	11.13	6.30	MW
	11/26/01	4.85	11.13	6.28	MW
	08/27/01	5.29	11.13	5.84	MW
	08/27/01	5.33	11.13	5.80	MW
610SP01	08/14/06	Flowing	--	--	Surface
	05/22/06	Not Flowing	--	--	Surface
	03/06/06	Submerged ³	--	--	Surface
	11/28/05	Submerged ³	--	--	Surface
	08/29/05	Flowing	--	--	Surface
	05/23/05	Not flowing	--	--	Surface
	03/14/05	Not flowing	--	--	Surface
	12/13/04	Not flowing	--	--	Surface
	08/09/04	Not flowing	--	--	Surface
	05/24/04	Not flowing	--	--	Surface
	03/08/04	Not flowing	--	--	Surface
	12/01/03	Not flowing	--	--	Surface
	08/11/03	Not flowing	--	--	Surface
	06/02/03	Not flowing	--	--	Surface
610SP02	08/14/06	Flowing	--	--	Surface
	05/22/06	Not Flowing	--	--	Surface
	03/06/06	Submerged ³	--	--	Surface
	11/28/05	Submerged ³	--	--	Surface
	08/29/05	Flowing	--	--	Surface
	05/23/05	Not flowing	--	--	Surface
	03/14/05	Not flowing	--	--	Surface
	12/13/04	Not flowing	--	--	Surface
	08/09/04	Not flowing	--	--	Surface
	05/24/04	Not flowing	--	--	Surface
	03/08/04	Not flowing	--	--	Surface
	12/01/03	Not flowing	--	--	Surface
	08/11/03	Not flowing	--	--	Surface
	06/02/03	Not flowing	--	--	Surface

Notes

1 - All depth to water measurements are an average of three measurements recorded in the field.

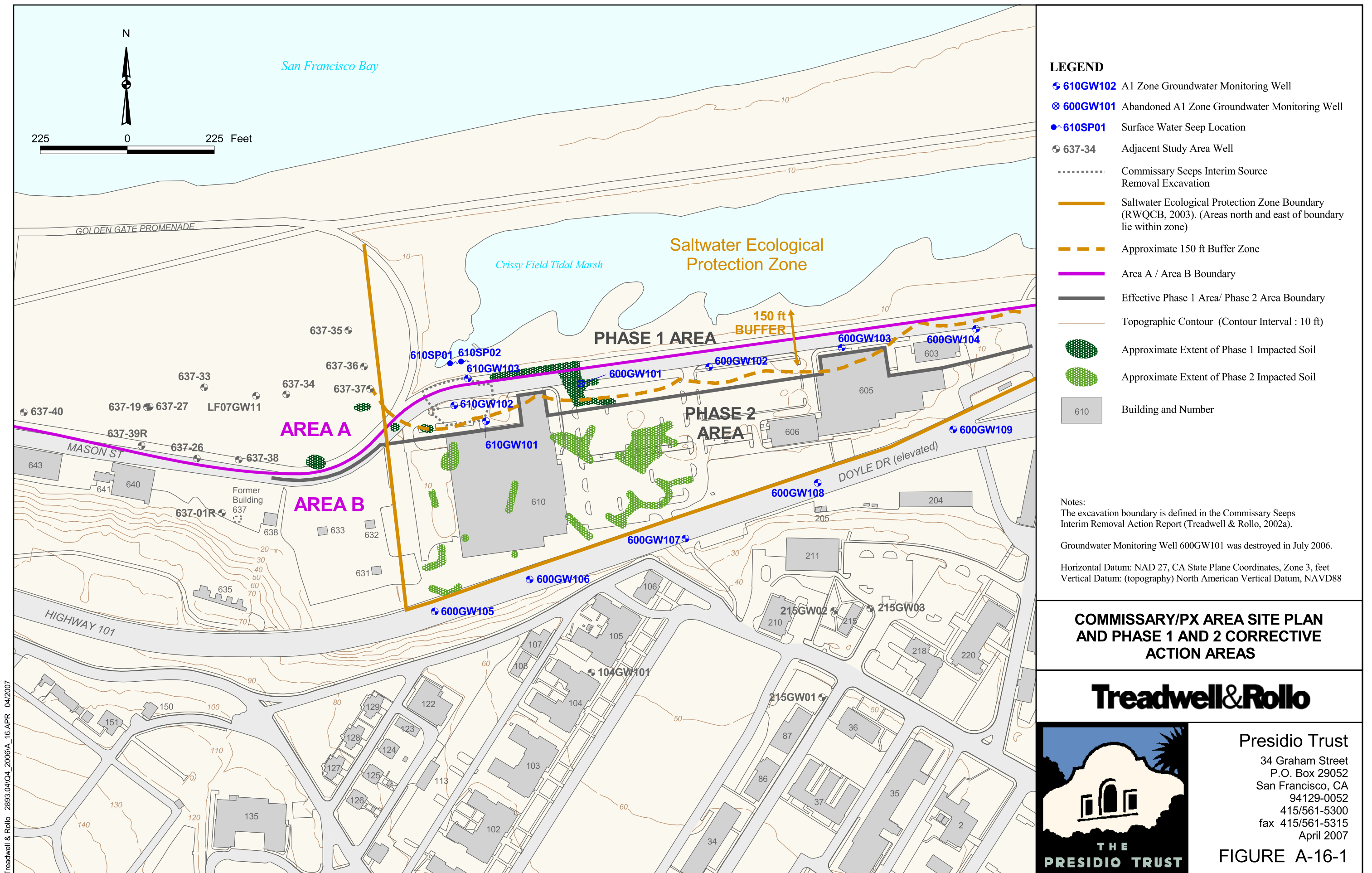
2 - Well was abandoned prior to Phase I CAP implementation.

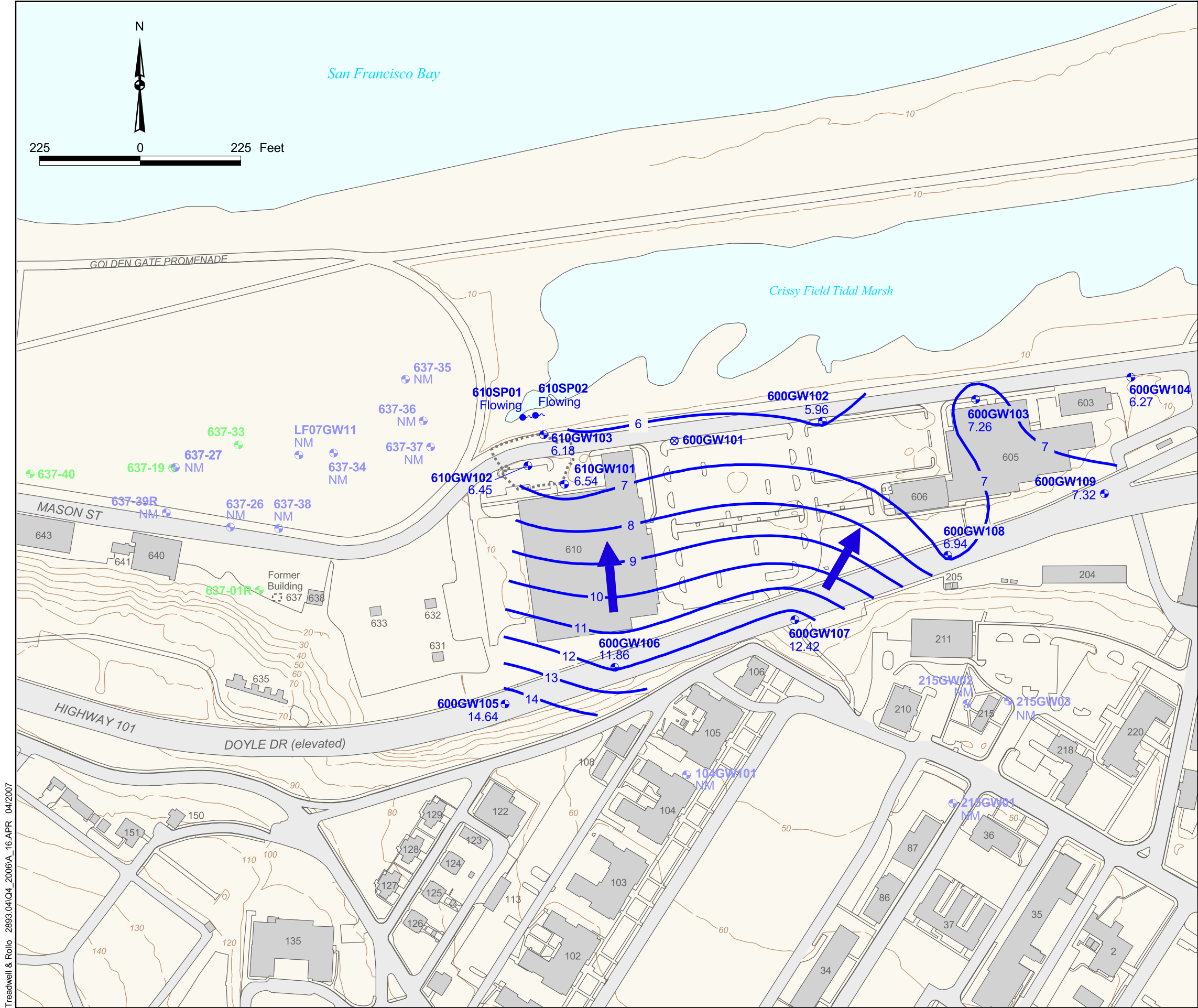
3 - Seep sampling location was submerged under standing water.

MW- Monitoring well

feet PLLW - feet above Presidio lower low water vertical datum

-- Groundwater level measurements were not collected on a tidal schedule beginning with Fourth Quarter 2003.





LEGEND

- 610GW101** 6.54 A1 Zone Groundwater Monitoring Well
August 2006 Groundwater Elevation
- 600GW101** Abandoned A1 Zone Groundwater Monitoring Well
- 637-35** Adjacent Study Area A1 Zone
Groundwater Monitoring Well
- NM** Not Measured. Well approved for removal
from the groundwater monitoring program.
- 637-19** Adjacent Study Area A2 Zone
Groundwater Monitoring Well
- 610SP01** Surface Water Seep Location
- Approximate Direction of
Groundwater Flow
- Groundwater Contour
(Contour Interval : 1 ft)
- Commissary Seeps Interim Source
Removal Excavation
- Topographic Contour
(Contour Interval : 10 ft)
- 610** Building and Number

Notes:
Groundwater elevation data collected on 14 August 2006.

Groundwater Monitoring Well 600GW101 was destroyed in July 2006.

The excavation boundary is defined in the Commissary Seeps
Interim Removal Action Report (Treadwell & Rollo, 2002a).

Horizontal Datum: NAD 27, CA State Plane Coordinates, Zone 3, feet

Vertical Datums: (groundwater) Presidio Lower Low Water (ft. PLLW)
(topography) North American Vertical Datum, NAVD88

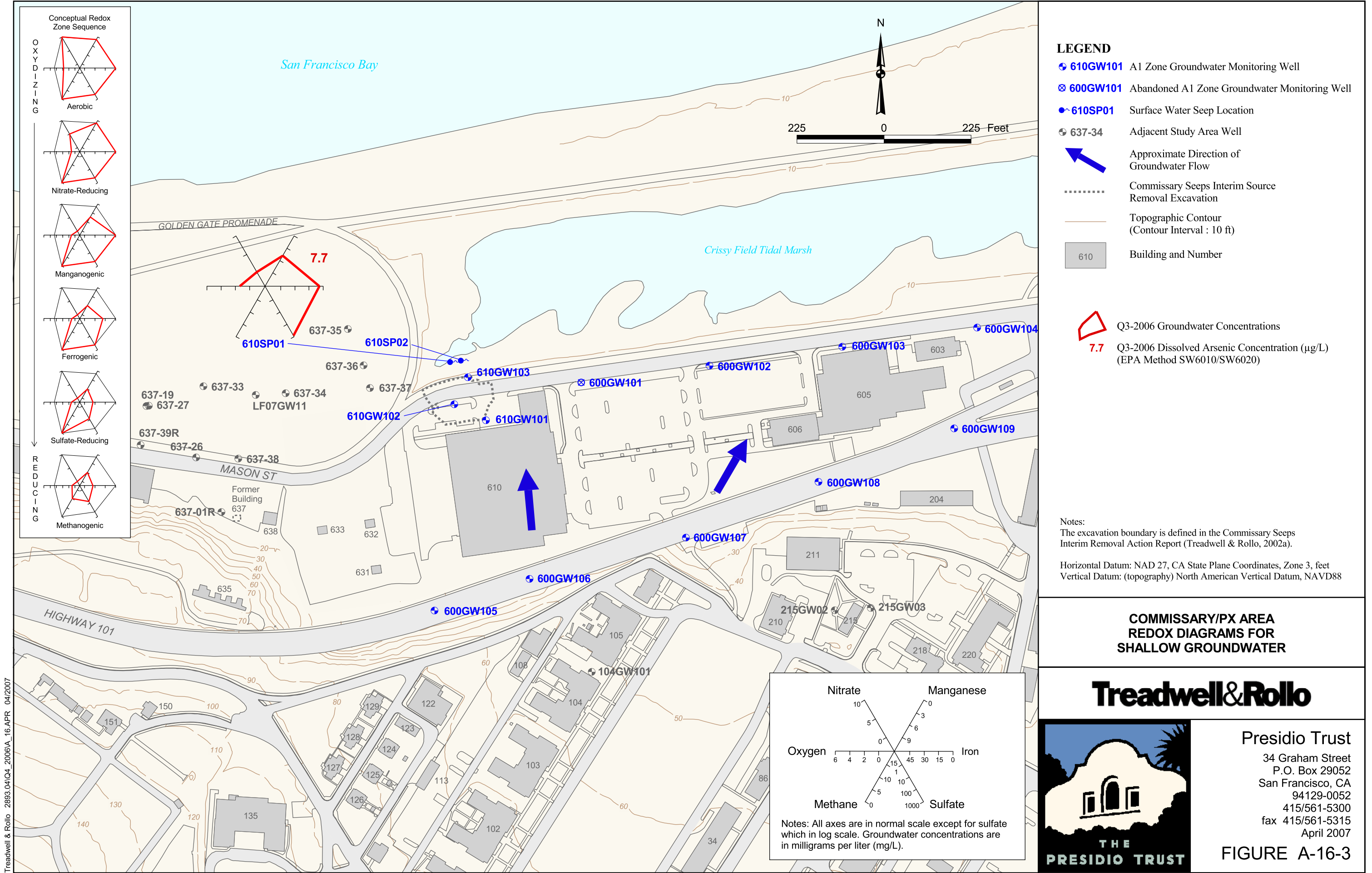
**COMMISSARY/PX AREA
14 AUGUST 2006
GROUNDWATER ELEVATION MAP
A1 ZONE WELLS**



**THE
PRESIDIO TRUST**

Presidio Trust
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April 2007

FIGURE A-16-2



Third Quarter 2006

Treadwell & Rollo
Environmental and Geotechnical Consultant

BAKER BEACH DISTURBED AREAS 1 AND 2A
APPENDIX SECTION A-17
SEMI-ANNUAL GROUNDWATER MONITORING REPORT
THIRD AND FOURTH QUARTERS 2006
Presidio of San Francisco, California

1.0 INTRODUCTION AND BACKGROUND

Baker Beach Disturbed Area (BBDA)s 1 and 2A are located along the western coastline of the Presidio, south of the Golden Gate Bridge. The site is bordered by the Golden Gate Bridge Highway and Transportation District to the north, Merchant Road, and Lincoln Boulevard to the east and the Pacific Ocean to the west. BBDAs 1 and 2A are situated immediately west of Batteries Boutelle and Marcus Miller, and north of BBDA 2 (Figure 1). The site elevation ranges from approximately 10 to 250 feet above PLLW.

BBDAs 1 and 2A have been identified as “disturbed areas” where buried waste fill is present (Figure A-17-1). Based on a review of aerial photographs, BBDAs 1 and 2A received fill material intermittently between 1946 and 1973 (MACTEC, 2004a). The fill material in BBDAs 1 and 2A is composed primarily of soil and debris fill containing concrete, asphalt, and metal debris (Figure A-17-1).

Freshwater seeps are present at various locations throughout the Coastal Bluffs (MACTEC, 2004a). On 21 and 22 April 2005, two piezometers were installed within the fill to monitor freshwater seeps at BBDA 1. The piezometers were designated as BB1PZ100 and BB1PZ101. An ephemeral seep, BB2ASW100, flows seasonally at the toe of the fill at BBDA 2A (A-17-1). Summaries of dissolved oxygen, general chemistry, TPH, and metals, PAH, and VOC results are presented in Table A-17-1 through A-17-4.

Remedial excavation is planned for these areas and is scheduled to begin in 2007. Monitoring and sampling of the freshwater seeps at BBDAs 1 and 2A will continue until commencement of remedial construction activities. The piezometers will be abandoned prior to the remedial action. Following remediation, a monitoring program at BBDAs 1 and 2A will be conducted in accordance with the Final RAP (in preparation).

2.0 SITE DESCRIPTION AND GEOLOGY

BBDAs 1 and 2A are located in the Coastal Groundwater Basin (Figure 1). Based upon hydrogeologic information from adjacent areas, groundwater may be present in limited areas of the landslide deposit and the weathered serpentinite bedrock formations. Groundwater flow is assumed to follow the general topographic trend westward toward the Pacific Ocean (Figure A-17-1).

The fill material at the sites is characterized as random mixtures of soil, chert, and serpentinite fragments, debris fill including building debris (red brick, concrete, glass, and wood) and glass, ceramics, and automotive parts (MACTEC, 2007).

The area in the vicinity of BBDA 1 and 2A is a steeply sloping bluff with a narrow beach at its base. Surface drainage in the area is to the west, toward the Pacific Ocean. Vegetation in the area consists of grasses, shrubs, and trees.

Local geology is predominantly Franciscan Formation overlain by landslide deposits. The Franciscan Formation in the area consists primarily of serpentinite and minor amounts of sandstones, shales, and cherts; the overlaying landslide deposits generally consist of unstratified mixtures of bedrock fragments, sand, silt, and clay (Schlocker, 1974). The thickness of debris fill is estimated to be greater than 3.5 feet in this area. (MACTEC, 2007).

Ephemeral seeps are monitored at two locations at BBDA 1 (BB1PZ100 and BB1PZ101) and at the toe of the fill at BBDA 2A (BB2ASW100) (Figure A-17-1). These seeps are likely the result of groundwater flow through bedrock fracture zones or along contacts between units of differing permeability, similar to other areas on coastal bluffs at the Presidio. The seeps may also be associated with surface water runoff in the fill overlying the bedrock surface.

Historical surface water monitoring data for BBDA 1 and 2A are presented in the *Redlined Recommended Revised Draft Remedial Action Plan, Baker Beach Disturbed Areas 1 and 2A, and Twenty-Six Other Sites* (RAP3) (MACTEC, 2007). As documented in the Revised Draft RAP3, it is anticipated that removal of the fill material could alter the location(s) of the freshwater seep(s) located at BBDA 1 and 2A.

3.0 REMEDIAL ACTION PLAN

The Revised Draft RAP3 is currently being reviewed by the Trust and the NPS and was submitted to the DTSC, RWQCB, and RAB for concurrence in March 2007. The public review draft of RAP3 is scheduled to be submitted by May 2007. Based on the soil analytical results from previous investigations, contaminants of concern (COCs) in soil identified for BBDA 1 and 2A include pesticides, PAHs, VOCs, TPH and metals. Additionally, PCBs and dioxins and furans are COCs at BBDA 1. Groundwater/seep water COCs include metals, mercury PAHs, and TPH at BBDA 1; and metals, pesticides, and PAHs at BBDA 2A.

Groundwater and freshwater seep monitoring at the BBDA 1 and 2A will be conducted in accordance with the RAP3 when the RAP3 is finalized. The current analytical suite for freshwater seep samples is to monitor for the groundwater COCs and most soil COCs. The recommended remedial actions for the BBDA 1 and 2A will be discussed in detail in this report when RAP3 is approved by the stakeholders. Cleanup levels proposed in the RAP3 are based on human health drinking water and freshwater seep quality criteria and are presented in

Tables A-17-2 through A-17-4. Prior to implementing excavation activities proposed in RAP3, existing piezometers BB1PZ100 and BB1PZ101 will be abandoned.

4.0 FRESHWATER SEEP MONITORING

BBDAs 1 and 2A were added to the Presidio-Wide Groundwater Monitoring Program beginning in the Second Quarter 2006. Prior to that event, Site monitoring and sampling was performed and reported as part of the RAP3 activities. The Third and Fourth Quarters 2006 were the third and fourth expanded monitoring events conducted at BBDAs 1 and 2A, since the piezometers were installed in April 2005 and BB1PZ101 was sampled for TPH, PAHs, VOCs, and metals. The BB2ASW100 seep location was dry during the Third and Fourth Quarters 2006 and therefore no water elevations or samples were collected. The proposed sampling schedules for Third and Fourth Quarters 2006 are presented in Tables 1A and 1B, respectively. During the Third and Fourth Quarters 2006, fresh water seep elevations were measured and sampling was performed within the two piezometers (BB1PZ100 and BB1PZ101).

4.1 Fresh Water Seep-Level Measurements and Interpretation

Fresh water seep elevation measurements were collected on 14 August and 4 December during the Third and Fourth Quarters 2006, respectively. The fresh water seep elevations for the Third and Fourth Quarters 2006 at BBDAs 1 and 2A are shown on Figures A-17-1 and A-17-2, respectively. Water level meters were calibrated on 14 August and 4 December 2006 and the calibration logs can be found in Appendix B. Groundwater elevation field forms can be found in Appendix C.

Fresh water seep elevations at the BBDA 1 during the Third Quarter 2006 were 63.61 and 103.68 feet above PLLW in piezometers BB1PZ101 and BB1PZ100, respectively (Table A-17-5).

Fresh water seep elevations at the BBDA 1 during the Fourth Quarter 2006 were 63.24 and 103.66 feet above PLLW in piezometers BB1PZ101 and BB1PZ100, respectively (Table A-17-5).

BBDA2A seep BB2ASW100 was not flowing during the Third or Fourth Quarters 2006.

Groundwater contours and flow directions for BBDAs 1 and 2A could not be calculated due to the lack of monitoring locations. However, the apparent surface water flow direction across BBDA 1 was observed to be in a westerly direction toward the Pacific Ocean following the general topographic trend.

4.2 Monitoring Well Purging and Sampling

Two piezometers (BB1PZ100 and BB1PZ101) and seep location BB2ASW100 were proposed for sampling during the Third (Table 1A) and Fourth Quarters 2006 (Table 1B) at BBDA 1 and 2A. The results from the Third and Fourth Quarters 2006 are included in Tables A-17-1 through A-17-5.

During the Third Quarter 2006, BBDA 1 piezometers BB1PZ100 and BB1PZ101 were purged and sampled on 14 August. During the Fourth Quarter 2006, BBDA 1 piezometers BB1PZ100 and BB1PZ101 were purged and sampled on 4 December. Seep location BB2ASW100 was not flowing during both the Third and Fourth Quarters 2006 and therefore, could not be sampled. All samples were collected in accordance with methods shown in Tables 1A and 1B and procedures described in the FSP (Treadwell & Rollo, 2001a).

Purging equipment, purging volumes, purge water parameters, and sampling equipment for each sampling location are described in the purge records at the conclusion of this section. Purge water was stored for future disposal in one of two 2,800-gallon aboveground polyethylene storage tanks, which are located at the Central Magazine.

4.3 Groundwater Analytical Program

All fresh water seep samples were submitted to the project laboratory for the analyses shown in Tables 1A and 1B of the main text. The appropriate sampling containers, preservatives, and maximum holding times for each analytical method are shown in Table 5. Sample containers used for each well are described in the purge records located at the conclusion of this section.

QA/QC samples were collected as part of this program. Section 6.2 of the main text discusses the QA/QC sampling and analysis performed for the Third and Fourth Quarters 2006.

5.0 SURFACE WATER ANALYTICAL RESULTS

During the Third and Fourth Quarters 2006, BBDA 1 piezometers BB1PZ100 and BB1PZ101 were purged and sampled for dissolved oxygen, general chemistry parameters, OCPs, PAHs, TPHd, TPHfo, and both dissolved and total metals. All analyses were conducted in accordance with the groundwater sampling schedule (Tables 1A and 1B). Seep location BB2ASW100 was not flowing during both the Third and Fourth Quarters 2006 and therefore, could not be sampled.

A discussion of the detected analyte concentrations is provided below.

5.1 Dissolved Oxygen and General Chemistry Results

Dissolved oxygen and general chemistry results are presented in Table A-17-1.

During the Third Quarter 2006, dissolved oxygen was measured at concentrations of 0.49 and 2.0 mg/L within BB1PZ100 and BB1PZ101, respectively. During the Fourth Quarter 2006, dissolved oxygen was measured at concentrations of 0.6 and 0.8 mg/L within BB1PZ100 and BB1PZ101, respectively. The Third and Fourth Quarter 2006 dissolved oxygen concentrations are significantly lower than those measured during the Second Quarter 2006. A sufficient amount of dissolved oxygen data has not yet been collected from these locations to assess trends.

General chemistry analytical results are also presented in Table A-17-1. In general, total alkalinity, bicarbonate, chloride, fluoride, and sulfate are slightly higher in samples collected from BB1PZ101 than those collected from BB1PZ100. Trends will continue to be monitored during future sampling events.

5.2 TPH Results

The analytical results for TPHd and TPHfo are presented in Table A-17-2.

During the Third Quarter 2006, TPHd was detected at concentrations of 62 µg/L at BB1PZ101 and 180 µg/L at BB1PZ100; the Draft RAP3 cleanup level for TPHd is 115 µg/L. TPHfo was detected at a concentration of 910 µg/L in BB1PZ100 above the Draft RAP3 cleanup level of 144 µg/L and was not detected in BB1PZ101. During the Fourth Quarter 2006, TPHd and TPHfo were not detected above the laboratory limits in either BB1PZ100 or BB1PZ101. As shown in Table A-17-2, concentrations of TPHd and TPHfo at BBDA 1 have been generally decreasing since the piezometers were installed.

5.3 Total and Dissolved Metals Results

The total and dissolved metals and TDS results for Third and Fourth Quarters 2006, along with RAP-specified cleanup levels, are presented in Table A-17-3. Total cadmium exceeded the RAP-specific cleanup level in BB1PZ100 during the Third Quarter 2006 and total mercury exceeded the RAP-specified cleanup levels during the Third and/or Fourth Quarters 2006 in both BBDA 1 piezometers.

5.4 PAH Results

During the Third and Fourth Quarters 2006, BB1PZ100 and BB1PZ101 samples were analyzed for PAHs.

During the Third and Fourth Quarters 2006, only fluoranthene was detected within BB1PZ100 at concentrations of 0.07 and 0.04 µg/L, respectively. Neither of these concentrations exceed the RAP-specified cleanup level for fluoranthene of 300 µg/L at BBDA 1. No other PAHs were detected within the samples collected from BB1PZ100 and BB1PZ101 during the Third or Fourth Quarters 2006.

6.0 CONCLUSIONS AND RECOMMENDATIONS

BBDAs 1 and 2A were added to the Presidio-Wide Groundwater Monitoring Program beginning Second Quarter 2006. Two piezometers (BBDA1PZ100 and BB1PZ101) monitor fresh water seeps at BBDA 1 and one seep location is monitored at BBDA 2A (BB2ASW100).

Due to limited data collected to date, no significant trends were identified during the Third and Fourth Quarters 2006 at BBDAs 1 and 2A. Future detections and trends will continue to be monitored and evaluated in accordance with the RAP, which is scheduled to be completed in 2007.

Table A-17-1
Results of Dissolved Oxygen and General Chemistry Analyses
Baker Beach Disturbed Areas 1 and 2A
Presidio of San Francisco, California

Location ID	Sample Date	Alkalinity, Total	Bicarbonate	Chloride	Dissolved Oxygen	Fluoride	Nitrate as N	Nitrite as N	Nitrate + Nitrite	Sulfate
	Analytical Method ¹	E310.1	E310.1	E300.0	Field	E300.0	E300.0	E300.0	E300.0	E300.0
		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
BB1PZ100	12/05/06	460	460	240	0.6	0.11	< 0.05	< 0.05	NA	82
	08/15/06	420	420	230	0.49	0.12	< 0.05	< 0.05	NA	91
	05/23/06	430	430	230	3.51	0.12	< 0.05	< 0.05	NA	110
	02/01/06	490	490	240	NA	0.13	< 0.05	NA	0.14	140
DUP020106	02/01/06	550	550	230	NA	0.091 J	< 0.05	NA	0.11	110
BB1PZ101	12/05/06	670	670	310	0.8	0.25	< 0.05	< 0.05	NA	150
	08/15/06	720	720	330	2	0.27	< 0.05	< 0.05	NA	180
	05/23/06	590	590	260	4.13	0.26	< 0.05	< 0.05	NA	150
	02/01/06	670	670	270	NA	0.25	< 0.05	NA	< 0.1	110
BB2ASW100	05/23/06	NM	NM	NM	NM	NM	NM	NM	NM	NM
	02/01/06	530	530	250	NA	0.31	0.94	NA	0.97	210

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2006.

mg/L - milligrams per liter

NA - not analyzed

NM - not measured

Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-17-2
Results of TPH Analyses
Baker Beach Disturbed Areas 1 and 2A
Presidio of San Francisco, California

Location ID	Sample Date	TPH as Gasoline (Carbon Range C ₇ -C ₁₂)	TPH as Diesel (Carbon Range C ₁₂ -C ₂₄)	TPH as Fuel Oil (Carbon Range C ₂₄ -C ₃₆)
	Analytical Method ¹	SW8015B/ SW8015M	SW8015B/ SW8015M	SW8015B/ SW8015M
		(µg/L)	(µg/L)	(µg/L)
Target Effective Cleanup Level ²		100	115	144
BB1PZ100	12/05/06	NA	< 50	< 300
	08/15/06	NA	180 HY	910
	05/23/06	NA	130 HY	630
	02/01/06	< 33 UJ	380 HY	1,600
DUP020106	02/01/06	< 31 UJ	830 HY	3,100
BB1PZ101	12/05/06	NA	< 50	< 300
	08/15/06	NA	62 HY	< 300
	05/23/06	NA	120 HY	420
	02/01/06	< 32 UJ	94 HY	140 J
	08/01/05	NA	NA	NA
	05/27/05	< 50 UJ	31 J	58 JY
BB2ASW100	05/23/06	NA	NA	NA
	02/01/06	< 27 UJ	47 JY	< 300

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2006.

2 - Seep water target effective cleanup levels were taken from *Redlined Recommended Revised Draft Remedial Action Plan, Baker Beach Disturbed Areas 1 and 2A, and Twenty-Six Other Sites, Presidio of San Francisco, California* (MACTEC, 2007).

Bold numbers indicate concentrations in excess of cleanup criteria.

µg/L - micrograms per liter

TPH - total petroleum hydrocarbons

NA - not analyzed

Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were

Table 11 in the main report identifies current and historical data qualifiers.

Table A-17-3
Results of Total and Dissolved Metals Analyses
Baker Beach Disturbed Areas 1 and 2A
Presidio of San Francisco, California

Location ID	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Total Dissolved Solids
	Analytical Method ¹	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6020	SW7470	SW6010	SW6010/ SW6020	SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	SW6010/ SW6020	E160.1
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(mg/L)
Target Effective Cleanup Level (Dissolved) ²		--	6	10	1,000	4	1.1	--	50	--	9	--	2.5	--	--	0.012	--	52	--	5	3.4	--	1.7	--	120	--
Target Effective Cleanup Level (Total) ²		--	14	--	--	--	1.1	--	--	--	--	--	--	--	--	0.012	--	--	--	5	--	--	1.7	--	--	--
BB1PZ100 (Total)	12/05/06	< 100	< 1	< 5	110	< 2	< 1	44,000	< 10	< 10	< 1	240	< 3	63,000	130	< 0.2	NA	< 20	12,000 J	< 5	< 1	190,000	< 1	< 10	< 20	NA
	12/05/06	1,400	< 1	< 5	150	< 2	< 1	45,000	54	< 10	19	9,200	320	67,000	320	0.35	NA	100	11,000 J	< 5	< 1	180,000	< 1	11	360	NA
	08/15/06	< 100	< 1	< 5	99	< 2	< 1	47,000	< 10	< 10	2.3	260	< 3	64,000	140	< 0.2 UJ	NA	< 20	11,000	< 5	< 1	220,000	< 1	< 10	< 20	NA
	08/15/06	3,800	< 1	5.2	200	< 2	1.8	73,000	130	15	7.7	47,000	850	87,000	1,200	0.89 J-	NA	210	12,000	< 5	< 1	230,000	< 1	38	1,800	NA
	05/23/06	< 100	< 1	< 5	110	< 2	< 1	41,000	< 10	< 10	< 1	220	< 3	61,000	140	< 0.2	NA	< 20	10,000	< 5	< 1	240,000	< 1	< 10	< 20	NA
	05/23/06	2,500	< 1	< 5	170	< 2	1.2	52,000	100	< 10	19	25,000	790	73,000	720	1.1	NA	130	10,000	< 5	< 1	230,000	< 1	26	1,100	NA
	02/01/06	51	4.9	3.4	99 J	< 1	< 1	NA	2 J	0.32 J	1.4 J	250	2.2	55,000	110	8.5	32	11	NA	0.63 J	< 1	190,000	< 1	3.6	19	NA
	02/01/06	NA	1.1	8.9	250 J	0.4 J	3.1	39,000 J	180 J	16	74 J	NA	1,800	NA	NA	7.5	3.3	230	NA	1.7	0.21 J	NA	< 1	55	2,200	990
	02/01/06	34 J	9.7	9.3	85 J	< 1	< 1	74,000 J	1.3 J	2.6	2.1 J	300	1.5	110,000	1,000	8.9	8.7	13	NA	1.1	< 1	180,000	< 1	8.6	23	NA
	02/01/06	NA	1.9	9.4	330 J	0.38 J	3.3	NA	320 J	26	190 J	NA	2,000	NA	NA	11	6.9	360	NA	2.4	0.96 J	NA	< 1	62	2,000	1,000
BB1PZ101 (Total)	12/05/06	< 100	< 1	5.3	110	< 2	< 1	96,000	< 10	< 10	< 1	330	< 3	120,000	3,600	< 0.2	NA	< 20	5,000 J	< 5	< 1	190,000	< 1	< 10	< 20	NA
	12/05/06	2,300	< 1	7.4	130	< 2	< 1	97,000	10	< 10	28	4,900	27	120,000	2,000	< 0.2	NA	31	5,400 J	< 5	< 1	190,000	< 1	12	100	NA
	08/15/06	< 100	3	6.3	100	< 2	< 1	110,000	< 10	< 10	1.2	340	< 3	150,000	3,600	< 0.2 UJ	NA	< 20	5,500	< 5	< 1	220,000	< 1	< 10	< 20	NA
	08/15/06	3,400	1.6	13	140	< 2	< 1	110,000	14	21	170	9000	57	150,000	3,900	0.23 J-	NA	62	5,700	< 5	< 1	210,000	< 1	30	100	NA
	05/23/06	< 100	1.7	< 5	83	< 2	< 1	83,000	< 10	< 10	6.7	< 100	< 3	130,000	1,700	< 0.2	NA	< 20	4,300	< 5	< 1	200,000	< 1	< 10	< 20	NA
	05/23/06	5,000	1.7	14	130	< 2	< 1	91,000	24	26	230	14,000	83	130,000	2,200	0.54	NA	86	4,600	< 5	< 1	200,000	< 1	41	160	NA
	02/01/06	22 J	1.9	3.4	110 J	< 1	< 1	36,000 J	1	< 0.17 UJ	0.56 J	140	0.62	61,000	110	<0.2	33	11	NA	1.3	< 1	200,000	< 1	3.8	14 b	NA
	02/01/06	NA	3.8	18	160 J	0.63 J	0.42 J	NA	37 J	20	64 J	NA	56	NA	NA	0.3	4	62	NA	1.7	0.054 J	NA	0.09 J	49	140	1,340
	08/01/05	NA	3.1	7.1	74	< 1	< 1	NA	0.69 J	1.9	1.2	NA	0.25	NA	NA	<0.2	5.9	9.4	NA	0.8 J	< 1	NA	< 1	2.7	17 J	NA
	08/01/05	NA	1.3	13	120	0.33 J	0.17 J	NA	17 J	14	60	NA	45	NA	NA	<0.2	2.2	42	NA	1.9	< 1	NA	0.94 J	25	75 J	NA
	05/27/05	NA	2.6 J	6.8	63 J	< 2	< 5	NA	0.69	2.1 J	1.6 J	NA	0.26	NA	NA	<0.2	6.7 J	10 J	NA	0.6 J	< 5	NA	< 5	3 J	18 J	NA
BB2ASW100 (Total)	05/23/06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	02/01/06	36 J	7.3	7.5	88	< 1	< 1	NA	5 J	0.6 J	13 J	200	< 1.2	120,000	7	1.3	12	17	NA	2.1	< 1	180,000	< 1	5.2	24	NA
	02/01/06	NA	3	19	290 J	2	2.6	53,000	77 J	190	320 J	NA	610	NA	NA	5.5	1.5	810	NA	5.5	0.097 J	NA	0.95 Jb	65	820	1,200

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2006.

2 - Seep water target effective cleanup levels were taken from *Redlined Recommended Revised Draft Remedial Action Plan, Baker Beach Disturbed Areas 1 and 2A, and Twenty-Six Other Sites, Presidio of San Francisco, California* (MACTEC, 2007).

All metals results represent dissolved metals, unless indicated as "total" in the left-hand column for total metal results. The target effective cleanup levels are presented for dissolved and total metals concentrations, as applicable.

Bold numbers indicate concentrations of metals which exceed cleanup criteria.

mg/L - milligrams per liter

µg/L - micrograms per liter

NA - not analyzed

-- - not available or applicable

Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-17-4
Results of PAH and VOC Analyses
Baker Beach Disturbed Areas 1 and 2A
Presidio of San Francisco, California

Location ID	Sample Date	Acenaphthene	Anthracene	Benzo(a)-anthracene	Benzo(b)-fluoranthene	Chrysene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	All Other PAH	All OCPs	Acetone	Benzene	Carbon disulfide	Methylene chloride	All Other VOCs
	Analytical Method ¹	8270SIM	8270SIM	8270SIM	8270SIM	8270SIM	8270SIM	8270SIM	8270SIM	8270SIM	8270SIM	8270SIM	8081	8260B	8260B	8260B	8260B	8260B
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	
Target Effective Cleanup Levels ²		1,200	770	0.0044	0.0044	0.0044	300	300	300	230	230	--	--	--	1	--	4.7	--
BB1PZ100	12/05/06	< 0.96	< 0.48	< 0.1	< 0.19	< 0.1	0.04 J	< 0.96	< 0.96	< 0.48	< 0.19	ND	ND	NA	NA	NA	NA	NA
	08/15/06	< 0.94	< 0.47	< 0.09	< 0.19	< 0.09	0.07 J	< 0.94	NA	< 0.47	< 0.19	ND	ND	NA	NA	NA	NA	NA
	05/23/06	< 2	< 0.49	< 0.1	< 0.2	< 0.1	< 0.39	< 0.98	< 0.98	< 0.49	< 0.2	ND	ND	NA	NA	NA	NA	NA
	02/01/06	<0.1	< 0.1	< 0.1	< 0.1	0.02 J	<0.1	< 0.1	0.06 J	0.02 J	0.02 J	ND	NA	1.5 J	0.2 J	0.1 J	0.3 J	ND
DUP020106	02/01/06	<0.1	<0.1	< 0.1	< 0.1	<0.1	<0.1	< 0.1	0.02 J	0.01 J	< 0.02 UJ	ND	NA	0.9 J	0.1 J	0.1 J	0.2 J	ND
BB1PZ101	12/05/06	< 0.95	< 0.48	< 0.1	< 0.19	< 0.1	< 0.38	< 0.95	< 0.95	< 0.48	< 0.19	ND	ND	NA	NA	NA	NA	NA
	08/15/06	< 0.94	< 0.47	< 0.09	< 0.19	< 0.09	< 0.38	< 0.94	NA	< 0.47	< 0.19	ND	ND	NA	NA	NA	NA	NA
	05/23/06	< 2	< 0.5	< 0.1	< 0.2	< 0.1	< 0.4	< 0.99	< 0.99	< 0.5	< 0.2	ND	ND	NA	NA	NA	NA	NA
	02/01/06	<0.1	< 0.1	< 0.1	< 0.1	<0.1	<0.1	0.06 J	<0.1 UJ	0.01 J	< 0.01 UJ	ND	NA	1 J	< 0.5	<0.5	0.2 J	ND
	05/27/05	<0.09	< 0.09	< 0.09	< 0.1	0.01	0.03	0.2	<0.09	0.03	<0.09	ND	NA	0.9 J	<0.5	<0.5	<10	ND
BB2ASW100	02/01/06	0.03 J	0.05 J	0.01 J	0.02 J	0.03 J	0.05 J	0.1	< 0.05 UJ	0.09 J	0.05 J	ND	NA	2.6 J	< 0.5	0.1 J	< 0.6	ND

Notes

1 - The identified analytical method(s) are for analyses performed beginning in the Second Quarter 2006.

2 - Seep water target effective cleanup levels were taken from *Redlined Recommended Revised Draft Remedial Action Plan, Baker Beach Disturbed Areas 1 and 2A, and Twenty-Six Other Sites, Presidio of San Francisco, California* (MACTEC, 2007).

Bold numbers indicate concentrations in excess of cleanup criteria.

µg/L - micrograms per liter

NA - not analyzed

-- - not available or applicable

ND - All analytes below reported individual analytical detection limits

Table 7 in the main report identifies all duplicate and split samples and associates them with the well from which they were collected.

Table 11 in the main report identifies current and historical data qualifiers.

Table A-17-5
Groundwater Elevation Summary
Baker Beach Disturbed Areas 1 and 2A
Presidio of San Francisco, California

Location ID	Date	Average Depth to Water ¹ (feet)	Top of Casing Elevation (feet PLLW)	Water Elevation (feet PLLW)	Well Type
BB1PZ100	12/04/06	3.82	107.48	103.66	PZ
	08/14/06	3.80	107.48	103.68	PZ
	05/22/06	3.28	107.48	104.20	PZ
	02/01/06	3.48	107.48	104.00	PZ
BB1PZ101	12/04/06	5.12	68.36	63.24	PZ
	08/14/06	4.75	68.36	63.61	PZ
	05/22/06	4.52	68.36	63.84	PZ
	02/01/06	4.63	68.36	63.73	PZ
BB2ASW100	12/04/06	Not Flowing	28.69	NM	SW
	08/14/06	Not Flowing	28.69	NM	SW
	05/22/06	Not Flowing	28.69	NM	SW
	02/01/06	Flowing	28.69	28.69	SW

Notes

1 - All depth to water measurements are an average of three measurements recorded in the field.

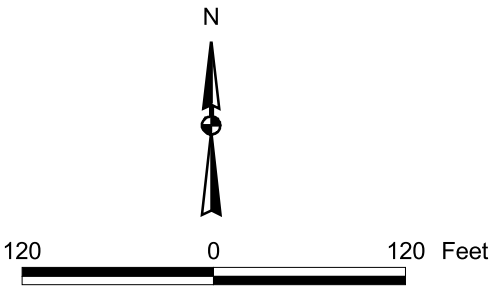
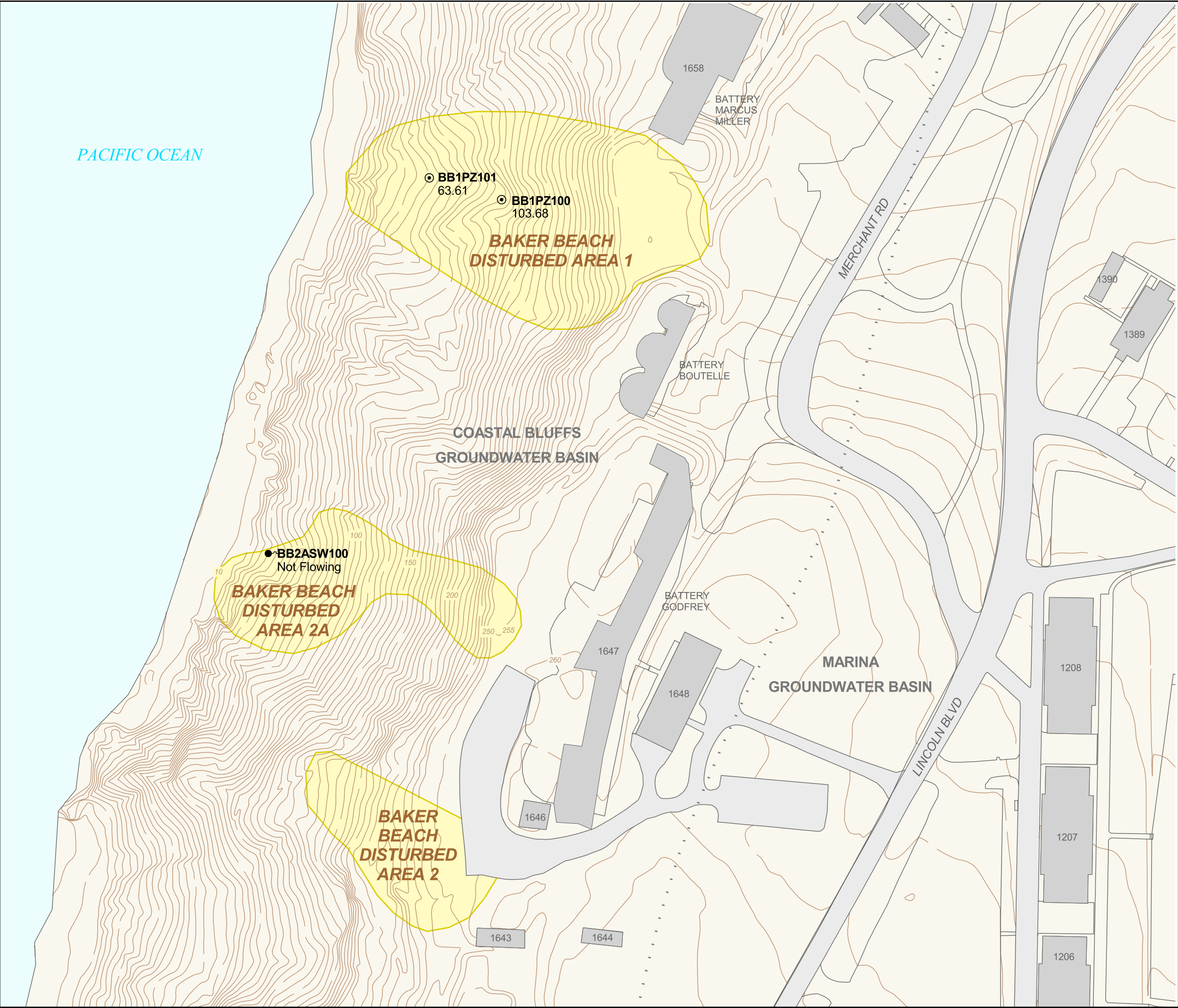
SW - Seep

PZ - Piezometer

NM - not measured

feet PLLW - feet above Presidio lower low water vertical datum

Treadwell & Rollo 2893_04/04_2006A_17 APR 04/2007



LEGEND

- ⊙ **BB1PZ100** 103.68 Piezometer
August 2006 Fresh Water Seep Elevation
- **BB2ASW100** Not Flowing Approximate Fresh Water Sample Location
- Groundwater Basin Boundary
- Topographic Contour
(Contour Interval : 5 ft)
- Presidio Base map
- Approximate Lateral Extent of Landfill
- 1648 Building

Notes:
Fresh water seep elevation data collected 14 August 2006.

Base map provided by the Presidio Trust in June 2003.

Horizontal Datum: NAD 27, CA State Plane Coordinates, Zone 3, feet

Vertical Datums: (groundwater) Presidio Lower Low Water (ft. PLLW)
(topography) North American Vertical Datum, NAVD88

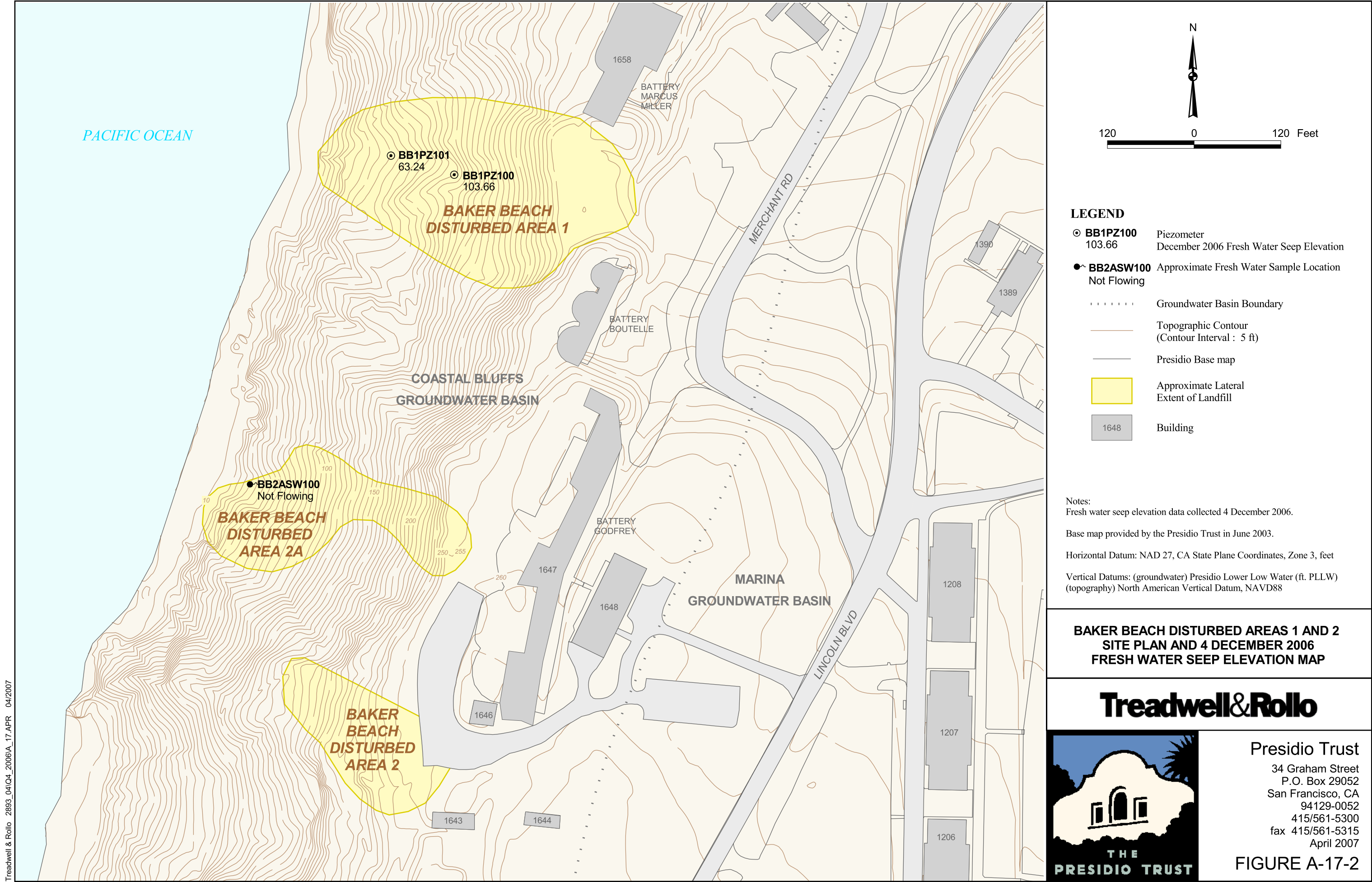
BAKER BEACH DISTURBED AREAS 1 AND 2
SITE PLAN AND 14 AUGUST 2006
FRESH WATER SEEP ELEVATION MAP

Treadwell&Rollo



Presidio Trust
34 Graham Street
P.O. Box 29052
San Francisco, CA
94129-0052
415/561-5300
fax 415/561-5315
April 2007

FIGURE A-17-1



Third Quarter 2006

Treadwell & Rollo
Environmental and Geotechnical Consultant

Fourth Quarter 2006

Environmental and Geotechnical Consultants

MONITORING WELL SAMPLING LOG (Normal, Low Flow, and Low Yield)

Site / Area BB3

Well No. BB3A-W100

Project Number 2843

Well Type ☒ Monitor ☐ Extraction ☐ Other

Recorded By P. Cornish

Sampled by P. Cornish

Date 12/6/06

WELL PURGING

PURGE VOLUME

Well casing diameter

☐ 2-inch ☐ 4-inch ☐ Other

Well Total Depth (TD, ft. below TOC):

Depth to Water (WL, ft. below TOC):

Depth to free phase (FP, ft. below TOC):

Number of borehole volumes to be purged

☐ 3 ☐ Not Applicable ☐ Other

Liquid in a 1 Foot Section of a Boring (gallons)

Borehole Size	Casing Size	Water Volume/Ft
8	2	0.9
10	4	1.68
12	4	2.22

PURGE METHOD

☐ Low Flow ☐ Bailer / Type
☐ Normal ☐ Pump / Type
☐ Modified (max 5 gpm) ☐ Other

PUMP INTAKE

Near top Depth (ft) _____
 Near Bottom Depth (ft) _____
 Other _____

PURGE VOLUME CALCULATION

Water Column Length

X

Water Volume/ft

X

No. Vols

gals
CALCULATED PURGE VOLUME
gals
ACTUAL PURGE VOLUME

Total Purge Time

Recharge Rate

Purge Rate

GROUNDWATER PARAMETER MEASUREMENTS

Meter Type

Time	Liters or Gallons	pH	Temp °C °F	DO (mg/L)	Sp. COND (mS/cm)	ORP (mV)	Turbidity (NTU)	Comments
/								
/								
/								
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/								
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/								
/								
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/								
/								
/								
/								
/								
/								

SEP checked on 12/6/06
 w/ M. Chamberlain - not running

Comments

Purge water storage/disposal

☐ Drummed onsite

☐ Other

WELL SAMPLING

SAMPLING METHOD

Date/Time Sampled

Purging

Equipment

Pump - Type

Bailer - Type

Other

Sample Filtered:

Yes / No

Filtered Sample Analysis:

SAMPLING PROGRAM

Sample No.	Container #/Volume	Laboratory	COC #	Comments

QUALITY CONTROL SAMPLES

Duplicate Samples

Blank Samples

Original Sample No.

Duplicate Sample No.

Type

Sample No.

Trip

Rinsate

Transfer

Other:

APPENDIX B
Calibration Forms

Third Quarter 2006

Field Instrument Calibration Log

Major Work Order No.: 2893
 Project Name: Pasadena SF

Instrument Type	Instrument SN	Calibration Type	Date	By
Ultrameter Myron L	607200	7.0 → 6.99	8/15/06	DR
		10.0 → 10.01	↓	
		4.0 → 4.00	↓	
Hach Turbidimeter	041000038120	5.37 → 6.0	8/15/06	DR
		48.4 → 50.0	↓	
		483 → 521	↓	
YSI SSOA DO meter	04E8408 AE	102	8/15/06	DR
Ultrameter Myron L	607200	7.0 → 7.0	8/16/06	DR
		10.0 → 10.01	↓	
		4.0 → 4.00	↓	
Hach Turbidimeter	041000038120	5.37 → 5.0	8/16/06	DR
		48.4 → 51	↓	
		483 → 518	↓	
YSI SSOA DO meter	04E8408 AE	101	8/16/06	DR
Ultrameter Myron L	607200	7.0 → 7.0	8/17/06	DR
		10.0 → 10.0	↓	
		4.0 → 4.01	↓	
Hach Turbidimeter	041000038120	5.37 → 5.0	8/17/06	DR
		48.4 → 50	↓	
		483 → 512	↓	
YSI SSOA DO meter	04E8408 AE	100	8/17/06	DR

Field Instrument Calibration Log

Major Work Order No.: 2893

Project Name: Presidio, SF.

Sooch
Will
Dave A.
Pete
Devin

Instrument Type	Instrument SN	Calibration Type	Date	Reading	By
Purham ^{SN} 682	15407	water level taken	8/14/00	4.82 ft.	
Slope Indicator	25370	@ 93764108		4.83	
	25363			4.85	
	25365			4.84	P. Cornish
	25369			4.86	
YSI 556 Flowcell	06F2009AC	4.0 pH → 3.95 pH	8/15/06		P. Cornish
		7.0 pH → 7.02			
		10.0 pH → 9.95			
		3900 MS → 3964 MS			
		To 100% DO → 99.2%			
Hach Turbidimeter	020600026785	48.4 NTU → 48.6 NTU			
		5.37 NTU → 5.46			
		488 NTU → 483			
		ORP → 244 mV @ 15°C			
		→ 250 mV @ 15.33°C			
YSI 556 Flowcell	06F2009AC	DO → 100% 92.9%	8/16/06		P. Cornish
		7.0 pH → 7.01 pH			
		4.0 4.00			
		10.0 10.02			
		3900 MS 3929 MS			
		ORP → 244 mV @ 15°C			
		→ 250 mV @ 15.2°C			
Hach Turbidimeter	020600026785	48.4 NTU → 48.6 NTU			
		5.37 → 5.46			
		488 → 483			
ORP Meter Equipco	X	checked w/ ORP Buffer mV			

Field Instrument Calibration Log

2893

Will Cow

Major Work Order No.: 060814 R-1

Project Name: TREC Presidio

Instrument Type	Instrument SN	Calibration Type	Date	By
YSI 556	06F2009AD	pH 7.0 → 7.01	8/15/06	calibrated w/in 10%
↓	↓	pH 10.0 → 10.10	↓	↓
↓	↓	pH 4.0 → 3.90	↓	↓
↓	↓	conductivity μS 3900 → 39187	↓	↓
↓	↓	ORP 15% mV 244.0 → 247.5	↓	↓
↓	↓	DO 100% → 99.8%	↓	↓
Hach 2100P turbidity	021100028998	7.0 NTU → 6.0	8/15/06	calibrated w/in 10%
↓	↓	60.0 NTU → 53.3	↓	↓
↓	↓	470 NTU → 498	↓	↓
(Equipped) ORP meter	100.03	222 mV	8/16/06	calibrated w/in 10%
Hach 2100P turbidity	021100028998	7.0 NTU → 6.3	8/18/06	calibrated w/in 10%
↓	↓	60.0 NTU → 53.4	↓	↓
↓	↓	470 NTU → 481	↓	↓
Myron L Ultrameter	617803	pH 4.0 → 3.89	8/16/06	calibrated w/in 10%
↓	↓	pH 7.0 → 7.11	↓	↓
↓	↓	pH 10.0 → 10.03	↓	↓
↓	↓	μS 3900 → 3926	↓	↓
YSI 556	06F2009AD	DO 100% → 98.9%	8/16/06	calibrated w/in 10%
Myron L Ultrameter	617803	pH 4.0 → 3.93	8/17/06	calibrated w/in 10%
↓	↓	pH 7.0 → 7.01	↓	↓
↓	↓	pH 10.0 → 9.98	↓	↓
↓	↓	μS 3400 → 3913	↓	↓
YSI 550	03C0864 AA	DO 100% → 96.9%	8/17/06	calibrated w/in 10%

Field Instrument Calibration Log

Major Work Order No.: 2893

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Project Name: Presidio, SF.

Instrument Type	Instrument SN	Calibration Type	Date	By
YSI 556 FlowCell	06F2009AC	DO → 100% → 100.4%	8/17/06	P. Cornish
		4.0 pH 3.94 pH		
		7.0 7.03		
		10.0 9.92		
		3900 μS 3895 μS		
		ORP 244 mV @ 15°C		
		reading → 249 mV @ 15.5°C		
Hach Turbidimeter	020600026785	48.4 NTU → 49 NTU		
		5.37 5.5		
		488 496		
YSI 556 FlowCell	06F2009AC	DO → 100% : 97.6%	8/16/06	P. Cornish
		4.0 pH 3.98 pH		
		7.0 pH 7.04		
		10.0 pH 10.02		
		3900 μS 3884 μS		
		ORP 244 mV @ 15°C		
		→ 249 mV @ 15.6°C		
Hach Turbidimeter	020600026785	7.00 NTU 6.04 NTU		
		55 58.1		
		58470 58		

Fourth Quarter 2006

Field Instrument Calibration Log

Major Work Order No.: 2893
Project Name: Presidio S.f.

[illegible]

Field Instrument Calibration Log

Major Work Order No.: 2893

Project Name: Presidio SF.

Instrument Type	Instrument SN	Calibration Type	Date	By
	reading	all meters took		
Durham Geoslope Indicator	28.92 25339	reading @ 2F4 GW 102	12/4/06	Ben Summersett
	28.94 25340			Devin Rynal
	28.94 26424			Pete Cornish
	28.95 26136			Sarah Sung
Myron L Ultrameter	602781	4.0 pH / 7.0 / 10.0	12/5/06	P. Cornish
	results	4.01 / 6.99 / 9.99		
		3900 μ s $\rightarrow$ 3956		
		ORP 250 mV @ 10 °C		
	result	252 mV 10.6 °C		
Hach Turb. meter	021100028998	NTU 55 / 7.00 / 470		
		593 / 7.57 / 446		
YSI DO Meter	0468408	$\rightarrow$ 100% $\rightarrow$ 99.9%		
YSI 556 Flowcell	05C1520	DO $\rightarrow$ 100% $\rightarrow$ 100.4	12/5/06	P. Cornish
		pH 4.0 / 7.0 / 10.0		
		3.63 / 6.86 / 9.87		
		3900 μ s $\rightarrow$ 3683 μ s		
		ORP 244 mV @ 15 °C $\rightarrow$ 268 mV @ 12.68 °C		
YSI DO Meter	05C1520	DO $\rightarrow$ 100% $\rightarrow$ 98.9%	12/6/06	P. Cornish
		pH 4.0 / 10.0 / 7.0 $\rightarrow$ 3.91 / 9.81 / 6.91 pH		
		3900 μ s $\rightarrow$		
		ORP 244 mV @ 15 °C $\rightarrow$ 237.1 mV @ 13.21		
Hach Turb. meter	021100028998	55 / 7.0 / 470 NTU		
		58.9 / 7.1 / 449		
Orion ORP Meter	3533	233 mV @ 13.14	12/6/06	

Field Instrument Calibration Log

Major Work Order No.: 2893

Project Name: Presidoo S.I.

[illegible]

Field Instrument Calibration Log

Major Work Order No.: 2893
Project Name: Presidio

[illegible]

APPENDIX C
Groundwater Level Measurement Logs

Third Quarter 2006

2021

GROUNDWATER LEVEL MEASUREMENTS LOG



Well Number	Time	Depth to Groundwater (ft.) (two measurements)				Depth to Bottom (ft.)	Well Type (Stick up / Flush)	Well Box Condition (Good / Suspect / Damaged)	Annular Seal Condition (Good / Suspect / Damaged)	Standing Water In Box (Yes / No)	Well Cap and Lock (Yes / No)	Vegetation Clearing Performed (Yes / No)	Comments / Action Taken
		1st	2nd	3rd	Average								
BB2100	930	3.80	3.80	3.80	3.80		S	G	NA	NA	Y	N	
BB1P2101	920	4.75	4.75	4.75	4.75		S	G	MA	NA	Y	N	BPD Lock
BB3SP01	1015	02.7				4.85	S	G	MA	NA	Y	N	
BB3SW100	1020	02.7				6.97	S	G	MA	NA	Y	N	
BB3GW100	1000	29.94	29.94	29.94	29.94		S	G	MA	NA	Y	N	
BB3GW101	1005	27.39	27.39	27.39	27.39		S	G	MA	NA	Y	N	
1349MW01	1035	22.79	22.79	22.79	22.79		F	S	G	N	Y	N	
1349MW104	1055	28.19	28.19	28.19	28.19		S	G			Y	N	
1349MW105	1100	24.38	24.38	24.38	24.38		S	G			Y	N	
1349MW100	1113	25.37	25.37	25.37	25.37		F	G	G	N	Y	N	
1349MW02	1110	27.25	27.25	27.25	27.25		F	G	S	N	Y	N	strapped tabs
1260GW102	1135	20.80	20.80	20.80	20.80		S	G			Y	N	
1260GW103	1138	25.68	25.68	25.68	25.68		S	G			Y	N	
1260GW104	1140	10.80	10.80	10.80	10.80		F	G	G	N	Y	N	
BB3P01	1200	RUNNING											
1F02GW01	1204	.80	.80	.80	.80		F	S	S	Y	Y	N	no bars / Bad tabs
1F02GW02	1207	3.15	3.15	3.15	3.15		F	S	S	N	Y	N	Bad tabs

Date: 8/14/06

Page No.: 1 of 2

Consultant: T&R

Field Staff: Sooch Sang

Field Staff Signature: [Signature]

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GROUNDWATER LEVEL MEASUREMENTS LOG



Well Number	Time	Depth to Groundwater (ft.) (two measurements)				Depth to Bottom (ft.)	Well Type (Stick up / Flush)	Well Box Condition (Good / Suspect / Damaged)	Annular Seal Condition (Good / Suspect / Damaged)	Standing Water In Box (Yes / No)	Well Cap and Lock (Yes / No)	Vegetation Clearing Performed (Yes / No)	Comments / Action Taken
		1st	2nd	3rd	Average								
6F02GW01													
1801GW01	1215	7.09	7.09	7.09	7.09		S	G	—	—	Y	N	
Q79GW117	1230	9.83	9.83	9.83	9.83		F	G	G	N	Y	N	
Q79GW116	1233	8.00	8.00	8.00	8.00		F	G	G	N	Y	N	
Q79GW112	1238	15.40	15.40	15.40	15.40		F	G	G	N	Y	N	
Q79GW111R	1241	15.34	15.34	15.34	15.34		F	S	S	Y	Y	N	massing 1 bolt / Bad tech / Bad Cap
Q37GW106	1250	10.10	10.10	10.10	10.10		F	G	G	N	Y	N	
Q37GW107	1253	10.30	10.30	10.30	10.30		F	G	G	N	Y	N	
CF01GW03	1357	44.76	44.76	44.76	44.76		S	S	—	—	Y	Y	
WBR03GW02	1415	15.13	15.13	15.13	15.13		F	G	G	N	Y	N	
WBR03GW01	1417	33.45	33.45	33.45	33.45		F	G	G	N	Y	N	
300GW01	1430	26.20	26.20	26.20	26.20		F	G	G	N	Y	N	
BB2ASW100	—	located 28' N not running											
BB3SW100	1020	4.85	4.85	4.85	4.85	PRY +	S	G	G	—	Y	N	
BB3SW102	1025	6.97	6.97	6.97	6.97	DRY +							
610SP01	1150	under water											
610SP02	1158	under water											

Date: 6/14/00

Page No.: pg 2 of 2

Consultant: TSP

Field Staff: Siach Sun

Field Staff Signature: [Signature]

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GROUNDWATER LEVEL MEASUREMENTS LOG



Well Number	Time	Depth to Groundwater (ft.) (two measurements)				Depth to Bottom (ft.)	Well Type (Stick up / Flush)	Well Box Condition (Good / Suspect / Damaged)	Annular Seal Condition (Good / Suspect / Damaged)	Standing Water In Box (Yes / No)	Well Cap and Lock (Yes / No)	Vegetation Clearing Performed (Yes / No)	Comments / Action Taken
		1st	2nd	3rd	Average								
12" LF6GW105	0930	22.15	22.15	22.15			Flush	Good	Good	No	Yes	Y	
14" 1027MW03	0950	8.98	8.98	8.98			F	G	G	N	Y	Y	
14" 1027MW01	0955	8.95	8.95	8.95			F	G	G	N	Y	Y	
12" LF6GW103	0959	7.37	7.37	7.38			F	G	G	N	Y	Y	
12" 1065PZ3A	1004	9.38	9.38	9.38			F	G	G	N	Y	Y	
12" LF6GW101	1010	11.63	11.63	11.63			F	G	G	N	Y	Y	
12" 1065PZ6A	1014	10.67	10.68	10.68			F	G	G	N	Y	Y	
12" LF6GW100	1018	12.58	12.59	12.59			F	G	G	Y	Y	Y	
12" 1027MW101	1025	4.40	4.40	4.40			F	G	G	N	Y	Y	
12" 1065PZ5AR	1031	3.55	3.55	3.55			F	G	G	N	Y	Y	
12" 1065AW10A	1036	3.95	3.96	3.96			F	G	G	N	Y	Y	
12" 1065MW9A	1039	4.00	4.00	4.00			F	G	G	N	Y	Y	
12" 1065PZ2A	1049	3.40	3.40	3.40			F	G	G	N	Y	Y	
12" 1065MW9B	1043	0.00	0.00	0.00			F	G	G	Y	Y	Y	
12" 1065PZ2B	1046	1.35	1.35	1.35			S	G	G	N	Y	Y	
12" 1065AW10B	1056	3.57	3.57	3.57			F	G	G	N	Y	Y	
12" 1065PZ5B	1102	2.19	2.19	2.19			F	G	G	N	Y	Y	

Date: 8/14/06

Page No.: 1

Consultant: Trudwell + Gullett

Field Staff: D. Regan

Field Staff Signature: [Signature]

1065PZ6B - can't be found. Covered w/ landscaping.

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GROUNDWATER LEVEL MEASUREMENTS LOG



Well Number	Time	Depth to Groundwater (ft.) (two measurements)				Depth to Bottom (ft.)	Well Type (Stick up / Flush)	Well Box Condition (Good / Suspect / Damaged)	Annular Seal Condition (Good / Suspect / Damaged)	Standing Water In Box (Yes / No)	Well Cap and Lock (Yes / No)	Vegetation Clearing Performed (Yes / No)	Comments / Action Taken
		1st	2nd	3rd	Average								
2" 1065 MW 11A	1107	8.84	8.84	8.84			F	G	G	N	Y	Y	Cap is broken
2" 1065 MW 11B	1111	8.50	8.50	8.50			F	G	G	N	Y	Y	
2" 1065 PZ 3B	1114	9.05	9.05	9.06			F	G	G	N	Y	Y	
2" 1065 MW 102	1125	4.99	5.00	5.00			F	G	G	N	Y	Y	
2" 1065 PZ 1A	1128	5.80	5.80	5.80			F	G	G	N	Y	Y	
2" 1065 PZ 1B	1131	1.03	1.03	1.03			F	G	G	N	Y	Y	
2" 1065 MW 101	1135	5.72	5.72	5.72			F	G	G	N	Y	Y	
2" 1065 PZ 4B	1138	2.58	2.58	2.58			F	G	G	N	Y	Y	
2" 1065 PZ 4A	1141	5.22	5.22	5.22			F	G	G	N	Y	Y	
2" LF6 CW 106	1151	10.07	10.07	10.07			F	G	G	N	Y	Y	
2" LF6 PZ 106	1213	4.90	4.90	4.90			S	G	G	N	N	Y	
2" LF6 PZ 105	1216	0.87	0.87	0.87			S	G	G	N	N	Y	
PZ101 LF6 PZ 101	1219	1.22	1.22	1.23			S	G	G	N	N	Y	
2" LF6 PZ 102	1205	0.58	0.58	0.58			S	G	G	N	N	Y	
2" LF6 PZ 103	1208	3.16	3.16	3.16			S	G	G	N	N	Y	
2" LF6 PZ 104	1210	7.17	7.17	7.17			S	G	G	N	N	Y	
2" G10 CW 102	1236	3.84	3.84	3.84			F	G	G	N	Y	Y	

Date: 8/14/06

Page No.: 2

Consultant: Intrepid / F. R. 110

Field Staff: D. Regan

Field Staff Signature: [Signature]

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Well Number	Time	Depth to Groundwater (ft.) (two measurements)				Depth to Bottom (ft.)	Well Type (Stick up / Flush)	Well Box Condition (Good / Suspect / Damaged)	Annular Seal Condition (Good / Suspect / Damaged)	Standing Water In Box (Yes / No)	Well Cap and Lock (Yes / No)	Vegetation Clearing Performed (Yes / No)	Comments / Action Taken
		1st	2nd	3rd	Average								
6106G103	1239	4.95	4.95	4.95			F	G	G	N	Y	Y	
600GW102	1250	4.14	4.14	4.14			F	G	G	N	Y	Y	
600GW103	1254	3.05	3.05	3.05			F	G	G	N	Y	Y	
600GW104	1300	4.20	4.21	4.21			F	G	G	N	Y	Y	
106SPZ 7B	1348	2.64	2.64	2.64			F	G	G	N	Y	Y	
106SPZ 7A	1353	3.03	3.03	3.03			F	G	G	N	Y	Y	
UBRPGW02	1410	8.91	8.91	8.91			F	G	G	N	Y	Y	
UBRPGW01	1415	8.71	8.71	8.71			F	G	G	N	Y	Y	
B03Gw101	1025	3.00	3.00	3.00			S	G	G	T	Y	N	
106SPZ6B	1108												covered - unable to locate
106SPZ3B	1115												unable to locate.
VBR01GW01	1435	unable to locate.											
												</	

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GROUNDWATER LEVEL MEASUREMENTS LOG



Well Number	Time	Depth to Groundwater (ft.) (two measurements)				Depth to Bottom (ft.)	Well Type (Stick up / Flush)	Well Box Condition (Good / Suspect / Damaged)	Annular Seal Condition (Good / Suspect / Damaged)	Standing Water In Box (Yes / No)	Well Cap and Lock (Yes / No)	Vegetation Clearing Performed (Yes / No)	Comments / Action Taken
		1st	2nd	3rd	Average								
LF4GW102	0916	21.33	21.33	21.33		42-37	Flush	Good	Good	No	Yes	Yes	
LF04GW03	0954	17.64	17.64	17.64			SU	Good	Good	No	No	No	no lock
LF4GW100	0938	16.89	16.89	16.89			SU	Good	Good	Yes	No	No	no lock
LF4GW101	1000	19.86	19.86	19.86			SU	Good	Good	No	Yes	No	lid prevents locking
LF4GW103	0933	17.62	17.62	17.62			SU	Good	Good	Yes	No	No	no lock
LF4GW104	0928	15.63	15.63	15.63			SU	Good	Good	No	No	No	no lock
LF4GW105	0957	26.78	26.78	26.78			SU	Good	Good	No	No	No	no lock
LF4GW106	0944/05	10.60	11.19	11.20	11.00		SU	Good	Good	Yes	Yes	No	2nd & 3rd @ 1005
BB3PZ101	1029	dry	dry	dry		18.00	SU	Good	Good	No	Yes	No	delphin lock
BB3SW102	1031	dry	dry	dry			SU	Good	Good	No	Yes	No	delphin lock
1349mw03R	1056	24.67	24.67	24.67			SU	Good	Good	No	Yes	No	
1349mw101	1053	22.75	22.75	22.75			Flush	Good	Good	No	Yes	No	
1349mw102	1048	17.90	17.90	17.90			Flush	Good	Good	No	Yes	No	
LF5GW102	1059	24.57	24.57	24.57			SU	Good	Good	No	Yes	No	
LF5GW103	1102	6.98	6.98	6.98			SU	Good	Good	No	Yes	No	
LF5GW104	1106	19.75	19.75	19.75			SU	Good	Good	No	Yes	No	
1349mw103	1115	31.11	31.11	31.11			S	Good	Good	No	Y	N	

Date: 8/14/06

Page No.: _____

Consultant: C&T

Field Staff: Will Crow

Field Staff Signature: [Signature]

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GROUNDWATER LEVEL MEASUREMENTS LOG



Well Number	Time	Depth to Groundwater (ft.) (two measurements)				Depth to Bottom (ft.)	Well Type (Stick up / Flush)	Well Box Condition (Good / Suspect / Damaged)	Annular Seal Condition (Good / Suspect / Damaged)	Standing Water In Box (Yes / No)	Well Cap and Lock (Yes / No)	Vegetation Clearing Performed (Yes / No)	Comments / Action Taken
		1st	2nd	3rd	Average								
LF01GW05	1200	7.83	2.83	2.83			Flush	G	G	n	Y	Y	
LF01GW02	1205	20.55	20.55	20.55			Flush	G	G	n	Y	Y	
TH-3	1214	7.14	7.14	7.14			Flush	G	G	n	Y	Y	
979GW115	1230	8.07	8.07	8.07			Flush	G	G	n	Y	Y	
979GW114	1240	6.55	6.55	6.55			Flush	G	G	Y	Y	n	
979GW113	1246	6.23	6.23	6.23			Flush	G	G	Y	Y	n	
979GW109	1249	6.35	6.35	6.35			Flush	G	G	Y	Y	n	1 of 2 bolt/tabs broken/missing
979GW110	1252	6.19	6.19	6.19			Flush	G	G	Y	Y	n	1 of 2 tabs broken
937GW35	1258	7.09	7.09	7.09			Flush	G	G	Y	Y	n	1 of 2 tabs broken Bolt missing
950GW108	1300	6.82	6.82	6.82			Flush	G	G	Y	X	n	1 of 2 tabs broken
937GW39	1303	7.46	7.46	7.46			Flush	G	G	n	Y	n	
937GW105	1307	6.40	6.40	6.40			Flush	G	G	n	Y	n	
937GW104	1305	6.65	6.65	6.65			Flush	G	G	n	Y	n	
937GW42	1317	5.20	5.20	5.20			Flush	G	G	n	Y	clear dirt	#357 Master lock
937GW322	1321	5.10	5.10	5.10			Flush	G	G	n	Y	"	
LF01GW06	1353	59.65	59.65	59.65			Flush	G	G	n	Y	n	2 of 2 tabs missing / 1 of 2 bolts missing
LF08P201	1440	13.90	13.90	13.90			Flush	G	G	n	Y	n	1 of 2 bolts missing

Date: 8/11/00

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Consultant: CR7

Field Staff: WILL CROW

Field Staff Signature: [Signature]

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GROUNDWATER LEVEL MEASUREMENTS LOG



Well Number	Time	Depth to Groundwater (ft.) (two measurements)				Depth to Bottom (ft.)	Well Type (Stick up / Flush)	Well Box Condition (Good / Suspect / Damaged)	Annular Seal Condition (Good / Suspect / Damaged)	Standing Water In Box (Yes / No)	Well Cap and Lock (Yes / No)	Vegetation Clearing Performed (Yes / No)	Comments / Action Taken
		1st	2nd	3rd	Average								
DAEGW103	1159	28.47	28.47	28.47			F	G	G	N	Y	N	
DAEGW06	1204	12.67	12.67	12.67			F	G	G	N	Y	N	
DAEGW104	1206	15.53	15.53	15.53			S	G	G	N	Y	N	
DAEGW102	1209	11.50	11.50	11.50			F	G	G	N	Y	N	
DAEPZ101	1219	23.73	23.73	23.73			F	G	G	N	Y	N	
9376W101	1239	6.35	6.35	6.35			F	G	G	N	Y	N	
9376W102	1242	6.20	6.20	6.20			F	G	G	N	Y	N	
9376W103	1246	6.05	6.05	6.05			F	G	G	N	Y	N	
9376W07	1250	8.79	8.79	8.79			S	G	G	N	Y	N	
9376W15	1253	7.07	7.07	7.07			S	G	G	N	Y	N	
9376W37	1256	6.91	6.91	6.91			S	G	G	N	Y	N	
9376W12	1302	2.49	2.49	2.49			F	G	G	N	Y	N	
9376W38	1305	4.06	4.06	4.06			F	G	G	N	Y	N	
9376W06 9376W105	1312	5.64	5.64	5.64			F	G	G	N	Y	N	
106W100	1345	42.79	42.79	42.79			F	G	G	N	Y	N	
DAEGW07 104W001 TH-2	1359	41.15	41.15	41.15			F	G	G	N	Y	N	
DAEGW09	1407	52.12	52.12	52.12			F	G	G	N	Y	N	

Date: _____ Consultant: _____
Page No.: _____ Field Staff: _____
Field Staff Signature: _____

TH-2

TH-4

TH-1

1415

1421

0.48 0.48 0.48

15.48 15.48 15.48

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F G G N Y N

F G G N Y N

GROUNDWATER LEVEL MEASUREMENTS LOG



Well Number	Time	Depth to Groundwater (ft.) (two measurements)				Depth to Bottom (ft.)	Well Type (Stick up / Flush)	Well Box Condition (Good / Suspect / Damaged)	Annular Seal Condition (Good / Suspect / Damaged)	Standing Water In Box (Yes / No)	Well Cap and Lock (Yes / No)	Vegetation Clearing Performed (Yes / No)	Comments / Action Taken
		1st	2nd	3rd	Average								
2076W03	0906	4.31	4.31	4.31			F	G	G	N	Y	N	
2316W10	0914	3.87	3.87	3.87			F	G	G	N	Y	N	
2316W23	0917	3.53	3.53	3.53			F	G	G	N	Y	N	
2316W30	0921	5.73	5.73	5.73			F	G	G	N	Y	N	
2316W25	0926	4.56	4.56	4.56			F	G	G	N	Y	N	
2316W15 2316W15	0929	4.17	4.17	4.17			F	G	G	N	Y	N	
2316W16	0932	5.70	5.70	5.70			F	G	G	N	Y	N	
2316W13	0935	2.81	2.81	2.81			S	G	G	N	X	N	
2316W24	0938	4.67	4.67	4.67			F	G	G	N	Y	N	
2316W19	0942	4.67	4.67	4.67			F	G	G	N	Y	N	
2316W18	0945	2.73	2.73	2.73			F	G	G	N	Y	N	
2316W17	0947	1.48	1.48	1.48			F	G	G	N	Y	N	
2316W09	0951	13.47	13.47	13.47			F	G	G	N	Y	N	
2316W28	0954	3.74	3.74	3.74			F	G	G	N	Y	N	
2316W29	0957	2.81	2.81	2.81			F	G	G	N	Y	N	
OW-1	1001	2.25	2.25	2.25			F	G	G	N	Y	N	
231PZ01	1004	6.38	6.38	6.38			F	G	G	N	Y	N	

Date: 8/14/06

Page No.: 1

Consultant: _____

Field Staff: D. Aunt

Field Staff Signature: Dan Aunt

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GROUNDWATER LEVEL MEASUREMENTS LOG



Well Number	Time	Depth to Groundwater (ft.) (two measurements)				Depth to Bottom (ft.)	Well Type (Stick up / Flush)	Well Box Condition (Good / Suspect / Damaged)	Annular Seal Condition (Good / Suspect / Damaged)	Standing Water In Box (Yes / No)	Well Cap and Lock (Yes / No)	Vegetation Clearing Performed (Yes / No)	Comments / Action Taken
		1st	2nd	3rd	Average								
231PZ02	1006	6.12	6.12	6.12			F	G	G	N	Y	N	
2316W27	1012	10.75	10.75	10.75			F	G	G	N	Y	N	
2316W26	1018	7.33	7.33	7.33			F	G	G	N	Y	N	
2316W22	1020	6.80	6.80	6.80			F	G	G	N	Y	N	
231PZ03	1025	5.75	5.75	5.75			F	G	G	N	Y	N	
231PZ04	1028	5.42	5.42	5.42			F	G	G	N	Y	N	
2316W11	1033	2.84	2.84	2.84			F	G	G	N	Y	N	
2316W20	1037	2.28	2.28	2.28			F	G	G	N	Y	N	
2316W21	1040	5.69	5.69	5.69			F	G	G	N	Y	N	
2316W19	1042	5.14	5.14	5.14			F	G	G	N	Y	N	
DAE6W07	110	9.40	9.40	9.40			S	G	G	N	Y	N	
DAE6W08	1123	18.34	18.34	18.34			S	G	G	N	Y	N	
DAE6W101	1132	39.09	39.09	39.09			S	G	G	N	Y	N	
DAE6W05	1135	51.45	51.45	51.45			S	G	G	N	Y	N	
DAESP03	1136	27.88	27.88	27.88			-	-	-	-	-	-	NOT FLOWING
DAEPZ102	1144	27.88	27.88	27.88			F	G	G	N	Y	N	
DAE6W03	1153	52.68	52.68	52.68									

Date: 5/14/06

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Consultant: _____

Field Staff: D. Allert

Field Staff Signature: D. Allert

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GROUNDWATER LEVEL MEASUREMENTS LOG



Well Number	Time	Depth to Groundwater (ft.) (two measurements)				Depth to Bottom (ft.)	Well Type (Stick up / Push)	Well Box Condition (Good / Suspect / Damaged)	Annular Seal Condition (Good / Suspect / Damaged)	Standing Water In Box (Yes / No)	Well Cap and Lock (Yes / No)	Vegetation Clearing Performed (Yes / No)	Comments / Action Taken
		1st	2nd	3rd	Average								
LE10GW01	924	7.15	7.15	7.15			S	G	G	Y	Y	Y	Heavily overgrown
LE10GW100	932	38.73	38.73	38.73			F	G	G	Y	Y	N	
LE10GW03	942	40.35	40.35	40.35			F	G	G	N	Y	N	
NKGW02	952	17.34	17.34	17.34			F	G	G	N	Y	N	
NKGW04	958	8.82	8.82	8.82			F	G/S	S	N	Y	N	2/2 bolts missing
NKGW01	1010	29.11	29.11	29.11			F	G	G	N	Y	N	
NKGW05	1014	21.78	21.78	21.78			F	G	G	N	Y	N	
NKGW03	1026	14.54	14.54	14.54			S	G	G	Y	Y	Y	
LE56GW00	1032	6.62	6.62	6.62			F	G	G	N	Y	N	
LE56GW01	1038	4.80	4.80	4.80			F	G	G	Y	Y	N	2/2 tabs stripped
1221GW03	1050	11.44	11.44	11.44			F	G	G	Y	Y	N	
1221GW01	1058	8.51	8.51	8.51			F	G	G	N	Y	N	
1221GW04	1104	15.36	15.36	15.36			F	G	G	N	Y	N	
1221GW02	1108	9.73	9.73	9.73			F	G	G	N	Y	N	
1213GW01	1115	23.75	23.75	23.75			F	G	G	N	Y	N	
HWGW100	1120	23.15	23.15	23.15			F	G	G	N	Y	N	
HWGW01	1128	25.50	25.50	25.50			F	G	G	N	Y	N	

Date: 8/14/06

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Consultant: BTS

Field Staff: P. Cornish

Field Staff Signature: [Signature]

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GROUNDWATER LEVEL MEASUREMENTS LOG



Well Number	Time	Depth to Groundwater (ft.) (two measurements)				Depth to Bottom (ft.)	Well Type (Stick up / Flush)	Well Box Condition (Good / Suspect / Damaged)	Annular Seal Condition (Good / Suspect / Damaged)	Standing Water in Box (Yes / No)	Well Cap and Lock (Yes / No)	Vegetation Clearing Performed (Yes / No)	Comments / Action Taken
		1st	2nd	3rd	Average								
BH6W04	1140	13.69	13.69	13.69			F	G	G	N	Y	N	
BH6W05	1145	27.69	27.69	27.69			F	G	G	N	Y	Y	
BH6W01	1152	11.90	12.90	12.90			F	G	G	N	Y	Y	Tham overcolity
BH6W02	1156	35	well Dn			35.80	F	G	G	N	Y	Y	1/2 tabs broken
FM14E07W02	1204	25.45	25.46	25.45			F	G	G	N	Y	N	
FM14E07W01	1210	27.05	27.05	27.05			F	G	G	N	Y	N	
6106W101	1222	3.37	3.37	3.37			F	G	G	Y	Y	N	
6006W101	1236	Well destroyed - EERG conducting CAP process - well destroyed											~ July 06
6006W107	1245	4.34	4.34	4.34			F	G	G	N	Y	N	
6006W108	1250	5.35	5.35	5.35			F	G	G	N	Y	N	
6006W109	1254	4.35	4.35	4.35			F	G	G	N	Y	N	
6006W106	1259	4.18	4.18	4.18			S	G	G	N	Y	N	
6006W105	1304	3.00	3.00	3.00			S	G	G	N	Y	N	Poison Oak
937(W)08	1312	4.84	4.84	4.84			F	G	G	N	Y	N	
LF026W04	1340	19.24	19.24	19.24			S	G	G	N	Y	N	
LF016W 07	1348	52.57	52.57	52.57			S	S	G	N	Y	N	No lock
LF016W 04	1350	50.65	50.65	50.65			S	G	G	N	Y	N	

Date: 8/14/06 Consultant: BTS
 Page No.: _____ Field Staff: D. G. Smith
 Field Staff Signature: [Signature]

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THE
PRESIDIO TRUST

[illegible]

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Fourth Quarter 2006

DEC 19 2006

Comments /
Action Taken[illegible]

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GROUNDWATER LEVEL MEASUREMENTS LOG



Well Number	Time	Depth to Groundwater (ft.) (two measurements)				Depth to Bottom (ft.)	Well Type (Stick up / Flush)	Well Box Condition (Good / Suspect / Damaged)	Annular Seal Condition (Good / Suspect / Damaged)	Standing Water In Box (Yes / No)	Well Cap and Lock (Yes / No)	Vegetation Clearing Performed (Yes / No)	Comments / Action Taken
		1st	2nd	3rd	Average								
BB1PZ100	1055	3.82	3.82	3.82	3.82		S	G	G	N	Y	N	
BB1PZ101	1100	5.12	5.12	5.12	5.12		G	G	G	N	Y	N	MOON LOCK
BB3SW104 BB3SW101	1130	NOT	FLOWING										
BB3SW101	1132	2.90	2.90	2.90	2.90	7.00	S						2" PVC
BB3SW102	1135	2.90	2.90	2.90	2.90	3.14	S						2" PVC (DRY)
BB3PZ102	1132	DRY				7.00	S						2" PVC (DRY)
231GW30	1320	5.75	5.75	5.75	5.75		F	S	S	Y	Y	N	stripped tabs
231GW10	1327	3.45	3.45	3.45	3.45		F	S	S	N	Y	N	1/2 stripped tab
231GW23	1330	3.23	3.23	3.23	3.23		F	S	G	N	Y	N	stripped tabs
231GW25	1338	4.28	4.28	4.28	4.28		F	G	G	N	Y	N	missing 1 bolt
207GW03	1345	4.21	4.21	4.21	4.21		F	G	G	Y	Y	N	
231GW16	1355	5.63	5.63	5.63	5.63		F	G	S	Y	Y	N	
231GW15	1352	3.92	3.92	3.92	3.92		F	G	G	N	Y	N	
231GW13	1350	2.80	2.80	2.80	2.80		S	G	G	N	Y	N	
231GW24	1407	4.45	4.45	4.45	4.45		F	G	G	N	Y	N	
231GW11	1410	1.51	1.51	1.51	1.51		F	G	G	N	Y	N	
231GW14	1412	2.75	2.75	2.75	2.75		F	G	G	N	Y	N	

Date: 12/4/06
 Page No.: 107

Consultant: TSP
 Field Staff: Sooch
 Field Staff Signature: [Signature]

BB3SW100 1115 4.10 4.10 4.10 4.10

S

2" PVC

GROUNDWATER LEVEL MEASUREMENTS LOG



Well Number	Time	Depth to Groundwater (ft.) (two measurements)				Depth to Bottom (ft.)	Well Type (Stick up / Flush)	Well Box Condition (Good / Suspect / Damaged)	Annular Seal Condition (Good / Suspect / Damaged)	Standing Water in Box (Yes / No)	Well Cap and Lock (Yes / No)	Vegetation Clearing Performed (Yes / No)	Comments / Action Taken
		1st	2nd	3rd	Average								
LF4GW103	1138	29.70	29.70	29.70	-	-	S	G	S	N	Y	N	
LF4GW102	1147	29.04	29.04	29.04	-	-	F	G	G	N	Y	N	
LF4GW100	1152	13.96	13.96	13.96	-	-	S	G	G	Y	Y	N	
LF4GW103	1157	15.79	15.79	15.79	-	-	S	G	G	Y	Y	N	
LF4GW100	1202	20.29	20.29	20.29	-	-	S	G	G	N	Y	N	
LF4GW104	1210	19.05	19.05	19.05	-	-	S	G	G	N	Y	N	
LF4GW105	1215	30.62	30.62	30.62	-	-	S	G	G	N	Y	N	lock rusted - not functional
LF4GW101	1220	well dry				200.55	S	G	G	N	Y	N	" " " "
LF4GW103	1222	18.80	18.80	18.80	-	-	S	G	G	N	Y	N	
LF10GW03	1248	42.00	42.00	42.00	-	-	F	G	G	N	Y	N	
1349MW105	1300	26.88	26.88	26.88	-	-	S	G	G	N	Y	N	
1349MW103	1305	33.10	33.10	33.10	-	-	S	G	G	N	Y	N	
1349MW104	1308	30.74	30.74	30.74	-	-	S	G	G	N	Y	N	
1349MW100	1320	28.01	28.01	28.01	-	-	F	G	G	Y	Y	N	
1349MW101	1325	24.19	24.19	24.19	-	-	F	G	S	N	Y	N	2/2 tabs stripped
1349MW101	1400	27.49	27.49	27.49	-	-	F	G	G	N	Y	N	
1349MW101	1410	26.50	26.50	26.50	-	-	S	G	G	N	Y	N	

Date: 12/4/06 Consultant: BTS/TGR
 Page No.: _____ Field Staff: D. Lornish
 Field Staff Signature: D. Lornish

GROUNDWATER LEVEL MEASUREMENTS LOG



Well Number	Time	Depth to Groundwater (ft.) (two measurements)				Depth to Bottom (ft.)	Well Type (Stick up / Flush)	Well Box Condition (Good / Suspect / Damaged)	Annular Seal Condition (Good / Suspect / Damaged)	Standing Water in Box (Yes / No)	Well Cap and Lock (Yes / No)	Vegetation Clearing Performed (Yes / No)	Comments / Action Taken
		1st	2nd	3rd	Average								
LF10GW01	930	9.25	9.25	19.25 9.25	9.25	19.44	S	G	S	Y	Y	Y	
LF10GW02	938	4.20	4.20	4.20	4.20	13.21	S	G	S	Y	Y	Y	
LF10GW100	955	39.30	39.30	39.30		-	F	G	G	Y	Y	N	
1221GW101	1024	9.70	9.70	9.70		-							
LF10GW	944	running				-							Flow can be observed
1221GW103	1030	13.05	13.05	13.05		-	F	G	G	N	Y	N	
1221GW102	1035	8.45	8.46	8.46		-	F	G	G	N	Y	N	
1221GW104	1040	16.59	16.59	16.59		-	F	G	G	N	Y	N	
BHGW04	1048	14.21	14.21	14.21		-	F	S	S	N	Y	Y	tabs 2/2 stripped
BHGW05	28.35 1055	28.35	28.35	28.35		-	F	G	G	N	Y	Y	
BHGW01	1059	20.55	20.55	20.55		-	F	G	G	N	Y	Y	
BHGW102	1104	35.86	Dry			35.86	F	G	G	N	Y	N	1/2 tabs broken
HGW100	1110	27.30	27.30	27.30		-	F	G	G	N	Y	N	
HGW101	1115	27.86	27.86	27.86		-	F	G	G	N	Y	N	
1213GW101	1122	29.86	29.86	29.86		-	F	G	G	N	Y	N	1/2 tabs broken
1260GW101	1130	17.50	17.50	17.50		-	F	G	G	Y	Y	N	
1260GW102	1134	26.60	26.60	26.60		-	S	G	G	N	Y	N	

Date: 12/4/00 Consultant: BTS / TGR

Page No.: _____ Field Staff: P. Curnish

Field Staff Signature: P. Curnish

Well Number	Time	Depth to Groundwater (ft.) (two measurements)				Depth to Bottom (ft.)	Well Type (Stick up / Flush)	Well Box Condition (Good / Suspect / Damaged)	Annular Seal Condition (Good / Suspect / Damaged)	Standing Water In Box (Yes / No)	Well Cap and Lock (Yes / No)	Vegetation Clearing Performed (Yes / No)	Comments / Action Taken
		1st	2nd	3rd	Average								
Z31GW17	1416	1.50	1.50	1.51	1.50		F	G	G	n	y	n	
Z31GW18	1417	2.63	2.63	2.63	2.63		f	G	G	n	y	n	
Z31GW19	1419	4.28	4.28	4.28	4.28		f	D	G	n	y	n	1/2 tabs / 1/2 bolts
S14 AGW101	1349	21.40	21.40	21.40	21.40		f	G	G	n	y	n	
fm14EX07GWI02	1401	27.30	27.30	27.30	27.30		f	G	G	n	y	n	
fm14EX07GWI04	1406	30.04	30.04	30.04	30.04		f	G	G	n	y	n	

Date: _____ Consultant: _____

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Field Staff Signature: _____

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GROUNDWATER LEVEL MEASUREMENTS LOG



Well Number	Time	Depth to Groundwater (ft.) (two measurements)				Depth to Bottom (ft.)	Well Type (Stick up / Flush)	Well Box Condition (Good / Suspect / Damaged)	Annular Seal Condition (Good / Suspect / Damaged)	Standing Water In Box (Yes / No)	Well Cap and Lock (Yes / No)	Vegetation Clearing Performed (Yes / No)	Comments / Action Taken
		1st	2nd	3rd	Average								
BB3GW100	1124	30.64	30.64	30.64	30.64		S	G	G	no	yes	n	
BB3P2101	1127	Dry	Dry	Dry	Dry	17.98	S	G	N/A	no	yes	n	
BB3GW101	1133	27.39	27.38	27.39	27.39		S	G	G	no	yes	n	
231GW28	1313	4.18	4.18	4.19	4.18		F	G	G	no	yes	n	
231GW29	1317	2.56	2.56	2.56	2.56		F	G	G	no	yes	n	
OW-1	1323	2.23	2.23	2.24	2.23		F	G	G	n	y	n	
231P202	1328	5.96	5.98	5.98	5.98		F	G	G	n	n	n	no lock due to 1" well
231P201	1330	6.32	6.32	6.32	6.32		F	G	G	y	n	n	no lock due to 1" well
231GW22	1339	6.93	6.91	6.92	6.92		F	G	G	y	n	n	
231GW26	1337	7.03	7.03	7.04	7.03		F	G	G	n	y	n	
231P203	1343	5.59	5.59	5.60	5.59		F	G	G	y	n	n	no lock 1" well
231P204	1348	5.18	5.18	5.18	5.18		F	G	G	n	n	n	no lock 1" well
231GW11	1350	2.53	2.54	2.53	2.53		F	D	D	y	y	n	1/2 bolts
231GW20	1356	2.31	2.31	2.31	2.31		F	G	G	y	y	n	
231GW21	1358	5.69	5.68	5.68	5.68		F	G	G	n	y	n	
231GW06	1402	4.86	4.88	4.88	4.88		F	S	G	y	y	n	1/2 bolts / 1/2 tabs broken
231GW27	1409	10.54	10.53	10.54	10.54		F	S	G	n	y	n	1/2 tabs stripped

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GROUNDWATER LEVEL MEASUREMENTS LOG



Well Number	Time	Depth to Groundwater (ft.) (two measurements)				Depth to Bottom (ft.)	Well Type (Stick up / Flush)	Well Box Condition (Good / Suspect / Damaged)	Annular Seal Condition (Good / Suspect / Damaged)	Standing Water in Box (Yes / No)	Well Cap and Lock (Yes / No)	Vegetation Clearing Performed (Yes / No)	Comments / Action Taken
		1st	2nd	3rd	Average								
1065 MW 93	1132	0.00	0.00	0.00	0.00		P	G	G	Y	Y	N	
1065 MW 102	1139	4.71	4.71	4.71	4.71		F	G	G	N	Y	N	
1065 P2 1A	1143	5.68	5.68	5.68	5.68		P	G	G	Y	Y	N	
1065 P2 1B	1146	2.18	2.18	2.18	2.18		P	G	G	N	Y	N	
1065 MW 101	1149	5.65	5.65	5.65	5.65		P	G	G	N	Y	N	
1065 P2 4A	1152	5.60	5.60	5.60	5.60		F	G	G	N	Y	N	
1065 P2 4B	1154	2.40	2.40	2.40	2.40		F	G	G	N	Y	N	
1065 P2 7A	1202	3.24	3.24	3.24	3.24		F	G	G	N	Y	N	
1065 P2 7B	1207	2.81	2.81	2.81	2.81		P	G	G	N	Y	N	
LP6GW103	1230	7.61	7.61	7.61	7.61		F	G	G	N	Y	N	
LP6GW105	1239	22.55	22.55	22.55	22.55		F	G	G	N	Y	N	
LP6GW106	1245	10.33	10.33	10.33	10.33		F	G	G	N	Y	N	
LP6P2101	1320	1.06	1.06	1.06	1.06		S	-	-	N	N	N	Piezometer, Just PVC in ground
LP6P2102	1315	0.45	0.45	0.45	0.45		S	-	-	N	N	N	" "
LP6P2103	1312	3.12	3.12	3.12	3.12		S	-	-	N	N	N	" "
LP6P2104	1309	7.21	7.21	7.21	7.21		S	-	-	N	N	N	" "
LP6P2105	1304	0.31	0.31	0.31	0.31		S	-	-	N	N	N	" "
LP6P2106	1300	4.90	4.90	4.90	4.90		S	-	-	N	N	N	" "

Date: 12/4/06 Consultant: Trendwell + Kellogg

Page No.: 2 Field Staff: D. Raym

Field Staff Signature: [Signature]

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GROUNDWATER LEVEL MEASUREMENTS LOG



Well Number	Time	Depth to Groundwater (ft.) (two measurements)				Depth to Bottom (ft.)	Well Type (Stick up / Rusty)	Well Box Condition (Good / Suspect / Damaged)	Annular Seal Condition (Good / Suspect / Damaged)	Standing Water in Box (Yes / No)	Well Cap and Lock (Yes / No)	Vegetation Clearing Performed (Yes / No)	Comments / Action Taken
		1st	2nd	3rd	Average								
1027 MW 03	1020	9.25	9.25	9.25	9.25		F	G	G	N	Y	N	
1027 MW 01	1023	9.21	9.21	9.21	9.21		F	G	G	Y	Y	N	
1065 P23A	1030	9.78	9.78	9.78	9.78		F	G	G	N	Y	N	
1065 P23B	1026	9.22	9.22	9.22	9.22		F	G	G	Y	Y	N	
1065 P26B	1036	10.95	10.95	10.95	10.95		F	G	S	N	Y	N	Annular seal has broken up
LP66W101	1041	12.07	12.08	12.08	12.08		F	G	G	N	Y	N	
LP66W100	1041	13.03	13.04	13.04	13.04		F	G	G	Y	Y	N	
1065 MW 11A	1050	9.15	9.15	9.15	9.15		F	G	G	N	Y	N	Replaced cap and lock
1065 MW 11B	1054	8.53	8.53	8.53	8.53		F	G	G	Y	Y	N	
1047 MW 101	1102	5.04	5.04	5.04	5.04		F	G	G	N	Y	N	
1065 P25AR	1108	3.70	3.70	3.70	3.70		F	G	G	N	Y	N	
1065 P25B	1105	2.50	2.50	2.50	2.50		F	G	G	N	Y	N	
1065 MW 10A	1110	4.11	4.11	4.11	4.11		F	G	G	N	Y	N	
1065 MW 10B	1114	3.37	3.37	3.37	3.37		F	G	G	N	Y	N	
1065 P22B	1119	1.44	1.44	1.44	1.44		S	G	G	N	Y	N	
1065 P22A	1124	3.45	3.45	3.46	3.46		F	G	G	Y	Y	N	
1065 MW 9A	1129	4.02	4.02	4.02	4.02		F	G	G	N	Y	N	

Date: 12/4/06

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Consultant: Treadwell + Rille

Field Staff: D. Reynard

Field Staff Signature: [Signature]

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APPENDIX D
DataVal Data Validation Summary Reports

Third Quarter 2006

TO: Joshua Graber, Treadwell & Rollo, Inc.

November 29, 2006

FROM: Donna Breaux, DataVal, Inc. DB 11/29/06

T&R Project No. 2893.04

**DATA VALIDATION SUMMARY REPORT FOR THE THIRD QUARTER 2006
GROUNDWATER MONITORING, THE PRESIDIO OF SAN FRANCISCO, CA****PRIMARY LABORATORY: Curtis & Tompkins, Ltd., Berkeley, CA****QC SPLIT SAMPLE LABORATORY: Columbia Analytical Services, Inc., Redding, CA****SAMPLING DATES: August 15, 16, 17, 18 and 21, 2006**

Data validation of Level III laboratory data packages was performed according to the project-specific guidelines. These guidelines were outlined in the Presidio-wide Quality Assurance Project Plan, Sampling and Analysis Plan, April, 2001; the U. S. Environmental Protection Agency Contract Laboratory Program National Functional Guidelines for Organic Data Review, October, 1999; the U. S. Environmental Protection Agency Contract Laboratory Program National Functional Guidelines for Low Concentration Organic Data Review, June, 2001; and the U. S. Environmental Protection Agency Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, October 2004.

The data were reviewed for holding times, surrogate recoveries, laboratory blanks, laboratory control samples, laboratory duplicate samples, matrix spikes and matrix spike duplicates, GC/MS tunes, performance evaluation mix standards, ICP interference check standards, ICP serial dilutions, initial calibrations, continuing calibration verification standards, internal standards and field QC samples.

The following paragraphs highlight the essential findings of the data validation effort:

I. Volatile Organic Compounds (VOCs) by GC/MS (8260B)

Overall, the data are usable as reported with any added qualifiers. Qualification was required for the reason noted in Section I.

A. Reporting Limits

The laboratory reporting limits for VOCs in water matrix samples met the project required reporting limits, with the following exception:

1. The laboratory reporting limits did not meet the project required reporting limits listed in Table 2-6.8-1 of the QAPP for bromoform, bromomethane, chloroethane, and chloromethane. The laboratory reported 1.0 ug/L for these compounds. The project required reporting limit was 0.5 ug/L.

- B. Holding Times
Technical holding time criteria were met for all project samples.
- C. Surrogate Recoveries
Surrogate spike recoveries met QC acceptance criteria for all project samples.
- D. Blanks
Target analytes were not observed in any laboratory method blanks associated with the project samples. Target analytes were not observed in any field QC blanks associated with the project samples, with the following exception:
1. Source blank DW082106B (188869-001) had a detected level of acetone at 16 ug/L. Project sample association with this source blank could not be established, and qualification was not required.
- E. Laboratory Control Samples
All QC criteria were met for the laboratory control samples associated with the project samples.
- F. Matrix Spike/Matrix Spike Duplicate
All QC criteria were met for the matrix spikes and matrix spike duplicates associated with the project samples.
- G. GC/MS Tunes
All QC criteria were met for the GC/MS tunes associated with the project samples.
- H. Initial Calibration
Initial calibration criteria were met for all calibration standards associated with the project samples.
- I. Continuing Calibration
Continuing calibration criteria were met for all continuing calibration verification standards associated with the project samples, with the following exceptions:
1. The 8/16/06 at 13:34 water matrix continuing calibration verification (CCV) standard analyzed on instrument MSVOA09 had bromomethane with a percent difference (%D) less than the +/-25%D acceptance criteria at -38%. The results for bromomethane in the associated samples were non-detect and qualified as estimated (UJ).
 2. The 8/21/06 at 8:47 water matrix CCV analyzed on instrument MSVOA09 had bromomethane with a %D less than the +/-25%D acceptance criteria at -27%. The results for bromomethane in the associated samples were non-detect and qualified as estimated (UJ).
- See Table 2 of this report for a summary of samples qualified for continuing calibration verification standard percent difference failure.

- J. Internal Standards
Internal standard areas and retention times met QC acceptance criteria for all project samples.

II. **N-Nitrosodimethylamine (NDMA) by GC/MS (1625C)**

Overall, the data are usable as reported. Qualification was not required.

- A. Reporting Limits
A project required reporting limit for NDMA in water matrix samples was not listed in the QAPP.
- B. Holding Times
Technical holding time criteria were met for all project samples.
- C. Labeled Compound Recoveries
Labeled compound recoveries met QC acceptance criteria for all project samples.
- D. Blanks
Target analytes were not observed in any laboratory method blanks or field QC blanks associated with the project samples, with the following exceptions:
1. Method blank B11714 had a detected level of n-nitrosodimethylamine at 0.0006 ug/L. The levels of n-nitrosodimethylamine present in the project samples were greater than five times the blank amount or were non-detect, and qualification was not required.
 2. Source blank DW081706A (188837-012) had a detected level of n-nitrosodimethylamine at 0.0121 ug/L. The project samples were non-detect for NDMA, and qualification was not required.
 3. Source blank DW082106B (188869-001) had a detected level of n-nitrosodimethylamine at 0.0417 ug/L. Project sample association with this blank could not be established, and qualification was not required.
- E. Laboratory Control Samples
All QC criteria were met for the laboratory control samples associated with the project samples.
- F. Matrix Spike/Matrix Spike Duplicate
A matrix spike and matrix spike duplicate were not analyzed with the project samples for this analysis.
- G. GC/MS Tunes
GC/MS tunes were not analyzed in association with the project samples. The requirement to analyze a decafluorotriphenylphosphine (DFTPP) tuning standard applies only in full scan mode.

- H. Initial Calibration
Initial calibration criteria were met for all calibration standards associated with the project samples.
- I. Continuing Calibration
Continuing calibration criteria were met for all continuing calibration standards associated with the project samples.
- J. Internal Standards
Internal standard areas and retention times could not be verified with the information provided in the data package.

III. Total Petroleum Hydrocarbons (TPH) - Gasoline/Stoddard Solvent (8015B)

Overall, the data are usable as reported. Qualification was not required.

- A. Reporting Limits
The laboratory reporting limit for TPH-gasoline in water matrix samples met the project required reporting limit. A project required reporting limit was not provided for Stoddard solvent in the project QAPP.
- B. Holding Times
Technical holding time criteria were met for all project samples.
- C. Surrogate Recoveries
Surrogate spike recoveries met QC acceptance criteria for all project samples.
- D. Blanks
Target analytes were not observed in any laboratory method blanks associated with the project samples. Target analytes were not observed in any field QC blanks associated with the project samples.
- E. Laboratory Control Samples
All QC criteria were met for the laboratory control samples associated with the project samples.
- F. Matrix Spike/Matrix Spike Duplicate
All QC criteria were met for the matrix spikes and matrix spike duplicates associated with the project samples.
- G. Initial Calibration
Initial calibration criteria were met for all calibration standards associated with the project samples.
- H. Continuing Calibration
Continuing calibration criteria were met for all continuing calibration standards associated with the project samples.

IV. Total Petroleum Hydrocarbons – Diesel/Fuel Oil Range (8015B)

Overall, the data are usable as reported. Qualification was not required.

A. Reporting Limits

The laboratory reporting limits for TPH-diesel and TPH-fuel oil in water matrix samples met the project-required reporting limits.

B. Holding Times

Technical holding time criteria were met for all project samples.

C. Surrogate Recoveries

Surrogate spike recoveries met QC acceptance criteria for all project samples.

D. Blanks

Target analytes were not observed in any laboratory method blanks associated with the project samples. Target analytes were not observed in any field QC blanks associated with the project samples.

E. Laboratory Control Samples

All QC criteria were met for the laboratory control samples associated with the project samples.

F. Matrix Spike/Matrix Spike Duplicate

All QC criteria were met for the matrix spikes and matrix spike duplicates associated with the project samples, with the following exception:

1. The percent recoveries for diesel were outside the 65%-135% project acceptance criteria in QC samples 1349MW100 (188802-001) MS/MSD. The amount of diesel present in the parent sample was greater than four times the amount spiked and qualification was not required. (QC Batch 116703)

G. Initial Calibration

Initial calibration criteria were met for all calibration standards associated with the project samples.

H. Continuing Calibration

Continuing calibration criteria were met for all continuing calibration standards associated with the project samples.

V. Aromatic Volatiles by GC (8021B)

Overall, the data are usable as reported with any added qualifiers. Qualification was required for the reason noted in Section D.

A. Reporting Limits

The laboratory reporting limits for benzene, toluene, ethylbenzene, xylenes and methyl tertiary-butyl ether in water matrix samples met the project-required reporting limits.

B. Holding Times

Technical holding time criteria were met for all project samples.

C. Surrogate Recoveries

Surrogate spike recoveries met QC acceptance criteria for all project samples.

D. Blanks

Target analytes were not observed in any laboratory method blanks associated with the project samples. Target analytes were not observed in any field QC blanks associated with the project samples, with the following exception:

1. Source blank DW081706A (188837-012) had a detected level of methyl tertiary-butyl ether at 6.8 ug/L. The detected results for methyl tertiary-butyl ether in the associated project samples were changed to non-detect (U) if those values were less than five times the blank amount.

See Table 2 of this report for a summary of qualifications due to blank contamination.

E. Laboratory Control Samples

All QC criteria were met for the laboratory control samples associated with the project samples.

F. Matrix Spike/Matrix Spike Duplicate

A matrix spike and matrix spike duplicate were not analyzed with the project samples for this analysis.

G. Initial Calibration

Initial calibration criteria were met for all calibration standards associated with the project samples.

H. Continuing Calibration

Continuing calibration criteria were met for all continuing calibration standards associated with the project samples. Data was reported from two columns. Samples associated with CCVs with %Ds that failed criteria on one column did not require qualification if results were reported from the column in control. Those failures were not noted in this report.

VI. Organochlorine Pesticides (8081A)

Overall, the data are usable as reported with any added qualifiers. Qualifications were required for the reasons noted in Sections C, F and I.

A. Reporting Limits

The laboratory reporting limits for pesticides in water matrix samples met the project-required reporting limits, with the following exception:

1. The results for various pesticides in sample 1349MW100 (188802-001) were reported as non-detect at a three-fold dilution. The reporting limits were raised by the dilution factor.

B. Holding Times

Technical holding time criteria were met for all project samples.

C. Surrogate Recoveries

Surrogate spike recoveries met QC acceptance criteria for all project samples, with the following exceptions:

1. The percent recoveries for surrogates 2,4,5,6-tetrachloro-meta-xylene (TCMX) and/or decachlorobiphenyl (DCB) failed the 65%-135% project acceptance criteria in several project samples. The compounds associated with surrogate TCMX (alpha-BHC, beta-BHC, delta-BHC, gamma-BHC, aldrin, heptachlor, heptachlor epoxide and endosulfan I) and the compounds associated with surrogate DCB (alpha-chlordane, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, dieldrin, endosulfan II, endosulfan sulfate, endrin, endrin ketone, gamma-chlordane, methoxychlor and toxaphene) were qualified as estimated with a low bias (J-/UJ). The following table lists the project samples that required qualification.

Project Sample Name	Laboratory Sample ID	DCB % Recovery	TCMX % Recovery
BB1PZ101	188774-002	45%	79%
1349MW100	188802-001	63%	61%
1349MW102	188837-004	43%	67%
LF5GW102	188837-013	66%	63%
DW082106B	188869-001	67%	62%

See Table 2 of this report for a summary of qualifications due to surrogate percent recovery failures.

D. Blanks

Target analytes were not observed in any laboratory method blanks associated with the project samples. Target analytes were not observed in any field QC blanks associated with the project samples.

E. Laboratory Control Samples

All QC criteria were met for the laboratory control samples associated with the project samples.

F. Matrix Spike/Matrix Spike Duplicate

All QC criteria were met for the matrix spikes and matrix spike duplicates associated with the project samples, with the following exception:

1. The percent recoveries for 4,4'-DDT, dieldrin, endrin, gamma-BHC and heptachlor were outside the 65%-135% project acceptance criteria in QC samples 1349MW100 (188802-001) MS/MSD. The amounts of gamma-BHC and heptachlor present in the parent sample were greater than four times the amounts spiked and qualification was not required. The result for dieldrin in the parent sample was non-detect and qualification was not required. The results for 4,4'-DDT and endrin in the parent sample were detected and qualified as estimated with a low bias (J-). (QC Batch 116604)

See Table 2 of this report for a summary of qualifications due to MS/MSD percent recovery failure.

G. Performance Evaluation Mix (PEM) Check Standards

All PEM check standards met the project degradation criteria of 20% for endrin and 4,4'-DDT. Data was reported from two columns. PEM standards with percent degradations that failed criteria on one column did not require qualification if sample results were reported from the column in control. Those failures were not noted in this report.

H. Initial Calibration

Initial calibration criteria were met for all calibration standards associated with the project samples.

I. Continuing Calibration

Continuing calibration criteria were met for all continuing calibration standards associated with the project samples, with the following exceptions:

1. Data was reported from two columns. Continuing calibration verification standards with percent differences that failed criteria on one column did not require qualification if the results were reported from the column in control. Those failures were not noted in this report.
2. Qualification was not required for samples with non-detect results associated with high-failing CCV standards. Those failures were not noted in this report.
3. The 8/23/06 at 15:44 water matrix CCV analyzed on instrument GC23, channel A, had eight compounds with %Ds less than the +/-15%D acceptance criteria: gamma-BHC (-16%), heptachlor (-16%), gamma-chlordane (-16%), endosulfan I (-16%), endrin (-17%), 4,4'-DDD (-16%), 4,4'-DDT (-18%) and endosulfan sulfate (-16%). The results for these compounds in the associated samples were qualified as estimated with a low bias (J-/UJ).
4. The 8/29/06 at 22:33 water matrix CCV analyzed on instrument GC16, channel A, had two compounds with %Ds less than the +/-15%D

acceptance criteria: 4,4'-DDT (-18%) and methoxychlor (-19%). The results for 4,4'-DDT and methoxychlor in the associated samples were non-detect and qualified as estimated (UJ).

5. The 8/30/06 at 2:05 water matrix CCV analyzed on instrument GC16, channel A, had eight compounds with %Ds less than the +/-15%D acceptance criteria: delta-BHC (-18%), heptachlor (-19%), aldrin (-16%), heptachlor epoxide (-16%), alpha-chlordane (-18%), 4,4'-DDT (-31%), methoxychlor (-30%) and endosulfan sulfate (-18%). The results for these compounds in the associated samples were non-detect and qualified as estimated (UJ).

See Table 2 of this report for a summary of samples qualified for continuing calibration verification standard percent difference failure.

VII. Polychlorinated Biphenyls (PCBs) (8082)

Overall, the data are usable as reported with any added qualifiers. Qualifications were required for the reasons noted in Sections B and C.

A. Reporting Limits

The laboratory reporting limits for PCBs in water matrix samples met the project required reporting limits.

B. Holding Times

Technical holding time criteria were met for all project samples, with the following exception:

1. Sample 1349MW100 RE (188802-021) was extracted two days past the seven-day extraction holding time for PCB analysis. The sample results were non-detect and qualified as estimated (UJ). The sample was originally extracted within the holding time as 1349MW100 (188802-001). Failed surrogate recoveries below 30% would have resulted in rejected data for the original extraction; therefore, data from the re-extraction was used.

See Table 2 of this report for a summary of qualifications due to missed extraction holding times.

C. Surrogate Recoveries

Surrogate spike recoveries met QC acceptance criteria for all project samples, with the following exceptions:

1. The percent recoveries for surrogates 2,4,5,6-tetrachloro-meta-xylene (TCMX) and/or decachlorobiphenyl (DCB) failed the 65%-135% project acceptance criteria in two project samples. The compounds associated with surrogate TCMX (PCB-1016, PCB-1221, PCB-1232 and PCB-1242) and the compounds associated with surrogate DCB (PCB-1248, PCB-1254 and PCB-1260) were non-detect and qualified as estimated (UJ). The following table lists the project samples that were qualified due to these QC failures.

Project Sample Name	Laboratory Sample ID	DCB % Recovery	TCMX % Recovery
LF6GW103	188802-008	39%	96%
1349MW100 RE	188802-021	37%	31%

See Table 2 of this report for a summary of qualifications due to surrogate percent recovery failures.

- D. Blanks
Target analytes were not observed in any laboratory method blanks associated with the project samples. Target analytes were not observed in any field QC blanks associated with the project samples.
- E. Laboratory Control Samples
All QC criteria were met for the laboratory control samples associated with the project samples.
- F. Matrix Spike/Matrix Spike Duplicate
All QC criteria were met for the matrix spikes and matrix spike duplicates associated with the project samples.
- G. Initial Calibration
Initial calibration criteria were met for all calibration standards associated with the project samples.
- H. Continuing Calibration
Continuing calibration criteria were met for all continuing calibration standards associated with the project samples. Data was reported from two columns. Continuing calibration verification standards with percent differences that failed criteria on one column did not require sample qualification if the reported results were from the column in control. Those failures were not noted in this report.

VIII. Polynuclear Aromatic Hydrocarbons (PAHs) by HPLC (8310)

Overall, the data are usable as reported with any added qualifiers. Qualifications were required for the reasons noted in Section F.

- A. Reporting Limits
The laboratory reporting limits for PAHs in water matrix samples met the project required reporting limits, with the following exceptions:
1. The laboratory reporting limits did not meet the project required reporting limits listed in Table 2-6.12-1 of the QAPP for anthracene and fluoranthene. The laboratory reported 0.5 ug/L for anthracene and 0.4 ug/L for fluoranthene. The project required reporting limit for these compounds was 0.2 ug/L.

- B. Holding Times
Technical holding time criteria were met for all project samples.
- C. Surrogate Recoveries
Surrogate spike recoveries met QC acceptance criteria for all project samples, with the following exception:
1. Surrogates were reported from two wavelengths. Surrogate recoveries that failed criteria at one wavelength did not require qualification of sample results if the surrogate recoveries at the alternate wavelength met criteria. Those failures were not noted in this report.
- D. Blanks
Target analytes were not observed in any laboratory method blanks associated with the project samples. Target analytes were not observed in any field QC blanks associated with the project samples.
- E. Laboratory Control Samples
All QC criteria were met for the laboratory control samples associated with the project samples.
- F. Matrix Spike/Matrix Spike Duplicate
All QC criteria were met for the matrix spikes and matrix spike duplicates associated with the project samples, with the following exception:
1. In QC samples 1349MW100 (188802-001) MS/MSD, the percent recoveries were outside the 65%-135% project acceptance criteria for benzo(a)pyrene (25%/26%), fluorene (440%/193%) and pyrene (18%/149%). The percent recovery for naphthalene was outside the 50%-135% project acceptance criteria at 0%/0%. In addition, the relative percent difference (RPD) for pyrene was outside the 35% project acceptance criteria in the same MS/MSD pair at 53%. The amount of fluorene present in the parent sample was greater than four times the amount spiked and qualification was not required. Recoveries less than 30% required rejection of non-detect results. The results for benzo(a)pyrene and naphthalene in the parent sample were non-detect and qualified as rejected (R). The result for pyrene in the sample was detected and qualified as estimated with a low bias (J-) for MS/MSD percent recovery failure and RPD failure. (QC Batch 116658)
See Table 2 of this report for a summary of qualifications due to MS/MSD percent recovery and RPD failures.
- G. Initial Calibration
Initial calibration criteria were met for all calibration standards associated with the project samples.
- H. Continuing Calibration
Continuing calibration criteria were met for all continuing calibration standards associated with the project samples.

IX. Metals (6010B/6020A/7470A)

Overall, the data are usable as reported with any added qualifiers. Qualifications were required for the reasons noted in Sections E and G.

A. Reporting Limits

The laboratory reporting limits for metals in water matrix samples met the project required reporting limits listed in Table 2-5.21-1 of the QAPP.

B. Holding Times

Technical holding time criteria were met for all project samples.

C. Blanks

Target analytes were not observed in any laboratory method blanks associated with the project samples. Target analytes were not observed in any field QC blanks associated with the project samples, with the following exceptions:

1. Equipment blank BHWGW05RB01 (188774-013) had a detected level of calcium at 770 ug/L. The associated samples had calcium values greater than five times the blank amount, and qualification was not required.
2. Equipment blank 1065MW9BRB9A (188802-015) had a detected level of sodium at 600 ug/L. The associated samples had sodium values greater than five times the blank amount, and qualification was not required.
3. Source blank DW081706A (188837-012) had a detected level of sodium at 800 ug/L. The associated samples had sodium values greater than five times the blank amount, and qualification was not required.

D. Laboratory Control Samples

All QC criteria were met for the laboratory control samples associated with the project samples.

E. Matrix Spike/Matrix Spike Duplicate

All QC criteria were met for the matrix spikes and matrix spike duplicates associated with the project samples, with the following exceptions:

1. The percent recoveries for magnesium and sodium were outside the 75%-125% project acceptance criteria in QC samples BB3GW100 (188774-003) MS and/or MSD. The amounts of magnesium and sodium present in the parent sample were greater than four times the amounts spiked and qualification was not required. (QC Batch 116572)
2. The percent recoveries for mercury were outside the 75%-125% project acceptance criteria in QC samples 1349MW100 (188802-001) MS/MSD at 72%/70%. The results for total and dissolved mercury in the associated samples were qualified as estimated with a low bias (J-UJ). (QC Batch 116599)

3. The percent recoveries for calcium, magnesium, manganese and sodium were outside the 75%-125% project acceptance criteria in QC samples 1349MW100 (188802-001) MS/MSD. The amounts of these metals present in the parent sample were greater than four times the amounts spiked and qualification was not required. (QC Batch 116736)
4. The percent recovery for manganese was outside the 75%-125% project acceptance criteria in QC sample 1065PZ2A (188837-009) MS. The amount of manganese present in the parent sample was greater than four times the amount spiked and qualification was not required. (QC Batch 116738)

See Table 2 of this report for a summary of qualifications due to matrix spike percent recovery failure.

F. ICP Interference Check Standards

All QC criteria were met for the ICP interference check standards associated with the project samples.

G. ICP Serial Dilution

All QC criteria were met for the ICP serial dilutions associated with the project samples, with the following exception:

1. The percent difference (%D) failed the 10% project acceptance criteria for calcium in the serial dilution of sample 1065PZ2A (188837-009) at 18%. The results for total and dissolved calcium in the associated samples were qualified as estimated (J/UJ). (QC Batch 116738)

See Table 2 of this report for a summary of qualifications due to serial dilution percent difference failure.

H. Initial and Continuing Calibrations

All initial and continuing calibration (CCV) standards associated with the project samples met QC acceptance criteria. Qualification was not required for samples with non-detect results associated with high-failing CCV standards. Those failures were not noted in this report.

X. Various General Chemistry Methods

Overall, the data are usable as reported with any added qualifiers. Qualifications were required for the reason noted in Section E.

A. Reporting Limits

The laboratory reporting limits for the general chemistry methods analyzed met the project required reporting limits listed in the QAPP, with the following exceptions:

1. The results for nitrite-nitrogen in samples 1349MW100 (188802-001) and 610SP01 (188837-005) were reported as non-detect at two-fold and twenty-fold dilutions, respectively, due to the nature of the sample matrices. The reporting limits were raised by the dilution factors.
2. The results for fluoride and nitrate-nitrogen in sample 610SP01 (188837-005) were reported as non-detect at a ten-fold dilution due to

the nature of the sample matrix. The reporting limits were raised by the dilution factor.

B. Holding Times

Technical holding time criteria were met for all project samples.

C. Blanks

Target analytes were not observed in any laboratory method blanks associated with the project samples. Target analytes were not observed in any field QC blanks associated with the project samples, with the following exceptions:

1. Equipment blank BHWGW05RB01 (188774-013) had a detected level of alkalinity at 1.5 mg/L. The associated samples had alkalinity values greater than five times the blank amount, and qualification was not required.
2. Source blank DW082106B (188869-001) had a detected level of total dissolved solids at 50 mg/L. Qualification was not required for this physical property measurement.

D. Laboratory Control Samples

All QC criteria were met for the laboratory control samples associated with the project samples, with the following exceptions:

1. The percent recovery for fluoride was outside the 90%-100% project acceptance criteria in QC sample QC352845 LCS at 111%. The results for fluoride in the associated samples were non-detect and qualification was not required. (QC Batch 116633)
2. The percent recoveries for fluoride were outside the 90%-100% project acceptance criteria in QC samples QC353054/QC353055 LCS/LCSD at 112%/113%. The results for fluoride in the associated samples were non-detect and qualification was not required. (QC Batch 116688)

E. Matrix Spike/Matrix Spike Duplicate

All QC criteria were met for the matrix spikes and matrix spike duplicates associated with the project samples, with the following exception:

1. The percent recoveries for sulfide were outside the 75%-125% project acceptance criteria in QC samples 1065PZ2A (188837-009) MS/MSD at 67%/68%. The results for sulfide in the associated samples were qualified as estimated with a low bias (J-/UJ). (QC Batch 116737)

See Table 2 of this report for a summary of qualifications due to matrix spike percent recovery failure.

F. Laboratory Duplicate Samples

All QC criteria were met for the laboratory duplicate samples associated with the project samples.

G. Initial and Continuing Calibrations

All initial and continuing calibration standards associated with the project samples met QC acceptance criteria.

The following paragraphs highlight the essential findings of the data validation effort of the QC split samples:

XI. Volatile Organic Compounds (VOCs) by GC/MS (8260B)

Overall, the data are usable as reported. Qualification was not required.

A. Reporting Limits

The laboratory reporting limits for VOCs in water matrix samples met the project required reporting limits, with the following exception:

1. The laboratory reporting limits did not meet the project required reporting limits listed in Table 2-6.8-1 of the QAPP for bromoform, bromomethane, chloroethane, and chloromethane. The laboratory reported 1.0 ug/L for these compounds. The project required reporting limit was 0.5 ug/L.

B. Holding Times

Technical holding time criteria were met for all project samples.

C. Surrogate Recoveries

Surrogate spike recoveries met QC acceptance criteria for all project samples.

D. Blanks

Target analytes were not observed in any laboratory method blanks associated with the project samples. Target analytes were not observed in the trip blank associated with the project samples.

E. Laboratory Control Samples

All QC criteria were met for the laboratory control samples associated with the project samples.

F. Matrix Spike/Matrix Spike Duplicate

A matrix spike and matrix spike duplicate were not analyzed with the project samples for this analysis.

G. GC/MS Tunes

All QC criteria were met for the GC/MS tunes associated with the project samples.

H. Initial Calibration

Initial calibration criteria were met for all calibration standards associated with the project samples.

- I. Continuing Calibration
Continuing calibration criteria were met for all continuing calibration standards associated with the project samples.
 - J. Internal Standards
Internal standard areas and retention times met QC acceptance criteria for all project samples.
- XII. Total Petroleum Hydrocarbons (TPH) - Gasoline Range (8015B)**
Overall, the data are usable as reported. Qualification was not required.
- A. Reporting Limits
The laboratory reporting limit for TPH-gasoline in water matrix samples met the project-required reporting limits.
 - B. Holding Times
Technical holding time criteria were met for all project samples.
 - C. Surrogate Recoveries
Surrogate spike recoveries met QC acceptance criteria for all project samples.
 - D. Blanks
Target analytes were not observed in any laboratory method blanks associated with the project samples.
 - E. Laboratory Control Samples
All QC criteria were met for the laboratory control samples associated with the project samples.
 - F. Matrix Spike/Matrix Spike Duplicate
A matrix spike and matrix spike duplicate were not analyzed with the project samples for this analysis.
 - G. Initial Calibration
Initial calibration criteria were met for all calibration standards associated with the project samples.
 - H. Continuing Calibration
Continuing calibration criteria were met for all continuing calibration standards associated with the project samples.

XIII. Total Petroleum Hydrocarbons – TPH-Diesel/TPH-Fuel Oil Range (8015B)

Overall, the data are usable as reported. Qualification was not required.

A. Reporting Limits

The laboratory reporting limits for TPH-diesel and TPH-fuel oil in water matrix samples met the project-required reporting limits

B. Holding Times

Technical holding time criteria were met for all project samples.

C. Surrogate Recoveries

Surrogate spike recoveries met QC acceptance criteria for all project samples.

D. Blanks

Target analytes were not observed in any laboratory method blanks associated with the project samples.

E. Laboratory Control Samples

All QC criteria were met for the laboratory control samples associated with the project samples.

F. Matrix Spike/Matrix Spike Duplicate

A matrix spike and matrix spike duplicate were not analyzed with the project samples for this analysis.

G. Initial Calibration

Initial calibration criteria were met for all calibration standards associated with the project samples.

H. Continuing Calibration

Continuing calibration criteria were met for all continuing calibration standards associated with the project samples.

XIV. Aromatic Volatiles by GC (8021B)

Overall, the data are usable as reported with any added qualifiers. Qualification was required for the reason noted in Section H.

A. Reporting Limits

The laboratory reporting limits for benzene, toluene, ethylbenzene, xylenes and methyl tertiary-butyl ether in water matrix samples met the project-required reporting limits.

B. Holding Times

Technical holding time criteria were met for all project samples.

- C. Surrogate Recoveries
Surrogate spike recoveries met QC acceptance criteria for all project samples.
- D. Blanks
Target analytes were not observed in any laboratory method blanks associated with the project samples.
- E. Laboratory Control Samples
All QC criteria were met for the laboratory control samples associated with the project samples.
- F. Matrix Spike/Matrix Spike Duplicate
A matrix spike and matrix spike duplicate were not analyzed with the project samples for this analysis.
- G. Initial Calibration
Initial calibration criteria were met for all calibration standards associated with the project samples.
- H. Continuing Calibration
Continuing calibration criteria were met for all continuing calibration standards associated with the project samples, with the following exceptions:
 - 1. Qualification was not required for samples with non-detect results associated with high-failing continuing calibration verification standards. Those failures were not noted in this report.
 - 2. The 8/30/06 at 10:57 water matrix CCV analyzed on instrument GCN had benzene with a percent difference (%D) less than the +/-15%D acceptance criteria at -18%. The result for benzene in the associated sample was non-detect and qualified as estimated (UJ).See Table 2 of this report for a summary of samples qualified for continuing calibration verification standard percent difference failure.

XV. Organochlorine Pesticides (8081A)

Overall, the data are usable as reported with any added qualifiers. Qualification was required for the reason noted in Section C.

- A. Reporting Limits
The laboratory reporting limits for pesticides in water matrix samples met the project-required reporting limits.
- B. Holding Times
Technical holding time criteria were met for all project samples.

C. Surrogate Recoveries

Surrogate spike recoveries met QC acceptance criteria for all project samples, with the following exception:

1. The percent recovery for surrogate decachlorobiphenyl (DCB) failed the 65%-135% project acceptance criteria in project sample LF6GW103CL (D0601136-002) at 58%. The compounds associated with surrogate DCB: alpha-chlordane, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, dieldrin, endosulfan II, endosulfan sulfate, endrin, endrin ketone, gamma-chlordane, methoxychlor and toxaphene were non-detect and qualified as estimated (UJ).

See Table 2 of this report for a summary of qualifications due to surrogate percent recovery failures.

D. Blanks

Target analytes were not observed in any laboratory method blanks associated with the project samples.

E. Laboratory Control Samples

All QC criteria were met for the laboratory control samples associated with the project samples.

F. Matrix Spike/Matrix Spike Duplicate

A matrix spike and matrix spike duplicate were not analyzed with the project samples for this analysis.

G. Performance Evaluation Mix (PEM) Check Standards

All PEM check standards met the project degradation criteria of 20% for endrin and 4,4'-DDT.

H. Initial Calibration

Initial calibration criteria were met for all calibration standards associated with the project samples.

I. Continuing Calibration

Continuing calibration criteria were met for all continuing calibration standards associated with the project samples.

XVI. Polychlorinated Biphenyls (PCBs) (8082)

Overall, the data are usable as reported with any added qualifiers. Qualifications were required for the reasons noted in Sections C and E.

A. Reporting Limits

The laboratory reporting limits for PCBs in water matrix samples met the project-required reporting limits.

B. Holding Times

Technical holding time criteria were met for all project samples.

C. Surrogate Recoveries

Surrogate spike recoveries met QC acceptance criteria for all project samples, with the following exception:

1. The percent recovery for surrogate decachlorobiphenyl (DCB) failed the 65%-135% project acceptance criteria in project sample LF6GW103CL (D0601136-002) at 60%. The compounds associated with surrogate DCB: PCB-1248, PCB-1254 and PCB-1260 were non-detect and qualified as estimated (UJ).

See Table 2 of this report for a summary of qualifications due to surrogate percent recovery failures.

D. Blanks

Target analytes were not observed in any laboratory method blanks associated with the project samples.

E. Laboratory Control Samples

All QC criteria were met for the laboratory control samples associated with the project samples, with the following exception:

1. The percent recoveries for PCB-1016 and PCB-1260 were outside the 65%-135% project acceptance criteria in QC sample PWB10821LCS at 43% and 40%, respectively. In addition, the relative percent differences (RPDs) for PCB-1016 and PCB-1260 were outside the 35% project acceptance criteria in the LCS/LCSD pair at 77% and 76%, respectively. The results for PCB-1016 and PCB-1260 in the sample were non-detect and qualified as estimated (UJ). (QC Batch PWB10821)

See Table 2 of this report for a summary of qualifications due to LCS/LCSD percent recovery and RPD failures.

F. Matrix Spike/Matrix Spike Duplicate

A matrix spike and matrix spike duplicate were not analyzed with the project samples for this analysis.

G. Initial Calibration

Initial calibration criteria were met for all calibration standards associated with the project samples.

H. Continuing Calibration

Continuing calibration criteria were met for all continuing calibration standards associated with the project samples.

XVII. Polynuclear Aromatic Hydrocarbons (PAHs) by HPLC (8310)

Overall, the data are usable as reported with any added qualifiers. Qualification was required for the reason noted in Section C.

A. Reporting Limits

The laboratory reporting limits for PAHs in water matrix samples met the project-required reporting limits.

B. Holding Times

Technical holding time criteria were met for all project samples.

C. Surrogate Recoveries

Surrogate spike recoveries met QC acceptance criteria for all project samples, with the following exception:

1. The percent recovery for surrogate terphenyl-d14 failed the 65%-135% project acceptance criteria in project sample LF6GW103CL (D0601136-002) at 63%. The results in this sample were non-detect and qualified as estimated (UJ).

See Table 2 of this report for a summary of qualifications due to surrogate percent recovery failures.

D. Blanks

Target analytes were not observed in any laboratory method blanks associated with the project samples.

E. Laboratory Control Samples

All QC criteria were met for the laboratory control samples associated with the project samples.

F. Matrix Spike/Matrix Spike Duplicate

A matrix spike and matrix spike duplicate were not analyzed with the project samples for this analysis.

G. Initial Calibration

Initial calibration criteria were met for all calibration standards associated with the project samples.

H. Continuing Calibration

Continuing calibration criteria were met for all continuing calibration standards associated with the project samples.

XVIII. Metals (6010B/7470A)

Overall, the data are usable as reported with any added qualifiers. Qualification was required for the reason noted in Section C.

A. Reporting Limits

The laboratory reporting limits for metals in water matrix samples met the project-required reporting limits.

B. Holding Times

Technical holding time criteria were met for all project samples.

C. Blanks

Target analytes were not observed in any laboratory method blanks associated with the project samples, with the following exception:

1. The laboratory method blank had detected levels of magnesium, silver and thallium at 177 ug/L, 3.1 ug/L and 43 ug/L, respectively. The levels of magnesium and thallium present in the associated samples were greater than five times the blank amounts or were non-detect, and qualification was not required. The results for silver in the associated samples were changed to non-detect (U) if those values were less than five times the blank amount.

See Table 2 of this report for a summary of qualifications due to blank contamination.

D. Laboratory Control Samples

All QC criteria were met for the laboratory control samples associated with the project samples.

E. Matrix Spike/Matrix Spike Duplicate

A matrix spike and matrix spike duplicate were not analyzed with the project samples for this analysis.

F. ICP Interference Check Standards

All QC criteria were met for the ICP interference check standards associated with the project samples.

G. ICP Serial Dilution

ICP serial dilutions were not analyzed with the project samples.

H. Initial and Continuing Calibrations

All initial and continuing calibration standards associated with the project samples met QC acceptance criteria.

XIX. Various General Chemistry Methods

Overall, the data are usable as reported with any added qualifiers. Qualification was required for the reason noted in Section B.

A. Reporting Limits

The laboratory reporting limits for the general chemistry methods analyzed met the project required reporting limits listed in the QAPP, with the following exceptions:

1. The laboratory reporting limit for fluoride was 1.0 mg/L; the project required reporting limit for this analyte was 0.1 mg/L. The laboratory reporting limit for alkalinity was 10 mg/L; the project required reporting limit for this analyte was 5 mg/L. The laboratory reporting limit for total dissolved solids was 20 mg/L; the project required reporting limit for this analyte was 10 mg/L. The laboratory reporting limit for nitrate-nitrogen was 0.1 mg/L; the project required reporting limit for this analyte was 0.05 mg/L.
2. The results for fluoride in samples LF6GW103CL (D0601136-002) and 1065MW9BCL (D0601136-003) were reported as non-detect at two-fold dilutions and the result for fluoride in sample 1213GW101CL (D0601136-004) was reported as non-detect at a fifty-fold dilution due to the nature of the sample matrices. The reporting limits were raised by the dilution factors.

B. Holding Times

Technical holding time criteria were met for all project samples, with the following exceptions:

1. Samples LF6GW103C (D0601136-002), 1065MW9BCL (D0601136-003) and 1213GW101CL (D0601136-004) were analyzed past the 48-hour analysis holding time for nitrate-nitrogen. The sample results were qualified as estimated with a low bias (J-/UJ).

See Table 2 of this report for a summary of qualifications due to missed analysis holding times.

C. Blanks

Target analytes were not observed in any laboratory method blanks associated with the project samples.

D. Laboratory Control Samples

All QC criteria were met for the laboratory control samples associated with the project samples.

E. Matrix Spike/Matrix Spike Duplicate

All QC criteria were met for the matrix spikes and matrix spike duplicates associated with the project samples.

- F. Laboratory Duplicate Samples
All QC criteria were met for the laboratory duplicate samples associated with the project samples.
- G. Initial and Continuing Calibrations
All initial and continuing calibration standards associated with the project samples met QC acceptance criteria.

SUMMARY

The attached Table 1 lists the samples and analyses included in the data validation effort. The attached Table 2 summarizes the data qualifications for the project samples included in the data packages.

USABILITY

The quality control criteria were reviewed, and other than those discussed above, all criteria were met and the data are considered acceptable. Rejected sample results (R) are not usable for any purpose. Estimated sample results (J/UJ) are usable only for limited purposes. Based upon the cursory data validation, all other results are considered valid and usable for all purposes.

VALIDATION QUALIFIERS IDENTIFICATION

The definitions of the following qualifiers are prepared according to the document, "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review," October, 1999.

- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample. *A minus sign (-) indicates the numerical value has a low bias. A plus sign (+) indicates the numerical value has a high bias.*
- N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."
- NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

The following paragraphs highlight the essential findings of the field duplicate samples:

Field duplicate precision was evaluated by calculating the relative percent difference (RPD) between detected results in the original sample and its associated duplicate. The control limit used for field duplicates was a relative percent difference less than or equal to 50 percent, or the absolute difference of the two results must be less than the reporting limit for those analytes that were at or near the detection limit. Eight samples were collected in duplicate for the Third Quarter 2006 sampling event.

Project Sample Primary ID	Laboratory Sample ID	Project Sample Duplicate ID	Laboratory Sample ID
BB3GW100	188774-003	DUP0815061A	188774-004
1221GW104	188774-006	DUP0815063A	188774-011
BHWGW01	188774-015	DUP0815062A	188774-014
1213GW101	188802-005	DUP0816063A	188802-006
LF6GW103	188802-008	DUP0816061A	188802-010
NKGW04	188802-007	DUP0816061B	188802-011
1065MW9A	188802-013	DUP0816062A	188802-020
LF5GW104	188837-015	DUP0817062A	188837-016

The attached Table 3 summarizes the field duplicate sample results. The detected results of the original samples and the associated duplicate samples were compared and the calculated RPDs reported. All RPDs met the 50 percent precision control limit requirement, with the following exceptions:

1. In QC split duplicates BB3GW100 and DUP0815061A, the absolute difference between the results was greater than the 10 ug/L reporting limit for dissolved manganese. The original result was 24 ug/L and the duplicate result was non-detect at 10 ug/L.
2. In field duplicates 1213GW101 and DUP0816063A, the relative percent differences (RPDs) between the detected results failed the 50% acceptance criteria for ethylbenzene and TPH-gasoline at -51% and -78%, respectively.
3. In field duplicates 1065MW9A and DUP0816062A, the RPDs between the detected results failed the 50% acceptance criteria for dissolved magnesium (51%), dissolved potassium (185%), alkalinity (55%), chloride (102%) and sulfate (-127%). In addition, the absolute differences between the results were greater than the reporting limits for dissolved chromium, dissolved iron, dissolved manganese and nitrate-nitrogen. The original result for dissolved chromium was non-detect at 10 ug/L and the duplicate result was 33 ug/L. The original result for dissolved iron was 5100 ug/L and the duplicate result was non-detect at 100 ug/L. The original result for dissolved manganese was 460 ug/L and the duplicate result was non-detect at 10 ug/L. The original result for nitrate-nitrogen was non-detect at 0.05 ug/L and the duplicate result was 5.7 ug/L.

The analysis of field duplicate samples is a measure of both field and analytical precision. The imprecision in the results in the field duplicate pairs listed above may be due to the sample matrix, sampling or laboratory technique, or method defects. With the exceptions noted above, the results between the field duplicate pairs matched well. Since the effect on the quality of the data is not known, data is not qualified for field duplicate failure.

The following paragraphs highlight the essential findings of the QC split duplicate samples:

Laboratory analytical precision was evaluated by calculating the relative percent differences (RPDs) between detected results in the samples and the associated QC split duplicates, which were sent to another laboratory for analysis. The QC split samples were sent to Columbia Analytical Services in Redding, CA. The control limit used for QC split duplicates was a relative percent difference less than or equal to 50 percent, or the absolute difference of the two results must be less than the reporting limit for those analytes that were at or near the detection limit. Three samples were collected in duplicate for the Third Quarter 2006 sampling event.

Project Sample Primary ID	Laboratory Sample ID	Project Sample Split Duplicate ID	Laboratory Sample ID
LF6GW103	188802-008	LF6GW103CL	D0601136-002
1065MW9B	188802-014	1065MW9BCL	D0601136-003
1213GW101	188802-005	1213GW101CL	D0601136-004

The attached Table 4 summarizes the QC split duplicate samples. The detected results were compared and the calculated RPDs reported. All RPDs met the 50 percent precision control limit requirement, with the following exceptions:

1. In QC split duplicates 1213GW101 and 1213GW101CL, the relative percent differences (RPDs) between the reported results failed the 50% RPD acceptance criteria for ethylbenzene (109%), TPH-gasoline (93%), nitrate-nitrogen (-158%) and sulfate (-162%)
2. In QC split duplicates 1065MW9B and 1065MW9BCL, the RPDs between the reported results failed the 50% RPD acceptance criteria for chloride (84%), nitrate-nitrogen (80%) and sulfate (81%).

Data is not qualified due to RPD failure of QC split samples because the effect on the quality of the data is not known.

The following paragraphs highlight the essential findings of the field QC blank samples:

Four trip blanks, two equipment blanks and two source blanks were analyzed with the project samples. All field QC blanks were non-detect for all methods analyzed, with the following exceptions:

1. Source blank DW082106B (188869-001) had a detected level of acetone at 16 ug/L. Project sample association with this source blank could not be established, and qualification was not required.
2. Source blank DW081706A (188837-012) had a detected level of n-nitrosodimethylamine at 0.0121 ug/L. The levels of n-nitrosodimethylamine present in the project samples were non-detect, and qualification was not required.
3. Source blank DW082106B (188869-001) had a detected level of n-nitrosodimethylamine at 0.0417 ug/L. Project sample association with this blank could not be established, and qualification was not required.
4. Source blank DW081706A (188837-012) had a detected level of methyl tertiary-butyl ether at 6.8 ug/L. The detected results for methyl tertiary-butyl ether in the associated project samples were changed to non-detect (U) if those values were less than five times the blank amount.
5. Equipment blank BHWGW05RB01 (188774-013) had a detected level of calcium at 770 ug/L. The associated samples had calcium values greater than five times the blank amount, and qualification was not required.
6. Equipment blank 1065MW9BRB9A (188802-015) had a detected level of sodium at 600 ug/L. The associated samples had sodium values greater than five times the blank amount, and qualification was not required.
7. Source blank DW081706A (188837-012) had a detected level of sodium at 800 ug/L. The associated samples had sodium values greater than five times the blank amount, and qualification was not required.
8. Equipment blank BHWGW05RB01 (188774-013) had a detected level of alkalinity at 1.5 mg/L. The associated samples had alkalinity values greater than five times the blank amount, and qualification was not required.
9. Source blank DW082106B (188869-001) had a detected level of total dissolved solids at 50 mg/L. Qualification was not required for the physical property parameter total dissolved solids.

Table 1
Sample Summary
Third Quarter 2006 Groundwater Sampling Event
The Presidio of San Francisco, CA

Site Sample ID	Laboratory Sample ID	Date Sampled	Analyses	Sample Type
BB1PZ100	188774-001	15-Aug-06	TPH-Diesel/FO (8015B), Pesticides (8081A), PAHs (8310), Total & Dissolved Metals (6020, 7470A), General Chemistry Parameters (2, 3)	Water
BB1PZ101	188774-002	15-Aug-06	TPH-Diesel/FO (8015B), Pesticides (8081A), PAHs (8310), Total & Dissolved Metals (6020, 7470A), General Chemistry Parameters (2, 3)	Water
BB3GW100	188774-003	15-Aug-06	TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), Dissolved Metals (6020), General Chemistry Parameters (1, 2, 3)	Water (1)
DUP0815061A	188774-004	15-Aug-06	TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), Dissolved Metals (6020), General Chemistry Parameters (1, 2, 3)	FD (1)
TB0815061A	188774-005	15-Aug-06	Volatile Organic Compounds (8260B)	Trip Blank
1221GW104	188774-006	15-Aug-06	Dissolved Metals (6020), General Chemistry Parameters (2, 3)	Water (2)
514AGW101	188774-007	15-Aug-06	TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), BTEX/MTBE (8021B), PAHs (8310)	Water
FM14EX07GW102	188774-008	15-Aug-06	TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), BTEX/MTBE (8021B), PAHs (8310)	Water
FM14EX07GW101	188774-009	15-Aug-06	TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), BTEX/MTBE (8021B), PAHs (8310)	Water
231GW09	188774-010	15-Aug-06	VOCs (8260B), TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), Dissolved Metals (6020, 7470A), General Chemistry Parameters (1, 2, 3, 12)	Water
DUP0815063A	188774-011	15-Aug-06	Dissolved Metals (6020), General Chemistry Parameters (2, 3)	FD (2)
1065PZ1B	188774-012	15-Aug-06	VOCs (8260B), TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), Dissolved Metals (6020), General Chemistry Parameters (1, 2, 3, 12)	Water
BHWGW05RB01	188774-013	15-Aug-06	Dissolved Metals (6020), General Chemistry Parameters (2, 3)	Equip. Blank
DUP0815062A	188774-014	15-Aug-06	Dissolved Metals (6020), General Chemistry Parameters (2, 3)	FD (3)
BHWGW01	188774-015	15-Aug-06	Dissolved Metals (6020), General Chemistry Parameters (2, 3)	Water (3)
BHWGW05	188774-016	15-Aug-06	Dissolved Metals (6020), General Chemistry Parameters (2, 3)	Water
BHWGW04	188774-017	15-Aug-06	Dissolved Metals (6020), General Chemistry Parameters (2, 3)	Water
HWGW101	188774-018	15-Aug-06	Dissolved Metals (6020), General Chemistry Parameters (2, 3)	Water
HWGW100	188774-019	15-Aug-06	Dissolved Metals (6020), General Chemistry Parameters (2, 3)	Water
1349MW100	188802-001	16-Aug-06	VOCs (8260B), TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), Pesticides (8081A), PAHs (8310), Dissolved Metals (6020, 7470A), General Chemistry Parameters (1, 2, 3)	Water
1065PZ5AR	188802-002	16-Aug-06	TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), BTEX/MTBE (8021B), Dissolved Metals (6020), General Chemistry Parameters (1, 2, 3, 12)	Water
LF6GW105	188802-003	16-Aug-06	Dissolved Metals (6020, 7470A), General Chemistry Parameters (1, 2, 3)	Water
LF6GW106	188802-004	16-Aug-06	TPH-Diesel/FO (8015B), PAHs (8310), Dissolved Metals (6020, 7470A), General Chemistry Parameters (1, 2, 3)	Water
1213GW101	188802-005	16-Aug-06	VOCs (8260B), TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), PAHs (8310), Dissolved Metals (6020), General Chemistry Parameters (2, 3)	Water (4)
DUP0816063A	188802-006	16-Aug-06	VOCs (8260B), TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), PAHs (8310), Dissolved Metals (6020), General Chemistry Parameters (2, 3)	FD (4)
NKGW04	188802-007	16-Aug-06	N-Nitrosodimethylamine (1625C)	Water (6)

Table 1
Sample Summary
Third Quarter 2006 Groundwater Sampling Event
The Presidio of San Francisco, CA

Site Sample ID	Laboratory Sample ID	Date Sampled	Analyses	Sample Type
LF6GW103	188802-008	16-Aug-06	TPH-Gasoline (8015B), TPH-Diesel (8015B), Pesticides (8081A), PCBs (8082), PAHs (8310), Dissolved Metals (6020, 7470A), General Chemistry Parameters (1, 2, 3)	Water (5)
1065MW101	188802-009	16-Aug-06	VOCs (8260B), TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), Dissolved Metals (6020), General Chemistry Parameters (1, 2, 3, 12)	Water
DUP0816061A	188802-010	16-Aug-06	TPH-Gasoline (8015B), TPH-Diesel (8015B), Pesticides (8081A), PCBs (8082), PAHs (8310), Dissolved Metals (6020, 7470A), General Chemistry Parameters (2, 3)	FD (5)
DUP0816061B	188802-011	16-Aug-06	N-Nitrosodimethylamine (1625C)	FD (6)
1065MW102	188802-012	16-Aug-06	VOCs (8260B), TPH-Gasoline (8015B), Dissolved Metals (6020), General Chemistry Parameters (1, 2, 3, 12)	Water
1065MW9A	188802-013	16-Aug-06	TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), BTEX/MTBE (8021B), Dissolved Metals (6020), General Chemistry Parameters (1, 2, 3, 12)	Water (7)
1065MW9B	188802-014	16-Aug-06	TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), BTEX/MTBE (8021B), Dissolved Metals (6020), General Chemistry Parameters (1, 2, 3, 12)	Water (9)
1065MW9BRB9A	188802-015	16-Aug-06	TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), BTEX/MTBE (8021B), Dissolved Metals (6020), General Chemistry Parameters (1, 2, 3, 12)	Equip. Blank
1047MW101	188802-016	16-Aug-06	VOCs (8260B), TPH-Gasoline/Stoddard Solvent (8015B)	
LF4GW103	188802-017	16-Aug-06	PCBs (8082), Dissolved Metals (6020), General Chemistry Parameters (1, 2, 3)	Water
LF4GW104	188802-018	16-Aug-06	PCBs (8082), Dissolved Metals (6020), General Chemistry Parameters (1, 2, 3)	Water
TB081606A	188802-019	16-Aug-06	Volatile Organic Compounds (8260B)	Trip Blank
DUP0816062A	188802-020	16-Aug-06	TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), BTEX/MTBE (8021B), Dissolved Metals (6020), General Chemistry Parameters (1, 2, 3, 12)	FD (7)
1349MW100 RE	188802-021	16-Aug-06	Polychlorinated Biphenyls (8082)	Water
LF10GW03	188837-001	17-Aug-06	TPH-Gasoline (8015B), TPH-Diesel/FO (8015B)	Water
1349MW03R	188837-002	17-Aug-06	Pesticides (8081A)	Water
1349MW101	188837-003	17-Aug-06	Pesticides (8081A)	Water
1349MW102	188837-004	17-Aug-06	Pesticides (8081A)	Water
610SP01	188837-005	17-Aug-06	TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), BTEX/MTBE (8021B), Total & Dissolved Metals (6020), General Chemistry Parameters (1, 2, 3, 12)	Water
LF5GW101	188837-006	17-Aug-06	Pesticides (8081A)	Water
LF5GW100	188837-007	17-Aug-06	Pesticides (8081A)	Water
1065PZ1A	188837-008	17-Aug-06	VOCs (8260B), TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), Dissolved Metals (6020), General Chemistry Parameters (1, 2, 3, 12)	Water
1065PZ2A	188837-009	17-Aug-06	TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), BTEX/MTBE (8021B), Dissolved Metals (6020), General Chemistry Parameters (1, 2, 3, 12)	Water
1065PZ4A	188837-010	17-Aug-06	TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), BTEX/MTBE (8021B), Dissolved Metals (6020), General Chemistry Parameters (1, 2, 3, 12)	Water
TB081706A	188837-011	17-Aug-06	Volatile Organic Compounds (8260B)	Trip Blank
DW081706A	188837-012	17-Aug-06	VOCs (8260B), NDMA (1625C), TPH-Gasoline/Stoddard Solvent (8015B), TPH-Diesel/FO (8015B), BTEX/MTBE (8021B), Pesticides (8081A), PCBs (8082), PAHs (8310), Total Metals (6020, 7470A), General Chemistry Parameters (1, 2, 3, 12)	Source Blank

Table 1
Sample Summary
Third Quarter 2006 Groundwater Sampling Event
The Presidio of San Francisco, CA

Site Sample ID	Laboratory Sample ID	Date Sampled	Analyses	Sample Type
LF5GW102	188837-013	17-Aug-06	Pesticides (8081A)	Water
LF5GW103	188837-014	17-Aug-06	Pesticides (8081A)	Water
LF5GW104	188837-015	17-Aug-06	Pesticides (8081A)	Water (8)
DUP0817062A	188837-016	17-Aug-06	Pesticides (8081A)	FD (8)
NKGW01	188837-017	17-Aug-06	N-Nitrosodimethylamine (1625C)	Water
NKGW02	188837-018	17-Aug-06	N-Nitrosodimethylamine (1625C)	Water
NKGW05	188837-019	17-Aug-06	N-Nitrosodimethylamine (1625C)	Water
LF10GW100	188837-020	18-Aug-06	TPH-Gasoline (8015B), TPH-Diesel/FO (8015B)	Water
LF10GW01	188837-021	18-Aug-06	TPH-Gasoline (8015B), TPH-Diesel/FO (8015B)	Water
DW082106B	188869-001	21-Aug-06	VOCs (8260B), NDMA (1625C), TPH-Gasoline/Stoddard Solvent (8015B), TPH-Diesel/FO (8015B), BTEX/MTBE (8021B), Pesticides (8081A), PCBs (8082), PAHs (8310), Total Metals (6020, 7470A), General Chemistry Parameters (1, 2, 3, 12)	Source Blank
LF6GW103CL	D0601136-002	16-Aug-06	TPH-Gasoline (8015B), TPH-Diesel (8015B), Pesticides (8081A), PCBs (8082), PAHs (8310), Dissolved Metals (6010B, 7470A), General Chemistry Parameters (1, 2, 3, 15)	QC (5)
1065MW9BCL	D0601136-003	16-Aug-06	TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), BTEX/MTBE (8021B), Dissolved Metals (6010B), General Chemistry Parameters (1, 2, 3, 12, 15)	QC (9)
1213GW101CL	D0601136-004	16-Aug-06	VOCs (8260B), TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), PAHs (8310), Dissolved Metals (6010B), General Chemistry Parameters (2, 3, 15)	QC (4)
TB081606A	D0601136-005	16-Aug-06	Volatile Organic Compounds (8260B)	Trip Blank

VOCs: Volatile Organic Compounds

TPH: Total Petroleum Hydrocarbons

FO: Fuel Oil

PCBs: Polychlorinated Biphenyls

PAHs: Polynuclear Aromatic Hydrocarbons

BTEX: Benzene, Toluene, Ethylbenzene, Xylenes

MTBE: Methyl tertiary-butyl ether

NDMA: N-Nitrosodimethylamine

FD: Field duplicate of previous numbered sample, (1), (2), etc.

QC: QC split duplicate of previous numbered sample, (1), (2), etc.

General Chemistry Parameters

- (1) Total Dissolved Solids (160.1)
- (2) Alkalinity (310.1)
- (3) Anions (300.0)
- (4) Fluoride (340.2)
- (5) Nitrate-N (353.2)
- (6) Nitrate/Nitrite-N (353.2)
- (7) Hardness (SM 2340B)
- (8) Cyanide (335.2)
- (9) Surfactants (425.1)
- (10) Oil & Grease (1664A)
- (11) Phenolics (420.1)
- (12) Sulfide (376.2)
- (13) Total Organic Carbon (415.2)
- (14) pH (SW9040B)
- (15) Nitrite-N (354.1)

Table 2
Qualified Data Summary
Third Quarter 2006 Groundwater Sampling Event
The Presidio of San Francisco, CA

Sample ID	Laboratory ID	Analysis Method	Compound	Qualifier	Reason
BB1PZ100	188774-001	8081A	gamma-BHC	UJ	Continuing calibration verification percent difference failure
BB1PZ100	188774-001	8081A	Heptachlor	UJ	Continuing calibration verification percent difference failure
BB1PZ100	188774-001	8081A	gamma-Chlordane	UJ	Continuing calibration verification percent difference failure
BB1PZ100	188774-001	8081A	Endosulfan I	UJ	Continuing calibration verification percent difference failure
BB1PZ100	188774-001	8081A	Endrin	UJ	Continuing calibration verification percent difference failure
BB1PZ100	188774-001	8081A	4,4'-DDD	UJ	Continuing calibration verification percent difference failure
BB1PZ100	188774-001	8081A	4,4'-DDT	UJ	Continuing calibration verification percent difference failure
BB1PZ100	188774-001	8081A	Endosulfan Sulfate	UJ	Continuing calibration verification percent difference failure
BB1PZ100	188774-001	7470A	Mercury, Total	J-	MS/MSD percent recovery failure
BB1PZ100	188774-001	7470A	Mercury, Dissolved	UJ	MS/MSD percent recovery failure
BB1PZ101	188774-002	8081A	gamma-BHC	UJ	Continuing calibration verification percent difference failure
BB1PZ101	188774-002	8081A	Heptachlor	UJ	Continuing calibration verification percent difference failure
BB1PZ101	188774-002	8081A	gamma-Chlordane	UJ	CCV %D failure, Surrogate %R failure
BB1PZ101	188774-002	8081A	Endosulfan I	UJ	Continuing calibration verification percent difference failure
BB1PZ101	188774-002	8081A	Endrin	UJ	CCV %D failure, Surrogate %R failure
BB1PZ101	188774-002	8081A	4,4'-DDD	UJ	CCV %D failure, Surrogate %R failure
BB1PZ101	188774-002	8081A	4,4'-DDT	UJ	CCV %D failure, Surrogate %R failure
BB1PZ101	188774-002	8081A	Endosulfan Sulfate	UJ	CCV %D failure, Surrogate %R failure
BB1PZ101	188774-002	8081A	Dieldrin	UJ	Surrogate percent recovery failure
BB1PZ101	188774-002	8081A	4,4'-DDE	UJ	Surrogate percent recovery failure
BB1PZ101	188774-002	8081A	Endosulfan II	UJ	Surrogate percent recovery failure
BB1PZ101	188774-002	8081A	Methoxychlor	UJ	Surrogate percent recovery failure
BB1PZ101	188774-002	8081A	Endrin ketone	UJ	Surrogate percent recovery failure
BB1PZ101	188774-002	8081A	alpha-Chlordane	UJ	Surrogate percent recovery failure
BB1PZ101	188774-002	8081A	Toxaphene	UJ	Surrogate percent recovery failure
BB1PZ101	188774-002	7470A	Mercury, Total	J-	MS/MSD percent recovery failure
BB1PZ101	188774-002	7470A	Mercury, Dissolved	UJ	MS/MSD percent recovery failure
TB0815061A	188774-005	8260B	Bromomethane	UJ	Continuing calibration verification percent difference failure
231GW09	188774-010	8260B	Bromomethane	UJ	Continuing calibration verification percent difference failure
231GW09	188774-010	7470A	Mercury, Dissolved	UJ	MS/MSD percent recovery failure
1065PZ1B	188774-012	8260B	Bromomethane	UJ	Continuing calibration verification percent difference failure
1349MW100	188802-001	8260B	Bromomethane	UJ	Continuing calibration verification percent difference failure
1349MW100	188802-001	8081A	alpha-BHC	UJ	Surrogate percent recovery failure

Table 2
Qualified Data Summary
Third Quarter 2006 Groundwater Sampling Event
The Presidio of San Francisco, CA

Sample ID	Laboratory ID	Analysis Method	Compound	Qualifier	Reason
1349MW100	188802-001	8081A	beta-BHC	UJ	Surrogate percent recovery failure
1349MW100	188802-001	8081A	delta-BHC	UJ	Surrogate percent recovery failure
1349MW100	188802-001	8081A	gamma-BHC	J-	CCV %D failure, Surrogate %R failure
1349MW100	188802-001	8081A	Heptachlor	J-	CCV %D failure, Surrogate %R failure
1349MW100	188802-001	8081A	Aldrin	UJ	Surrogate percent recovery failure
1349MW100	188802-001	8081A	Heptachlor epoxide	J-	Surrogate percent recovery failure
1349MW100	188802-001	8081A	Endosulfan I	UJ	CCV %D failure, Surrogate %R failure
1349MW100	188802-001	8081A	Dieldrin	UJ	Surrogate percent recovery failure
1349MW100	188802-001	8081A	4,4'-DDE	UJ	Surrogate percent recovery failure
1349MW100	188802-001	8081A	Endrin	J-	CCV %D failure, Surrogate %R failure, MS/MSD %R failure
1349MW100	188802-001	8081A	Endosulfan II	UJ	Surrogate percent recovery failure
1349MW100	188802-001	8081A	4,4'-DDD	UJ	CCV %D failure, Surrogate %R failure
1349MW100	188802-001	8081A	Endosulfan sulfate	UJ	CCV %D failure, Surrogate %R failure
1349MW100	188802-001	8081A	4,4'-DDT	J-	CCV %D failure, Surrogate %R failure, MS/MSD %R failure
1349MW100	188802-001	8081A	Methoxychlor	UJ	Surrogate percent recovery failure
1349MW100	188802-001	8081A	Endrin ketone	UJ	Surrogate percent recovery failure
1349MW100	188802-001	8081A	alpha-Chlordane	UJ	Surrogate percent recovery failure
1349MW100	188802-001	8081A	gamma-Chlordane	UJ	CCV %D failure, Surrogate %R failure
1349MW100	188802-001	8081A	Toxaphene	UJ	Surrogate percent recovery failure
1349MW100	188802-001	8310	Benzo(a)pyrene	R	MS/MSD percent recovery failure
1349MW100	188802-001	8310	Naphthalene	R	MS/MSD percent recovery failure
1349MW100	188802-001	8310	Pyrene	J-	MS/MSD %R failure, MS/MSD RPD failure
1349MW100	188802-001	7470A	Mercury, Dissolved	UJ	MS/MSD percent recovery failure
LF6GW105	188802-003	7470A	Mercury, Dissolved	UJ	MS/MSD percent recovery failure
LF6GW106	188802-004	7470A	Mercury, Dissolved	UJ	MS/MSD percent recovery failure
1213GW101	188802-005	8260B	Bromomethane	UJ	Continuing calibration verification percent difference failure
DUP0816063A	188802-006	8260B	Bromomethane	UJ	Continuing calibration verification percent difference failure
LF6GW103	188802-008	8081A	gamma-BHC	UJ	Continuing calibration verification percent difference failure
LF6GW103	188802-008	8081A	Heptachlor	UJ	Continuing calibration verification percent difference failure
LF6GW103	188802-008	8081A	gamma-Chlordane	UJ	Continuing calibration verification percent difference failure
LF6GW103	188802-008	8081A	Endosulfan I	UJ	Continuing calibration verification percent difference failure
LF6GW103	188802-008	8081A	Endrin	UJ	Continuing calibration verification percent difference failure
LF6GW103	188802-008	8081A	4,4-DDD	UJ	Continuing calibration verification percent difference failure

Table 2
Qualified Data Summary
Third Quarter 2006 Groundwater Sampling Event
The Presidio of San Francisco, CA

Sample ID	Laboratory ID	Analysis Method	Compound	Qualifier	Reason
LF6GW103	188802-008	8081A	4,4-DDT	UJ	Continuing calibration verification percent difference failure
LF6GW103	188802-008	8081A	Endosulfan Sulfate	UJ	Continuing calibration verification percent difference failure
LF6GW103	188802-008	8082	PCB-1248	UJ	Surrogate percent recovery failure
LF6GW103	188802-008	8082	PCB-1254	UJ	Surrogate percent recovery failure
LF6GW103	188802-008	8082	PCB-1260	UJ	Surrogate percent recovery failure
LF6GW103	188802-008	7470A	Mercury, Dissolved	UJ	MS/MSD percent recovery failure
1065MW101	188802-009	8260B	Bromomethane	UJ	Continuing calibration verification percent difference failure
DUP0816061A	188802-010	8081A	gamma-BHC	UJ	Continuing calibration verification percent difference failure
DUP0816061A	188802-010	8081A	Heptachlor	UJ	Continuing calibration verification percent difference failure
DUP0816061A	188802-010	8081A	gamma-Chlordane	UJ	Continuing calibration verification percent difference failure
DUP0816061A	188802-010	8081A	Endosulfan I	UJ	Continuing calibration verification percent difference failure
DUP0816061A	188802-010	8081A	Endrin	UJ	Continuing calibration verification percent difference failure
DUP0816061A	188802-010	8081A	4,4-DDD	UJ	Continuing calibration verification percent difference failure
DUP0816061A	188802-010	8081A	4,4-DDT	UJ	Continuing calibration verification percent difference failure
DUP0816061A	188802-010	8081A	Endosulfan Sulfate	UJ	Continuing calibration verification percent difference failure
DUP0816061A	188802-010	7470A	Mercury, Dissolved	UJ	MS/MSD percent recovery failure
1349MW100 RE	188802-021	8082	PCB-1016	UJ	Missed extraction holding time, Surrogate %R failure
1349MW100 RE	188802-021	8082	PCB-1221	UJ	Missed extraction holding time, Surrogate %R failure
1349MW100 RE	188802-021	8082	PCB-1232	UJ	Missed extraction holding time, Surrogate %R failure
1349MW100 RE	188802-021	8082	PCB-1242	UJ	Missed extraction holding time, Surrogate %R failure
1349MW100 RE	188802-021	8082	PCB-1248	UJ	Missed extraction holding time, Surrogate %R failure
1349MW100 RE	188802-021	8082	PCB-1254	UJ	Missed extraction holding time, Surrogate %R failure
1349MW100 RE	188802-021	8082	PCB-1260	UJ	Missed extraction holding time, Surrogate %R failure
1349MW03R	188837-002	8081A	4,4-DDT	UJ	Continuing calibration verification percent difference failure
1349MW03R	188837-002	8081A	Metoxychlor	UJ	Continuing calibration verification percent difference failure
1349MW101	188837-003	8081A	4,4-DDT	UJ	Continuing calibration verification percent difference failure
1349MW101	188837-003	8081A	Metoxychlor	UJ	Continuing calibration verification percent difference failure
1349MW102	188837-004	8081A	Dieldrin	UJ	Surrogate percent recovery failure
1349MW102	188837-004	8081A	4,4'-DDE	UJ	Surrogate percent recovery failure
1349MW102	188837-004	8081A	Endrin	UJ	Surrogate percent recovery failure
1349MW102	188837-004	8081A	Endosulfan II	UJ	Surrogate percent recovery failure
1349MW102	188837-004	8081A	4,4'-DDD	UJ	Surrogate percent recovery failure
1349MW102	188837-004	8081A	Endosulfan sulfate	UJ	Surrogate percent recovery failure

Table 2
Qualified Data Summary
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Sample ID	Laboratory ID	Analysis Method	Compound	Qualifier	Reason
1349MW102	188837-004	8081A	4,4'-DDT	UJ	Surrogate percent recovery failure
1349MW102	188837-004	8081A	Methoxychlor	UJ	Surrogate percent recovery failure
1349MW102	188837-004	8081A	Endrin ketone	UJ	Surrogate percent recovery failure
1349MW102	188837-004	8081A	alpha-Chlordane	UJ	Surrogate percent recovery failure
1349MW102	188837-004	8081A	gamma-Chlordane	UJ	Surrogate percent recovery failure
1349MW102	188837-004	8081A	Toxaphene	UJ	Surrogate percent recovery failure
610SP01	188837-005	8021B	Methyl tertiary-butyl ether	U	Field blank contamination
610SP01	188837-005	6020	Calcium, Total	J	Serial dilution percent difference failure
610SP01	188837-005	6020	Calcium, Dissolved	J	Serial dilution percent difference failure
610SP01	188837-005	376.2	Sulfide	J-	MS/MSD percent recovery failure
LF5GW101	188837-006	8081A	4,4-DDT	UJ	Continuing calibration verification percent difference failure
LF5GW101	188837-006	8081A	Metoxychlor	UJ	Continuing calibration verification percent difference failure
LF5GW100	188837-007	8081A	4,4-DDT	UJ	Continuing calibration verification percent difference failure
LF5GW100	188837-007	8081A	Metoxychlor	UJ	Continuing calibration verification percent difference failure
1065PZ1A	188837-008	6020	Calcium, Dissolved	J	Serial dilution percent difference failure
1065PZ1A	188837-008	376.2	Sulfide	UJ	MS/MSD percent recovery failure
1065PZ2A	188837-009	8021B	Methyl tertiary-butyl ether	U	Field blank contamination
1065PZ2A	188837-009	6020	Calcium, Dissolved	J	Serial dilution percent difference failure
1065PZ2A	188837-009	376.2	Sulfide	UJ	MS/MSD percent recovery failure
1065PZ4A	188837-010	6020	Calcium, Dissolved	J	Serial dilution percent difference failure
1065PZ4A	188837-010	376.2	Sulfide	UJ	MS/MSD percent recovery failure
DW081706A	188837-012	8081A	delta-BHC	UJ	Continuing calibration verification percent difference failure
DW081706A	188837-012	8081A	Heptachlor	UJ	Continuing calibration verification percent difference failure
DW081706A	188837-012	8081A	Aldrin	UJ	Continuing calibration verification percent difference failure
DW081706A	188837-012	8081A	Heptachlor Epoxide	UJ	Continuing calibration verification percent difference failure
DW081706A	188837-012	8081A	alpha-Chlordane	UJ	Continuing calibration verification percent difference failure
DW081706A	188837-012	8081A	4,4-DDT	UJ	Continuing calibration verification percent difference failure
DW081706A	188837-012	8081A	Metoxychlor	UJ	Continuing calibration verification percent difference failure
DW081706A	188837-012	8081A	Endosulfan Sulfate	UJ	Continuing calibration verification percent difference failure
DW081706A	188837-012	7470A	Mercury, Total	UJ	MS/MSD percent recovery failure
DW081706A	188837-012	6020	Calcium, Total	UJ	Serial dilution percent difference failure
DW081706A	188837-012	376.2	Sulfide	UJ	MS/MSD percent recovery failure
LF5GW102	188837-013	8081A	alpha-Chlordane	UJ	Continuing calibration verification percent difference failure

Table 2
Qualified Data Summary
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Sample ID	Laboratory ID	Analysis Method	Compound	Qualifier	Reason
LF5GW102	188837-013	8081A	4,4-DDT	UJ	Continuing calibration verification percent difference failure
LF5GW102	188837-013	8081A	Metoxychlor	UJ	Continuing calibration verification percent difference failure
LF5GW102	188837-013	8081A	Endosulfan Sulfate	UJ	Continuing calibration verification percent difference failure
LF5GW102	188837-013	8081A	alpha-BHC	UJ	Surrogate percent recovery failure
LF5GW102	188837-013	8081A	beta-BHC	UJ	Surrogate percent recovery failure
LF5GW102	188837-013	8081A	delta-BHC	UJ	CCV %D failure, Surrogate %R failure
LF5GW102	188837-013	8081A	gamma-BHC	UJ	Surrogate percent recovery failure
LF5GW102	188837-013	8081A	Heptachlor	UJ	CCV %D failure, Surrogate %R failure
LF5GW102	188837-013	8081A	Aldrin	UJ	CCV %D failure, Surrogate %R failure
LF5GW102	188837-013	8081A	Heptachlor epoxide	UJ	CCV %D failure, Surrogate %R failure
LF5GW102	188837-013	8081A	Endosulfan I	UJ	Surrogate percent recovery failure
LF5GW103	188837-014	8081A	delta-BHC	UJ	Continuing calibration verification percent difference failure
LF5GW103	188837-014	8081A	Heptachlor	UJ	Continuing calibration verification percent difference failure
LF5GW103	188837-014	8081A	Aldrin	UJ	Continuing calibration verification percent difference failure
LF5GW103	188837-014	8081A	Heptachlor Epoxide	UJ	Continuing calibration verification percent difference failure
LF5GW103	188837-014	8081A	alpha-Chlordane	UJ	Continuing calibration verification percent difference failure
LF5GW103	188837-014	8081A	4,4-DDT	UJ	Continuing calibration verification percent difference failure
LF5GW103	188837-014	8081A	Metoxychlor	UJ	Continuing calibration verification percent difference failure
LF5GW103	188837-014	8081A	Endosulfan Sulfate	UJ	Continuing calibration verification percent difference failure
LF5GW104	188837-015	8081A	delta-BHC	UJ	Continuing calibration verification percent difference failure
LF5GW104	188837-015	8081A	Heptachlor	UJ	Continuing calibration verification percent difference failure
LF5GW104	188837-015	8081A	Aldrin	UJ	Continuing calibration verification percent difference failure
LF5GW104	188837-015	8081A	Heptachlor Epoxide	UJ	Continuing calibration verification percent difference failure
LF5GW104	188837-015	8081A	alpha-Chlordane	UJ	Continuing calibration verification percent difference failure
LF5GW104	188837-015	8081A	4,4-DDT	UJ	Continuing calibration verification percent difference failure
LF5GW104	188837-015	8081A	Metoxychlor	UJ	Continuing calibration verification percent difference failure
LF5GW104	188837-015	8081A	Endosulfan Sulfate	UJ	Continuing calibration verification percent difference failure
DUP0817062A	188837-016	8081A	delta-BHC	UJ	Continuing calibration verification percent difference failure
DUP0817062A	188837-016	8081A	Heptachlor	UJ	Continuing calibration verification percent difference failure
DUP0817062A	188837-016	8081A	Aldrin	UJ	Continuing calibration verification percent difference failure
DUP0817062A	188837-016	8081A	Heptachlor Epoxide	UJ	Continuing calibration verification percent difference failure
DUP0817062A	188837-016	8081A	alpha-Chlordane	UJ	Continuing calibration verification percent difference failure
DUP0817062A	188837-016	8081A	4,4-DDT	UJ	Continuing calibration verification percent difference failure
DUP0817062A	188837-016	8081A	Metoxychlor	UJ	Continuing calibration verification percent difference failure

Table 2
Qualified Data Summary
Third Quarter 2006 Groundwater Sampling Event
The Presidio of San Francisco, CA

Sample ID	Laboratory ID	Analysis Method	Compound	Qualifier	Reason
DUP0817062A	188837-016	8081A	Endosulfan Sulfate	UJ	Continuing calibration verification percent difference failure
DW082106B	188869-001	8081A	alpha-Chlordane	UJ	Continuing calibration verification percent difference failure
DW082106B	188869-001	8081A	4,4-DDT	UJ	Continuing calibration verification percent difference failure
DW082106B	188869-001	8081A	Metoxychlor	UJ	Continuing calibration verification percent difference failure
DW082106B	188869-001	8081A	Endosulfan Sulfate	UJ	Continuing calibration verification percent difference failure
DW082106B	188869-001	8081A	alpha-BHC	UJ	Surrogate percent recovery failure
DW082106B	188869-001	8081A	beta-BHC	UJ	Surrogate percent recovery failure
DW082106B	188869-001	8081A	delta-BHC	UJ	CCV %D failure, Surrogate %R failure
DW082106B	188869-001	8081A	gamma-BHC	UJ	Surrogate percent recovery failure
DW082106B	188869-001	8081A	Heptachlor	UJ	CCV %D failure, Surrogate %R failure
DW082106B	188869-001	8081A	Aldrin	UJ	CCV %D failure, Surrogate %R failure
DW082106B	188869-001	8081A	Heptachlor epoxide	UJ	CCV %D failure, Surrogate %R failure
DW082106B	188869-001	8081A	Endosulfan I	UJ	Surrogate percent recovery failure
DW082106B	188869-001	6020	Calcium, Total	UJ	Serial dilution percent difference failure
DW082106B	188869-001	376.2	Sulfide	UJ	MS/MSD percent recovery failure
LF6GW103CL	D0601136-002	8081A	Dieldrin	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601136-002	8081A	4,4'-DDE	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601136-002	8081A	Endrin	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601136-002	8081A	Endosulfan II	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601136-002	8081A	4,4'-DDD	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601136-002	8081A	Endosulfan sulfate	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601136-002	8081A	4,4'-DDT	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601136-002	8081A	Methoxychlor	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601136-002	8081A	Endrin ketone	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601136-002	8081A	alpha-Chlordane	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601136-002	8081A	gamma-Chlordane	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601136-002	8081A	Toxaphene	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601136-002	8082	PCB-1016	UJ	LCS/LCSD %R failure, LCS/LCSD RPD failure
LF6GW103CL	D0601136-002	8082	PCB-1248	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601136-002	8082	PCB-1254	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601136-002	8082	PCB-1260	UJ	Surrogate percent recovery failure, LCS/LCSD %R failure, LCS/LCSD RPD failure
LF6GW103CL	D0601136-002	8310	Acenaphthene	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601136-002	8310	Acenaphthylene	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601136-002	8310	Anthracene	UJ	Surrogate percent recovery failure

Table 2
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Sample ID	Laboratory ID	Analysis Method	Compound	Qualifier	Reason
LF6GW103CL	D0601136-002	8310	Benzo(a)anthracene	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601136-002	8310	Benzo(a)pyrene	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601136-002	8310	Benzo(b)fluoranthene	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601136-002	8310	Benzo(g,h,i)perylene	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601136-002	8310	Benzo(k)fluoranthene	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601136-002	8310	Chrysene	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601136-002	8310	Dibenz(a,h)anthracene	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601136-002	8310	Fluoranthene	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601136-002	8310	Fluorene	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601136-002	8310	Indeno(1,2,3-cd)pyrene	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601136-002	8310	Naphthalene	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601136-002	8310	Phenanthrene	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601136-002	8310	Pyrene	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601136-002	6010B	Silver, dissolved	U	Method blank contamination
LF6GW103CL	D0601136-002	300.0	Nitrate-Nitrogen	J-	Missed analysis holding time
1065MW9BCL	D0601136-003	8020B	Benzene	UJ	Continuing calibration verification percent difference failure
1065MW9BCL	D0601136-003	300.0	Nitrate-Nitrogen	J-	Missed analysis holding time
1213GW101CL	D0601136-004	300.0	Nitrate-Nitrogen	J-	Missed analysis holding time

%D: Percent difference

%R: percent recovery

CCV: Continuing calibration verification (standard)

RPD: Relative percent difference

Table 3
Summary of Field Duplicates
Third Quarter 2006 Groundwater Sampling Event
The Presidio of San Francisco, CA

Original Sample ID	Laboratory ID	Matrix	Compound	Original Results*	Duplicate Sample ID	Laboratory ID	Duplicate Results*	RPD
BB3GW100	188774-003	Water	Gasoline C7-C12	ND	DUP0815061A	188774-004	ND	NA
BB3GW100	188774-003	Water	Diesel	ND	DUP0815061A	188774-004	ND	NA
BB3GW100	188774-003	Water	Motor Oil	ND	DUP0815061A	188774-004	ND	NA
BB3GW100	188774-003	Water	Barium, Dissolved	96	DUP0815061A	188774-004	96	0%
BB3GW100	188774-003	Water	Calcium, Dissolved	30000	DUP0815061A	188774-004	29000	3.4%
BB3GW100	188774-003	Water	Magnesium, Dissolved	90000	DUP0815061A	188774-004	90000	0%
BB3GW100	188774-003	Water	Manganese, Dissolved	24	DUP0815061A	188774-004	ND	>RL
BB3GW100	188774-003	Water	Nickel, Dissolved	25	DUP0815061A	188774-004	25	0%
BB3GW100	188774-003	Water	Potassium, Dissolved	750	DUP0815061A	188774-004	710	5.5%
BB3GW100	188774-003	Water	Sodium, Dissolved	120000	DUP0815061A	188774-004	120000	0%
BB3GW100	188774-003	Water	All other metals	ND	DUP0815061A	188774-004	ND	NA
BB3GW100	188774-003	Water	Alkalinity	230	DUP0815061A	188774-004	230	0%
BB3GW100	188774-003	Water	Chloride	250	DUP0815061A	188774-004	250	0%
BB3GW100	188774-003	Water	Fluoride	ND	DUP0815061A	188774-004	ND	NA
BB3GW100	188774-003	Water	Nitrate-N	5.5	DUP0815061A	188774-004	5.2	5.6%
BB3GW100	188774-003	Water	Nitrite-N	ND	DUP0815061A	188774-004	ND	NA
BB3GW100	188774-003	Water	Sulfate	61	DUP0815061A	188774-004	61	0%
BB3GW100	188774-003	Water	TDS	800	DUP0815061A	188774-004	860	-7.2%
1221GW104	188774-006	Water	Calcium, Dissolved	51000	DUP0815063A	188774-011	49000	4.0%
1221GW104	188774-006	Water	Magnesium, Dissolved	84000	DUP0815063A	188774-011	81000	3.6%
1221GW104	188774-006	Water	Manganese, Dissolved	33	DUP0815063A	188774-011	27	20%
1221GW104	188774-006	Water	Potassium, Dissolved	1600	DUP0815063A	188774-011	1700	-6.1%
1221GW104	188774-006	Water	Sodium, Dissolved	62000	DUP0815063A	188774-011	63000	-1.6%
1221GW104	188774-006	Water	All other metals	ND	DUP0815063A	188774-011	ND	NA
1221GW104	188774-006	Water	Alkalinity	440	DUP0815063A	188774-011	440	0%
1221GW104	188774-006	Water	Chloride	61	DUP0815063A	188774-011	61	0%
1221GW104	188774-006	Water	Fluoride	ND	DUP0815063A	188774-011	ND	NA
1221GW104	188774-006	Water	Nitrate-N	ND	DUP0815063A	188774-011	ND	NA
1221GW104	188774-006	Water	Nitrite-N	ND	DUP0815063A	188774-011	ND	NA
1221GW104	188774-006	Water	Sulfate	70	DUP0815063A	188774-011	68	2.9%
BHWGW01	188774-015	Water	Barium, Dissolved	46	DUP0815062A	188774-014	47	-2.2%
BHWGW01	188774-015	Water	Calcium, Dissolved	18000	DUP0815062A	188774-014	18000	0%
BHWGW01	188774-015	Water	Chromium, Dissolved	120	DUP0815062A	188774-014	110	8.7%
BHWGW01	188774-015	Water	Magnesium, Dissolved	84000	DUP0815062A	188774-014	82000	2.4%
BHWGW01	188774-015	Water	Sodium, Dissolved	250000	DUP0815062A	188774-014	240000	4.1%
BHWGW01	188774-015	Water	All other metals	ND	DUP0815062A	188774-014	ND	NA
BHWGW01	188774-015	Water	Alkalinity	530	DUP0815062A	188774-014	530	0%
BHWGW01	188774-015	Water	Chloride	200	DUP0815062A	188774-014	200	0%
BHWGW01	188774-015	Water	Fluoride	ND	DUP0815062A	188774-014	ND	NA
BHWGW01	188774-015	Water	Nitrate-N	5.9	DUP0815062A	188774-014	5.7	3.4%
BHWGW01	188774-015	Water	Nitrite-N	ND	DUP0815062A	188774-014	ND	NA
BHWGW01	188774-015	Water	Sulfate	68	DUP0815062A	188774-014	66	3.0%
1213GW101	188802-005	Water	1,2-Dichloroethane	6.9	DUP0816063A	188802-006	9.7	-34%

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Summary of Field Duplicates
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Original Sample ID	Laboratory ID	Matrix	Compound	Original Results*	Duplicate Sample ID	Laboratory ID	Duplicate Results*	RPD
1213GW101	188802-005	Water	Benzene	24	DUP0816063A	188802-006	36	-40%
1213GW101	188802-005	Water	Toluene	ND <0.5	DUP0816063A	188802-006	0.7	NC
1213GW101	188802-005	Water	Ethylbenzene	1.9	DUP0816063A	188802-006	3.2	-51%
1213GW101	188802-005	Water	Xylene (total)	0.5	DUP0816063A	188802-006	0.9	NC
1213GW101	188802-005	Water	All other VOCs	ND	DUP0816063A	188802-006	ND	NA
1213GW101	188802-005	Water	Gasoline C7-C12	150	DUP0816063A	188802-006	340	-78%
1213GW101	188802-005	Water	Diesel	ND	DUP0816063A	188802-006	ND	NA
1213GW101	188802-005	Water	Motor Oil	ND	DUP0816063A	188802-006	ND	NA
1213GW101	188802-005	Water	all PAHs	ND	DUP0816063A	188802-006	ND	NA
1213GW101	188802-005	Water	Arsenic, Dissolved	6	DUP0816063A	188802-006	7.2	-18%
1213GW101	188802-005	Water	Barium, Dissolved	17	DUP0816063A	188802-006	17	0%
1213GW101	188802-005	Water	Calcium, Dissolved	17000	DUP0816063A	188802-006	17000	0%
1213GW101	188802-005	Water	Chromium, Dissolved	22	DUP0816063A	188802-006	24	-8.7%
1213GW101	188802-005	Water	Copper, Dissolved	1	DUP0816063A	188802-006	ND< 1	NC
1213GW101	188802-005	Water	Magnesium, Dissolved	87000	DUP0816063A	188802-006	88000	-1.1%
1213GW101	188802-005	Water	Manganese, Dissolved	33	DUP0816063A	188802-006	28	16%
1213GW101	188802-005	Water	Potassium, Dissolved	1500	DUP0816063A	188802-006	1500	0%
1213GW101	188802-005	Water	Sodium, Dissolved	310000	DUP0816063A	188802-006	310000	0%
1213GW101	188802-005	Water	All other metals	ND	DUP0816063A	188802-006	ND	NA
1213GW101	188802-005	Water	Alkalinity	420	DUP0816063A	188802-006	420	0%
1213GW101	188802-005	Water	Chloride	310	DUP0816063A	188802-006	310	0%
1213GW101	188802-005	Water	Fluoride	ND	DUP0816063A	188802-006	ND	NA
1213GW101	188802-005	Water	Nitrogen, Nitrate	0.83	DUP0816063A	188802-006	0.92	-10%
1213GW101	188802-005	Water	Nitrogen, Nitrite	ND	DUP0816063A	188802-006	ND	NA
1213GW101	188802-005	Water	Sulfate	110	DUP0816063A	188802-006	110	0%
NKGW04	188802-007	Water	N-Nitrosodimethylamine	ND	DUP0816061B	188802-011	ND	NA
LF6GW103	188802-008	Water	Gasoline C7-C12	ND	DUP0816061A	188802-010	ND	NA
LF6GW103	188802-008	Water	Diesel	ND	DUP0816061A	188802-010	ND	NA
LF6GW103	188802-008	Water	All Pesticides	ND	DUP0816061A	188802-010	ND	NA
LF6GW103	188802-008	Water	All PCBs	ND	DUP0816061A	188802-010	ND	NA
LF6GW103	188802-008	Water	all PAHs	ND	DUP0816061A	188802-010	ND	NA
LF6GW103	188802-008	Water	Barium, Dissolved	71	DUP0816061A	188802-010	71	0%
LF6GW103	188802-008	Water	Calcium, Dissolved	38000	DUP0816061A	188802-010	38000	0%
LF6GW103	188802-008	Water	Chromium, Dissolved	26	DUP0816061A	188802-010	26	0%
LF6GW103	188802-008	Water	Magnesium, Dissolved	62000	DUP0816061A	188802-010	63000	-1.6%
LF6GW103	188802-008	Water	Potassium, Dissolved	580	DUP0816061A	188802-010	590	-1.7%
LF6GW103	188802-008	Water	Sodium, Dissolved	68000	DUP0816061A	188802-010	69000	-1.5%
LF6GW103	188802-008	Water	All other metals	ND	DUP0816061A	188802-010	ND	NA
LF6GW103	188802-008	Water	Alkalinity	300	DUP0816061A	188802-010	310	-3.3%
LF6GW103	188802-008	Water	Chloride	35	DUP0816061A	188802-010	35	0%
LF6GW103	188802-008	Water	Fluoride	ND	DUP0816061A	188802-010	ND	NA
LF6GW103	188802-008	Water	Nitrogen, Nitrate	3.8	DUP0816061A	188802-010	3.8	0%
LF6GW103	188802-008	Water	Nitrogen, Nitrite	ND	DUP0816061A	188802-010	ND	NA

Table 3
Summary of Field Duplicates
Third Quarter 2006 Groundwater Sampling Event
The Presidio of San Francisco, CA

Original Sample ID	Laboratory ID	Matrix	Compound	Original Results*	Duplicate Sample ID	Laboratory ID	Duplicate Results*	RPD
LF6GW103	188802-008	Water	Sulfate	100	DUP0816061A	188802-010	100	0%
LF6GW103	188802-008	Water	TDS	550	DUP0816061A	188802-010	N/A	NA
1065MW9A	188802-013	Water	Gasoline C7-C12	ND	DUP0816062A	188802-020	ND	NA
1065MW9A	188802-013	Water	Methyl tertiary-butyl ether	ND <2.0	DUP0816062A	188802-020	2.3	NC
1065MW9A	188802-013	Water	Benzene	ND	DUP0816062A	188802-020	ND	NA
1065MW9A	188802-013	Water	Toluene	ND	DUP0816062A	188802-020	ND	NA
1065MW9A	188802-013	Water	Ethylbenzene	ND	DUP0816062A	188802-020	ND	NA
1065MW9A	188802-013	Water	Xylene (total)	ND	DUP0816062A	188802-020	ND	NA
1065MW9A	188802-013	Water	Diesel	ND	DUP0816062A	188802-020	ND	NA
1065MW9A	188802-013	Water	Motor Oil	ND	DUP0816062A	188802-020	ND	NA
1065MW9A	188802-013	Water	Arsenic, Dissolved	10	DUP0816062A	188802-020	ND< 5	NC
1065MW9A	188802-013	Water	Calcium, Dissolved	58000	DUP0816062A	188802-020	38000	42%
1065MW9A	188802-013	Water	Chromium, Dissolved	ND< 10	DUP0816062A	188802-020	33	> RL
1065MW9A	188802-013	Water	Iron, Dissolved	5100	DUP0816062A	188802-020	ND< 100	> RL
1065MW9A	188802-013	Water	Magnesium, Dissolved	94000	DUP0816062A	188802-020	56000	51%
1065MW9A	188802-013	Water	Manganese, Dissolved	460	DUP0816062A	188802-020	ND< 10	> RL
1065MW9A	188802-013	Water	Potassium, Dissolved	18000	DUP0816062A	188802-020	710	185%
1065MW9A	188802-013	Water	Sodium, Dissolved	75000	DUP0816062A	188802-020	60000	22%
1065MW9A	188802-013	Water	Vanadium, Dissolved	ND< 10	DUP0816062A	188802-020	11	NC
1065MW9A	188802-013	Water	All other metals	ND	DUP0816062A	188802-020	ND	NA
1065MW9A	188802-013	Water	Alkalinity	440	DUP0816062A	188802-020	250	55%
1065MW9A	188802-013	Water	Chloride	160	DUP0816062A	188802-020	52	102%
1065MW9A	188802-013	Water	Fluoride	0.19	DUP0816062A	188802-020	ND< 0.1	NC
1065MW9A	188802-013	Water	Nitrate-N	ND< 0.05	DUP0816062A	188802-020	5.7	> RL
1065MW9A	188802-013	Water	Nitrite-N	ND	DUP0816062A	188802-020	ND	NA
1065MW9A	188802-013	Water	Sulfate	16	DUP0816062A	188802-020	72	-127%
1065MW9A	188802-013	Water	Sulfide	ND	DUP0816062A	188802-020	ND	NA
1065MW9A	188802-013	Water	TDS	710	DUP0816062A	188802-020	490	37%
LF5GW104	188837-015	Water	All Pesticides	ND	DUP0817062A	188837-016	ND	NA

*Units for organic and metals analyses are ug/L; units for general chemistry analyses are mg/L.

RL: Reporting limit

VOCs: Volatile Organic Compounds

PCBs: Polychlorinated Biphenyls

PAHs: Polynuclear Aromatic Hydrocarbons

ND: Not detected

NC: Not calculated. The absolute difference between the sample result and the duplicate sample result is less than the reporting limit.

N/A: Not analyzed

NA: Not applicable. Calculation of the relative percent difference between the sample result and the duplicate sample result is not applicable.

Table 4
Summary of QC Split Duplicates
Third Quarter 2006 Groundwater Sampling Event
The Presidio of San Francisco, CA

Original Sample ID	Laboratory ID	Matrix	Compound	Original Results*	QC Split Sample ID	Laboratory ID	Duplicate Results*	RPD
1213GW101	188802-005	Water	1,2-Dichloroethane	6.9	1213GW101CL	D0601136-004	8.2	-17%
1213GW101	188802-005	Water	Benzene	24	1213GW101CL	D0601136-004	29	-19%
1213GW101	188802-005	Water	Ethylbenzene	1.9	1213GW101CL	D0601136-004	0.56	109%
1213GW101	188802-005	Water	Xylene (total)	0.5	1213GW101CL	D0601136-004	ND< 1.0	NC
1213GW101	188802-005	Water	All other VOCs	ND	1213GW101CL	D0601136-004	ND	NA
1213GW101	188802-005	Water	Gasoline C7-C12	150	1213GW101CL	D0601136-004	55	93%
1213GW101	188802-005	Water	Diesel	ND	1213GW101CL	D0601136-004	ND	NA
1213GW101	188802-005	Water	Motor Oil	ND	1213GW101CL	D0601136-004	ND	NA
1213GW101	188802-005	Water	all PAHs	ND	1213GW101CL	D0601136-004	ND	NA
1213GW101	188802-005	Water	Aluminum, Dissolved	ND< 100	1213GW101CL	D0601136-004	56	NC
1213GW101	188802-005	Water	Arsenic, Dissolved	6	1213GW101CL	D0601136-004	ND< 100	NC
1213GW101	188802-005	Water	Barium, Dissolved	17	1213GW101CL	D0601136-004	14	19%
1213GW101	188802-005	Water	Calcium, Dissolved	17000	1213GW101CL	D0601136-004	19100	-12%
1213GW101	188802-005	Water	Chromium, Dissolved	22	1213GW101CL	D0601136-004	22	0%
1213GW101	188802-005	Water	Copper, Dissolved	1	1213GW101CL	D0601136-004	ND< 20	NC
1213GW101	188802-005	Water	Magnesium, Dissolved	87000	1213GW101CL	D0601136-004	84200	3.3%
1213GW101	188802-005	Water	Manganese, Dissolved	33	1213GW101CL	D0601136-004	40	-19%
1213GW101	188802-005	Water	Nickel, Dissolved	ND< 20	1213GW101CL	D0601136-004	13	NC
1213GW101	188802-005	Water	Potassium, Dissolved	1500	1213GW101CL	D0601136-004	2070	-32%
1213GW101	188802-005	Water	Sodium, Dissolved	310000	1213GW101CL	D0601136-004	331000	-6.6%
1213GW101	188802-005	Water	Vanadium, Dissolved	ND< 10	1213GW101CL	D0601136-004	5.0	NC
1213GW101	188802-005	Water	Zinc, Dissolved	ND< 20	1213GW101CL	D0601136-004	10	NC
1213GW101	188802-005	Water	All other metals	ND	1213GW101CL	D0601136-004	ND	NA
1213GW101	188802-005	Water	Alkalinity	420	1213GW101CL	D0601136-004	435	-3.5%
1213GW101	188802-005	Water	Chloride	310	1213GW101CL	D0601136-004	288	7.4%
1213GW101	188802-005	Water	Fluoride	ND	1213GW101CL	D0601136-004	ND	NA
1213GW101	188802-005	Water	Nitrogen, Nitrate	0.83	1213GW101CL	D0601136-004	7.1	-158%
1213GW101	188802-005	Water	Nitrogen, Nitrite	ND	1213GW101CL	D0601136-004	ND	NA
1213GW101	188802-005	Water	Sulfate	110	1213GW101CL	D0601136-004	1050	-162%
LF6GW103	188802-008	Water	Gasoline C7-C12	ND	LF6GW103CL	D0601136-002	ND	NA
LF6GW103	188802-008	Water	Diesel	ND	LF6GW103CL	D0601136-002	ND	NA
LF6GW103	188802-008	Water	All Pesticides	ND	LF6GW103CL	D0601136-002	ND	NA
LF6GW103	188802-008	Water	All PCBs	ND	LF6GW103CL	D0601136-002	ND	NA
LF6GW103	188802-008	Water	all PAHs	ND	LF6GW103CL	D0601136-002	ND	NA

Table 4
Summary of QC Split Duplicates
Third Quarter 2006 Groundwater Sampling Event
The Presidio of San Francisco, CA

Original Sample ID	Laboratory ID	Matrix	Compound	Original Results*	QC Split Sample ID	Laboratory ID	Duplicate Results*	RPD
LF6GW103	188802-008	Water	Barium, Dissolved	71	LF6GW103CL	D0601136-002	73	-2.8%
LF6GW103	188802-008	Water	Calcium, Dissolved	38000	LF6GW103CL	D0601136-002	38400	-1.0%
LF6GW103	188802-008	Water	Chromium, Dissolved	26	LF6GW103CL	D0601136-002	28	-7.4%
LF6GW103	188802-008	Water	Magnesium, Dissolved	62000	LF6GW103CL	D0601136-002	61000	1.6%
LF6GW103	188802-008	Water	Potassium, Dissolved	580	LF6GW103CL	D0601136-002	ND< 5000	NC
LF6GW103	188802-008	Water	Silver, Dissolved	ND< 1	LF6GW103CL	D0601136-002	4.0	NC
LF6GW103	188802-008	Water	Sodium, Dissolved	68000	LF6GW103CL	D0601136-002	68400	-0.6%
LF6GW103	188802-008	Water	Vanadium, Dissolved	ND< 10	LF6GW103CL	D0601136-002	12	NC
LF6GW103	188802-008	Water	Zinc, Dissolved	ND< 20	LF6GW103CL	D0601136-002	7.0	NC
LF6GW103	188802-008	Water	All other metals	ND	LF6GW103CL	D0601136-002	ND	NA
LF6GW103	188802-008	Water	Alkalinity	300	LF6GW103CL	D0601136-002	317	-5.5%
LF6GW103	188802-008	Water	Chloride	35	LF6GW103CL	D0601136-002	35	0%
LF6GW103	188802-008	Water	Fluoride	ND	LF6GW103CL	D0601136-002	ND	NA
LF6GW103	188802-008	Water	Nitrogen, Nitrate	3.8	LF6GW103CL	D0601136-002	3.8	0%
LF6GW103	188802-008	Water	Nitrogen, Nitrite	ND	LF6GW103CL	D0601136-002	ND	NA
LF6GW103	188802-008	Water	Sulfate	100	LF6GW103CL	D0601136-002	106	-5.8%
LF6GW103	188802-008	Water	TDS	550	LF6GW103CL	D0601136-002	590	-7.0%
1065MW9B	188802-014	Water	Gasoline C7-C12	ND	1065MW9BCL	D0601136-003	ND	NA
1065MW9B	188802-014	Water	Diesel	ND	1065MW9BCL	D0601136-003	ND	NA
1065MW9B	188802-014	Water	Motor Oil	ND	1065MW9BCL	D0601136-003	ND	NA
1065MW9B	188802-014	Water	Benzene	ND	1065MW9BCL	D0601136-003	ND	NA
1065MW9B	188802-014	Water	Toluene	ND	1065MW9BCL	D0601136-003	ND	NA
1065MW9B	188802-014	Water	Ethylbenzene	ND	1065MW9BCL	D0601136-003	ND	NA
1065MW9B	188802-014	Water	Xylene (total)	ND	1065MW9BCL	D0601136-003	ND	NA
1065MW9B	188802-014	Water	Methyl tertiary-butyl ether	3.4	1065MW9BCL	D0601136-003	ND< 2.5	NC
1065MW9B	188802-014	Water	Calcium, Dissolved	37000	1065MW9BCL	D0601136-003	40100	-8.0%
1065MW9B	188802-014	Water	Chromium, Dissolved	34	1065MW9BCL	D0601136-003	38	-11%
1065MW9B	188802-014	Water	Copper, Dissolved	1	1065MW9BCL	D0601136-003	ND< 20	NC
1065MW9B	188802-014	Water	Magnesium, Dissolved	54000	1065MW9BCL	D0601136-003	57000	-5.4%
1065MW9B	188802-014	Water	Potassium, Dissolved	750	1065MW9BCL	D0601136-003	1110	-39%
1065MW9B	188802-014	Water	Sodium, Dissolved	56000	1065MW9BCL	D0601136-003	60800	-8.2%
1065MW9B	188802-014	Water	Vanadium, Dissolved	12	1065MW9BCL	D0601136-003	N/A	NA
1065MW9B	188802-014	Water	Zinc, Dissolved	ND< 20	1065MW9BCL	D0601136-003	9.0	NC
1065MW9B	188802-014	Water	All other metals	ND	1065MW9BCL	D0601136-003	ND	NA

Table 4
Summary of QC Split Duplicates
Third Quarter 2006 Groundwater Sampling Event
The Presidio of San Francisco, CA

Original Sample ID	Laboratory ID	Matrix	Compound	Original Results*	QC Split Sample ID	Laboratory ID	Duplicate Results*	RPD
1065MW9B	188802-014	Water	Alkalinity	170	1065MW9BCL	D0601136-003	253	-39%
1065MW9B	188802-014	Water	Chloride	130	1065MW9BCL	D0601136-003	53	84%
1065MW9B	188802-014	Water	Fluoride	ND	1065MW9BCL	D0601136-003	ND	NA
1065MW9B	188802-014	Water	Nitrogen, Nitrate	14	1065MW9BCL	D0601136-003	6.0	80%
1065MW9B	188802-014	Water	Nitrogen, Nitrite	ND	1065MW9BCL	D0601136-003	ND	NA
1065MW9B	188802-014	Water	Sulfate	180	1065MW9BCL	D0601136-003	76	81%
1065MW9B	188802-014	Water	TDS	490	1065MW9BCL	D0601136-003	505	-3.0%
1065MW9B	188802-014	Water	Sulfide	ND	1065MW9BCL	D0601136-003	ND	NA

*Units for organic and metals analyses are ug/L; units for general chemistry analyses are mg/L.

RL: Reporting limit

VOCs: Volatile Organic Compounds

PCBs: Polychlorinated Biphenyls

PAHs: Polynuclear Aromatic Hydrocarbons

ND: Not detected

NC: Not calculated. The absolute difference between the sample result and the duplicate sample result is less than the reporting limit.

N/A: Not analyzed

NA: Not applicable. Calculation of the relative percent difference between the sample result and the duplicate sample result is not applicable.

Fourth Quarter 2006

TO: Joshua Graber, Treadwell & Rollo, Inc.

February 19, 2007

FROM: Donna Breaux, DataVal, Inc.

Treadwell & Rollo Project No. 2893.04

**DATA VALIDATION SUMMARY REPORT FOR THE FOURTH QUARTER 2006
GROUNDWATER MONITORING, THE PRESIDIO OF SAN FRANCISCO, CA**

PRIMARY LABORATORY: Curtis & Tompkins, Ltd., Berkeley, CA

QC SPLIT SAMPLE LABORATORY: Columbia Analytical Services, Inc., Redding, CA

SAMPLING DATES: December 5, 6 and 7, 2006

Data validation of Level III laboratory data packages was performed according to the project-specific guidelines. These guidelines were outlined in the Presidio-wide Quality Assurance Project Plan, Sampling and Analysis Plan, April, 2001; the U. S. Environmental Protection Agency Contract Laboratory Program National Functional Guidelines for Organic Data Review, October, 1999; the U. S. Environmental Protection Agency Contract Laboratory Program National Functional Guidelines for Low Concentration Organic Data Review, June, 2001; and the U. S. Environmental Protection Agency Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, October 2004.

The data were reviewed for holding times, surrogate recoveries, laboratory blanks, laboratory control samples, laboratory duplicate samples, matrix spikes and matrix spike duplicates, GC/MS tunes, performance evaluation mix standards, ICP interference check standards, ICP serial dilutions, initial calibrations, continuing calibration verification standards, internal standards and field QC samples.

The following paragraphs highlight the essential findings of the data validation effort:

I. Volatile Organic Compounds (VOCs) by GC/MS (8260B)

Overall, the data are usable as reported. Qualification was not required.

A. Reporting Limits

The laboratory reporting limits for VOCs in water matrix samples met the project required reporting limits, with the following exception:

1. The laboratory reporting limits did not meet the project required reporting limits listed in Table 2-6.8-1 of the QAPP for bromoform, bromomethane, chloroethane, and chloromethane. The laboratory reported 1.0 ug/L for these compounds. The project required reporting limit was 0.5 ug/L.

B. Holding Times

Technical holding time criteria were met for all project samples.

C. Surrogate Recoveries

Surrogate spike recoveries met QC acceptance criteria for all project samples. Samples with high-failing surrogate recoveries and non-detected results did not require qualification, and were not noted in this report.

D. Blanks

Target analytes were not observed in any laboratory method blanks associated with the project samples. Target analytes were not observed in any field QC blanks associated with the project samples, with the following exceptions:

1. Trip blank TB1206061A (191314-013) had a detected level of chloroform at 7.7 ug/L. The levels of chloroform in the associated project samples were non-detect, and qualification was not required.
2. Trip blank TB1207061A (191358-012) had detected levels of acetone (22 ug/L) and methylene chloride (5.4 ug/L). The levels of acetone and methylene chloride in the associated project samples were non-detect, and qualification was not required.
3. Trip blank TB1207061B (191358-014) had a detected level of chloroform at 0.5 ug/L. The levels of chloroform in the associated project samples were non-detect, and qualification was not required.

E. Laboratory Control Samples

All QC criteria were met for the laboratory control samples associated with the project samples.

F. Matrix Spike/Matrix Spike Duplicate

All QC criteria were met for the matrix spikes and matrix spike duplicates associated with the project samples.

G. GC/MS Tunes

All QC criteria were met for the GC/MS tunes associated with the project samples.

H. Initial Calibration

Initial calibration criteria were met for all calibration standards associated with the project samples.

I. Continuing Calibration

Continuing calibration criteria were met for all continuing calibration standards associated with the project samples.

J. Internal Standards

Internal standard areas and retention times met QC acceptance criteria for all project samples.

II. Total Petroleum Hydrocarbons (TPH) - Gasoline Range/Stoddard Solvent (8015B)

Overall, the data are usable as reported. Qualification was not required.

A. Reporting Limits

The laboratory reporting limit for TPH-gasoline in water matrix samples met the project required reporting limit. A project required reporting limit was not provided for Stoddard solvent in the project QAPP.

B. Holding Times

Technical holding time criteria were met for all project samples.

C. Surrogate Recoveries

Surrogate spike recoveries met QC acceptance criteria for all project samples.

D. Blanks

Target analytes were not observed in any laboratory method blanks associated with the project samples. Target analytes were not observed in any field QC blanks associated with the project samples.

E. Laboratory Control Samples

All QC criteria were met for the laboratory control samples associated with the project samples.

F. Matrix Spike/Matrix Spike Duplicate

All QC criteria were met for the matrix spikes and matrix spike duplicates associated with the project samples.

G. Initial Calibration

Initial calibration criteria were met for all calibration standards associated with the project samples.

H. Continuing Calibration

Continuing calibration criteria were met for all continuing calibration standards associated with the project samples.

III. Total Petroleum Hydrocarbons (TPH) – Diesel/Fuel Oil Range (8015B)

Overall, the data are usable as reported with any added qualifiers. Qualification was required for the reason noted in Section F.

A. Reporting Limits

The laboratory reporting limits for TPH-diesel and TPH-fuel oil in water matrix samples met the project-required reporting limits, with the following exception:

1. The results for TPH-diesel and TPH-fuel oil in samples 1065PZ2A (191314-011) and 1065PZ4A (191314-012) were reported as non-detect at two-fold dilutions due to limited sample volume.

- B. Holding Times
Technical holding time criteria were met for all project samples.
- C. Surrogate Recoveries
Surrogate spike recoveries met QC acceptance criteria for all project samples.
- D. Blanks
Target analytes were not observed in any laboratory method blanks associated with the project samples. Target analytes were not observed in any field QC blanks associated with the project samples.
- E. Laboratory Control Samples
All QC criteria were met for the laboratory control samples associated with the project samples.
- F. Matrix Spike/Matrix Spike Duplicate
All QC criteria were met for the matrix spikes and matrix spike duplicates associated with the project samples, with the following exception:
 - 1. The percent recoveries for TPH-diesel were outside the 65%-135% project acceptance criteria in QC samples LF10SP01 (191314-003) MS/MSD at 30%/19%. The detected result for TPH-diesel in the parent sample qualified as estimated with a low bias (J-). (QC Batch 120405)
See Table 2 of this report for a summary of qualifications due to matrix spike percent recovery failure.
- G. Initial Calibration
Initial calibration criteria were met for all calibration standards associated with the project samples.
- H. Continuing Calibration
Continuing calibration criteria were met for all continuing calibration standards associated with the project samples.

IV. Aromatic Volatiles by GC (8021B)

Overall, the data are usable as reported. Qualification was not required.

- A. Reporting Limits
The laboratory reporting limits for benzene, toluene, ethylbenzene, xylenes and methyl tertiary-butyl ether in water matrix samples met the project-required reporting limits.
- B. Holding Times
Technical holding time criteria were met for all project samples.

- C. Surrogate Recoveries
Surrogate spike recoveries met QC acceptance criteria for all project samples.
- D. Blanks
Target analytes were not observed in any laboratory method blanks associated with the project samples. Target analytes were not observed in any field QC blanks associated with the project samples.
- E. Laboratory Control Samples
All QC criteria were met for the laboratory control samples associated with the project samples.
- F. Matrix Spike/Matrix Spike Duplicate
All QC criteria were met for the matrix spikes and matrix spike duplicates associated with the project samples.
- G. Initial Calibration
Initial calibration criteria were met for all calibration standards associated with the project samples.
- H. Continuing Calibration
Continuing calibration criteria were met for all continuing calibration standards associated with the project samples.

V. Organochlorine Pesticides (8081A)

Overall, the data are usable as reported with any added qualifiers. Qualifications were required for the reasons noted in Sections C, H and I.

- A. Reporting Limits
The laboratory reporting limits for pesticides in water matrix samples met the project-required reporting limits, with the following exception:
 - 1. The results for various pesticides in sample 1349MW100 (191286-013) were reported as non-detect at a two-fold or five-fold dilution. The reporting limits were raised by the dilution factors.
- B. Holding Times
Technical holding time criteria were met for all project samples.
- C. Surrogate Recoveries
Surrogate spike recoveries met QC acceptance criteria for all project samples, with the following exception:
 - 1. The percent recoveries for surrogates 2,4,5,6-tetrachloro-meta-xylene (TCMX) and/or decachlorobiphenyl (DCB) failed the 65%-135% project acceptance criteria in several project samples. The compounds associated with surrogate TCMX (alpha-BHC, beta-BHC, delta-BHC, gamma-BHC, aldrin, heptachlor, heptachlor epoxide and endosulfan I);

and the compounds associated with surrogate DCB (alpha-chlordane, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, dieldrin, endosulfan II, endosulfan sulfate, endrin, endrin ketone, gamma-chlordane, methoxychlor and toxaphene) were qualified as estimated with a low bias (J/UJ). The following table lists the project samples that were qualified due to these QC failures.

Project Sample Name	Laboratory Sample ID	DCB % Recovery	TCMX % Recovery
BB1PZ100	191286-007	51%	75% (pass)
BB1PZ101	191286-008	61%	76% (pass)
1349MW100	191286-013	67% (pass)	63%
DW120606B	191290-001	70% (pass)	49%

See Table 2 of this report for a summary of qualifications due to surrogate percent recovery failure.

D. Blanks

Target analytes were not observed in any laboratory method blanks associated with the project samples. Target analytes were not observed in any field QC blanks associated with the project samples.

E. Laboratory Control Samples

All QC criteria were met for the laboratory control samples associated with the project samples.

F. Matrix Spike/Matrix Spike Duplicate

A matrix spike and matrix spike duplicate were not analyzed with the project samples for this analysis.

G. Performance Evaluation Mix (PEM) Check Standards

All PEM check standards met the project degradation criteria of 20% for endrin and 4,4'-DDT.

H. Initial Calibration

Initial calibration criteria were met for all calibration standards associated with the project samples, with the following exception:

1. The 12/6/06 initial calibration analyzed on instrument GC23, channel A, had one compound with a percent relative standard deviation (%RSD) greater than 20%: methoxychlor at 26%. The results for methoxychlor in the associated samples were non-detect and qualified as estimated (UJ).

See Table 2 of this report for a summary of qualifications due to initial calibration percent relative standard deviation failure.

I. Continuing Calibration

Continuing calibration criteria were met for all continuing calibration standards associated with the project samples, with the following exceptions:

1. Data was reported from two columns. Continuing calibration verification (CCV) standards with percent differences (%Ds) that failed criteria on one column did not require qualification of sample results if those results were reported from the column in control. Such failures were not noted in this report.
2. Qualification was not required for samples with non-detect results associated with high-failing CCV standards. Those failures were not noted in this report.
3. The 12/8/06 at 8:31 water matrix CCV analyzed on instrument GC23, channel A, had two compounds with %Ds less than the +/-15%D acceptance criteria: beta-BHC (-18%) and endosulfan II (-16%). The results for beta-BHC and endosulfan II in the associated samples were non-detect and qualified as estimated (UJ).
4. The 12/15/06 at 4:40 water matrix CCV analyzed on instrument GC23, channel A, had one compound with a %D less than the +/-15%D acceptance criteria: 4,4'-DDT (-25%). The results for 4,4'-DDT in the associated samples were non-detect and qualified as estimated (UJ).

See Table 2 of this report for a summary of samples qualified for continuing calibration verification standard percent difference failure.

VI. Polychlorinated Biphenyls (PCBs) (8082)

Overall, the data are usable as reported. Qualification was not required.

A. Reporting Limits

The laboratory reporting limits for PCBs in water matrix samples met the project-required reporting limits.

B. Holding Times

Technical holding time criteria were met for all project samples.

C. Surrogate Recoveries

Surrogate spike recoveries met QC acceptance criteria for all project samples.

D. Blanks

Target analytes were not observed in any laboratory method blanks associated with the project samples. Target analytes were not observed in any field QC blanks associated with the project samples.

E. Laboratory Control Samples

All QC criteria were met for the laboratory control samples associated with the project samples.

- F. Matrix Spike/Matrix Spike Duplicate
A matrix spike and matrix spike duplicate were not analyzed with the project samples for this analysis.
- G. Initial Calibration
Initial calibration criteria were met for all calibration standards associated with the project samples.
- H. Continuing Calibration
Continuing calibration criteria were met for all continuing calibration standards associated with the project samples. Data was reported from two columns. Continuing calibration verification (CCV) standards with percent differences (%Ds) that failed criteria on one column did not require qualification of sample results if those results were reported from the column in control. Such failures were not noted in this report.

VII. Polynuclear Aromatic Hydrocarbons (PAHs) by HPLC (8310)

Overall, the data are usable as reported with any added qualifiers. Qualification was required for the reason noted in Section F.

- A. Reporting Limits
The laboratory reporting limits for PAHs in water matrix samples met the project required reporting limits, with the following exceptions:
 - 1. The laboratory reporting limits did not meet the project required reporting limits listed in Table 2-6.12-1 of the QAPP for anthracene and fluoranthene. The laboratory reported 0.5 ug/L for anthracene and 0.4 ug/L for fluoranthene. The project required reporting limit for each of these compounds was 0.2 ug/L.
- B. Holding Times
Technical holding time criteria were met for all project samples.
- C. Surrogate Recoveries
Surrogate spike recoveries met QC acceptance criteria for all project samples.
- D. Blanks
Target analytes were not observed in any laboratory method blanks associated with the project samples. Target analytes were not observed in any field QC blanks associated with the project samples.
- E. Laboratory Control Samples
All QC criteria were met for the laboratory control samples associated with the project samples.

F. Matrix Spike/Matrix Spike Duplicate

All QC criteria were met for the matrix spikes and matrix spike duplicates associated with the project samples, with the following exception:

1. The percent recoveries for benzo(a)pyrene were outside the 65%-135% project acceptance criteria in QC samples 514AGW101 (191314-019) MS/MSD at 29%/38%. The result for benzo(a)pyrene in the parent sample was non-detect and qualified as estimated (UJ). (QC Batch 120180)

See Table 2 of this report for a summary of qualifications due to matrix spike percent recovery failure.

G. Initial Calibration

Initial calibration criteria were met for all calibration standards associated with the project samples.

H. Continuing Calibration

Continuing calibration criteria were met for all continuing calibration standards associated with the project samples.

VIII. Total and Dissolved Metals (6020A/7470A)

Overall, the data are usable as reported with any added qualifiers. Qualification was required for the reason noted in Section G.

A. Reporting Limits

The laboratory reporting limits for metals in water matrix samples met the project required reporting limits listed in Table 2-5.21-1 of the QAPP.

B. Holding Times

Technical holding time criteria were met for all project samples.

C. Blanks

Target analytes were not observed in any field QC blanks associated with the project samples. Target analytes were not observed in any laboratory method blanks associated with the project samples, with the following exception:

1. Method blank QC367719 had a detected level of lead at 15 ug/L. The associated samples were either non-detect for lead, or had lead values greater than five times the blank amount, and qualification was not required.

D. Laboratory Control Samples

All QC criteria were met for the laboratory control samples associated with the project samples.

E. Matrix Spike/Matrix Spike Duplicate

All QC criteria were met for the matrix spikes and matrix spike duplicates associated with the project samples, with the following exceptions:

1. The percent recoveries for magnesium and sodium were outside the 75%-125% project acceptance criteria in QC samples 1213GW101 (191286-012) MS and/or MSD. The amounts of magnesium and sodium present in the parent sample were greater than four times the amounts spiked and qualification was not required. (QC Batch 120218)
2. The percent recoveries for manganese and sodium were outside the 75%-125% project acceptance criteria in QC samples 11065PZ2A (191314-011) MS and/or MSD. The amounts of manganese and sodium present in the parent sample were greater than four times the amounts spiked and qualification was not required. (QC Batch 120323)
3. The percent recoveries for calcium and manganese were outside the 75%-125% project acceptance criteria in QC sample LF10SP01 (191314-003) MS. The amounts of calcium and manganese present in the parent sample were nearly four times the amounts spiked and qualification was not required. (QC Batch 120324)

F. ICP Interference Check Standards

All QC criteria were met for the ICP interference check standards associated with the project samples.

G. ICP Serial Dilution

All QC criteria were met for the ICP serial dilutions associated with the project samples, with the following exceptions:

1. The percent difference (%D) failed the 10% project acceptance criteria for potassium in the serial dilution of sample 1213GW101 (191286-012) at 48%. The results for total and dissolved potassium in the associated samples were qualified as estimated (J/UJ). (QC Batch 120218)
2. The %Ds failed the 10% project acceptance criteria for calcium and sodium in the serial dilution of sample LF10SP01 (191314-003) at 12% for both metals. The results for total calcium and sodium in the associated sample were qualified as estimated (J/UJ). (QC Batch 120323)
3. The %D failed the 10% project acceptance criteria for sodium in the serial dilution of sample LF10SP01 (191314-003) at 12%. The results for dissolved sodium in the associated samples were qualified as estimated (J/UJ). (QC Batch 120324)

See Table 2 of this report for a summary of qualifications due to serial dilution percent difference failure.

H. Initial and Continuing Calibrations

All initial and continuing calibration verification (CCV) standards associated with the project samples met QC acceptance criteria. Qualification was not required for samples with non-detect results associated with high-failing CCV standards. Those failures were not noted in this report.

IX. Various General Chemistry Methods

Overall, the data are usable as reported with any added qualifiers. Qualifications were required for the reasons noted in Sections B, D and E.

A. Reporting Limits

The laboratory reporting limits for the general chemistry methods analyzed met the project required reporting limits listed in the QAPP, with the following exception:

1. The results for nitrite-nitrogen in samples 1213GW101 (191286-012), 1349MW100 (191286-013) and LF4GW103 (191286-014) were reported as non-detect at two-fold dilutions due to the nature of the sample matrices. The reporting limits were raised by the dilution factors.

B. Holding Times

Technical holding time criteria were met for all project samples, with the following exception:

1. Samples LF10GW02 (191314-001), LF10SP01 (191314-003), BB3GW100 (191314-006), 1065MW101 (191314-009), 1065MW102 (191314-010), 1065PZ2A (191314-011), 1065PZ4A (191314-012), LF6GW104 (191314-014), LF6GW105 (191314-015) and LF6GW106 (191314-016) were analyzed five days past the seven-day analysis holding time for total dissolved solids. The sample results were detected and qualified as estimated with a low bias (J-).

See Table 2 of this report for a summary of qualifications due to missed analysis holding times.

C. Blanks

Target analytes were not observed in any laboratory method blanks associated with the project samples. Target analytes were not observed in any field QC blanks associated with the project samples, with the following exceptions:

1. Source blank DW120606B (191290-001) had a detected level of total dissolved solids at 30 mg/L. Project sample association with this source blank could not be established, and qualification was not required.
2. Equipment blank BHWGW04RBHWGW100 (191358-006) had a detected level of alkalinity at 1.1 mg/L. The associated samples had alkalinity values greater than five times the blank amount, and qualification was not required.

D. Laboratory Control Samples

All QC criteria were met for the laboratory control samples associated with the project samples, with the following exception:

1. The percent recovery for total dissolved solids was outside the 80%-120% project acceptance criteria in QC sample QC368049 LCSD (laboratory control sample duplicate) at 122%. The detected results for

total dissolved solids in the associated samples were qualified as estimated with a high bias (J+). (QC Batch 120302)

See Table 2 of this report for a summary of qualifications due to laboratory control sample percent recovery failure.

E. Matrix Spike/Matrix Spike Duplicate

All QC criteria were met for the matrix spikes and matrix spike duplicates associated with the project samples, with the following exception:

1. The percent recoveries for sulfide were outside the 75%-125% project acceptance criteria in QC samples 1065PZ2A (191314-011) MS/MSD at 58%/59%. The results for sulfide in the associated samples were non-detect and qualified as estimated (UJ). (QC Batch 120322)

See Table 2 of this report for a summary of qualifications due to matrix spike percent recovery failure.

F. Laboratory Duplicate Samples

All QC criteria were met for the laboratory duplicate samples associated with the project samples.

G. Initial and Continuing Calibrations

All initial and continuing calibration standards associated with the project samples met QC acceptance criteria.

The following paragraphs highlight the essential findings of the data validation effort of the QC split samples:

X. **Volatile Organic Compounds (VOCs) by GC/MS (8260B)**

Overall, the data are usable as reported. Qualification was not required.

A. Reporting Limits

The laboratory reporting limits for VOCs in water matrix samples met the project required reporting limits, with the following exceptions:

1. The laboratory reporting limits did not meet the project required reporting limits listed in Table 2-6.8-1 of the QAPP for bromoform, bromomethane, chloroethane, and chloromethane. The laboratory reported 1.0 ug/L for these compounds. The project required reporting limit was 0.5 ug/L.

B. Holding Times

Technical holding time criteria were met for all project samples.

C. Surrogate Recoveries

Surrogate spike recoveries met QC acceptance criteria for all project samples.

- D. Blanks
Target analytes were not observed in any laboratory method blanks associated with the project samples. Target analytes were not observed in any field QC blanks associated with the project samples.
- E. Laboratory Control Samples
All QC criteria were met for the laboratory control samples associated with the project samples.
- F. Matrix Spike/Matrix Spike Duplicate
A matrix spike and matrix spike duplicate were not analyzed with the project samples for this analysis.
- G. GC/MS Tunes
All QC criteria were met for the GC/MS tunes associated with the project samples.
- H. Initial Calibration
Initial calibration criteria were met for all calibration standards associated with the project samples.
- I. Continuing Calibration
Continuing calibration criteria were met for all continuing calibration standards associated with the project samples.
- J. Internal Standards
Internal standard areas and retention times met QC acceptance criteria for all project samples.

XI. Total Petroleum Hydrocarbons (TPH) - Gasoline Range (8015B)

Overall, the data are usable as reported. Qualification was not required.

- A. Reporting Limits
The laboratory reporting limit for TPH-gasoline in water matrix samples met the project-required reporting limits.
- B. Holding Times
Technical holding time criteria were met for all project samples.
- C. Surrogate Recoveries
Surrogate spike recoveries met QC acceptance criteria for all project samples.
- D. Blanks
Target analytes were not observed in any laboratory method blanks associated with the project samples.

- E. Laboratory Control Samples
All QC criteria were met for the laboratory control samples associated with the project samples.
- F. Matrix Spike/Matrix Spike Duplicate
A matrix spike and matrix spike duplicate were not analyzed with the project samples for this analysis.
- G. Initial Calibration
Initial calibration criteria were met for all calibration standards associated with the project samples.
- H. Continuing Calibration
Continuing calibration criteria were met for all continuing calibration standards associated with the project samples.

XII. Total Petroleum Hydrocarbons (TPH) – Diesel/Fuel Oil Range (8015B)

Overall, the data are usable as reported. Qualification was not required.

- A. Reporting Limits
The laboratory reporting limits for TPH-diesel and TPH-fuel oil in water matrix samples met the project-required reporting limits.
- B. Holding Times
Technical holding time criteria were met for all project samples.
- C. Surrogate Recoveries
Surrogate spike recoveries met QC acceptance criteria for all project samples.
- D. Blanks
Target analytes were not observed in any laboratory method blanks associated with the project samples.
- E. Laboratory Control Samples
All QC criteria were met for the laboratory control samples associated with the project samples.
- F. Matrix Spike/Matrix Spike Duplicate
A matrix spike and matrix spike duplicate were not analyzed with the project samples for this analysis.
- G. Initial Calibration
Initial calibration criteria were met for all calibration standards associated with the project samples.

H. Continuing Calibration

Continuing calibration criteria were met for all continuing calibration standards associated with the project samples.

XIII. Aromatic Volatiles by GC (8021B)

Overall, the data are usable as reported with any added qualifiers. Qualification was required for the reason noted in Section H.

A. Reporting Limits

The laboratory reporting limits for benzene, toluene, ethylbenzene, xylenes and methyl tertiary-butyl ether in water matrix samples met the project-required reporting limits.

B. Holding Times

Technical holding time criteria were met for all project samples.

C. Surrogate Recoveries

Surrogate spike recoveries met QC acceptance criteria for all project samples.

D. Blanks

Target analytes were not observed in any laboratory method blanks associated with the project samples.

E. Laboratory Control Samples

All QC criteria were met for the laboratory control samples associated with the project samples.

F. Matrix Spike/Matrix Spike Duplicate

A matrix spike and matrix spike duplicate were not analyzed with the project samples for this analysis.

G. Initial Calibration

Initial calibration criteria were met for all calibration standards associated with the project samples.

H. Continuing Calibration

Continuing calibration criteria were met for all continuing calibration standards associated with the project samples, with the following exception:

1. The 12/12/06 at 11:00 water matrix continuing calibration verification (CCV) standard analyzed on instrument GCN had methyl tertiary-butyl ether with a percent difference (%D) less than the +/-15%D acceptance criteria at -17%. The result for methyl tertiary-butyl ether in the associated sample was non-detect and qualified as estimated (UJ).

See Table 2 of this report for a summary of samples qualified for continuing calibration verification standard percent difference failure.

XIV. Organochlorine Pesticides (8081A)

Overall, the data are usable as reported. Qualification was not required.

- A. Reporting Limits
The laboratory reporting limits for pesticides in water matrix samples met the project-required reporting limits.
- B. Holding Times
Technical holding time criteria were met for all project samples.
- C. Surrogate Recoveries
Surrogate spike recoveries met QC acceptance criteria for all project samples.
- D. Blanks
Target analytes were not observed in any laboratory method blanks associated with the project samples.
- E. Laboratory Control Samples
All QC criteria were met for the laboratory control samples associated with the project samples.
- F. Matrix Spike/Matrix Spike Duplicate
A matrix spike and matrix spike duplicate were not analyzed with the project samples for this analysis.
- G. Performance Evaluation Mix (PEM) Check Standards
All PEM check standards met the project degradation criteria of 20% for endrin and 4,4'-DDT.
- H. Initial Calibration
Initial calibration criteria were met for all calibration standards associated with the project samples.
- I. Continuing Calibration
Continuing calibration criteria were met for all continuing calibration standards associated with the project samples. Qualification was not required for samples with non-detect results associated with high-failing continuing calibration verification (CCV) standards. Those failures were not noted in this report.

XV. Polychlorinated Biphenyls (PCBs) (8082)

Overall, the data are usable as reported with any added qualifiers. Qualification was required for the reason noted in Section C.

A. Reporting Limits

The laboratory reporting limits for PCBs in water matrix samples met the project-required reporting limits.

B. Holding Times

Technical holding time criteria were met for all project samples.

C. Surrogate Recoveries

Surrogate spike recoveries met QC acceptance criteria for all project samples, with the following exception:

1. The percent recovery for surrogate decachlorobiphenyl (DCB) failed the 65%-135% project acceptance criteria in project sample LF6GW103CL (D0601981-001) at 57%. The compounds associated with surrogate DCB: PCB-1248, PCB-1254 and PCB-1260 were non-detect and qualified as estimated (UJ).

See Table 2 of this report for a summary of qualifications due to surrogate percent recovery failures.

D. Blanks

Target analytes were not observed in any laboratory method blanks associated with the project samples.

E. Laboratory Control Samples

All QC criteria were met for the laboratory control samples associated with the project samples.

F. Matrix Spike/Matrix Spike Duplicate

A matrix spike and matrix spike duplicate were not analyzed with the project samples for this analysis.

G. Initial Calibration

Initial calibration criteria were met for all calibration standards associated with the project samples.

H. Continuing Calibration

Continuing calibration criteria were met for all continuing calibration standards associated with the project samples.

XVI. Polynuclear Aromatic Hydrocarbons (PAHs) by HPLC (8310)

Overall, the data are usable as reported. Qualification was not required.

- A. Reporting Limits
The laboratory reporting limits for PAHs in water matrix samples met the project-required reporting limits.
- B. Holding Times
Technical holding time criteria were met for all project samples.
- C. Surrogate Recoveries
Surrogate spike recoveries met QC acceptance criteria for all project samples.
- D. Blanks
Target analytes were not observed in any laboratory method blanks associated with the project samples.
- E. Laboratory Control Samples
All QC criteria were met for the laboratory control samples associated with the project samples.
- F. Matrix Spike/Matrix Spike Duplicate
A matrix spike and matrix spike duplicate were not analyzed with the project samples for this analysis.
- G. Initial Calibration
Initial calibration criteria were met for all calibration standards associated with the project samples.
- H. Continuing Calibration
Continuing calibration criteria were met for all continuing calibration standards associated with the project samples.

XVII. Dissolved Metals (6010B/6020/7470A)

Overall, the data are usable as reported. Qualification was not required.

- A. Reporting Limits
The laboratory reporting limits for metals in water matrix samples met the project-required reporting limits.
- B. Holding Times
Technical holding time criteria were met for all project samples.
- C. Blanks
Target analytes were not observed in any laboratory method blanks associated with the project samples.

- D. Laboratory Control Samples
All QC criteria were met for the laboratory control samples associated with the project samples.
- E. Matrix Spike/Matrix Spike Duplicate
All QC criteria were met for the matrix spikes and matrix spike duplicates associated with the project samples.
- F. ICP Interference Check Standards
All QC criteria were met for the ICP interference check standards associated with the project samples.
- G. ICP Serial Dilution
All QC criteria were met for the ICP serial dilutions associated with the project samples.
- H. Initial and Continuing Calibrations
All initial and continuing calibration standards associated with the project samples met QC acceptance criteria.

XVIII. Various General Chemistry Methods

Overall, the data are usable as reported. Qualification was not required.

- A. Reporting Limits
The laboratory reporting limits for the general chemistry methods analyzed met the project required reporting limits listed in the QAPP, with the following exception:
 - 1. The laboratory reporting limit for alkalinity was 10 mg/L; the project required reporting limit for this analyte was 5 mg/L. The laboratory reporting limit for fluoride was 1.0 mg/L; the project required reporting limit for this analyte was 0.1 mg/L. The laboratory reporting limit for nitrate-nitrogen and nitrite-nitrogen was 0.1 mg/L; the project required reporting limit for these analytes was 0.05 mg/L. The laboratory reporting limit for total dissolved solids was 20 mg/L; the project required reporting limit for this analyte was 10 mg/L.
- B. Holding Times
Technical holding time criteria were met for all project samples.
- C. Blanks
Target analytes were not observed in any laboratory method blanks associated with the project samples.
- D. Laboratory Control Samples
All QC criteria were met for the laboratory control samples associated with the project samples.

- E. Matrix Spike/Matrix Spike Duplicate
All QC criteria were met for the matrix spikes and matrix spike duplicates associated with the project samples.
- F. Laboratory Duplicate Samples
All QC criteria were met for the laboratory duplicate samples associated with the project samples.
- G. Initial and Continuing Calibrations
All initial and continuing calibration standards associated with the project samples met QC acceptance criteria.

FIELD DUPLICATE SAMPLES

Field duplicate precision was evaluated by calculating the relative percent difference (RPD) between detected results in the original sample and its associated duplicate. The control limit used for field duplicates was a relative percent difference less than or equal to 50 percent, or the absolute difference of the two results must be less than the reporting limit for those analytes that were at or near the detection limit. Six samples were collected in duplicate for the Fourth Quarter 2006 sampling event.

Project Sample Primary ID	Laboratory Sample ID	Project Sample Duplicate ID	Laboratory Sample ID
LF6GW103	191286-001	DUP1205062A	191286-004
1065MW9A	191286-002	DUP1205062C	191286-005
231GW09	191286-003	DUP1205062B	191286-006
1065PZ1B	191286-010	DUP1205061A	191286-011
1221GW104	191314-004	DUP-1206063A	191314-005
BHWGW04	191358-001	DUP1207062A	191358-007

The attached Table 3 summarizes the field duplicate sample results. The detected results of the original samples and the associated duplicate samples were compared and the calculated RPDs reported. All RPDs met the 50 percent precision control limit requirement.

QC SPLIT DUPLICATE SAMPLES

Laboratory analytical precision was evaluated by calculating the relative percent differences (RPDs) between detected results in the samples and the associated QC split duplicates, which were sent to another laboratory for analysis. The QC split samples were sent to Columbia Analytical Services in Redding, CA. The control limit used for QC split duplicates was a relative percent difference less than or equal to 50 percent, or the absolute difference of the two results must be less than the reporting limit for those analytes that were at or near the detection limit. Four samples were collected in duplicate for the Fourth Quarter 2006 sampling event.

Project Sample Primary ID	Laboratory Sample ID	Project Sample Split Duplicate ID	Laboratory Sample ID
LF6GW103	191286-001	LF6GW103CL	D0601981-001
1065MW9A	191286-002	1065MW9ACL	D0601981-003
231GW09	191286-003	231GW09CL	D0601981-002
1065PZ1B	191286-010	1065PZ1BCL	D0601981-004

The attached Table 4 summarizes the QC split duplicate samples. The detected results were compared and the calculated RPDs reported. All RPDs met the 50 percent precision control limit requirement, with the following exception:

1. In QC split duplicates 1065MW9A and 1065MW9A CL, the relative percent difference (RPD) between the reported results failed the 50% RPD acceptance criteria for arsenic at 51%.

Data is not qualified due to RPD failure of QC split samples because the effect on the quality of the data is not known.

FIELD QC BLANKS

Four trip blanks, two equipment blanks and one source blank were analyzed with the project samples. All field QC blanks were non-detect for all methods analyzed, with the following exceptions:

1. Trip blank TB1206061A (191314-013) had a detected level of chloroform at 7.7 ug/L. The levels of chloroform in the associated project samples were non-detect, and qualification was not required.
2. Trip blank TB1207061A (191358-012) had detected levels of acetone (22 ug/L) and methylene chloride (5.4 ug/L). The levels of acetone and methylene chloride in the associated project samples were non-detect, and qualification was not required.
3. Trip blank TB1207061B (191358-014) had a detected level of chloroform at 0.5 ug/L. The levels of chloroform in the associated project samples were non-detect, and qualification was not required.
4. Source blank DW120606B (191290-001) had a detected level of total dissolved solids at 30 mg/L. Project sample association with this source blank could not be established, and qualification was not required.
5. Equipment blank BHWGW04RBHWGW100 (191358-006) had a detected level of alkalinity at 1.1 mg/L. The associated samples had alkalinity values greater than five times the blank amount, and qualification was not required.

SUMMARY

The attached Table 1 lists the samples and analyses included in the data validation effort. The attached Table 2 summarizes the data qualifications for the project samples included in the data packages.

USABILITY

The quality control criteria were reviewed, and other than those discussed above, all criteria were met and the data are considered acceptable. Estimated sample results (J/UJ) are usable only for limited purposes. Based upon the cursory data validation, all other results are considered valid and usable for all purposes.

VALIDATION QUALIFIERS IDENTIFICATION

The definitions of the following qualifiers are prepared according to the document, "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review," October, 1999.

- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample. *A minus sign (-) indicates the numerical value has a low bias. A plus sign (+) indicates the numerical value has a high bias.*
- N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."
- NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Table 1
Sample Summary
Fourth Quarter 2006 Groundwater Sampling Event
The Presidio of San Francisco, CA

Site Sample ID	Laboratory Sample ID	Date Sampled	Analyses	Sample Type
LF6GW103	191286-001	5-Dec-06	TPH-Gasoline (8015B), TPH-Diesel (8015B), Pesticides (8081A), PCBs (8082), PAHs (8310), Dissolved Metals (6020, 7470A), General Chemistry Parameters (1, 2, 3)	Water (1)
1065MW9A	191286-002	5-Dec-06	TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), BTEX/MTBE (8021B), Dissolved Metals (6020), General Chemistry Parameters (1, 2, 3, 12)	Water (2)
231GW09	191286-003	5-Dec-06	VOCs (8260B), TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), Dissolved Metals (6020, 7470A), General Chemistry Parameters (1, 2, 3, 12)	Water (3)
DUP1205062A	191286-004	5-Dec-06	TPH-Gasoline (8015B), TPH-Diesel (8015B), Pesticides (8081A), PCBs (8082), PAHs (8310), Dissolved Metals (6020, 7470A), General Chemistry Parameters (1, 2, 3)	FD (1)
DUP1205062C	191286-005	5-Dec-06	TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), BTEX/MTBE (8021B), Dissolved Metals (6020), General Chemistry Parameters (1, 2, 3, 12)	FD (2)
DUP1205062B	191286-006	5-Dec-06	VOCs (8260B), TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), Dissolved Metals (6020, 7470A), General Chemistry Parameters (1, 2, 3, 12)	FD (3)
BB1PZ100	191286-007	5-Dec-06	TPH-Diesel/FO (8015B), Pesticides (8081A), PAHs (8310), Total & Dissolved Metals (6020, 7470A), General Chemistry Parameters (2, 3)	Water
BB1PZ101	191286-008	5-Dec-06	TPH-Diesel/FO (8015B), Pesticides (8081A), PAHs (8310), Total & Dissolved Metals (6020, 7470A), General Chemistry Parameters (2, 3)	Water
1065PZ1A	191286-009	5-Dec-06	VOCs (8260B), TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), Dissolved Metals (6020), General Chemistry Parameters (1, 2, 3, 12)	Water
1065PZ1B	191286-010	5-Dec-06	VOCs (8260B), TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), Dissolved Metals (6020), General Chemistry Parameters (1, 2, 3, 12)	Water (4)
DUP1205061A	191286-011	5-Dec-06	VOCs (8260B), TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), Dissolved Metals (6020), General Chemistry Parameters (1, 2, 3, 12)	FD (4)
1213GW101	191286-012	5-Dec-06	VOCs (8260B), TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), PAHs (8310), Dissolved Metals (6020), General Chemistry Parameters (2, 3)	Water
1349MW100	191286-013	5-Dec-06	VOCs (8260B), TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), Pesticides (8081A), PAHs (8310), Dissolved Metals (6020, 7470A), General Chemistry Parameters (1, 2, 3)	Water
LF4GW103	191286-014	5-Dec-06	Dissolved Metals (6020), General Chemistry Parameters (1, 2, 3)	Water
LF4GW104	191286-015	5-Dec-06	Dissolved Metals (6020), General Chemistry Parameters (1, 2, 3)	Water
TB1205061A	191286-016	5-Dec-06	Volatile Organic Compounds (8260B)	Trip Blank
DW120606B	191290-001	6-Dec-06	VOCs (8260B), TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), Pesticides (8081A), PCBs (8082), PAHs (8310), Dissolved Metals (6020, 7470A), General Chemistry Parameters (1, 2, 3, 12)	Field Blank
LF10GW02	191314-001	6-Dec-06	TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), BTEX/MTBE (8021B), Dissolved Metals (6020, 7470A), General Chemistry Parameters (1, 2, 3)	Water
LF10GW01	191314-002	6-Dec-06	TPH-Gasoline (8015B), TPH-Diesel/FO (8015B)	Water
LF10SP01	191314-003	6-Dec-06	TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), BTEX/MTBE (8021B), Total & Dissolved Metals (6020, 7470A), General Chemistry Parameters (1, 2, 3)	Water

Table 1
Sample Summary
Fourth Quarter 2006 Groundwater Sampling Event
The Presidio of San Francisco, CA

Site Sample ID	Laboratory Sample ID	Date Sampled	Analyses	Sample Type
1221GW104	191314-004	6-Dec-06	Dissolved Metals (6020), General Chemistry Parameters (2, 3)	Water (5)
DUP-1206063A	191314-005	6-Dec-06	Dissolved Metals (6020), General Chemistry Parameters (2, 3)	FD (5)
BB3GW100	191314-006	6-Dec-06	Dissolved Metals (6020), General Chemistry Parameters (1, 2, 3)	Water
LF10GW03	191314-007	6-Dec-06	TPH-Gasoline (8015B), TPH-Diesel/FO (8015B)	Water
LF10GW100	191314-008	6-Dec-06	TPH-Gasoline (8015B), TPH-Diesel/FO (8015B)	Water
1065MW101	191314-009	6-Dec-06	VOCs (8260B), TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), Dissolved Metals (6020), General Chemistry Parameters (1, 2, 3, 12)	Water
1065MW102	191314-010	6-Dec-06	VOCs (8260B), TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), Dissolved Metals (6020), General Chemistry Parameters (1, 2, 3, 12)	Water
1065PZ2A	191314-011	6-Dec-06	TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), BTEX/MTBE (8021B), PAHs (8310), Dissolved Metals (6020), General Chemistry Parameters (1, 2, 3, 12)	Water
1065PZ4A	191314-012	6-Dec-06	TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), BTEX/MTBE (8021B), PAHs (8310), Dissolved Metals (6020), General Chemistry Parameters (1, 2, 3, 12)	Water
TB1206061A	191314-013	6-Dec-06	Volatile Organic Compounds (8260B)	Water
LF6GW104	191314-014	6-Dec-06	TPH-Diesel/FO (8015B), PAHs (8310), Dissolved Metals (6020, 7470A), General Chemistry Parameters (1, 2, 3)	Water
LF6GW105	191314-015	6-Dec-06	Dissolved Metals (6020, 7470A), General Chemistry Parameters (1, 2, 3)	Water
LF6GW106	191314-016	6-Dec-06	TPH-Diesel/FO (8015B), PAHs (8310), Dissolved Metals (6020, 7470A), General Chemistry Parameters (1, 2, 3)	Water
FM14EX07GW102	191314-017	6-Dec-06	TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), BTEX/MTBE (8021B), PAHs (8310)	Water
FM14EX07GW101	191314-018	6-Dec-06	TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), BTEX/MTBE (8021B), PAHs (8310)	Water
514AGW101	191314-019	6-Dec-06	TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), BTEX/MTBE (8021B), PAHs (8310)	Water
BHWGW04	191358-001	7-Dec-06	Dissolved Metals (6020), General Chemistry Parameters (2, 3)	Water (6)
HWGW100	191358-002	7-Dec-06	Dissolved Metals (6020), General Chemistry Parameters (2, 3)	Water
HWGW101	191358-003	7-Dec-06	Dissolved Metals (6020), General Chemistry Parameters (2, 3)	Water
BHWGW01	191358-004	7-Dec-06	Dissolved Metals (6020), General Chemistry Parameters (2, 3)	Water
BHWGW05	191358-005	7-Dec-06	Dissolved Metals (6020), General Chemistry Parameters (2, 3)	Water
BHWGW04RBHWGW100	191358-006	7-Dec-06	Dissolved Metals (6020), General Chemistry Parameters (2, 3)	Water
DUP1207062A	191358-007	7-Dec-06	Dissolved Metals (6020), General Chemistry Parameters (2, 3)	FD (6)
1047MW101	191358-008	7-Dec-06	VOCs (8260B), TPH-Gasoline/Stoddard Solvent (8015B)	Water
1065MW9B	191358-009	7-Dec-06	TPH-Gasoline/Stoddard Solvent (8015B), TPH-Diesel/FO (8015B), BTEX/MTBE (8021B), Dissolved Metals (6020), General Chemistry Parameters (1, 2, 3, 12)	Water
1047MW101RB1065MW9B	191358-010	7-Dec-06	VOCs (8260B), TPH-Gasoline/Stoddard Solvent (8015B)	Water
1065PZ5AR	191358-011	7-Dec-06	TPH-Gasoline/Stoddard Solvent (8015B), TPH-Diesel/FO (8015B), BTEX/MTBE (8021B), Dissolved Metals (6020), General Chemistry Parameters (1, 2, 3, 12)	Water
TB1207061A	191358-012	7-Dec-06	Volatile Organic Compounds (8260B)	Trip Blank
WT120706	191358-013	7-Dec-06	Total Metals (6020, 7470A), General Chemistry Parameters (8, 10, 11, 12, 14)	Water

Table 1
Sample Summary
Fourth Quarter 2006 Groundwater Sampling Event
The Presidio of San Francisco, CA

Site Sample ID	Laboratory Sample ID	Date Sampled	Analyses	Sample Type
TB1207061B	191358-014	7-Dec-06	Volatile Organic Compounds (8260B)	Trip Blank
LF6GW103CL	D0601981-001	5-Dec-06	VOCs (8260B), TPH-Gasoline (8015B), TPH-Diesel (8015B), Pesticides (8081A), PCBs (8082), PAHs (8310), Dissolved Metals (6010B, 6020, 7470A), General Chemistry Parameters (1, 2, 3)	QC (1)
231GW09CL	D0601981-002	5-Dec-06	VOCs (8260B), TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), Dissolved Metals (6010B, 6020, 7470A), General Chemistry Parameters (1, 2, 3, 12)	QC (3)
1065MW9ACL	D0601981-003	5-Dec-06	TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), BTEX/MTBE (8021B), Dissolved Metals (6010B, 6020), General Chemistry Parameters (1, 2, 3, 12)	QC (2)
1065PZ1BCL	D0601981-004	5-Dec-06	VOCs (8260B), TPH-Gasoline (8015B), TPH-Diesel/FO (8015B), Dissolved Metals (6010B, 6020), General Chemistry Parameters (1, 2, 3, 12)	QC (4)
TB-1	D0601981-005	5-Dec-06	Volatile Organic Compounds (8260B)	Trip Blank

VOCs: Volatile Organic Compounds

TPH: Total Petroleum Hydrocarbons

FO: Fuel Oil

PCBs: Polychlorinated Biphenyls

PAHs: Polynuclear Aromatic Hydrocarbons

BTEX: Benzene, Toluene, Ethylbenzene, Xylenes

MTBE: Methyl tertiary-butyl ether

FD: Field duplicate of previous numbered sample, (1), (2), etc.

QC: QC split duplicate of previous numbered sample, (1), (2), etc.

General Chemistry Parameters

(1) Total Dissolved Solids (160.1)

(2) Alkalinity (310.1)

(3) Anions (300.0)

(4) Fluoride (340.2)

(5) Nitrate-N (353.2)

(6) Nitrate/Nitrite-N (353.2)

(7) Hardness (SM 2340B)

(8) Cyanide (335.2)

(9) Surfactants (425.1)

(10) Oil & Grease (1664A)

(11) Phenolics (420.1)

(12) Sulfide (376.2)

(13) Total Organic Carbon (415.2)

(14) pH (SW9040B)

(15) Nitrite-N (354.1)

Table 2
Qualified Data Summary
Fourth Quarter 2006 Groundwater Sampling Event
The Presidio of San Francisco, CA

Sample ID	Laboratory ID	Analysis Method	Compound	Qualifier	Reason
LF6GW103	191286-001	8081A	beta-BHC	UJ	Continuing calibration verification percent difference failure
LF6GW103	191286-001	8081A	Endosulfan II	UJ	Continuing calibration verification percent difference failure
LF6GW103	191286-001	8081A	Methoxychlor	UJ	Initial calibration percent relative standard deviation failure
LF6GW103	191286-001	6020A	Potassium, dissolved	UJ	Serial dilution percent difference failure
LF6GW103	191286-001	160.1	Total Dissolved Solids	J+	LCS/LCSD percent recovery failure
1065MW9A	191286-002	6020A	Potassium, dissolved	J	Serial dilution percent difference failure
1065MW9A	191286-002	160.1	Total Dissolved Solids	J+	LCS/LCSD percent recovery failure
231GW09	191286-003	6020A	Potassium, dissolved	UJ	Serial dilution percent difference failure
231GW09	191286-003	160.1	Total Dissolved Solids	J+	LCS/LCSD percent recovery failure
DUP1205062A	191286-004	8081A	beta-BHC	UJ	Continuing calibration verification percent difference failure
DUP1205062A	191286-004	8081A	Endosulfan II	UJ	Continuing calibration verification percent difference failure
DUP1205062A	191286-004	8081A	Methoxychlor	UJ	Initial calibration percent relative standard deviation failure
DUP1205062A	191286-004	6020A	Potassium, dissolved	UJ	Serial dilution percent difference failure
DUP1205062A	191286-004	160.1	Total Dissolved Solids	J+	LCS/LCSD percent recovery failure
DUP1205062C	191286-005	6020A	Potassium, dissolved	J	Serial dilution percent difference failure
DUP1205062C	191286-005	160.1	Total Dissolved Solids	J+	LCS/LCSD percent recovery failure
DUP1205062B	191286-006	6020A	Potassium, dissolved	UJ	Serial dilution percent difference failure
DUP1205062B	191286-006	160.1	Total Dissolved Solids	J+	LCS/LCSD percent recovery failure
BB1PZ100	191286-007	8081A	Dieldrin	UJ	Surrogate percent recovery failure
BB1PZ100	191286-007	8081A	4,4'-DDE	UJ	Surrogate percent recovery failure
BB1PZ100	191286-007	8081A	Endrin	UJ	Surrogate percent recovery failure
BB1PZ100	191286-007	8081A	Endosulfan II	UJ	Surrogate percent recovery failure
BB1PZ100	191286-007	8081A	4,4'-DDD	UJ	Surrogate percent recovery failure
BB1PZ100	191286-007	8081A	Endosulfan sulfate	UJ	Surrogate percent recovery failure
BB1PZ100	191286-007	8081A	4,4'-DDT	UJ	CCV %D failure, Surrogate %R failure
BB1PZ100	191286-007	8081A	Methoxychlor	UJ	Surrogate percent recovery failure
BB1PZ100	191286-007	8081A	Endrin ketone	UJ	Surrogate percent recovery failure
BB1PZ100	191286-007	8081A	alpha-Chlordane	UJ	Surrogate percent recovery failure

Table 2
Qualified Data Summary
Fourth Quarter 2006 Groundwater Sampling Event
The Presidio of San Francisco, CA

Sample ID	Laboratory ID	Analysis Method	Compound	Qualifier	Reason
BB1PZ100	191286-007	8081A	gamma-Chlordane	UJ	Surrogate percent recovery failure
BB1PZ100	191286-007	8081A	Toxaphene	UJ	Surrogate percent recovery failure
BB1PZ100	191286-007	6020A	Potassium, total	J	Serial dilution percent difference failure
BB1PZ100	191286-007	6020A	Potassium, dissolved	J	Serial dilution percent difference failure
BB1PZ101	191286-008	8081A	Dieldrin	UJ	Surrogate percent recovery failure
BB1PZ101	191286-008	8081A	4,4'-DDE	UJ	Surrogate percent recovery failure
BB1PZ101	191286-008	8081A	Endrin	UJ	Surrogate percent recovery failure
BB1PZ101	191286-008	8081A	Endosulfan II	UJ	Surrogate percent recovery failure
BB1PZ101	191286-008	8081A	4,4'-DDD	UJ	Surrogate percent recovery failure
BB1PZ101	191286-008	8081A	Endosulfan sulfate	UJ	Surrogate percent recovery failure
BB1PZ101	191286-008	8081A	4,4'-DDT	UJ	CCV %D failure, Surrogate %R failure
BB1PZ101	191286-008	8081A	Methoxychlor	UJ	Surrogate percent recovery failure
BB1PZ101	191286-008	8081A	Endrin ketone	UJ	Surrogate percent recovery failure
BB1PZ101	191286-008	8081A	alpha-Chlordane	UJ	Surrogate percent recovery failure
BB1PZ101	191286-008	8081A	gamma-Chlordane	UJ	Surrogate percent recovery failure
BB1PZ101	191286-008	8081A	Toxaphene	UJ	Surrogate percent recovery failure
BB1PZ101	191286-008	6020A	Potassium, total	J	Serial dilution percent difference failure
BB1PZ101	191286-008	6020A	Potassium, dissolved	J	Serial dilution percent difference failure
1065PZ1A	191286-009	6020A	Potassium, dissolved	J	Serial dilution percent difference failure
1065PZ1A	191286-009	160.1	Total Dissolved Solids	J+	LCS/LCSD percent recovery failure
1065PZ1B	191286-010	6020A	Potassium, dissolved	J	Serial dilution percent difference failure
1065PZ1B	191286-010	160.1	Total Dissolved Solids	J+	LCS/LCSD percent recovery failure
DUP1205061A	191286-011	6020A	Potassium, dissolved	J	Serial dilution percent difference failure
DUP1205061A	191286-011	160.1	Total Dissolved Solids	J+	LCS/LCSD percent recovery failure
1213GW101	191286-012	6020A	Potassium, dissolved	J	Serial dilution percent difference failure
1349MW100	191286-013	8081A	alpha-BHC	UJ	Surrogate percent recovery failure
1349MW100	191286-013	8081A	beta-BHC	UJ	Surrogate percent recovery failure
1349MW100	191286-013	8081A	delta-BHC	UJ	Surrogate percent recovery failure

Table 2
Qualified Data Summary
Fourth Quarter 2006 Groundwater Sampling Event
The Presidio of San Francisco, CA

Sample ID	Laboratory ID	Analysis Method	Compound	Qualifier	Reason
1349MW100	191286-013	8081A	gamma-BHC	UJ	Surrogate percent recovery failure
1349MW100	191286-013	8081A	Heptachlor	J-	Surrogate percent recovery failure
1349MW100	191286-013	8081A	Aldrin	UJ	Surrogate percent recovery failure
1349MW100	191286-013	8081A	Heptachlor epoxide	UJ	Surrogate percent recovery failure
1349MW100	191286-013	8081A	Endosulfan I	UJ	Surrogate percent recovery failure
1349MW100	191286-013	8081A	4,4'-DDT	UJ	Continuing calibration verification percent difference failure
1349MW100	191286-013	6020A	Potassium, dissolved	J	Serial dilution percent difference failure
1349MW100	191286-013	160.1	Total Dissolved Solids	J+	LCS/LCSD percent recovery failure
LF4GW103	191286-014	6020A	Potassium, dissolved	J	Serial dilution percent difference failure
LF4GW103	191286-014	160.1	Total Dissolved Solids	J+	LCS/LCSD percent recovery failure
LF4GW104	191286-015	6020A	Potassium, dissolved	J	Serial dilution percent difference failure
LF4GW104	191286-015	160.1	Total Dissolved Solids	J+	LCS/LCSD percent recovery failure
DW120606B	191290-001	8081A	alpha-BHC	UJ	Surrogate percent recovery failure
DW120606B	191290-001	8081A	beta-BHC	UJ	Surrogate percent recovery failure
DW120606B	191290-001	8081A	delta-BHC	UJ	Surrogate percent recovery failure
DW120606B	191290-001	8081A	gamma-BHC	UJ	Surrogate percent recovery failure
DW120606B	191290-001	8081A	Heptachlor	UJ	Surrogate percent recovery failure
DW120606B	191290-001	8081A	Aldrin	UJ	Surrogate percent recovery failure
DW120606B	191290-001	8081A	Heptachlor epoxide	UJ	Surrogate percent recovery failure
DW120606B	191290-001	8081A	Endosulfan I	UJ	Surrogate percent recovery failure
DW120606B	191290-001	8081A	4,4'-DDT	UJ	Continuing calibration verification percent difference failure
DW120606B	191290-001	6020A	Sodium, dissolved	UJ	Serial dilution percent difference failure
LF10GW02	191314-001	6020A	Sodium, dissolved	J	Serial dilution percent difference failure
LF10GW02	191314-001	160.1	Total Dissolved Solids	J-	Missed analysis holding time
LF10SP01	191314-003	8015B	Diesel C12-C24	J-	MS/MSD percent recovery failure
LF10SP01	191314-003	6020A	Sodium, dissolved	J	Serial dilution percent difference failure
LF10SP01	191314-003	6020A	Calcium, total	J	Serial dilution percent difference failure
LF10SP01	191314-003	6020A	Sodium, total	J	Serial dilution percent difference failure

Table 2
Qualified Data Summary
Fourth Quarter 2006 Groundwater Sampling Event
The Presidio of San Francisco, CA

Sample ID	Laboratory ID	Analysis Method	Compound	Qualifier	Reason
LF10SP01	191314-003	160.1	Total Dissolved Solids	J-	Missed analysis holding time
1221GW104	191314-004	6020A	Sodium, dissolved	J	Serial dilution percent difference failure
DUP-1206063A	191314-005	6020A	Sodium, dissolved	J	Serial dilution percent difference failure
BB3GW100	191314-006	6020A	Sodium, dissolved	J	Serial dilution percent difference failure
BB3GW100	191314-006	160.1	Total Dissolved Solids	J-	Missed analysis holding time
1065MW101	191314-009	6020A	Sodium, dissolved	J	Serial dilution percent difference failure
1065MW101	191314-009	160.1	Total Dissolved Solids	J-	Missed analysis holding time
1065MW101	191314-009	376.2	Sulfide	UJ	MS/MSD percent recovery failure
1065MW102	191314-010	6020A	Sodium, dissolved	J	Serial dilution percent difference failure
1065MW102	191314-010	160.1	Total Dissolved Solids	J-	Missed analysis holding time
1065MW102	191314-010	376.2	Sulfide	UJ	MS/MSD percent recovery failure
1065PZ2A	191314-011	6020A	Sodium, dissolved	J	Serial dilution percent difference failure
1065PZ2A	191314-011	160.1	Total Dissolved Solids	J-	Missed analysis holding time
1065PZ2A	191314-011	376.2	Sulfide	UJ	MS/MSD percent recovery failure
1065PZ4A	191314-012	6020A	Sodium, dissolved	J	Serial dilution percent difference failure
1065PZ4A	191314-012	160.1	Total Dissolved Solids	J-	Missed analysis holding time
1065PZ4A	191314-012	376.2	Sulfide	UJ	MS/MSD percent recovery failure
LF6GW104	191314-014	6020A	Sodium, dissolved	J	Serial dilution percent difference failure
LF6GW104	191314-014	160.1	Total Dissolved Solids	J-	Missed analysis holding time
LF6GW105	191314-015	6020A	Sodium, dissolved	J	Serial dilution percent difference failure
LF6GW105	191314-015	160.1	Total Dissolved Solids	J-	Missed analysis holding time
LF6GW106	191314-016	6020A	Sodium, dissolved	J	Serial dilution percent difference failure
LF6GW106	191314-016	160.1	Total Dissolved Solids	J-	Missed analysis holding time
514AGW101	191314-019	8310	Benzo(a)pyrene	UJ	MS/MSD percent recovery failure
BHWGW04	191358-001	6020A	Sodium, dissolved	J	Serial dilution percent difference failure
HWGW100	191358-002	6020A	Sodium, dissolved	J	Serial dilution percent difference failure
HWGW101	191358-003	6020A	Sodium, dissolved	J	Serial dilution percent difference failure
BHWGW01	191358-004	6020A	Sodium, dissolved	J	Serial dilution percent difference failure

Table 2
Qualified Data Summary
Fourth Quarter 2006 Groundwater Sampling Event
The Presidio of San Francisco, CA

Sample ID	Laboratory ID	Analysis Method	Compound	Qualifier	Reason
BHWGW05	191358-005	6020A	Sodium, dissolved	J	Serial dilution percent difference failure
BHWGW04RBHWGW100	191358-006	6020A	Sodium, dissolved	UJ	Serial dilution percent difference failure
DUP1207062A	191358-007	6020A	Sodium, dissolved	J	Serial dilution percent difference failure
1065MW9B	191358-009	6020A	Sodium, dissolved	J	Serial dilution percent difference failure
1065MW9B	191358-009	376.2	Sulfide	UJ	MS/MSD percent recovery failure
1065PZ5AR	191358-011	6020A	Sodium, dissolved	J	Serial dilution percent difference failure
1065PZ5AR	191358-011	376.2	Sulfide	UJ	MS/MSD percent recovery failure
LF6GW103CL	D0601981-001	8082	PCB-1248	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601981-001	8082	PCB-1254	UJ	Surrogate percent recovery failure
LF6GW103CL	D0601981-001	8082	PCB-1260	UJ	Surrogate percent recovery failure
1065MW9ACL	D0601981-003	8021B	Methyl tertiary-butyl ether	UJ	Continuing calibration verification percent difference failure

%D: Percent difference
%R: percent recovery
CCV: Continuing calibration verification (standard)
RPD: Relative percent difference
LCS/LCSD: Laboratory control sample/Laboratory control sample duplicate
MS/MSD: Matrix spike/Matrix spike duplicate

Table 3
Summary of Field Duplicates
Fourth Quarter 2006 Groundwater Sampling Event
The Presidio of San Francisco, CA

Original Sample ID	Laboratory ID	Matrix	Compound	Original Results*	Duplicate Sample ID	Laboratory ID	Duplicate Results*	RPD
LF6GW103	191286-001	Water	Gasoline C7-C12	ND	DUP1205062A	191286-004	ND	NA
LF6GW103	191286-001	Water	Diesel C12-C24	ND	DUP1205062A	191286-004	ND	NA
LF6GW103	191286-001	Water	All pesticides	ND	DUP1205062A	191286-004	ND	NA
LF6GW103	191286-001	Water	All PCBs	ND	DUP1205062A	191286-004	ND	NA
LF6GW103	191286-001	Water	All PAHs	ND	DUP1205062A	191286-004	ND	NA
LF6GW103	191286-001	Water	Barium, dissolved	67	DUP1205062A	191286-004	69	-2.9%
LF6GW103	191286-001	Water	Calcium, dissolved	34000	DUP1205062A	191286-004	36000	-5.7%
LF6GW103	191286-001	Water	Chromium, dissolved	28	DUP1205062A	191286-004	29	-3.5%
LF6GW103	191286-001	Water	Magnesium, dissolved	50000	DUP1205062A	191286-004	52000	-3.9%
LF6GW103	191286-001	Water	Sodium, dissolved	62000	DUP1205062A	191286-004	62000	0%
LF6GW103	191286-001	Water	Vanadium, dissolved	11	DUP1205062A	191286-004	10	10%
LF6GW103	191286-001	Water	All other metals	ND	DUP1205062A	191286-004	ND	NA
LF6GW103	191286-001	Water	Chloride	39	DUP1205062A	191286-004	38	2.6%
LF6GW103	191286-001	Water	Fluoride	ND	DUP1205062A	191286-004	ND	NA
LF6GW103	191286-001	Water	Nitrogen, Nitrate	3.3	DUP1205062A	191286-004	3.2	3.1%
LF6GW103	191286-001	Water	Nitrogen, Nitrite	ND	DUP1205062A	191286-004	ND	NA
LF6GW103	191286-001	Water	Sulfate	97	DUP1205062A	191286-004	95	2.1%
LF6GW103	191286-001	Water	Alkalinity, Total as CaCO3	320	DUP1205062A	191286-004	330	-3.1%
LF6GW103	191286-001	Water	Total Dissolved Solids	600	DUP1205062A	191286-004	590	1.7%
1065MW9A	191286-002	Water	Gasoline C7-C12	ND	DUP1205062C	191286-005	ND	NA
1065MW9A	191286-002	Water	Diesel C12-C24	ND	DUP1205062C	191286-005	ND	NA
1065MW9A	191286-002	Water	Fuel Oil C24-C36	ND	DUP1205062C	191286-005	ND	NA
1065MW9A	191286-002	Water	Methyl tertiary-butyl ether	ND	DUP1205062C	191286-005	ND	NA
1065MW9A	191286-002	Water	Benzene	ND	DUP1205062C	191286-005	ND	NA
1065MW9A	191286-002	Water	Toluene	0.57	DUP1205062C	191286-005	ND (<0.5)	NC
1065MW9A	191286-002	Water	Ethylbenzene	ND	DUP1205062C	191286-005	ND	NA
1065MW9A	191286-002	Water	Xylene (total)	ND	DUP1205062C	191286-005	ND	NA
1065MW9A	191286-002	Water	Arsenic, dissolved	27	DUP1205062C	191286-005	23	16%
1065MW9A	191286-002	Water	Calcium, dissolved	55000	DUP1205062C	191286-005	56000	-1.8%
1065MW9A	191286-002	Water	Iron, dissolved	3700	DUP1205062C	191286-005	2800	28%
1065MW9A	191286-002	Water	Magnesium, dissolved	78000	DUP1205062C	191286-005	78000	0%
1065MW9A	191286-002	Water	Manganese, dissolved	460	DUP1205062C	191286-005	450	2.2%
1065MW9A	191286-002	Water	Potassium, dissolved	16000	DUP1205062C	191286-005	16000	0%
1065MW9A	191286-002	Water	Sodium, dissolved	67000	DUP1205062C	191286-005	64000	4.6%
1065MW9A	191286-002	Water	All other metals	ND	DUP1205062C	191286-005	ND	NA
1065MW9A	191286-002	Water	Chloride	170	DUP1205062C	191286-005	170	0%
1065MW9A	191286-002	Water	Fluoride	0.15	DUP1205062C	191286-005	0.11	31%
1065MW9A	191286-002	Water	Nitrogen, Nitrate	ND	DUP1205062C	191286-005	ND	NA
1065MW9A	191286-002	Water	Nitrogen, Nitrite	ND	DUP1205062C	191286-005	ND	NA

Table 3
Summary of Field Duplicates
Fourth Quarter 2006 Groundwater Sampling Event
The Presidio of San Francisco, CA

Original Sample ID	Laboratory ID	Matrix	Compound	Original Results*	Duplicate Sample ID	Laboratory ID	Duplicate Results*	RPD
1065MW9A	191286-002	Water	Sulfate	20	DUP1205062C	191286-005	19	5.1%
1065MW9A	191286-002	Water	Sulfide	ND	DUP1205062C	191286-005	ND	NA
1065MW9A	191286-002	Water	Alkalinity, Total as CaCO3	450	DUP1205062C	191286-005	450	0%
1065MW9A	191286-002	Water	Total Dissolved Solids	760	DUP1205062C	191286-005	750	1.3%
231GW09	191286-003	Water	All VOCs	ND	DUP1205062B	191286-006	ND	NA
231GW09	191286-003	Water	Gasoline C7-C12	ND	DUP1205062B	191286-006	ND	NA
231GW09	191286-003	Water	Diesel C12-C24	ND	DUP1205062B	191286-006	ND	NA
231GW09	191286-003	Water	Fuel Oil C24-C36	ND	DUP1205062B	191286-006	ND	NA
231GW09	191286-003	Water	Barium, dissolved	58	DUP1205062B	191286-006	56	3.5%
231GW09	191286-003	Water	Calcium, dissolved	25000	DUP1205062B	191286-006	25000	0%
231GW09	191286-003	Water	Chromium, dissolved	26	DUP1205062B	191286-006	26	0%
231GW09	191286-003	Water	Iron, dissolved	ND (<100)	DUP1205062B	191286-006	180	NC
231GW09	191286-003	Water	Magnesium, dissolved	41000	DUP1205062B	191286-006	40000	2.5%
231GW09	191286-003	Water	Sodium, dissolved	64000	DUP1205062B	191286-006	66000	-3.1%
231GW09	191286-003	Water	All other metals	ND	DUP1205062B	191286-006	ND	NA
231GW09	191286-003	Water	Chloride	38	DUP1205062B	191286-006	37	2.7%
231GW09	191286-003	Water	Fluoride	ND	DUP1205062B	191286-006	ND	NA
231GW09	191286-003	Water	Nitrogen, Nitrate	14	DUP1205062B	191286-006	14	0%
231GW09	191286-003	Water	Nitrogen, Nitrite	ND	DUP1205062B	191286-006	ND	NA
231GW09	191286-003	Water	Sulfate	66	DUP1205062B	191286-006	66	0%
231GW09	191286-003	Water	Sulfide	ND	DUP1205062B	191286-006	ND	NA
231GW09	191286-003	Water	Alkalinity, Total as CaCO3	230	DUP1205062B	191286-006	240	-4.3%
231GW09	191286-003	Water	Total Dissolved Solids	520	DUP1205062B	191286-006	530	-1.9%
1065PZ1B	191286-010	Water	All VOCs	ND	DUP1205061A	191286-011	ND	NA
1065PZ1B	191286-010	Water	Gasoline C7-C12	ND	DUP1205061A	191286-011	ND	NA
1065PZ1B	191286-010	Water	Diesel C12-C24	ND	DUP1205061A	191286-011	ND	NA
1065PZ1B	191286-010	Water	Fuel Oil C24-C36	ND	DUP1205061A	191286-011	ND	NA
1065PZ1B	191286-010	Water	Calcium, dissolved	48000	DUP1205061A	191286-011	45000	6.5%
1065PZ1B	191286-010	Water	Iron, dissolved	210	DUP1205061A	191286-011	110	NC
1065PZ1B	191286-010	Water	Magnesium, dissolved	67000	DUP1205061A	191286-011	64000	4.6%
1065PZ1B	191286-010	Water	Manganese, dissolved	78	DUP1205061A	191286-011	68	14%
1065PZ1B	191286-010	Water	Potassium, dissolved	38000	DUP1205061A	191286-011	36000	5.4%
1065PZ1B	191286-010	Water	Sodium, dissolved	82000	DUP1205061A	191286-011	78000	5.0%
1065PZ1B	191286-010	Water	All other metals	ND	DUP1205061A	191286-011	ND	NA
1065PZ1B	191286-010	Water	Chloride	160	DUP1205061A	191286-011	160	0%
1065PZ1B	191286-010	Water	Fluoride	ND	DUP1205061A	191286-011	ND	NA
1065PZ1B	191286-010	Water	Nitrogen, Nitrate	0.22	DUP1205061A	191286-011	0.22	0%
1065PZ1B	191286-010	Water	Nitrogen, Nitrite	ND	DUP1205061A	191286-011	ND	NA
1065PZ1B	191286-010	Water	Sulfate	72	DUP1205061A	191286-011	70	2.8%

Table 3
Summary of Field Duplicates
Fourth Quarter 2006 Groundwater Sampling Event
The Presidio of San Francisco, CA

Original Sample ID	Laboratory ID	Matrix	Compound	Original Results*	Duplicate Sample ID	Laboratory ID	Duplicate Results*	RPD
1065PZ1B	191286-010	Water	Sulfide	ND	DUP1205061A	191286-011	ND	NA
1065PZ1B	191286-010	Water	Alkalinity, Total as CaCO ₃	360	DUP1205061A	191286-011	340	5.7%
1065PZ1B	191286-010	Water	Total Dissolved Solids	750	DUP1205061A	191286-011	770	-2.6%
1221GW104	191314-004	Water	Calcium, dissolved	47000	DUP-1206063A	191314-005	44000	6.6%
1221GW104	191314-004	Water	Magnesium, dissolved	89000	DUP-1206063A	191314-005	85000	4.6%
1221GW104	191314-004	Water	Manganese, dissolved	16	DUP-1206063A	191314-005	13	21%
1221GW104	191314-004	Water	Potassium, dissolved	1800	DUP-1206063A	191314-005	1700	5.7%
1221GW104	191314-004	Water	Sodium, dissolved	63000	DUP-1206063A	191314-005	60000	4.9%
1221GW104	191314-004	Water	All other metals	ND	DUP-1206063A	191314-005	ND	NA
1221GW104	191314-004	Water	Chloride	58	DUP-1206063A	191314-005	57	1.7%
1221GW104	191314-004	Water	Fluoride	ND	DUP-1206063A	191314-005	ND	NA
1221GW104	191314-004	Water	Nitrogen, Nitrate	0.05	DUP-1206063A	191314-005	0.06	-18%
1221GW104	191314-004	Water	Nitrogen, Nitrite	ND	DUP-1206063A	191314-005	ND	NA
1221GW104	191314-004	Water	Sulfate	66	DUP-1206063A	191314-005	66	0%
1221GW104	191314-004	Water	Alkalinity, Total as CaCO ₃	470	DUP-1206063A	191314-005	470	0%
BHWGW04	191358-001	Water	Barium, dissolved	40	DUP1207062A	191358-007	40	0%
BHWGW04	191358-001	Water	Calcium, dissolved	17000	DUP1207062A	191358-007	17000	0%
BHWGW04	191358-001	Water	Magnesium, dissolved	47000	DUP1207062A	191358-007	47000	0%
BHWGW04	191358-001	Water	Sodium, dissolved	130000	DUP1207062A	191358-007	130000	0%
BHWGW04	191358-001	Water	All other metals	ND	DUP1207062A	191358-007	ND	NA
BHWGW04	191358-001	Water	Chloride	85	DUP1207062A	191358-007	85	0%
BHWGW04	191358-001	Water	Fluoride	ND	DUP1207062A	191358-007	ND	NA
BHWGW04	191358-001	Water	Nitrogen, Nitrate	4.7	DUP1207062A	191358-007	4.7	0%
BHWGW04	191358-001	Water	Nitrogen, Nitrite	ND	DUP1207062A	191358-007	ND	NA
BHWGW04	191358-001	Water	Sulfate	59	DUP1207062A	191358-007	59	0%
BHWGW04	191358-001	Water	Alkalinity, Total as CaCO ₃	310	DUP1207062A	191358-007	310	0%

*Units for organic and metals analyses are ug/L; units for general chemistry analyses are mg/L.

RL: Reporting limit

VOCs: Volatile Organic Compounds

PCBs: Polychlorinated Biphenyls

PAHs: Polynuclear Aromatic Hydrocarbons

ND: Not detected

NC: Not calculated. The absolute difference between the sample result and the duplicate sample result is less than the reporting limit.

N/A: Not analyzed

NA: Not applicable. Calculation of the relative percent difference between the sample result and the duplicate sample result is not applicable.

Table 4
Summary of QC Split Duplicates
Fourth Quarter 2006 Groundwater Sampling Event
The Presidio of San Francisco, CA

Original Sample ID	Laboratory ID	Matrix	Compound	Original Results*	QC Split Sample ID	Laboratory ID	Duplicate Results*	RPD
LF6GW103	191286-001	Water	Gasoline C7-C12	ND	LF6GW103CL	D0601981-001	ND	NA
LF6GW103	191286-001	Water	All VOCs	N/A	LF6GW103CL	D0601981-001	ND	NA
LF6GW103	191286-001	Water	Diesel C12-C24**	ND	LF6GW103CL	D0601981-001	ND	NA
LF6GW103	191286-001	Water	All pesticides	ND	LF6GW103CL	D0601981-001	ND	NA
LF6GW103	191286-001	Water	All PCBs	ND	LF6GW103CL	D0601981-001	ND	NA
LF6GW103	191286-001	Water	All PAHs	ND	LF6GW103CL	D0601981-001	ND	NA
LF6GW103	191286-001	Water	Barium, dissolved	67	LF6GW103CL	D0601981-001	79	-16%
LF6GW103	191286-001	Water	Calcium, dissolved	34000	LF6GW103CL	D0601981-001	43600	-25%
LF6GW103	191286-001	Water	Chromium, dissolved	28	LF6GW103CL	D0601981-001	32	-13%
LF6GW103	191286-001	Water	Magnesium, dissolved	50000	LF6GW103CL	D0601981-001	66200	-28%
LF6GW103	191286-001	Water	Nickel, dissolved	ND< 20	LF6GW103CL	D0601981-001	6.9	NC
LF6GW103	191286-001	Water	Sodium, dissolved	62000	LF6GW103CL	D0601981-001	75000	-19%
LF6GW103	191286-001	Water	Vanadium, dissolved	11	LF6GW103CL	D0601981-001	13	-17%
LF6GW103	191286-001	Water	All other metals	ND	LF6GW103CL	D0601981-001	ND	NA
LF6GW103	191286-001	Water	Chloride	39	LF6GW103CL	D0601981-001	40	-2.5%
LF6GW103	191286-001	Water	Fluoride	ND	LF6GW103CL	D0601981-001	ND	NA
LF6GW103	191286-001	Water	Nitrogen, Nitrate	3.3	LF6GW103CL	D0601981-001	3.0	9.5%
LF6GW103	191286-001	Water	Nitrogen, Nitrite	ND	LF6GW103CL	D0601981-001	ND	NA
LF6GW103	191286-001	Water	Sulfate	97	LF6GW103CL	D0601981-001	100	-3.0%
LF6GW103	191286-001	Water	Alkalinity, Total as CaCO3	320	LF6GW103CL	D0601981-001	324	-1.2%
LF6GW103	191286-001	Water	Total Dissolved Solids	600	LF6GW103CL	D0601981-001	547	9.2%
1065MW9A	191286-002	Water	Gasoline C7-C12	ND	1065MW9ACL	D0601981-003	ND	NA
1065MW9A	191286-002	Water	Diesel C12-C24**	ND	1065MW9ACL	D0601981-003	ND	NA
1065MW9A	191286-002	Water	Fuel Oil C24-C36	ND	1065MW9ACL	D0601981-003	ND	NA
1065MW9A	191286-002	Water	Methyl tertiary-butyl ether	ND	1065MW9ACL	D0601981-003	ND	NA
1065MW9A	191286-002	Water	Benzene	ND	1065MW9ACL	D0601981-003	ND	NA
1065MW9A	191286-002	Water	Toluene	0.57	1065MW9ACL	D0601981-003	ND< 0.50	NC
1065MW9A	191286-002	Water	Ethylbenzene	ND	1065MW9ACL	D0601981-003	ND	NA
1065MW9A	191286-002	Water	Xylene (total)	ND	1065MW9ACL	D0601981-003	ND	NA
1065MW9A	191286-002	Water	Arsenic, dissolved	27	1065MW9ACL	D0601981-003	16	51%
1065MW9A	191286-002	Water	Calcium, dissolved	55000	1065MW9ACL	D0601981-003	67600	-21%
1065MW9A	191286-002	Water	Iron, dissolved	3700	1065MW9ACL	D0601981-003	4480	-19%
1065MW9A	191286-002	Water	Magnesium, dissolved	78000	1065MW9ACL	D0601981-003	99800	-25%
1065MW9A	191286-002	Water	Manganese, dissolved	460	1065MW9ACL	D0601981-003	498	-7.9%

Table 4
Summary of QC Split Duplicates
Fourth Quarter 2006 Groundwater Sampling Event
The Presidio of San Francisco, CA

Original Sample ID	Laboratory ID	Matrix	Compound	Original Results*	QC Split Sample ID	Laboratory ID	Duplicate Results*	RPD
1065MW9A	191286-002	Water	Nickel, dissolved	ND< 20	1065MW9ACL	D0601981-003	2.6	NC
1065MW9A	191286-002	Water	Potassium, dissolved	16000	1065MW9ACL	D0601981-003	19600	-20%
1065MW9A	191286-002	Water	Sodium, dissolved	67000	1065MW9ACL	D0601981-003	79400	-17%
1065MW9A	191286-002	Water	All other metals	ND	1065MW9ACL	D0601981-003	ND	NA
1065MW9A	191286-002	Water	Chloride	170	1065MW9ACL	D0601981-003	192	-12%
1065MW9A	191286-002	Water	Fluoride	0.15	1065MW9ACL	D0601981-003	ND< 1	NC
1065MW9A	191286-002	Water	Nitrogen, Nitrate	ND	1065MW9ACL	D0601981-003	ND	NA
1065MW9A	191286-002	Water	Nitrogen, Nitrite	ND	1065MW9ACL	D0601981-003	ND	NA
1065MW9A	191286-002	Water	Sulfate	20	1065MW9ACL	D0601981-003	19.3	3.6%
1065MW9A	191286-002	Water	Sulfide	ND	1065MW9ACL	D0601981-003	ND	NA
1065MW9A	191286-002	Water	Alkalinity, Total as CaCO3	450	1065MW9ACL	D0601981-003	433	3.9%
1065MW9A	191286-002	Water	Total Dissolved Solids	760	1065MW9ACL	D0601981-003	743	2.3%
231GW09	191286-003	Water	All VOCs	ND	231GW09CL	D0601981-002	ND	NA
231GW09	191286-003	Water	Gasoline C7-C12	ND	231GW09CL	D0601981-002	ND	NA
231GW09	191286-003	Water	Diesel C12-C24**	ND	231GW09CL	D0601981-002	ND	NA
231GW09	191286-003	Water	Fuel Oil C24-C36	ND	231GW09CL	D0601981-002	ND	NA
231GW09	191286-003	Water	Barium, dissolved	58	231GW09CL	D0601981-002	63	-8.3%
231GW09	191286-003	Water	Calcium, dissolved	25000	231GW09CL	D0601981-002	30200	-19%
231GW09	191286-003	Water	Chromium, dissolved	26	231GW09CL	D0601981-002	30	-14%
231GW09	191286-003	Water	Magnesium, dissolved	41000	231GW09CL	D0601981-002	51000	-22%
231GW09	191286-003	Water	Nickel, dissolved	ND< 20	231GW09CL	D0601981-002	18	NC
231GW09	191286-003	Water	Sodium, dissolved	64000	231GW09CL	D0601981-002	78000	-20%
231GW09	191286-003	Water	All other metals	ND	231GW09CL	D0601981-002	ND	NA
231GW09	191286-003	Water	Chloride	38	231GW09CL	D0601981-002	40	-5.1%
231GW09	191286-003	Water	Fluoride	ND	231GW09CL	D0601981-002	ND	NA
231GW09	191286-003	Water	Nitrogen, Nitrate	14	231GW09CL	D0601981-002	15	-6.9%
231GW09	191286-003	Water	Nitrogen, Nitrite	ND	231GW09CL	D0601981-002	ND	NA
231GW09	191286-003	Water	Sulfate	66	231GW09CL	D0601981-002	67.7	-2.5%
231GW09	191286-003	Water	Sulfide	ND	231GW09CL	D0601981-002	ND	NA
231GW09	191286-003	Water	Alkalinity, Total as CaCO3	230	231GW09CL	D0601981-002	228	0.9%
231GW09	191286-003	Water	Total Dissolved Solids	520	231GW09CL	D0601981-002	490	5.9%
1065PZ1B	191286-010	Water	All VOCs	ND	1065PZ1BCL	D0601981-004	ND	NA
1065PZ1B	191286-010	Water	Gasoline C7-C12	ND	1065PZ1BCL	D0601981-004	ND	NA
1065PZ1B	191286-010	Water	Diesel C12-C24**	ND	1065PZ1BCL	D0601981-004	ND	NA

Table 4
Summary of QC Split Duplicates
Fourth Quarter 2006 Groundwater Sampling Event
The Presidio of San Francisco, CA

Original Sample ID	Laboratory ID	Matrix	Compound	Original Results*	QC Split Sample ID	Laboratory ID	Duplicate Results*	RPD
1065PZ1B	191286-010	Water	Fuel Oil C24-C36	ND	1065PZ1BCL	D0601981-004	ND	NA
1065PZ1B	191286-010	Water	Calcium, dissolved	48000	1065PZ1BCL	D0601981-004	57800	-19%
1065PZ1B	191286-010	Water	Iron, dissolved	210	1065PZ1BCL	D0601981-004	138	41%
1065PZ1B	191286-010	Water	Magnesium, dissolved	67000	1065PZ1BCL	D0601981-004	85500	-24%
1065PZ1B	191286-010	Water	Manganese, dissolved	78	1065PZ1BCL	D0601981-004	80	-2.5%
1065PZ1B	191286-010	Water	Potassium, dissolved	38000	1065PZ1BCL	D0601981-004	43900	-14%
1065PZ1B	191286-010	Water	Sodium, dissolved	82000	1065PZ1BCL	D0601981-004	96700	-16%
1065PZ1B	191286-010	Water	All other metals	ND	1065PZ1BCL	D0601981-004	ND	NA
1065PZ1B	191286-010	Water	Chloride	160	1065PZ1BCL	D0601981-004	174	-8.4%
1065PZ1B	191286-010	Water	Fluoride	ND	1065PZ1BCL	D0601981-004	ND	NA
1065PZ1B	191286-010	Water	Nitrogen, Nitrate	0.22	1065PZ1BCL	D0601981-004	0.27	-20%
1065PZ1B	191286-010	Water	Nitrogen, Nitrite	ND	1065PZ1BCL	D0601981-004	ND	NA
1065PZ1B	191286-010	Water	Sulfate	72	1065PZ1BCL	D0601981-004	82.2	-13%
1065PZ1B	191286-010	Water	Sulfide	ND	1065PZ1BCL	D0601981-004	ND	NA
1065PZ1B	191286-010	Water	Alkalinity, Total as CaCO3	360	1065PZ1BCL	D0601981-004	335	7.2%
1065PZ1B	191286-010	Water	Total Dissolved Solids	750	1065PZ1BCL	D0601981-004	725	3.4%

*Units for oRganic and metals analyses are ug/L; units for general chemistry analyses are mg/L.

**The primary laboratory reported carbon range C12-C24 for TPH-diesel; the QC laboratory reported carbon range C10-C24.

RL: Reporting limit

VOCs: Volatile Organic Compounds

PCBs: Polychlorinated Biphenyls

PAHs: Polynuclear Aromatic Hydrocarbons

ND: Not detected

NC: Not calculated. The absolute difference between the sample result and the duplicate sample result is less than the reporting limit.

N/A: Not analyzed

NA: Not applicable. Calculation of the relative percent difference between the sample result and the duplicate sample result is not applicable.

APPENDIX E
Curtis & Tompkins Analytical Data Reports

Third Quarter 2006

Table E-1
Curtis and Tompkins
Sample Delivery Group Index List
Third Quarter 2006
Presidio-wide Groundwater Monitoring Project
Presidio of San Francisco, California

Location ID	Sample Date	SDG Number
Battery Howe/Wagner		
BHWGW01	8/15/2006	188774
BHWGW01 (DUP0815062A)	8/15/2006	188774
BHWGW04	8/15/2006	188774
BHWGW05	8/15/2006	188774
HWGW100	8/15/2006	188774
HWGW101	8/15/2006	188774
Commissary/PX		
610SP01	8/17/2006	188837
Building 1047		
1047MW101	8/16/2006	188802
Building 1349/Fill Site 5		
1349MW03R	8/17/2006	188837
1349MW100	8/16/2006	188802
1349MW101	8/17/2006	188837
1349MW102	8/17/2006	188837
Fill Site 5		
LF5GW100	8/17/2006	188837
LF5GW101	8/17/2006	188837
LF5GW102	8/17/2006	188837
LF5GW103	8/17/2006	188837
LF5GW104	8/17/2006	188837
LF5GW104 (DUP0817062A)	8/17/2006	188837
Building 231/207 Area		
231GW09	8/15/2006	188774
Building 1065 Area		
1065MW9A	8/16/2006	188802
1065MW9A (DUP0816062A)	8/16/2006	188802
1065MW9B	8/16/2006	188802
1065PZ1A	8/17/2006	188837
1065PZ1B	8/15/2006	188774
1065PZ2A	8/17/2006	188837
1065PZ4A	8/17/2006	188837
1065PZ5AR	8/16/2006	188802
1065MW101	8/16/2006	188802
1065MW102	8/16/2006	188802
Landfill 4		
LF4GW103	8/16/2006	188802
LF4GW104	8/16/2006	188802
Landfill 10		
LF10GW01	8/18/2006	188837
LF10GW03	8/17/2006	188837
LF10GW100	8/18/2006	188837

Table E-1
Curtis and Tompkins
Sample Delivery Group Index List
Third Quarter 2006
Presidio-wide Groundwater Monitoring Project
Presidio of San Francisco, California

Location ID	Sample Date	SDG Number
Fill Site 6		
LF6GW103	8/16/2006	188802
LF6GW103 (DUP0816061A)	8/16/2006	188802
LF6GW105	8/16/2006	188802
LF6GW106	8/16/2006	188802
Nike Facility		
NKGW01	8/17/2006	188837
NKGW02	8/17/2006	188837
NKGW04	8/16/2006	188802
NKGW04 (DUP0816061B)	8/16/2006	188802
NKGW05	8/17/2006	188837
Baker Beach Disturbed Area 3		
BB3GW100	8/15/2006	188774
BB3GW100 (DUP0815061A)	8/15/2006	188774
Mini-CAPs		
1213GW101	8/16/2006	188802
1213GW101 (DUP0816063A)	8/16/2006	188802
1221GW104	8/15/2006	188774
1221GW104 (DUP0815063A)	8/15/2006	188774
514AGW101	8/15/2006	188774
FM14EX07GW101	8/15/2006	188774
FM14EX07GW102	8/15/2006	188774
Baker Beach Disturbed Area 1 and 2		
BB1PZ100	8/15/2006	188774
BB1PZ101	8/15/2006	188774
Rinsate Samples		
1065MW9BRB9A	8/16/2006	188802
BHWGW05RB01	8/15/2006	188774
Trip Blanks		
TB0815061A	8/15/2006	188774
TB081606A	8/16/2006	188802
TB081706A	8/17/2006	188837
Source Water Samples		
DW081706A	8/17/2006	188837
DW082106B	8/21/2006	188869
Purge Water Sample		
WT032906		



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Number 188774

Treadwell & Rollo
555 Montgomery Street
San Francisco, CA 94111

Project#: 2893.04.51
Location: Presidio of San Francisco

<u>Sample ID</u>	<u>Lab ID</u>
BB1PZ100	188774-001
BB1PZ101	188774-002
BB3GW100	188774-003
DUP0815061A	188774-004
TB0815061A	188774-005
1221GW104	188774-006
514AGW101	188774-007
FM14EX07GW102	188774-008
FM14EX07GW101	188774-009
231GW09	188774-010
DUP0815063A	188774-011
1065PZ1B	188774-012
BHWGW05RB01	188774-013
DUP0815062A	188774-014
BHWGW01	188774-015
BHWGW05	188774-016
BHWGW04	188774-017
HWGW101	188774-018
HWGW100	188774-019
BB1PZ101 RE	188774-020
514AGW101 RE	188774-021

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis.

Signature: _____

Operations Manager

Date: _____

5/19/06

Signature: _____

Project Manager

Date: _____

8/18/06

CASE NARRATIVE

Laboratory number: 188774
Client: Treadwell & Rollo
Project: 2893.04.51
Location: Presidio of San Francisco
Request Date: 08/16/06
Samples Received: 08/16/06

This hardcopy data package contains sample and QC results for nineteen water samples, requested for the above referenced project on 08/16/06. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):

No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):

Low response was observed for bromomethane in the CCV analyzed 08/16/06 13:34; this analyte met minimum response criteria. No other analytical problems were encountered.

Pesticides (EPA 8081A):

Low responses were observed for 4,4'-DDT and methoxychlor in the ICV analyzed 08/21/06 22:31; average ICV drift met method requirements, and these analytes were not detected at or above the RL in the associated samples. Low responses were observed for many analytes in the CCV analyzed 08/23/06 15:44. High response was observed for endrin; average CCV drift met method requirements. High responses were observed for many analytes in the CCV analyzed 08/24/06 10:16; average CCV drift met method requirements, and these analytes were not detected at or above the RL in the associated samples. High response was observed for endrin in the CCV analyzed 08/23/06 10:28; average CCV drift met method requirements. Low recoveries were observed for 4,4'-DDT and endrin in the MS/MSD of 1349MW100 (lab # 188802-001); the LCS was within limits, and the associated RPDs were within limits. High recoveries were observed for dieldrin; the LCS was within limits, the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated samples. Low surrogate recoveries were observed for decachlorobiphenyl in BB1PZ101 (lab # 188774-002) and the MS of 1349MW100 (lab # 188802-001); the corresponding TCMX surrogate recoveries were within limits. No other analytical problems were encountered.

Polynuclear Aromatics by HPLC (EPA 8310):

Low recoveries were observed for benzo(a)pyrene, naphthalene, and pyrene in the MS/MSD of 1349MW100 (lab # 188802-001); the LCS was within limits. High recovery was observed for pyrene in the MSD of 1349MW100 (lab # 188802-001); the LCS was within limits, and this analyte was not detected at or above the RL in the associated samples. High RPD was also observed for pyrene in the

CASE NARRATIVE

Laboratory number: 188774
Client: Treadwell & Rollo
Project: 2893.04.51
Location: Presidio of San Francisco
Request Date: 08/16/06
Samples Received: 08/16/06

Polynuclear Aromatics by HPLC (EPA 8310):

MS/MSD of 1349MW100 (lab # 188802-001); this analyte was not detected at or above the RL in the associated samples. Response exceeding the instrument's linear range was observed for fluorene in the MS of 1349MW100 (lab # 188802-001). High surrogate recoveries were observed for 1-methylnaphthalene (UV) in the MS/MSD of 1349MW100 (lab # 188802-001). High surrogate recovery was observed for 1-methylnaphthalene (F) in the MSD of 1349MW100 (lab # 188802-001). No other analytical problems were encountered.

Metals (EPA 6020 and EPA 7470A) Water:

Low recoveries were observed for mercury in the MS/MSD of 1349MW100 (lab # 188802-001); the BS/BSD were within limits, and the associated RPD was within limits. No other analytical problems were encountered.

Metals (EPA 6020 and EPA 7470A) Filtrate:

No analytical problems were encountered.

Ion Chromatography (EPA 300.0):

No analytical problems were encountered.

Alkalinity (EPA 310.1):

No analytical problems were encountered.

Sulfide (EPA 376.2):

No analytical problems were encountered.

Total Dissolved Solids (TDS) (EPA 160.1):

No analytical problems were encountered.

Chain of Custody

TURNAROUND TIME: 10 Days

(Pb, Fe, Cu, Ni and Zn)

Method of Shipment:

White Copy - Original Yellow Copy - Laboratory Pink Copy - Field

Project Name: Presidio of San Francisco						PROJECT MANAGER: Joshua Graber								TURNAROUND TIME: 10 Days									
Location: Presidio of San Francisco						PROJECT NUMBER: 2893																	
Sampled By (Firm and Samplers): BTS / D. Raynal						REQUESTED ANALYSES																	
Recorder (signature required): [Signature]																							
Sent to Laboratory (Name): Citi																							
SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix	Number of Containers and Preservation	TPHg (8015M)	TPHd (8015M)	TPHto (8015M)	VOCs (8260) / MIBZ	General Chemistry?	OCPs (8081)	(23)(13, 9, 8, 7, 3, Other)	Metals - Total ³ (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	BTEX / MTBE	T-4 / 5 / 166	Dioxin / HCB	COMMENTS / NOTES				
12216W104	8/15/06	1340		Soil	X																		
514AGW101		1245		Water	X																		
FMI14EX07GW102		1050		Other	X																		
FMI14EX07GW101		1153		HCl	X																		
231GWL09		1440		Other	X																		
DUP0815063A		1350		Water	X																		
				Soil	X																		
				Water	X																		
				Other	X																		
				HCl	X																		
				H2SO4	X																		
				HNO3	X																		
				NaOH	X																		
				Other	X																		

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
3 - Indicate in the metals column (by number) which metals list is requested. Metals Lists (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Ti, V, and Zn)
Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Ti, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn)
Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (Other -)

RELINQUISHED BY: [Signature] DATE: 8/16/06 RECEIVED BY: [Signature] DATE: 8/16/06
PRINT NAME: Devin Raynal FIRM: BTS PRINT NAME: ARAN GREUTER FIRM: CTT
RELINQUISHED BY: DATE: TIME: 1240 RECEIVED BY: DATE: TIME: 1240
PRINT NAME: DATE: TIME: FIRM: FIRM:
ADDITIONAL REMARKS / LABORATORY NOTES:

Method of Shipment: White Copy - Original Yellow Copy - Laboratory Pink Copy - Field

188774

Project Name: Presidio of San Francisco				PROJECT MANAGER: Joshua Graber		TURNAROUND TIME: 10 Days																	
Location: Presidio of San Francisco				PROJECT NUMBER: 2893																			
Sampled By (Firm and Samplers): <i>BTS / Will Crow</i>																							
Recorder (signature required): <i>[Signature]</i>																							
Sent to Laboratory (Name): <i>C&T</i>																							
SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix	Number of Containers and Preservation				REQUESTED ANALYSES										COMMENTS / NOTES				
					Soil	Water	Other	HCl	H ₂ SO ₄	HNO ₃	NaOH	Other	TPHg (8015M)	TPHd (8015M)	VOCs (8260) MTE	General Chemistry ²	OCs (8081)	Metals - Dissolved ³ (23, 22, 13, 9, 8, 7, 3, Other)		Metals - Total ³ (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	Metals - Dissolved ³ (15)
12 1065F21B	8/15/06	1441		X				6															
13 BHWGW05RB01		1300						1															
14 DUF0815062A		1340						1															
15 BHWGW01		1330						1															
16 BHWGW05		1238						1															
17 BHWGW04		1146						1															
18 HWWGW101		1047						1															
19 HWWGW100		1006						1															

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 1 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd



COOLER RECEIPT CHECKLIST

Login#: 188774 Date Received: 8-16-06 Number of Coolers: 3
Client: Tetra Tech Project: 2893.04.51

A. Preliminary Examination Phase

Date Opened: 8-16-06 By (print): Tray Windsor (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc.)?..... YES ☒ NO ☐

If YES, enter carrier name and airbill number: _____

2. Were custody seals on outside of cooler?..... YES ☒ NO ☐

How many and where? 1 per cooler Seal date: 8/16/06 Seal name: Illegible (see below)

3. Were custody seals unbroken and intact at the date and time of arrival?..... YES ☒ NO ☐

4. Were custody papers dry and intact when received?..... YES ☒ NO ☐

5. Were custody papers filled out properly (ink, signed, etc.)?..... YES ☒ NO ☐

6. Did you sign the custody papers in the appropriate place?..... YES ☒ NO ☐

7. Was project identifiable from custody papers?..... YES ☒ NO ☐

If YES, enter project name at the top of this form.

8. If required, was sufficient ice used? Samples should be 2-6 degrees C. YES ☒ NO ☐

Type of ice: Wet Temperature: Cold - no temp blanks

B. Login Phase

Date Logged In: 8-16-06 By (print): Tray Windsor (sign) [Signature]

1. Describe type of packing in cooler: In ziploc type bags

2. Did all bottles arrive unbroken?..... YES ☒ NO ☐

3. Were labels in good condition and complete (ID, date, time, signature, etc.)?..... YES ☒ NO ☒

4. Did bottle labels agree with custody papers?..... YES ☒ NO ☐

5. Were appropriate containers used for the tests indicated?..... YES ☒ NO ☐

6. Were correct preservatives added to samples?..... YES ☒ NO ☐

7. Was sufficient amount of sample sent for tests indicated?..... YES ☒ NO ☐

8. Were bubbles absent in VOA samples? If NO, list sample IDs below..... YES ☒ NO ☐

9. Was the client contacted concerning this sample delivery?..... YES ☐ NO ☒

If YES, give details below.

Who was called? _____ By whom? _____ Date: _____

* Additional Comments:

* B3 - sample - old one bottle arrived w/out a label on it. ID'd by process of elimination.

ENVIRONMENTAL & SAMPLING SUPPLY	LOT#	
	SAMPLE ID	
	SAMPLED BY	DATE
	LOCATION	PRESERVATIVE
	ANALYSIS	CLIENT

Oakland, CA • Houston, TX • Chicago, IL • Richmond, VA
(510) 562-4988 www.essvial.com (800) 233-8425

**TOTAL VOLATILE
HYDROCARBONS**



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	BB3GW100	Batch#:	116442
Lab ID:	188774-003	Sampled:	08/15/06
Matrix:	Water	Received:	08/16/06
Units:	ug/L	Analyzed:	08/16/06
Diln Fac:	1.000		

Analyte**Result****RL**

Gasoline C7-C12

ND

50

Surrogate**%REC****Limits**

Trifluorotoluene (FID)

97

65-135

Bromofluorobenzene (FID)

102

65-135

ND= Not Detected
RL= Reporting Limit



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DUP0815061A	Batch#:	116442
Lab ID:	188774-004	Sampled:	08/15/06
Matrix:	Water	Received:	08/16/06
Units:	ug/L	Analyzed:	08/16/06
Diln Fac:	1.000		

Analyte

Result

RL

Gasoline C7-C12

ND

50

Surrogate

%REC

Limits

Trifluorotoluene (FID)

84

65-135

Bromofluorobenzene (FID)

93

65-135

ND= Not Detected
RL= Reporting Limit

Page 1 of 1



Curtis & Tompkins Laboratories Analytical Report

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	514AGW101	Batch#:	116442
Lab ID:	188774-007	Sampled:	08/15/06
Matrix:	Water	Received:	08/16/06
Units:	ug/L	Analyzed:	08/16/06
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	88	65-135	EPA 8015B
Bromofluorobenzene (FID)	94	65-135	EPA 8015B
Trifluorotoluene (PID)	91	65-135	EPA 8021B
Bromofluorobenzene (PID)	96	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	FM14EX07GW102	Batch#:	116442
Lab ID:	188774-008	Sampled:	08/15/06
Matrix:	Water	Received:	08/16/06
Units:	ug/L	Analyzed:	08/16/06
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	91	65-135	EPA 8015B
Bromofluorobenzene (FID)	95	65-135	EPA 8015B
Trifluorotoluene (PID)	91	65-135	EPA 8021B
Bromofluorobenzene (PID)	97	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Page 1 of 1

10.0

00013

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	FM14EX07GW101	Batch#:	116442
Lab ID:	188774-009	Sampled:	08/15/06
Matrix:	Water	Received:	08/16/06
Units:	ug/L	Analyzed:	08/16/06
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	94	65-135	EPA 8015B
Bromofluorobenzene (FID)	99	65-135	EPA 8015B
Trifluorotoluene (PID)	93	65-135	EPA 8021B
Bromofluorobenzene (PID)	98	65-135	EPA 8021B



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	231GW09	Batch#:	116442
Lab ID:	188774-010	Sampled:	08/15/06
Matrix:	Water	Received:	08/16/06
Units:	ug/L	Analyzed:	08/16/06
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	91	65-135
Bromofluorobenzene (FID)	95	65-135

ND= Not Detected
RL= Reporting Limit



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1065PZ1B	Batch#:	116442
Lab ID:	188774-012	Sampled:	08/15/06
Matrix:	Water	Received:	08/16/06
Units:	ug/L	Analyzed:	08/17/06
Diln Fac:	1.000		

Analyte**Result****RL**

Gasoline C7-C12	ND	50
-----------------	----	----

Surrogate**%REC****Limits**

Trifluorotoluene (FID)	88	65-135
Bromofluorobenzene (FID)	92	65-135



Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC352021	Batch#:	116442
Matrix:	Water	Analyzed:	08/16/06
Units:	ug/L		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	96	65-135	EPA 8015B
Bromofluorobenzene (FID)	100	65-135	EPA 8015B
Trifluorotoluene (PID)	100	65-135	EPA 8021B
Bromofluorobenzene (PID)	103	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC352022	Batch#:	116442
Matrix:	Water	Analyzed:	08/16/06
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	22.72	114	65-135
Benzene	20.00	19.43	97	65-135
Toluene	20.00	19.34	97	65-135
Ethylbenzene	20.00	19.97	100	65-135

Surrogate	%REC	Limits
Trifluorotoluene (PID)	95	65-135
Bromofluorobenzene (PID)	98	65-135



Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC352023	Batch#:	116442
Matrix:	Water	Analyzed:	08/16/06
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,930	96	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	127	65-135
Bromofluorobenzene (FID)	101	65-135



Curtis & Tompkins, Ltd.

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	BB3GW100	Batch#:	116442
MSS Lab ID:	188774-003	Sampled:	08/15/06
Matrix:	Water	Received:	08/16/06
Units:	ug/L	Analyzed:	08/16/06
Diln Fac:	1.000		

Type: MS Lab ID: QC352087

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	17.06	2,000	1,960	97	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	133	65-135
Bromofluorobenzene (FID)	109	65-135

Type: MSD Lab ID: QC352088

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,947	96	65-135	1	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	111	65-135
Bromofluorobenzene (FID)	110	65-135

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188774 GCVOA Water: EPA 8015B

Inst : GC05
Calnum : 316199245001
Units : ng

Name : GAS
Date : 18-MAY-2006 16:47
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	138_006	316199245006	lvh 1	18-MAY-2006 16:47	S3460 (1000X), S3248 (5000X)
L2	138_007	316199245007	lvh 2	18-MAY-2006 17:19	S3459 (1000X), S3248 (5000X)
L3	138_008	316199245008	lvh 3	18-MAY-2006 17:51	S3458 (1000X), S3248 (5000X)
L4	138_009	316199245009	lvh 4	18-MAY-2006 18:23	S3457 (2000X), S3248 (5000X)
L5	138_010	316199245010	lvh 5	18-MAY-2006 18:55	S3457 (1000X), S3248 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ²	%RSD	MWR ²	MWRSD	Fig
Gasoline C7-C12	G	1168.4	1143.2	1104.8	1017.7	1031.8	AVRG		9.15E-4		1093.2	6	0.995		20	

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor
Page 1 of 1

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188774 GCVOA Water
EPA 8015B

Inst : GC05
Calnum : 316199245001

Name : GAS
Cal Date: 18-MAY-2006

ICV 316199245014 (138_014 18-MAY-2006) stds: S3323 (1000X), S3248 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Gasoline C7-C12	G	1093.2	1144.6	10000	10470	ng	5	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188774 GCVOA Water: EPA 8021B

Inst : GC05
 Calnum : 316256980002
 Units : ng

Name : MBTXE
 Date : 27-JUN-2006 16:28
 X Axis : R

Reviewer: MCH

Level	File	Segment	Sample ID	Analyzed	Std
L1	178_009	316256980009	BTXE 1	27-JUN-2006 16:28	S3735 (1000X), S3248 (5000X)
L2	178_010	316256980010	MTBE 1	27-JUN-2006 17:00	S3734 (1250X), S3248 (5000X)
L3	178_011	316256980011	BTXE 2	27-JUN-2006 17:32	S3734 (500X), S3248 (5000X)
L4	178_012	316256980012	BTXE 3	27-JUN-2006 18:04	S3734 (125X), S3248 (5000X)
L5	178_013	316256980013	BTXE 4	27-JUN-2006 18:36	S3733 (1000X), S3248 (5000X)
L6	178_014	316256980014	BTXE 5	27-JUN-2006 19:08	S3733 (500X), S3248 (5000X)
L7	178_015	316256980015	BTXE 6	27-JUN-2006 19:40	S3733 (250X), S3248 (5000X)
L8	178_016	316256980016	MTXE 7	27-JUN-2006 20:12	S3732 (500X), S3248 (5000X)

Analyte	Ch	I1	I2	I3	I4	I5	I6	I7	I8	Type	a0	a1	a2	Avg	r ²	MNR ²	MxRSD	Flg
MTBE	H		560.00	564.60	549.20	648.24	656.83	625.10	603.21	AVRG		0.00166		601.03	7	0.995	20	
Benzene	H	1644.0		1533.6	1540.3	1729.3	1759.0	1690.0		AVRG		6.06E-4		1649.2	6	0.995	20	
Toluene	H	1536.0		1553.2	1518.4	1663.8	1681.2	1582.5		AVRG		6.29E-4		1589.2	4	0.995	20	
Ethylbenzene	H	1184.0		1286.0	1308.1	1478.3	1511.0	1414.6		AVRG		7.33E-4		1363.7	9	0.995	20	
m,p-Xylenes	H	1520.0		1563.6	1546.9	1744.1	1743.2	1615.3		AVRG		6.16E-4		1622.2	6	0.995	20	
o-Xylene	H	1273.9		1321.2	1302.8	1445.8	1453.5	1354.3		AVRG		7.36E-4		1358.6	6	0.995	20	
MTBE	I		476.45	453.49	444.88	596.37	647.83	659.37	672.40	AVRG		0.00177		564.40	18	0.995	20	
Benzene	I	1289.0		1312.1	1383.2	1770.1	1882.0	1898.0		AVRG		6.29E-4		1589.1	18	0.995	20	
Toluene	I	1888.0		1184.7	1232.1	1680.9	1802.3	1780.7		AVRG		6.27E-4		1594.8	19	0.995	20	
Ethylbenzene	I	1519.8		1024.4	1142.4	1514.8	1639.4	1619.3		AVRG		7.09E-4		1410.0	18	0.995	20	
m,p-Xylenes	I	1360.1		1208.5	1338.5	1759.4	1907.0	1886.4		AVRG		6.34E-4		1576.7	20	0.995	20	
o-Xylene	I	1497.0		1024.6	1082.5	1478.8	1596.4	1590.2		AVRG		7.26E-4		1378.2	19	0.995	20	

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188774 GCVOA Water
EPA 8021B

Inst : GC05
Calnum : 316256980002

Name : MBTXE
Cal Date: 27-JUN-2006

ICV 316256980019 (178_019 27-JUN-2006) stds: S3079 (1000X), S3248 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
MTBE	H	601.03	551.90	100.0	91.83	ng	-8	15	
Benzene	H	1649.2	1657.6	100.0	100.5	ng	1	15	
Toluene	H	1589.2	1640.1	100.0	103.2	ng	3	15	
Ethylbenzene	H	1363.7	1396.6	100.0	102.4	ng	2	15	
m,p-Xylenes	H	1622.2	1736.9	200.0	214.1	ng	7	15	
o-Xylene	H	1358.6	1419.3	100.0	104.5	ng	4	15	
MTBE	I	564.40	507.26	100.0	89.88	ng	-10	15	
Benzene	I	1589.1	1656.4	100.0	104.2	ng	4	15	
Toluene	I	1594.8	1536.9	100.0	96.37	ng	-4	15	
Ethylbenzene	I	1410.0	1327.0	100.0	94.11	ng	-6	15	
m,p-Xylenes	I	1576.7	1644.5	200.0	208.6	ng	4	15	
o-Xylene	I	1378.2	1243.6	100.0	90.23	ng	-10	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188774 GCV0A Water: EPA 8015B / EPA 8021B

Inst : GC05
 Calnum : 316256980001
 Units : ng
 Name : TFT/BFB
 Date : 27-JUN-2006 11:32
 X Axis : R
 Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	178_002	316256980002	TFT/BFB 1	27-JUN-2006 11:32	S3289 (5000X)
L2	178_003	316256980003	TFT/BFB 2	27-JUN-2006 12:15	S3290 (5000X)
L3	178_004	316256980004	TFT/BFB 3	27-JUN-2006 12:48	S3291 (5000X)
L4	178_005	316256980005	TFT/BFB 4	27-JUN-2006 13:20	S3292 (5000X)
L5	178_006	316256980006	TFT/BFB 5	27-JUN-2006 14:00	S3293 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ²	%RSD	MnR ²	MxRSD	Flg
Trifluorocoluene (FID)	G	1196.5	1050.6	1047.7	1080.5	1028.7	AVRG		9.25E-4		1080.8	6	0.995	0.995	20	
Bromofluorobenzene (FID)	G	715.53	622.35	643.36	685.08	654.33	AVRG		0.00151		664.13	6	0.995	0.995	20	
Trifluorocoluene (PID)	H	428.47	388.60	416.82	454.90	440.54	AVRG		0.00235		425.87	6	0.995	0.995	20	
Bromofluorobenzene (PID)	H	826.27	773.56	859.00	931.80	902.86	AVRG		0.00116		858.70	7	0.995	0.995	20	
Trifluorocoluene (PID)	I	389.06	351.31	377.77	409.07	403.16	AVRG		0.00259		386.07	6	0.995	0.995	20	
Bromofluorobenzene (PID)	I	808.06	758.25	827.88	934.38	905.97	AVRG		0.00118		846.91	9	0.995	0.995	20	

CURTIS & TOMPKINS SPIKE USER REPORT FOR 188774 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name: QC352022 IDF : 1.0
Seqnum : 316329105002.5 File : 228_002 Time : 16-AUG-2006 13:37
Standards: S4123 (1000X), S3969 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
MTBE	H	316256980002	27-JUN-2006	682.65	100.0	110	ng	14	15	u
MTBE	I	316256980002	27-JUN-2006	564.55	100.0	100	ng	0	15	
Benzene	H	316256980002	27-JUN-2006	1601.9	100.0	97	ng	-3	15	u
Benzene	I	316256980002	27-JUN-2006	1471.6	100.0	93	ng	-7	15	
Toluene	H	316256980002	27-JUN-2006	1536.7	100.0	97	ng	-3	15	u
Toluene	I	316256980002	27-JUN-2006	1368.6	100.0	86	ng	-14	15	
Ethylbenzene	H	316256980002	27-JUN-2006	1361.6	100.0	100	ng	0	15	u
Ethylbenzene	I	316256980002	27-JUN-2006	1233.2	100.0	87	ng	-13	15	
m,p-Xylenes	H	316256980002	27-JUN-2006	1764.2	100.0	110	ng	9	15	u
m,p-Xylenes	I	316256980002	27-JUN-2006	1605.2	100.0	100	ng	2	15	
o-Xylene	H	316256980002	27-JUN-2006	1343.8	100.0	99	ng	-1	15	u
o-Xylene	I	316256980002	27-JUN-2006	1188.1	100.0	86	ng	-14	15	
Trifluorotoluene (FID)	G	316256980001	27-JUN-2006	990.81	450.0	410	ng	-8	15	
Bromofluorobenzene (FID)	G	316256980001	27-JUN-2006	629.66	450.0	430	ng	-5	15	
Trifluorotoluene (PID)	H	316256980001	27-JUN-2006	406.22	450.0	430	ng	-5	15	u
Trifluorotoluene (PID)	I	316256980001	27-JUN-2006	343.52	450.0	400	ng	-11	15	
Bromofluorobenzene (PID)	H	316256980001	27-JUN-2006	845.44	450.0	440	ng	-2	15	u
Bromofluorobenzene (PID)	I	316256980001	27-JUN-2006	825.05	450.0	440	ng	-3	15	

CURTIS & TOMPKINS SPIKE USER REPORT FOR 188774 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name: QC352023 IDF : 1.0
 Seqnum : 316329105003.5 File : 228_003 Time : 16-AUG-2006 14:09
 Standards: S3982 (1000X), S3969 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	G	316199245001	18-MAY-2006	1054.7	10000	9600	ng	-4	15	u
Trifluorotoluene (FID)	G	316256980001	27-JUN-2006	1374.8	450.0	570	ng	27	15	c+ u <i>MS</i>
Bromofluorobenzene (FID)	G	316256980001	27-JUN-2006	672.25	450.0	460	ng	1	15	u
Trifluorotoluene (PID)	H	316256980001	27-JUN-2006	465.01	450.0	490	ng	9	15	
Trifluorotoluene (PID)	I	316256980001	27-JUN-2006	293.98	450.0	340	ng	-24	15	c- <i>N/A</i>
Bromofluorobenzene (PID)	H	316256980001	27-JUN-2006	819.87	450.0	430	ng	-5	15	
Bromofluorobenzene (PID)	I	316256980001	27-JUN-2006	833.16	450.0	440	ng	-2	15	

mmg 8/17/06

IN-House QC Limits:
 TFT-FID-H₂O:
 69-137 %Rec.

mmg 8/28/06

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188774 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name: MBTXE IDF : 1.0
Seqnum : 316329105012 File : 228_012 Time : 16-AUG-2006 21:41
Standards: S4123 (666.7X), S3969 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	G	316256980001	27-JUN-2006	974.49	450.0	405.7	ng	-10	15	
Bromofluorobenzene (FID)	G	316256980001	27-JUN-2006	635.84	450.0	430.8	ng	-4	15	
MTBE	H	316256980002	27-JUN-2006	611.73	150.0	152.7	ng	2	15	
Benzene	H	316256980002	27-JUN-2006	1591.9	150.0	144.8	ng	-3	15	
Toluene	H	316256980002	27-JUN-2006	1488.1	150.0	140.5	ng	-6	15	
Ethylbenzene	H	316256980002	27-JUN-2006	1261.7	150.0	138.8	ng	-7	15	
m,p-Xylenes	H	316256980002	27-JUN-2006	1768.8	150.0	163.6	ng	9	15	
o-Xylene	H	316256980002	27-JUN-2006	1305.8	150.0	144.2	ng	-4	15	
Trifluorotoluene (PID)	H	316256980001	27-JUN-2006	396.08	450.0	418.5	ng	-7	15	
Bromofluorobenzene (PID)	H	316256980001	27-JUN-2006	828.23	450.0	434.0	ng	-4	15	
MTBE	I	316256980002	27-JUN-2006	581.51	150.0	154.5	ng	3	15	
Benzene	I	316256980002	27-JUN-2006	1526.7	150.0	144.1	ng	-4	15	
Toluene	I	316256980002	27-JUN-2006	1376.0	150.0	129.4	ng	-14	15	
Ethylbenzene	I	316256980002	27-JUN-2006	1244.0	150.0	132.3	ng	-12	15	
m,p-Xylenes	I	316256980002	27-JUN-2006	1629.1	150.0	155.0	ng	3	15	
o-Xylene	I	316256980002	27-JUN-2006	1243.0	150.0	135.3	ng	-10	15	
Trifluorotoluene (PID)	I	316256980001	27-JUN-2006	345.58	450.0	402.8	ng	-10	15	
Bromofluorobenzene (PID)	I	316256980001	27-JUN-2006	812.69	450.0	431.8	ng	-4	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188774 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name: TVH IDF : 1.0
Seqnum : 316329105014 File : 228_014 Time : 16-AUG-2006 22:44
Standards: S3982 (666.7X), S3969 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	G	316199245001	18-MAY-2006	1045.7	15000	14350	ng	-4	15	
Trifluorotoluene (FID)	G	316256980001	27-JUN-2006	1232.4	450.0	513.1	ng	14	15	
Bromofluorobenzene (FID)	G	316256980001	27-JUN-2006	708.48	450.0	480.0	ng	7	15	
Trifluorotoluene (PID)	H	316256980001	27-JUN-2006	491.20	450.0	519.0	ng	15	15	
Bromofluorobenzene (PID)	H	316256980001	27-JUN-2006	789.04	450.0	413.5	ng	-8	15	
Trifluorotoluene (PID)	I	316256980001	27-JUN-2006	437.03	450.0	509.4	ng	13	15	
Bromofluorobenzene (PID)	I	316256980001	27-JUN-2006	833.78	450.0	443.0	ng	-2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188774 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name: TVH IDF : 1.0
Seqnum : 316329105015 File : 228_015 Time : 16-AUG-2006 23:16
Standards: S3982 (666.7X), S3969 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	G	316199245001	18-MAY-2006	1007.3	15000	13820	ng	-8	15	
Trifluorotoluene (FID)	G	316256980001	27-JUN-2006	1177.3	450.0	490.2	ng	9	15	
Bromofluorobenzene (FID)	G	316256980001	27-JUN-2006	657.29	450.0	445.4	ng	-1	15	
Trifluorotoluene (PID)	H	316256980001	27-JUN-2006	476.98	450.0	504.0	ng	12	15	
Bromofluorobenzene (PID)	H	316256980001	27-JUN-2006	767.40	450.0	402.2	ng	-11	15	
Trifluorotoluene (PID)	I	316256980001	27-JUN-2006	430.57	450.0	501.9	ng	12	15	
Bromofluorobenzene (PID)	I	316256980001	27-JUN-2006	813.56	450.0	432.3	ng	-4	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188774 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name: TVH IDF : 1.0
Seqnum : 316329105023 File : 228_023 Time : 17-AUG-2006 03:32
Standards: S3982 (2000X), S3969 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	G	316199245001	18-MAY-2006	1077.2	5000	4927	ng	-1	15	
Trifluorotoluene (FID)	G	316256980001	27-JUN-2006	1188.4	450.0	494.8	ng	10	15	
Bromofluorobenzene (FID)	G	316256980001	27-JUN-2006	634.86	450.0	430.2	ng	-4	15	
Trifluorotoluene (PID)	H	316256980001	27-JUN-2006	405.49	450.0	428.5	ng	-5	15	
Bromofluorobenzene (PID)	H	316256980001	27-JUN-2006	813.49	450.0	426.3	ng	-5	15	
Trifluorotoluene (PID)	I	316256980001	27-JUN-2006	384.68	450.0	448.4	ng	0	15	
Bromofluorobenzene (PID)	I	316256980001	27-JUN-2006	788.30	450.0	418.9	ng	-7	15	

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 316199245 Instrument: GC05 Gas Chromatograph #5 TVH/BTXE Begun: 18-MAY-2006
Analytical Method: EPA 8015B SOP Version: TVH BTXE rv11
Analytical Method: EPA 8021B SOP Version: TVH BTXE rv13

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stdts	Used	>LR
001	138_001	X	ib			18-MAY-2006	08:45	1.0					1		
002	138_002	X	QC340572	113573	Water	18-MAY-2006	09:17	1.0					2	1	Not used
003	138_003	X	QC340573	113573	Water	18-MAY-2006	09:49	1.0					3	1	
004	138_004	X	QC340571	113573	Water	18-MAY-2006	10:21	1.0					1		
005	138_005	X	ib			18-MAY-2006	16:15	1.0					1		
006	138_006	ICAL	tvh 1			18-MAY-2006	16:47	1.0					4	1	Pass/Use
007	138_007	ICAL	tvh 2			18-MAY-2006	17:19	1.0					5	1	
008	138_008	ICAL	tvh 3			18-MAY-2006	17:51	1.0					6	1	
009	138_009	ICAL	tvh 4			18-MAY-2006	18:23	1.0					7	1	
010	138_010	ICAL	tvh 5			18-MAY-2006	18:55	1.0					7	1	
011	138_011	X	ib			18-MAY-2006	19:27	1.0					1		
012	138_012	X	carbmak			18-MAY-2006	19:58	1.0					8	9	1 Use
013	138_013	X	ib			18-MAY-2006	20:30	1.0					1		
014	138_014	ICV	tvh			18-MAY-2006	21:02	1.0					3	1	Pass/Use
										5000					

Stdts used: 1-S3248 2-S3406 3-S3323 4-S3460 5-S3459 6-S3458 7-S3457 8-S1645 9-S1646

Analyst: Michael J. Perry Date: 05/22/06
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Michael J. Perry 05/22/06

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05/22/06
Date

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 316256980 Instrument: GC05
Analytical Method: EPA 8015B
Analytical Method: EPA 8021B

Gas Chromatograph #5 TVH/BTXE
SOP Version: TVH BTXE rv11
SOP Version: TVH BTXE rv13

Begun: 27-JUN-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	ID#	IOC	SPK	uL	VL	pH	Stds	Used	>LR
001	178_001	X	IB			27-JUN-2006	11:00	1.0					1		
002	178_002	ICAL	TFT/BFB 1			27-JUN-2006	11:32	1.0					2		
003	178_003	ICAL	TFT/BFB 2			27-JUN-2006	12:15	1.0					3		
004	178_004	ICAL	TFT/BFB 3			27-JUN-2006	12:48	1.0					4		
005	178_005	ICAL	TFT/BFB 4			27-JUN-2006	13:20	1.0					5		
006	178_006	ICAL	TFT/BFB 5			27-JUN-2006	14:00	1.0					6		
007	178_007	X	IB			27-JUN-2006	15:24	1.0					1		
008	178_008	X	IB			27-JUN-2006	15:56	1.0					1		
009	178_009	ICAL	BTXE 1			27-JUN-2006	16:28	1.0					7		
010	178_010	ICAL	MTBE 1			27-JUN-2006	17:00	1.0					8		
011	178_011	ICAL	BTXE 2			27-JUN-2006	17:32	1.0					8		
012	178_012	ICAL	BTXE 3			27-JUN-2006	18:04	1.0					8		
013	178_013	ICAL	BTXE 4			27-JUN-2006	18:36	1.0					9		
014	178_014	ICAL	BTXE 5			27-JUN-2006	19:08	1.0					9		
015	178_015	ICAL	BTXE 6			27-JUN-2006	19:40	1.0					9		
016	178_016	ICAL	MBTXE 7			27-JUN-2006	20:12	1.0					10		
017	178_017	X	IB			27-JUN-2006	20:44	1.0					1		
018	178_018	X	MBTXE			27-JUN-2006	21:16	1.0					11		
019	178_019	ICV	MBTXE			27-JUN-2006	21:48	1.0					11		

Stds used: 1-S3248 2-S3289 3-S3290 4-S3291 5-S3292 6-S3293 7-S3735 8-S3734 9-S3733 10-S3732 11-S3079

Analyst: Michael J. Pelt Date: 6/28/06

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Michael J. Pelt 6/28/06

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6/28/06
Date

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SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 316329105 Instrument: GC05
 Analytical Method: EPA 8015B
 Analytical Method: EPA 8021B

Gas Chromatograph #5 TVH/BTXE
 SOP Version: TVH BTXE rv11
 SOP Version: TVH BTXE rv13

Begun: 16-AUG-2006

File Name	Type	Sample Name	Batch	Matrix	Analyzed	IDF	IOC	SPK	VL	PH	Stds	Used
228_001	X	IB	116442	Water	16-AUG-2006	13:05	1.0					>LR
228_002	CCV/LCS	QC352022	116442	Water	16-AUG-2006	13:37	1.0					
228_003	CCV/LCS	QC352023	116442	Water	16-AUG-2006	14:09	1.0					
228_004	BLANK	QC352021	116442	Water	16-AUG-2006	14:40	1.0					
228_005	MSS	188774-003	116442	Water	16-AUG-2006	17:59	1.0	3				
228_006	MS	QC352087	116442	Water	16-AUG-2006	18:31	1.0	3				
228_007	MSD	QC352088	116442	Water	16-AUG-2006	19:02	1.0					
228_008	SAMPLE	188774-004	116442	Water	16-AUG-2006	19:34	1.0					
228_009	SAMPLE	188774-007	116442	Water	16-AUG-2006	20:06	1.0	1				
228_010	SAMPLE	188774-008	116442	Water	16-AUG-2006	20:38	1.0	1				
228_011	SAMPLE	188774-009	116442	Water	16-AUG-2006	21:09	1.0	1				
228_012	CCV	MBTXE	116442		16-AUG-2006	21:41	1.0					
228_013	CCV	MBTXE	116442		16-AUG-2006	22:13	1.0					
228_014	CCV	TVH	116442		16-AUG-2006	22:44	1.0					
228_015	CCV	TVH	116442		16-AUG-2006	23:16	1.0					
228_016	SAMPLE	188774-010	116442	Water	16-AUG-2006	23:48	1.0	1				
228_017	SAMPLE	188774-012	116442	Water	17-AUG-2006	00:20	1.0	1				
228_018	SAMPLE	188779-001	116442	Water	17-AUG-2006	00:52	1.0					
228_019	X	188779-002	116442	Water	17-AUG-2006	01:24	1.0	2				
228_020	SAMPLE	188775-029	116442	Water	17-AUG-2006	01:56	1.0					
228_021	X	MBTXE	116442		17-AUG-2006	02:28	1.0					
228_022	X	MBTXE	116442		17-AUG-2006	03:00	1.0					
228_023	CCV	TVH	116442		17-AUG-2006	03:32	1.0	3				
228_024	CCV	TVH	116442		17-AUG-2006	04:04	1.0					
228_025	SAMPLE	188787-001	116442	Water	17-AUG-2006	09:28	1.0					
228_026	SAMPLE	188787-002	116442	Water	17-AUG-2006	09:59	1.0					
228_027	SAMPLE	188790-010	116442	Water	17-AUG-2006	10:31	1.0					
228_028	SAMPLE	188779-002	116442	Water	17-AUG-2006	11:03	1.0					
228_029	CCV	MBTXE	116442		17-AUG-2006	12:05	1.0					
228_030	CCV	TVH	116442		17-AUG-2006	12:37	1.0					

Stds used: 1-S3969 2-S4123 3-S3982

Analyst: *David G. [Signature]* Date: 8/17/06

Page 1 of 1

Continued on Page

Read and Understood By

Signed

Date

8/17/06

David G. [Signature] 8/17/06

REPORTING SUMMARY FOR 188774 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
188774-003	Gasoline C7-C12	GC05	G	08/16/06 17:59
188774-003	Trifluorotoluene (FID)	GC05	G	08/16/06 17:59
188774-003	Bromofluorobenzene (FID)	GC05	G	08/16/06 17:59
188774-004	Gasoline C7-C12	GC05	G	08/16/06 19:34
188774-004	Trifluorotoluene (FID)	GC05	G	08/16/06 19:34
188774-004	Bromofluorobenzene (FID)	GC05	G	08/16/06 19:34
188774-007	Gasoline C7-C12	GC05	G	08/16/06 20:06
188774-007	MTBE	GC05	H	08/16/06 20:06
188774-007	Benzene	GC05	H	08/16/06 20:06
188774-007	Toluene	GC05	H	08/16/06 20:06
188774-007	Ethylbenzene	GC05	H	08/16/06 20:06
188774-007	Trifluorotoluene (FID)	GC05	G	08/16/06 20:06
188774-007	Bromofluorobenzene (FID)	GC05	G	08/16/06 20:06
188774-007	Trifluorotoluene (PID)	GC05	H	08/16/06 20:06
188774-007	Bromofluorobenzene (PID)	GC05	H	08/16/06 20:06
188774-007	Xylene (total)	GC05	H	08/16/06 20:06
188774-008	Gasoline C7-C12	GC05	G	08/16/06 20:38
188774-008	MTBE	GC05	H	08/16/06 20:38
188774-008	Benzene	GC05	H	08/16/06 20:38
188774-008	Toluene	GC05	H	08/16/06 20:38
188774-008	Ethylbenzene	GC05	H	08/16/06 20:38
188774-008	Trifluorotoluene (FID)	GC05	G	08/16/06 20:38
188774-008	Bromofluorobenzene (FID)	GC05	G	08/16/06 20:38
188774-008	Trifluorotoluene (PID)	GC05	H	08/16/06 20:38
188774-008	Bromofluorobenzene (PID)	GC05	H	08/16/06 20:38
188774-008	Xylene (total)	GC05	H	08/16/06 20:38
188774-009	Gasoline C7-C12	GC05	G	08/16/06 21:09
188774-009	MTBE	GC05	H	08/16/06 21:09
188774-009	Benzene	GC05	H	08/16/06 21:09
188774-009	Toluene	GC05	H	08/16/06 21:09
188774-009	Ethylbenzene	GC05	H	08/16/06 21:09
188774-009	Trifluorotoluene (FID)	GC05	G	08/16/06 21:09
188774-009	Bromofluorobenzene (FID)	GC05	G	08/16/06 21:09
188774-009	Trifluorotoluene (PID)	GC05	H	08/16/06 21:09
188774-009	Bromofluorobenzene (PID)	GC05	H	08/16/06 21:09
188774-009	Xylene (total)	GC05	H	08/16/06 21:09
188774-010	Gasoline C7-C12	GC05	G	08/16/06 23:48
188774-010	Trifluorotoluene (FID)	GC05	G	08/16/06 23:48
188774-010	Bromofluorobenzene (FID)	GC05	G	08/16/06 23:48
188774-012	Gasoline C7-C12	GC05	G	08/17/06 00:20
188774-012	Trifluorotoluene (FID)	GC05	G	08/17/06 00:20
188774-012	Bromofluorobenzene (FID)	GC05	G	08/17/06 00:20
QC352021	Gasoline C7-C12	GC05	G	08/16/06 14:40
QC352021	MTBE	GC05	H	08/16/06 14:40
QC352021	Benzene	GC05	H	08/16/06 14:40
QC352021	Toluene	GC05	H	08/16/06 14:40
QC352021	Ethylbenzene	GC05	H	08/16/06 14:40

REPORTING SUMMARY FOR 188774 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC352021	Trifluorotoluene (FID)	GC05	G	08/16/06 14:40
QC352021	Bromofluorobenzene (FID)	GC05	G	08/16/06 14:40
QC352021	Trifluorotoluene (PID)	GC05	H	08/16/06 14:40
QC352021	Bromofluorobenzene (PID)	GC05	H	08/16/06 14:40
QC352021	Xylene (total)	GC05	H	08/16/06 14:40
QC352022	MTBE	GC05	H	08/16/06 13:37
QC352022	Benzene	GC05	H	08/16/06 13:37
QC352022	Toluene	GC05	H	08/16/06 13:37
QC352022	Ethylbenzene	GC05	H	08/16/06 13:37
QC352022	Trifluorotoluene (PID)	GC05	H	08/16/06 13:37
QC352022	Bromofluorobenzene (PID)	GC05	H	08/16/06 13:37
QC352023	Gasoline C7-C12	GC05	G	08/16/06 14:09
QC352023	Trifluorotoluene (FID)	GC05	G	08/16/06 14:09
QC352023	Bromofluorobenzene (FID)	GC05	G	08/16/06 14:09
QC352087	Gasoline C7-C12	GC05	G	08/16/06 18:31
QC352087	Trifluorotoluene (FID)	GC05	G	08/16/06 18:31
QC352087	Bromofluorobenzene (FID)	GC05	G	08/16/06 18:31
QC352088	Gasoline C7-C12	GC05	G	08/16/06 19:02
QC352088	Trifluorotoluene (FID)	GC05	G	08/16/06 19:02
QC352088	Bromofluorobenzene (FID)	GC05	G	08/16/06 19:02

GCOS

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 116442
Date Started: 16-AUG-2006
Batched by : Matthew Josh McManus

Analysis : N/A
Bgroup : TVH
Department : GC Organics

Sample	Type	Client	Matrix	Analyses	Due Date
188774-003		Treadwell & Rollo	Water	TVH	28-AUG-2006
188774-004		Treadwell & Rollo	Water	TVH	28-AUG-2006
188774-007		Treadwell & Rollo	Water	MBTXE, TVH	28-AUG-2006
188774-008		Treadwell & Rollo	Water	MBTXE, TVH	28-AUG-2006
188774-009		Treadwell & Rollo	Water	MBTXE, TVH	28-AUG-2006
188774-010		Treadwell & Rollo	Water	TVH	28-AUG-2006
188774-012		Treadwell & Rollo	Water	TVH	28-AUG-2006
188775-029		Innovative Technic	Water	TVH	22-AUG-2006
188779-001		Green Environment,	Water	TVH	22-AUG-2006
188779-002		Green Environment,	Water	TVH	22-AUG-2006
188787-001		ERAS Environmental	Water	MBTXE, TVH	22-AUG-2006
188787-002		ERAS Environmental	Water	MBTXE, TVH	22-AUG-2006
188790-010		Clayton Group Serv	Water	BTXE, TVH	23-AUG-2006
QC352021	BLANK		Water		
QC352022	LCS		Water		
QC352023	LCS		Water		
QC352087	MS	of 188774-003	Water		
QC352088	MSD	of 188774-003	Water		

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Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 09/18/06

Analyte	Units	GC19 A	GC19 X	GC04 A	GC04 J	GC05 G	GC07 A
Gasoline C6-C10	ug/L	21	21	6.7	6.2	14	10
Gasoline C6-C12	ug/L	21	21	5.5	6.8	11	14
Gasoline C7-C12	ug/L	27	27	4.8	7.2	7.4	15
JP-4 C7-C12	ug/L		4.6	12	12	9.9	19
Gasoline C6-C8	ug/L						7.0
Gasoline C8-C10	ug/L						12
Trifluorotoluene (FID)	ug/L			3.9			9.8
Bromofluorobenzene (FID)	ug/L			5.2			7.5

**TOTAL EXTRACTABLE
HYDROCARBONS**



Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	08/15/06
Units:	ug/L	Received:	08/16/06
Diln Fac:	1.000	Prepared:	08/22/06
Batch#:	116659		

Field ID: BB1PZ100
Type: SAMPLE
Lab ID: 188774-001

Analyzed: 08/23/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	180 H Y	50
Motor Oil C24-C36	910	300

Surrogate	%REC	Limits
Hexacosane	98	65-135

Field ID: BB1PZ101
Type: SAMPLE
Lab ID: 188774-002

Analyzed: 08/24/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	62 H Y	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	102	65-135

Field ID: BB3GW100
Type: SAMPLE
Lab ID: 188774-003

Analyzed: 08/23/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	115	65-135

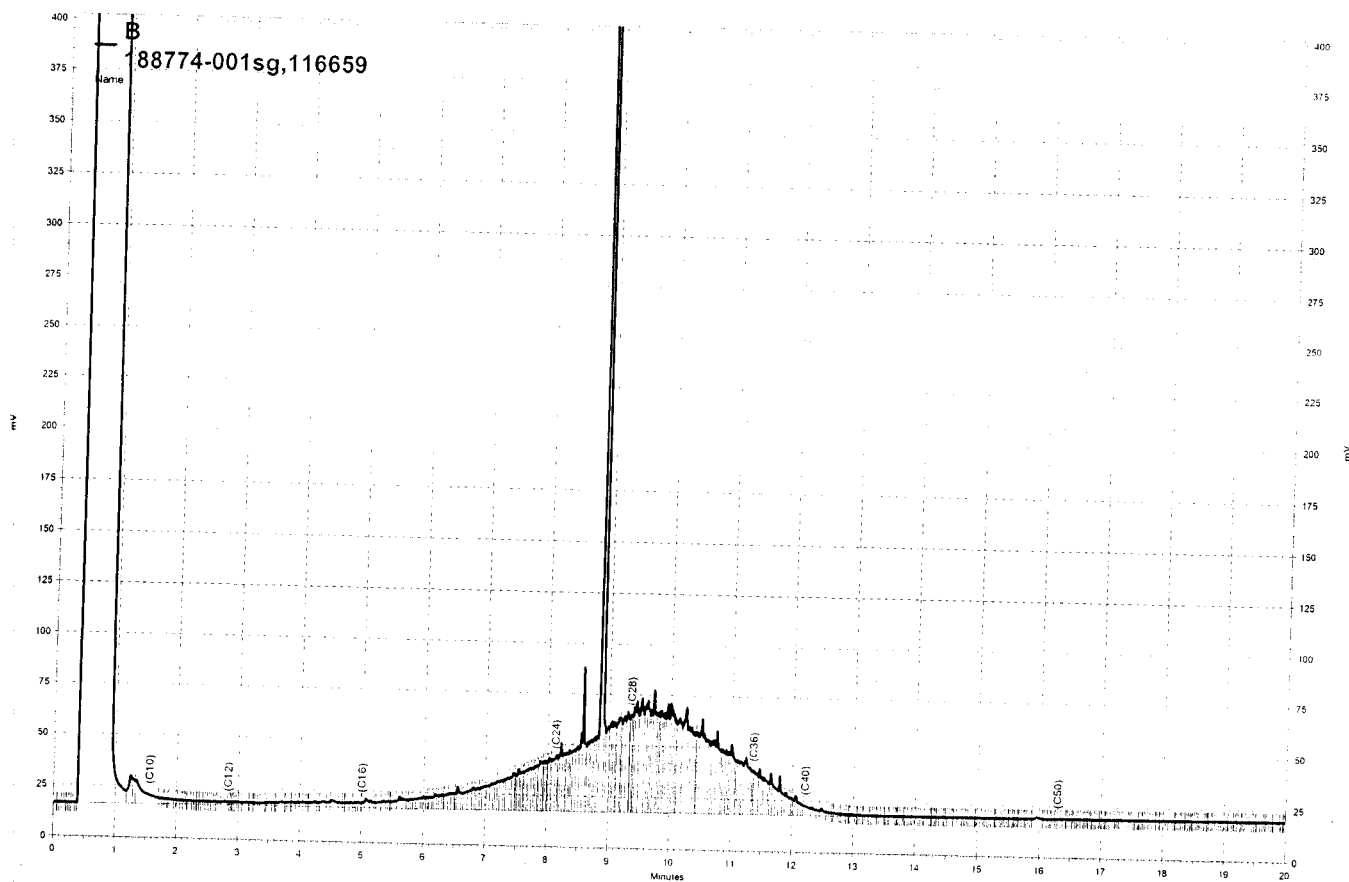
Field ID: DUP0815061A
Type: SAMPLE
Lab ID: 188774-004

Analyzed: 08/23/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

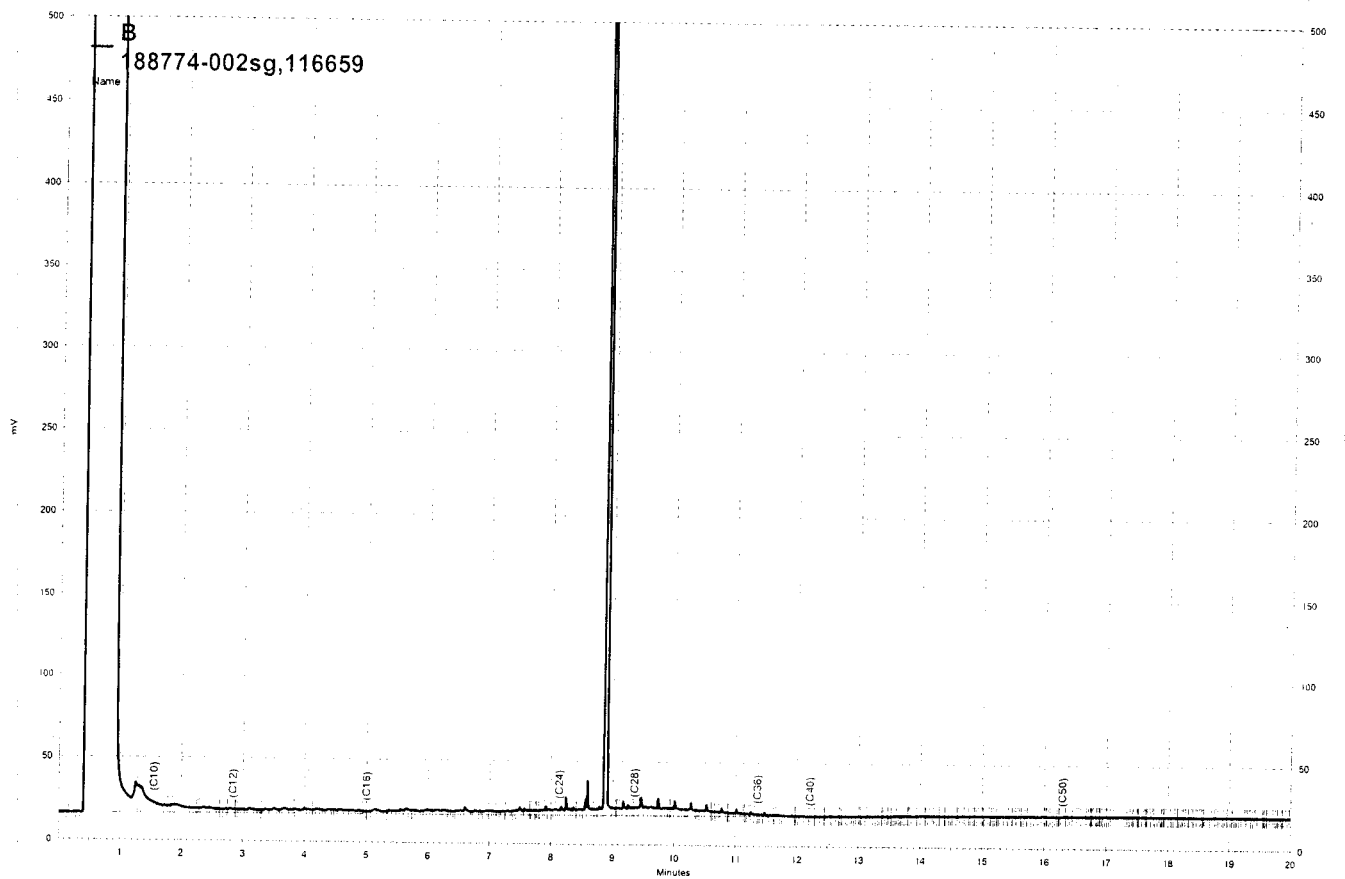
Surrogate	%REC	Limits
Hexacosane	75	65-135

H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit



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BB1PZ100



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BB1PZ101



Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	08/15/06
Units:	ug/L	Received:	08/16/06
Diln Fac:	1.000	Prepared:	08/22/06
Batch#:	116659		

Field ID: 514AGW101
Type: SAMPLE
Lab ID: 188774-007

Analyzed: 08/23/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	92	65-135

Field ID: FM14EX07GW102
Type: SAMPLE
Lab ID: 188774-008

Analyzed: 08/23/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	83	65-135

Field ID: FM14EX07GW101
Type: SAMPLE
Lab ID: 188774-009

Analyzed: 08/23/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	90	65-135

Field ID: 231GW09
Type: SAMPLE
Lab ID: 188774-010

Analyzed: 08/23/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	90	65-135

H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit

00043



Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	08/15/06
Units:	ug/L	Received:	08/16/06
Diln Fac:	1.000	Prepared:	08/22/06
Batch#:	116659		

Field ID: 1065PZ1B
Type: SAMPLE
Lab ID: 188774-012

Analyzed: 08/23/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	92	65-135

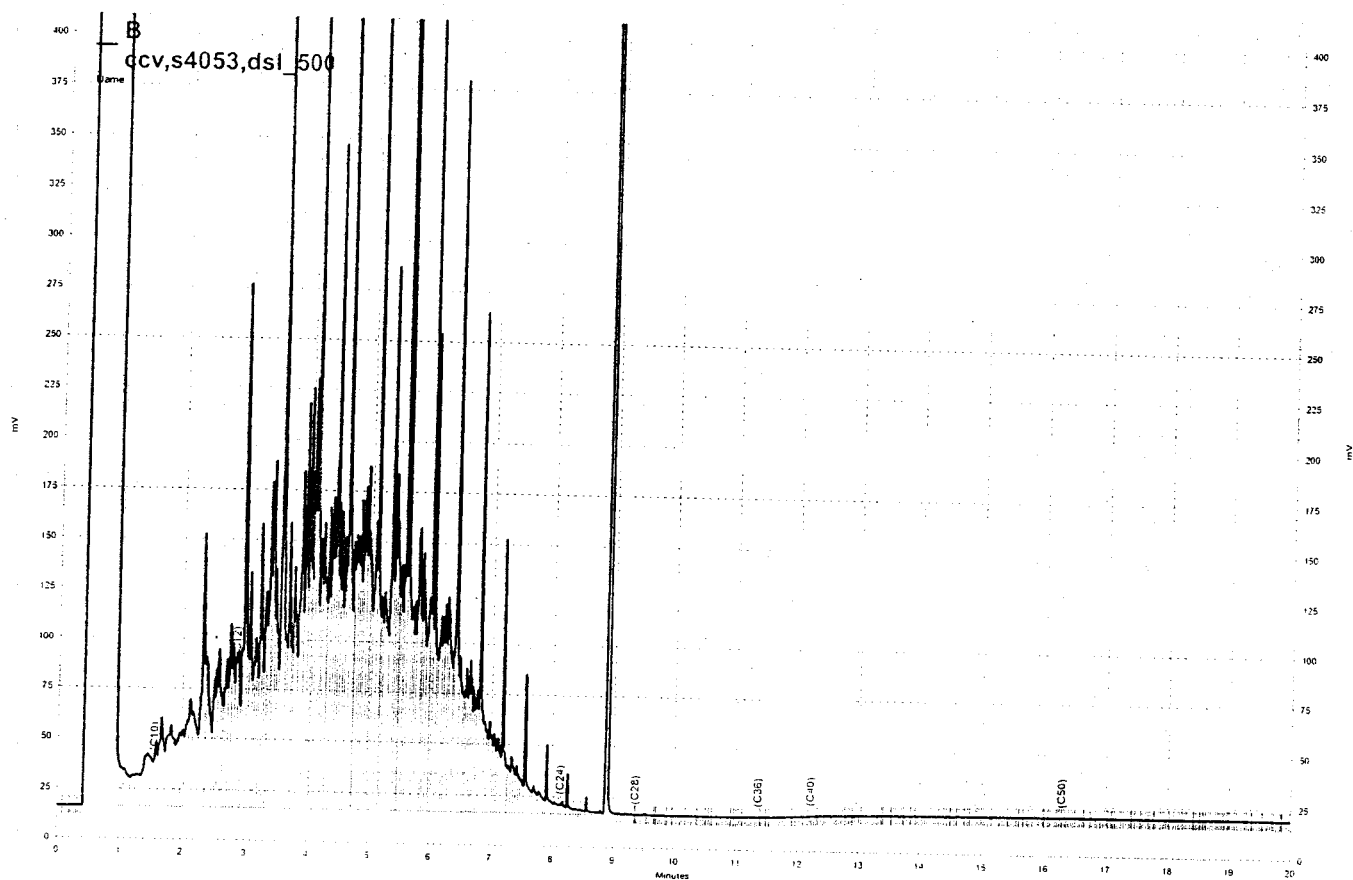
Type: BLANK
Lab ID: QC352950

Analyzed: 08/24/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

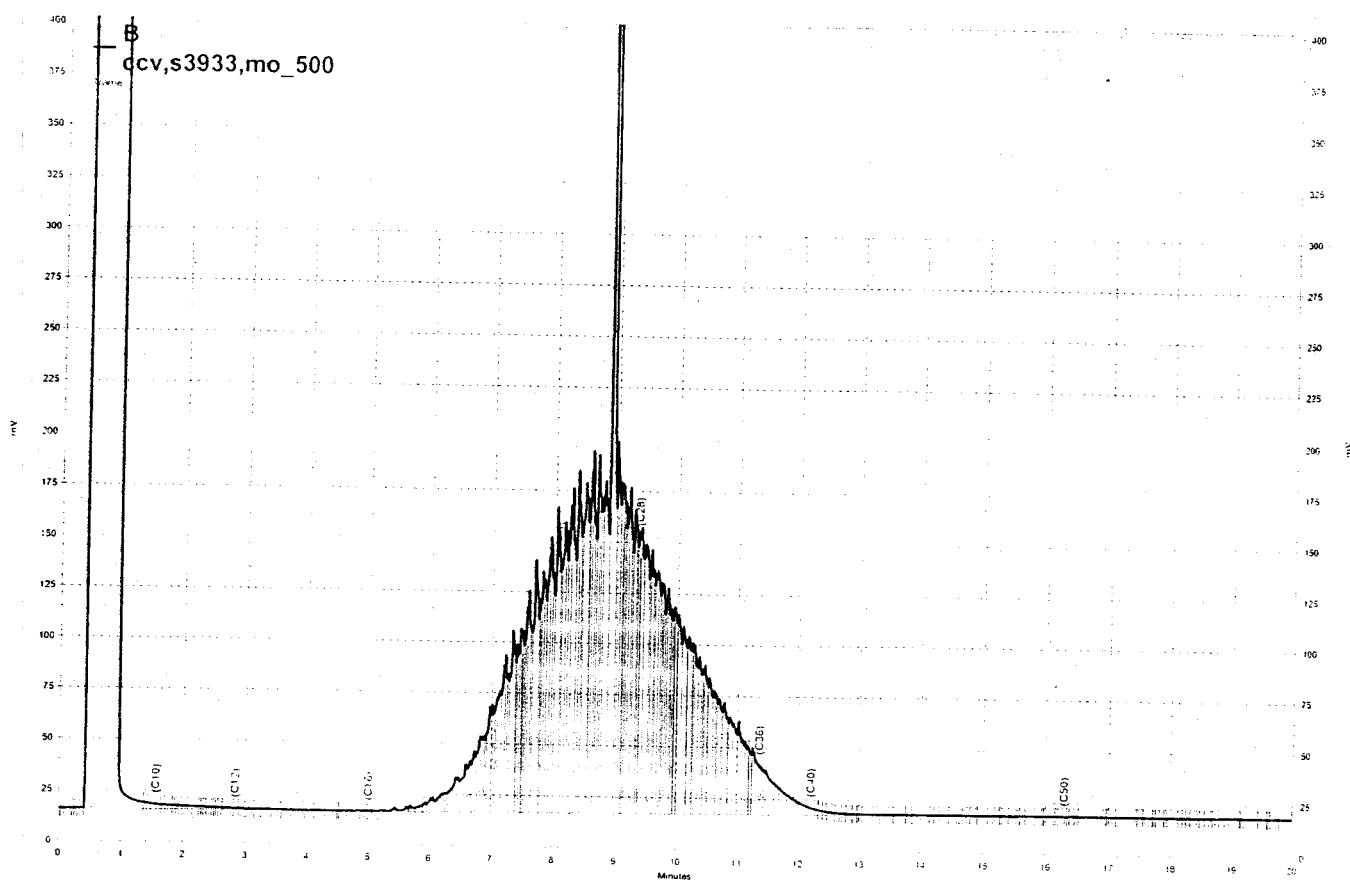
Surrogate	%REC	Limits
Hexacosane	92	65-135

H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit



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Diesel



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Motor Oil



Batch QC Report

Total Extractable Hydrocarbons

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC352951	Batch#:	116659
Matrix:	Water	Prepared:	08/22/06
Units:	ug/L	Analyzed:	08/23/06

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,532	101	65-135

Surrogate	%REC	Limits
Hexacosane	102	65-135



Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	BB3GW100	Batch#:	116659
MSS Lab ID:	188774-003	Sampled:	08/15/06
Matrix:	Water	Received:	08/16/06
Units:	ug/L	Prepared:	08/22/06
Diln Fac:	1.000	Analyzed:	08/23/06

Type: MS
Lab ID: QC352952

Cleanup Method: EPA 3630C

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C12-C24	21.02	2,500	2,419	96	65-135

Surrogate	%REC	Limits
Hexacosane	99	65-135

Type: MSD
Lab ID: QC352953

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,303	91	65-135	5	35

Surrogate	%REC	Limits
Hexacosane	94	65-135

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188774 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 166285577001
Units : mg/L

Name : gc15bds1cal7/18/06
Date : 17-JUL-2006 18:35
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	198b017	166285577017	DSL_10	17-JUL-2006 18:35	S3433
L2	198b018	166285577018	DSL_100	17-JUL-2006 19:02	S3434
L3	198b019	166285577019	DSL_250	17-JUL-2006 19:29	S3435
L4	198b020	166285577020	DSL_500	17-JUL-2006 19:57	S3436
L5	198b021	166285577021	DSL_1000	17-JUL-2006 20:25	S3437
L6	198b022	166285577022	DSL_2500	17-JUL-2006 20:52	S3438
L7	198b023	166285577023	DSL_5000	17-JUL-2006 21:20	S3432

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2	MnR^2	MxRSD	F1g
Diesel C12-C24	71951	59765	58006	59298	58068	58873	60144	AVRG		1.64E-5		60872	8	0.995	20	

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188774 GCSV Water
EPA 8015B

Inst : GC15B
Calnum : 166285577001

Name : gc15bdslcal7/18/06
Cal Date: 17-JUL-2006

ICV 166285577025 (198b025 17-JUL-2006) stds: S3718

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	60872	58055	500.0	476.9	mg/L	-5	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188774 GCSV Water: EPA 8015B

Inst : GC15B
 Calnum : 166311670001
 Units : mg/L

Name : motor oil
 Date : 04-AUG-2006 17:18
 X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	216D010	166311670010	MO_50	04-AUG-2006 17:18	S3326
L2	216D011	166311670011	MO_250	04-AUG-2006 17:45	S3327
L3	216D012	166311670012	MO_500	04-AUG-2006 18:13	S3328
L4	216D013	166311670013	MO_1000	04-AUG-2006 18:40	S3329
L5	216D014	166311670014	MO_2500	04-AUG-2006 19:08	S3330
L6	216D015	166311670015	MO_5000	04-AUG-2006 19:35	S3325

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	AVG	r ²	MNR ²	MRSD	Flg
Motor Oil C24-C36	44384	46840	44251	42635	36463	30073	AVRG		2.45E-5		40774	15	0.995	20	

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor
 Page 1 of 1

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188774 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 166285577003
Units : mg/L

Name : gc15hexcal17/18/06
Date : 18-JUL-2006 03:47
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Std
L1	198B037	166285577037	HEX_5	18-JUL-2006 03:47	S3671
L2	198B038	166285577038	HEX_10	18-JUL-2006 04:14	S3672
L3	198B039	166285577039	HEX_25	18-JUL-2006 04:42	S3673
L4	198B040	166285577040	HEX_50	18-JUL-2006 05:10	S3674
L5	198B041	166285577041	HEX_75	18-JUL-2006 05:38	S3675

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ²	Mmr ²	MxrSD	Flg
Hexacosane	71177	71934	69538	70527	71596	AVRG		1.41E-5		70954	1	0.995	20	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188774 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 176265447001
Units : mg/L

Name : diesel
Date : 03-JUL-2006 09:02
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	184a003	176265447003	DSL_10	03-JUL-2006 09:02	S3433
L2	184a004	176265447004	DSL_100	03-JUL-2006 09:29	S3434
L3	184a005	176265447005	DSL_250	03-JUL-2006 09:57	S3435
L4	184a006	176265447006	DSL_500	03-JUL-2006 10:25	S3436
L5	184a007	176265447007	DSL_1000	03-JUL-2006 10:52	S3437
L6	184a008	176265447008	DSL_2500	03-JUL-2006 11:19	S3438
L7	184a009	176265447009	DSL_5000	03-JUL-2006 12:57	S3432

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	%RSD	MNR ²	MxRSD	Flg
Diesel C12-C24	70879	71444	75567	77980	76533	78376	79841	AVRG		1.32E-5		75803	5		0.995	20	

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor
Page 1 of 1

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188774 GCSV Water
EPA 8015B

Inst : GC17A
Calnum : 176265447001

Name : diesel
Cal Date: 03-JUL-2006

ICV 176265447011 (184a011 03-JUL-2006) stds: S3623

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	75803	78704	500.0	519.1	mg/L	4	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188774 GCSV Water: EPA 8015B

Inst : GC17A
 Calnum : 176290175001
 Units : mg/L

Name : gcl7mocal7/21/06
 Date : 20-JUL-2006 19:04
 X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	201A009	176290175009	MO_50	20-JUL-2006 19:04	S3326
L2	201A010	176290175010	MO_250	20-JUL-2006 19:31	S3327
L3	201A011	176290175011	MO_500	20-JUL-2006 19:58	S3328
L4	201A012	176290175012	MO_1000	20-JUL-2006 20:25	S3329
L5	201A013	176290175013	MO_2500	20-JUL-2006 20:53	S3330
L6	201A014	176290175014	MO_5000	20-JUL-2006 21:20	S3325

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ²	%RSD	MOR ²	MXRSD	Fig
Motor Oil C24-C36	45862	53667	50318	54190	50530	52699	AVRG		1.95E-5		51211	6	0.995		20	

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor
 Page 1 of 1

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188774 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 176265447003
Units : mg/L

Name : hexacosane
Date : 03-JUL-2006 19:19
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	184a023	176265447023	HEX_5	03-JUL-2006 19:19	S3671
L2	184a024	176265447024	HEX_10	03-JUL-2006 19:46	S3672
L3	184a025	176265447025	HEX_25	03-JUL-2006 20:13	S3673
L4	184a026	176265447026	HEX_50	03-JUL-2006 20:41	S3674
L5	184a027	176265447027	HEX_75	03-JUL-2006 21:08	S3675

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ²	MUR ²	MXRSD	F1g
Hexacosane	97867	96188	94060	92872	105645	AVRG		1.03E-5		97326	5	0.995	20	

Instrument amount = a0 + response * a1 + response^2 * a2; AVRg=Average response factor
Page 1 of 1

CONTINUING CALIBRATION SUMMARY FOR 188774 GCSV Water
Curtis & Tompkins Laboratories

Analyte: Diesel C12-C24

Instid	Ch	Segnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D Flags
						RF/CF	RF/CF					
GC15B	B	166338858013	23-AUG-2006 15:05	166285577001	17-JUL-2006	60872	61611	1000.0	1012.1	mg/L	1	15
GC15B	B	166338858028	24-AUG-2006 00:13	166285577001	17-JUL-2006	60872	62321	250.00	255.95	mg/L	2	15
GC15B	B	166338858040	24-AUG-2006 05:45	166285577001	17-JUL-2006	60872	61173	500.00	502.47	mg/L	0	15
GC15B	B	166338858047	24-AUG-2006 13:01	166285577001	17-JUL-2006	60872	60324	1000.0	990.99	mg/L	-1	15
GC17A	A	176338855014	23-AUG-2006 14:54	176265447001	03-JUL-2006	75803	68999	1000.0	910.24	mg/L	-9	15
GC17A	A	176338855029	24-AUG-2006 00:40	176265447001	03-JUL-2006	75803	68839	250.00	227.03	mg/L	-9	15

CONTINUING CALIBRATION SUMMARY FOR 188774 GCSV Water
Curtis & Tompkins Laboratories

Analyte: Motor Oil C24-C36

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D	Max	%D	Flags
						RF/CF	RF/CF							
GC15B	B	166338858014	23-AUG-2006 15:33	166311670001	04-AUG-2006	40774	40522	500.00	496.91	mg/L	-1	15		
GC15B	B	166338858029	24-AUG-2006 00:41	166311670001	04-AUG-2006	40774	39392	500.00	483.04	mg/L	-3	15		
GC15B	B	166338858041	24-AUG-2006 06:13	166311670001	04-AUG-2006	40774	38715	500.00	474.74	mg/L	-5	15		
GC15B	B	166338858048	24-AUG-2006 13:28	166311670001	04-AUG-2006	40774	39772	500.00	487.70	mg/L	-2	15		
GC17A	A	176338855015	23-AUG-2006 15:21	176290175001	20-JUL-2006	51211	44653	500.00	435.97	mg/L	-13	15		
GC17A	A	176338855027	23-AUG-2006 23:46	176290175001	20-JUL-2006	51211	43431	500.00	424.04	mg/L	-15	15		

CONTINUING CALIBRATION SUMMARY FOR 188774 GCSV Water
Curtis & Tompkins Laboratories

Analyte: Hexacosane

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D	Max	%D	Flags
						RF/CF	RF/CF							
GC15B	B	166338858013	23-AUG-2006 15:05	166285577003	18-JUL-2006	70954	71379	50.000	50.299	mg/L	1	15		
GC15B	B	166338858028	24-AUG-2006 00:13	166285577003	18-JUL-2006	70954	70032	50.000	49.350	mg/L	-1	15		
GC15B	B	166338858040	24-AUG-2006 05:45	166285577003	18-JUL-2006	70954	70410	50.000	49.616	mg/L	-1	15		
GC15B	B	166338858047	24-AUG-2006 13:01	166285577003	18-JUL-2006	70954	69580	50.000	49.032	mg/L	-2	15		
GC17A	A	176338855014	23-AUG-2006 14:54	176265447003	03-JUL-2006	97326	85212	50.000	43.776	mg/L	-12	15		
GC17A	A	176338855027	23-AUG-2006 23:46	176265447003	03-JUL-2006	97326	91435	50.000	46.973	mg/L	-6	15		

SEQUENCE SUMMARY FOR 188774 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 176265447 Instrument: GC17A Gas Chromatograph #17 (Channel A) TEH Begun: 03-JUL-2006
 Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
001	184a001	X	PRIMER			03-JUL-2006 08:07	1.0								
002	184a002	X	IB			03-JUL-2006 08:35	1.0								
003	184a003	ICAL	DSL_10			03-JUL-2006 09:02	1.0								
004	184a004	ICAL	DSL_100			03-JUL-2006 09:29	1.0								
005	184a005	ICAL	DSL_250			03-JUL-2006 09:57	1.0								
006	184a006	ICAL	DSL_500			03-JUL-2006 10:25	1.0								
007	184a007	ICAL	DSL_1000			03-JUL-2006 10:52	1.0								
008	184a008	ICAL	DSL_2500			03-JUL-2006 11:19	1.0								
009	184a009	ICAL	DSL_5000			03-JUL-2006 12:57	1.0								
010	184a010	X	IB			03-JUL-2006 13:24	1.0								
011	184a011	ICV	DSL_500			03-JUL-2006 14:19	1.0								
012	184a012	X	IB			03-JUL-2006 14:46	1.0								
013	184a013	ICV	DSL_500			03-JUL-2006 15:13	1.0								
014	184a014	X	IB			03-JUL-2006 15:40	1.0								
015	184a015	ICAL	MO_50			03-JUL-2006 16:08	1.0								
016	184a016	ICAL	MO_250			03-JUL-2006 17:03	1.0								
017	184a017	ICAL	MO_500			03-JUL-2006 17:30	1.0								
018	184a018	ICAL	MO_1000			03-JUL-2006 17:57	1.0								
019	184a019	ICAL	MO_2500			03-JUL-2006 18:24	1.0								
020	184a020	ICAL	MO_5000			03-JUL-2006 18:52	1.0								
021	184a021	X	IB			03-JUL-2006 19:19	1.0								
022	184a022	X	IB			03-JUL-2006 19:46	1.0								
023	184a023	ICAL	HEX_5			03-JUL-2006 20:13	1.0								
024	184a024	ICAL	HEX_10			03-JUL-2006 20:41	1.0								
025	184a025	ICAL	HEX_25			03-JUL-2006 21:08	1.0								
026	184a026	ICAL	HEX_50			03-JUL-2006 21:35	1.0								
027	184a027	ICAL	HEX_75			03-JUL-2006 22:02	1.0								
028	184a028	X	IB			03-JUL-2006 22:30	1.0								
029	184a029	X	IB												
030	184a030	ICAL	JET_10												

Stds used: 1=S3433 2=S3434 3=S3435 4=S3436 5=S3437 6=S3438 7=S3432 8=S3623 9=S3326 10=S3327 11=S3328 12=S3329 13=S3330 14=S3325 15=S3671 16=S3672 17=S3673 18=S3674 19=S3675
 20=S3614 21=S3615 22=S3616 23=S3617 24=S3618 25=S3619 26=S3526

SEQUENCE SUMMARY FOR 188774 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 176265447 Instrument: GC17A Gas Chromatograph #17 (Channel A) TEH Begun: 03-JUL-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Std	Used
031	184a031	ICAL	JET_100			03-JUL-2006 22:57	1.0						21	
032	184a032	ICAL	JET_500			03-JUL-2006 23:24	1.0						22	
033	184a033	ICAL	JET_1000			03-JUL-2006 23:52	1.0						23	
034	184a034	ICAL	JET_2000			04-JUL-2006 00:19	1.0						24	
035	184a035	ICAL	JET_3000			04-JUL-2006 00:46	1.0						25	
036	184a036	ICAL	JET_5000			04-JUL-2006 01:14	1.0						26	
037	184a037	X	IB			04-JUL-2006 01:41	1.0							
038	184a038	X	IB			04-JUL-2006 02:08	1.0							

Std's used: 1=S3433 2=S3434 3=S3435 4=S3436 5=S3437 6=S3438 7=S3432 8=S3623 9=S3326 10=S3327 11=S3328 12=S3329 13=S3330 14=S3325 15=S3671 16=S3672 17=S3673 18=S3674 19=S3675
20=S3614 21=S3615 22=S3616 23=S3617 24=S3618 25=S3619 26=S3526

SEQUENCE SUMMARY FOR 188774 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 166285577 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 17-JUL-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
001	198b001	X	PRIMER			17-JUL-2006 07:37	1.0								
002	198b002	X	IB			17-JUL-2006 08:04	1.0								
003	198b003	X	DSL_500			17-JUL-2006 08:39	1.0								
004	198b004	X	MO_500			17-JUL-2006 09:06	1.0								
005	198b005	X	MO_500			17-JUL-2006 09:40	1.0								
006	198b006	X	IB			17-JUL-2006 12:00	1.0								
007	198b007	CCV	DSL_500			17-JUL-2006 12:28	1.0								
008	198b008	CCV	MO_500			17-JUL-2006 12:55	1.0								
009	198b009	CCV	MO_500			17-JUL-2006 13:42	1.0								
010	198b010	X	PRIMER			17-JUL-2006 14:39	1.0								
011	198b011	X	IB			17-JUL-2006 15:07	1.0								
012	198b012	X	CM			17-JUL-2006 15:34	1.0								
013	198b013	X	CM			17-JUL-2006 16:02	1.0								
014	198b014	CCV	DSL_500			17-JUL-2006 16:29	1.0								
015	198b015	CCV	MO_500			17-JUL-2006 16:57	1.0								
016	198b016	X	IB			17-JUL-2006 18:07	1.0								
017	198b017	ICAL	DSL_10			17-JUL-2006 18:35	1.0								
018	198b018	ICAL	DSL_100			17-JUL-2006 19:02	1.0								
019	198b019	ICAL	DSL_250			17-JUL-2006 19:29	1.0								
020	198b020	ICAL	DSL_500			17-JUL-2006 20:25	1.0								
021	198b021	ICAL	DSL_1000			17-JUL-2006 20:52	1.0								
022	198b022	ICAL	DSL_2500			17-JUL-2006 21:20	1.0								
023	198b023	ICAL	DSL_5000			17-JUL-2006 21:47	1.0								
024	198b024	X	IB			17-JUL-2006 22:15	1.0								
025	198b025	ICV	DSL_500			17-JUL-2006 22:42	1.0								
026	198b026	X	ICV			17-JUL-2006 23:10	1.0								
027	198b027	X	IB			17-JUL-2006 23:37	1.0								
028	198b028	X	IB			18-JUL-2006 00:05	1.0								
029	198b029	ICAL	MO_50			18-JUL-2006 00:33	1.0								
030	198b030	ICAL	MO_250												

Stds used: 1=S3741 2=S3741 3=03SS315 4=03SS316 5=S3433 6=S3434 7=S3435 8=S3436 9=S3437 10=S3438 11=S3432 12=S3326 13=S3327 14=S3328 15=S3329 16=S3330 17=S3325 18=S3671
19=S3672 20=S3673 21=S3674 22=S3675

SEQUENCE SUMMARY FOR 188774 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 166285577 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 17-JUL-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	stds	Used	>LR
031	198b031	ICAL	MO_500			18-JUL-2006 01:00	1.0						14		
032	198b032	ICAL	MO_1000			18-JUL-2006 01:28	1.0						15		
033	198b033	ICAL	MO_2500			18-JUL-2006 01:56	1.0						16		
034	198b034	ICAL	MO_5000			18-JUL-2006 02:24	1.0						17		
035	198b035	X	IB			18-JUL-2006 02:51	1.0								
036	198b036	X	IB			18-JUL-2006 03:19	1.0								
037	198b037	ICAL	HEX_5			18-JUL-2006 03:47	1.0						18		
038	198b038	ICAL	HEX_10			18-JUL-2006 04:14	1.0						19		
039	198b039	ICAL	HEX_25			18-JUL-2006 04:42	1.0						20		
040	198b040	ICAL	HEX_50			18-JUL-2006 05:10	1.0						21		
041	198b041	ICAL	HEX_75			18-JUL-2006 05:38	1.0						22		
042	198b042	X	IB			18-JUL-2006 06:06	1.0								
043	198b043	X	IB			18-JUL-2006 06:33	1.0								

StdS used: 1=S3718 2=S3741 3=03SS315 4=03SS316 5=S3433 6=S3434 7=S3435 8=S3436 9=S3437 10=S3438 11=S3432 12=S3326 13=S3327 14=S3328 15=S3329 16=S3330 17=S3325 18=S3671
19=S3672 20=S3673 21=S3674 22=S3675

SEQUENCE SUMMARY FOR 188774 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 176290175 Instrument: GC17A Gas Chromatograph #17 (Channel A) TEH Begun: 20-JUL-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	stds	Used	>LR
001	201a001	X	PRIMER			20-JUL-2006	12:15	1.0							
002	201a002	X	IB			20-JUL-2006	12:43	1.0							
003	201a003	X	CM			20-JUL-2006	13:22	1.0					1		
004	201a004	X	CM			20-JUL-2006	13:49	1.0					2		
005	201a005	CCV	DSL_500			20-JUL-2006	14:17	1.0					3		
006	201a006	CCV	MO_500			20-JUL-2006	14:44	1.0	2	3			3		
007	201a007	X	IB			20-JUL-2006	18:09	1.0					4		
008	201a008	X	IB			20-JUL-2006	18:36	1.0							
009	201a009	ICAL	MO_50			20-JUL-2006	19:04	1.0					5		
010	201a010	ICAL	MO_250			20-JUL-2006	19:31	1.0					6		
011	201a011	ICAL	MO_500			20-JUL-2006	19:58	1.0					7		
012	201a012	ICAL	MO_1000			20-JUL-2006	20:25	1.0					8		
013	201a013	ICAL	MO_2500			20-JUL-2006	21:20	1.0					9		
014	201a014	ICAL	MO_5000			20-JUL-2006	21:47	1.0					10		
015	201a015	X	IB			20-JUL-2006	22:14	1.0							
016	201a016	X	IB			20-JUL-2006	22:14	1.0							

Std's used: 1=03SSS315 2=03SSS316 3=S3623 4=S3741 5=S3326 6=S3327 7=S3328 8=S3329 9=S3330 10=S3325

SEQUENCE SUMMARY FOR 188774 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 166311670 Instrument: GC15B
Analytical Method: EPA 8015B

Gas Chromatograph #15 (Channel B) TEH Begun: 04-AUG-2006
SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Std	Used	>LR
001	216b001	X	PRIMER			04-AUG-2006	10:30	1.0							
003	216b003	X	IB			04-AUG-2006	12:03	1.0							
004	216b004	X	IB			04-AUG-2006	12:31	1.0							
005	216b005	X	CM			04-AUG-2006	12:58	1.0							
006	216b006	CCV	DSL_250			04-AUG-2006	13:26	1.0		3			1		
007	216b007	CCV	MO_500			04-AUG-2006	13:53	1.0		3			2		
008	216b008	CCV	JP5_250			04-AUG-2006	14:21	1.0	5	3			3		
009	216b009	X	IB			04-AUG-2006	16:51	1.0		3			4		
010	216b010	ICAL	MO_50			04-AUG-2006	17:18	1.0					5		
011	216b011	ICAL	MO_250			04-AUG-2006	17:45	1.0					6		
012	216b012	ICAL	MO_500			04-AUG-2006	18:13	1.0					7		
013	216b013	ICAL	MO_1000			04-AUG-2006	18:40	1.0					8		
014	216b014	ICAL	MO_2500			04-AUG-2006	19:08	1.0					9		
015	216b015	ICAL	MO_5000			04-AUG-2006	19:35	1.0					10		
016	216b016	X	IB			04-AUG-2006	20:03	1.0							

Stds used: 1=S4049 2=S3717 3=S3933 4=S3333 5=S3326 6=S3327 7=S3328 8=S3329 9=S3330 10=S3325

SEQUENCE SUMMARY FOR 188774 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 166338858 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 23-AUG-2006
 Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used
001	235b001	X	PRIMER			23-AUG-2006 07:38	1.0						
002	235b002	X	IB			23-AUG-2006 08:05	1.0						
003	235b003	CCV	DSL_500			23-AUG-2006 08:33	1.0	1.0				1	
004	235b004	CCV	MO_500			23-AUG-2006 09:01	1.0	1.0				2	
005	235b005	BLANK	QC352984			23-AUG-2006 09:35	1.0	0.0996	2				
006	235b006	BS	QC352985			23-AUG-2006 10:04	1.0	0.1001	8				
007	235b007	BSD	QC352986			23-AUG-2006 10:31	1.0	0.1004					
008	235b008	SAMPLE	188881-001			23-AUG-2006 10:59	1.0	0.1002					
009	235b009	SAMPLE	188881-002			23-AUG-2006 11:27	1.0	0.1000					
010	235b010	SAMPLE	188881-003			23-AUG-2006 12:39	2.0	0.1001					
011	235b011	SAMPLE	188862-007	S	116627	23-AUG-2006 14:37	1.0						
012	235b012	X	IB			23-AUG-2006 15:05	1.0						
013	235b013	CCV	DSL_1000			23-AUG-2006 15:33	1.0						
014	235b014	CCV	MO_500			23-AUG-2006 17:33	1.0						
015	235b015	CCV	JP5_250			23-AUG-2006 18:01	1.0						
016	235b016	CCV	JP8_250			23-AUG-2006 19:09	1.0						
017	235b017	X	QC352950	S	116659	23-AUG-2006 19:36	1.0						
018	235b018	LCS	QC352951	S	116659	23-AUG-2006 20:04	1.0						
019	235b019	MSS	188774-003	S	116659	23-AUG-2006 20:32	1.0						
020	235b020	MS	QC352952	S	116659	23-AUG-2006 21:00	1.0						
021	235b021	MSD	QC352953	S	116659	23-AUG-2006 21:28	1.0						
022	235b022	SAMPLE	188863-003			23-AUG-2006 21:55	1.0						
023	235b023	X	IB			23-AUG-2006 22:23	1.0						
024	235b024	SAMPLE	188867-001	S	116659	23-AUG-2006 22:50	1.0						
025	235b025	SAMPLE	188867-002	S	116659	23-AUG-2006 23:18	1.0						
026	235b026	SAMPLE	188774-001	S	116659	23-AUG-2006 23:46	1.0						
027	235b027	X	IB			24-AUG-2006 00:13	1.0						
028	235b028	CCV	DSL_250			24-AUG-2006 00:41	1.0						
029	235b029	CCV	MO_500			24-AUG-2006 01:08	1.0						
030	235b030	CCV	JP5_250										

Stds used: 1=S4053 2=S3933 3=S4054 4=S4077 5=S3510 6=S3717
 Flags used: eh=out of extract hold

SEQUENCE SUMMARY FOR 188774 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 166338858 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 23-AUG-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
031	235b031	CCV	JP8_250			24-AUG-2006	01:36 1.0	1.0			3	5		
032	235b032	X	CCV			24-AUG-2006	02:04 1.0					6		
033	235b033	X	CCV			24-AUG-2006	02:31 1.0					2		
034	235b034	X	CCV			24-AUG-2006	02:59 1.0					4		
035	235b035	X	CCV			24-AUG-2006	03:26 1.0					5		
036	235b036	SAMPLE	188888-001			24-AUG-2006	03:54 1.0	0.1008			3			
037	235b037	SAMPLE	188888-002			24-AUG-2006	04:22 1.0	0.1009			3			
038	235b038	SAMPLE	188888-003			24-AUG-2006	04:50 5.0	0.1003			3			
039	235b039	X	IB			24-AUG-2006	05:17 1.0							
040	235b040	CCV	DSL_500			24-AUG-2006	05:45 1.0	1.0			3	1		
041	235b041	CCV	MO_500			24-AUG-2006	06:13 1.0	1.0			2	2		
042	235b042	CCV	JP5_250			24-AUG-2006	10:01 1.0	1.0			3	4		
043	235b043	CCV	JP8_250			24-AUG-2006	10:29 1.0	1.0			3	5		
044	235b044	BLANK	QC352950 S			24-AUG-2006	10:56 1.0	0.005			3			
045	235b045	SAMPLE	188863-003			24-AUG-2006	11:44 1.0	0.005			3			
046	235b046	SAMPLE	188774-002 S			24-AUG-2006	12:12 1.0	0.005			3			
047	235b047	CCV	DSL_1000			24-AUG-2006	13:01 1.0	1.0			3	3		
048	235b048	CCV	MO_500			24-AUG-2006	13:28 1.0	1.0			2	2		
049	235b049	CCV	JP5_250			24-AUG-2006	13:56 1.0	1.0			3	4		
050	235b050	CCV	JP8_250			24-AUG-2006	14:23 1.0	1.0			3	5		
051	235b051	X	TANK #3			24-AUG-2006	15:24 1.0							
052	235b052	SAMPLE	188905-003 S			24-AUG-2006	16:14 1.0	0.09976			3			
053	235b053	SAMPLE	188905-006 S			24-AUG-2006	16:41 1.0	0.1001			3			
054	235b054	SAMPLE	188897-002			24-AUG-2006	17:09 1.0	0.1006			1			2: BUNKC:=5423.01
055	235b055	SAMPLE	188897-001			24-AUG-2006	17:36 1.0	0.1000			1			1: KER:10=3037.04
056	235b056	SAMPLE	188897-003			24-AUG-2006	18:04 1.0	0.09976			1			
057	235b057	X	IB			24-AUG-2006	18:31 1.0							
058	235b058	SAMPLE	188897-006			24-AUG-2006	18:59 1.0	0.1008			1			
059	235b059	SAMPLE	188897-005			24-AUG-2006	19:26 1.0	0.1005			2			11: JP8:10=9498.54
060	235b060	SAMPLE	188897-004			24-AUG-2006	19:54 1.0	0.1003			2			13: BUNKC:=14146.0

Stds used: 1=S4053 2=S3933 3=S4054 4=S4077 5=S3510 6=S3717
Flags used: eh=out of extract hold

SEQUENCE SUMMARY FOR 188774 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 166338858 Instrument: GC15B
Analytical Method: EPA 8015B

Gas Chromatograph #15 (Channel B) TEH
SOP Version: TEH_rv12

Begun: 23-AUG-2006

#	Filename	Type	Sample	enum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used
061	235b061	SAMPLE	188870-001	S	116727	Soil	24-AUG-2006 20:22	1.0	0.1006					
062	235b062	SAMPLE	188870-002	S	116727	Soil	24-AUG-2006 20:50	2.0	0.1006					7:BUNKC:=13184.2
063	235b063	X	IB				24-AUG-2006 21:17	1.0						6:BUNKC:=13540.0
064	235b064	CCV	DSL_1000				24-AUG-2006 21:45	1.0	1.0					
065	235b065	CCV	MO_500				24-AUG-2006 22:12	1.0	1.0					
066	235b066	X	CCV				24-AUG-2006 22:40	1.0						
067	235b067	X	CCV				24-AUG-2006 23:08	1.0						
068	235b068	SAMPLE	188870-005	S	116727	Soil	24-AUG-2006 23:35	1.0	0.1007					3:BUNKC:=9505.97
069	235b069	SAMPLE	188870-004	S	116727	Soil	25-AUG-2006 00:03	1.0	0.1005					3:BUNKC:=8595.48
070	235b070	X	IB				25-AUG-2006 00:31	1.0						
071	235b071	BLANK	QC353376				25-AUG-2006 00:58	1.0	40.0					
072	235b072	BS	QC353377				25-AUG-2006 01:26	1.0	40.0					
073	235b073	BSD	QC353378				25-AUG-2006 01:53	1.0	40.0					
074	235b074	SAMPLE	188898-003				25-AUG-2006 02:21	1.0	39.72					
075	235b075	SAMPLE	188898-001				25-AUG-2006 02:49	1.0	39.68					
076	235b076	SAMPLE	188898-004				25-AUG-2006 03:16	1.0	39.88					
077	235b077	X	IB				25-AUG-2006 07:37	1.0						2:BUNKC:=6270.75
078	235b078	SAMPLE	188898-002				25-AUG-2006 08:05	1.0	40.11					
079	235b079	SAMPLE	188870-003	S	116727	Soil	25-AUG-2006 08:33	2.0	0.1003					12:BUNKC:=19182.4
080	235b080	X	IB				25-AUG-2006 09:00	1.0						
081	235b081	CCV	DSL_250				25-AUG-2006 09:28	1.0	1.0					
082	235b082	CCV	MO_500				25-AUG-2006 09:56	1.0	1.0					
083	235b083	BLANK	QC346755				25-AUG-2006 12:04	1.0						
084	235b084	IDOC	QC346756				25-AUG-2006 12:31	1.0	0.09934					eh
085	235b085	IDOC	QC346757				25-AUG-2006 12:59	1.0	0.09934					eh
086	235b086	IDOC	QC346758				25-AUG-2006 13:27	1.0	0.09936					eh
087	235b087	IDOC	QC346759				25-AUG-2006 13:54	1.0	0.0999					eh
088	235b088	X	IB				25-AUG-2006 14:22	1.0						
089	235b089	BLANK	QC353324				25-AUG-2006 14:50	1.0						
090	235b090	IDOC	QC353325				25-AUG-2006 15:17	1.0	0.1004					

Stds used: 1=S4053 2=S3933 3=S4054 4=S4077 5=S3510 6=S3717
Flags used: eh=out of extract hold

SEQUENCE SUMMARY FOR 188774 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 166338858 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 23-AUG-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Std	Used	>LR
091	235b091	IDOC	QC353326	116754	Soil	25-AUG-2006 15:45	1.0	0.1001	7	3				
092	235b092	IDOC	QC353327	116754	Soil	25-AUG-2006 16:12	1.0	0.1001		3				
093	235b093	IDOC	QC353328	116754	Soil	25-AUG-2006 16:40	1.0	0.0994		3				
094	235b094	X	IB			25-AUG-2006 17:08	1.0							
095	235b095	CCV	DSL_500			25-AUG-2006 17:35	1.0	1.0		3				
096	235b096	X	CCV			25-AUG-2006 18:03	1.0							
097	235b097	BLANK	QC353361	116766	Soil	25-AUG-2006 18:31	1.0							
098	235b098	IDOC	QC353362	116766	Soil	25-AUG-2006 18:59	1.0	0.0993		3				
099	235b099	IDOC	QC353363	116766	Soil	25-AUG-2006 19:27	1.0	0.1009		3				
100	235b100	IDOC	QC353364	116766	Soil	25-AUG-2006 19:54	1.0	0.1009		3				
101	235b101	IDOC	QC353365	116766	Soil	25-AUG-2006 20:22	1.0	0.0998		3				
102	235b102	CCV	DSL_1000			25-AUG-2006 20:50	1.0	1.0		3				
103	235b103	X	CCV			25-AUG-2006 21:17	1.0							

Std's used: 1=S4053 2=S3933 3=S4054 4=S4077 5=S3510 6=S3717
Flags used: eh=out of extract hold

SEQUENCE SUMMARY FOR 188774 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 176338855 Instrument: GC17A
Analytical Method: EPA 8015B

Gas Chromatograph #17 (Channel A) TEH Begun: 23-AUG-2006
SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
001	235a001	X	PRIMER			23-AUG-2006 07:35	1.0							
002	235a002	X	IB			23-AUG-2006 08:02	1.0							
003	235a003	CCV	DSL_500			23-AUG-2006 08:29	1.0	1.0				1		
004	235a004	CCV	MO_500			23-AUG-2006 08:57	1.0							
005	235a005	X	QC352816			23-AUG-2006 09:54	1.0	1.0	2		3	2		
006	235a006	CCV	KERO_250			23-AUG-2006 10:22	1.0							
007	235a007	BLANK	QC352816 S			23-AUG-2006 10:56	1.0	1.0			3	3		
008	235a008	BLANK	QC352561 S			23-AUG-2006 11:23	1.0	0.09936	16		3			
009	235a009	SAMPLE	188857-001			23-AUG-2006 11:51	1.0	0.005	10		3			
010	235a010	SAMPLE	188857-004			23-AUG-2006 12:18	25.0	0.1005			3			
011	235a011	SAMPLE	188825-005 S			23-AUG-2006 12:51	1.0	0.09982			3			
012	235a012	X	TC			23-AUG-2006 14:00	1.0	0.005			3			
013	235a013	X	TC			23-AUG-2006 14:27	1.0							
014	235a014	CCV	DSL_1000			23-AUG-2006 15:21	1.0	1.0			3	4		
015	235a015	CCV	MO_500			23-AUG-2006 16:06	1.0	1.0	2		3	5		
016	235a016	CCV	KERO_250			23-AUG-2006 19:12	1.0	1.0			3	3		
017	235a017	SAMPLE	188774-002 S			23-AUG-2006 19:39	1.0	0.005			3			
018	235a018	SAMPLE	188774-004 S			23-AUG-2006 20:06	1.0	0.005			3			
019	235a019	SAMPLE	188774-007 S			23-AUG-2006 20:34	1.0	0.005			3			
020	235a020	SAMPLE	188774-008 S			23-AUG-2006 21:02	1.0	0.005			3			
021	235a021	X	IB			23-AUG-2006 21:29	1.0							
022	235a022	SAMPLE	188774-009 S			23-AUG-2006 21:56	1.0	0.005			3			
023	235a023	SAMPLE	188774-010 S			23-AUG-2006 22:24	1.0	0.005			3			
024	235a024	SAMPLE	188774-012 S			23-AUG-2006 22:51	1.0	0.005			3			
025	235a025	X	IB			23-AUG-2006 23:19	1.0							
026	235a026	XCCV	DSL_250			23-AUG-2006 23:46	1.0	1.0			3	6		
027	235a027	CCV	MO_500			24-AUG-2006 00:13	1.0	1.0	2		3	5		
028	235a028	CCV	KERO_250			24-AUG-2006 00:40	1.0	1.0			3	3		
029	235a029	CCV	DSL_250			24-AUG-2006 01:08	1.0	1.0			3	6		
030	235a030	X	CCV			24-AUG-2006 01:35	1.0					5		
031	235a031	X	CCV			24-AUG-2006 01:35	1.0					3		

Stds used: 1=S4053 2=S3933 3=S3880 4=S4054 5=S3934 6=S3717

SEQUENCE SUMMARY FOR 188774 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 176338855 Instrument: GCI7A Gas Chromatograph #17 (Channel A) TEH Begun: 23-AUG-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	lenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used
032	235a032	SAMPLE	188886-001	116686	Soil	24-AUG-2006	02:02	1.0	0.09913				>LR 1:BUNKC:=5036.33
033	235a033	SAMPLE	188886-005	116686	Soil	24-AUG-2006	02:29	1.0	0.1002				
034	235a034	SAMPLE	188886-002	116686	Soil	24-AUG-2006	02:57	1.0	0.09909	2	1	3	18:BUNKC:=77465.6
035	235a035	SAMPLE	188885-001	116686	Soil	24-AUG-2006	03:24	1.0	0.0995	3	1	3	22:BUNKC:=100742
036	235a036	X	IB			24-AUG-2006	03:52	1.0					
037	235a037	SAMPLE	188910-001	116686	Soil	24-AUG-2006	04:19	1.0	0.1005				
038	235a038	SAMPLE	188910-002	116686	Soil	24-AUG-2006	04:46	1.0	0.1009				
039	235a039	X	IB			24-AUG-2006	05:14	1.0					
040	235a040	CCV	DSL_500			24-AUG-2006	05:41	1.0	1.0				1
041	235a041	CCV	MO_500			24-AUG-2006	06:08	1.0	1.0	2		3	5
042	235a042	CCV	KERO_250			24-AUG-2006	06:36	1.0	1.0			3	3
043	235a043	X	TC			24-AUG-2006	10:04	1.0					
044	235a044	X	TC			24-AUG-2006	10:32	1.0					
045	235a045	SAMPLE	188886-002	116686	Soil	24-AUG-2006	10:59	10.0	0.09909			3	3:BUNKC:=7369.86
046	235a046	SAMPLE	188885-001	116686	Soil	24-AUG-2006	11:27	20.0	0.0995			3	
047	235a047	X	IB			24-AUG-2006	11:54	1.0					
048	235a048	SAMPLE	188770-001	116686	Soil	24-AUG-2006	12:21	20.0	0.09988			3	
049	235a049	XCCV	DSL_1000			24-AUG-2006	12:59	1.0	1.0			3	4
050	235a050	CCV	MO_500			24-AUG-2006	13:26	1.0	1.0	2		3	5
051	235a051	CCV	DSL_1000			24-AUG-2006	13:53	1.0	1.0			3	4
052	235a052	CCV	KERO_250			24-AUG-2006	14:21	1.0	1.0			3	3
053	235a053	X	TC			24-AUG-2006	15:22	1.0					3
054	235a054	X	TC			24-AUG-2006	15:49	1.0					
055	235a055	BLANK	QC353210	S	116727	Soil	24-AUG-2006	16:16	1.0	0.1000	10	1	3
056	235a056	LCS	QC353211	S	116727	Soil	24-AUG-2006	16:47	1.0	0.1009		2	3
057	235a057	MSS	188870-006	S	116727	Soil	24-AUG-2006	17:14	1.0	0.1003	10		3
058	235a058	MS	QC353212	S	116727	Soil	24-AUG-2006	17:41	1.0	0.1004		3	7:BUNKC:=11475.6
059	235a059	MSD	QC353213	S	116727	Soil	24-AUG-2006	18:09	1.0	0.1004		3	7:BUNKC:=11517.6
060	235a060	X	IB			24-AUG-2006	18:37	1.0				3	10:BUNKC:=14634.1
061	235a061	SAMPLE	188902-001	116727	Soil	24-AUG-2006	19:04	1.0	0.09921			3	
062	235a062	SAMPLE	188902-002	116727	Soil	24-AUG-2006	19:32	1.0	0.09964	1		3	12:BUNKC:=13477.1

Stds used: 1=S4053 2=S3933 3=S3880 4=S4054 5=S3934 6=S3717

SEQUENCE SUMMARY FOR 188774 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 176338855 Instrument: GC17A
Analytical Method: EPA 8015B

Gas Chromatograph #17 (Channel A) TEH
SOP Version: TEH_rv12

Begun: 23-AUG-2006

#	Filename	Type	Sample	enum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
063	235a063	SAMPLE	188902-003		116727	Soil	24-AUG-2006 20:00	1.0	0.09976		3				
064	235a064	SAMPLE	188902-005		116727	Soil	24-AUG-2006 20:27	1.0	0.1009		3				
065	235a065	SAMPLE	188895-001		116727	Soil	24-AUG-2006 20:55	5.0	0.1002		3				
066	235a066	X	IB				24-AUG-2006 21:22	1.0			3				
067	235a067	CCV	MO_500				24-AUG-2006 21:49	1.0							
068	235a068	CCV	DSL_250				24-AUG-2006 22:16	1.0	1.0		3				
069	235a069	CCV	KERO_250				24-AUG-2006 22:44	1.0	1.0		3				
070	235a070	X	CCV				24-AUG-2006 23:11	1.0	1.0		3				
071	235a071	X	CCV				24-AUG-2006 23:38	1.0							
072	235a072	X	CCV				25-AUG-2006 00:05	1.0							
073	235a073	SAMPLE	188769-001	S	116727	Miscel	25-AUG-2006 00:32	1.0	0.1001		3				
074	235a074	SAMPLE	188837-001	S	116703	Water	25-AUG-2006 01:00	1.0	0.005		3				
075	235a075	SAMPLE	188837-008	S	116703	Water	25-AUG-2006 01:27	1.0	0.005		3				
076	235a076	SAMPLE	188837-010	S	116703	Water	25-AUG-2006 01:54	1.0	0.005		3				
077	235a077	X	IB				25-AUG-2006 02:22	1.0							
078	235a078	SAMPLE	188802-004	S	116703	Water	25-AUG-2006 02:49	1.0	0.005		3				
079	235a079	SAMPLE	188802-005	S	116703	Water	25-AUG-2006 03:16	1.0	0.005		3				
080	235a080	SAMPLE	188837-012	S	116703	Water	25-AUG-2006 03:44	1.0	0.005		3				
081	235a081	SAMPLE	188802-020	S	116703	Water	25-AUG-2006 04:11	1.0	0.005		3				
082	235a082	SAMPLE	188837-005	S	116703	Water	25-AUG-2006 04:38	1.0	0.005		3				
083	235a083	CCV	MO_500				25-AUG-2006 05:05	1.0	1.0		3				
084	235a084	CCV	DSL_250				25-AUG-2006 05:33	1.0	1.0		3				

Stds used: 1=S4053 2=S3933 3=S3880 4=S4054 5=S3934 6=S3717



Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 188774 TEHM Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	D S L :	M O :	H X C S
188774-001	GC15B	08/23/06 23:18	1.0	+	+	+
188774-002	GC17A	08/23/06 19:12	1.0			
188774-002	GC15B	08/24/06 12:12	1.0	+	+	+
188774-003	GC15B	08/23/06 20:04	1.0	+	+	+
188774-004	GC17A	08/23/06 19:39	1.0	+	+	+
188774-007	GC17A	08/23/06 20:06	1.0	+	+	+
188774-008	GC17A	08/23/06 20:34	1.0	+	+	+
188774-009	GC17A	08/23/06 21:29	1.0	+	+	+
188774-010	GC17A	08/23/06 21:56	1.0	+	+	+
188774-012	GC17A	08/23/06 22:24	1.0	+	+	+
QC352950	GC15B	08/24/06 10:56	1.0	+	+	+
QC352951	GC15B	08/23/06 19:36	1.0	+		+
QC352952	GC15B	08/23/06 20:32	1.0	+		+
QC352953	GC15B	08/23/06 21:00	1.0	+		+

Curtis & Tompkins Laboratories

Sample Preparation Summary

23-AUG-2006 19:14

Batch Number : 116659
 Date Extracted : 22-AUG-2006
 Extracted by : Jessie O'Brien Mee
 Prep Method : 3520C

Analysis : N/A
 Bgroup : TEH
 Units : mL
 Clean-up :

Spike #1 ID : S4026B
 Spike #2 ID : S4117A
 Spike #3 ID :
 SDP Version : TEH50LL rv10

Sample	Type	Client	Matrix	Init	Units	Final	Prep	Clean	pH	Sp 1	Sp 2	Sp 3	Analyses	Clean	Method	Comments
188774-001		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C		
188774-002		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C		
188774-003		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C		
188774-004		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C		
188774-007		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C		
188774-008		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C		
188774-009		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C		
188774-010		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C		
188774-012		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C		
188848-001		ACC Environmental Consultants	Water	500	mL	2.5	0.005000	1	7.5	0			TEH	3630C		
188848-002		ACC Environmental Consultants	Water	500	mL	2.5	0.005000	1	7.5	0			TEH	3630C		
188848-003		ACC Environmental Consultants	Water	500	mL	2.5	0.005000	1	7.5	0			TEH	3630C		
188848-004		ACC Environmental Consultants	Water	500	mL	2.5	0.005000	1	7.5	0			TEH	3630C		
188848-005		ACC Environmental Consultants	Water	500	mL	2.5	0.005000	1	7.5	0			TEH	3630C		
188848-006		ACC Environmental Consultants	Water	500	mL	2.5	0.005000	1	7.5	0			TEH	3630C		
188848-007		ACC Environmental Consultants	Water	500	mL	2.5	0.005000	1	7.5	0			TEH	3630C		
188863-003		ACC Environmental Consultants	Water	500	mL	2.5	0.005000	1	7.5	0			TEH	3630C		
188867-001		Tetra Tech EC, INC	Water	500	mL	2.5	0.005000	1	7.5	0			TEH	3630C		
188867-002		Iris Environmental	Water	500	mL	2.5	0.005000	1	7.5	0			TEH	3630C		
188867-002		Iris Environmental	Water	500	mL	2.5	0.005000	1	7.5	0			TEH	3630C		
QC352950	BLANK	Iris Environmental	Water	500	mL	2.5	0.005000	1	7.5	0			TEH	3630C		
QC352951	LCS		Water	500	mL	2.5	0.005000	1	7.5	0			TEH	3630C		
QC352952	MS		Water	500	mL	2.5	0.005000	1	7.5	0			TEH	3630C		
QC352953	MSD		Water	500	mL	2.5	0.005000	1	7.5	0			TEH	3630C		

of 188774-003 ✓
 of 188774-003 ✓

Prep Chemist: Jessie O'Brien

Reviewed By: Tommy Hargrett

Date: 8/23/06

Relinquished By: JOM for MCC

Received By: Dum

Date: 8/25/06

LIMS Batch No: 116659
 LIMS Analysis: TEH/M
 Extracted by: DM
 Date Extracted: 22 Aug 06

Extraction Method:

- ☐ mod. EPA 3510 sep. funnel
☒ mod. EPA 3520 cont. L/L
☐ _____

Cleanup Method (if needed):

- ☒ EPA 3630 Silica Gel
☐ Other _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
198774-001 F	500	7	2.5	X	
02 F					
03 R					MSS
04 F					
07 E					
08 F					
09 E					
10 J					
12 J					
198848-001 D					
02 D					
03 D					
04 D					
05 D					
06 D					
07 D					
198863-003					alias of 198674-4 H
198867-001 D				X	
02 D					
MB AC352950		NA			
LCS	51				
MS	52				198774-003 P
MSD	53	7			
					per 8/23/06

0.5 mL of TEH_SURR was added to all samples

0.5 mL of TEH_SP was added to all spikes

pH of all samples adjusted to pH ≤ 2 with H₂SO₄

☒ Samples were continually extracted about 450 mL of CH₂Cl₂

Extraction Start Time: 1700

Extraction End Time: 1155

☐ Samples were extracted 3 times with 60 mL of CH₂Cl₂

Extracts filtered through baked, CH₂Cl₂-rinsed granular Na₂SO₄

Concentrated to volumes as noted above

Mfg & Lot# / LIMS # / Time Date/ Initials

54026B DMB/22/06

54117A

18054522

EM46121

1700

1155 MCC 8/24/06

N/A

EM4611620

✓

Jessie Mee 8/23/06
 Extraction Chemist Date

Continued from Page _____
 Continued on Page _____

Pamela Mought 8/23/06
 Reviewed by Date

Prep Chemist: MCC
 Cleanup Date: 8/23/06

 Benchbook # **BK 2356**
 Page 85

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
188774-001	116659	1.0	1.0	
↓ 002	↓	↓	↓	
↓ 003	↓	↓	↓	
↓ 004	↓	↓	↓	MS
↓ 007	↓	↓	↓	
↓ 008	↓	↓	↓	
↓ 009	↓	↓	↓	
↓ 010	↓	↓	↓	
↓ 011	↓	↓	↓	
188867-001	↓	↓	↓	
↓ 002	↓	↓	↓	
MR QC 852950	↓	↓	↓	
CS ↓ 51	↓	↓	↓	
MS ↓ 52	↓	↓	↓	
MSD ↓ 53	↓	↓	↓	

☐ Extracts were cleaned up using C&T assembled _____ g columns
☒ Extracts were cleaned up using 1.0 g cartridges
 Extracts were eluted with 40 mL CH_2Cl_2
 Concentrated to volumes as noted above

Mfg & Lot # / Time / Program

Initials / Date

N/A	MCC 8/23/06
SP 7716	↓
EM 4630	↓
✓	

Michael Chen 8/23/06
 Extraction Chemist / Date

Continued from page /
 Continued on page /

Pomelo Hsing 8/23/06
 Reviewed 8/23/06

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 09/18/06

Analyte	Units	GC11A	GC13B B	GC15B	GC17A	GC14B B
JP-5 C10-C16	ug/L	17	16	7.9	5.4	
Jet Fuel A C10-C16	ug/L	14	30	24	33	
Diesel C12-C32	ug/L	22	14	25	23	
Diesel C12-C36	ug/L	13	17			
Diesel C12-C28	ug/L		31			
Diesel C12-C24	ug/L	20	13	20	33	
Diesel C12-C22	ug/L	19	17	20	25	
Diesel C10-C28	ug/L	18	11	22	37	
Diesel C10-C24	ug/L	21	15	18	33	
Diesel C10-C22	ug/L	21	18	19	27	
Diesel C10-C20	ug/L		16	13	19	
Motor Oil C22-C36	ug/L	120	110	120	140	89
Motor Oil C24-C36	ug/L	150	140	140	170	99
Motor Oil C22-C32	ug/L	140	130	21	160	99
Motor Oil C28-C40	ug/L	67	68	63	78	
Motor Oil C28-C36	ug/L	64	74	64	69	
Motor Oil C20-C36	ug/L	120	99	110	130	76
Hexacosane	ug/L	4.5	16	4.2	3.1	

**VOLATILE ORGANIC
COMPOUNDS**

Purgeable Organics by GC/MS

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	TB0815061A	Batch#:	116445
Lab ID:	188774-005	Sampled:	08/15/06
Matrix:	Water	Received:	08/16/06
Units:	ug/L	Analyzed:	08/16/06
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-120
1,2-Dichloroethane-d4	101	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	96	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231GW09	Batch#:	116445
Lab ID:	188774-010	Sampled:	08/15/06
Matrix:	Water	Received:	08/16/06
Units:	ug/L	Analyzed:	08/16/06
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	108	80-120
1,2-Dichloroethane-d4	103	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	98	86-115

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit



Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1065PZ1B	Batch#:	116445
Lab ID:	188774-012	Sampled:	08/15/06
Matrix:	Water	Received:	08/16/06
Units:	ug/L	Analyzed:	08/16/06
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	
Trichloroethene	ND	0.5	0.1
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	0.5	
cis-1,3-Dichloropropene	ND	10	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	0.5	
Tetrachloroethene	ND	10	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	0.5	
1,1,2,2-Tetrachloroethane	ND	1.0	
Xylene (total)	ND	0.5	
		1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-120
1,2-Dichloroethane-d4	103	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	98	86-115

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

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4.0

00001

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC352034	Batch#:	116445
Matrix:	Water	Analyzed:	08/16/06
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-120
1,2-Dichloroethane-d4	101	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	98	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit
Page 1 of 1

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	116445
Units:	ug/L	Analyzed:	08/16/06
Diln Fac:	1.000		

Type: BS Lab ID: QC352032

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	29.45	118	65-135
Benzene	25.00	27.16	109	65-135
Trichloroethene	25.00	27.50	110	65-135
Toluene	25.00	28.79	115	65-135
Chlorobenzene	25.00	26.54	106	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-120
1,2-Dichloroethane-d4	101	76-114
Toluene-d8	104	88-110
Bromofluorobenzene	97	86-115

Type: BSD Lab ID: QC352033

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	28.03	112	65-135	5	35
Benzene	25.00	26.64	107	65-135	2	35
Trichloroethene	25.00	27.26	109	65-135	1	35
Toluene	25.00	27.57	110	65-135	4	35
Chlorobenzene	25.00	26.05	104	65-135	2	35

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-120
1,2-Dichloroethane-d4	102	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	94	86-115

CURTIS & TOMPKINS BFB TUNE FOR 188774 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name: BFB IDF : 1.0
Seqnum : 486258514001 File : ifs01 Time : 28-JUN-2006 12:34

Standards: S3716

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	28728	19.83	
75	30.00% - 60.00% of mass 95	65034	44.90	
95		144848		
96	5.00% - 9.00% of mass 95	9591	6.62	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	99208	68.49	
175	5.00% - 9.00% of mass 174	7217	7.27	
176	> 95.00% and < 101.00% of mass 174	95056	95.81	
177	5.00% - 9.00% of mass 176	6300	6.63	

Analyst: SJD Date: 06/29/06 Reviewer: AMK Date: 06/30/06
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486258514001

00004

CURTIS & TOMPKINS BFB TUNE FOR 188774 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name: BFB IDF : 1.0
Seqnum : 486259923001 File : ift01 Time : 29-JUN-2006 12:03

Standards: S3716

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	56496	19.41	
75	30.00% - 60.00% of mass 95	133952	46.02	
95		291072		
96	5.00% - 9.00% of mass 95	19056	6.55	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	186368	64.03	
175	5.00% - 9.00% of mass 174	14055	7.54	
176	> 95.00% and < 101.00% of mass 174	179840	96.50	
177	5.00% - 9.00% of mass 176	13015	7.24	

CURTIS & TOMPKINS BFB TUNE FOR 188774 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name: BFB IDF : 1.0
Seqnum : 486329078002 File : ihg02 Time : 16-AUG-2006 13:17

Standards: S3716

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	54226	18.63	
75	30.00% - 60.00% of mass 95	128581	44.17	
95		291072		
96	5.00% - 9.00% of mass 95	20397	7.01	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	215744	74.12	
175	5.00% - 9.00% of mass 174	14845	6.88	
176	> 95.00% and < 101.00% of mass 174	209813	97.25	
177	5.00% - 9.00% of mass 176	14186	6.76	

Analyst: ACM

Date: 08/16/06

Reviewer: AMK

Date: 08/17/06

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188774 MSVOA Water: EPA 8260B

Inst : MSVOA09
 Calnum : 486258514006
 Units : ug/L

Name : 826GOX9W
 Date : 28-JUN-2006 14:11
 X Axis : R

Reviewer: AMK
 Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Std's
L1	ifs04	486258514004	0.25/0.5PPB	28-JUN-2006 14:11	S3638 (1000000X), S3760 (20000000X), S2864 (20000000X), S3579 (1000X)
L2	ifs05	486258514005	0.5/1PPB	28-JUN-2006 14:45	S3638 (5000000X), S3760 (10000000X), S2864 (10000000X), S3579 (1000X)
L3	ifs06	486258514006	2PPB	28-JUN-2006 15:20	S3638 (2500000X), S3760 (2500000X), S2864 (5000000X), S3579 (1000X)
L4	ifs07	486258514007	5PPB	28-JUN-2006 15:55	S3638 (1000000X), S3760 (1000000X), S2864 (2000000X), S3579 (1000X)
L5	ifs08	486258514008	10PPB	28-JUN-2006 16:29	S3638 (500000X), S3760 (500000X), S2864 (1000000X), S3579 (1000X)
L6	ifs09	486258514009	20PPB	28-JUN-2006 17:04	S3638 (250000X), S3760 (250000X), S2864 (500000X), S3579 (1000X)
L7	ifs10	486258514010	50PPB	28-JUN-2006 17:38	S3638 (100000X), S3760 (100000X), S2864 (200000X), S3579 (1000X)
L8	ifs11	486258514011	75PPB	28-JUN-2006 18:12	S3638 (6667X), S3760 (6667X), S2864 (133330X), S3579 (1000X)
L9	ifs12	486258514012	100PPB	28-JUN-2006 18:47	S3638 (50000X), S3760 (50000X), S2864 (100000X), S3579 (1000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ²	%RSD	%RSD	RF	r ²	Min	Max	Min	Flg
Chloromethane		2.5386	2.4700m	2.3131	2.2781	2.3606	2.0497			AVRG		0.42826		2.3350	7	15		0.10	0.99				
Vinyl Chloride	1.5770	1.6802	1.7533m	1.7413	1.6511	1.8647	1.6245	1.6784		AVRG		0.58951		1.6963	5	15		0.050	0.99				
Bromomethane		1.3160m	1.1422m	1.0212m	0.9921	1.0788	1.0100	1.0611	1.0668	AVRG		0.92080		1.0860	10	15		0.050	0.99				
Chloroethane		0.8519m	0.9064m	1.0022	0.9497m	1.0305	0.9231	0.9644	0.9587	AVRG		1.05444		0.9484	6	15		0.050	0.99				
Acetone				0.5722	0.5863	0.5123	0.5119	0.5200	0.4672	AVRG		1.89281		0.5283	8	15		0.050	0.99				
1,1-Dichloroethene	0.7017	0.9361	0.9037	0.9037	0.8818	0.9843	1.0489	0.9848	0.9939	AVRG		1.07512		0.9301	12	15		0.050	0.99				
Methylene Chloride		1.7740	1.6468	1.6793	1.6383	1.5686	1.5197	1.5056		AVRG		0.61770		1.6189	6	15		0.050	0.99				
Carbon Disulfide		3.4716	4.2664	4.4908	4.4673	4.7765	5.0136	4.6531	4.8403	AVRG		0.22235		4.4974	11	15		0.050	0.99				
MTBE		2.9531	3.4747	3.6507	3.6964	3.6720	3.4662	3.3827	3.3399	AVRG		0.28948		3.4544	7	15		0.050	0.99				
trans-1,2-Dichloroethene		0.9917m	1.0468	1.1269	1.1529m	1.1820	1.2050	1.1368	1.1454	AVRG		0.89013		1.1234	6	15		0.050	0.99				
Vinyl Acetate	2.9107	3.4615	2.8821	2.9967	3.4793	2.8685				AVRG		0.32260		3.0998	9	15		0.050	0.99				
1,1-Dichloroethane	2.0115	2.3466	2.3531	2.3854	2.4518	2.3924	2.2772	2.2486		AVRG		0.43322		2.3083	6	15		0.10	0.99				
cis-1,2-Dichloroethene		1.1512	1.2096	1.2703	1.2946	1.2790	1.2881	1.2580	1.2537	AVRG		1.36985		0.7300	6	15		0.050	0.99				
Chloroform		1.9176	2.0466	2.1552	2.1022	2.1671	2.1369	2.0711	2.0327	AVRG		0.79965		1.2506	4	15		0.050	0.99				
1,1,1-Trichloroethane		1.1295	1.2244	1.2586	1.2984	1.3923	1.4371	1.3535	1.4155	AVRG		0.48107		2.0787	4	15		0.050	0.99				
Carbon Tetrachloride		0.4533	0.6134	0.6077	0.5931	0.6755	0.7249	0.6720	0.7449	AVRG		1.57333		1.3137	8	15		0.050	0.99				
1,2-Dichloroethane		0.8117	0.9759	0.9596	0.9690	0.9736	0.9349	0.8899	0.8968	AVRG		1.07943		0.6356	14	15		0.050	0.99				
Benzene		2.4844	2.7759	2.8113	2.7833	2.9013	2.8094	2.6489	2.6639	AVRG		0.36566		2.7348	5	15		0.050	0.99				
Trichloroethene		0.5429	0.6496	0.6332	0.6529	0.6798	0.7027	0.6672	0.6844	AVRG		1.51724		0.6591	8	15		0.050	0.99				
1,2-Dichloropropane		0.7619	0.9083	0.8699	0.8719	0.8890	0.8716	0.8188	0.8137	AVRG		1.17557		0.8507	6	15		0.050	0.99				
Bromodichloromethane		0.7816	0.8713	0.9537	0.9335	0.9548	0.9464	0.9046	0.9270	AVRG		1.09939		0.9091	6	15		0.050	0.99				
4-Methyl-2-Pentanone				0.8882	0.9632	0.9866	0.8958	0.8592	0.8847	AVRG		1.09415		0.9139	6	15		0.050	0.99				
cis-1,3-Dichloropropene		0.9967	1.2047	1.2563	1.2446	1.2554	1.2229	1.1717	1.1759	AVRG		0.83961		1.1910	7	15		0.050	0.99				

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avq	r ²	Max	Min	Min	Flg
Toluene		1.3757	1.6286	1.6722	1.5717	1.6746	1.6033	1.5244	1.5729	AVRG		0.63369		1.5781	6	15	0.050	0.99	
trans-1,3-Dichloropropene		0.8345	1.0666	1.0844	1.1106	1.1304	1.1034	1.0494	1.0755	AVRG		0.94621		1.0568	9	15	0.050	0.99	
1,1,2-Trichloroethane		0.3073	0.4057	0.3965	0.3891	0.3919	0.3824	0.3702	0.3770	AVRG		2.64881		0.3775	8	15	0.050	0.99	
2-Hexanone				0.6608	0.7567	0.7602	0.7162	0.6997	0.6901	AVRG		1.40066		0.7139	5	15	0.050	0.99	
Tetrachloroethene		0.5753	0.5342	0.5847	0.5575	0.6295	0.6797	0.6286	0.6858	AVRG		1.64094		0.6094	9	15	0.050	0.99	
Dibromochloroethane		0.6318	0.7873	0.8110	0.8316	0.8451	0.8518	0.8250	0.8533	AVRG		1.24281		0.8046	9	15	0.050	0.99	
Chlorobenzene		1.9818	2.1248	2.1427	2.1391	2.1331	2.1264	1.9993	2.0167	AVRG		0.48008		2.0830	3	15	0.30	0.99	
Ethylbenzene		2.9678	3.1429	3.3533	3.2565	3.3951	3.3250	3.0395	3.0690	AVRG		0.31312		3.1937	5	15	0.050	0.99	
m,p-Xylenes	1.1413	1.1504	1.2283	1.3082	1.2572	1.3333	1.2769	1.1615	1.1946	AVRG		0.81435		1.2280	6	15	0.050	0.99	
o-Xylene		1.1081	1.2324	1.3308	1.3028	1.3334	1.2978	1.2208	1.2369	AVRG		0.79499		1.2579	6	15	0.050	0.99	
Styrene		1.9591	2.1509	2.3080	2.3255	2.4001	2.3287	2.1934	2.1833	AVRG		0.44820		2.2311	6	15	0.050	0.99	
Bromoform		0.5078	0.5556	0.5478	0.5778	0.5998	0.6023	0.5938	0.6081	AVRG		1.74179		0.5741	6	15	0.10	0.99	
1,1,2,2-Tetrachloroethane		1.6740	2.1748	2.1640	2.2451	2.2870	2.1277	2.0143	2.0970	AVRG		0.47665		2.0980	9	15	0.30	0.99	
Dibromofluoromethane	0.5916	0.5985	0.5988	0.5963	0.6034	0.5996	0.6088	0.6191	0.6111	AVRG		1.65833		0.6030	1	15	0.050	0.99	
1,2-Dichloroethane-d4	0.3556	0.3623	0.3632	0.3652	0.3717	0.3776	0.3510	0.3528	0.3525	AVRG		2.76759		0.3613	3	15	0.050	0.99	
Toluene-d8	1.1130	1.1010	1.1331	1.1437	1.1176	1.1351	1.1152	1.0991	1.1345	AVRG		0.89176		1.1214	1	15	0.050	0.99	
Bromofluorobenzene	1.1332	1.1339	1.1198	1.1183	1.1250	1.1099	1.1065	1.0730	1.0932	AVRG		0.89884		1.1125	2	15	0.050	0.99	

Analyst: SJD

Date: 08/17/06

Reviewer: AMK

Date: 08/17/06

m=Manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor
Page 2 of 2

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188774 MSVOA Water
EPA 8260B

Inst : MSVOA09
Calnum : 486258514006

Name : 826GOX9W
Cal Date: 28-JUN-2006

Type : WATER

ICV 486259923003 (ift03 29-JUN-2006) stds: S3391 (10000X), S3600 (10000X),
S3604 (10000X), S3579 (1000X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	2.3350	2.0185	25.00	22	ug/L	-14	30	
Vinyl Chloride	1.6963	1.6099	25.00	24	ug/L	-5	20	
Bromomethane	1.0860	1.1482	25.00	26	ug/L	6	30	
Chloroethane	0.9484	0.9109	25.00	24	ug/L	-4	30	
Acetone	0.5283	0.4203	25.00	20	ug/L	-20	40	
1,1-Dichloroethene	0.9301	1.0122	25.00	27	ug/L	9	20	
Methylene Chloride	1.6189	1.6072	25.00	25	ug/L	-1	30	
Carbon Disulfide	4.4974	4.0850	25.00	23	ug/L	-9	30	
MTBE	3.4544	3.2589	25.00	24	ug/L	-6	30	
trans-1,2-Dichloroethene	1.1234	1.1492	25.00	26	ug/L	2	30	
Vinyl Acetate	3.0998	2.4668	25.00	20	ug/L	-20	40	
1,1-Dichloroethane	2.3083	2.2544	25.00	24	ug/L	-2	30	
2-Butanone	0.7300	0.6510	25.00	22	ug/L	-11	40	
cis-1,2-Dichloroethene	1.2506	1.2929	25.00	26	ug/L	3	30	
Chloroform	2.0787	2.0786	25.00	25	ug/L	0	20	
1,1,1-Trichloroethane	1.3137	1.4425	25.00	27	ug/L	10	30	
Carbon Tetrachloride	0.6356	0.7740	25.00	30	ug/L	22	30	!v+
1,2-Dichloroethane	0.9264	0.9236	25.00	25	ug/L	0	30	
Benzene	2.7348	2.8319	25.00	26	ug/L	4	30	
Trichloroethene	0.6591	0.7086	25.00	27	ug/L	8	30	
1,2-Dichloropropane	0.8507	0.8370	25.00	25	ug/L	-2	20	
Bromodichloromethane	0.9091	0.9928	25.00	27	ug/L	9	30	
4-Methyl-2-Pentanone	0.9139	0.8620	25.00	24	ug/L	-6	40	
cis-1,3-Dichloropropene	1.1910	1.2632	25.00	27	ug/L	6	30	
Toluene	1.5781	1.6809	25.00	27	ug/L	7	20	
trans-1,3-Dichloropropene	1.0568	1.0622	25.00	25	ug/L	1	30	
1,1,2-Trichloroethane	0.3775	0.3912	25.00	26	ug/L	4	30	
2-Hexanone	0.7139	0.6508	25.00	23	ug/L	-9	40	
Tetrachloroethene	0.6094	0.7151	25.00	29	ug/L	17	30	
Dibromochloromethane	0.8046	0.8681	25.00	27	ug/L	8	30	
Chlorobenzene	2.0830	2.2015	25.00	26	ug/L	6	30	
Ethylbenzene	3.1937	3.5869	25.00	28	ug/L	12	20	
m,p-Xylenes	1.2280	1.4097	50.00	57	ug/L	15	30	
o-Xylene	1.2579	1.4044	25.00	28	ug/L	12	30	
Styrene	2.2311	2.4733	25.00	28	ug/L	11	30	
Bromoform	0.5741	0.5896	25.00	26	ug/L	3	30	
1,1,2,2-Tetrachloroethane	2.0980	2.0665	25.00	25	ug/L	-2	30	

Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS04.D
Report Date: 29-Jun-2006 12:25

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS04.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 28-JUN-2006 14:11 MS Autotune Date: 30-MAY-2006 10:57
Operator : VOC Inst ID: MSVOA09.i
Smp Info : ICAL,S3638,0.001/1000,S3760,0.0005/1000,
Misc Info : S2864,0.0005/1000,0.25/0.5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\826GOX9W.m
Meth Date : 29-Jun-2006 12:25 target Quant Type: ISTD
Cal Date : 28-JUN-2006 14:11 Cal File: IFS04.D
Als bottle: 4 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	=====	====	=====	=====	=====	=====	=====
1 Freon 12	85	4.086	4.088	(0.368)	2694	0.50000	0.2531 (a)
2 Chloromethane	50	4.529	4.542	(0.407)	4330	0.50000	0.2561 (a)
3 Vinyl Chloride	62	4.737	4.749	(0.426)	5709	0.50000	0.4648 (a)
4 Bromomethane	94	5.466	5.469	(0.492)	3814	0.50000	0.4850 (a)
5 Chloroethane	64	5.674	5.676	(0.510)	3302	0.50000	0.4808 (a)
6 Trichlorofluoromethane	101	6.117	6.120	(0.550)	5380	0.50000	0.4386 (a)
7 Ethanol	45	6.532	6.534	(0.588)	2104	25.0000	12.4445 (A)
8 Freon 113	101	7.044	7.067	(0.634)	464	0.25000	0.0811 (a)
9 1,1-Dichloroethene	96	7.143	7.155	(0.643)	1258	0.25000	0.1868 (a)
10 Acetone	43	7.320	7.333	(0.658)	1459	0.25000	0.3814 (a)
11 Isopropanol	45	7.498	7.510	(0.674)	1143	2.50000	1.5756 (A)
12 Carbon Disulfide	76	7.567	7.579	(0.681)	5802	0.25000	0.1781 (a)
13 Methylene Chloride	84	8.119	8.122	(0.730)	3407	0.25000	0.2906 (a)
14 tert-Butyl Alcohol (TBA)	59	8.198	8.221	(0.737)	716	2.50000	0.8584 (A)
15 MTBE	73	8.455	8.467	(0.760)	3829	0.25000	0.1530 (a)
16 trans-1,2-Dichloroethene	96	8.514	8.526	(0.766)	1469	0.25000	0.1806 (a)
17 Isopropyl Ether (DIPE)	45	9.253	9.256	(0.832)	6887	0.25000	0.1810 (aA)
18 1,1-Dichloroethane	63	9.313	9.335	(0.838)	2638	0.25000	0.1578 (a)
19 Vinyl Acetate	43	9.323	9.335	(0.839)	3796	0.25000	0.1691 (a)
20 Ethyl tert-Butyl Ether (ETBE)	59	9.855	9.867	(0.886)	5113	0.25000	0.1718 (aA)
21 2,2-Dichloropropane	77	10.279	10.292	(0.925)	1762	0.25000	0.1865 (a)
22 cis-1,2-Dichloroethene	96	10.319	10.321	(0.928)	1650	0.25000	0.1822 (a)

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
23 2-Butanone	43	10.328	10.341	(0.929)	518	0.25000	0.0980 (a)
24 Bromochloromethane	128	10.733	10.745	(0.965)	372	0.25000	0.0772 (a)
25 Tetrahydrofuran	42	10.743	10.745	(0.966)	9025	2.50000	2.9609 (A)
26 Chloroform	83	10.812	10.824	(0.973)	3330	0.25000	0.2212 (a)
27 Dibromofluoromethane	113	11.088	11.100	(0.997)	214147	50.0000	49.0498
28 1,1,1-Trichloroethane	97	11.108	11.110	(0.999)	1872	0.25000	0.1968 (a)
* 29 Pentafluorobenzene	168	11.117	11.130	(1.000)	362006	50.0000	
30 Carbon Tetrachloride	117	11.325	11.337	(0.916)	1266	0.25000	0.1734 (a)
31 1,1-Dichloropropene	75	11.374	11.376	(0.920)	2225	0.25000	0.2279 (a)
32 1,2-Dichloroethane-d4	65	11.719	11.731	(0.948)	211978	50.0000	49.2140
33 Benzene	78	11.719	11.731	(0.948)	6298	0.25000	0.1931 (a)
34 Methyl tert-Amyl Ether (TAME)	73	11.798	11.800	(0.955)	3792	0.25000	0.1595 (aA)
35 1,2-Dichloroethane	62	11.837	11.860	(0.958)	1440	0.25000	0.1303 (a)
* 36 1,4-Difluorobenzene	114	12.360	12.373	(1.000)	596037	50.0000	
37 Trichloroethene	95	12.784	12.787	(1.034)	1568	0.25000	0.1995 (a)
38 1,2-Dichloropropane	63	13.248	13.250	(1.072)	2133	0.25000	0.2103 (a)
39 Trifluorotoluene	146	13.258	13.260	(1.073)	1644	0.25000	0.1747 (aA)
40 Dibromomethane	93	13.445	13.467	(1.088)	433	0.25000	0.0706 (a)
41 Bromodichloromethane	83	13.672	13.664	(1.106)	1763	0.25000	0.1626 (a)
42 2-Chloroethylvinylether	63	14.135	14.138	(1.144)	1844	0.25000	0.3178 (a)
43 Tetramethyl THF	43	14.402	14.404	(1.165)	3735	0.25000	0.1712 (aA)
44 cis-1,3-Dichloropropene	75	14.411	14.424	(1.166)	2529	0.25000	0.1781 (a)
45 4-Methyl-2-Pentanone	43	14.619	14.621	(1.183)	1283	0.25000	0.1177 (a)
46 Toluene-d8	98	14.786	14.799	(1.196)	663413	50.0000	49.6280
47 Toluene	92	14.895	14.907	(1.205)	3919	0.25000	0.2083 (a)
48 trans-1,3-Dichloropropene	75	15.299	15.302	(1.238)	1897	0.25000	0.1505 (a)
49 1,1,2-Trichloroethane	85	15.585	15.597	(1.261)	756	0.25000	0.1679 (a)
50 Tetrachloroethene	166	15.694	15.706	(0.927)	1554	0.25000	0.2370 (a)
51 1,3-Dichloropropane	76	15.851	15.864	(0.936)	2235	0.25000	0.1636 (a)
52 2-Hexanone	43	15.881	15.883	(0.938)	974	0.25000	0.1268 (a)
53 Dibromochloromethane	129	16.137	16.149	(0.953)	1346	0.25000	0.1555 (a)
54 1,2-Dibromoethane	107	16.344	16.357	(1.322)	969	0.25000	0.1146 (a)
* 55 Chlorobenzene-d5	117	16.936	16.949	(1.000)	537824	50.0000	
56 Chlorobenzene	112	16.976	16.988	(1.002)	4973	0.25000	0.2219 (a)
57 Ethylbenzene	91	17.055	17.067	(1.007)	8174	0.25000	0.2379 (a)
58 1,1,1,2-Tetrachloroethane	131	17.074	17.087	(1.008)	1561	0.25000	0.2130 (a)
59 m,p-Xylenes	106	17.212	17.215	(1.016)	6138	0.50000	0.4646 (a)
60 o-Xylene	106	17.735	17.747	(1.047)	2862	0.25000	0.2115 (a)
61 Styrene	104	17.765	17.777	(1.049)	4023	0.25000	0.1676 (a)
62 Bromoform	173	18.060	18.063	(1.066)	1329	0.25000	0.2152 (a)
63 Isopropylbenzene	105	18.169	18.172	(0.919)	7319	0.25000	0.2441 (a)
64 Cyclohexanone	55	18.416	18.418	(0.932)	1944	2.50000	1.4884 (A)
65 Bromofluorobenzene	95	18.425	18.438	(0.932)	302720	50.0000	50.9266
66 1,1,2,2-Tetrachloroethane	83	18.593	18.596	(0.941)	1928	0.25000	0.1719 (a)
67 Bromobenzene	156	18.632	18.635	(0.943)	1919	0.25000	0.2181 (a)
68 Propylbenzene	91	18.662	18.665	(0.944)	9526	0.25000	0.2422 (a)
69 1,2,3-Trichloropropane	110	18.682	18.684	(0.945)	378	0.25000	0.1403 (a)
70 2-Chlorotoluene	91	18.830	18.832	(0.953)	7298	0.25000	0.2586 (a)
71 1,3,5-Trimethylbenzene	105	18.859	18.862	(0.954)	6451	0.25000	0.2380 (a)
72 4-Chlorotoluene	91	18.958	18.960	(0.959)	6966	0.25000	0.2578 (a)
73 tert-Butylbenzene	119	19.234	19.237	(0.973)	5027	0.25000	0.2357 (a)
74 1,2,4-Trimethylbenzene	105	19.303	19.306	(0.977)	6803	0.25000	0.2387 (a)
75 sec-Butylbenzene	105	19.481	19.483	(0.986)	7102	0.25000	0.2175 (a)
76 para-Isopropyl Toluene	119	19.629	19.631	(0.993)	5053	0.25000	0.1945 (a)

Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS04.D
 Report Date: 29-Jun-2006 12:25

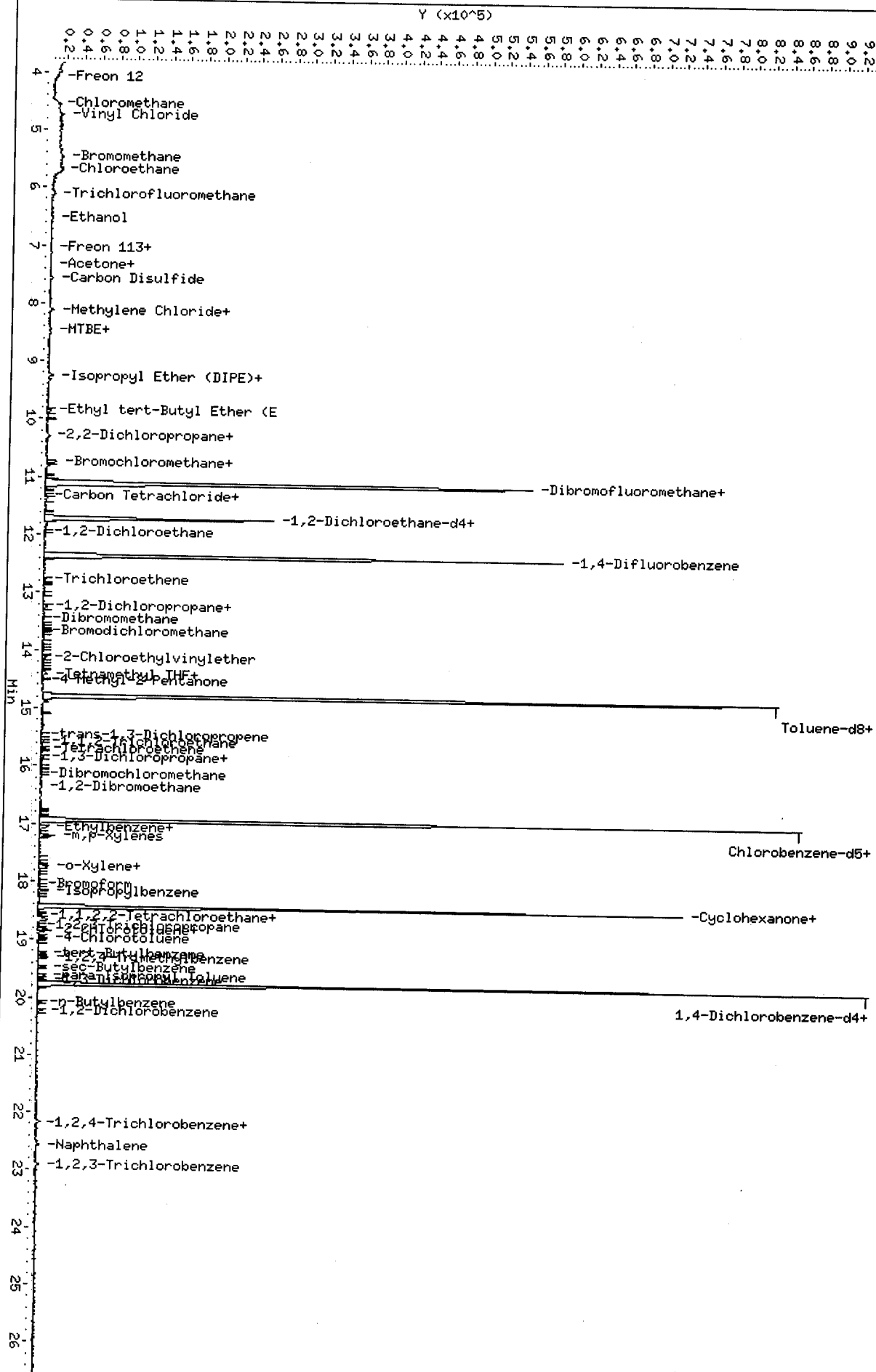
Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
77 1,3-Dichlorobenzene	146	19.688	19.690	(0.996)	4224	0.25000	0.2442 (a)
* 78 1,4-Dichlorobenzene-d4	152	19.767	19.769	(1.000)	267147	50.0000	
79 1,4-Dichlorobenzene	146	19.786	19.799	(1.001)	4294	0.25000	0.2425 (a)
80 n-Butylbenzene	91	20.092	20.095	(1.016)	5509	0.25000	0.2260 (a)
81 1,2-Dichlorobenzene	146	20.230	20.243	(1.023)	3680	0.25000	0.2216 (a)
83 1,2,4-Trichlorobenzene	180	22.183	22.185	(1.122)	2511	0.25000	0.2582 (a)
84 Hexachlorobutadiene	225	22.301	22.294	(1.128)	346	0.25000	0.1202 (a)
85 Naphthalene	128	22.568	22.570	(1.142)	6016	0.25000	0.2499 (a)
86 1,2,3-Trichlorobenzene	180	22.913	22.915	(1.159)	2013	0.25000	0.2237 (a)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount
exceeded maximum amount.

Data File: \\GCHSERVER\DD\chem\MSV0909.i\062806.b\IFS04.D
 Date : 28-JUN-2006 14:11
 Client ID: DYNA P&T
 Sample Info: ICAL,S3638,0.001/1000,S3760,0.0005/1000,
 Purge Volume: 5.0
 Column phase: RTX Volatiles

Instrument: MSV0909.i
 Operator: VDC
 Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS05.D
 Report Date: 29-Jun-2006 12:26

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS05.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 28-JUN-2006 14:45 MS Autotune Date: 30-MAY-2006 10:57
 Operator : VOC Inst ID: MSVOA09.i
 Smp Info : ICAL,S3638,0.002/1000,S3760,0.001/1000,
 Misc Info : S2864,0.001/1000,0.5/1PPB
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\826GOX9W.m
 Meth Date : 29-Jun-2006 12:26 target Quant Type: ISTD
 Cal Date : 28-JUN-2006 14:45 Cal File: IFS05.D
 Als bottle: 5 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
	=====	=====	=====	=====	=====	(ug/L)	(ug/L)
1 Freon 12	85	4.079	4.088	(0.367)	11615	1.00000	1.1232 (M)
2 Chloromethane	50	4.523	4.542	(0.407)	17858	1.00000	1.0871
3 Vinyl Chloride	62	4.730	4.749	(0.426)	11820	1.00000	0.9905
4 Bromomethane	94	5.469	5.469	(0.492)	9258	1.00000	1.2118 (M)
5 Chloroethane	64	5.667	5.676	(0.510)	5993	1.00000	0.8983 (M)
6 Trichlorofluoromethane	101	6.101	6.120	(0.549)	11155	1.00000	0.9360
7 Ethanol	45	6.525	6.534	(0.587)	7854	50.0000	47.8104 (AM)
8 Freon 113	101	7.057	7.067	(0.635)	1903	0.50000	0.3426 (a)
9 1,1-Dichloroethene	96	7.136	7.155	(0.642)	2468	0.50000	0.3771 (a)
10 Acetone	43	7.323	7.333	(0.659)	2701	0.50000	0.7267
11 Isopropanol	45	7.491	7.510	(0.674)	3117	5.00000	4.4223 (A)
12 Carbon Disulfide	76	7.570	7.579	(0.681)	12211	0.50000	0.3859 (a)
13 Methylene Chloride	84	8.103	8.122	(0.729)	7234	0.50000	0.6352 (M)
14 tert-Butyl Alcohol (TBA)	59	8.201	8.221	(0.738)	3377	5.00000	4.1672 (A)
15 MTBE	73	8.448	8.467	(0.760)	10387	0.50000	0.4274 (a)
16 trans-1,2-Dichloroethene	96	8.527	8.526	(0.767)	3488	0.50000	0.4413 (aM)
17 Isopropyl Ether (DIPE)	45	9.247	9.256	(0.832)	17087	0.50000	0.4623 (aA)
18 1,1-Dichloroethane	63	9.316	9.335	(0.838)	7075	0.50000	0.4357 (a)
19 Vinyl Acetate	43	9.325	9.335	(0.839)	10238	0.50000	0.4694 (a)
20 Ethyl tert-Butyl Ether (ETBE)	59	9.858	9.867	(0.887)	11865	0.50000	0.4103 (aA)
21 2,2-Dichloropropane	77	10.272	10.292	(0.925)	3817	0.50000	0.4160 (a)
22 cis-1,2-Dichloroethene	96	10.312	10.321	(0.928)	4049	0.50000	0.4602 (a)

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
23 2-Butanone	43	10.341	10.341	(0.931)	2386	0.50000	0.4646 (aM)
24 Bromochloromethane	128	10.716	10.745	(0.964)	1879	0.50000	0.4015 (a)
25 Tetrahydrofuran	42	10.736	10.745	(0.966)	18014	5.00000	6.0825 (A)
26 Chloroform	83	10.805	10.824	(0.972)	6745	0.50000	0.4612 (a)
27 Dibromofluoromethane	113	11.091	11.100	(0.998)	210521	50.0000	49.6273
28 1,1,1-Trichloroethane	97	11.101	11.110	(0.999)	3973	0.50000	0.4299 (a)
* 29 Pentafluorobenzene	168	11.111	11.130	(1.000)	351735	50.0000	
30 Carbon Tetrachloride	117	11.328	11.337	(0.916)	2680	0.50000	0.3702 (a)
31 1,1-Dichloropropene	75	11.367	11.376	(0.919)	3955	0.50000	0.4085 (a)
32 1,2-Dichloroethane-d4	65	11.722	11.731	(0.948)	214205	50.0000	50.1336
33 Benzene	78	11.712	11.731	(0.947)	14689	0.50000	0.4542 (a)
34 Methyl tert-Amyl Ether (TAME)	73	11.801	11.800	(0.955)	9874	0.50000	0.4188 (aA)
35 1,2-Dichloroethane	62	11.850	11.860	(0.959)	4799	0.50000	0.4380 (a)
* 36 1,4-Difluorobenzene	114	12.363	12.373	(1.000)	591251	50.0000	
37 Trichloroethene	95	12.777	12.787	(1.034)	3210	0.50000	0.4118 (a)
38 1,2-Dichloropropane	63	13.251	13.250	(1.072)	4505	0.50000	0.4478 (a)
39 Trifluorotoluene	146	13.251	13.260	(1.072)	3302	0.50000	0.3538 (aA)
40 Dibromomethane	93	13.448	13.467	(1.088)	2452	0.50000	0.4032 (a)
41 Bromodichloromethane	83	13.665	13.664	(1.105)	4621	0.50000	0.4298 (a)
42 2-Chloroethylvinylether	63	14.138	14.138	(1.144)	5516	1.00000	0.9586
43 Tetramethyl THF	43	14.395	14.404	(1.164)	9780	0.50000	0.4519 (aA)
44 cis-1,3-Dichloropropene	75	14.414	14.424	(1.166)	5893	0.50000	0.4184 (a)
45 4-Methyl-2-Pentanone	43	14.612	14.621	(1.182)	4094	0.50000	0.3788 (a)
46 Toluene-d8	98	14.789	14.799	(1.196)	650983	50.0000	49.0923
47 Toluene	92	14.898	14.907	(1.205)	8134	0.50000	0.4358 (a)
48 trans-1,3-Dichloropropene	75	15.302	15.302	(1.238)	4934	0.50000	0.3948 (a)
49 1,1,2-Trichloroethane	85	15.588	15.597	(1.261)	1817	0.50000	0.4070 (a)
50 Tetrachloroethene	166	15.696	15.706	(0.927)	2992	0.50000	0.4720 (a)
51 1,3-Dichloropropane	76	15.854	15.864	(0.936)	5546	0.50000	0.4198 (a)
52 2-Hexanone	43	15.894	15.883	(0.938)	2415	0.50000	0.3251 (a)
53 Dibromochloromethane	129	16.140	16.149	(0.953)	3286	0.50000	0.3926 (a)
54 1,2-Dibromoethane	107	16.357	16.357	(1.323)	3312	0.50000	0.3949 (a)
* 55 Chlorobenzene-d5	117	16.939	16.949	(1.000)	520082	50.0000	
56 Chlorobenzene	112	16.979	16.988	(1.002)	10307	0.50000	0.4757 (a)
57 Ethylbenzene	91	17.057	17.067	(1.007)	15435	0.50000	0.4646 (a)
58 1,1,1,2-Tetrachloroethane	131	17.077	17.087	(1.008)	3216	0.50000	0.4539 (a)
59 m,p-Xylenes	106	17.215	17.215	(1.016)	11966	1.00000	0.9368
60 o-Xylene	106	17.738	17.747	(1.047)	5763	0.50000	0.4404 (a)
61 Styrene	104	17.768	17.777	(1.049)	10189	0.50000	0.4390 (a)
62 Bromoform	173	18.063	18.063	(1.066)	2641	0.50000	0.4422 (a)
63 Isopropylbenzene	105	18.172	18.172	(0.920)	13584	0.50000	0.4583 (a)
64 Cyclohexanone	55	18.409	18.418	(0.932)	5274	5.00000	4.0845 (A)
65 Bromofluorobenzene	95	18.428	18.438	(0.933)	299470	50.0000	50.9602
66 1,1,2,2-Tetrachloroethane	83	18.596	18.596	(0.941)	4421	0.50000	0.3989 (a)
67 Bromobenzene	156	18.635	18.635	(0.943)	3793	0.50000	0.4361 (a)
68 Propylbenzene	91	18.665	18.665	(0.945)	18564	0.50000	0.4774 (a)
69 1,2,3-Trichloropropane	110	18.675	18.684	(0.945)	1241	0.50000	0.4659 (a)
70 2-Chlorotoluene	91	18.823	18.832	(0.953)	13291	0.50000	0.4765 (a)
71 1,3,5-Trimethylbenzene	105	18.862	18.862	(0.955)	12415	0.50000	0.4633 (a)
72 4-Chlorotoluene	91	18.961	18.960	(0.960)	13271	0.50000	0.4968 (a)
73 tert-Butylbenzene	119	19.237	19.237	(0.974)	9771	0.50000	0.4635 (a)
74 1,2,4-Trimethylbenzene	105	19.306	19.306	(0.977)	13777	0.50000	0.4891 (a)
75 sec-Butylbenzene	105	19.484	19.483	(0.986)	15356	0.50000	0.4757 (a)
76 para-Isopropyl Toluene	119	19.622	19.631	(0.993)	11700	0.50000	0.4556 (a)

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
	=====	=====	=====	=====	=====	(ug/L)	(ug/L)
77 1,3-Dichlorobenzene	146	19.691	19.690	(0.997)	8617	0.50000	0.5039
* 78 1,4-Dichlorobenzene-d4	152	19.760	19.769	(1.000)	264105	50.0000	
79 1,4-Dichlorobenzene	146	19.789	19.799	(1.001)	8130	0.50000	0.4646 (a)
80 n-Butylbenzene	91	20.085	20.095	(1.016)	10787	0.50000	0.4477 (a)
81 1,2-Dichlorobenzene	146	20.233	20.243	(1.024)	7557	0.50000	0.4603 (a)
82 1,2-Dibromo-3-Chloropropane	75	21.160	21.160	(1.071)	870	0.50000	0.4641 (a)
83 1,2,4-Trichlorobenzene	180	22.176	22.185	(1.122)	5041	0.50000	0.5243
84 Hexachlorobutadiene	225	22.294	22.294	(1.128)	974	0.50000	0.3425 (a)
85 Naphthalene	128	22.561	22.570	(1.142)	10497	0.50000	0.4410 (a)
86 1,2,3-Trichlorobenzene	180	22.916	22.915	(1.160)	4059	0.50000	0.4563 (a)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount
exceeded maximum amount.
- M - Compound response manually integrated.

Data File: \\GCHSERVER\JD\chem\MSV0A09.i\062806.b\IFS05.D
 Date : 28-JUN-2006 14:45

Client ID: DYNA P&T

Sample Info: ICAL,S3638,0.002/1000,S3760,0.001/1000,

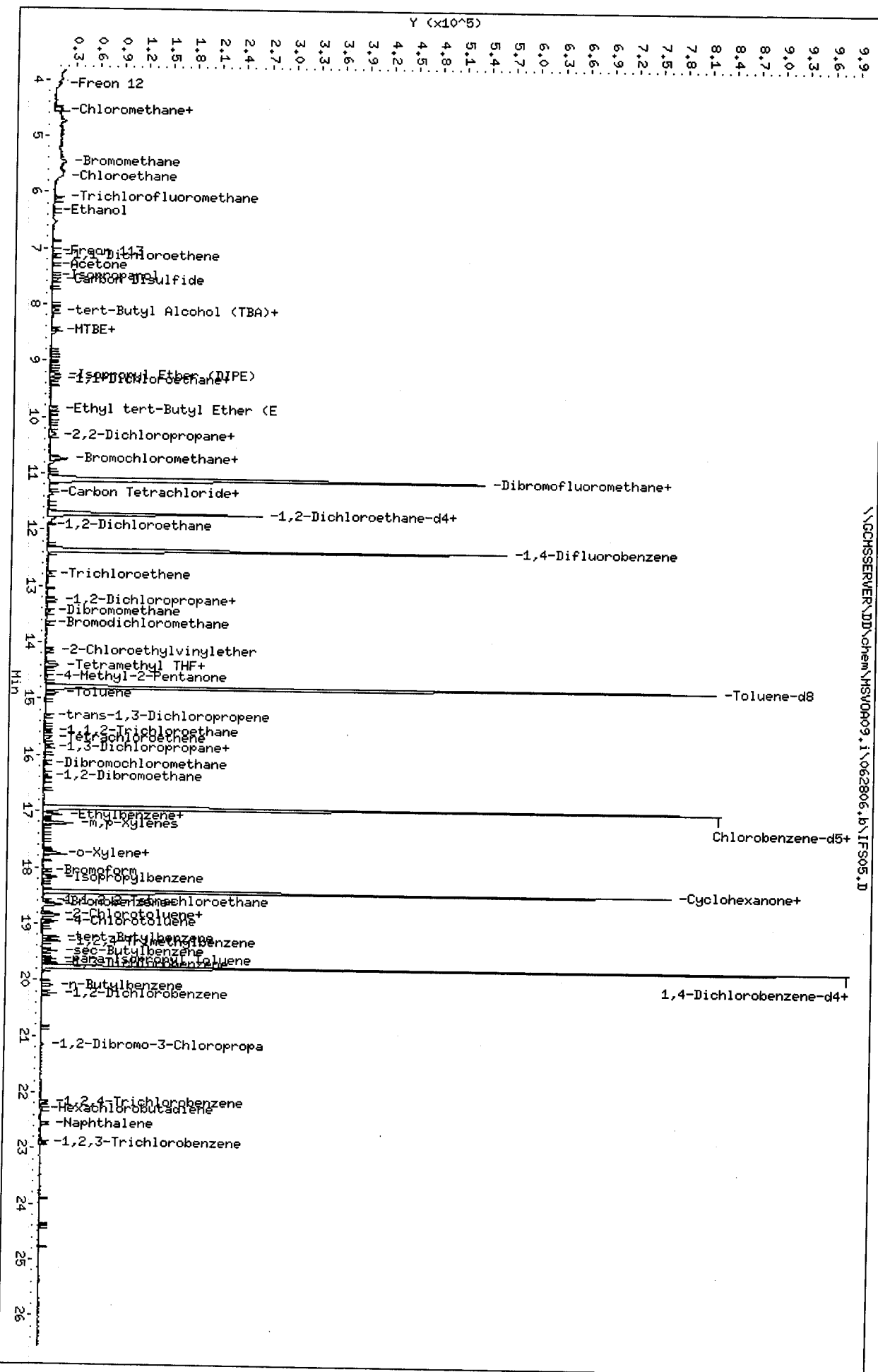
Purge Volume: 5.0

Column phase: RTX Volatiles

Instrument: MSV0A09.i

Operator: WDC

Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS06.D
Report Date: 29-Jun-2006 12:28

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS06.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 28-JUN-2006 15:20 MS Autotune Date: 30-MAY-2006 10:57
Operator : VOC Inst ID: MSVOA09.i
Smp Info : ICAL,S3638,0.002/500,S3760,0.002/500,
Misc Info : S2864,0.001/500,2PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\826GOX9W.m
Meth Date : 29-Jun-2006 12:27 target Quant Type: ISTD
Cal Date : 28-JUN-2006 15:20 Cal File: IFS06.D
Als bottle: 6 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.086	4.088 (0.368)		20028	2.00000	1.8865 (M)
2 Chloromethane	50	4.520	4.542 (0.407)		35678	2.00000	2.1156 (M)
3 Vinyl Chloride	62	4.727	4.749 (0.425)		25325	2.00000	2.0671 (M)
4 Bromomethane	94	5.457	5.469 (0.491)		16498	2.00000	2.1033 (M)
5 Chloroethane	64	5.674	5.676 (0.510)		13093	2.00000	1.9115 (M)
6 Trichlorofluoromethane	101	6.108	6.120 (0.549)		23247	2.00000	1.8999
7 Ethanol	45	6.522	6.534 (0.587)		33674	200.000	199.6627 (AM)
8 Freon 113	101	7.055	7.067 (0.635)		8989	2.00000	1.5766
9 1,1-Dichloroethene	96	7.134	7.155 (0.642)		13521	2.00000	2.0127
10 Acetone	43	7.321	7.333 (0.659)		7866	2.00000	2.0615
11 Isopropanol	45	7.489	7.510 (0.674)		12881	20.0000	17.8004 (A)
12 Carbon Disulfide	76	7.568	7.579 (0.681)		61626	2.00000	1.8972
13 Methylene Chloride	84	8.110	8.122 (0.729)		25625	2.00000	2.1916
14 tert-Butyl Alcohol (TBA)	59	8.209	8.221 (0.738)		15475	20.0000	18.6004 (A)
15 MTBE	73	8.455	8.467 (0.761)		50190	2.00000	2.0116
16 trans-1,2-Dichloroethene	96	8.514	8.526 (0.766)		15120	2.00000	1.8635
17 Isopropyl Ether (DIPE)	45	9.244	9.256 (0.831)		77156	2.00000	2.0334 (A)
18 1,1-Dichloroethane	63	9.323	9.335 (0.839)		33895	2.00000	2.0331
19 Vinyl Acetate	43	9.323	9.335 (0.839)		50000	2.00000	2.2333
20 Ethyl tert-Butyl Ether (ETBE)	59	9.865	9.867 (0.887)		61473	2.00000	2.0709 (A)
21 2,2-Dichloropropane	77	10.280	10.292 (0.925)		18592	2.00000	1.9737
22 cis-1,2-Dichloroethene	96	10.319	10.321 (0.928)		17472	2.00000	1.9344

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
23 2-Butanone	43	10.339	10.341	(0.930)	9971	2.00000	1.8911
24 Bromochloromethane	128	10.723	10.745	(0.965)	9077	2.00000	1.8892
25 Tetrahydrofuran	42	10.743	10.745	(0.966)	74927	20.0000	24.6425 (A)
26 Chloroform	83	10.812	10.824	(0.973)	29563	2.00000	1.9691
27 Dibromofluoromethane	113	11.088	11.100	(0.997)	216225	50.0000	49.6480
28 1,1,1-Trichloroethane	97	11.108	11.110	(0.999)	17686	2.00000	1.8640
* 29 Pentafluorobenzene	168	11.118	11.130	(1.000)	361115	50.0000	
30 Carbon Tetrachloride	117	11.325	11.337	(0.916)	14509	2.00000	2.0039
31 1,1-Dichloropropene	75	11.374	11.376	(0.920)	17979	2.00000	1.8568
32 1,2-Dichloroethane-d4	65	11.720	11.731	(0.948)	214775	50.0000	50.2579
33 Benzene	78	11.720	11.731	(0.948)	65661	2.00000	2.0300
34 Methyl tert-Amyl Ether (TAME)	73	11.798	11.800	(0.955)	49169	2.00000	2.0854 (A)
35 1,2-Dichloroethane	62	11.848	11.860	(0.959)	23085	2.00000	2.1069
* 36 1,4-Difluorobenzene	114	12.361	12.373	(1.000)	591358	50.0000	
37 Trichloroethene	95	12.775	12.787	(1.034)	15367	2.00000	1.9713
38 1,2-Dichloropropane	63	13.238	13.250	(1.071)	21486	2.00000	2.1356
39 Trifluorotoluene	146	13.258	13.260	(1.073)	18095	2.00000	1.9384 (A)
40 Dibromomethane	93	13.445	13.467	(1.088)	12409	2.00000	2.0404
41 Bromodichloromethane	83	13.662	13.664	(1.105)	20610	2.00000	1.9168
42 2-Chloroethylvinylether	63	14.136	14.138	(1.144)	10592	2.00000	1.8404
43 Tetramethyl THF	43	14.392	14.404	(1.164)	44135	2.00000	2.0391 (A)
44 cis-1,3-Dichloropropene	75	14.412	14.424	(1.166)	28497	2.00000	2.0229
45 4-Methyl-2-Pentanone	43	14.619	14.621	(1.183)	21203	2.00000	1.9615
46 Toluene-d8	98	14.787	14.799	(1.196)	670078	50.0000	50.5232
47 Toluene	92	14.895	14.907	(1.205)	38524	2.00000	2.0640
48 trans-1,3-Dichloropropene	75	15.300	15.302	(1.238)	25229	2.00000	2.0183
49 1,1,2-Trichloroethane	85	15.586	15.597	(1.261)	9596	2.00000	2.1491
50 Tetrachloroethene	166	15.694	15.706	(0.927)	11449	2.00000	1.7530
51 1,3-Dichloropropane	76	15.852	15.864	(0.936)	27561	2.00000	2.0253
52 2-Hexanone	43	15.881	15.883	(0.938)	13459	2.00000	1.7590
53 Dibromochloromethane	129	16.138	16.149	(0.953)	16875	2.00000	1.9569
54 1,2-Dibromoethane	107	16.355	16.357	(1.323)	16627	2.00000	1.9824
* 55 Chlorobenzene-d5	117	16.937	16.949	(1.000)	535835	50.0000	
56 Chlorobenzene	112	16.976	16.988	(1.002)	45541	2.00000	2.0401
57 Ethylbenzene	91	17.055	17.067	(1.007)	67363	2.00000	1.9682
58 1,1,1,2-Tetrachloroethane	131	17.075	17.087	(1.008)	13742	2.00000	1.8828
59 m,p-Xylenes	106	17.213	17.215	(1.016)	52652	4.00000	4.0009
60 o-Xylene	106	17.736	17.747	(1.047)	26415	2.00000	1.9595
61 Styrene	104	17.765	17.777	(1.049)	46102	2.00000	1.9281
62 Bromoform	173	18.061	18.063	(1.066)	11909	2.00000	1.9355
63 Isopropylbenzene	105	18.169	18.172	(0.919)	55781	2.00000	1.8512
64 Cyclohexanone	55	18.406	18.418	(0.931)	23336	20.0000	17.7745 (A)
65 Bromofluorobenzene	95	18.426	18.438	(0.932)	300716	50.0000	50.3271
66 1,1,2,2-Tetrachloroethane	83	18.594	18.596	(0.941)	23361	2.00000	2.0732
67 Bromobenzene	156	18.633	18.635	(0.943)	17465	2.00000	1.9752
68 Propylbenzene	91	18.663	18.665	(0.944)	75403	2.00000	1.9074
69 1,2,3-Trichloropropane	110	18.682	18.684	(0.945)	5248	2.00000	1.9379
70 2-Chlorotoluene	91	18.830	18.832	(0.953)	58388	2.00000	2.0589
71 1,3,5-Trimethylbenzene	105	18.860	18.862	(0.954)	54154	2.00000	1.9876
72 4-Chlorotoluene	91	18.958	18.960	(0.959)	54480	2.00000	2.0059
73 tert-Butylbenzene	119	19.235	19.237	(0.973)	39122	2.00000	1.8255
74 1,2,4-Trimethylbenzene	105	19.304	19.306	(0.977)	55320	2.00000	1.9317
75 sec-Butylbenzene	105	19.481	19.483	(0.986)	59166	2.00000	1.8027
76 para-Isopropyl Toluene	119	19.629	19.631	(0.993)	46583	2.00000	1.7841

Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS06.D
Report Date: 29-Jun-2006 12:28

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 1,3-Dichlorobenzene	146	19.688	19.690	(0.996)	34723		2.00000	1.9970
* 78 1,4-Dichlorobenzene-d4	152	19.767	19.769	(1.000)	268540		50.0000	
79 1,4-Dichlorobenzene	146	19.787	19.799	(1.001)	36446		2.00000	2.0483
80 n-Butylbenzene	91	20.083	20.095	(1.016)	43211		2.00000	1.7640
81 1,2-Dichlorobenzene	146	20.231	20.243	(1.023)	32202		2.00000	1.9291
82 1,2-Dibromo-3-Chloropropane	75	21.158	21.160	(1.070)	3541		2.00000	1.8580
83 1,2,4-Trichlorobenzene	180	22.174	22.185	(1.122)	17677		2.00000	1.8083
84 Hexachlorobutadiene	225	22.292	22.294	(1.128)	5197		2.00000	1.7973
85 Naphthalene	128	22.558	22.570	(1.141)	44966		2.00000	1.8581
86 1,2,3-Trichlorobenzene	180	22.903	22.915	(1.159)	15651		2.00000	1.7306

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.

Data File: \\GCHSERVER\JD\chem\MSVD09.1\062806.b\IFS06.D
Date : 28-JUN-2006 15:20

Client ID: DYNA P&T

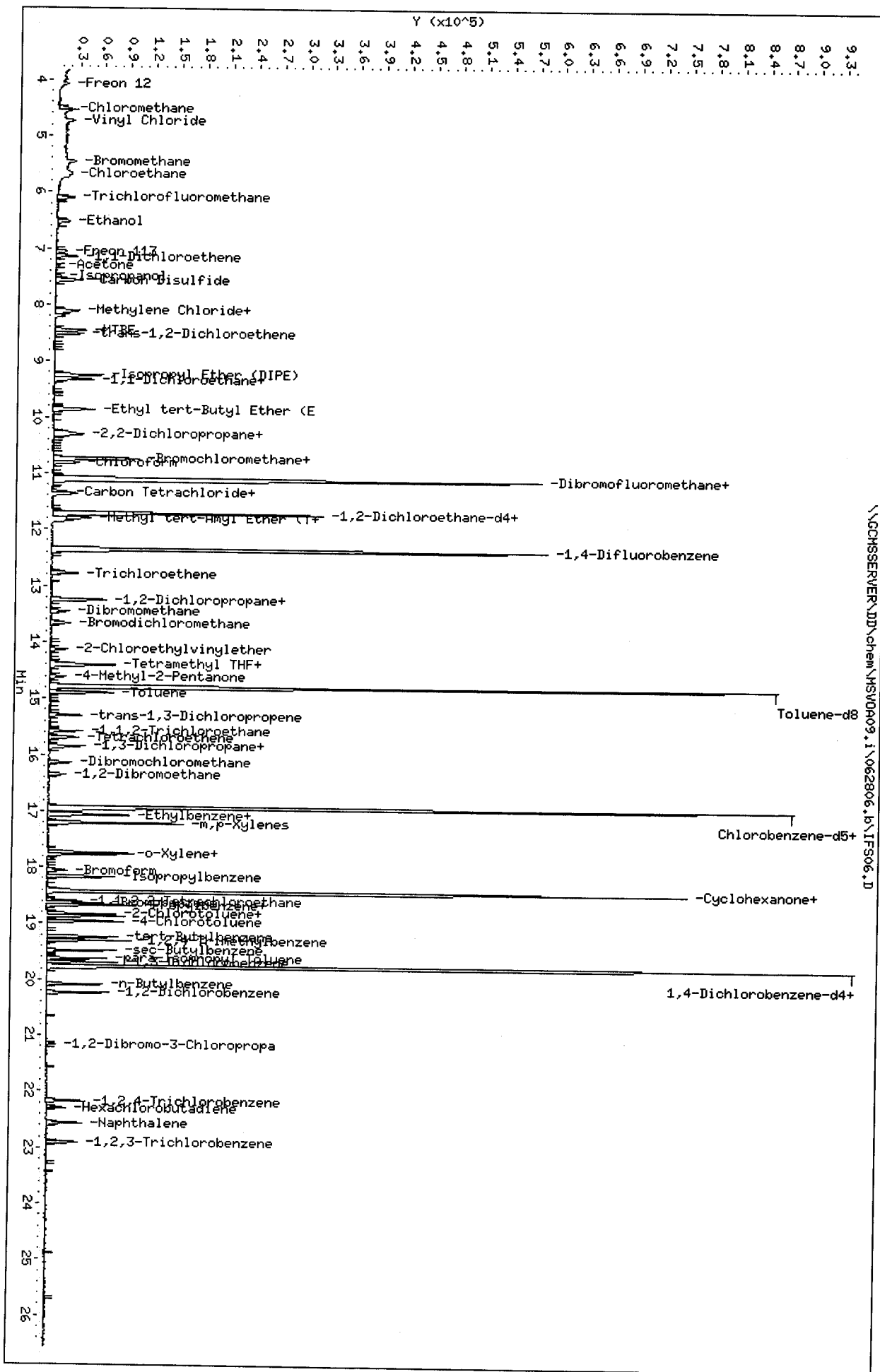
Sample Info: ICAL,S3638,0.002/500,S3760,0.002/500,
Purge Volume: 5.0

Column phase: RTX Volatiles

Instrument: MSVD09.1

Operator: WDC

Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS07.D
Report Date: 29-Jun-2006 12:29

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS07.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 28-JUN-2006 15:55 MS Autotune Date: 30-MAY-2006 10:57
Operator : VOC Inst ID: MSVOA09.i
Smp Info : ICAL,S3638,0.005/500,S3760,0.005/500,
Misc Info : S2864,0.0025/500,5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\826GOX9W.m
Meth Date : 29-Jun-2006 12:29 target Quant Type: ISTD
Cal Date : 28-JUN-2006 15:55 Cal File: IFS07.D
Als bottle: 7 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.082	4.088 (0.367)		55827	5.00000	5.2727
2 Chloromethane	50	4.526	4.542 (0.407)		83307	5.00000	4.9531
3 Vinyl Chloride	62	4.733	4.749 (0.426)		62714	5.00000	5.1326
4 Bromomethane	94	5.462	5.469 (0.492)		36778	5.00000	4.7015 (M)
5 Chloroethane	64	5.660	5.676 (0.509)		36095	5.00000	5.2839
6 Trichlorofluoromethane	101	6.104	6.120 (0.549)		61751	5.00000	5.0604
7 Ethanol	45	6.528	6.534 (0.587)		88314	500.000	525.0434 (AM)
8 Freon 113	101	7.060	7.067 (0.635)		26026	5.00000	4.5771
9 1,1-Dichloroethene	96	7.139	7.155 (0.642)		32546	5.00000	4.8578
10 Acetone	43	7.317	7.333 (0.658)		20609	5.00000	5.4156
11 Isopropanol	45	7.494	7.510 (0.674)		36275	50.0000	50.2634 (AM)
12 Carbon Disulfide	76	7.563	7.579 (0.681)		161734	5.00000	4.9925
13 Methylene Chloride	84	8.115	8.122 (0.730)		59311	5.00000	5.0863
14 tert-Butyl Alcohol (TBA)	59	8.194	8.221 (0.737)		42034	50.0000	50.6589 (A)
15 MTBE	73	8.451	8.467 (0.760)		131479	5.00000	5.2840
16 trans-1,2-Dichloroethene	96	8.510	8.526 (0.766)		40586	5.00000	5.0155
17 Isopropyl Ether (DIPE)	45	9.250	9.256 (0.832)		198044	5.00000	5.2334 (A)
18 1,1-Dichloroethane	63	9.319	9.335 (0.838)		84746	5.00000	5.0969
19 Vinyl Acetate	43	9.328	9.335 (0.839)		103797	5.00000	4.6487
20 Ethyl tert-Butyl Ether (ETBE)	59	9.861	9.867 (0.887)		153876	5.00000	5.1976 (A)
21 2,2-Dichloropropane	77	10.275	10.292 (0.925)		48824	5.00000	5.1969
22 cis-1,2-Dichloroethene	96	10.315	10.321 (0.928)		45750	5.00000	5.0789

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
23 2-Butanone	43	10.325	10.341	(0.929)	26881	5.00000	5.1121
24 Bromochloromethane	128	10.729	10.745	(0.965)	23505	5.00000	4.9054
25 Tetrahydrofuran	42	10.739	10.745	(0.966)	164334	50.0000	54.1924 (A)
26 Chloroform	83	10.808	10.824	(0.972)	77619	5.00000	5.1840
27 Dibromofluoromethane	113	11.084	11.100	(0.997)	214766	50.0000	49.4452
28 1,1,1-Trichloroethane	97	11.104	11.110	(0.999)	45329	5.00000	4.7904
* 29 Pentafluorobenzene	168	11.114	11.130	(1.000)	360149	50.0000	
30 Carbon Tetrachloride	117	11.330	11.337	(0.916)	36190	5.00000	4.9634
31 1,1-Dichloropropene	75	11.370	11.376	(0.919)	47551	5.00000	4.8766
32 1,2-Dichloroethane-d4	65	11.715	11.731	(0.947)	217495	50.0000	50.5385
33 Benzene	78	11.715	11.731	(0.947)	167421	5.00000	5.1398
34 Methyl tert-Amyl Ether (TAME)	73	11.794	11.800	(0.954)	125600	5.00000	5.2899 (A)
35 1,2-Dichloroethane	62	11.843	11.860	(0.958)	57144	5.00000	5.1789
* 36 1,4-Difluorobenzene	114	12.366	12.373	(1.000)	595523	50.0000	
37 Trichloroethene	95	12.780	12.787	(1.033)	41279	5.00000	5.2584
38 1,2-Dichloropropane	63	13.244	13.250	(1.071)	51804	5.00000	5.1130
39 Trifluorotoluene	146	13.254	13.260	(1.072)	45953	5.00000	4.8884 (A)
40 Dibromomethane	93	13.451	13.467	(1.088)	31290	5.00000	5.1090
41 Bromodichloromethane	83	13.658	13.664	(1.104)	56793	5.00000	5.2451
42 2-Chloroethylvinylether	63	14.131	14.138	(1.143)	30023	5.00000	5.1801
43 Tetramethyl THF	43	14.388	14.404	(1.163)	115738	5.00000	5.3100 (A)
44 cis-1,3-Dichloropropene	75	14.417	14.424	(1.166)	74816	5.00000	5.2740
45 4-Methyl-2-Pentanone	43	14.615	14.621	(1.182)	52895	5.00000	4.8591
46 Toluene-d8	98	14.792	14.799	(1.196)	681082	50.0000	50.9937
47 Toluene	92	14.891	14.907	(1.204)	99586	5.00000	5.2984
48 trans-1,3-Dichloropropene	75	15.295	15.302	(1.237)	64580	5.00000	5.1304
49 1,1,2-Trichloroethane	85	15.581	15.597	(1.260)	23610	5.00000	5.2507
50 Tetrachloroethene	166	15.699	15.706	(0.927)	31613	5.00000	4.7969
51 1,3-Dichloropropane	76	15.847	15.864	(0.935)	70482	5.00000	5.1328
52 2-Hexanone	43	15.877	15.883	(0.937)	35729	5.00000	4.6276
53 Dibromochloromethane	129	16.143	16.149	(0.953)	43851	5.00000	5.0396
54 1,2-Dibromoethane	107	16.350	16.357	(1.322)	43119	5.00000	5.1051
* 55 Chlorobenzene-d5	117	16.942	16.949	(1.000)	540703	50.0000	
56 Chlorobenzene	112	16.982	16.988	(1.002)	115857	5.00000	5.1433
57 Ethylbenzene	91	17.060	17.067	(1.007)	181316	5.00000	5.2499
58 1,1,1,2-Tetrachloroethane	131	17.080	17.087	(1.008)	39314	5.00000	5.3380
59 m,p-Xylenes	106	17.208	17.215	(1.016)	141470	10.0000	10.6534
60 o-Xylene	106	17.741	17.747	(1.047)	71958	5.00000	5.2899
61 Styrene	104	17.771	17.777	(1.049)	124795	5.00000	5.1722
62 Bromoform	173	18.057	18.063	(1.066)	29621	5.00000	4.7709
63 Isopropylbenzene	105	18.165	18.172	(0.919)	158290	5.00000	5.1960
64 Cyclohexanone	55	18.402	18.418	(0.931)	71148	50.0000	53.6016 (A)
65 Bromofluorobenzene	95	18.431	18.438	(0.933)	303610	50.0000	50.2578
66 1,1,2,2-Tetrachloroethane	83	18.599	18.596	(0.941)	58753	5.00000	5.1574
67 Bromobenzene	156	18.629	18.635	(0.943)	45055	5.00000	5.0401
68 Propylbenzene	91	18.658	18.665	(0.944)	206679	5.00000	5.1712
69 1,2,3-Trichloropropane	110	18.678	18.684	(0.945)	13921	5.00000	5.0847
70 2-Chlorotoluene	91	18.826	18.832	(0.953)	149119	5.00000	5.2012
71 1,3,5-Trimethylbenzene	105	18.855	18.862	(0.954)	139606	5.00000	5.0681
72 4-Chlorotoluene	91	18.954	18.960	(0.959)	149030	5.00000	5.4274
73 tert-Butylbenzene	119	19.240	19.237	(0.974)	109767	5.00000	5.0661
74 1,2,4-Trimethylbenzene	105	19.299	19.306	(0.977)	148930	5.00000	5.1438
75 sec-Butylbenzene	105	19.477	19.483	(0.986)	162387	5.00000	4.8940
76 para-Isopropyl Toluene	119	19.625	19.631	(0.993)	131857	5.00000	4.9952

Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS07.D
 Report Date: 29-Jun-2006 12:29

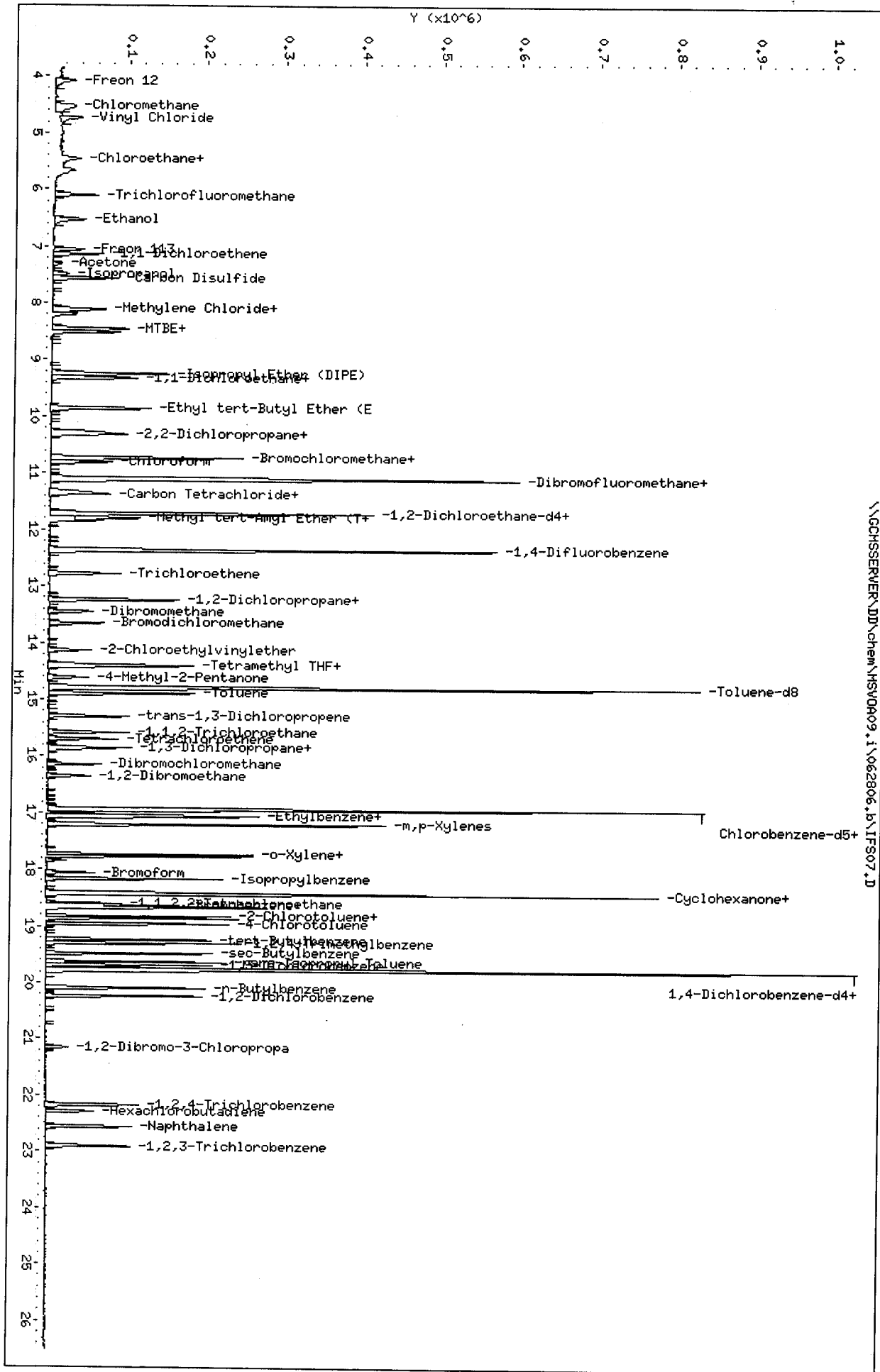
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
* 77 1,3-Dichlorobenzene	146	19.684	19.690	(0.996)	89201	5.00000	5.0744
78 1,4-Dichlorobenzene-d4	152	19.763	19.769	(1.000)	271498	50.0000	
79 1,4-Dichlorobenzene	146	19.792	19.799	(1.001)	92556	5.00000	5.1452
80 n-Butylbenzene	91	20.088	20.095	(1.016)	125053	5.00000	5.0494
81 1,2-Dichlorobenzene	146	20.236	20.243	(1.024)	87377	5.00000	5.1774
82 1,2-Dibromo-3-Chloropropane	75	21.163	21.160	(1.071)	9529	5.00000	4.9455
83 1,2,4-Trichlorobenzene	180	22.179	22.185	(1.122)	47100	5.00000	4.7657
84 Hexachlorobutadiene	225	22.297	22.294	(1.128)	15083	5.00000	5.1594
85 Naphthalene	128	22.564	22.570	(1.142)	112190	5.00000	4.5856
86 1,2,3-Trichlorobenzene	180	22.909	22.915	(1.159)	43828	5.00000	4.7936

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.

Data File: \NCHSERVER\JD\chem\MSV0A09.i\062806.b\IFS07.D
 Date : 28-JUN-2006 15:55
 Client ID: DYNA P&I
 Sample Info: ICAL,S3638,0.005/500,S3760,0.005/500,
 Purge Volume: 5.0
 Column phase: RTX Volatiles

Instrument: MSV0A09.i
 Operator: WOC
 Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS08.D
 Report Date: 29-Jun-2006 12:30

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS08.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 28-JUN-2006 16:29 MS Autotune Date: 30-MAY-2006 10:57
 Operator : VOC Inst ID: MSVOA09.i
 Smp Info : ICAL,S3638,0.002/100,S3760,0.002/100,
 Misc Info : S2864,0.001/100,10PPB
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\826GOX9W.m
 Meth Date : 29-Jun-2006 12:30 target Quant Type: ISTD
 Cal Date : 28-JUN-2006 16:29 Cal File: IFS08.D
 Als bottle: 8 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.085	4.088	(0.367)	83265	10.0000	7.9355
2 Chloromethane	50	4.529	4.542	(0.407)	162617	10.0000	9.7563
3 Vinyl Chloride	62	4.736	4.749	(0.426)	117856	10.0000	9.7331
4 Bromomethane	94	5.466	5.469	(0.492)	70819	10.0000	9.1353
5 Chloroethane	64	5.663	5.676	(0.509)	67791	10.0000	10.0139 (M)
6 Trichlorofluoromethane	101	6.107	6.120	(0.549)	106069	10.0000	8.7712
7 Ethanol	45	6.521	6.534	(0.587)	180551	1000.00	1083.1482 (AM)
8 Freon 113	101	7.064	7.067	(0.635)	48483	10.0000	8.6040
9 1,1-Dichloroethene	96	7.142	7.155	(0.643)	62944	10.0000	9.4802
10 Acetone	43	7.310	7.333	(0.658)	41853	10.0000	11.0980
11 Isopropanol	45	7.488	7.510	(0.674)	74416	100.000	104.0480 (AM)
12 Carbon Disulfide	76	7.567	7.579	(0.681)	318886	10.0000	9.9329
13 Methylene Chloride	84	8.109	8.122	(0.729)	119871	10.0000	10.3729
14 tert-Butyl Alcohol (TBA)	59	8.198	8.221	(0.737)	91829	100.000	111.6754 (A)
15 MTBE	73	8.454	8.467	(0.760)	263856	10.0000	10.7003
16 trans-1,2-Dichloroethene	96	8.513	8.526	(0.766)	82300	10.0000	10.2627 (M)
17 Isopropyl Ether (DIPE)	45	9.243	9.256	(0.831)	401008	10.0000	10.6929 (A)
18 1,1-Dichloroethane	63	9.312	9.335	(0.838)	170272	10.0000	10.3338
19 Vinyl Acetate	43	9.322	9.335	(0.839)	213913	10.0000	9.6674
20 Ethyl tert-Butyl Ether (ETBE)	59	9.855	9.867	(0.886)	316654	10.0000	10.7931 (A)
21 2,2-Dichloropropane	77	10.279	10.292	(0.925)	90593	10.0000	9.7305
22 cis-1,2-Dichloroethene	96	10.308	10.321	(0.927)	92413	10.0000	10.3524

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
23 2-Butanone	43	10.318	10.341	(0.928)	56224	10.0000	10.7895
24 Bromochloromethane	128	10.732	10.745	(0.965)	49362	10.0000	10.3951
25 Tetrahydrofuran	42	10.732	10.745	(0.965)	328120	100.000	109.1858 (A)
26 Chloroform	83	10.811	10.824	(0.973)	150063	10.0000	10.1133
27 Dibromofluoromethane	113	11.087	11.100	(0.997)	215369	50.0000	50.0339
28 1,1,1-Trichloroethane	97	11.107	11.110	(0.999)	92681	10.0000	9.8835
* 29 Pentafluorobenzene	168	11.117	11.130	(1.000)	356911	50.0000	
30 Carbon Tetrachloride	117	11.324	11.337	(0.916)	71034	10.0000	9.6890
31 1,1-Dichloropropene	75	11.373	11.376	(0.920)	93746	10.0000	9.5615
32 1,2-Dichloroethane-d4	65	11.719	11.731	(0.948)	222595	50.0000	51.4407
33 Benzene	78	11.719	11.731	(0.948)	333329	10.0000	10.1773
34 Methyl tert-Amyl Ether (TAME)	73	11.797	11.800	(0.955)	247103	10.0000	10.3503 (A)
35 1,2-Dichloroethane	62	11.847	11.860	(0.959)	116045	10.0000	10.4595
* 36 1,4-Difluorobenzene	114	12.360	12.373	(1.000)	598797	50.0000	
37 Trichloroethene	95	12.784	12.787	(1.034)	78191	10.0000	9.9060
38 1,2-Dichloropropane	63	13.247	13.250	(1.072)	104417	10.0000	10.2496
39 Trifluorotoluene	146	13.257	13.260	(1.073)	86910	10.0000	9.1948 (A)
40 Dibromomethane	93	13.454	13.467	(1.089)	64235	10.0000	10.4310
41 Bromodichloromethane	83	13.661	13.664	(1.105)	111792	10.0000	10.2681
42 2-Chloroethylvinylether	63	14.135	14.138	(1.144)	59737	10.0000	10.2506
43 Tetramethyl THF	43	14.391	14.404	(1.164)	234357	10.0000	10.6935 (A)
44 cis-1,3-Dichloropropene	75	14.411	14.424	(1.166)	149048	10.0000	10.4494
45 4-Methyl-2-Pentanone	43	14.618	14.621	(1.183)	116067	10.0000	10.6041
46 Toluene-d8	98	14.786	14.799	(1.196)	669245	50.0000	49.8335
47 Toluene	92	14.894	14.907	(1.205)	188227	10.0000	9.9597
48 trans-1,3-Dichloropropene	75	15.299	15.302	(1.238)	133010	10.0000	10.5090
49 1,1,2-Trichloroethane	85	15.585	15.597	(1.261)	46604	10.0000	10.3077
50 Tetrachloroethene	166	15.693	15.706	(0.927)	59156	10.0000	9.1488
51 1,3-Dichloropropane	76	15.851	15.864	(0.936)	141742	10.0000	10.5206
52 2-Hexanone	43	15.880	15.883	(0.938)	80289	10.0000	10.5990
53 Dibromochloromethane	129	16.137	16.149	(0.953)	88236	10.0000	10.3354
54 1,2-Dibromoethane	107	16.354	16.357	(1.323)	88505	10.0000	10.4213
* 55 Chlorobenzene-d5	117	16.936	16.949	(1.000)	530508	50.0000	
56 Chlorobenzene	112	16.975	16.988	(1.002)	226962	10.0000	10.2693
57 Ethylbenzene	91	17.054	17.067	(1.007)	345523	10.0000	10.1968
58 1,1,1,2-Tetrachloroethane	131	17.074	17.087	(1.008)	74011	10.0000	10.2422
59 m,p-Xylenes	106	17.212	17.215	(1.016)	266782	20.0000	20.4761
60 o-Xylene	106	17.744	17.747	(1.048)	138229	10.0000	10.3571
61 Styrene	104	17.764	17.777	(1.049)	246743	10.0000	10.4230
62 Bromoform	173	18.060	18.063	(1.066)	61307	10.0000	10.0642
63 Isopropylbenzene	105	18.168	18.172	(0.919)	292015	10.0000	9.7650
64 Cyclohexanone	55	18.405	18.418	(0.931)	144958	100.000	111.2526 (A)
65 Bromofluorobenzene	95	18.425	18.438	(0.932)	299832	50.0000	50.5614
66 1,1,2,2-Tetrachloroethane	83	18.593	18.596	(0.941)	119669	10.0000	10.7012
67 Bromobenzene	156	18.632	18.635	(0.943)	90266	10.0000	10.2867
68 Propylbenzene	91	18.662	18.665	(0.944)	386119	10.0000	9.8417
69 1,2,3-Trichloropropane	110	18.681	18.684	(0.945)	28393	10.0000	10.5648
70 2-Chlorotoluene	91	18.829	18.832	(0.953)	288109	10.0000	10.2372
71 1,3,5-Trimethylbenzene	105	18.859	18.862	(0.954)	267615	10.0000	9.8971
72 4-Chlorotoluene	91	18.957	18.960	(0.959)	270266	10.0000	10.0269
73 tert-Butylbenzene	119	19.234	19.237	(0.973)	204107	10.0000	9.5965
74 1,2,4-Trimethylbenzene	105	19.303	19.306	(0.977)	288308	10.0000	10.1441
75 sec-Butylbenzene	105	19.480	19.483	(0.986)	305081	10.0000	9.3665
76 para-Isopropyl Toluene	119	19.628	19.631	(0.993)	246315	10.0000	9.5060

Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS08.D
Report Date: 29-Jun-2006 12:30

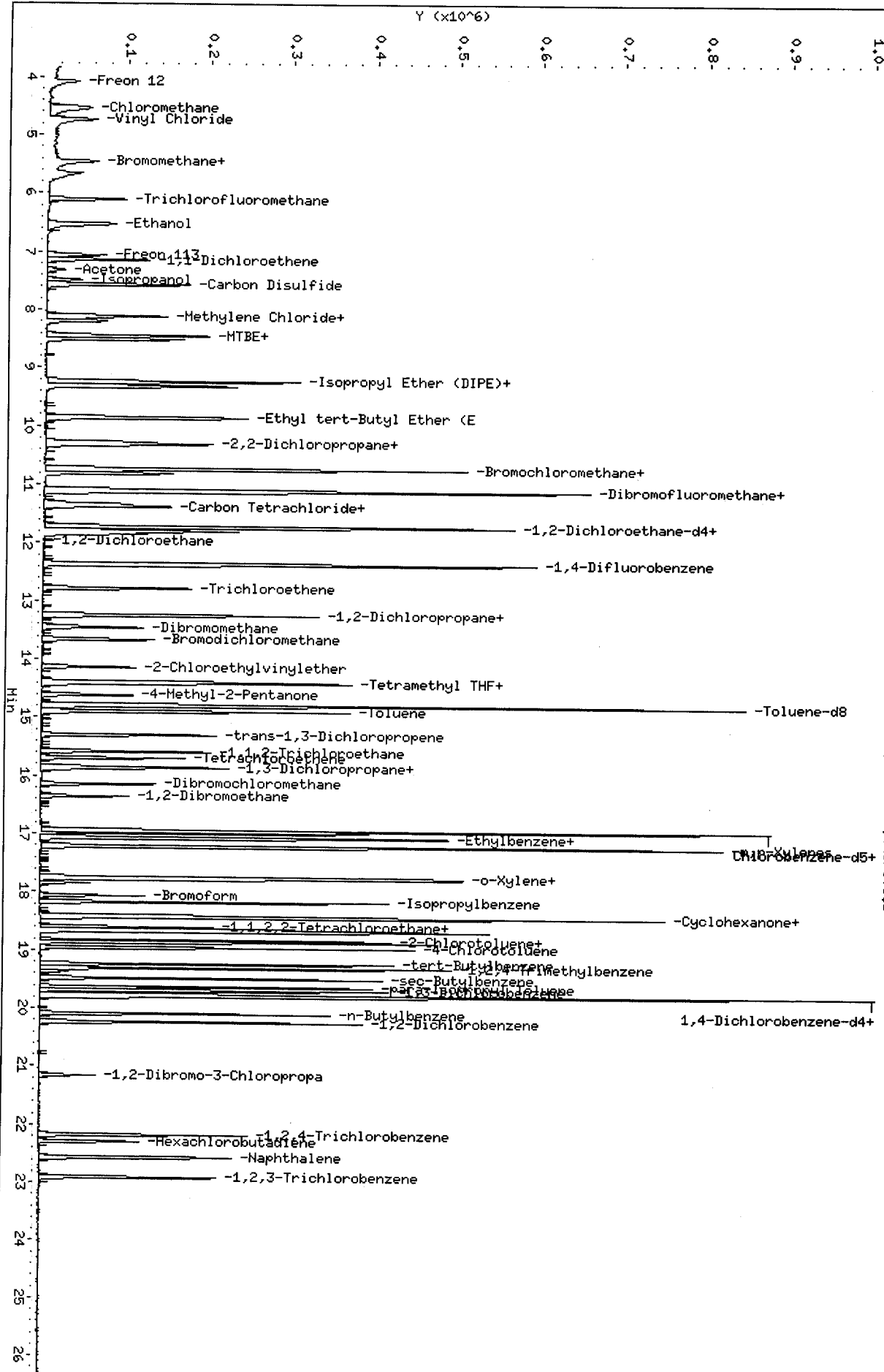
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	
77 1,3-Dichlorobenzene	146	19.687	19.690	(0.996)	171679	10.0000	9.9492	
* 78 1,4-Dichlorobenzene-d4	152	19.766	19.769	(1.000)	266510	50.0000		
79 1,4-Dichlorobenzene	146	19.796	19.799	(1.001)	178786	10.0000	10.1249	
80 n-Butylbenzene	91	20.092	20.095	(1.016)	232534	10.0000	9.5651	
81 1,2-Dichlorobenzene	146	20.230	20.243	(1.023)	171402	10.0000	10.3462	
82 1,2-Dibromo-3-Chloropropane	75	21.157	21.160	(1.070)	20308	10.0000	10.7370	
83 1,2,4-Trichlorobenzene	180	22.173	22.185	(1.122)	93850	10.0000	9.6738	
84 Hexachlorobutadiene	225	22.291	22.294	(1.128)	28367	10.0000	9.8851	
85 Naphthalene	128	22.557	22.570	(1.141)	246143	10.0000	10.2491	
86 1,2,3-Trichlorobenzene	180	22.912	22.915	(1.159)	89843	10.0000	10.0103	

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.

Data File: \\GCHSERVER\JD\chem\MSVDR09.i\062806.b\IFS08.D
 Date : 28-JUN-2006 16:29
 Client ID: DYNA P&T
 Sample Info: ICAL,S3638,0.002/100,S3760,0.002/100,
 Purge Volume: 5.0
 Column phase: RTX Volatiles

Instrument: MSVDR09.i
 Operator: VDC
 Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS09.D
 Report Date: 29-Jun-2006 12:31

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS09.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 28-JUN-2006 17:04 MS Autotune Date: 30-MAY-2006 10:57
 Operator : VOC Inst ID: MSVOA09.i
 Smp Info : ICAL,S3638,0.004/100,S3760,0.004/100,
 Misc Info : S2864,0.002/100,20PPB
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\826GOX9W.m
 Meth Date : 29-Jun-2006 12:31 target Quant Type: ISTD
 Cal Date : 28-JUN-2006 17:04 Cal File: IFS09.D
 Als bottle: 9 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.082	4.088	(0.367)	222225	20.0000	20.7893
2 Chloromethane	50	4.535	4.542	(0.408)	343329	20.0000	20.2192
3 Vinyl Chloride	62	4.732	4.749	(0.426)	271203	20.0000	21.9851
4 Bromomethane	94	5.462	5.469	(0.492)	156895	20.0000	19.8662
5 Chloroethane	64	5.659	5.676	(0.509)	149874	20.0000	21.7316
6 Trichlorofluoromethane	101	6.103	6.120	(0.549)	256594	20.0000	20.8281
7 Ethanol	45	6.527	6.534	(0.587)	368625	2000.00	2170.7332(A)
8 Freon 113	101	7.060	7.067	(0.635)	124631	20.0000	21.7105
9 1,1-Dichloroethene	96	7.139	7.155	(0.642)	143155	20.0000	21.1644
10 Acetone	43	7.316	7.333	(0.658)	74504	20.0000	19.3923
11 Isopropanol	45	7.484	7.510	(0.673)	156647	200.000	214.9924(A)
12 Carbon Disulfide	76	7.573	7.579	(0.681)	694695	20.0000	21.2408
13 Methylene Chloride	84	8.115	8.122	(0.730)	238276	20.0000	20.2396
14 tert-Butyl Alcohol (TBA)	59	8.194	8.221	(0.737)	185893	200.000	221.9088(A)
15 MTBE	73	8.450	8.467	(0.760)	534054	20.0000	21.2593
16 trans-1,2-Dichloroethene	96	8.510	8.526	(0.766)	171907	20.0000	21.0421
17 Isopropyl Ether (DIPE)	45	9.249	9.256	(0.832)	816009	20.0000	21.3586(A)
18 1,1-Dichloroethane	63	9.318	9.335	(0.838)	356591	20.0000	21.2432
19 Vinyl Acetate	43	9.328	9.335	(0.839)	506039	20.0000	22.4487
20 Ethyl tert-Butyl Ether (ETBE)	59	9.861	9.867	(0.887)	645385	20.0000	21.5930(A)
21 2,2-Dichloropropane	77	10.275	10.292	(0.925)	201232	20.0000	21.2163
22 cis-1,2-Dichloroethene	96	10.314	10.321	(0.928)	186016	20.0000	20.4546

Compounds	QUANT SIG	AMOUNTS					
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
23 2-Butanone	43	10.324	10.341	(0.929)	110242	20.0000	20.7665
24 Bromochloromethane	128	10.729	10.745	(0.965)	104492	20.0000	21.5999
25 Tetrahydrofuran	42	10.739	10.745	(0.966)	660275	200.000	215.6712 (A)
26 Chloroform	83	10.808	10.824	(0.972)	315180	20.0000	20.8503
27 Dibromofluoromethane	113	11.094	11.100	(0.998)	218011	50.0000	49.7157
28 1,1,1-Trichloroethane	97	11.103	11.110	(0.999)	202497	20.0000	21.1970
* 29 Pentafluorobenzene	168	11.113	11.130	(1.000)	363602	50.0000	
30 Carbon Tetrachloride	117	11.330	11.337	(0.916)	162429	20.0000	22.0673
31 1,1-Dichloropropene	75	11.370	11.376	(0.919)	209097	20.0000	21.2419
32 1,2-Dichloroethane-d4	65	11.715	11.731	(0.947)	227016	50.0000	52.2539
33 Benzene	78	11.725	11.731	(0.948)	697698	20.0000	21.2178
34 Methyl tert-Amyl Ether (TAME)	73	11.794	11.800	(0.954)	510508	20.0000	21.2985 (A)
35 1,2-Dichloroethane	62	11.843	11.860	(0.958)	234116	20.0000	21.0178
* 36 1,4-Difluorobenzene	114	12.366	12.373	(1.000)	601186	50.0000	
37 Trichloroethene	95	12.780	12.787	(1.033)	163478	20.0000	20.6288
38 1,2-Dichloropropane	63	13.244	13.250	(1.071)	213793	20.0000	20.9026
39 Trifluorotoluene	146	13.253	13.260	(1.072)	204664	20.0000	21.5668 (A)
40 Dibromomethane	93	13.451	13.467	(1.088)	130124	20.0000	21.0467
41 Bromodichloromethane	83	13.668	13.664	(1.105)	229615	20.0000	21.0063
42 2-Chloroethylvinylether	63	14.131	14.138	(1.143)	124614	20.0000	21.2983
43 Tetramethyl THF	43	14.388	14.404	(1.163)	483024	20.0000	21.9525 (A)
44 cis-1,3-Dichloropropene	75	14.417	14.424	(1.166)	301899	20.0000	21.0813
45 4-Methyl-2-Pentanone	43	14.614	14.621	(1.182)	237261	20.0000	21.5906
46 Toluene-d8	98	14.792	14.799	(1.196)	682435	50.0000	50.6137
47 Toluene	92	14.900	14.907	(1.205)	402698	20.0000	21.2234
48 trans-1,3-Dichloropropene	75	15.295	15.302	(1.237)	271835	20.0000	21.3921
49 1,1,2-Trichloroethane	85	15.581	15.597	(1.260)	94247	20.0000	20.7624
50 Tetrachloroethene	166	15.699	15.706	(0.927)	136328	20.0000	20.6600
51 1,3-Dichloropropane	76	15.847	15.864	(0.935)	288236	20.0000	20.9638
52 2-Hexanone	43	15.877	15.883	(0.937)	164619	20.0000	21.2944
53 Dibromochloromethane	129	16.143	16.149	(0.953)	183023	20.0000	21.0071
54 1,2-Dibromoethane	107	16.350	16.357	(1.322)	182631	20.0000	21.4190
* 55 Chlorobenzene-d5	117	16.942	16.949	(1.000)	541396	50.0000	
56 Chlorobenzene	112	16.981	16.988	(1.002)	461949	20.0000	20.4814
57 Ethylbenzene	91	17.060	17.067	(1.007)	735245	20.0000	21.2616
58 1,1,1,2-Tetrachloroethane	131	17.080	17.087	(1.008)	151553	20.0000	20.5513
59 m,p-Xylenes	106	17.208	17.215	(1.016)	577494	40.0000	43.4325
60 o-Xylene	106	17.741	17.747	(1.047)	288766	20.0000	21.2012
61 Styrene	104	17.770	17.777	(1.049)	519755	20.0000	21.5143
62 Bromoform	173	18.056	18.063	(1.066)	129883	20.0000	20.8930
63 Isopropylbenzene	105	18.165	18.172	(0.919)	658992	20.0000	21.5355
64 Cyclohexanone	55	18.401	18.418	(0.931)	242802	200.000	182.1063 (A)
65 Bromofluorobenzene	95	18.431	18.438	(0.933)	302688	50.0000	49.8816
66 1,1,2,2-Tetrachloroethane	83	18.599	18.596	(0.941)	249476	20.0000	21.8015
67 Bromobenzene	156	18.628	18.635	(0.943)	191233	20.0000	21.2971
68 Propylbenzene	91	18.658	18.665	(0.944)	865850	20.0000	21.5674
69 1,2,3-Trichloropropane	110	18.678	18.684	(0.945)	58695	20.0000	21.3430
70 2-Chlorotoluene	91	18.826	18.832	(0.953)	610163	20.0000	21.1873
71 1,3,5-Trimethylbenzene	105	18.865	18.862	(0.955)	597145	20.0000	21.5815
72 4-Chlorotoluene	91	18.954	18.960	(0.959)	571401	20.0000	20.7167
73 tert-Butylbenzene	119	19.240	19.237	(0.974)	470493	20.0000	21.6180
74 1,2,4-Trimethylbenzene	105	19.299	19.306	(0.977)	622176	20.0000	21.3931
75 sec-Butylbenzene	105	19.486	19.483	(0.986)	730292	20.0000	21.9112
76 para-Isopropyl Toluene	119	19.624	19.631	(0.993)	581734	20.0000	21.9401

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
* 77 1,3-Dichlorobenzene	146	19.684	19.690	(0.996)	367677	20.0000	20.8229
78 1,4-Dichlorobenzene-d4	152	19.762	19.769	(1.000)	272715	50.0000	
79 1,4-Dichlorobenzene	146	19.792	19.799	(1.001)	381425	20.0000	21.1092
80 n-Butylbenzene	91	20.088	20.095	(1.016)	554869	20.0000	22.3047
81 1,2-Dichlorobenzene	146	20.236	20.243	(1.024)	357715	20.0000	21.1013
82 1,2-Dibromo-3-Chloropropane	75	21.163	21.160	(1.071)	41138	20.0000	21.2552
83 1,2,4-Trichlorobenzene	180	22.179	22.185	(1.122)	204975	20.0000	20.6476
84 Hexachlorobutadiene	225	22.297	22.294	(1.128)	70100	20.0000	23.8722
85 Naphthalene	128	22.563	22.570	(1.142)	532598	20.0000	21.6723
86 1,2,3-Trichlorobenzene	180	22.909	22.915	(1.159)	195499	20.0000	21.2869

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \GCHSERVER\ID\chem\MSV009.1\062806.b\IFS09.D
Date : 28-JUN-2006 17:04

Client ID: DYNA P&T

Sample Info: ICAL, S3638, 0.004/100, S3760, 0.004/100,

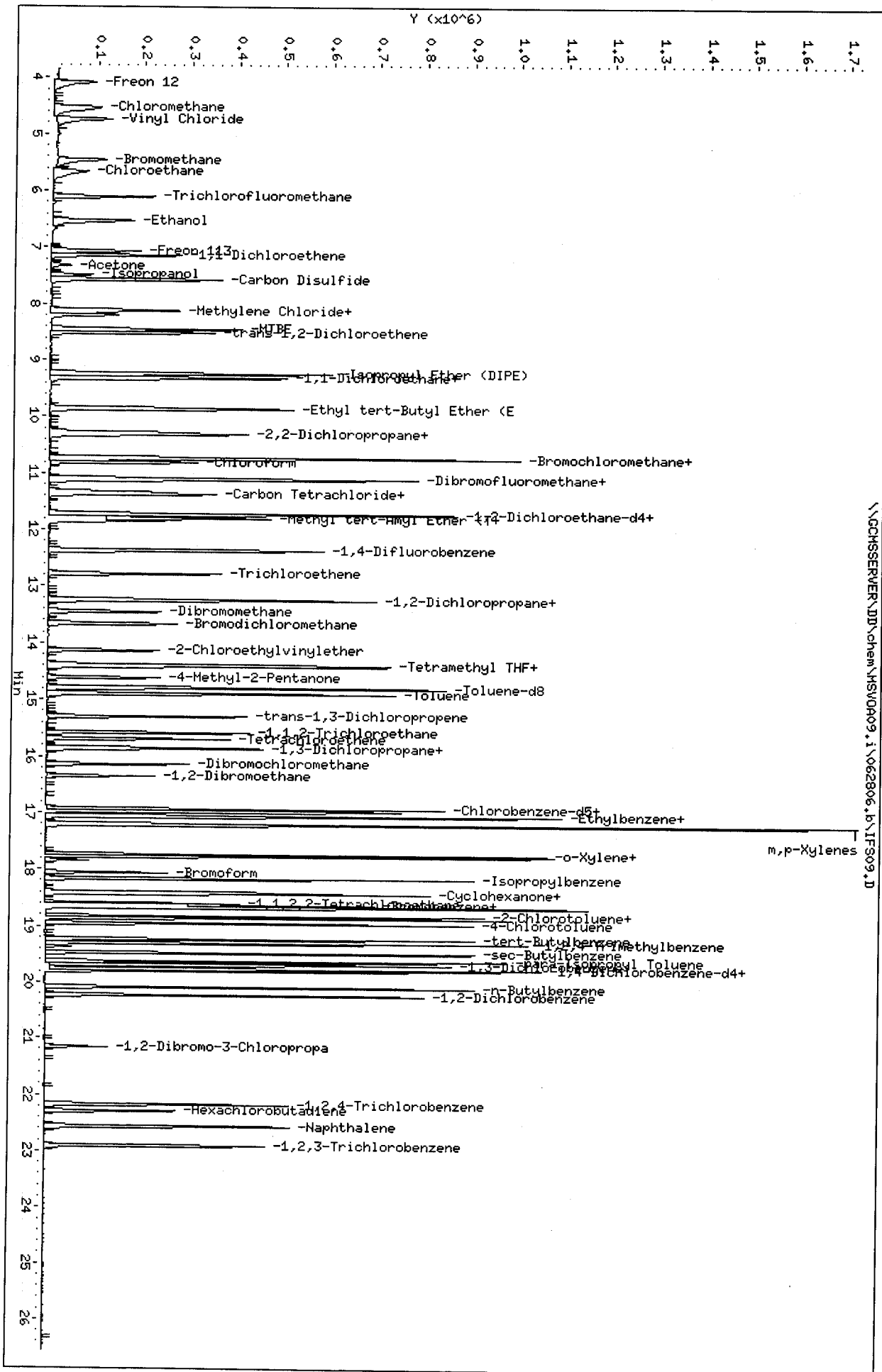
Purge Volume: 5.0

Column phase: RTX Volatiles

Instrument: MSV009.1

Operator: VDC

Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS10.D
 Report Date: 29-Jun-2006 12:32

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS10.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 28-JUN-2006 17:38 MS Autotune Date: 30-MAY-2006 10:57
 Operator : VOC Inst ID: MSVOA09.i
 Smp Info : ICAL,S3638,0.01/100,S3760,0.01/100,
 Misc Info : S2864,0.005/100,50PPB
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\826GOX9W.m
 Meth Date : 29-Jun-2006 12:32 target Quant Type: ISTD
 Cal Date : 28-JUN-2006 17:38 Cal File: IFS10.D
 Als bottle: 10 Calibration Sample, Level: 6
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.086	4.088 (0.368)		555733	50.0000	49.4544
2 Chloromethane	50	4.530	4.542 (0.407)		783459	50.0000	43.8896
3 Vinyl Chloride	62	4.737	4.749 (0.426)		620967	50.0000	47.8842
4 Bromomethane	94	5.467	5.469 (0.492)		386057	50.0000	46.4995
5 Chloroethane	64	5.664	5.676 (0.509)		352855	50.0000	48.6691
6 Trichlorofluoromethane	101	6.108	6.120 (0.549)		667064	50.0000	51.5065
7 Ethanol	45	6.532	6.534 (0.588)		814107	5000.00	4560.2987 (AM)
8 Freon 113	101	7.065	7.067 (0.635)		382260	50.0000	63.3424
9 1,1-Dichloroethene	96	7.144	7.155 (0.643)		400928	50.0000	56.3840
10 Acetone	43	7.311	7.333 (0.658)		195680	50.0000	48.4494
11 Isopropanol	45	7.489	7.510 (0.674)		351900	500.000	459.4206 (A)
12 Carbon Disulfide	76	7.568	7.579 (0.681)		1916386	50.0000	55.7380
13 Methylene Chloride	84	8.110	8.122 (0.729)		599592	50.0000	48.4473
14 tert-Butyl Alcohol (TBA)	59	8.199	8.221 (0.737)		422946	500.000	480.2712 (A)
15 MTBE	73	8.455	8.467 (0.761)		1324934	50.0000	50.1706
16 trans-1,2-Dichloroethene	96	8.515	8.526 (0.766)		460609	50.0000	53.6315
17 Isopropyl Ether (DIPE)	45	9.244	9.256 (0.831)		2024871	50.0000	50.4158 (A)
18 1,1-Dichloroethane	63	9.323	9.335 (0.839)		914482	50.0000	51.8222
19 Vinyl Acetate	43	9.323	9.335 (0.839)		1096453	50.0000	46.2689
20 Ethyl tert-Butyl Ether (ETBE)	59	9.866	9.867 (0.887)		1597617	50.0000	50.8461 (A)
21 2,2-Dichloropropane	77	10.280	10.292 (0.925)		534508	50.0000	53.6066
22 cis-1,2-Dichloroethene	96	10.319	10.321 (0.928)		492379	50.0000	51.5028

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
23 2-Butanone	43	10.329	10.341	(0.929)	271179	50.0000	48.5917
24 Bromochloromethane	128	10.734	10.745	(0.965)	271037	50.0000	53.2952
25 Tetrahydrofuran	42	10.734	10.745	(0.965)	1522039	500.000	472.9152 (A)
26 Chloroform	83	10.812	10.824	(0.973)	816806	50.0000	51.4001
27 Dibromofluoromethane	113	11.098	11.100	(0.998)	232689	50.0000	50.4755
28 1,1,1-Trichloroethane	97	11.108	11.110	(0.999)	549333	50.0000	54.6995
* 29 Pentafluorobenzene	168	11.118	11.130	(1.000)	382240	50.0000	
30 Carbon Tetrachloride	117	11.335	11.337	(0.916)	458654	50.0000	59.2069
31 1,1-Dichloropropene	75	11.375	11.376	(0.919)	585078	50.0000	56.4758
32 1,2-Dichloroethane-d4	65	11.720	11.731	(0.947)	222066	50.0000	48.5675
33 Benzene	78	11.720	11.731	(0.947)	1777551	50.0000	51.3638
34 Methyl tert-Amyl Ether (TAME)	73	11.799	11.800	(0.954)	1281501	50.0000	50.8005 (A)
35 1,2-Dichloroethane	62	11.848	11.860	(0.958)	591546	50.0000	50.4600
* 36 1,4-Difluorobenzene	114	12.371	12.373	(1.000)	632714	50.0000	
37 Trichloroethene	95	12.785	12.787	(1.033)	444579	50.0000	53.3048
38 1,2-Dichloropropane	63	13.248	13.250	(1.071)	551503	50.0000	51.2338
39 Trifluorotoluene	146	13.258	13.260	(1.072)	572834	50.0000	57.3556 (A)
40 Dibromomethane	93	13.456	13.467	(1.088)	333244	50.0000	51.2143
41 Bromodichloromethane	83	13.663	13.664	(1.104)	598777	50.0000	52.0495
42 2-Chloroethylvinylether	63	14.136	14.138	(1.143)	314454	50.0000	51.0667
43 Tetramethyl THF	43	14.392	14.404	(1.163)	1141210	50.0000	49.2814 (A)
44 cis-1,3-Dichloropropene	75	14.412	14.424	(1.165)	773753	50.0000	51.3381
45 4-Methyl-2-Pentanone	43	14.609	14.621	(1.181)	566790	50.0000	49.0075
46 Toluene-d8	98	14.787	14.799	(1.195)	705598	50.0000	49.7240
47 Toluene	92	14.895	14.907	(1.204)	1015055	50.0000	50.8309
48 trans-1,3-Dichloropropene	75	15.300	15.302	(1.237)	698121	50.0000	52.2012
49 1,1,2-Trichloroethane	85	15.586	15.597	(1.260)	241971	50.0000	50.6496
50 Tetrachloroethene	166	15.704	15.706	(0.927)	375912	50.0000	55.7655
51 1,3-Dichloropropane	76	15.852	15.864	(0.936)	727714	50.0000	51.8102
52 2-Hexanone	43	15.872	15.883	(0.937)	396115	50.0000	50.1581
53 Dibromochloromethane	129	16.148	16.149	(0.953)	471114	50.0000	52.9321
54 1,2-Dibromoethane	107	16.355	16.357	(1.322)	469856	50.0000	52.3590
* 55 Chlorobenzene-d5	117	16.937	16.949	(1.000)	553073	50.0000	
56 Chlorobenzene	112	16.976	16.988	(1.002)	1176072	50.0000	51.0426
57 Ethylbenzene	91	17.055	17.067	(1.007)	1838988	50.0000	52.0567
58 1,1,1,2-Tetrachloroethane	131	17.075	17.087	(1.008)	387232	50.0000	51.4020
59 m,p-Xylenes	106	17.213	17.215	(1.016)	1412401	100.000	103.9820
60 o-Xylene	106	17.746	17.747	(1.048)	717754	50.0000	51.5851
61 Styrene	104	17.765	17.777	(1.049)	1287949	50.0000	52.1867
62 Bromoform	173	18.061	18.063	(1.066)	333094	50.0000	52.4505
63 Isopropylbenzene	105	18.170	18.172	(0.919)	1676352	50.0000	53.6464
64 Cyclohexanone	55	18.406	18.418	(0.931)	683380	500.000	501.9218 (A)
65 Bromofluorobenzene	95	18.426	18.438	(0.932)	308160	50.0000	49.7305
66 1,1,2,2-Tetrachloroethane	83	18.594	18.596	(0.941)	592540	50.0000	50.7081
67 Bromobenzene	156	18.633	18.635	(0.943)	472547	50.0000	51.5353
68 Propylbenzene	91	18.663	18.665	(0.944)	2177590	50.0000	53.1169
69 1,2,3-Trichloropropane	110	18.683	18.684	(0.945)	141844	50.0000	50.5088
70 2-Chlorotoluene	91	18.830	18.832	(0.953)	1503241	50.0000	51.1163
71 1,3,5-Trimethylbenzene	105	18.860	18.862	(0.954)	1478626	50.0000	52.3314
72 4-Chlorotoluene	91	18.959	18.960	(0.959)	1432784	50.0000	50.8700
73 tert-Butylbenzene	119	19.235	19.237	(0.973)	1195632	50.0000	53.7975
74 1,2,4-Trimethylbenzene	105	19.304	19.306	(0.977)	1521542	50.0000	51.2326
75 sec-Butylbenzene	105	19.481	19.483	(0.986)	1880354	50.0000	55.2473
76 para-Isopropyl Toluene	119	19.629	19.631	(0.993)	1495975	50.0000	55.2509

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
* 77 1,3-Dichlorobenzene	146	19.688	19.690	(0.996)	918403	50.0000	50.9343
78 1,4-Dichlorobenzene-d4	152	19.767	19.769	(1.000)	278489	50.0000	
79 1,4-Dichlorobenzene	146	19.797	19.799	(1.001)	948370	50.0000	51.3974
80 n-Butylbenzene	91	20.093	20.095	(1.016)	1443550	50.0000	56.8251
81 1,2-Dichlorobenzene	146	20.241	20.243	(1.024)	894502	50.0000	51.6719
82 1,2-Dibromo-3-Chloropropane	75	21.158	21.160	(1.070)	101058	50.0000	51.1322
83 1,2,4-Trichlorobenzene	180	22.174	22.185	(1.122)	533617	50.0000	52.6381
84 Hexachlorobutadiene	225	22.292	22.294	(1.128)	189722	50.0000	63.2693
85 Naphthalene	128	22.568	22.570	(1.142)	1335318	50.0000	53.2098
86 1,2,3-Trichlorobenzene	180	22.913	22.915	(1.159)	510216	50.0000	54.4031

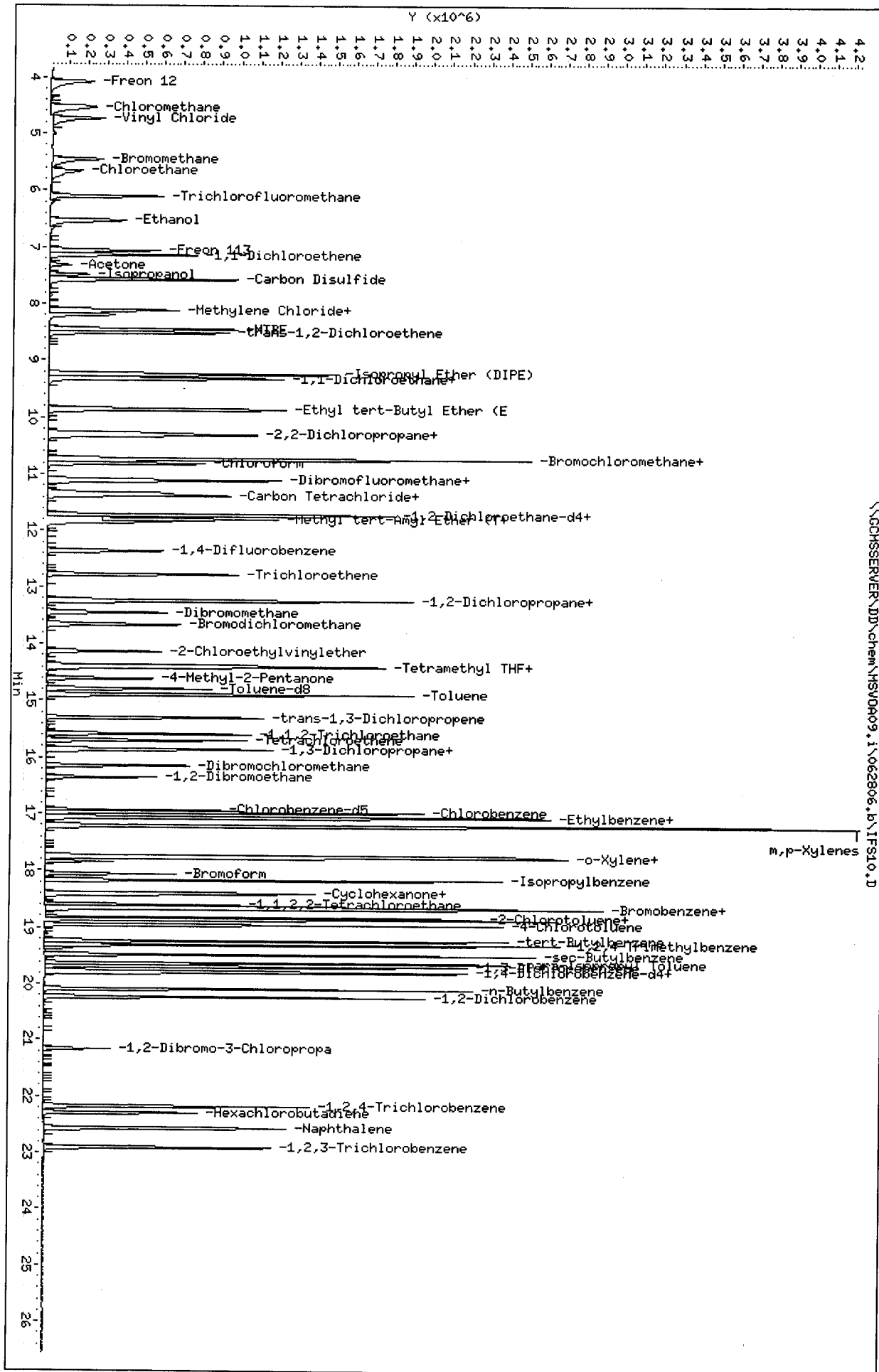
QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.

Data File: \\GCHSERVER\JD\chem\MSV0A09.i\062806.b\IFS10.D
Date: 28-JUN-2006 17:38
Client ID: DNA Pat

Sample Info: ICAL, S3638, 0.01/100, S3760, 0.01/100,
Purge Volume: 5.0
Column phase: RTX Volatiles

Instrument: MSV0A09.i
Operator: WDC
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS11.D
Report Date: 29-Jun-2006 12:34

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS11.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 28-JUN-2006 18:12 MS Autotune Date: 30-MAY-2006 10:57
Operator : VOC Inst ID: MSVOA09.i
Smp Info : ICAL,S3638,0.015/100,S3760,0.015/100,
Misc Info : S2864,0.0075/100,75PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\826GOX9W.m
Meth Date : 29-Jun-2006 12:33 target Quant Type: ISTD
Cal Date : 28-JUN-2006 18:12 Cal File: IFS11.D
Als bottle: 11 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.076	4.088	(0.367)	874623	75.0000	77.6029
2 Chloromethane	50	4.529	4.542	(0.407)	1198464	75.0000	66.9404
3 Vinyl Chloride	62	4.736	4.749	(0.426)	965196	75.0000	74.2092
4 Bromomethane	94	5.456	5.469	(0.491)	610201	75.0000	73.2805
5 Chloroethane	64	5.663	5.676	(0.509)	554576	75.0000	76.2669
6 Trichlorofluoromethane	101	6.107	6.120	(0.549)	1058185	75.0000	81.4656
7 Ethanol	45	6.531	6.534	(0.588)	1251722	7500.00	6990.9742 (AM)
8 Freon 113	101	7.064	7.067	(0.635)	507900	75.0000	83.9135
9 1,1-Dichloroethene	96	7.143	7.155	(0.643)	566324	75.0000	79.4095
10 Acetone	43	7.310	7.333	(0.658)	299013	75.0000	73.8159
11 Isopropanol	45	7.488	7.510	(0.674)	559121	750.000	727.8050 (A)
12 Carbon Disulfide	76	7.577	7.579	(0.682)	2675766	75.0000	77.5951
13 Methylene Chloride	84	8.109	8.122	(0.729)	873893	75.0000	70.4028
14 tert-Butyl Alcohol (TBA)	59	8.198	8.221	(0.737)	661992	750.000	749.5013 (A)
15 MTBE	73	8.445	8.467	(0.760)	1945234	75.0000	73.4420
16 trans-1,2-Dichloroethene	96	8.514	8.526	(0.766)	653721	75.0000	75.8923
17 Isopropyl Ether (DIPE)	45	9.243	9.256	(0.831)	2856927	75.0000	70.9229 (A)
18 1,1-Dichloroethane	63	9.322	9.335	(0.839)	1309488	75.0000	73.9879
19 Vinyl Acetate	43	9.322	9.335	(0.839)	1469796	75.0000	61.8406
20 Ethyl tert-Butyl Ether (ETBE)	59	9.855	9.867	(0.886)	2305489	75.0000	73.1587 (A)
21 2,2-Dichloropropane	77	10.279	10.292	(0.925)	755661	75.0000	75.5630
22 cis-1,2-Dichloroethene	96	10.309	10.321	(0.927)	723394	75.0000	75.4440

Compounds	QUANT SIG	AMOUNTS						
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
							(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	
23 2-Butanone	43	10.318	10.341	(0.928)	399678	75.0000	71.4060	
24 Bromochloromethane	128	10.733	10.745	(0.965)	400685	75.0000	78.5563	
25 Tetrahydrofuran	42	10.733	10.745	(0.965)	2217557	750.000	686.9898 (A)	
26 Chloroform	83	10.811	10.824	(0.973)	1190975	75.0000	74.7249	
27 Dibromofluoromethane	113	11.088	11.100	(0.997)	237363	50.0000	51.3377	
28 1,1,1-Trichloroethane	97	11.107	11.110	(0.999)	778321	75.0000	77.2724	
* 29 Pentafluorobenzene	168	11.117	11.130	(1.000)	383370	50.0000		
30 Carbon Tetrachloride	117	11.334	11.337	(0.917)	645401	75.0000	82.3339	
31 1,1-Dichloropropene	75	11.374	11.376	(0.920)	802531	75.0000	76.5546	
32 1,2-Dichloroethane-d4	65	11.719	11.731	(0.948)	225876	50.0000	48.8197	
33 Benzene	78	11.719	11.731	(0.948)	2543944	75.0000	72.6447	
34 Methyl tert-Amyl Ether (TAME)	73	11.798	11.800	(0.955)	1862608	75.0000	72.9679 (A)	
35 1,2-Dichloroethane	62	11.847	11.860	(0.959)	854626	75.0000	72.0437	
* 36 1,4-Difluorobenzene	114	12.360	12.373	(1.000)	640245	50.0000		
37 Trichloroethene	95	12.784	12.787	(1.034)	640766	75.0000	75.9238	
38 1,2-Dichloropropane	63	13.247	13.250	(1.072)	786358	75.0000	72.1923	
39 Trifluorotoluene	146	13.257	13.260	(1.073)	785774	75.0000	77.7510 (A)	
40 Dibromomethane	93	13.455	13.467	(1.089)	495101	75.0000	75.1941	
41 Bromodichloromethane	83	13.662	13.664	(1.105)	868721	75.0000	74.6265	
42 2-Chloroethylvinylether	63	14.135	14.138	(1.144)	455848	75.0000	73.1580	
43 Tetramethyl THF	43	14.382	14.404	(1.164)	1645504	75.0000	70.2227 (A)	
44 cis-1,3-Dichloropropene	75	14.411	14.424	(1.166)	1125264	75.0000	73.7825	
45 4-Methyl-2-Pentanone	43	14.608	14.621	(1.182)	825120	75.0000	70.5048	
46 Toluene-d8	98	14.786	14.799	(1.196)	703695	50.0000	49.0065	
47 Toluene	92	14.894	14.907	(1.205)	1463994	75.0000	72.4501	
48 trans-1,3-Dichloropropene	75	15.299	15.302	(1.238)	1007792	75.0000	74.4701	
49 1,1,2-Trichloroethane	85	15.585	15.597	(1.261)	355569	75.0000	73.5526	
50 Tetrachloroethene	166	15.703	15.706	(0.927)	529219	75.0000	77.3631	
51 1,3-Dichloropropane	76	15.851	15.864	(0.936)	1055719	75.0000	74.0666	
52 2-Hexanone	43	15.871	15.883	(0.937)	589054	75.0000	73.5011	
53 Dibromochloromethane	129	16.147	16.149	(0.953)	694565	75.0000	76.8998	
54 1,2-Dibromoethane	107	16.354	16.357	(1.323)	686301	75.0000	75.5792	
* 55 Chlorobenzene-d5	117	16.936	16.949	(1.000)	561259	50.0000		
56 Chlorobenzene	112	16.975	16.988	(1.002)	1683184	75.0000	71.9863	
57 Ethylbenzene	91	17.054	17.067	(1.007)	2558961	75.0000	71.3807	
58 1,1,1,2-Tetrachloroethane	131	17.074	17.087	(1.008)	566939	75.0000	74.1591	
59 m,p-Xylenes	106	17.212	17.215	(1.016)	1955745	150.000	141.8834	
60 o-Xylene	106	17.745	17.747	(1.048)	1027752	75.0000	72.7874	
61 Styrene	104	17.764	17.777	(1.049)	1846584	75.0000	73.7309	
62 Bromoform	173	18.060	18.063	(1.066)	499936	75.0000	77.5740	
63 Isopropylbenzene	105	18.169	18.172	(0.919)	2337352	75.0000	72.8656	
64 Cyclohexanone	55	18.396	18.418	(0.931)	1061181	750.000	759.2521 (A)	
65 Bromofluorobenzene	95	18.435	18.438	(0.933)	306754	50.0000	48.2235	
66 1,1,2,2-Tetrachloroethane	83	18.593	18.596	(0.941)	863768	75.0000	72.0078	
67 Bromobenzene	156	18.632	18.635	(0.943)	693668	75.0000	73.6944	
68 Propylbenzene	91	18.662	18.665	(0.944)	2976822	75.0000	70.7347	
69 1,2,3-Trichloropropane	110	18.682	18.684	(0.945)	209263	75.0000	72.5891	
70 2-Chlorotoluene	91	18.829	18.832	(0.953)	2100241	75.0000	69.5702	
71 1,3,5-Trimethylbenzene	105	18.859	18.862	(0.954)	2071956	75.0000	71.4344	
72 4-Chlorotoluene	91	18.958	18.960	(0.959)	2011266	75.0000	69.5622	
73 tert-Butylbenzene	119	19.234	19.237	(0.973)	1669972	75.0000	73.1975	
74 1,2,4-Trimethylbenzene	105	19.303	19.306	(0.977)	2147961	75.0000	70.4550	
75 sec-Butylbenzene	105	19.480	19.483	(0.986)	2537867	75.0000	72.6379	
76 para-Isopropyl Toluene	119	19.628	19.631	(0.993)	2031440	75.0000	73.0873	

Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS11.D
Report Date: 29-Jun-2006 12:34

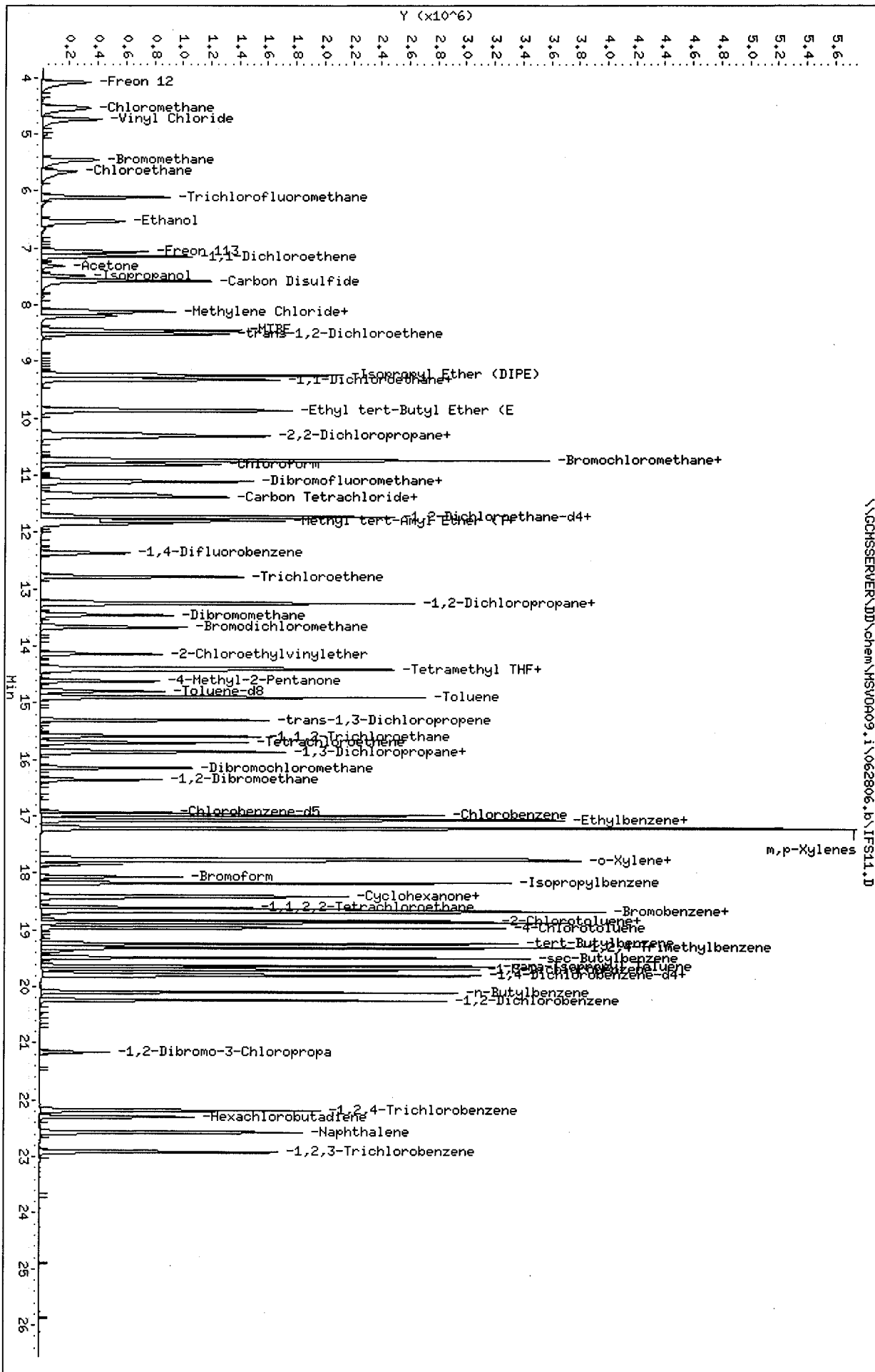
Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
77 1,3-Dichlorobenzene	146	19.687	19.690	(0.996)	1312507	75.0000	70.9090
* 78 1,4-Dichlorobenzene-d4	152	19.766	19.769	(1.000)	285881	50.0000	
79 1,4-Dichlorobenzene	146	19.796	19.799	(1.001)	1346728	75.0000	71.0995
80 n-Butylbenzene	91	20.092	20.095	(1.016)	1964311	75.0000	75.3254
81 1,2-Dichlorobenzene	146	20.230	20.243	(1.023)	1285563	75.0000	72.3418
82 1,2-Dibromo-3-Chloropropane	75	21.157	21.160	(1.070)	148399	75.0000	73.1438
83 1,2,4-Trichlorobenzene	180	22.173	22.185	(1.122)	772959	75.0000	74.2762
84 Hexachlorobutadiene	225	22.291	22.294	(1.128)	260297	75.0000	84.5605
85 Naphthalene	128	22.567	22.570	(1.142)	1954560	75.0000	75.8716
86 1,2,3-Trichlorobenzene	180	22.903	22.915	(1.159)	730506	75.0000	75.8781

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.

Data File: \\GCHSSERVER\DD\chem\MSV0909.i\062806.b\IFS11.D
 Date : 28-JUN-2006 18:12
 Client ID: DYNA P&T
 Sample Info: ICAL,S3638,0.015/100,S3760,0.015/100,
 Purge Volume: 5.0
 Column phase: RTX Volatiles

Instrument: MSV0909.i
 Operator: WDC
 Column diameter: 0.25



\\GCHSSERVER\DD\chem\MSV0909.i\062806.b\IFS11.D

Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS12.D
 Report Date: 29-Jun-2006 12:35

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS12.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 28-JUN-2006 18:47 MS Autotune Date: 30-MAY-2006 10:57
 Operator : VOC Inst ID: MSVOA09.i
 Smp Info : ICAL,S3638,0.02/100,S3760,0.02/100,
 Misc Info : S2864,0.01/100,100PPB
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\826GOX9W.m
 Meth Date : 29-Jun-2006 12:35 target Quant Type: ISTD
 Cal Date : 28-JUN-2006 18:47 Cal File: IFS12.D
 Als bottle: 12 Calibration Sample, Level: 8
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.081	4.088 (0.367)		1170756		100.000	102.2100
2 Chloromethane	50	4.535	4.542 (0.408)		1590152		100.000	87.3921
3 Vinyl Chloride	62	4.732	4.749 (0.426)		1302750		100.000	98.5538
4 Bromomethane	94	5.462	5.469 (0.492)		831281		100.000	98.2276
5 Chloroethane	64	5.669	5.676 (0.510)		747056		100.000	101.0877
6 Trichlorofluoromethane	101	6.103	6.120 (0.549)		1408593		100.000	106.7010
7 Ethanol	45	6.527	6.534 (0.587)		1705439		10000.0	9372.0846 (AM)
8 Freon 113	101	7.059	7.067 (0.635)		786914		100.000	127.9237
9 1,1-Dichloroethene	96	7.138	7.155 (0.642)		779144		100.000	107.4968
10 Acetone	43	7.316	7.333 (0.658)		364034		100.000	88.4244
11 Isopropanol	45	7.484	7.510 (0.673)		772989		1000.00	990.0400 (A)
12 Carbon Disulfide	76	7.572	7.579 (0.681)		3771839		100.000	107.6241
13 Methylene Chloride	84	8.115	8.122 (0.730)		1173204		100.000	92.9984
14 tert-Butyl Alcohol (TBA)	59	8.194	8.221 (0.737)		931019		1000.00	1037.1662 (A)
15 MTBE	73	8.450	8.467 (0.760)		2602621		100.000	96.6839
16 trans-1,2-Dichloroethene	96	8.519	8.526 (0.767)		892528		100.000	101.9524
17 Isopropyl Ether (DIPE)	45	9.249	9.256 (0.832)		3769487		100.000	92.0746 (A)
18 1,1-Dichloroethane	63	9.318	9.335 (0.838)		1752221		100.000	97.4133
19 Vinyl Acetate	43	9.328	9.335 (0.839)		2428938		100.000	100.5550
20 Ethyl tert-Butyl Ether (ETBE)	59	9.860	9.867 (0.887)		3052053		100.000	95.2939 (A)
21 2,2-Dichloropropane	77	10.275	10.292 (0.925)		1045032		100.000	102.8211
22 cis-1,2-Dichloroethene	96	10.314	10.321 (0.928)		976929		100.000	100.2497

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
23 2-Butanone	43	10.324	10.341	(0.929)	532660	100.000	93.6364
24 Bromochloromethane	128	10.728	10.745	(0.965)	538296	100.000	103.8411
25 Tetrahydrofuran	42	10.728	10.745	(0.965)	2900446	1000.00	884.1186 (A)
26 Chloroform	83	10.807	10.824	(0.972)	1584016	100.000	97.7896
27 Dibromofluoromethane	113	11.093	11.100	(0.998)	238082	50.0000	50.6664
28 1,1,1-Trichloroethane	97	11.103	11.110	(0.999)	1103030	100.000	107.7515
* 29 Pentafluorobenzene	168	11.113	11.130	(1.000)	389626	50.0000	
30 Carbon Tetrachloride	117	11.330	11.337	(0.916)	949432	100.000	121.6775
31 1,1-Dichloropropene	75	11.369	11.376	(0.919)	1159008	100.000	111.0692
32 1,2-Dichloroethane-d4	65	11.714	11.731	(0.947)	224627	50.0000	48.7736
33 Benzene	78	11.724	11.731	(0.948)	3395467	100.000	97.4077
34 Methyl tert-Amyl Ether (TAME)	73	11.793	11.800	(0.954)	2471508	100.000	97.2680 (A)
35 1,2-Dichloroethane	62	11.852	11.860	(0.959)	1143018	100.000	96.7989
* 36 1,4-Difluorobenzene	114	12.365	12.373	(1.000)	637307	50.0000	
37 Trichloroethene	95	12.780	12.787	(1.033)	872379	100.000	103.8439
38 1,2-Dichloropropane	63	13.243	13.250	(1.071)	1037119	100.000	95.6526
39 Trifluorotoluene	146	13.253	13.260	(1.072)	1170817	100.000	116.3844 (A)
40 Dibromomethane	93	13.450	13.467	(1.088)	674499	100.000	102.9127
41 Bromodichloromethane	83	13.667	13.664	(1.105)	1181577	100.000	101.9700
42 2-Chloroethylvinylether	63	14.131	14.138	(1.143)	619242	100.000	99.8389
43 Tetramethyl THF	43	14.387	14.404	(1.163)	2158881	100.000	92.5561 (A)
44 cis-1,3-Dichloropropene	75	14.417	14.424	(1.166)	1498864	100.000	98.7322
45 4-Methyl-2-Pentanone	43	14.614	14.621	(1.182)	1127652	100.000	96.7997
46 Toluene-d8	98	14.791	14.799	(1.196)	723022	50.0000	50.5846
47 Toluene	92	14.900	14.907	(1.205)	2004820	100.000	99.6719
48 trans-1,3-Dichloropropene	75	15.294	15.302	(1.237)	1370815	100.000	101.7624
49 1,1,2-Trichloroethane	85	15.580	15.597	(1.260)	480569	100.000	99.8683
50 Tetrachloroethene	166	15.699	15.706	(0.927)	774494	100.000	112.5334
51 1,3-Dichloropropane	76	15.847	15.864	(0.935)	1429645	100.000	99.6935
52 2-Hexanone	43	15.876	15.883	(0.937)	779412	100.000	96.6653
53 Dibromochloromethane	129	16.143	16.149	(0.953)	963657	100.000	106.0472
54 1,2-Dibromoethane	107	16.350	16.357	(1.322)	930874	100.000	102.9856
* 55 Chlorobenzene-d5	117	16.941	16.949	(1.000)	564675	50.0000	
56 Chlorobenzene	112	16.981	16.988	(1.002)	2277563	100.000	96.8175
57 Ethylbenzene	91	17.060	17.067	(1.007)	3466000	100.000	96.0972
58 1,1,1,2-Tetrachloroethane	131	17.079	17.087	(1.008)	780215	100.000	101.4396
59 m,p-Xylenes	106	17.208	17.215	(1.016)	2698349	200.000	194.5728
60 o-Xylene	106	17.740	17.747	(1.047)	1396929	100.000	98.3347
61 Styrene	104	17.770	17.777	(1.049)	2465736	100.000	97.8569
62 Bromoform	173	18.066	18.063	(1.066)	686717	100.000	105.9118
63 Isopropylbenzene	105	18.164	18.172	(0.919)	3301790	100.000	102.0646
64 Cyclohexanone	55	18.401	18.418	(0.931)	1219458	1000.00	865.1482 (A)
65 Bromofluorobenzene	95	18.431	18.438	(0.933)	315180	50.0000	49.1309
66 1,1,2,2-Tetrachloroethane	83	18.598	18.596	(0.941)	1209172	100.000	99.9534
67 Bromobenzene	156	18.638	18.635	(0.943)	973111	100.000	102.5114
68 Propylbenzene	91	18.667	18.665	(0.945)	4197742	100.000	98.9059
69 1,2,3-Trichloropropane	110	18.687	18.684	(0.946)	285049	100.000	98.0450
70 2-Chlorotoluene	91	18.825	18.832	(0.953)	2874369	100.000	94.4112
71 1,3,5-Trimethylbenzene	105	18.865	18.862	(0.955)	2919385	100.000	99.8034
72 4-Chlorotoluene	91	18.953	18.960	(0.959)	2724702	100.000	93.4436
73 tert-Butylbenzene	119	19.239	19.237	(0.974)	2425890	100.000	105.4351
74 1,2,4-Trimethylbenzene	105	19.298	19.306	(0.977)	3009810	100.000	97.8931
75 sec-Butylbenzene	105	19.486	19.483	(0.986)	3744198	100.000	106.2626
76 para-Isopropyl Toluene	119	19.624	19.631	(0.993)	3000445	100.000	107.0412

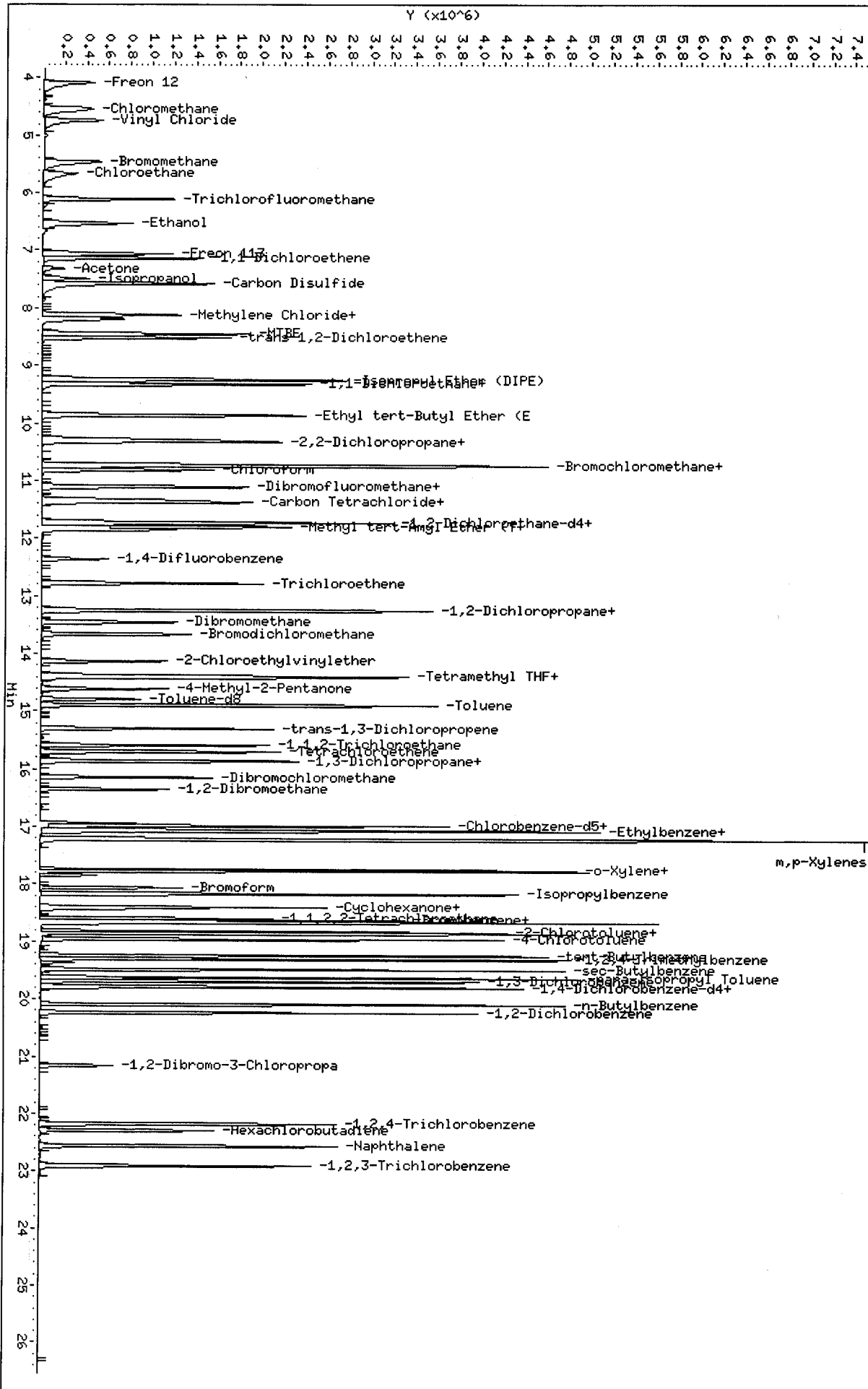
Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
77 1,3-Dichlorobenzene	146	19.693	19.690	(0.997)	1826592	100.000	97.8517
* 78 1,4-Dichlorobenzene-d4	152	19.762	19.769	(1.000)	288309	50.0000	
79 1,4-Dichlorobenzene	146	19.792	19.799	(1.001)	1859867	100.000	97.3634
80 n-Butylbenzene	91	20.087	20.095	(1.016)	2890223	100.000	109.8980
81 1,2-Dichlorobenzene	146	20.235	20.243	(1.024)	1777187	100.000	99.1646
82 1,2-Dibromo-3-Chloropropane	75	21.162	21.160	(1.071)	208535	100.000	101.9184
83 1,2,4-Trichlorobenzene	180	22.178	22.185	(1.122)	1103122	100.000	105.1100
84 Hexachlorobutadiene	225	22.297	22.294	(1.128)	412356	100.000	132.8305
85 Naphthalene	128	22.563	22.570	(1.142)	2824775	100.000	108.7279
86 1,2,3-Trichlorobenzene	180	22.908	22.915	(1.159)	1066109	100.000	109.8048

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.

Data File: \\GCHSERVER\DD\chem\MSV0A09.1\062806.b\IFS12.D
 Date : 28-JUN-2006 18:47
 Client ID: DYNA P&T
 Sample Info: ICAL,S3638.0,02/100,S3760.0,02/100,
 Purge Volume: 5.0
 Column phase: RTX Volatiles

Instrument: MSV0A09.1
 Operator: WOC
 Column diameter: 0.25



CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188774 MSVOA Water
EPA 8260B

Inst : MSVOA09 ID# : 1.0
Seqnum : 486329078003 File : ihg03 Time : 16-AUG-2006 13:34
Cal : 486258514006 Caldate: 28-JUN-2006 Caltype: WATER
Standards: S3053 (50000X), S3980 (25000X), S3942 (25000X), S3967 (1000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	2.3350	2.3594	20.00	20.21	ug/L	1	30	0.1000	
Vinyl Chloride	1.6963	1.8317	20.00	21.60	ug/L	8	20	0.0500	m
Bromomethane	1.0860	0.6782	20.00	12.49	ug/L	-38	30	0.0500	c- ***
Chloroethane	0.9484	1.0127	20.00	21.36	ug/L	7	30	0.0500	
Acetone	0.5283	0.4594	20.00	17.39	ug/L	-13	40	0.0500	
1,1-Dichloroethene	0.9301	1.0502	20.00	22.58	ug/L	13	20	0.0500	
Methylene Chloride	1.6189	1.6895	20.00	20.87	ug/L	4	30	0.0500	
Carbon Disulfide	4.4974	5.0488	20.00	22.45	ug/L	12	30	0.0500	
MTBE	3.4544	3.3010	20.00	19.11	ug/L	-4	30	0.0500	
trans-1,2-Dichloroethene	1.1234	1.2813	20.00	22.81	ug/L	14	30	0.0500	
Vinyl Acetate	3.0998	3.0066	20.00	19.40	ug/L	-3	40	0.0500	
1,1-Dichloroethane	2.3083	2.4392	20.00	21.13	ug/L	6	30	0.1000	
2-Butanone	0.7300	0.6221	20.00	17.04	ug/L	-15	40	0.0500	
cis-1,2-Dichloroethene	1.2506	1.3604	20.00	21.76	ug/L	9	30	0.0500	
Chloroform	2.0787	2.2695	20.00	21.84	ug/L	9	20	0.0500	
1,1,1-Trichloroethane	1.3137	1.4677	20.00	22.34	ug/L	12	30	0.0500	
Carbon Tetrachloride	0.6356	0.7411	20.00	23.32	ug/L	17	30	0.0500	
1,2-Dichloroethane	0.9264	0.9553	20.00	20.62	ug/L	3	30	0.0500	
Benzene	2.7348	2.8931	20.00	21.16	ug/L	6	30	0.0500	
Trichloroethene	0.6591	0.6992	20.00	21.22	ug/L	6	30	0.0500	
1,2-Dichloropropane	0.8507	0.8747	20.00	20.57	ug/L	3	20	0.0500	
Bromodichloromethane	0.9091	0.9841	20.00	21.65	ug/L	8	30	0.0500	
4-Methyl-2-Pentanone	0.9139	0.7478	20.00	16.36	ug/L	-18	40	0.0500	
cis-1,3-Dichloropropene	1.1910	1.2485	20.00	20.96	ug/L	5	30	0.0500	
Toluene	1.5781	1.7093	20.00	21.66	ug/L	8	20	0.0500	
trans-1,3-Dichloropropene	1.0568	1.0967	20.00	20.75	ug/L	4	30	0.0500	
1,1,2-Trichloroethane	0.3775	0.3979	20.00	21.08	ug/L	5	30	0.0500	
2-Hexanone	0.7139	0.5405	20.00	15.14	ug/L	-24	40	0.0500	
Tetrachloroethene	0.6094	0.6702	20.00	22.00	ug/L	10	30	0.0500	
Dibromochloromethane	0.8046	0.8493	20.00	21.11	ug/L	6	30	0.0500	
Chlorobenzene	2.0830	2.2326	20.00	21.44	ug/L	7	30	0.3000	
Ethylbenzene	3.1937	3.3591	20.00	21.04	ug/L	5	20	0.0500	
m,p-Xylenes	1.2280	1.3248	40.00	43.15	ug/L	8	30	0.0500	
o-Xylene	1.2579	1.3315	20.00	21.17	ug/L	6	30	0.0500	
Styrene	2.2311	2.3871	20.00	21.40	ug/L	7	30	0.0500	
Bromoform	0.5741	0.6168	20.00	21.49	ug/L	7	30	0.1000	
1,1,2,2-Tetrachloroethane	2.0980	2.0257	20.00	19.31	ug/L	-3	30	0.3000	
Dibromofluoromethane	0.6030	0.6307	50.00	52.29	ug/L	5	30	0.0500	
1,2-Dichloroethane-d4	0.3613	0.3617	50.00	50.05	ug/L	0	30	0.0500	
Toluene-d8	1.1214	1.1558	50.00	51.54	ug/L	3	30	0.0500	
Bromofluorobenzene	1.1125	1.0699	50.00	48.08	ug/L	-4	30	0.0500	

ISTD (ICAL ifs10)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	382240	449572	17.62	11.12	11.11	-0.01
1,4-Difluorobenzene	632714	756760	19.61	12.37	12.36	-0.01
Chlorobenzene-d5	553073	696269	25.89	16.94	16.94	0.00
1,4-Dichlorobenzene-d4	278489	374141	34.35	19.77	19.77	0.00

Analyst: ACM
 --low bias c=CCV m=manual integration
 Page 2 of 2

Date: 08/16/06 Reviewer: AMK

Date: 08/17/06

486329078003

00127

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 486329078

Date : 08/16/06
Sequence : MSVOA09 ihg

ICAL Filename: ifs10
ICAL Analyzed: 06/28/06 17:38

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	382240	11.12	632714	12.37	553073	16.94	278489	19.77
		LOWER LIMIT	191120	10.62	316357	11.87	276537	16.44	139245	19.27
		UPPER LIMIT	764480	11.62	1265428	12.87	1106146	17.44	556978	20.27
003	CCV		449572	11.11	756760	12.36	696269	16.94	374141	19.77
004	BS	QC352032	465612	11.12	779852	12.36	744793	16.93	391374	19.76
005	BSD	QC352033	489954	11.12	801906	12.36	747641	16.93	397958	19.76
007	BLANK	QC352034	464392	11.12	783137	12.36	742612	16.94	376466	19.77
008	SAMPLE	188762-001	463546	11.12	776395	12.37	732576	16.94	380048	19.76
009	SAMPLE	188762-006	437518	11.12	741623	12.36	698076	16.94	364207	19.76
010	SAMPLE	188755-001	460401	11.12	772278	12.36	730705	16.94	378114	19.77
011	SAMPLE	188711-010	455808	11.12	772571	12.37	726739	16.94	386742	19.77
012	SAMPLE	188774-005	463311	11.13	799465	12.37	743495	16.94	379758	19.76
013	SAMPLE	188774-010	454774	11.13	771958	12.37	722506	16.94	369858	19.76
014	SAMPLE	188774-012	450967	11.13	771344	12.37	720857	16.94	367413	19.76
015	SAMPLE	188762-004	453401	11.12	772377	12.36	728738	16.94	371239	19.77
016	SAMPLE	188762-005	436813	11.12	745549	12.36	710839	16.94	364530	19.77
017	SAMPLE	188762-009	447477	11.12	757024	12.36	722805	16.93	372493	19.76
018	SAMPLE	188762-003	432552	11.12	732233	12.36	704148	16.94	372139	19.77
019	SAMPLE	188762-008	447918	11.12	772976	12.36	724524	16.94	372226	19.77
020	SAMPLE	188762-002	444003	11.12	737331	12.37	699562	16.94	360110	19.76
021	SAMPLE	188762-007	432318	11.12	750188	12.36	707008	16.94	367344	19.77

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 486258514

Instrument : MSVOA09
Method : EPA 8260B

Begun : 06/28/06 12:34
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	ifs01	TUN	BFB			06/28/06 12:34	1.0	1	
002	ifs02	X	IB			06/28/06 13:02	1.0	2	
003	ifs03	IB	CALIB			06/28/06 13:36	1.0	2	
004	ifs04	ICAL	0.25/0.5PPB			06/28/06 14:11	1.0	3 4 5 2	
005	ifs05	ICAL	0.5/1PPB			06/28/06 14:45	1.0	3 4 5 2	
006	ifs06	ICAL	2PPB			06/28/06 15:20	1.0	3 4 5 2	
007	ifs07	ICAL	5PPB			06/28/06 15:55	1.0	3 4 5 2	
008	ifs08	ICAL	10PPB			06/28/06 16:29	1.0	3 4 5 2	
009	ifs09	ICAL	20PPB			06/28/06 17:04	1.0	3 4 5 2	
010	ifs10	ICAL	50PPB			06/28/06 17:38	1.0	3 4 5 2	
011	ifs11	ICAL	75PPB			06/28/06 18:12	1.0	3 4 5 2	
012	ifs12	ICAL	100PPB			06/28/06 18:47	1.0	3 4 5 2	
013	ifs13	X				06/28/06 19:22	1.0	6 2	
014	ifs14	X				06/28/06 19:56	1.0	7 8 2	
015	ifs15	X	IB			06/28/06 20:31	1.0	2	
016	ifs16	X	IB			06/28/06 21:05	1.0	2	
017	ifs17	X	IB			06/28/06 21:40	1.0	2	

Standards used: 1=S3716 2=S3579 3=S3638 4=S3760 5=S2864 6=S3600 7=S3604
8=S3391

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 486259923

Instrument : MSVOA09
Method : EPA 8260B

Begun : 06/29/06 12:03
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	ift01	TUN	BFB			06/29/06 12:03	1.0	1	
002	ift02	CCV				06/29/06 12:20	1.0	2 3 4 5	
003	ift03	ICV/BS	QC345730	Water	114853	06/29/06 13:30	1.0	6 7 8 5	
004	ift04	BSD	QC345731	Water	114853	06/29/06 14:04	1.0	6 7 8 5	
005	ift05	X	IB			06/29/06 14:39	1.0	5	
006	ift06	BLANK	QC345732	Water	114853	06/29/06 15:13	1.0	5	
007	ift07	SAMPLE	187722-015	Water	114853	06/29/06 15:48	1.0	5	
008	ift08	SAMPLE	187722-016	Water	114853	06/29/06 16:22	1.0	5	
009	ift09	SAMPLE	187706-009	Water	114853	06/29/06 16:59	1.0	5	
010	ift10	SAMPLE	187734-014	Water	114853	06/29/06 17:33	1.0	5	
011	ift11	SAMPLE	187734-015	Water	114853	06/29/06 18:08	1.0	5	
012	ift12	SAMPLE	187737-001	Water	114853	06/29/06 18:43	1.0	5	
013	ift13	SAMPLE	187737-002	Water	114853	06/29/06 19:17	1.0	5	
014	ift14	SAMPLE	187737-003	Water	114853	06/29/06 19:52	1.0	5	
015	ift15	SAMPLE	187737-005	Water	114853	06/29/06 20:26	1.0	5	
016	ift16	SAMPLE	187737-010	Water	114853	06/29/06 21:01	1.0	5	
017	ift17	SAMPLE	187737-004	Water	114853	06/29/06 21:35	1.429	5	
018	ift18	SAMPLE	187737-006	Water	114853	06/29/06 22:10	3.333	5	
019	ift19	SAMPLE	187737-007	Water	114853	06/29/06 22:44	2.500	5	
020	ift20	SAMPLE	187737-009	Water	114853	06/29/06 23:19	1.429	5	
021	ift21	X	IB			06/29/06 23:54	1.0	5	
022	ift22	X	IB			06/30/06 00:28	1.0	5	
023	ift23	X	IB			06/30/06 01:03	1.0	5	

Standards used: 1=S3716 2=S3760 3=S3638 4=S2864 5=S3579 6=S3391 7=S3600
8=S3604

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 486329078

Instrument : MSVOA09
Method : EPA 8260B

Begun : 08/16/06 12:38
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	ihg01	X	IB			08/16/06 12:38	1.0	1	
002	ihg02	TUN	BFB			08/16/06 13:17	1.0	2	
003	ihg03	CCV				08/16/06 13:34	1.0	3 4 5 1	
004	ihg04	BS	QC352032	Water	116445	08/16/06 14:11	1.0	6 7 8 1	
005	ihg05	BSD	QC352033	Water	116445	08/16/06 14:46	1.0	6 9 8 1	
006	ihg06	X	IB			08/16/06 15:21	1.0	1	
007	ihg07	BLANK	QC352034	Water	116445	08/16/06 15:55	1.0	1	
008	ihg08	SAMPLE	188762-001	Water	116445	08/16/06 16:30	1.0	1	
009	ihg09	SAMPLE	188762-006	Water	116445	08/16/06 17:04	1.0	1	
010	ihg10	SAMPLE	188755-001	Water	116445	08/16/06 17:39	14.29	1	
011	ihg11	SAMPLE	188711-010	Water	116445	08/16/06 18:14	33.33	1	
012	ihg12	SAMPLE	188774-005	Water	116445	08/16/06 18:48	1.0	1	
013	ihg13	SAMPLE	188774-010	Water	116445	08/16/06 19:23	1.0	1	
014	ihg14	SAMPLE	188774-012	Water	116445	08/16/06 19:57	1.0	1	
015	ihg15	SAMPLE	188762-004	Water	116445	08/16/06 20:31	7.143	1	
016	ihg16	SAMPLE	188762-005	Water	116445	08/16/06 21:06	8.333	1	
017	ihg17	SAMPLE	188762-009	Water	116445	08/16/06 21:40	20.0	1	
018	ihg18	SAMPLE	188762-003	Water	116445	08/16/06 22:15	33.33	1	
019	ihg19	SAMPLE	188762-008	Water	116445	08/16/06 22:50	83.33	1	
020	ihg20	SAMPLE	188762-002	Water	116445	08/16/06 23:24	333.3	1	
021	ihg21	SAMPLE	188762-007	Water	116445	08/16/06 23:59	333.3	1	
022	ihg22	X	IB			08/17/06 00:34	1.0	1	
023	ihg23	X	IB			08/17/06 01:09	1.0	1	
024	ihg24	X	IB			08/17/06 01:43	1.0	1	
025	ihg25	X	IB			08/17/06 02:18	1.0	1	

Standards used: 1=S3967 2=S3716 3=S3053 4=S3980 5=S3942 6=S3979 7=S4023
8=S3978 9=S3843

REPORTING SUMMARY FOR 188774 8260 Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	C V B C A D M C M D V D M D T T C D B T D B M D B D T H P D C E X X T S T P D D B B L C R L C C T D T C A C E C C C T C Z C C D I C Z C C X C B L B Y Y O T B C B C Z R M M E E E L S B E A K E L A C A E P C B P M P A O E C B Z L L T Y M A F A M 4 E E A 1 N E 1 1 1 M 1 L 1 A M K 1 E 1 1 2 M Z M O X E M 1 E F
188774-005	MSVOA09	08/16/06 18:48	1.0	2 3 2 2 2 3 2
188774-010	MSVOA09	08/16/06 19:23	1.0	+ +

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 8/16/06

PREPPED BY.

116445

WATER

SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
711-10		D	2	LV		9	pp 33x TBA or	
755-1		C	2	LV			RR 14.2x OD	
762		A	2	W			TB	
1		B	2				333x	
2							33x	
3							7.14x	
4							8.3x	
5							1x	
6			2				333x	
7			2				83.3x	
8			2				20x	
9			2				TB	
774		A					1x	
5							1x	
10								
12								

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 09/18/06

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
Ethanol	ug/L	55	22	23	50	11	22	36	10
1,1-Dichloroethene	ug/L	0.27	0.22	0.062	0.17	0.10	0.17	0.089	0.11
Benzene	ug/L	0.11	0.041	0.060	0.061	0.12	0.10	0.027	0.084
Trichloroethene	ug/L	0.21	0.076	0.18	0.17	0.11	0.13	0.087	0.086
Toluene	ug/L	0.083	0.083	0.12	0.092	0.062	0.085	0.053	0.14
Chlorobenzene	ug/L	0.10	0.090	0.11	0.16	0.16	0.098	0.050	0.075
Freon 12	ug/L	0.18	0.099	0.22	0.062	0.15	0.47	0.18	0.20
Chloromethane	ug/L	0.12	0.16	0.12	0.18	0.13	0.34	0.089	0.20
Vinyl Chloride	ug/L	0.19	0.23	0.10	0.066	0.10	0.097	0.16	0.039
Bromomethane	ug/L	0.29	0.30	0.31	0.13	0.31	0.34	0.20	0.23
Chloroethane	ug/L	0.33	0.33	0.15	0.16	0.13	0.45	0.12	0.18
Trichlorofluoromethane	ug/L	0.16	0.057	0.17	0.10	0.080	0.46	0.10	0.19
Acetone	ug/L	0.39	0.87	0.21	0.85	0.16	0.20	0.49	0.15
Freon 113	ug/L	0.062	0.12	0.13	0.25	0.071	0.19	0.091	0.16
Methylene Chloride	ug/L	0.15	0.21	0.11	0.12	0.16	0.29	0.22	0.086
MTBE	ug/L	0.069	0.074	0.065	0.045	0.040	0.15	0.052	0.068
Carbon Disulfide	ug/L	0.039	0.031	0.086	0.076	0.11	0.14	0.037	0.066
trans-1,2-Dichloroethene	ug/L	0.37	0.13	0.18	0.051	0.064	0.15	0.093	0.094
Vinyl Acetate	ug/L	0.076	0.36	0.084	0.99	0.40	0.13	0.10	0.13
1,1-Dichloroethane	ug/L	0.088	0.061	0.048	0.090	0.11	0.14	0.063	0.10
2-Butanone	ug/L	0.16	0.17	0.20	0.50	0.099	0.23	0.26	0.081
cis-1,2-Dichloroethene	ug/L	0.26	0.18	0.083	0.12	0.042	0.12	0.11	0.16
2,2-Dichloropropane	ug/L	0.093	0.17	0.077	0.12	0.066	0.15	0.083	0.14
Chloroform	ug/L	0.082	0.055	0.086	0.060	0.11	0.16	0.044	0.084
Bromochloromethane	ug/L	0.091	0.090	0.10	0.18	0.11	0.18	0.15	0.11
1,1,1-Trichloroethane	ug/L	0.084	0.066	0.14	0.11	0.061	0.12	0.041	0.096
1,1-Dichloropropene	ug/L	0.12	0.11	0.081	0.16	0.16	0.11	0.055	0.084
Carbon Tetrachloride	ug/L	0.089	0.11	0.098	0.17	0.15	0.14	0.056	0.14
1,2-Dichloroethane	ug/L	0.090	0.088	0.099	0.096	0.12	0.18	0.056	0.094
1,2-Dichloropropane	ug/L	0.093	0.060	0.079	0.071	0.14	0.16	0.12	0.086
Bromodichloromethane	ug/L	0.086	0.039	0.067	0.074	0.10	0.14	0.069	0.094
Dibromomethane	ug/L	0.16	0.061	0.092	0.16	0.11	0.18	0.13	0.089
4-Methyl-2-Pentanone	ug/L	0.044	0.076	0.057	0.20	0.13	0.14	0.25	0.067
cis-1,3-Dichloropropene	ug/L	0.068	0.065	0.056	0.20	0.16	0.094	0.044	0.080
trans-1,3-Dichloropropene	ug/L	0.074	0.074	0.044	0.073	0.14	0.13	0.060	0.059
1,1,2-Trichloroethane	ug/L	0.12	0.12	0.14	0.19	0.15	0.21	0.058	0.12
2-Hexanone	ug/L	0.043	0.31	0.047	0.34	0.11	0.13	0.14	0.097
1,3-Dichloropropane	ug/L	0.064	0.067	0.061	0.063	0.10	0.14	0.068	0.049
Tetrachloroethene	ug/L	0.13	0.14	0.12	0.22	0.14	0.092	0.093	0.089
Dibromochloromethane	ug/L	0.099	0.054	0.10	0.085	0.056	0.15	0.063	0.094
1,2-Dibromoethane	ug/L	0.16	0.061	0.10	0.073	0.11	0.13	0.070	0.088
2-Chloroethylvinylether	ug/L	0.093	0.18	0.24	0.17	0.14	0.19	0.23	0.14
1,1,1,2-Tetrachloroethane	ug/L	0.11	0.087	0.10	0.11	0.14	0.10	0.088	0.16
Ethylbenzene	ug/L	0.059	0.076	0.075	0.17	0.041	0.11	0.11	0.069
m,p-Xylenes	ug/L	0.24	0.22	0.14	0.27	0.17	0.19	0.20	0.14

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 09/18/06

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
o-Xylene	ug/L	0.10	0.058	0.092	0.11	0.16	0.087	0.13	0.078
Styrene	ug/L	0.12	0.092	0.098	0.085	0.16	0.11	0.061	0.055
Bromoform	ug/L	0.12	0.088	0.11	0.18	0.094	0.12	0.15	0.10
Isopropylbenzene	ug/L	0.12	0.059	0.090	0.18	0.059	0.11	0.10	0.089
1,1,2,2-Tetrachloroethane	ug/L	0.13	0.096	0.086	0.047	0.13	0.20	0.055	0.11
1,2,3-Trichloropropane	ug/L	0.31	0.28	0.074	0.11	0.17	0.19	0.16	0.072
Propylbenzene	ug/L	0.075	0.10	0.063	0.21	0.023	0.12	0.11	0.088
Bromobenzene	ug/L	0.12	0.12	0.10	0.19	0.12	0.17	0.085	0.088
1,3,5-Trimethylbenzene	ug/L	0.060	0.095	0.047	0.14	0.057	0.13	0.13	0.069
2-Chlorotoluene	ug/L	0.12	0.11	0.068	0.15	0.025	0.10	0.12	0.080
4-Chlorotoluene	ug/L	0.079	0.069	0.043	0.14	0.037	0.14	0.069	0.078
tert-Butylbenzene	ug/L	0.11	0.15	0.075	0.19	0.038	0.13	0.079	0.082
1,2,4-Trimethylbenzene	ug/L	0.091	0.088	0.066	0.12	0.069	0.082	0.10	0.099
sec-Butylbenzene	ug/L	0.11	0.12	0.062	0.17	0.088	0.088	0.076	0.097
para-Isopropyl Toluene	ug/L	0.058	0.12	0.12	0.14	0.056	0.071	0.045	0.075
1,3-Dichlorobenzene	ug/L	0.080	0.16	0.097	0.18	0.060	0.13	0.10	0.094
1,4-Dichlorobenzene	ug/L	0.068	0.14	0.095	0.18	0.038	0.10	0.17	0.072
n-Butylbenzene	ug/L	0.12	0.15	0.11	0.18	0.21	0.11	0.12	0.073
1,2-Dichlorobenzene	ug/L	0.072	0.14	0.080	0.14	0.16	0.16	0.061	0.081
1,2-Dibromo-3-Chloropropane	ug/L	0.39	0.25	0.21	0.22	0.13	0.17	0.098	0.18
1,2,4-Trichlorobenzene	ug/L	0.12	0.17	0.14	0.16	0.10	0.12	0.17	0.061
Hexachlorobutadiene	ug/L	0.19	0.19	0.29	0.21	0.11	0.065	0.25	0.17
Naphthalene	ug/L	0.12	0.13	0.060	0.10	0.091	0.11	0.16	0.052
1,2,3-Trichlorobenzene	ug/L	0.063	0.17	0.10	0.20	0.095	0.10	0.29	0.15
tert-Butyl Alcohol (TBA)	ug/L	1.3	1.6	0.83	2.5	1.3	1.1	1.3	1.3
Isopropyl Ether (DIPE)	ug/L	0.068	0.070	0.063	0.027	0.030	0.14	0.027	0.089
Ethyl tert-Butyl Ether (ETBE)	ug/L	0.089	0.045	0.024	0.20	0.033	0.13	0.034	0.079
Methyl tert-Amyl Ether (TAME)	ug/L	0.094	0.13	0.055	0.054	0.048	0.10	0.057	0.17
Isopropanol	ug/L	4.6	2.7	1.6	6.6	1.5	1.4	1.1	1.3
Hexane	ug/L				0.33		0.15		
Cyclohexanone	ug/L	3.8	2.4	0.21	1.6	1.6	1.3		1.0
Tetrahydrofuran	ug/L	0.64	1.2	1.1	0.79	1.4	2.1	3.5	0.70
Tetramethyl THF	ug/L	0.067	0.061	0.062	0.20	0.10	0.13	0.078	0.079
Gasoline C6-C10	ug/L		15		4.8	15	8.5		
Gasoline C7-C12	ug/L		18		2.4	13	7.7		
Dibromofluoromethane	ug/L	3.1	2.9	1.8	2.4	1.5	1.1	3.2	1.1
1,2-Dichloroethane-d4	ug/L	3.0	3.9		2.4	1.2	1.7	3.0	1.0
Toluene-d8	ug/L	1.7	3.8		1.1	1.0	1.5	1.1	0.96
Bromofluorobenzene	ug/L	2.5	2.6		1.2	1.2	2.5	1.5	0.62
Trifluorotoluene	ug/L	0.12	0.43	0.065	0.21	0.13		0.14	

PESTICIDES



Organochlorine Pesticides

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	BB1PZ100	Batch#:	116604
Lab ID:	188774-001	Sampled:	08/15/06
Matrix:	Water	Received:	08/16/06
Units:	ug/L	Prepared:	08/21/06
Diln Fac:	1.000	Analyzed:	08/23/06

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND #	0.05
delta-BHC	ND	0.05
Heptachlor	ND #	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND #	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND #	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND #	0.1
4,4'-DDD	ND #	0.1
4,4'-DDT	ND #	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND #	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	82	65-135
Decachlorobiphenyl	70	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements

ND= Not Detected

RL= Reporting Limit



Organochlorine Pesticides

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	BB1PZ101	Batch#:	116604
Lab ID:	188774-002	Sampled:	08/15/06
Matrix:	Water	Received:	08/16/06
Units:	ug/L	Prepared:	08/21/06
Diln Fac:	1.000	Analyzed:	08/23/06

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND #	0.05
delta-BHC	ND	0.05
Heptachlor	ND #	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND #	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND #	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND #	0.1
4,4'-DDD	ND #	0.1
4,4'-DDT	ND #	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND #	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	79	65-135
Decachlorobiphenyl	45 *	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Batch QC Report
Organochlorine Pesticides

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC352721	Batch#:	116604
Matrix:	Water	Prepared:	08/21/06
Units:	ug/L	Analyzed:	08/23/06

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND #	0.05
delta-BHC	ND	0.05
Heptachlor	ND #	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND #	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND #	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND #	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND #	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	84	65-135
Decachlorobiphenyl	83	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements

ND= Not Detected

RL= Reporting Limit



Batch QC Report

Organochlorine Pesticides

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC352722	Batch#:	116604
Matrix:	Water	Prepared:	08/21/06
Units:	ug/L	Analyzed:	08/23/06

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	0.2000	0.1872 #	94	65-135
Heptachlor	0.2000	0.1698 #	85	65-135
Aldrin	0.2000	0.1738	87	65-135
Dieldrin	0.4000	0.3904	98	65-135
Endrin	0.4000	0.3791 #	95	65-135
4,4'-DDT	0.4000	0.3170 #	79	65-135

Surrogate	%REC	Limits
TCMX	83	65-135
Decachlorobiphenyl	82	65-135

Batch QC Report

Organochlorine Pesticides

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	1349MW100	Batch#:	116604
MSS Lab ID:	188802-001	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Prepared:	08/21/06
Diln Fac:	3.000	Analyzed:	08/24/06

Type: MS Lab ID: QC352723

Analyte	MSS Result	Spiked	Result	%REC	Limits
gamma-BHC	2.398	0.1887	2.224	-93 NM	65-135
Heptachlor	2.236	0.1887	0.9742	-669 NM	65-135
Aldrin	<0.01743	0.1887	0.2427	129	65-135
Dieldrin	<0.01171	0.3774	0.8591	228 *	65-135
Endrin	0.7497	0.3774	0.5316	-58 *	65-135
4,4'-DDT	0.4441	0.3774	0.5653	32 *	65-135

Surrogate	%REC	Limits
TCMX	88	65-135
Decachlorobiphenyl	58 *	65-135

Type: MSD Lab ID: QC352724

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.1887	2.175	-118 NM	65-135	2	35
Heptachlor	0.1887	0.6838	-823 NM	65-135	35	35
Aldrin	0.1887	0.1890	100	65-135	25	35
Dieldrin	0.3774	0.7054	187 *	65-135	20	35
Endrin	0.3774	0.5249	-60 *	65-135	1	35
4,4'-DDT	0.3774	0.6285	49 *	65-135	11	35

Surrogate	%REC	Limits
TCMX	99	65-135
Decachlorobiphenyl	79	65-135

*= Value outside of QC limits; see narrative

NM= Not Meaningful: Sample concentration > 4X spike concentration

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188774 PEST Water: EPA 8081A

Inst : GC23
 Calnum : 806336455001
 Units : pg

Name : gc23pest_233
 Date : 21-AUG-2006 20:12
 X Axis : R

Reviewer: MCH

Level	File	Segment	Sample ID	Analyzed	Std
L1	233_017	806336455017	PEST_1	21-AUG-2006 20:12	S2827
L2	233_018	806336455018	PEST_2	21-AUG-2006 20:29	S3833
L3	233_019	806336455019	PEST_3	21-AUG-2006 20:47	S3698
L4	233_020	806336455020	PEST_4	21-AUG-2006 21:04	S3699
L5	233_021	806336455021	PEST_5	21-AUG-2006 21:21	S3834
L6	233_022	806336455022	PEST_6	21-AUG-2006 21:39	S4042
L7	233_023	806336455023	PEST_7	21-AUG-2006 21:56	S4043

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ² %RSD	MNR ²	MXRSD	Fig
alpha-BHC	A	15077	15147	14852	14984	15751	15577	15354	AVRG		6.56E-5		15249	2	0.995	20	
gamma-BHC	A	15247	13559	12980	12947	13824	13432	13685	AVRG		7.32E-5		13668	6	0.995	20	
beta-BHC	A	6121.5	5625.6	5222.6	4973.1	5238.0	4670.4	5277.3	AVRG		1.89E-4		5304.1	9	0.995	20	
delta-BHC	A	13455	14050	13107	13034	14055	13345	13623	AVRG		7.39E-5		13524	3	0.995	20	
Heptachlor	A	10256	11727	11059	10679	11696	11021	12033	AVRG		8.92E-5		11210	6	0.995	20	
Aldrin	A	11823	11800	11174	10988	11673	11195	12070	AVRG		8.67E-5		11532	4	0.995	20	
Heptachlor epoxide	A	10924	10997	10315	9793.7	10514	9701.9	10742	AVRG		9.59E-5		10427	5	0.995	20	
gamma-Chlordane	A	10519	10892	10097	9585.7	10299	9618.1	10886	AVRG		9.74E-5		10271	5	0.995	20	
alpha-Chlordane	A	9772.0	10456	9538.0	9081.1	9715.8	9085.6	10609	AVRG		1.03E-4		9751.0	6	0.995	20	
4,4'-DDE	A	9263.3	9937.1	9443.4	9519.6	10744	9971.1	8841.8	AVRG		1.03E-4		9674.3	6	0.995	20	
Endosulfan I	A	9241.5	9640.8	9137.9	8648.8	9349.3	8551.8	9764.5	AVRG		1.09E-4		9190.7	5	0.995	20	
Dieldrin	A	9570.0	10307	9930.9	10022	11164	10333	9046.3	AVRG		9.95E-5		10053	7	0.995	20	
Endrin	A	6767.3	7782.6	7393.3	7076.9	7973.4	7238.6	7444.9	AVRG		1.35E-4		7382.4	6	0.995	20	
4,4'-DDD	A	8408.0	8768.4	8276.0	8206.9	9053.9	8493.1	8287.8	AVRG		1.18E-4		8499.2	4	0.995	20	
Endosulfan II	A	7678.0	8723.2	8263.8	8129.0	9088.1	8495.1	8342.4	AVRG		1.19E-4		8388.5	5	0.995	20	
4,4'-DDT	A	4073.3	5945.7	5980.4	5759.3	6875.7	6632.8	7346.3	AVRG		1.64E-4		6087.6	17	0.995	20	
Methoxychlor	A	2056.3	2905.6	2949.9	3034.1	3630.2	2850.8		AVRG		3.44E-4		2904.5	17	0.995	20	
Endosulfan sulfate	A	6946.3	7302.0	6820.5	6521.7	7202.7	6589.1	7098.2	AVRG		1.44E-4		6925.8	4	0.995	20	
Endrin ketone	A	7975.5	8503.9	8006.9	8056.2	9318.9	8598.2	7933.6	AVRG		1.20E-4		8341.9	6	0.995	20	
TCMX	A	9509.5	9717.2	9364.3	9445.0	10312	9878.0	8953.6	AVRG		1.04E-4		9597.1	4	0.995	20	
Decachlorobiphenyl	A	5020.3	5681.5	4958.3	4418.7	5249.8	4214.7	4976.7	AVRG		2.03E-4		4931.4	10	0.995	20	
alpha-BHC	B	9023.0	7977.4	7856.0	7654.7	7881.5	8056.1	10258	AVRG		1.20E-4		8315.2	12	0.995	20	
gamma-BHC	B	7869.5	7066.2	6835.4	6627.7	6396.3	6966.4	8932.7	AVRG		1.38E-4		7242.0	12	0.995	20	
beta-BHC	B	3432.5	2980.4	2793.2	2708.7	2582.2	2634.5	3064.0	AVRG		3.47E-4		2885.1	10	0.995	20	
delta-BHC	B	8735.5	7257.0	6813.4	6555.4	6425.2	6940.8	8983.5	AVRG		1.35E-4		7387.3	14	0.995	20	
Heptachlor	B	6854.5	6166.8	5944.1	5667.9	5506.0	5956.6	7726.9	AVRG		1.60E-4		6260.4	12	0.995	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avy	r ²	%RSD	MnR ²	MxRSD	Fig
Aldrin	B	7288.5	6231.6	5952.8	5684.7	5526.8	5847.3	7455.8	AVRG	1.59E-4			6283.9	12	0.995	20		
Heptachlor epoxide	B	6533.5	5558.6	5462.2	5137.4	5020.7	5216.0	6421.1	AVRG	1.78E-4			5621.4	11	0.995	20		
gamma-Chlordane	B	6399.0	5513.6	5253.6	4993.3	4938.1	5164.9	6584.5	AVRG	1.80E-4			5549.6	12	0.995	20		
alpha-Chlordane	B	6301.5	5289.8	5053.1	4777.3	4711.9	4921.8	6232.2	AVRG	1.88E-4			5326.8	13	0.995	20		
4,4'-DDE	B	5937.0	5105.0	4863.1	4713.3	4740.1	5384.7	6759.4	AVRG	1.87E-4			5357.5	14	0.995	20		
Endosulfan I	B	5845.5	5044.0	4810.2	4531.9	4459.6	4623.9	5697.8	AVRG	2.00E-4			5001.8	11	0.995	20		
Dieldrin	B	6085.5	5324.5	5110.0	4922.1	4910.0	5505.6	6730.3	AVRG	1.81E-4			5512.6	12	0.995	20		
Endrin	B	4104.5	3782.3	3748.2	3312.7	3341.8	3683.3	4759.3	AVRG	2.62E-4			3818.9	13	0.995	20		
4,4'-DDD	B	5459.8	4477.7	4228.6	4106.1	4089.7	4393.1	5730.9	AVRG	2.15E-4			4640.8	14	0.995	20		
Endosulfan II	B	5218.3	4434.1	4242.6	4051.6	4001.3	4338.0	5593.6	AVRG	2.20E-4			4554.2	13	0.995	20		
4,4'-DDT	B	3150.0	3201.1	3205.3	3013.3	3074.0	3592.8		AVRG	3.12E-4			3206.1	6	0.995	20		
Methoxychlor	B	1321.8	1360.0	1316.6	1327.5	1391.9	1647.3	1700.8	AVRG	6.95E-4			1438.0	11	0.995	20		
Endosulfan sulfate	B	4250.8	3626.9	3410.6	3293.8	3261.0	3444.3	4498.2	AVRG	2.71E-4			3683.6	13	0.995	20		
Endrin ketone	B	4809.3	4108.3	3853.6	3919.2	3882.0	4205.4	5377.3	AVRG	2.32E-4			4307.9	13	0.995	20		
TCMX	B	6084.0	5326.8	5088.4	4928.8	4844.2	5293.1	6480.0	AVRG	1.84E-4			5435.1	11	0.995	20		
Decachlorobiphenyl	B	3204.0	2622.1	2297.8	2286.9	2382.8	2225.6	2951.6	AVRG	3.90E-4			2567.2	15	0.995	20		
Average EPA 8081A	A												(n=22)	7			20	
Average EPA 8081A	B												(n=22)	13			20	

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188774 PEST Water
EPA 8081A

Inst : GC23
Calnum : 806336455001

Name : gc23pest_233
Cal Date: 21-AUG-2006

ICV 806336455025 (233_025 21-AUG-2006) stds: S3877

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	15249	14259	25.00	23.38	pg	-6	15	
gamma-BHC	A	13668	12418	25.00	22.71	pg	-9	15	
beta-BHC	A	5304.1	4654.0	25.00	21.94	pg	-12	15	
delta-BHC	A	13524	12927	25.00	23.90	pg	-4	15	
Heptachlor	A	11210	10234	25.00	22.82	pg	-9	15	
Aldrin	A	11532	10353	25.00	22.45	pg	-10	15	
Heptachlor epoxide	A	10427	9170.9	25.00	21.99	pg	-12	15	
gamma-Chlordane	A	10271	8897.4	25.00	21.66	pg	-13	15	
alpha-Chlordane	A	9751.0	8564.0	25.00	21.96	pg	-12	15	
4,4'-DDE	A	9674.3	8711.6	25.00	22.51	pg	-10	15	
Endosulfan I	A	9190.7	8330.9	25.00	22.66	pg	-9	15	
Dieldrin	A	10053	8854.7	25.00	22.02	pg	-12	15	
Endrin	A	7382.4	6327.8	25.00	21.43	pg	-14	15	
4,4'-DDD	A	8499.2	7557.9	25.00	22.23	pg	-11	15	
Endosulfan II	A	8388.5	7452.0	25.00	22.21	pg	-11	15	
4,4'-DDT	A	6087.6	4958.6	25.00	20.36	pg	-19	15	v- ***
Methoxychlor	A	2904.5	2436.6	25.00	20.97	pg	-16	15	v- ***
Endosulfan sulfate	A	6925.8	5998.4	25.00	21.65	pg	-13	15	
Endrin ketone	A	8341.9	7397.5	25.00	22.17	pg	-11	15	
alpha-BHC	B	8315.2	7937.2	25.00	23.86	pg	-5	15	
gamma-BHC	B	7242.0	6924.0	25.00	23.90	pg	-4	15	
beta-BHC	B	2885.1	2777.4	25.00	24.07	pg	-4	15	
delta-BHC	B	7387.3	7272.6	25.00	24.61	pg	-2	15	
Heptachlor	B	6260.4	6125.9	25.00	24.46	pg	-2	15	
Aldrin	B	6283.9	5999.4	25.00	23.87	pg	-5	15	
Heptachlor epoxide	B	5621.4	5308.0	25.00	23.61	pg	-6	15	
gamma-Chlordane	B	5549.6	5154.8	25.00	23.22	pg	-7	15	
alpha-Chlordane	B	5326.8	4987.1	25.00	23.41	pg	-6	15	
4,4'-DDE	B	5357.5	5001.0	25.00	23.34	pg	-7	15	
Endosulfan I	B	5001.8	4794.9	25.00	23.97	pg	-4	15	
Dieldrin	B	5512.6	5093.9	25.00	23.10	pg	-8	15	
Endrin	B	3818.9	3705.2	25.00	24.26	pg	-3	15	
4,4'-DDD	B	4640.8	4279.2	25.00	23.05	pg	-8	15	
Endosulfan II	B	4554.2	4238.8	25.00	23.27	pg	-7	15	
4,4'-DDT	B	3206.1	3080.1	25.00	24.02	pg	-4	15	
Methoxychlor	B	1438.0	1393.4	25.00	24.23	pg	-3	15	
Endosulfan sulfate	B	3683.6	3419.0	25.00	23.20	pg	-7	15	
Endrin ketone	B	4307.9	4070.8	25.00	23.62	pg	-6	15	
Average EPA 8081A	A	n=20					11	15	
Average EPA 8081A	B	n=20					5	15	

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188774 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 806338937005 File : 235_005 Time : 23-AUG-2006 10:07

Standards: S3952

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	533686	13	15	
4,4'-DDE	A	4404			
4,4'-DDD	A	75451			
Endrin	A	293191	16	15	
Endrin aldehyde	A	21901			
Endrin ketone	A	31920			
4,4'-DDT	B	376314	11	15	
4,4'-DDE	B	3354			
4,4'-DDD	B	41497			
Endrin	B	209739	14	15	
Endrin aldehyde	B	14294			
Endrin ketone	B	21127			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188774 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 806338937017 File : 235_017 Time : 23-AUG-2006 15:27

Standards: S3952

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	670357	12	15	
4,4'-DDE	A	4743			
4,4'-DDD	A	89655			
Endrin	A	377332	12	15	
Endrin aldehyde	A	13875			
Endrin ketone	A	35925			
4,4'-DDT	B	358956	12	15	
4,4'-DDE	B	3006			
4,4'-DDD	B	46678			
Endrin	B	210271	11	15	
Endrin aldehyde	B	8127			
Endrin ketone	B	19188			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188774 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 806338937030 File : 235_030 Time : 24-AUG-2006 09:58

Standards: S3952

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	730765	12	15	
4,4'-DDE	A	5129			
4,4'-DDD	A	94844			
Endrin	A	415541	10	15	
Endrin aldehyde	A	10076			
Endrin ketone	A	35653			
4,4'-DDT	B	383904	12	15	
4,4'-DDE	B	3200			
4,4'-DDD	B	49535			
Endrin	B	225068	11	15	
Endrin aldehyde	B	7368			
Endrin ketone	B	20100			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188774 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 806338937037 File : 235_037 Time : 24-AUG-2006 12:39

Standards: S3952

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	588148	17	15	
4,4'-DDE	A	4708			
4,4'-DDD	A	117429			
Endrin	A	385554	12	15	
Endrin aldehyde	A	9657			
Endrin ketone	A	41673			
4,4'-DDT	B	428674	13	15	
4,4'-DDE	B	3685			
4,4'-DDD	B	60309			
Endrin	B	256623	10	15	
Endrin aldehyde	B	5639			
Endrin ketone	B	24209			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188774 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 806338937045 File : 235_045 Time : 24-AUG-2006 18:27

Standards: S3952

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	696457	16	15	
4,4'-DDE	A	3476			
4,4'-DDD	A	130047			
Endrin	A	454332	11	15	
Endrin aldehyde	A	9976			
Endrin ketone	A	46025			
4,4'-DDT	B	354562	14	15	
4,4'-DDE	B	2548			
4,4'-DDD	B	57422			
Endrin	B	220960	11	15	
Endrin aldehyde	B	6471			
Endrin ketone	B	20786			

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188774 PEST Water
EPA 8081A

Inst : GC23
Seqnum : 806338937006
Cal : 806336455001
Standards: S3698

Run Name: PEST_3
File : 235_006
Caldate : 21-AUG-2006

IDF : 1.0
Time : 23-AUG-2006 10:28

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	15249	15324	10.00	10.05	pg	0	15	
gamma-BHC	A	13668	13396	10.00	9.801	pg	-2	15	
beta-BHC	A	5304.1	5754.8	10.00	10.85	pg	8	15	
delta-BHC	A	13524	13576	10.00	10.04	pg	0	15	
Heptachlor	A	11210	11273	10.00	10.06	pg	1	15	
Aldrin	A	11532	11434	10.00	9.915	pg	-1	15	
Heptachlor epoxide	A	10427	10571	10.00	10.14	pg	1	15	
gamma-Chlordane	A	10271	10103	10.00	9.837	pg	-2	15	
alpha-Chlordane	A	9751.0	9775.5	10.00	10.03	pg	0	15	
4,4'-DDE	A	9674.3	9709.3	20.00	20.07	pg	0	15	
Endosulfan I	A	9190.7	9122.5	10.00	9.926	pg	-1	15	
Dieldrin	A	10053	10049	20.00	19.99	pg	0	15	
Endrin	A	7382.4	7644.8	20.00	20.71	pg	4	15	
4,4'-DDD	A	8499.2	8416.5	20.00	19.81	pg	-1	15	
Endosulfan II	A	8388.5	8636.3	20.00	20.59	pg	3	15	
4,4'-DDT	A	6087.6	6277.4	20.00	20.62	pg	3	15	
Methoxychlor	A	2904.5	3089.6	100.0	106.4	pg	6	15	
Endosulfan sulfate	A	6925.8	6965.9	20.00	20.12	pg	1	15	
Endrin ketone	A	8341.9	8296.8	20.00	19.89	pg	-1	15	
TCMX	A	9597.1	9440.0	20.00	19.67	pg	-2	15	
Decachlorobiphenyl	A	4931.4	4932.4	20.00	20.00	pg	0	15	
alpha-BHC	B	8315.2	9237.6	10.00	11.11	pg	11	15	
gamma-BHC	B	7242.0	8122.2	10.00	11.22	pg	12	15	
beta-BHC	B	2885.1	3348.3	10.00	11.61	pg	16	15	c+ ***
delta-BHC	B	7387.3	8074.3	10.00	10.93	pg	9	15	
Heptachlor	B	6260.4	7191.4	10.00	11.49	pg	15	15	
Aldrin	B	6283.9	7038.4	10.00	11.20	pg	12	15	
Heptachlor epoxide	B	5621.4	6352.9	10.00	11.30	pg	13	15	
gamma-Chlordane	B	5549.6	6273.2	10.00	11.30	pg	13	15	
alpha-Chlordane	B	5326.8	6046.5	10.00	11.35	pg	14	15	
4,4'-DDE	B	5357.5	5847.7	20.00	21.83	pg	9	15	
Endosulfan I	B	5001.8	5716.6	10.00	11.43	pg	14	15	
Dieldrin	B	5512.6	6109.6	20.00	22.17	pg	11	15	
Endrin	B	3818.9	4675.8	20.00	24.49	pg	22	15	c+ ***
4,4'-DDD	B	4640.8	4960.0	20.00	21.38	pg	7	15	
Endosulfan II	B	4554.2	5075.4	20.00	22.29	pg	11	15	
4,4'-DDT	B	3206.1	4093.2	20.00	25.53	pg	28	15	c+ ***
Methoxychlor	B	1438.0	1735.1	100.0	120.7	pg	21	15	c+ ***
Endosulfan sulfate	B	3683.6	4163.2	20.00	22.60	pg	13	15	
Endrin ketone	B	4307.9	4706.0	20.00	21.85	pg	9	15	
TCMX	B	5435.1	5889.2	20.00	21.67	pg	8	15	
Decachlorobiphenyl	B	2567.2	2747.0	20.00	21.40	pg	7	15	
Average EPA 8081A	A	(n=22)					2	15	
Average EPA 8081A	B	(n=22)					13	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188774 PEST Water
EPA 8081A

Inst : GC23
Seqnum : 806338937018
Cal : 806336455001
Standards: S3699

Run Name: PEST 4
File : 235_018
Caldate : 21-AUG-2006

IDF : 1.0
Time : 23-AUG-2006 15:44

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	15249	13285	20.00	17.42	pg	-13	15	
gamma-BHC	A	13668	11484	20.00	16.80	pg	-16	15	c- ***
beta-BHC	A	5304.1	4507.8	20.00	17.00	pg	-15	15	
delta-BHC	A	13524	11543	20.00	17.07	pg	-15	15	
Heptachlor	A	11210	9367.2	20.00	16.71	pg	-16	15	c- ***
Aldrin	A	11532	9905.3	20.00	17.18	pg	-14	15	
Heptachlor epoxide	A	10427	8833.8	20.00	16.94	pg	-15	15	
gamma-Chlordane	A	10271	8668.4	20.00	16.88	pg	-16	15	c- ***
alpha-Chlordane	A	9751.0	8382.3	20.00	17.19	pg	-14	15	
4,4'-DDE	A	9674.3	8456.6	40.00	34.97	pg	-13	15	
Endosulfan I	A	9190.7	7756.1	20.00	16.88	pg	-16	15	c- ***
Dieldrin	A	10053	8897.1	40.00	35.40	pg	-11	15	
Endrin	A	7382.4	6138.2	40.00	33.26	pg	-17	15	c- ***
4,4'-DDD	A	8499.2	7129.9	40.00	33.56	pg	-16	15	c- ***
Endosulfan II	A	8388.5	7201.9	40.00	34.34	pg	-14	15	
4,4'-DDT	A	6087.6	5004.0	40.00	32.88	pg	-18	15	c- ***
Methoxychlor	A	2904.5	2631.5	200.0	181.2	pg	-9	15	
Endosulfan sulfate	A	6925.8	5817.3	40.00	33.60	pg	-16	15	c- ***
Endrin ketone	A	8341.9	7142.8	40.00	34.25	pg	-14	15	
TCMX	A	9597.1	8290.2	40.00	34.55	pg	-14	15	
Decachlorobiphenyl	A	4931.4	4123.4	40.00	33.45	pg	-16	15	c-
alpha-BHC	B	8315.2	8845.4	20.00	21.28	pg	6	15	
gamma-BHC	B	7242.0	7788.0	20.00	21.51	pg	8	15	
beta-BHC	B	2885.1	3183.3	20.00	22.07	pg	10	15	
delta-BHC	B	7387.3	7946.8	20.00	21.51	pg	8	15	
Heptachlor	B	6260.4	6669.2	20.00	21.31	pg	7	15	
Aldrin	B	6283.9	6779.0	20.00	21.58	pg	8	15	
Heptachlor epoxide	B	5621.4	6147.9	20.00	21.87	pg	9	15	
gamma-Chlordane	B	5549.6	6098.2	20.00	21.98	pg	10	15	
alpha-Chlordane	B	5326.8	5848.3	20.00	21.96	pg	10	15	
4,4'-DDE	B	5357.5	5938.6	40.00	44.34	pg	11	15	
Endosulfan I	B	5001.8	5535.2	20.00	22.13	pg	11	15	
Dieldrin	B	5512.6	6132.9	40.00	44.50	pg	11	15	
Endrin	B	3818.9	4440.8	40.00	46.51	pg	16	15	c+ ***
4,4'-DDD	B	4640.8	5152.0	40.00	44.41	pg	11	15	
Endosulfan II	B	4554.2	5064.3	40.00	44.48	pg	11	15	
4,4'-DDT	B	3206.1	3819.5	40.00	47.65	pg	19	15	c+ ***
Methoxychlor	B	1438.0	1710.4	200.0	237.9	pg	19	15	c+ ***
Endosulfan sulfate	B	3683.6	4098.9	40.00	44.51	pg	11	15	
Endrin ketone	B	4307.9	4877.9	40.00	45.29	pg	13	15	
TCMX	B	5435.1	5599.3	40.00	41.21	pg	3	15	
Decachlorobiphenyl	B	2567.2	2915.4	40.00	45.42	pg	14	15	
Average EPA 8081A	A	(n=22)					15	15	
Average EPA 8081A	B	(n=22)					10	15	

+=high bias -=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188774 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEST_5 IDF : 1.0
Seqnum : 806338937031 File : 235_031 Time : 24-AUG-2006 10:16
Cal : 806336455001 Caldate : 21-AUG-2006
Standards: S3834

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	15249	17003	25.00	27.88	pg	12	15	
gamma-BHC	A	13668	14732	25.00	26.95	pg	8	15	
beta-BHC	A	5304.1	5612.2	25.00	26.45	pg	6	15	
delta-BHC	A	13524	15191	25.00	28.08	pg	12	15	
Heptachlor	A	11210	12392	25.00	27.64	pg	11	15	
Aldrin	A	11532	12605	25.00	27.33	pg	9	15	
Heptachlor epoxide	A	10427	11320	25.00	27.14	pg	9	15	
gamma-Chlordane	A	10271	11183	25.00	27.22	pg	9	15	
alpha-Chlordane	A	9751.0	10605	25.00	27.19	pg	9	15	
4,4'-DDE	A	9674.3	11582	50.00	59.86	pg	20	15	c+ ***
Endosulfan I	A	9190.7	9996.2	25.00	27.19	pg	9	15	
Dieldrin	A	10053	12138	50.00	60.37	pg	21	15	c+ ***
Endrin	A	7382.4	8559.1	50.00	57.97	pg	16	15	c+ ***
4,4'-DDD	A	8499.2	10072	50.00	59.25	pg	19	15	c+ ***
Endosulfan II	A	8388.5	9812.8	50.00	58.49	pg	17	15	c+ ***
4,4'-DDT	A	6087.6	6744.1	50.00	55.39	pg	11	15	
Methoxychlor	A	2904.5	3540.1	250.0	304.7	pg	22	15	c+ ***
Endosulfan sulfate	A	6925.8	7660.0	50.00	55.30	pg	11	15	
Endrin ketone	A	8341.9	9992.9	50.00	59.90	pg	20	15	c+ ***
TCMX	A	9597.1	10828	50.00	56.41	pg	13	15	
Decachlorobiphenyl	A	4931.4	5019.0	50.00	50.89	pg	2	15	
alpha-BHC	B	8315.2	8923.6	25.00	26.83	pg	7	15	
gamma-BHC	B	7242.0	7756.3	25.00	26.78	pg	7	15	
beta-BHC	B	2885.1	3088.5	25.00	26.76	pg	7	15	
delta-BHC	B	7387.3	7767.0	25.00	26.28	pg	5	15	
Heptachlor	B	6260.4	6558.4	25.00	26.19	pg	5	15	
Aldrin	B	6283.9	6606.4	25.00	26.28	pg	5	15	
Heptachlor epoxide	B	5621.4	5887.1	25.00	26.18	pg	5	15	
gamma-Chlordane	B	5549.6	5822.7	25.00	26.23	pg	5	15	
alpha-Chlordane	B	5326.8	5531.3	25.00	25.96	pg	4	15	
4,4'-DDE	B	5357.5	5617.4	50.00	52.43	pg	5	15	
Endosulfan I	B	5001.8	5237.8	25.00	26.18	pg	5	15	
Dieldrin	B	5512.6	5836.4	50.00	52.94	pg	6	15	
Endrin	B	3818.9	4099.5	50.00	53.67	pg	7	15	
4,4'-DDD	B	4640.8	4818.9	50.00	51.92	pg	4	15	
Endosulfan II	B	4554.2	4744.5	50.00	52.09	pg	4	15	
4,4'-DDT	B	3206.1	3464.3	50.00	54.03	pg	8	15	
Methoxychlor	B	1438.0	1538.7	250.0	267.5	pg	7	15	
Endosulfan sulfate	B	3683.6	3724.3	50.00	50.55	pg	1	15	
Endrin ketone	B	4307.9	4417.2	50.00	51.27	pg	3	15	
TCMX	B	5435.1	5864.8	50.00	53.95	pg	8	15	
Decachlorobiphenyl	B	2567.2	2385.2	50.00	46.45	pg	-7	15	
Average EPA 8081A	A	(n=22)					12	15	
Average EPA 8081A	B	(n=22)					5	15	

+ = high bias c = CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188774 PEST Water
EPA 8081A

Inst : GC23
Seqnum : 806338937038
Cal : 806336455001
Standards: S4177

Run Name: PEST_3
File : 235_038
Caldate : 21-AUG-2006

IDF : 1.0
Time : 24-AUG-2006 12:56

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	15249	16700	10.00	10.95	pg	10	15	
gamma-BHC	A	13668	14607	10.00	10.69	pg	7	15	
beta-BHC	A	5304.1	5862.8	10.00	11.05	pg	11	15	
delta-BHC	A	13524	14636	10.00	10.82	pg	8	15	
Heptachlor	A	11210	11827	10.00	10.55	pg	6	15	
Aldrin	A	11532	12760	10.00	11.07	pg	11	15	
Heptachlor epoxide	A	10427	11496	10.00	11.02	pg	10	15	
gamma-Chlordane	A	10271	11414	10.00	11.11	pg	11	15	
alpha-Chlordane	A	9751.0	10916	10.00	11.19	pg	12	15	
4,4'-DDE	A	9674.3	10942	20.00	22.62	pg	13	15	
Endosulfan I	A	9190.7	10130	10.00	11.02	pg	10	15	
Dieldrin	A	10053	11287	20.00	22.46	pg	12	15	
Endrin	A	7382.4	8441.8	20.00	22.87	pg	14	15	
4,4'-DDD	A	8499.2	10079	20.00	23.72	pg	19	15	c+ ***
Endosulfan II	A	8388.5	9188.5	20.00	21.91	pg	10	15	
4,4'-DDT	A	6087.6	5325.2	20.00	17.49	pg	-13	15	
Methoxychlor	A	2904.5	2721.7	100.0	93.71	pg	-6	15	
Endosulfan sulfate	A	6925.8	7495.9	20.00	21.65	pg	8	15	
Endrin ketone	A	8341.9	9142.7	20.00	21.92	pg	10	15	
TCMX	A	9597.1	10642	20.00	22.18	pg	11	15	
Decachlorobiphenyl	A	4931.4	5206.4	20.00	21.12	pg	6	15	
alpha-BHC	B	8315.2	9194.4	10.00	11.06	pg	11	15	
gamma-BHC	B	7242.0	8036.2	10.00	11.10	pg	11	15	
beta-BHC	B	2885.1	3257.0	10.00	11.29	pg	13	15	
delta-BHC	B	7387.3	7992.6	10.00	10.82	pg	8	15	
Heptachlor	B	6260.4	6701.5	10.00	10.70	pg	7	15	
Aldrin	B	6283.9	6879.7	10.00	10.95	pg	9	15	
Heptachlor epoxide	B	5621.4	6163.4	10.00	10.96	pg	10	15	
gamma-Chlordane	B	5549.6	6060.4	10.00	10.92	pg	9	15	
alpha-Chlordane	B	5326.8	5775.0	10.00	10.84	pg	8	15	
4,4'-DDE	B	5357.5	5662.7	20.00	21.14	pg	6	15	
Endosulfan I	B	5001.8	5495.1	10.00	10.99	pg	10	15	
Dieldrin	B	5512.6	5838.4	20.00	21.18	pg	6	15	
Endrin	B	3818.9	4164.6	20.00	21.81	pg	9	15	
4,4'-DDD	B	4640.8	5159.9	20.00	22.24	pg	11	15	
Endosulfan II	B	4554.2	4764.8	20.00	20.92	pg	5	15	
4,4'-DDT	B	3206.1	2860.2	20.00	17.84	pg	-11	15	
Methoxychlor	B	1438.0	1225.1	100.0	85.20	pg	-15	15	
Endosulfan sulfate	B	3683.6	3734.3	20.00	20.28	pg	1	15	
Endrin ketone	B	4307.9	4275.3	20.00	19.85	pg	-1	15	
TCMX	B	5435.1	6040.2	20.00	22.23	pg	11	15	
Decachlorobiphenyl	B	2567.2	2381.7	20.00	18.55	pg	-7	15	
Average EPA 8081A	A	(n=22)					10	15	
Average EPA 8081A	B	(n=22)					8	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188774 PEST Water
EPA 8081A

Inst : GC23
Seqnum : 806338937046
Cal : 806336455001
Standards: S3699

Run Name: PEST 4
File : 235_046
Caldate : 21-AUG-2006

IDF : 1.0
Time : 24-AUG-2006 18:44

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	15249	17238	20.00	22.61	pg	13	15	
gamma-BHC	A	13668	14933	20.00	21.85	pg	9	15	
beta-BHC	A	5304.1	5730.0	20.00	21.61	pg	8	15	
delta-BHC	A	13524	14966	20.00	22.13	pg	11	15	
Heptachlor	A	11210	11830	20.00	21.11	pg	6	15	
Aldrin	A	11532	12645	20.00	21.93	pg	10	15	
Heptachlor epoxide	A	10427	11340	20.00	21.75	pg	9	15	
gamma-Chlordane	A	10271	11001	20.00	21.42	pg	7	15	
alpha-Chlordane	A	9751.0	10623	20.00	21.79	pg	9	15	
4,4'-DDE	A	9674.3	11386	40.00	47.08	pg	18	15	c+ ***
Endosulfan I	A	9190.7	10078	20.00	21.93	pg	10	15	
Dieldrin	A	10053	11859	40.00	47.19	pg	18	15	c+ ***
Endrin	A	7382.4	8134.7	40.00	44.08	pg	10	15	
4,4'-DDD	A	8499.2	10250	40.00	48.24	pg	21	15	c+ ***
Endosulfan II	A	8388.5	9498.0	40.00	45.29	pg	13	15	
4,4'-DDT	A	6087.6	5703.3	40.00	37.47	pg	-6	15	
Methoxychlor	A	2904.5	3042.5	200.0	209.5	pg	5	15	
Endosulfan sulfate	A	6925.8	7398.6	40.00	42.73	pg	7	15	
Endrin ketone	A	8341.9	9508.3	40.00	45.59	pg	14	15	
TCMX	A	9597.1	10571	40.00	44.06	pg	10	15	
Decachlorobiphenyl	A	4931.4	4699.0	40.00	38.11	pg	-5	15	
alpha-BHC	B	8315.2	9435.4	20.00	22.69	pg	13	15	
gamma-BHC	B	7242.0	8173.4	20.00	22.57	pg	13	15	
beta-BHC	B	2885.1	3273.7	20.00	22.69	pg	13	15	
delta-BHC	B	7387.3	8178.4	20.00	22.14	pg	11	15	
Heptachlor	B	6260.4	6950.1	20.00	22.20	pg	11	15	
Aldrin	B	6283.9	6990.1	20.00	22.25	pg	11	15	
Heptachlor epoxide	B	5621.4	6253.1	20.00	22.25	pg	11	15	
gamma-Chlordane	B	5549.6	6150.8	20.00	22.17	pg	11	15	
alpha-Chlordane	B	5326.8	5865.7	20.00	22.02	pg	10	15	
4,4'-DDE	B	5357.5	5921.6	40.00	44.21	pg	11	15	
Endosulfan I	B	5001.8	5582.7	20.00	22.32	pg	12	15	
Dieldrin	B	5512.6	6167.4	40.00	44.75	pg	12	15	
Endrin	B	3818.9	4395.0	40.00	46.03	pg	15	15	
4,4'-DDD	B	4640.8	5136.5	40.00	44.27	pg	11	15	
Endosulfan II	B	4554.2	4923.7	40.00	43.25	pg	8	15	
4,4'-DDT	B	3206.1	3336.4	40.00	41.63	pg	4	15	
Methoxychlor	B	1438.0	1492.7	200.0	207.6	pg	4	15	
Endosulfan sulfate	B	3683.6	3848.3	40.00	41.79	pg	4	15	
Endrin ketone	B	4307.9	4422.1	40.00	41.06	pg	3	15	
TCMX	B	5435.1	6045.5	40.00	44.49	pg	11	15	
Decachlorobiphenyl	B	2567.2	2391.6	40.00	37.26	pg	-7	15	
Average EPA 8081A	A	(n=22)					10	15	
Average EPA 8081A	B	(n=22)					10	15	

SEQUENCE SUMMARY FOR 188774 PEST Water
Curtis & Tompkins Laboratories

Sequence: 806336455 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Begun: 21-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
001	233_001	X	HEX			21-AUG-2006 15:35	1.0								
002	233_002	X	PRIMER			21-AUG-2006 15:52	1.0								
003	233_003	X	PRIMER			21-AUG-2006 16:09	1.0								
004	233_004	X	PRIMER			21-AUG-2006 16:27	1.0								
005	233_005	X	PRIMER			21-AUG-2006 16:44	1.0								
006	233_006	X	PRIMER			21-AUG-2006 17:02	1.0								
007	233_007	X	PRIMER			21-AUG-2006 17:19	1.0								
008	233_008	X	PRIMER			21-AUG-2006 17:36	1.0								
009	233_009	X	PRIMER			21-AUG-2006 17:53	1.0								
010	233_010	X	PRIMER			21-AUG-2006 18:11	1.0								
011	233_011	X	PRIMER			21-AUG-2006 18:28	1.0								
012	233_012	X	HEX			21-AUG-2006 18:45	1.0								
013	233_013	X	HEX			21-AUG-2006 19:03	1.0								
014	233_014	X	HEX			21-AUG-2006 19:20	1.0								
015	233_015	PEM	PEM			21-AUG-2006 19:37	1.0			1					
016	233_016	X	HEX			21-AUG-2006 19:55	1.0								
017	233_017	ICAL	PEST_1			21-AUG-2006 20:12	1.0						2		
018	233_018	ICAL	PEST_2			21-AUG-2006 20:29	1.0						3		
019	233_019	ICAL	PEST_3			21-AUG-2006 20:47	1.0						4		
020	233_020	ICAL	PEST_4			21-AUG-2006 21:04	1.0						5		
021	233_021	ICAL	PEST_5			21-AUG-2006 21:21	1.0						6		
022	233_022	ICAL	PEST_6			21-AUG-2006 21:39	1.0						7		
023	233_023	ICAL	PEST_7			21-AUG-2006 21:56	1.0						8		
024	233_024	X	HEX			21-AUG-2006 22:13	1.0								
025	233_025	ICV	ICV			21-AUG-2006 22:31	1.0			2			9		
026	233_026	ICV	ICV			21-AUG-2006 22:48	1.0						9		
027	233_027	PEM	PEM			21-AUG-2006 23:05	1.0			1			1		
028	233_028	X	HEX			21-AUG-2006 23:23	1.0								

Stds used: 1=S3952 2=S2827 3=S3833 4=S3698 5=S3699 6=S3834 7=S4042 8=S4043 9=S3877

SEQUENCE SUMMARY FOR 188774 PEST Water
Curtis & Tompkins Laboratories

Sequence: 806338937 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Begun: 23-AUG-2006

#	Filename	Type	Sample	enum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
001	235_001	X	PRIMER				23-AUG-2006 08:57	1.0							
002	235_002	X	PRIMER				23-AUG-2006 09:15	1.0							
003	235_003	X	PRIMER				23-AUG-2006 09:32	1.0							
004	235_004	X	HEX				23-AUG-2006 09:50	1.0							
005	235_005	PEM	PEM				23-AUG-2006 10:07	1.0	1.0			1	1	1:DDT44=117.376	
006	235_006	CCV	PEST_3				23-AUG-2006 10:28	1.0	1.0			1	2		
007	235_007	X	PEST_3				23-AUG-2006 10:49	1.0	1.0			1	2	ac	
008	235_008	BLANK	QC351924				23-AUG-2006 11:09	1.0	0.6673			1			
009	235_009	BLANK	QC352721				23-AUG-2006 11:26	1.0	0.01			1			
010	235_010	LCS	QC352722				23-AUG-2006 11:44	1.0	0.01			1			
011	235_011	BLANK	QC352451				23-AUG-2006 13:43	1.0	0.6667			1			
012	235_012	LCS	QC352452				23-AUG-2006 14:00	1.0	0.6667			1			
013	235_013	BLANK	QC352676				23-AUG-2006 14:18	1.0	0.6667			1			
014	235_014	LCS	QC352677				23-AUG-2006 14:35	1.0	0.6766			1			
015	235_015	PREPBLK	QC352725				23-AUG-2006 14:52	1.0	0.009709			1			
016	235_016	X	HEX				23-AUG-2006 15:10	1.0							
017	235_017	PEM	PEM				23-AUG-2006 15:27	1.0	1.0			1	1	1:DDT44=111.962	
018	235_018	CCV	PEST_4				23-AUG-2006 15:44	1.0	1.0			1	3		
019	235_019	X	HEX				23-AUG-2006 17:15	1.0							
020	235_020	SAMPLE	188757-004				23-AUG-2006 17:32	10.0	0.6709			1			
021	235_021	SAMPLE	188759-028				23-AUG-2006 17:49	2.0	0.6669			1		1:DDT44=204.040	
022	235_022	SAMPLE	188775-029				23-AUG-2006 18:07	1.0	0.009709			1			
023	235_023	SAMPLE	188774-001				23-AUG-2006 18:24	1.0	0.009804			1			
024	235_024	SAMPLE	188774-002				23-AUG-2006 18:41	1.0	0.009524			1			
025	235_025	MSS	188802-001				23-AUG-2006 18:59	1.0	0.009434			1		4:BHCBE=804.888	
026	235_026	SAMPLE	188802-008				24-AUG-2006 08:48	1.0	0.009524			1			
027	235_027	SAMPLE	188802-010				24-AUG-2006 09:06	1.0	0.009434			1			
028	235_028	SAMPLE	188808-031				24-AUG-2006 09:23	10.0	0.009524			1			
029	235_029	X	HEX				24-AUG-2006 09:41	1.0							
030	235_030	PEM	PEM				24-AUG-2006 09:58	1.0	1.0			1	1	1:DDT44=119.743	

Stds used: 1=S3952 2=S3698 3=S3699 4=S3834 5=S4177
Flags used: >=closing ac=average CCV drift out

SEQUENCE SUMMARY FOR 188774 PEST Water
Curtis & Tompkins Laboratories

Sequence: 806338937 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Begun: 23-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
031	235_031	CCV	PEST_5			24-AUG-2006	10:16 1.0	1.0	7		1	4		
032	235_032	X	HEX			24-AUG-2006	11:06 1.0							
033	235_033	SAMPLE	188846-005	116590	Soil	24-AUG-2006	11:23 10.0	0.6725			1			
034	235_034	MS	QC352723	116604	Water	24-AUG-2006	11:40 1.0	0.009434	20	22	1		16:BHCBEI=783.002	
035	235_035	MSD	QC352724	116604	Water	24-AUG-2006	11:58 1.0	0.009434	20	20	1		16:BHCBEI=794.076	
036	235_036	X	HEX			24-AUG-2006	12:22 1.0							
037	235_037	PEM	PEM			24-AUG-2006	12:39 1.0	1.0			1	1	1:DDT44=133.707	
038	235_038	CCV	PEST_3			24-AUG-2006	12:56 1.0	1.0	1		1	5		
039	235_039	X	HEX			24-AUG-2006	13:27 1.0							
040	235_040	MSS	188771-002	116545	Soil	24-AUG-2006	13:45 1.0	0.6777			1			
041	235_041	MSS	188802-001	116604	Water	24-AUG-2006	17:17 3.0	0.009434		2	1			
042	235_042	MS	QC352723	116604	Water	24-AUG-2006	17:34 3.0	0.009434	4	25	1		2:BHCBEI=374.456	
043	235_043	MSD	QC352724	116604	Water	24-AUG-2006	17:52 3.0	0.009434	4	21	1		1:BHCBEI=356.910	
044	235_044	X	HEX			24-AUG-2006	18:09 1.0							
045	235_045	PEM	PEM			24-AUG-2006	18:27 1.0	1.0			1	1	1:DDT44=110.591	
046	235_046	CCV	PEST_4			24-AUG-2006	18:44 1.0	1.0	3		1	3		
047	235_047	X	PEST_4			24-AUG-2006	19:01 1.0							
048	235_048	X	PEM			24-AUG-2006	19:18 1.0	1.0			1	1		
049	235_049	X	HEX			24-AUG-2006	19:36 1.0							
050	235_050	SAMPLE	188808-006	116590	Soil	24-AUG-2006	19:53 3.0	0.6696	6	1	1			
051	235_051	SAMPLE	188808-007	116590	Soil	24-AUG-2006	20:10 5.0	0.7273	3		1			
052	235_052	SAMPLE	188808-008	116590	Soil	24-AUG-2006	20:28 10.0	0.6649	5		1			
053	235_053	SAMPLE	188808-009	116590	Soil	24-AUG-2006	20:45 5.0	0.6633	5		1			
054	235_054	SAMPLE	188808-011	116590	Soil	24-AUG-2006	21:03 2.0	0.6651	6		1			
055	235_055	MSS	188808-012	116590	Soil	24-AUG-2006	21:20 3.0	0.6709	3		1			
056	235_056	SAMPLE	188808-022	116590	Soil	24-AUG-2006	21:38 10.0	0.675	6		1			
057	235_057	SAMPLE	188808-023	116590	Soil	24-AUG-2006	21:55 20.0	0.6656	3		1			
058	235_058	MSS	188808-029	116590	Soil	24-AUG-2006	22:12 1.0	0.6566	3		1			
059	235_059	SAMPLE	188808-030	116590	Soil	24-AUG-2006	22:30 1.0	0.6709	4		1			
060	235_060	X	HEX			24-AUG-2006	22:47 1.0							

Stds used: 1=S3952 2=S3698 3=S3699 4=S3834 5=S4177

Flags used: >=closing ac=average CCV drift out

SEQUENCE SUMMARY FOR 188774 PEST Water
Curtis & Tompkins Laboratories

Sequence: 806338937 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Run: 23-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds Used	>LR
061	235_061	PEM	PEM			24-AUG-2006 23:05	1.0	1.0			1	1	
062	235_062	X	PEST_5			24-AUG-2006 23:22	1.0	1.0			1	4 ac	
063	235_063	CCV	PEST_5			24-AUG-2006 23:39	1.0	1.0	10		1	4	
064	235_064	X	PEMS3952			24-AUG-2006 23:57	1.0						
065	235_065	X	HEX			25-AUG-2006 00:14	1.0						
066	235_066	MSS	188808-032		Soil	25-AUG-2006 00:32	20.0	0.6689	6		1	>ac	
067	235_067	SAMPLE	188808-033		Soil	25-AUG-2006 00:49	1.0	0.6649	4		1	>ac	
068	235_068	SAMPLE	188808-034		Soil	25-AUG-2006 01:06	1.0	0.6743	9	1	1	>ac	
069	235_069	SAMPLE	188808-035		Soil	25-AUG-2006 01:24	2.0	0.6649	5	2	1	>ac	
070	235_070	SAMPLE	188808-036		Soil	25-AUG-2006 01:41	5.0	0.6601	14	3	1	>ac	
071	235_071	SAMPLE	188808-037		Soil	25-AUG-2006 01:59	2.0	0.6727	7	1	1	>ac	1:HEPT-F=114.357
072	235_072	MS	QC352678		Soil	25-AUG-2006 02:16	3.0	0.6647	23	3	1	>ac	
073	235_073	MSD	QC352679		Soil	25-AUG-2006 02:33	3.0	0.6711	23	5	1	>ac	
074	235_074	MS	QC352680		Soil	25-AUG-2006 02:51	1.0	0.6693	23	4	1	>ac	
075	235_075	MSD	QC352681		Soil	25-AUG-2006 03:08	1.0	0.6627	23	2	1	>ac	
076	235_076	X	HEX			25-AUG-2006 03:26	1.0						
077	235_077	X	PEM			25-AUG-2006 03:43	1.0	1.0			1	1	
078	235_078	CCV	PEST_3			25-AUG-2006 04:00	1.0	1.0	21		1	5 ac	
079	235_079	CCV	PEST_3			25-AUG-2006 04:18	1.0	1.0	29		1	5 ac	
080	235_080	PEM	PEM			25-AUG-2006 04:35	1.0	1.0			1	1	
081	235_081	X	HEX			25-AUG-2006 04:53	1.0						

Stds used: 1=S3952 2=S3698 3=S3699 4=S3834 5=S4177
Flags used: >=closing ac=average CCV drift out

REPORTING SUMMARY FOR 188774 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
188774-001	alpha-BHC	GC23	A	08/23/06 18:24
188774-001	beta-BHC	GC23	A	08/23/06 18:24
188774-001	gamma-BHC	GC23	A	08/23/06 18:24
188774-001	delta-BHC	GC23	A	08/23/06 18:24
188774-001	Heptachlor	GC23	A	08/23/06 18:24
188774-001	Aldrin	GC23	A	08/23/06 18:24
188774-001	Heptachlor epoxide	GC23	A	08/23/06 18:24
188774-001	Endosulfan I	GC23	A	08/23/06 18:24
188774-001	Dieldrin	GC23	A	08/23/06 18:24
188774-001	4,4'-DDE	GC23	A	08/23/06 18:24
188774-001	Endrin	GC23	A	08/23/06 18:24
188774-001	Endosulfan II	GC23	A	08/23/06 18:24
188774-001	Endosulfan sulfate	GC23	A	08/23/06 18:24
188774-001	4,4'-DDD	GC23	A	08/23/06 18:24
188774-001	4,4'-DDT	GC23	A	08/23/06 18:24
188774-001	alpha-Chlordane	GC23	A	08/23/06 18:24
188774-001	gamma-Chlordane	GC23	A	08/23/06 18:24
188774-001	Methoxychlor	GC23	A	08/23/06 18:24
188774-001	Endrin ketone	GC23	A	08/23/06 18:24
188774-001	Toxaphene	GC23	A	08/23/06 18:24
188774-001	TCMX	GC23	A	08/23/06 18:24
188774-001	Decachlorobiphenyl	GC23	A	08/23/06 18:24
188774-002	alpha-BHC	GC23	A	08/23/06 18:41
188774-002	beta-BHC	GC23	A	08/23/06 18:41
188774-002	gamma-BHC	GC23	A	08/23/06 18:41
188774-002	delta-BHC	GC23	A	08/23/06 18:41
188774-002	Heptachlor	GC23	A	08/23/06 18:41
188774-002	Aldrin	GC23	A	08/23/06 18:41
188774-002	Heptachlor epoxide	GC23	A	08/23/06 18:41
188774-002	Endosulfan I	GC23	A	08/23/06 18:41
188774-002	Dieldrin	GC23	A	08/23/06 18:41
188774-002	4,4'-DDE	GC23	A	08/23/06 18:41
188774-002	Endrin	GC23	A	08/23/06 18:41
188774-002	Endosulfan II	GC23	A	08/23/06 18:41
188774-002	Endosulfan sulfate	GC23	A	08/23/06 18:41
188774-002	4,4'-DDD	GC23	A	08/23/06 18:41
188774-002	4,4'-DDT	GC23	A	08/23/06 18:41
188774-002	alpha-Chlordane	GC23	A	08/23/06 18:41
188774-002	gamma-Chlordane	GC23	A	08/23/06 18:41
188774-002	Methoxychlor	GC23	A	08/23/06 18:41
188774-002	Endrin ketone	GC23	A	08/23/06 18:41
188774-002	Toxaphene	GC23	A	08/23/06 18:41
188774-002	TCMX	GC23	A	08/23/06 18:41
188774-002	Decachlorobiphenyl	GC23	A	08/23/06 18:41
QC352721	alpha-BHC	GC23	A	08/23/06 11:26
QC352721	beta-BHC	GC23	A	08/23/06 11:26
QC352721	gamma-BHC	GC23	A	08/23/06 11:26
QC352721	delta-BHC	GC23	A	08/23/06 11:26
QC352721	Heptachlor	GC23	A	08/23/06 11:26
QC352721	Aldrin	GC23	A	08/23/06 11:26
QC352721	Heptachlor epoxide	GC23	A	08/23/06 11:26
QC352721	Endosulfan I	GC23	A	08/23/06 11:26

REPORTING SUMMARY FOR 188774 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC352721	Dieldrin	GC23	A	08/23/06 11:26
QC352721	4,4'-DDE	GC23	A	08/23/06 11:26
QC352721	Endrin	GC23	B	08/23/06 11:26
QC352721	Endosulfan II	GC23	A	08/23/06 11:26
QC352721	Endosulfan sulfate	GC23	A	08/23/06 11:26
QC352721	4,4'-DDD	GC23	B	08/23/06 11:26
QC352721	4,4'-DDT	GC23	A	08/23/06 11:26
QC352721	alpha-Chlordane	GC23	A	08/23/06 11:26
QC352721	gamma-Chlordane	GC23	A	08/23/06 11:26
QC352721	Methoxychlor	GC23	A	08/23/06 11:26
QC352721	Endrin ketone	GC23	B	08/23/06 11:26
QC352721	Toxaphene	GC23	A	08/23/06 11:26
QC352721	TCMX	GC23	A	08/23/06 11:26
QC352721	Decachlorobiphenyl	GC23	A	08/23/06 11:26
QC352722	gamma-BHC	GC23	A	08/23/06 11:44
QC352722	Heptachlor	GC23	A	08/23/06 11:44
QC352722	Aldrin	GC23	A	08/23/06 11:44
QC352722	Dieldrin	GC23	A	08/23/06 11:44
QC352722	Endrin	GC23	B	08/23/06 11:44
QC352722	4,4'-DDT	GC23	A	08/23/06 11:44
QC352722	TCMX	GC23	A	08/23/06 11:44
QC352722	Decachlorobiphenyl	GC23	A	08/23/06 11:44
QC352723	gamma-BHC	GC23	B	08/24/06 17:34
QC352723	Heptachlor	GC23	B	08/24/06 17:34
QC352723	Aldrin	GC23	B	08/24/06 17:34
QC352723	Dieldrin	GC23	B	08/24/06 17:34
QC352723	Endrin	GC23	B	08/24/06 17:34
QC352723	4,4'-DDT	GC23	B	08/24/06 17:34
QC352723	TCMX	GC23	B	08/24/06 17:34
QC352723	Decachlorobiphenyl	GC23	B	08/24/06 17:34
QC352724	gamma-BHC	GC23	B	08/24/06 17:52
QC352724	Heptachlor	GC23	B	08/24/06 17:52
QC352724	Aldrin	GC23	B	08/24/06 17:52
QC352724	Dieldrin	GC23	B	08/24/06 17:52
QC352724	Endrin	GC23	B	08/24/06 17:52
QC352724	4,4'-DDT	GC23	B	08/24/06 17:52
QC352724	TCMX	GC23	B	08/24/06 17:52
QC352724	Decachlorobiphenyl	GC23	B	08/24/06 17:52

Curtis & Tompkins Laboratories

Sample Preparation Summary

22-AUG-2006 13:02

Batch Number : 116604
 Date Extracted : 21-AUG-2006
 Extracted by : Jessie O'Brien Mee
 Prep Method : 3520C

Analysis : 8081
 Bgrndp : N/A
 Units : mL
 Clean-up :

Spike #1 ID : S4064A
 Spike #2 ID : S4098A
 Spike #3 ID :
 SOP Version : 8081w_rv14

Sample	Type	Client	Matrix	Init	Units	Final	Prep	Clean	pH	Sp. 1	Sp. 2	Sp. 3	Analyses	Clean	Comments
188758-001		Tetra Tech EC, Inc.	TCLP Leach	1000	1	10	0.010000	1	7	.025	0		8081		
188758-002		Tetra Tech EC, Inc.	TCLP Leach	1040	1	10	0.009615	1	7	.025	0		8081		
188758-003		Tetra Tech EC, Inc.	TCLP Leach	1040	1	10	0.009615	1	7	.025	0		8081		
188758-004		Tetra Tech EC, Inc.	TCLP Leach	1040	1	10	0.009615	1	7	.025	0		8081		
188758-005		Tetra Tech EC, Inc.	TCLP Leach	1040	1	10	0.009615	1	7	.025	0		8081		
188758-006		Tetra Tech EC, Inc.	TCLP Leach	1030	1	10	0.009709	1	7	.025	0		8081		
188774-001		Treadwell & Rollo	Water	1020	1	10	0.009804	1	7	.025	0		8081		
188774-002		Treadwell & Rollo	Water	1050	1	10	0.009524	1	7	.025	0		8081		
188775-029		Innovative Technical Solutions	Water	1030	1	10	0.009709	1	7	.025	0		8081		
188802-001		Treadwell & Rollo	Water	1060	1	10	0.009434	1	7	.025	0		8081		
188802-008		Treadwell & Rollo	Water	1050	1	10	0.009524	1	7	.025	0		8081		
188802-010		Treadwell & Rollo	Water	1060	1	10	0.009434	1	7	.025	0		8081		
188808-031		Innovative Technical Solutions	Water	1050	1	10	0.009524	1	7	.025	0		8081		
QC352721	BLANK		Water	1000	1	10	0.010000	1		.025	0		8081		
QC352722	LCS		Water	1000	1	10	0.010000	1		.025	.025		8081		
QC352723	MS	of 188802-001	Water	1060	1	10	0.009434	1	7	.025	.025		8081		
QC352724	MSD	of 188802-001	Water	1060	1	10	0.009434	1	7	.025	.025		8081		
QC352725	PREPBLK		TCLP Leach	1030	1	10	0.009709	1	7	.025	0		8081		

MSD

Prep Chemist:

Jessie O'Brien Mee

Reviewed By:

John M. Mee

Date:

8/23/06

Relinquished By:

John M. Mee

Received By:

John M. Mee

Date:

8/23/06

Reviewed by John M. [Signature] Date 8/23/06

TCLP EXTRACTION LOG

Curtis & Tompkins, Ltd.

LIMS Batch #: 116577
 Extraction Method: 1311
 Rotator #'s: 24

Date/ Time ON: 8/21/06 12:00pm
 Temp (F) ON: 132
 Date/ Time OFF: 8/21/06 7:42am
 Temp (F) OFF: 23°

Page: 2
 Benchbook#: BK 2380

Sample # / Letter	Vessel #	Sample Mass (g)	Free Liq (y/n)*	Sieved? (y/n)*	Sample pH	pH after +1N HCl	Fluid #	Extract Vol (mL)	Final pH	*Comments
Blank -	1	-	-	-	-	-	1	200mL	5	
188758-1 E	2	100g	N	N	T	T	1	1	7	
-2	3	1	1	1	1	1	1	1	7	
-3	4	1	1	1	1	1	1	1	7	
-4	5	1	1	1	1	1	1	1	7	
-5	6	1	1	1	1	1	1	1	7	
-6	7	1	1	1	1	1	1	1	7	

TCLP Fluid # 1 USED FOR ORGANICS EXTRACTION

3.5 mL of 1 N HCl was added to all samples

Used Sodium Hydroxide (NaOH)

Used Acetic acid (HOAc)

Temperature Limits: 21 - 25 C

Fluid #1 pH Limits: 4.88 - 4.98 su

Fluid #2 pH Limits: 2.83 - 3.03 su

Extract filtered through 0.7um x 142mm TCLP filter paper

Mfg & Lot # / LIMS #

Date/ Initials

ND	8/21/06
VWR 6067	
Baker B49828	
4.88/4.94	
Env. Exp. TCLP 605831	8/21/06

Ch 8/21/06
 Extraction Chemist Date

AS 8/21/06
 Reviewed by Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8081A Water
As of 09/18/06

Analyte	Units	GC21 A	GC21 B	GC16 A	GC16 B	GC23 A	GC23 B
gamma-BHC	ug/L	0.0065	0.0039	0.0032	0.0025	0.0029	0.0039
Heptachlor	ug/L	0.0083	0.0056	0.0057	0.0061	0.0029	0.0055
Aldrin	ug/L	0.0094	0.0070	0.0066	0.0066	0.0062	0.0077
Dieldrin	ug/L	0.011	0.0051	0.0074	0.0070	0.0041	0.0097
Endrin	ug/L	0.012	0.011	0.0095	0.0083	0.0054	0.011
4,4'-DDT	ug/L	0.012	0.0071	0.011	0.0099	0.0088	0.0087
alpha-BHC	ug/L	0.0063	0.0040	0.0029	0.0027	0.0032	0.0049
beta-BHC	ug/L	0.0061	0.011	0.0033	0.0052	0.0029	0.0055
delta-BHC	ug/L	0.0065	0.0023	0.0040	0.0026	0.0018	0.0041
Heptachlor epoxide	ug/L	0.0066	0.0097	0.0033	0.0032	0.0028	0.0044
gamma-Chlordane	ug/L	0.0064	0.011	0.0041	0.0037	0.0020	0.0042
alpha-Chlordane	ug/L	0.010	0.0052	0.0045	0.0036	0.0023	0.0052
Endosulfan I	ug/L	0.0062	0.0033	0.0043	0.0032	0.0026	0.0048
4,4'-DDE	ug/L	0.011	0.0057	0.010	0.0082	0.0045	0.0097
Endosulfan II	ug/L	0.013	0.0077	0.0088	0.0073	0.0066	0.0097
Endosulfan sulfate	ug/L	0.0096	0.0054	0.015	0.0087	0.0054	0.0093
4,4'-DDD	ug/L	0.011	0.0096	0.0088	0.0090	0.0033	0.010
Endrin aldehyde	ug/L	0.010	0.0092	0.0084	0.0086	0.0052	0.0088
Chlordane (Technical)	ug/L	0.26	0.21	0.19	0.19	0.17	0.21
Methoxychlor	ug/L	0.050	0.018	0.057	0.080	0.043	0.051
Endrin ketone	ug/L	0.0083	0.023	0.027	0.0095	0.0051	0.015
Toxaphene	ug/L	0.49	0.26	0.39	0.34	0.54	0.29

**POLYAROMATIC
HYDROCARBONS**

Polynuclear Aromatics by HPLC

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	BB1PZ100	Batch#:	116658
Lab ID:	188774-001	Sampled:	08/15/06
Matrix:	Water	Received:	08/16/06
Units:	ug/L	Prepared:	08/22/06
Diln Fac:	1.000	Analyzed:	08/24/06

Analyte	Result	RL	MDL
Naphthalene	ND	0.94	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.94	
Fluorene	ND	0.94	
Phenanthrene	ND	0.47	
Anthracene	ND	0.47	0.02
Fluoranthene	0.07 J	0.38	0.01
Pyrene	ND	0.19	
Benzo (a) anthracene	ND	0.09	
Chrysene	ND	0.09	
Benzo (b) fluoranthene	ND	0.19	
Benzo (k) fluoranthene	ND	0.09	
Benzo (a) pyrene	ND	0.09	
Dibenz (a, h) anthracene	ND	0.19	
Benzo (g, h, i) perylene	ND	0.19	
Indeno (1, 2, 3-cd) pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	91	65-135
1-Methylnaphthalene (F)	92	65-135

J= Estimated value

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit



Polynuclear Aromatics by HPLC

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	BB1PZ101	Batch#:	116658
Lab ID:	188774-002	Sampled:	08/15/06
Matrix:	Water	Received:	08/16/06
Units:	ug/L	Prepared:	08/22/06
Diln Fac:	1.000	Analyzed:	08/24/06

Analyte	Result	RL	MDL
Naphthalene	ND	0.94	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.94	
Fluorene	ND	0.94	
Phenanthrene	ND	0.47	
Anthracene	ND	0.47	0.02
Fluoranthene	ND	0.38	0.01
Pyrene	ND	0.19	
Benzo (a) anthracene	ND	0.09	
Chrysene	ND	0.09	
Benzo (b) fluoranthene	ND	0.19	
Benzo (k) fluoranthene	ND	0.09	
Benzo (a) pyrene	ND	0.09	
Dibenz (a,h) anthracene	ND	0.19	
Benzo (g,h,i) perylene	ND	0.19	
Indeno (1,2,3-cd) pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	88	65-135
1-Methylnaphthalene (F)	89	65-135

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit



Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	514AGW101	Batch#:	116658
Lab ID:	188774-007	Sampled:	08/15/06
Matrix:	Water	Received:	08/16/06
Units:	ug/L	Prepared:	08/22/06
Diln Fac:	1.000	Analyzed:	08/24/06

Analyte	Result	RL	MDL
Naphthalene	ND	0.94	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.94	
Fluorene	ND	0.94	
Phenanthrene	ND	0.47	
Anthracene	ND	0.47	0.02
Fluoranthene	0.03 J	0.38	0.01
Pyrene	ND	0.19	
Benzo (a) anthracene	ND	0.09	
Chrysene	ND	0.09	
Benzo (b) fluoranthene	ND	0.19	
Benzo (k) fluoranthene	ND	0.09	
Benzo (a) pyrene	ND	0.09	
Dibenz (a, h) anthracene	ND	0.19	
Benzo (g, h, i) perylene	ND	0.19	
Indeno (1, 2, 3-cd) pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	81	65-135
1-Methylnaphthalene (F)	82	65-135

J= Estimated value

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Polynuclear Aromatics by HPLC

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	FM14EX07GW102	Batch#:	116658
Lab ID:	188774-008	Sampled:	08/15/06
Matrix:	Water	Received:	08/16/06
Units:	ug/L	Prepared:	08/22/06
Diln Fac:	1.000	Analyzed:	08/24/06

Analyte	Result	RL	MDL
Naphthalene	ND	0.94	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.94	
Fluorene	ND	0.94	
Phenanthrene	ND	0.47	
Anthracene	ND	0.47	0.02
Fluoranthene	ND	0.38	0.01
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.09	
Chrysene	ND	0.09	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.09	
Benzo(a)pyrene	ND	0.09	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	91	65-135
1-Methylnaphthalene (F)	92	65-135

ND= Not Detected
 RL= Reporting Limit
 MDL= Method Detection Limit

Polynuclear Aromatics by HPLC

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	FM14EX07GW101	Batch#:	116658
Lab ID:	188774-009	Sampled:	08/15/06
Matrix:	Water	Received:	08/16/06
Units:	ug/L	Prepared:	08/22/06
Diln Fac:	1.000	Analyzed:	08/24/06

Analyte	Result	RL	MDL
Naphthalene	ND	0.94	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.94	
Fluorene	ND	0.94	
Phenanthrene	ND	0.47	
Anthracene	ND	0.47	0.02
Fluoranthene	ND	0.38	0.01
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.09	
Chrysene	ND	0.09	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.09	
Benzo(a)pyrene	ND	0.09	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	94	65-135
1-Methylnaphthalene (F)	95	65-135

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit



Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC352946	Batch#:	116658
Matrix:	Water	Prepared:	08/22/06
Units:	ug/L	Analyzed:	08/24/06

Analyte	Result	RL	MDL
Naphthalene	ND	1.0	
Acenaphthylene	ND	2.0	
Acenaphthene	ND	1.0	
Fluorene	ND	1.0	
Phenanthrene	ND	0.50	
Anthracene	ND	0.50	0.02
Fluoranthene	ND	0.40	0.01
Pyrene	ND	0.20	
Benzo (a) anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo (b) fluoranthene	ND	0.20	
Benzo (k) fluoranthene	ND	0.10	
Benzo (a) pyrene	ND	0.10	
Dibenz (a, h) anthracene	ND	0.20	
Benzo (g, h, i) perylene	ND	0.20	
Indeno (1, 2, 3-cd) pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	88	65-135
1-Methylnaphthalene (F)	89	65-135

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC352947	Batch#:	116658
Matrix:	Water	Prepared:	08/22/06
Units:	ug/L	Analyzed:	08/24/06

Analyte	Spiked	Result	%REC	Limits
Naphthalene	10.00	8.668	87	50-135
Fluorene	2.000	1.786	89	65-135
Pyrene	1.000	0.9056	91	65-135
Benzo(a)pyrene	1.000	0.8693	87	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	88	65-135
1-Methylnaphthalene (F)	90	65-135

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	1349MW100	Batch#:	116658
MSS Lab ID:	188802-001	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Prepared:	08/22/06
Diln Fac:	1.000	Analyzed:	08/24/06

Type: MS Lab ID: QC352948

Analyte	MSS Result	Spiked	Result	%REC	Limits
Naphthalene	<0.09154	9.434	0	0 *	50-135
Fluorene	12.92	1.887	21.22 >LR	440 NM	65-135
Pyrene	1.527	0.9434	1.698	18 *	65-135
Benzo(a)pyrene	<0.02358	0.9434	0.2358	25 *	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	174 *	65-135
1-Methylnaphthalene (F)	126	65-135

Type: MSD Lab ID: QC352949

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Naphthalene	9.434	0	0 *	50-135	NC	35
Fluorene	1.887	16.56	193 NM	65-135	NC	35
Pyrene	0.9434	2.935	149 *	65-135	53 *	35
Benzo(a)pyrene	0.9434	0.2432	26 *	65-135	3	35

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	204 *	65-135
1-Methylnaphthalene (F)	141 *	65-135

*= Value outside of QC limits; see narrative

NC= Not Calculated

NM= Not Meaningful: Sample concentration > 4X spike concentration

>LR= Response exceeds instrument's linear range

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188774 HPLC water: EPA 8310

Inst : HPLC04
 Calnum : 296199754001
 Units : ug/L

Date : 18-MAY-2006 19:52
 X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Std
L1	13800006	296199754006	18-MAY-2006	19:52	S3065
L2	13800007	296199754007	18-MAY-2006	20:24	S3064
L3	13800008	296199754008	18-MAY-2006	20:56	S3063
L4	13800009	296199754009	18-MAY-2006	21:27	S3062
L5	13800010	296199754010	18-MAY-2006	21:59	S3061
L6	13800011	296199754011	18-MAY-2006	22:31	S3060
L7	13800012	296199754012	18-MAY-2006	23:02	S3059

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	%RSD	MWR ²	MRSD	Fig
Naphthalene	1	0.0127	0.0132	0.0131	0.0132	0.0131	0.0130	0.0129	LNIR	-52.228	77.4002		0.0130	1.000	0.99	20		
Acenaphthylene	1	0.0092	0.0093	0.0094	0.0095	0.0094	0.0092	0.0091	LNIR	-269.75	109.800		0.0093	1.000	0.99	20		
Acenaphthene	1	0.0052	0.0052	0.0052	0.0054	0.0053	0.0052	0.0051	LNIR	-189.44	195.810		0.0052	1.000	0.99	20		
Fluorene	1	0.0627	0.0624	0.0622	0.0635	0.0628	0.0627	0.0625	LNIR	-5.8158	16.0057		0.0627	1.000	0.99	20		
Phenanthrene	1	0.1770	0.1795	0.1810	0.1828	0.1804	0.1795	0.1796	LNIR	-2.6724	5.57221		0.1800	1.000	0.99	20		
Anthracene	1	0.4152	0.4253	0.4257	0.4310	0.4281	0.4249	0.4232	LNIR	-4.5965	2.36313		0.4248	1.000	0.99	20		
Fluoranthene	1	0.0412	0.0411	0.0410	0.0412	0.0406	0.0406	0.0407	LNIR	-3.4660	24.6116		0.0409	1.000	0.99	20		
Pyrene	1	0.0368	0.0344	0.0333	0.0343	0.0336	0.0336	0.0338	LNIR	-0.0362	29.6394		0.0342	1.000	0.99	20		
Benzo(a)anthracene	1	0.0900	0.0968	0.0940	0.0956	0.0948	0.0945	0.0948	LNIR	0.57638	10.5497		0.0943	1.000	0.99	20		
Chrysene	1	0.1270	0.1360	0.1344	0.1356	0.1346	0.1336	0.1335	LNIR	-3.4437	7.49542		0.1335	1.000	0.99	20		
Benzo(b)fluoranthene	1	0.1037	0.1043	0.1063	0.1075	0.1067	0.1065	0.1063	LNIR	-2.9110	9.40726		0.1059	1.000	0.99	20		
Benzo(k)fluoranthene	1	0.0788	0.0790	0.0823	0.0837	0.0837	0.0836	0.0835	LNIR	1.73999	11.9711		0.0821	1.000	0.99	20		
Benzo(a)pyrene	1	0.0878	0.0823	0.0860	0.0884	0.0876	0.0881	0.0886	LNIR	6.09778	11.2895		0.0870	1.000	0.99	20		
Dibenz(a,h)anthracene	1	0.0186	0.0202	0.0213	0.0218	0.0220	0.0221	0.0223	LNIR	23.8574	44.7933		0.0212	1.000	0.99	20		
Benzo(g,h,i)perylene	1	0.0317	0.0340	0.0353	0.0359	0.0358	0.0363	0.0368	LNIR	28.4784	27.1931		0.0351	1.000	0.99	20		
Indeno(1,2,3-cd)pyrene	1	0.0880	0.0965	0.0978	0.1005	0.0999	0.1003	0.1005	LNIR	4.90163	9.94487		0.0976	1.000	0.99	20		
1-Methylnaphthalene (UV)	1	0.0086	0.0086	0.0086	0.0087	0.0085	0.0084	0.0084	LNIR	-341.04	119.464		0.0085	1.000	0.99	20		
Acenaphthylene	2	0.0277	0.0280	0.0280	0.0283	0.0280	0.0278	0.0278	LNIR	-84.965	36.0430		0.0279	1.000	0.99	20		
1-Methylnaphthalene (UV)	2	0.0030	0.0031	0.0031	0.0031	0.0031	0.0030	0.0030	LNIR	-288.17	330.724		0.0031	1.000	0.99	20		
Naphthalene	3	0.0110	0.0111	0.0111	0.0112	0.0110	0.0110	0.0109	LNIR	-50.394	91.4049		0.0110	1.000	0.99	20		
Acenaphthene	3	0.0234	0.0236	0.0235	0.0239	0.0233	0.0231	0.0226	LNIR	-178.43	44.2064		0.0233	1.000	0.99	20		
Fluorene	3	0.1279	0.1273	0.1274	0.1284	0.1265	0.1243	0.1225	LNIR	-32.341	8.16717		0.1263	1.000	0.99	20		
Phenanthrene	3	0.1354	0.1366	0.1364	0.1377	0.1361	0.1356	0.1354	LNIR	-3.3588	7.38874		0.1362	1.000	0.99	20		
Anthracene	3	0.4199	0.4224	0.4266	0.4322	0.4290	0.4269	0.4268	LNIR	-1.7330	2.34358		0.4263	1.000	0.99	20		
Fluoranthene	3	0.0382	0.0384	0.0386	0.0392	0.0388	0.0387	0.0387	LNIR	-1.5194	25.8283		0.0387	1.000	0.99	20		
Pyrene	3	0.1308	0.1311	0.1332	0.1355	0.1333	0.1340	0.1343	LNIR	1.83815	7.44901		0.1332	1.000	0.99	20		

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	MnR ²	MxRSD	Fig
Benzo (a) anthracene	3	0.1489	0.1515	0.1523	0.1536	0.1520	0.1512	0.1508	LINR	-3.9150	6.63150		0.1515	1.000	0.99	20	10
Chrysene	3	0.1787	0.1811	0.1815	0.1828	0.1806	0.1793	0.1780	LINR	-7.8225	5.62009		0.1803	1.000	0.99	20	11
Benzo (b) fluoranthene	3	0.0628	0.0642	0.0647	0.0654	0.0646	0.0644	0.0641	LINR	-9.1941	15.6059		0.0643	1.000	0.99	20	12
Benzo (k) fluoranthene	3	0.3857	0.3920	0.3949	0.3978	0.3926	0.3879	0.3820	LINR	-13.766	2.61710		0.3904	1.000	0.99	20	13
Benzo (a) pyrene	3	0.2089	0.2127	0.2141	0.2165	0.2143	0.2129	0.2128	LINR	-3.0160	4.70028		0.2132	1.000	0.99	20	14
Dibenz (a, h) anthracene	3	0.0303	0.0301	0.0308	0.0318	0.0315	0.0316	0.0317	LINR	9.18553	31.5065		0.0311	1.000	0.99	20	15
Benzo (g, h, i) perylene	3	0.0608	0.0590	0.0602	0.0618	0.0617	0.0624	0.0631	LINR	24.3223	15.8303		0.0613	1.000	0.99	20	16
Indeno (1,2,3-cd) pyrene	3	0.0962	0.0968	0.0965	0.0983	0.0975	0.0975	0.0971	LINR	-1.8455	10.2902		0.0971	1.000	0.99	20	17
1-Methylnaphthalene (F)	3	0.0122	0.0123	0.0123	0.0124	0.0122	0.0120	0.0118	LINR	-661.87	84.7083		0.0122	1.000	0.99	20	18

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

Calibration Table

NEW ICAL FOLLOWING REPLACEMENT OF UV LAMP. *gm*
HPLC04 METHOD 8310 *22 MAY 2006*

Calib. Data Modified : 5/22/2006 4:16:03 PM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 1.000 %

Abs. Reference Window : 0.200 min

Rel. Non-ref. Window : 1.000 %

Abs. Non-ref. Window : 0.250 min

Do not use Multiplier & Dilution Factor with ISTDs

Uncalibrated Peaks : not reported

Partial Calibration : Yes, identified peaks are recalibrated

Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear

Origin : Ignored

Weight : Equal

Recalibration Settings:

Average Response : Average all calibrations

Average Retention Time: Floating Average New 75%

Calibration Report Options :

Printout of recalibrations within a sequence:

Calibration Table after Recalibration

Normal Report after Recalibration

If the sequence is done with bracketing:

Results of first cycle (ending previous bracket)

Signal 1: DAD1 A, Sig=254,4 Ref=480,80

Signal 2: DAD1 B, Sig=305,4 Ref=480,80

Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime	Lvl	Amount	Area	Amt/Area	Ref Grp Name
[min]	Sig	[ug/l]			
4.752	1	1 500.00000	6.35383	78.69275	Naphthalene
		2 1000.00000	13.15704	76.00496	
		3 2500.00000	32.77972	76.26668	
		4 5000.00000	66.00784	75.74857	
		5 1.00000e4	130.71696	76.50116	
		6 2.50000e4	323.77454	77.21423	
		7 5.00000e4	646.40033	77.35145	
4.790	3	1 500.00000	5.48376	91.17835	Naphthalene
		2 1000.00000	11.08296	90.22864	
		3 2500.00000	27.68407	90.30465	
		4 5000.00000	55.85367	89.51963	
		5 1.00000e4	110.44406	90.54357	
		6 2.50000e4	274.47531	91.08287	
		7 5.00000e4	547.22638	91.36986	
6.004	1	1 1000.00000	9.18307	108.89603	Acenaphthylene
		2 2000.00000	18.68859	107.01715	
		3 5000.00000	46.93712	106.52549	
		4 1.00000e4	94.78723	105.49944	
		5 2.00000e4	187.08742	106.90190	
		6 5.00000e4	462.20984	108.17598	
		7 1.00000e5	910.50854	109.82873	
6.005	2	1 1000.00000	27.65381	36.16138	Acenaphthylene
		2 2000.00000	56.04304	35.68686	
		3 5000.00000	140.16672	35.67181	

RetTime [min]	Lvl Sig	Amount [ug/l]	Area	Amt/Area	Ref Grp Name
6.773	1	4 1.00000e4	282.77841	35.36338	
		5 2.00000e4	559.61334	35.73896	
		6 5.00000e4	1390.57104	35.95645	
		7 1.00000e5	2775.66528	36.02740	
		1 2000.00000	17.19066	116.34227	1-Methylnaphthalene (UV)
		2 4000.00000	34.41462	116.22969	
		3 1.00000e4	85.94093	116.35899	
		4 2.00000e4	173.09207	115.54544	
		5 4.00000e4	340.84924	117.35394	
		6 1.00000e5	839.48529	119.12061	
		7 2.00000e5	1676.38977	119.30400	
6.774	2	1 2000.00000	6.06443	329.79188	1-Methylnaphthalene (UV)
		2 4000.00000	12.31411	324.83055	
		3 1.00000e4	30.67977	325.94769	
		4 2.00000e4	61.92251	322.98433	
		5 4.00000e4	122.83121	325.65012	
		6 1.00000e5	304.35931	328.55903	
		7 2.00000e5	604.82648	330.67335	
6.811	3	1 2000.00000	24.40978	81.93437	1-Methylnaphthalene (F)
		2 4000.00000	49.21495	81.27612	
		3 1.00000e4	122.94567	81.33674	
		4 2.00000e4	247.30377	80.87220	
		5 4.00000e4	488.69351	81.85089	
		6 1.00000e5	1199.20923	83.38828	
		7 2.00000e5	2361.67969	84.68549	
7.233	1	1 500.00000	5.96680	83.79698	2-Methylnaphthalene
		2 1000.00000	11.99022	83.40130	
		3 2500.00000	29.85911	83.72654	
		4 5000.00000	60.88431	82.12296	
		5 1.00000e4	120.14920	83.22985	
		6 2.50000e4	297.53644	84.02332	
7.269	3	1 500.00000	7.74911	64.52351	2-Methylnaphthalene
		2 1000.00000	15.52372	64.41757	
		3 2500.00000	38.81281	64.41172	
		4 5000.00000	78.28068	63.87272	
		5 1.00000e4	154.78474	64.60585	
		6 2.50000e4	382.29327	65.39482	
7.613	1	1 500.00000	2.59693	192.53514	Acenaphthene
		2 1000.00000	5.17957	193.06637	
		3 2500.00000	13.08239	191.09658	
		4 5000.00000	26.89059	185.93866	
		5 1.00000e4	53.03941	188.53907	
		6 2.50000e4	131.16444	190.60043	
		7 5.00000e4	254.87729	196.17283	
7.651	3	1 500.00000	11.70526	42.71583	Acenaphthene
		2 1000.00000	23.56936	42.42797	
		3 2500.00000	58.84945	42.48128	
		4 5000.00000	119.32713	41.90162	
		5 1.00000e4	233.17419	42.88639	
		6 2.50000e4	577.51837	43.28867	
		7 5.00000e4	1130.49866	44.22827	
8.138	1	1 100.00000	6.27447	15.93759	Fluorene
		2 200.00000	12.48572	16.01830	
		3 500.00000	31.10701	16.07355	
		4 1000.00000	63.54686	15.73642	
		5 2000.00000	125.67238	15.91440	
		6 5000.00000	313.25665	15.96135	
		7 1.00000e4	624.78467	16.00551	
8.176	3	1 100.00000	12.79477	7.81570	Fluorene
		2 200.00000	25.46982	7.85243	
		3 500.00000	63.67719	7.85210	
		4 1000.00000	128.43744	7.78589	
		5 2000.00000	252.91112	7.90792	

RetTime	Lvl	Amount	Area	Amt/Area	Ref Grp Name
[min]	Sig	[ug/l]			
----- ----- ----- ----- ----- -----					
9.260	1	6 5000.00000	621.43634	8.04588	Phenanthrene
		7 1.00000e4	1224.89038	8.16400	
		1 50.00000	8.85156	5.64872	
		2 100.00000	17.94612	5.57224	
		3 250.00000	45.25932	5.52372	
		4 500.00000	91.37579	5.47191	
		5 1000.00000	180.36794	5.54422	
9.297	3	6 2500.00000	448.64795	5.57230	Phenanthrene
		7 5000.00000	897.85052	5.56886	
		1 50.00000	6.77231	7.38301	
		2 100.00000	13.66179	7.31969	
		3 250.00000	34.08815	7.33393	
		4 500.00000	68.83022	7.26425	
		5 1000.00000	136.09827	7.34763	
10.285	1	6 2500.00000	338.96707	7.37535	Anthracene
		7 5000.00000	676.96960	7.38586	
		1 50.00000	20.75930	2.40856	
		2 100.00000	42.52945	2.35131	
		3 250.00000	106.41690	2.34925	
		4 500.00000	215.48436	2.32035	
		5 1000.00000	428.09290	2.33594	
10.323	3	6 2500.00000	1062.12512	2.35377	Anthracene
		7 5000.00000	2115.98950	2.36296	
		1 50.00000	20.99740	2.38125	
		2 100.00000	42.23863	2.36750	
		3 250.00000	106.64105	2.34431	
		4 500.00000	216.08749	2.31388	
		5 1000.00000	428.97952	2.33111	
11.435	1	6 2500.00000	1067.30798	2.34234	Fluoranthene
		7 5000.00000	2133.87500	2.34316	
		1 100.00000	4.12269	24.25600	
		2 200.00000	8.21146	24.35620	
		3 500.00000	20.48045	24.41353	
		4 1000.00000	41.23911	24.24883	
		5 2000.00000	81.15630	24.64380	
11.472	3	6 5000.00000	203.07642	24.62127	Fluoranthene
		7 1.00000e4	406.56757	24.59616	
		1 100.00000	3.82083	26.17234	
		2 200.00000	7.68846	26.01302	
		3 500.00000	19.30645	25.89808	
		4 1000.00000	39.23374	25.48827	
		5 2000.00000	77.62599	25.76457	
12.208	1	6 5000.00000	193.25951	25.87195	Pyrene
		7 1.00000e4	387.35989	25.81579	
		1 50.00000	1.83995	27.17468	
		2 100.00000	3.43952	29.07386	
		3 250.00000	8.33079	30.00916	
		4 500.00000	17.14116	29.16955	
		5 1000.00000	33.56740	29.79081	
12.245	3	6 2500.00000	83.91055	29.79363	Pyrene
		7 5000.00000	168.92415	29.59908	
		1 50.00000	6.53807	7.64751	
		2 100.00000	13.11404	7.62541	
		3 250.00000	33.29245	7.50921	
		4 500.00000	67.75372	7.37967	
		5 1000.00000	133.33412	7.49996	
15.039	1	6 2500.00000	334.87701	7.46543	Benzo(a)anthracene
		7 5000.00000	671.27612	7.44850	
		1 50.00000	4.49803	11.11598	
		2 100.00000	9.67921	10.33142	
		3 250.00000	23.48936	10.64311	
		4 500.00000	47.78680	10.46314	
		5 1000.00000	94.79131	10.54949	

RetTime [min]	Lvl Sig	Amount [ug/l]	Area	Amt/Area	Ref Grp Name
15.077	3	6 2500.00000	236.18423	10.58496	
		7 5000.00000	474.20624	10.54394	
	1	1 50.00000	7.44724	6.71390	Benzo(a)anthracene
	2	2 100.00000	15.15430	6.59879	
	3	3 250.00000	38.07673	6.56569	
	4	4 500.00000	76.80959	6.50960	
	5	5 1000.00000	151.99316	6.57924	
	6	6 2500.00000	377.89438	6.61561	
	7	7 5000.00000	754.23340	6.62925	
15.539	1	1 50.00000	6.35061	7.87325	Chrysene
	2	2 100.00000	13.59609	7.35506	
	3	3 250.00000	33.59677	7.44119	
	4	4 500.00000	67.79062	7.37565	
	5	5 1000.00000	134.58353	7.43033	
	6	6 2500.00000	334.09467	7.48291	
	7	7 5000.00000	667.30255	7.49285	
15.577	3	1 50.00000	8.93709	5.59467	Chrysene
	2	2 100.00000	18.11283	5.52095	
	3	3 250.00000	45.37164	5.51005	
	4	4 500.00000	91.38473	5.47137	
	5	5 1000.00000	180.56219	5.53826	
	6	6 2500.00000	448.13257	5.57871	
	7	7 5000.00000	889.81403	5.61915	
17.772	1	1 100.00000	10.36747	9.64555	Benzo(b)fluoranthene
	2	2 200.00000	20.85804	9.58863	
	3	3 500.00000	53.17228	9.40340	
	4	4 1000.00000	107.52938	9.29978	
	5	5 2000.00000	213.44913	9.36991	
	6	6 5000.00000	532.37317	9.39191	
	7	7 1.00000e4	1062.87402	9.40845	
17.810	3	1 100.00000	6.27574	15.93439	Benzo(b)fluoranthene
	2	2 200.00000	12.83850	15.57814	
	3	3 500.00000	32.34958	15.45615	
	4	4 1000.00000	65.39377	15.29198	
	5	5 2000.00000	129.20119	15.47973	
	6	6 5000.00000	322.01157	15.52739	
	7	7 1.00000e4	640.72485	15.60732	
18.726	1	1 50.00000	3.94109	12.68686	Benzo(k)fluoranthene
	2	2 100.00000	7.89588	12.66483	
	3	3 250.00000	20.57043	12.15337	
	4	4 500.00000	41.83699	11.95115	
	5	5 1000.00000	83.72203	11.94429	
	6	6 2500.00000	208.88004	11.96859	
	7	7 5000.00000	417.35922	11.98009	
18.764	3	1 50.00000	19.28471	2.59273	Benzo(k)fluoranthene
	2	2 100.00000	39.20409	2.55075	
	3	3 250.00000	98.73430	2.53205	
	4	4 500.00000	198.87831	2.51410	
	5	5 1000.00000	392.59399	2.54716	
	6	6 2500.00000	969.84100	2.57774	
	7	7 5000.00000	1910.04431	2.61774	
19.676	1	1 50.00000	4.38903	11.39205	Benzo(a)pyrene
	2	2 100.00000	8.22974	12.15105	
	3	3 250.00000	21.51167	11.62160	
	4	4 500.00000	44.20454	11.31105	
	5	5 1000.00000	87.60189	11.41528	
	6	6 2500.00000	220.13969	11.35643	
	7	7 5000.00000	442.77490	11.29242	
19.714	3	1 50.00000	10.44253	4.78811	Benzo(a)pyrene
	2	2 100.00000	21.26584	4.70238	
	3	3 250.00000	53.53555	4.66979	
	4	4 500.00000	108.22565	4.61998	
	5	5 1000.00000	214.33957	4.66549	

RetTime	Lvl	Amount	Area	Amt/Area	Ref Grp Name
[min]	Sig	[ug/l]			
21.294	1	6 2500.00000	532.33307	4.69631	Dibenz(a,h)anthracene
		7 5000.00000	1064.23083	4.69823	
		1 100.00000	1.86005	53.76185	
		2 200.00000	4.03761	49.53425	
		3 500.00000	10.67297	46.84733	
		4 1000.00000	21.81421	45.84168	
		5 2000.00000	44.01789	45.43607	
21.332	3	6 5000.00000	110.60422	45.20623	Dibenz(a,h)anthracene
		7 1.00000e4	222.97006	44.84907	
		1 100.00000	3.03149	32.98710	
		2 200.00000	6.02086	33.21784	
		3 500.00000	15.37518	32.51994	
		4 1000.00000	31.83378	31.41317	
		5 2000.00000	63.06483	31.71339	
22.074	1	6 5000.00000	158.06801	31.63195	Benzo(g,h,i)perylene
		7 1.00000e4	317.26797	31.51910	
		1 100.00000	3.17288	31.51711	
		2 200.00000	6.79410	29.43731	
		3 500.00000	17.66954	28.29729	
		4 1000.00000	35.90152	27.85397	
		5 2000.00000	71.56614	27.94618	
22.111	3	6 5000.00000	181.34886	27.57117	Benzo(g,h,i)perylene
		7 1.00000e4	367.56784	27.20586	
		1 100.00000	6.08162	16.44298	
		2 200.00000	11.79889	16.95075	
		3 500.00000	30.11854	16.60107	
		4 1000.00000	61.84187	16.17027	
		5 2000.00000	123.34122	16.21518	
22.588	1	6 5000.00000	312.19437	16.01566	Indeno(1,2,3-cd)pyrene
		7 1.00000e4	631.46387	15.83622	
		1 50.00000	4.39845	11.36763	
		2 100.00000	9.64680	10.36613	
		3 250.00000	24.43922	10.22946	
		4 500.00000	50.25140	9.94997	
		5 1000.00000	99.94793	10.00521	
22.626	3	6 2500.00000	250.73134	9.97083	Indeno(1,2,3-cd)pyrene
		7 5000.00000	502.34595	9.95330	
		1 50.00000	4.81022	10.39454	
		2 100.00000	9.68046	10.33008	
		3 250.00000	24.11350	10.36764	
		4 500.00000	49.15816	10.17125	
		5 1000.00000	97.53080	10.25317	
		6 2500.00000	243.71762	10.25777	
		7 5000.00000	485.73682	10.29364	

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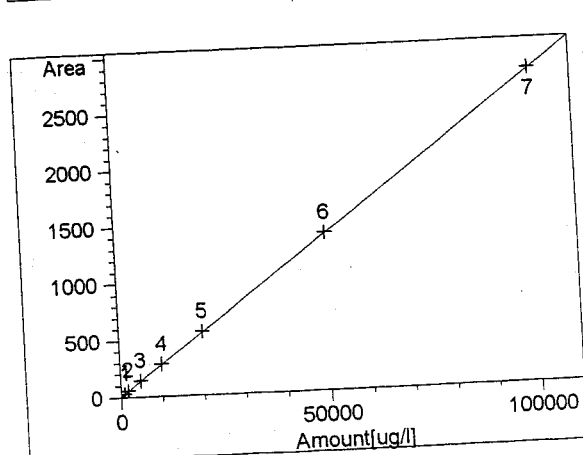
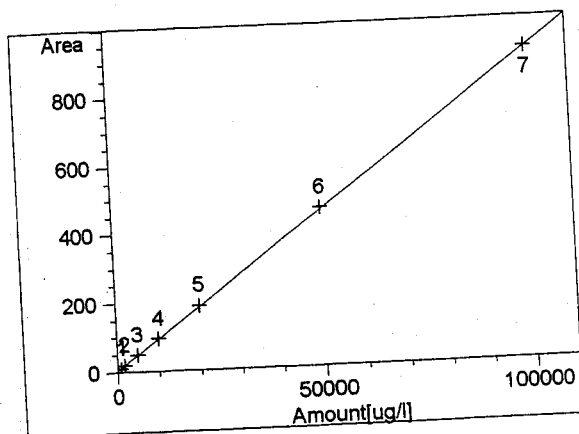
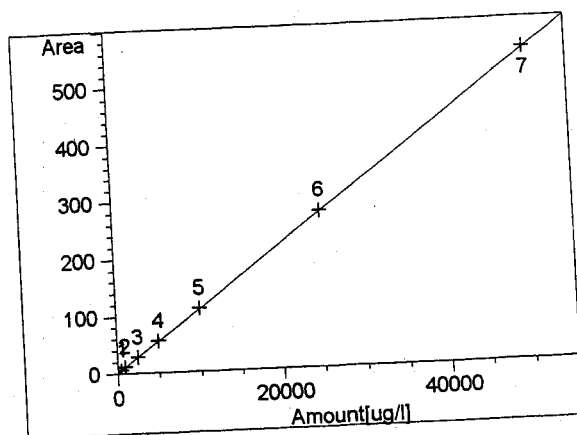
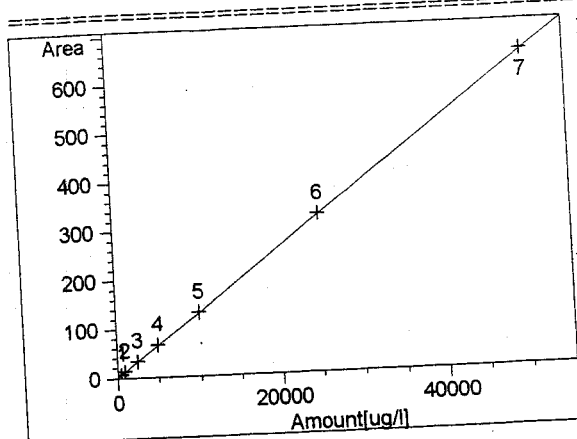
Peak Sum Table

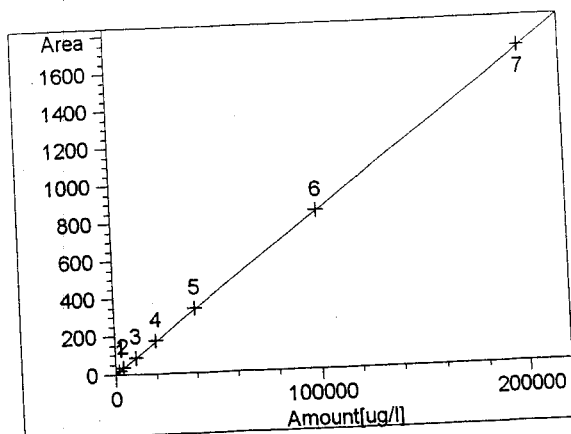
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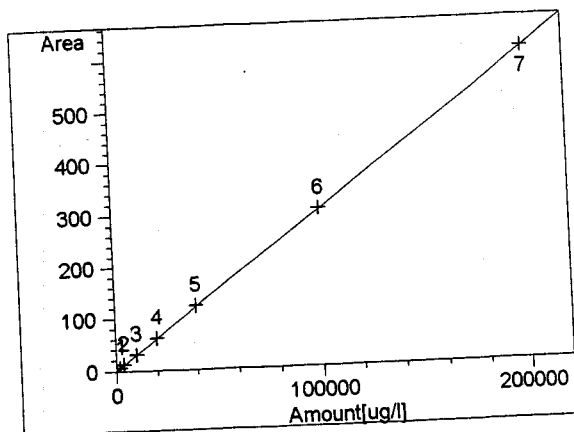
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Calibration Curves

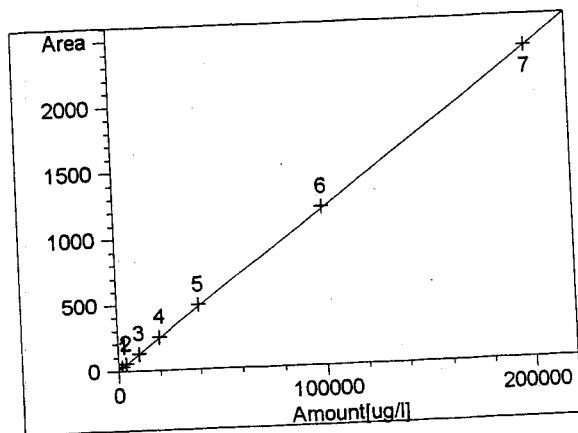




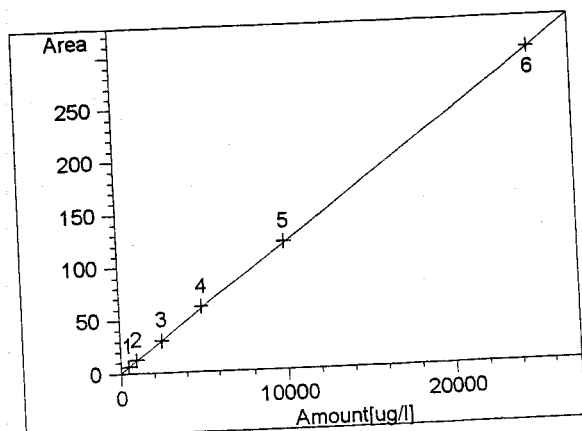
1-Methylnaphthalene (UV) at exp. RT: 6.773
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 2.38438
Formula: $y = mx + b$
m: $8.37069e-3$
b: 2.85473
x: Amount[ug/l]
y: Area



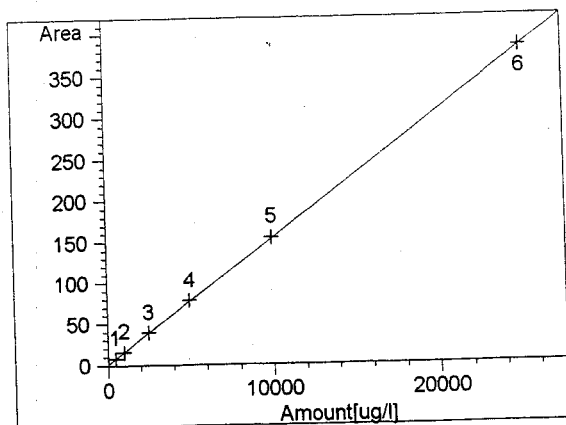
1-Methylnaphthalene (UV) at exp. RT: 6.774
DAD1 B, Sig=305,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.95514
Formula: $y = mx + b$
m: $3.02367e-3$
b: $8.71326e-1$
x: Amount[ug/l]
y: Area



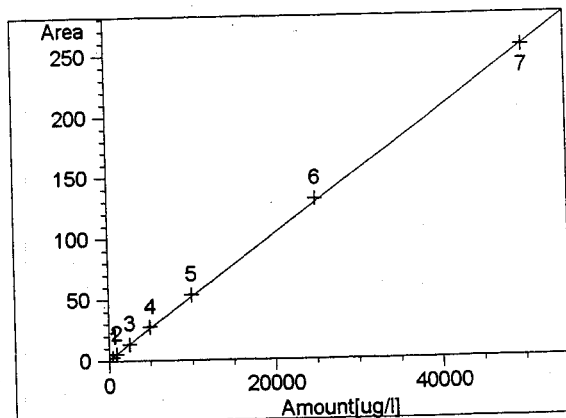
1-Methylnaphthalene (F) at exp. RT: 6.811
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99996
Residual Std. Dev.: 8.34271
Formula: $y = mx + b$
m: $1.18052e-2$
b: 7.81357
x: Amount[ug/l]
y: Area



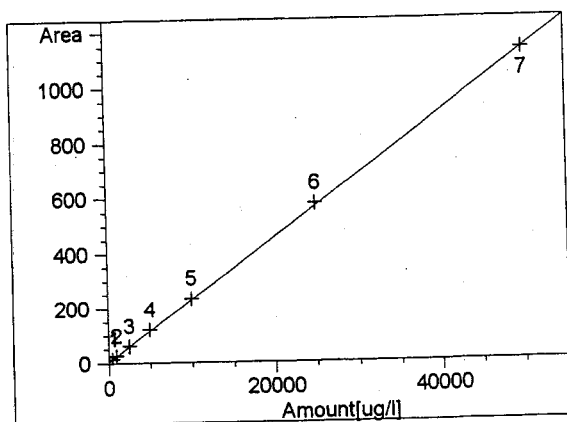
2-Methylnaphthalene at exp. RT: 7.233
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 0.70066
Formula: $y = mx + b$
m: $1.18983e-2$
b: $4.76749e-1$
x: Amount[ug/l]
y: Area



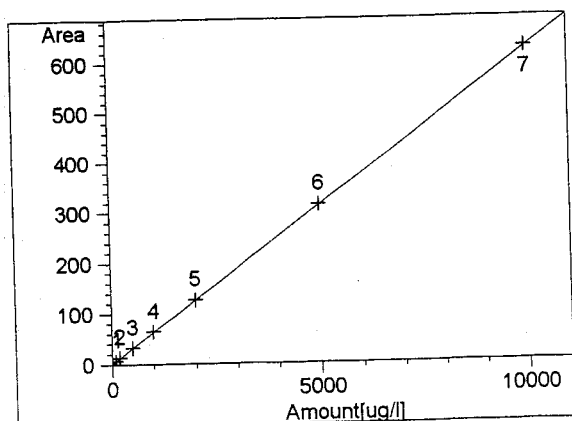
2-Methylnaphthalene at exp. RT: 7.269
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99998
 Residual Std. Dev.: 0.95275
 Formula: $y = mx + b$
 m: $1.52819e-2$
 b: $8.39982e-1$
 x: Amount[ug/l]
 y: Area



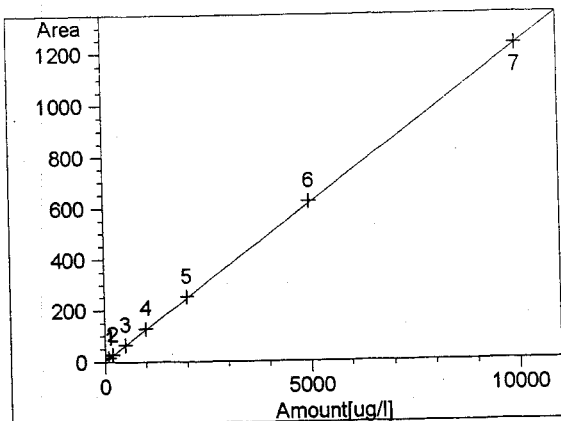
Acenaphthene at exp. RT: 7.613
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 0.99989
 Residual Std. Dev.: 1.52771
 Formula: $y = mx + b$
 m: $5.10700e-3$
 b: $9.67465e-1$
 x: Amount[ug/l]
 y: Area



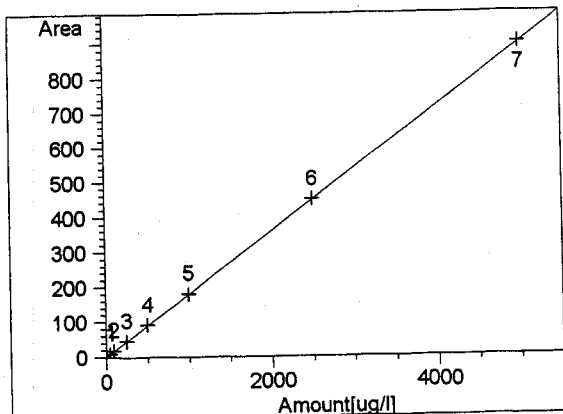
Acenaphthene at exp. RT: 7.651
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99994
 Residual Std. Dev.: 4.97058
 Formula: $y = mx + b$
 m: $2.26212e-2$
 b: 4.03630
 x: Amount[ug/l]
 y: Area



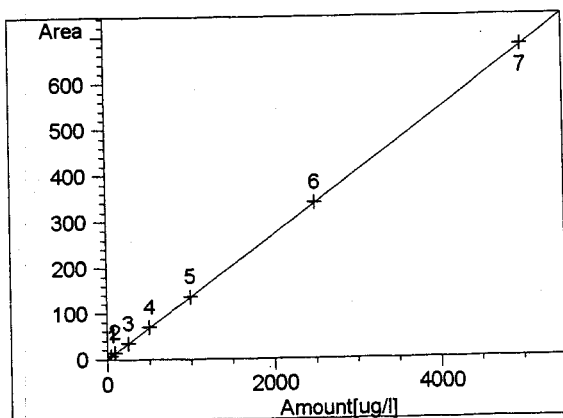
Fluorene at exp. RT: 8.138
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.54815
 Formula: $y = mx + b$
 m: $6.24779e-2$
 b: $3.63360e-1$
 x: Amount[ug/l]
 y: Area



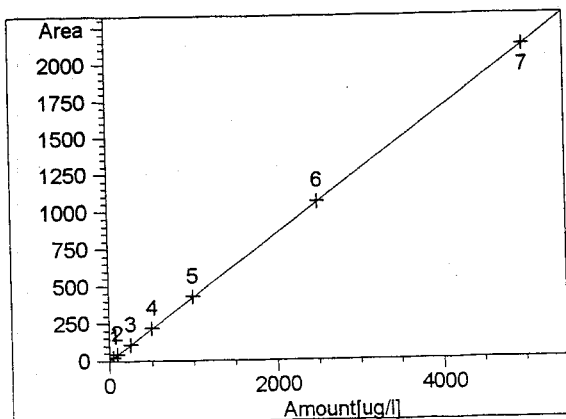
Fluorene at exp. RT: 8.176
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99997
 Residual Std. Dev.: 4.08298
 Formula: $y = mx + b$
 m: 1.22441e-1
 b: 3.95988
 x: Amount[ug/l]
 y: Area



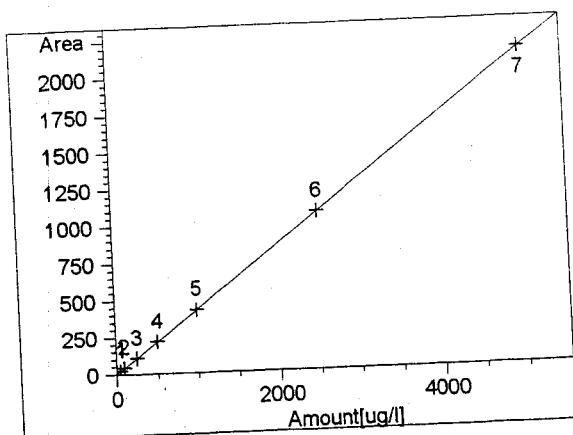
Phenanthrene at exp. RT: 9.260
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.68975
 Formula: $y = mx + b$
 m: 1.79462e-1
 b: 4.79584e-1
 x: Amount[ug/l]
 y: Area



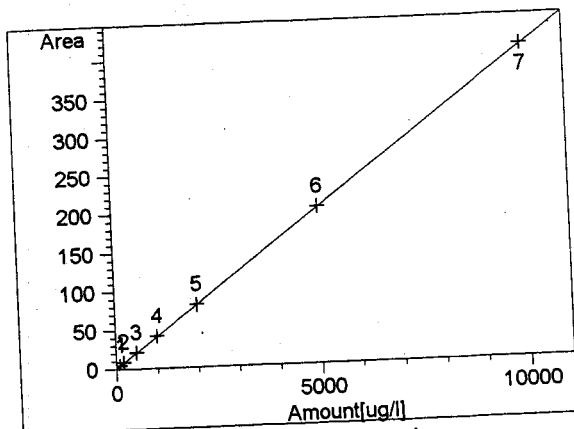
Phenanthrene at exp. RT: 9.297
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 0.44720
 Formula: $y = mx + b$
 m: 1.35341e-1
 b: 4.54582e-1
 x: Amount[ug/l]
 y: Area



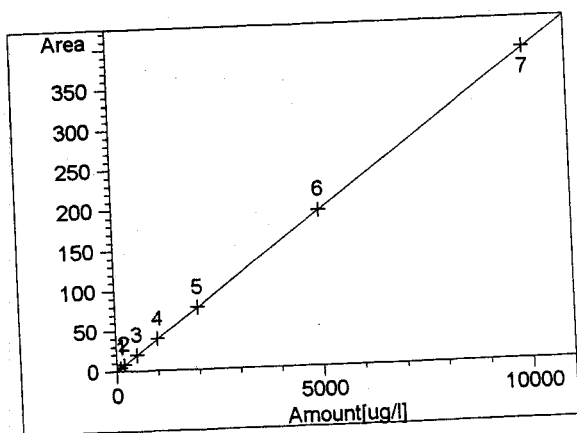
Anthracene at exp. RT: 10.285
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 2.50095
 Formula: $y = mx + b$
 m: 4.23168e-1
 b: 1.94511
 x: Amount[ug/l]
 y: Area



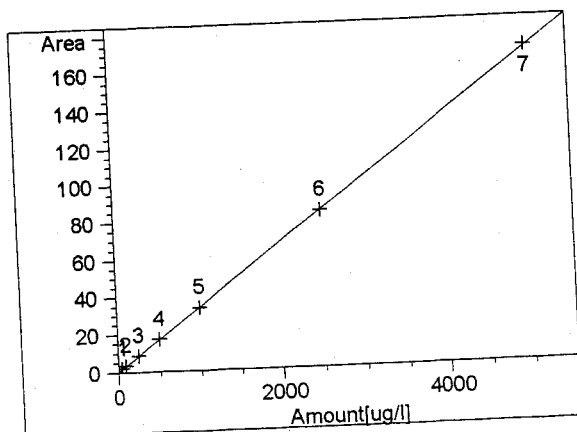
Anthracene at exp. RT: 10.323
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 1.38985
 Formula: $y = mx + b$
 m: $4.26697e-1$
 b: $7.39476e-1$
 x: Amount[ug/l]
 y: Area



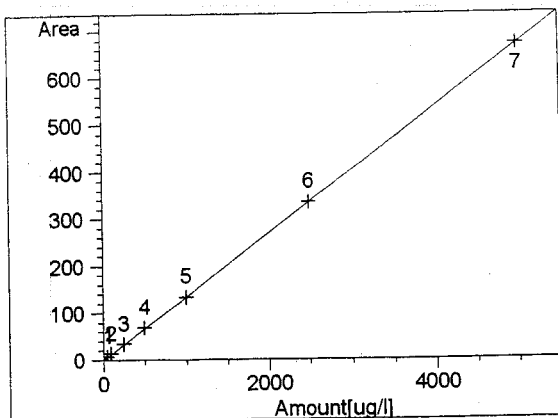
Fluoranthene at exp. RT: 11.435
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.26501
 Formula: $y = mx + b$
 m: $4.06313e-2$
 b: $1.40829e-1$
 x: Amount[ug/l]
 y: Area



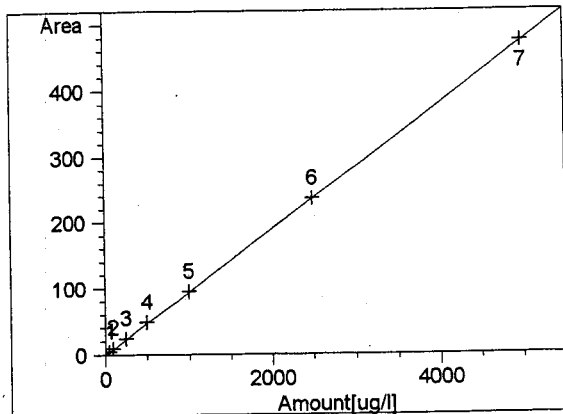
Fluoranthene at exp. RT: 11.472
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 0.29311
 Formula: $y = mx + b$
 m: $3.87172e-2$
 b: $5.88250e-2$
 x: Amount[ug/l]
 y: Area



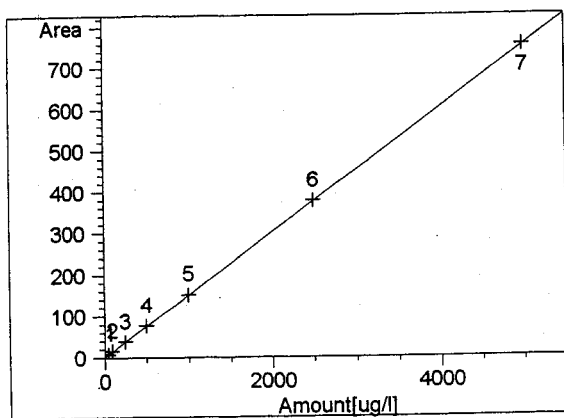
Pyrene at exp. RT: 12.208
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 0.99999
 Residual Std. Dev.: 0.27756
 Formula: $y = mx + b$
 m: $3.37388e-2$
 b: $1.22142e-3$
 x: Amount[ug/l]
 y: Area



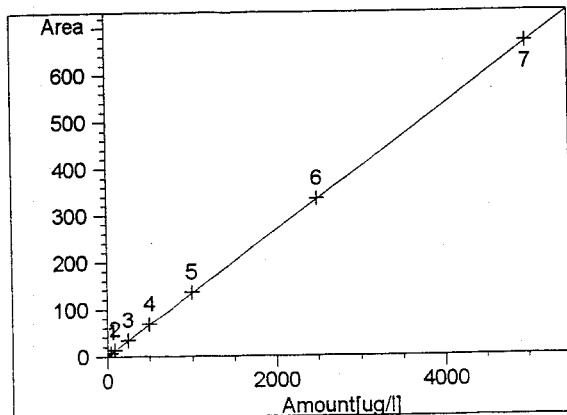
Pyrene at exp. RT: 12.245
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 0.55665
 Formula: $y = mx + b$
 m: $1.34246e-1$
 b: $-2.46762e-1$
 x: Amount[ug/l]
 y: Area



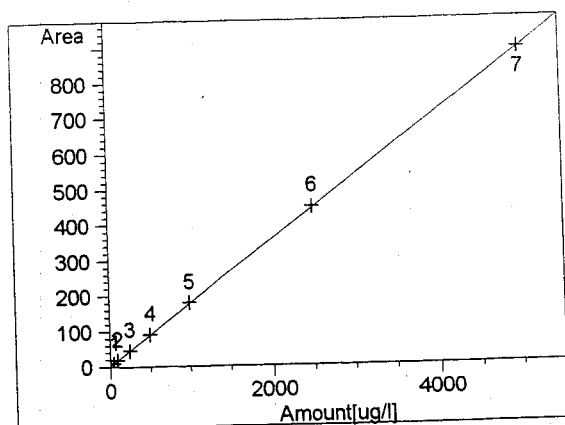
Benzo(a)anthracene at exp. RT: 15.039
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.43917
 Formula: $y = mx + b$
 m: $9.47891e-2$
 b: $-5.46320e-2$
 x: Amount[ug/l]
 y: Area



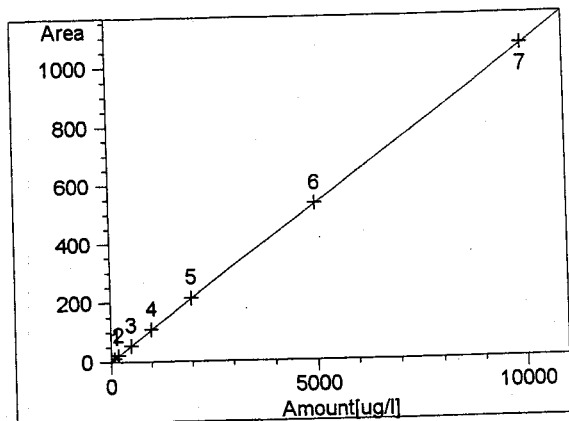
Benzo(a)anthracene at exp. RT: 15.077
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 0.63754
 Formula: $y = mx + b$
 m: $1.50795e-1$
 b: $5.90358e-1$
 x: Amount[ug/l]
 y: Area



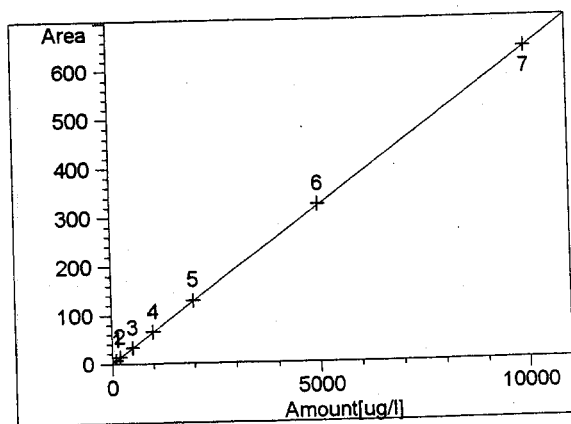
Chrysene at exp. RT: 15.539
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.57474
 Formula: $y = mx + b$
 m: $1.33415e-1$
 b: $4.59439e-1$
 x: Amount[ug/l]
 y: Area



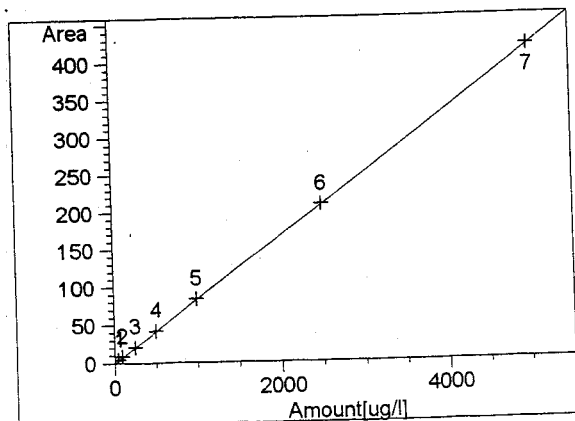
Chrysene at exp. RT: 15.577
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99999
 Residual Std. Dev.: 1.48324
 Formula: $y = mx + b$
 m: $1.77933e-1$
 b: 1.39188
 x: Amount[ug/l]
 y: Area



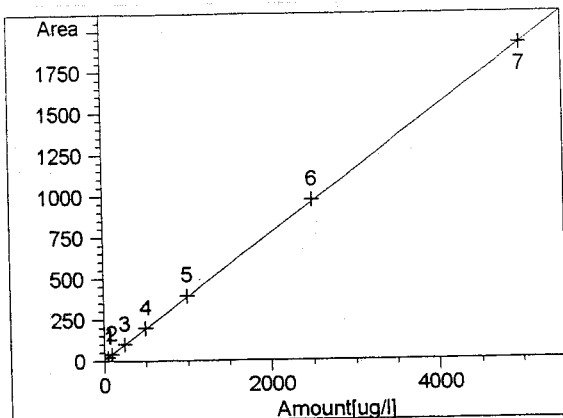
Benzo(b)fluoranthene at exp. RT: 17.772
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.71561
 Formula: $y = mx + b$
 m: $1.06301e-1$
 b: $3.09438e-1$
 x: Amount[ug/l]
 y: Area



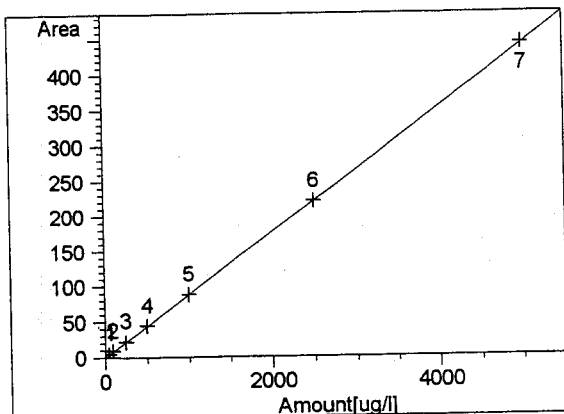
Benzo(b)fluoranthene at exp. RT: 17.810
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 0.79187
 Formula: $y = mx + b$
 m: $6.40783e-2$
 b: $5.89141e-1$
 x: Amount[ug/l]
 y: Area



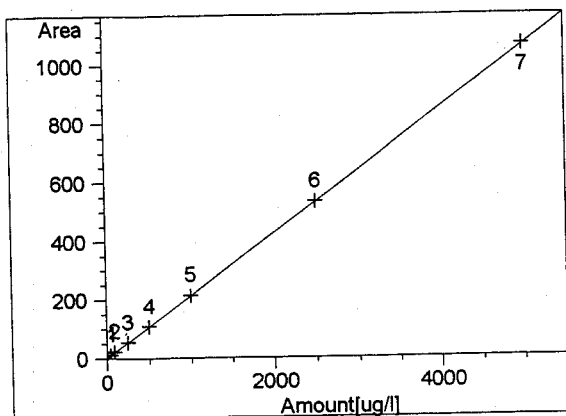
Benzo(k)fluoranthene at exp. RT: 18.726
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.26640
 Formula: $y = mx + b$
 m: $8.35344e-2$
 b: $-1.45349e-1$
 x: Amount[ug/l]
 y: Area



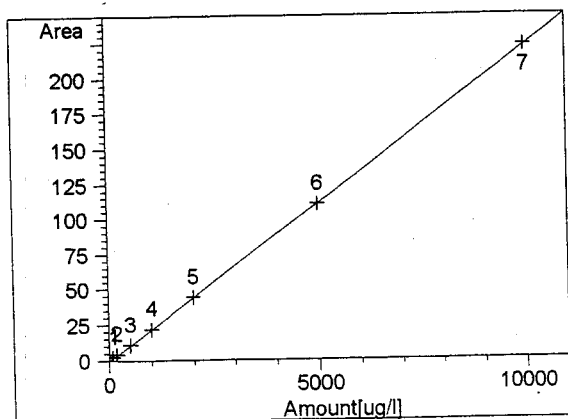
Benzo(k)fluoranthene at exp. RT: 18.764
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99997
 Residual Std. Dev.: 6.35516
 Formula: $y = mx + b$
 m: $3.82102e-1$
 b: 5.25986
 x: Amount[ug/l]
 y: Area



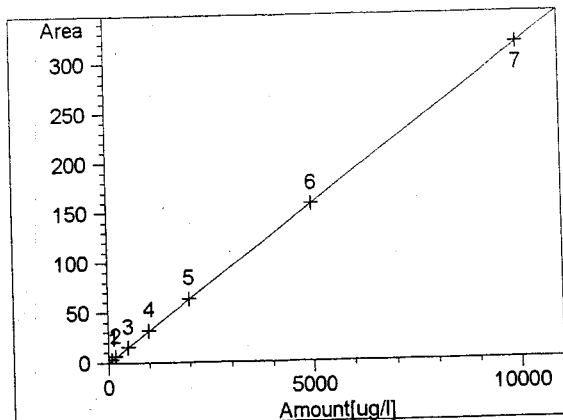
Benzo(a)pyrene at exp. RT: 19.676
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.53487
 Formula: $y = mx + b$
 m: $8.85779e-2$
 b: $-5.40129e-1$
 x: Amount[ug/l]
 y: Area



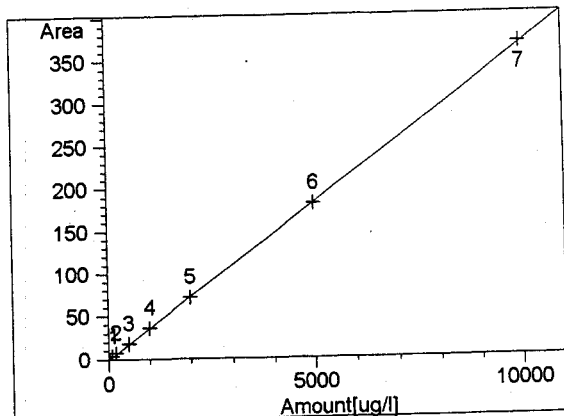
Benzo(a)pyrene at exp. RT: 19.714
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 0.85195
 Formula: $y = mx + b$
 m: $2.12753e-1$
 b: $6.41655e-1$
 x: Amount[ug/l]
 y: Area



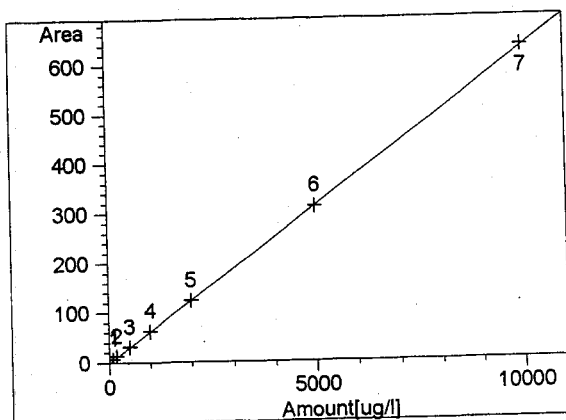
Dibenz(a,h)anthracene at exp. RT: 21.294
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.26499
 Formula: $y = mx + b$
 m: $2.23247e-2$
 b: $-5.32610e-1$
 x: Amount[ug/l]
 y: Area



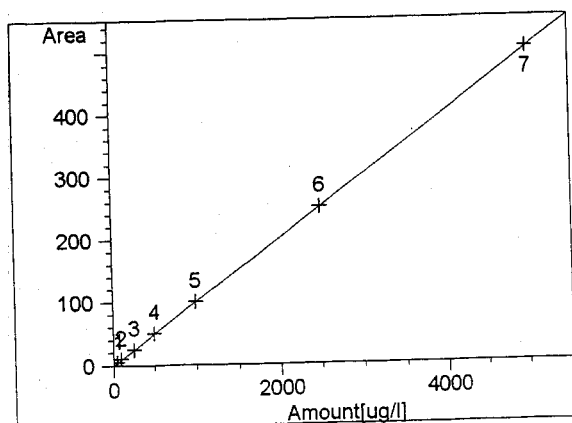
Dibenzo(a,h)anthracene at exp. RT: 21.332
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 0.27198
 Formula: $y = mx + b$
 m: $3.17395e-2$
 b: $-2.91544e-1$
 x: Amount[ug/l]
 y: Area



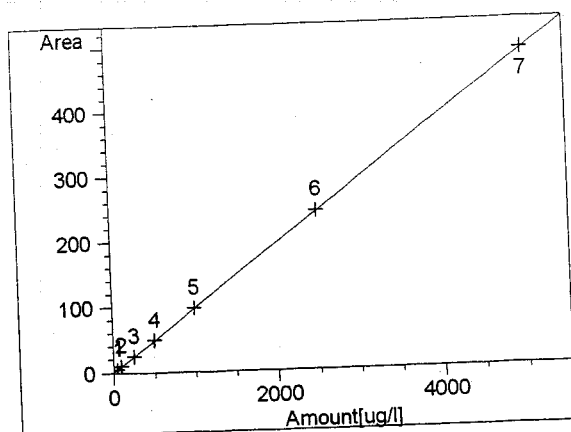
Benzo(g,h,i)perylene at exp. RT: 22.074
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 0.99998
 Residual Std. Dev.: 0.94681
 Formula: $y = mx + b$
 m: $3.67740e-2$
 b: -1.04727
 x: Amount[ug/l]
 y: Area



Benzo(g,h,i)perylene at exp. RT: 22.111
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99998
 Residual Std. Dev.: 1.45280
 Formula: $y = mx + b$
 m: $6.31700e-2$
 b: -1.53644
 x: Amount[ug/l]
 y: Area



Indeno(1,2,3-cd)pyrene at exp. RT: 22.588
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.25692
 Formula: $y = mx + b$
 m: $1.00554e-1$
 b: $-4.92879e-1$
 x: Amount[ug/l]
 y: Area



Indeno(1,2,3-cd)pyrene at exp. RT: 22.626
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.41791
Formula: $y = mx + b$
m: 9.71800e-2
b: 1.79343e-1
x: Amount[ug/l]
y: Area

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188774 HPLC Water
EPA 8310

Inst : HPLC04
Calnum : 296199754001

Cal Date: 18-MAY-2006

ICV 296199754015 (13800015 19-MAY-2006) stds: S3051

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Naphthalene	1	0.0130	0.0134	5000	5126	ug/L	3	15	
Acenaphthylene	1	0.0093	0.0100	10000	10680	ug/L	7	15	
Acenaphthene	1	0.0052	0.0057	5000	5392	ug/L	8	15	
Fluorene	1	0.0627	0.0646	1000	1028	ug/L	3	15	
Phenanthrene	1	0.1800	0.1815	500.0	503.1	ug/L	1	15	
Anthracene	1	0.4248	0.4384	500.0	513.4	ug/L	3	15	
Fluoranthene	1	0.0409	0.0422	1000	1034	ug/L	3	15	
Pyrene	1	0.0342	0.0343	500.0	508.5	ug/L	2	15	
Benzo(a)anthracene	1	0.0943	0.0969	500.0	511.5	ug/L	2	15	
Chrysene	1	0.1335	0.1357	500.0	505.0	ug/L	1	15	
Benzo(b)fluoranthene	1	0.1059	0.1090	1000	1023	ug/L	2	15	
Benzo(k)fluoranthene	1	0.0821	0.0850	500.0	510.7	ug/L	2	15	
Benzo(a)pyrene	1	0.0870	0.0890	500.0	508.4	ug/L	2	15	
Dibenz(a,h)anthracene	1	0.0212	0.0222	1000	1017	ug/L	2	15	
Benzo(g,h,i)perylene	1	0.0351	0.0359	1000	1004	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	1	0.0976	0.1026	500.0	515.2	ug/L	3	15	
Acenaphthylene	2	0.0279	0.0285	10000	10180	ug/L	2	15	
Naphthalene	3	0.0110	0.0113	5000	5130	ug/L	3	15	
Acenaphthene	3	0.0233	0.0248	5000	5302	ug/L	6	15	
Fluorene	3	0.1263	0.1289	1000	1020	ug/L	2	15	
Phenanthrene	3	0.1362	0.1386	500.0	508.6	ug/L	2	15	
Anthracene	3	0.4263	0.4399	500.0	513.7	ug/L	3	15	
Fluoranthene	3	0.0387	0.0407	1000	1050	ug/L	5	15	
Pyrene	3	0.1332	0.1384	500.0	517.2	ug/L	3	15	
Benzo(a)anthracene	3	0.1515	0.1558	500.0	512.8	ug/L	3	15	
Chrysene	3	0.1803	0.1841	500.0	509.6	ug/L	2	15	
Benzo(b)fluoranthene	3	0.0643	0.0664	1000	1027	ug/L	3	15	
Benzo(k)fluoranthene	3	0.3904	0.4029	500.0	513.5	ug/L	3	15	
Benzo(a)pyrene	3	0.2132	0.2200	500.0	513.9	ug/L	3	15	
Dibenz(a,h)anthracene	3	0.0311	0.0322	1000	1025	ug/L	3	15	
Benzo(g,h,i)perylene	3	0.0613	0.0619	1000	1004	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	3	0.0971	0.1010	500.0	517.9	ug/L	4	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188774 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: L IDF : 1.0
Seqnum : 296340469002 File : 23600002 Time : 24-AUG-2006 11:01
Cal : 296199754001 Caldate : 18-MAY-2006
Standards: S3190

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0128	2500	2430	ug/L	-3	15	
Acenaphthylene	1	0.0093	0.0090	5000	4696	ug/L	-6	15	
Acenaphthene	1	0.0052	0.0052	2500	2341	ug/L	-6	15	
Fluorene	1	0.0627	0.0610	500.0	482.1	ug/L	-4	15	
Phenanthrene	1	0.1800	0.1744	250.0	240.3	ug/L	-4	15	
Anthracene	1	0.4248	0.4115	250.0	238.5	ug/L	-5	15	
Fluoranthene	1	0.0409	0.0400	500.0	488.2	ug/L	-2	15	
Pyrene	1	0.0342	0.0331	250.0	245.3	ug/L	-2	15	
Benzo(a)anthracene	1	0.0943	0.0910	250.0	240.6	ug/L	-4	15	
Chrysene	1	0.1335	0.1310	250.0	242.0	ug/L	-3	15	
Benzo(b)fluoranthene	1	0.1059	0.1023	500.0	478.4	ug/L	-4	15	
Benzo(k)fluoranthene	1	0.0821	0.0805	250.0	242.7	ug/L	-3	15	
Benzo(a)pyrene	1	0.0870	0.0848	250.0	245.5	ug/L	-2	15	
Dibenz(a,h)anthracene	1	0.0212	0.0209	500.0	492.5	ug/L	-2	15	
Benzo(g,h,i)perylene	1	0.0351	0.0348	500.0	502.0	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	1	0.0976	0.0984	250.0	249.6	ug/L	0	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0084	50000	49810	ug/L	0	15	
Acenaphthylene	2	0.0279	0.0272	5000	4808	ug/L	-4	15	
1-Methylnaphthalene (UV)	2	0.0031	0.0030	50000	49580	ug/L	-1	15	
Naphthalene	3	0.0110	0.0110	2500	2473	ug/L	-1	15	
Acenaphthene	3	0.0233	0.0233	2500	2395	ug/L	-4	15	
Fluorene	3	0.1263	0.1230	500.0	469.8	ug/L	-6	15	
Phenanthrene	3	0.1362	0.1346	250.0	245.3	ug/L	-2	15	
Anthracene	3	0.4263	0.4204	250.0	244.6	ug/L	-2	15	
Fluoranthene	3	0.0387	0.0380	500.0	488.9	ug/L	-2	15	
Pyrene	3	0.1332	0.1327	250.0	248.9	ug/L	0	15	
Benzo(a)anthracene	3	0.1515	0.1499	250.0	244.7	ug/L	-2	15	
Chrysene	3	0.1803	0.1798	250.0	244.9	ug/L	-2	15	
Benzo(b)fluoranthene	3	0.0643	0.0638	500.0	488.5	ug/L	-2	15	
Benzo(k)fluoranthene	3	0.3904	0.3876	250.0	239.8	ug/L	-4	15	
Benzo(a)pyrene	3	0.2132	0.2128	250.0	247.0	ug/L	-1	15	
Dibenz(a,h)anthracene	3	0.0311	0.0297	500.0	477.0	ug/L	-5	15	
Benzo(g,h,i)perylene	3	0.0613	0.0599	500.0	498.3	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	3	0.0971	0.0944	250.0	241.1	ug/L	-4	15	
1-Methylnaphthalene (F)	3	0.0122	0.0123	50000	51320	ug/L	3	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188774 HPLC Water
EPA 8310

Inst : HPLC04	Run Name: M	IDF : 1.0
Seqnum : 296340469020	File : 23600020	Time : 24-AUG-2006 20:30
Cal : 296199754001	Caldate : 18-MAY-2006	
Standards: S3192		

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0134	5000	5146	ug/L	3	15	
Acenaphthylene	1	0.0093	0.0095	10000	10210	ug/L	2	15	
Acenaphthene	1	0.0052	0.0054	5000	5128	ug/L	3	15	
Fluorene	1	0.0627	0.0643	1000	1024	ug/L	2	15	
Phenanthrene	1	0.1800	0.1848	500.0	512.1	ug/L	2	15	
Anthracene	1	0.4248	0.4359	500.0	510.4	ug/L	2	15	
Fluoranthene	1	0.0409	0.0422	1000	1036	ug/L	4	15	
Pyrene	1	0.0342	0.0357	500.0	529.6	ug/L	6	15	
Benzo(a)anthracene	1	0.0943	0.0966	500.0	510.2	ug/L	2	15	
Chrysene	1	0.1335	0.1381	500.0	514.1	ug/L	3	15	
Benzo(b)fluoranthene	1	0.1059	0.1094	1000	1026	ug/L	3	15	
Benzo(k)fluoranthene	1	0.0821	0.0852	500.0	511.9	ug/L	2	15	
Benzo(a)pyrene	1	0.0870	0.0892	500.0	509.6	ug/L	2	15	
Dibenz(a,h)anthracene	1	0.0212	0.0220	1000	1007	ug/L	1	15	
Benzo(g,h,i)perylene	1	0.0351	0.0361	1000	1010	ug/L	1	15	
Indeno(1,2,3-cd)pyrene	1	0.0976	0.1005	500.0	504.5	ug/L	1	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0086	50000	50900	ug/L	2	15	
Acenaphthylene	2	0.0279	0.0287	10000	10250	ug/L	3	15	
1-Methylnaphthalene (UV)	2	0.0031	0.0031	50000	50760	ug/L	2	15	
Naphthalene	3	0.0110	0.0112	5000	5086	ug/L	2	15	
Acenaphthene	3	0.0233	0.0239	5000	5111	ug/L	2	15	
Fluorene	3	0.1263	0.1284	1000	1016	ug/L	2	15	
Phenanthrene	3	0.1362	0.1370	500.0	502.6	ug/L	1	15	
Anthracene	3	0.4263	0.4422	500.0	516.5	ug/L	3	15	
Fluoranthene	3	0.0387	0.0393	1000	1013	ug/L	1	15	
Pyrene	3	0.1332	0.1310	500.0	489.7	ug/L	-2	15	
Benzo(a)anthracene	3	0.1515	0.1544	500.0	508.0	ug/L	2	15	
Chrysene	3	0.1803	0.1832	500.0	507.0	ug/L	1	15	
Benzo(b)fluoranthene	3	0.0643	0.0664	1000	1027	ug/L	3	15	
Benzo(k)fluoranthene	3	0.3904	0.4043	500.0	515.3	ug/L	3	15	
Benzo(a)pyrene	3	0.2132	0.2187	500.0	510.9	ug/L	2	15	
Dibenz(a,h)anthracene	3	0.0311	0.0327	1000	1040	ug/L	4	15	
Benzo(g,h,i)perylene	3	0.0613	0.0624	1000	1012	ug/L	1	15	
Indeno(1,2,3-cd)pyrene	3	0.0971	0.1014	500.0	519.8	ug/L	4	15	
1-Methylnaphthalene (F)	3	0.0122	0.0122	50000	50990	ug/L	2	15	

Confirmation Report for 188774 HPLC Water
Curtis & Tompkins Laboratories

Units: ug/L

Lab ID	Client ID	Analyte	Result	Confirmation	RPD	%D
188774-001	BB1PZ100	Fluoranthene	0.06998 J	0.06602	6	-6
188774-007	514AGW101	Fluoranthene	0.03242 J	0.1502	129	363

SEQUENCE SUMMARY FOR 188774 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 296199754 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 18-MAY-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
001	13800001	X	PRIMER - 138			18-MAY-2006	17:14 1.0								
002	13800002	X	PRIMER			18-MAY-2006	17:46 1.0								
003	13800003	X	IB - 138			18-MAY-2006	18:17 1.0								
004	13800004	X	IB			18-MAY-2006	18:49 1.0								
005	13800005	X	IB			18-MAY-2006	19:21 1.0								
006	13800006	ICAL				18-MAY-2006	19:52 1.0								
007	13800007	ICAL				18-MAY-2006	20:24 1.0								
008	13800008	ICAL				18-MAY-2006	20:56 1.0								
009	13800009	ICAL				18-MAY-2006	21:27 1.0								
010	13800010	ICAL				18-MAY-2006	21:59 1.0								
011	13800011	ICAL				18-MAY-2006	22:31 1.0								
012	13800012	ICAL				18-MAY-2006	23:02 1.0								
013	13800013	X	IB			18-MAY-2006	23:34 1.0								
014	13800014	X	IB			19-MAY-2006	00:05 1.0								
015	13800015	ICV	ICV			19-MAY-2006	00:37 1.0								
016	13800016	X	ICV			19-MAY-2006	01:09 1.0								
017	13800017	X	IB			19-MAY-2006	01:40 1.0								

Stds used: 1=S3065 2=S3064 3=S3063 4=S3062 5=S3061 6=S3060 7=S3059 8=S3051

SEQUENCE SUMMARY FOR 188774 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 296340469 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 24-AUG-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds Used	>LR
001	23600001	X	IB - 236			24-AUG-2006 10:29	1.0					1	
002	23600002	CCV	L			24-AUG-2006 11:01	1.0	1.0			10	1	
003	23600003	X	CCV			24-AUG-2006 11:33	1.0					1	
004	23600004	X	IB			24-AUG-2006 12:04	1.0						
005	23600005	BLANK	QC352946			24-AUG-2006 12:36	1.0	0.002			10		
006	23600006	LCS	QC352947			24-AUG-2006 13:07	1.0	0.002			10		
007	23600007	X	IB			24-AUG-2006 13:39	1.0						
008	23600008	SAMPLE	188774-001			24-AUG-2006 14:11	1.0	0.001887			10		
009	23600009	SAMPLE	188774-007			24-AUG-2006 14:42	1.0	0.001887			10		
010	23600010	SAMPLE	188774-002			24-AUG-2006 15:14	1.0	0.001887			10		
011	23600011	SAMPLE	188774-008			24-AUG-2006 15:45	1.0	0.001887			10		
012	23600012	SAMPLE	188774-009			24-AUG-2006 16:17	1.0	0.001887			10		
013	23600013	MSS	188802-001			24-AUG-2006 16:49	1.0	0.001887	6	1	10		
014	23600014	MS	QC352948			24-AUG-2006 17:20	1.0	0.001887	1	24	10		
015	23600015	MSD	QC352949			24-AUG-2006 17:52	1.0	0.001887	3	23	10		
016	23600016	X	IB			24-AUG-2006 18:24	1.0						
017	23600017	X	IB			24-AUG-2006 18:55	1.0						
018	23600018	X	IB			24-AUG-2006 19:27	1.0						
019	23600019	X	IB			24-AUG-2006 19:58	1.0						
020	23600020	CCV	M			24-AUG-2006 20:30	1.0	1.0			10	2	
021	23600021	X	CCV			24-AUG-2006 21:01	1.0					2	
022	23600022	X	IB			24-AUG-2006 21:33	1.0						
023	23600023	SAMPLE	188802-004			24-AUG-2006 22:05	1.0	0.001887			10		
024	23600024	SAMPLE	188802-005			24-AUG-2006 22:36	1.0	0.001887			10		
025	23600025	SAMPLE	188802-006			24-AUG-2006 23:08	1.0	0.001887			10		
026	23600026	SAMPLE	188802-008			24-AUG-2006 23:40	1.0	0.001887			10		
027	23600027	SAMPLE	188802-010			25-AUG-2006 00:11	1.0	0.001887			10		
028	23600028	SAMPLE	188837-012			25-AUG-2006 00:43	1.0	0.001905			10		
029	23600029	SAMPLE	188869-001			25-AUG-2006 01:14	1.0	0.001905			10		
030	23600030	X	IB			25-AUG-2006 01:46	1.0						
031	23600031	CCV	H			25-AUG-2006 02:18	1.0	1.0			10	3	

Stds used: 1=S3190 2=S3192 3=S2954

SEQUENCE SUMMARY FOR 188774 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 296340469 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 24-AUG-2006
 Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Std	Used	>LR
032	23600032	X	CCV			25-AUG-2006	02:49	1.0				3		
033	23600033	X	IB			25-AUG-2006	03:21	1.0						

Std's used: 1=S3190 2=S3192 3=S2954

REPORTING SUMMARY FOR 188774 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
188774-001	Naphthalene	HPLC04	1	08/24/06 14:11
188774-001	Acenaphthylene	HPLC04	1	08/24/06 14:11
188774-001	Acenaphthene	HPLC04	1	08/24/06 14:11
188774-001	Fluorene	HPLC04	1	08/24/06 14:11
188774-001	Phenanthrene	HPLC04	3	08/24/06 14:11
188774-001	Anthracene	HPLC04	3	08/24/06 14:11
188774-001	Fluoranthene	HPLC04	3	08/24/06 14:11
188774-001	Pyrene	HPLC04	3	08/24/06 14:11
188774-001	Benzo(a)anthracene	HPLC04	3	08/24/06 14:11
188774-001	Chrysene	HPLC04	3	08/24/06 14:11
188774-001	Benzo(b)fluoranthene	HPLC04	3	08/24/06 14:11
188774-001	Benzo(k)fluoranthene	HPLC04	3	08/24/06 14:11
188774-001	Benzo(a)pyrene	HPLC04	3	08/24/06 14:11
188774-001	Dibenz(a,h)anthracene	HPLC04	3	08/24/06 14:11
188774-001	Benzo(g,h,i)perylene	HPLC04	3	08/24/06 14:11
188774-001	Indeno(1,2,3-cd)pyrene	HPLC04	3	08/24/06 14:11
188774-001	1-Methylnaphthalene (UV)	HPLC04	1	08/24/06 14:11
188774-001	1-Methylnaphthalene (F)	HPLC04	3	08/24/06 14:11
188774-002	Naphthalene	HPLC04	1	08/24/06 15:14
188774-002	Acenaphthylene	HPLC04	1	08/24/06 15:14
188774-002	Acenaphthene	HPLC04	1	08/24/06 15:14
188774-002	Fluorene	HPLC04	1	08/24/06 15:14
188774-002	Phenanthrene	HPLC04	3	08/24/06 15:14
188774-002	Anthracene	HPLC04	3	08/24/06 15:14
188774-002	Fluoranthene	HPLC04	3	08/24/06 15:14
188774-002	Pyrene	HPLC04	3	08/24/06 15:14
188774-002	Benzo(a)anthracene	HPLC04	3	08/24/06 15:14
188774-002	Chrysene	HPLC04	3	08/24/06 15:14
188774-002	Benzo(b)fluoranthene	HPLC04	3	08/24/06 15:14
188774-002	Benzo(k)fluoranthene	HPLC04	3	08/24/06 15:14
188774-002	Benzo(a)pyrene	HPLC04	3	08/24/06 15:14
188774-002	Dibenz(a,h)anthracene	HPLC04	3	08/24/06 15:14
188774-002	Benzo(g,h,i)perylene	HPLC04	3	08/24/06 15:14
188774-002	Indeno(1,2,3-cd)pyrene	HPLC04	3	08/24/06 15:14
188774-002	1-Methylnaphthalene (UV)	HPLC04	1	08/24/06 15:14
188774-002	1-Methylnaphthalene (F)	HPLC04	3	08/24/06 15:14
188774-007	Naphthalene	HPLC04	1	08/24/06 14:42
188774-007	Acenaphthylene	HPLC04	1	08/24/06 14:42
188774-007	Acenaphthene	HPLC04	1	08/24/06 14:42
188774-007	Fluorene	HPLC04	1	08/24/06 14:42
188774-007	Phenanthrene	HPLC04	3	08/24/06 14:42
188774-007	Anthracene	HPLC04	3	08/24/06 14:42
188774-007	Fluoranthene	HPLC04	3	08/24/06 14:42
188774-007	Pyrene	HPLC04	3	08/24/06 14:42
188774-007	Benzo(a)anthracene	HPLC04	3	08/24/06 14:42
188774-007	Chrysene	HPLC04	3	08/24/06 14:42
188774-007	Benzo(b)fluoranthene	HPLC04	3	08/24/06 14:42
188774-007	Benzo(k)fluoranthene	HPLC04	3	08/24/06 14:42
188774-007	Benzo(a)pyrene	HPLC04	3	08/24/06 14:42
188774-007	Dibenz(a,h)anthracene	HPLC04	3	08/24/06 14:42
188774-007	Benzo(g,h,i)perylene	HPLC04	3	08/24/06 14:42
188774-007	Indeno(1,2,3-cd)pyrene	HPLC04	3	08/24/06 14:42

REPORTING SUMMARY FOR 188774 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
188774-007	1-Methylnaphthalene (UV)	HPLC04	1	08/24/06 14:42
188774-007	1-Methylnaphthalene (F)	HPLC04	3	08/24/06 14:42
188774-008	Naphthalene	HPLC04	1	08/24/06 15:45
188774-008	Acenaphthylene	HPLC04	1	08/24/06 15:45
188774-008	Acenaphthene	HPLC04	1	08/24/06 15:45
188774-008	Fluorene	HPLC04	1	08/24/06 15:45
188774-008	Phenanthrene	HPLC04	3	08/24/06 15:45
188774-008	Anthracene	HPLC04	3	08/24/06 15:45
188774-008	Fluoranthene	HPLC04	3	08/24/06 15:45
188774-008	Pyrene	HPLC04	3	08/24/06 15:45
188774-008	Benzo(a) anthracene	HPLC04	3	08/24/06 15:45
188774-008	Chrysene	HPLC04	3	08/24/06 15:45
188774-008	Benzo(b) fluoranthene	HPLC04	3	08/24/06 15:45
188774-008	Benzo(k) fluoranthene	HPLC04	3	08/24/06 15:45
188774-008	Benzo(a) pyrene	HPLC04	3	08/24/06 15:45
188774-008	Dibenz(a,h) anthracene	HPLC04	3	08/24/06 15:45
188774-008	Benzo(g,h,i) perylene	HPLC04	3	08/24/06 15:45
188774-008	Indeno(1,2,3-cd) pyrene	HPLC04	3	08/24/06 15:45
188774-008	1-Methylnaphthalene (UV)	HPLC04	1	08/24/06 15:45
188774-008	1-Methylnaphthalene (F)	HPLC04	3	08/24/06 15:45
188774-009	Naphthalene	HPLC04	1	08/24/06 16:17
188774-009	Acenaphthylene	HPLC04	1	08/24/06 16:17
188774-009	Acenaphthene	HPLC04	1	08/24/06 16:17
188774-009	Fluorene	HPLC04	1	08/24/06 16:17
188774-009	Phenanthrene	HPLC04	3	08/24/06 16:17
188774-009	Anthracene	HPLC04	3	08/24/06 16:17
188774-009	Fluoranthene	HPLC04	3	08/24/06 16:17
188774-009	Pyrene	HPLC04	3	08/24/06 16:17
188774-009	Benzo(a) anthracene	HPLC04	3	08/24/06 16:17
188774-009	Chrysene	HPLC04	3	08/24/06 16:17
188774-009	Benzo(b) fluoranthene	HPLC04	3	08/24/06 16:17
188774-009	Benzo(k) fluoranthene	HPLC04	3	08/24/06 16:17
188774-009	Benzo(a) pyrene	HPLC04	3	08/24/06 16:17
188774-009	Dibenz(a,h) anthracene	HPLC04	3	08/24/06 16:17
188774-009	Benzo(g,h,i) perylene	HPLC04	3	08/24/06 16:17
188774-009	Indeno(1,2,3-cd) pyrene	HPLC04	3	08/24/06 16:17
188774-009	1-Methylnaphthalene (UV)	HPLC04	1	08/24/06 16:17
188774-009	1-Methylnaphthalene (F)	HPLC04	3	08/24/06 16:17
QC352946	Naphthalene	HPLC04	1	08/24/06 12:36
QC352946	Acenaphthylene	HPLC04	1	08/24/06 12:36
QC352946	Acenaphthene	HPLC04	1	08/24/06 12:36
QC352946	Fluorene	HPLC04	1	08/24/06 12:36
QC352946	Phenanthrene	HPLC04	3	08/24/06 12:36
QC352946	Anthracene	HPLC04	3	08/24/06 12:36
QC352946	Fluoranthene	HPLC04	3	08/24/06 12:36
QC352946	Pyrene	HPLC04	3	08/24/06 12:36
QC352946	Benzo(a) anthracene	HPLC04	3	08/24/06 12:36
QC352946	Chrysene	HPLC04	3	08/24/06 12:36
QC352946	Benzo(b) fluoranthene	HPLC04	3	08/24/06 12:36
QC352946	Benzo(k) fluoranthene	HPLC04	3	08/24/06 12:36
QC352946	Benzo(a) pyrene	HPLC04	3	08/24/06 12:36

REPORTING SUMMARY FOR 188774 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC352946	Dibenz(a,h)anthracene	HPLC04	3	08/24/06 12:36
QC352946	Benzo(g,h,i)perylene	HPLC04	3	08/24/06 12:36
QC352946	Indeno(1,2,3-cd)pyrene	HPLC04	3	08/24/06 12:36
QC352946	1-Methylnaphthalene (UV)	HPLC04	1	08/24/06 12:36
QC352946	1-Methylnaphthalene (F)	HPLC04	3	08/24/06 12:36
QC352947	Naphthalene	HPLC04	1	08/24/06 13:07
QC352947	Fluorene	HPLC04	1	08/24/06 13:07
QC352947	Pyrene	HPLC04	3	08/24/06 13:07
QC352947	Benzo(a)pyrene	HPLC04	3	08/24/06 13:07
QC352947	1-Methylnaphthalene (UV)	HPLC04	1	08/24/06 13:07
QC352947	1-Methylnaphthalene (F)	HPLC04	3	08/24/06 13:07
QC352948	Naphthalene	HPLC04	1	08/24/06 17:20
QC352948	Fluorene	HPLC04	1	08/24/06 17:20
QC352948	Pyrene	HPLC04	3	08/24/06 17:20
QC352948	Benzo(a)pyrene	HPLC04	3	08/24/06 17:20
QC352948	1-Methylnaphthalene (UV)	HPLC04	1	08/24/06 17:20
QC352948	1-Methylnaphthalene (F)	HPLC04	3	08/24/06 17:20
QC352949	Naphthalene	HPLC04	1	08/24/06 17:52
QC352949	Fluorene	HPLC04	1	08/24/06 17:52
QC352949	Pyrene	HPLC04	3	08/24/06 17:52
QC352949	Benzo(a)pyrene	HPLC04	3	08/24/06 17:52
QC352949	1-Methylnaphthalene (UV)	HPLC04	1	08/24/06 17:52
QC352949	1-Methylnaphthalene (F)	HPLC04	3	08/24/06 17:52

Curtis & Tompkins Laboratories

Sample Preparation Summary

23-AUG-2006 17:56

Batch Number : 116658
Date Extracted : 22-AUG-2006
Extracted by : Jessie O'Brien Mee
Prep Method : 3520C

Analysis : 8310
Bg group : N/A
Units : mL
Clean-up :

Spike #1 ID : S4149D
Spike #2 ID : S3553B
Spike #3 ID :
SDP Version : 8310w_rv6

Sample	Type	Client	Matrix	Init Units	Final Prep	Clean	pH	SP 1	SP 2	SP 3	Analyses	Clean	Comments
				W/V	D.F.	D.F.		Vol	Vol	Vol		Method	
188774-001		Treadwell & Rollo	Water	1060 mL	2	0.001887	1	7	.1	0	8310		
188774-002		Treadwell & Rollo	Water	1060 mL	2	0.001887	1	7	.1	0	8310		
188774-007		Treadwell & Rollo	Water	1060 mL	2	0.001887	1	7	.1	0	8310		
188774-008		Treadwell & Rollo	Water	1060 mL	2	0.001887	1	7	.1	0	8310		
188774-009		Treadwell & Rollo	Water	1060 mL	2	0.001887	1	7	.1	0	8310		
188802-001		Treadwell & Rollo	Water	1060 mL	2	0.001887	1	7	.1	0	8310		
188802-004		Treadwell & Rollo	Water	1060 mL	2	0.001887	1	7	.1	0	8310		
188802-005		Treadwell & Rollo	Water	1060 mL	2	0.001887	1	7	.1	0	8310		
188802-006		Treadwell & Rollo	Water	1060 mL	2	0.001887	1	7	.1	0	8310		
188802-008		Treadwell & Rollo	Water	1060 mL	2	0.001887	1	7	.1	0	8310		
188802-010		Treadwell & Rollo	Water	1060 mL	2	0.001905	1	5	.1	0	8310		
188837-012		Treadwell & Rollo	Water	1050 mL	2	0.001905	1	6	.1	0	8310		
188869-001		Treadwell & Rollo	Water	1000 mL	2	0.002000	1		.1	0	8310		
QC352946	BLANK		Water	1000 mL	2	0.002000	1		.1	1	8310		
QC352947	LCS		Water	1000 mL	2	0.002000	1		.1	1	8310		
QC352948	MS	of 188802-001	Water	1060 mL	2	0.001887	1	7	.1	1	8310		
QC352949	MSD	of 188802-001	Water	1060 mL	2	0.001887	1	7	.1	1	8310		

MSS

Prep Chemist:

Reviewed By:

Date:

8/24/06

Relinquished By:

Received By:

Date:

24 AUG 2006

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Cleanup Method (if needed):

☐ EPA 3640a GPC

☐ EPA 3630c Silica Gel

[illegible]

Mfg & Lot# / LIMS # / Time	Date / Initials
0.1 mL of surrogate solution was added to all samples	S449D / G* JCM 8/22/06
1.0 mL of matrix spiking solution was added to all spikes	S3553B
☒ Samples continuously extracted with about 450 mL of CH ₂ Cl ₂	EM46131
Extraction Start Time:	1420 JCM 8/22/06 1620
Extraction End Time:	1025 JCM 8/23/06
☐ Samples were extracted 3 times with 60 mL of CH ₂ Cl ₂	n/A PDM 8/23/06
Extracts filtered through baked, CH ₂ Cl ₂ -rinsed ^{accumulated} powdered Na ₂ SO ₄	EM46111620
Exchanged 2x with Acetonitrile	EM46059
Concentrated: ☐ to volumes as noted above ☐ to clean-up volume	✓
Clean-up (if necessary): ☐ GPC (see GPC run log) ☐ Silica Gel	n/A
Extracts filtered with 0.45 um PTFE syringe filter	whatman K774

Reviewed by [Signature] Date 8/24/06

Curtis & Tompkins Laboratories
MDL Summary for EPA 8310 Water 3520C
As of 09/18/06

Analyte	Units	HPLC02 1	HPLC02 2	HPLC02 3	HPLC04 1	HPLC04 2	HPLC04 3
Naphthalene	ug/L	0.16		0.069	0.097		0.10
Acenaphthylene	ug/L	0.37	0.29		0.24	0.16	
2-Methylnaphthalene	ug/L				0.072		0.10
Acenaphthene	ug/L	0.36		0.098	0.33		0.085
Fluorene	ug/L	0.051		0.054	0.028		0.017
Phenanthrene	ug/L	0.030		0.0086	0.0082		0.0078
Anthracene	ug/L	0.021		0.0077	0.024		0.023
Fluoranthene	ug/L	0.13		0.011	0.042		0.013
Pyrene	ug/L	0.066		0.0048	0.036		0.010
Benzo(a)anthracene	ug/L	0.044		0.0046	0.022		0.013
Chrysene	ug/L	0.036		0.0059	0.021		0.0096
Benzo(b)fluoranthene	ug/L	0.032		0.0081	0.015		0.013
Benzo(k)fluoranthene	ug/L	0.037		0.0044	0.013		0.0080
Benzo(a)pyrene	ug/L	0.055		0.0045	0.017		0.025
Dibenz(a,h)anthracene	ug/L	0.12		0.026	0.037		0.025
Benzo(g,h,i)perylene	ug/L	0.066		0.014	0.047		0.017
Indeno(1,2,3-cd)pyrene	ug/L	0.065		0.011	0.013		0.0096
1-Methylnaphthalene (UV)	ug/L	1.2	1.9		9.0	9.1	
1-Methylnaphthalene (F)	ug/L			0.72			9.8

METALS



Target Analyte List Metals

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BB1PZ100	Batch#:	116572
Lab ID:	188774-001	Sampled:	08/15/06
Matrix:	Water	Received:	08/16/06
Units:	ug/L	Prepared:	08/20/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	3,800	500	10.00	08/22/06
Antimony	ND	1.0	10.00	08/22/06
Arsenic	5.2	5.0	10.00	08/22/06
Barium	200	10	10.00	08/22/06
Beryllium	ND	2.0	10.00	08/22/06
Cadmium	1.8	1.0	10.00	08/22/06
Calcium	73,000	500	10.00	08/22/06
Chromium	130	10	10.00	08/22/06
Cobalt	15	10	10.00	08/22/06
Copper	7.7	1.0	10.00	08/22/06
Iron	47,000	100	10.00	08/22/06
Lead	850	3.0	10.00	08/22/06
Magnesium	87,000	500	10.00	08/22/06
Manganese	1,200	10	10.00	08/22/06
Nickel	210	20	10.00	08/22/06
Potassium	12,000	500	10.00	08/22/06
Selenium	ND	5.0	10.00	08/22/06
Silver	ND	1.0	10.00	08/22/06
Sodium	230,000	1,000	20.00	08/23/06
Thallium	ND	1.0	10.00	08/22/06
Vanadium	38	10	10.00	08/22/06
Zinc	1,800	20	10.00	08/22/06

ND= Not Detected

RL= Reporting Limit

Dissolved Target Analyte List Metals

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BB1PZ100	Batch#:	116572
Lab ID:	188774-001	Sampled:	08/15/06
Matrix:	Filtrate	Received:	08/16/06
Units:	ug/L	Prepared:	08/20/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	08/22/06
Antimony	ND	1.0	10.00	08/21/06
Arsenic	ND	5.0	10.00	08/21/06
Barium	99	10	10.00	08/21/06
Beryllium	ND	2.0	10.00	08/21/06
Cadmium	ND	1.0	10.00	08/21/06
Calcium	47,000	500	10.00	08/21/06
Chromium	ND	10	10.00	08/21/06
Cobalt	ND	10	10.00	08/21/06
Copper	2.3	1.0	10.00	08/21/06
Iron	260	100	10.00	08/21/06
Lead	ND	3.0	10.00	08/21/06
Magnesium	64,000	500	10.00	08/21/06
Manganese	140	10	10.00	08/21/06
Nickel	ND	20	10.00	08/21/06
Potassium	11,000	500	10.00	08/21/06
Selenium	ND	5.0	10.00	08/21/06
Silver	ND	1.0	10.00	08/21/06
Sodium	220,000	1,000	20.00	08/22/06
Thallium	ND	1.0	10.00	08/21/06
Vanadium	ND	10	10.00	08/21/06
Zinc	ND	20	10.00	08/21/06

ND= Not Detected
RL= Reporting Limit



Target Analyte List Metals

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BB1PZ101	Batch#:	116572
Lab ID:	188774-002	Sampled:	08/15/06
Matrix:	Water	Received:	08/16/06
Units:	ug/L	Prepared:	08/20/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	3,400	500	10.00	08/22/06
Antimony	1.6	1.0	10.00	08/22/06
Arsenic	13	5.0	10.00	08/22/06
Barium	140	10	10.00	08/22/06
Beryllium	ND	2.0	10.00	08/22/06
Cadmium	ND	1.0	10.00	08/22/06
Calcium	110,000	500	10.00	08/22/06
Chromium	14	10	10.00	08/22/06
Cobalt	21	10	10.00	08/22/06
Copper	170	1.0	10.00	08/22/06
Iron	9,000	100	10.00	08/22/06
Lead	57	3.0	10.00	08/22/06
Magnesium	150,000	500	10.00	08/22/06
Manganese	3,900	10	20.00	08/23/06
Nickel	62	20	10.00	08/22/06
Potassium	5,700	500	10.00	08/22/06
Selenium	ND	5.0	10.00	08/22/06
Silver	ND	1.0	10.00	08/22/06
Sodium	210,000	1,000	20.00	08/23/06
Thallium	ND	1.0	10.00	08/22/06
Vanadium	30	10	10.00	08/22/06
Zinc	100	20	10.00	08/22/06

ND= Not Detected

RL= Reporting Limit

Dissolved Target Analyte List Metals

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BB1PZ101	Batch#:	116572
Lab ID:	188774-002	Sampled:	08/15/06
Matrix:	Filtrate	Received:	08/16/06
Units:	ug/L	Prepared:	08/20/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	08/22/06
Antimony	3.0	1.0	10.00	08/21/06
Arsenic	6.3	5.0	10.00	08/21/06
Barium	100	10	10.00	08/21/06
Beryllium	ND	2.0	10.00	08/21/06
Cadmium	ND	1.0	10.00	08/21/06
Calcium	110,000	500	10.00	08/21/06
Chromium	ND	10	10.00	08/21/06
Cobalt	ND	10	10.00	08/21/06
Copper	1.2	1.0	10.00	08/21/06
Iron	340	100	10.00	08/21/06
Lead	ND	3.0	10.00	08/21/06
Magnesium	150,000	500	10.00	08/21/06
Manganese	3,600	10	20.00	08/22/06
Nickel	ND	20	10.00	08/21/06
Potassium	5,500	500	10.00	08/21/06
Selenium	ND	5.0	10.00	08/21/06
Silver	ND	1.0	10.00	08/21/06
Sodium	220,000	1,000	20.00	08/22/06
Thallium	ND	1.0	10.00	08/21/06
Vanadium	ND	10	10.00	08/21/06
Zinc	ND	20	10.00	08/21/06



Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BB3GW100	Batch#:	116572
Lab ID:	188774-003	Sampled:	08/15/06
Matrix:	Filtrate	Received:	08/16/06
Units:	ug/L	Prepared:	08/20/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	08/22/06
Antimony	ND	1.0	10.00	08/21/06
Arsenic	ND	5.0	10.00	08/21/06
Barium	96	10	10.00	08/21/06
Beryllium	ND	2.0	10.00	08/21/06
Cadmium	ND	1.0	10.00	08/21/06
Calcium	30,000	500	10.00	08/21/06
Chromium	ND	10	10.00	08/21/06
Cobalt	ND	10	10.00	08/21/06
Copper	ND	1.0	10.00	08/21/06
Iron	ND	100	10.00	08/21/06
Lead	ND	3.0	10.00	08/21/06
Magnesium	90,000	500	10.00	08/21/06
Manganese	24	10	10.00	08/21/06
Nickel	25	20	10.00	08/21/06
Potassium	750	500	10.00	08/21/06
Selenium	ND	5.0	10.00	08/21/06
Silver	ND	1.0	10.00	08/21/06
Sodium	120,000	500	10.00	08/21/06
Thallium	ND	1.0	10.00	08/21/06
Vanadium	ND	10	10.00	08/21/06
Zinc	ND	20	10.00	08/21/06

ND= Not Detected

RL= Reporting Limit

00203

Dissolved Target Analyte List Metals

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP0815061A	Batch#:	116572
Lab ID:	188774-004	Sampled:	08/15/06
Matrix:	Filtrate	Received:	08/16/06
Units:	ug/L	Prepared:	08/20/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	08/22/06
Antimony	ND	1.0	10.00	08/21/06
Arsenic	ND	5.0	10.00	08/21/06
Barium	96	10	10.00	08/21/06
Beryllium	ND	2.0	10.00	08/21/06
Cadmium	ND	1.0	10.00	08/21/06
Calcium	29,000	500	10.00	08/21/06
Chromium	ND	10	10.00	08/21/06
Cobalt	ND	10	10.00	08/21/06
Copper	ND	1.0	10.00	08/21/06
Iron	ND	100	10.00	08/21/06
Lead	ND	3.0	10.00	08/21/06
Magnesium	90,000	500	10.00	08/21/06
Manganese	ND	10	10.00	08/21/06
Nickel	25	20	10.00	08/21/06
Potassium	710	500	10.00	08/21/06
Selenium	ND	5.0	10.00	08/21/06
Silver	ND	1.0	10.00	08/21/06
Sodium	120,000	500	10.00	08/21/06
Thallium	ND	1.0	10.00	08/21/06
Vanadium	ND	10	10.00	08/21/06
Zinc	ND	20	10.00	08/21/06

ND= Not Detected
RL= Reporting Limit

Dissolved Target Analyte List Metals

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1221GW104	Batch#:	116572
Lab ID:	188774-006	Sampled:	08/15/06
Matrix:	Filtrate	Received:	08/16/06
Units:	ug/L	Prepared:	08/20/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	08/22/06
Antimony	ND	1.0	10.00	08/21/06
Arsenic	ND	5.0	10.00	08/21/06
Barium	ND	10	10.00	08/21/06
Beryllium	ND	2.0	10.00	08/21/06
Cadmium	ND	1.0	10.00	08/21/06
Calcium	51,000	500	10.00	08/21/06
Chromium	ND	10	10.00	08/21/06
Cobalt	ND	10	10.00	08/21/06
Copper	ND	1.0	10.00	08/21/06
Iron	ND	100	10.00	08/21/06
Lead	ND	3.0	10.00	08/21/06
Magnesium	84,000	500	10.00	08/21/06
Manganese	33	10	10.00	08/21/06
Nickel	ND	20	10.00	08/21/06
Potassium	1,600	500	10.00	08/21/06
Selenium	ND	5.0	10.00	08/21/06
Silver	ND	1.0	10.00	08/21/06
Sodium	62,000	500	10.00	08/21/06
Thallium	ND	1.0	10.00	08/21/06
Vanadium	ND	10	10.00	08/21/06
Zinc	ND	20	10.00	08/21/06

ND= Not Detected

RL= Reporting Limit



Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231GW09	Batch#:	116572
Lab ID:	188774-010	Sampled:	08/15/06
Matrix:	Filtrate	Received:	08/16/06
Units:	ug/L	Prepared:	08/20/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	08/22/06
Antimony	ND	1.0	10.00	08/21/06
Arsenic	ND	5.0	10.00	08/21/06
Barium	52	10	10.00	08/21/06
Beryllium	ND	2.0	10.00	08/21/06
Cadmium	ND	1.0	10.00	08/21/06
Calcium	27,000	500	10.00	08/21/06
Chromium	26	10	10.00	08/21/06
Cobalt	ND	10	10.00	08/21/06
Copper	ND	1.0	10.00	08/21/06
Iron	ND	100	10.00	08/21/06
Lead	ND	3.0	10.00	08/21/06
Magnesium	42,000	500	10.00	08/21/06
Manganese	ND	10	10.00	08/21/06
Nickel	23	20	10.00	08/21/06
Potassium	ND	500	10.00	08/21/06
Selenium	ND	5.0	10.00	08/21/06
Silver	ND	1.0	10.00	08/21/06
Sodium	68,000	500	10.00	08/21/06
Thallium	ND	1.0	10.00	08/21/06
Vanadium	ND	10	10.00	08/21/06
Zinc	ND	20	10.00	08/21/06

ND= Not Detected

RL= Reporting Limit



Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP0815063A	Batch#:	116572
Lab ID:	188774-011	Sampled:	08/15/06
Matrix:	Filtrate	Received:	08/16/06
Units:	ug/L	Prepared:	08/20/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	08/22/06
Antimony	ND	1.0	10.00	08/21/06
Arsenic	ND	5.0	10.00	08/21/06
Barium	ND	10	10.00	08/21/06
Beryllium	ND	2.0	10.00	08/21/06
Cadmium	ND	1.0	10.00	08/21/06
Calcium	49,000	500	10.00	08/21/06
Chromium	ND	10	10.00	08/21/06
Cobalt	ND	10	10.00	08/21/06
Copper	ND	1.0	10.00	08/21/06
Iron	ND	100	10.00	08/21/06
Lead	ND	3.0	10.00	08/21/06
Magnesium	81,000	500	10.00	08/21/06
Manganese	27	10	10.00	08/21/06
Nickel	ND	20	10.00	08/21/06
Potassium	1,700	500	10.00	08/21/06
Selenium	ND	5.0	10.00	08/21/06
Silver	ND	1.0	10.00	08/21/06
Sodium	63,000	500	10.00	08/21/06
Thallium	ND	1.0	10.00	08/21/06
Vanadium	ND	10	10.00	08/21/06
Zinc	ND	20	10.00	08/21/06

ND= Not Detected
RL= Reporting Limit

Dissolved Metals

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ1B	Batch#:	116572
Lab ID:	188774-012	Sampled:	08/15/06
Matrix:	Filtrate	Received:	08/16/06
Units:	ug/L	Prepared:	08/20/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	08/22/06
Antimony	ND	1.0	10.00	08/21/06
Arsenic	ND	5.0	10.00	08/21/06
Cadmium	ND	1.0	10.00	08/21/06
Calcium	52,000	500	10.00	08/21/06
Chromium	ND	10	10.00	08/21/06
Copper	ND	1.0	10.00	08/21/06
Iron	270	100	10.00	08/21/06
Lead	ND	3.0	10.00	08/21/06
Magnesium	77,000	500	10.00	08/21/06
Manganese	86	10	10.00	08/21/06
Nickel	ND	20	10.00	08/21/06
Potassium	35,000	500	10.00	08/21/06
Sodium	96,000	500	10.00	08/21/06
Vanadium	ND	10	10.00	08/21/06
Zinc	ND	20	10.00	08/21/06

ND= Not Detected
 RL= Reporting Limit



Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BHWGW05RB01	Batch#:	116572
Lab ID:	188774-013	Sampled:	08/15/06
Matrix:	Filtrate	Received:	08/16/06
Units:	ug/L	Prepared:	08/20/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	08/22/06
Antimony	ND	1.0	10.00	08/21/06
Arsenic	ND	5.0	10.00	08/21/06
Barium	ND	10	10.00	08/21/06
Beryllium	ND	2.0	10.00	08/21/06
Cadmium	ND	1.0	10.00	08/21/06
Calcium	770	500	10.00	08/21/06
Chromium	ND	10	10.00	08/21/06
Cobalt	ND	10	10.00	08/21/06
Copper	ND	1.0	10.00	08/21/06
Iron	ND	100	10.00	08/21/06
Lead	ND	3.0	10.00	08/21/06
Magnesium	ND	500	10.00	08/21/06
Manganese	ND	10	10.00	08/21/06
Nickel	ND	20	10.00	08/21/06
Potassium	ND	500	10.00	08/21/06
Selenium	ND	5.0	10.00	08/21/06
Silver	ND	1.0	10.00	08/21/06
Sodium	ND	500	10.00	08/21/06
Thallium	ND	1.0	10.00	08/21/06
Vanadium	ND	10	10.00	08/21/06
Zinc	ND	20	10.00	08/21/06

ND= Not Detected
RL= Reporting Limit



Curtis & Tompkins, Ltd.

Dissolved Target Analyte List Metals

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP0815062A	Batch#:	116572
Lab ID:	188774-014	Sampled:	08/15/06
Matrix:	Filtrate	Received:	08/16/06
Units:	ug/L	Prepared:	08/20/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	08/22/06
Antimony	ND	1.0	10.00	08/21/06
Arsenic	ND	5.0	10.00	08/21/06
Barium	47	10	10.00	08/21/06
Beryllium	ND	2.0	10.00	08/21/06
Cadmium	ND	1.0	10.00	08/21/06
Calcium	18,000	500	10.00	08/21/06
Chromium	110	10	10.00	08/21/06
Cobalt	ND	10	10.00	08/21/06
Copper	ND	1.0	10.00	08/21/06
Iron	ND	100	10.00	08/21/06
Lead	ND	3.0	10.00	08/21/06
Magnesium	82,000	500	10.00	08/21/06
Manganese	ND	10	10.00	08/21/06
Nickel	ND	20	10.00	08/21/06
Potassium	ND	500	10.00	08/21/06
Selenium	ND	5.0	10.00	08/21/06
Silver	ND	1.0	10.00	08/21/06
Sodium	240,000	1,000	20.00	08/22/06
Thallium	ND	1.0	10.00	08/21/06
Vanadium	ND	10	10.00	08/21/06
Zinc	ND	20	10.00	08/21/06

ND= Not Detected

RL= Reporting Limit

Dissolved Target Analyte List Metals

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BHWGW01	Batch#:	116572
Lab ID:	188774-015	Sampled:	08/15/06
Matrix:	Filtrate	Received:	08/16/06
Units:	ug/L	Prepared:	08/20/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	08/22/06
Antimony	ND	1.0	10.00	08/21/06
Arsenic	ND	5.0	10.00	08/21/06
Barium	46	10	10.00	08/21/06
Beryllium	ND	2.0	10.00	08/21/06
Cadmium	ND	1.0	10.00	08/21/06
Calcium	18,000	500	10.00	08/21/06
Chromium	120	10	10.00	08/21/06
Cobalt	ND	10	10.00	08/21/06
Copper	ND	1.0	10.00	08/21/06
Iron	ND	100	10.00	08/21/06
Lead	ND	3.0	10.00	08/21/06
Magnesium	84,000	500	10.00	08/21/06
Manganese	ND	10	10.00	08/21/06
Nickel	ND	20	10.00	08/21/06
Potassium	ND	500	10.00	08/21/06
Selenium	ND	5.0	10.00	08/21/06
Silver	ND	1.0	10.00	08/21/06
Sodium	250,000	1,000	20.00	08/22/06
Thallium	ND	1.0	10.00	08/21/06
Vanadium	ND	10	10.00	08/21/06
Zinc	ND	20	10.00	08/21/06

ND= Not Detected

RL= Reporting Limit

Dissolved Target Analyte List Metals

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BHWGW05	Sampled:	08/15/06
Lab ID:	188774-016	Received:	08/16/06
Matrix:	Filtrate	Prepared:	08/20/06
Units:	ug/L	Analyzed:	08/22/06
Batch#:	116572		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	1.000
Antimony	ND	1.0	10.00
Arsenic	ND	5.0	10.00
Barium	85	10	10.00
Beryllium	ND	2.0	10.00
Cadmium	ND	1.0	10.00
Calcium	70,000	500	10.00
Chromium	ND	10	10.00
Cobalt	ND	10	10.00
Copper	ND	1.0	10.00
Iron	ND	100	10.00
Lead	ND	3.0	10.00
Magnesium	79,000	500	10.00
Manganese	430	10	10.00
Nickel	27	20	10.00
Potassium	3,200	500	10.00
Selenium	ND	5.0	10.00
Silver	ND	1.0	10.00
Sodium	230,000	1,000	20.00
Thallium	ND	1.0	10.00
Vanadium	ND	10	10.00
Zinc	ND	20	10.00

Dissolved Target Analyte List Metals

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BHWGW04	Sampled:	08/15/06
Lab ID:	188774-017	Received:	08/16/06
Matrix:	Filtrate	Prepared:	08/20/06
Units:	ug/L	Analyzed:	08/22/06
Batch#:	116572		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	1.000
Antimony	ND	1.0	10.00
Arsenic	ND	5.0	10.00
Barium	39	10	10.00
Beryllium	ND	2.0	10.00
Cadmium	ND	1.0	10.00
Calcium	18,000	500	10.00
Chromium	ND	10	10.00
Cobalt	ND	10	10.00
Copper	ND	1.0	10.00
Iron	ND	100	10.00
Lead	ND	3.0	10.00
Magnesium	44,000	500	10.00
Manganese	ND	10	10.00
Nickel	ND	20	10.00
Potassium	ND	500	10.00
Selenium	ND	5.0	10.00
Silver	ND	1.0	10.00
Sodium	130,000	500	10.00
Thallium	ND	1.0	10.00
Vanadium	ND	10	10.00
Zinc	ND	20	10.00

ND= Not Detected
RL= Reporting Limit

Dissolved Target Analyte List Metals

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	HWGW101	Sampled:	08/15/06
Lab ID:	188774-018	Received:	08/16/06
Matrix:	Filtrate	Prepared:	08/20/06
Units:	ug/L	Analyzed:	08/22/06
Batch#:	116572		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	1.000
Antimony	ND	1.0	10.00
Arsenic	ND	5.0	10.00
Barium	ND	10	10.00
Beryllium	ND	2.0	10.00
Cadmium	ND	1.0	10.00
Calcium	15,000	500	10.00
Chromium	17	10	10.00
Cobalt	ND	10	10.00
Copper	ND	1.0	10.00
Iron	ND	100	10.00
Lead	ND	3.0	10.00
Magnesium	25,000	500	10.00
Manganese	ND	10	10.00
Nickel	ND	20	10.00
Potassium	900	500	10.00
Selenium	ND	5.0	10.00
Silver	ND	1.0	10.00
Sodium	230,000	1,000	20.00
Thallium	ND	1.0	10.00
Vanadium	ND	10	10.00
Zinc	ND	20	10.00

ND= Not Detected
RL= Reporting Limit

Dissolved Target Analyte List Metals

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	HWGW100	Sampled:	08/15/06
Lab ID:	188774-019	Received:	08/16/06
Matrix:	Filtrate	Prepared:	08/20/06
Units:	ug/L	Analyzed:	08/22/06
Batch#:	116572		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	1.000
Antimony	ND	1.0	10.00
Arsenic	6.1	5.0	10.00
Barium	12	10	10.00
Beryllium	ND	2.0	10.00
Cadmium	ND	1.0	10.00
Calcium	24,000	500	10.00
Chromium	20	10	10.00
Cobalt	ND	10	10.00
Copper	1.8	1.0	10.00
Iron	ND	100	10.00
Lead	ND	3.0	10.00
Magnesium	81,000	500	10.00
Manganese	36	10	10.00
Nickel	ND	20	10.00
Potassium	2,000	500	10.00
Selenium	ND	5.0	10.00
Silver	ND	1.0	10.00
Sodium	240,000	1,000	20.00
Thallium	ND	1.0	10.00
Vanadium	ND	10	10.00
Zinc	ND	20	10.00

ND= Not Detected
RL= Reporting Limit

Batch QC Report
Dissolved Target Analyte List Metals

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC352577	Batch#:	116572
Matrix:	Filtrate	Prepared:	08/20/06
Units:	ug/L	Analyzed:	08/21/06

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	ND	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	ND	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	ND	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	ND	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected

RL= Reporting Limit



Curtis & Tompkins, Ltd.

Mercury by Cold Vapor AA

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Sampled:	08/15/06
Matrix:	Water	Received:	08/16/06
Units:	ug/L	Prepared:	08/21/06
Diln Fac:	1.000	Analyzed:	08/21/06
Batch#:	116599		

Field ID	Type	Lab ID	Result	RL
BB1PZ100	SAMPLE	188774-001	0.89	0.20
BB1PZ101	SAMPLE	188774-002	0.23	0.20
	BLANK	QC352691	ND	0.20

ND= Not Detected
RL= Reporting Limit



Curtis & Tompkins, Ltd.

Dissolved Mercury by Cold Vapor AA

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Sampled:	08/15/06
Units:	ug/L	Received:	08/16/06
Diln Fac:	1.000	Prepared:	08/21/06
Batch#:	116599	Analyzed:	08/21/06

Field ID	Type	Lab ID	Matrix	Result	RL
BB1PZ100	SAMPLE	188774-001	Filtrate	ND	0.20
BB1PZ101	SAMPLE	188774-002	Filtrate	ND	0.20
231GW09	SAMPLE	188774-010	Filtrate	ND	0.20
	BLANK	QC352691	Water	ND	0.20

ND= Not Detected

RL= Reporting Limit

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Batch QC Report
Dissolved Target Analyte List Metals

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Filtrate	Batch#:	116572
Units:	ug/L	Prepared:	08/20/06

Type: BS Lab ID: QC352578

Analyte	Spiked	Result	%REC	Limits	Diln	Fac	Analyzed
Aluminum	10,100	10,560	105	80-120	10.00		08/21/06
Antimony	100.0	101.0	101	80-120	10.00		08/21/06
Arsenic	100.0	107.2	107	80-120	10.00		08/21/06
Barium	100.0	102.4	102	80-120	10.00		08/21/06
Beryllium	100.0	105.6	106	80-120	10.00		08/21/06
Cadmium	100.0	107.1	107	80-120	10.00		08/21/06
Calcium	10,000	11,150	112	80-120	10.00		08/21/06
Chromium	100.0	109.1	109	80-120	10.00		08/21/06
Cobalt	100.0	111.2	111	80-120	10.00		08/21/06
Copper	100.0	112.4	112	80-120	10.00		08/21/06
Iron	10,000	11,080	111	80-120	10.00		08/21/06
Lead	100.0	114.9	115	80-120	10.00		08/21/06
Magnesium	10,000	10,500	105	80-120	10.00		08/21/06
Manganese	100.0	109.8	110	80-120	10.00		08/21/06
Nickel	100.0	114.7	115	80-120	10.00		08/21/06
Potassium	10,000	10,600	106	80-120	10.00		08/21/06
Selenium	100.0	109.9	110	80-120	10.00		08/21/06
Silver	100.0	109.8	110	80-120	10.00		08/21/06
Sodium	10,000	10,850	109	80-120	10.00		08/21/06
Thallium	50.00	49.12	98	80-120	10.00		08/21/06
Vanadium	100.0	106.2	106	80-120	10.00		08/21/06
Zinc	100.0	103.0	103	80-120	1.000		08/22/06

Type: BSD Lab ID: QC352579

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Analyzed
Aluminum	10,100	10,400	103	80-120	2	20	10.00		08/21/06
Antimony	100.0	98.01	98	80-120	3	20	10.00		08/21/06
Arsenic	100.0	105.6	106	80-120	2	20	10.00		08/21/06
Barium	100.0	102.7	103	80-120	0	20	10.00		08/21/06
Beryllium	100.0	105.0	105	80-120	1	20	10.00		08/21/06
Cadmium	100.0	105.0	105	80-120	2	20	10.00		08/21/06
Calcium	10,000	10,710	107	80-120	4	20	10.00		08/21/06
Chromium	100.0	108.1	108	80-120	1	20	10.00		08/21/06
Cobalt	100.0	110.8	111	80-120	0	20	10.00		08/21/06
Copper	100.0	111.6	112	80-120	1	20	10.00		08/21/06
Iron	10,000	11,140	111	80-120	1	20	10.00		08/21/06
Lead	100.0	112.4	112	80-120	2	20	10.00		08/21/06
Magnesium	10,000	10,220	102	80-120	3	20	10.00		08/21/06
Manganese	100.0	108.9	109	80-120	1	20	10.00		08/21/06
Nickel	100.0	112.7	113	80-120	2	20	10.00		08/21/06
Potassium	10,000	10,370	104	80-120	2	20	10.00		08/21/06
Selenium	100.0	109.1	109	80-120	1	20	10.00		08/21/06
Silver	100.0	108.6	109	80-120	1	20	10.00		08/21/06
Sodium	10,000	10,750	108	80-120	1	20	10.00		08/21/06
Thallium	50.00	48.98	98	80-120	0	20	10.00		08/21/06
Vanadium	100.0	105.8	106	80-120	0	20	10.00		08/21/06
Zinc	100.0	102.5	103	80-120	0	20	1.000		08/22/06

RPD= Relative Percent Difference

Batch QC Report
Mercury by Cold Vapor AA

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	116599
Field ID:	1349MW100	Sampled:	08/16/06
MSS Lab ID:	188802-001	Received:	08/17/06
Units:	ug/L	Prepared:	08/21/06
Diln Fac:	1.000	Analyzed:	08/21/06

Type	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC352692	Water		5.000	4.190	84	80-120		
BSD	QC352693	Water		5.000	4.240	85	80-120	1	20
MS	QC352695	Filtrate	<0.05753	5.000	3.590	72 *	75-125		
MSD	QC352696	Filtrate		5.000	3.520	70 *	75-125	2	20

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Batch QC Report
Dissolved Target Analyte List Metals

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BB3GW100	Batch#:	116572
MSS Lab ID:	188774-003	Sampled:	08/15/06
Matrix:	Filtrate	Received:	08/16/06
Units:	ug/L	Prepared:	08/20/06

Type: MS Lab ID: QC352580

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln	Fac	Analyzed
Aluminum	<9.556	10,100	10,860	108	75-125	1.000		08/22/06
Antimony	<0.09301	100.0	100.9	101	75-125	10.00		08/21/06
Arsenic	0.4858	100.0	105.7	105	75-125	10.00		08/21/06
Barium	95.54	100.0	194.8	99	75-125	10.00		08/21/06
Beryllium	<0.1733	100.0	106.1	106	75-125	10.00		08/21/06
Cadmium	<0.05768	100.0	105.9	106	75-125	10.00		08/21/06
Calcium	29,970	10,000	38,980	90	75-125	10.00		08/21/06
Chromium	5.028	100.0	111.9	107	75-125	10.00		08/21/06
Cobalt	0.1160	100.0	108.8	109	75-125	10.00		08/21/06
Copper	0.5438	100.0	108.2	108	75-125	10.00		08/21/06
Iron	<19.37	10,000	10,760	108	75-125	10.00		08/21/06
Lead	<0.1276	100.0	111.1	111	75-125	10.00		08/21/06
Magnesium	90,180	10,000	96,170	60 NM	75-125	10.00		08/21/06
Manganese	23.81	100.0	129.7	106	75-125	10.00		08/21/06
Nickel	24.98	100.0	132.9	108	75-125	10.00		08/21/06
Potassium	753.1	10,000	11,140	104	75-125	10.00		08/21/06
Selenium	0.4095	100.0	107.4	107	75-125	10.00		08/21/06
Silver	<0.07903	100.0	108.3	108	75-125	10.00		08/21/06
Sodium	118,700	10,000	124,000	53 NM	75-125	10.00		08/21/06
Thallium	<0.2993	50.00	44.96	90	75-125	10.00		08/21/06
Vanadium	4.643	100.0	109.9	105	75-125	10.00		08/21/06
Zinc	5.099	100.0	121.5	116	75-125	10.00		08/21/06

Type: MSD Lab ID: QC352581

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Analyzed
Aluminum	10,100	10,810	107	75-125	0	20	1.000		08/22/06
Antimony	100.0	100.9	101	75-125	0	20	10.00		08/21/06
Arsenic	100.0	110.9	110	75-125	5	20	10.00		08/21/06
Barium	100.0	195.7	100	75-125	0	20	10.00		08/21/06
Beryllium	100.0	106.8	107	75-125	1	20	10.00		08/21/06
Cadmium	100.0	104.9	105	75-125	1	20	10.00		08/21/06
Calcium	10,000	40,020	101	75-125	3	20	10.00		08/21/06
Chromium	100.0	116.7	112	75-125	4	20	10.00		08/21/06
Cobalt	100.0	113.5	113	75-125	4	20	10.00		08/21/06
Copper	100.0	113.0	112	75-125	4	20	10.00		08/21/06
Iron	10,000	11,670	117	75-125	8	20	10.00		08/21/06
Lead	100.0	111.9	112	75-125	1	20	10.00		08/21/06
Magnesium	10,000	98,540	84 NM	75-125	2	20	10.00		08/21/06
Manganese	100.0	135.1	111	75-125	4	20	10.00		08/21/06
Nickel	100.0	140.0	115	75-125	5	20	10.00		08/21/06
Potassium	10,000	11,230	105	75-125	1	20	10.00		08/21/06
Selenium	100.0	114.6	114	75-125	6	20	10.00		08/21/06
Silver	100.0	108.8	109	75-125	0	20	10.00		08/21/06
Sodium	10,000	132,500	138 NM	75-125	7	20	10.00		08/21/06
Thallium	50.00	45.95	92	75-125	2	20	10.00		08/21/06
Vanadium	100.0	114.9	110	75-125	4	20	10.00		08/21/06
Zinc	100.0	117.3	112	75-125	4	20	10.00		08/21/06

NM= Not Meaningful: Sample concentration > 4X spike concentration

RPD= Relative Percent Difference

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BB3GW100	Units:	ug/L
Type:	Serial Dilution	Batch#:	116572
MSS Lab ID:	188774-003	Sampled:	08/15/06
Lab ID:	QC352582	Received:	08/16/06
Matrix:	Filtrate		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln	Fac	Analyzed
Aluminum	ND	100.0	ND	250.0	NC	10	5.000		08/22/06
Antimony	ND	1.000	ND	5.000	NC	10	50.00		08/21/06
Arsenic	ND	5.000	ND	5.000	NC	10	50.00		08/21/06
Barium	95.54	10.00	95.91	10.00	0	10	50.00		08/21/06
Beryllium	ND	2.000	ND	5.000	NC	10	50.00		08/21/06
Cadmium	ND	1.000	ND	5.000	NC	10	50.00		08/21/06
Calcium	29,970	500.0	32,030	500.0	7	10	50.00		08/21/06
Chromium	ND	10.00	4.568 J	10.00	NC	10	50.00		08/21/06
Cobalt	ND	10.00	ND	10.00	NC	10	50.00		08/21/06
Copper	ND	1.000	ND	5.000	NC	10	50.00		08/21/06
Iron	ND	100.0	ND	500.0	NC	10	50.00		08/21/06
Lead	ND	3.000	ND	5.000	NC	10	50.00		08/21/06
Magnesium	90,180	500.0	90,110	500.0	0	10	50.00		08/21/06
Manganese	23.81	10.00	24.15	10.00	1	10	50.00		08/21/06
Nickel	24.98	20.00	26.24	20.00	5	10	50.00		08/21/06
Potassium	753.1	500.0	761.1	500.0	NC	10	50.00		08/21/06
Selenium	ND	5.000	ND	5.000	NC	10	50.00		08/21/06
Silver	ND	1.000	ND	5.000	NC	10	50.00		08/21/06
Sodium	118,700	500.0	121,700	500.0	3	10	50.00		08/21/06
Thallium	ND	1.000	ND	2.500	NC	10	50.00		08/21/06
Vanadium	ND	10.00	12.36	10.00	NC	10	50.00		08/21/06
Zinc	ND	20.00	42.18	20.00	NC	10	50.00		08/21/06

J= Estimated value

NC= Not Calculated

ND= Not Detected

RL= Reporting Limit



Curtis & Tompkins, Ltd.

Batch QC Report

Mercury by Cold Vapor AA

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	1349MW100	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	116599
MSS Lab ID:	188802-001	Sampled:	08/16/06
Lab ID:	QC352694	Received:	08/17/06
Matrix:	Filtrate	Analyzed:	08/21/06

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
 Inst : MET06
 Seqnum: 66336549027
 File : h21r0027
 IDF : 10.0
 Lab ID: 188774-003
 Matrix: Filtrate
 Batch : 116572
 Time : 21-AUG-2006 20:34
 Cal : 66336549001
 Units : ug/L

Type : PDS
 Inst : MET06
 Seqnum: 66336549031
 File : h21r0031
 IDF : 10.0
 Lab ID: QC352583
 Matrix: Filtrate
 Batch : 116572
 Time : 21-AUG-2006 21:04
 Cal : 66336549001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
 PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S3780 (1000X)

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	0.7416	A	1000	957.4	A	96	75-125	u
Antimony	ND	A	10.00	9.594	A	96	75-125	u
Arsenic	0.04858	E	10.00	10.21	E	102	75-125	u
Barium	9.554	A	10.00	18.82	A	93	75-125	u
Beryllium	ND	A	10.00	9.789	A	98	75-125	u
Cadmium	ND	A	10.00	9.988	A	100	75-125	u
Calcium	2997	A	1000	3843	A	85	75-125	u
Chromium	0.5028	E	10.00	10.76	E	103	75-125	u
Cobalt	0.01160	E	10.00	10.49	E	105	75-125	u
Copper	0.05438	E	10.00	10.52	E	105	75-125	u
Iron	ND	H	1000	1104	H	110	75-125	u
Lead	ND	A	10.00	10.35	A	104	75-125	u
Magnesium	9018	A	1000	9769	A	75	75-125	: u
Manganese	2.381	E	10.00	12.60	E	102	75-125	u
Molybdenum	0.02447	A	10.00	9.356	A	93	75-125	
Nickel	2.498	E	10.00	13.17	E	107	75-125	u
Potassium	75.31	A	1000	1051	A	98	75-125	u
Selenium	0.04095	H	10.00	11.00	H	110	75-125	u
Silver	ND	A	10.00	9.793	A	98	75-125	u
Sodium	11870	E	1000	13080	E	121	75-125	: u
Thallium	ND	A	5.000	4.687	A	94	75-125	u
Vanadium	0.4643	E	10.00	10.61	E	101	75-125	u
Zinc	0.5099	E	10.00	11.10	E	106	75-125	u

ISTD (ICALBLK h21r0003)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	1661045	1507776	-9.23
Scandium	A	1842296	1711662	-7.09
Scandium	E	111545	100579	-9.83
Scandium	H	665562	589402	-11.44
Germanium	H	129939	114154	-12.15
Germanium	E	47886	42630	-10.98
Indium	A	1136733	949401	-16.48
Bismuth	A	490830	406270	-17.23
Yttrium	A	1877282	1686309	-10.17
Terbium	A	1022693	866697	-15.25

: =recovery not meaningful u=use

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
 Inst : MET05
 Seqnum: 56337726036
 File : h2212036
 IDF : 1.0
 Lab ID: 188774-003
 Matrix: Filtrate
 Batch : 116572
 Time : 22-AUG-2006 16:19
 Cal : 56337726001
 Units : ug/L

Type : PDS
 Inst : MET05
 Seqnum: 56337726040
 File : h2212040
 IDF : 1.0
 Lab ID: QC352583
 Matrix: Filtrate
 Batch : 116572
 Time : 22-AUG-2006 16:41
 Cal : 56337726001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S3780 (100X)

Analyte	MSS	Spiked	PDS	%Rec	Limits	Flags
Aluminum	ND	10000	10280	103	75-125	
Antimony	0.1612	100.0	104.2	104	75-125	
Arsenic	0.7790	100.0	104.3	104	75-125	
Barium	93.38	100.0	201.4 >LR	108	75-125	>LR b*
Beryllium	ND	100.0	107.0	107	75-125	
Cadmium	ND	100.0	98.87	99	75-125	
Chromium	4.821	100.0	108.6	104	75-125	
Cobalt	0.1829	100.0	101.8	102	75-125	
Copper	0.7782	100.0	100.8	100	75-125	
Iron	103.4	10000	9731	96	75-125	
Lead	ND	100.0	108.9	109	75-125	
Manganese	20.98	100.0	120.8	100	75-125	
Molybdenum	ND	100.0	104.6	105	75-125	
Nickel	22.39	100.0	121.3	99	75-125	
Potassium	803.7	10000	10930	101	75-125	
Selenium	ND	100.0	94.00	94	75-125	
Silver	ND	100.0	100.0	100	75-125	
Thallium	0.3167	50.00	50.86	101	75-125	
Vanadium	2.969	100.0	107.6	105	75-125	
Zinc	4.807	100.0	104.9	100	75-125	

ISTD (ICALBLK h2212003)	ICALBLK Abund	PDS Abund	%Drift
Lithium	434401	359984	-17.13
Scandium	229818	201720	-12.23
Germanium	62250	52313	-15.96
Indium	342259	265347	-22.47
Bismuth	377532	295930	-21.61

MISSING READINGS: CA MG NA

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET06
Calnum : 66336549001
Units : ug/L

Date : 21-AUG-2006 17:25
X Axis : R

Reviewer: ---

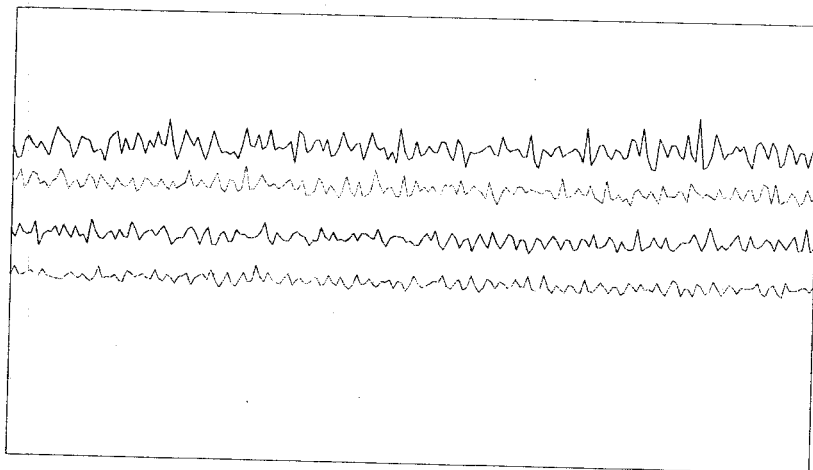
Level	File	Seqnum	Sample ID	Analyzed	Std
L1	h21r0004	66336549004	21-AUG-2006 17:33	S4003	
L2	h21r0005	66336549005	21-AUG-2006 17:40	S4005	
L3	h21r0006	66336549006	21-AUG-2006 17:47	S4006	
L4	h21r0007	66336549007	21-AUG-2006 17:55	S4007	
L5	h21r0008	66336549008	21-AUG-2006 18:02	S4001	
L6	h21r0009	66336549009	21-AUG-2006 18:09	S4002	

Analyte	Ch	I1	I2	I3	I4	I5	I6	Type	a0	a1	a2	Avg	r ²	%RSD	MR ²	Fig
Aluminum	A	0.6239	0.6104	0.5352	0.4839	0.4878	0.4906	BLNK	-0.7825	2.04063		0.5386	1.000	0.995		
Antimony	A	0.2076	0.1933	0.1939	0.1893	0.1957	0.1975	BLNK	-0.0054	5.07420		0.1962	1.000	0.995		
Barium	A	0.1313	0.0890	0.0841	0.0779	0.0784	0.0785	BLNK	-0.0381	12.7477		0.0899	1.000	0.995		
Beryllium	A	0.1861	0.1687	0.1707	0.1682	0.1680	0.1652	BLNK	-0.0004	6.03181		0.1712	1.000	0.995		
Cadmium	A	0.0730	0.0673	0.0662	0.0665	0.0669	0.0660	BLNK	-0.0039	15.1132		0.0676	1.000	0.995		
Calcium	A	0.0457	0.0368	0.0222	0.0170	0.0165	0.0163	BLNK	-10.604	61.1477		0.0257	1.000	0.995		
Lead	A	0.5260	0.4765	0.4210	0.4070	0.3984	0.3928	BLNK	-0.0193	2.53847		0.4370	1.000	0.995		
Magnesium	A	0.4935	0.4722	0.4228	0.3839	0.3846	0.3872	BLNK	-0.4586	2.58646		0.4240	1.000	0.995		
Molybdenum	A	0.1547	0.1775	0.1478	0.1309	0.1336	0.1387	BLNK	-0.0071	7.26463		0.1472	1.000	0.995		
Potassium	A	0.3517	1.2685	0.8715	0.5684	0.5473	0.5439	BLNK	-50.952	1.84186		1.2269	1.000	0.995		
Silver	A	0.3944	0.3407	0.3370	0.3289	0.3302	0.3256	BLNK	-0.0091	3.06269		0.3428	1.000	0.995		
Thallium	A	1.5265	0.7580	0.6812	0.6316	0.6671	0.6821	BLNK	-0.0933	1.47437		0.8244	1.000	0.995		
Arsenic	E	0.7243	0.4920	0.4468	0.4267	0.4293	0.4227	BLNK	-0.0694	2.35946		0.4903	1.000	0.995		
Chromium	E	5.1472	2.4867	2.0145	1.7026	1.6518	1.6257	BLNK	-0.2172	0.61392		2.4381	1.000	0.995		
Cobalt	E	2.7825	2.5461	2.4016	2.3648	2.3118	2.2455	BLNK	-0.0122	0.44271		2.4421	1.000	0.995		
Copper	E	13.853	8.1112	4.9233	3.6901	3.5330	3.4437	BLNK	-0.2050	0.28921		6.2590	1.000	0.995		
Manganese	E	2.1182	1.4586	1.2699	1.1797	1.1638	1.1519	BLNK	-0.0443	0.86655		1.3903	1.000	0.995		
Nickel	E	1.4735	0.9367	0.6907	0.6140	0.5777	0.5584	BLNK	-0.1085	1.77931		0.8085	1.000	0.995		
Sodium	E	2.1090	0.9004	0.6046	0.4287	0.4007	0.3994	BLNK	-52.147	2.51012		0.8071	1.000	0.995		
Vanadium	E	5.1756	2.1228	1.7251	1.3952	1.3698	1.3643	BLNK	-0.2569	0.73351		2.1921	1.000	0.995		
Zinc	E	24.930	7.8177	3.7576	0.9272	0.7044	0.6710	BLNK	-2.7968	1.49991		6.4680	0.999	0.995		
Iron	H	0.8574	0.9426	0.7332	0.5997	0.5843	0.5750	BLNK	-1.3146	1.73358		0.7154	1.000	0.995		
Selenium	H	0.0937	0.1096	0.1006	0.0990	0.0970	0.0940	BLNK	-0.0090	10.5701		0.0990	1.000	0.995		

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+ [blank]

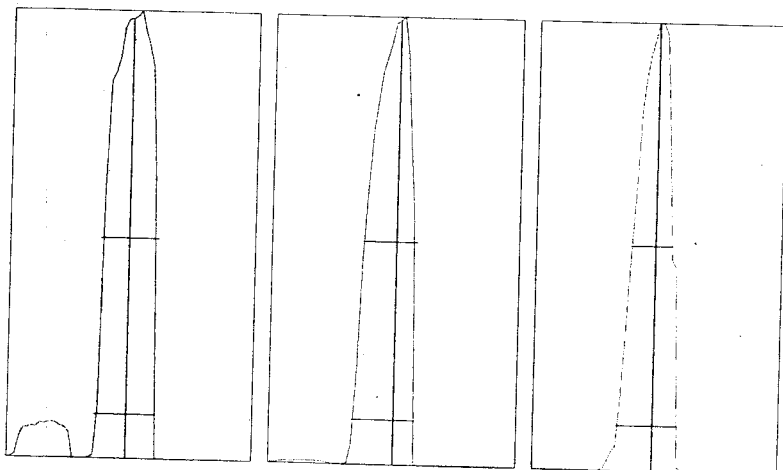
Tune Report

Tune File : norm.u
Comment :



Integration Time: 0.1000 sec
Sampling Period: 0.7200 sec
n: 200
Oxide: 156/140 0.885%
Doubly Charged: 70/140 2.810%

m/z	Range	Count	Mean	RSD%	Background
7	20,000	14867.0	14087.6	3.06	0.00
59	50,000	20821.0	20235.6	2.48	0.30
89	50,000	30685.0	30715.7	2.23	0.10
205	20,000	10051.0	10042.5	2.64	0.70
156/140	2	0.855%	0.880%	9.43	
70/140	5	2.545%	2.747%	6.06	



m/z:	7	89	205
Height:	14,423	31,256	10,337
Axis:	7.00	89.05	205.00
W-50%:	0.70	0.65	0.50
W-10%:	0.7500	0.7500	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Tune Report

Tune File : norm.u
Comment :

Tuning Parameters

===Plasma Condition===

RF Power : 1550 W
RF Matching : 1.76 V
Smpl Depth : 8 mm
Torch-H : 0.7 mm
Torch-V : 0.6 mm
Carrier Gas : 1.07 L/min
Makeup Gas : 0 L/min
Optional Gas : --- %
Nebulizer Pump : 0.1 rps
Sample Pump : 0.11 rps
S/C Temp : 2 degC

===Ion Lenses===

Extract 1 : 0 V
Extract 2 : -110 V
Omega Bias-ce : -26 V
Omega Lens-ce : 1.2 V
Cell Entrance : -30 V
QP Focus : 1 V
Cell Exit : -30 V

===Q-Pole Parameters===

AMU Gain : 130
AMU Offset : 126
Axis Gain : 1.0001
Axis Offset : 0.01
QP Bias : -3 V

===Detector Parameters===

Discriminator : .8 mV
Analog HV : 1650 V
Pulse HV : 1150 V

===Octopole Parameters===

OctP RF : 150 V
OctP Bias : -7 V

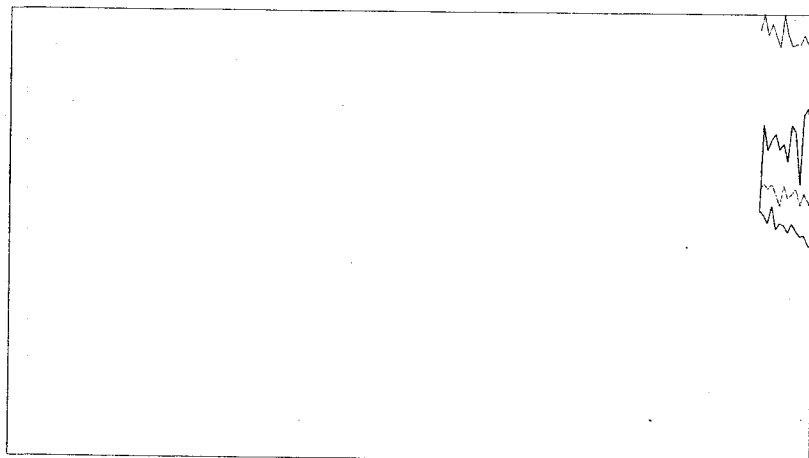
===Reaction Cell===

Reaction Mode : OFF
H2 Gas : 0 mL/min

He Gas : 0 mL/min
Optional Gas : --- %

Sensitivity

Tune File : h2.U



Integration Time: 0.1000 sec
Sampling Period: 0.6100 sec
n: 14

m/z	Range	Count	Mean	RSD%
59	10,000	4775.0	5222.7	5.03
89	20,000	17978.0	19011.1	3.07
140	20,000	11072.0	11907.4	3.44
57/56	5	3.616%	3.548%	8.63
78	20	0.0	0.1	254.20

Tuning Parameters

===Plasma Condition===

RF Power : 1550 W
RF Matching : 1.76 V
Smpl Depth : 8 mm
Torch-H : 0.7 mm
Torch-V : 0.6 mm
Carrier Gas : 1.07 L/min
Makeup Gas : 0 L/min
Optional Gas : --- %
Nebulizer Pump : 0.1 rps
Sample Pump : 0.11 rps
S/C Temp : 2 degC

===Ion Lenses===

Extract 1 : 0 V
Extract 2 : -110 V
Omega Bias-ce : -26 V
Omega Lens-ce : 1.2 V
Cell Entrance : -30 V
QP Focus : -8 V
Cell Exit : -40 V

===Q-Pole Parameters===

AMU Gain : 132
AMU Offset : 125
Axis Gain : 1.0001
Axis Offset : 0.03
QP Bias : -16 V

===Detector Parameters===

Discriminator : 8 mV
Analog HV : 1650 V
Pulse HV : 1150 V

===Octopole Parameters===

OctP RF : 150 V
OctP Bias : -18 V

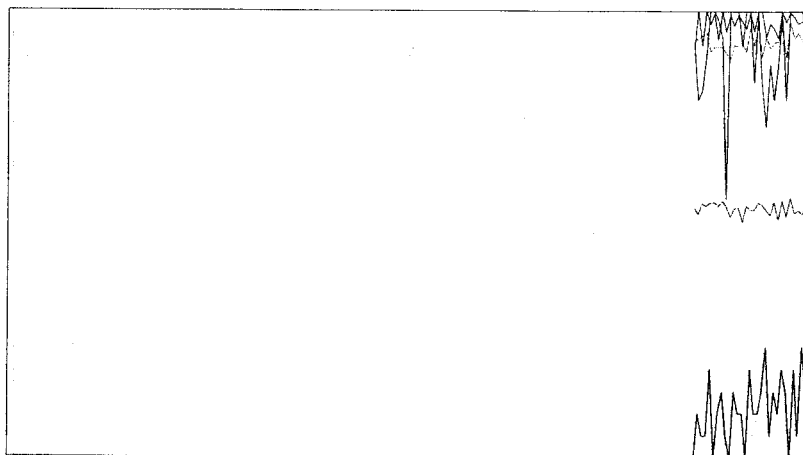
===Reaction Cell===

Reaction Mode : ON
H2 Gas : 2.7 mL/min

He Gas : 0 mL/min
Optional Gas : --- %

Sensitivity

Tune File : he.U



Integration Time: 0.1000 sec
 Sampling Period: 0.5100 sec
 n: 29

m/z	Range	Count	Mean	RSD%
59	5,000	4910.0	4903.0	3.52
89	10,000	5700.0	5591.8	2.45
140	10,000	9310.0	9302.5	2.31
51	50	46.0	48.7	17.67
75	20	3.0	2.2	69.67
51/59	2	0.937%	0.992%	17.37

Tuning Parameters

===Plasma Condition===

RF Power : 1550 W
 RF Matching : 1.76 V
 Smpl Depth : 8 mm
 Torch-H : 0.7 mm
 Torch-V : 0.6 mm
 Carrier Gas : 1.07 L/min
 Makeup Gas : 0 L/min
 Optional Gas : --- %
 Nebulizer Pump : 0.1 rps
 Sample Pump : 0.11 rps
 S/C Temp : 2 degC

===Ion Lenses===

Extract 1 : 0 V
 Extract 2 : -110 V
 Omega Bias-ce : -26 V
 Omega Lens-ce : 1.2 V
 Cell Entrance : -30 V
 QP Focus : -10 V
 Cell Exit : -40 V

===Q-Pole Parameters===

AMU Gain : 132
 AMU Offset : 125
 Axis Gain : 1.0001
 Axis Offset : 0.03
 QP Bias : -13.5 V

===Detector Parameters===

Discriminator : 8 mV
 Analog HV : 1650 V
 Pulse HV : 1150 V

===Octopole Parameters===

OctP RF : 150 V
 OctP Bias : -18 V

===Reaction Cell===

Reaction Mode : ON
 H2 Gas : 0 mL/min
 He Gas : 3.6 mL/min
 Optional Gas : --- %

P/A Factor Tuning Report

Acquired: Aug 21 2006 01:13 pm

Mass[amu]	Element	P/A Factor
6	Li	0.072416
7	(Li)	0.076323
9	Be	Sensitivity too low
23	Na	0.092360
24	Mg	0.096519
27	Al	0.099737
39	K	0.100427
44	Ca	Sensitivity too low
45	Sc	0.100330
51	V	0.102384
52	Cr	0.105171
55	Mn	0.106638
56	Fe	0.103539
59	Co	0.109740
60	Ni	Sensitivity too low
63	Cu	0.113391
65	Cu	Sensitivity too low
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.111687
98	Mo	Sensitivity too low
99	(Ru)	Sensitivity too low
107	Ag	0.118950
111	Cd	Sensitivity too low
115	In	0.119390
118	(In)	Sensitivity too low
121	Sb	Sensitivity too low
137	Ba	Sensitivity too low
159	Tb	0.122082
205	Tl	0.126701
206	(Pb)	Sensitivity too low
207	(Pb)	Sensitivity too low
208	Pb	0.126661
209	Bi	0.127424

===Detector Parameters===

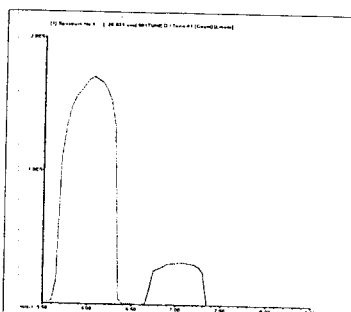
Discriminator: 8.0 mV
Analog HV: 1650 V
Pulse HV: 1150 V

6020 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\06H21r00.B\001TUNE.D
Date Acquired: Aug 21 2006 05:09 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s4021
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	1.65	5.00	
59 Co	0.99	5.00	
115 In	1.23	5.00	
205 Tl	4.30	5.00	



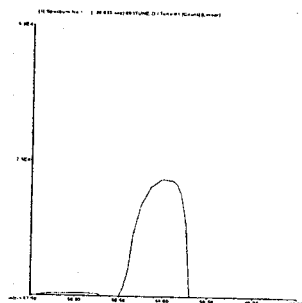
7 Li

Mass Calib.

Actual: 7.05
Required: 6.90 - 7.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



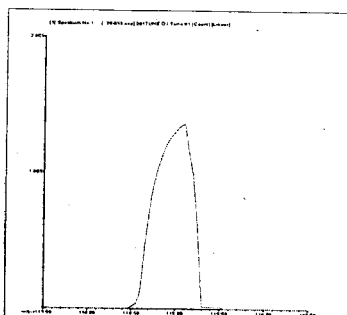
59 Co

Mass Calib.

Actual: 59.00
Required: 58.90 - 59.10
Flag:

Peak Width

Actual: 0.65
Required: 0.90
Flag:



115 In

Mass Calib.

Actual: 115.00

Required: 114.90 - 115.10

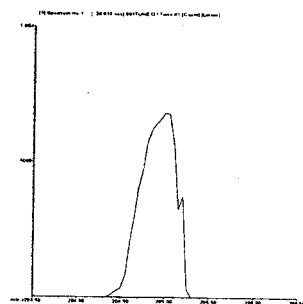
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



205 Tl

Mass Calib.

Actual: 204.95

Required: 204.90 - 205.10

Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:

Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06H21r00.B\002BLNK.D\002BLNK.D#
 Date Acquired: Aug 21 2006 05:16 pm
 Operator:
 Sample Name: rinse
 Misc Info:
 Vial Number: 1101
 Current Method: C:\ICPCHEM\1\METHODS\6020.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020.C
 Last Cal Update: Aug 21 2006 05:21 pm
 Sample Type: 6-Blank
 Total Dil Factor: 1.00

Data Results:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	3	0.00 ppb	152.74	0.10	
23 Na	45	2	13.53 ppb	4.36	10.00	Fail
24 Mg	45	3	-0.60 ppb	3.75	10.00	
27 Al	45	3	-0.85 ppb	1.05	0.10	
39 K	45	3	-2.01 ppb	19.14	10.00	
44 Ca	45	3	-6.44 ppb	5.20	10.00	
51 V	45	2	-0.02 ppb	34.61	0.10	
52 Cr	45	2	-0.02 ppb	46.51	0.10	
55 Mn	45	2	0.00 ppb	64.64	0.10	
56 Fe	45	1	-0.05 ppb	31.12	10.00	
59 Co	45	2	0.00 ppb	1045.80	0.10	
60 Ni	45	2	0.00 ppb	401.31	0.10	
63 Cu	72	2	0.00 ppb	164.11	0.10	
66 Zn	72	2	-1.76 ppb	5.67	0.10	
75 As	72	2	0.01 ppb	359.03	0.10	
78 Se	72	1	0.00 ppb	149.11	0.10	
98 Mo	89	3	0.00 ppb	98.52	0.10	
107 Ag	115	3	0.00 ppb	314.20	0.10	
111 Cd	115	3	0.00 ppb	128.47	0.10	
121 Sb	115	3	0.00 ppb	52.61	0.10	
137 Ba	159	3	-0.01 ppb	63.79	0.10	
205 Tl	209	3	0.08 ppb	4.34	0.20	
208 Pb	159	3	0.00 ppb	272.96	0.10	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3	1645029	0.99	---	#VALUE!	80 - 120	
45 Sc	1	796500	7.61	---	#VALUE!	80 - 120	
45 Sc	2	110905	1.47	---	#VALUE!	80 - 120	
45 Sc	3	1852374	0.12	---	#VALUE!	80 - 120	
72 Ge	1	153281	6.44	---	#VALUE!	80 - 120	
72 Ge	2	47931	1.86	---	#VALUE!	80 - 120	
72 Ge	3	305683	0.12	---	#VALUE!	80 - 120	
89 Y	1	1173005	4.58	---	#VALUE!	80 - 120	
89 Y	2	374085	1.93	---	#VALUE!	80 - 120	
89 Y	3	1893018	0.88	---	#VALUE!	80 - 120	
115 In	1	906025	5.28	---	#VALUE!	80 - 120	
115 In	2	395280	2.11	---	#VALUE!	80 - 120	
115 In	3	1173066	0.54	---	#VALUE!	80 - 120	
159 Tb	3	1104470	1.59	---	#VALUE!	80 - 120	
209 Bi	3	530933	1.83	---	#VALUE!	80 - 120	

Tune File# 1 c:\icpchem\1\7500\h2.u
 Tune File# 2 c:\icpchem\1\7500\he.u
 Tune File# 3 c:\icpchem\1\7500\norm.u

ISTD Ref File : ---

1 :Element Failures
 0 :ISTD Failures

0 :Max. Number of Failures Allowed
 0 :Max. Number of ISTD Failures Allowed

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06H21r00.B\003CALB.D\003CALB.D#
 Date Acquired: Aug 21 2006 05:23 pm
 Acq. Method: 6020.M
 Operator:
 Sample Name: calblank
 Misc Info:
 Vial Number: 1101
 Current Method: C:\ICPCHEM\1\METHODS\6020.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020.C
 Last Cal. Update: Aug 21 2006 05:28 pm
 Sample Type: CalBlk

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
6	Li	---	3	1,661,044.90	1.38
7	(Li)	---	3	94,596.84	0.57
9	Be	6	3	2.22	86.60
23	Na	45	2	46,343.72	1.20
24	Mg	45	3	6,532.82	1.00
27	Al	45	3	14,130.80	3.11
39	K	45	3	1,019,272.30	0.59
44	Ca	45	3	6,390.57	3.60
45	Sc	---	1	665,562.00	0.40
45	Sc	---	2	111,545.27	0.81
45	Sc	---	3	1,842,296.40	0.66
51	V	45	2	781.14	6.75
52	Cr	45	2	789.29	1.28
55	Mn	45	2	114.08	11.54
56	Fe	45	1	10,094.09	1.80
59	Co	45	2	61.48	4.55
60	Ni	45	2	135.93	13.74
63	Cu	72	2	678.54	3.52
65	Cu	72	2	327.79	8.22
66	Zn	72	2	1,785.69	3.87
72	Ge	---	1	129,939.37	0.05
72	Ge	---	2	47,886.18	1.21
72	Ge	---	3	303,570.72	0.68
75	As	72	2	28.22	17.41
78	Se	72	1	2.22	75.50
89	Y	---	1	1,019,553.50	0.40
89	Y	---	2	366,765.56	2.22
89	Y	---	3	1,877,282.30	1.10
98	Mo	89	3	36.67	24.05
99	(Ru)	89	3	4.44	43.30
107	Ag	115	3	67.78	5.68
111	Cd	115	3	5.93	60.27
115	In	---	1	760,364.88	0.53
115	In	---	2	384,543.44	2.70
115	In	---	3	1,136,733.30	0.98
118	(In)	---	1	809.66	2.20
118	(In)	---	2	454.83	5.36
118	(In)	---	3	1,146.76	12.65
121	Sb	115	3	24.45	47.89
137	Ba	159	3	61.11	17.53
159	Tb	---	3	1,022,692.70	1.39
205	Tl	209	3	621.15	8.22
206	(Pb)	209	3	40.00	33.33
207	(Pb)	159	3	31.11	72.93
208	Pb	159	3	155.56	8.11
209	Bi	---	3	490,830.09	1.14

Tune File# 1 c:\icpchem\1\7500\h2.u
 Tune File# 2 c:\icpchem\1\7500\he.u
 Tune File# 3 c:\icpchem\1\7500\norm.u

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H21r00.B\004CAL.S.D\004CAL.S.D#
 Date Acquired: Aug 21 2006 05:30 pm
 Acq. Method: 6020.M
 Operator:
 Sample Name: s4003
 Misc Info:
 Vial Number: 1102
 Current Method: C:\ICPCHEM\1\METHODS\6020.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020.C
 Last Cal. Update: Aug 21 2006 05:28 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)
6	Li	---	3	1650601.80
7	(Li)	---	3	94872.04
9	Be	6	3	614.48
23	Na	45	2	46604.61
24	Mg	45	3	182324.80
27	Al	45	3	230527.98
39	K	45	3	1315928.10
44	Ca	45	3	16895.07
45	Sc	---	1	667349.06
45	Sc	---	2	110487.35
45	Sc	---	3	1847357.30
51	V	45	2	1143.76
52	Cr	45	2	1137.47
55	Mn	45	2	468.15
56	Fe	45	1	114433.81
59	Co	45	2	614.84
60	Ni	45	2	325.56
63	Cu	72	2	1314.53
65	Cu	72	2	639.65
66	Zn	72	2	2366.52
72	Ge	---	1	130536.05
72	Ge	---	2	47455.45
72	Ge	---	3	305589.00
75	As	72	2	68.89
78	Se	72	1	24.44
89	Y	---	1	1022829.10
89	Y	---	2	366141.13
89	Y	---	3	1886131.60
98	Mo	89	3	583.37
99	(Ru)	89	3	1.11
107	Ag	115	3	887.84
111	Cd	115	3	164.45
115	In	---	1	757556.25
115	In	---	2	380317.50
115	In	---	3	1126010.10
118	(In)	---	1	3526.06
118	(In)	---	2	2013.51
118	(In)	---	3	4786.58
121	Sb	115	3	467.80
137	Ba	159	3	264.46
159	Tb	---	3	1007799.40
205	Tl	209	3	741.16
208	Pb	159	3	1060.06
209	Bi	---	3	485488.16

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	3	1650602	0.84	1661045	99.4	80 - 120
45	Sc	1	667349	0.27	665562	100.3	80 - 120
45	Sc	2	110487	0.81	111545	99.1	80 - 120
45	Sc	3	1847357	0.46	1842296	100.3	80 - 120
72	Ge	1	130536	0.85	129939	100.5	80 - 120
72	Ge	2	47455	1.79	47886	99.1	80 - 120
72	Ge	3	305589	0.33	303571	100.7	80 - 120
89	Y	1	1022829	0.14	1019554	100.3	80 - 120
89	Y	2	366141	1.64	366766	99.8	80 - 120
89	Y	3	1886132	0.83	1877282	100.5	80 - 120
115	In	1	757556	0.49	760365	99.6	80 - 120
115	In	2	380318	2.58	384543	98.9	80 - 120
115	In	3	1126010	1.75	1136733	99.1	80 - 120
159	Tb	3	1007799	1.41	1022693	98.5	80 - 120
209	Bi	3	485488	0.92	490830	98.9	80 - 120

Tune File# 1 c:\icpchem\1\7500\h2.u
 Tune File# 2 c:\icpchem\1\7500\he.u
 Tune File# 3 c:\icpchem\1\7500\norm.u

ISTD Ref File : C:\ICPCHEM\1\DATA\06H21r00.B\003CALB.D\003CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H21r00.B\005CAL.S.D\005CAL.S.D#
 Date Acquired: Aug 21 2006 05:38 pm
 Acq. Method: 6020.M
 Operator:
 Sample Name: s4005
 Misc Info:
 Vial Number: 1103
 Current Method: C:\ICPCHEM\1\METHODS\6020.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020.C
 Last Cal. Update: Aug 21 2006 05:35 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)
6 Li	---	3	1654288.40	2.36
7 (Li)	---	3	93951.96	1.67
9 Be	6	3	0.08	4.49
23 Na	45	2	45.02	1.38
24 Mg	45	3	23.61	2.11
27 Al	45	3	30.52	1.42
39 K	45	3	63.43	2.04
44 Ca	45	3	1.84	1.26
45 Sc	---	1	663551.75	0.59
45 Sc	---	2	111037.99	0.95
45 Sc	---	3	1835680.10	2.11
51 V	45	2	1.06	1.89
52 Cr	45	2	1.24	1.70
55 Mn	45	2	0.73	3.17
56 Fe	45	1	47.13	0.29
59 Co	45	2	1.27	1.49
60 Ni	45	2	0.47	5.05
63 Cu	72	2	4.06	1.21
65 Cu	72	2	1.96	0.99
66 Zn	72	2	3.91	0.79
72 Ge	---	1	129332.91	1.10
72 Ge	---	2	47555.32	1.52
72 Ge	---	3	301984.03	0.98
75 As	72	2	0.25	1.78
78 Se	72	1	0.05	5.64
89 Y	---	1	1011694.10	0.57
89 Y	---	2	368171.13	2.53
89 Y	---	3	1877466.00	2.24
98 Mo	89	3	0.09	3.29
99 (Ru)	89	3	0.00	86.61
107 Ag	115	3	0.17	5.65
111 Cd	115	3	0.03	2.86
115 In	---	1	748197.88	0.41
115 In	---	2	381322.88	2.67
115 In	---	3	1118448.00	2.83
118 (In)	---	1	14109.32	0.28
118 (In)	---	2	8017.27	3.82
118 (In)	---	3	19728.31	3.00
121 Sb	115	3	0.10	8.30
137 Ba	159	3	0.04	12.29
159 Tb	---	3	994686.56	2.88
205 Tl	209	3	0.19	3.07
208 Pb	159	3	0.24	4.29
209 Bi	---	3	480580.81	3.25

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3	1654288	2.36	1661045	99.6	80 - 120	
45 Sc	1	663552	0.59	665562	99.7	80 - 120	
45 Sc	2	111038	0.95	111545	99.5	80 - 120	
45 Sc	3	1835680	2.11	1842296	99.6	80 - 120	
72 Ge	1	129333	1.10	129939	99.5	80 - 120	
72 Ge	2	47555	1.52	47886	99.3	80 - 120	
72 Ge	3	301984	0.98	303571	99.5	80 - 120	
89 Y	1	1011694	0.57	1019554	99.2	80 - 120	
89 Y	2	368171	2.53	366766	100.4	80 - 120	
89 Y	3	1877466	2.24	1877282	100.0	80 - 120	
115 In	1	748198	0.41	760365	98.4	80 - 120	
115 In	2	381323	2.67	384543	99.2	80 - 120	
115 In	3	1118448	2.83	1136733	98.4	80 - 120	
159 Tb	3	994687	2.88	1022693	97.3	80 - 120	
209 Bi	3	480581	3.25	490830	97.9	80 - 120	

Tune File# 1 c:\icpchem\1\7500\h2.u
 Tune File# 2 c:\icpchem\1\7500\he.u
 Tune File# 3 c:\icpchem\1\7500\norm.u

ISTD Ref File : C:\ICPCHEM\1\DATA\06H21r00.B\003CALB.D\003CALB.D#

0 : Element Failures 0
 0 : ISTD Failures 0

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H21r00.B\006CAL.S.D\006CAL.S.D#
 Date Acquired: Aug 21 2006 05:45 pm
 Acq. Method: 6020.M
 Operator:
 Sample Name: s4006
 Misc Info:
 Vial Number: 1104
 Current Method: C:\ICPCHEM\1\METHODS\6020.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020.C
 Last Cal. Update: Aug 21 2006 05:43 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)
6	Li	---	3	1663882.00
7	(Li)	---	3	95521.66
9	Be	6	3	0.17
23	Na	45	2	60.46
24	Mg	45	3	42.28
27	Al	45	3	53.52
39	K	45	3	87.15
44	Ca	45	3	2.22
45	Sc	---	1	675140.00
45	Sc	---	2	111749.59
45	Sc	---	3	1861353.50
51	V	45	2	1.73
52	Cr	45	2	2.01
55	Mn	45	2	1.27
56	Fe	45	1	73.32
59	Co	45	2	2.40
60	Ni	45	2	0.69
63	Cu	72	2	4.92
65	Cu	72	2	2.38
66	Zn	72	2	3.76
72	Ge	---	1	131030.23
72	Ge	---	2	47691.37
72	Ge	---	3	305961.78
75	As	72	2	0.45
78	Se	72	1	0.10
89	Y	---	1	1021648.70
89	Y	---	2	366998.91
89	Y	---	3	1911233.90
98	Mo	89	3	0.15
99	(Ru)	89	3	0.00
107	Ag	115	3	0.34
111	Cd	115	3	0.07
115	In	---	1	757203.50
115	In	---	2	381090.38
115	In	---	3	1127011.50
118	(In)	---	1	27524.02
118	(In)	---	2	15646.20
118	(In)	---	3	38451.20
121	Sb	115	3	0.19
137	Ba	159	3	0.08
159	Tb	---	3	1006899.40
205	Tl	209	3	0.34
208	Pb	159	3	0.42
209	Bi	---	3	485509.38

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	3	1663882	0.65	1661045	100.2	80 - 120
45	Sc	1	675140	0.71	665562	101.4	80 - 120
45	Sc	2	111750	0.84	111545	100.2	80 - 120
45	Sc	3	1861354	0.36	1842296	101.0	80 - 120
72	Ge	1	131030	0.65	129939	100.8	80 - 120
72	Ge	2	47691	0.73	47886	99.6	80 - 120
72	Ge	3	305962	0.15	303571	100.8	80 - 120
89	Y	1	1021649	0.89	1019554	100.2	80 - 120
89	Y	2	366999	2.66	366766	100.1	80 - 120
89	Y	3	1911234	0.83	1877282	101.8	80 - 120
115	In	1	757204	0.99	760365	99.6	80 - 120
115	In	2	381090	3.14	384543	99.1	80 - 120
115	In	3	1127012	1.05	1136733	99.1	80 - 120
159	Tb	3	1006899	1.68	1022693	98.5	80 - 120
209	Bi	3	485509	1.28	490830	98.9	80 - 120

Tune File# 1 c:\icpchem\1\7500\h2.u
 Tune File# 2 c:\icpchem\1\7500\he.u
 Tune File# 3 c:\icpchem\1\7500\norm.u

ISTD Ref File : C:\ICPCHEM\1\DATA\06H21r00.B\003CALB.D\003CALB.D#

0 : Element Failures 0
 0 : ISTD Failures 0

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H21r00.B\007CAL.S.D\007CAL.S.D#
 Date Acquired: Aug 21 2006 05:53 pm
 Acq. Method: 6020.M
 Operator:
 Sample Name: s4007
 Misc Info:
 Vial Number: 1105
 Current Method: C:\ICPCHEM\1\METHODS\6020.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020.C
 Last Cal. Update: Aug 21 2006 05:50 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
6	Li	---	3	1702415.00	0.09
7	(Li)	---	3	97339.46	0.99
9	Be	6	3	1.68	0.48
23	Na	45	2	428.70	0.36
24	Mg	45	3	383.94	1.14
27	Al	45	3	483.86	0.76
39	K	45	3	568.38	0.73
44	Ca	45	3	16.98	0.71
45	Sc	---	1	664897.38	0.23
45	Sc	---	2	113027.64	1.01
45	Sc	---	3	1912947.60	0.92
51	V	45	2	13.95	0.58
52	Cr	45	2	17.03	0.24
55	Mn	45	2	11.80	0.84
56	Fe	45	1	599.70	0.49
59	Co	45	2	23.65	0.94
60	Ni	45	2	6.14	1.57
63	Cu	72	2	36.90	0.77
65	Cu	72	2	18.16	0.52
66	Zn	72	2	9.27	0.45
72	Ge	---	1	129572.55	1.52
72	Ge	---	2	48320.68	1.25
72	Ge	---	3	312614.09	0.65
75	As	72	2	4.27	0.17
78	Se	72	1	0.99	2.66
89	Y	---	1	1016017.70	0.62
89	Y	---	2	369342.38	2.21
89	Y	---	3	1924555.80	0.76
98	Mo	89	3	1.31	1.57
99	(Ru)	89	3	0.00	108.09
107	Ag	115	3	3.29	1.92
111	Cd	115	3	0.67	1.01
115	In	---	1	743494.19	0.96
115	In	---	2	383494.69	2.94
115	In	---	3	1135187.30	1.08
118	(In)	---	1	263581.47	0.20
118	(In)	---	2	154788.66	2.40
118	(In)	---	3	375055.50	0.06
121	Sb	115	3	1.89	1.41
137	Ba	159	3	0.78	1.39
159	Tb	---	3	1015485.90	1.49
205	Tl	209	3	3.16	1.63
208	Pb	159	3	4.07	0.87
209	Bi	---	3	478762.81	1.38

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	3	1702415	0.09	1661045	102.5	80 - 120
45	Sc	1	664897	0.23	665562	99.9	80 - 120
45	Sc	2	113028	1.01	111545	101.3	80 - 120
45	Sc	3	1912948	0.92	1842296	103.8	80 - 120
72	Ge	1	129573	1.52	129939	99.7	80 - 120
72	Ge	2	48321	1.25	47886	100.9	80 - 120
72	Ge	3	312614	0.65	303571	103.0	80 - 120
89	Y	1	1016018	0.62	1019554	99.7	80 - 120
89	Y	2	369342	2.21	366766	100.7	80 - 120
89	Y	3	1924556	0.76	1877282	102.5	80 - 120
115	In	1	743494	0.96	760365	97.8	80 - 120
115	In	2	383495	2.94	384543	99.7	80 - 120
115	In	3	1135187	1.08	1136733	99.9	80 - 120
159	Tb	3	1015486	1.49	1022693	99.3	80 - 120
209	Bi	3	478763	1.38	490830	97.5	80 - 120

Tune File# 1 c:\icpchem\1\7500\h2.u
 Tune File# 2 c:\icpchem\1\7500\he.u
 Tune File# 3 c:\icpchem\1\7500\norm.u

ISTD Ref File : C:\ICPCHEM\1\DATA\06H21r00.B\003CALB.D\003CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H21r00.B\008CAL.S.D\008CAL.S.D#
 Date Acquired: Aug 21 2006 06:00 pm
 Acq. Method: 6020.M
 Operator:
 Sample Name: s4001
 Misc Info:
 Vial Number: 1106
 Current Method: C:\ICPCHEM\1\METHODS\6020.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020.C
 Last Cal. Update: Aug 21 2006 05:58 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)
6	Li	---	3	1726636.60
7	(Li)	---	3	99013.13
9	Be	6	3	16.80
23	Na	45	2	4006.66
24	Mg	45	3	3846.08
27	Al	45	3	4878.20
39	K	45	3	5473.33
44	Ca	45	3	165.10
45	Sc	---	1	668016.63
45	Sc	---	2	114065.01
45	Sc	---	3	1925160.00
51	V	45	2	136.98
52	Cr	45	2	165.18
55	Mn	45	2	116.38
56	Fe	45	1	5842.74
59	Co	45	2	231.18
60	Ni	45	2	57.77
63	Cu	72	2	353.30
65	Cu	72	2	171.48
66	Zn	72	2	70.44
72	Ge	---	1	127272.28
72	Ge	---	2	47872.78
72	Ge	---	3	304674.78
75	As	72	2	42.93
78	Se	72	1	9.70
89	Y	---	1	1003042.30
89	Y	---	2	370038.28
89	Y	---	3	1911825.60
98	Mo	89	3	13.36
99	(Ru)	89	3	0.00
107	Ag	115	3	33.02
111	Cd	115	3	6.69
115	In	---	1	720846.25
115	In	---	2	370955.03
115	In	---	3	1102188.30
118	(In)	---	1	2607448.80
118	(In)	---	2	1557520.50
118	(In)	---	3	3782810.30
121	Sb	115	3	19.57
137	Ba	159	3	7.84
159	Tb	---	3	1010977.60
205	Tl	209	3	33.36
208	Pb	159	3	39.84
209	Bi	---	3	451538.78

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	3	1726637	1.10	1661045	103.9	80 - 120
45	Sc	1	668017	1.47	665562	100.4	80 - 120
45	Sc	2	114065	1.45	111545	102.3	80 - 120
45	Sc	3	1925160	1.10	1842296	104.5	80 - 120
72	Ge	1	127272	0.90	129939	97.9	80 - 120
72	Ge	2	47873	1.72	47886	100.0	80 - 120
72	Ge	3	304675	0.55	303571	100.4	80 - 120
89	Y	1	1003042	0.93	1019554	98.4	80 - 120
89	Y	2	370038	2.61	366766	100.9	80 - 120
89	Y	3	1911826	1.27	1877282	101.8	80 - 120
115	In	1	720846	0.83	760365	94.8	80 - 120
115	In	2	370955	2.72	384543	96.5	80 - 120
115	In	3	1102188	0.63	1136733	97.0	80 - 120
159	Tb	3	1010978	0.88	1022693	98.9	80 - 120
209	Bi	3	451539	1.06	490830	92.0	80 - 120

Tune File# 1 c:\icpchem\1\7500\h2.u
 Tune File# 2 c:\icpchem\1\7500\he.u
 Tune File# 3 c:\icpchem\1\7500\norm.u

ISTD Ref File : C:\ICPCHEM\1\DATA\06H21r00.B\003CALB.D\003CALB.D#

0 : Element Failures 0
 0 : ISTD Failures 0

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H21r00.B\009CAL.S.D\009CAL.S.D#
 Date Acquired: Aug 21 2006 06:07 pm
 Acq. Method: 6020.M
 Operator:
 Sample Name: s4002
 Misc Info:
 Vial Number: 1107
 Current Method: C:\ICPCHEM\1\METHODS\6020.M
 Calibration File: C:\ICPCHEM\1\CALIB\6020.C
 Last Cal. Update: Aug 21 2006 06:05 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)
6 Li	---	3	1718123.50	0.47
7 (Li)	---	3	98666.14	0.72
9 Be	6	3	33.04	0.64
23 Na	45	2	7987.02	0.43
24 Mg	45	3	7743.06	0.60
27 Al	45	3	9812.86	0.87
39 K	45	3	10878.16	0.68
44 Ca	45	3	326.53	0.65
45 Sc	---	1	658328.88	0.42
45 Sc	---	2	115978.63	1.75
45 Sc	---	3	1938298.90	0.17
51 V	45	2	272.87	0.29
52 Cr	45	2	325.14	0.16
55 Mn	45	2	230.37	0.61
56 Fe	45	1	11499.56	0.04
59 Co	45	2	449.10	0.77
60 Ni	45	2	111.69	0.45
63 Cu	72	2	688.75	0.13
65 Cu	72	2	334.85	0.71
66 Zn	72	2	134.21	0.23
72 Ge	---	1	123333.10	0.58
72 Ge	---	2	47892.88	1.63
72 Ge	---	3	299109.69	0.14
75 As	72	2	84.54	0.34
78 Se	72	1	18.80	0.27
89 Y	---	1	982705.56	0.32
89 Y	---	2	374868.13	2.29
89 Y	---	3	1885686.40	0.13
98 Mo	89	3	27.74	2.91
99 (Ru)	89	3	0.00	14.76
107 Ag	115	3	65.12	1.28
111 Cd	115	3	13.20	0.80
115 In	---	1	701531.88	0.51
115 In	---	2	367987.84	3.03
115 In	---	3	1086365.30	0.53
118 (In)	---	1	5023635.50	0.36
118 (In)	---	2	3090651.00	3.03
118 (In)	---	3	7383672.50	0.78
121 Sb	115	3	39.49	0.62
137 Ba	159	3	15.69	0.49
159 Tb	---	3	1012020.10	0.84
205 Tl	209	3	68.21	0.31
208 Pb	159	3	78.57	0.88
209 Bi	---	3	439136.19	1.12

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3	1718124	0.47	1661045	103.4	80 - 120	
45 Sc	1	658329	0.42	665562	98.9	80 - 120	
45 Sc	2	115979	1.75	111545	104.0	80 - 120	
45 Sc	3	1938299	0.17	1842296	105.2	80 - 120	
72 Ge	1	123333	0.58	129939	94.9	80 - 120	
72 Ge	2	47893	1.63	47886	100.0	80 - 120	
72 Ge	3	299110	0.14	303571	98.5	80 - 120	
89 Y	1	982706	0.32	1019554	96.4	80 - 120	
89 Y	2	374868	2.29	366766	102.2	80 - 120	
89 Y	3	1885686	0.13	1877282	100.4	80 - 120	
115 In	1	701532	0.51	760365	92.3	80 - 120	
115 In	2	367988	3.04	384543	95.7	80 - 120	
115 In	3	1086365	0.53	1136733	95.6	80 - 120	
159 Tb	3	1012020	0.84	1022693	99.0	80 - 120	
209 Bi	3	439136	1.11	490830	89.5	80 - 120	

Tune File# 1 c:\icpchem\1\7500\h2.u
 Tune File# 2 c:\icpchem\1\7500\he.u
 Tune File# 3 c:\icpchem\1\7500\norm.u

ISTD Ref File : C:\ICPCHEM\1\DATA\06H21r00.B\003CALB.D\003CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

Step	Mass	Element	r	a	b(blank)	DL	BEC	Unit
3	6	Li	0.0000	---	---	---		
3	9	Be	1.0000	1.658E-01	6.741E-05		1.056E-03	4.066E-04
	ppb							
2	23	Na	1.0000	3.984E-01	20.77	2.515	52.15	ppb
3	24	Mg	1.0000	3.866E-01	1.773E-01		5.461E-03	4.586E-01
	ppb							
3	27	Al	1.0000	4.900E-01	3.835E-01		5.938E-02	7.825E-01
	ppb							
3	39	K	1.0000	5.429E-01	27.66	3.651E-01	50.95	ppb
3	44	Ca	1.0000	1.635E-02	1.734E-01		9.332E-01	10.60 ppb
1	45	Sc	0.0000	---	---	---		
2	45	Sc	0.0000	---	---	---		
3	45	Sc	0.0000	---	---	---		
2	51	V	1.0000	1.363	3.503E-01	5.770E-02	2.569E-01	ppb
2	52	Cr	1.0000	1.629	3.538E-01	4.475E-03	2.172E-01	ppb
2	55	Mn	1.0000	1.154	5.111E-02	1.460E-02	4.429E-02	ppb
1	56	Fe	1.0000	5.768E-01	7.583E-01	5.722E-02	1.315	ppb
2	59	Co	0.9999	2.259	2.756E-02	1.834E-03	1.220E-02	ppb
2	60	Ni	0.9999	5.620E-01	6.097E-02	4.647E-02	1.085E-01	ppb
	ppb							
2	63	Cu	0.9999	3.458	7.087E-01	2.692E-02	2.050E-01	ppb
2	65	Cu	0.9999	1.681	3.423E-01	5.197E-02	2.037E-01	ppb
2	66	Zn	0.9999	6.667E-01	1.865	3.350E-01	2.797	ppb
1	72	Ge	0.0000	---	---	---		
2	72	Ge	0.0000	---	---	---		
3	72	Ge	0.0000	---	---	---		
2	75	As	1.0000	4.238E-01	2.943E-02		3.423E-02	6.945E-02
	ppb							
1	78	Se	0.9999	9.461E-02	8.550E-04		2.046E-02	9.037E-03
	ppb							
1	89	Y	0.0000	---	---	---		
2	89	Y	0.0000	---	---	---		
3	89	Y	0.0000	---	---	---		
3	98	Mo	0.9999	1.377E-01	9.752E-04		4.908E-03	7.085E-03
	ppb							
3	99	(Ru)	0.9262	4.750E-06	1.181E-04		31.63 24.86	ppb
3	107	Ag	1.0000	3.265E-01	2.981E-03		1.372E-03	9.129E-03
	ppb							
3	111	Cd	1.0000	6.617E-02	2.610E-04		7.158E-03	3.945E-03
	ppb							
1	115	In	0.0000	---	---	---		
2	115	In	0.0000	---	---	---		
3	115	In	0.0000	---	---	---		
3	121	Sb	1.0000	1.971E-01	1.073E-03		7.688E-03	5.444E-03
	ppb							
3	137	Ba	1.0000	7.845E-02	2.992E-03		2.141E-02	3.814E-02
	ppb							
3	159	Tb	0.0000	---	---	---		
3	205	Tl	0.9999	6.783E-01	6.327E-02		2.253E-02	9.328E-02
	ppb							
3	206	(Pb)	1.0000	2.300E-01	4.084E-03		1.821E-02	1.776E-02
	ppb							
3	207	(Pb)	1.0000	8.730E-02	1.524E-03		3.820E-02	1.746E-02
	ppb							
3	208	Pb	1.0000	3.939E-01	7.606E-03		4.700E-03	1.931E-02
	ppb							
3	209	Bi	0.0000	---	---	---		

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06
 Seqnum : 66336549012
 Cal : 66336549001
 Standards: S4008

File : h21r0012
 Caldate: 21-AUG-2006

IDF : 1.0
 Time : 21-AUG-2006 18:34

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.5386	0.4813	10000	9820	ug/L	-2	10	
Antimony	A	0.1962	0.1931	100.0	98.00	ug/L	-2	10	
Barium	A	0.0899	0.0786	100.0	100.2	ug/L	0	10	
Beryllium	A	0.1712	0.1702	100.0	102.7	ug/L	3	10	
Cadmium	A	0.0676	0.0664	100.0	100.4	ug/L	0	10	
Calcium	A	0.0257	0.0165	10000	10050	ug/L	1	10	
Lead	A	0.4370	0.4015	100.0	101.9	ug/L	2	10	
Magnesium	A	0.4240	0.3853	10000	9964	ug/L	0	10	
Molybdenum	A	0.1472	0.1327	100.0	96.42	ug/L	-4	10	
Potassium	A	1.2269	0.5458	10000	10000	ug/L	0	10	
Silver	A	0.3428	0.3249	100.0	99.51	ug/L	0	10	
Thallium	A	0.8244	0.6715	50.00	49.41	ug/L	-1	10	
Arsenic	E	0.4903	0.4285	100.0	101.0	ug/L	1	10	
Chromium	E	2.4381	1.6437	100.0	100.7	ug/L	1	10	
Cobalt	E	2.4421	2.2977	100.0	101.7	ug/L	2	10	
Copper	E	6.2590	3.5537	100.0	102.6	ug/L	3	10	
Manganese	E	1.3903	1.1578	100.0	100.3	ug/L	0	10	
Nickel	E	0.8085	0.5780	100.0	102.7	ug/L	3	10	
Sodium	E	0.8071	0.4014	10000	10020	ug/L	0	10	
Vanadium	E	2.1921	1.3718	100.0	100.4	ug/L	0	10	
Zinc	E	6.4680	0.7060	100.0	103.1	ug/L	3	10	
Iron	H	0.7154	0.5900	10000	10230	ug/L	2	10	
Selenium	H	0.0990	0.0965	100.0	101.9	ug/L	2	10	

ISTD (ICALBLK h21r0003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1661045	1719187	3.50
Scandium	A	1842296	1929166	4.72
Scandium	E	111545	113048	1.35
Scandium	H	665562	647569	-2.70
Germanium	H	129939	123864	-4.68
Germanium	E	47886	47096	-1.65
Indium	A	1136733	1090522	-4.07
Bismuth	A	490830	450878	-8.14
Yttrium	A	1877282	1894069	0.89
Terbium	A	1022693	994040	-2.80

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
 Seqnum : 66336549034
 Cal : 66336549001
 Standards: S4009

File : h21r0034
 Caldate: 21-AUG-2006

IDF : 1.0
 Time : 21-AUG-2006 21:26

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.5386	0.4721	10000	9632	ug/L	-4	10	
Antimony	A	0.1962	0.1909	100.0	96.86	ug/L	-3	10	
Barium	A	0.0899	0.0776	100.0	98.94	ug/L	-1	10	
Beryllium	A	0.1712	0.1666	100.0	100.5	ug/L	1	10	
Cadmium	A	0.0676	0.0666	100.0	100.6	ug/L	1	10	
Calcium	A	0.0257	0.0163	10000	9982	ug/L	0	10	
Lead	A	0.4370	0.4142	100.0	105.1	ug/L	5	10	
Magnesium	A	0.4240	0.3780	10000	9777	ug/L	-2	10	
Molybdenum	A	0.1472	0.1306	100.0	94.84	ug/L	-5	10	
Potassium	A	1.2269	0.5437	10000	9962	ug/L	0	10	
Silver	A	0.3428	0.3335	100.0	102.1	ug/L	2	10	
Thallium	A	0.8244	0.6645	50.00	48.89	ug/L	-2	10	
Arsenic	E	0.4903	0.4286	100.0	101.0	ug/L	1	10	
Chromium	E	2.4381	1.6492	100.0	101.0	ug/L	1	10	
Cobalt	E	2.4421	2.3233	100.0	102.8	ug/L	3	10	
Copper	E	6.2590	3.5532	100.0	102.6	ug/L	3	10	
Manganese	E	1.3903	1.1640	100.0	100.8	ug/L	1	10	
Nickel	E	0.8085	0.5801	100.0	103.1	ug/L	3	10	
Sodium	E	0.8071	0.4014	10000	10020	ug/L	0	10	
Vanadium	E	2.1921	1.3708	100.0	100.3	ug/L	0	10	
Zinc	E	6.4680	0.7037	100.0	102.8	ug/L	3	10	
Iron	H	0.7154	0.5824	10000	10090	ug/L	1	10	
Selenium	H	0.0990	0.0966	100.0	102.1	ug/L	2	10	

ISTD (ICALBLK h21r0003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1661045	1499198	-9.74
Scandium	A	1842296	1706065	-7.39
Scandium	E	111545	98625	-11.58
Scandium	H	665562	591340	-11.15
Germanium	H	129939	112735	-13.24
Germanium	E	47886	41426	-13.49
Indium	A	1136733	933599	-17.87
Bismuth	A	490830	400094	-18.49
Yttrium	A	1877282	1676288	-10.71
Terbium	A	1022693	851796	-16.71

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
 Seqnum : 66336549051
 Cal : 66336549001
 Standards: S4009

File : h21r0051
 Caldate: 21-AUG-2006

IDF : 1.0
 Time : 21-AUG-2006 23:32

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.5386	0.4752	10000	9697	ug/L	-3	10	
Antimony	A	0.1962	0.1906	100.0	96.70	ug/L	-3	10	
Barium	A	0.0899	0.0774	100.0	98.67	ug/L	-1	10	
Beryllium	A	0.1712	0.1642	100.0	99.03	ug/L	-1	10	
Cadmium	A	0.0676	0.0670	100.0	101.3	ug/L	1	10	
Calcium	A	0.0257	0.0164	10000	10020	ug/L	0	10	
Lead	A	0.4370	0.4129	100.0	104.8	ug/L	5	10	
Magnesium	A	0.4240	0.3818	10000	9875	ug/L	-1	10	
Molybdenum	A	0.1472	0.1300	100.0	94.40	ug/L	-6	10	
Potassium	A	1.2269	0.5475	10000	10030	ug/L	0	10	
Silver	A	0.3428	0.3307	100.0	101.3	ug/L	1	10	
Thallium	A	0.8244	0.6585	50.00	48.45	ug/L	-3	10	
Arsenic	E	0.4903	0.4224	100.0	99.60	ug/L	0	10	
Chromium	E	2.4381	1.6393	100.0	100.4	ug/L	0	10	
Cobalt	E	2.4421	2.3038	100.0	102.0	ug/L	2	10	
Copper	E	6.2590	3.4932	100.0	100.8	ug/L	1	10	
Manganese	E	1.3903	1.1600	100.0	100.5	ug/L	1	10	
Nickel	E	0.8085	0.5778	100.0	102.7	ug/L	3	10	
Sodium	E	0.8071	0.4027	10000	10060	ug/L	1	10	
Vanadium	E	2.1921	1.3643	100.0	99.82	ug/L	0	10	
Zinc	E	6.4680	0.7009	100.0	102.3	ug/L	2	10	
Iron	H	0.7154	0.5836	10000	10120	ug/L	1	10	
Selenium	H	0.0990	0.0963	100.0	101.7	ug/L	2	10	

ISTD (ICALBLK h21r0003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1661045	1516102	-8.73
Scandium	A	1842296	1679470	-8.84
Scandium	E	111545	97879	-12.25
Scandium	H	665562	573175	-13.88
Germanium	H	129939	109208	-15.95
Germanium	E	47886	41280	-13.80
Indium	A	1136733	909321	-20.01
Bismuth	A	490830	387472	-21.06
Yttrium	A	1877282	1647725	-12.23
Terbium	A	1022693	824927	-19.34

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
 Seqnum : 66336549063
 Cal : 66336549001
 Standards: S4009

File : h21r0063
 Caldate: 21-AUG-2006

IDF : 1.0
 Time : 22-AUG-2006 01:00

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.5386	0.4762	10000	9718	ug/L	-3	10	
Antimony	A	0.1962	0.1897	100.0	96.25	ug/L	-4	10	
Barium	A	0.0899	0.0776	100.0	98.84	ug/L	-1	10	
Beryllium	A	0.1712	0.1647	100.0	99.31	ug/L	-1	10	
Cadmium	A	0.0676	0.0668	100.0	100.9	ug/L	1	10	
Calcium	A	0.0257	0.0164	10000	9994	ug/L	0	10	
Lead	A	0.4370	0.4147	100.0	105.3	ug/L	5	10	
Magnesium	A	0.4240	0.3822	10000	9885	ug/L	-1	10	
Molybdenum	A	0.1472	0.1285	100.0	93.35	ug/L	-7	10	
Potassium	A	1.2269	0.5458	10000	10000	ug/L	0	10	
Silver	A	0.3428	0.3321	100.0	101.7	ug/L	2	10	
Thallium	A	0.8244	0.6570	50.00	48.34	ug/L	-3	10	
Arsenic	E	0.4903	0.4232	100.0	99.77	ug/L	0	10	
Chromium	E	2.4381	1.6459	100.0	100.8	ug/L	1	10	
Cobalt	E	2.4421	2.3091	100.0	102.2	ug/L	2	10	
Copper	E	6.2590	3.5065	100.0	101.2	ug/L	1	10	
Manganese	E	1.3903	1.1621	100.0	100.7	ug/L	1	10	
Nickel	E	0.8085	0.5806	100.0	103.2	ug/L	3	10	
Sodium	E	0.8071	0.4034	10000	10070	ug/L	1	10	
Vanadium	E	2.1921	1.3705	100.0	100.3	ug/L	0	10	
Zinc	E	6.4680	0.6964	100.0	101.7	ug/L	2	10	
Iron	H	0.7154	0.5842	10000	10130	ug/L	1	10	
Selenium	H	0.0990	0.0968	100.0	102.3	ug/L	2	10	

ISTD (ICALBLK h21r0003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1661045	1498236	-9.80
Scandium	A	1842296	1663039	-9.73
Scandium	E	111545	95420	-14.46
Scandium	H	665562	543201	-18.38
Germanium	H	129939	103449	-20.39
Germanium	E	47886	40254	-15.94
Indium	A	1136733	888300	-21.86
Bismuth	A	490830	380170	-22.55
Yttrium	A	1877282	1621678	-13.62
Terbium	A	1022693	804961	-21.29

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
 Seqnum : 66336549016
 Cal : 66336549001

File : h21r0016
 Caldate: 21-AUG-2006

IDF : 1.0
 Time : 21-AUG-2006 19:13

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	50.00	3.871	ug/L	
Antimony	A	ND	0.1000	0.01557	ug/L	
Barium	A	ND	0.1000	0.02280	ug/L	
Beryllium	A	ND	0.1000	0.01701	ug/L	
Cadmium	A	ND	0.1000	0.01572	ug/L	
Calcium	A	ND	10.00	11.39	ug/L	
Lead	A	ND	0.1000	0.01616	ug/L	
Magnesium	A	ND	10.00	3.993	ug/L	
Molybdenum	A	ND	0.1000	0.08529	ug/L	
Potassium	A	ND	10.00	11.51	ug/L	
Silver	A	ND	0.1000	0.01756	ug/L	
Thallium	A	ND	0.05000	0.1455	ug/L	
Arsenic	E	ND	0.1000	0.01328	ug/L	
Chromium	E	[0.001033]	0.1000	0.0009916	ug/L	!ib
Cobalt	E	ND	0.1000	0.007178	ug/L	
Copper	E	ND	0.1000	0	ug/L	
Manganese	E	ND	0.1000	0.01280	ug/L	
Nickel	E	ND	0.1000	0.003532	ug/L	
Sodium	E	ND	10.00	151.2	ug/L	
Vanadium	E	ND	0.1000	0.01728	ug/L	
Zinc	E	ND	0.1000	0.02678	ug/L	
Iron	H	ND	10.00	21.34	ug/L	
Selenium	H	ND	0.1000	0.004642	ug/L	

ISTD (ICALBLK h21r0003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1661045	1694034	1.99
Scandium	A	1842296	1860281	0.98
Scandium	E	111545	112503	0.86
Scandium	H	665562	658586	-1.05
Germanium	H	129939	127593	-1.81
Germanium	E	47886	47586	-0.63
Indium	A	1136733	1098988	-3.32
Bismuth	A	490830	462905	-5.69
Yttrium	A	1877282	1871394	-0.31
Terbium	A	1022693	960602	-6.07

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
 Seqnum : 66336549036
 Cal : 66336549001

File : h21r0036
 Caldate: 21-AUG-2006

IDF : 1.0
 Time : 21-AUG-2006 21:40

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	50.00	3.871	ug/L	
Antimony	A	ND	0.1000	0.01557	ug/L	
Barium	A	ND	0.1000	0.02280	ug/L	
Beryllium	A	ND	0.1000	0.01701	ug/L	
Cadmium	A	ND	0.1000	0.01572	ug/L	
Calcium	A	ND	10.00	11.39	ug/L	
Lead	A	ND	0.1000	0.01616	ug/L	
Magnesium	A	ND	10.00	3.993	ug/L	
Molybdenum	A	ND	0.1000	0.08529	ug/L	
Potassium	A	ND	10.00	11.51	ug/L	
Silver	A	ND	0.1000	0.01756	ug/L	
Thallium	A	ND	0.05000	0.1455	ug/L	
Arsenic	E	ND	0.1000	0.01328	ug/L	
Chromium	E	ND	0.1000	0.0009916	ug/L	
Cobalt	E	ND	0.1000	0.007178	ug/L	
Copper	E	ND	0.1000	0	ug/L	
Manganese	E	ND	0.1000	0.01280	ug/L	
Nickel	E	ND	0.1000	0.003532	ug/L	
Sodium	E	ND	10.00	151.2	ug/L	
Vanadium	E	ND	0.1000	0.01728	ug/L	
Zinc	E	ND	0.1000	0.02678	ug/L	
Iron	H	ND	10.00	21.34	ug/L	
Selenium	H	[0.01033]	0.1000	0.004642	ug/L	!ib

ISTD (ICALBLK h21r0003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1661045	1521614	-8.39
Scandium	A	1842296	1701438	-7.65
Scandium	E	111545	99842	-10.49
Scandium	H	665562	590295	-11.31
Germanium	H	129939	115072	-11.44
Germanium	E	47886	42474	-11.30
Indium	A	1136733	970407	-14.63
Bismuth	A	490830	426077	-13.19
Yttrium	A	1877282	1696779	-9.62
Terbium	A	1022693	856224	-16.28

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06

Seqnum : 66336549053

Cal : 66336549001

File : h21r0053

Caldate: 21-AUG-2006

IDF : 1.0

Time : 21-AUG-2006 23:46

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	50.00	3.871	ug/L	
Antimony	A	ND	0.1000	0.01557	ug/L	
Barium	A	ND	0.1000	0.02280	ug/L	
Beryllium	A	ND	0.1000	0.01701	ug/L	
Cadmium	A	ND	0.1000	0.01572	ug/L	
Calcium	A	ND	10.00	11.39	ug/L	
Lead	A	ND	0.1000	0.01616	ug/L	
Magnesium	A	ND	10.00	3.993	ug/L	
Molybdenum	A	ND	0.1000	0.08529	ug/L	
Potassium	A	ND	10.00	11.51	ug/L	
Silver	A	ND	0.1000	0.01756	ug/L	
Thallium	A	ND	0.05000	0.1455	ug/L	
Arsenic	E	ND	0.1000	0.01328	ug/L	
Chromium	E	ND	0.1000	0.0009916	ug/L	
Cobalt	E	ND	0.1000	0.007178	ug/L	
Copper	E	ND	0.1000	0	ug/L	
Manganese	E	ND	0.1000	0.01280	ug/L	
Nickel	E	[0.004328]	0.1000	0.003532	ug/L	!ib
Sodium	E	ND	10.00	151.2	ug/L	
Vanadium	E	[0.01976]	0.1000	0.01728	ug/L	!ib
Zinc	E	ND	0.1000	0.02678	ug/L	
Iron	H	ND	10.00	21.34	ug/L	
Selenium	H	[0.004865]	0.1000	0.004642	ug/L	!ib

ISTD (ICALBLK h21r0003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1661045	1509429	-9.13
Scandium	A	1842296	1659039	-9.95
Scandium	E	111545	97544	-12.55
Scandium	H	665562	556811	-16.34
Germanium	H	129939	109816	-15.49
Germanium	E	47886	41609	-13.11
Indium	A	1136733	939197	-17.38
Bismuth	A	490830	410469	-16.37
Yttrium	A	1877282	1648875	-12.17
Terbium	A	1022693	820768	-19.74

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
 Seqnum : 66336549065
 Cal : 66336549001

File : h21r0065
 Caldate: 21-AUG-2006

IDF : 1.0
 Time : 22-AUG-2006 01:15

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	50.00	3.871	ug/L	
Antimony	A	ND	0.1000	0.01557	ug/L	
Barium	A	ND	0.1000	0.02280	ug/L	
Beryllium	A	ND	0.1000	0.01701	ug/L	
Cadmium	A	ND	0.1000	0.01572	ug/L	
Calcium	A	ND	10.00	11.39	ug/L	
Lead	A	ND	0.1000	0.01616	ug/L	
Magnesium	A	ND	10.00	3.993	ug/L	
Molybdenum	A	ND	0.1000	0.08529	ug/L	
Potassium	A	ND	10.00	11.51	ug/L	
Silver	A	ND	0.1000	0.01756	ug/L	
Thallium	A	ND	0.05000	0.1455	ug/L	
Arsenic	E	ND	0.1000	0.01328	ug/L	
Chromium	E	ND	0.1000	0.0009916	ug/L	
Cobalt	E	ND	0.1000	0.007178	ug/L	
Copper	E	ND	0.1000	0	ug/L	
Manganese	E	ND	0.1000	0.01280	ug/L	
Nickel	E	[0.003612]	0.1000	0.003532	ug/L	!ib
Sodium	E	ND	10.00	151.2	ug/L	
Vanadium	E	ND	0.1000	0.01728	ug/L	
Zinc	E	ND	0.1000	0.02678	ug/L	
Iron	H	ND	10.00	21.34	ug/L	
Selenium	H	[0.005221]	0.1000	0.004642	ug/L	!ib

ISTD (ICALBLK h21r0003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1661045	1482985	-10.72
Scandium	A	1842296	1638315	-11.07
Scandium	E	111545	96059	-13.88
Scandium	H	665562	547608	-17.72
Germanium	H	129939	106939	-17.70
Germanium	E	47886	40677	-15.05
Indium	A	1136733	908576	-20.07
Bismuth	A	490830	399165	-18.68
Yttrium	A	1877282	1614847	-13.98
Terbium	A	1022693	791996	-22.56

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06
 Seqnum : 66336549018 File : h21r0018 IDF : 1.0
 Cal : 66336549001 Caldate: 21-AUG-2006 Time : 21-AUG-2006 19:27
 Standards: S4011, S3310

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	2.385	0.1000	ug/L	
Barium	A	1.093	0.1000	ug/L	
Beryllium	A	[0.01139]	0.1000	ug/L	
Cadmium	A	1.732	0.1000	ug/L	
Lead	A	1.170	0.1000	ug/L	
Silver	A	0.1488	0.1000	ug/L	
Thallium	A	[0.002743]	0.05000	ug/L	
Arsenic	E	0.3623	0.1000	ug/L	
Chromium	E	0.9192	0.1000	ug/L	
Cobalt	E	2.746	0.1000	ug/L	
Copper	E	1.093	0.1000	ug/L	
Manganese	E	1.167	0.1000	ug/L	
Nickel	E	0.8227	0.1000	ug/L	
Vanadium	E	[0.09841]	0.1000	ug/L	
Zinc	E	1.874	0.1000	ug/L	
Selenium	H	[0.07021]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	110000	ug/L	110
Calcium	A	300000	329300	ug/L	110
Magnesium	A	100000	108600	ug/L	109
Molybdenum	A	2000	2230	ug/L	112
Potassium	A	100000	107900	ug/L	108
Sodium	E	250000	275200	ug/L	110
Iron	H	250000	250600	ug/L	100

ISTD (ICALBLK h21r0003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1661045	1562555	-5.93
Scandium	A	1842296	1779069	-3.43
Scandium	E	111545	110826	-0.64
Scandium	H	665562	659342	-0.93
Germanium	H	129939	112628	-13.32
Germanium	E	47886	44853	-6.33
Indium	A	1136733	1053486	-7.32
Bismuth	A	490830	390426	-20.46
Yttrium	A	1877282	1666768	-11.21
Terbium	A	1022693	1053030	2.97

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06
 Seqnum : 66336549019
 Cal : 66336549001
 Standards: S4012, S3310

File : h21r0019
 Caldate: 21-AUG-2006

IDF : 1.0
 Time : 21-AUG-2006 19:35

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	106700	ug/L	7		
Cadmium	A	100.0	98.87	ug/L	-1	20	
Calcium	A	300000	317800	ug/L	6		
Magnesium	A	100000	105000	ug/L	5		
Molybdenum	A	2000	2145	ug/L	7		
Potassium	A	100000	104700	ug/L	5		
Silver	A	50.00	47.01	ug/L	-6	20	
Arsenic	E	100.0	102.7	ug/L	3	20	
Chromium	E	200.0	210.5	ug/L	5	20	
Cobalt	E	200.0	199.9	ug/L	0	20	
Copper	E	200.0	186.9	ug/L	-7	20	
Manganese	E	200.0	211.2	ug/L	6	20	
Nickel	E	200.0	191.5	ug/L	-4	20	
Sodium	E	250000	268900	ug/L	8		
Vanadium	E	200.0	218.3	ug/L	9	20	
Zinc	E	100.0	102.4	ug/L	2	20	
Iron	H	250000	243900	ug/L	-2		
Selenium	H	100.0	96.55	ug/L	-3	20	

ISTD (ICALBLK h21r0003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	665562	637052	-4.28
Scandium	A	1842296	1753189	-4.84
Scandium	E	111545	106980	-4.09
Germanium	H	129939	109274	-15.90
Germanium	E	47886	43471	-9.22
Indium	A	1136733	1012382	-10.94
Yttrium	A	1877282	1630007	-13.17

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06
 Seqnum : 66336549067 File : h21r0067 IDF : 1.0
 Cal : 66336549001 Caldate: 21-AUG-2006 Time : 22-AUG-2006 01:30
 Standards: S4011, S3310

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	2.384	0.1000	ug/L	
Barium	A	1.068	0.1000	ug/L	
Beryllium	A	[0.01096]	0.1000	ug/L	
Cadmium	A	1.930	0.1000	ug/L	
Lead	A	1.228	0.1000	ug/L	
Silver	A	0.1453	0.1000	ug/L	
Thallium	A	[0]	0.05000	ug/L	
Arsenic	E	0.3856	0.1000	ug/L	
Chromium	E	0.9025	0.1000	ug/L	
Cobalt	E	2.763	0.1000	ug/L	
Copper	E	1.072	0.1000	ug/L	
Manganese	E	1.159	0.1000	ug/L	
Nickel	E	0.8693	0.1000	ug/L	
Vanadium	E	0.1208	0.1000	ug/L	
Zinc	E	1.678	0.1000	ug/L	
Selenium	H	[0.03890]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	111300	ug/L	111
Calcium	A	300000	329400	ug/L	110
Magnesium	A	100000	109500	ug/L	110
Molybdenum	A	2000	2175	ug/L	109
Potassium	A	100000	108900	ug/L	109
Sodium	E	250000	274800	ug/L	110
Iron	H	250000	250400	ug/L	100

ISTD (ICALBLK h21r0003)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	1661045	1475122	-11.19
Scandium	A	1842296	1592693	-13.55
Scandium	E	111545	94723	-15.08
Scandium	H	665562	544968	-18.12
Germanium	H	129939	93079	-28.37
Germanium	E	47886	38690	-19.20
Indium	A	1136733	847499	-25.44
Bismuth	A	490830	339847	-30.76
Yttrium	A	1877282	1425181	-24.08
Terbium	A	1022693	873222	-14.62

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06
 Seqnum : 66336549068
 Cal : 66336549001
 Standards: S4012, S3310

File : h21r0068
 Caldate: 21-AUG-2006

IDF : 1.0
 Time : 22-AUG-2006 01:37

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	107500	ug/L	8		
Cadmium	A	100.0	99.08	ug/L	-1	20	
Calcium	A	300000	318800	ug/L	6		
Magnesium	A	100000	105600	ug/L	6		
Molybdenum	A	2000	2112	ug/L	6		
Potassium	A	100000	105800	ug/L	6		
Silver	A	50.00	47.79	ug/L	-4	20	
Arsenic	E	100.0	103.0	ug/L	3	20	
Chromium	E	200.0	210.2	ug/L	5	20	
Cobalt	E	200.0	199.9	ug/L	0	20	
Copper	E	200.0	187.9	ug/L	-6	20	
Manganese	E	200.0	210.6	ug/L	5	20	
Nickel	E	200.0	191.2	ug/L	-4	20	
Sodium	E	250000	268200	ug/L	7		
Vanadium	E	200.0	218.0	ug/L	9	20	
Zinc	E	100.0	101.3	ug/L	1	20	
Iron	H	250000	244500	ug/L	-2		
Selenium	H	100.0	97.23	ug/L	-3	20	

ISTD (ICALBLK h21r0003)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	665562	531473	-20.15
Scandium	A	1842296	1562008	-15.21
Scandium	E	111545	92349	-17.21
Germanium	H	129939	90578	-30.29
Germanium	E	47886	37430	-21.84
Indium	A	1136733	816122	-28.20
Yttrium	A	1877282	1391823	-25.86

SEQUENCE SUMMARY

Curtis & Tompkins Laboratories

Sequence: 66336549 Instrument: MET06
 Analytical Method: EPA 6020 Agilent ICP-MS MET06
 SOP Version: 6020_rv2

Begun: 21-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
001	h21r0001	TUN				21-AUG-2006 17:09	1.0	1.0				1		
002	h21r0002	X	RINSE			21-AUG-2006 17:18	1.0					2		
003	h21r0003	ICALBLK	CALBLANK			21-AUG-2006 17:25	1.0	1.0				2		
004	h21r0004	ICAL				21-AUG-2006 17:33	1.0	1.0				3		
005	h21r0005	ICAL				21-AUG-2006 17:40	1.0	1.0				4		
006	h21r0006	ICAL				21-AUG-2006 17:47	1.0	1.0				5		
007	h21r0007	ICAL				21-AUG-2006 17:55	1.0	1.0				6		
008	h21r0008	ICAL				21-AUG-2006 18:02	1.0	1.0				7		
009	h21r0009	ICAL				21-AUG-2006 18:09	1.0	1.0				8		
010	h21r0010	X	RINSE			21-AUG-2006 18:17	1.0					2		
011	h21r0011	X				21-AUG-2006 18:24	1.0					9		
012	h21r0012	ICV				21-AUG-2006 18:34	1.0	1.0				9	2	
013	h21r0013	X	RINSE			21-AUG-2006 18:41	1.0					2		
014	h21r0014	X				21-AUG-2006 18:49	1.0					2		
015	h21r0015	X				21-AUG-2006 18:56	1.0					2		
016	h21r0016	ICB				21-AUG-2006 19:13	1.0	1.0				2		
017	h21r0017	X				21-AUG-2006 19:20	1.0					2		
018	h21r0018	ICSA				21-AUG-2006 19:27	1.0	1.0				10	2	7:CA=329300
019	h21r0019	ICSAB				21-AUG-2006 19:35	1.0	1.0				11	2	10:CA=317800
020	h21r0020	X	RINSE			21-AUG-2006 19:42	1.0					2		
021	h21r0021	X	RINSE			21-AUG-2006 19:50	1.0					2		
022	h21r0022	X	RINSE			21-AUG-2006 19:57	1.0					2		
023	h21r0023	BLANK				21-AUG-2006 20:05	1.0	1.0				2		
024	h21r0024	BS				21-AUG-2006 20:12	10.0	1.0				2		
025	h21r0025	BSD				21-AUG-2006 20:19	10.0	1.0				2		
026	h21r0026	X	RINSE			21-AUG-2006 20:27	1.0	1.0				2		
027	h21r0027	MSS				21-AUG-2006 20:34	10.0	1.0				2		
028	h21r0028	SER				21-AUG-2006 20:42	50.0	1.0				2		
029	h21r0029	MS				21-AUG-2006 20:49	10.0	1.0				2		
030	h21r0030	MSD				21-AUG-2006 20:56	10.0	1.0				2		

Stds used: 1=S4021 2=S3310 3=S4003 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S3780 13=S4009
 Flags used: spk=5% spike rule

Analyst:  Date: _____

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 66336549 Instrument: MET06
Analytical Method: EPA 6020 Agilent ICP-MS MET06
SOP Version: 6020_rv2

Begun: 21-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds Used	>LR
031	h21r0031	PDS	QC352583	116572	Filtera	21-AUG-2006 21:04	10.0	1.0			1	12	
032	h21r0032	X	RINSE			21-AUG-2006 21:11	1.0					2	
033	h21r0033	X	RINSE			21-AUG-2006 21:18	1.0					2	
034	h21r0034	CCV				21-AUG-2006 21:26	1.0				1	13	
035	h21r0035	X	RINSE			21-AUG-2006 21:33	1.0					2	
036	h21r0036	CCB				21-AUG-2006 21:40	1.0				1	2	
037	h21r0037	X				21-AUG-2006 21:48	1.0					2	
038	h21r0038	X	RINSE			21-AUG-2006 21:55	1.0					2	
039	h21r0039	SAMPLE	188774-001	116572	Filtera	21-AUG-2006 22:03	10.0	1.0			1	2	1:NA=21560.0
040	h21r0040	SAMPLE	188774-002	116572	Filtera	21-AUG-2006 22:10	10.0	1.0			1	2	2:NA=21070.0
041	h21r0041	SAMPLE	188774-004	116572	Filtera	21-AUG-2006 22:18	10.0	1.0			1	2	
042	h21r0042	SAMPLE	188774-006	116572	Filtera	21-AUG-2006 22:25	10.0	1.0			1	2	
043	h21r0043	SAMPLE	188774-010	116572	Filtera	21-AUG-2006 22:32	10.0	1.0			1	2	
044	h21r0044	SAMPLE	188774-011	116572	Filtera	21-AUG-2006 22:40	10.0	1.0			1	2	
045	h21r0045	SAMPLE	188774-012	116572	Filtera	21-AUG-2006 22:47	10.0	1.0			1	2	spk
046	h21r0046	SAMPLE	188774-013	116572	Filtera	21-AUG-2006 22:55	10.0	1.0			1	2	1:NA=22950.0
047	h21r0047	SAMPLE	188774-014	116572	Filtera	21-AUG-2006 23:02	10.0	1.0			1	2	1:NA=24280.0
048	h21r0048	SAMPLE	188774-015	116572	Filtera	21-AUG-2006 23:09	10.0	1.0			1	2	
049	h21r0049	X	RINSE			21-AUG-2006 23:17	1.0					2	
050	h21r0050	X	RINSE			21-AUG-2006 23:24	1.0					2	
051	h21r0051	CCV				21-AUG-2006 23:32	1.0				1	13	
052	h21r0052	X	RINSE			21-AUG-2006 23:39	1.0					2	
053	h21r0053	CCB				21-AUG-2006 23:46	1.0				1	2	
054	h21r0054	X				21-AUG-2006 23:54	1.0					2	
055	h21r0055	SAMPLE	188774-016	116572	Filtera	22-AUG-2006 00:01	10.0	1.0			1	2	1:NA=22140.0
056	h21r0056	SAMPLE	188774-017	116572	Filtera	22-AUG-2006 00:09	10.0	1.0			1	2	
057	h21r0057	SAMPLE	188774-018	116572	Filtera	22-AUG-2006 00:16	10.0	1.0			1	2	1:NA=22290.0
058	h21r0058	SAMPLE	188774-019	116572	Filtera	22-AUG-2006 00:23	10.0	1.0			1	2	1:NA=24260.0
059	h21r0059	SAMPLE	188774-001	116572	Water	22-AUG-2006 00:31	10.0	1.0			1	2	1:NA=22450.0
060	h21r0060	SAMPLE	188774-002	116572	Water	22-AUG-2006 00:38	10.0	1.0			2	2	2:NA=20620.0

Stds used: 1=S4021 2=S3310 3=S4003 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S3780 13=S4009
Flags used: spk=5% spike rule

Analyst:

Date:

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 66336549 Instrument: MET06
Analytical Method: EPA 6020 Agilent ICP-MS MET06
SOP Version: 6020_rv2

Begun: 21-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	UL	Std's	Used	>LR
061	h21r0061	X	RINSE			22-AUG-2006 00:46	1.0					2		
062	h21r0062	X	RINSE			22-AUG-2006 00:53	1.0					2		
063	h21r0063	CCV				22-AUG-2006 01:00	1.0					13		
064	h21r0064	X	RINSE			22-AUG-2006 01:08	1.0					2		
065	h21r0065	CCB				22-AUG-2006 01:15	1.0					2		
066	h21r0066	X				22-AUG-2006 01:23	1.0					2		
067	h21r0067	ICSA				22-AUG-2006 01:30	1.0					10 2		7:CA=329400
068	h21r0068	ICSAB				22-AUG-2006 01:37	1.0					11 2		10:CA=318800

Std's used: 1=S4021 2=S3310 3=S4003 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S3780 13=S4009
Flags used: spk=5% spike rule

Analyst: AD Date: 8/22/06

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET05
 Calnum : 56337726001
 Units : ug/L

Date : 22-AUG-2006 12:58
 X Axis : R

Reviewer: ---

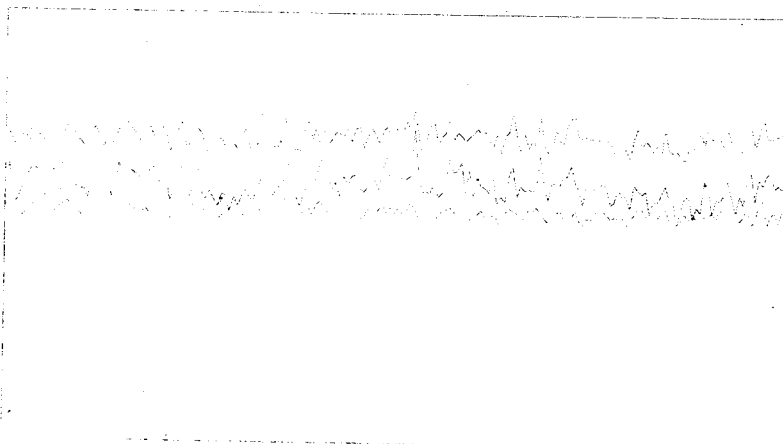
Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	h2212004	56337726004	CS1	22-AUG-2006 13:04	S4004
L2	h2212005	56337726005	CS2	22-AUG-2006 13:09	S4005
L3	h2212006	56337726006	CS3	22-AUG-2006 13:15	S4006
L4	h2212007	56337726007	CS4	22-AUG-2006 13:21	S4007
L5	h2212008	56337726008	CS5	22-AUG-2006 13:26	S4001
L6	h2212009	56337726009	CS6	22-AUG-2006 13:32	S4002

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ²	%RSD	MNR ²	Fig
Aluminum		0.9819	0.9169	0.9187	0.9527	0.9146	BLNK	-10.706	1.08504		0.9370	1.000	0.995		
Antimony	0.2872	0.2584	0.2438	0.2459	0.2532	0.2602	BLNK	-0.0333	3.86503		0.2581	1.000	0.995		
Arsenic		0.6880	0.5860	0.4354	0.4348	0.4393	BLNK	-0.2798	2.28508		0.5167	1.000	0.995		
Barium	0.1526	0.1407	0.1243	0.1075	0.1114	0.1141	BLNK	-0.1073	8.81434		0.1251	1.000	0.995		
Beryllium	0.1648	0.1547	0.1571	0.1506	0.1509	0.1506	BLNK	-0.0577	6.64112		0.1548	1.000	0.995		
Cadmium	0.5258	0.4455	0.4125	0.3343	0.3196	0.3222	BLNK	-0.2222	3.11296		0.3933	1.000	0.995		
Calcium		0.0304	0.0244	0.0188	0.0198	0.0199	BLNK	-38.757	50.4782		0.0227	1.000	0.995		
Chromium		6.4606	4.4250	2.7628	2.5654	2.5539	BLNK	-0.7424	0.39294		3.7535	1.000	0.995		
Cobalt	3.5989	3.3462	3.3356	3.2530	3.1339	3.1558	BLNK	-0.0377	0.31737		3.3039	1.000	0.995		
Copper		1.2334	1.0593	0.8477	0.8002	0.8018	BLNK	-0.1895	1.24898		0.9485	1.000	0.995		
Iron		0.1823	0.1289	0.0771	0.0766	0.0757	BLNK	-76.223	13.2393		0.1081	1.000	0.995		
Lead	1.1340	1.0079	0.9802	0.9264	0.9830	0.9598	BLNK	-0.0392	1.03721		0.9985	1.000	0.995		
Magnesium		0.1302	0.1172	0.1095	0.1207	0.1162	BLNK	-8.5329	8.54269		0.1188	1.000	0.995		
Manganese	6.7231	4.9079	4.4003	3.5698	3.4509	3.6300	BLNK	-0.2118	0.27860		4.4470	0.999	0.995		
Molybdenum		1.3960	1.0073	0.7368	0.7084	0.7200	BLNK	-0.7648	1.39994		0.9137	1.000	0.995		
Nickel	1.3322	0.8506	0.8262	0.7279	0.6801	0.6825	BLNK	-0.1389	1.46737		0.8499	1.000	0.995		
Potassium		2.9961	1.9753	0.8406	0.7507	0.7263	BLNK	-159.05	1.38073		1.4578	1.000	0.995		
Selenium		0.1116	0.0770	0.0307	0.0288	0.0282	BLNK	-1.8381	35.7504		0.0553	1.000	0.995		
Silver	1.7537	1.6467	1.6211	1.5829	1.5674	1.5671	BLNK	-0.0136	0.63815		1.6235	1.000	0.995		
Sodium		2.9643	2.1221	1.3194	1.2592	1.2232	BLNK	-61.489	0.81571		1.7776	1.000	0.995		
Thallium		0.7013	0.6994	0.6334	0.6729	0.6953	BLNK	-0.0544	1.44874		0.6805	1.000	0.995		
Vanadium		4.1116	2.8810	2.9556	2.8821	2.9135	BLNK	-0.1640	0.34431		3.1488	1.000	0.995		
Zinc		2.0577	1.6043	0.5201	0.4250	0.4113	BLNK	-1.4674	2.43591		1.0037	1.000	0.995		

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=AX+[blank]
 Page 1 of 1

Tune Report

Tune File : Autotune.u



m/z:	7	89	205
Range:	20,000	20,000	20,000
Count:	11,999	14,586	11,086
Mean:	11960.6	14247.5	10696.9
RSD%:	5.08	3.36	2.43
n:	200		

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec

Oxide: 156/140 0.38%
Doubly Charged: 70/140 0.89%

m/z:	7	89	205
Cps:	42.3	16.6	15.0

m/z:	7	89	205
Height:	12,320	14,308	12,018
Axis:	6.90	89.00	204.90
W-50%:	0.65	0.60	0.60
W-10%:	0.7500	0.700	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Tuning Parameters

===Plasma Condition===

RF Power: 1300 W
RF Matching: 1.7 V
Smpl Depth: 8 mm
Torch-H: 0.2 mm
Torch-V: -0.2 mm
Carrier Gas: 1.07 L/min
Makeup Gas: 0 L/min
Optional Gas: --- %
PeriPump1: 0.1 rps
PeriPump2: --- rps
S/C Temp: 2 degC

===Ion Lenses===

Extract 1: -110 V
Extract 2: -70 V
Einzel 1,3: -110 V
Einzel 2: 7 V
Omega Bias: -85 V
Omega (+): 5 V
Omega (-): -5 V
QP Focus: 9 V
Plate Bias: -5 V

===Q-Pole Parameters===

AMU Gain: 130
AMU Offset: 126
Axis Gain: 0.9993
Axis Offset: -0.1
QP Bias: 1.6 V

===Detector Parameters===

Discriminator: 8.8 mV
Analog HV: 1860 V
Pulse HV: 1590 V

P/A Factor Tuning Report

Acquired: Aug 22 2006 06:23 am

Mass[amu]	Element	P/A Factor
6	Li	0.073972
9	Be	0.083259
23	Na	Sensitivity too high
25	Mg	Sensitivity too high
26	Mg	Sensitivity too high
27	Al	0.099365
39	K	Sensitivity too high
43	Ca	0.098734
44	Ca	0.104176
45	Sc	Sensitivity too low
51	V	0.103652
52	Cr	0.105117
53	Cr	Sensitivity too low
54	Fe	Sensitivity too high
55	Mn	0.107362
57	Fe	0.110309
59	Co	0.110197
60	Ni	0.107001
63	Cu	0.111611
65	Cu	0.109836
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
77	(As)	Sensitivity too low
82	Se	Sensitivity too low
83	(As)	Sensitivity too low
88	(Ca)	Sensitivity too low
89	Y	0.105699
95	Mo	0.105909
98	Mo	0.107833
99	(Mo)	Sensitivity too low
106	(Cd)	Sensitivity too low
108	(Cd)	Sensitivity too low
109	Ag	0.114297
111	Cd	Sensitivity too low
114	Cd	0.113501
115	In	0.111835
118	(In)	Sensitivity too high
121	Sb	0.114954
135	Ba	Sensitivity too low
137	Ba	0.111754
159	Tb	0.115172
166	Er	Sensitivity too low

Temp.p\$\$
205 Tl 0.124718
206 (Pb) 0.121201
207 (Pb) 0.120328
208 Pb 0.123189
209 Bi Sensitivity too low

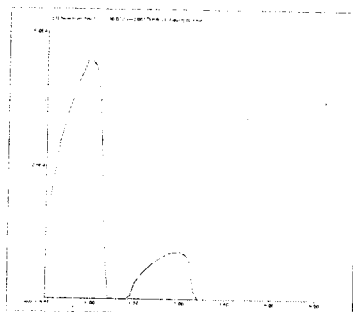
===Detector Parameters===

Discriminator: 8.8 mV
Analog HV: 1860 V
Pulse HV: 1590 V

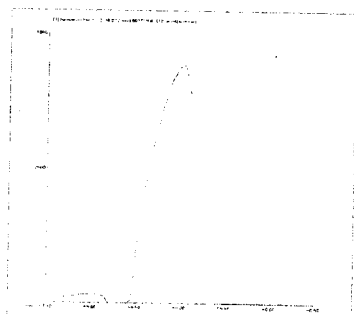
6020 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\06H2212a.B\001TUNE.D
Date Acquired: Aug 22 2006 12:46 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s4021
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

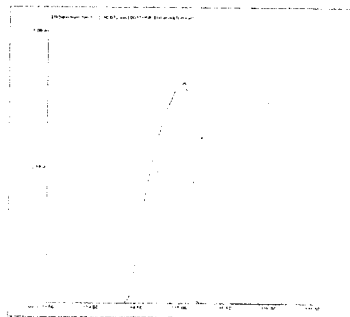
RSD (%)	Element	Actual	Required	Flag
	7 Li	1.61	5.00	
	59 Co	0.99	5.00	
	115 In	0.69	5.00	
	205 Tl	1.95	5.00	



7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.55
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.05
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



115 In

Mass Calib.

Actual: 115.05

Required: 114.90 - 115.10

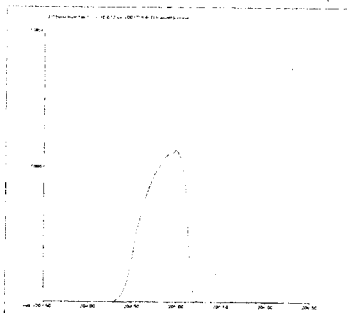
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



205 Tl

Mass Calib.

Actual: 205.00

Required: 204.90 - 205.10

Flag:

Peak Width

Actual: 0.55

Required: 0.90

Flag:

Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06H2212a.B\002BLNK.D\002BLNK.D#
 Date Acquired: Aug 22 2006 12:53 pm
 Acq. Method: 60200111.M
 Operator:
 Sample Name: rinse
 Misc Info:
 Vial Number: 1101
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal. Update: Aug 22 2006 07:45 am
 Sample Type: 6-Blank
 Dilution Factor: 1.00

QC Elements

Element	Corr. Conc.	RSD(%)	Raw Conc.	High Limit	Flag
9 Be	-0.07051 ppb	7.33	-0.07051	1.00	
23 Na	-14.64 ppb	3.99	-14.64	1.00	
26 Mg	-2.117 ppb	15.43	-2.117	1.00	
27 Al	0.2181 ppb	112.75	0.2181	1.00	
39 K	-3.449 ppb	42.56	-3.449	1.00	
44 Ca	-7.419 ppb	6.32	-7.419	1.00	
51 V	-0.09557 ppb	45.87	-0.09557	1.00	
52 Cr	-0.1293 ppb	14.62	-0.1293	1.00	
55 Mn	-0.04527 ppb	10.18	-0.04527	1.00	
57 Fe	-2.676 ppb	82.47	-2.676	1.00	
59 Co	-0.02805 ppb	17.12	-0.02805	1.00	
60 Ni	-0.08254 ppb	25.79	-0.08254	1.00	
65 Cu	-1.719 ppb	1.81	-1.719	1.00	
66 Zn	-1.862 ppb	2.39	-1.862	1.00	
75 As	-0.3521 ppb	49.05	-0.3521	1.00	
82 Se	-0.3218 ppb	257.99	-0.3218	1.00	
95 Mo	0.5452 ppb	12.50	0.5452	1.00	
109 Ag	-0.02232 ppb	7.84	-0.02232	1.00	
111 Cd	-0.01699 ppb	96.59	-0.01699	1.00	
121 Sb	-0.03268 ppb	11.39	-0.03268	1.00	
137 Ba	0.01137 ppb	118.73	0.01137	1.00	
205 Tl	0.01944 ppb	88.68	0.01944	1.00	
208 Pb	-0.02823 ppb	38.90	-0.02823	1.00	

ISTD Elements

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	433737.78	1.17	---		#VALUE!	80 - 120	
45 Sc	225004.44	1.32	---		#VALUE!	80 - 120	
72 Ge	61619.56	0.96	---		#VALUE!	80 - 120	
115 In	340399.50	1.08	---		#VALUE!	80 - 120	
209 Bi	375727.78	1.17	---		#VALUE!	80 - 120	

ISTD Ref File : ---

0 :Element Failures	0 :Max. Number of Failures Allowed
0 :ISTD Failures	0 :Max. Nnumber of ISTD Failures Allowed

QC Results:

Analytes:	Pass
ISTD:	Pass

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06H2212a.B\003CAL
 Date Acquired: Aug 22 2006 12:58 pm
 Operator:
 Sample Name: std-blank
 Misc Info:
 Vial Number: 1101
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\602001
 Last Cal Update: Aug 22 2006 07:45 am
 Sample Type: CalBlk
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	434401.09 P	4709.00	1.08
9 Be	75.56 P	15.03	19.89
23 Na	346405.50 P	6214.00	1.79
26 Mg	4594.44 P	333.40	7.26
27 Al	45330.00 P	534.90	1.18
39 K	529294.38 P	1819.00	0.34
44 Ca	3528.14 P	89.42	2.53
45 Sc	229817.80 P	5413.00	2.36
51 V	593.63 P	661.60	111.45
52 Cr	2352.22 P	121.20	5.15
55 Mn	946.67 P	97.70	10.32
57 Fe	7167.78 P	138.30	1.93
59 Co	147.78 P	30.97	20.96
60 Ni	117.78 P	10.18	8.64
65 Cu	188.87 P	15.03	7.96
66 Zn	750.00 P	23.33	3.11
72 Ge	62250.00 P	295.80	0.48
75 As	152.43 P	43.28	28.39
82 Se	64.00 P	9.26	14.47
95 Mo	680.00 P	35.28	5.19
109 Ag	26.67 P	15.28	57.30
111 Cd	88.87 P	25.11	28.26
115 In	342259.00 P	1637.00	0.48
121 Sb	58.89 P	11.71	19.89
137 Ba	83.33 P	12.02	14.42
205 Tl	283.33 P	43.59	15.39
208 Pb	285.56 P	35.01	12.26
209 Bi	377532.19 P	1857.00	0.49

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2212a.B\004CALI.D\004CALI.D#
 Date Acquired: Aug 22 2006 01:04 pm
 Operator:
 Sample Name: cs1,s4004
 Misc Info:
 Vial Number: 1102
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 22 2006 01:00 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	442728.91 P	6940.00	1.57
9 Be	364.44 P	33.39	9.16
23 Na	555986.63 P	15040.00	2.71
26 Mg	18128.89 P	247.90	1.37
27 Al	138320.00 P	873.50	0.63
39 K	623207.69 P	5487.00	0.88
44 Ca	5624.16 P	267.50	4.76
45 Sc	230097.80 P	3253.00	1.41
51 V	1391.99 P	410.00	29.45
52 Cr	3200.00 P	66.92	2.09
55 Mn	2108.89 P	77.05	3.65
57 Fe	9684.44 P	195.60	2.02
59 Co	1128.89 P	30.06	2.66
60 Ni	417.78 P	34.21	8.19
65 Cu	503.25 P	32.83	6.52
66 Zn	1246.67 P	69.84	5.60
72 Ge	62735.11 P	254.00	0.40
75 As	171.05 P	21.93	12.82
82 Se	32.89 P	16.63	50.56
95 Mo	785.56 P	28.74	3.66
109 Ag	550.00 P	38.44	6.99
111 Cd	164.88 P	19.86	12.05
115 In	345082.00 P	1017.00	0.29
121 Sb	495.56 P	58.53	11.81
137 Ba	263.33 P	3.33	1.27
205 Tl	860.00 P	49.10	5.71
208 Pb	2148.89 P	45.50	2.12
209 Bi	378968.91 P	3021.00	0.80

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	442728.88	1.57	434401.09	101.9	80 - 120	

45 Sc	230097.78	1.41	229817.78	100.1	80 -	120
72 Ge	62735.11	0.40	62250.00	100.8	80 -	120
115 In	345082.00	0.29	342258.97	100.8	80 -	120
209 Bi	378968.88	0.80	377532.19	100.4	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2212a.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2212a.B\005CALI.D\005CALI.D#
 Date Acquired: Aug 22 2006 01:09 pm
 Operator:
 Sample Name: cs2,s4005
 Misc Info:
 Vial Number: 1103
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 22 2006 01:05 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	448431.50 M	9664.00	2.16
9 Be	693.33 P	11.55	1.67
23 Na	692961.13 M	51110.00	7.38
26 Mg	30450.00 P	500.80	1.64
27 Al	229562.20 P	2744.00	1.20
39 K	700412.19 P	11840.00	1.69
44 Ca	7115.78 P	30.33	0.43
45 Sc	233786.70 P	1172.00	0.50
51 V	2587.74 P	474.90	18.35
52 Cr	4067.78 P	141.30	3.47
55 Mn	3090.00 P	62.27	2.02
57 Fe	11475.56 P	204.50	1.78
59 Co	2106.67 P	56.08	2.66
60 Ni	535.56 P	7.70	1.44
65 Cu	776.53 P	13.33	1.72
66 Zn	1295.56 P	23.41	1.81
72 Ge	62958.67 P	208.10	0.33
75 As	433.00 P	75.08	17.34
82 Se	70.22 P	23.42	33.35
95 Mo	878.89 P	21.17	2.41
109 Ag	1037.78 P	92.52	8.92
111 Cd	280.48 P	7.23	2.58
115 In	349623.91 P	3787.00	1.08
121 Sb	903.33 P	39.30	4.35
137 Ba	492.22 P	84.94	17.26
205 Tl	1365.56 P	39.06	2.86
208 Pb	3924.44 P	96.97	2.47
209 Bi	389404.41 P	1112.00	0.29

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	448431.53	2.16	434401.09	103.2	80 - 120	

45	Sc	233786.66	0.50	229817.78	101.7	80 -	120
72	Ge	62958.67	0.33	62250.00	101.1	80 -	120
115	In	349623.94	1.08	342258.97	102.2	80 -	120
209	Bi	389404.44	0.29	377532.19	103.1	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2212a.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2212a.B\006CALI.D\006CALI.D#
 Date Acquired: Aug 22 2006 01:15 pm
 Operator:
 Sample Name: cs3,s4006
 Misc Info:
 Vial Number: 1104
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 22 2006 01:11 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	440062.19 P	3779.00	0.86
9 Be	1382.22 P	36.87	2.67
23 Na	981403.63 A	21120.00	2.15
26 Mg	54194.44 P	655.30	1.21
27 Al	424005.50 P	8621.00	2.03
39 K	913520.81 A	9219.00	1.01
44 Ca	11287.77 P	98.75	0.87
45 Sc	231308.91 P	3938.00	1.70
51 V	3608.64 P	430.30	11.92
52 Cr	5541.11 P	176.30	3.18
55 Mn	5510.00 P	191.50	3.48
57 Fe	16137.78 P	170.20	1.05
59 Co	4176.67 P	17.32	0.41
60 Ni	1034.44 P	65.35	6.32
65 Cu	1326.43 P	69.36	5.23
66 Zn	2008.89 P	58.91	2.93
72 Ge	62609.56 P	233.20	0.37
75 As	733.80 P	26.25	3.58
82 Se	96.44 P	13.36	13.85
95 Mo	1261.11 P	66.78	5.30
109 Ag	2030.00 P	43.59	2.15
111 Cd	516.43 P	63.13	12.22
115 In	344133.31 P	1278.00	0.37
121 Sb	1677.78 P	56.80	3.39
137 Ba	855.56 P	54.81	6.41
205 Tl	2694.44 P	5.09	0.19
208 Pb	7553.33 P	275.10	3.64
209 Bi	385283.31 P	4998.00	1.30

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	440062.22	0.86	434401.09	101.3	80 - 120	

45	Sc	231308.88	1.70	229817.78	100.6	80 -	120
72	Ge	62609.56	0.37	62250.00	100.6	80 -	120
115	In	344133.28	0.37	342258.97	100.5	80 -	120
209	Bi	385283.31	1.30	377532.19	102.1	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2212a.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

CURTIS & TOMPKINS SPIKE USER REPORT FOR 188732 METALS Filtrate
EPA 6020

Type : MS
Inst : MET05
Seqnum: 56331958020.2
File : h1812020
IDF : 1.0
Lab ID: QC351987
Matrix: Filtrate
Batch : 116431
Time : 18-AUG-2006 14:30
Cal : 56331958001
MSS : 188732-004

Type : MSD
Inst : MET05
Seqnum: 56331958021.2
File : h1812021
IDF : 1.0
Lab ID: QC351988
Matrix: Filtrate
Batch : 116431
Time : 18-AUG-2006 14:36
Cal : 56331958001
Units : ug/L

MS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
MSD: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	MSS Seqnum	Result	Spiked	MS	%Rec	MSD	%Rec	Limits	RPD	Lim	Flags
Arsenic	56330444167	5.479	100.0	99.97	94	101.8	96	80-120	2	20	u
Iron	56331958034	34710	10000	8576	-261*	8674	-260*	79-120	1	20	u
Manganese	56331958034	302.0	100.0	107.7	-194*	110.2	-192*	76-121	2	20	u

ISTD (ICALBLK h1812003)		ICALBLK Abund	MS Abund	%Drift
Germanium		60136	54716	-9.01

ISTD (ICALBLK h1812003)		ICALBLK Abund	MSD Abund	%Drift
Germanium		60136	53280	-11.40

CURTIS & TOMPKINS SPIKE USER REPORT FOR EPA 6020

Type : MS
 Inst : MET05
 Seqnum: 56331958020
 File : h1812020
 IDF : 1.0
 Lab ID: QC351987
 Matrix: Filtrate
 Batch : 116431
 Time : 18-AUG-2006 14:30
 Cal : 56331958001
 MSS : 188732-004

Type : MSD
 Inst : MET05
 Seqnum: 56331958021
 File : h1812021
 IDF : 1.0
 Lab ID: QC351988
 Matrix: Filtrate
 Batch : 116431
 Time : 18-AUG-2006 14:36
 Cal : 56331958001
 Units : ug/L

MS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
 MSD: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	MSS Seqnum	Result	Spiked	MS	%Rec	MSD	%Rec	Limits	RPD	Lim	Flags
Antimony	56330444150	0.4119	100.0	96.47	96	98.10	98	80-120	2	20	
Arsenic	56330444167	5.479	100.0	99.97	94	101.8	96	80-120	2	20	u
Barium	56330444150	131.5	100.0	117.5	-14*	118.9	-13*	75-126	1	20	
Beryllium	56330444150	0.6922	100.0	101.5	101	102.9	102	80-120	1	20	
Cadmium	56330444150	ND	100.0	88.39	88	89.85	90	76-120	2	20	
Calcium	56331958034	37510	10000	34140 >LR	-34	35050 >LR	-25	68-128		20	>LR b*
Chromium	56330444150	33.87	100.0	92.03	58*	94.03	60*	78-120	2	20	
Cobalt	56330444150	11.83	100.0	91.32	79*	93.40	82	80-120	2	20	
Copper	56330444150	17.58	100.0	93.40	76*	96.04	78*	80-120	3	20	
Iron	56331958034	34710	10000	8576	-261*	8674	-260*	79-120	1	20	u
Lead	56330444150	7.667	100.0	95.83	88	98.58	91	80-120	3	20	
Magnesium	56331958034	23600	10000	25290 >LR	17	26350 >LR	28	66-130		20	>LR b*
Manganese	56331958034	302.0	100.0	107.7	-194*	110.2	-192*	76-121	2	20	u
Molybdenum	56330444150	7.856	100.0	103.1	95	106.1	98	80-120	3	20	
Nickel	56330444150	15.11	100.0	92.35	77	95.23	80	77-120	3	20	
Potassium	56330444150	13970	10000	18230	43*	18820	49*	77-120	3	20	
Selenium	56330444150	0.6727	100.0	90.64	90	92.73	92	65-120	2	20	
Silver	56330444150	0.09884	100.0	89.15	89	91.28	91	73-120	2	20	
Thallium	56330444150	0.6218	50.00	44.84	88	47.86	94	64-120	7	20	
Vanadium	56330444150	72.95	100.0	93.20	20*	95.71	23*	78-122	3	20	
Zinc	56330444150	72.19	100.0	107.3	35*	95.94	24*	60-124	11	20	

ISTD (ICALBLK h1812003)	ICALBLK Abund	MS Abund	%Drift
Lithium	379257	332219	-12.40
Scandium	243668	215906	-11.39
Germanium	60136	54716	-9.01
Indium	386743	311674	-19.41
Bismuth	407406	338376	-16.94

ISTD (ICALBLK h1812003)	ICALBLK Abund	MSD Abund	%Drift
Lithium	379257	327503	-13.65
Scandium	243668	210779	-13.50
Germanium	60136	53280	-11.40
Indium	386743	304327	-21.31
Bismuth	407406	325760	-20.04

MISSING READINGS: AL NA

>LR=overrange b=noncompliant u=use

CURTIS & TOMPKINS SPIKE USER REPORT FOR 188732 METALS Water
EPA 6020

Type : MS
Inst : MET05
Seqnum: 56331958020.1
File : h1812020
IDF : 1.0
Lab ID: QC351987
Matrix: Filtrate
Batch : 116431
Time : 18-AUG-2006 14:30
Cal : 56331958001
MSS : 188732-004

Type : MSD
Inst : MET05
Seqnum: 56331958021.1
File : h1812021
IDF : 1.0
Lab ID: QC351988
Matrix: Filtrate
Batch : 116431
Time : 18-AUG-2006 14:36
Cal : 56331958001
Units : ug/L

MS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
MSD: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	MSS Seqnum	Result	Spiked	MS	%Rec	MSD	%Rec	Limits	RPD	Lim	Flags
Arsenic	56330444167	5.479	100.0	99.97	94	101.8	96	80-120	2	20	u
Iron	56331958034	34710	10000	8576	-261*	8674	-260*	79-120	1	20	u
Manganese	56331958034	302.0	100.0	107.7	-194*	110.2	-192*	76-121	2	20	u

ISTD (ICALBLK h1812003)	ICALBLK Abund	MS Abund	%Drift
Germanium	60136	54716	-9.01

ISTD (ICALBLK h1812003)	ICALBLK Abund	MSD Abund	%Drift
Germanium	60136	53280	-11.40

CURTIS & TOMPKINS SPIKE USER REPORT FOR 188732 METALS Filtrate
EPA 6020

Type : MS
Inst : MET05
Seqnum: 56331958020.2
File : h1812020
IDF : 1.0
Lab ID: QC351987
Matrix: Filtrate
Batch : 116431
Time : 18-AUG-2006 14:30
Cal : 56331958001
MSS : 188732-004

Type : MSD
Inst : MET05
Seqnum: 56331958021.2
File : h1812021
IDF : 1.0
Lab ID: QC351988
Matrix: Filtrate
Batch : 116431
Time : 18-AUG-2006 14:36
Cal : 56331958001
Units : ug/L

MS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
MSD: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	MSS Seqnum	Result	Spiked	MS	%Rec	MSD	%Rec	Limits	RPD	Lim	Flags
Arsenic	56330444150	14.64	100.0	99.97	85	101.8	87	80-120	2	20	u
Iron	56331958034	34710	10000	8576	-261*	8674	-260*	79-120	1	20	u
Manganese	56331958034	302.0	100.0	107.7	-194*	110.2	-192*	76-121	2	20	u

ISTD (ICALBLK h1812003)		ICALBLK Abund	MS Abund	%Drift
Germanium		60136	54716	-9.01

ISTD (ICALBLK h1812003)		ICALBLK Abund	MSD Abund	%Drift
Germanium		60136	53280	-11.40

CURTIS & TOMPKINS SPIKE USER REPORT FOR EPA 6020

Type : MS
 Inst : MET05
 Seqnum: 56331958020
 File : h1812020
 IDF : 1.0
 Lab ID: QC351987
 Matrix: Filtrate
 Batch : 116431
 Time : 18-AUG-2006 14:30
 Cal : 56331958001
 MSS : 188732-004

Type : MSD
 Inst : MET05
 Seqnum: 56331958021
 File : h1812021
 IDF : 1.0
 Lab ID: QC351988
 Matrix: Filtrate
 Batch : 116431
 Time : 18-AUG-2006 14:36
 Cal : 56331958001
 Units : ug/L

MS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
 MSD: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	MSS Seqnum	Result	Spiked	MS	%Rec	MSD	%Rec	Limits	RPD	Lim	Flags
Antimony	56330444150	0.4119	100.0	96.47	96	98.10	98	80-120	2	20	
Arsenic	56330444150	14.64	100.0	99.97	85	101.8	87	80-120	2	20	u
Barium	56330444150	131.5	100.0	117.5	-14*	118.9	-13*	75-126	1	20	
Beryllium	56330444150	0.6922	100.0	101.5	101	102.9	102	80-120	1	20	
Cadmium	56330444150	ND	100.0	88.39	88	89.85	90	76-120	2	20	
Calcium	56331958034	37510	10000	34140 >LR	-34	35050 >LR	-25	68-128		20	>LR b*
Chromium	56330444150	33.87	100.0	92.03	58*	94.03	60*	78-120	2	20	
Cobalt	56330444150	11.83	100.0	91.32	79*	93.40	82	80-120	2	20	
Copper	56330444150	17.58	100.0	93.40	76*	96.04	78*	80-120	3	20	
Iron	56331958034	34710	10000	8576	-261*	8674	-260*	79-120	1	20	u
Lead	56330444150	7.667	100.0	95.83	88	98.58	91	80-120	3	20	
Magnesium	56331958034	23600	10000	25290 >LR	17	26350 >LR	28	66-130		20	>LR b*
Manganese	56331958034	302.0	100.0	107.7	-194*	110.2	-192*	76-121	2	20	u
Molybdenum	56330444150	7.856	100.0	103.1	95	106.1	98	80-120	3	20	
Nickel	56330444150	15.11	100.0	92.35	77	95.23	80	77-120	3	20	
Potassium	56330444150	13970	10000	18230	43*	18820	49*	77-120	3	20	
Selenium	56330444150	0.6727	100.0	90.64	90	92.73	92	65-120	2	20	
Silver	56330444150	0.09884	100.0	89.15	89	91.28	91	73-120	2	20	
Thallium	56330444150	0.6218	50.00	44.84	88	47.86	94	64-120	7	20	
Vanadium	56330444150	72.95	100.0	93.20	20*	95.71	23*	78-122	3	20	
Zinc	56330444150	72.19	100.0	107.3	35*	95.94	24*	60-124	11	20	

ISTD (ICALBLK h1812003)	ICALBLK Abund	MS Abund	%Drift
Lithium	379257	332219	-12.40
Scandium	243668	215906	-11.39
Germanium	60136	54716	-9.01
Indium	386743	311674	-19.41
Bismuth	407406	338376	-16.94

ISTD (ICALBLK h1812003)	ICALBLK Abund	MSD Abund	%Drift
Lithium	379257	327503	-13.65
Scandium	243668	210779	-13.50
Germanium	60136	53280	-11.40
Indium	386743	304327	-21.31
Bismuth	407406	325760	-20.04

MISSING READINGS: AL NA

>LR=overrange b=noncompliant u=use

CURTIS & TOMPKINS SPIKE USER REPORT FOR 188732 METALS Water
EPA 6020

Type : MS
Inst : MET05
Seqnum: 56331958020.1
File : h1812020
IDF : 1.0
Lab ID: QC351987
Matrix: Filtrate
Batch : 116431
Time : 18-AUG-2006 14:30
Cal : 56331958001
MSS : 188732-004

Type : MSD
Inst : MET05
Seqnum: 56331958021.1
File : h1812021
IDF : 1.0
Lab ID: QC351988
Matrix: Filtrate
Batch : 116431
Time : 18-AUG-2006 14:36
Cal : 56331958001
Units : ug/L

MS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
MSD: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	MSS Seqnum	Result	Spiked	MS	%Rec	MSD	%Rec	Limits	RPD	Lim	Flags
Arsenic	56330444150	14.64	100.0	99.97	85	101.8	87	80-120	2	20	u
Iron	56331958034	34710	10000	8576	-261*	8674	-260*	79-120	1	20	u
Manganese	56331958034	302.0	100.0	107.7	-194*	110.2	-192*	76-121	2	20	u

ISTD (ICALBLK h1812003)		ICALBLK Abund	MS Abund	%Drift
Germanium		60136	54716	-9.01

ISTD (ICALBLK h1812003)		ICALBLK Abund	MSD Abund	%Drift
Germanium		60136	53280	-11.40

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2212a.B\007CALI.D\007CALI.D#
 Date Acquired: Aug 22 2006 01:21 pm
 Operator:
 Sample Name: cs4,s4007
 Misc Info:
 Vial Number: 1105
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 22 2006 01:17 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	447891.09 P	10920.00	2.44
9 Be	13491.11 P	138.10	1.02
23 Na	6214098.00 A	87640.00	1.41
26 Mg	515688.91 P	12650.00	2.45
27 Al	4326152.00 A	149200.00	3.45
39 K	3958736.00 A	90150.00	2.28
44 Ca	88610.67 P	687.80	0.78
45 Sc	235523.30 P	3379.00	1.43
51 V	37224.72 P	691.30	1.86
52 Cr	34800.00 P	776.00	2.23
55 Mn	44964.44 P	721.00	1.60
57 Fe	97103.33 P	730.00	0.75
59 Co	40971.11 P	59.29	0.14
60 Ni	9167.78 P	70.26	0.77
65 Cu	10677.70 P	182.20	1.71
66 Zn	6551.11 P	243.50	3.72
72 Ge	62976.89 P	496.30	0.79
75 As	5484.26 P	153.60	2.80
82 Se	387.11 P	29.49	7.62
95 Mo	9282.22 P	423.00	4.56
109 Ag	19935.55 P	215.00	1.08
111 Cd	4211.13 P	160.60	3.81
115 In	347553.09 P	1921.00	0.55
121 Sb	17091.11 P	344.60	2.02
137 Ba	7471.11 P	15.75	0.21
205 Tl	24593.33 P	615.00	2.50
208 Pb	71938.88 P	418.40	0.58
209 Bi	388291.09 P	4613.00	1.19

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	447891.06	2.44	434401.09	103.1	80 - 120	

45 Sc	235523.33	1.43	229817.78	102.5	80 -	120
72 Ge	62976.89	0.79	62250.00	101.2	80 -	120
115 In	347553.13	0.55	342258.97	101.5	80 -	120
209 Bi	388291.09	1.19	377532.19	102.8	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2212a.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

CURTIS & TOMPKINS SPIKE USER REPORT FOR EPA 6020

Type : MS
 Inst : MET05
 Seqnum: 56331958020
 File : h1812020
 IDF : 1.0
 Lab ID: QC351987
 Matrix: Filtrate
 Batch : 116431
 Time : 18-AUG-2006 14:30
 Cal : 56331958001
 MSS : 188732-004

Type : MSD
 Inst : MET05
 Seqnum: 56331958021
 File : h1812021
 IDF : 1.0
 Lab ID: QC351988
 Matrix: Filtrate
 Batch : 116431
 Time : 18-AUG-2006 14:36
 Cal : 56331958001
 Units : ug/L

MS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
 MSD: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	MSS Seqnum	Result	Spiked	MS	%Rec	MSD	%Rec	Limits	RPD	Lim	Flags
Antimony	56330444150	0.4119	100.0	96.47	96	98.10	98	80-120	2	20	
Arsenic	56330444150	14.64	100.0	99.97	85	101.8	87	80-120	2	20	u
Barium	56330444150	131.5	100.0	117.5	-14*	118.9	-13*	75-126	1	20	
Beryllium	56330444150	0.6922	100.0	101.5	101	102.9	102	80-120	1	20	
Cadmium	56330444150	ND	100.0	88.39	88	89.85	90	76-120	2	20	
Calcium	56331958034	37510	10000	34140 >LR	-34	35050 >LR	-25	68-128		20	>LR b*
Chromium	56330444150	33.87	100.0	92.03	58*	94.03	60*	78-120	2	20	
Cobalt	56330444150	11.83	100.0	91.32	79*	93.40	82	80-120	2	20	
Copper	56330444150	17.58	100.0	93.40	76*	96.04	78*	80-120	3	20	
Iron	56331958034	34710	10000	8576	-261*	8674	-260*	79-120	1	20	u
Lead	56330444150	7.667	100.0	95.83	88	98.58	91	80-120	3	20	
Magnesium	56331958034	23600	10000	25290 >LR	17	26350 >LR	28	66-130		20	>LR b*
Manganese	56331958034	302.0	100.0	107.7	-194*	110.2	-192*	76-121	2	20	u
Molybdenum	56330444150	7.856	100.0	103.1	95	106.1	98	80-120	3	20	
Nickel	56330444150	15.11	100.0	92.35	77	95.23	80	77-120	3	20	
Potassium	56330444150	13970	10000	18230	43*	18820	49*	77-120	3	20	
Selenium	56330444150	0.6727	100.0	90.64	90	92.73	92	65-120	2	20	
Silver	56330444150	0.09884	100.0	89.15	89	91.28	91	73-120	2	20	
Thallium	56330444150	0.6218	50.00	44.84	88	47.86	94	64-120	7	20	
Vanadium	56330444150	72.95	100.0	93.20	20*	95.71	23*	78-122	3	20	
Zinc	56330444150	72.19	100.0	107.3	35*	95.94	24*	60-124	11	20	

ISTD (ICALBLK h1812003)	ICALBLK Abund	MS Abund	%Drift
Lithium	379257	332219	-12.40
Scandium	243668	215906	-11.39
Germanium	60136	54716	-9.01
Indium	386743	311674	-19.41
Bismuth	407406	338376	-16.94

ISTD (ICALBLK h1812003)	ICALBLK Abund	MSD Abund	%Drift
Lithium	379257	327503	-13.65
Scandium	243668	210779	-13.50
Germanium	60136	53280	-11.40
Indium	386743	304327	-21.31
Bismuth	407406	325760	-20.04

MISSING READINGS: AL NA

>LR=overrange b=noncompliant u=use

CURTIS & TOMPKINS SPIKE USER REPORT FOR 188732 METALS Filtrate
EPA 6020

Type : MS
Inst : MET05
Seqnum: 56331958020.2
File : h1812020
IDF : 1.0
Lab ID: QC351987
Matrix: Filtrate
Batch : 116431
Time : 18-AUG-2006 14:30
Cal : 56331958001
MSS : 188732-004

Type : MSD
Inst : MET05
Seqnum: 56331958021.2
File : h1812021
IDF : 1.0
Lab ID: QC351988
Matrix: Filtrate
Batch : 116431
Time : 18-AUG-2006 14:36
Cal : 56331958001
Units : ug/L

MS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
MSD: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	MSS Seqnum	Result	Spiked	MS	%Rec	MSD	%Rec	Limits	RPD	Lim	Flags
Arsenic	56330444167	5.479	100.0	99.97	94	101.8	96	80-120	2	20	u
Iron	56331958034	34710	10000	8576	-261*	8674	-260*	79-120	1	20	u
Manganese	56331958034	302.0	100.0	107.7	-194*	110.2	-192*	76-121	2	20	u

ISTD (ICALBLK h1812003)		ICALBLK Abund	MS Abund	%Drift
Germanium		60136	54716	-9.01

ISTD (ICALBLK h1812003)		ICALBLK Abund	MSD Abund	%Drift
Germanium		60136	53280	-11.40

CURTIS & TOMPKINS SPIKE USER REPORT FOR EPA 6020

Type : MS
 Inst : MET05
 Seqnum: 56331958020
 File : h1812020
 IDF : 1.0
 Lab ID: QC351987
 Matrix: Filtrate
 Batch : 116431
 Time : 18-AUG-2006 14:30
 Cal : 56331958001
 MSS : 188732-004

Type : MSD
 Inst : MET05
 Seqnum: 56331958021
 File : h1812021
 IDF : 1.0
 Lab ID: QC351988
 Matrix: Filtrate
 Batch : 116431
 Time : 18-AUG-2006 14:36
 Cal : 56331958001
 Units : ug/L

MS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
 MSD: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	MSS Seqnum	Result	Spiked	MS	%Rec	MSD	%Rec	Limits	RPD	Lim	Flags
Antimony	56330444150	0.4119	100.0	96.47	96	98.10	98	80-120	2	20	
Arsenic	56330444167	5.479	100.0	99.97	94	101.8	96	80-120	2	20	u
Barium	56330444150	131.5	100.0	117.5	-14*	118.9	-13*	75-126	1	20	
Beryllium	56330444150	0.6922	100.0	101.5	101	102.9	102	80-120	1	20	
Cadmium	56330444150	ND	100.0	88.39	88	89.85	90	76-120	2	20	
Calcium	56331958034	37510	10000	34140 >LR	-34	35050 >LR	-25	68-128		20	>LR b*
Chromium	56330444150	33.87	100.0	92.03	58*	94.03	60*	78-120	2	20	
Cobalt	56330444150	11.83	100.0	91.32	79*	93.40	82	80-120	2	20	
Copper	56330444150	17.58	100.0	93.40	76*	96.04	78*	80-120	3	20	
Iron	56331958034	34710	10000	8576	-261*	8674	-260*	79-120	1	20	u
Lead	56330444150	7.667	100.0	95.83	88	98.58	91	80-120	3	20	
Magnesium	56331958034	23600	10000	25290 >LR	17	26350 >LR	28	66-130		20	>LR b*
Manganese	56331958034	302.0	100.0	107.7	-194*	110.2	-192*	76-121	2	20	u
Molybdenum	56330444150	7.856	100.0	103.1	95	106.1	98	80-120	3	20	
Nickel	56330444150	15.11	100.0	92.35	77	95.23	80	77-120	3	20	
Potassium	56330444150	13970	10000	18230	43*	18820	49*	77-120	3	20	
Selenium	56330444150	0.6727	100.0	90.64	90	92.73	92	65-120	2	20	
Silver	56330444150	0.09884	100.0	89.15	89	91.28	91	73-120	2	20	
Thallium	56330444150	0.6218	50.00	44.84	88	47.86	94	64-120	7	20	
Vanadium	56330444150	72.95	100.0	93.20	20*	95.71	23*	78-122	3	20	
Zinc	56330444150	72.19	100.0	107.3	35*	95.94	24*	60-124	11	20	

ISTD (ICALBLK h1812003)	ICALBLK Abund	MS Abund	%Drift
Lithium	379257	332219	-12.40
Scandium	243668	215906	-11.39
Germanium	60136	54716	-9.01
Indium	386743	311674	-19.41
Bismuth	407406	338376	-16.94

ISTD (ICALBLK h1812003)	ICALBLK Abund	MSD Abund	%Drift
Lithium	379257	327503	-13.65
Scandium	243668	210779	-13.50
Germanium	60136	53280	-11.40
Indium	386743	304327	-21.31
Bismuth	407406	325760	-20.04

MISSING READINGS: AL NA

>LR=overrange b=noncompliant u=use

CURTIS & TOMPKINS SPIKE USER REPORT FOR 188732 METALS Water
EPA 6020

Type : MS
Inst : MET05
Seqnum: 56331958020.1
File : h1812020
IDF : 1.0
Lab ID: QC351987
Matrix: Filtrate
Batch : 116431
Time : 18-AUG-2006 14:30
Cal : 56331958001
MSS : 188732-004

Type : MSD
Inst : MET05
Seqnum: 56331958021.1
File : h1812021
IDF : 1.0
Lab ID: QC351988
Matrix: Filtrate
Batch : 116431
Time : 18-AUG-2006 14:36
Cal : 56331958001
Units : ug/L

MS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
MSD: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	MSS Seqnum	Result	Spiked	MS	%Rec	MSD	%Rec	Limits	RPD	Lim	Flags
Arsenic	56330444167	5.479	100.0	99.97	94	101.8	96	80-120	2	20	u
Iron	56331958034	34710	10000	8576	-261*	8674	-260*	79-120	1	20	u
Manganese	56331958034	302.0	100.0	107.7	-194*	110.2	-192*	76-121	2	20	u

ISTD (ICALBLK h1812003)	ICALBLK Abund	MS Abund	%Drift
Germanium	60136	54716	-9.01

ISTD (ICALBLK h1812003)	ICALBLK Abund	MSD Abund	%Drift
Germanium	60136	53280	-11.40

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2212a.B\008CALI.D\008CALI.D#
 Date Acquired: Aug 22 2006 01:26 pm
 Operator:
 Sample Name: cs5,s4001
 Misc Info:
 Vial Number: 1106
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 22 2006 01:22 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	434302.19 P	3122.00	0.72
9 Be	131064.40 P	1406.00	1.07
23 Na	57473152.00 A	867100.00	1.51
26 Mg	5509635.00 A	93490.00	1.70
27 Al	43482300.00 A	486000.00	1.12
39 K	34261240.00 A	367800.00	1.07
44 Ca	904707.00 A	3124.00	0.35
45 Sc	228218.91 P	3497.00	1.53
51 V	360924.81 P	4576.00	1.27
52 Cr	321260.00 P	1992.00	0.62
55 Mn	432156.59 P	3208.00	0.74
57 Fe	959529.31 A	10650.00	1.11
59 Co	392457.81 P	2589.00	0.66
60 Ni	85164.44 P	559.30	0.66
65 Cu	100212.50 P	1026.00	1.02
66 Zn	53225.55 P	428.80	0.81
72 Ge	62614.00 P	235.50	0.38
75 As	54455.17 P	421.40	0.77
82 Se	3608.44 P	17.11	0.47
95 Mo	88707.78 P	826.30	0.93
109 Ag	196282.20 P	1769.00	0.90
111 Cd	40024.54 P	115.90	0.29
115 In	331718.59 P	2269.00	0.68
121 Sb	167965.59 P	903.20	0.54
137 Ba	73915.55 P	678.10	0.92
205 Tl	249454.41 P	2244.00	0.90
208 Pb	728803.31 P	2136.00	0.29
209 Bi	370748.91 P	4215.00	1.14

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	434302.19	0.72	434401.09	100.0	80 - 120	

45	Sc	228218.88	1.53	229817.78	99.3	80 -	120
72	Ge	62614.00	0.38	62250.00	100.6	80 -	120
115	In	331718.63	0.68	342258.97	96.9	80 -	120
209	Bi	370748.88	1.14	377532.19	98.2	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2212a.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

CURTIS & TOMPKINS SPIKE USER REPORT FOR 188732 METALS Filtrate
EPA 6020

Type : SAMPLE	Type : MS	Type : MSD
Inst : MET05	Inst : MET05	Inst : MET05
Seqnum: 56330444167	Seqnum: 56331958020.2	Seqnum: 56331958021.2
File : h1711167	File : h1812020	File : h1812021
IDF : 1.0	IDF : 1.0	IDF : 1.0
Lab ID: 188732-004	Lab ID: QC351987	Lab ID: QC351988
Matrix: Filtrate	Matrix: Filtrate	Matrix: Filtrate
Batch : 116431	Batch : 116431	Batch : 116431
Time : 18-AUG-2006 03:28	Time : 18-AUG-2006 14:30	Time : 18-AUG-2006 14:36
Cal : 56330444001	Cal : 56331958001	Cal : 56331958001
Units : ug/L		

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
 MS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
 MSD: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	SAMPLE	Spiked	MS	%Rec	MSD	%Rec	Limits	RPD	Lim	Flags
Arsenic	5.479	100.0	99.97	94	101.8	96	80-120	2	20	u
Iron	78.88	10000	8576	85	8674	86	79-120	1	20	u
Manganese	21.96	100.0	107.7	86	110.2	88	76-121	2	20	u

ISTD (ICALBLK h1812003)	ICALBLK Abund	MS Abund	%Drift
Germanium	60136	54716	-9.01

ISTD (ICALBLK h1812003)	ICALBLK Abund	MSD Abund	%Drift
Germanium	60136	53280	-11.40

CURTIS & TOMPKINS SPIKE USER REPORT FOR EPA 6020

Type : MS
 Inst : MET05
 Seqnum: 56331958020
 File : h1812020
 IDF : 1.0
 Lab ID: QC351987
 Matrix: Filtrate
 Batch : 116431
 Time : 18-AUG-2006 14:30
 Cal : 56331958001
 MSS : 188732-004

Type : MSD
 Inst : MET05
 Seqnum: 56331958021
 File : h1812021
 IDF : 1.0
 Lab ID: QC351988
 Matrix: Filtrate
 Batch : 116431
 Time : 18-AUG-2006 14:36
 Cal : 56331958001
 Units : ug/L

MS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
 MSD: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	MSS Seqnum	Result	Spiked	MS	%Rec	MSD	%Rec	Limits	RPD	Lim	Flags
Antimony	56330444150	0.4119	100.0	96.47	96	98.10	98	80-120	2	20	
Arsenic	56330444167	5.479	100.0	99.97	94	101.8	96	80-120	2	20	u
Barium	56330444150	131.5	100.0	117.5	-14*	118.9	-13*	75-126	1	20	
Beryllium	56330444150	0.6922	100.0	101.5	101	102.9	102	80-120	1	20	
Cadmium	56330444150	ND	100.0	88.39	88	89.85	90	76-120	2	20	
Calcium	56331958034	37510	10000	34140 >LR	-34	35050 >LR	-25	68-128		20	>LR b*
Chromium	56330444150	33.87	100.0	92.03	58*	94.03	60*	78-120	2	20	
Cobalt	56330444150	11.83	100.0	91.32	79*	93.40	82	80-120	2	20	
Copper	56330444150	17.58	100.0	93.40	76*	96.04	78*	80-120	3	20	
Iron	56330444167	78.88	10000	8576	85	8674	86	79-120	1	20	u
Lead	56330444150	7.667	100.0	95.83	88	98.58	91	80-120	3	20	
Magnesium	56331958034	23600	10000	25290 >LR	17	26350 >LR	28	66-130		20	>LR b*
Manganese	56330444167	21.96	100.0	107.7	86	110.2	88	76-121	2	20	u
Molybdenum	56330444150	7.856	100.0	103.1	95	106.1	98	80-120	3	20	
Nickel	56330444150	15.11	100.0	92.35	77	95.23	80	77-120	3	20	
Potassium	56330444150	13970	10000	18230	43*	18820	49*	77-120	3	20	
Selenium	56330444150	0.6727	100.0	90.64	90	92.73	92	65-120	2	20	
Silver	56330444150	0.09884	100.0	89.15	89	91.28	91	73-120	2	20	
Thallium	56330444150	0.6218	50.00	44.84	88	47.86	94	64-120	7	20	
Vanadium	56330444150	72.95	100.0	93.20	20*	95.71	23*	78-122	3	20	
Zinc	56330444150	72.19	100.0	107.3	35*	95.94	24*	60-124	11	20	

ISTD (ICALBLK h1812003)	ICALBLK Abund	MS Abund	%Drift
Lithium	379257	332219	-12.40
Scandium	243668	215906	-11.39
Germanium	60136	54716	-9.01
Indium	386743	311674	-19.41
Bismuth	407406	338376	-16.94

ISTD (ICALBLK h1812003)	ICALBLK Abund	MSD Abund	%Drift
Lithium	379257	327503	-13.65
Scandium	243668	210779	-13.50
Germanium	60136	53280	-11.40
Indium	386743	304327	-21.31
Bismuth	407406	325760	-20.04

MISSING READINGS: AL NA

>LR=overrange b=noncompliant u=use

CURTIS & TOMPKINS SPIKE USER REPORT FOR 188732 METALS Water
EPA 6020

Type : SAMPLE
Inst : MET05
Seqnum: 56330444167
File : h1711167
IDF : 1.0
Lab ID: 188732-004
Matrix: Filtrate
Batch : 116431
Time : 18-AUG-2006 03:28
Cal : 56330444001
Units : ug/L

Type : MS
Inst : MET05
Seqnum: 56331958020.1
File : h1812020
IDF : 1.0
Lab ID: QC351987
Matrix: Filtrate
Batch : 116431
Time : 18-AUG-2006 14:30
Cal : 56331958001

Type : MSD
Inst : MET05
Seqnum: 56331958021.1
File : h1812021
IDF : 1.0
Lab ID: QC351988
Matrix: Filtrate
Batch : 116431
Time : 18-AUG-2006 14:36
Cal : 56331958001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
MS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
MSD: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

Analyte	SAMPLE	Spiked	MS	%Rec	MSD	%Rec	Limits	RPD	Lim	Flags
Arsenic	5.479	100.0	99.97	94	101.8	96	80-120	2	20	u
Iron	78.88	10000	8576	85	8674	86	79-120	1	20	u
Manganese	21.96	100.0	107.7	86	110.2	88	76-121	2	20	u

ISTD (ICALBLK h1812003)		ICALBLK Abund	MS Abund	%Drift
Germanium		60136	54716	-9.01

ISTD (ICALBLK h1812003)		ICALBLK Abund	MSD Abund	%Drift
Germanium		60136	53280	-11.40

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2212a.B\009CALI.D\009CALI.D#
 Date Acquired: Aug 22 2006 01:32 pm
 Operator:
 Sample Name: cs6,s4002
 Misc Info:
 Vial Number: 1107
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 22 2006 01:28 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	427298.91 P	5767.00	1.35
9 Be	257316.70 P	2098.00	0.82
23 Na	112208000.00 A	776400.00	0.69
26 Mg	10662720.00 A	85510.00	0.80
27 Al	83895368.00 A	869200.00	1.04
39 K	66621140.00 A	830800.00	1.25
44 Ca	1822641.00 A	8252.00	0.45
45 Sc	229337.80 P	2428.00	1.06
51 V	716319.63 P	6092.00	0.85
52 Cr	627906.63 P	5683.00	0.91
55 Mn	892517.13 A	15630.00	1.75
57 Fe	1861240.00 A	12630.00	0.68
59 Co	775885.50 P	5510.00	0.71
60 Ni	167787.80 P	843.40	0.50
65 Cu	197135.50 P	3119.00	1.58
66 Zn	101116.70 P	951.80	0.94
72 Ge	61465.78 P	373.90	0.61
75 As	108002.40 P	1361.00	1.26
82 Se	6922.00 P	115.40	1.67
95 Mo	177021.09 P	1658.00	0.94
109 Ag	385284.41 P	2231.00	0.58
111 Cd	79206.00 P	706.00	0.89
115 In	320588.59 P	3211.00	1.00
121 Sb	333691.09 P	3664.00	1.10
137 Ba	146280.00 P	2153.00	1.47
205 Tl	499911.09 P	2347.00	0.47
208 Pb	1380139.00 P	7655.00	0.55
209 Bi	359497.81 P	3666.00	1.02

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	427298.88	1.35	434401.09	98.4	80 - 120	

45 Sc	229337.78	1.06	229817.78	99.8	80 -	120
72 Ge	61465.78	0.61	62250.00	98.7	80 -	120
115 In	320588.59	1.00	342258.97	93.7	80 -	120
209 Bi	359497.78	1.02	377532.19	95.2	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2212a.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

ICS-A QC Report

Data File: C:\ICPCHEM\1\DATA\06H2212a.B\015ICSA.D\015ICSA.D#
 Date Acquired: Aug 22 2006 02:21 pm
 Acq. Method: 60200111.M
 Operator:
 Sample Name: icsa,s4011
 Misc Info:
 Vial Number: 1204
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal. Update: Aug 22 2006 01:50 pm
 Sample Type: 6-ICSA
 Dilution Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
9 Be	0.03 ppb	14.21	2.00	
23 Na	246000.00 ppb	1.51	2.00	
26 Mg	101600.00 ppb	2.70	2.00	
27 Al	104500.00 ppb	2.60	2.00	
39 K	101700.00 ppb	1.66	2.00	
44 Ca	298800.00 ppb	0.60	2.00	
51 V	0.17 ppb	104.22	2.00	
52 Cr	1.35 ppb	6.57	5.00	
55 Mn	0.97 ppb	1.44	2.00	
57 Fe	228200.00 ppb	1.16	2.00	
59 Co	2.82 ppb	0.71	2.00	**
60 Ni	2.06 ppb	2.59	2.00	**
65 Cu	1.93 ppb	4.28	2.00	
66 Zn	3.49 ppb	7.67	2.00	**
75 As	1.19 ppb	26.26	2.00	
82 Se	-0.33 ppb	135.59	2.00	
95 Mo	2030.00 ppb	2.28	2.00	
109 Ag	0.13 ppb	18.59	2.00	
111 Cd	0.10 ppb	30.37	2.00	
121 Sb	2.28 ppb	5.23	2.00	**
137 Ba	0.92 ppb	9.20	2.00	
205 Tl	0.06 ppb	23.16	2.00	
208 Pb	1.25 ppb	2.40	2.00	

ISTD Elements

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	378215.53	0.82	434401.09	87.1	30 -	120	
45 Sc	206492.22	1.27	229817.78	89.9	30 -	120	
72 Ge	58064.67	1.21	62250.00	93.3	30 -	120	
115 In	283790.47	0.78	342258.97	82.9	30 -	120	
209 Bi	304911.09	1.79	377532.19	80.8	30 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2212a.B\003CALB.D\003CALB.D#

4 :Element Failures	0 :Max. Number of Failures Allowed
0 :ISTD Failures	0 :Max. Nnumber of ISTD Failures Allowed

Data Results:

Analytes:	Fail
ISTD:	Pass

Calibration Summary

Calibration : C:\ICPCHEM\1\DATA\06G1718A.B\60200111.C
 Last Calib: Aug 22, 2006 13:50
 Cal Type : External Calibration Method
 Cal Title :

Standard Data Files

Level	DataPath	DataFile	Date Acquired
1	...hem\1\data\06h2212a.b\003calb.d\	003calb.d#	Aug 22 2006 12:58 pm
2	...hem\1\data\06h2212a.b\004cali.d\	004cali.d#	Aug 22 2006 01:04 pm
3	...hem\1\data\06h2212a.b\005cali.d\	005cali.d#	Aug 22 2006 01:09 pm
4	...hem\1\data\06h2212a.b\006cali.d\	006cali.d#	Aug 22 2006 01:15 pm
5	...hem\1\data\06h2212a.b\007cali.d\	007cali.d#	Aug 22 2006 01:21 pm
6	...hem\1\data\06h2212a.b\008cali.d\	008cali.d#	Aug 22 2006 01:26 pm
7	...hem\1\data\06h2212a.b\009cali.d\	009cali.d#	Aug 22 2006 01:32 pm
8	---		
9	---		
10	---		
11	---		
12	---		
13	---		
14	---		
15	---		
16	---		
17	---		
18	---		
19	---		
20	---		

Level	BkgPath	BkgFile	Interference Correction
1	---	---	ON
2	---	---	ON
3	---	---	ON
4	---	---	ON
5	---	---	ON
6	---	---	ON
7	---	---	ON
8	---	---	ON
9	---		
10	---		
11	---		
12	---		
13	---		
14	---		
15	---		
16	---		
17	---		
18	---		
19	---		
20	---		

Name	m/z	IS	Equation	r	Units
Li	6	---	Excluded	---	ppb
Be	9	6	$Y = 1.506E-1 * X + 8.691E-3$ (blank)	---	ppb
Na	23	45	$Y = 1.226E+0 * X + 7.538E+1$ (blank)	---	ppb
Mg	25	45	Excluded	---	ppb
Mg	26	45	$Y = 1.171E-1 * X + 9.989E-1$ (blank)	---	ppb
Al	27	45	$Y = 9.216E-1 * X + 9.867E+0$ (blank)	---	ppb
K	39	45	$Y = 7.243E-1 * X + 1.152E+2$ (blank)	---	ppb
Ca	43	45	Excluded	---	ppb
Ca	44	45	$Y = 1.981E-2 * X + 7.678E-1$ (blank)	---	ppb
Sc	45	---	Excluded	---	ppb
V	51	72	$Y = 2.904E+0 * X + 4.764E-1$ (blank)	---	ppb
Cr	52	72	$Y = 2.545E+0 * X + 1.889E+0$ (blank)	---	ppb
Cr	53	72	Excluded	---	ppb
Fe	54	72	Excluded	---	ppb
Mn	55	72	$Y = 3.589E+0 * X + 7.603E-1$ (blank)	---	ppb
Fe	57	72	$Y = 7.553E-2 * X + 5.757E+0$ (blank)	---	ppb
Co	59	72	$Y = 3.151E+0 * X + 1.186E-1$ (blank)	---	ppb
Ni	60	72	$Y = 6.815E-1 * X + 9.463E-2$ (blank)	---	ppb
Cu	63	72	Excluded	---	ppb
Cu	65	72	$Y = 8.007E-1 * X + 1.517E-1$ (blank)	---	ppb
Zn	66	72	$Y = 4.105E-1 * X + 6.024E-1$ (blank)	---	ppb
Ge	72	---	Excluded	---	ppb
As	75	72	$Y = 4.376E-1 * X + 1.224E-1$ (blank)	---	ppb
(As)	77	72	Excluded	---	ppb
Se	82	72	$Y = 2.797E-2 * X + 5.141E-2$ (blank)	---	ppb
(As)	83	72	Excluded	---	ppb
(Ca)	88	72	Excluded	---	ppb
Y	89	72	Excluded	---	ppb
Mo	95	72	$Y = 7.143E-1 * X + 5.463E-1$ (blank)	---	ppb
Mo	98	72	Excluded	---	ppb
(Mo)	99	72	Excluded	---	ppb
(Cd)	106	72	Excluded	---	ppb
(Cd)	108	72	Excluded	---	ppb
Ag	109	72	$Y = 1.567E+0 * X + 2.138E-2$ (blank)	---	ppb
Cd	111	72	$Y = 3.212E-1 * X + 7.139E-2$ (blank)	---	ppb
Cd	114	72	Excluded	---	ppb
In	115	---	Excluded	---	ppb
(In)	118	---	Excluded	---	ppb
Sb	121	115	$Y = 2.587E-1 * X + 8.604E-3$ (blank)	---	ppb
Ba	135	115	Excluded	---	ppb
Ba	137	115	$Y = 1.135E-1 * X + 1.218E-2$ (blank)	---	ppb
Tb	159	---	Excluded	---	ppb
Er	166	115	Excluded	---	ppb
Tl	205	209	$Y = 6.903E-1 * X + 3.754E-2$ (blank)	---	ppb
(Pb)	206	209	Excluded	---	ppb
(Pb)	207	209	Excluded	---	ppb
Pb	208	209	$Y = 9.641E-1 * X + 3.782E-2$ (blank)	---	ppb
Bi	209	---	Excluded	---	ppb

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET05
 Seqnum : 56337726011
 Cal : 56337726001
 Standards: S4008

File : h2212011
 Caldate: 22-AUG-2006
 IDF : 1.0
 Time : 22-AUG-2006 13:59

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	0.9370	0.9527	10000	10330	ug/L	3	10	
Antimony	0.2581	0.2566	100.0	99.15	ug/L	-1	10	
Arsenic	0.5167	0.4436	100.0	101.1	ug/L	1	10	
Barium	0.1251	0.1116	100.0	98.24	ug/L	-2	10	
Beryllium	0.1548	0.1544	100.0	102.5	ug/L	3	10	
Cadmium	0.3933	0.3308	100.0	102.8	ug/L	3	10	
Calcium	0.0227	0.0204	10000	10230	ug/L	2	10	
Chromium	3.7535	2.5787	100.0	100.6	ug/L	1	10	
Cobalt	3.3039	3.1817	100.0	100.9	ug/L	1	10	
Copper	0.9485	0.8218	100.0	102.4	ug/L	2	10	
Iron	0.1081	0.0773	10000	10160	ug/L	2	10	
Lead	0.9985	1.0128	100.0	105.0	ug/L	5	10	
Magnesium	0.1188	0.1219	10000	10410	ug/L	4	10	
Manganese	4.4470	3.5000	100.0	97.30	ug/L	-3	10	
Molybdenum	0.9137	0.7262	100.0	100.9	ug/L	1	10	
Nickel	0.8499	0.6907	100.0	101.2	ug/L	1	10	
Potassium	1.4578	0.7598	10000	10330	ug/L	3	10	
Selenium	0.0553	0.0292	100.0	102.4	ug/L	2	10	
Silver	1.6235	1.5948	100.0	101.8	ug/L	2	10	
Sodium	1.7776	1.2846	10000	10420	ug/L	4	10	
Thallium	0.6805	0.7003	50.00	50.67	ug/L	1	10	
Vanadium	3.1488	2.8956	100.0	99.54	ug/L	0	10	
Zinc	1.0037	0.4385	100.0	105.4	ug/L	5	10	

ISTD (ICALBLK h2212003)	ICALBLK Abund	Abund	%Drift
Lithium	434401	437457	0.70
Scandium	229818	227030	-1.21
Germanium	62250	62036	-0.34
Indium	342259	328648	-3.98
Bismuth	377532	362641	-3.94

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Segnum : 56337726028
 Cal : 56337726001
 Standards: S4009

File : h2212028
 Caldate: 22-AUG-2006

IDF : 1.0
 Time : 22-AUG-2006 15:34

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.9370	0.9805	10000	10630	ug/L	6	10	
Antimony	0.2581	0.2603	100.0	100.6	ug/L	1	10	
Arsenic	0.5167	0.4532	100.0	103.3	ug/L	3	10	
Barium	0.1251	0.1135	100.0	99.90	ug/L	0	10	
Beryllium	0.1548	0.1553	100.0	103.1	ug/L	3	10	
Cadmium	0.3933	0.3303	100.0	102.6	ug/L	3	10	
Calcium	0.0227	0.0206	10000	10380	ug/L	4	10	
Chromium	3.7535	2.5473	100.0	99.35	ug/L	-1	10	
Cobalt	3.3039	3.1860	100.0	101.1	ug/L	1	10	
Copper	0.9485	0.8228	100.0	102.6	ug/L	3	10	
Iron	0.1081	0.0772	10000	10150	ug/L	2	10	
Lead	0.9985	1.0137	100.0	105.1	ug/L	5	10	
Magnesium	0.1188	0.1241	10000	10590	ug/L	6	10	
Manganese	4.4470	3.4437	100.0	95.73	ug/L	-4	10	
Molybdenum	0.9137	0.7335	100.0	101.9	ug/L	2	10	
Nickel	0.8499	0.6922	100.0	101.4	ug/L	1	10	
Potassium	1.4578	0.7797	10000	10610	ug/L	6	10	
Selenium	0.0553	0.0297	100.0	104.4	ug/L	4	10	
Silver	1.6235	1.6042	100.0	102.4	ug/L	2	10	
Sodium	1.7776	1.3008	10000	10550	ug/L	6	10	
Thallium	0.6805	0.7001	50.00	50.66	ug/L	1	10	
Vanadium	3.1488	2.8754	100.0	98.84	ug/L	-1	10	
Zinc	1.0037	0.4345	100.0	104.4	ug/L	4	10	

ISTD (ICALBLK h2212003)	ICALBLK Abund	Abund	%Drift
Lithium	434401	448214	3.18
Scandium	229818	233408	1.56
Germanium	62250	62899	1.04
Indium	342259	328885	-3.91
Bismuth	377532	366690	-2.87

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56337726045
 Cal : 56337726001
 Standards: S4009

File : h2212045
 Caldate: 22-AUG-2006

IDF : 1.0
 Time : 22-AUG-2006 17:09

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.9370	0.9374	10000	10160	ug/L	2	10	
Antimony	0.2581	0.2548	100.0	98.44	ug/L	-2	10	
Arsenic	0.5167	0.4401	100.0	100.3	ug/L	0	10	
Barium	0.1251	0.1111	100.0	97.83	ug/L	-2	10	
Beryllium	0.1548	0.1493	100.0	99.11	ug/L	-1	10	
Cadmium	0.3933	0.3278	100.0	101.8	ug/L	2	10	
Calcium	0.0227	0.0204	10000	10240	ug/L	2	10	
Chromium	3.7535	2.6093	100.0	101.8	ug/L	2	10	
Cobalt	3.3039	3.2121	100.0	101.9	ug/L	2	10	
Copper	0.9485	0.8241	100.0	102.7	ug/L	3	10	
Iron	0.1081	0.0791	10000	10400	ug/L	4	10	
Lead	0.9985	0.9949	100.0	103.1	ug/L	3	10	
Magnesium	0.1188	0.1201	10000	10250	ug/L	3	10	
Manganese	4.4470	3.5458	100.0	98.57	ug/L	-1	10	
Molybdenum	0.9137	0.7201	100.0	100.0	ug/L	0	10	
Nickel	0.8499	0.7030	100.0	103.0	ug/L	3	10	
Potassium	1.4578	0.7482	10000	10170	ug/L	2	10	
Selenium	0.0553	0.0287	100.0	100.9	ug/L	1	10	
Silver	1.6235	1.6040	100.0	102.3	ug/L	2	10	
Sodium	1.7776	1.2734	10000	10330	ug/L	3	10	
Thallium	0.6805	0.6810	50.00	49.27	ug/L	-1	10	
Vanadium	3.1488	2.9134	100.0	100.1	ug/L	0	10	
Zinc	1.0037	0.4322	100.0	103.8	ug/L	4	10	

ISTD (ICALBLK h2212003)	ICALBLK Abund	Abund	%Drift
Lithium	434401	439984	1.29
Scandium	229818	225898	-1.71
Germanium	62250	60673	-2.53
Indium	342259	325346	-4.94
Bismuth	377532	365033	-3.31

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Segnum : 56337726060
 Cal : 56337726001
 Standards: S4009

File : h2212060
 Caldate: 22-AUG-2006

IDF : 1.0
 Time : 22-AUG-2006 18:33

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.9370	1.0081	10000	10930	ug/L	9	10	
Antimony	0.2581	0.2585	100.0	99.88	ug/L	0	10	
Arsenic	0.5167	0.4489	100.0	102.3	ug/L	2	10	
Barium	0.1251	0.1125	100.0	99.08	ug/L	-1	10	
Beryllium	0.1548	0.1566	100.0	103.9	ug/L	4	10	
Cadmium	0.3933	0.3271	100.0	101.6	ug/L	2	10	
Calcium	0.0227	0.0207	10000	10400	ug/L	4	10	
Chromium	3.7535	2.5199	100.0	98.28	ug/L	-2	10	
Cobalt	3.3039	3.1505	100.0	99.95	ug/L	0	10	
Copper	0.9485	0.8154	100.0	101.7	ug/L	2	10	
Iron	0.1081	0.0757	10000	9948	ug/L	-1	10	
Lead	0.9985	1.0100	100.0	104.7	ug/L	5	10	
Magnesium	0.1188	0.1276	10000	10890	ug/L	9	10	
Manganese	4.4470	3.3954	100.0	94.38	ug/L	-6	10	
Molybdenum	0.9137	0.7308	100.0	101.5	ug/L	2	10	
Nickel	0.8499	0.6870	100.0	100.7	ug/L	1	10	
Potassium	1.4578	0.8006	10000	10890	ug/L	9	10	
Selenium	0.0553	0.0294	100.0	103.4	ug/L	3	10	
Silver	1.6235	1.6194	100.0	103.3	ug/L	3	10	
Sodium	1.7776	1.3209	10000	10710	ug/L	7	10	
Thallium	0.6805	0.6926	50.00	50.11	ug/L	0	10	
Vanadium	3.1488	2.8387	100.0	97.58	ug/L	-2	10	
Zinc	1.0037	0.4299	100.0	103.3	ug/L	3	10	

ISTD (ICALBLK h2212003)	ICALBLK Abund	Abund	%Drift
Lithium	434401	474603	9.25
Scandium	229818	242716	5.61
Germanium	62250	65504	5.23
Indium	342259	342700	0.13
Bismuth	377532	378662	0.30

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56337726074
 Cal : 56337726001
 Standards: S4009

File : h2212074
 Caldate: 22-AUG-2006

IDF : 1.0
 Time : 22-AUG-2006 19:51

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.9370	0.9897	10000	10730	ug/L	7	10	
Antimony	0.2581	0.2508	100.0	96.92	ug/L	-3	10	
Arsenic	0.5167	0.4429	100.0	100.9	ug/L	1	10	
Barium	0.1251	0.1093	100.0	96.25	ug/L	-4	10	
Beryllium	0.1548	0.1540	100.0	102.2	ug/L	2	10	
Cadmium	0.3933	0.3215	100.0	99.87	ug/L	0	10	
Calcium	0.0227	0.0202	10000	10170	ug/L	2	10	
Chromium	3.7535	2.5026	100.0	97.60	ug/L	-2	10	
Cobalt	3.3039	3.1244	100.0	99.12	ug/L	-1	10	
Copper	0.9485	0.7990	100.0	99.60	ug/L	0	10	
Iron	0.1081	0.0748	10000	9828	ug/L	-2	10	
Lead	0.9985	0.9917	100.0	102.8	ug/L	3	10	
Magnesium	0.1188	0.1257	10000	10730	ug/L	7	10	
Manganese	4.4470	3.3676	100.0	93.61	ug/L	-6	10	
Molybdenum	0.9137	0.7145	100.0	99.26	ug/L	-1	10	
Nickel	0.8499	0.6750	100.0	98.90	ug/L	-1	10	
Potassium	1.4578	0.7839	10000	10670	ug/L	7	10	
Selenium	0.0553	0.0292	100.0	102.5	ug/L	3	10	
Silver	1.6235	1.5712	100.0	100.3	ug/L	0	10	
Sodium	1.7776	1.3037	10000	10570	ug/L	6	10	
Thallium	0.6805	0.6765	50.00	48.95	ug/L	-2	10	
Vanadium	3.1488	2.8221	100.0	97.01	ug/L	-3	10	
Zinc	1.0037	0.4264	100.0	102.4	ug/L	2	10	

ISTD (ICALBLK h2212003)	ICALBLK Abund	Abund	%Drift
Lithium	434401	450024	3.60
Scandium	229818	233498	1.60
Germanium	62250	62968	1.15
Indium	342259	332430	-2.87
Bismuth	377532	367467	-2.67

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56337726014
 Cal : 56337726001

File : h2212014
 Caldate: 22-AUG-2006

IDF : 1.0
 Time : 22-AUG-2006 14:15

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[3.038]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	ND	0.5000	0.09029	ug/L	
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	ND	0.2500	0.009674	ug/L	
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	ND	0.5000	0.03860	ug/L	
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	ND	50.00	3.054	ug/L	
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	[0.01766]	0.2500	0.01266	ug/L	!ib
Sodium	ND	50.00	9.919	ug/L	
Thallium	[0.02601]	0.2500	0.02100	ug/L	!ib
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	[0.1502]	0.5000	0.09577	ug/L	!ib

ISTD (ICALBLK h2212003)	ICALBLK Abund	Abund	%Drift
Lithium	434401	454052	4.52
Scandium	229818	230273	0.20
Germanium	62250	62247	0.00
Indium	342259	341019	-0.36
Bismuth	377532	379158	0.43

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56337726031
 Cal : 56337726001

File : h2212031
 Caldate: 22-AUG-2006

IDF : 1.0
 Time : 22-AUG-2006 15:51

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[3.017]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	ND	0.5000	0.09029	ug/L	
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	ND	0.2500	0.009674	ug/L	
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	[9.176]	50.00	7.739	ug/L	!ib
Chromium	ND	0.5000	0.03860	ug/L	
Cobalt	[0.009770]	0.2500	0.008548	ug/L	!ib
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	[0.01651]	0.2500	0.005283	ug/L	!ib
Magnesium	[3.753]	50.00	3.054	ug/L	!ib
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	[0.01723]	0.2500	0.01266	ug/L	!ib
Sodium	ND	50.00	9.919	ug/L	
Thallium	ND	0.2500	0.02100	ug/L	
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	[0.4367]	0.5000	0.09577	ug/L	!ib

ISTD (ICALBLK h2212003)	ICALBLK Abund	Abund	%Drift
Lithium	434401	457506	5.32
Scandium	229818	231400	0.69
Germanium	62250	62106	-0.23
Indium	342259	339620	-0.77
Bismuth	377532	380397	0.76

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56337726048
 Cal : 56337726001

File : h2212048
 Caldate: 22-AUG-2006

IDF : 1.0
 Time : 22-AUG-2006 17:26

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	50.00	2.123	ug/L	
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	ND	0.5000	0.09029	ug/L	
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	[0.02795]	0.2500	0.009674	ug/L	!ib
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	ND	0.5000	0.03860	ug/L	
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	[0.01709]	0.2500	0.005283	ug/L	!ib
Magnesium	[5.537]	50.00	3.054	ug/L	!ib
Manganese	[0.1254]	0.2500	0.01838	ug/L	!ib
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	[0.02209]	0.2500	0.01266	ug/L	!ib
Sodium	ND	50.00	9.919	ug/L	
Thallium	[0.06225]	0.2500	0.02100	ug/L	!ib
Vanadium	[0.09021]	0.5000	0.08283	ug/L	!ib
Zinc	[0.4631]	0.5000	0.09577	ug/L	!ib

ISTD (ICALBLK h2212003)	ICALBLK Abund	Abund	%Drift
Lithium	434401	452426	4.15
Scandium	229818	227940	-0.82
Germanium	62250	61444	-1.29
Indium	342259	336764	-1.61
Bismuth	377532	377494	-0.01

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56337726063
 Cal : 56337726001

File : h2212063
 Caldate: 22-AUG-2006

IDF : 1.0
 Time : 22-AUG-2006 18:50

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	50.00	2.123	ug/L	
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	ND	0.5000	0.09029	ug/L	
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	ND	0.2500	0.009674	ug/L	
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	[9.701]	50.00	7.739	ug/L	!ib
Chromium	ND	0.5000	0.03860	ug/L	
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	[0.01716]	0.2500	0.005283	ug/L	!ib
Magnesium	[14.28]	50.00	3.054	ug/L	!ib
Manganese	[0.05238]	0.2500	0.01838	ug/L	!ib
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	[0.01384]	0.2500	0.01266	ug/L	!ib
Sodium	ND	50.00	9.919	ug/L	
Thallium	ND	0.2500	0.02100	ug/L	
Vanadium	[0.1114]	0.5000	0.08283	ug/L	!ib
Zinc	[0.3210]	0.5000	0.09577	ug/L	!ib

ISTD (ICALBLK h2212003)	ICALBLK Abund	Abund	%Drift
Lithium	434401	503413	15.89
Scandium	229818	254710	10.83
Germanium	62250	68265	9.66
Indium	342259	366494	7.08
Bismuth	377532	401521	6.35

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56337726077
 Cal : 56337726001

File : h2212077
 Caldate: 22-AUG-2006

IDF : 1.0
 Time : 22-AUG-2006 20:08

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	50.00	2.123	ug/L	
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.1733]	0.5000	0.09029	ug/L	!ib
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	ND	0.2500	0.009674	ug/L	
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	ND	0.5000	0.03860	ug/L	
Cobalt	[0.009937]	0.2500	0.008548	ug/L	!ib
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	[0.02069]	0.2500	0.005283	ug/L	!ib
Magnesium	[9.696]	50.00	3.054	ug/L	!ib
Manganese	[0.04430]	0.2500	0.01838	ug/L	!ib
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	[0.01898]	0.2500	0.01266	ug/L	!ib
Sodium	ND	50.00	9.919	ug/L	
Thallium	ND	0.2500	0.02100	ug/L	
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	[0.4910]	0.5000	0.09577	ug/L	!ib

ISTD (ICALBLK h2212003)	ICALBLK Abund	Abund	%Drift
Lithium	434401	472626	8.80
Scandium	229818	242607	5.56
Germanium	62250	64119	3.00
Indium	342259	350631	2.45
Bismuth	377532	382678	1.36

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05

Seqnum : 56337726015

Cal : 56337726001

Standards: S4011, S3310

File : h2212015

Caldate: 22-AUG-2006

IDF : 1.0

Time : 22-AUG-2006 14:21

Analyte	Quant	RL	Units	Flags
Antimony	2.281	0.2500	ug/L	
Arsenic	1.193	0.5000	ug/L	
Barium	0.9209	0.2500	ug/L	
Beryllium	[0.02814]	0.2500	ug/L	
Cadmium	[0.1036]	0.2500	ug/L	
Chromium	1.345	0.5000	ug/L	
Cobalt	2.824	0.2500	ug/L	
Copper	1.929	0.5000	ug/L	
Lead	1.253	0.2500	ug/L	
Manganese	0.9738	0.2500	ug/L	
Nickel	2.061	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1291]	0.2500	ug/L	
Thallium	[0.05846]	0.2500	ug/L	
Vanadium	[0.1684]	0.5000	ug/L	
Zinc	3.493	0.5000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	104500	ug/L	105
Calcium	300000	298800	ug/L	100
Iron	250000	228200	ug/L	91
Magnesium	100000	101600	ug/L	102
Molybdenum	2000	2030	ug/L	102
Potassium	100000	101700	ug/L	102
Sodium	250000	246000	ug/L	98

ISTD (ICALBLK h2212003)	ICALBLK Abund	Abund	%Drift
Lithium	434401	378216	-12.93
Scandium	229818	206492	-10.15
Germanium	62250	58065	-6.72
Indium	342259	283791	-17.08
Bismuth	377532	304911	-19.24

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05

Seqnum : 56337726016

Cal : 56337726001

Standards: S4012, S3310

File : h2212016

Caldate: 22-AUG-2006

IDF : 1.0

Time : 22-AUG-2006 14:26

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	102500	ug/L	3		
Arsenic	100.0	105.3	ug/L	5	20	
Cadmium	100.0	94.95	ug/L	-5	20	
Calcium	300000	295500	ug/L	-2		
Chromium	200.0	203.0	ug/L	2	20	
Cobalt	200.0	198.6	ug/L	-1	20	
Copper	200.0	193.3	ug/L	-3	20	
Iron	250000	228400	ug/L	-9		
Magnesium	100000	99850	ug/L	0		
Manganese	200.0	193.0	ug/L	-4	20	
Molybdenum	2000	2029	ug/L	1		
Nickel	200.0	194.8	ug/L	-3	20	
Potassium	100000	101500	ug/L	2		
Selenium	100.0	94.50	ug/L	-6	20	
Silver	50.00	48.05	ug/L	-4	20	
Sodium	250000	243700	ug/L	-3		
Vanadium	200.0	212.4	ug/L	6	20	
Zinc	100.0	107.9	ug/L	8	20	

ISTD (ICALBLK h2212003)	ICALBLK Abund	Abund	%Drift
Scandium	229818	207344	-9.78
Germanium	62250	58147	-6.59

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05

IDF : 1.0

Seqnum : 56337726078

File : h2212078

Time : 22-AUG-2006 20:14

Cal : 56337726001

Caldate: 22-AUG-2006

Standards: S4011, S3310

Analyte	Quant	RL	Units	Flags
Antimony	2.185	0.2500	ug/L	
Arsenic	1.101	0.5000	ug/L	
Barium	0.9570	0.2500	ug/L	
Beryllium	[0.01760]	0.2500	ug/L	
Cadmium	[0.1363]	0.2500	ug/L	
Chromium	1.298	0.5000	ug/L	
Cobalt	2.712	0.2500	ug/L	
Copper	1.889	0.5000	ug/L	
Lead	1.261	0.2500	ug/L	
Manganese	0.9539	0.2500	ug/L	
Nickel	2.313	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1563]	0.2500	ug/L	
Thallium	[0.04708]	0.2500	ug/L	
Vanadium	[0.2271]	0.5000	ug/L	
Zinc	3.535	0.5000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	106600	ug/L	107
Calcium	300000	302300	ug/L	101
Iron	250000	220400	ug/L	88
Magnesium	100000	104600	ug/L	105
Molybdenum	2000	2027	ug/L	101
Potassium	100000	107300	ug/L	107
Sodium	250000	248300	ug/L	99

ISTD (ICALBLK h2212003)	ICALBLK Abund	Abund	%Drift
Lithium	434401	382257	-12.00
Scandium	229818	207453	-9.73
Germanium	62250	58660	-5.77
Indium	342259	279271	-18.40
Bismuth	377532	300622	-20.37

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56337726079
 Cal : 56337726001
 Standards: S4012, S3310

File : h2212079
 Caldate: 22-AUG-2006

IDF : 1.0
 Time : 22-AUG-2006 20:19

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	103800	ug/L	4		
Arsenic	100.0	103.7	ug/L	4	20	
Cadmium	100.0	92.91	ug/L	-7	20	
Calcium	300000	298600	ug/L	0		
Chromium	200.0	199.1	ug/L	0	20	
Cobalt	200.0	195.8	ug/L	-2	20	
Copper	200.0	189.0	ug/L	-6	20	
Iron	250000	224900	ug/L	-10		
Magnesium	100000	102100	ug/L	2		
Manganese	200.0	189.1	ug/L	-5	20	
Molybdenum	2000	2035	ug/L	2		
Nickel	200.0	192.2	ug/L	-4	20	
Potassium	100000	103200	ug/L	3		
Selenium	100.0	94.31	ug/L	-6	20	
Silver	50.00	47.23	ug/L	-6	20	
Sodium	250000	245400	ug/L	-2		
Vanadium	200.0	204.5	ug/L	2	20	
Zinc	100.0	105.2	ug/L	5	20	

ISTD (ICALBLK h2212003)	ICALBLK Abund	Abund	%Drift
Scandium	229818	200372	-12.81
Germanium	62250	56237	-9.66

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56337726 Instrument: MET05
Analytical Method: EPA 6020 Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 22-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used
001	h2212001	TVN				22-AUG-2006	12:46	1.0				1	
002	h2212002	X	RINSE			22-AUG-2006	12:53	1.0				2	
003	h2212003	ICALBLK	STD-BLANK			22-AUG-2006	12:58	1.0				2	
004	h2212004	ICAL	CS1			22-AUG-2006	13:04	1.0				3	
005	h2212005	ICAL	CS2			22-AUG-2006	13:09	1.0				4	
006	h2212006	ICAL	CS3			22-AUG-2006	13:15	1.0				5	
007	h2212007	ICAL	CS4			22-AUG-2006	13:21	1.0				6	
008	h2212008	ICAL	CS5			22-AUG-2006	13:26	1.0				7	
009	h2212009	ICAL	CS6			22-AUG-2006	13:32	1.0				8	
010	h2212010	X	RINSE			22-AUG-2006	13:53	1.0				2	
011	h2212011	ICV				22-AUG-2006	13:59	1.0				9	
012	h2212012	X	RINSE			22-AUG-2006	14:04	1.0				2	
013	h2212013	X				22-AUG-2006	14:10	1.0				2	
014	h2212014	ICB				22-AUG-2006	14:15	1.0				2	
015	h2212015	ICSA				22-AUG-2006	14:21	1.0				10	2
016	h2212016	ICSAB				22-AUG-2006	14:26	1.0				11	2
017	h2212017	X	RINSE			22-AUG-2006	14:32	1.0				2	
018	h2212018	X	RINSE			22-AUG-2006	14:38	1.0				2	
019	h2212019	X	RINSE			22-AUG-2006	14:43	1.0				2	
020	h2212020	X	RINSE			22-AUG-2006	14:49	1.0				2	
021	h2212021	IDL				22-AUG-2006	14:54	1.0				2	
022	h2212022	IDL				22-AUG-2006	15:00	1.0				2	
023	h2212023	IDL				22-AUG-2006	15:06	1.0				2	
024	h2212024	IDL				22-AUG-2006	15:11	1.0				2	
025	h2212025	IDL				22-AUG-2006	15:17	1.0				2	
026	h2212026	IDL				22-AUG-2006	15:23	1.0				2	
027	h2212027	IDL				22-AUG-2006	15:28	1.0				2	
028	h2212028	CCV				22-AUG-2006	15:34	1.0				12	
029	h2212029	X	RINSE			22-AUG-2006	15:39	1.0				2	
030	h2212030	X				22-AUG-2006	15:45	1.0				2	

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S4009 13=S3780
Flags used: spk=5% spike rule

Analyst: *J. Halsey* Date: *8/23/06*

SEQUENCE SUMMARY

Curtis & Tompkins Laboratories

Sequence: 56337726 Instrument: MET05
 Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 22-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
031	h2212031	CCB		22-AUG-2006	15:51	1.0	1.0	1.0	1	1	1	2		
032	h2212032	BLANK	QC352577	116572	Filter	22-AUG-2006	15:56	1.0	1.0	1	1	2		
033	h2212033	BS	QC352578	116572	Filter	22-AUG-2006	16:02	1.0	1.0	1	1	2		
034	h2212034	BSD	QC352579	116572	Filter	22-AUG-2006	16:07	1.0	1.0	1	1	2		
035	h2212035	X	RINSE			22-AUG-2006	16:13	1.0			1	2		
036	h2212036	MSS	188774-003	116572	Filter	22-AUG-2006	16:19	1.0	1.0	3	1	2		
037	h2212037	SER	QC352582	116572	Filter	22-AUG-2006	16:24	5.0	1.0	1	1	2		
038	h2212038	MS	QC352580	116572	Filter	22-AUG-2006	16:30	1.0	1.0	1	1	2		
039	h2212039	MSD	QC352581	116572	Filter	22-AUG-2006	16:35	1.0	1.0	2	1	2		
040	h2212040	PDS	QC352583	116572	Filter	22-AUG-2006	16:41	1.0	1.0	1	1	13		
041	h2212041	X	RINSE			22-AUG-2006	16:46	1.0			1	2		
042	h2212042	SAMPLE	188774-001	116572	Filter	22-AUG-2006	16:52	1.0	1.0	3	1	2		
043	h2212043	SAMPLE	188774-002	116572	Filter	22-AUG-2006	16:58	1.0	1.0	4	1	2		
044	h2212044	X	RINSE			22-AUG-2006	17:03	1.0			1	2		
045	h2212045	CCV		22-AUG-2006	17:09	1.0					1	12		
046	h2212046	X	RINSE			22-AUG-2006	17:14	1.0	1.0			2		
047	h2212047	X		22-AUG-2006	17:20	1.0				1	1	2		
048	h2212048	CCB		22-AUG-2006	17:26	1.0					1	2		
049	h2212049	SAMPLE	188774-004	116572	Filter	22-AUG-2006	17:31	1.0	1.0	3	1	2		
050	h2212050	SAMPLE	188774-006	116572	Filter	22-AUG-2006	17:37	1.0	1.0	3	1	2		
051	h2212051	SAMPLE	188774-010	116572	Filter	22-AUG-2006	17:43	1.0	1.0	3	1	2		
052	h2212052	SAMPLE	188774-011	116572	Filter	22-AUG-2006	17:48	1.0	1.0	3	1	2		
053	h2212053	SAMPLE	188774-012	116572	Filter	22-AUG-2006	17:54	1.0	1.0	4	1	2		
054	h2212054	SAMPLE	188774-013	116572	Filter	22-AUG-2006	17:59	1.0	1.0	1	1	2		
055	h2212055	SAMPLE	188774-014	116572	Filter	22-AUG-2006	18:05	1.0	1.0	2	1	2		
056	h2212056	SAMPLE	188774-015	116572	Filter	22-AUG-2006	18:11	1.0	1.0	2	1	2		
057	h2212057	SAMPLE	188774-016	116572	Filter	22-AUG-2006	18:16	1.0	1.0	4	1	2		
058	h2212058	SAMPLE	188774-017	116572	Filter	22-AUG-2006	18:22	1.0	1.0	2	1	2		
059	h2212059	X	RINSE			22-AUG-2006	18:27	1.0			1	2		
060	h2212060	CCV		22-AUG-2006	18:33	1.0				1	1	2		

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S4009 13=S3780
 Flags used: spk=5% spike rule

Analyst: *A. Valdes* Date: *8/23/06*

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56337726 Instrument: MET05
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 22-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
061	h2212061	X	RINSE			22-AUG-2006 18:38	1.0					2		
062	h2212062	X				22-AUG-2006 18:44	1.0					2		
063	h2212063	CCB				22-AUG-2006 18:50	1.0	1.0	1	1	1	2		
064	h2212064	SAMPLE	188774-018			22-AUG-2006 18:55	1.0	1.0	2	1	1	2	2:NA=209600	
065	h2212065	SAMPLE	188774-019			22-AUG-2006 19:01	1.0	1.0	3	1	1	2	3:NA=221200	
066	h2212066	SAMPLE	188774-001			22-AUG-2006 19:07	20.0	1.0		1	1	2		
067	h2212067	SAMPLE	188774-002			22-AUG-2006 19:12	20.0	1.0		1	1	2		
068	h2212068	SAMPLE	188774-014			22-AUG-2006 19:18	20.0	1.0		1	1	2		
069	h2212069	SAMPLE	188774-015			22-AUG-2006 19:23	20.0	1.0		1	1	2		
070	h2212070	SAMPLE	188774-016			22-AUG-2006 19:29	20.0	1.0		1	1	2		
071	h2212071	SAMPLE	188774-018			22-AUG-2006 19:35	20.0	1.0	2	1	1	2		
072	h2212072	SAMPLE	188774-019			22-AUG-2006 19:40	20.0	1.0		1	1	2		
073	h2212073	X	RINSE			22-AUG-2006 19:46	1.0					2		
074	h2212074	CCV				22-AUG-2006 19:51	1.0					12		
075	h2212075	X	RINSE			22-AUG-2006 19:57	1.0	1.0		1	1	2		
076	h2212076	X				22-AUG-2006 20:03	1.0		1	1	1	2		
077	h2212077	CCB				22-AUG-2006 20:08	1.0	1.0		1	1	2		
078	h2212078	ICSA				22-AUG-2006 20:14	1.0	1.0		1	1	10 2	7:CA=302300	
079	h2212079	ICSAB				22-AUG-2006 20:19	1.0	1.0		1	1	11 2	8:CA=298600	

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S4009 13=S3780
Flags used: spk=5% spike rule

Analyst: *A. Carley* Date: *8/23/06*

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET05
Calnum : 56338993001
Units : ug/L

Date : 23-AUG-2006 10:26
X Axis : R

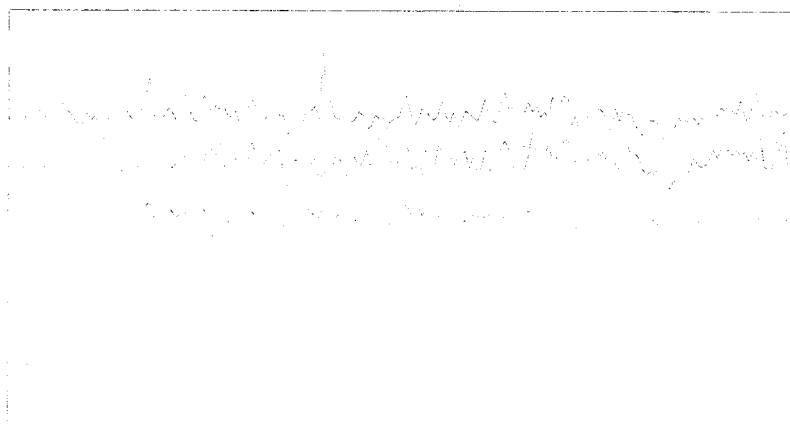
Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	h2309006	56338993006	CS1	23-AUG-2006 10:31	S4004
L2	h2309007	56338993007	CS2	23-AUG-2006 10:37	S4005
L3	h2309008	56338993008	CS3	23-AUG-2006 10:42	S4006
L4	h2309009	56338993009	CS4	23-AUG-2006 10:48	S4007
L5	h2309010	56338993010	CS5	23-AUG-2006 10:54	S4001
L6	h2309011	56338993011	CS6	23-AUG-2006 10:59	S4002

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ²	%RSD	MNR ²	Fig
Aluminum		1.2335	1.1596	1.2071	1.2174	1.1545	BLNK	-3.8893	0.85698		1.1944	0.999	0.995		
Antimony	0.4078	0.3683	0.3125	0.2962	0.3169	0.3153	BLNK	-0.0972	3.17084		0.3362	1.000	0.995		
Arsenic		0.9678	0.6561	0.5467	0.5489	0.5479	BLNK	-0.3104	1.82810		0.6535	1.000	0.995		
Barium	0.2281	0.1694	0.1479	0.1290	0.1350	0.1356	BLNK	-0.0986	7.38825		0.1575	1.000	0.995		
Beryllium	0.2868	0.2288	0.2184	0.1941	0.2047	0.1996	BLNK	-0.1296	4.98900		0.2220	1.000	0.995		
Cadmium	0.7812	0.5726	0.5023	0.4051	0.3889	0.3876	BLNK	-0.2254	2.58150		0.5063	1.000	0.995		
Calcium		0.0370	0.0298	0.0233	0.0244	0.0238	BLNK	-26.863	41.9298		0.0276	1.000	0.995		
Chromium		8.0842	5.4129	3.2028	3.0294	2.9826	BLNK	-0.8265	0.33589		4.5424	1.000	0.995		
Cobalt	4.7378	4.3107	3.8245	3.6269	3.6249	3.5717	BLNK	-0.0557	0.27923		3.9494	1.000	0.995		
Copper		1.7881	1.4980	0.9869	0.9499	0.9302	BLNK	-0.4545	1.07340		1.2306	1.000	0.995		
Iron		0.2498	0.1610	0.0873	0.0827	0.0841	BLNK	-103.61	12.0076		0.1330	1.000	0.995		
Lead	1.4671	1.2976	1.1713	1.1131	1.2003	1.1533	BLNK	-0.0638	0.86048		1.2338	1.000	0.995		
Magnesium		0.1632	0.1448	0.1402	0.1490	0.1419	BLNK	-6.7731	6.98200		0.1476	0.999	0.995		
Manganese	8.2586	6.4931	4.9734	3.9174	3.9280	3.9648	BLNK	-0.2605	0.25310		5.2559	1.000	0.995		
Molybdenum		1.0052	1.0090	0.9119	0.9102	0.9256	BLNK	-0.0831	1.08454		0.9524	1.000	0.995		
Nickel	2.0903	1.2089	1.0578	0.8287	0.7958	0.7812	BLNK	-0.2595	1.27718		1.1271	1.000	0.995		
Potassium		4.6193	2.7911	1.1951	1.0623	0.9895	BLNK	-166.38	1.00579		2.1315	0.999	0.995		
Selenium		0.1218	0.0744	0.0408	0.0357	0.0351	BLNK	-1.4380	28.6178		0.0616	1.000	0.995		
Silver	2.2040	2.0685	2.0450	1.8969	1.9289	1.9035	BLNK	-0.0413	0.52410		2.0078	1.000	0.995		
Sodium		2.5171	2.1561	1.4766	1.4547	1.3818	BLNK	-37.895	0.71774		1.7973	0.999	0.995		
Thallium		1.0232	0.9010	0.7661	0.8245	0.8331	BLNK	-0.0778	1.20421		0.8696	1.000	0.995		
Vanadium		5.9042	4.9179	3.4077	3.4426	3.6262	BLNK	-0.2511	0.27906		4.2597	0.999	0.995		
Zinc		2.8899	1.9844	0.5955	0.4914	0.4640	BLNK	-1.9743	2.15487		1.2850	0.999	0.995		

Tune Report

Tune File : ATUNE.U



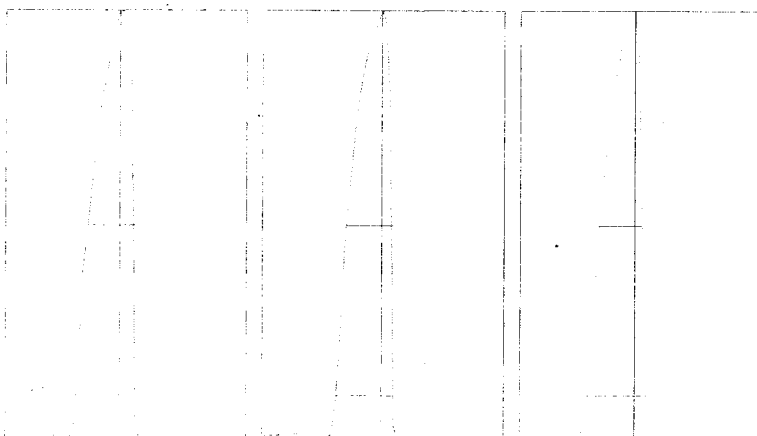
m/z:	7	89	205
Range:	20,000	20,000	20,000
Count:	12,454	15,265	9,997
Mean:	12943.2	15089.3	10193.0
RSD%:	3.93	3.34	2.99
n:	200		

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec

Oxide: 156/140 0.41%
Doubly Charged: 70/140 1.08%

Background:

m/z:	7	89	205
Cps:	72.1	29.8	22.7



m/z:	7	89	205
Height:	13,001	15,103	11,757
Axis:	6.95	89.00	204.95
W-50%:	0.60	0.60	0.55
W-10%:	0.7500	0.700	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Tuning Parameters

===Plasma Condition===

RF Power: 1300 W
RF Matching: 1.7 V
Smpl Depth: 8 mm
Torch-H: 0.2 mm
Torch-V: -0.2 mm
Carrier Gas: 1.07 L/min
Makeup Gas: 0 L/min
Optional Gas: --- %
PeriPump1: 0.1 rps
PeriPump2: --- rps
S/C Temp: 2 degC

===Ion Lenses===

Extract 1: -110 V
Extract 2: -100 V
Einzel 1,3: -120 V
Einzel 2: 7 V
Omega Bias: -95 V
Omega (+): 5 V
Omega (-): -5 V
QP Focus: 9 V
Plate Bias: -5 V

===Q-Pole Parameters===

AMU Gain: 130
AMU Offset: 126
Axis Gain: 0.9993
Axis Offset: -0.1
QP Bias: 1.6 V

===Detector Parameters===

Discriminator: 8.8 mV
Analog HV: 1860 V
Pulse HV: 1590 V

P/A Factor Tuning Report

Acquired: Aug 23 2006 09:30 am

Mass[amu]	Element	P/A Factor
6	Li	0.076115
9	Be	0.085251
23	Na	EM Error
25	Mg	Sensitivity too high
26	Mg	Sensitivity too high
27	Al	0.097612
39	K	EM Error
43	Ca	0.100321
44	Ca	Sensitivity too high
45	Sc	0.098774
51	V	0.101716
52	Cr	0.103305
53	Cr	0.101534
54	Fe	Sensitivity too high
55	Mn	0.105615
57	Fe	0.109012
59	Co	0.108272
60	Ni	0.108533
63	Cu	0.111130
65	Cu	0.109937
66	Zn	0.106944
72	Ge	Sensitivity too low
75	As	0.104623
77	(As)	Sensitivity too low
82	Se	Sensitivity too low
83	(As)	Sensitivity too low
88	(Ca)	Sensitivity too low
89	Y	0.104758
95	Mo	0.105793
98	Mo	0.107821
99	(Mo)	Sensitivity too low
106	(Cd)	Sensitivity too low
108	(Cd)	Sensitivity too low
109	Ag	0.114288
111	Cd	0.110245
114	Cd	0.113447
115	In	0.112084
118	(In)	Sensitivity too high
121	Sb	0.115235
135	Ba	0.111346
137	Ba	0.113149
159	Tb	0.114833
166	Er	Sensitivity too low

Temp.p\$\$

205	Tl	0.123703
206	(Pb)	0.120134
207	(Pb)	0.118937
208	Pb	0.121906
209	Bi	0.115614

===Detector Parameters===

Discriminator: 8.8 mV

Analog HV: 1860 V

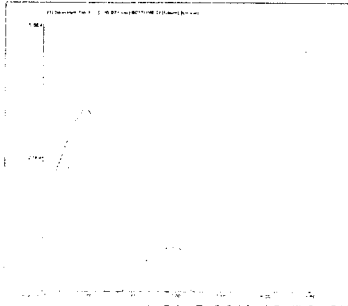
Pulse HV: 1590 V

6020 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\06H2309a.B\001TUNE.D
Date Acquired: Aug 23 2006 09:53 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s4021
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	0.63	5.00	
59 Co	1.31	5.00	
115 In	0.37	5.00	
205 Tl	0.68	5.00	



7 Li

Mass Calib.

Actual: 7.00

Required: 6.90 - 7.10

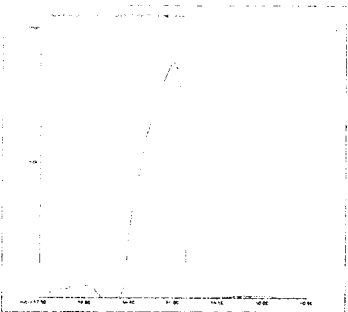
Flag:

Peak Width

Actual: 0.55

Required: 0.90

Flag:



59 Co

Mass Calib.

Actual: 59.00

Required: 58.90 - 59.10

Flag:

Peak Width

Actual: 0.55

Required: 0.90

Flag:

115 In

Mass Calib.

Actual: 115.00

Required: 114.90 - 115.10

Flag:

Peak Width

Actual: 0.55

Required: 0.90

Flag:

205 T1

Mass Calib.

Actual: 204.95

Required: 204.90 - 205.10

Flag:

Peak Width

Actual: 0.55

Required: 0.90

Flag:

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06H2309a.B\005CAL
Date Acquired: Aug 23 2006 10:26 am
Operator:
Sample Name: std-blank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\602001
Last Cal Update: Aug 22 2006 01:50 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	338025.50 P	3436.00	1.02
9 Be	175.56 P	25.46	14.50
23 Na	207047.80 P	1739.00	0.84
26 Mg	3803.33 P	150.70	3.96
27 Al	17795.55 P	154.90	0.87
39 K	648667.69 P	463.70	0.07
44 Ca	2512.46 P	41.05	1.63
45 Sc	196081.09 P	2324.00	1.19
51 V	900.10 P	231.80	25.75
52 Cr	2464.44 P	148.10	6.01
55 Mn	1031.11 P	29.88	2.90
57 Fe	8643.33 P	196.60	2.27
59 Co	200.00 P	12.02	6.01
60 Ni	203.33 P	17.64	8.68
65 Cu	424.43 P	48.11	11.34
66 Zn	917.78 P	60.12	6.55
72 Ge	50080.44 P	586.70	1.17
75 As	170.80 P	106.20	62.18
82 Se	50.22 P	13.00	25.89
95 Mo	76.67 P	8.82	11.50
109 Ag	78.89 P	15.75	19.97
111 Cd	87.44 P	33.45	38.25
115 In	266344.59 P	1938.00	0.73
121 Sb	163.33 P	14.53	8.90
137 Ba	71.11 P	12.62	17.75
205 Tl	380.00 P	21.86	5.75
208 Pb	436.67 P	48.07	11.01
209 Bi	294241.09 P	6344.00	2.16

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2309a.B\006CALI.D\006CALI.D#
 Date Acquired: Aug 23 2006 10:31 am
 Operator:
 Sample Name: cs1,s4004
 Misc Info:
 Vial Number: 1102
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 23 2006 10:27 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	351072.19 P	285.50	0.08
9 Be	503.33 P	53.64	10.66
23 Na	378665.50 P	5381.00	1.42
26 Mg	18381.11 P	278.10	1.51
27 Al	137372.20 P	1436.00	1.05
39 K	818464.31 A	9057.00	1.11
44 Ca	5322.17 P	89.86	1.69
45 Sc	202745.59 P	2025.00	1.00
51 V	1797.65 P	314.40	17.49
52 Cr	3398.89 P	155.60	4.58
55 Mn	2111.11 P	36.72	1.74
57 Fe	11091.11 P	120.10	1.08
59 Co	1211.11 P	53.47	4.42
60 Ni	534.44 P	40.05	7.49
65 Cu	678.81 P	21.43	3.16
66 Zn	1206.67 P	28.87	2.39
72 Ge	51126.89 P	220.40	0.43
75 As	281.26 P	175.20	62.29
82 Se	59.11 P	23.33	39.47
95 Mo	321.11 P	44.39	13.82
109 Ag	563.33 P	28.48	5.06
111 Cd	199.68 P	5.50	2.75
115 In	275598.00 P	1247.00	0.45
121 Sb	562.22 P	83.82	14.91
137 Ba	314.44 P	32.89	10.46
205 Tl	945.56 P	90.21	9.54
208 Pb	2225.56 P	26.74	1.20
209 Bi	303434.41 P	4119.00	1.36

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	351072.19	0.08	338025.53	103.9	80 - 120	

45	Sc	202745.55	1.00	196081.09	103.4	80 -	120
72	Ge	51126.89	0.43	50080.44	102.1	80 -	120
115	In	275598.03	0.45	266344.63	103.5	80 -	120
209	Bi	303434.44	1.36	294241.09	103.1	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2309a.B\005CALB.D\005CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2309a.B\007CALI.D\007CALI.D#
 Date Acquired: Aug 23 2006 10:37 am
 Operator:
 Sample Name: cs2,s4005
 Misc Info:
 Vial Number: 1103
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 23 2006 10:33 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	343258.91 P	2634.00	0.77
9 Be	785.56 P	63.01	8.02
23 Na	499558.91 P	3983.00	0.80
26 Mg	32200.00 P	589.70	1.83
27 Al	244804.41 P	812.10	0.33
39 K	916803.50 A	5016.00	0.55
44 Ca	7333.59 P	205.60	2.80
45 Sc	198497.80 P	3346.00	1.69
51 V	2994.78 P	417.70	13.95
52 Cr	4103.33 P	35.12	0.86
55 Mn	3295.55 P	126.20	3.83
57 Fe	12681.11 P	82.21	0.65
59 Co	2188.89 P	167.40	7.65
60 Ni	613.33 P	46.31	7.55
65 Cu	907.64 P	26.74	2.95
66 Zn	1466.67 P	53.64	3.66
72 Ge	50758.67 P	459.10	0.90
75 As	491.12 P	50.52	10.29
82 Se	61.78 P	7.81	12.65
95 Mo	510.00 P	60.00	11.77
109 Ag	1050.00 P	101.70	9.69
111 Cd	290.74 P	31.65	10.89
115 In	270941.69 P	715.70	0.26
121 Sb	997.78 P	70.03	7.02
137 Ba	458.89 P	65.77	14.33
205 Tl	1531.11 P	23.41	1.53
208 Pb	3883.33 P	41.77	1.08
209 Bi	299275.50 P	1274.00	0.43

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	343258.88	0.77	338025.53	101.5	80 - 120	

45	Sc	198497.77	1.69	196081.09	101.2	80 -	120
72	Ge	50758.67	0.90	50080.44	101.4	80 -	120
115	In	270941.72	0.26	266344.63	101.7	80 -	120
209	Bi	299275.53	0.43	294241.09	101.7	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2309a.B\005CALB.D\005CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2309a.B\008CALI.D\008CALI.D#
 Date Acquired: Aug 23 2006 10:42 am
 Operator:
 Sample Name: cs3,s4006
 Misc Info:
 Vial Number: 1104
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 23 2006 10:39 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	344461.09 P	2458.00	0.71
9 Be	1504.44 P	45.26	3.01
23 Na	857895.50 A	5546.00	0.65
26 Mg	57622.22 P	846.90	1.47
27 Al	461390.00 P	4937.00	1.07
39 K	1110577.00 A	12060.00	1.09
44 Ca	11840.72 P	307.20	2.59
45 Sc	198947.80 P	598.60	0.30
51 V	5036.70 P	562.70	11.17
52 Cr	5543.33 P	68.88	1.24
55 Mn	5093.33 P	300.50	5.90
57 Fe	16484.44 P	318.50	1.93
59 Co	3916.67 P	27.28	0.70
60 Ni	1083.33 P	34.64	3.20
65 Cu	1534.19 P	93.41	6.09
66 Zn	2032.22 P	1.93	0.09
72 Ge	51205.56 P	118.40	0.23
75 As	671.64 P	147.90	22.02
82 Se	76.22 P	7.90	10.36
95 Mo	1033.33 P	15.28	1.48
109 Ag	2094.44 P	81.67	3.90
111 Cd	514.38 P	18.12	3.52
115 In	272745.81 P	390.30	0.14
121 Sb	1704.44 P	108.80	6.38
137 Ba	806.67 P	105.90	13.13
205 Tl	2754.44 P	61.94	2.25
208 Pb	7158.89 P	269.50	3.76
209 Bi	305701.09 P	4161.00	1.36

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	344461.09	0.71	338025.53	101.9	80 - 120	

45	Sc	198947.77	0.30	196081.09	101.5	80 -	120
72	Ge	51205.56	0.23	50080.44	102.2	80 -	120
115	In	272745.84	0.14	266344.63	102.4	80 -	120
209	Bi	305701.09	1.36	294241.09	103.9	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2309a.B\005CALB.D\005CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2309a.B\009CALI.D\009CALI.D#
 Date Acquired: Aug 23 2006 10:48 am
 Operator:
 Sample Name: cs4,s4007
 Misc Info:
 Vial Number: 1105
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 23 2006 10:44 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	346514.41 P	5141.00	1.48
9 Be	13451.11 P	377.10	2.80
23 Na	5983386.00 A	91850.00	1.54
26 Mg	568057.69 P	894.60	0.16
27 Al	4890589.00 A	3551.00	0.07
39 K	4841892.00 A	87290.00	1.80
44 Ca	94333.35 P	1783.00	1.89
45 Sc	202595.59 P	1988.00	0.98
51 V	35153.12 P	1151.00	3.27
52 Cr	33036.67 P	557.70	1.69
55 Mn	40410.00 P	852.50	2.11
57 Fe	90054.44 P	1324.00	1.47
59 Co	37410.00 P	344.60	0.92
60 Ni	8550.00 P	479.20	5.60
65 Cu	10178.69 P	18.37	0.18
66 Zn	6141.11 P	115.00	1.87
72 Ge	51574.22 P	634.20	1.23
75 As	5638.95 P	39.62	0.70
82 Se	420.44 P	3.08	0.73
95 Mo	9405.55 P	169.20	1.80
109 Ag	19563.33 P	283.40	1.45
111 Cd	4178.67 P	93.00	2.23
115 In	273323.69 P	4169.00	1.53
121 Sb	16187.78 P	59.85	0.37
137 Ba	7051.11 P	214.50	3.04
205 Tl	23406.67 P	600.00	2.56
208 Pb	68016.66 P	806.70	1.19
209 Bi	305544.41 P	1904.00	0.62

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	346514.44	1.48	338025.53	102.5	80 - 120	

45	Sc	202595.55	0.98	196081.09	103.3	80 -	120
72	Ge	51574.22	1.23	50080.44	103.0	80 -	120
115	In	273323.66	1.53	266344.63	102.6	80 -	120
209	Bi	305544.44	0.62	294241.09	103.8	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2309a.B\005CALB.D\005CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2309a.B\010CALI.D\010CALI.D#
 Date Acquired: Aug 23 2006 10:54 am
 Operator:
 Sample Name: cs5,s4001
 Misc Info:
 Vial Number: 1106
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 23 2006 10:50 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	330925.50 P	1953.00	0.59
9 Be	135484.41 P	1601.00	1.18
23 Na	57229960.00 A	192700.00	0.34
26 Mg	5860788.00 A	66000.00	1.13
27 Al	47894520.00 A	562700.00	1.17
39 K	41792820.00 A	249900.00	0.60
44 Ca	961335.00 A	16940.00	1.76
45 Sc	196712.20 P	688.00	0.35
51 V	349620.00 P	3294.00	0.94
52 Cr	307635.50 P	1330.00	0.43
55 Mn	398908.91 P	4008.00	1.00
57 Fe	839834.50 M	44410.00	5.29
59 Co	368130.00 P	1768.00	0.48
60 Ni	80817.78 P	343.40	0.42
65 Cu	96471.11 P	899.50	0.93
66 Zn	49900.00 P	355.50	0.71
72 Ge	50778.67 P	375.10	0.74
75 As	55741.47 P	636.90	1.14
82 Se	3622.22 P	60.91	1.68
95 Mo	92433.33 P	538.30	0.58
109 Ag	195887.80 P	1047.00	0.53
111 Cd	39492.38 P	529.10	1.34
115 In	260020.20 P	1614.00	0.62
121 Sb	164790.00 P	2130.00	1.29
137 Ba	70207.78 P	1265.00	1.80
205 Tl	240920.00 P	2031.00	0.84
208 Pb	701433.31 P	10030.00	1.43
209 Bi	292188.91 P	1080.00	0.37

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	330925.53	0.59	338025.53	97.9	80 - 120	

45 Sc	196712.22	0.35	196081.09	100.3	80 -	120
72 Ge	50778.67	0.74	50080.44	101.4	80 -	120
115 In	260020.22	0.62	266344.63	97.6	80 -	120
209 Bi	292188.88	0.37	294241.09	99.3	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2309a.B\005CALB.D\005CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2309a.B\011CALI.D\011CALI.D#
 Date Acquired: Aug 23 2006 10:59 am
 Operator:
 Sample Name: cs6,s4002
 Misc Info:
 Vial Number: 1107
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 23 2006 10:55 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	339378.91 P	2810.00	0.83
9 Be	270952.19 P	2657.00	0.98
23 Na	112421400.00 A	144900.00	0.13
26 Mg	11542100.00 A	127300.00	1.10
27 Al	93921240.00 A	2342000.00	2.49
39 K	80498552.00 A	2574000.00	3.20
44 Ca	1932581.00 A	16180.00	0.84
45 Sc	203404.41 P	1450.00	0.71
51 V	736399.88 M	34070.00	4.63
52 Cr	605510.00 P	5745.00	0.95
55 Mn	805160.00 M	32030.00	3.98
57 Fe	1706997.00 A	11160.00	0.65
59 Co	725133.31 P	9416.00	1.30
60 Ni	158603.30 P	1983.00	1.25
65 Cu	188846.91 P	2834.00	1.50
66 Zn	94205.55 P	1771.00	1.88
72 Ge	50756.44 P	788.30	1.55
75 As	111214.30 P	259.20	0.23
82 Se	7132.89 P	12.93	0.18
95 Mo	187900.00 P	289.50	0.15
109 Ag	386415.50 P	2904.00	0.75
111 Cd	78684.11 P	297.30	0.38
115 In	256840.41 P	4815.00	1.87
121 Sb	323878.91 P	3706.00	1.14
137 Ba	139240.00 P	1048.00	0.75
205 Tl	481102.19 P	4452.00	0.93
208 Pb	1332151.00 P	14030.00	1.05
209 Bi	288797.81 P	5239.00	1.81

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	339378.88	0.83	338025.53	100.4	80 - 120	

45 Sc	203404.44	0.71	196081.09	103.7	80 -	120
72 Ge	50756.44	1.55	50080.44	101.3	80 -	120
115 In	256840.44	1.87	266344.63	96.4	80 -	120
209 Bi	288797.78	1.81	294241.09	98.2	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2309a.B\005CALB.D\005CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06H2309a.B\012BLNK.D\012BLNK.D#
 Date Acquired: Aug 23 2006 11:05 am
 Acq. Method: 60200111.M
 Operator:
 Sample Name: rinse
 Misc Info:
 Vial Number: 1303
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal. Update: Aug 23 2006 11:01 am
 Sample Type: 6-Blank
 Dilution Factor: 1.00

QC Elements

Element	Corr. Conc.	RSD(%)	Raw Conc.	High Limit	Flag
9 Be	0.09699 ppb	13.55	0.09699	1.00	
23 Na	2.73 ppb	27.37	2.73	1.00	
26 Mg	7.549 ppb	7.48	7.549	1.00	
27 Al	8.104 ppb	5.93	8.104	1.00	
39 K	8.169 ppb	106.44	8.169	1.00	
44 Ca	7.416 ppb	12.91	7.416	1.00	
51 V	0.003464 ppb	3692.30	0.003464	1.00	
52 Cr	0.1198 ppb	22.44	0.1198	1.00	
55 Mn	0.06507 ppb	12.18	0.06507	1.00	
57 Fe	3.307 ppb	111.70	3.307	1.00	
59 Co	0.1044 ppb	11.87	0.1044	1.00	
60 Ni	0.09833 ppb	41.79	0.09833	1.00	
65 Cu	-0.02096 ppb	199.52	-0.02096	1.00	
66 Zn	0.006208 ppb	583.76	0.006208	1.00	
75 As	-0.004153 ppb	7471.70	-0.004153	1.00	
82 Se	0.08404 ppb	594.84	0.08404	1.00	
95 Mo	0.3243 ppb	22.52	0.3243	1.00	
109 Ag	0.08115 ppb	18.02	0.08115	1.00	
111 Cd	0.0605 ppb	73.67	0.0605	1.00	
121 Sb	0.1467 ppb	13.82	0.1467	1.00	
137 Ba	0.1387 ppb	18.80	0.1387	1.00	
205 Tl	0.484 ppb	17.82	0.484	1.00	
208 Pb	0.07739 ppb	1.02	0.07739	1.00	

ISTD Elements

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	337528.88		1.05	338025.53	99.9	80 - 120	
45 Sc	202024.44		0.87	196081.09	103.0	80 - 120	
72 Ge	50175.56		0.70	50080.44	100.2	80 - 120	
115 In	270042.31		1.44	266344.63	101.4	80 - 120	
209 Bi	301341.09		0.06	294241.09	102.4	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2309a.B\005CALB.D\005CALB.D#

6 :Element Failures	0 :Max. Number of Failures Allowed
0 :ISTD Failures	0 :Max. Nnumber of ISTD Failures Allowed

QC Results:

Analytes:	Fail
ISTD:	Pass

Calibration Summary

Calibration : C:\ICPCHEM\1\DATA\06G1718A.B\60200111.C

Last Calib: Aug 23, 2006 11:01

Cal Type : External Calibration Method

Cal Title :

Standard Data Files

Level	DataPath	DataFile	Date Acquired
1	...hem\1\data\06h2309a.b\005calb.d\	005calb.d#	Aug 23 2006 10:26 am
2	...hem\1\data\06h2309a.b\006cali.d\	006cali.d#	Aug 23 2006 10:31 am
3	...hem\1\data\06h2309a.b\007cali.d\	007cali.d#	Aug 23 2006 10:37 am
4	...hem\1\data\06h2309a.b\008cali.d\	008cali.d#	Aug 23 2006 10:42 am
5	...hem\1\data\06h2309a.b\009cali.d\	009cali.d#	Aug 23 2006 10:48 am
6	...hem\1\data\06h2309a.b\010cali.d\	010cali.d#	Aug 23 2006 10:54 am
7	...hem\1\data\06h2309a.b\011cali.d\	011cali.d#	Aug 23 2006 10:59 am
8	---		
9	---		
10	---		
11	---		
12	---		
13	---		
14	---		
15	---		
16	---		
17	---		
18	---		
19	---		
20	---		

Level	BkgPath	BkgFile	Interference Correction
1	---	---	ON
2	---	---	ON
3	---	---	ON
4	---	---	ON
5	---	---	ON
6	---	---	ON
7	---	---	ON
8	---		
9	---		
10	---		
11	---		
12	---		
13	---		
14	---		
15	---		
16	---		
17	---		
18	---		
19	---		
20	---		

Name	m/z	IS	Equation	r	Units
Li	6	---	Excluded	---	ppb
Be	9	6	$Y = 2.004E-1 \cdot X + 2.597E-2$ (blank)	---	ppb
Na	23	45	$Y = 1.393E+0 \cdot X + 5.280E+1$ (blank)	---	ppb
Mg	25	45	Excluded	---	ppb
Mg	26	45	$Y = 1.432E-1 \cdot X + 9.701E-1$ (blank)	---	ppb
Al	27	45	$Y = 1.167E+0 \cdot X + 4.538E+0$ (blank)	---	ppb
K	39	45	$Y = 9.942E-1 \cdot X + 1.654E+2$ (blank)	---	ppb
Ca	43	45	Excluded	---	ppb
Ca	44	45	$Y = 2.385E-2 \cdot X + 6.407E-1$ (blank)	---	ppb
Sc	45	---	Excluded	---	ppb
V	51	72	$Y = 3.584E+0 \cdot X + 8.999E-1$ (blank)	---	ppb
Cr	52	72	$Y = 2.977E+0 \cdot X + 2.461E+0$ (blank)	---	ppb
Cr	53	72	Excluded	---	ppb
Fe	54	72	Excluded	---	ppb
Mn	55	72	$Y = 3.951E+0 \cdot X + 1.029E+0$ (blank)	---	ppb
Fe	57	72	$Y = 8.328E-2 \cdot X + 8.629E+0$ (blank)	---	ppb
Co	59	72	$Y = 3.581E+0 \cdot X + 1.996E-1$ (blank)	---	ppb
Ni	60	72	$Y = 7.830E-1 \cdot X + 2.032E-1$ (blank)	---	ppb
Cu	63	72	Excluded	---	ppb
Cu	65	72	$Y = 9.316E-1 \cdot X + 4.235E-1$ (blank)	---	ppb
Zn	66	72	$Y = 4.641E-1 \cdot X + 9.162E-1$ (blank)	---	ppb
Ge	72	---	Excluded	---	ppb
As	75	72	$Y = 5.470E-1 \cdot X + 1.698E-1$ (blank)	---	ppb
(As)	77	72	Excluded	---	ppb
Se	82	72	$Y = 3.494E-2 \cdot X + 5.025E-2$ (blank)	---	ppb
(As)	83	72	Excluded	---	ppb
(Ca)	88	72	Excluded	---	ppb
Y	89	72	Excluded	---	ppb
Mo	95	72	$Y = 9.221E-1 \cdot X + 7.660E-2$ (blank)	---	ppb
Mo	98	72	Excluded	---	ppb
(Mo)	99	72	Excluded	---	ppb
(Cd)	106	72	Excluded	---	ppb
(Cd)	108	72	Excluded	---	ppb
Ag	109	72	$Y = 1.908E+0 \cdot X + 7.889E-2$ (blank)	---	ppb
Cd	111	72	$Y = 3.874E-1 \cdot X + 8.732E-2$ (blank)	---	ppb
Cd	114	72	Excluded	---	ppb
In	115	---	Excluded	---	ppb
(In)	118	---	Excluded	---	ppb
Sb	121	115	$Y = 3.154E-1 \cdot X + 3.065E-2$ (blank)	---	ppb
Ba	135	115	Excluded	---	ppb
Ba	137	115	$Y = 1.354E-1 \cdot X + 1.335E-2$ (blank)	---	ppb
Tb	159	---	Excluded	---	ppb
Er	166	115	Excluded	---	ppb
Tl	205	209	$Y = 8.304E-1 \cdot X + 6.457E-2$ (blank)	---	ppb
(Pb)	206	209	Excluded	---	ppb
(Pb)	207	209	Excluded	---	ppb
Pb	208	209	$Y = 1.162E+0 \cdot X + 7.415E-2$ (blank)	---	ppb
Bi	209	---	Excluded	---	ppb

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET05
 Segnum : 56338993013
 Cal : 56338993001
 Standards: S4008

File : h2309013
 Caldate: 23-AUG-2006

IDF : 1.0
 Time : 23-AUG-2006 11:10

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	1.1944	1.2292	10000	10530	ug/L	5	10	
Antimony	0.3362	0.3191	100.0	101.1	ug/L	1	10	
Arsenic	0.6535	0.5557	100.0	101.3	ug/L	1	10	
Barium	0.1575	0.1357	100.0	100.2	ug/L	0	10	
Beryllium	0.2220	0.2025	100.0	100.9	ug/L	1	10	
Cadmium	0.5063	0.3993	100.0	102.9	ug/L	3	10	
Calcium	0.0276	0.0249	10000	10430	ug/L	4	10	
Chromium	4.5424	3.0715	100.0	102.3	ug/L	2	10	
Cobalt	3.9494	3.6976	100.0	103.2	ug/L	3	10	
Copper	1.2306	0.9619	100.0	102.8	ug/L	3	10	
Iron	0.1330	0.0854	10000	10150	ug/L	2	10	
Lead	1.2338	1.2159	100.0	104.6	ug/L	5	10	
Magnesium	0.1476	0.1504	10000	10490	ug/L	5	10	
Manganese	5.2559	3.9593	100.0	99.95	ug/L	0	10	
Molybdenum	0.9524	0.9278	100.0	100.5	ug/L	1	10	
Nickel	1.1271	0.8087	100.0	103.0	ug/L	3	10	
Potassium	2.1315	1.0733	10000	10630	ug/L	6	10	
Selenium	0.0616	0.0360	100.0	101.5	ug/L	2	10	
Silver	2.0078	1.9688	100.0	103.1	ug/L	3	10	
Sodium	1.7973	1.4596	10000	10440	ug/L	4	10	
Thallium	0.8696	0.8310	50.00	49.95	ug/L	0	10	
Vanadium	4.2597	3.5185	100.0	97.93	ug/L	-2	10	
Zinc	1.2850	0.4971	100.0	105.1	ug/L	5	10	

ISTD (ICALBLK h2309005)	ICALBLK Abund	Abund	%Drift
Lithium	338026	339510	0.44
Scandium	196081	198210	1.09
Germanium	50080	50430	0.70
Indium	266345	258354	-3.00
Bismuth	294241	292493	-0.59

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56338993031
 Cal : 56338993001
 Standards: S4009

File : h2309031
 Caldate: 23-AUG-2006

IDF : 1.0
 Time : 23-AUG-2006 12:51

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	1.1944	1.2082	10000	10350	ug/L	3	10	
Antimony	0.3362	0.3130	100.0	99.16	ug/L	-1	10	
Arsenic	0.6535	0.5495	100.0	100.1	ug/L	0	10	
Barium	0.1575	0.1344	100.0	99.21	ug/L	-1	10	
Beryllium	0.2220	0.1996	100.0	99.44	ug/L	-1	10	
Cadmium	0.5063	0.3910	100.0	100.7	ug/L	1	10	
Calcium	0.0276	0.0248	10000	10360	ug/L	4	10	
Chromium	4.5424	3.0393	100.0	101.3	ug/L	1	10	
Cobalt	3.9494	3.6329	100.0	101.4	ug/L	1	10	
Copper	1.2306	0.9499	100.0	101.5	ug/L	2	10	
Iron	0.1330	0.0839	10000	9974	ug/L	0	10	
Lead	1.2338	1.2079	100.0	103.9	ug/L	4	10	
Magnesium	0.1476	0.1483	10000	10350	ug/L	4	10	
Manganese	5.2559	3.8559	100.0	97.33	ug/L	-3	10	
Molybdenum	0.9524	0.9280	100.0	100.6	ug/L	1	10	
Nickel	1.1271	0.7993	100.0	101.8	ug/L	2	10	
Potassium	2.1315	1.0484	10000	10380	ug/L	4	10	
Selenium	0.0616	0.0358	100.0	101.0	ug/L	1	10	
Silver	2.0078	1.9413	100.0	101.7	ug/L	2	10	
Sodium	1.7973	1.4424	10000	10310	ug/L	3	10	
Thallium	0.8696	0.8283	50.00	49.79	ug/L	0	10	
Vanadium	4.2597	3.5294	100.0	98.24	ug/L	-2	10	
Zinc	1.2850	0.4815	100.0	101.8	ug/L	2	10	

ISTD (ICALBLK h2309005)	ICALBLK Abund	Abund	%Drift
Lithium	338026	349738	3.46
Scandium	196081	204230	4.16
Germanium	50080	50965	1.77
Indium	266345	262133	-1.58
Bismuth	294241	298941	1.60

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05

Seqnum : 56338993048

Cal : 56338993001

Standards: S4009, S3310

File : h2309048

Caldate: 23-AUG-2006

IDF : 1.0

Time : 23-AUG-2006 14:35

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	1.1944	1.1452	10000	9811	ug/L	-2	10	
Antimony	0.3362	0.3025	100.0	95.81	ug/L	-4	10	
Arsenic	0.6535	0.5321	100.0	96.97	ug/L	-3	10	
Barium	0.1575	0.1316	100.0	97.12	ug/L	-3	10	
Beryllium	0.2220	0.1941	100.0	96.73	ug/L	-3	10	
Cadmium	0.5063	0.3814	100.0	98.23	ug/L	-2	10	
Calcium	0.0276	0.0242	10000	10120	ug/L	1	10	
Chromium	4.5424	2.9143	100.0	97.06	ug/L	-3	10	
Cobalt	3.9494	3.4834	100.0	97.21	ug/L	-3	10	
Copper	1.2306	0.9085	100.0	97.06	ug/L	-3	10	
Iron	0.1330	0.0822	10000	9772	ug/L	-2	10	
Lead	1.2338	1.1785	100.0	101.3	ug/L	1	10	
Magnesium	0.1476	0.1409	10000	9831	ug/L	-2	10	
Manganese	5.2559	3.7304	100.0	94.16	ug/L	-6	10	
Molybdenum	0.9524	0.8984	100.0	97.35	ug/L	-3	10	
Nickel	1.1271	0.7650	100.0	97.45	ug/L	-3	10	
Potassium	2.1315	1.0245	10000	10140	ug/L	1	10	
Selenium	0.0616	0.0348	100.0	98.13	ug/L	-2	10	
Silver	2.0078	1.8856	100.0	98.79	ug/L	-1	10	
Sodium	1.7973	1.3400	10000	9579	ug/L	-4	10	
Thallium	0.8696	0.8044	50.00	48.36	ug/L	-3	10	
Vanadium	4.2597	3.4133	100.0	95.00	ug/L	-5	10	
Zinc	1.2850	0.4687	100.0	99.02	ug/L	-1	10	

ISTD (ICALBLK h2309005)	ICALBLK Abund	Abund	%Drift
Lithium	338026	352903	4.40
Scandium	196081	213528	8.90
Germanium	50080	52001	3.83
Indium	266345	266389	0.02
Bismuth	294241	304702	3.56

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05

Seqnum : 56338993064

Cal : 56338993001

Standards: S4009, S3310

File : h2309064

Caldate: 23-AUG-2006

IDF : 1.0

Time : 23-AUG-2006 16:12

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	1.1944	1.1316	10000	9694	ug/L	-3	10	
Antimony	0.3362	0.2989	100.0	94.69	ug/L	-5	10	
Arsenic	0.6535	0.5228	100.0	95.25	ug/L	-5	10	
Barium	0.1575	0.1279	100.0	94.39	ug/L	-6	10	
Beryllium	0.2220	0.1947	100.0	96.99	ug/L	-3	10	
Cadmium	0.5063	0.3749	100.0	96.55	ug/L	-3	10	
Calcium	0.0276	0.0239	10000	9987	ug/L	0	10	
Chromium	4.5424	2.8905	100.0	96.26	ug/L	-4	10	
Cobalt	3.9494	3.3737	100.0	94.15	ug/L	-6	10	
Copper	1.2306	0.8872	100.0	94.78	ug/L	-5	10	
Iron	0.1330	0.0808	10000	9594	ug/L	-4	10	
Lead	1.2338	1.1549	100.0	99.32	ug/L	-1	10	
Magnesium	0.1476	0.1373	10000	9583	ug/L	-4	10	
Manganese	5.2559	3.6462	100.0	92.02	ug/L	-8	10	
Molybdenum	0.9524	0.9086	100.0	98.46	ug/L	-2	10	
Nickel	1.1271	0.7338	100.0	93.46	ug/L	-7	10	
Potassium	2.1315	1.0270	10000	10160	ug/L	2	10	
Selenium	0.0616	0.0342	100.0	96.31	ug/L	-4	10	
Silver	2.0078	1.8643	100.0	97.67	ug/L	-2	10	
Sodium	1.7973	1.2999	10000	9292	ug/L	-7	10	
Thallium	0.8696	0.7982	50.00	47.98	ug/L	-4	10	
Vanadium	4.2597	3.3631	100.0	93.60	ug/L	-6	10	
Zinc	1.2850	0.4496	100.0	94.91	ug/L	-5	10	

ISTD (ICALBLK h2309005)	ICALBLK Abund	Abund	%Drift
Lithium	338026	347453	2.79
Scandium	196081	214547	9.42
Germanium	50080	51909	3.65
Indium	266345	268281	0.73
Bismuth	294241	305856	3.95

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56338993016
 Cal : 56338993001

File : h2309016
 Caldate: 23-AUG-2006

IDF : 1.0
 Time : 23-AUG-2006 11:27

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	50.00	2.123	ug/L	
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	ND	0.5000	0.09029	ug/L	
Barium	[0.02850]	0.2500	0.02391	ug/L	!ib
Beryllium	ND	0.2500	0.009674	ug/L	
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	ND	0.5000	0.03860	ug/L	
Cobalt	[0.01475]	0.2500	0.008548	ug/L	!ib
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	ND	50.00	3.054	ug/L	
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	ND	0.2500	0.01266	ug/L	
Sodium	ND	50.00	9.919	ug/L	
Thallium	ND	0.2500	0.02100	ug/L	
Vanadium	[0.1397]	0.5000	0.08283	ug/L	!ib
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2309005)	ICALBLK Abund	Abund	%Drift
Lithium	338026	349690	3.45
Scandium	196081	206294	5.21
Germanium	50080	50621	1.08
Indium	266345	274168	2.94
Bismuth	294241	309296	5.12

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56338993033
 Cal : 56338993001

File : h2309033
 Caldate: 23-AUG-2006

IDF : 1.0
 Time : 23-AUG-2006 13:02

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[3.732]	50.00	2.123	ug/L	!ib
Antimony	[0.04327]	0.2500	0.03394	ug/L	!ib
Arsenic	[0.1421]	0.5000	0.09029	ug/L	!ib
Barium	[0.05211]	0.2500	0.02391	ug/L	!ib
Beryllium	ND	0.2500	0.009674	ug/L	
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	ND	0.5000	0.03860	ug/L	
Cobalt	[0.02853]	0.2500	0.008548	ug/L	!ib
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	ND	50.00	3.054	ug/L	
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	[0.06436]	0.2500	0.03982	ug/L	!ib
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	ND	0.2500	0.01266	ug/L	
Sodium	ND	50.00	9.919	ug/L	
Thallium	[0.07577]	0.2500	0.02100	ug/L	!ib
Vanadium	[0.09614]	0.5000	0.08283	ug/L	!ib
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2309005)	ICALBLK Abund	Abund	%Drift
Lithium	338026	351957	4.12
Scandium	196081	203499	3.78
Germanium	50080	50598	1.03
Indium	266345	272236	2.21
Bismuth	294241	306190	4.06

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56338993051
 Cal : 56338993001

File : h2309051
 Caldate: 23-AUG-2006

IDF : 1.0
 Time : 23-AUG-2006 14:51

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	50.00	2.123	ug/L	
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	ND	0.5000	0.09029	ug/L	
Barium	[0.03345]	0.2500	0.02391	ug/L	!ib
Beryllium	ND	0.2500	0.009674	ug/L	
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	ND	0.5000	0.03860	ug/L	
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	ND	50.00	3.054	ug/L	
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	ND	0.2500	0.01266	ug/L	
Sodium	ND	50.00	9.919	ug/L	
Thallium	ND	0.2500	0.02100	ug/L	
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2309005)	ICALBLK Abund	Abund	%Drift
Lithium	338026	358371	6.02
Scandium	196081	213512	8.89
Germanium	50080	51399	2.63
Indium	266345	280122	5.17
Bismuth	294241	306649	4.22

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56338993066
 Cal : 56338993001

File : h2309066
 Caldate: 23-AUG-2006

IDF : 1.0
 Time : 23-AUG-2006 16:23

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[3.247]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	ND	0.5000	0.09029	ug/L	
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	ND	0.2500	0.009674	ug/L	
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	ND	0.5000	0.03860	ug/L	
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	ND	50.00	3.054	ug/L	
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	ND	0.2500	0.01266	ug/L	
Sodium	ND	50.00	9.919	ug/L	
Thallium	ND	0.2500	0.02100	ug/L	
Vanadium	[0.08920]	0.5000	0.08283	ug/L	!ib
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2309005)	ICALBLK Abund	Abund	%Drift
Lithium	338026	353752	4.65
Scandium	196081	213937	9.11
Germanium	50080	52020	3.87
Indium	266345	278830	4.69
Bismuth	294241	314187	6.78

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05

Seqnum : 56338993017

Cal : 56338993001

Standards: S4011, S3310

File : h2309017

Caldate: 23-AUG-2006

IDF : 1.0

Time : 23-AUG-2006 11:33

Analyte	Quant	RL	Units	Flags
Antimony	2.183	0.2500	ug/L	
Arsenic	1.093	0.5000	ug/L	
Barium	0.9211	0.2500	ug/L	
Beryllium	[0.008909]	0.2500	ug/L	
Cadmium	[0]	0.2500	ug/L	
Chromium	1.416	0.5000	ug/L	
Cobalt	2.732	0.2500	ug/L	
Copper	1.739	0.5000	ug/L	
Lead	1.266	0.2500	ug/L	
Manganese	0.9224	0.2500	ug/L	
Nickel	2.429	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1369]	0.2500	ug/L	
Thallium	[0.07146]	0.2500	ug/L	
Vanadium	[0.3259]	0.5000	ug/L	
Zinc	3.119	0.5000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	99470	ug/L	99
Calcium	300000	293800	ug/L	98
Iron	250000	221200	ug/L	88
Magnesium	100000	97820	ug/L	98
Molybdenum	2000	1921	ug/L	96
Potassium	100000	99440	ug/L	99
Sodium	250000	240000	ug/L	96

ISTD (ICALBLK h2309005)	ICALBLK Abund	Abund	%Drift
Lithium	338026	292477	-13.47
Scandium	196081	182488	-6.93
Germanium	50080	50162	0.16
Indium	266345	231049	-13.25
Bismuth	294241	245404	-16.60

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56338993018
 Cal : 56338993001
 Standards: S4012, S3310

File : h2309018
 Caldate: 23-AUG-2006

IDF : 1.0
 Time : 23-AUG-2006 11:38

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	97300	ug/L	-3		
Arsenic	100.0	97.88	ug/L	-2	20	
Cadmium	100.0	89.42	ug/L	-11	20	
Calcium	300000	288700	ug/L	-4		
Chromium	200.0	194.2	ug/L	-3	20	
Cobalt	200.0	188.6	ug/L	-6	20	
Copper	200.0	181.8	ug/L	-9	20	
Iron	250000	218200	ug/L	-13		
Magnesium	100000	95690	ug/L	-4		
Manganese	200.0	186.2	ug/L	-7	20	
Molybdenum	2000	1881	ug/L	-6		
Nickel	200.0	186.5	ug/L	-7	20	
Potassium	100000	97500	ug/L	-3		
Selenium	100.0	89.21	ug/L	-11	20	
Silver	50.00	44.90	ug/L	-10	20	
Sodium	250000	235800	ug/L	-6		
Vanadium	200.0	194.7	ug/L	-3	20	
Zinc	100.0	100.9	ug/L	1	20	

ISTD (ICALBLK h2309005)	ICALBLK Abund	Abund	%Drift
Scandium	196081	185540	-5.38
Germanium	50080	50683	1.20

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56338993059
 Cal : 56338993001
 Standards: S4011, S3310

File : h2309059
 Caldate: 23-AUG-2006

IDF : 1.0
 Time : 23-AUG-2006 15:44

Analyte	Quant	RL	Units	Flags
Antimony	2.141	0.2500	ug/L	
Arsenic	1.128	0.5000	ug/L	
Barium	0.9848	0.2500	ug/L	
Beryllium	[0]	0.2500	ug/L	
Cadmium	[0.09114]	0.2500	ug/L	
Chromium	1.309	0.5000	ug/L	
Cobalt	2.733	0.2500	ug/L	
Copper	1.699	0.5000	ug/L	
Lead	1.241	0.2500	ug/L	
Manganese	0.9761	0.2500	ug/L	
Nickel	2.101	0.2500	ug/L	
Selenium	[0.2894]	0.5000	ug/L	
Silver	[0.1218]	0.2500	ug/L	
Thallium	[0.008993]	0.2500	ug/L	
Vanadium	[0.1267]	0.5000	ug/L	
Zinc	2.989	0.5000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	98750	ug/L	99
Calcium	300000	290700	ug/L	97
Iron	250000	226700	ug/L	91
Magnesium	100000	97580	ug/L	98
Molybdenum	2000	1873	ug/L	94
Potassium	100000	95740	ug/L	96
Sodium	250000	248200	ug/L	99

ISTD (ICALBLK h2309005)	ICALBLK Abund	Abund	%Drift
Lithium	338026	234633	-30.59
Scandium	196081	145903	-25.59
Germanium	50080	40798	-18.54
Indium	266345	186828	-29.85
Bismuth	294241	212776	-27.69

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56338993060
 Cal : 56338993001
 Standards: S4012, S3310

File : h2309060
 Caldate: 23-AUG-2006

IDF : 1.0
 Time : 23-AUG-2006 15:50

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	95360	ug/L	-5		
Arsenic	100.0	93.84	ug/L	-6	20	
Cadmium	100.0	85.09	ug/L	-15	20	
Calcium	300000	285300	ug/L	-5		
Chromium	200.0	195.2	ug/L	-2	20	
Cobalt	200.0	190.6	ug/L	-5	20	
Copper	200.0	180.0	ug/L	-10	20	
Iron	250000	223800	ug/L	-10		
Magnesium	100000	94840	ug/L	-5		
Manganese	200.0	188.5	ug/L	-6	20	
Molybdenum	2000	1863	ug/L	-7		
Nickel	200.0	187.4	ug/L	-6	20	
Potassium	100000	92680	ug/L	-7		
Selenium	100.0	85.86	ug/L	-14	20	
Silver	50.00	43.94	ug/L	-12	20	
Sodium	250000	242800	ug/L	-3		
Vanadium	200.0	191.8	ug/L	-4	20	
Zinc	100.0	99.97	ug/L	0	20	

ISTD (ICALBLK h2309005)	ICALBLK Abund	Abund	%Drift
Scandium	196081	154634	-21.14
Germanium	50080	42855	-14.43

INTERNAL STANDARD SUMMARY Curtis & Tompkins Laboratories

Sequence Date: 21-AUG-2006
Sequence: 66336549
Instrument ID: MET06

(h21r0)

ICALBLK Filename: h21r0003
Date Analyzed: 21-AUG-2006
Time Analyzed: 17:25

ICALBLK STD	ICALBLK STD	ICALBLK STD	ICALBLK STD	ICALBLK STD	ICALBLK STD
READING	READING	READING	READING	READING	READING
1661045	1842296	303571	1136733	490830	1877282
498314	552689	91071	341020	147249	563185
UPPER LIMIT	1993254	2210755	364285	588996	2252738

TYPE	SAMPLE	#						
ICB		016	1694034	1860281	304201	1098988	462905	1871394
ICSA		018	1562555	1779069	281073	1053486	390426	1666768
BLANK	QC352577	023	1288086	1582952	321985	894615	384575	16322412
BS	QC352578	024	1437195	1639810	266719	951905	417052	1680197
BSD	QC352579	025	1443815	1648091	269291	955975	418506	1690183
MSS	188774-003	027	1488587	1692623	274143	956536	409693	1701370
SER	QC352582	028	1527837	1679219	277808	967219	423677	1706112
MS	QC352580	029	1489870	1697203	272661	946291	406155	1685160
MSD	QC352581	030	1523219	1729080	276030	963008	409868	1718374
PDS	QC352583	031	1507776	1711662	273387	949401	406270	1686309
CCV		034	1499198	1706065	267360	933599	400094	1676288
CCB		036	1521614	1701438	276504	970407	426077	1696779
SAMPLE	188774-001	039	1540399	1718721	276327	958242	404793	1699008
SAMPLE	188774-002	040	1611092	1798884	280973	964350	409547	1721169
SAMPLE	188774-004	041	1554957	1709536	273063	935221	401191	1670655
SAMPLE	188774-006	042	1506304	1675675	266397	914626	394171	1632503
SAMPLE	188774-010	043	1524192	1650227	267841	924188	395920	1625242
SAMPLE	188774-011	044	1508438	1660426	268184	917592	395296	1637562
SAMPLE	188774-012	045	1493342	1657064	264521	913741	390684	1631798
SAMPLE	188774-013	046	1506199	1655324	270107	938575	411317	1662861
SAMPLE	188774-014	047	1516593	1671859	265953	922496	387986	1638230
SAMPLE	188774-015	048	1529341	1679937	266690	918561	388750	1633658
CCV		051	1516102	1679470	261961	909321	387472	1647725
CCB		053	1509429	1659039	268109	939197	410469	1648875
SAMPLE	188774-016	055	1516412	1676117	265596	922004	386103	1640353
SAMPLE	188774-017	056	1513229	1657616	262981	910462	386040	1614671
SAMPLE	188774-018	057	1512183	1651753	265329	910705	389757	1626828
SAMPLE	188774-019	058	1486654	1671151	261353	902234	379830	1605769

INTERNAL STANDARD SUMMARY Curtis & Tompkins Laboratories

Sequence Date: 21-AUG-2006
Sequence: 66336549
Instrument ID: MET06

(h21r0)
ICALBLK Filename: h21r0003
Date Analyzed: 21-AUG-2006
Time Analyzed: 17:25

TYPE	SAMPLE	#							
SAMPLE	188774-001	059	1502648	1660009	260060	892822	378958	1627364	
SAMPLE	188774-002	060	1541530	1692439	261987	895707	381401	1651583	
CCV		063	1498236	1663039	259223	888300	380170	1621678	
CCB		065	1482985	1638315	262063	908576	399165	1614847	
ICSA		067	1475122	1592693	246529	847499	339847	1425181	

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 22-AUG-2006
Sequence: 56337726
Instrument ID: MET05

(h2212)
ICALBLK Filename: h2212003
Date Analyzed: 22-AUG-2006
Time Analyzed: 12:58

TYPE	SAMPLE	#							
SAMPLE	188774-018	064	402764	224714	56992	295199	319094	438539	
SAMPLE	188774-019	065	387683	223777	55886	283147	305016	435393	
SAMPLE	188774-001	066	465470	240500	64539	353089	384999	519291	
SAMPLE	188774-002	067	482016	246920	67243	357026	388610	525188	
SAMPLE	188774-014	068	476298	244203	66122	356577	387979	523182	
SAMPLE	188774-015	069	447896	230479	63352	343936	377023	504744	
SAMPLE	188774-016	070	461488	237772	63919	343372	378960	507040	
SAMPLE	188774-018	071	456007	231862	61968	338882	378970	497299	
SAMPLE	188774-019	072	443296	228313	62039	332815	368434	494012	
CCV		074	450024	233498	62968	332430	367467	501242	
CCB		077	472626	242607	64119	350631	382678	503949	
ICSA		078	382257	207453	58660	279271	300622	435044	

(h2309)

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INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 23-AUG-2006
Sequence: 56338993
Instrument ID: MET05
(h2309)
ICALBLK Filename: h2309005
Date Analyzed: 23-AUG-2006
Time Analyzed: 10:26

TYPE	SAMPLE	#							
SAMPLE	188774-002	058	302868	177562	46350	236466	276164	344506	
ICSA		059	234633	145903	40798	186828	212776	295084	
CCV		064	347453	214547	51909	268281	305856	383872	
CCB		066	353752	213937	52020	278830	314187	379581	

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56338993 Instrument: MET05
Analytical Method: EPA 6020 Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 23-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
001	h2309001	TUN				23-AUG-2006 09:53	1.0	1.0				1		
002	h2309002	X	RINSE			23-AUG-2006 09:59	1.0					2		
003	h2309003	X	RINSE			23-AUG-2006 10:07	1.0					2		
004	h2309004	X	RINSE			23-AUG-2006 10:12	1.0					2		
005	h2309005	ICALBLK	STD-BLANK			23-AUG-2006 10:26	1.0	1.0				2		
006	h2309006	ICAL	CSI			23-AUG-2006 10:31	1.0	1.0				3		
007	h2309007	ICAL	CS2			23-AUG-2006 10:37	1.0	1.0				4		
008	h2309008	ICAL	CS3			23-AUG-2006 10:42	1.0	1.0				5		
009	h2309009	ICAL	CS4			23-AUG-2006 10:48	1.0	1.0				6		
010	h2309010	ICAL	CS5			23-AUG-2006 10:54	1.0	1.0				7		
011	h2309011	ICAL	CS6			23-AUG-2006 10:59	1.0	1.0				8		
012	h2309012	X	RINSE			23-AUG-2006 11:05	1.0					9		
013	h2309013	ICV				23-AUG-2006 11:10	1.0	1.0				10		
014	h2309014	X	RINSE			23-AUG-2006 11:16	1.0					11		
015	h2309015	X				23-AUG-2006 11:21	1.0	1.0				12		
016	h2309016	ICB				23-AUG-2006 11:27	1.0	1.0				13		
017	h2309017	ICSA				23-AUG-2006 11:33	1.0	1.0				14		
018	h2309018	ICSAB				23-AUG-2006 11:38	1.0	1.0				15		
019	h2309019	X	RINSE			23-AUG-2006 11:44	1.0					16		
020	h2309020	X	RINSE			23-AUG-2006 11:49	1.0					17		
021	h2309021	BLANK				23-AUG-2006 11:55	1.0	1.0				18		
022	h2309022	BS	QC352920			23-AUG-2006 12:01	1.0	1.0				19		
023	h2309023	BSD	QC352921			23-AUG-2006 12:06	1.0	1.0				20		
024	h2309024	X	RINSE			23-AUG-2006 12:12	1.0					21		
025	h2309025	MSS	188736-014			23-AUG-2006 12:17	1.0	1.0				22		
026	h2309026	SER	QC352924			23-AUG-2006 12:23	5.0	1.0				23		
027	h2309027	MS	QC352922			23-AUG-2006 12:29	1.0	1.0				24		
028	h2309028	MSD	QC352923			23-AUG-2006 12:34	1.0	1.0				25		
029	h2309029	PDS	QC352925			23-AUG-2006 12:40	1.0	1.0				26		
030	h2309030	X	RINSE			23-AUG-2006 12:45	1.0					27		
031	h2309031	CCV				23-AUG-2006 12:51	1.0	1.0				28		

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S3780 13=S4009

Analyst: *Healy* Date: 8/23/06

SEQUENCE SUMMARY

Curtis & Tompkins Laboratories

Sequence: 56338993 Instrument: MET05
 Analytical Method: EPA 6020 Agilent ICP-MS
 SOP Version: 6020_rv2

Begun: 23-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
032	h2309032	X	RINSE			23-AUG-2006 12:56	1.0					2		
033	h2309033	CCB				23-AUG-2006 13:02	1.0	1.0			1	2		
034	h2309034	X				23-AUG-2006 13:08	1.0					2		
035	h2309035	X	RINSE			23-AUG-2006 13:13	1.0					2		
036	h2309036	SAMPLE	188687-002	116653	Water	23-AUG-2006 13:19	1.0	1.0			1	2	3:CA=36540.0	
037	h2309037	SAMPLE	188687-003	116653	Water	23-AUG-2006 13:25	1.0	1.0			1	2		
038	h2309038	SAMPLE	188687-008	116653	Water	23-AUG-2006 13:30	1.0	1.0			1	2	3:CA=61310.0	
039	h2309039	PDS	QC352925	116653	Water	23-AUG-2006 13:36	2.0	1.0			1	12 2		
040	h2309040	X	AS MISS CUP	116653	Water	23-AUG-2006 13:41	2.0					2		
041	h2309041	X	AS MISS CUP	116653	Water	23-AUG-2006 13:47	2.0					12 2		
042	h2309042	X	RINSE			23-AUG-2006 13:53	1.0					2		
043	h2309043	SAMPLE	188687-002	116653	Water	23-AUG-2006 14:07	1.0	1.0			1	2	3:CA=36550.0	
044	h2309044	SAMPLE	188687-008	116653	Water	23-AUG-2006 14:12	2.0	1.0			1	2	2:CA=30785.0	
045	h2309045	SAMPLE	188736-015	116653	Water	23-AUG-2006 14:18	1.0	1.0			1	2		
046	h2309046	SAMPLE	188736-016	116653	Water	23-AUG-2006 14:23	1.0	1.0			1	2		
047	h2309047	X	RINSE			23-AUG-2006 14:29	1.0					2		
048	h2309048	CCV				23-AUG-2006 14:35	1.0	1.0			1	13 2		
049	h2309049	X	RINSE			23-AUG-2006 14:40	1.0					2		
050	h2309050	X				23-AUG-2006 14:46	1.0					2		
051	h2309051	CCB				23-AUG-2006 14:51	1.0	1.0			1	2		
052	h2309052	SAMPLE	188792-001	116653	Filtira	23-AUG-2006 14:57	1.0	1.0			1	2	3:NA=83040.0	
053	h2309053	MS	QC352922	116653	Water	23-AUG-2006 15:03	2.0	1.0			1	2		
054	h2309054	MSD	QC352923	116653	Water	23-AUG-2006 15:16	2.0	1.0			1	2		
055	h2309055	X	RINSE			23-AUG-2006 15:22	1.0					2		
056	h2309056	SAMPLE	188792-001	116653	Filtira	23-AUG-2006 15:27	10.0	1.0			1	2		
057	h2309057	SAMPLE	188774-001	116572	Water	23-AUG-2006 15:33	20.0	1.0			1	2		
058	h2309058	SAMPLE	188774-002	116572	Water	23-AUG-2006 15:39	20.0	1.0			1	2		
059	h2309059	ICSA				23-AUG-2006 15:44	1.0	1.0			1	10 2	7:CA=290700	
060	h2309060	ICCSAB				23-AUG-2006 15:50	1.0	1.0			1	11 2	7:CA=285300	
061	h2309061	X	RINSE			23-AUG-2006 15:55	1.0					2		
062	h2309062	X	RINSE			23-AUG-2006 16:01	1.0					2		

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S3780 13=S4009

Analyst: *McAvoy* Date: *8/23/06*

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 56338993 Instrument: MET05 Agilent ICP-MS
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 23-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Std's	Used	>LR
063	h2309063	X	RINSE			23-AUG-2006	16:07	1.0				2		
064	h2309064	CCV				23-AUG-2006	16:12	1.0				13	2	
065	h2309065	X	RINSE			23-AUG-2006	16:18	1.0				2		
066	h2309066	CCB				23-AUG-2006	16:23	1.0				2		
067	h2309067	X				23-AUG-2006	16:29	1.0				2		

Std's used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S3780 13=S4009

Analyst: *McCarthy* Date: *8/23/06*

REPORTING SUMMARY FOR 188774 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	A	S	A	B	B	C	C	C	C	F	P	M	M	H	N	K	S	A	N	T	V	Z
				L	B	S	A	E	D	A	R	O	U	E	B	G	N	G	I	E	G	A	L	N	
188774-001	MET04	08/21/06 15:04	1.0															+							
188774-001	MET06	08/22/06 00:31	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
188774-001	MET05	08/23/06 15:33	20.0																			+			
188774-002	MET04	08/21/06 15:06	1.0															+							
188774-002	MET06	08/22/06 00:38	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
188774-002	MET05	08/23/06 15:39	20.0														+					+			
QC352577	MET06	08/21/06 20:05	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC352577	MET05	08/22/06 15:56	1.0																						
QC352578	MET06	08/21/06 20:12	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC352578	MET05	08/22/06 16:02	1.0																					+	
QC352579	MET06	08/21/06 20:19	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC352579	MET05	08/22/06 16:07	1.0																					+	
QC352580	MET06	08/21/06 20:49	10.0		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC352580	MET05	08/22/06 16:30	1.0	+																					
QC352581	MET06	08/21/06 20:56	10.0		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC352581	MET05	08/22/06 16:35	1.0	+																					
QC352582	MET06	08/21/06 20:42	50.0		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC352582	MET05	08/22/06 16:24	5.0	+																					
QC352583	MET06	08/21/06 21:04	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC352583	MET05	08/22/06 16:41	1.0																						
QC352691	MET04	08/21/06 14:33	1.0															+							
QC352692	MET04	08/21/06 14:37	1.0															+							
QC352693	MET04	08/21/06 14:39	1.0															+							
QC352694	MET04	08/21/06 14:44	5.0															+							
QC352695	MET04	08/21/06 14:46	1.0															+							
QC352696	MET04	08/21/06 14:49	1.0															+							
QC352697	MET04	08/21/06 17:47	1.0															+							



Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 188774 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	A	S	A	B	B	C	C	C	C	C	F	P	M	M	H	N	K	S	A	N	T	V	Z
				L	B	S	A	E	D	A	R	O	U	E	B	G	N	G	I	E	G	A	L	N		
188774-001	MET04	08/21/06 15:08	1.0															+								
188774-001	MET06	08/21/06 22:03	10.0		+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+
188774-001	MET05	08/22/06 16:52	1.0	+																						
188774-001	MET05	08/22/06 19:07	20.0																				+			
188774-002	MET04	08/21/06 15:12	1.0															+								
188774-002	MET06	08/21/06 22:10	10.0		+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+		+	+	+
188774-002	MET05	08/22/06 16:58	1.0	+																						
188774-002	MET05	08/22/06 19:12	20.0														+						+			
188774-003	MET06	08/21/06 20:34	10.0		+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
188774-003	MET05	08/22/06 16:19	1.0	+																						
188774-004	MET06	08/21/06 22:18	10.0		+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
188774-004	MET05	08/22/06 17:31	1.0	+																						
188774-006	MET06	08/21/06 22:25	10.0		+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
188774-006	MET05	08/22/06 17:37	1.0	+																						
188774-010	MET04	08/21/06 15:15	1.0															+								
188774-010	MET06	08/21/06 22:32	10.0		+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
188774-010	MET05	08/22/06 17:43	1.0	+																						
188774-011	MET06	08/21/06 22:40	10.0		+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
188774-011	MET05	08/22/06 17:48	1.0	+																						
188774-012	MET06	08/21/06 22:47	10.0		+	+			+	+	+		+	+	+	+			+	+			+		+	+
188774-012	MET05	08/22/06 17:54	1.0	+																						
188774-013	MET06	08/21/06 22:55	10.0		+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
188774-013	MET05	08/22/06 17:59	1.0	+																						
188774-014	MET06	08/21/06 23:02	10.0		+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+		+	+	+
188774-014	MET05	08/22/06 18:05	1.0	+																						
188774-014	MET05	08/22/06 19:18	20.0																				+			
188774-015	MET06	08/21/06 23:09	10.0		+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+		+	+	+
188774-015	MET05	08/22/06 18:11	1.0	+																						
188774-015	MET05	08/22/06 19:23	20.0																				+			
188774-016	MET06	08/22/06 00:01	10.0		+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+		+	+	+
188774-016	MET05	08/22/06 18:16	1.0	+																						
188774-016	MET05	08/22/06 19:29	20.0																				+			
188774-017	MET06	08/22/06 00:09	10.0		+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
188774-017	MET05	08/22/06 18:22	1.0	+																						
188774-018	MET06	08/22/06 00:16	10.0		+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+		+	+	+

REPORTING SUMMARY FOR 188774 METALS Filtrate

Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	A	S	A	B	B	C	C	C	C	C	F	P	M	M	H	N	K	S	A	N	T	V	Z
				L	B	S	A	E	D	A	R	O	U	E	B	G	N	G	I	E	G	A	L	N		
188774-018	MET05	08/22/06 18:55	1.0	+																			+			
188774-018	MET05	08/22/06 19:35	20.0																							
188774-019	MET06	08/22/06 00:23	10.0		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
188774-019	MET05	08/22/06 19:01	1.0	+																						
188774-019	MET05	08/22/06 19:40	20.0																				+			
QC352577	MET06	08/21/06 20:05	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC352577	MET05	08/22/06 15:56	1.0																							
QC352578	MET06	08/21/06 20:12	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC352578	MET05	08/22/06 16:02	1.0																							+
QC352579	MET06	08/21/06 20:19	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC352579	MET05	08/22/06 16:07	1.0																							+
QC352580	MET06	08/21/06 20:49	10.0		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC352580	MET05	08/22/06 16:30	1.0	+																						
QC352581	MET06	08/21/06 20:56	10.0		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC352581	MET05	08/22/06 16:35	1.0	+																						
QC352582	MET06	08/21/06 20:42	50.0		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC352582	MET05	08/22/06 16:24	5.0	+																						
QC352583	MET06	08/21/06 21:04	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC352583	MET05	08/22/06 16:41	1.0																							
QC352691	MET04	08/21/06 14:33	1.0																+							
QC352692	MET04	08/21/06 14:37	1.0																+							
QC352693	MET04	08/21/06 14:39	1.0																+							
QC352694	MET04	08/21/06 14:44	5.0																+							
QC352695	MET04	08/21/06 14:46	1.0																+							
QC352696	MET04	08/21/06 14:49	1.0																+							
QC352697	MET04	08/21/06 17:47	1.0																+							

Curtis & Tompkins Laboratories Sample Preparation Summary

22-AUG-2006 11:55

Batch Number : 116572
Date Extracted : 20-AUG-2006
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S3379
Spike #2 ID : S4130
Spike #3 ID :
SDP Version :

Sample	Type	Client	Matrix	Init		Final		Clean	pH	Sp			Analyses	Clean	Comments
				W/V	Units	Vol	D.F.			Vol	Vol	Vol			
188774-001		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
188774-001		Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
188774-002		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
188774-002		Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
188774-003		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
188774-004		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
188774-006		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
188774-010		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
188774-011		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
188774-012		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					15MET		
188774-013		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
188774-014		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
188774-015		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
188774-016		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
188774-017		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
188774-018		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
188774-019		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
QC352577	BLANK		Filtrate	50	mL	50	1.000000	1					ICAP		
QC352578	BS		Filtrate	50	mL	50	1.000000	1					ICAP		
QC352579	BSD		Filtrate	50	mL	50	1.000000	1					ICAP		
QC352580	MS	of 188774-003	Filtrate	50	mL	50	1.000000	1					ICAP		
QC352581	MSD	of 188774-003	Filtrate	50	mL	50	1.000000	1					ICAP		
QC352582	SER	of 188774-003	Filtrate	50	mL	50	1.000000	1					ICAP		
QC352583	PDS	of 188774-003	Filtrate	50	mL	50	1.000000	1					ICAP		

Prep Chemist:

Reviewed By:

Date:

Relinquished By:

Received By:

Date:

Water Digestion for ICP-MS

Curtis & Tompkins, Ltd.

LIMS Batch #: 116572
 Date Digested: 8/20/06
 Digested by: KRL

Digestion Method
☒ EPA 200.8 for ICP-MS
☐

BK BK 2382

Page 3

Continued From: /
 Continued On: /

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
<u>01K</u>	<u>50</u>	<u>50</u>	<u>N</u>	
<u>133</u>				
<u>135D</u>				
<u>135</u>				<u>FILTERED IN THE FIELD</u>
<u>135D</u>				
<u>135724-01</u>				
<u>-02</u>				
<u>-03</u>				
<u>-04</u>				
<u>-06</u>				
<u>-10</u>				
<u>-11</u>				
<u>-13</u>				
<u>-14</u>				
<u>-15</u>				
<u>-16</u>				
<u>-17</u>				
<u>-18</u>				
<u>-19</u>				
<u>-12</u>				
<u>744-01 A</u>				
<u>-02</u>				

digestion temperature (90-95 degrees C)
5/1.0 mL of spike solution was added to all spikes

concentrated HCl
 concentrated HNO3

☐ filtered thru' Whatman # 541

Reagent ID or LIMS #	Initials / Date
<u>95</u>	<u>KRL 8/20</u>
<u>33379</u>	
<u>34130</u>	
<u>C17075 DAKAR</u>	
<u>C16035</u>	

KRL 8/20/06
 Prep Chemist Signature / Date

KRL 8/22/06
 Reviewer Signature / Date

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 7470A

nst : MET04
 alnum : 46336367002
 nits : ug/L

Date : 21-AUG-2006 14:07
 X Axis : R

Reviewer: ---
 Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	116599	46336367002	STD02REP1	21-AUG-2006 14:09	S4162 (500X)
L2	116599	46336367003	STD03REP1	21-AUG-2006 14:11	S4162 (200X)
L3	116599	46336367004	STD04REP1	21-AUG-2006 14:13	S4162 (50X)
L4	116599	46336367005	STD05REP1	21-AUG-2006 14:15	S4162 (20X)
L5	116599	46336367006	STD06REP1	21-AUG-2006 14:17	S4162 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ²	MRSD	MNR ²	F1g
mercury	4160.0	2772.0	2563.0	2431.2	2552.1	LINR	-0.0511	3.98E-4		2895.7	0.999		.99	

struement amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression
 ge 1 of 1

RN RN ?

Protocol hgppb

Dataset/Proto 082106 /hgppb

Protocol Line info Cal Curve Report Ctrl Chart Viewer

Reset

Calib Coeffs

New Cal

Update Coeffs

Spike Coeffs

A

B

C

Rho

Type

Linear

☒ Calibrated☒ Accepted

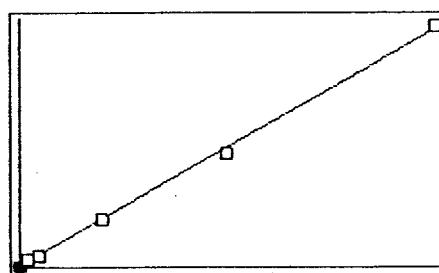
Accept

 μ Abs.

25521

Accepted

New



Include S1

Rep 1 ☒☐☐☐

21-Aug-06 14:18

Conc.

10.1

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3
01	0.0000	0.45	0.45	243	0	242		
02	20.000	2.80	0.80	832	0%	832		
03	50.000	5.00	0.00	1386	0%	1386		
04	2.0000	1.99	-0.01	5126	0%	5126		
05	5.0000	4.78	-0.21	12157	0%	12156		
06	10.000	10.1	0.10	25522	0%	25521		

Ready

NUM

Protocol: hgppb

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1								
				Seq: 1		14:07:04	21 Aug 06	HG
Hg	.000	ppb	242					
		Bkgd 1	18163654					
*** Standard: 2 Rep: 1								
				Seq: 2		14:09:13	21 Aug 06	HG
Hg	.200	ppb	832					
		Bkgd 1	18165975					
*** Standard: 3 Rep: 1								
				Seq: 3		14:11:21	21 Aug 06	HG
Hg	.500	ppb	1386					
		Bkgd 1	18152305					
*** Standard: 4 Rep: 1								
				Seq: 4		14:13:29	21 Aug 06	HG
Hg	2.00	ppb	5126					
		Bkgd 1	18151982					
*** Standard: 5 Rep: 1								
				Seq: 5		14:15:34	21 Aug 06	HG
Hg	5.00	ppb	12156					
		Bkgd 1	18153405					
*** Standard: 6 Rep: 1								
				Seq: 6		14:17:41	21 Aug 06	HG
Hg	10.0	ppb	25521					
		Bkgd 1	18150793					
*** Check Standard: 2								
Line	Flag		Ck2S4164	Seq: 7		14:20:58	21 Aug 06	HG
			Intensities					
Hg			10278					
		Bkgd 1	18151021					
*** Check Standard: 1								
Line	Flag		Ck1ICB	Seq: 8		14:25:14	21 Aug 06	HG
			Intensities					
Hg			178					
		Bkgd 1	18154824					
*** Check Standard: 2								
Line	Flag		Ck2S4164	Seq: 9		14:27:27	21 Aug 06	HG
			Intensities					
Hg			12486					
		Bkgd 1	18146858					

Sequence: 46336367 Instrument: MET04
Analytical Method: EPA 7470A
Analyte: Mercury

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories
HydraAA HG Analyzer
SOP Version: HG_water_rv7

Begun: 21-AUG-2006

#	Filename	Type	Sample	Subj	Batch	Matrix	Analyzed	IDF	PDR	Stds	Spiked	Calium	Result	RL	Units	Rec	RPD	Flags
001	116599	ICALL	STD01REP1				21-AUG-2006 14:07 1.0	1.0	1.0			46336367001	4.920	0.20	ug/L	98		
002	116599	ICALL	STD02REP1				21-AUG-2006 14:09 1.0	1.0	1.0			46336367001	ND	0.20	ug/L			
003	116599	ICALL	STD03REP1				21-AUG-2006 14:11 1.0	1.0	1.0			46336367001	4.190	0.20	ug/L	84		
004	116599	ICALL	STD04REP1				21-AUG-2006 14:13 1.0	1.0	1.0			46336367001	4.240	0.20	ug/L	85	1	
005	116599	ICALL	STD05REP1				21-AUG-2006 14:15 1.0	1.0	1.0			46336367001	ND	0.20	ug/L			
006	116599	ICALL	STD06REP1				21-AUG-2006 14:17 1.0	1.0	1.0			46336367001	ND	0.20	ug/L			
007	116599	X					21-AUG-2006 14:20 1.0											
008	116599	X					21-AUG-2006 14:27 1.0	1.0	2	5.000		46336367001	[0.03500]	0.20	ug/L	98		
009	116599	ICV					21-AUG-2006 14:30 1.0	1.0	1.0			46336367001	ND	0.20	ug/L			
010	116599	ICV					21-AUG-2006 14:33 1.0	1.0	1.0			46336367001	ND	0.20	ug/L			
011	116599	BLANK	QC352691				21-AUG-2006 14:37 1.0	1.0	1.0			46336367001	4.190	0.20	ug/L	84		
012	116599	BS	QC352692				21-AUG-2006 14:39 1.0	1.0	1.0			46336367001	4.240	0.20	ug/L	85	1	
013	116599	BSD	QC352693				21-AUG-2006 14:41 1.0	1.0	1.0			46336367001	ND	0.20	ug/L			
014	116599	MSS	188802-001				21-AUG-2006 14:44 5.0	1.0	1.0			46336367001	ND	0.20	ug/L			
015	116599	SER	QC352694				21-AUG-2006 14:46 1.0	1.0	1.0			46336367001	3.590	0.20	ug/L	72*		
016	116599	MS	QC352695				21-AUG-2006 14:49 1.0	1.0	1.0			46336367001	3.520	0.20	ug/L	70*	2	
017	116599	SMD	QC352696				21-AUG-2006 14:51 1.0	1.0	1.0			46336367001	ND	0.20	ug/L			
018	116599	SAMPLE	188734-001				21-AUG-2006 14:54 1.0	1.0	1.0			46336367001	ND	0.20	ug/L			
019	116599	SAMPLE	188736-014				21-AUG-2006 14:56 1.0	1.0	1.0			46336367001	ND	0.20	ug/L			
020	116599	SAMPLE	188736-015				21-AUG-2006 14:58 1.0	1.0	3	2.500		46336367001	2.880	0.20	ug/L	115		
021	116599	CCV					21-AUG-2006 15:02 1.0	1.0	1.0			46336367001	ND	0.20	ug/L			
022	116599	CCV					21-AUG-2006 15:04 1.0	1.0	1.0			46336367001	0.89	0.20	ug/L			
023	116599	SAMPLE	188774-001				21-AUG-2006 15:06 1.0	1.0	1.0			46336367001	0.23	0.20	ug/L			
024	116599	SAMPLE	188774-002				21-AUG-2006 15:08 1.0	1.0	1.0			46336367001	ND	0.20	ug/L			
025	116599	SAMPLE	188774-001				21-AUG-2006 15:12 1.0	1.0	1.0			46336367001	ND	0.20	ug/L			
026	116599	SAMPLE	188774-002				21-AUG-2006 15:15 1.0	1.0	1.0			46336367001	ND	0.20	ug/L			
027	116599	SAMPLE	188774-003				21-AUG-2006 15:17 1.0	1.0	1.0			46336367001	ND	0.20	ug/L			
028	116599	SAMPLE	188802-003				21-AUG-2006 15:20 1.0	1.0	1.0			46336367001	ND	0.20	ug/L			
029	116599	SAMPLE	188802-004				21-AUG-2006 15:22 1.0	1.0	1.0			46336367001	ND	0.20	ug/L			
030	116599	SAMPLE	188802-008				21-AUG-2006 15:24 1.0	1.0	1.0			46336367001	ND	0.20	ug/L			
031	116599	SAMPLE	188802-010				21-AUG-2006 15:26 1.0	1.0	4	5.000		46336367001	4.950	0.20	ug/L	99		
032	116599	CCV					21-AUG-2006 15:31 1.0	1.0	1.0			46336367001	ND	0.20	ug/L			
033	116599	SAMPLE	188809-001				21-AUG-2006 15:33 1.0	1.0	1.0			46336367001	ND	0.20	ug/L			
034	116599	SAMPLE	188818-001				21-AUG-2006 15:35 1.0	1.0	1.0			46336367001	ND	0.20	ug/L			
035	116599	SAMPLE	188818-012				21-AUG-2006 15:38 1.0	1.0	1.0			46336367001	ND	0.20	ug/L			
036	116599	SAMPLE	188840-001				21-AUG-2006 15:40 1.0	1.0	5	7.500		46336367001	7.490	0.20	ug/L	100		
037	116599	CCV					21-AUG-2006 15:42 1.0	1.0	1.0			46336367001	ND	0.20	ug/L			
038	116599	PDS	QC352697				21-AUG-2006 17:47 1.0	1.0	1	5.000		46336367001	4.560	0.20	ug/L	91		
039	116599	CCV					21-AUG-2006 17:50 1.0	1.0	3	2.500		46336367001	2.700	0.20	ug/L	108		
040	116599	CCV					21-AUG-2006 17:52 1.0	1.0				46336367001	[0.009000]	0.20	ug/L			

Stds used: 1=S4162 2=S4164 3=S4165 4=S4166 5=S4167
Flags used: u=use

Analyst: Jack Brown Date: 8/1/06

Curtis & Tompkins Laboratories

Sample Preparation Summary

21-AUG-2006 14:03

Batch Number : 116599
Date Extracted : 21-AUG-2006
Extracted by : Zachary Abbott
Prep Method : METHOD

Analysis : N/A
Bgroup : HG
Units : mL
Clean-up :

Spike #1 ID : S4162
Spike #2 ID :
Spike #3 ID :
SDP Version :

Sample	Type	Client	Matrix	Init	Units	Final	Prep	Clean	pH	Sp 1	Sp 2	Sp 3	Analyses	Clean	Comments
				W/V		Vol	D.F.	D.F.		Vol	Vol	Vol		Method	
188734-001		Polymatrix	Water	50	mL	50	1.000000	1					HG		
188736-014		U.S. Army Corps of Engineers	Water	50	mL	50	1.000000	1					T26/HG		
188736-015		U.S. Army Corps of Engineers	Water	50	mL	50	1.000000	1					T26/HG		
188736-016		U.S. Army Corps of Engineers	Water	50	mL	50	1.000000	1					T26/HG		
188774-001		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
188774-001		Treadwell & Rollo	Water	50	mL	50	1.000000	1					HG		
188774-002		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
188774-002		Treadwell & Rollo	Water	50	mL	50	1.000000	1					HG		
188774-010		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
188802-001		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
188802-003		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
188802-004		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
188802-008		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
188802-010		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
188809-001		Kensington Laboratories	Water	50	mL	50	1.000000	1					HG		
188818-001		Arcadis G&M	Water	50	mL	50	1.000000	1					HG		
188837-012		Treadwell & Rollo	Water	50	mL	50	1.000000	1					HG		
188840-001		Conocophillips Company	Water	50	mL	50	1.000000	1					T26/HG		
QC352691	BLANK		Water	50	mL	50	1.000000	1					HG		
QC352692	BS		Water	50	mL	50	1.000000	1					HG		
QC352693	BSD		Water	50	mL	50	1.000000	1					HG		
QC352694	SER	of 188802-001	Water	50	mL	50	1.000000	1					HG		
QC352695	MS	of 188802-001	Filtrate	50	mL	50	1.000000	1					HG		
QC352696	MSD	of 188802-001	Filtrate	50	mL	50	1.000000	1					HG		
QC352697	PDS	of 188802-001	Filtrate	50	mL	50	1.000000	1					HG		

Prep Chemist:

Zach Abbott

8/21/06

Reviewed By:

AA

Date:

8/21/06

Relinquished By:

Zach Abbott

8/21/06

Received By:

Zach Abbott

Date:

8/21/06

Water Digestion for Mercury

Curtis & Tompkins, L

WI

LIMS Batch #: 116599
 Date Digested: 8/21/06
 Digested by: EA

Digestion Method
☒ EPA 7470A/ EPA 245.1
☐

BK 2335
 Page 60

LIMS
 Date []
 Page []

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
188612-001				water
188734-001 B	50	50		water
188736-014 A				
↓ -015				
↓ -016				
188774-001				
↓ -002				
188774-001 B				Filtrate (F.F.)
-002 B				
-010 H				
188802-001 MSS S				Filtrate (F.F.)
-003 A				
-004 A				
-008 D				
-010 D				
188809-001 A				water
188818-001 J				
188837-012 K				
188837-012				Filtrate
188840-001 A				water → reacted violently w/ H ₂ SO ₄
Blank				
BS				
BSD				
MS 188802-001 S				Filtrate (F.F.)
MSD				

2.5 mL of spike solution was added to all spikes

Reagent ID/ LIMS# / Time

Initials / Date

ICAL Source WS#

ICV / CCV WS#

Digestion of Samples & Standards: Time ON / Temperature ON

Time OFF/ Temperature OFF

concentrated H₂SO₄

concentrated HNO₃

5% KMnO₄

5% K₂S₂O₈

NaCl.hydroxylamine hydrochloride

Stannous Chloride

☒ filtered thru' 0.45 um syringe filter

54162	7/8/21/06
54162	
54164/65/66/67	
12:30 95°C	
2:30 95°C	
B41041	
C22019	
K081406	
K2072706	
K4081506	
Smelk 082106	
millipore R6AN47832	

Continued from page

AA 8/21/06 06373



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories
MDL Summary for EPA 6020 Water 200.8
As of 09/18/06

Analyte	Units	MET06 A	MET06 E	MET06 H	MET05
Aluminum	ug/L	0.40			9.6
Antimony	ug/L	0.0093			0.062
Arsenic	ug/L		0.034		0.34
Barium	ug/L	0.023			0.13
Beryllium	ug/L	0.017			0.12
Cadmium	ug/L	0.0058			0.17
Calcium	ug/L	5.6			15
Chromium	ug/L		0.038		0.18
Cobalt	ug/L		0.0072		0.069
Copper	ug/L		0.028		0.24
Iron	ug/L			1.9	16
Lead	ug/L	0.013			0.088
Magnesium	ug/L	0.73			11
Manganese	ug/L		0.011		0.050
Molybdenum	ug/L	0.0063			0.24
Nickel	ug/L		0.029		0.21
Potassium	ug/L	5.3			8.7
Selenium	ug/L			0.027	0.35
Silver	ug/L	0.0079			0.068
Sodium	ug/L		2.7		14
Thallium	ug/L	0.030			0.030
Vanadium	ug/L		0.026		0.24
Zinc	ug/L		0.062		0.23



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories
MDL Summary for EPA 7470A Water
As of 09/18/06

Analyte	Units	MET04	MET14
Mercury	ug/L	0.058	0.021

GENERAL CHEMISTRY

**Alkalinity**

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	08/15/06
Units:	mg/L	Received:	08/16/06
Diln Fac:	1.000	Analyzed:	08/24/06
Batch#:	116756		

Field ID: BB1PZ100
Type: SAMPLE

Lab ID: 188774-001

Analyte	Result	RL
Alkalinity, Bicarbonate	420	4.0
Alkalinity, Carbonate	ND	4.0
Alkalinity, Hydroxide	ND	4.0
Alkalinity, Total as CaCO ₃	420	4.0

Field ID: BB1PZ101
Type: SAMPLE

Lab ID: 188774-002

Analyte	Result	RL
Alkalinity, Bicarbonate	720	4.0
Alkalinity, Carbonate	ND	4.0
Alkalinity, Hydroxide	ND	4.0
Alkalinity, Total as CaCO ₃	720	4.0

Field ID: BB3GW100
Type: SAMPLE

Lab ID: 188774-003

Analyte	Result	RL
Alkalinity, Bicarbonate	230	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	230	6.7

Field ID: DUP0815061A
Type: SAMPLE

Lab ID: 188774-004

Analyte	Result	RL
Alkalinity, Bicarbonate	230	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	230	6.7

Field ID: 1221GW104
Type: SAMPLE

Lab ID: 188774-006

Analyte	Result	RL
Alkalinity, Bicarbonate	440	4.0
Alkalinity, Carbonate	ND	4.0
Alkalinity, Hydroxide	ND	4.0
Alkalinity, Total as CaCO ₃	440	4.0



Curtis & Tompkins, Ltd.

Alkalinity			
Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	08/15/06
Units:	mg/L	Received:	08/16/06
Diln Fac:	1.000	Analyzed:	08/24/06
Batch#:	116756		

Field ID: 231GW09
Type: SAMPLE

Lab ID: 188774-010

Analyte	Result	RL
Alkalinity, Bicarbonate	220	4.0
Alkalinity, Carbonate	ND	4.0
Alkalinity, Hydroxide	ND	4.0
Alkalinity, Total as CaCO ₃	220	4.0

Field ID: DUP0815063A
Type: SAMPLE

Lab ID: 188774-011

Analyte	Result	RL
Alkalinity, Bicarbonate	440	4.0
Alkalinity, Carbonate	ND	4.0
Alkalinity, Hydroxide	ND	4.0
Alkalinity, Total as CaCO ₃	440	4.0

Field ID: 1065PZ1B
Type: SAMPLE

Lab ID: 188774-012

Analyte	Result	RL
Alkalinity, Bicarbonate	440	4.0
Alkalinity, Carbonate	ND	4.0
Alkalinity, Hydroxide	ND	4.0
Alkalinity, Total as CaCO ₃	440	4.0

Field ID: BHWGW05RB01
Type: SAMPLE

Lab ID: 188774-013

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO ₃	1.5	1.0

Field ID: DUP0815062A
Type: SAMPLE

Lab ID: 188774-014

Analyte	Result	RL
Alkalinity, Bicarbonate	530	4.0
Alkalinity, Carbonate	ND	4.0
Alkalinity, Hydroxide	ND	4.0
Alkalinity, Total as CaCO ₃	530	4.0

ND= Not Detected
RL= Reporting Limit
Page 2 of 4

19.1

00376

Alkalinity			
Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	08/15/06
Units:	mg/L	Received:	08/16/06
Diln Fac:	1.000	Analyzed:	08/24/06
Batch#:	116756		

Field ID: BHWGW01 Lab ID: 188774-015
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	530	4.0
Alkalinity, Carbonate	ND	4.0
Alkalinity, Hydroxide	ND	4.0
Alkalinity, Total as CaCO3	530	4.0

Field ID: BHWGW05 Lab ID: 188774-016
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	620	4.0
Alkalinity, Carbonate	ND	4.0
Alkalinity, Hydroxide	ND	4.0
Alkalinity, Total as CaCO3	620	4.0

Field ID: BHWGW04 Lab ID: 188774-017
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	310	4.0
Alkalinity, Carbonate	ND	4.0
Alkalinity, Hydroxide	ND	4.0
Alkalinity, Total as CaCO3	310	4.0

Field ID: HWGW101 Lab ID: 188774-018
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	450	4.0
Alkalinity, Carbonate	ND	4.0
Alkalinity, Hydroxide	ND	4.0
Alkalinity, Total as CaCO3	450	4.0

Field ID: HWGW100 Lab ID: 188774-019
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	680	4.0
Alkalinity, Carbonate	ND	4.0
Alkalinity, Hydroxide	ND	4.0
Alkalinity, Total as CaCO3	680	4.0

Alkalinity			
Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	08/15/06
Units:	mg/L	Received:	08/16/06
Diln Fac:	1.000	Analyzed:	08/24/06
Batch#:	116756		

Type: BLANK Lab ID: QC353331

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO ₃	ND	1.0

Batch QC Report

Alkalinity			
Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO ₃	Units:	mg/L
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC353332	Batch#:	116756
Matrix:	Water	Analyzed:	08/24/06

Spiked	Result	%REC	Limits
200.0	185.6	93	90-110



Batch QC Report

Alkalinity			
Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	1.000
Field ID:	BB3GW100	Batch#:	116756
MSS Lab ID:	188774-003	Sampled:	08/15/06
Matrix:	Water	Received:	08/16/06
Units:	mg/L	Analyzed:	08/24/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC353333	232.0	200.0	546.2	94	69-112		
MSD	QC353334		200.0	551.0	96	69-112	1	25

Analysis: Alkalinity
Method: EPA 310.1 / SMWW 2320B
SOP#: Alkalinity_rv 7.doc

Analysis Date: 08/24/06
Batch No: 116756
H₂SO₄ Normality = 0.029
conc.(mg/L) Na₂CO₃ for QC = 200

Analyst: SJ

QC DATA

	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	Alkalinity as CaCO ₃ (mg/L)	Low Alk Vol (mL) (mg/L)	Low Alk as CaCO ₃ (mg/L)	RL (mg/L)	% Rec.	% RPD
MB	7.2	100	0.0	0.0	ND			1.0		
LCS	10.5	25	1.5	3.2	185.60			4.0	93	
188774-003	6.6	15	0.0	2.4	232.00	n/a		6.7		
MS	9.2	15	0.8	5.7	546.17			6.7	94	
MSD	9.3	15	0.8	5.7	551.00			6.7	96	1

SAMPLE	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	Alkalinity as CaCO ₃ (mg/L)	Low Alkalinity Volume (4.5-4.2) (mL)	Low Alkalinity as CaCO ₃ (mg/L)	Reporting Limit (mg/L)

188736-002	9.50	100	1.3	4.6	66.70		n/a	1.0
188736-003	8.60	100	0.2	4.6	66.70		n/a	1.0
188774-001	7.90	25	0.0	7.2	417.60		n/a	4.0
188774-002	7.30	25	0.0	12.4	716.30		n/a	4.0
188774-003	6.60	15	0.0	2.4	232.00		n/a	6.7
188774-004	6.60	15	0.0	2.4	232.00		n/a	6.7
188774-006	6.70	25	0.0	7.6	440.80		n/a	4.0
188774-010	6.70	25	0.0	3.8	220.40		n/a	4.0
188774-011	6.70	25	0.0	7.5	435.00		n/a	4.0
188774-012	7.80	25	0.0	7.5	435.00		n/a	4.0
188774-013	5.80	100	0.0	0.3	rpt low alk	0.40	1.450	1.0
188774-014	7.90	25	0.0	9.2	533.60		n/a	4.0
188774-015	7.80	25	0.0	9.1	527.80		n/a	4.0
188774-016	7.10	25	0.0	10.8	623.50		n/a	4.0
188774-017	7.10	25	0.0	5.3	307.40		n/a	4.0
188774-018	7.70	25	0.0	7.8	452.40		n/a	4.0
188774-019	7.70	25	0.0	11.7	678.60		n/a	4.0

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Reviewed by/ Date:

ms 8/28/06

Analysis:

Alkalinity

Analysis Date: 08/24/06

H₂SO₄ Normality = 0.029

Template: F:\inorganwetstufalkalinity.xls

QC Limits		RPD	Recovery
LCS/BS/BSD	MS/MSD		
20	25		90 - 110
			80 - 120

Method:

EPA 310.1

Batch No: 116756

Analyst: SJ

SAMPLE	(P)	(T-P)	Total Alkalinity as CaCO ₃ (mg/L)	Bicarbonate Alkalinity			Hydroxide Alkalinity
				Alkalinity	Carbonate Alkalinity	as CaCO ₃ (mg/L)	
188736-002	18.9	47.9	66.7	29.000	37.700	0.000	
188736-003	2.9	63.80	66.700	60.900	5.800	0.000	
188774-001	0.0	417.60	417.600	417.600	0.000	0.000	
188774-002	0.0	716.30	716.300	716.300	0.000	0.000	
188774-003	0.0	232.00	232.000	232.000	0.000	0.000	
188774-004	0.0	232.00	232.000	232.000	0.000	0.000	
188774-006	0.0	440.80	440.800	440.800	0.000	0.000	
188774-010	0.0	220.40	220.400	220.400	0.000	0.000	
188774-011	0.0	435.00	435.000	435.000	0.000	0.000	
188774-012	0.0	435.00	435.000	435.000	0.000	0.000	
188774-013	0.0	#VALUE!	1.450	not applicable	not applicable	not applicable	
188774-014	0.0	533.60	533.600	533.600	0.000	0.000	
188774-015	0.0	527.80	527.800	527.800	0.000	0.000	
188774-016	0.0	623.50	623.500	623.500	0.000	0.000	
188774-017	0.0	307.40	307.400	307.400	0.000	0.000	
188774-018	0.0	452.40	452.400	452.400	0.000	0.000	
188774-019	0.0	678.60	678.600	678.600	0.000	0.000	

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

P: Phenolphthalein Alkalinity (using volume to pH 8.3)

T-P: Total Alkalinity minus Phenolphthalein Alkalinity

Carbonate Alkalinity = 2x the smaller of P or (T-P)

Bicarbonate Alkalinity = (T-2P) when P < (T-P)

Hydroxide Alkalinity = (2P-T) when (T-P) < P

Analysis:
Method:

Alkalinity
EPA 310.1

Analysis Date: 08/24/06
Batch No: 116756

H₂SO₄ Normality = 0.029
Analyst: SJ

SAMPLE	Total Alkalinity as CaCO ₃ (mg/L)	Bicarbonate		Carbonate		Hydroxide	
		Alkalinity as HCO ₃ ⁻ (mg/L)	Alkalinity as CO ₃ ²⁻ (mg/L)	Alkalinity as CO ₃ ²⁻ (mg/L)	Alkalinity as OH ⁻ (mg/L)	Alkalinity as OH ⁻ (mg/L)	Alkalinity as OH ⁻ (mg/L)
188736-002	66.700	35.358	22.608	22.608	0.000	0.000	0.000
188736-003	66.700	74.252	3.478	3.478	0.000	0.000	0.000
188774-001	417.600	509.158	0.000	0.000	0.000	0.000	0.000
188774-002	716.300	873.347	0.000	0.000	0.000	0.000	0.000
188774-003	232.000	282.865	0.000	0.000	0.000	0.000	0.000
188774-004	232.000	282.865	0.000	0.000	0.000	0.000	0.000
188774-006	440.800	537.444	0.000	0.000	0.000	0.000	0.000
188774-010	220.400	268.722	0.000	0.000	0.000	0.000	0.000
188774-011	435.000	530.372	0.000	0.000	0.000	0.000	0.000
188774-012	435.000	530.372	0.000	0.000	0.000	0.000	0.000
188774-013	1.450	not applicable	not applicable	not applicable	not applicable	not applicable	not applicable
188774-014	533.600	650.590	0.000	0.000	0.000	0.000	0.000
188774-015	527.800	643.519	0.000	0.000	0.000	0.000	0.000
188774-016	623.500	760.201	0.000	0.000	0.000	0.000	0.000
188774-017	307.400	374.797	0.000	0.000	0.000	0.000	0.000
188774-018	452.400	551.587	0.000	0.000	0.000	0.000	0.000
188774-019	678.600	827.381	0.000	0.000	0.000	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 116756
 Date Started: 24-AUG-2006
 Batched by : Stephanie Jim

Analysis : ALKALINITY
 Bgroup : N/A
 Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
188736-002		U.S. Army Corps of	Water	ALKALINITY	25-AUG-2006
188736-003		U.S. Army Corps of	Water	ALKALINITY	25-AUG-2006
188774-001		Treadwell & Rollo	Water	ALKALINITY	28-AUG-2006
188774-002		Treadwell & Rollo	Water	ALKALINITY	28-AUG-2006
188774-003		Treadwell & Rollo	Water	ALKALINITY	28-AUG-2006
188774-004		Treadwell & Rollo	Water	ALKALINITY	28-AUG-2006
188774-006		Treadwell & Rollo	Water	ALKALINITY	28-AUG-2006
188774-010		Treadwell & Rollo	Water	ALKALINITY	28-AUG-2006
188774-011		Treadwell & Rollo	Water	ALKALINITY	28-AUG-2006
188774-012		Treadwell & Rollo	Water	ALKALINITY	28-AUG-2006
188774-013		Treadwell & Rollo	Water	ALKALINITY	28-AUG-2006
188774-014		Treadwell & Rollo	Water	ALKALINITY	28-AUG-2006
188774-015		Treadwell & Rollo	Water	ALKALINITY	28-AUG-2006
188774-016		Treadwell & Rollo	Water	ALKALINITY	28-AUG-2006
188774-017		Treadwell & Rollo	Water	ALKALINITY	28-AUG-2006
188774-018		Treadwell & Rollo	Water	ALKALINITY	28-AUG-2006
188774-019		Treadwell & Rollo	Water	ALKALINITY	28-AUG-2006
QC353331	BLANK		Water	ALKALINITY	
QC353332	LCS		Water	ALKALINITY	
QC353333	MS	of 188774-003	Water	ALKALINITY	
QC353334	MSD	of 188774-003	Water	ALKALINITY	

LIMS Batch #: 116756
 Matrix: water

 Date: 8/24/06
 Time: 8:30

 Benchbook#: **BK2384**
 Page: 1

 CAL-ph 4.0: SS#: S749
 CAL-ph 7.0: SS#: S177
 CAL-ph 10.0: SS#: S3822
 Slope: 93.6
 (slope limits: 92 - 102)

 NaCO₃ Vol (mg/L) Spiked: 5
 NaCO₃ Conc (mg/L): 1000
 NaCO₃ WS#: S3723
 H₂SO₄ Normality: 0.029
 H₂SO₄ Reagent ID: 12119106

Sample # / Letter	Initial pH (S.U.)	Sample Vol. Titrated (mL)	H ₂ SO ₄ Vol (mL) to pH 8.3	H ₂ SO ₄ Vol (mL) to pH 4.5 *	Low Alk Total Vol (mL)	Comments
1 MB	7.2	100	—	40.05		
100	10.5	25	1.5	3.2		
188736-2A	8.9	25	0.4	1.4		to pH = 3.6
-2	9.5	100	1.3	4.6		
5 -3	8.3	25	—	1.2		to pH = 4.1
-3	8.6	100	0.2	4.6		
188774-1C	7.9	25	—	7.2		
-2	7.3	25	—	12.35		
-3M	6.6	15	—	2.4		
10 MS -3	9.2	↓	0.8	5.65		
MSP -3	9.3	↓	0.8	5.6		
-4E	6.6	↓	—	2.4		
-6B	6.7	25	—	7.6		
-10I	6.7	↓	—	3.8		
15 -11B	6.7	↓	—	7.5		
-12I	7.8	25	—	7.5		
-13B	5.3	25	—	40.05		to pH = 3.8
-13	6.8	100	—	0.25 ST 0.35 0.4		
-14	7.9	25	—	9.2		
20 -15	7.8	25	—	9.1		
-16	7.1	25	—	10.75		
-17	7.1	25	—	5.3		
-18	7.7	25	—	7.8		
-19	7.7	25	—	11.7		

* If Acid Vol to 4.5 is < 2.0mL, redo using 100mL sample volume. If still < 2.0mL, go on to Low Alkalinity.

 Analyst: [Signature] Date: 8/24/06

 Reviewed by: [Signature] Date: 8/25/06

Chloride

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Batch#:	116500
Matrix:	Water	Received:	08/16/06
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln	Fac	Sampled	Analized
BB1PZ100	SAMPLE	188774-001	230	5.0	25.00		08/15/06 10:35	08/17/06 02:13
BB1PZ101	SAMPLE	188774-002	330	10	50.00		08/15/06 11:05	08/16/06 17:38
BB3GW100	SAMPLE	188774-003	250	5.0	25.00		08/15/06 14:00	08/16/06 17:56
DUP0815061A	SAMPLE	188774-004	250	5.0	25.00		08/15/06 14:10	08/17/06 02:32
1221GW104	SAMPLE	188774-006	61	5.0	25.00		08/15/06 13:40	08/17/06 02:50
231GW09	SAMPLE	188774-010	38	2.0	10.00		08/15/06 14:40	08/17/06 03:08
DUP0815063A	SAMPLE	188774-011	61	5.0	25.00		08/15/06 13:50	08/17/06 04:40
1065PZ1B	SAMPLE	188774-012	180	5.0	25.00		08/15/06 14:41	08/17/06 04:59
BHWGW05RB01	SAMPLE	188774-013	ND	0.20	1.000		08/15/06 13:00	08/17/06 00:23
DUP0815062A	SAMPLE	188774-014	200	5.0	25.00		08/15/06 13:40	08/17/06 05:17
BHWGW01	SAMPLE	188774-015	200	5.0	25.00		08/15/06 13:30	08/17/06 05:36
BHWGW05	SAMPLE	188774-016	100	5.0	25.00		08/15/06 12:38	08/17/06 05:54
BHWGW04	SAMPLE	188774-017	87	2.0	10.00		08/15/06 11:46	08/17/06 06:13
HWGW101	SAMPLE	188774-018	57	5.0	25.00		08/15/06 10:47	08/17/06 06:31
HWGW100	SAMPLE	188774-019	38	5.0	25.00		08/15/06 10:06	08/17/06 06:49
	BLANK	QC352245	ND	0.20	1.000			08/16/06 15:02

ND= Not Detected

RL= Reporting Limit

Fluoride

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Diln Fac:	1.000
Matrix:	Water	Received:	08/16/06
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Batch#	Sampled	Analyzed
BB1PZ100	SAMPLE	188774-001	0.12	0.10	116740	08/15/06 10:35	08/23/06 14:08
BB1PZ101	SAMPLE	188774-002	0.27	0.10	116740	08/15/06 11:05	08/23/06 14:25
BB3GW100	SAMPLE	188774-003	ND	0.10	116740	08/15/06 14:00	08/23/06 14:43
DUP0815061A	SAMPLE	188774-004	ND	0.10	116740	08/15/06 14:10	08/23/06 15:00
1221GW104	SAMPLE	188774-006	ND	0.10	116740	08/15/06 13:40	08/23/06 23:20
231GW09	SAMPLE	188774-010	ND	0.10	116740	08/15/06 14:40	08/23/06 23:55
DUP0815063A	SAMPLE	188774-011	ND	0.10	116740	08/15/06 13:50	08/24/06 01:40
1065PZ1B	SAMPLE	188774-012	ND	0.10	116740	08/15/06 14:41	08/24/06 02:15
BHWGW05RB01	SAMPLE	188774-013	ND	0.10	116740	08/15/06 13:00	08/24/06 02:50
DUP0815062A	SAMPLE	188774-014	ND	0.10	116740	08/15/06 13:40	08/24/06 03:25
BHWGW01	SAMPLE	188774-015	ND	0.10	116740	08/15/06 13:30	08/24/06 04:00
BHWGW05	SAMPLE	188774-016	ND	0.10	116740	08/15/06 12:38	08/24/06 04:35
BHWGW04	SAMPLE	188774-017	ND	0.10	116740	08/15/06 11:46	08/24/06 05:10
HWGW101	SAMPLE	188774-018	0.10	0.10	116740	08/15/06 10:47	08/24/06 05:45
HWGW100	SAMPLE	188774-019	ND	0.10	116742	08/15/06 10:06	08/24/06 08:05
	BLANK	QC353262	ND	0.10	116740		08/23/06 13:15
	BLANK	QC353272	ND	0.10	116742		08/24/06 07:30

Nitrate Nitrogen

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Batch#:	116500
Matrix:	Water	Received:	08/16/06
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln	Fac	Sampled	Analyzed
BB1PZ100	SAMPLE	188774-001	ND	0.05	1.000		08/15/06 10:35	08/16/06 21:00
BB1PZ101	SAMPLE	188774-002	ND	0.05	1.000		08/15/06 11:05	08/16/06 20:23
BB3GW100	SAMPLE	188774-003	5.5	1.3	25.00		08/15/06 14:00	08/16/06 17:56
DUP0815061A	SAMPLE	188774-004	5.2	1.3	25.00		08/15/06 14:10	08/17/06 02:32
1221GW104	SAMPLE	188774-006	ND	0.05	1.000		08/15/06 13:40	08/16/06 21:37
231GW09	SAMPLE	188774-010	12	0.50	10.00		08/15/06 14:40	08/17/06 03:08
DUP0815063A	SAMPLE	188774-011	ND	0.05	1.000		08/15/06 13:50	08/16/06 22:14
1065PZ1B	SAMPLE	188774-012	ND	0.05	1.000		08/15/06 14:41	08/16/06 22:32
BHWGW05RB01	SAMPLE	188774-013	ND	0.05	1.000		08/15/06 13:00	08/17/06 00:23
DUP0815062A	SAMPLE	188774-014	5.7	1.3	25.00		08/15/06 13:40	08/17/06 05:17
BHWGW01	SAMPLE	188774-015	5.9	1.3	25.00		08/15/06 13:30	08/17/06 05:36
BHWGW05	SAMPLE	188774-016	0.05	0.05	1.000		08/15/06 12:38	08/17/06 01:00
BHWGW04	SAMPLE	188774-017	4.7	0.05	1.000		08/15/06 11:46	08/17/06 01:18
HWGW101	SAMPLE	188774-018	1.5	0.05	1.000		08/15/06 10:47	08/17/06 01:36
HWGW100	SAMPLE	188774-019	0.51	0.05	1.000		08/15/06 10:06	08/17/06 01:55
	BLANK	QC352245	ND	0.05	1.000			08/16/06 15:02

ND= Not Detected

RL= Reporting Limit

Nitrite Nitrogen

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Diln Fac:	1.000
Matrix:	Water	Batch#:	116500
Units:	mg/L	Received:	08/16/06

Field ID	Type	Lab ID	Result	RL	Sampled	Analyzed
BB1PZ100	SAMPLE	188774-001	ND	0.05	08/15/06 10:35	08/16/06 21:00
BB1PZ101	SAMPLE	188774-002	ND	0.05	08/15/06 11:05	08/16/06 20:23
BB3GW100	SAMPLE	188774-003	ND	0.05	08/15/06 14:00	08/16/06 18:15
DUP0815061A	SAMPLE	188774-004	ND	0.05	08/15/06 14:10	08/16/06 21:19
1221GW104	SAMPLE	188774-006	ND	0.05	08/15/06 13:40	08/16/06 21:37
231GW09	SAMPLE	188774-010	ND	0.05	08/15/06 14:40	08/16/06 21:56
DUP0815063A	SAMPLE	188774-011	ND	0.05	08/15/06 13:50	08/16/06 22:14
1065PZ1B	SAMPLE	188774-012	ND	0.05	08/15/06 14:41	08/16/06 22:32
BHWGW05RB01	SAMPLE	188774-013	ND	0.05	08/15/06 13:00	08/17/06 00:23
DUP0815062A	SAMPLE	188774-014	ND	0.05	08/15/06 13:40	08/16/06 22:51
BHWGW01	SAMPLE	188774-015	ND	0.05	08/15/06 13:30	08/17/06 00:41
BHWGW05	SAMPLE	188774-016	ND	0.05	08/15/06 12:38	08/17/06 01:00
BHWGW04	SAMPLE	188774-017	ND	0.05	08/15/06 11:46	08/17/06 01:18
HWGW101	SAMPLE	188774-018	ND	0.05	08/15/06 10:47	08/17/06 01:36
HWGW100	SAMPLE	188774-019	ND	0.05	08/15/06 10:06	08/17/06 01:55
	BLANK	QC352245	ND	0.05		08/16/06 15:02



Curtis & Tompkins, Ltd.

Sulfate

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Batch#:	116500
Matrix:	Water	Received:	08/16/06
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln Fac	Sampled	Analyzed
BB1PZ100	SAMPLE	188774-001	91	13	25.00	08/15/06 10:35	08/17/06 02:13
BB1PZ101	SAMPLE	188774-002	180	25	50.00	08/15/06 11:05	08/16/06 17:38
BB3GW100	SAMPLE	188774-003	61	13	25.00	08/15/06 14:00	08/16/06 17:56
DUP0815061A	SAMPLE	188774-004	61	13	25.00	08/15/06 14:10	08/17/06 02:32
1221GW104	SAMPLE	188774-006	70	13	25.00	08/15/06 13:40	08/17/06 02:50
231GW09	SAMPLE	188774-010	64	5.0	10.00	08/15/06 14:40	08/17/06 03:08
DUP0815063A	SAMPLE	188774-011	68	13	25.00	08/15/06 13:50	08/17/06 04:40
1065PZ1B	SAMPLE	188774-012	60	13	25.00	08/15/06 14:41	08/17/06 04:59
BHWGW05RB01	SAMPLE	188774-013	ND	0.50	1.000	08/15/06 13:00	08/17/06 00:23
DUP0815062A	SAMPLE	188774-014	66	13	25.00	08/15/06 13:40	08/17/06 05:17
BHWGW01	SAMPLE	188774-015	68	13	25.00	08/15/06 13:30	08/17/06 05:36
BHWGW05	SAMPLE	188774-016	84	13	25.00	08/15/06 12:38	08/17/06 05:54
BHWGW04	SAMPLE	188774-017	59	5.0	10.00	08/15/06 11:46	08/17/06 06:13
HWGW101	SAMPLE	188774-018	81	13	25.00	08/15/06 10:47	08/17/06 06:31
HWGW100	SAMPLE	188774-019	73	13	25.00	08/15/06 10:06	08/17/06 06:49
	BLANK	QC352245	ND	0.50	1.000		08/16/06 15:02

ND= Not Detected
RL= Reporting Limit

00392

Batch QC Report

Chloride			
Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Units:	mg/L
Field ID:	BB3GW100	Batch#:	116500
MSS Lab ID:	188774-003	Sampled:	08/15/06 14:00
Matrix:	Water	Received:	08/16/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Analyzed
BS	QC352246		4.000	4.171	104	80-120			1.000		08/16/06 15:20
BSD	QC352247		4.000	4.126	103	80-120	1	20	1.000		08/16/06 15:39
MS	QC352248	249.9	100.0	346.0	96	80-120			50.00		08/16/06 19:47
MSD	QC352249		100.0	345.5	96	80-120	0	25	50.00		08/16/06 20:05

RPD= Relative Percent Difference

Fluoride

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Units:	mg/L
Matrix:	Water	Received:	08/16/06

Field ID	Type	MSS	Lab ID	Lab ID	MSS	Result	Spiked	Result	%REC	Limits	RPD	Lim	Diin	Fac	Batch#	Sampled	Analyzed
BS			QC353263				2.000	2.008	100	80-120	4	20	1.000		116740		08/23/06 13:33
BSD			QC353264				2.000	2.082	104	80-120	4	20	1.000		116740		08/23/06 13:50
BB1PZ100 MS		188774-001	QC353265		0.1153		1.000	1.059	94	77-120			1.020		116740	08/15/06 10:35	08/23/06 19:49
BB1PZ100 MSD		188774-001	QC353266				1.000	1.074	96	77-120	1	20	1.020		116740	08/15/06 10:35	08/23/06 20:24
LCS			QC353273				2.000	2.019	101	80-120			1.000		116742		08/24/06 07:47
HWGW100 MS		188774-019	QC353274		0.06928		1.000	0.9978	93	77-120			1.020		116742	08/15/06 10:06	08/24/06 08:40
HWGW100 MSD		188774-019	QC353275				1.000	1.017	95	77-120	2	20	1.020		116742	08/15/06 10:06	08/24/06 09:15

RPD= Relative Percent Difference

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29.0



Curtis & Tompkins, Ltd.

000004

Batch QC Report

Nitrate Nitrogen			
Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Units:	mg/L
Field ID:	BB3GW100	Batch#:	116500
MSS Lab ID:	188774-003	Sampled:	08/15/06 14:00
Matrix:	Water	Received:	08/16/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	DiIn	Fac	Analyzed
BS	QC352246		1.000	1.017	102	80-120			1.000		08/16/06 15:20
BSD	QC352247		1.000	0.9874	99	80-120	3	20	1.000		08/16/06 15:39
MS	QC352248	5.540	25.00	31.00	102	80-120			50.00		08/16/06 19:47
MSD	QC352249		25.00	30.14	98	80-120	3	25	50.00		08/16/06 20:05

Batch QC Report

Nitrite Nitrogen			
Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Units:	mg/L
Field ID:	BB3GW100	Batch#:	116500
MSS Lab ID:	188774-003	Sampled:	08/15/06 14:00
Matrix:	Water	Received:	08/16/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Analyzed
BS	QC352246		1.000	1.017	102	80-120			1.000		08/16/06 15:20
BSD	QC352247		1.000	1.016	102	80-120	0	20	1.000		08/16/06 15:39
MS	QC352248	<0.01206	25.00	24.12	96	80-120			50.00		08/16/06 19:47
MSD	QC352249		25.00	23.85	95	80-120	1	25	50.00		08/16/06 20:05

Batch QC Report

Sulfate			
Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Units:	mg/L
Field ID:	BB3GW100	Batch#:	116500
MSS Lab ID:	188774-003	Sampled:	08/15/06 14:00
Matrix:	Water	Received:	08/16/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Analyzed
BS	QC352246		10.00	10.29	103	80-120			1.000		08/16/06 15:20
BSD	QC352247		10.00	10.05	100	80-120	2	20	1.000		08/16/06 15:39
MS	QC352248	61.12	250.0	301.9	96	80-120			50.00		08/16/06 19:47
MSD	QC352249		250.0	304.2	97	80-120	1	25	50.00		08/16/06 20:05

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188774 IC Water: EPA 300.0

Inst : IC01
 Calnum : 606336645001
 Units : mg/L
 Date : 21-AUG-2006 19:03
 X Axis : A
 Reviewer: MCH
 Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	233_2.000	606336645002	L1	21-AUG-2006 19:03	S3313 (500X)
L2	233_3.000	606336645003	L2	21-AUG-2006 19:20	S3313 (100X)
L3	233_4.000	606336645004	L3	21-AUG-2006 19:38	S3313 (25X)
L4	233_5.000	606336645005	L4	21-AUG-2006 19:55	S3313 (10X)
L5	233_6.000	606336645006	L5	21-AUG-2006 20:13	S3313 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ²	rSD	Mmr ²	Flg
Fluoride	0.2336	0.2379	0.2620	0.2757	0.2883	QORG		0.26006	0.002834	0.2595	1.000	0.990	0.990	
Chloride	0.1715	0.1700	0.1749	0.1863	0.2009	QORG		0.17068	0.001511	0.1807	1.000	0.990	0.990	
Nitrogen, Nitrite	0.3042	0.3202	0.3381	0.3509	0.3672	QORG		0.33296	0.006873	0.3361	1.000	0.990	0.990	
Nitrogen, Nitrate	0.3896	0.4009	0.4242	0.4428	0.4642	QORG		0.41861	0.009151	0.4243	1.000	0.990	0.990	
Sulfate	0.2103	0.1540	0.1372	0.1369	0.1482	QORG		0.13176	3.271E-4	0.1577	1.000	0.990	0.990	

mset
 8/28/06

Instrument response = a0 + amount * a1 + amount² * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188774 IC Water
EPA 300.0

Inst : IC01
Calnum : 606336645001

Cal Date: 21-AUG-2006

ICV 606336645007 (233_7.000 21-AUG-2006) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.2595	0.2620	1.000	0.9967	mg/L	0	10	
Chloride	0.1807	0.1710	2.000	1.969	mg/L	-2	10	
Nitrogen, Nitrite	0.3361	0.3504	0.5000	0.5207	mg/L	4	10	
Nitrogen, Nitrate	0.4243	0.3907	0.5000	0.4620	mg/L	-8	10	
Sulfate	0.1577	0.1375	5.000	5.152	mg/L	3	10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 300.0

Inst : IC01
 Calnum : 606336645001
 Units : mg/L

Date : 21-AUG-2006 19:03
 X Axis : A

Inj Vol: 25 uL

Aug 23/06

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	233_2.000	606336645002	L1	21-AUG-2006 19:03	S3313 (500X)
L2	233_3.000	606336645003	L2	21-AUG-2006 19:20	S3313 (100X)
L3	233_4.000	606336645004	L3	21-AUG-2006 19:38	S3313 (25X)
L4	233_5.000	606336645005	L4	21-AUG-2006 19:55	S3313 (10X)
L5	233_6.000	606336645006	L5	21-AUG-2006 20:13	S3313 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ²	MnR ²	Fig
Fluoride	0.2336	0.2379	0.2620	0.2757	0.2883	QORG		0.26006	0.002834	0.2595	1.000	0.990	
Chloride	0.1715	0.1700	0.1749	0.1863	0.2009	QORG		0.17068	0.001511	0.1807	1.000	0.990	
Nitrogen, Nitrite	0.3042	0.3202	0.3381	0.3509	0.3672	QORG		0.33296	0.006873	0.3361	1.000	0.990	
Bromide	0.0733	0.0743	0.0743	0.0763	0.0790	QORG		0.07349	2.742E-4	0.0754	1.000	0.990	
Nitrogen, Nitrate	0.3896	0.4009	0.4242	0.4428	0.4642	QORG		0.41861	0.009151	0.4243	1.000	0.990	
Orthophosphate (as P)	0.3598	0.2623	0.2174	0.1951	0.1921	QORG		0.20764	-0.00080	0.2453	0.999	0.990	
Sulfate	0.2103	0.1540	0.1372	0.1389	0.1482	QORG		0.13176	3.271E-4	0.1577	1.000	0.990	

Not good for
 SDY or POP
 mes 8/23/06

004000

Sequence: 233
Operator: ic_analyst

Page 1 of 2
Printed: 8/23/2006 2:05:06 PM

Title: Anions
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2006
Timebase: IC1_DX120
#Samples: 21

Created: 8/18/2003 10:25:33 AM by ic_analyst
Last Update: 8/23/2006 12:03:17 PM by ic_analyst

No.	*Batch	Name	Comment	Dil. Factor	Program	Inj. Date/Time	*operator	Method
1	CAL-233	IB		1.0000	IC01-7AN	8/21/2006 6:45:33 PM	MRS	IC01-7AN_CAL
2	CAL-233	ICAL,L1,S3313,500		1.0000	IC01-7AN	8/21/2006 7:03:03 PM	MRS	IC01-7AN_CAL
3	CAL-233	ICAL,L2,S3313,100		1.0000	IC01-7AN	8/21/2006 7:20:34 PM	MRS	IC01-7AN_CAL
4	CAL-233	ICAL,L3,S3313,25		1.0000	IC01-7AN	8/21/2006 7:38:04 PM	MRS	IC01-7AN_CAL
5	CAL-233	ICAL,L4,S3313,10		1.0000	IC01-7AN	8/21/2006 7:55:35 PM	MRS	IC01-7AN_CAL
6	CAL-233	ICAL,L5,S3313,5		1.0000	IC01-7AN	8/21/2006 8:13:06 PM	MRS	IC01-7AN_CAL
7	CAL-233	ICV,S3859,5		1.0000	IC01-7AN	8/21/2006 8:30:36 PM	MRS	IC01-7AN_CAL
8	CAL-233	ICB		1.0000	IC01-7AN	8/21/2006 8:48:07 PM	MRS	IC01-7AN_CAL
9	116692	CCV,L,S3313,100		1.0000	IC01-7AN	8/21/2006 9:05:37 PM	MRS	IC01-7AN_CAL
10	116692	CCB/MB,QC353067		1.0000	IC01-7AN	8/21/2006 9:23:08 PM	MRS	IC01-7AN_CAL
11	116692	MDL,187854-001,S3313,500		1.0000	IC01-7AN	8/21/2006 9:40:39 PM	MRS	IC01-7AN_CAL
12	116692	MDL,187854-002,S3313,500		1.0000	IC01-7AN	8/21/2006 9:58:09 PM	MRS	IC01-7AN_CAL
13	116692	MDL,187854-003,S3313,500		1.0000	IC01-7AN	8/21/2006 10:15:40 PM	MRS	IC01-7AN_CAL
14	116692	MDL,187854-004,S3313,500		1.0000	IC01-7AN	8/21/2006 10:33:10 PM	MRS	IC01-7AN_CAL
15	116692	MDL,187854-005,S3313,500		1.0000	IC01-7AN	8/21/2006 10:50:41 PM	MRS	IC01-7AN_CAL
16	116692	MDL,187854-006,S3313,500		1.0000	IC01-7AN	8/21/2006 11:08:11 PM	MRS	IC01-7AN_CAL
17	116692	MDL,187854-007,S3313,500		1.0000	IC01-7AN	8/21/2006 11:25:42 PM	MRS	IC01-7AN_CAL
18	116692	X,MDL,187854-007,S3313,500		1.0000	IC01-7AN	8/21/2006 11:43:13 PM	MRS	IC01-7AN_CAL
19	116692	CCV,M,S3313,25		1.0000	IC01-7AN	8/22/2006 12:00:43 AM	MRS	IC01-7AN_CAL
20	116692	CCB		1.0000	IC01-7AN	8/22/2006 12:18:14 AM	MRS	IC01-7AN_CAL
21	116692	SHUTDOWN		1.0000	IC01-7AN_OFF	8/22/2006 12:35:45 AM	MRS	IC01-7AN_CAL

Sequence: 233
Operator: ic_analyst

Page 2 of 2
Printed: 8/23/2006 2:05:07 PM

Title: Anions

Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2006
Timebase: IC1_DX120
#Samples: 21

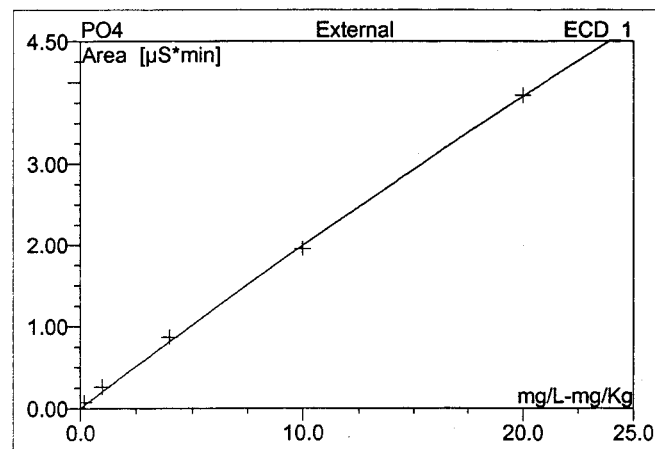
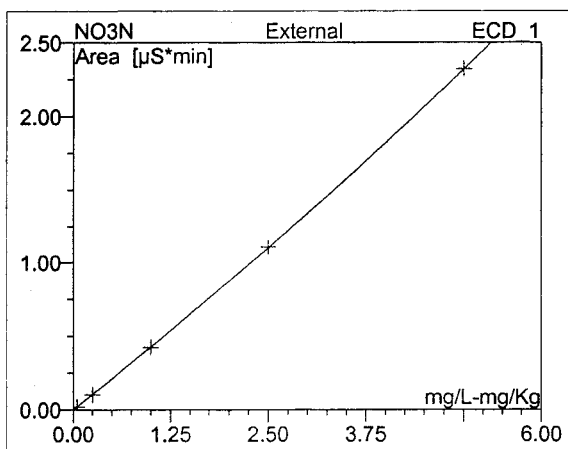
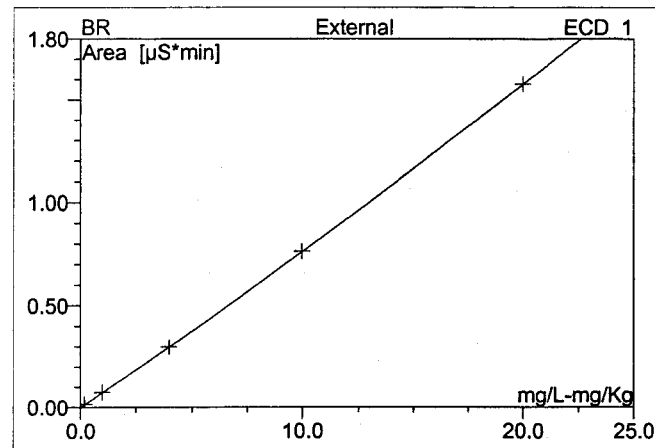
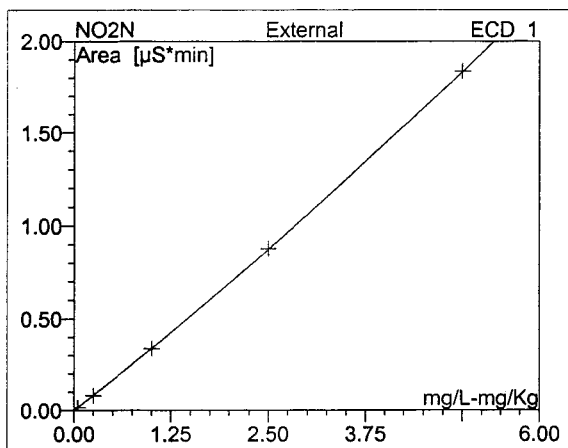
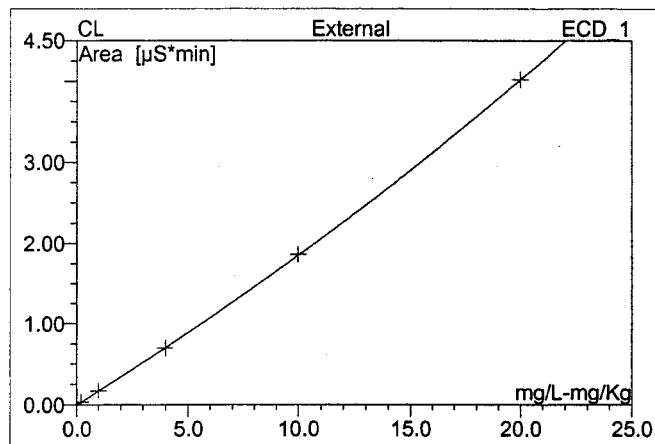
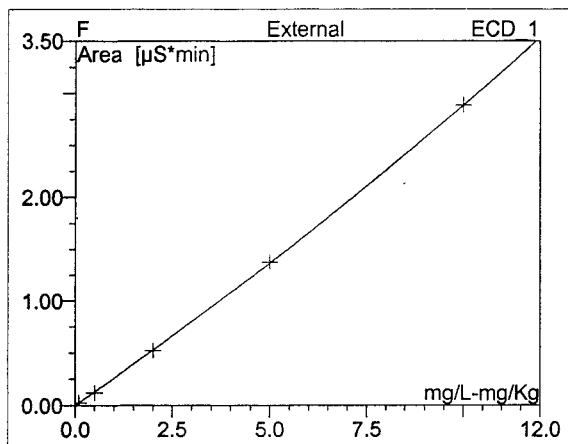
Created: 8/18/2003 10:25:33 AM by ic_analyst
Last Update: 8/23/2006 12:03:17 PM by ic_analyst

No.	*Batch	Name	Comment	Status	Inj. Vol.	Type	*PDF
1	CAL-233	IB		Finished	25.0	Unknown	1
2	CAL-233	ICAL,L1,S3313,500		Finished	25.0	Standard	1
3	CAL-233	ICAL,L2,S3313,100		Finished	25.0	Standard	1
4	CAL-233	ICAL,L3,S3313,25		Finished	25.0	Standard	1
5	CAL-233	ICAL,L4,S3313,10		Finished	25.0	Standard	1
6	CAL-233	ICAL,L5,S3313,5		Finished	25.0	Standard	1
7	CAL-233	ICV,S3859,5		Finished	25.0	Unknown	1
8	CAL-233	ICB		Finished	25.0	Unknown	1
9	116692	CCV,L,S3313,100		Finished	25.0	Unknown	1
10	116692	CCB/MB,QC353067		Finished	25.0	Unknown	1
11	116692	MDL,187854-001,S3313,500		Finished	25.0	Unknown	1
12	116692	MDL,187854-002,S3313,500		Finished	25.0	Unknown	1
13	116692	MDL,187854-003,S3313,500		Finished	25.0	Unknown	1
14	116692	MDL,187854-004,S3313,500		Finished	25.0	Unknown	1
15	116692	MDL,187854-005,S3313,500		Finished	25.0	Unknown	1
16	116692	MDL,187854-006,S3313,500		Finished	25.0	Unknown	1
17	116692	MDL,187854-007,S3313,500		Finished	25.0	Unknown	1
18	116692	X,MDL,187854-007,S3313,500		Finished	25.0	Unknown	1
19	116692	CCV,M,S3313,25		Finished	25.0	Unknown	1
20	116692	CCB		Finished	25.0	Unknown	1
21	116692	SHUTDOWN		Finished	25.0	Unknown	1

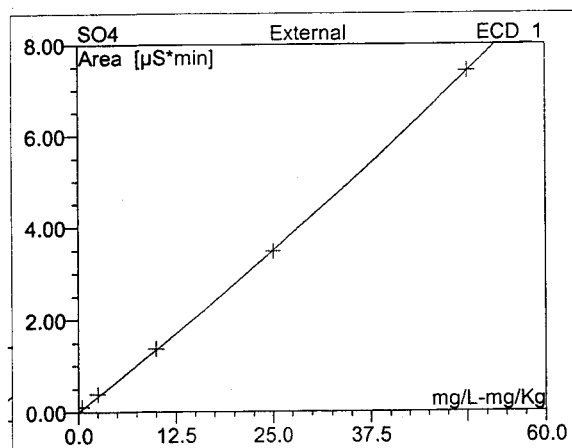
IC01 Calibration Batch Report

Sequence: 233
Program: IC01-7AN
Inj. Date/Time: 08/21/06 19:38

Inj. Vol.: 25.0
Operator: PC_NEWIC
Run Time: 15.00



Sequence:	233	Inj. Vol.:	25.0
Program:	IC01-7AN	Operator:	n.a.
Ini. Date/Time:	08/21/06 19:38	Run Time:	15.00



No.	Ret. Time min	Peak Name	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr.Coeff. %
1	3.45	F	Quad	5	0.000000	0.260060	0.002834	99.973221
3	5.01	CL	Quad	5	0.000000	0.170683	0.001511	99.924341
4	5.91	NO2N	Quad	5	0.000000	0.332959	0.006873	99.973396
5	7.47	BR	Quad	5	0.000000	0.073488	0.000274	99.983293
6	8.42	NO3N	Quad	5	0.000000	0.418605	0.009151	99.970537
7	10.78	PO4	Quad	5	0.000000	0.207643	-0.000801	99.982722
8	12.89	SO4	Quad	5	0.000000	0.131757	0.000327	99.933967
AVERAGE:					0.000000	0.227885	0.002881	99.963068

No.	Name	Area $\mu\text{S} \cdot \text{min}$ F ECD 1	Area $\mu\text{S} \cdot \text{min}$ CL ECD 1	Area $\mu\text{S} \cdot \text{min}$ NO2N ECD 1	Area $\mu\text{S} \cdot \text{min}$ BR ECD 1	Area $\mu\text{S} \cdot \text{min}$ NO3N ECD 1	Area $\mu\text{S} \cdot \text{min}$ PO4 ECD 1	Area $\mu\text{S} \cdot \text{min}$ SO4 ECD 1
2	ICAL,L1,S331	0.023361 ✓	0.034306 ✓	0.015208 ✓	0.014660 ✓	0.019478 ✓	0.071958	0.105134
3	ICAL,L2,S331	0.118958 ✓	0.169962 ✓	0.080040 ✓	0.074287 ✓	0.100237 ✓	0.262261	0.385064
4	ICAL,L3,S331	0.524043 ✓	0.699571 ✓	0.338120 ✓	0.297334 ✓	0.424157 ✓	0.869498	1.372075
5	ICAL,L4,S331	1.378250 ✓	1.863026 ✓	0.877195 ✓	0.762843 ✓	1.107017 ✓	1.951480	3.472693
6	ICAL,L5,S331	2.882594 ✓	4.017017 ✓	1.836233 ✓	1.579330 ✓	2.321134 ✓	3.841451	7.411057

No.	Name	Height μS F ECD 1	Height μS CL ECD 1	Height μS NO2N ECD 1	Height μS BR ECD 1	Height μS NO3N ECD 1	Height μS PO4 ECD 1	Height μS SO4 ECD 1
2	ICAL,L1,S331	0.176202	0.235740	0.079444	0.057838	0.066822	0.135100	0.225118
3	ICAL,L2,S331	0.891716	1.073668	0.406412	0.302198	0.348122	0.602496	0.930322
4	ICAL,L3,S331	3.849026	4.483330	1.672584	1.244118	1.492336	2.306872	3.663530
5	ICAL,L4,S331	10.307684	11.869054	4.269388	3.167808	3.854612	5.511034	9.600310
6	ICAL,L5,S331	21.858498	25.755202	8.902990	6.609518	8.133154	11.321928	20.520296

No.	Name	Amount mg/L-mg/Kg F ECD 1	Amount mg/L-mg/Kg CL ECD 1	Amount mg/L-mg/Kg NO2N ECD 1	Amount mg/L-mg/Kg BR ECD 1	Amount mg/L-mg/Kg NO3N ECD 1	Amount mg/L-mg/Kg PO4 ECD 1	Amount mg/L-mg/Kg SO4 ECD 1
2	ICAL,L1,S331	0.089742	0.200634	0.045632	0.199343	0.046484	0.347013	0.796365
3	ICAL,L2,S331	0.455168	0.987153	0.239209	1.007090	0.238215	1.269253	2.901620
4	ICAL,L3,S331	1.972672	3.959860	0.995063	3.986712	0.991761	4.257380	10.157497
5	ICAL,L4,S331	5.024576	10.025448	2.505016	10.006910	2.507125	9.766175	24.826513
6	ICAL,L5,S331	9.995434	19.995762	4.999047	19.998845	4.998685	20.051272	50.032903

Method File: IC01-7AN_CAL
Operator: ic_analyst

Page 1 of 6
Printed: 8/23/2006 2:07:55 PM

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2006\233.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON
Last Update: 8/23/2006 12:23:10 PM by ic_analyst

Blank Run Subtraction: No Blank Run Subtraction

Detection Table:

No.	Ret. Time [min]	Param. Name	Param. Value	Channel
1	0.000	Inhibit Integration	On	ECD_1
2	3.000	Inhibit Integration	Off	ECD_1
3	3.000	Sensitivity	0.001 "[Signal]"	ECD_1
4	3.010	Minimum Area	0.001 "[Signal]*min"	ECD_1
5	3.011	Peak Slice	0.50 s	ECD_1

Method File: IC01-7AN_CAL
Operator: ic_analyst

Page 2 of 6
Printed: 8/23/2006 2:07:55 PM

Title: IC01-7AN_CAL

Datasource: DGLD4X01_local

Location: IC1_DX120\IC01-ANIONS-2006\233.SEQ

Created:

10/22/2001 2:51:50 PM by CURTIS & THOMPSON

Last Update:

8/23/2006 12:23:10 PM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off

Dead time:

Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Window	Standard	Int.Type	Cal.Type	Peak Type	Group	Comment	Amount
										ICAL,L1,S3313,500
1	F	3.453 min	5.000 RG	External	Area	Quad	Auto			0.100000
2	CL	5.010 min	5.000 RG	External	Area	Quad	Auto			0.200000
3	NO2N	5.913 min	5.000 RG	External	Area	Quad	Auto			0.050000
4	BR	7.473 min	5.000 RG	External	Area	Quad	Auto			0.200000
5	NO3N	8.417 min	10.000 RG	External	Area	Quad	Auto			0.050000
6	PO4	10.780 min	10.000 RG	External	Area	Quad	Auto			0.200000
7	SO4	12.887 min	10.000 RG	External	Area	Quad	Auto			0.500000

Method File: IC01-7AN_CAL
Operator: ic_analyst

Page 3 of 6
Printed: 8/23/2006 2:07:55 PM

Title: IC01-7AN_CAL

Datasource: DGLD4X01_local

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON

Location: IC1_DX120\IC01-ANIONS-2006\233.SEQ

Last Update: 8/23/2006 12:23:10 PM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off

Dead time:

Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Amount	Amount	Amount	Amount
			ICAL,L2,S3313,100	ICAL,L3,S3313,25	ICAL,L4,S3313,10	ICAL,L5,S3313,5
1	F	3.453 min	0.500000	2.000000	5.000000	10.000000
2	CL	5.010 min	1.000000	4.000000	10.000000	20.000000
3	NO2N	5.913 min	0.250000	1.000000	2.500000	5.000000
4	BR	7.473 min	1.000000	4.000000	10.000000	20.000000
5	NO3N	8.417 min	0.250000	1.000000	2.500000	5.000000
6	PO4	10.780 min	1.000000	4.000000	10.000000	20.000000
7	SO4	12.887 min	2.500000	10.000000	25.000000	50.000000

Method File: IC01-7AN_CAL
Operator: ic_analyst

Page 4 of 6
Printed: 8/23/2006 2:07:56 PM

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2006\233.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKN
Last Update: 8/23/2006 12:23:10 PM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg
Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Resp.Fact.	Comment	Amount	Amount	Amount	Amount
					ICAL,L1,S3313,500	ICAL,L2,S3313,100	ICAL,L3,S3313,25	ICAL,L4,S3313,10
1	F	3.453 min	1.000000		0.100000	0.500000	2.000000	5.000000
2	CL	5.010 min	1.000000		0.200000	1.000000	4.000000	10.000000
3	NO2N	5.913 min	1.000000		0.050000	0.250000	1.000000	2.500000
4	BR	7.473 min	1.000000		0.200000	1.000000	4.000000	10.000000
5	NO3N	8.417 min	1.000000		0.050000	0.250000	1.000000	2.500000
6	PO4	10.780 min	1.000000		0.200000	1.000000	4.000000	10.000000
7	SO4	12.887 min	1.000000		0.500000	2.500000	10.000000	25.000000

Method File: IC01-7AN_CAL
Operator: ic_analyst

Page 5 of 6
Printed: 8/23/2006 2:07:56 PM

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2006\233.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON
Last Update: 8/23/2006 12:23:10 PM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg
Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Amount
			ICAL,L5,S3313,5
1	F	3.453 min	10.000000
2	CL	5.010 min	20.000000
3	NO2N	5.913 min	5.000000
4	BR	7.473 min	20.000000
5	NO3N	8.417 min	5.000000
6	PO4	10.780 min	20.000000
7	SO4	12.887 min	50.000000

Method File: IC01-7AN_CAL
Operator: ic_analyst

Page 6 of 6
Printed: 8/23/2006 2:07:56 PM

Title: IC01-7AN_CAL
Datasource: DGLD4X01_local
Location: IC1_DX120\IC01-ANIONS-2006\233.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKN
Last Update: 8/23/2006 12:23:10 PM by ic_analyst

Calibration:

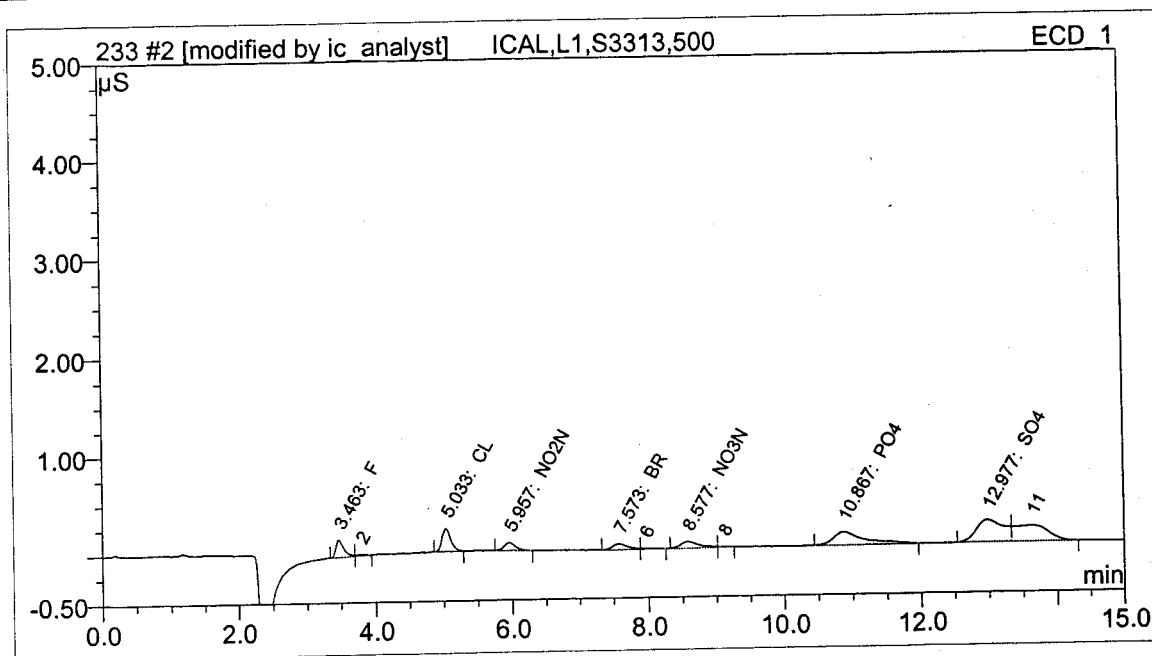
Calibration Mode: Total
Auto Recalibrate: On

No.	Enabled	Name	Smp.No.	Pos.	Inj. Vol.	Weight	ISTD Amount	Dil. Factor	Inj. Date/Time	Calib. Comment
1	☒	ICAL,L1,S3313,500	2	70	25.0	1.0000	1.0000	1.0000	8/21/2006 7:03:03 PM	Ok
2	☒	ICAL,L2,S3313,100	3	35	25.0	1.0000	1.0000	1.0000	8/21/2006 7:20:34 PM	Ok
3	☒	ICAL,L3,S3313,25	4	35	25.0	1.0000	1.0000	1.0000	8/21/2006 7:38:04 PM	Ok
4	☒	ICAL,L4,S3313,10	5	36	25.0	1.0000	1.0000	1.0000	8/21/2006 7:55:35 PM	Ok
5	☒	ICAL,L5,S3313,5	6	37	25.0	1.0000	1.0000	1.0000	8/21/2006 8:13:06 PM	Ok

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L1,S3313,500	Sample No.:	2
Sequence Name:	233	Batch #:	CAL-233
Program Method:	IC01-7AN	Injection vol.:	25.0
Quantitation Method:	IC01-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC01-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/21/2006 7:03 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.463	0.023361	0.0897	0.0897	
3	CL	5.033	0.034306	0.2006	0.2006	
4	NO2N	5.957	0.015208	0.0456	0.0456	
5	BR	7.573	0.014660	0.1993	0.1993	
7	NO3N	8.577	0.019478	0.0465	0.0465	
9	PO4	10.867	0.071958	0.3470	0.3470	
10	SO4	12.977	0.105134	0.7964	0.7964	



ANALYZED BY:

REVIEWED BY:

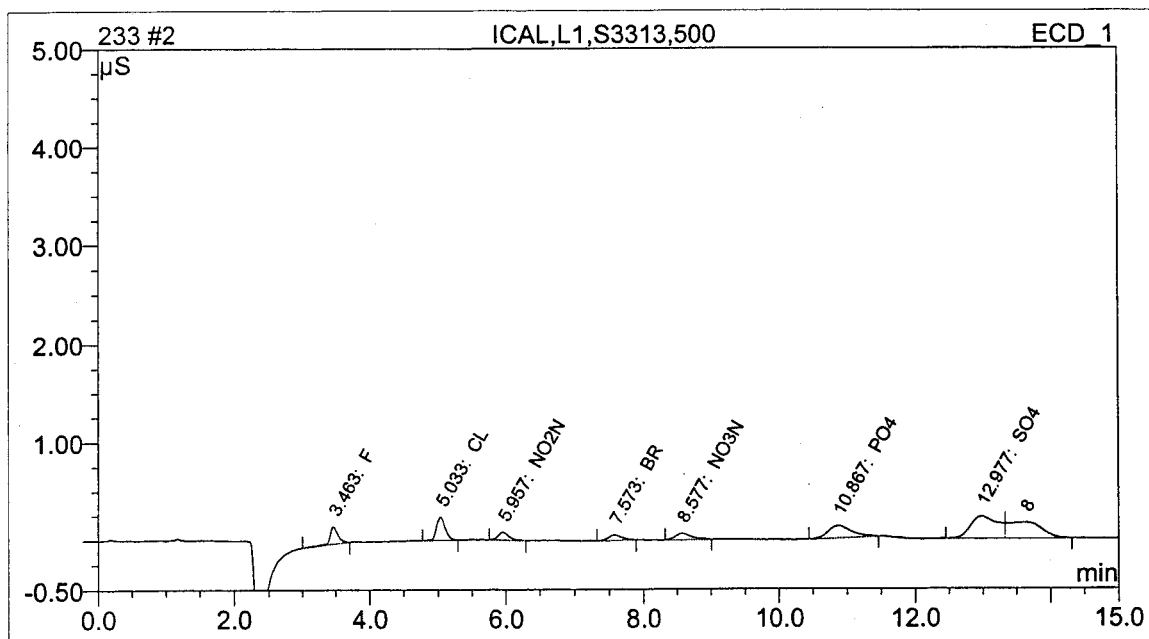
Curtis & Tompkins, Ltd.

00412

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L1,S3313,500	Sample No.:	2
Sequence Name:	233	Batch #:	CAL-233
Program Method:	IC01-7AN	Injection vol.:	25.0
Quantitation Method:	IC01-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC01-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/21/2006 7:03 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.463	0.025405	0.0976	0.0976	
2	CL	5.033	0.035130	0.2054	0.2054	
3	NO2N	5.957	0.015178	0.0455	0.0455	
4	BR	7.573	0.012901	0.1755	0.1755	
5	NO3N	8.577	0.018485	0.0441	0.0441	
6	PO4	10.867	0.049055	0.2366	0.2366	
7	SO4	12.977	0.107413	0.8136	0.8136	



ANALYZED BY:

REVIEWED BY:

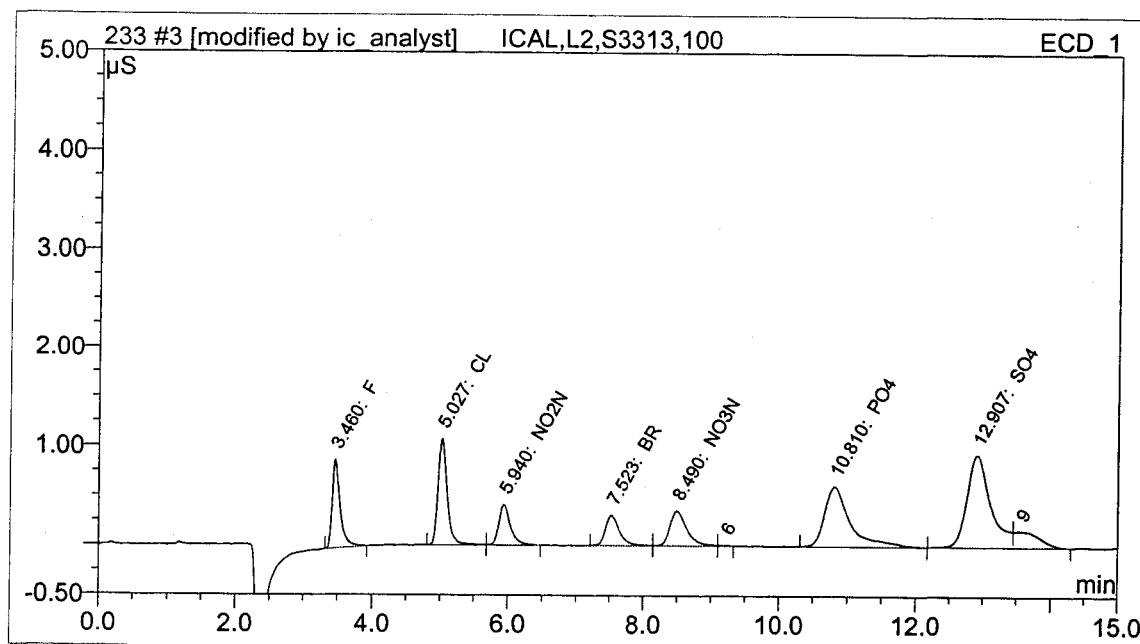
Curtis & Tompkins, Ltd.

00416

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L2,S3313,100	Sample No.:	3
Sequence Name:	233	Batch #:	CAL-233
Program Method:	IC01-7AN	Injection vol.:	25.0
Quantitation Method:	IC01-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC01-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/21/2006 7:20 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.460	0.118958	0.4552	0.4552	
2	CL	5.027	0.169962	0.9872	0.9872	
3	NO2N	5.940	0.080040	0.2392	0.2392	
4	BR	7.523	0.074287	1.0071	1.0071	
5	NO3N	8.490	0.100237	0.2382	0.2382	
7	PO4	10.810	0.262261	1.2693	1.2693	
8	SO4	12.907	0.385064	2.9016	2.9016	



ANALYZED BY:

REVIEWED BY:

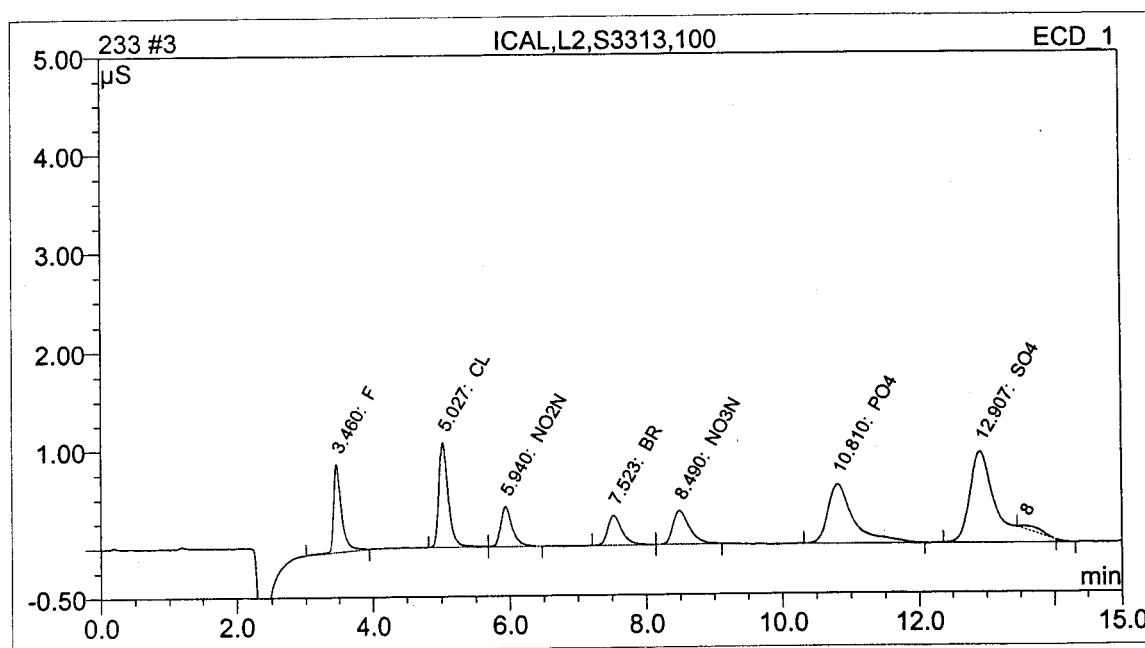
Curtis & Tompkins, Ltd.

00414

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L2,S3313,100	Sample No.:	3
Sequence Name:	233	Batch #:	CAL-233
Program Method:	IC01-7AN	Injection vol.:	25.0
Quantitation Method:	IC01-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC01-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/21/2006 7:20 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.460	0.124463	0.4756	0.4756	
2	CL	5.027	0.169899	0.9868	0.9868	
3	NO2N	5.940	0.080022	0.2392	0.2392	
4	BR	7.523	0.073176	0.9925	0.9925	
5	NO3N	8.490	0.096808	0.2303	0.2303	
6	PO4	10.810	0.260043	1.2588	1.2588	
7	SO4	12.907	0.439762	3.2967	3.2967	



ANALYZED BY:

REVIEWED BY:

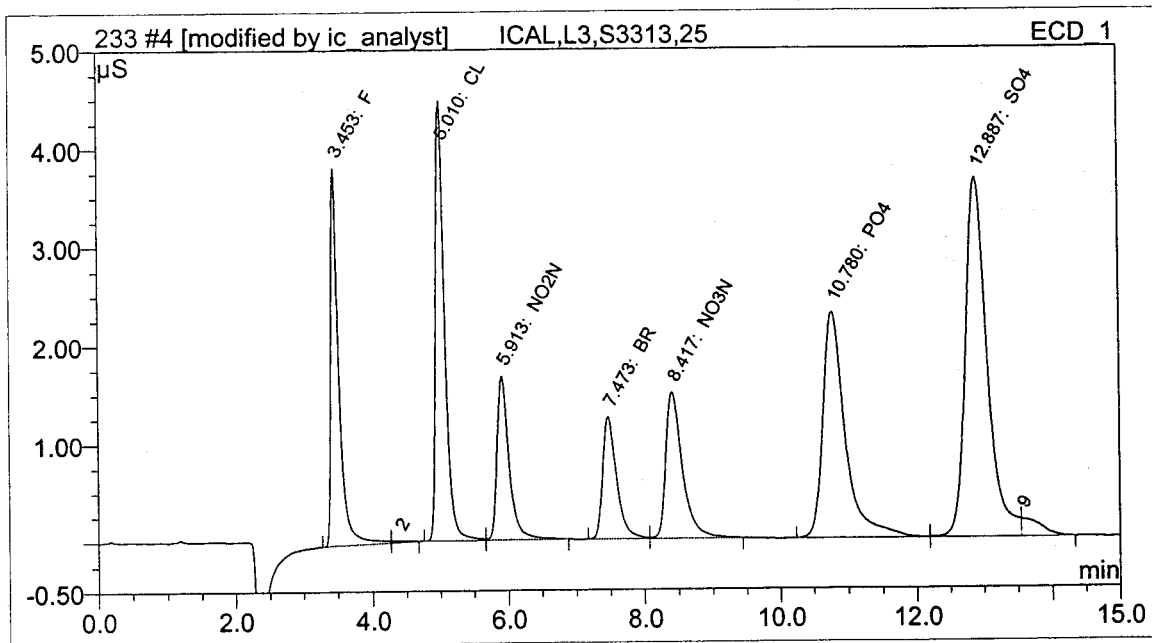
Curtis & Tompkins, Ltd.

00415

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L3,S3313,25	Sample No.:	4
Sequence Name:	233	Batch #:	CAL-233
Program Method:	IC01-7AN	Injection vol.:	25.0
Quantitation Method:	IC01-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC01-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/21/2006 7:38 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.453	0.524043	1.9727	1.9727	
3	CL	5.010	0.699571	3.9599	3.9599	
4	NO2N	5.913	0.338120	0.9951	0.9951	
5	BR	7.473	0.297334	3.9867	3.9867	
6	NO3N	8.417	0.424157	0.9918	0.9918	
7	PO4	10.780	0.869498	4.2574	4.2574	
8	SO4	12.887	1.372075	10.1575	10.1575	



ANALYZED BY:

REVIEWED BY:

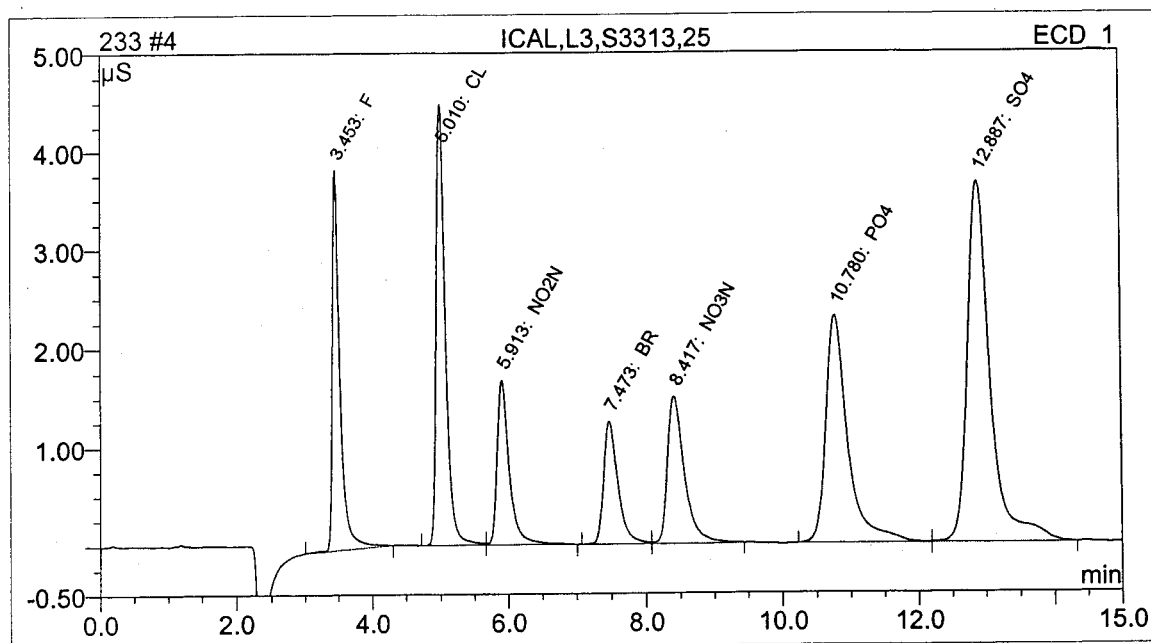
Curtis & Tompkins, Ltd.

00416

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L3,S3313,25	Sample No.:	4
Sequence Name:	233	Batch #:	CAL-233
Program Method:	IC01-7AN	Injection vol.:	25.0
Quantitation Method:	IC01-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC01-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/21/2006 7:38 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.453	0.522637	1.9690	1.9690	
2	CL	5.010	0.701196	3.9662	3.9662	
3	NO2N	5.913	0.344147	1.0074	1.0074	
4	BR	7.473	0.299609	4.0081	4.0081	
5	NO3N	8.417	0.425260	0.9936	0.9936	
6	PO4	10.780	0.869613	4.2578	4.2578	
7	SO4	12.887	1.430982	10.4555	10.4555	



ANALYZED BY:

REVIEWED BY:

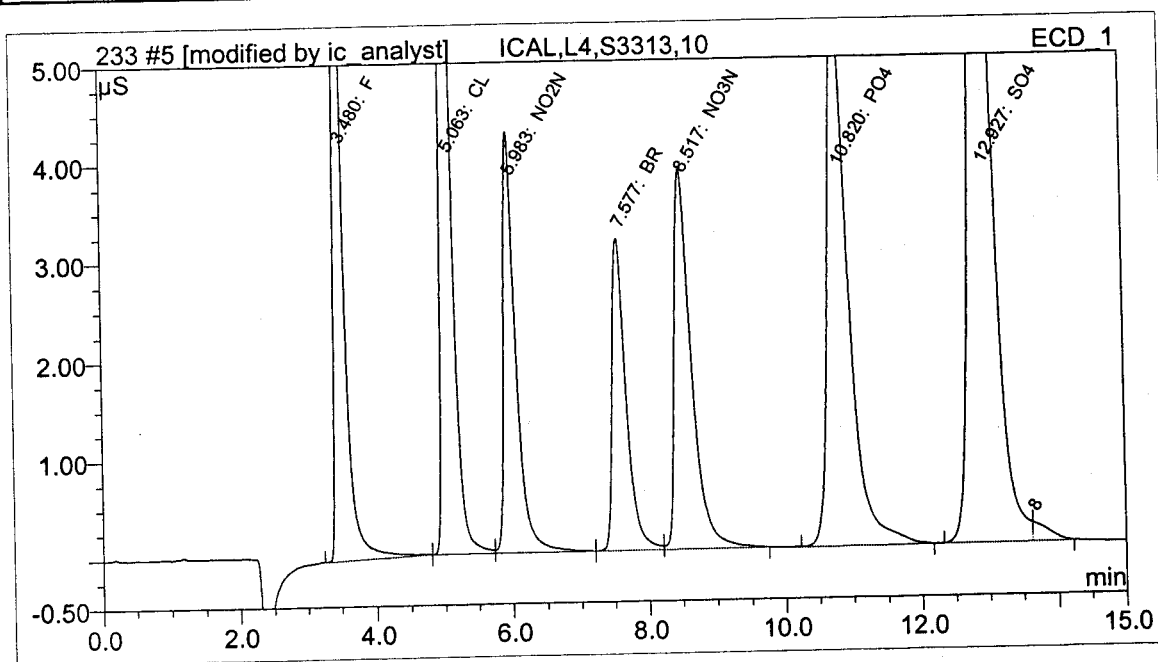
Curtis & Tompkins, Ltd.

00417

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L4,S3313,10	Sample No.:	5
Sequence Name:	233	Batch #:	CAL-233
Program Method:	IC01-7AN	Injection vol.:	25.0
Quantitation Method:	IC01-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC01-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/21/2006 7:55 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.480	1.378250	5.0246	5.0246	
2	CL	5.063	1.863026	10.0254	10.0254	
3	NO2N	5.983	0.877195	2.5050	2.5050	
4	BR	7.577	0.762843	10.0069	10.0069	
5	NO3N	8.517	1.107017	2.5071	2.5071	
6	PO4	10.820	1.951480	9.7662	9.7662	
7	SO4	12.927	3.472693	24.8265	24.8265	



ANALYZED BY:

REVIEWED BY:

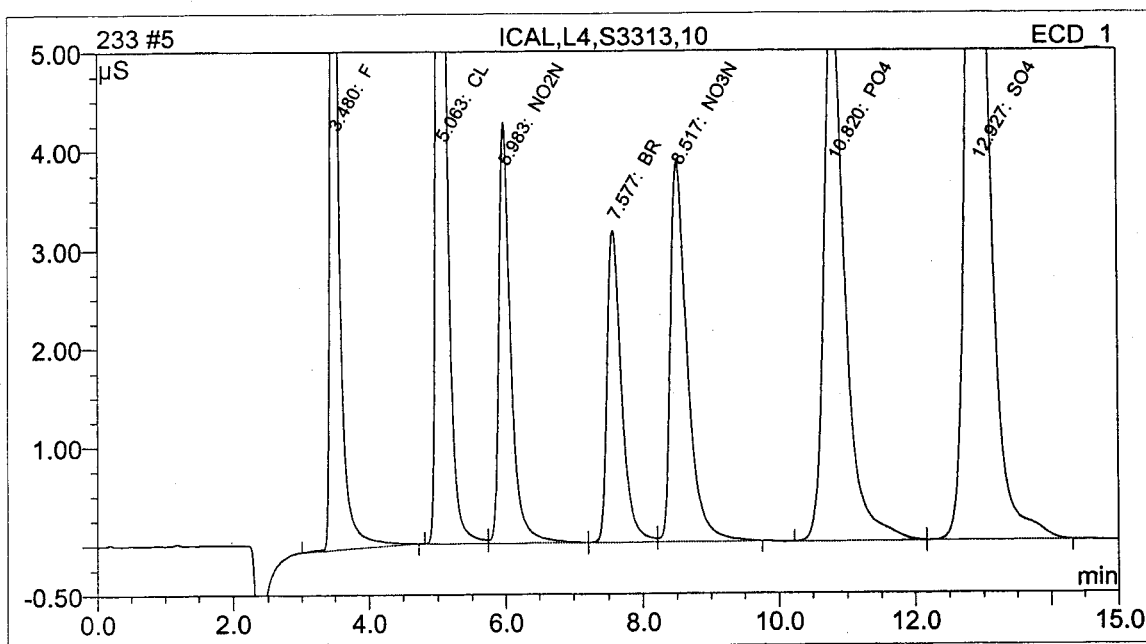
Curtis & Tompkins, Ltd.

00416

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L4,S3313,10	Sample No.:	5
Sequence Name:	233	Batch #:	CAL-233
Program Method:	IC01-7AN	Injection vol.:	25.0
Quantitation Method:	IC01-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC01-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/21/2006 7:55 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.480	1.384098	5.0308	5.0308	
2	CL	5.063	1.862701	10.0250	10.0250	
3	NO2N	5.983	0.875412	2.5035	2.5035	
4	BR	7.577	0.761432	10.0014	10.0014	
5	NO3N	8.517	1.106197	2.5066	2.5066	
6	PO4	10.820	1.952848	9.7684	9.7684	
7	SO4	12.927	3.530040	24.9449	24.9449	



ANALYZED BY:

REVIEWED BY:

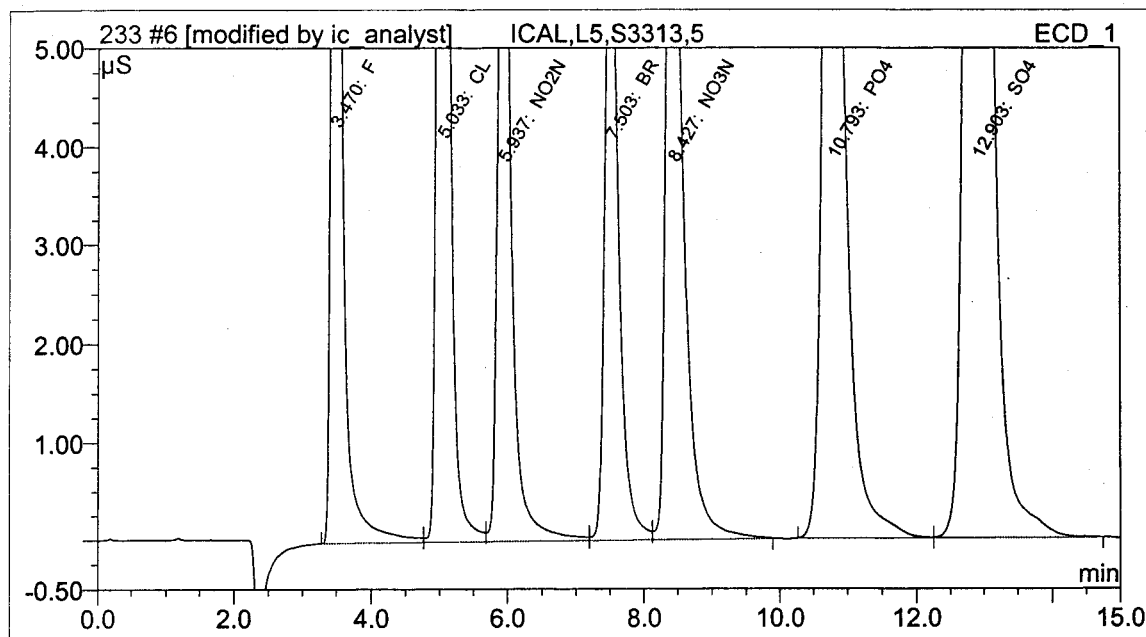
Curtis & Tompkins, Ltd.

00419

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L5,S3313,5	Sample No.:	6
Sequence Name:	233	Batch #:	CAL-233
Program Method:	IC01-7AN	Injection vol.:	25.0
Quantitation Method:	IC01-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC01-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/21/2006 8:13 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.470	2.882594	9.9954	9.9954	
2	CL	5.033	4.017017	19.9958	19.9958	
3	NO2N	5.937	1.836233	4.9990	4.9990	
4	BR	7.503	1.579330	19.9988	19.9988	
5	NO3N	8.427	2.321134	4.9987	4.9987	
6	PO4	10.793	3.841451	20.0513	20.0513	
7	SO4	12.903	7.411057	50.0329	50.0329	



ANALYZED BY:

REVIEWED BY:

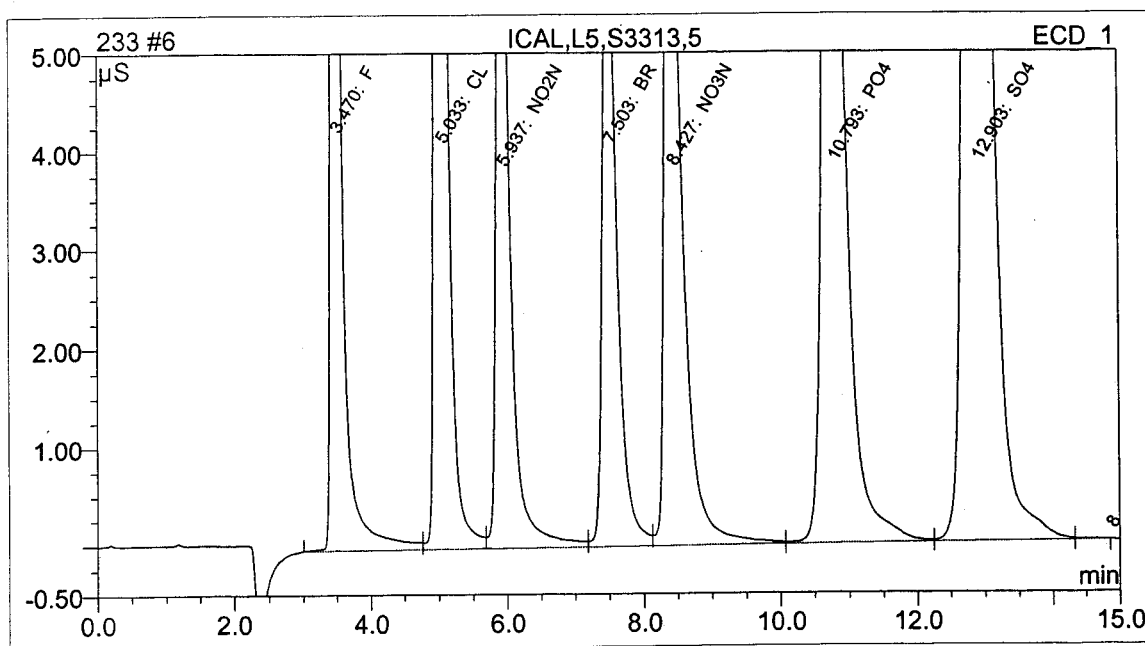
Curtis & Tompkins, Ltd.

00420

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICAL,L5,S3313,5	Sample No.:	6
Sequence Name:	233	Batch #:	CAL-233
Program Method:	IC01-7AN	Injection vol.:	25.0
Quantitation Method:	IC01-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC01-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/21/2006 8:13 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.470	2.916428	9.9967	9.9967	
2	CL	5.033	4.036262	19.9967	19.9967	
3	NO2N	5.937	1.867664	4.9999	4.9999	
4	BR	7.503	1.598974	20.0014	20.0014	
5	NO3N	8.427	2.361769	4.9996	4.9996	
6	PO4	10.793	3.878659	20.0522	20.0522	
7	SO4	12.903	7.423039	50.0336	50.0336	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

00421

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 300.0

Inst : IC01
 3eqnum : 606336645007
 3al : 606336645001
 3standards: S3859 (5X)

File : 233_7.000
 Caldate: 21-AUG-2006

IDF : 1.0
 Time : 21-AUG-2006 20:30

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.2595	0.2620	1.000	0.9967	mg/L	0	10	
Chloride	0.1807	0.1710	2.000	1.969	mg/L	-2	10	
Nitrogen, Nitrite	0.3361	0.3504	0.5000	0.5207	mg/L	4	10	
Bromide	0.0754	0.0765	2.000	2.066	mg/L	3	10	
Nitrogen, Nitrate	0.4243	0.3907	0.5000	0.4620	mg/L	-8	10	
Orthophosphate (as P)	0.2453	0.2710	2.000	2.637	mg/L	32	10	v+ ***
Sulfate	0.1577	0.1375	5.000	5.152	mg/L	3	10	

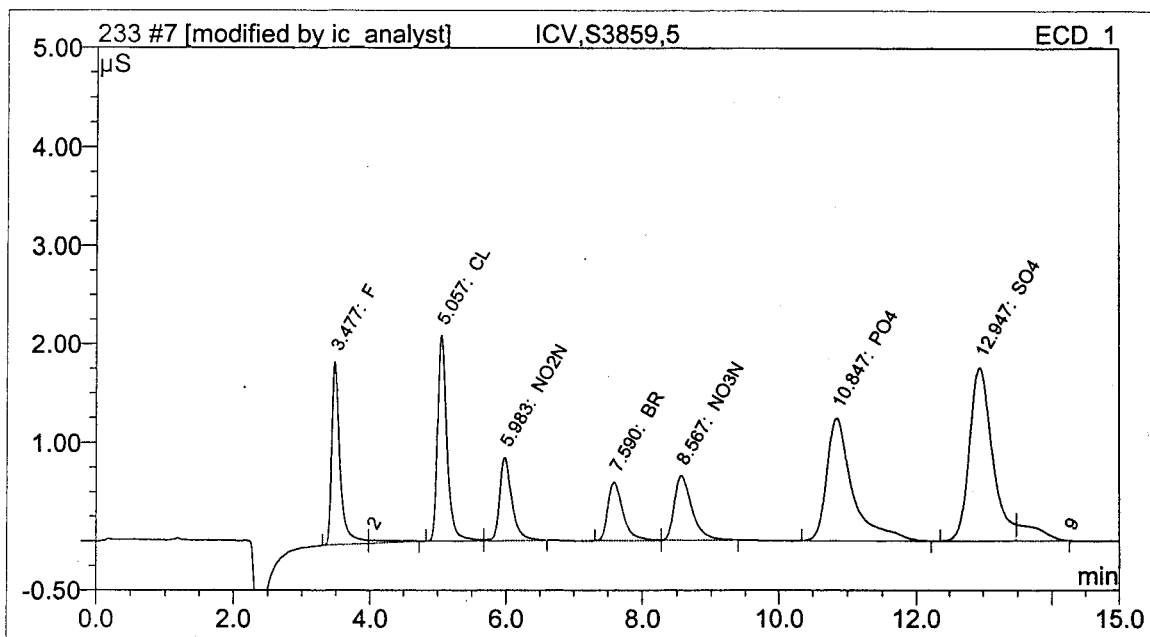
MCS 8/22/06

mev/r32

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICV,S3859,5	Sample No.:	7
Sequence Name:	233	Batch #:	CAL-233
Program Method:	IC01-7AN	Injection vol.:	25.0
Quantitation Method:	IC01-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC01-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/21/2006 8:30 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S}^*\text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.477	0.262013	0.9967	0.9967	
3	CL	5.057	0.341910	1.9689	1.9689	
4	NO2N	5.983	0.175221	0.5207	0.5207	
5	BR	7.590	0.153010	2.0662	2.0662	
6	NO3N	8.567	0.195342	0.4620	0.4620	
7	PO4	10.847	0.541924	2.6367	2.6367	
8	SO4	12.947	0.687484	5.1519	5.1519	



ANALYZED BY:

REVIEWED BY:

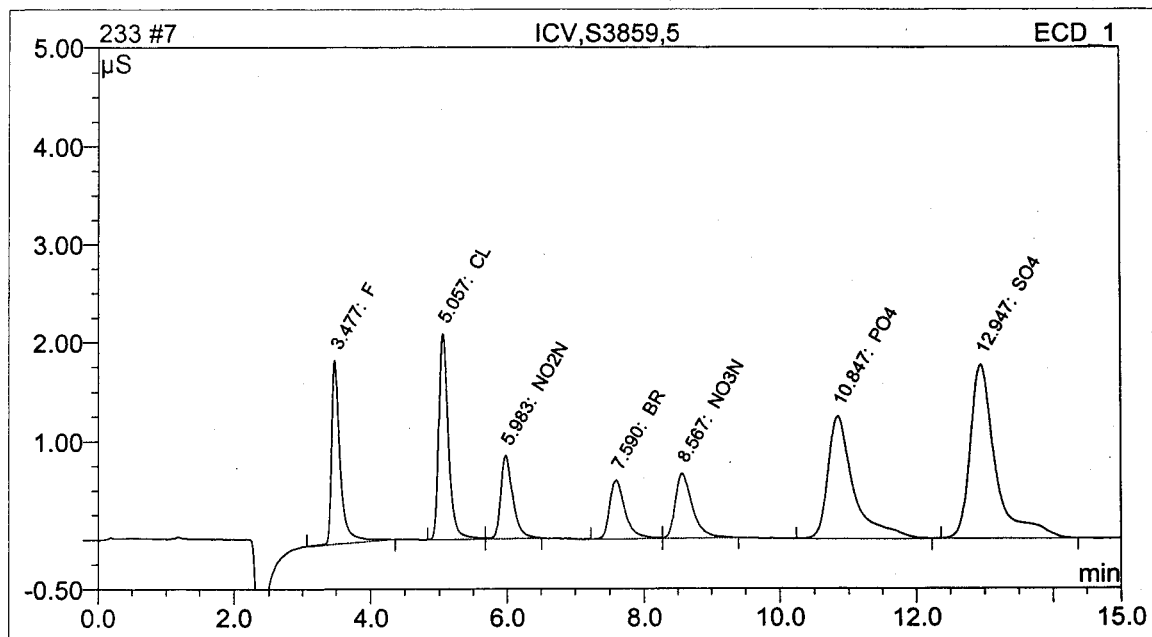
Curtis & Tompkins, Ltd.

00423

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICV,S3859,5	Sample No.:	7
Sequence Name:	233	Batch #:	CAL-233
Program Method:	IC01-7AN	Injection vol.:	25.0
Quantitation Method:	IC01-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC01-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/21/2006 8:30 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.477	0.268450	1.0209	1.0209	
2	CL	5.057	0.340975	1.9636	1.9636	
3	NO2N	5.983	0.172385	0.5123	0.5123	
4	BR	7.590	0.155268	2.0964	2.0964	
5	NO3N	8.567	0.196212	0.4640	0.4640	
6	PO4	10.847	0.545349	2.6535	2.6535	
7	SO4	12.947	0.761134	5.6962	5.6962	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

00424

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC01
Seqnum : 606336645001
Cal : 606046871001

File : 233_1.000
Caldate: 01-FEB-2006

IDF : 1.0
Time : 21-AUG-2006 18:45

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01819	mg/L	
Chloride	ND	0.2000	0.02624	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.006664	mg/L	
Bromide	ND	0.2000	0.05841	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01819	mg/L	
Orthophosphate (as P)	0.3092	0.2000	0.04544	mg/L	ib ***
Sulfate	1.192	0.5000	0.04597	mg/L	ib ***

MRS 8/22/06

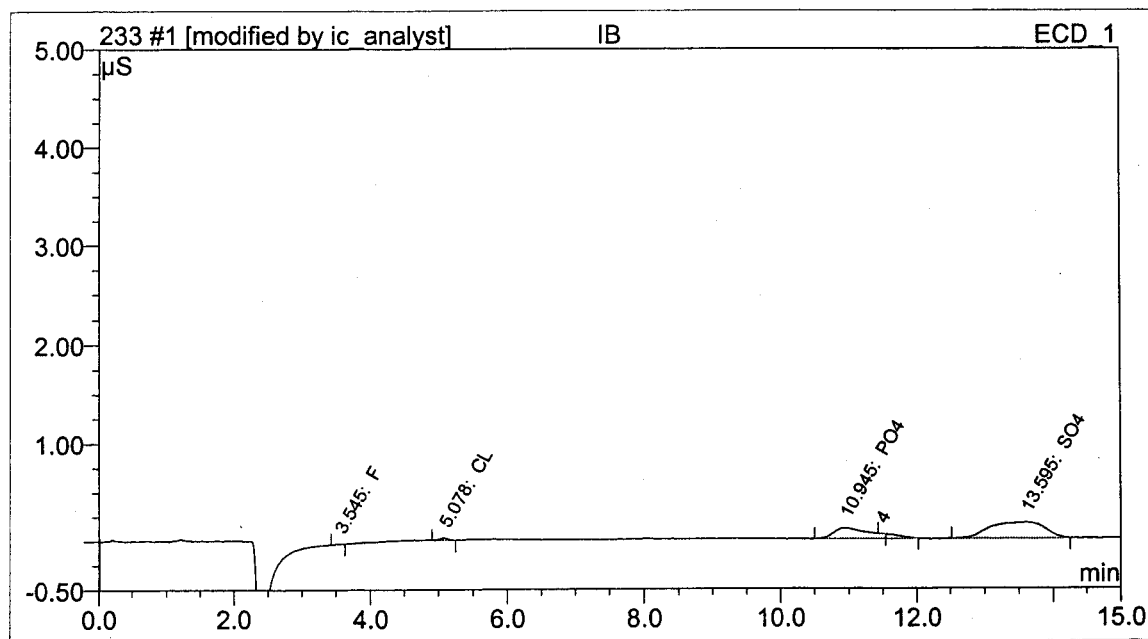
not used for Poypor

SOY

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	IB	Sample No.:	1
Sequence Name:	233	Batch #:	CAL-233
Program Method:	IC01-7AN	Injection vol.:	25.0
Quantitation Method:	IC01-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC01-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/21/2006 6:45 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.545	0.000567	0.0022	0.0022	
2	CL	5.078	0.003302	0.0193	0.0193	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
3	PO4	10.945	0.074783	0.3607	0.3607	
5	SO4	13.595	0.150729	1.1408	1.1408	



ANALYZED BY:

REVIEWED BY:

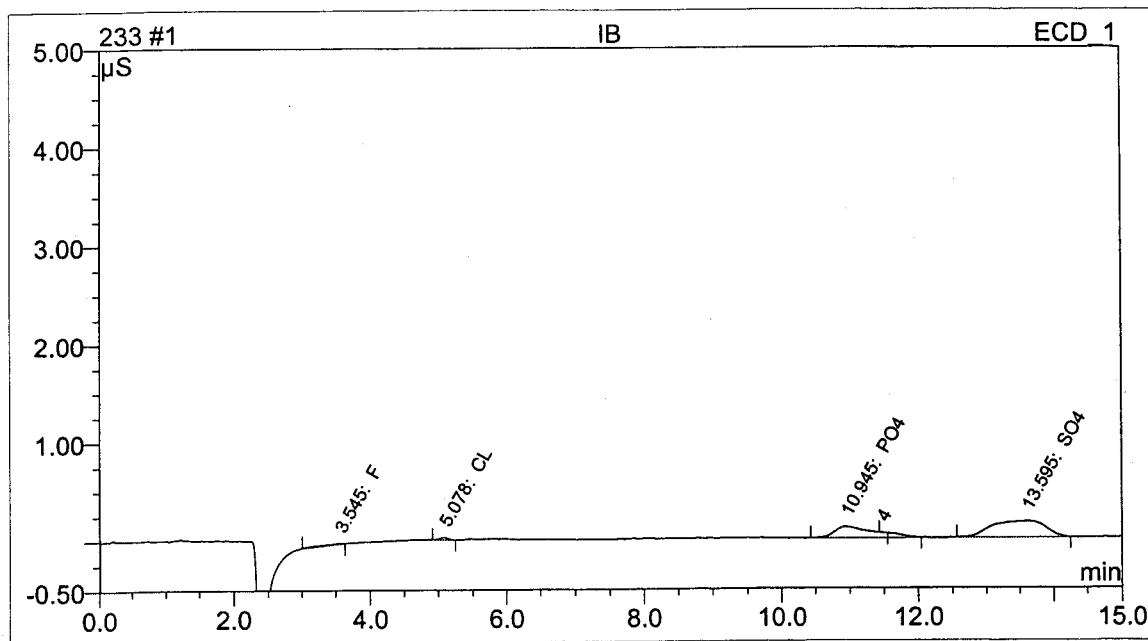
Curtis & Tompkins, Ltd.

00426

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	IB	Sample No.:	1
Sequence Name:	233	Batch #:	CAL-233
Program Method:	IC01-7AN	Injection vol.:	25.0
Quantitation Method:	IC01-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC01-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/21/2006 6:45 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S}\cdot\text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.545	0.004357	0.0168	0.0168	
2	CL	5.078	0.003286	0.0192	0.0192	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
3	PO4	10.945	0.077840	0.3754	0.3754	
5	SO4	13.595	0.150704	1.1406	1.1406	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

00427

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC01
Seqnum : 606336645008
Cal : 606336645001

File : 233_8.000
Caldate: 21-AUG-2006

IDF : 1.0
Time : 21-AUG-2006 20:48

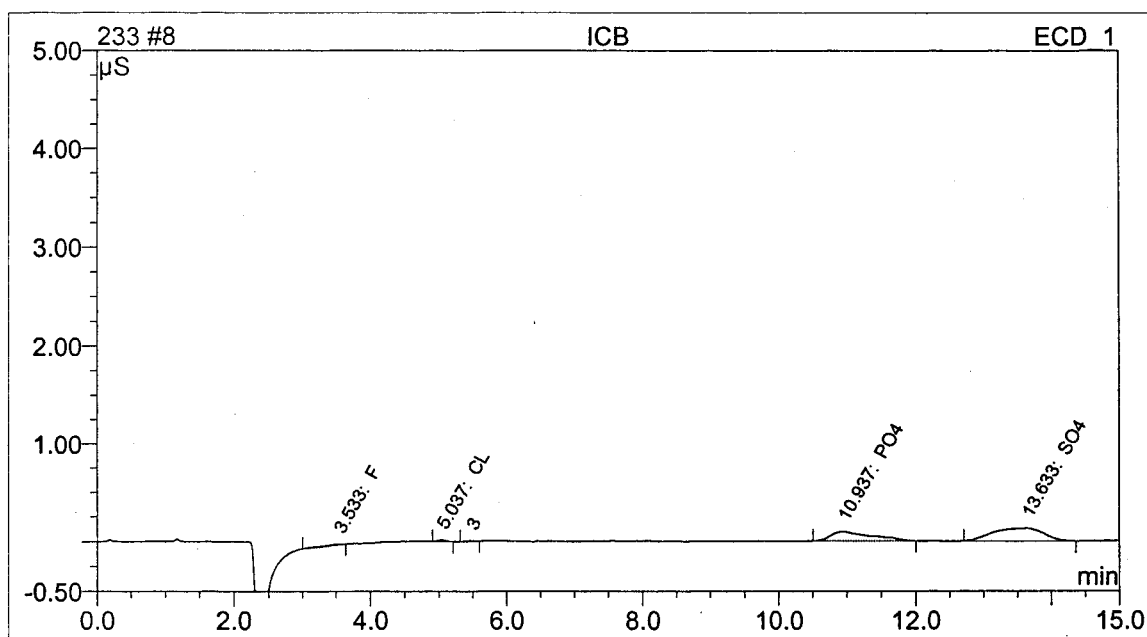
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.01819	mg/L	
Chloride	ND	0.2000	0.02624	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.006664	mg/L	
Bromide	ND	0.2000	0.05841	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01819	mg/L	
Orthophosphate (as P)	0.3038	0.2000	0.04544	mg/L	ib ***
Sulfate	0.8304	0.5000	0.04597	mg/L	ib ***

not used
for PO4P or SO4
was 8/22/06

ANIONS ANALYSIS REPORT DX120 - IC01

Sample Name:	ICB	Sample No.:	8
Sequence Name:	233	Batch #:	CAL-233
Program Method:	IC01-7AN	Injection vol.:	25.0
Quantitation Method:	IC01-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC01-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/21/2006 8:48 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.533	0.003730	0.0143	0.0143	
2	CL	5.037	0.002105	0.0123	0.0123	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
4	PO4	10.937	0.063016	0.3038	0.3038	
5	SO4	13.633	0.109642	0.8304	0.8304	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

00420

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188774 IC Water: EPA 300.0

Inst : IC03

Calnum : 626316153001

Units : mg/L

Reviewer: MCH

Date : 07-AUG-2006 13:32

X Axis : A

Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Std
L1	219_2.000	626316153002	L1	07-AUG-2006 13:32	S3313 (500X)
L2	219_3.000	626316153003	L2	07-AUG-2006 13:50	S3313 (100X)
L3	219_4.000	626316153004	L3	07-AUG-2006 14:08	S3313 (25X)
L4	219_5.000	626316153005	L4	07-AUG-2006 14:27	S3313 (10X)
L5	219_6.000	626316153006	L5	07-AUG-2006 14:45	S3313 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ² #RSD	Mn ²	Fig
Fluoride	0.1408	0.1784	0.1981	0.1997	0.2117	QORG		0.18939	0.002226	0.1857	1.000	0.990	
Chloride	0.1798	0.1424	0.1577	0.1620	0.1754	QORG		0.14987	0.001272	0.1635	1.000	0.990	
Nitrogen, Nitrite	0.3015	0.2811	0.3170	0.3101	0.3249	QORG		0.30061	0.004805	0.3069	1.000	0.990	
Nitrogen, Nitrate	0.3592	0.3684	0.3804	0.3802	0.4005	QORG		0.36466	0.007116	0.3777	1.000	0.990	
Sulfate	0.1175	0.1051	0.1102	0.1150	0.1232	QORG		0.10680	3.274E-4	0.1142	1.000	0.990	

Instrument response = a0 + amount * a1 + amount² * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188774 IC Water
EPA 300.0

Inst : IC03
Calnum : 626316153001

Cal Date: 07-AUG-2006

ICV 626316153007 (219_7.000 07-AUG-2006) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.1857	0.1829	1.000	0.9548	mg/L	-5	10	
Chloride	0.1635	0.1434	2.000	1.884	mg/L	-6	10	
Nitrogen, Nitrite	0.3069	0.2982	0.5000	0.4922	mg/L	-2	10	
Nitrogen, Nitrate	0.3777	0.3599	0.5000	0.4888	mg/L	-2	10	
Sulfate	0.1142	0.1045	5.000	4.821	mg/L	-4	10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 300.0

Inst : IC03

Calnum : 626316153001

Units : mg/L

Date : 07-AUG-2006 13:32

X Axis : A

Inj Vol: 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Std
L1	219_2.000	626316153002	L1	07-AUG-2006 13:32	S3313 (500X)
L2	219_3.000	626316153003	L2	07-AUG-2006 13:50	S3313 (100X)
L3	219_4.000	626316153004	L3	07-AUG-2006 14:08	S3313 (25X)
L4	219_5.000	626316153005	L4	07-AUG-2006 14:27	S3313 (10X)
L5	219_6.000	626316153006	L5	07-AUG-2006 14:45	S3313 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	RSD	MR ²	Flg
Fluoride	0.1408	0.1784	0.1981	0.1997	0.2117	QORG		0.18939	0.002226	0.1857	1.000	0.990	
Chloride	0.1798	0.1424	0.1577	0.1620	0.1754	QORG		0.14987	0.001272	0.1635	1.000	0.990	
Nitrogen, Nitrite	0.3015	0.2811	0.3170	0.3101	0.3249	QORG		0.30061	0.004805	0.3069	1.000	0.990	
Bromide	0.0582	0.0629	0.0649	0.0646	0.0682	QORG		0.06192	3.116E-4	0.0638	1.000	0.990	
Nitrogen, Nitrate	0.3592	0.3684	0.3804	0.3802	0.4005	QORG		0.36466	0.007116	0.3777	1.000	0.990	
Orthophosphate (as P)	0.1619	0.1265	0.1192	0.1265	0.1337	QORG		0.11850	7.617E-4	0.1336	1.000	0.990	
Sulfate	0.1175	0.1051	0.1102	0.1150	0.1232	QORG		0.10680	3.274E-4	0.1142	1.000	0.990	

Instrument response = a0 + amount * a1 + amount² * a2 (invert equation before quantitating); QORG-Quadratic regression forced through origin

Sequence: 219
Operator: ic_analyst

Page 1 of 2
Printed: 8/9/2006 11:26:31 AM

Title: Anions
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006
Timebase: IC3_DX120
#Samples: 25

Created: 8/1/2003 11:03:14 AM by ic_analyst
Last Update: 8/8/2006 11:49:40 AM by ic_analyst

No.	*Batch	Name	Comment	Dil. Factor	Program	Status	Inj. Date/Time	Method
1	CAL-219	IB		1.0000	IC03-7AN	Finished	8/7/2006 1:13:41 PM	IC03-7AN_CAL
2	CAL-219	ICAL, L1,S3313,500		1.0000	IC03-7AN	Finished	8/7/2006 1:32:05 PM	IC03-7AN_CAL
3	CAL-219	ICAL, L2,S3313,100		1.0000	IC03-7AN	Finished	8/7/2006 1:50:30 PM	IC03-7AN_CAL
4	CAL-219	ICAL, L3,S3313,25		1.0000	IC03-7AN	Finished	8/7/2006 2:08:55 PM	IC03-7AN_CAL
5	CAL-219	ICAL, L4,S3313,10		1.0000	IC03-7AN	Finished	8/7/2006 2:27:20 PM	IC03-7AN_CAL
6	CAL-219	ICAL, L5,S3313,5		1.0000	IC03-7AN	Finished	8/7/2006 2:45:45 PM	IC03-7AN_CAL
7	CAL-219	ICV,S3859,5		1.0000	IC03-7AN	Finished	8/7/2006 3:04:10 PM	IC03-7AN_CAL
8	CAL-219	ICB		1.0000	IC03-7AN	Finished	8/7/2006 3:22:34 PM	IC03-7AN_CAL
9	116163	CCV,L,S3313,100		1.0000	IC03-7AN	Finished	8/7/2006 3:41:00 PM	IC03-7AN_CAL
10	116163	CCB/MB,QC350859		1.0000	IC03-7AN	Finished	8/7/2006 5:05:38 PM	IC03-7AN_CAL
11	116163	188437-016	A	1.0000	IC03-7AN	Finished	8/7/2006 5:24:04 PM	IC03-7AN_CAL
12	116163	BLK		1.0000	IC03-7AN	Finished	8/7/2006 5:42:29 PM	IC03-7AN_CAL
13	116163	188437-016	A DUP	1.0000	IC03-7AN	Finished	8/7/2006 6:00:54 PM	IC03-7AN_CAL
14	116163	BLK		1.0000	IC03-7AN	Finished	8/7/2006 6:19:18 PM	IC03-7AN_CAL
15	116163	188437-016	A DUP	2.0000	IC03-7AN	Finished	8/7/2006 6:37:43 PM	IC03-7AN_CAL
16	116163	BLK		1.0000	IC03-7AN	Finished	8/7/2006 6:56:07 PM	IC03-7AN_CAL
17	116163	188437-016	A	2.0000	IC03-7AN	Finished	8/7/2006 7:14:32 PM	IC03-7AN_CAL
18	116163	BLK		1.0000	IC03-7AN	Finished	8/7/2006 7:32:56 PM	IC03-7AN_CAL
19	116163	BS,QC350860,S3313,25		1.0000	IC03-7AN	Finished	8/7/2006 7:51:21 PM	IC03-7AN_CAL
20	116163	BSD,QC350861,S3313,25		1.0000	IC03-7AN	Finished	8/7/2006 8:09:45 PM	IC03-7AN_CAL
21	116163	CCV,M,S3313,25		1.0000	IC03-7AN	Finished	8/7/2006 8:28:09 PM	IC03-7AN_CAL
22	116163	CCB		1.0000	IC03-7AN	Finished	8/7/2006 8:46:34 PM	IC03-7AN_CAL
23	116163	X,CCV,M,S3313,25		1.0000	IC03-7AN	Finished	8/7/2006 9:04:59 PM	IC03-7AN_CAL
24	116163	X,CCB		1.0000	IC03-7AN	Finished	8/7/2006 9:23:24 PM	IC03-7AN_CAL
25	116163	SHUTDOWN		1.0000	IC03-7AN_OFF	Finished	8/7/2006 9:41:49 PM	IC03-7AN_CAL

Sequence: 219
Operator: ic_analyst

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Printed: 8/9/2006 11:26:31 AM

Title: Anions
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006
Timebase: IC3_DX120
#Samples: 25

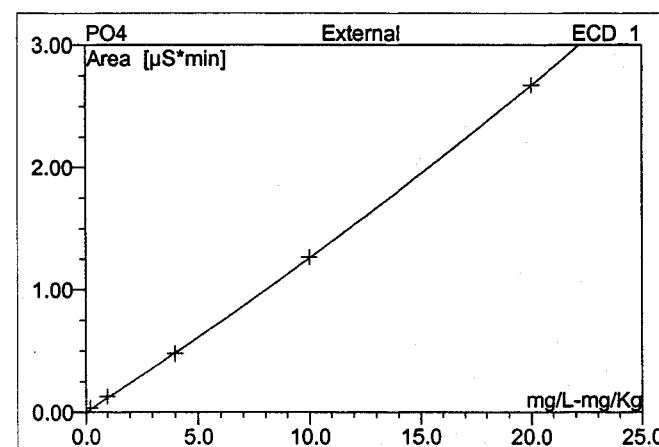
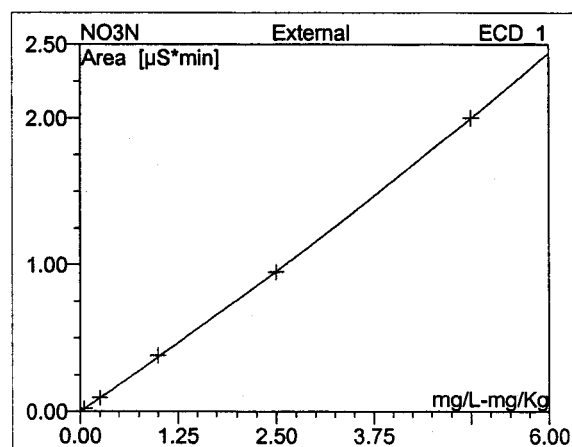
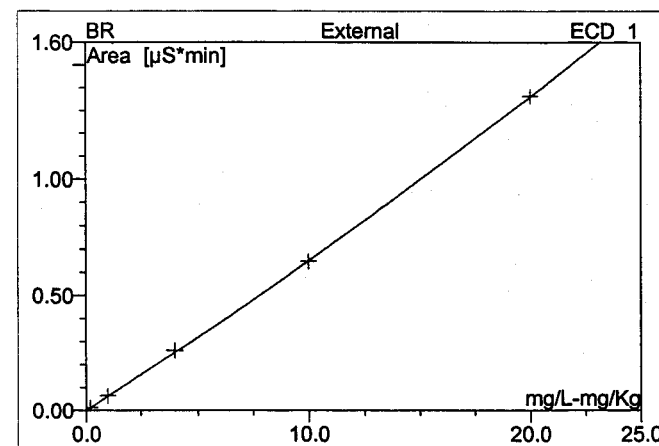
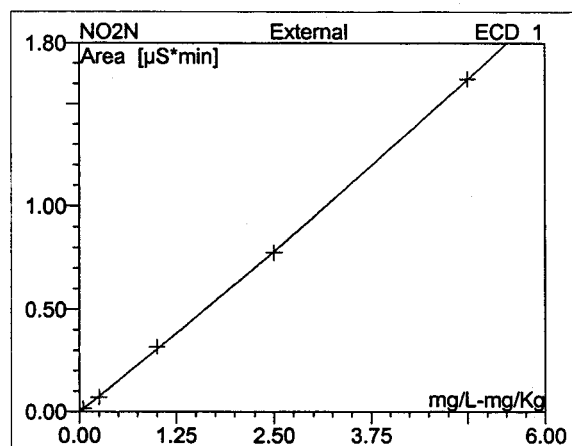
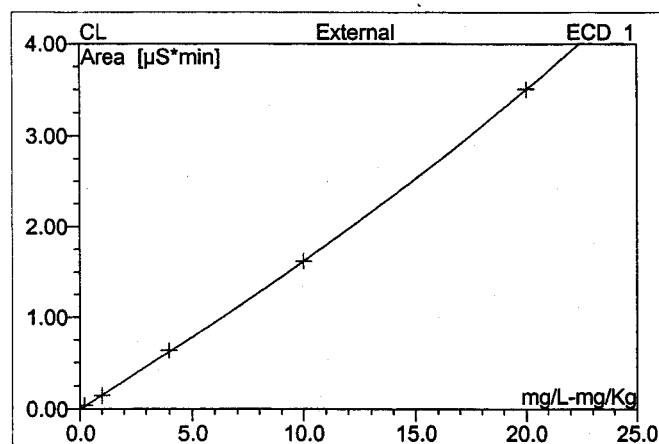
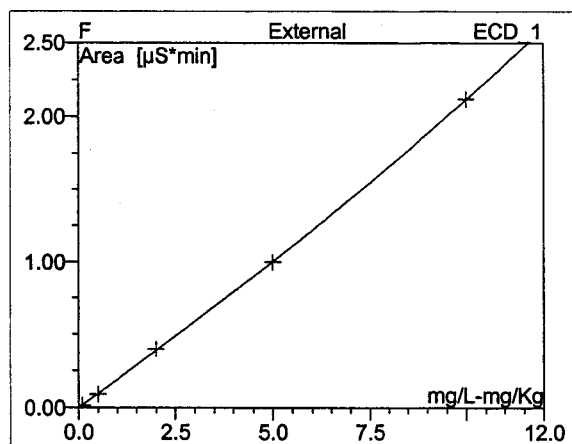
Created: 8/1/2003 11:03:14 AM by ic_analyst
Last Update: 8/8/2006 11:49:40 AM by ic_analyst

No.	*Batch	Name	Comment	Type	Inj. Vol.	*operator	*PDF
1	CAL-219	IB		Unknown	25.0 MRS		1
2	CAL-219	ICAL, L1,S3313,500		Standard	25.0 MRS		1
3	CAL-219	ICAL, L2,S3313,100		Standard	25.0 MRS		1
4	CAL-219	ICAL, L3,S3313,25		Standard	25.0 MRS		1
5	CAL-219	ICAL, L4,S3313,10		Standard	25.0 MRS		1
6	CAL-219	ICAL, L5,S3313,5		Standard	25.0 MRS		1
7	CAL-219	ICV,S3859,5		Unknown	25.0 MRS		1
8	CAL-219	ICB		Unknown	25.0 MRS		1
9	116163	CCV,L,S3313,100		Unknown	25.0 MRS		1
10	116163	CCB/MB,QC350859		Unknown	25.0 MRS		10
11	116163	188437-016	A	Unknown	25.0 MRS		10
12	116163	BLK		Unknown	25.0 MRS		1
13	116163	188437-016	A DUP	Unknown	25.0 MRS		10
14	116163	BLK		Unknown	25.0 MRS		1
15	116163	188437-016	A DUP	Unknown	25.0 MRS		10
16	116163	BLK		Unknown	25.0 MRS		1
17	116163	188437-016	A	Unknown	25.0 MRS		10
18	116163	BLK		Unknown	25.0 MRS		1
19	116163	BS,QC350860,S3313,25		Unknown	25.0 MRS		10
20	116163	BSD,QC350861,S3313,25		Unknown	25.0 MRS		10
21	116163	CCV,M,S3313,25		Unknown	25.0 MRS		1
22	116163	CCB		Unknown	25.0 MRS		1
23	116163	X,CCV,M,S3313,25		Unknown	25.0 MRS		1
24	116163	X,CCB		Unknown	25.0 MRS		1
25	116163	SHUTDOWN		Unknown	25.0 MRS		1

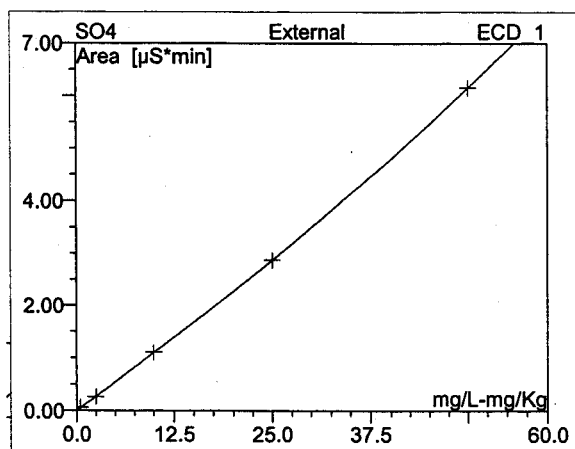
IC03 Calibration Batch Report

Sequence: 219
Program: IC03-7AN
Ini. Date/Time: 08/07/06 14:08

Inj. Vol.: 25.0
Operator: PC_NEWIC
Run Time: 16.00



Sequence:	219	Inj. Vol.:	25.0
Program:	IC03-7AN	Operator:	n.a.
Ini. Date/Time:	08/07/06 14:08	Run Time:	16.00



No.	Ret. Time min	Peak Name	Cal. Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr. Coeff. %
1	3.000	F	Quad	5	0.000000	0.189393	0.002226	99.963700
2	4.440	CL	Quad	5	0.000000	0.149871	0.001272	99.923351
3	5.267	NO2N	Quad	5	0.000000	0.300609	0.004805	99.974524
4	6.713	BR	Quad	5	0.000000	0.061924	0.000312	99.965404
5	7.560	NO3N	Quad	5	0.000000	0.364664	0.007116	99.967997
6	9.993	PO4	Quad	5	0.000000	0.118498	0.000762	99.946746
7	12.113	SO4	Quad	5	0.000000	0.106804	0.000327	99.938665
AVERAGE:					0.000000	0.184538	0.002403	99.954341

No.	Name	Area $\mu\text{S}\cdot\text{min}$ F ECD 1	Area $\mu\text{S}\cdot\text{min}$ CL ECD 1	Area $\mu\text{S}\cdot\text{min}$ NO2N ECD 1	Area $\mu\text{S}\cdot\text{min}$ BR ECD 1	Area $\mu\text{S}\cdot\text{min}$ NO3N ECD 1	Area $\mu\text{S}\cdot\text{min}$ PO4 ECD 1	Area $\mu\text{S}\cdot\text{min}$ SO4 ECD 1
2	ICAL, L1,S33	0.014082 ✓	0.035962 ✓	0.015075 ✓	0.011640 ✓	0.017960 ✓	0.032386 ✓	0.058766 ✓
3	ICAL, L2,S33	0.089197 ✓	0.142405 ✓	0.070273 ✓	0.062883 ✓	0.092105 ✓	0.126465 ✓	0.262736 ✓
4	ICAL, L3,S33	0.396141 ✓	0.630966 ✓	0.316996 ✓	0.259520 ✓	0.380392 ✓	0.476707 ✓	1.101783 ✓
5	ICAL, L4,S33	0.998542 ✓	1.620199 ✓	0.775126 ✓	0.645923 ✓	0.950537 ✓	1.265496 ✓	2.875113 ✓
6	ICAL, L5,S33	2.117198 ✓	3.507177 ✓	1.624333 ✓	1.363948 ✓	2.002260 ✓	2.673902 ✓	6.158694 ✓

No.	Name	Height μS F ECD 1	Height μS CL ECD 1	Height μS NO2N ECD 1	Height μS BR ECD 1	Height μS NO3N ECD 1	Height μS PO4 ECD 1	Height μS SO4 ECD 1
2	ICAL, L1,S33	0.097748	0.248510	0.081660	0.057140	0.075438	0.085046	0.142094
3	ICAL, L2,S33	0.510940	1.002968	0.387470	0.285220	0.347530	0.334330	0.720480
4	ICAL, L3,S33	2.372720	4.360622	1.675998	1.208756	1.509428	1.367058	3.080848
5	ICAL, L4,S33	6.576900	11.549712	4.226818	3.093882	3.884954	3.659188	8.124328
6	ICAL, L5,S33	14.951860	25.450598	8.844992	6.526706	8.302974	8.159064	17.870036

No.	Name	Amount mg/L-mg/Kg F ECD 1	Amount mg/L-mg/Kg CL ECD 1	Amount mg/L-mg/Kg NO2N ECD 1	Amount mg/L-mg/Kg BR ECD 1	Amount mg/L-mg/Kg NO3N ECD 1	Amount mg/L-mg/Kg PO4 ECD 1	Amount mg/L-mg/Kg SO4 ECD 1
2	ICAL, L1,S33	0.074288	0.239463	0.050108	0.187790	0.049203	0.272825	0.549299
3	ICAL, L2,S33	0.468387	0.942642	0.232903	1.010349	0.251341	1.060013	2.441693
4	ICAL, L3,S33	2.042605	4.069515	1.037313	4.106137	1.022721	3.923948	10.008775
5	ICAL, L4,S33	4.980786	9.967483	2.480189	9.934382	2.486019	10.032519	25.002885
6	ICAL, L5,S33	10.002967	20.004985	5.003318	20.011326	5.002416	19.995117	49.999188

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 1 of 6
Printed: 8/9/2006 11:23:26 AM

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006\219.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON
Last Update: 8/7/2006 3:54:14 PM by ic_analyst

Blank Run Subtraction: No Blank Run Subtraction

Detection Table:

No.	Ret. Time [min]	Param. Name	Param. Value	Channel
1	0.000	Inhibit Integration	On	ECD_1
2	2.250	Sensitivity	0.001 "[Signal]"	ECD_1
3	2.250	Minimum Area	0.001 "[Signal]*min"	ECD_1
4	2.250	Peak Slice	0.50 s	ECD_1
5	2.500	Inhibit Integration	Off	ECD_1

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 2 of 6
Printed: 8/9/2006 11:23:27 AM

Title: IC03-7AN_CAL

Datasource: DGLD4X01_local

Location: IC3_DX120\IC03-ANIONS-2006\219.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON
Last Update: 8/7/2006 3:54:14 PM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off

Dead time:

Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Window	Standard	Int.Type	Cal.Type	Peak Type	Group	Amount ICAL, L1,S3313,500	Amount ICAL, L2,S3313,100
1	F	3.000 min	5.000 RG	External	Area	Quad	Auto		0.100000	0.500000
2	CL	4.440 min	5.000 RG	External	Area	Quad	Auto		0.200000	1.000000
3	NO2N	5.267 min	5.000 RG	External	Area	Quad	Auto		0.050000	0.250000
4	BR	6.713 min	5.000 RG	External	Area	Quad	Auto		0.200000	1.000000
5	NO3N	7.560 min	10.000 RG	External	Area	Quad	Auto		0.050000	0.250000
6	PO4	9.993 min	10.000 RG	External	Area	Quad	Auto		0.200000	1.000000
7	SO4	12.113 min	10.000 RG	External	Area	Quad	Auto		0.500000	2.500000

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 3 of 6
Printed: 8/9/2006 11:23:27 AM

Title: IC03-7AN_CAL

Datasource: DGLD4X01_local

Location: IC3_DX120\IC03-ANIONS-2006\219.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON

Last Update: 8/7/2006 3:54:14 PM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off

Dead time:

Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Amount	Amount	Amount	Comment
			ICAL, L3,S3313,25	ICAL, L4,S3313,10	ICAL, L5,S3313,5	
1	F	3.000 min	2.000000	5.000000	10.000000	
2	CL	4.440 min	4.000000	10.000000	20.000000	
3	NO2N	5.267 min	1.000000	2.500000	5.000000	
4	BR	6.713 min	4.000000	10.000000	20.000000	
5	NO3N	7.560 min	1.000000	2.500000	5.000000	
6	PO4	9.993 min	4.000000	10.000000	20.000000	
7	SO4	12.113 min	10.000000	25.000000	50.000000	

Method File: IC03-7AN_CAL

Operator: ic_analyst

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Printed: 8/9/2006 11:23:27 AM

Title: IC03-7AN_CAL

Datasource: DGLD4X01_local

Location: IC3_DX120\IC03-ANIONS-2006\219.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON

Last Update: 8/7/2006 3:54:14 PM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg

Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Resp.Fact.	Amount	Amount	Amount	Amount
				ICAL, L1,S3313,500	ICAL, L2,S3313,100	ICAL, L3,S3313,25	ICAL, L4,S3313,10
1	F	3.000 min	1.000000	0.100000	0.500000	2.000000	5.000000
2	CL	4.440 min	1.000000	0.200000	1.000000	4.000000	10.000000
3	NO2N	5.267 min	1.000000	0.050000	0.250000	1.000000	2.500000
4	BR	6.713 min	1.000000	0.200000	1.000000	4.000000	10.000000
5	NO3N	7.560 min	1.000000	0.050000	0.250000	1.000000	2.500000
6	PO4	9.993 min	1.000000	0.200000	1.000000	4.000000	10.000000
7	SO4	12.113 min	1.000000	0.500000	2.500000	10.000000	25.000000

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 5 of 6
Printed: 8/9/2006 11:23:27 AM

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006\219.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON
Last Update: 8/7/2006 3:54:14 PM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg

Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Amount	Comment
			ICAL, L5,S3313,5	
1	F	3.000 min	10.000000	
2	CL	4.440 min	20.000000	
3	NO2N	5.267 min	5.000000	
4	BR	6.713 min	20.000000	
5	NO3N	7.560 min	5.000000	
6	PO4	9.993 min	20.000000	
7	SO4	12.113 min	50.000000	

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 6 of 6
Printed: 8/9/2006 11:23:27 AM

Title: IC03-7AN_CAL

Datasource: DGLD4X01_local

Location: IC3_DX120\IC03-ANIONS-2006\219.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON

Last Update: 8/7/2006 3:54:14 PM by ic_analyst

Calibration:

Calibration Mode: Total

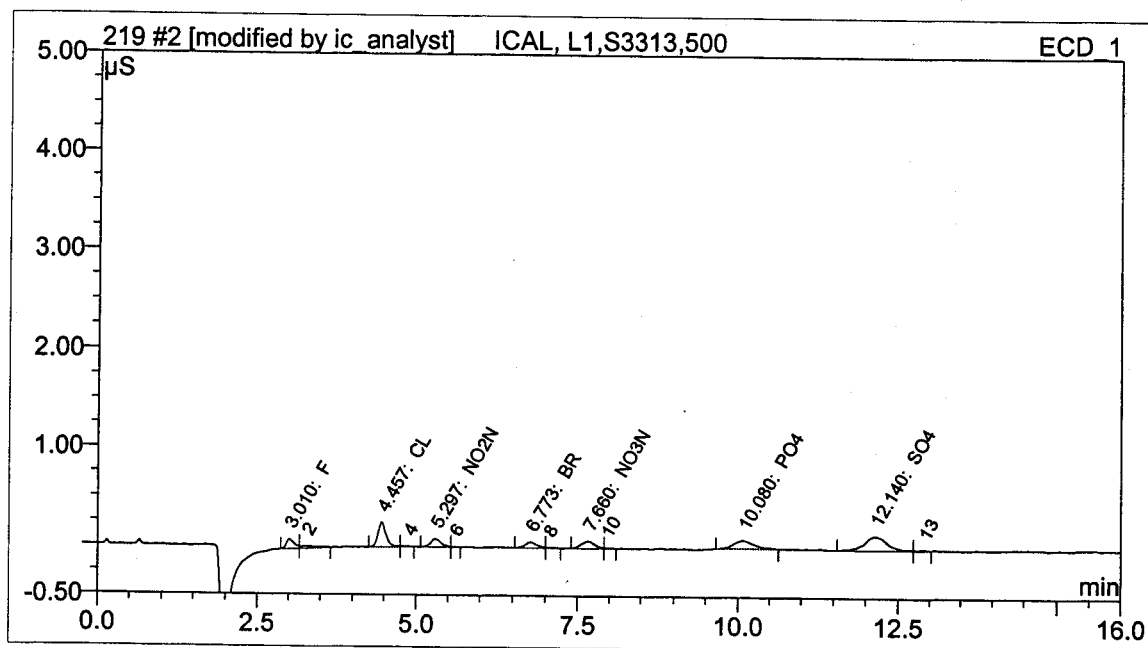
Auto Recalibrate: On

No.	Enabled	Name	Smp.No.	Pos.	Inj. Vol.	Weight	ISTD Amount	Dil. Factor	Inj. Date/Time	Calib. Comment
1	☒	ICAL, L1,S3313,500	2	179	25.0	1.0000	1.0000	1.0000	8/7/2006 1:32:05 PM	Ok
2	☒	ICAL, L2,S3313,100	3	179	25.0	1.0000	1.0000	1.0000	8/7/2006 1:50:30 PM	Ok
3	☒	ICAL, L3,S3313,25	4	180	25.0	1.0000	1.0000	1.0000	8/7/2006 2:08:55 PM	Ok
4	☒	ICAL, L4,S3313,10	5	181	25.0	1.0000	1.0000	1.0000	8/7/2006 2:27:20 PM	Ok
5	☒	ICAL, L5,S3313,5	6	183	25.0	1.0000	1.0000	1.0000	8/7/2006 2:45:45 PM	Ok

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L1,S3313,500	Sample No.:	2
Sequence Name:	219	Batch #:	CAL-219
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/7/2006 1:32 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.010	0.014082	0.0743	0.0743	
3	CL	4.457	0.035962	0.2395	0.2395	
5	NO2N	5.297	0.015075	0.0501	0.0501	
7	BR	6.773	0.011640	0.1878	0.1878	
9	NO3N	7.660	0.017960	0.0492	0.0492	
11	PO4	10.080	0.032386	0.2728	0.2728	
12	SO4	12.140	0.058766	0.5493	0.5493	



ANALYZED BY:

REVIEWED BY:

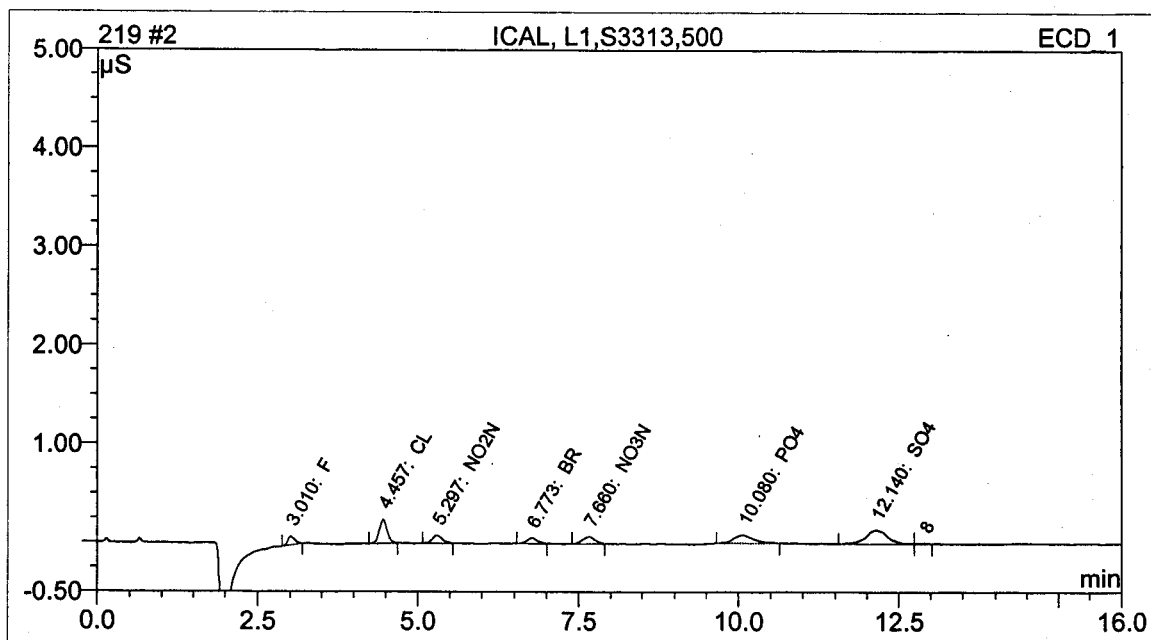
Curtis & Tompkins, Ltd.

00444

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L1,S3313,500	Sample No.:	2
Sequence Name:	219	Batch #:	CAL-219
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/7/2006 1:32 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.010	0.011338	0.0598	0.0598	
2	CL	4.457	0.034649	0.2308	0.2308	
3	NO2N	5.297	0.014752	0.0490	0.0490	
4	BR	6.773	0.010869	0.1754	0.1754	
5	NO3N	7.660	0.016523	0.0453	0.0453	
6	PO4	10.080	0.032386	0.2728	0.2728	
7	SO4	12.140	0.058766	0.5493	0.5493	



ANALYZED BY:

REVIEWED BY:

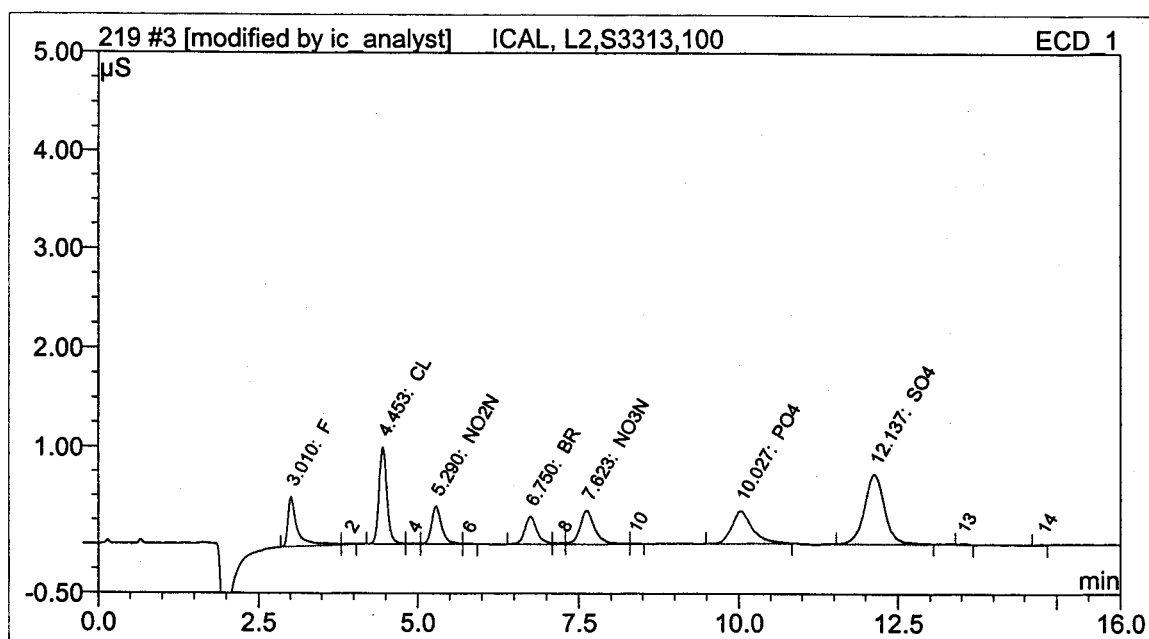
Curtis & Tompkins, Ltd.

00445

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L2,S3313,100	Sample No.:	3
Sequence Name:	219	Batch #:	CAL-219
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/7/2006 1:50 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.010	0.089197	0.4684	0.4684	
3	CL	4.453	0.142405	0.9426	0.9426	
5	NO2N	5.290	0.070273	0.2329	0.2329	
7	BR	6.750	0.062883	1.0103	1.0103	
9	NO3N	7.623	0.092105	0.2513	0.2513	
11	PO4	10.027	0.126465	1.0600	1.0600	
12	SO4	12.137	0.262736	2.4417	2.4417	



ANALYZED BY:

REVIEWED BY:

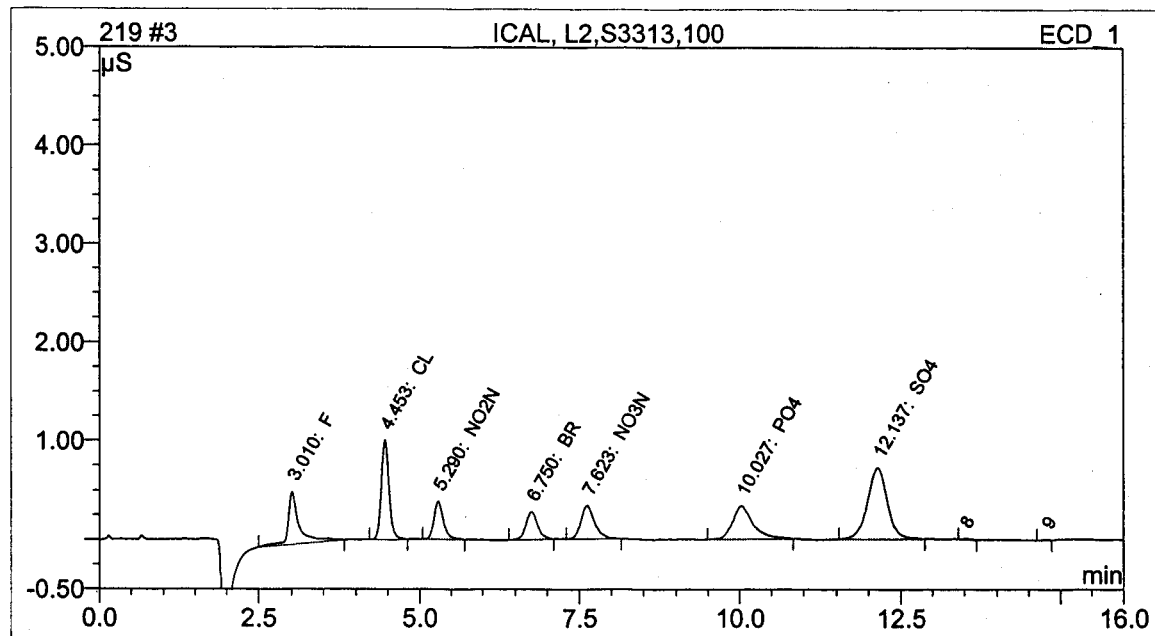
Curtis & Tompkins, Ltd.

00446

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L2,S3313,100	Sample No.:	3
Sequence Name:	219	Batch #:	CAL-219
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/7/2006 1:50 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.010	0.103831	0.5426	0.5426	
2	CL	4.453	0.141043	0.9339	0.9339	
3	NO2N	5.290	0.068383	0.2268	0.2268	
4	BR	6.750	0.058911	0.9484	0.9484	
5	NO3N	7.623	0.083954	0.2297	0.2297	
6	PO4	10.027	0.126465	1.0600	1.0600	
7	SO4	12.137	0.259886	2.4161	2.4161	



ANALYZED BY:

REVIEWED BY:

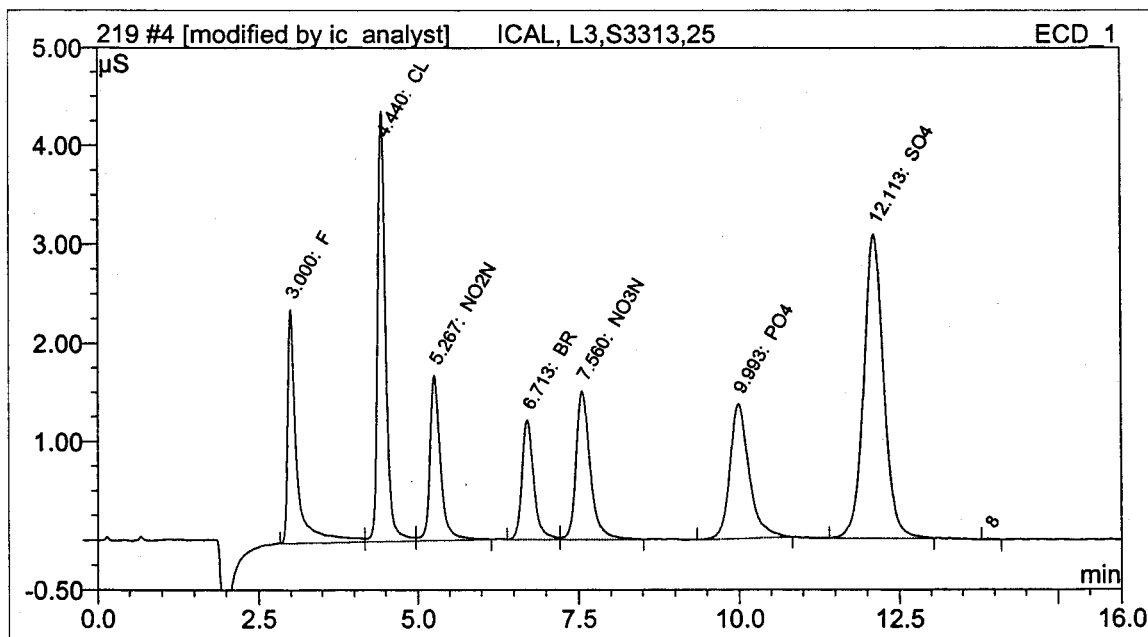
Curtis & Tompkins, Ltd.

00447

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L3,S3313,25	Sample No.:	4
Sequence Name:	219	Batch #:	CAL-219
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/7/2006 2:08 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.000	0.396141	2.0426	2.0426	
2	CL	4.440	0.630966	4.0695	4.0695	
3	NO2N	5.267	0.316996	1.0373	1.0373	
4	BR	6.713	0.259520	4.1061	4.1061	
5	NO3N	7.560	0.380392	1.0227	1.0227	
6	PO4	9.993	0.476707	3.9239	3.9239	
7	SO4	12.113	1.101783	10.0088	10.0088	



ANALYZED BY:

REVIEWED BY:

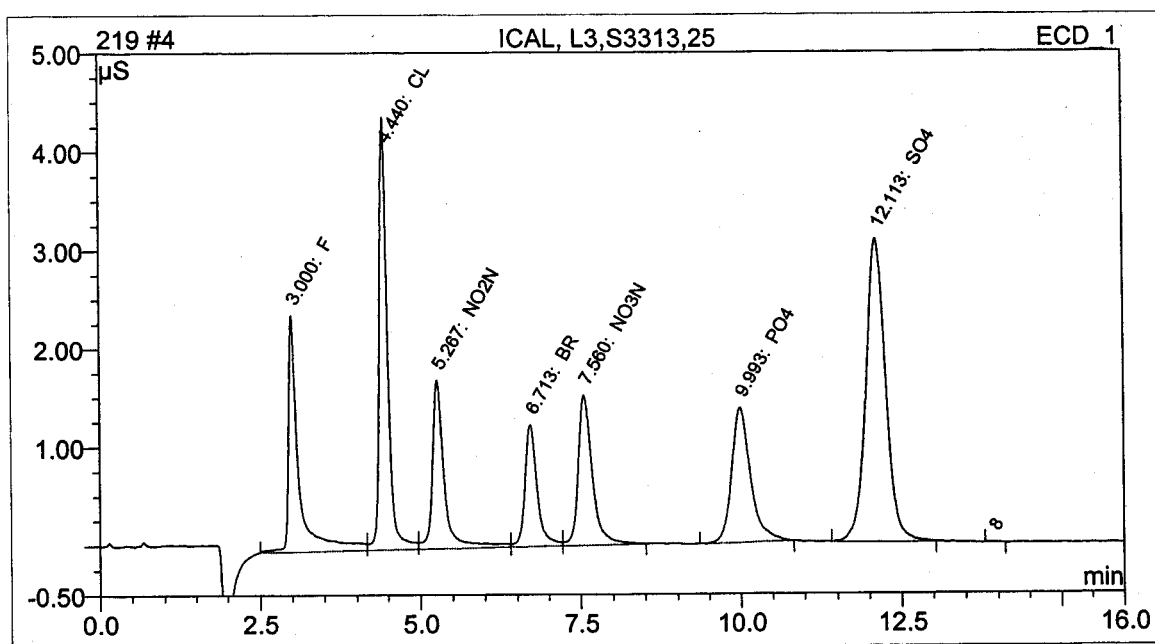
Curtis & Tompkins, Ltd.

00446

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L3,S3313,25	Sample No.:	4
Sequence Name:	219	Batch #:	CAL-219
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/7/2006 2:08 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.000	0.449373	2.2265	2.2265	
2	CL	4.440	0.657180	4.1840	4.1840	
3	NO2N	5.267	0.361545	1.1351	1.1351	
4	BR	6.713	0.276725	4.2915	4.2915	
5	NO3N	7.560	0.390831	1.0420	1.0420	
6	PO4	9.993	0.476707	3.9239	3.9239	
7	SO4	12.113	1.101783	10.0088	10.0088	



ANALYZED BY:

REVIEWED BY:

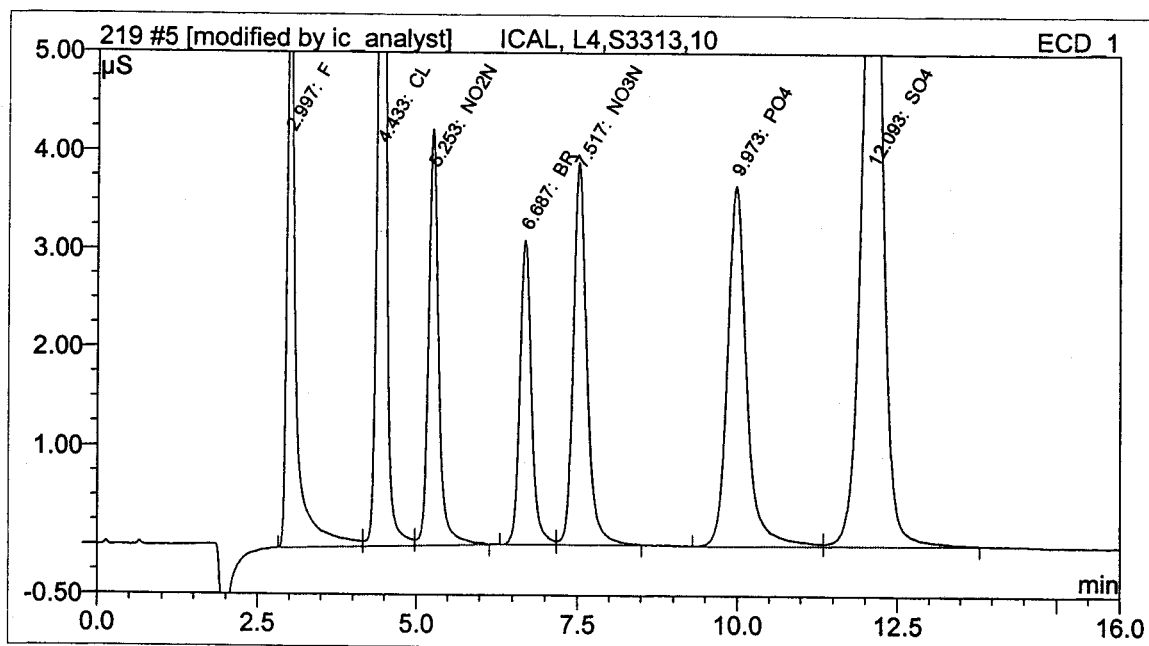
Curtis & Tompkins, Ltd.

00446

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L4,S3313,10	Sample No.:	5
Sequence Name:	219	Batch #:	CAL-219
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/7/2006 2:27 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.997	0.998542	4.9808	4.9808	
2	CL	4.433	1.620199	9.9675	9.9675	
3	NO2N	5.253	0.775126	2.4802	2.4802	
4	BR	6.687	0.645923	9.9344	9.9344	
5	NO3N	7.517	0.950537	2.4860	2.4860	
6	PO4	9.973	1.265496	10.0325	10.0325	
7	SO4	12.093	2.875113	25.0029	25.0029	



ANALYZED BY:

REVIEWED BY:

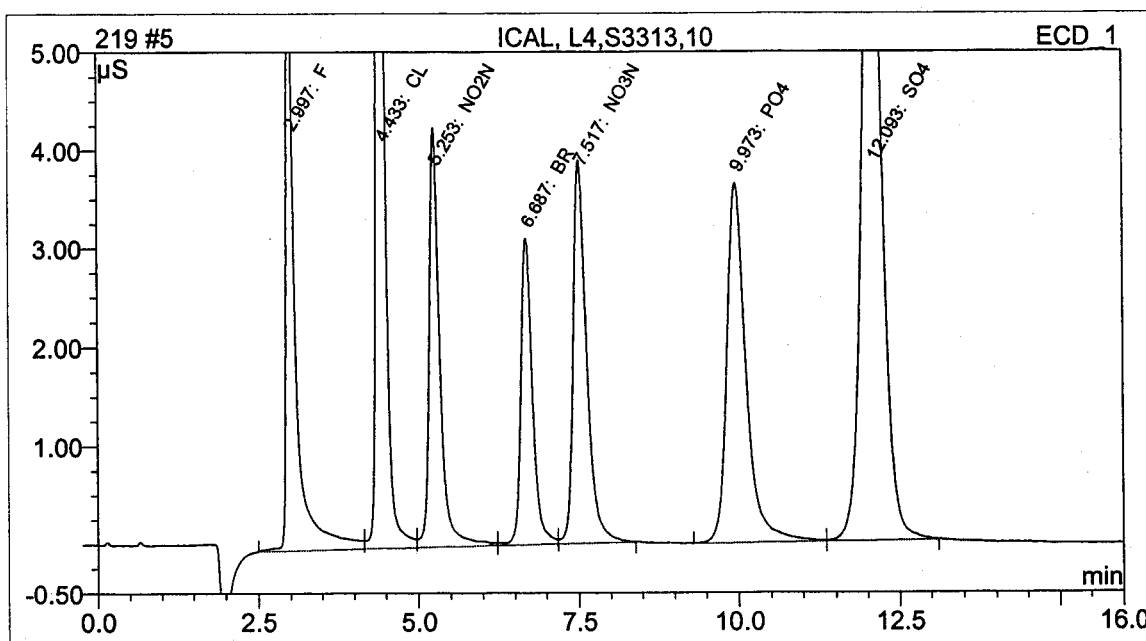
Curtis & Tompkins, Ltd.

00450

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L4,S3313,10	Sample No.:	5
Sequence Name:	219	Batch #:	CAL-219
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/7/2006 2:27 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.997	1.045583	5.0486	5.0486	
2	CL	4.433	1.643205	10.0076	10.0076	
3	NO2N	5.253	0.807551	2.5107	2.5107	
4	BR	6.687	0.660297	9.9988	9.9988	
5	NO3N	7.517	0.949365	2.4851	2.4851	
6	PO4	9.973	1.249434	9.9958	9.9958	
7	SO4	12.093	2.825967	24.8809	24.8809	



ANALYZED BY:

REVIEWED BY:

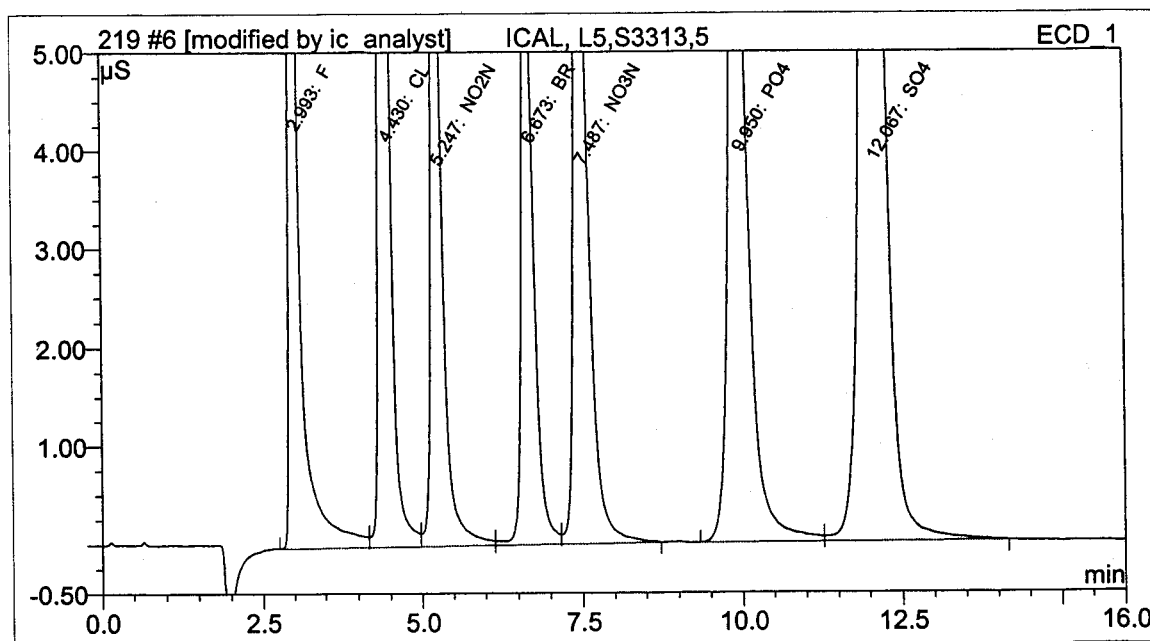
Curtis & Tompkins, Ltd.

00451

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L5,S3313,5	Sample No.:	6
Sequence Name:	219	Batch #:	CAL-219
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/7/2006 2:45 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S}\cdot\text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.993	2.117198	10.0030	10.0030	
2	CL	4.430	3.507177	20.0050	20.0050	
3	NO2N	5.247	1.624333	5.0033	5.0033	
4	BR	6.673	1.363948	20.0113	20.0113	
5	NO3N	7.487	2.002260	5.0024	5.0024	
6	PO4	9.950	2.673902	19.9951	19.9951	
7	SO4	12.067	6.158694	49.9992	49.9992	



ANALYZED BY:

REVIEWED BY:

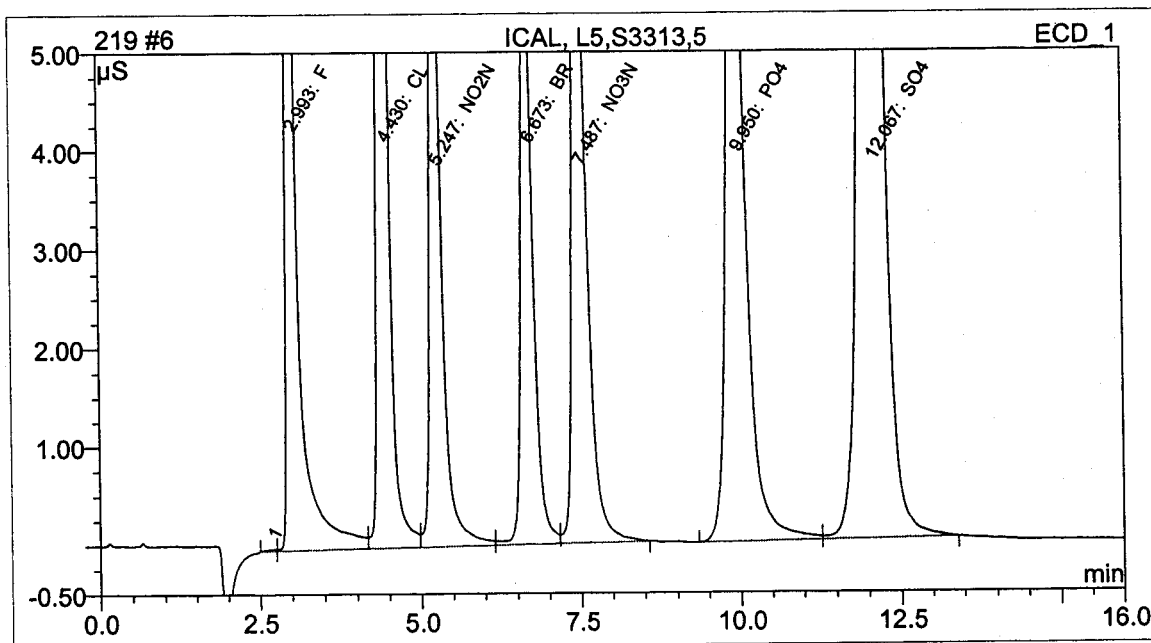
Curtis & Tompkins, Ltd.

00452

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L5,S3313,5	Sample No.:	6
Sequence Name:	219	Batch #:	CAL-219
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/7/2006 2:45 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
2	F	2.993	2.131545	10.0036	10.0036	
3	CL	4.430	3.511474	20.0052	20.0052	
4	NO2N	5.247	1.625408	5.0033	5.0033	
5	BR	6.673	1.360011	20.0108	20.0108	
6	NO3N	7.487	1.987817	5.0021	5.0021	
7	PO4	9.950	2.657481	19.9938	19.9938	
8	SO4	12.067	6.089424	49.9934	49.9934	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

00453

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 300.0

Inst : IC03
Seqnum : 626316153007
Cal : 626316153001
Standards: S3859 (5X)

File : 219_7.000
Caldate: 07-AUG-2006

IDF : 1.0
Time : 07-AUG-2006 15:04

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.1857	0.1829	1.000	0.9548	mg/L	-5	10	
Chloride	0.1635	0.1434	2.000	1.884	mg/L	-6	10	
Nitrogen, Nitrite	0.3069	0.2982	0.5000	0.4922	mg/L	-2	10	
Bromide	0.0638	0.0642	2.000	2.053	mg/L	3	10	
Nitrogen, Nitrate	0.3777	0.3599	0.5000	0.4888	mg/L	-2	10	
Orthophosphate (as P)	0.1336	0.1254	2.000	2.089	mg/L	4	10	
Sulfate	0.1142	0.1045	5.000	4.821	mg/L	-4	10	

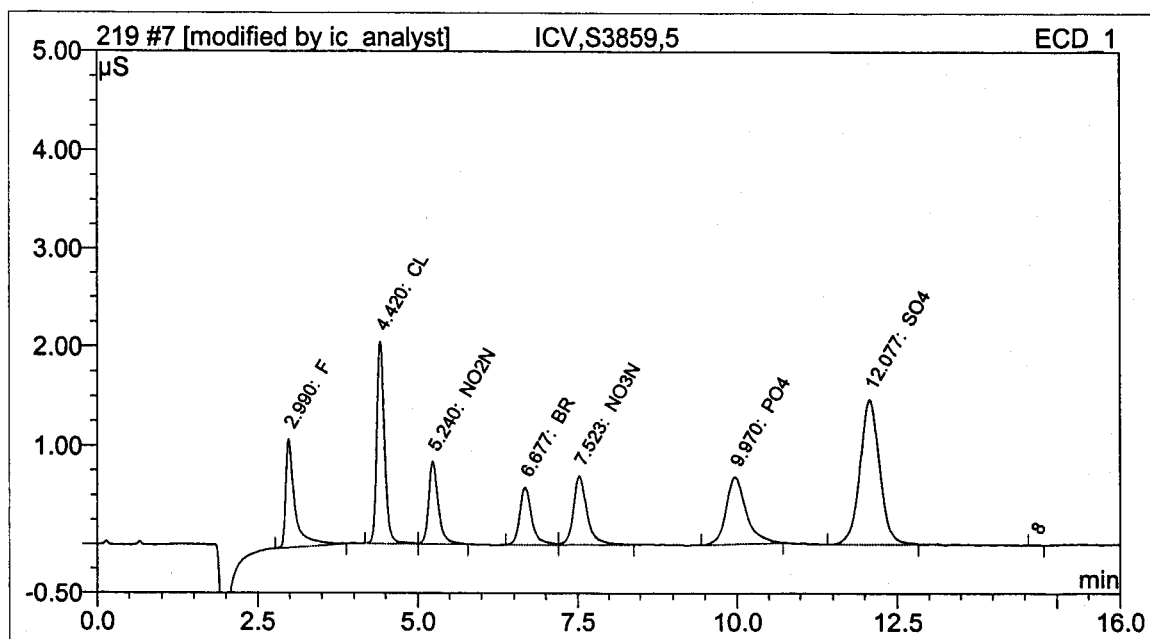
MS 8/9/06

me 8/9/06

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICV,S3859,5	Sample No.:	7
Sequence Name:	219	Batch #:	CAL-219
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/7/2006 3:04 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.990	0.182863	0.9548	0.9548	
2	CL	4.420	0.286853	1.8839	1.8839	
3	NO2N	5.240	0.149123	0.4922	0.4922	
4	BR	6.677	0.128432	2.0528	2.0528	
5	NO3N	7.523	0.179950	0.4888	0.4888	
6	PO4	9.970	0.250812	2.0886	2.0886	
7	SO4	12.077	0.522466	4.8206	4.8206	



ANALYZED BY:

REVIEWED BY:

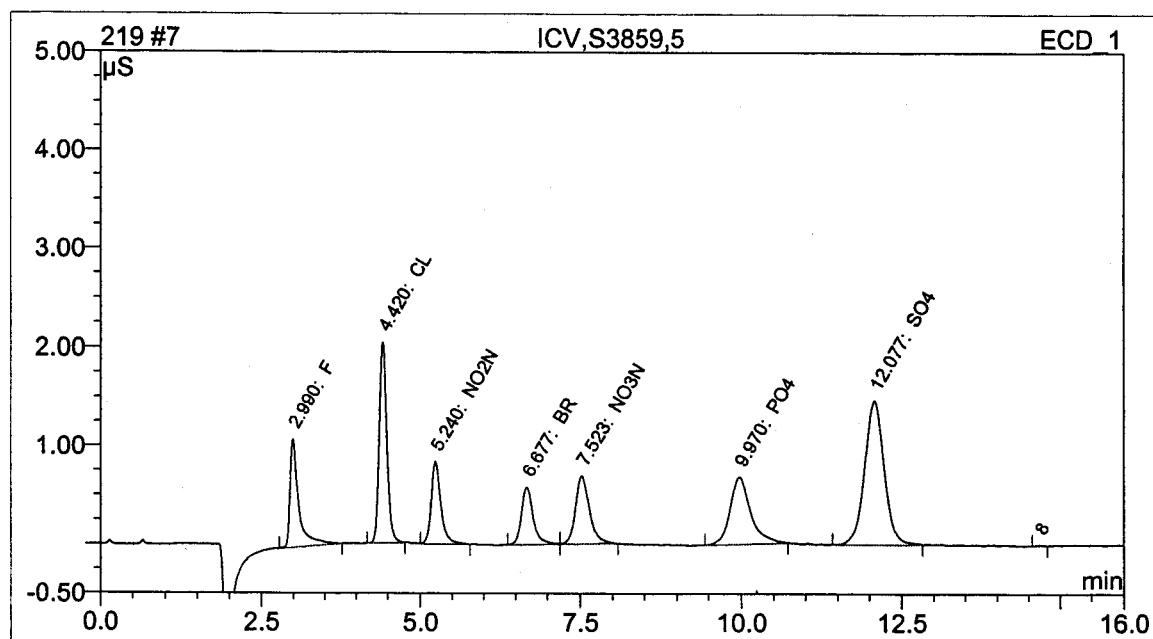
Curtis & Tompkins, Ltd.

00455

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICV,S3859,5	Sample No.:	7
Sequence Name:	219	Batch #:	CAL-219
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/7/2006 3:04 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.990	0.179295	0.9364	0.9364	
2	CL	4.420	0.281366	1.8484	1.8484	
3	NO2N	5.240	0.148197	0.4892	0.4892	
4	BR	6.677	0.125843	2.0119	2.0119	
5	NO3N	7.523	0.169168	0.4598	0.4598	
6	PO4	9.970	0.250812	2.0886	2.0886	
7	SO4	12.077	0.522466	4.8206	4.8206	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

00456

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC03
Seqnum : 626316153008
Cal : 626316153001

File : 219_8.000
Caldate: 07-AUG-2006

IDF : 1.0
Time : 07-AUG-2006 15:22

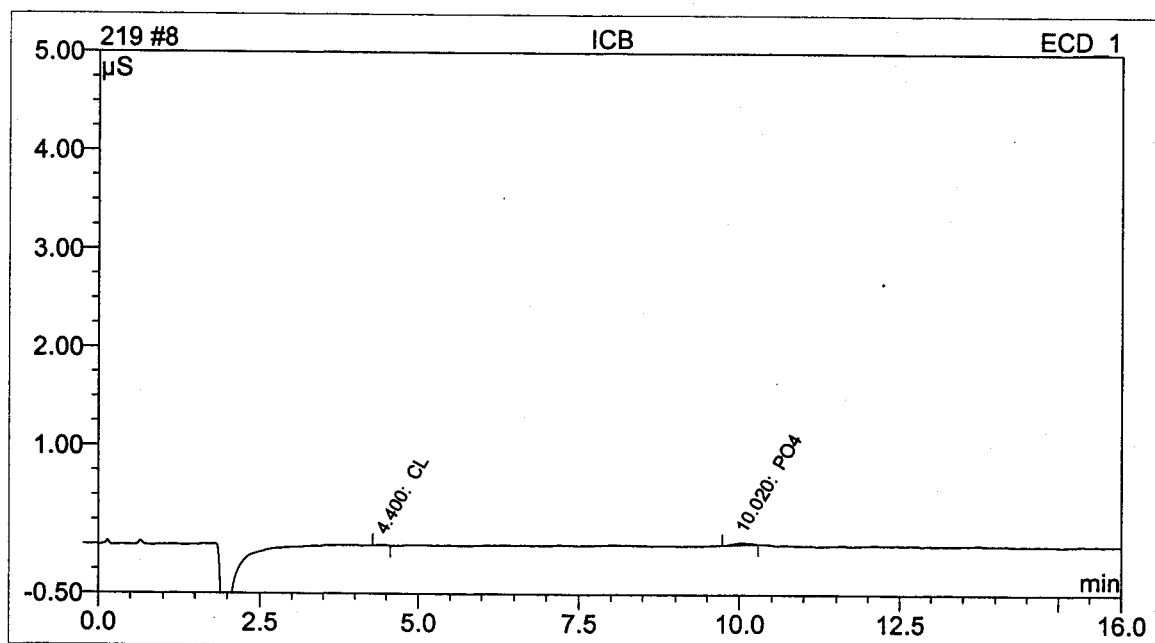
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Bromide	ND	0.2000	0.02767	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Orthophosphate (as P)	[0.06010]	0.2000	0.03686	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

MKS 8/9/06

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICB	Sample No.:	8
Sequence Name:	219	Batch #:	CAL-219
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/7/2006 3:22 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
1	CL	4.400	0.001593	0.0106	0.0106	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
2	PO4	10.020	0.007125	0.0601	0.0601	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

00456

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC03
Seqnum : 626316153001
Cal : 626290299001
File : 219_1.000
Caldate: 20-JUL-2006
IDF : 1.0
Time : 07-AUG-2006 13:13

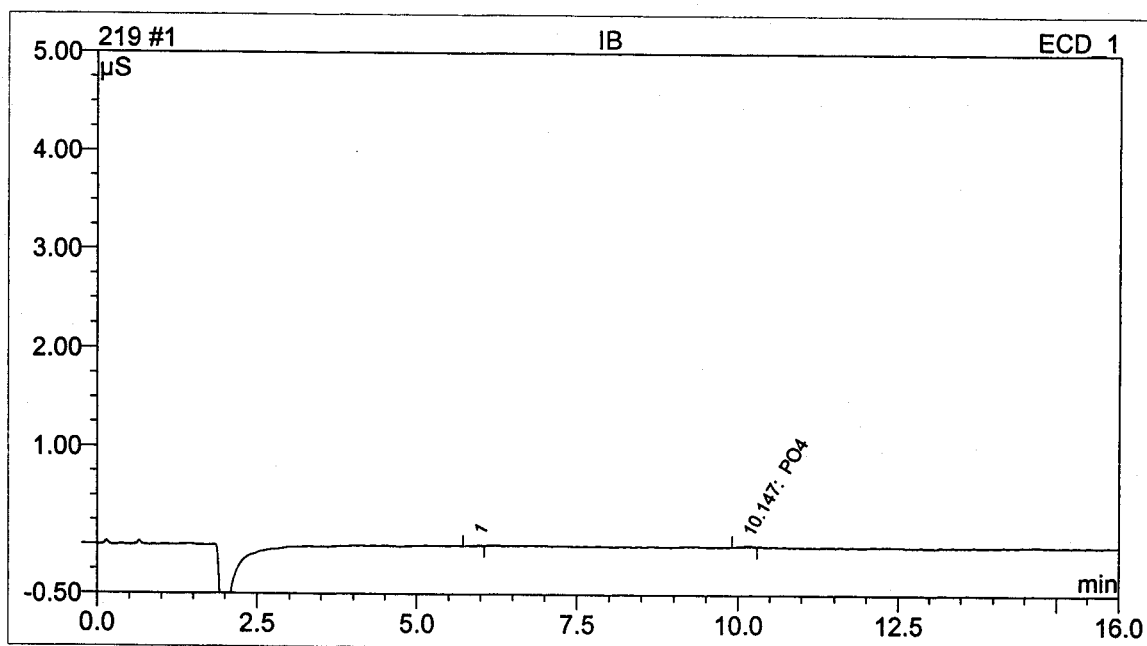
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Bromide	ND	0.2000	0.02767	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Orthophosphate (as P)	ND	0.2000	0.03686	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

mas 8/9/06

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	IB	Sample No.:	1
Sequence Name:	219	Batch #:	CAL-219
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/7/2006 1:13 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
n.a.	CL	n.a.	n.a.	n.a.	n.a.	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
2	PO4	10.147	0.002472	0.0209	0.0209	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

CONTINUING CALIBRATION SUMMARY FOR 188774 IC Water
Curtis & Tompkins Laboratories

Analyte: Fluoride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D	Max	%D	Flags
						RF/CF	RF/CF							
IC01	P	606339230007	23-AUG-2006 12:58	606336645001	21-AUG-2006	0.2595	0.2433	0.5000	0.4654	mg/L	-7	10		
IC01	P	606339230025	23-AUG-2006 18:39	606336645001	21-AUG-2006	0.2595	0.2586	2.0000	1.9477	mg/L	-3	10		
IC01	P	606339230045	24-AUG-2006 00:30	606336645001	21-AUG-2006	0.2595	0.2707	5.0000	4.9394	mg/L	-1	10		
IC01	P	606339230066	24-AUG-2006 06:37	606336645001	21-AUG-2006	0.2595	0.2609	2.0000	1.9643	mg/L	-2	10		
IC01	P	606339230068	24-AUG-2006 07:12	606336645001	21-AUG-2006	0.2595	0.2662	2.0000	2.0032	mg/L	0	10		
IC01	P	606339230077	24-AUG-2006 09:50	606336645001	21-AUG-2006	0.2595	0.2425	0.5000	0.4639	mg/L	-7	10		

CONTINUING CALIBRATION SUMMARY FOR 188774 IC Water
Curtis & Tompkins Laboratories

Analyte: Chloride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D	Flags
						RF/CF	RF/CF						
IC03	P	626329099015	16-AUG-2006 14:43	626316153001	07-AUG-2006	0.1635	0.1539	4.0000	3.9733	mg/L	-1	10	
IC03	P	626329099026	16-AUG-2006 18:33	626316153001	07-AUG-2006	0.1635	0.1651	10.000	10.144	mg/L	1	10	
IC03	P	626329099041	16-AUG-2006 23:09	626316153001	07-AUG-2006	0.1635	0.1460	1.0000	0.9664	mg/L	-3	10	
IC03	P	626329099055	17-AUG-2006 03:27	626316153001	07-AUG-2006	0.1635	0.1596	4.0000	4.1155	mg/L	3	10	
IC03	P	626329099070	17-AUG-2006 08:03	626316153001	07-AUG-2006	0.1635	0.1655	10.000	10.167	mg/L	2	10	

CONTINUING CALIBRATION SUMMARY FOR 188774 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrite

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D Flags
						RF/CF	RF/CF					
IC01	P	606339230007	23-AUG-2006 12:58	606336645001	21-AUG-2006	0.3361	0.3449	0.2500	0.2576	mg/L	3 10	
IC01	P	606339230025	23-AUG-2006 18:39	606336645001	21-AUG-2006	0.3361	0.3501	1.0000	1.0295	mg/L	3 10	
IC01	P	606339230045	24-AUG-2006 00:30	606336645001	21-AUG-2006	0.3361	0.3581	2.5000	2.5544	mg/L	2 10	
IC03	P	626329099015	16-AUG-2006 14:43	626316153001	07-AUG-2006	0.3069	0.2991	1.0000	0.9798	mg/L	-2 10	
IC03	P	626329099026	16-AUG-2006 18:33	626316153001	07-AUG-2006	0.3069	0.3089	2.5000	2.4712	mg/L	-1 10	
IC03	P	626329099041	16-AUG-2006 23:09	626316153001	07-AUG-2006	0.3069	0.2876	0.2500	0.2383	mg/L	-5 10	
IC03	P	626329099055	17-AUG-2006 03:27	626316153001	07-AUG-2006	0.3069	0.3074	1.0000	1.0064	mg/L	1 10	

CONTINUING CALIBRATION SUMMARY FOR 188774 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D	Max	%D	Flags
						RF/CF	RF/CF							
IC01	P	606339230007	23-AUG-2006 12:58	606336645001	21-AUG-2006	0.4243	0.4060	0.2500	0.2412	mg/L	-4	10		
IC01	P	606339230025	23-AUG-2006 18:39	606336645001	21-AUG-2006	0.4243	0.4266	1.0000	0.9973	mg/L	0	10		
IC01	P	606339230045	24-AUG-2006 00:30	606336645001	21-AUG-2006	0.4243	0.4448	2.5000	2.5180	mg/L	1	10		
IC03	P	626329099015	16-AUG-2006 14:43	626316153001	07-AUG-2006	0.3777	0.3773	1.0000	1.0145	mg/L	1	10		
IC03	P	626329099026	16-AUG-2006 18:33	626316153001	07-AUG-2006	0.3777	0.3786	2.5000	2.4757	mg/L	-1	10		
IC03	P	626329099041	16-AUG-2006 23:09	626316153001	07-AUG-2006	0.3777	0.3834	0.2500	0.2615	mg/L	5	10		
IC03	P	626329099055	17-AUG-2006 03:27	626316153001	07-AUG-2006	0.3777	0.3781	1.0000	1.0166	mg/L	2	10		
IC03	P	626329099070	17-AUG-2006 08:03	626316153001	07-AUG-2006	0.3777	0.3849	2.5000	2.5153	mg/L	1	10		

CONTINUING CALIBRATION SUMMARY FOR 188774 IC Water
Curtis & Tompkins Laboratories

Analyte: Sulfate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D Flags
						RF/CF	RF/CF					
IC03	P	626329099015	16-AUG-2006 14:43	626316153001	07-AUG-2006	0.1142	0.1102	10.000	10.015	mg/L	0	10
IC03	P	626329099026	16-AUG-2006 18:33	626316153001	07-AUG-2006	0.1142	0.1153	25.000	25.055	mg/L	0	10
IC03	P	626329099041	16-AUG-2006 23:09	626316153001	07-AUG-2006	0.1142	0.1031	2.5000	2.3959	mg/L	-4	10
IC03	P	626329099055	17-AUG-2006 03:27	626316153001	07-AUG-2006	0.1142	0.1111	10.000	10.087	mg/L	1	10
IC03	P	626329099070	17-AUG-2006 08:03	626316153001	07-AUG-2006	0.1142	0.1156	25.000	25.127	mg/L	1	10

CURTIS & TOMPKINS BLANK USER REPORT FOR 188774 IC Water
EPA 300.0

Inst : IC03 Lab ID : QC352245
Seqnum : 626329099016.3 Matrix : Water
File : 228_16.000 Batch : 116500 Time : 16-AUG-2006 15:02
IDF : 1.0 PDF : 1.0 Units : mg/L
Cal : 626316153001 Caldate: 07-AUG-2006

Analyte	Result	RL	Flags
Fluoride	ND	0.10	
Chloride	ND	0.20	u
Nitrogen, Nitrite	ND	0.05	u
Nitrogen, Nitrate	ND	0.05	u
Sulfate	ND	0.50	u

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 188774 IC Water
EPA 300.0

Inst : IC03
Seqnum : 626329099027
Cal : 626316153001

File : 228_27.000
Caldate: 07-AUG-2006

IDF : 1.0
Time : 16-AUG-2006 18:51

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	[0.04704]	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 188774 IC Water
EPA 300.0

Inst : IC03
Seqnum : 626329099042
Cal : 626316153001
File : 228_42.000
Caldate: 07-AUG-2006
IDF : 1.0
Time : 16-AUG-2006 23:28

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 188774 IC Water
EPA 300.0

Inst : IC03
Seqnum : 626329099056
Cal : 626316153001
File : 228_56.000
Caldate: 07-AUG-2006
IDF : 1.0
Time : 17-AUG-2006 03:45

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 188774 IC Water
EPA 300.0

Inst : IC03
Seqnum : 626329099071
Cal : 626316153001
File : 228_71.000
Caldate: 07-AUG-2006
IDF : 1.0
Time : 17-AUG-2006 08:21

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	[0.03802]	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

CURTIS & TOMPKINS BLANK USER REPORT FOR 188774 IC Water
EPA 300.0

Inst : IC01 Lab ID : QC353262
Seqnum : 606339230008.2 Matrix : Water
File : 235_8.000 Batch : 116740 Time : 23-AUG-2006 13:15
IDF : 1.0 PDF : 1.0 Units : mg/L
Cal : 606336645001 Caldate: 21-AUG-2006

Analyte	Result	RL	Flags
Fluoride	ND	0.10	u
Chloride	ND	0.20	
Nitrogen, Nitrite	ND	0.05	u
Nitrogen, Nitrate	ND	0.05	u
Sulfate	0.58	0.50	<c+ B ib b*

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 188774 IC Water
EPA 300.0

Inst : IC01
Seqnum : 606339230026
Cal : 606336645001
File : 235_26.000
Caldate: 21-AUG-2006
IDF : 1.0
Time : 23-AUG-2006 18:57

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009577	mg/L	
Chloride	ND	0.2000	0.04396	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.006750	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01443	mg/L	
Sulfate	ND	0.5000	0.04597	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 188774 IC Water
EPA 300.0

Inst : IC01
Seqnum : 606339230046
Cal : 606336645001
File : 235_46.000
Caldate: 21-AUG-2006
IDF : 1.0
Time : 24-AUG-2006 00:47

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009577	mg/L	
Chloride	ND	0.2000	0.04396	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.006750	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01443	mg/L	
Sulfate	ND	0.5000	0.04597	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 188774 IC Water
EPA 300.0

Inst : IC01
Seqnum : 606339230067
Cal : 606336645001
File : 235_67.000
Caldate: 21-AUG-2006
IDF : 1.0
Time : 24-AUG-2006 06:55

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009577	mg/L	
Chloride	ND	0.2000	0.04396	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.006750	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01443	mg/L	
Sulfate	ND	0.5000	0.04597	mg/L	

CURTIS & TOMPKINS BLANK USER REPORT FOR 188774 IC Water
EPA 300.0

Inst : IC01 Lab ID : QC353272
Seqnum : 606339230069.1 Matrix : Water
File : 235_69.000 Batch : 116742 Time : 24-AUG-2006 07:30
IDF : 1.0 PDF : 1.0 Units : mg/L
Cal : 606336645001 Caldate: 21-AUG-2006

Analyte	Result	RL	Flags
Fluoride	ND	0.10	u
Chloride	ND	0.20	
Nitrogen, Nitrite	ND	0.05	
Nitrogen, Nitrate	ND	0.05	
Sulfate	ND	0.50	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 188774 IC Water
EPA 300.0

Inst : IC01
Seqnum : 606339230078
Cal : 606336645001
File : 235_78.000
Caldate: 21-AUG-2006
IDF : 1.0
Time : 24-AUG-2006 10:07

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.009577	mg/L	
Chloride	[0.05534]	0.2000	0.04396	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.006750	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.01443	mg/L	
Sulfate	ND	0.5000	0.04597	mg/L	

SEQUENCE SUMMARY FOR 188774 IC Water
Curtis & Tompkins Laboratories

Sequence: 626316153 Instrument: IC03
Analytical Method: EPA 300.0

Ion Chromatograph
SOP Version: ANIONS_300_rv6

Begun: 07-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
001	219_1.00	IB				07-AUG-2006 13:13	1.0			25					
002	219_2.00	ICAL	L1			07-AUG-2006 13:32	1.0						1		
003	219_3.00	ICAL	L2			07-AUG-2006 13:50	1.0						1		
004	219_4.00	ICAL	L3			07-AUG-2006 14:08	1.0						1		
005	219_5.00	ICAL	L4			07-AUG-2006 14:27	1.0						1		
006	219_6.00	ICAL	L5			07-AUG-2006 14:45	1.0						1		
007	219_7.00	ICV				07-AUG-2006 15:04	1.0						1		
008	219_8.00	ICB				07-AUG-2006 15:22	1.0						2		
009	219_9.00	CCV	L			07-AUG-2006 15:41	1.0						1		
010	219_10.0	CCB/MB	QC350859			07-AUG-2006 17:05	1.0								
011	219_11.0	SAMPLE	188437-016			07-AUG-2006 17:24	1.0								
012	219_12.0	X	BLK			07-AUG-2006 17:42	1.0								
013	219_13.0	SAMPLE	188437-016			07-AUG-2006 18:00	1.0								
014	219_14.0	X	BLK			07-AUG-2006 18:19	1.0								
015	219_15.0	SAMPLE	188437-016			07-AUG-2006 18:37	2.0								
016	219_16.0	X	BLK			07-AUG-2006 18:56	1.0								
017	219_17.0	SAMPLE	188437-016			07-AUG-2006 19:14	2.0								
018	219_18.0	X	BLK			07-AUG-2006 19:32	1.0								
019	219_19.0	BS	QC350860			07-AUG-2006 19:51	1.0						1		
020	219_20.0	BSD	QC350861			07-AUG-2006 20:09	1.0						1		
021	219_21.0	CCV	M			07-AUG-2006 20:28	1.0						1		
022	219_22.0	CCB				07-AUG-2006 20:46	1.0								
023	219_23.0	X	CCV			07-AUG-2006 21:04	1.0								
024	219_24.0	X	CCB			07-AUG-2006 21:23	1.0						1		
025	219_25.0	X	SHUTDOWN			07-AUG-2006 21:41	1.0								

Stds used: 1=S3313 2=S3859

SEQUENCE SUMMARY FOR 188774 IC Water
Curtis & Tompkins Laboratories

Sequence: 626329099 Instrument: IC03
Analytical Method: EPA 300.0

Ion Chromatograph
SOP Version: ANIONS_300_rv6

Begun: 16-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Std	Used	>LR
007	228_7.00	CCV	L	116498	16-AUG-2006	11:34	1.0	1		25			1		
008	228_8.00	CCB/MB	QC352237	116498	Soil	16-AUG-2006	12:22	1.0		25					
009	228_9.00	BS	QC352238	116498	Soil	16-AUG-2006	12:40	1.0		25			1		
010	228_10.0	BSD	QC352239	116498	Soil	16-AUG-2006	12:59	1.0		25			1		
011	228_11.0	SAMPLE	188585-001	116498	Soil	16-AUG-2006	13:17	1.0		25					1:CL=50.7396
012	228_12.0	X	BLK	116498		16-AUG-2006	13:48	1.0							
013	228_13.0	CCV	M	116498		16-AUG-2006	14:07	1.0	1	25			1		
014	228_14.0	CCB		116498		16-AUG-2006	14:25	1.0		25					
015	228_15.0	CCV	M	116500		16-AUG-2006	14:43	1.0		25			1		
016	228_16.0	CCB/MB	QC352245	116500	Water	16-AUG-2006	15:02	1.0		25					
017	228_17.0	BS	QC352246	116500	Water	16-AUG-2006	15:20	1.0		25			1		
018	228_18.0	BSD	QC352247	116500	Water	16-AUG-2006	15:39	1.0		25			1		
019	228_19.0	SAMPLE	188756-002	116500	Water	16-AUG-2006	16:24	100.0		25					
020	228_20.0	SAMPLE	188756-004	116500	Water	16-AUG-2006	16:43	100.0		25					
021	228_21.0	SAMPLE	188756-005	116500	Water	16-AUG-2006	17:01	100.0		25					
022	228_22.0	SAMPLE	188756-006	116500	Water	16-AUG-2006	17:19	100.0		25					
023	228_23.0	SAMPLE	188774-002	116500	Water	16-AUG-2006	17:38	50.0		25					
024	228_24.0	MSS	188774-003	116500	Water	16-AUG-2006	17:56	25.0		25					
025	228_25.0	MSS	188774-003	116500	Water	16-AUG-2006	18:15	1.0		25					3:SO4=61.4627
026	228_26.0	CCV	H	116500		16-AUG-2006	18:33	1.0	3	25			1		
027	228_27.0	CCB		116500		16-AUG-2006	19:10	1.0		25					
028	228_28.0	X	CCV	116500		16-AUG-2006	19:28	1.0					1		
029	228_29.0	X	CCB	116500		16-AUG-2006	19:47	50.0		25			1		
030	228_30.0	MS	QC352248	116500	Water	16-AUG-2006	20:05	50.0	1	25					
031	228_31.0	MSD	QC352249	116500	Water	16-AUG-2006	20:23	1.0		25			1		
032	228_32.0	SAMPLE	188774-002	116500	Water	16-AUG-2006	20:42	1.0	2	25					1:SO4=166.255
033	228_33.0	X	BLK	116500		16-AUG-2006	21:00	1.0		25					
034	228_34.0	SAMPLE	188774-001	116500	Water	16-AUG-2006	21:19	1.0	3	25					2:CL=157.646
035	228_35.0	SAMPLE	188774-004	116500	Water	16-AUG-2006	21:37	1.0	4	25					3:CL=106.078
036	228_36.0	SAMPLE	188774-006	116500	Water	16-AUG-2006	21:56	1.0	3	25					2:SO4=70.1925
037	228_37.0	SAMPLE	188774-010	116500	Water	16-AUG-2006	21:56	1.0	4	25					3:SO4=64.6079

Std's used: 1=S3313

SEQUENCE SUMMARY FOR 188774 IC Water
Curtis & Tompkins Laboratories

Sequence: 626329099 Instrument: IC03
Analytical Method: EPA 300.0

Ion Chromatograph
SOP Version: ANIONS_300_rv6

Begun: 16-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
038	228_38.0	SAMPLE	188774-011	116500	Water	16-AUG-2006	22:14 1.0	3		25					2:SO4=69.9252
039	228_39.0	SAMPLE	188774-012	116500	Water	16-AUG-2006	22:32 1.0	3		25					2:Cl=129.816
040	228_40.0	SAMPLE	188774-014	116500	Water	16-AUG-2006	22:51 1.0	4		25					3:Cl=140.480
041	228_41.0	CCV	L	116500		16-AUG-2006	23:09 1.0	2		25			1		
042	228_42.0	CCB		116500		16-AUG-2006	23:28 1.0			25					
043	228_43.0	X	CCV	116500		16-AUG-2006	23:46 1.0						1		
044	228_44.0	X	CCB	116500		17-AUG-2006	00:04 1.0								
045	228_45.0	SAMPLE	188774-013	116500	Water	17-AUG-2006	00:23 1.0	1		25					
046	228_46.0	SAMPLE	188774-015	116500	Water	17-AUG-2006	00:41 1.0	4		25					3:Cl=140.222
047	228_47.0	SAMPLE	188774-016	116500	Water	17-AUG-2006	01:00 1.0	3		25					2:Cl=88.2886
048	228_48.0	SAMPLE	188774-017	116500	Water	17-AUG-2006	01:18 1.0	3		25					2:Cl=76.0772
049	228_49.0	SAMPLE	188774-018	116500	Water	17-AUG-2006	01:36 1.0	3		25					2:SO4=79.6673
050	228_50.0	SAMPLE	188774-019	116500	Water	17-AUG-2006	01:55 1.0	3		25					2:SO4=72.9036
051	228_51.0	SAMPLE	188774-001	116500	Water	17-AUG-2006	02:13 25.0	1		25					
052	228_52.0	SAMPLE	188774-004	116500	Water	17-AUG-2006	02:32 25.0	1		25					
053	228_53.0	SAMPLE	188774-006	116500	Water	17-AUG-2006	02:50 25.0	1		25					
054	228_54.0	SAMPLE	188774-010	116500	Water	17-AUG-2006	03:08 10.0	1		25					
055	228_55.0	CCV	M	116500		17-AUG-2006	03:27 1.0			25					
056	228_56.0	CCB		116500		17-AUG-2006	03:45 1.0			25			1		
057	228_57.0	X	CCV	116500		17-AUG-2006	04:04 1.0						1		
058	228_58.0	X	CCB	116500		17-AUG-2006	04:22 1.0								
059	228_59.0	SAMPLE	188774-011	116500	Water	17-AUG-2006	04:40 25.0			25					
060	228_60.0	SAMPLE	188774-012	116500	Water	17-AUG-2006	04:59 25.0			25					
061	228_61.0	SAMPLE	188774-014	116500	Water	17-AUG-2006	05:17 25.0			25					
062	228_62.0	SAMPLE	188774-015	116500	Water	17-AUG-2006	05:36 25.0			25					
063	228_63.0	SAMPLE	188774-016	116500	Water	17-AUG-2006	05:54 25.0			25					
064	228_64.0	SAMPLE	188774-017	116500	Water	17-AUG-2006	06:13 10.0			25					
065	228_65.0	SAMPLE	188774-018	116500	Water	17-AUG-2006	06:31 25.0			25					
066	228_66.0	SAMPLE	188774-019	116500	Water	17-AUG-2006	06:49 25.0			25					
067	228_67.0	SAMPLE	188767-002	116500	Water	17-AUG-2006	07:08 100.0			25					
068	228_68.0	SAMPLE	188767-002	116500	Water	17-AUG-2006	07:26 10.0	1		25					1:NO3N=24.5988

Stds used: 1=S3313

SEQUENCE SUMMARY FOR 188774 IC Water
Curtis & Tompkins Laboratories

Sequence: 626329099 Instrument: IC03
Analytical Method: EPA 300.0

Ion Chromatograph
SOP Version: ANIONS_300_rv6

Begun: 16-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Std	Used	>LR
069	228_69.0	X	BLK	116500		17-AUG-2006	07:45	1.0							
070	228_70.0	CCV	H	116500		17-AUG-2006	08:03	1.0		25			1		
071	228_71.0	CCB		116500		17-AUG-2006	08:21	1.0		25					
072	228_72.0	X	CCV	116500		17-AUG-2006	08:40	1.0					1		
073	228_73.0	X	CCB	116500		17-AUG-2006	08:58	1.0							
074	228_74.0	X	SHUTDOWN	116500		17-AUG-2006	09:17	1.0							

Std's used: 1=S3313

SEQUENCE SUMMARY FOR 188774 IC Water
Curtis & Tompkins Laboratories

Sequence: 606336645 Instrument: IC01 Ion Chromatograph
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

Begun: 21-AUG-2006 11:00

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds	Used	>LR
001	233_1.00	IB				21-AUG-2006 18:45	1.0	2		25					
002	233_2.00	ICAL	L1			21-AUG-2006 19:03	1.0						1		
003	233_3.00	ICAL	L2			21-AUG-2006 19:20	1.0						1		
004	233_4.00	ICAL	L3			21-AUG-2006 19:38	1.0						1		
005	233_5.00	ICAL	L4			21-AUG-2006 19:55	1.0						1		
006	233_6.00	ICAL	L5			21-AUG-2006 20:13	1.0						1		
007	233_7.00	ICV				21-AUG-2006 20:30	1.0	1		25			2		
008	233_8.00	ICB				21-AUG-2006 20:48	1.0	2		25					
009	233_9.00	CCV	L			21-AUG-2006 21:05	1.0	1		25			1		
010	233_10.00	CCB/MB	QC353067			21-AUG-2006 21:23	1.0	2		25					
011	233_11.00	MDL	187854-001			21-AUG-2006 21:40	1.0	2		25			1		
012	233_12.00	MDL	187854-002			21-AUG-2006 21:58	1.0	2		25			1		
013	233_13.00	MDL	187854-003			21-AUG-2006 22:15	1.0	2		25			1		
014	233_14.00	MDL	187854-004			21-AUG-2006 22:33	1.0	2		25			1		
015	233_15.00	MDL	187854-005			21-AUG-2006 22:50	1.0	2		25			1		
016	233_16.00	MDL	187854-006			21-AUG-2006 23:08	1.0	2		25			1		
017	233_17.00	MDL	187854-007			21-AUG-2006 23:25	1.0	2		25			1		
018	233_18.00	X	187854-007			21-AUG-2006 23:43	1.0						1		
019	233_19.00	CCV	M			22-AUG-2006 00:00	1.0			25			1		
020	233_20.00	CCB				22-AUG-2006 00:18	1.0	2		25					
021	233_21.00	X	SHUTDOWN			22-AUG-2006 00:35	1.0								

Stds used: 1=S3313 2=S3859

SEQUENCE SUMMARY FOR 188774 IC Water
Curtis & Tompkins Laboratories

Sequence: 606339230 Instrument: IC01
Analytical Method: EPA 300.0

Ion Chromatograph
SOP Version: ANIONS_300_rv6

Begun: 23-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds	Used	>LR
007	235_7.00	CCV	L	116740	Water	23-AUG-2006 12:58	1.0	2		25			1		
008	235_8.00	CCB/MB	QC353262	116740	Water	23-AUG-2006 13:15	1.0	1		25					
009	235_9.00	BS	QC353263	116740	Water	23-AUG-2006 13:33	1.0	1		25			1		
010	235_10.0	BSD	QC353264	116740	Water	23-AUG-2006 13:50	1.0	1		25			1		
011	235_11.0	MSS	188774-001	116740	Water	23-AUG-2006 14:08	1.0	4		25					1:SO4=91.4227
012	235_12.0	SAMPLE	188774-002	116740	Water	23-AUG-2006 14:25	1.0	3		25					1:SO4=168.377
013	235_13.0	SAMPLE	188774-003	116740	Water	23-AUG-2006 14:43	1.0	4		25					3:CL=99.9304
014	235_14.0	SAMPLE	188774-004	116740	Water	23-AUG-2006 15:00	1.0	4		25					3:CL=99.1135
015	235_15.0	X	BLK	116740		23-AUG-2006 15:34	1.0								
016	235_16.0	X	BLK	116740		23-AUG-2006 15:51	1.0								
017	235_17.0	X	BLK	116740		23-AUG-2006 16:09	1.0								
018	235_18.0	X	BLK	116740		23-AUG-2006 16:26	1.0								
019	235_19.0	X	BLK	116740		23-AUG-2006 16:44	1.0								
020	235_20.0	MDLCHC	187854-008	116740	Water	23-AUG-2006 17:01	1.0			25			1		
021	235_21.0	SAMPLE	188849-012	116740	Water	23-AUG-2006 17:29	1.0			25					2:SO4=108.368
022	235_22.0	X	BLK	116740		23-AUG-2006 17:47	1.0								
023	235_23.0	SAMPLE	188788-003	116740	Water	23-AUG-2006 18:04	1.0			25					1:CL=156.782
024	235_24.0	X	BLK	116740		23-AUG-2006 18:22	1.0								
025	235_25.0	CCV	M	116740		23-AUG-2006 18:39	1.0			25					
026	235_26.0	CCB		116740		23-AUG-2006 18:57	1.0	1		25					
027	235_27.0	SAMPLE	188912-001	116740	Water	23-AUG-2006 19:14	100.0			25					
028	235_28.0	SAMPLE	188912-002	116740	Water	23-AUG-2006 19:32	100.0			25					
029	235_29.0	MS	QC353265	116740	Water	23-AUG-2006 19:49	1.02	1		25			1		1:SO4=93.6358
030	235_30.0	X	BLK	116740		23-AUG-2006 20:07	1.0								
031	235_31.0	MSD	QC353266	116740	Water	23-AUG-2006 20:24	1.02	1		25			1		1:SO4=93.5102
032	235_32.0	X	BLK	116740		23-AUG-2006 20:42	1.0								
033	235_33.0	SAMPLE	188912-001	116740	Water	23-AUG-2006 20:59	2.0			25					2:CL=317.700
034	235_34.0	X	BLK	116740		23-AUG-2006 21:17	1.0								
035	235_35.0	SAMPLE	188912-002	116740	Water	23-AUG-2006 21:34	1.0			25					2:CL=276.521
036	235_36.0	X	BLK	116740		23-AUG-2006 21:52	1.0								
037	235_37.0	SAMPLE	188908-002	116740	Water	23-AUG-2006 22:09	100.0			25					

Stds used: 1=S3313

SEQUENCE SUMMARY FOR 188774 IC Water
Curtis & Tompkins Laboratories

Sequence: 606339230 Instrument: IC01
Analytical Method: EPA 300.0

Ion Chromatograph
SOP Version: ANIONS_300_rv6

Begun: 23-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
038	235_38.0	SAMPLE	188908-002	116740	Water	23-AUG-2006	22:27 10.0	1		25				1: NO3N=22.9946	
039	235_39.0	X	BLK	116740		23-AUG-2006	22:45 1.0								
040	235_40.0	X	BLK	116740		23-AUG-2006	23:02 1.0								
041	235_41.0	SAMPLE	188774-006	116740	Water	23-AUG-2006	23:20 1.0	4		25				2: SO4=69.1907	
042	235_42.0	X	BLK	116740		23-AUG-2006	23:37 1.0								
043	235_43.0	SAMPLE	188774-010	116740	Water	23-AUG-2006	23:55 1.0	4		25				3: SO4=63.4775	
044	235_44.0	X	BLK	116740		24-AUG-2006	00:12 1.0								
045	235_45.0	CCV	H	116740		24-AUG-2006	00:30 1.0			25				1	
046	235_46.0	CCB		116740		24-AUG-2006	00:47 1.0	1		25					
047	235_47.0	X	CCV	116740		24-AUG-2006	01:05 1.0								
048	235_48.0	X	CCB	116740		24-AUG-2006	01:22 1.0							1	
049	235_49.0	SAMPLE	188774-011	116740	Water	24-AUG-2006	01:40 1.0	4		25				2: SO4=68.8570	
050	235_50.0	X	BLK	116740		24-AUG-2006	01:57 1.0								
051	235_51.0	SAMPLE	188774-012	116740	Water	24-AUG-2006	02:15 1.0	4		25				2: CL=129.792	
052	235_52.0	X	BLK	116740		24-AUG-2006	02:32 1.0								
053	235_53.0	SAMPLE	188774-013	116740	Water	24-AUG-2006	02:50 1.0	2		25				2: SO4=65.4114	
054	235_54.0	X	BLK	116740		24-AUG-2006	03:07 1.0								
055	235_55.0	SAMPLE	188774-014	116740	Water	24-AUG-2006	03:25 1.0	3		25				2: SO4=65.5707	
056	235_56.0	X	BLK	116740		24-AUG-2006	03:42 1.0								
057	235_57.0	SAMPLE	188774-015	116740	Water	24-AUG-2006	04:00 1.0	3		25				2: SO4=65.5707	
058	235_58.0	X	BLK	116740		24-AUG-2006	04:17 1.0								
059	235_59.0	SAMPLE	188774-016	116740	Water	24-AUG-2006	04:35 1.0	4		25				2: CL=88.0350	
060	235_60.0	X	BLK	116740		24-AUG-2006	04:52 1.0								
061	235_61.0	SAMPLE	188774-017	116740	Water	24-AUG-2006	05:10 1.0	4		25				2: CL=76.1667	
062	235_62.0	X	BLK	116740		24-AUG-2006	05:27 1.0								
063	235_63.0	SAMPLE	188774-018	116740	Water	24-AUG-2006	05:45 1.0	4		25				2: SO4=79.2854	
064	235_64.0	X	BLK	116740		24-AUG-2006	06:02 1.0								
065	235_65.0	X	BLK	116740		24-AUG-2006	06:20 1.0								
066	235_66.0	CCV	M	116740		24-AUG-2006	06:37 1.0			25				1	
067	235_67.0	CCB		116740		24-AUG-2006	06:55 1.0			25					
068	235_68.0	CCV	M	116742		24-AUG-2006	07:12 1.0			25				1	

Stds used: 1=S3313

SEQUENCE SUMMARY FOR 188774 IC Water
Curtis & Tompkins Laboratories

Sequence: 606339230 Instrument: IC01
Analytical Method: EPA 300.0

Ion Chromatograph
SOP Version: ANIONS_300_rv6

Begun: 23-AUG-2006 11:00

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Std	Used	>LR
069	235_69.0	CCB/MB	QC353272	116742	Water	24-AUG-2006 07:30	1.0			25					
070	235_70.0	LCS	QC353273	116742	Water	24-AUG-2006 07:47	1.0			25			1		
071	235_71.0	MSS	188774-019	116742	Water	24-AUG-2006 08:05	1.0	5		25					2:SO4=72.4012
072	235_72.0	X	BLK	116742		24-AUG-2006 08:22	1.0								
073	235_73.0	MS	QC353274	116742	Water	24-AUG-2006 08:40	1.02		1	25			1		2:SO4=75.5251
074	235_74.0	X	BLK	116742		24-AUG-2006 08:57	1.0								
075	235_75.0	MSD	QC353275	116742	Water	24-AUG-2006 09:15	1.02		1	25			1		2:SO4=75.9277
076	235_76.0	X	BLK	116742		24-AUG-2006 09:32	1.0								
077	235_77.0	CCV	L	116742		24-AUG-2006 09:50	1.0			25			1		
078	235_78.0	CCB		116742		24-AUG-2006 10:07	1.0								
079	235_79.0	X	CCV	116742		24-AUG-2006 10:25	1.0						1		
080	235_80.0	X	CCB	116742		24-AUG-2006 10:42	1.0								
081	235_81.0	X	SHUTDOWN	116742		24-AUG-2006 11:00	1.0								

Std used: 1=SS3313

REPORTING SUMMARY FOR 188774 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analzyed	IDF	F	C	N	N	S
					L	O	O	O
						2	3	4
						N	N	
188774-001	IC03	08/16/06 21:00	1.0			+	+	
188774-001	IC03	08/17/06 02:13	25.0		+			+
188774-001	IC01	08/23/06 14:08	1.0	+				
188774-002	IC03	08/16/06 17:38	50.0		+			+
188774-002	IC03	08/16/06 20:23	1.0			+	+	
188774-002	IC01	08/23/06 14:25	1.0	+				
188774-003	IC03	08/16/06 17:56	25.0		+		+	+
188774-003	IC03	08/16/06 18:15	1.0			+		
188774-003	IC01	08/23/06 14:43	1.0	+				
188774-004	IC03	08/16/06 21:19	1.0			+		
188774-004	IC03	08/17/06 02:32	25.0		+		+	+
188774-004	IC01	08/23/06 15:00	1.0	+				
188774-006	IC03	08/16/06 21:37	1.0			+	+	
188774-006	IC03	08/17/06 02:50	25.0		+			+
188774-006	IC01	08/23/06 23:20	1.0	+				
188774-010	IC03	08/16/06 21:56	1.0			+		
188774-010	IC03	08/17/06 03:08	10.0		+		+	+
188774-010	IC01	08/23/06 23:55	1.0	+				
188774-011	IC03	08/16/06 22:14	1.0			+	+	
188774-011	IC03	08/17/06 04:40	25.0		+			+
188774-011	IC01	08/24/06 01:40	1.0	+				
188774-012	IC03	08/16/06 22:32	1.0			+	+	
188774-012	IC03	08/17/06 04:59	25.0		+			+
188774-012	IC01	08/24/06 02:15	1.0	+				
188774-013	IC03	08/17/06 00:23	1.0		+	+	+	+
188774-013	IC01	08/24/06 02:50	1.0	+				
188774-014	IC03	08/16/06 22:51	1.0			+		
188774-014	IC03	08/17/06 05:17	25.0		+		+	+
188774-014	IC01	08/24/06 03:25	1.0	+				
188774-015	IC03	08/17/06 00:41	1.0			+		
188774-015	IC03	08/17/06 05:36	25.0		+		+	+
188774-015	IC01	08/24/06 04:00	1.0	+				
188774-016	IC03	08/17/06 01:00	1.0			+	+	
188774-016	IC03	08/17/06 05:54	25.0		+			+
188774-016	IC01	08/24/06 04:35	1.0	+				

REPORTING SUMMARY FOR 188774 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analized	IDF	F	C	N	N	S
					L	O	O	O
						2	3	4
						N	N	
188774-017	IC03	08/17/06 01:18	1.0			+	+	
188774-017	IC03	08/17/06 06:13	10.0		+			+
188774-017	IC01	08/24/06 05:10	1.0	+				
188774-018	IC03	08/17/06 01:36	1.0			+	+	
188774-018	IC03	08/17/06 06:31	25.0		+			+
188774-018	IC01	08/24/06 05:45	1.0	+				
188774-019	IC03	08/17/06 01:55	1.0			+	+	
188774-019	IC03	08/17/06 06:49	25.0		+			+
188774-019	IC01	08/24/06 08:05	1.0	+				
QC352245	IC03	08/16/06 15:02	1.0		+	+	+	+
QC352246	IC03	08/16/06 15:20	1.0		+	+	+	+
QC352247	IC03	08/16/06 15:39	1.0		+	+	+	+
QC352248	IC03	08/16/06 19:47	50.0		+	+	+	+
QC352249	IC03	08/16/06 20:05	50.0		+	+	+	+
QC353262	IC01	08/23/06 13:15	1.0	+		+	+	
QC353263	IC01	08/23/06 13:33	1.0	+		+	+	
QC353264	IC01	08/23/06 13:50	1.0	+		+	+	
QC353265	IC01	08/23/06 19:49	1.02	+		+	+	
QC353266	IC01	08/23/06 20:24	1.02	+		+	+	
QC353272	IC01	08/24/06 07:30	1.0	+				
QC353273	IC01	08/24/06 07:47	1.0	+				
QC353274	IC01	08/24/06 08:40	1.02	+				
QC353275	IC01	08/24/06 09:15	1.02	+				

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 116500
 Date Started: 16-AUG-2006
 Batched by : Micah Smith

Analysis : N/A
 Bgroup : IC
 Department : GC Organics

Sample	Type	Client	Matrix	Analyses	Due Date
188756-002		LFR Levine Fricke	Water	CHLORIDE, SULFATE	21-AUG-2006
188756-004		LFR Levine Fricke	Water	CHLORIDE, SULFATE	21-AUG-2006
188756-005		LFR Levine Fricke	Water	CHLORIDE, SULFATE	21-AUG-2006
188756-006		LFR Levine Fricke	Water	CHLORIDE, SULFATE	21-AUG-2006
188767-002		Acme Fill Corp.	Water	NITRATE, NITRITE	28-AUG-2006
188774-001		Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	28-AUG-2006
188774-002		Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	28-AUG-2006
188774-003		Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	28-AUG-2006
188774-004		Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	28-AUG-2006
188774-006		Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	28-AUG-2006
188774-010		Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	28-AUG-2006
188774-011		Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	28-AUG-2006
188774-012		Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	28-AUG-2006
188774-013		Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	28-AUG-2006
188774-014		Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	28-AUG-2006
188774-015		Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	28-AUG-2006
188774-016		Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	28-AUG-2006
188774-017		Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	28-AUG-2006
188774-018		Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	28-AUG-2006
188774-019		Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	28-AUG-2006
QC352245	BLANK		Water		
QC352246	BS		Water		
QC352247	BSD		Water		
QC352248	MS	of 188774-003	Water		
QC352249	MSD	of 188774-003	Water		

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO₄) EPA 314
☐ Cr⁶⁺ EPA 7199

Batch#: 116500
 Date Started: 8/16/06
 Prep Chemist: MRS

BK 2373
 Page 4

	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	188756-002 G	5.26	100x	S	
2	-004	3.25			
3	-005	4.39			
4	-006	4.37			
5	188767-002 A-D	N/A	100x / 10x	P, Ag, Na, S	Comp. 1ml of each with A-D
6	188774-001 C	1.66	25x 1x	S	RRE 1x for F
7	-002 C	2.39	50x		
8	-003 M	1.40	25x		MSS
9	-004 E	1.36			
10	-006 B	1.06			
11	-010 I	0.75	10x		
12	-011 B	1.06	25x		
13	-012 I	1.34	25x		
14	-013 B	0.04			
15	-014 B	1.66	25x		
16	-015 B	1.67			
17	-016 B	1.66			
18	-017 B	0.99	10x		
19	-018 B	1.15	25x		
20	-019 D	1.42	25x		
	Blank QC352245	N/A	1x	N/A	
	BS QC352246				
	BSD QC352247				
	MS QC352248 M		50x	S	
	MSD QC352249 M		50x	S	

	Eluent Reagent ID	Mfg & Lot # / Time / Program	Initials / Date
BS/BSD Spiked with	0.2 mL of :	100x MRS 8/10/06	MRS 8/16/06
MS/MSD Spiked with	0.1 mL of :	53313	
Filters Used:	Ag: OnGuard II Ag	050622-1-Ag	
	Na: OnGuard II Na	050413-1-Na	
	P: OnGuard II P	050425-1-P	
	RP: OnGuard II RP	N/A	
	S: 0.20um/0.45um	Acrodisc lot #A10643613	

Extraction Chemist / Date

Continued from page
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Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 116740
 Date Started: 23-AUG-2006
 Batched by : Micah Smith

Analysis : N/A
 Bgroup : IC
 Department : GC Organics

Sample	Type	Client	Matrix	Analyses	Due Date
187854-008		MDL Studies	Water	BROMIDE, CHLORIDE, FLUORIDE, NITRATE, NITRITE	11-JUL-2006
188774-001		Treadwell & Rollo	Water	FLUORIDE	28-AUG-2006
188774-002		Treadwell & Rollo	Water	FLUORIDE	28-AUG-2006
188774-003		Treadwell & Rollo	Water	FLUORIDE	28-AUG-2006
188774-004		Treadwell & Rollo	Water	FLUORIDE	28-AUG-2006
188774-006		Treadwell & Rollo	Water	FLUORIDE	28-AUG-2006
188774-010		Treadwell & Rollo	Water	FLUORIDE	28-AUG-2006
188774-011		Treadwell & Rollo	Water	FLUORIDE	28-AUG-2006
188774-012		Treadwell & Rollo	Water	FLUORIDE	28-AUG-2006
188774-013		Treadwell & Rollo	Water	FLUORIDE	28-AUG-2006
188774-014		Treadwell & Rollo	Water	FLUORIDE	28-AUG-2006
188774-015		Treadwell & Rollo	Water	FLUORIDE	28-AUG-2006
188774-016		Treadwell & Rollo	Water	FLUORIDE	28-AUG-2006
188774-017		Treadwell & Rollo	Water	FLUORIDE	28-AUG-2006
188774-018		Treadwell & Rollo	Water	FLUORIDE	28-AUG-2006
188788-003		Union Sanitary Dis	Water	FLUORIDE	28-AUG-2006
188849-012		Union Sanitary Dis	Water	FLUORIDE	30-AUG-2006
188908-002		Acme Fill Corp.	Water	NITRATE, NITRITE	05-SEP-2006
188912-001		RMC Geoscience	Water	NITRATE	05-SEP-2006
188912-002		RMC Geoscience	Water	NITRATE	05-SEP-2006
QC353262	BLANK		Water		
QC353263	BS		Water		
QC353264	BSD		Water		
QC353265	MS	of 188774-001	Water		
QC353266	MSD	of 188774-001	Water		

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO₄) EPA 314
☐ Cr6+ EPA 7199

Batch#: 116740
 Date Started: 8/23/06
 Prep Chemist: MRS

BK 2373
 Page 12

	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	187854-008	N/A	1X	N/A	MOLCHECK
2	188774-001 C	1.66	1X	S	MSS
3	-002 C	2.39			
4	-003 M	1.40			
5	-004 E	1.36			
6	-006 B	1.06			
7	-010 I	0.75			
8	-011 D	1.06			
9	-012 I	1.34			
10	-013 B	0.04			
11	-014	1.66			
12	-015	1.67			
13	-016	0.99 1.66			
14	-017	1.15 0.99			
15	-018	1.42 1.15			
16	188788-003 A	1.74	1X	S	
17	188849-012 B	0.98	1X	S	
18	188908-002 A-D	N/A	100X 10X	P, Ag, Na, S	comp. 1ml of each bottle -002A, -002B, -002C, -002D
19	188912-001 G	5.40	100X 2X	S	
20	-002 G	3.47	100X 1X	S	
	Blank QC353262	N/A	1X	N/A	
	BS QC353263				
	BSD QC353264				
	MS QC353265 C		1.02X	S	
	MSD QC353266 C		1.02X	S	

Eluent Reagent ID		Mfg & Lot # / Time / Program	Initials / Date
BS/BSD Spiked with	0.2 mL of :	100X MRS 8/10/06	MRS 8/23/06
MS/MSD Spiked with	0.1 mL of :	53313	
Filters Used:	Ag: OnGuard II Ag	53313	
	Na: OnGuard II Na	050622-1-Ag	
	P: OnGuard II P	050413-1-Na	
	RP: OnGuard II RP	050425-1-P	
	S: 0.20um/0.45um	N/A	
		Acrodisc lot #A10643613	V

Extraction Chemist / Date

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Reviewed by Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 116742
 Date Started: 23-AUG-2006
 Batched by : Micah Smith

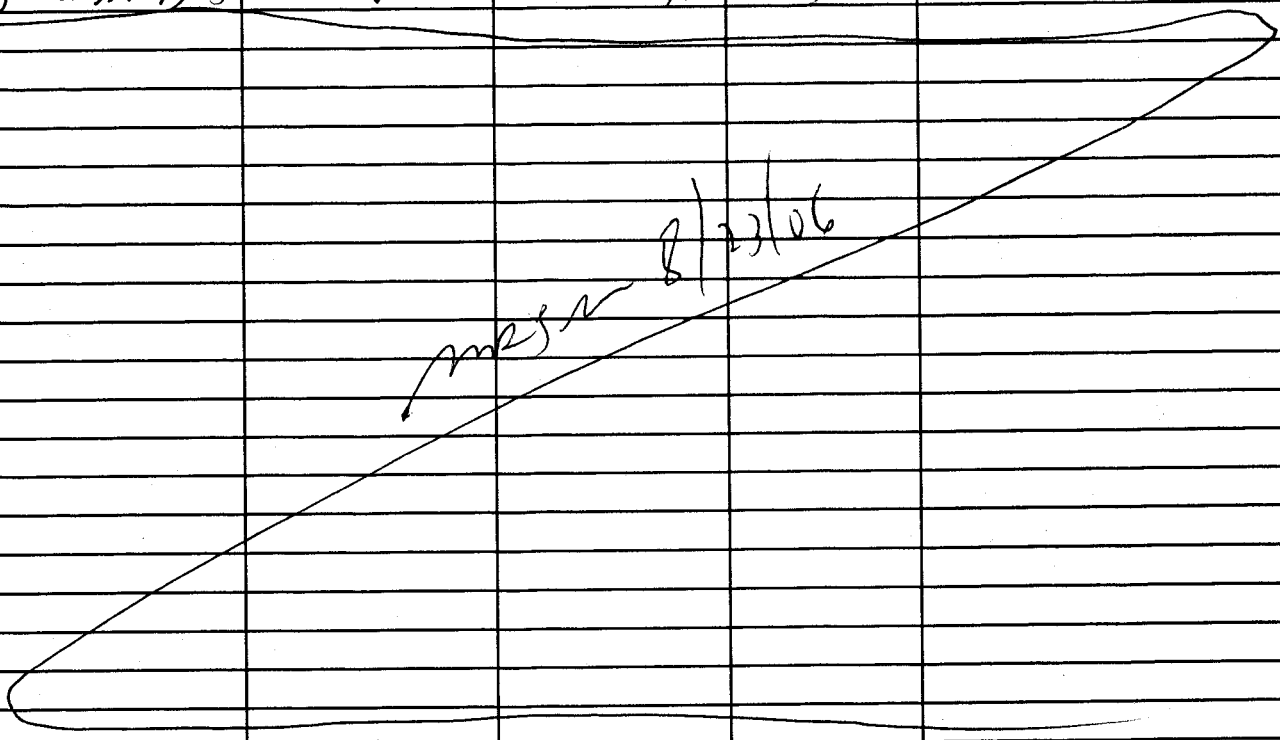
Analysis : N/A
 Bgroup : IC
 Department : GC Organics

Sample	Type	Client	Matrix	Analyses	Due Date
188774-019		Treadwell & Rollo	Water	FLUORIDE	28-AUG-2006
QC353272	BLANK		Water		
QC353273	LCS		Water		
QC353274	MS	of 188774-019	Water		
QC353275	MSD	of 188774-019	Water		

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO₄) EPA 314
☐ Cr6+ EPA 7199

Batch#: 116742
 Date Started: 8/23/06
 Prep Chemist: MRS

BK 2373
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	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	188774-019 B	1.42	1X	S	MSS
2	Blank QC353272	N/A	1X	N/A	
3	LCS QC353273	↓	↓	N/A	
4	M3 QC353274 B	↓	1.02X	S	
5	M50 QC353275 B	↓	1.02X	S	
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

Mfg & Lot # / Time / Program		Initials / Date
100X	MRS 8/14/06	MRS 8/23/06
Eluent Reagent ID	0.2 mL of : 53313	
MS/MSD Spiked with	0.1 mL of : 53313	
Filters Used:	Ag: OnGuard II Ag	
	Na: OnGuard II Na	
	P: OnGuard II P	
	RP: OnGuard II RP	
	S: 0.20um/0.45um	
Accessdisc lot # A10643613		

Extraction Chemist / Date

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Reviewed by / Date



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories
MDL Summary for EPA 300.0 Water
As of 09/18/06

Analyte	Units	IC03	IC01
Fluoride	mg/L	0.023	0.0096
Chloride	mg/L	0.032	0.044
Nitrogen, Nitrite	mg/L	0.012	0.0067
Bromide	mg/L	0.028	0.075
Nitrogen, Nitrate	mg/L	0.0088	0.014
Orthophosphate (as P)	mg/L	0.037	0.045
Sulfate	mg/L	0.079	0.046



Curtis & Tompkins, Ltd.

Sulfide

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Batch#:	116630
Matrix:	Water	Sampled:	08/15/06
Units:	mg/L	Received:	08/16/06
Diln Fac:	1.000	Analyzed:	08/22/06

Field ID	Type	Lab ID	Result	RL
231GW09	SAMPLE	188774-010	ND	0.04
1065PZ1B	SAMPLE	188774-012	0.05	0.04
	BLANK	QC352838	ND	0.04



Curtis & Tompkins, Ltd.

Batch QC Report

Sulfide

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Diln Fac:	1.000
Field ID:	1065PZ1B	Batch#:	116630
MSS Lab ID:	188774-012	Sampled:	08/15/06
Matrix:	Water	Received:	08/16/06
Units:	mg/L	Analyzed:	08/22/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC352839	0.04875	0.3025	0.2985	83	75-125		
MSD	QC352840		0.3025	0.3000	83	75-125	1	20
LCS	QC352841		0.4538	0.4385	97	75-125		

RPD= Relative Percent Difference

Analysis: **SULFIDE**
 Method: **EPA 376.2**
 Instrument: **HP UV-VIS Spectrometer**
 Wavelength: **626 nm**
 Matrix: **Water**

Batch: **116630**
 Prep Date: **8/22/2006**
 Analysis Date: **8/22/2006**
 Analyst: **DMC**

SAMPLE & BATCH QC DATA

Sample ID	Sample Vol (mL)	D.F.	Sample Absorb	Color Bik Absorb	Report mg/L	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	% Rec	% RPD
MB	7.5000	1.0000	-0.0009		ND	0.040					
LCS	7.5000	1.0000	0.1745		0.43849	0.040	1.0000	45.3760	0.4538	97	
188774-12	7.5000	1.0000	0.0194		0.04875	0.040					
188774-12m	7.5000	1.0000	0.1188		0.29852	0.040	0.0500	45.3760	0.3025	83	
188774-12m	7.5000	1.0000	0.1194		0.30003	0.040	0.0500	45.3760	0.3025	83	1
188756-2	7.5000	1.0000	0.0230		0.05780	0.040					
188756-3	7.5000	1.0000	-0.0042		ND	0.040					
188756-4	7.5000	1.0000	0.0105		ND	0.040					
188756-5	7.5000	1.0000	-0.0048		ND	0.040					
188756-6	7.5000	1.0000	-0.0042		ND	0.040					
188756-7	7.5000	1.0000	-0.0045		ND	0.040					
188756-9	7.5000	1.0000	-0.0046		ND	0.040					
188756-14	7.5000	1.0000	-0.0049		ND	0.040					
188756-15	7.5000	1.0000	0.0908		0.22816	0.040					
188756-16	7.5000	1.0000	-0.0009		ND	0.040					
188774-10	7.5000	1.0000	0.0001		ND	0.040					

QC Limits		RPD		Recovery	
LCS/BS/BSD	20	20	90 - 110		
MS/MSD	20	42	- 121		

Reviewed by/ Date:  8/28/06

Analysis: **SULFIDE**
 Method: **EPA 376.2**
 Instrument: HP UV-VIS Spectrometer
 Wavelength: 626 nm
 SOP#: sulfide_376_rv 4.doc

Matrix: Water
 Batch: **116630**
 Prep Date: **8/22/2006**
 Analysis Date: **8/22/2006**
 Analyst: DMC

INITIAL CALIBRATION DATA

Calibration Date: 11/15/05

Conc (mg/L)	Absorb	RF
0.0000	0.0001	
0.0233	0.0090	0.3863
0.0466	0.0156	0.3348
0.1862	0.0555	0.2981
0.3725	0.1650	0.4430
0.7450	0.3293	0.4420
1.3040	0.5687	0.4361
1.6760	0.7467	0.4455

Correlation Coefficient (r): 0.9994
 Avg Rf: 0.3980
 %RSD: 15.1

Note: Average Rf used to calculate sample results.

CONTINUING CALIBRATION DATA

	Absorb Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.1745	0.4385	97%	90 - 110%
ICB	-0.0009	-0.0023	0.0000	
CCV	0.1747	0.4390	97%	90 - 110%
CCB	-0.0001	-0.0003	0.0000	
CCV	0.1728	0.4342	96%	90 - 110%
CCB	-0.0004	-0.0010	0.0000	

---> Quantitation Results Report <---

Date : 08-11-2006
 Time : 10:10:05 ²² 8-2206 pm
 Operator : PAPDM

File Name : Data not stored yet

Sample Name : sulfide Analytical Wavelength : 626 nm
 Solvent Name : CAL11-15-05 Reference Wavelength : None Selected
 Conc Units : mg/L Confirmation Wavelengths : None Selected
 Dil. Factor : 1.00 Integration Time : 1 seconds

SAMPLE #	Sample Name	Wavelength	Func. Res.	Concentration
1	ICB/MB	Analytical	-0.0009	0.00000
2	ICV/LCS	Analytical	+0.1745	0.39530
3	188756-2	Analytical	+0.0230	0.05210
4	188756-3	Analytical	-0.0042	0.00000
5	188756-4	Analytical	+0.0105	0.02372
6	188756-5	Analytical	-0.0048	0.00000
7	188756-6	Analytical	-0.0042	0.00000
8	188756-7	Analytical	-0.0045	0.00000
9	188756-9	Analytical	-0.0046	0.00000
10	188756-14	Analytical	-0.0049	0.00000
11	CCV	Analytical	+0.1747	0.39589
12	CCB	Analytical	-0.0001	0.00000
13	188756-15	Analytical	+0.0908	0.20574
14	188756-16	Analytical	-0.0009	0.00000
15	188774-10	Analytical	+0.0001	2.420E-04
16	188774-12	Analytical	+0.0194	0.04401
17	188774-12MS	Analytical	+0.1188	0.26908
18	188774-12MSD	Analytical	+0.1194	0.27046
19	CCV	Analytical	+0.1728	0.39154
20	CCB	Analytical	-0.0004	0.00000

: 00498

---> Standard Calibration Report <---

Date : 08-²²11-2006
 Time : 10:10:23 8-22-06 *am*
 Operator : *PP DH*

File Name : C:\UV\DATA\SS1105.STD

Sample Name : sulfide Analytical Wavelength : 626 nm
 Solvent Name : CAL11-15-05 Reference Wavelength : None Selected
 Conc Units : mg/L Confirmation Wavelengths : None Selected
 Integration Time : 1 seconds

Analytical Function Concentration = +2.266E+00 * Absorbance

STD #	Concentration	Absorbance	% Error
1	0.00000	0.0001	*****
2	0.37250	0.1650	-0.366 %
3	0.74500	0.3293	-0.135 %
4	1.30400	0.5687	+1.198 %
5	1.67600	0.7467	-0.933 %
6	0.02330	0.0090	+14.422 %
7	0.04660	0.0156	+31.758 %
8	0.10620	0.0555	+48.042 %

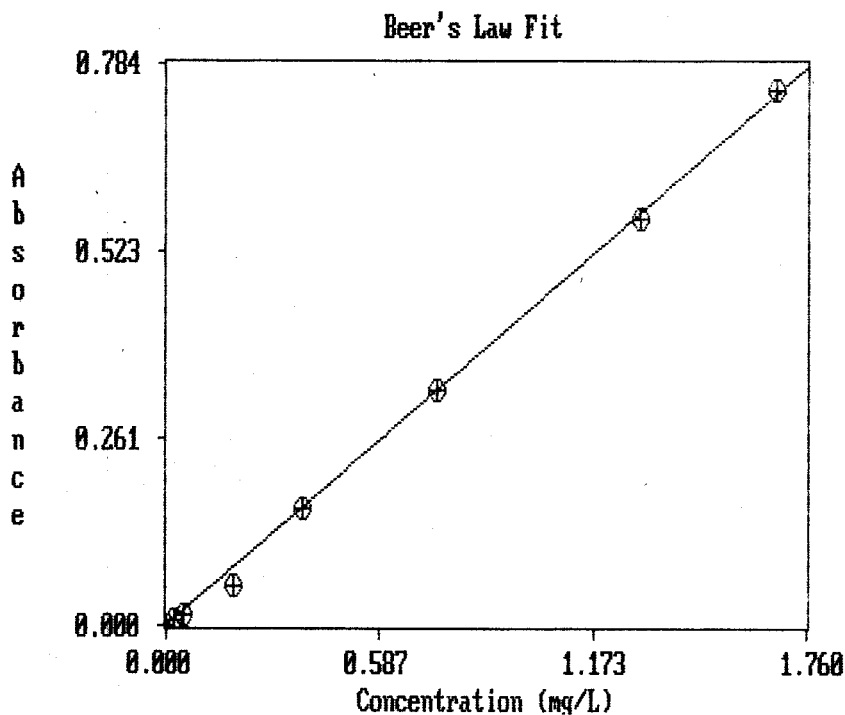
---> Standard Calibration Report <---

Date : 08-11-2006 ²²
 Time : 10:10:25 ²²⁻⁰⁶
 Operator : PAP ^{DM}

File Name : C:\UV\DATA\SS1105.STD

Sample Name : sulfide
 Solvent Name : CAL11-15-05
 Conc Units : mg/L

Analytical Wavelength : 626 nm
 Reference Wavelength : None Selected
 Confirmation Wavelengths : None Selected
 Integration Time : 1 seconds



Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 116630
 Date Started: 22-AUG-2006
 Batched by : Dennis McCanna

Analysis : SULFIDE
 Bgroup : N/A
 Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
188756-002		LFR Levine Fricke	Water	DISS SULFIDE	21-AUG-2006
188756-003		LFR Levine Fricke	Water	DISS SULFIDE	21-AUG-2006
188756-004		LFR Levine Fricke	Water	DISS SULFIDE	21-AUG-2006
188756-005		LFR Levine Fricke	Water	DISS SULFIDE	21-AUG-2006
188756-006		LFR Levine Fricke	Water	DISS SULFIDE	21-AUG-2006
188756-007		LFR Levine Fricke	Water	DISS SULFIDE	21-AUG-2006
188756-009		LFR Levine Fricke	Water	DISS SULFIDE	21-AUG-2006
188756-014		LFR Levine Fricke	Water	DISS SULFIDE	21-AUG-2006
188756-015		LFR Levine Fricke	Water	DISS SULFIDE	21-AUG-2006
188756-016		LFR Levine Fricke	Water	DISS SULFIDE	21-AUG-2006
188774-010		Treadwell & Rollo	Water	SULFIDE	28-AUG-2006
188774-012		Treadwell & Rollo	Water	SULFIDE	28-AUG-2006
QC352838	BLANK		Water	SULFIDE	
QC352839	MS	of 188774-012	Water	SULFIDE	
QC352840	MSD	of 188774-012	Water	SULFIDE	
QC352841	LCS		Water	SULFIDE	

Diss sulfide / Sulfide EPA 376.2		B 116630	
Sample Vol (ml)	Final Vol (ml)	ABS	
188756-2E	7.5	0.0230	
-3		-0.0042	
-4		0.0105	
-5		-0.0048	
-6		-0.0042	
-7		-0.0045	
-9		-0.0046	
-14		-0.0049	
-15		0.0908	
-16		-0.0009	
188774-10G		0.0001	
-120		0.0194	
-12MS	+0.05ml (45.3760 mg/L From 0455292)	1188	
-12HSD	10 ml @ HS	1194	
ICB/MB		-0.0009	
ICV/CCS	1 ml 45.3760 mg/L	1745	
CCV		1742	
CCB		-0.0001	
CCV		1728	
CCB		-0.0004	
S = std			
2.4g 0455292	50 ml DI H ₂ O		
1.0 ml S ₂			
9 ml I, 02363N	-0.11815		
38 ml S ₂ O ₃ , 02363N	-0.88979		
	0.02363 x 6000 = 453.76 mg/L		
	1.0		

Analysis: Sulfide
Method: EPA 376.2
Instrument: HP UV/Vis
Wavelength: 626 nm

Analysis Date: 4/14/2005
Analyst: DM

Instrument Calibrated to report sample results in concentration: mg/L

Concentration: 0.1098
Units: mg/L

1	0.100
2	0.104
3	0.105
4	0.096
5	0.096
6	0.095
7	0.092

Average: 0.098 ug/L
Std Deviation: 0.004691
Student T: 3.143

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev: 0.0147 mg/L
Reporting Limit: 0.04 mg/L
Status: PASS >1/3 RL

**Total Dissolved Solids (TDS)**

Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Batch#:	116608
Matrix:	Water	Sampled:	08/15/06
Units:	mg/L	Received:	08/16/06
Diln Fac:	1.000	Analyzed:	08/18/06

Field ID	Type	Lab ID	Result	RL
BB3GW100	SAMPLE	188774-003	800	50
DUP0815061A	SAMPLE	188774-004	860	50
231GW09	SAMPLE	188774-010	490	50
1065PZ1B	SAMPLE	188774-012	890	50
	BLANK	QC352744	ND	10

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Total Dissolved Solids (TDS)			
Lab #:	188774	Location:	Presidio of San Francisco
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Diln Fac:	1.000
Field ID:	BB3GW100	Batch#:	116608
MSS Lab ID:	188774-003	Sampled:	08/15/06
Matrix:	Water	Received:	08/16/06
Units:	mg/L	Analyzed:	08/18/06

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim
BS	QC352745		100.0	110.0		110	79-121		
BSD	QC352746		100.0	104.0		104	79-121	6	20
SDUP	QC352747	800.0		880.0	50.00			10	20

Analysis: **Total Dissolved Solids**
 Method: **EPA160.1 / SMWW 2540c**
 Matrix: **Water**
 SOP#: **tds_lv 9.doc**

Analysis Date: **18-Aug-06**
 Batch #: **116608**
 Analyst: **SJ**

BATCH QC DATA

Sample	Vol (mL) 50/vol	DF	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	Report (mg/L)	Reporting Limit (mg/L)	Spike Std Conc (mg/L)	Spike Vol Used (mL)	Spiking Level (mg/L)	Recovery, %	RPD, %
MB	50	1	50.3940	50.3943	0.0003	ND ✓	10					
BS	50	1	51.4856	51.4911	0.0055	110.0	10	1,000	5	100	110 ✓	
BSD	50	1	59.0005	59.0057	0.0052	104.0	10	1,000	5	100	104 ✓	5.61 ✓
188744-003	10	5	44.0353	44.0433	0.0080	800.0	50					
SDUP	10	5	45.3185	45.3273	0.0088	880.0	50					9.52 ✓

QC Limits		RPD		Recovery	
LCS/BS/BSD	20			79 - 121	
MS/MSD	20			69 - 131	

SAMPLE DATA

Sample	Vol (mL) 50/vol	DF	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	Report (mg/L)	Reporting Limit (mg/L)
188736-008	10	5	24.7432	24.7443	0.0011	110.0	50
188736-009	10	5	25.0866	25.0883	0.0017	170.0	50
188756-002	10	5	24.9366	24.9774	0.0408	4,080.0	50
188756-004	10	5	26.3676	26.3931	0.0255	2,550.0	50
188756-005	10	5	26.0444	26.0786	0.0342	3,420.0	50
188756-006	10	5	24.4214	24.4475	0.0261	2,610.0	50
188756-009	10	5	47.3371	47.3409	0.0038	380.0	50
188756-014	10	5	44.1450	44.1883	0.0433	4,330.0	50
188756-015	10	5	43.6420	43.6637	0.0217	2,170.0	50
188756-016	10	5	49.1740	49.1965	0.0225	2,250.0	50
188774-003	10	5	44.0353	44.0433	0.0080	800.0 ✓	50
188774-004	10	5	48.5374	48.5460	0.0086	860.0 ✓	50
188774-010	10	5	49.4799	49.4848	0.0049	490.0 ✓	50
188774-012	10	5	45.1218	45.1307	0.0089	890.0 ✓	50
188779-002	10	5	48.4898	48.5257	0.0359	3,590.0	50
188786-002	10	5	46.9573	47.0073	0.0500	5,000.0	50
188786-003	10	5	46.9090	46.9495	0.0405	4,050.0	50

188786-004	10	5	49.0650	49.1435	0.0785	7,850.0	50
188796-002	10	5	41.6678	41.6780	0.0102	1,020.0	50
188796-007	10	5	48.6806	48.6895	0.0089	890.0	50
188796-008	10	5	54.9939	55.0033	0.0094	940.0	50

Note: Because the regulatory holding time is based on the prep date, the analysis date referenced above is the prep date.

Reviewed by/ Date: *DMS/02/06*

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 116608
 Date Started: 21-AUG-2006
 Batched by : Stephanie Jim

Analysis : TDS
 Bgroup : N/A
 Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
188736-008		U.S. Army Corps of	Water	TDS	25-AUG-2006
188736-009		U.S. Army Corps of	Water	TDS	25-AUG-2006
188756-002		LFR Levine Fricke	Water	TDS	21-AUG-2006
188756-004		LFR Levine Fricke	Water	TDS	21-AUG-2006
188756-005		LFR Levine Fricke	Water	TDS	21-AUG-2006
188756-006		LFR Levine Fricke	Water	TDS	21-AUG-2006
188756-009		LFR Levine Fricke	Water	TDS	21-AUG-2006
188756-014		LFR Levine Fricke	Water	TDS	21-AUG-2006
188756-015		LFR Levine Fricke	Water	TDS	21-AUG-2006
188756-016		LFR Levine Fricke	Water	TDS	21-AUG-2006
188774-003		Treadwell & Rollo	Water	TDS	28-AUG-2006
188774-004		Treadwell & Rollo	Water	TDS	28-AUG-2006
188774-010		Treadwell & Rollo	Water	TDS	28-AUG-2006
188774-012		Treadwell & Rollo	Water	TDS	28-AUG-2006
188779-002		Green Environment,	Water	TDS	22-AUG-2006
188786-002		LFR Levine Fricke	Water	TDS	22-AUG-2006
188786-003		LFR Levine Fricke	Water	TDS	22-AUG-2006
188786-004		LFR Levine Fricke	Water	TDS	22-AUG-2006
188796-002		Treadwell & Rollo	Water	TDS	23-AUG-2006
188796-007		Treadwell & Rollo	Water	TDS	23-AUG-2006
188796-008		Treadwell & Rollo	Water	TDS	23-AUG-2006
QC352744	BLANK		Water	TDS	
QC352745	BS		Water	TDS	
QC352746	BSD		Water	TDS	
QC352747	SDUP	of 188774-003	Water	TDS	

LIMS Batch #: 116608Prep Date: 8/18/06Benchbook#: BK2254Prep Time: 16:00Page: 61Filter Mfg/ Lot#: G1848454Spike WS#: 53381Spike WS Conc (mg/L): 1000Spike Vol Added (mL): 5

	In	Out	In-2	Out-2	In-3	Out-3	In-4	Out-4
Date:	8/18/06	8/20/06	8/20/06	8/21/06	8/21/06	8/21/06	8/21/06	8/21/06
Time:	18:10	15:00	15:05	09:30	11:45	12:45	13:00	14:00
Temp (C):	90°C	180°C <i>Dmb 3/20</i>	180°	180°	180°	180°	180°	180°

Sample # / Letter	EC Value (µS/cm)	Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*	4th Dry Wt*
MB		50	SAM	50.3940	50.3942	50.3943	—	—
BS		↓	BOB	51.4856	51.4911	51.4911	—	—
BSD		↓	LOU	59.0005	59.0056	59.0057	—	—
188736-8A	137.1	10	TED	24.7432	24.7445	27.7443	—	—
-9 ↓	127		IRE	25.0866	25.0887	25.0883	—	—
188756-2F	4520		AL	24.9366	24.9783	24.9777	24.9774	—
-4 ↓	3270		BRA	26.3676	26.3930	26.3931	—	—
-5 ↓	3730		RON	26.0444	26.0800	26.0791	26.0786	—
-6 ↓	3810		IPA	24.4214	24.4473	24.4475	—	—
-9 G	6.79		TOM	47.3371	47.3414	47.3409	—	—
-14 F	3950		SOX	44.1450	44.1886	44.1883	—	—
-15 ↓	3150		CAT	49.1740	49.1989	49.1978	49.1966	49.1965
-16 G	3740		OG	43.6420	43.6650	43.6642	43.6637	—
188774-3 M	1226		SAL	44.0353	44.0447	44.0437	44.0433	—
188780-43 ↓	↓		OZ	45.3185	45.3286	45.3278	45.3273	—
-4 E	1271		RUM	48.5374	48.5472	48.5464	48.5460	48.5460
-10 I	691		GIN	49.4799	49.4868	49.4860	49.4848	49.4848
-12 ↓	1181		POO	45.1218	45.1310	45.1307	—	—
188779-2 H	460		NYC	48.4898	48.5295	48.5257	48.5257	—
188786-2 G	4790		GNFAM	46.9573	47.0089	47.0073	47.0073	—
-3 F	4920		GNR	46.9090	46.9495	46.9495	—	—
-4 G	5940		OJ	49.0650	49.1446	49.1440	49.1435	—
188796-2 J	1223		FAT	41.6678	41.6793	41.6784	41.6780	—
-7 ↓	1085		BAT	48.6806	48.6900	48.6895	—	—
-8 ↓	1078	✓	MAN	54.9939	55.0029	55.0033	—	—

* Constant weight must be within 0.0005 from previous reading.

Analyst / Date

8/18/06

Reviewed by / Date

00503



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

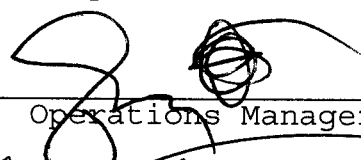
Laboratory Number 188802

Treadwell & Rollo
555 Montgomery Street
San Francisco, CA 94111

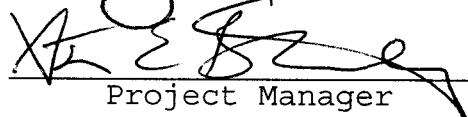
Project#: 2893.04.51
Location: Presidio

<u>Sample ID</u>	<u>Lab ID</u>
1349MW100	188802-001
1065PZ5AR	188802-002
LF6GW105	188802-003
LF6GW106	188802-004
1213GW101	188802-005
DUP0816063A	188802-006
NKGW04	188802-007
LF6GW103	188802-008
1065MW101	188802-009
DUP0816061A	188802-010
DUP0816061B	188802-011
1065MW102	188802-012
1065MW9A	188802-013
1065MW9B	188802-014
1065MW9BRB9A	188802-015
1047MW101	188802-016
LF4GW103	188802-017
LF4GW104	188802-018
TB081606A	188802-019
DUP0816062A	188802-020
1349MW100 RE	188802-021

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis.

Signature: 
Operations Manager

Date: 9/25/06

Signature: 
Project Manager

Date: 9/24/06

CASE NARRATIVE

Laboratory number: 188802
Client: Treadwell & Rollo
Project: 2893.04.51
Location: Presidio
Request Date: 08/17/06
Samples Received: 08/17/06

This hardcopy data package contains sample and QC results for twenty water samples, requested for the above referenced project on 08/17/06. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):

No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):

The requested matrix spikes were not reported for 1349MW100 (lab # 188802-001) because part of the matrix spike sample was lost during the extraction process. Insufficient sample remained to re-extract the matrix spikes. The LCS was within limits. No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):

High response was observed for vinyl acetate in the CCV analyzed 08/21/06 08:45; this analyte was not detected at or above the RL in the associated sample. No other analytical problems were encountered.

Pesticides (EPA 8081A):

Low responses were observed for many analytes in the ICV analyzed 08/21/06 22:31 and the ICV analyzed 08/28/06 14:47; average ICV drift met method requirements. High responses were observed for many analytes in the CCV analyzed 08/23/06 10:28, the CCV analyzed 08/24/06 10:16, and the CCV analyzed 08/24/06 18:44; average CCV drift met method requirements, and these analytes were not detected at or above the RL in the associated samples. Low responses were observed for many analytes in the CCV analyzed 08/23/06 15:44 and the CCV analyzed 08/29/06 12:41. High response was observed for endrin in the CCV analyzed 08/23/06 15:44; average CCV drift met method requirements. Low recoveries were observed for 4,4'-DDT and endrin in the MS/MSD of 1349MW100 (lab # 188802-001); the LCS was within limits, and the associated RPDs were within limits. High recoveries were observed for dieldrin; the LCS was within limits, the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated samples. Low surrogate recoveries were observed for decachlorobiphenyl and TCMX in sample 1349MW100 (188802-001). The sample was re-extracted 2 days past the EPA recommended hold time (188802-021, 1349MW100 RE); affected data was qualified with "b". Low surrogate recoveries for decachlorobiphenyl and TCMX in the re-extract confirmed matrix interference. No other analytical problems were encountered.

Polychlorinated Biphenyls (PCBs) (EPA 8082):

Low surrogate recoveries were observed for decachlorobiphenyl and TCMX in

CASE NARRATIVE

Laboratory number: 188802
Client: Treadwell & Rollo
Project: 2893.04.51
Location: Presidio
Request Date: 08/17/06
Samples Received: 08/17/06

Polychlorinated Biphenyls (PCBs) (EPA 8082):

sample 1349MW100 (188802-001). The sample was re-extracted 2 days past the EPA recommended hold time (188802-021, 1349MW100 RE); affected data was qualified with "b". Low surrogate recoveries for decachlorobiphenyl and TCMX in the re-extract confirmed matrix interference. No other analytical problems were encountered.

Polynuclear Aromatics by HPLC (EPA 8310):

Low recoveries were observed for benzo(a)pyrene, naphthalene, and pyrene in the MS/MSD of 1349MW100 (lab # 188802-001); the LCS was within limits. High recovery was observed for pyrene in the MSD of 1349MW100 (lab # 188802-001); the LCS was within limits. High RPD was also observed for pyrene in the MS/MSD of 1349MW100 (lab # 188802-001). Response exceeding the instrument's linear range was observed for fluorene in the MS of 1349MW100 (lab # 188802-001). High surrogate recoveries were observed for 1-methylnaphthalene (UV) in 1349MW100 (lab # 188802-001) and the MS/MSD of 1349MW100 (lab # 188802-001), due to matrix interference. High surrogate recovery was observed for 1-methylnaphthalene (F) in the MSD of 1349MW100 (lab # 188802-001), due to matrix interference. No other analytical problems were encountered.

Metals (EPA 6020 and EPA 7470A):

High responses were observed for magnesium in the CCV analyzed 08/25/06 02:09 and the CCV analyzed 08/25/06 03:28; this analyte was not detected at or above the RL in the associated sample. Low recoveries were observed for mercury in the MS/MSD of 1349MW100 (lab # 188802-001); the associated RPD was within limits. Responses exceeding the instrument's linear range were observed for many analytes in the MS/MSD of 1349MW100 (lab # 188802-001). No other analytical problems were encountered.

Ion Chromatography (EPA 300.0):

No analytical problems were encountered.

Alkalinity (EPA 310.1):

No analytical problems were encountered.

Sulfide (EPA 376.2):

No analytical problems were encountered.

Total Dissolved Solids (TDS) (EPA 160.1):

No analytical problems were encountered.

CASE NARRATIVE

Laboratory number: 188802
Client: Treadwell & Rollo
Project: 2893.04.51
Location: Presidio
Request Date: 08/17/06
Samples Received: 08/17/06

NDMA (EPA 1625):

Pacific Analytical, Inc. in Carlsbad, CA performed the analysis. Please see the Pacific Analytical, Inc. case narrative.

Chain of Custody

[illegible]

Project Name: Presidio of San Francisco										Project Manager: Joshua Graber										Turnaround Time: 10 Days									
Location: Presidio of San Francisco										Project Number: 2893																			
Sampled By (Firm and Samplers): <u>BTS/Will Crow</u>										Requested Analysis: <u>Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)</u>																			
Recorder (signature required): <u>[Signature]</u>																													
Sent to Laboratory (Name): <u>CE T</u>																													
SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix		Number of Containers and Preservation		REQUESTED ANALYSIS										COMMENTS / NOTES											
				Soil	Water	Other	HCl	H ₂ SO ₄	HNO ₃	NaOH	Other	TPHg (8015M)	TPHD (8015M)	TPHto (8015M)	VOCs (8260) <u>MTGE</u>	General Chemistry	OCPs (8081)		Metals - Dissolved (23, 22, 13, 9, 8, 7, 3, Other)	Metals - Total (23, 22, 13, 9, 8, 7, 3, Other)	PAHs (8310)	Metals - Dissolved (15)	PCBs (8082)	TPHs (8015)	GTEx/MTGE (8020)	Total sulfide 376.2	VOCs (8260)		
1065 MW9A	8/16/06	1240		X			6																						
1065 MW9B		1115					6																						
1065 MW9C		1210					6																						
1047 MW101		1005					6																						
LF4GW103		1400					3																						
LF4GW104		1430					3																						
TB081606A	8/16/06			X			2																						
DUP051606ZA		1250		X			6																						
Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate) 3 - Indicate in the metals column (by number) which metals list is requested. Metals Lists (23 - Al, Sb, As, Ba, Be, Cr, Cd, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Ti, V, and Zn) Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Ti, V, and Zn) (13 - As, Ca, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni, and Zn) (3 - Al, Fe, and Cr) (Other -)																													
RELINQUISHED BY: <u>[Signature]</u>										RECEIVED BY: <u>[Signature]</u>																			
PRINT NAME: <u>Will Crow</u>										PRINT NAME: <u>ARON GEEVER</u>																			
FIRM: <u>Will Crow</u>										FIRM: <u>CE T</u>																			
DATE: <u>8/17/06</u>										DATE: <u>8/17/06</u>																			
TIME: <u>1130</u>										TIME: <u>1130</u>																			
ADDITIONAL REMARKS / LABORATORY NOTES:																													

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 1 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd



COOLER RECEIPT CHECKLIST

Login#: 188802 Date Received: 8-17-06 Number of Coolers: 6
Client: Treadwell & Rollo Project: 2893.04.51

A. Preliminary Examination Phase

Date Opened: 8-17-06 By (print): Tray Windsor (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc.)?..... YES ☒ NO

If YES, enter carrier name and airbill number: _____

2. Were custody seals on outside of cooler?..... ☒ YES NO

How many and where? 1 per over cooler Seal date: 8/17/06 Seal name: Illegible (see below)

3. Were custody seals unbroken and intact at the date and time of arrival?..... ☒ YES NO

4. Were custody papers dry and intact when received?..... ☒ YES NO

5. Were custody papers filled out properly (ink, signed, etc.)?..... ☒ YES NO

6. Did you sign the custody papers in the appropriate place?..... ☒ YES NO

7. Was project identifiable from custody papers?..... ☒ YES NO

If YES, enter project name at the top of this form.

8. If required, was sufficient ice used? Samples should be 2-6 degrees C. ☒ YES NO

Type of ice: wet Temperature: 5.2 cold 5.6 4.0 5.7 3.4

(temp blank)

B. Login Phase

Date Logged In: 8-17-06 By (print): Tray Windsor (sign) [Signature]

1. Describe type of packing in cooler: in ziploc type bags

2. Did all bottles arrive unbroken?..... ☒ YES NO

3. Were labels in good condition and complete (ID, date, time, signature, etc.)?... ☒ YES NO

4. Did bottle labels agree with custody papers?..... ☒ YES NO

5. Were appropriate containers used for the tests indicated?..... ☒ YES NO

6. Were correct preservatives added to samples?..... ☒ YES NO

7. Was sufficient amount of sample sent for tests indicated?..... ☒ YES NO

8. Were bubbles absent in VOA samples? If NO, list sample IDs below..... YES ☒ NO

9. Was the client contacted concerning this sample delivery?..... YES NO

If YES, give details below.

Who was called? _____ By whom? _____ Date: _____

Additional Comments:

B8- Sample -001 17 of the 18 vials have air
bubbles of considerable size.

Filename: F:\qc\forms\qc\cooler.doc

	LOT#	<u>8/17/06</u>	
	SAMPLE ID		
	SAMPLED BY	<u>12</u>	DATE
	LOCATION		PRESERVATIVE
	ANALYSIS		CLIENT

TOTAL VOLATILE HYDROCARBONS/

BTXE

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1349MW100	Batch#:	116494
Lab ID:	188802-001	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Analyzed:	08/17/06
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	820 H Y	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	98	65-135
Bromofluorobenzene (FID)	115	65-135

H= Heavier hydrocarbons contributed to the quantitation
 Y= Sample exhibits chromatographic pattern which does not resemble standard
 RL= Reporting Limit

Chromatogram

Sample Name : mss,188802-001,116494,tvh only

FileName : G:\GC05\DATA\229G007.raw

Method : TVHBTXE

Start Time : 0.00 min

Scale Factor : 1.0

End Time : 25.00 min

Plot Offset: 6 mV

Sample #: a1.3

Date : 8/18/06 10:07 AM

Time of Injection: 8/17/06 06:02 PM

Low Point : 6.26 mV

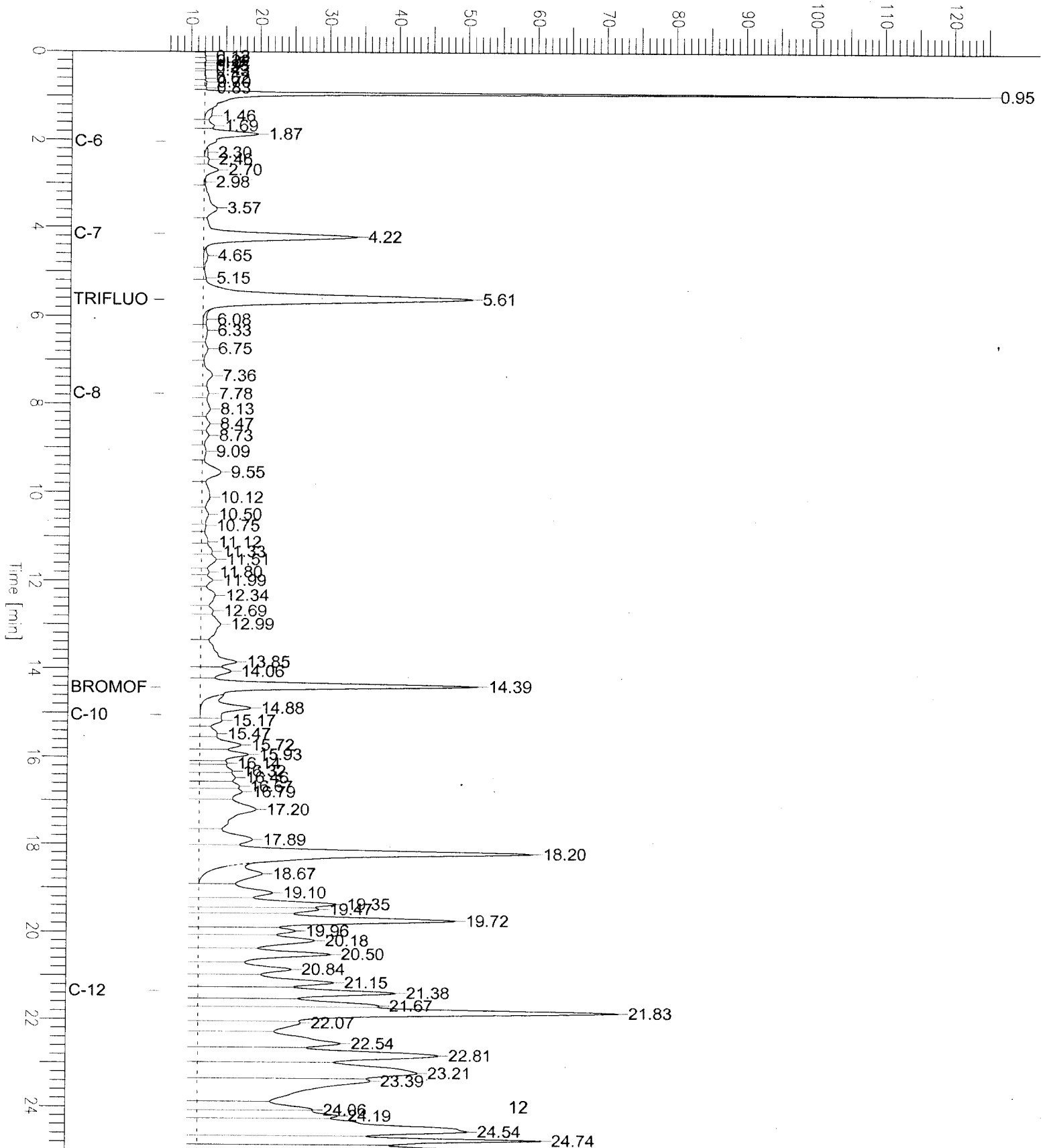
Plot Scale: 118.8 mV

Page 1 of 1

High Point : 125.08 mV

1349 MW100

Response [mV]



**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065PZ5AR	Batch#:	116494
Lab ID:	188802-002	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Analyzed:	08/17/06
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	3.9 C	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	93	65-135	EPA 8015B
Bromofluorobenzene (FID)	102	65-135	EPA 8015B
Trifluorotoluene (PID)	90	65-135	EPA 8021B
Bromofluorobenzene (PID)	99	65-135	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1213GW101	Batch#:	116494
Lab ID:	188802-005	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Analyzed:	08/18/06
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	150 L Y	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	121	65-135
Bromofluorobenzene (FID)	102	65-135

L= Lighter hydrocarbons contributed to the quantitation

Y= Sample exhibits chromatographic pattern which does not resemble standard

RL= Reporting Limit

Chromatogram

Sample Name : 188802-005,116494, tvh only

FileName : G:\GC05\DATA\229G020.raw

Method : TVHBTXE

Start Time : 0.00 min

Scale Factor: 1.0

End Time : 25.00 min

Plot Offset: 6 mV

Sample #: a2.2

Date : 8/18/06 01:21 AM

Time of Injection: 8/18/06 12:55 AM

Low Point : 6.32 mV

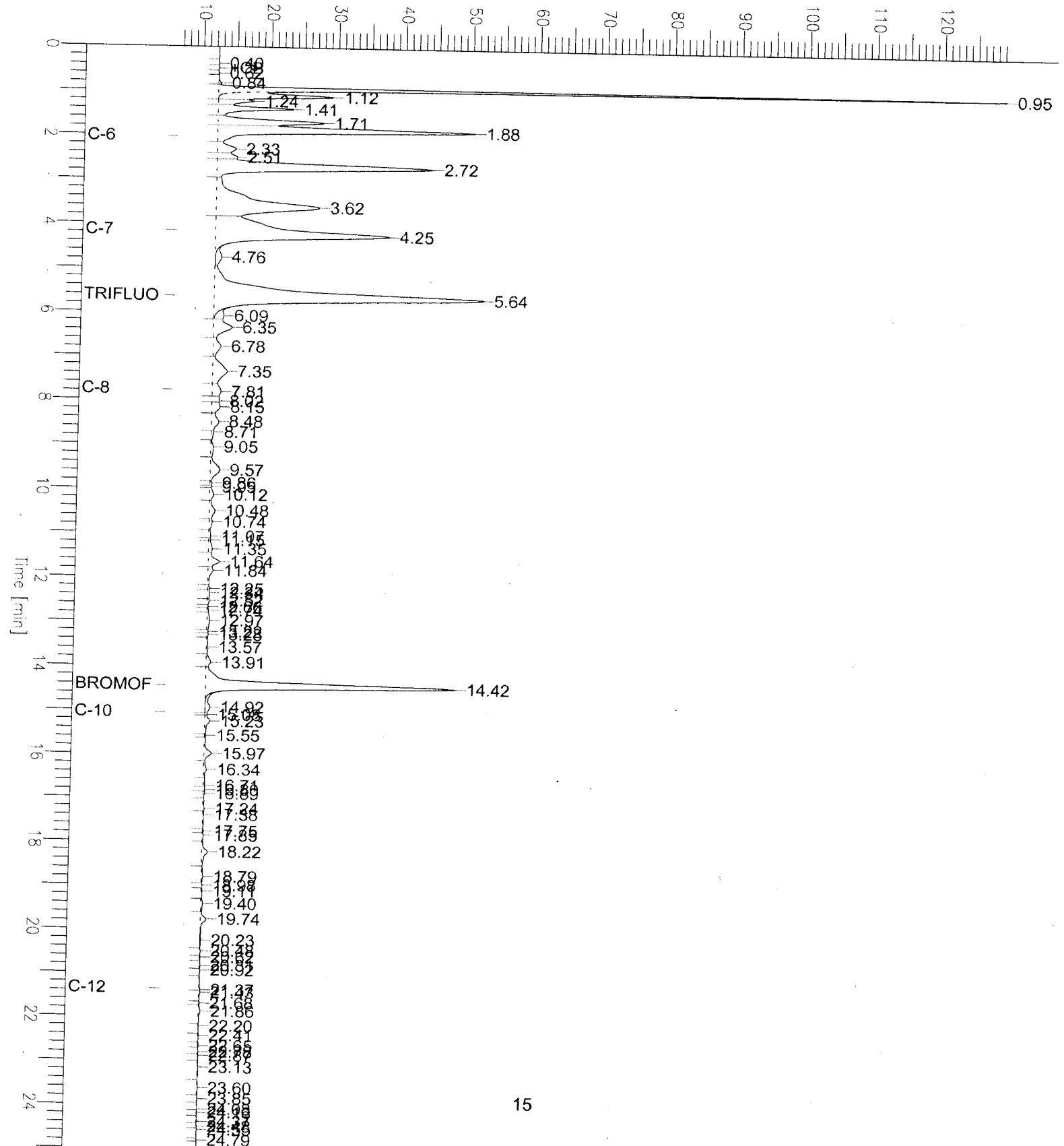
Plot Scale: 123.0 mV

Page 1 of 1

High Point : 129.30 mV

12136W(10)

Response [mV]



**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DUP0816063A	Batch#:	116494
Lab ID:	188802-006	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Analyzed:	08/18/06
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	340 L Y	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	111	65-135
Bromofluorobenzene (FID)	111	65-135

L= Lighter hydrocarbons contributed to the quantitation

Y= Sample exhibits chromatographic pattern which does not resemble standard

RL= Reporting Limit

Chromatogram

Sample Name : 188802-006,116494,tvh only

FileName : G:\GC05\DATA\229G021.raw

Method : TVHBTXE

Start Time : 0.00 min

End Time : 25.00 min

Scale Factor: 1.0

Plot Offset: 5 mV

Sample #: a2.2

Page 1 of 1

Date : 8/18/06 10:08 AM

Time of Injection: 8/18/06 01:28 AM

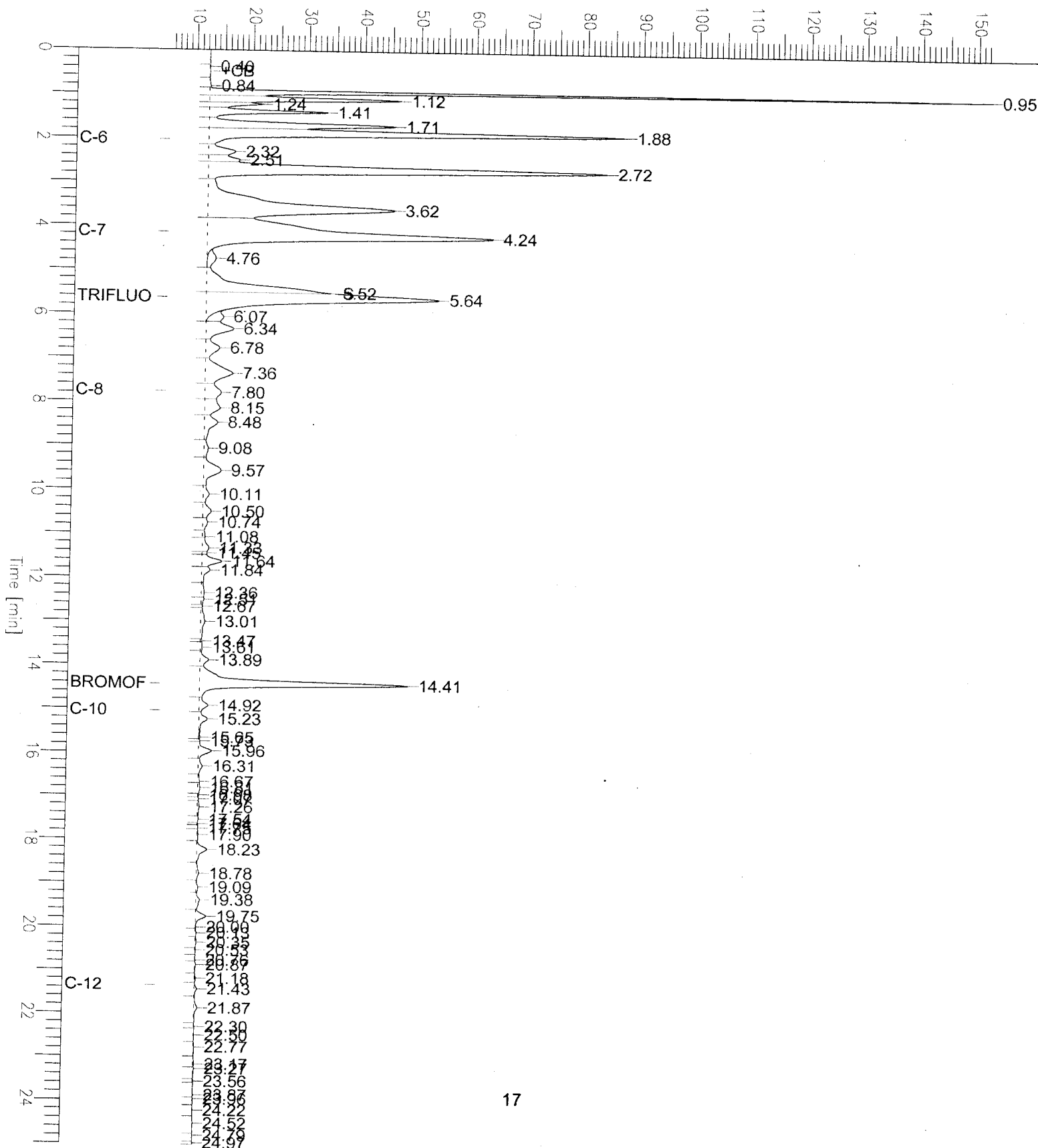
Low Point : 5.16 mV

High Point : 152.45 mV

Plot Scale: 147.3 mV

DUP 0816063A

Response [mV]



Curtis & Tompkins Laboratories Analytical Report

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	LF6GW103	Batch#:	116494
Lab ID:	188802-008	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Analyzed:	08/18/06
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	92	65-135
Bromofluorobenzene (FID)	101	65-135

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1065MW101	Batch#:	116494
Lab ID:	188802-009	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Analyzed:	08/18/06
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	90	65-135
Bromofluorobenzene (FID)	99	65-135

ND= Not Detected
RL= Reporting Limit

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DUP0816061A	Batch#:	116494
Lab ID:	188802-010	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Analyzed:	08/18/06
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	89	65-135
Bromofluorobenzene (FID)	101	65-135

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1065MW102	Batch#:	116494
Lab ID:	188802-012	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Analyzed:	08/18/06
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	87	65-135
Bromofluorobenzene (FID)	96	65-135

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065MW9A	Batch#:	116494
Lab ID:	188802-013	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Analyzed:	08/18/06
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	87	65-135	EPA 8015B
Bromofluorobenzene (FID)	90	65-135	EPA 8015B
Trifluorotoluene (PID)	88	65-135	EPA 8021B
Bromofluorobenzene (PID)	93	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065MW9B	Batch#:	116494
Lab ID:	188802-014	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Analyzed:	08/18/06
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	3.4 C	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	83	65-135	EPA 8015B
Bromofluorobenzene (FID)	83	65-135	EPA 8015B
Trifluorotoluene (PID)	83	65-135	EPA 8021B
Bromofluorobenzene (PID)	85	65-135	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065MW9BRB9A	Batch#:	116494
Lab ID:	188802-015	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Analyzed:	08/18/06
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	90	65-135	EPA 8015B
Bromofluorobenzene (FID)	95	65-135	EPA 8015B
Trifluorotoluene (PID)	91	65-135	EPA 8021B
Bromofluorobenzene (PID)	97	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1047MW101	Batch#:	116494
Lab ID:	188802-016	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Analyzed:	08/17/06
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Stoddard Solvent C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	85	65-135
Bromofluorobenzene (FID)	90	65-135

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	DUP0816062A	Batch#:	116494
Lab ID:	188802-020	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Analyzed:	08/18/06
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	2.3 C	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	91	65-135	EPA 8015B
Bromofluorobenzene (FID)	98	65-135	EPA 8015B
Trifluorotoluene (PID)	91	65-135	EPA 8021B
Bromofluorobenzene (PID)	99	65-135	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC352219	Batch#:	116494
Matrix:	Water	Analyzed:	08/17/06
Units:	ug/L		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
Stoddard Solvent C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	84	65-135	EPA 8015B
Bromofluorobenzene (FID)	85	65-135	EPA 8015B
Trifluorotoluene (PID)	84	65-135	EPA 8021B
Bromofluorobenzene (PID)	85	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Chromatogram

Sample Name : ccv/lcs,qc352221,116494,s3982,5/5000

FileName : G:\GC05\DATA\229G003.raw

Method : TVHBTXE

Start Time : 0.00 min

End Time : 25.00 min

Scale Factor : 1.0

Plot Offset : -4 mV

Sample #:

Page 1 of 1

Date : 8/17/06 03:31 PM

Time of Injection: 8/17/06 03:06 PM

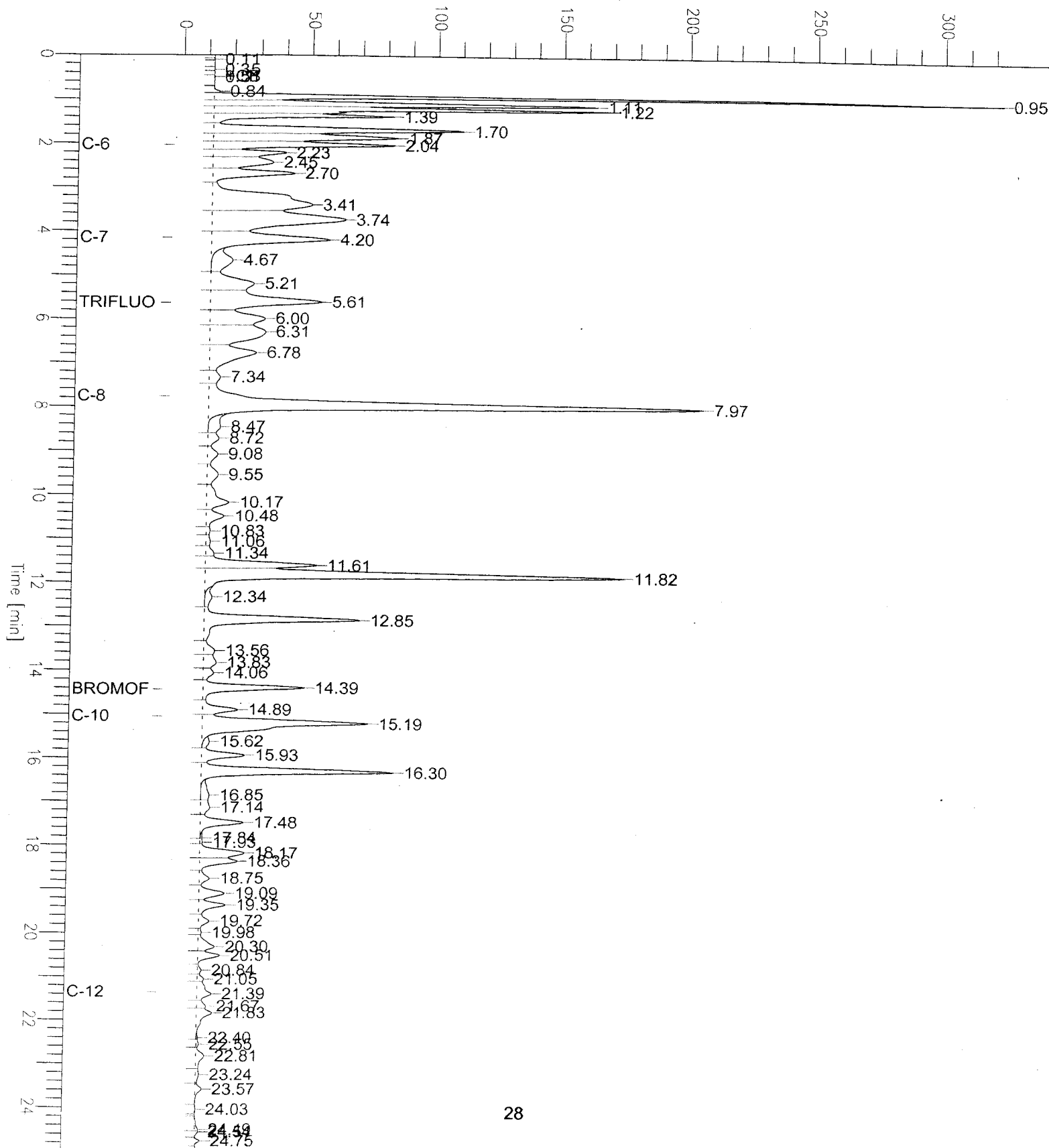
Low Point : -3.67 mV

High Point : 322.60 mV

Plot Scale: 326.3 mV

Gasoline

Response [mV]



Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC352220	Batch#:	116494
Matrix:	Water	Analyzed:	08/17/06
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	20.07	100	65-135
Benzene	20.00	19.01	95	65-135
Toluene	20.00	19.25	96	65-135
Ethylbenzene	20.00	19.32	97	65-135

Surrogate	%REC	Limits
Trifluorotoluene (PID)	102	65-135
Bromofluorobenzene (PID)	104	65-135

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC352221	Batch#:	116494
Matrix:	Water	Analyzed:	08/17/06
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,905	95	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	132	65-135
Bromofluorobenzene (FID)	107	65-135

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1349MW100	Batch#:	116494
MSS Lab ID:	188802-001	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Analyzed:	08/18/06
Diln Fac:	1.000		

Type: MS Lab ID: QC352307

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	819.9	2,000	2,745	96	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	103	65-135
Bromofluorobenzene (FID)	125	65-135

Type: MSD Lab ID: QC352308

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	2,616	90	65-135	5	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	107	65-135
Bromofluorobenzene (FID)	124	65-135



Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1047MW101	Batch#:	116494
MSS Lab ID:	188802-016	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Analyzed:	08/18/06
Diln Fac:	1.000		

Type: MS Lab ID: QC352309

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	18.97	2,000	1,905	94	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	132	65-135
Bromofluorobenzene (FID)	108	65-135

Type: MSD Lab ID: QC352310

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,894	94	65-135	1	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	125	65-135
Bromofluorobenzene (FID)	99	65-135

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188802 GCVOA water: EPA 8015B

Inst : GC05
 Calnum : 315421005001
 Units : ng

Name : stoddard 1pt
 Date : 19-OCT-2005 09:49
 X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	292_003	315421005003	stodd	19-OCT-2005 09:49	S736 (1000X), S1421 (5000X)

Analyte	Ch	LI	Type	a0	a1	a2	Avg	r ² %RSD	Mmr ²	MxRSD	Fig
Stoddard Solvent C7-Cl2	G	1843.8	AVRG		5.42E-4		1843.8	0	0.995	20	

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor
 Page 1 of 1

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188802 GCVOA water: EPA 8015B

Inst : GC05
Calnum : 316199245001
Units : ng

Name : GAS
Date : 18-MAY-2006 16:47
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Std
L1	138_006	316199245006	lvh 1	18-MAY-2006 16:47	S3460 (1000X), S3248 (5000X)
L2	138_007	316199245007	lvh 2	18-MAY-2006 17:19	S3459 (1000X), S3248 (5000X)
L3	138_008	316199245008	lvh 3	18-MAY-2006 17:51	S3458 (1000X), S3248 (5000X)
L4	138_009	316199245009	lvh 4	18-MAY-2006 18:23	S3457 (2000X), S3248 (5000X)
L5	138_010	316199245010	lvh 5	18-MAY-2006 18:55	S3457 (1000X), S3248 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ²	WRSD	MNR ²	WRSD	Fig
Gasoline C7-C12	G	1168.4	1143.2	1104.8	1017.7	1031.8	AVRG		9.15E-4		1093.2	6		0.995		20

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor
Page 1 of 1

316199245001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188802 GCVOA Water
EPA 8015B

Inst : GC05
Calnum : 316199245001

Name : GAS
Cal Date: 18-MAY-2006

ICV 316199245014 (138_014 18-MAY-2006) stds: S3323 (1000X), S3248 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Gasoline C7-C12	G	1093.2	1144.6	10000	10470	ng	5	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188802 GCVOA Water: EPA 8021B

Inst : GC05
 Calnum : 316256980002
 Units : ng

Name : MBTXE
 Date : 27-JUN-2006 16:28
 X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Std
L1	178_009	316256980009	BTXE 1	27-JUN-2006 16:28	S3735 (1000X), S3248 (5000X)
L2	178_010	316256980010	MTBE 1	27-JUN-2006 17:00	S3734 (1250X), S3248 (5000X)
L3	178_011	316256980011	BTXE 2	27-JUN-2006 17:32	S3734 (500X), S3248 (5000X)
L4	178_012	316256980012	BTXE 3	27-JUN-2006 18:04	S3734 (125X), S3248 (5000X)
L5	178_013	316256980013	BTXE 4	27-JUN-2006 18:36	S3733 (1000X), S3248 (5000X)
L6	178_014	316256980014	BTXE 5	27-JUN-2006 19:08	S3733 (500X), S3248 (5000X)
L7	178_015	316256980015	BTXE 6	27-JUN-2006 19:40	S3733 (250X), S3248 (5000X)
L8	178_016	316256980016	MTXE 7	27-JUN-2006 20:12	S3732 (500X), S3248 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Type	a0	a1	a2	Avg	r ²	MnR ²	MxRSD	Fig
MTBE	H		560.00	564.60	549.20	648.24	656.83	625.10	603.21	AVRG		0.00166		601.03	7	0.995	20	
Benzene	H	1644.0		1532.6	1540.3	1729.3	1759.0	1690.0		AVRG		6.06E-4		1649.2	6	0.995	20	
Toluene	H	1536.0		1553.2	1518.4	1663.8	1681.2	1582.5		AVRG		6.29E-4		1589.2	4	0.995	20	
Ethylbenzene	H	1184.0		1286.0	1308.1	1478.3	1511.0	1414.6		AVRG		7.33E-4		1363.7	9	0.995	20	
m,p-Xylenes	H	1520.0		1563.6	1546.9	1744.1	1743.2	1615.3		AVRG		6.16E-4		1622.2	6	0.995	20	
o-Xylene	H	1273.9		1321.2	1302.8	1445.8	1453.5	1354.3		AVRG		7.36E-4		1358.6	6	0.995	20	
MTBE	I		476.45	453.49	444.88	596.37	647.83	659.37	672.40	AVRG		0.00177		564.40	18	0.995	20	
Benzene	I	1289.0		1312.1	1383.2	1770.1	1882.0	1898.0		AVRG		6.29E-4		1589.1	18	0.995	20	
Toluene	I	1888.0		1184.7	1232.1	1680.9	1802.3	1780.7		AVRG		6.27E-4		1594.8	19	0.995	20	
Ethylbenzene	I	1519.8		1024.4	1142.4	1514.8	1639.4	1619.3		AVRG		7.09E-4		1410.0	18	0.995	20	
m,p-Xylenes	I	1360.1		1208.5	1338.5	1759.4	1907.0	1886.4		AVRG		6.34E-4		1576.7	20	0.995	20	
o-Xylene	I	1497.0		1024.6	1082.5	1478.8	1596.4	1590.2		AVRG		7.26E-4		1378.2	19	0.995	20	

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188802 GCVOA Water
EPA 8021B

Inst : GC05
Calnum : 316256980002

Name : MBTXE
Cal Date: 27-JUN-2006

ICV 316256980019 (178_019 27-JUN-2006) stds: S3079 (1000X), S3248 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
MTBE	H	601.03	551.90	100.0	91.83	ng	-8	15	
Benzene	H	1649.2	1657.6	100.0	100.5	ng	1	15	
Toluene	H	1589.2	1640.1	100.0	103.2	ng	3	15	
Ethylbenzene	H	1363.7	1396.6	100.0	102.4	ng	2	15	
m,p-Xylenes	H	1622.2	1736.9	200.0	214.1	ng	7	15	
o-Xylene	H	1358.6	1419.3	100.0	104.5	ng	4	15	
MTBE	I	564.40	507.26	100.0	89.88	ng	-10	15	
Benzene	I	1589.1	1656.4	100.0	104.2	ng	4	15	
Toluene	I	1594.8	1536.9	100.0	96.37	ng	-4	15	
Ethylbenzene	I	1410.0	1327.0	100.0	94.11	ng	-6	15	
m,p-Xylenes	I	1576.7	1644.5	200.0	208.6	ng	4	15	
o-Xylene	I	1378.2	1243.6	100.0	90.23	ng	-10	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188802 GCVOA Water: EPA 8015B / EPA 8021B

Inst : GC05
Calnum : 316256980001
Units : ng

Name : TFT/BFB
Date : 27-JUN-2006 11:32
X Axis : R

Reviewer: MCH

Level	File	Segment	Sample ID	Analyzed	Std
L1	178_002	316256980002	TFT/BFB 1	27-JUN-2006 11:32	S3289 (5000X)
L2	178_003	316256980003	TFT/BFB 2	27-JUN-2006 12:15	S3290 (5000X)
L3	178_004	316256980004	TFT/BFB 3	27-JUN-2006 12:48	S3291 (5000X)
L4	178_005	316256980005	TFT/BFB 4	27-JUN-2006 13:20	S3292 (5000X)
L5	178_006	316256980006	TFT/BFB 5	27-JUN-2006 14:00	S3293 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	R ²	RRSD	MnR ²	MKRSD	Flg
Trifluorotoluene (FID)	G	1196.5	1050.6	1047.7	1080.5	1028.7	AVRG		9.25E-4		1080.8	6	0.995		20	
Bromofluorobenzene (FID)	G	715.53	622.35	643.36	685.08	654.33	AVRG		0.00151		664.13	6	0.995		20	
Trifluorotoluene (PID)	H	428.47	388.60	416.82	454.90	440.54	AVRG		0.00235		425.87	6	0.995		20	
Bromofluorobenzene (PID)	H	826.27	773.56	859.00	931.80	902.86	AVRG		0.00116		858.70	7	0.995		20	
Trifluorotoluene (PID)	I	389.06	351.31	377.77	409.07	403.16	AVRG		0.00259		386.07	6	0.995		20	
Bromofluorobenzene (PID)	I	808.06	758.25	827.88	934.38	905.97	AVRG		0.00118		846.91	9	0.995		20	

CONTINUING CALIBRATION SUMMARY FOR 188802 GCVOA Water
Curtis & Tompkins Laboratories

Analyte: Gasoline C7-C12

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D	Flags
						RF/CF	RF/CF						
GC05	G	316330603003	17-AUG-2006 15:06	316199245001	18-MAY-2006	1093.2	1041.5	10000	9527.5	ng	-5 15		u
GC05	G	316330603016	17-AUG-2006 22:47	316199245001	18-MAY-2006	1093.2	1048.2	15000	14383	ng	-4 15		
GC05	G	316330603017	17-AUG-2006 23:19	316199245001	18-MAY-2006	1093.2	1033.2	15000	14176	ng	-5 15		
GC05	G	316330603032	18-AUG-2006 07:20	316199245001	18-MAY-2006	1093.2	1066.4	5000.0	4877.7	ng	-2 15		
GC05	G	316330603033	18-AUG-2006 07:52	316199245001	18-MAY-2006	1093.2	1054.6	5000.0	4823.7	ng	-4 15		
GC05	G	316330603039	18-AUG-2006 11:02	316199245001	18-MAY-2006	1093.2	1031.0	10000.0	9430.8	ng	-6 15		

u=use

CONTINUING CALIBRATION SUMMARY FOR 188802 GCVOA Water
Curtis & Tompkins Laboratories

Analyte: Stoddard Solvent C7-C12

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D Flags
						RF/CF	RF/CF					
GC05	G	316330603005	17-AUG-2006 16:59	315421005001	19-OCT-2005	1843.8	1688.7	10000.0	9158.8	ng	-8	15
GC05	G	316330603018	17-AUG-2006 23:51	315421005001	19-OCT-2005	1843.8	1760.8	10000.0	9550.1	ng	-4	15

CONTINUING CALIBRATION SUMMARY FOR 188802 GCVOA Water
Curtis & Tompkins Laboratories

Analyte: MTBE

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D	Max	%D	Flags
						RF/CF	RF/CF							
GC05	H	316330603002	17-AUG-2006 14:35	316256980002	27-JUN-2006	601.03	603.25	100.00	100.37	ng	0	15		u
GC05	I	316330603002	17-AUG-2006 14:35	316256980002	27-JUN-2006	564.40	550.50	100.00	97.538	ng	-2	15		
GC05	H	316330603014	17-AUG-2006 21:44	316256980002	27-JUN-2006	601.03	572.03	150.00	142.76	ng	-5	15		
GC05	I	316330603014	17-AUG-2006 21:44	316256980002	27-JUN-2006	564.40	543.29	150.00	144.39	ng	-4	15		
GC05	H	316330603015	17-AUG-2006 22:16	316256980002	27-JUN-2006	601.03	600.73	150.00	149.93	ng	0	15		
GC05	I	316330603015	17-AUG-2006 22:16	316256980002	27-JUN-2006	564.40	564.75	150.00	150.09	ng	0	15		
GC05	H	316330603030	18-AUG-2006 06:17	316256980002	27-JUN-2006	601.03	658.78	50.000	54.805	ng	10	15		
GC05	I	316330603030	18-AUG-2006 06:17	316256980002	27-JUN-2006	564.40	620.84	50.000	55.000	ng	10	15		

u=use

CONTINUING CALIBRATION SUMMARY FOR 188802 GCVOA Water
Curtis & Tompkins Laboratories

Analyte: Benzene

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D	Max	%D	Flags
						RF/CF	RF/CF							
GC05	H	316330603002	17-AUG-2006 14:35	316256980002	27-JUN-2006	1649.2	1567.2	100.00	95.029	ng	-5	15		u
GC05	I	316330603002	17-AUG-2006 14:35	316256980002	27-JUN-2006	1589.1	1518.2	100.00	95.539	ng	-4	15		
GC05	H	316330603014	17-AUG-2006 21:44	316256980002	27-JUN-2006	1649.2	1532.1	150.00	139.35	ng	-7	15		
GC05	I	316330603014	17-AUG-2006 21:44	316256980002	27-JUN-2006	1589.1	1546.9	150.00	146.02	ng	-3	15		
GC05	H	316330603015	17-AUG-2006 22:16	316256980002	27-JUN-2006	1649.2	1563.8	150.00	142.23	ng	-5	15		
GC05	I	316330603015	17-AUG-2006 22:16	316256980002	27-JUN-2006	1589.1	1570.9	150.00	148.28	ng	-1	15		
GC05	H	316330603030	18-AUG-2006 06:17	316256980002	27-JUN-2006	1649.2	1548.9	50.000	46.959	ng	-6	15		
GC05	I	316330603030	18-AUG-2006 06:17	316256980002	27-JUN-2006	1589.1	1502.0	50.000	47.261	ng	-5	15		

u=use

CONTINUING CALIBRATION SUMMARY FOR 188802 GCVOA Water
Curtis & Tompkins Laboratories

Analyte: Toluene

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D	Flags
						RF/CF	RF/CF						
GC05	H	316330603002	17-AUG-2006 14:35	316256980002	27-JUN-2006	1589.2	1529.6	100.00	96.252	ng	-4	15	u
GC05	I	316330603002	17-AUG-2006 14:35	316256980002	27-JUN-2006	1594.8	1420.9	100.00	89.099	ng	-11	15	
GC05	H	316330603014	17-AUG-2006 21:44	316256980002	27-JUN-2006	1589.2	1460.7	150.00	137.87	ng	-8	15	
GC05	I	316330603014	17-AUG-2006 21:44	316256980002	27-JUN-2006	1594.8	1374.6	150.00	129.29	ng	-14	15	
GC05	H	316330603015	17-AUG-2006 22:16	316256980002	27-JUN-2006	1589.2	1465.1	150.00	138.29	ng	-8	15	
GC05	I	316330603015	17-AUG-2006 22:16	316256980002	27-JUN-2006	1594.8	1401.2	150.00	131.80	ng	-12	15	
GC05	H	316330603030	18-AUG-2006 06:17	316256980002	27-JUN-2006	1589.2	1499.5	50.000	47.179	ng	-6	15	
GC05	I	316330603030	18-AUG-2006 06:17	316256980002	27-JUN-2006	1594.8	1340.6	50.000	42.030	ng	-16	15	c- *** EL conf.

Quantile
mm³ 8/15/06

--=low bias c=CCV u=use

CONTINUING CALIBRATION SUMMARY FOR 188802 GCVOA Water
Curtis & Tompkins Laboratories

Analyte: Ethylbenzene

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D	Max	%D	Flags
						RF/CF	RF/CF							
GC05	H	316330603002	17-AUG-2006 14:35	316256980002	27-JUN-2006	1363.7	1317.2	100.00	96.592	ng	-3	15		u
GC05	I	316330603002	17-AUG-2006 14:35	316256980002	27-JUN-2006	1410.0	1248.5	100.00	88.545	ng	-11	15		
GC05	H	316330603014	17-AUG-2006 21:44	316256980002	27-JUN-2006	1363.7	1293.6	150.00	142.29	ng	-5	15		
GC05	I	316330603014	17-AUG-2006 21:44	316256980002	27-JUN-2006	1410.0	1229.5	150.00	130.80	ng	-13	15		
GC05	H	316330603015	17-AUG-2006 22:16	316256980002	27-JUN-2006	1363.7	1262.7	150.00	138.89	ng	-7	15		
GC05	I	316330603015	17-AUG-2006 22:16	316256980002	27-JUN-2006	1410.0	1250.8	150.00	133.06	ng	-11	15		
GC05	H	316330603030	18-AUG-2006 06:17	316256980002	27-JUN-2006	1363.7	1258.6	50.000	46.145	ng	-8	15		
GC05	I	316330603030	18-AUG-2006 06:17	316256980002	27-JUN-2006	1410.0	1185.6	50.000	42.042	ng	-16	15		c- *** El cont

Quantok

mmms/14/10

-=low bias c=CCV u=use

CONTINUING CALIBRATION SUMMARY FOR 188802 GCVOA Water
Curtis & Tompkins Laboratories

Analyte: m,p-Xylenes

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	OntAmt	Units	%D	Max	%D	Flags
						RF/CF	RF/CF							
GC05	H	316330603002	17-AUG-2006 14:35	316256980002	27-JUN-2006	1622.2	1811.2	100.00	111.65	ng	12	15		u
GC05	I	316330603002	17-AUG-2006 14:35	316256980002	27-JUN-2006	1576.7	1625.1	100.00	103.07	ng	3	15		
GC05	H	316330603014	17-AUG-2006 21:44	316256980002	27-JUN-2006	1622.2	1707.0	150.00	157.84	ng	5	15		
GC05	I	316330603014	17-AUG-2006 21:44	316256980002	27-JUN-2006	1576.7	1623.1	150.00	154.42	ng	3	15		
GC05	H	316330603015	17-AUG-2006 22:16	316256980002	27-JUN-2006	1622.2	1779.2	150.00	164.52	ng	10	15		
GC05	I	316330603015	17-AUG-2006 22:16	316256980002	27-JUN-2006	1576.7	1641.3	150.00	156.15	ng	4	15		
GC05	H	316330603030	18-AUG-2006 06:17	316256980002	27-JUN-2006	1622.2	1790.4	50.000	55.187	ng	10	15		
GC05	I	316330603030	18-AUG-2006 06:17	316256980002	27-JUN-2006	1576.7	1595.4	50.000	50.596	ng	1	15		

u=use

CONTINUING CALIBRATION SUMMARY FOR 188802 GCVOA Water
Curtis & Tompkins Laboratories

Analyte: o-Xylene

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D Flags
						RF/CF	RF/CF					
GC05	H	316330603002	17-AUG-2006 14:35	316256980002	27-JUN-2006	1358.6	1347.2	100.00	99.162	ng	-1 15	u
GC05	I	316330603002	17-AUG-2006 14:35	316256980002	27-JUN-2006	1378.2	1240.3	100.00	89.994	ng	-10 15	
GC05	H	316330603014	17-AUG-2006 21:44	316256980002	27-JUN-2006	1358.6	1305.5	150.00	144.14	ng	-4 15	
GC05	I	316330603014	17-AUG-2006 21:44	316256980002	27-JUN-2006	1378.2	1217.7	150.00	132.53	ng	-12 15	
GC05	H	316330603015	17-AUG-2006 22:16	316256980002	27-JUN-2006	1358.6	1304.7	150.00	144.05	ng	-4 15	
GC05	I	316330603015	17-AUG-2006 22:16	316256980002	27-JUN-2006	1378.2	1246.7	150.00	135.68	ng	-10 15	
GC05	H	316330603030	18-AUG-2006 06:17	316256980002	27-JUN-2006	1358.6	1334.0	50.000	49.095	ng	-2 15	
GC05	I	316330603030	18-AUG-2006 06:17	316256980002	27-JUN-2006	1378.2	1218.8	50.000	44.217	ng	-12 15	

u=use

CONTINUING CALIBRATION SUMMARY FOR 188802 GCVOA Water
Curtis & Tompkins Laboratories

Analyte: Trifluorotoluene (FID)

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D	Flags
						RF/CF	RF/CF						
GC05	G	316330603002	17-AUG-2006 14:35	316256980001	27-JUN-2006	1080.8	1014.2	450.00	422.26	ng	-6	15	
GC05	G	316330603003	17-AUG-2006 15:06	316256980001	27-JUN-2006	1080.8	1424.4	450.00	593.06	ng	32	15	c+ u <i>pass</i>
GC05	G	316330603014	17-AUG-2006 21:44	316256980001	27-JUN-2006	1080.8	981.82	450.00	408.79	ng	-9	15	
GC05	G	316330603030	18-AUG-2006 06:17	316256980001	27-JUN-2006	1080.8	1007.3	450.00	419.41	ng	-7	15	
GC05	G	316330603039	18-AUG-2006 11:02	316256980001	27-JUN-2006	1080.8	1345.3	450.00	560.12	ng	24	15	c+

mmp slider

Laboratory limits:

69-137%

as 8/29/06

+ = high bias c = CCV u = use

CONTINUING CALIBRATION SUMMARY FOR 188802 GCVOA Water
Curtis & Tompkins Laboratories

Analyte: Bromofluorobenzene (FID)

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D	Max	%D	Flags
						RF/CF	RF/CF							
GC05	G	316330603002	17-AUG-2006 14:35	316256980001	27-JUN-2006	664.13	661.17	450.00	447.99	ng	0	15		
GC05	G	316330603003	17-AUG-2006 15:06	316256980001	27-JUN-2006	664.13	712.49	450.00	482.77	ng	7	15	u	
GC05	G	316330603014	17-AUG-2006 21:44	316256980001	27-JUN-2006	664.13	637.67	450.00	432.07	ng	-4	15		
GC05	G	316330603030	18-AUG-2006 06:17	316256980001	27-JUN-2006	664.13	643.17	450.00	435.80	ng	-3	15		
GC05	G	316330603039	18-AUG-2006 11:02	316256980001	27-JUN-2006	664.13	669.15	450.00	453.40	ng	1	15		

u=use

CONTINUING CALIBRATION SUMMARY FOR 188802 GCVOA Water
Curtis & Tompkins Laboratories

Analyte: Trifluorotoluene (PID)

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D	Max	%D	Flags
						RF/CF	RF/CF							
GC05	H	316330603002	17-AUG-2006 14:35	316256980001	27-JUN-2006	425.87	432.53	450.00	457.04	ng	2	15		u
GC05	I	316330603002	17-AUG-2006 14:35	316256980001	27-JUN-2006	386.07	377.20	450.00	439.66	ng	-2	15		
GC05	H	316330603014	17-AUG-2006 21:44	316256980001	27-JUN-2006	425.87	396.03	450.00	418.48	ng	-7	15		
GC05	I	316330603014	17-AUG-2006 21:44	316256980001	27-JUN-2006	386.07	350.82	450.00	408.91	ng	-9	15		
GC05	H	316330603030	18-AUG-2006 06:17	316256980001	27-JUN-2006	425.87	399.67	450.00	422.31	ng	-6	15		
GC05	I	316330603030	18-AUG-2006 06:17	316256980001	27-JUN-2006	386.07	351.44	450.00	409.63	ng	-9	15		

u=use

CONTINUING CALIBRATION SUMMARY FOR 188802 GCVOA Water
Curtis & Tompkins Laboratories

Analyte: Bromofluorobenzene (PID)

Instid	Ch	Segnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D	Flags
						RF/CF	RF/CF						
GC05	H	316330603002	17-AUG-2006 14:35	316256980001	27-JUN-2006	858.70	891.28	450.00	467.07	ng	4	15	u
GC05	I	316330603002	17-AUG-2006 14:35	316256980001	27-JUN-2006	846.91	870.15	450.00	462.35	ng	3	15	
GC05	H	316330603014	17-AUG-2006 21:44	316256980001	27-JUN-2006	858.70	840.29	450.00	440.35	ng	-2	15	
GC05	I	316330603014	17-AUG-2006 21:44	316256980001	27-JUN-2006	846.91	834.76	450.00	443.54	ng	-1	15	
GC05	H	316330603030	18-AUG-2006 06:17	316256980001	27-JUN-2006	858.70	836.98	450.00	438.62	ng	-3	15	
GC05	I	316330603030	18-AUG-2006 06:17	316256980001	27-JUN-2006	846.91	821.21	450.00	436.34	ng	-3	15	

u=use

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories
Sequence: 31619245 Instrument: GC05 Gas Chromatograph #5 TVH/BTXE
Analytical Method: EPA 8015B SOP Version: TVH_BTXE_rv11
Analytical Method: EPA 8021B SOP Version: TVH_BTXE_rv13
Begun: 18-MAY-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
001	138_001	X	ib			18-MAY-2006 08:45	1.0						1		
002	138_002	X	QC340572	113573	Water	18-MAY-2006 09:17	1.0						2	1	Not used
003	138_003	X	QC340573	113573	Water	18-MAY-2006 09:49	1.0						3	1	
004	138_004	X	QC340571	113573	Water	18-MAY-2006 10:21	1.0						1		
005	138_005	X	ib			18-MAY-2006 16:15	1.0						1		
006	138_006	ICAL	tvh 1			18-MAY-2006 16:47	1.0						4	1	Pass, use
007	138_007	ICAL	tvh 2			18-MAY-2006 17:19	1.0						5	1	
008	138_008	ICAL	tvh 3			18-MAY-2006 17:51	1.0						6	1	
009	138_009	ICAL	tvh 4			18-MAY-2006 18:23	1.0						7	1	
010	138_010	ICAL	tvh 5			18-MAY-2006 18:55	1.0						7	1	
011	138_011	X	ib			18-MAY-2006 19:27	1.0						1		
012	138_012	X	carbamark			18-MAY-2006 19:58	1.0						8	9	1 use
013	138_013	X	ib			18-MAY-2006 20:30	1.0						1		
014	138_014	ICV	tvh			18-MAY-2006 21:02	1.0			5000			3	1	Pass, use

Stds used: 1=S3248 2=S3406 3=S3323 4=S3460 5=S3459 6=S3458 7=S3457 8=S1645 9=S1646

Analyst: Micaela G. Perez Date: 05/22/06
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Micaela G. Perez 05/22/06
Signed Date
Read and Understood By Micaela G. Perez 05/22/06
Signed Date

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 316256980 Instrument: GC05
Analytical Method: EPA 8015B
Analytical Method: EPA 8021B

Gas Chromatograph #5 TVH/BTXE
SOP Version: TVH BTXE rv11
SOP Version: TVH BTXE rv13

Begun: 27-JUN-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Std	Used	>LR
001	178_001	X	IB			27-JUN-2006	11:00	1.0					1		
002	178_002	ICAL	TFT/BFB 1			27-JUN-2006	11:32	1.0					2	PASS/USE	
003	178_003	ICAL	TFT/BFB 2			27-JUN-2006	12:15	1.0					3		
004	178_004	ICAL	TFT/BFB 3			27-JUN-2006	12:48	1.0					4		
005	178_005	ICAL	TFT/BFB 4			27-JUN-2006	13:20	1.0					5		
006	178_006	ICAL	TFT/BFB 5			27-JUN-2006	14:00	1.0					6		
007	178_007	X	IB			27-JUN-2006	15:24	1.0					1		
008	178_008	X	IB			27-JUN-2006	15:56	1.0					1		
009	178_009	ICAL	BTXE 1			27-JUN-2006	16:28	1.0					7	PASS/USE	
010	178_010	ICAL	MTBE 1			27-JUN-2006	17:00	1.0					8		
011	178_011	ICAL	BTXE 2			27-JUN-2006	17:32	1.0					8		
012	178_012	ICAL	BTXE 3			27-JUN-2006	18:04	1.0					8		
013	178_013	ICAL	BTXE 4			27-JUN-2006	18:36	1.0					9		
014	178_014	ICAL	BTXE 5			27-JUN-2006	19:08	1.0					9		
015	178_015	ICAL	BTXE 6			27-JUN-2006	19:40	1.0					9		
016	178_016	ICAL	MTBE 7			27-JUN-2006	20:12	1.0					10		
017	178_017	X	IB			27-JUN-2006	20:44	1.0					1		
018	178_018	X	MTBE			27-JUN-2006	21:16	1.0					11	Not Used	
019	178_019	ICV	MTBE			27-JUN-2006	21:48	1.0					11	PASS/USE	

Std's used: 1-S3248 2-S3289 3-S3290 4-S3291 5-S3292 6-S3293 7-S3735 8-S3734 9-S3733 10-S3732 11-S3079

Analyst: [Signature] Date: 6/28/06

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Read and Understood By

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6/28/06
Date

52

[Signature]
Signed

6/28/06
Date

Date

[Signature] 6/28/06

PROJECT GC05 Sequence Log BookContinued From Page SEQUENCE SUMMARY
Curtis & Tompkins LaboratoriesSequence: 316330603 Instrument: GC05
Analytical Method: EPA 8015B
Analytical Method: EPA 8021BGas Chromatograph #5 TVH/BTXE
SOP Version: TVH_BTXE_rv11
SOP Version: TVH_BTXE_rv13

Begun: 17-AUG-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
001	229_001	X	IB			17-AUG-2006 14:03	1.0						1		
002	229_002	CCV/LCS	QC352220	116494	Water	17-AUG-2006 14:35	1.0			5000			2	1	Passure
003	229_003	CCV/LCS	QC352221	116494	Water	17-AUG-2006 15:06	1.0			5000			3	1	
004	229_004	X	IB			17-AUG-2006 15:38	1.0						1		
005	229_005	CCV	STODD	116494		17-AUG-2006 16:59	1.0			5000			4	1	Passure
006	229_006	BLANK	QC352219	116494	Water	17-AUG-2006 17:30	1.0	2		5000			1	1	1/2 hr
007	229_007	MSS	188802-001	116494	Water	17-AUG-2006 18:02	1.0	2		5000	A	13	1		
008	229_008	X	QC352307	116494	Water	17-AUG-2006 18:34	1.0			5000			3	1	FAIL - Analyte, PP
009	229_009	X	QC352308	116494	Water	17-AUG-2006 19:06	1.0		1	5000			3	1	
010	229_010	MSS	188802-016	116494	Water	17-AUG-2006 19:37	1.0	2		5000			1		
011	229_011	X	QC352309	116494	Water	17-AUG-2006 20:09	1.0	2		5000			4	1	PP w/ TVH spike
012	229_012	X	QC352310	116494	Water	17-AUG-2006 20:41	1.0	2		5000			4	1	
013	229_013	SAMPLE	188802-002	116494	Water	17-AUG-2006 21:12	1.0			5000			1		
014	229_014	CCV	MBTXE	116494		17-AUG-2006 21:44	1.0			5000			2	1	Passure
015	229_015	CCV	MBTXE	116494		17-AUG-2006 22:16	1.0			5000			2	1	
016	229_016	CCV	TVH	116494		17-AUG-2006 22:47	1.0			5000			3	1	
017	229_017	CCV	TVH	116494		17-AUG-2006 23:19	1.0			5000			3	1	
018	229_018	CCV	STODD	116494		17-AUG-2006 23:51	1.0			5000			4	1	
019	229_019	CCV	STODD	116494		18-AUG-2006 00:23	1.0			5000			4	1	
020	229_020	SAMPLE	188802-005	116494	Water	18-AUG-2006 00:55	1.0			5000	A	12	1		
021	229_021	SAMPLE	188802-006	116494	Water	18-AUG-2006 01:28	1.0			5000			1		
022	229_022	SAMPLE	188802-008	116494	Water	18-AUG-2006 02:00	1.0			5000			1		
023	229_023	SAMPLE	188802-009	116494	Water	18-AUG-2006 02:32	1.0			5000			1		
024	229_024	SAMPLE	188802-010	116494	Water	18-AUG-2006 03:04	1.0			5000			1		
025	229_025	SAMPLE	188802-012	116494	Water	18-AUG-2006 03:37	1.0			5000			1		
026	229_026	SAMPLE	188802-013	116494	Water	18-AUG-2006 04:09	1.0	2		5000			1		
027	229_027	SAMPLE	188802-014	116494	Water	18-AUG-2006 04:41	1.0	2		5000			1		
028	229_028	SAMPLE	188802-015	116494	Water	18-AUG-2006 05:13	1.0	2		5000			1		
029	229_029	SAMPLE	188802-020	116494	Water	18-AUG-2006 05:45	1.0	2		5000			1		
030	229_030	CCV	MBTXE	116494		18-AUG-2006 06:17	1.0	2		5000			2	1	Passure

Stds used: 1=S3969 2=S4123 3=S3982 4=S3641

Analyst: Michael J. L. Date: 08/18/06
Page 1 of 2SEQUENCE SUMMARY
Curtis & Tompkins LaboratoriesSequence: 316330603 Instrument: GC05
Analytical Method: EPA 8015B
Analytical Method: EPA 8021BGas Chromatograph #5 TVH/BTXE
SOP Version: TVH_BTXE_rv11
SOP Version: TVH_BTXE_rv13

Begun: 17-AUG-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
031	229_031	CCV	MBTXE	116494		18-AUG-2006 06:48	1.0	1		5000			2	1	Passure
032	229_032	CCV	TVH	116494		18-AUG-2006 07:20	1.0			5000			3	1	
033	229_033	CCV	TVH	116494		18-AUG-2006 07:52	1.0			5000			3	1	
034	229_034	SAMPLE	188808-031	116494	Water	18-AUG-2006 08:23	1.0			5000	B	13	1		
035	229_035	MS	QC352309	116494	Water	18-AUG-2006 08:55	1.0			5000	A	13	1	Passure	
036	229_036	MSD	QC352310	116494	Water	18-AUG-2006 09:27	1.0			5000			3	1	
037	229_037	MS	QC352307	116494	Water	18-AUG-2006 09:58	1.0			5000	B	13	1		
038	229_038	MSD	QC352308	116494	Water	18-AUG-2006 10:30	1.0			5000			3	1	
039	229_039	CCV	TVH	116494		18-AUG-2006 11:02	1.0			5000			3	1	

Stds used: 1=S3969 2=S4123 3=S3982 4=S3641

Analyst: Michael J. L. Date: 08/18/06
Page 2 of 2Continued on Page

Read and Understood By

Signed Michael J. L.Date 08/18/06 53Signed Michael J. L.Date 08/18/06

REPORTING SUMMARY FOR 188802 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
188802-001	Gasoline C7-C12	GC05	G	08/17/06 18:02
188802-001	Trifluorotoluene (FID)	GC05	G	08/17/06 18:02
188802-001	Bromofluorobenzene (FID)	GC05	G	08/17/06 18:02
188802-002	Gasoline C7-C12	GC05	G	08/17/06 21:12
188802-002	MTBE	GC05	H	08/17/06 21:12
188802-002	Benzene	GC05	H	08/17/06 21:12
188802-002	Toluene	GC05	H	08/17/06 21:12
188802-002	Ethylbenzene	GC05	H	08/17/06 21:12
188802-002	Trifluorotoluene (FID)	GC05	G	08/17/06 21:12
188802-002	Bromofluorobenzene (FID)	GC05	G	08/17/06 21:12
188802-002	Trifluorotoluene (PID)	GC05	H	08/17/06 21:12
188802-002	Bromofluorobenzene (PID)	GC05	H	08/17/06 21:12
188802-002	Xylene (total)	GC05	H	08/17/06 21:12
188802-005	Gasoline C7-C12	GC05	G	08/18/06 00:55
188802-005	Trifluorotoluene (FID)	GC05	G	08/18/06 00:55
188802-005	Bromofluorobenzene (FID)	GC05	G	08/18/06 00:55
188802-006	Gasoline C7-C12	GC05	G	08/18/06 01:28
188802-006	Trifluorotoluene (FID)	GC05	G	08/18/06 01:28
188802-006	Bromofluorobenzene (FID)	GC05	G	08/18/06 01:28
188802-008	Gasoline C7-C12	GC05	G	08/18/06 02:00
188802-008	Trifluorotoluene (FID)	GC05	G	08/18/06 02:00
188802-008	Bromofluorobenzene (FID)	GC05	G	08/18/06 02:00
188802-009	Gasoline C7-C12	GC05	G	08/18/06 02:32
188802-009	Trifluorotoluene (FID)	GC05	G	08/18/06 02:32
188802-009	Bromofluorobenzene (FID)	GC05	G	08/18/06 02:32
188802-010	Gasoline C7-C12	GC05	G	08/18/06 03:04
188802-010	Trifluorotoluene (FID)	GC05	G	08/18/06 03:04
188802-010	Bromofluorobenzene (FID)	GC05	G	08/18/06 03:04
188802-012	Gasoline C7-C12	GC05	G	08/18/06 03:37
188802-012	Trifluorotoluene (FID)	GC05	G	08/18/06 03:37
188802-012	Bromofluorobenzene (FID)	GC05	G	08/18/06 03:37
188802-013	Gasoline C7-C12	GC05	G	08/18/06 04:09
188802-013	MTBE	GC05	H	08/18/06 04:09
188802-013	Benzene	GC05	H	08/18/06 04:09
188802-013	Toluene	GC05	H	08/18/06 04:09
188802-013	Ethylbenzene	GC05	H	08/18/06 04:09
188802-013	Trifluorotoluene (FID)	GC05	G	08/18/06 04:09
188802-013	Bromofluorobenzene (FID)	GC05	G	08/18/06 04:09
188802-013	Trifluorotoluene (PID)	GC05	H	08/18/06 04:09
188802-013	Bromofluorobenzene (PID)	GC05	H	08/18/06 04:09
188802-013	Xylene (total)	GC05	H	08/18/06 04:09
188802-014	Gasoline C7-C12	GC05	G	08/18/06 04:41
188802-014	MTBE	GC05	H	08/18/06 04:41
188802-014	Benzene	GC05	H	08/18/06 04:41
188802-014	Toluene	GC05	H	08/18/06 04:41

REPORTING SUMMARY FOR 188802 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
188802-014	Ethylbenzene	GC05	H	08/18/06 04:41
188802-014	Trifluorotoluene (FID)	GC05	G	08/18/06 04:41
188802-014	Bromofluorobenzene (FID)	GC05	G	08/18/06 04:41
188802-014	Trifluorotoluene (PID)	GC05	H	08/18/06 04:41
188802-014	Bromofluorobenzene (PID)	GC05	H	08/18/06 04:41
188802-014	Xylene (total)	GC05	H	08/18/06 04:41
188802-015	Gasoline C7-C12	GC05	G	08/18/06 05:13
188802-015	MTBE	GC05	H	08/18/06 05:13
188802-015	Benzene	GC05	H	08/18/06 05:13
188802-015	Toluene	GC05	H	08/18/06 05:13
188802-015	Ethylbenzene	GC05	H	08/18/06 05:13
188802-015	Trifluorotoluene (FID)	GC05	G	08/18/06 05:13
188802-015	Bromofluorobenzene (FID)	GC05	G	08/18/06 05:13
188802-015	Trifluorotoluene (PID)	GC05	H	08/18/06 05:13
188802-015	Bromofluorobenzene (PID)	GC05	H	08/18/06 05:13
188802-015	Xylene (total)	GC05	H	08/18/06 05:13
188802-016	Gasoline C7-C12	GC05	G	08/17/06 19:37
188802-016	Stoddard Solvent C7-C12	GC05	G	08/17/06 19:37
188802-016	Trifluorotoluene (FID)	GC05	G	08/17/06 19:37
188802-016	Bromofluorobenzene (FID)	GC05	G	08/17/06 19:37
188802-020	Gasoline C7-C12	GC05	G	08/18/06 05:45
188802-020	MTBE	GC05	H	08/18/06 05:45
188802-020	Benzene	GC05	H	08/18/06 05:45
188802-020	Toluene	GC05	H	08/18/06 05:45
188802-020	Ethylbenzene	GC05	H	08/18/06 05:45
188802-020	Trifluorotoluene (FID)	GC05	G	08/18/06 05:45
188802-020	Bromofluorobenzene (FID)	GC05	G	08/18/06 05:45
188802-020	Trifluorotoluene (PID)	GC05	H	08/18/06 05:45
188802-020	Bromofluorobenzene (PID)	GC05	H	08/18/06 05:45
188802-020	Xylene (total)	GC05	H	08/18/06 05:45
QC352219	Gasoline C7-C12	GC05	G	08/17/06 17:30
QC352219	Stoddard Solvent C7-C12	GC05	G	08/17/06 17:30
QC352219	MTBE	GC05	H	08/17/06 17:30
QC352219	Benzene	GC05	H	08/17/06 17:30
QC352219	Toluene	GC05	H	08/17/06 17:30
QC352219	Ethylbenzene	GC05	H	08/17/06 17:30
QC352219	Trifluorotoluene (FID)	GC05	G	08/17/06 17:30
QC352219	Bromofluorobenzene (FID)	GC05	G	08/17/06 17:30
QC352219	Trifluorotoluene (PID)	GC05	H	08/17/06 17:30
QC352219	Bromofluorobenzene (PID)	GC05	H	08/17/06 17:30
QC352219	Xylene (total)	GC05	H	08/17/06 17:30
QC352220	MTBE	GC05	H	08/17/06 14:35
QC352220	Benzene	GC05	H	08/17/06 14:35
QC352220	Toluene	GC05	H	08/17/06 14:35
QC352220	Ethylbenzene	GC05	H	08/17/06 14:35
QC352220	Trifluorotoluene (PID)	GC05	H	08/17/06 14:35
QC352220	Bromofluorobenzene (PID)	GC05	H	08/17/06 14:35
QC352221	Gasoline C7-C12	GC05	G	08/17/06 15:06

REPORTING SUMMARY FOR 188802 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC352221	Trifluorotoluene (FID)	GC05	G	08/17/06 15:06
QC352221	Bromofluorobenzene (FID)	GC05	G	08/17/06 15:06
QC352307	Gasoline C7-C12	GC05	G	08/18/06 09:58
QC352307	Trifluorotoluene (FID)	GC05	G	08/18/06 09:58
QC352307	Bromofluorobenzene (FID)	GC05	G	08/18/06 09:58
QC352308	Gasoline C7-C12	GC05	G	08/18/06 10:30
QC352308	Trifluorotoluene (FID)	GC05	G	08/18/06 10:30
QC352308	Bromofluorobenzene (FID)	GC05	G	08/18/06 10:30
QC352309	Gasoline C7-C12	GC05	G	08/18/06 08:55
QC352309	Trifluorotoluene (FID)	GC05	G	08/18/06 08:55
QC352309	Bromofluorobenzene (FID)	GC05	G	08/18/06 08:55
QC352310	Gasoline C7-C12	GC05	G	08/18/06 09:27
QC352310	Trifluorotoluene (FID)	GC05	G	08/18/06 09:27
QC352310	Bromofluorobenzene (FID)	GC05	G	08/18/06 09:27

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Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 116494
Date Started: 17-AUG-2006
Batched by : Matthew Josh McManus

Analysis : N/A
Bgroup : TVH
Department : GC Organics

Sample	Type	Client	Matrix	Analyses	Due Date
188802-001		Treadwell & Rollo	Water	TVH	29-AUG-2006
188802-002		Treadwell & Rollo	Water	MBTXE, TVH	29-AUG-2006
188802-005		Treadwell & Rollo	Water	TVH	29-AUG-2006
188802-006		Treadwell & Rollo	Water	TVH	29-AUG-2006
188802-008		Treadwell & Rollo	Water	TVH	29-AUG-2006
188802-009		Treadwell & Rollo	Water	TVH	29-AUG-2006
188802-010		Treadwell & Rollo	Water	TVH	29-AUG-2006
188802-012		Treadwell & Rollo	Water	TVH	29-AUG-2006
188802-013		Treadwell & Rollo	Water	MBTXE, TVH	29-AUG-2006
188802-014		Treadwell & Rollo	Water	MBTXE, TVH	29-AUG-2006
188802-015		Treadwell & Rollo	Water	MBTXE, TVH	29-AUG-2006
188802-016		Treadwell & Rollo	Water	TVH	29-AUG-2006
188802-020		Treadwell & Rollo	Water	MBTXE, TVH	29-AUG-2006
188808-031		Innovative Technic	Water	TVH	23-AUG-2006
QC352219	BLANK		Water		
QC352220	LCS		Water		
QC352221	LCS		Water		
QC352307	MS	of 188802-001	Water		
QC352308	MSD	of 188802-001	Water		
QC352309	MS	of 188802-016	Water		
QC352310	MSD	of 188802-016	Water		

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Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 09/24/06

Analyte	Units	GC19 A	GC19 X	GC04 A	GC04 J	GC05 G	GC07 A
Gasoline C6-C10	ug/L	21	21	6.7	6.2	14	10
Gasoline C6-C12	ug/L	21	21	5.5	6.8	11	14
Gasoline C7-C12	ug/L	27	27	4.8	7.2	7.4	15
JP-4 C7-C12	ug/L		4.6	12	12	9.9	19
Gasoline C6-C8	ug/L						7.0
Gasoline C8-C10	ug/L						12
Trifluorotoluene (FID)	ug/L			3.9			9.8
Bromofluorobenzene (FID)	ug/L			5.2			7.5

Curtis & Tompkins Laboratories
MDL Summary for EPA 8021B Water
As of 09/24/06

Analyte	Units	GC19 B	GC19 C	GC19 Y	GC19 Z	GC04 B	GC04 C	GC04 K	GC04 L	GC05 H	GC05 I	GC07 B	GC07 C
MTBE	ug/L	0.84	0.85	0.49	0.18	0.48	0.26	0.45	0.83	0.30	0.62	0.35	0.23
Benzene	ug/L	0.24	0.21	0.073	0.033	0.15	0.032	0.094	0.16	0.034	0.057	0.23	0.035
Toluene	ug/L	0.15	0.14	0.13	0.025	0.11	0.098	0.14	0.11	0.048	0.15	0.069	0.024
Ethylbenzene	ug/L	0.12	0.11	0.14	0.024	0.087	0.061	0.038	0.12	0.036	0.17	0.084	0.056
m,p-Xylenes	ug/L	0.11	0.10	0.13	0.039	0.15	0.11	0.10	0.21	0.030	0.17	0.090	0.027
o-Xylene	ug/L	0.19	0.20	0.15	0.015	0.19	0.10	0.12	0.10	0.083	0.19	0.13	0.040

**TOTAL EXTRACTABLE
HYDROCARBONS**

Total Extractable Hydrocarbons			
Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	08/16/06
Units:	ug/L	Received:	08/17/06
Diln Fac:	1.000		

Field ID: LF6GW103 Prepared: 08/23/06
 Type: SAMPLE Analyzed: 08/26/06
 Lab ID: 188802-008 Cleanup Method: EPA 3630C
 Batch#: 116703

Analyte	Result	RL
Diesel C12-C24 (SGCU)	ND	50

Surrogate	%REC	Limits
Hexacosane (SGCU)	118	65-135

Field ID: DUP0816061A Prepared: 08/25/06
 Type: SAMPLE Analyzed: 08/28/06
 Lab ID: 188802-010 Cleanup Method: EPA 3630C
 Batch#: 116807

Analyte	Result	RL
Diesel C12-C24 (SGCU)	ND	50

Surrogate	%REC	Limits
Hexacosane (SGCU)	89	65-135

Type: BLANK Prepared: 08/23/06
 Lab ID: QC353116 Analyzed: 08/24/06
 Batch#: 116703 Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24 (SGCU)	ND	50

Surrogate	%REC	Limits
Hexacosane (SGCU)	109	65-135

Type: BLANK Prepared: 08/25/06
 Lab ID: QC353547 Analyzed: 08/29/06
 Batch#: 116807 Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24 (SGCU)	ND	50

Surrogate	%REC	Limits
Hexacosane (SGCU)	98	65-135

ND= Not Detected
 RL= Reporting Limit
 SGCU= Silica gel cleanup



Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	08/16/06
Units:	ug/L	Received:	08/17/06
Batch#:	116703	Prepared:	08/23/06

Field ID: 1349MW100
Type: SAMPLE

Lab ID: 188802-001
Cleanup Method: EPA 3630C

Analyte	Result	RL	Diln Fac	Analyzed
Diesel C12-C24	42,000	250	5.000	08/25/06
Motor Oil C24-C36	ND	1,500	5.000	08/25/06

Surrogate	%REC	Limits	Diln Fac	Analyzed
Hexacosane	120	65-135	1.000	08/24/06

Field ID: 1065PZ5AR
Type: SAMPLE
Lab ID: 188802-002

Diln Fac: 1.000
Analyzed: 08/25/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	122	65-135

Field ID: LF6GW106
Type: SAMPLE
Lab ID: 188802-004

Diln Fac: 1.000
Analyzed: 08/25/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

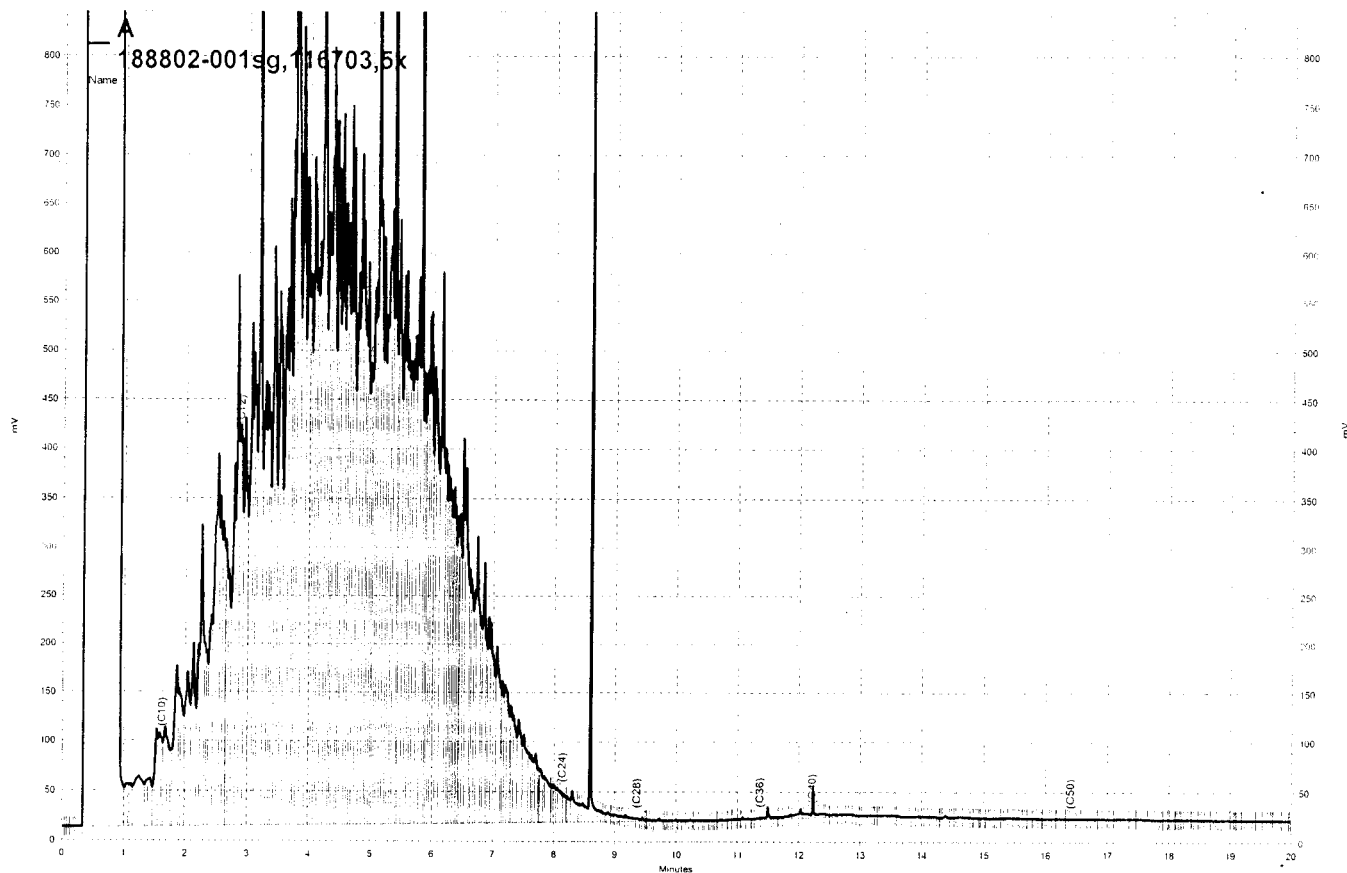
Surrogate	%REC	Limits
Hexacosane	85	65-135

Field ID: 1213GW101
Type: SAMPLE
Lab ID: 188802-005

Diln Fac: 1.000
Analyzed: 08/25/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	97	65-135



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1349MW100

**Total Extractable Hydrocarbons**

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	08/16/06
Units:	ug/L	Received:	08/17/06
Batch#:	116703	Prepared:	08/23/06

Field ID:	DUP0816063A	Diln Fac:	1.000
Type:	SAMPLE	Analyzed:	08/26/06
Lab ID:	188802-006	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	94	65-135

Field ID:	1065MW101	Diln Fac:	1.000
Type:	SAMPLE	Analyzed:	08/26/06
Lab ID:	188802-009	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	113	65-135

Field ID:	1065MW9A	Diln Fac:	1.000
Type:	SAMPLE	Analyzed:	08/26/06
Lab ID:	188802-013	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	114	65-135

Field ID:	1065MW9B	Diln Fac:	1.000
Type:	SAMPLE	Analyzed:	08/26/06
Lab ID:	188802-014	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	97	65-135

ND= Not Detected
RL= Reporting Limit

Total Extractable Hydrocarbons			
Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	08/16/06
Units:	ug/L	Received:	08/17/06
Batch#:	116703	Prepared:	08/23/06

Field ID: 1065MW9BRB9A
 Type: SAMPLE
 Lab ID: 188802-015

Diln Fac: 1.000
 Analyzed: 08/26/06
 Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	124	65-135

Field ID: DUP0816062A
 Type: SAMPLE
 Lab ID: 188802-020

Diln Fac: 1.000
 Analyzed: 08/25/06
 Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

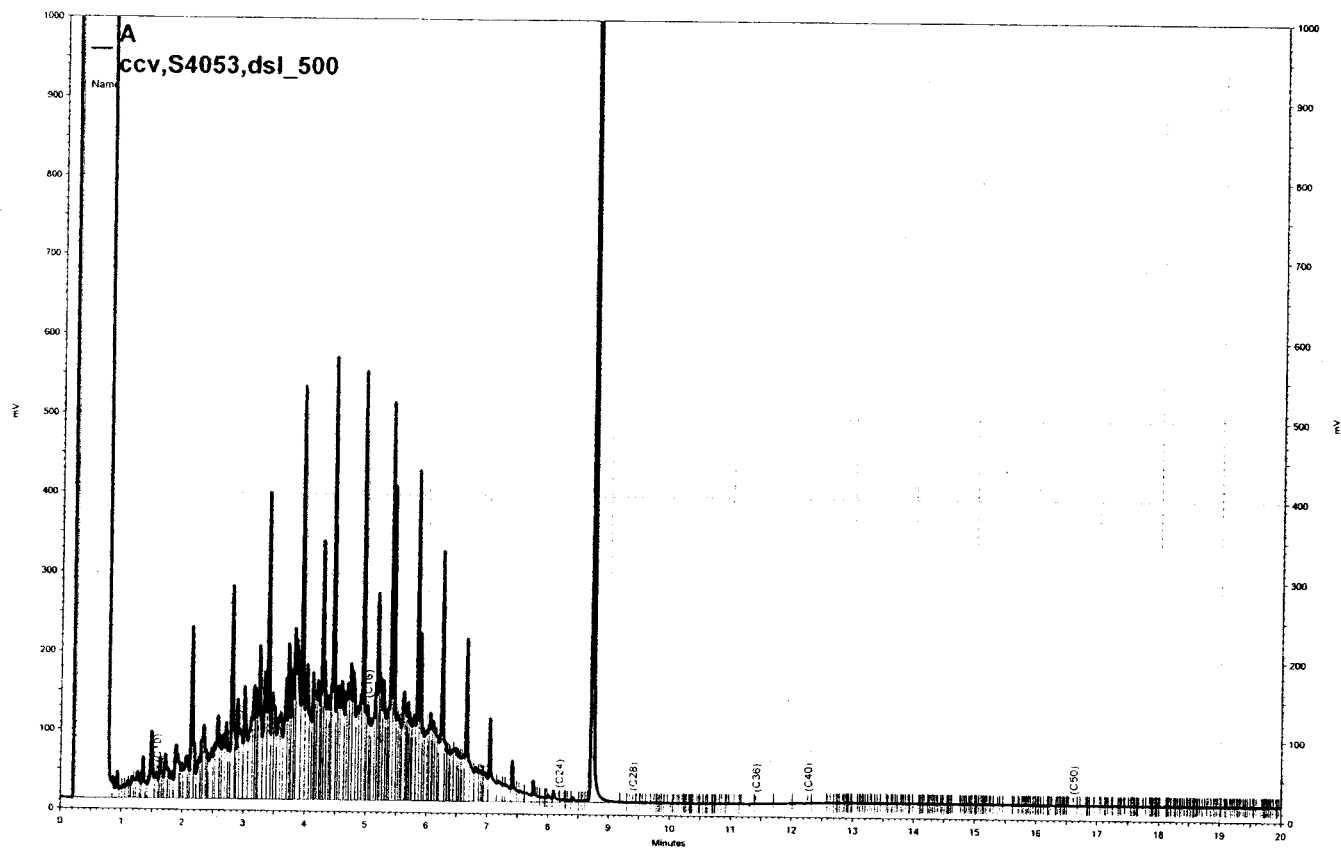
Surrogate	%REC	Limits
Hexacosane	87	65-135

Type: BLANK
 Lab ID: QC353116
 Diln Fac: 1.000

Analyzed: 08/24/06
 Cleanup Method: EPA 3630C

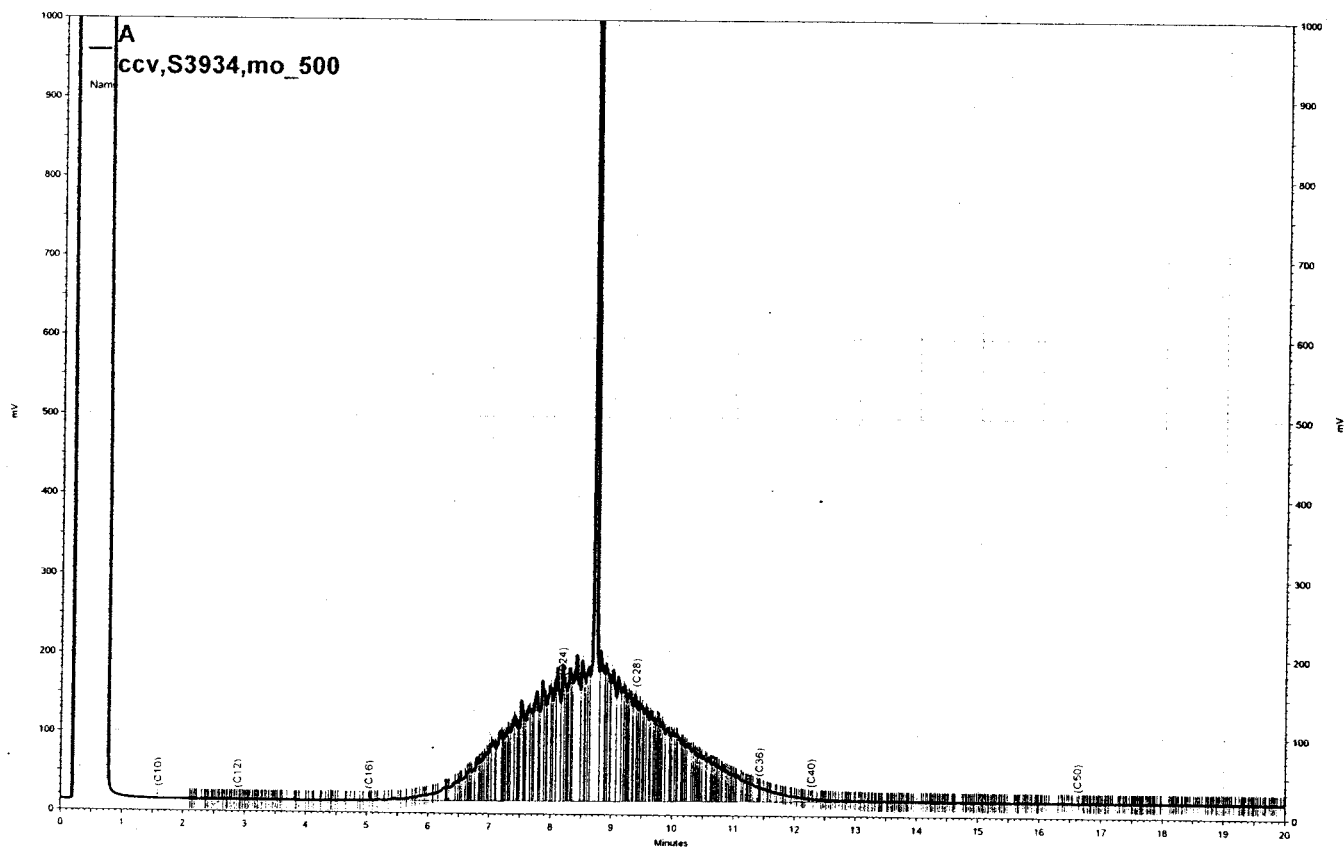
Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	109	65-135



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Diesel



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Motor Oil

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC353117	Batch#:	116703
Matrix:	Water	Prepared:	08/23/06
Units:	ug/L	Analyzed:	08/24/06

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24 (SGCU)	2,500	2,277	91	65-135

Surrogate	%REC	Limits
Hexacosane (SGCU)	106	65-135

SGCU= Silica gel cleanup

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Batch#:	116807
Units:	ug/L	Prepared:	08/25/06
Diln Fac:	1.000	Analyzed:	08/29/06

Type: BS
Lab ID: QC353548

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24 (SGCU)	2,500	2,434	97	65-135

Surrogate	%REC	Limits
Hexacosane (SGCU)	100	65-135

Type: BSD
Lab ID: QC353549

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24 (SGCU)	2,500	2,644	106	65-135	8	35

Surrogate	%REC	Limits
Hexacosane (SGCU)	109	65-135

RPD= Relative Percent Difference
SGCU= Silica gel cleanup

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1065PZ2A	Batch#:	116703
MSS Lab ID:	188837-009	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Prepared:	08/23/06
Diln Fac:	1.000	Analyzed:	08/25/06

Type: MS
Lab ID: QC353120

Cleanup Method: EPA 3630C

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C12-C24 (SGCU)	21.70	2,500	2,147	85	65-135
Surrogate	%REC	Limits			
Hexacosane (SGCU)	105	65-135			

Type: MSD
Lab ID: QC353121

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24 (SGCU)	2,500	2,437	97	65-135	13	35
Surrogate	%REC	Limits				
Hexacosane (SGCU)	112	65-135				

RPD= Relative Percent Difference
SGCU= Silica gel cleanup

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188802 GCSV water: EPA 8015B

Inst : GC11A Name : gcl1adslcal6/13/06
 Calnum : 116235201001 Date : 13-JUN-2006 07:02
 Units : mg/L X Axis : R Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	163a018	116235201018	DSL_10	13-JUN-2006 07:02	S3433
L2	163a019	116235201019	DSL_100	13-JUN-2006 07:30	S3434
L3	163a020	116235201020	DSL_250	13-JUN-2006 07:58	S3435
L4	163a021	116235201021	DSL_500	13-JUN-2006 08:26	S3436
L5	163a022	116235201022	DSL_1000	13-JUN-2006 08:54	S3437
L6	163a023	116235201023	DSL_2500	13-JUN-2006 09:23	S3438
L7	163a024	116235201024	DSL_5000	13-JUN-2006 09:51	S3432

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	%RSD	MIR ²	MAKSD	Fig
Diesel C12-C24	70351	61641	59864	60002	59376	59503	59800	AVRG		1.63E-5		61505	6	0.995	20		

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor
 Page 1 of 1

116235201001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188802 GCSV Water
EPA 8015B

Inst : GC11A
Calnum : 116235201001

Name : gc11adslcal6/13/06
Cal Date: 13-JUN-2006

ICV 116235201026 (163a026 13-JUN-2006) stds: S3623

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	61505	58612	500.0	476.5	mg/L	-5	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188802 GCSV Water: EPA 8015B

Inst : GC11A
Calnum : 116235201003
Units : mg/L

Name : MO
Date : 13-JUN-2006 11:42
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Std's
L1	163a028	116235201028	MO_50	13-JUN-2006 11:42	S3326
L2	163a029	116235201029	MO_250	13-JUN-2006 12:10	S3327
L3	163a030	116235201030	MO_500	13-JUN-2006 12:38	S3328
L4	163a031	116235201031	MO_1000	13-JUN-2006 13:06	S3329
L5	163a032	116235201032	MO_2500	13-JUN-2006 13:33	S3330
L6	163a033	116235201033	MO_5000	13-JUN-2006 14:01	S3325

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ² %RSD	MNR ²	MXRSD	Fig
Motor Oil C24-C36	37512	40742	39568	39106	40379	40112	AVRG		2.53E-5		39570	3	0.995	20	

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor
Page 1 of 1

116235201003

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188802 GCSV Water: EPA 8015B

Inst : GC11A
Calnum : 116235201002
Units : mg/L

Name : Hex
Date : 13-JUN-2006 14:57
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Std's
L1	163a035	116235201035	HEX_5	13-JUN-2006 14:57	S3671
L2	163a036	116235201036	HEX_10	13-JUN-2006 15:25	S3672
L3	163a037	116235201037	HEX_25	13-JUN-2006 15:52	S3673
L4	163a038	116235201038	HEX_50	13-JUN-2006 16:20	S3674
L5	163a039	116235201039	HEX_75	13-JUN-2006 16:48	S3675

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ²	MnR ²	MxRSD	Flg
Hexacosane	68290	70892	67660	67747	68862	AVRG		1.46E-5	.	68690	2	0.995	20	

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor
Page 1 of 1

116235201002

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188802 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 166285577001
Units : mg/L

Name : gc15bds1cal17/18/06
Date : 17-JUL-2006 18:35
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Std's
L1	198B017	166285577017	DSL_10	17-JUL-2006 18:35	S3433
L2	198B018	166285577018	DSL_100	17-JUL-2006 19:02	S3434
L3	198B019	166285577019	DSL_250	17-JUL-2006 19:29	S3435
L4	198B020	166285577020	DSL_500	17-JUL-2006 19:57	S3436
L5	198B021	166285577021	DSL_1000	17-JUL-2006 20:25	S3437
L6	198B022	166285577022	DSL_2500	17-JUL-2006 20:52	S3438
L7	198B023	166285577023	DSL_5000	17-JUL-2006 21:20	S3432

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2	MAR^2	MARRSD	Fig
Diesel C12-C24	71951	59765	58006	59298	58068	58873	60144	AVRG		1.64E-5		60872	8	0.995	20	

Instrument amount = a0 + response * a1 + response^2 * a2; AVRg=Average response factor
Page 1 of 1

166285577001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188802 GCSV Water
EPA 8015B

Inst : GC15B
Calnum : 166285577001

Name : gc15bdslcal7/18/06
Cal Date: 17-JUL-2006

ICV 166285577025 (198b025 17-JUL-2006) stds: S3718

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	60872	58055	500.0	476.9	mg/L	-5	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188802 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 166285577003
Units : mg/L

Name : gc15hexcal7/18/06
Date : 18-JUL-2006 03:47
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	198b037	166285577037	HEX_5	18-JUL-2006 03:47	S3671
L2	198b038	166285577038	HEX_10	18-JUL-2006 04:14	S3672
L3	198b039	166285577039	HEX_25	18-JUL-2006 04:42	S3673
L4	198b040	166285577040	HEX_50	18-JUL-2006 05:10	S3674
L5	198b041	166285577041	HEX_75	18-JUL-2006 05:38	S3675

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ² %RSD	MNR ² MxRSD	Flg
Hexacosane	71177	71934	69538	70527	71596	AVRG		1.41E-5		70954	1	0.995	20

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor
Page 1 of 1

166285577003

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188802 GCSV water: EPA 8015B

Inst : GC17A
 Calnum : 176265447001
 Units : mg/L

Name : diesel
 Date : 03-JUL-2006 09:02
 X Axis : R

Reviewer: CW

Level	File	Segnum	Sample ID	Analyzed	Std
L1	184a003	176265447003	DSL_10	03-JUL-2006 09:02	S3433
L2	184a004	176265447004	DSL_100	03-JUL-2006 09:29	S3434
L3	184a005	176265447005	DSL_250	03-JUL-2006 09:57	S3435
L4	184a006	176265447006	DSL_500	03-JUL-2006 10:25	S3436
L5	184a007	176265447007	DSL_1000	03-JUL-2006 10:52	S3437
L6	184a008	176265447008	DSL_2500	03-JUL-2006 11:19	S3438
L7	184a009	176265447009	DSL_5000	03-JUL-2006 12:57	S3432

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	%RSD	MCR ²	MWRSD	Flg
Diesel C12-C24	70879	71444	75567	77980	76533	78376	79841	AVRG		1.32E-5		75803	5	0.995	20		

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor
 Page 1 of 1

176265447001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188802 GCSV Water
EPA 8015B

Inst : GC17A
Calnum : 176265447001

Name : diesel
Cal Date: 03-JUL-2006

ICV 176265447011 (184a011 03-JUL-2006) stds: S3623

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	75803	78704	500.0	519.1	mg/L	4	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188802 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 176290175001
Units : mg/L

Name : gc17mocal7/21/06
Date : 20-JUL-2006 19:04
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	201a009	176290175009	MO_50	20-JUL-2006 19:04	S3326
L2	201a010	176290175010	MO_250	20-JUL-2006 19:31	S3327
L3	201a011	176290175011	MO_500	20-JUL-2006 19:58	S3328
L4	201a012	176290175012	MO_1000	20-JUL-2006 20:25	S3329
L5	201a013	176290175013	MO_2500	20-JUL-2006 20:53	S3330
L6	201a014	176290175014	MO_5000	20-JUL-2006 21:20	S3325

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ²	%RSD	MUR ²	MxrSD	Flg
Motor Oil C24-C36	45862	53667	50318	54190	50530	52699	AVRG		1.95E-5		51211	6		0.995	20	

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor
Page 1 of 1

176290175001

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188802 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 176265447003
Units : mg/L

Name : hexacosane
Date : 03-JUL-2006 19:19
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Std
L1	184a023	176265447023	HEX_5	03-JUL-2006 19:19	S3671
L2	184a024	176265447024	HEX_10	03-JUL-2006 19:46	S3672
L3	184a025	176265447025	HEX_25	03-JUL-2006 20:13	S3673
L4	184a026	176265447026	HEX_50	03-JUL-2006 20:41	S3674
L5	184a027	176265447027	HEX_75	03-JUL-2006 21:08	S3675

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ² %RSD	MGR ²	MGRSD	Flg
Hexacosane	97867	96188	94060	92872	105645	AVRG		1.03E-5		97326	5	0.995	20	

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor
Page 1 of 1

176265447003

CONTINUING CALIBRATION SUMMARY FOR 188802 GCSV Water
Curtis & Tompkins Laboratories

Analyte: Diesel C12-C24

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D	Max	%D	Flags
						RF/CF	RF/CF							
GC11A	A	116340404015	24-AUG-2006 19:15	116235201001	13-JUN-2006	61505	59775	1000.0	971.88	mg/L	-3	15		
GC11A	A	116340404033	25-AUG-2006 03:37	116235201001	13-JUN-2006	61505	63205	250.00	256.91	mg/L	3	15		
GC11A	A	116341767016	25-AUG-2006 22:36	116235201001	13-JUN-2006	61505	59791	1000.0	972.13	mg/L	-3	15		
GC11A	A	116341767032	26-AUG-2006 06:03	116235201001	13-JUN-2006	61505	64175	250.00	260.85	mg/L	4	15		
GC15B	B	166346092027	28-AUG-2006 23:30	166285577001	17-JUL-2006	60872	59208	1000.0	972.66	mg/L	-3	15		
GC15B	B	166346092039	29-AUG-2006 06:24	166285577001	17-JUL-2006	60872	62376	250.00	256.18	mg/L	2	15		
GC17A	A	176338855068	24-AUG-2006 22:16	176265447001	03-JUL-2006	75803	69761	250.00	230.07	mg/L	-8	15		
GC17A	A	176338855084	25-AUG-2006 05:33	176265447001	03-JUL-2006	75803	70276	250.00	231.77	mg/L	-7	15		
GC17A	A	176341750008	25-AUG-2006 13:44	176265447001	03-JUL-2006	75803	68480	500.00	451.70	mg/L	-10	15		
GC17A	A	176341750017	25-AUG-2006 18:31	176265447001	03-JUL-2006	75803	70018	500.00	461.84	mg/L	-8	15		
GC17A	A	176346093011	28-AUG-2006 15:06	176265447001	03-JUL-2006	75803	72919	500.00	480.98	mg/L	-4	15		
GC17A	A	176346093027	29-AUG-2006 00:13	176265447001	03-JUL-2006	75803	70105	1000.0	924.84	mg/L	-8	15		

CONTINUING CALIBRATION SUMMARY FOR 188802 GCSV Water
Curtis & Tompkins Laboratories

Analyte: Motor Oil C24-C36

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	OntAmt	Units	%D Max	%D	Flags
						RF/CF	RF/CF						
GC11A	A	116340404016	24-AUG-2006 19:43	116235201003	13-JUN-2006	39570	38721	500.00	489.28	mg/L	-2	15	
GC11A	A	116340404034	25-AUG-2006 04:05	116235201003	13-JUN-2006	39570	39186	500.00	495.15	mg/L	-1	15	
GC11A	A	116341767017	25-AUG-2006 23:04	116235201003	13-JUN-2006	39570	38740	500.00	489.52	mg/L	-2	15	
GC11A	A	116341767033	26-AUG-2006 06:32	116235201003	13-JUN-2006	39570	39169	500.00	494.94	mg/L	-1	15	
GC17A	A	176338855067	24-AUG-2006 21:49	176290175001	20-JUL-2006	51211	47009	500.00	458.97	mg/L	-8	15	
GC17A	A	176338855083	25-AUG-2006 05:05	176290175001	20-JUL-2006	51211	46455	500.00	453.57	mg/L	-9	15	
GC17A	A	176341750009	25-AUG-2006 14:11	176290175001	20-JUL-2006	51211	45944	500.00	448.58	mg/L	-10	15	
GC17A	A	176341750016	25-AUG-2006 18:04	176290175001	20-JUL-2006	51211	45739	500.00	446.58	mg/L	-11	15	

CONTINUING CALIBRATION SUMMARY FOR 188802 GCSV Water
Curtis & Tompkins Laboratories

Analyte: Hexacosane

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	OntAmt	Units	%D Max	%D	Flags
						RF/CF	RF/CF						
GC11A	A	116340404015	24-AUG-2006 19:15	116235201002	13-JUN-2006	68690	72377	50.000	52.684	mg/L	5	15	
GC11A	A	116340404033	25-AUG-2006 03:37	116235201002	13-JUN-2006	68690	74987	50.000	54.584	mg/L	9	15	
GC11A	A	116341767016	25-AUG-2006 22:36	116235201002	13-JUN-2006	68690	72365	50.000	52.675	mg/L	5	15	
GC11A	A	116341767032	26-AUG-2006 06:03	116235201002	13-JUN-2006	68690	75967	50.000	55.297	mg/L	11	15	
GC15B	B	166346092027	28-AUG-2006 23:30	166285577003	18-JUL-2006	70954	66816	50.000	47.084	mg/L	-6	15	
GC15B	B	166346092039	29-AUG-2006 06:24	166285577003	18-JUL-2006	70954	64518	50.000	45.464	mg/L	-9	15	
GC17A	A	176338855067	24-AUG-2006 21:49	176265447003	03-JUL-2006	97326	91492	50.000	47.003	mg/L	-6	15	
GC17A	A	176338855083	25-AUG-2006 05:05	176265447003	03-JUL-2006	97326	88974	50.000	45.709	mg/L	-9	15	
GC17A	A	176346093011	28-AUG-2006 15:06	176265447003	03-JUL-2006	97326	91632	50.000	47.075	mg/L	-6	15	
GC17A	A	176346093027	29-AUG-2006 00:13	176265447003	03-JUL-2006	97326	89438	50.000	45.948	mg/L	-8	15	

SEQUENCE SUMMARY FOR 188802 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 116235201 Instrument: GC11A
Analytical Method: EPA 8015B

Gas Chromatograph #11 (Channel A) TEH Begun: 12-JUN-2006
SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used	>LR
001	163a001	X	PRIMER			12-JUN-2006	08:01	1.0					
002	163a002	X	IB			12-JUN-2006	08:29	1.0					
003	163a003	CCV	DSL_500			12-JUN-2006	08:57	1.0				1	
004	163a004	CCV	MO_500			12-JUN-2006	09:25	1.0				2	
005	163a005	LCS	QC343463 S	114293	Soil	12-JUN-2006	11:42	1.0					
006	163a006	XCCV	DSL_500			12-JUN-2006	12:10	1.0				1	
007	163a007	SAMPLE	187264-002	114250	Water	12-JUN-2006	12:39	3.0					
008	163a008	SAMPLE	187264-001	114250	Water	12-JUN-2006	13:07	10.0					
009	163a009	CCV	DSL_1000			12-JUN-2006	13:34	1.0				3	
010	163a010	X	IB			12-JUN-2006	15:11	1.0					
011	163a011	X	C10			12-JUN-2006	15:39	1.0				4	
012	163a012	X	C12-C60			12-JUN-2006	16:07	1.0				5	
013	163a013	CCV	MO_500			12-JUN-2006	17:12	1.0				2	
014	163a014	CCV	DSL_500			12-JUN-2006	17:40	1.0				1	
015	163a015	X	C10			13-JUN-2006	05:39	1.0				4	
016	163a016	X	C12-C60			13-JUN-2006	06:07	1.0				5	
017	163a017	X	IB			13-JUN-2006	06:35	1.0					
018	163a018	ICAL	DSL_10			13-JUN-2006	07:02	1.0				6	
019	163a019	ICAL	DSL_100			13-JUN-2006	07:30	1.0				7	
020	163a020	ICAL	DSL_250			13-JUN-2006	07:58	1.0				8	
021	163a021	ICAL	DSL_500			13-JUN-2006	08:26	1.0				9	
022	163a022	ICAL	DSL_1000			13-JUN-2006	08:54	1.0				10	
023	163a023	ICAL	DSL_2500			13-JUN-2006	09:23	1.0				11	
024	163a024	ICAL	DSL_5000			13-JUN-2006	09:51	1.0				12	
025	163a025	X	IB			13-JUN-2006	10:19	1.0					
026	163a026	ICV	DSL_500			13-JUN-2006	10:47	1.0				13	
027	163a027	X	IB			13-JUN-2006	11:14	1.0					
028	163a028	ICAL	MO_50			13-JUN-2006	11:42	1.0				14	
029	163a029	ICAL	MO_250			13-JUN-2006	12:10	1.0				15	
030	163a030	ICAL	MO_500			13-JUN-2006	12:38	1.0				16	

Stds used: 1=S3367 2=S3639 3=S3368 4=03SS315 5=03SS316 6=S3433 7=S3434 8=S3435 9=S3436 10=S3437 11=S3438 12=S3432 13=S3623 14=S3326 15=S3327 16=S3328 17=S3329 18=S3330
19=S3325 20=S3671 21=S3672 22=S3673 23=S3674 24=S3675

SEQUENCE SUMMARY FOR 188802 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 116235201 Instrument: GC11A Gas Chromatograph #11 (Channel A) TEH Begun: 12-JUN-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used	>LR
031	163a031	ICAL	MO_1000			13-JUN-2006	13:06 1.0	1.0				17	
032	163a032	ICAL	MO_2500			13-JUN-2006	13:33 1.0	1.0				18	
033	163a033	ICAL	MO_5000			13-JUN-2006	14:01 1.0	1.0				19	
034	163a034	X	IB			13-JUN-2006	14:29 1.0						
035	163a035	ICAL	HEX_5			13-JUN-2006	14:57 1.0	1.0				20	
036	163a036	ICAL	HEX_10			13-JUN-2006	15:25 1.0	1.0				21	
037	163a037	ICAL	HEX_25			13-JUN-2006	15:52 1.0	1.0				22	
038	163a038	ICAL	HEX_50			13-JUN-2006	16:20 1.0	1.0				23	
039	163a039	ICAL	HEX_75			13-JUN-2006	16:48 1.0	1.0				24	
040	163a040	X	IB			13-JUN-2006	17:15 1.0						

Stds used: 1=S3367 2=S3639 3=S3368 4=03SS315 5=03SS316 6=S3433 7=S3434 8=S3435 9=S3436 10=S3437 11=S3438 12=S3432 13=S3623 14=S3326 15=S3327 16=S3328 17=S3329 18=S3330
19=S3325 20=S3671 21=S3672 22=S3673 23=S3674 24=S3675

SEQUENCE SUMMARY FOR 188802 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 176265447 Instrument: GC17A Gas Chromatograph #17 (Channel A) TEH Begun: 03-JUL-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	stds	Used	>LR
001	184a001	X	PRIMER			03-JUL-2006	08:07 1.0								
002	184a002	X	IB			03-JUL-2006	08:35 1.0								
003	184a003	ICAL	DSL_10			03-JUL-2006	09:02 1.0						1		
004	184a004	ICAL	DSL_100			03-JUL-2006	09:29 1.0						2		
005	184a005	ICAL	DSL_250			03-JUL-2006	09:57 1.0						3		
006	184a006	ICAL	DSL_500			03-JUL-2006	10:25 1.0						4		
007	184a007	ICAL	DSL_1000			03-JUL-2006	10:52 1.0						5		
008	184a008	ICAL	DSL_2500			03-JUL-2006	11:19 1.0						6		
009	184a009	ICAL	DSL_5000			03-JUL-2006	12:57 1.0						7		
010	184a010	X	IB			03-JUL-2006	13:24 1.0								
011	184a011	ICV	DSL_500			03-JUL-2006	13:52 1.0	1		3			8	1:HXCS=91.2842	
012	184a012	X	IB			03-JUL-2006	14:19 1.0								
013	184a013	ICV	DSL_500			03-JUL-2006	14:46 1.0	1		3			8	1:HXCS=87.8485	
014	184a014	X	IB			03-JUL-2006	15:13 1.0								
015	184a015	ICAL	MO_50			03-JUL-2006	15:40 1.0						9		
016	184a016	ICAL	MO_250			03-JUL-2006	16:08 1.0						10		
017	184a017	ICAL	MO_500			03-JUL-2006	16:35 1.0						11		
018	184a018	ICAL	MO_1000			03-JUL-2006	17:03 1.0						12		
019	184a019	ICAL	MO_2500			03-JUL-2006	17:30 1.0						13		
020	184a020	ICAL	MO_5000			03-JUL-2006	17:57 1.0						14		
021	184a021	X	IB			03-JUL-2006	18:24 1.0								
022	184a022	X	IB			03-JUL-2006	18:52 1.0								
023	184a023	ICAL	HEX_5			03-JUL-2006	19:19 1.0						15		
024	184a024	ICAL	HEX_10			03-JUL-2006	19:46 1.0						16		
025	184a025	ICAL	HEX_25			03-JUL-2006	20:13 1.0						17		
026	184a026	ICAL	HEX_50			03-JUL-2006	20:41 1.0						18		
027	184a027	ICAL	HEX_75			03-JUL-2006	21:08 1.0						19		
028	184a028	X	IB			03-JUL-2006	21:35 1.0								
029	184a029	X	IB			03-JUL-2006	22:02 1.0								
030	184a030	ICAL	JET_10			03-JUL-2006	22:30 1.0						20		

StdS used: 1=S3433 2=S3434 3=S3435 4=S3436 5=S3437 6=S3438 7=S3432 8=S3623 9=S3326 10=S3327 11=S3328 12=S3329 13=S3330 14=S3325 15=S3671 16=S3672 17=S3673 18=S3674 19=S3675
20=S3614 21=S3615 22=S3616 23=S3617 24=S3618 25=S3619 26=S3626

SEQUENCE SUMMARY FOR 188802 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 176265447 Instrument: GC17A Gas Chromatograph #17 (Channel A) TEH Begun: 03-JUL-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	stds	Used	>LR
031	184a031	ICAL	JET_100			03-JUL-2006	22:57	1.0					21		
032	184a032	ICAL	JET_500			03-JUL-2006	23:24	1.0					22		
033	184a033	ICAL	JET_1000			03-JUL-2006	23:52	1.0					23		
034	184a034	ICAL	JET_2000			04-JUL-2006	00:19	1.0					24		
035	184a035	ICAL	JET_3000			04-JUL-2006	00:46	1.0					25		
036	184a036	ICAL	JET_5000			04-JUL-2006	01:14	1.0					26		
037	184a037	X	IB			04-JUL-2006	01:41	1.0							
038	184a038	X	IB			04-JUL-2006	02:08	1.0							

Std's used: 1=S3433 2=S3434 3=S3435 4=S3436 5=S3437 6=S3438 7=S3432 8=S3623 9=S3326 10=S3327 11=S3328 12=S3329 13=S3330 14=S3325 15=S3671 16=S3672 17=S3673 18=S3674 19=S3675
20=S3614 21=S3615 22=S3616 23=S3617 24=S3618 25=S3619 26=S3526

SEQUENCE SUMMARY FOR 188802 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 166285577 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 17-JUL-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	stds	Used	>LR
001	198b001	X	PRIMER			17-JUL-2006	07:37 1.0								
002	198b002	X	IB			17-JUL-2006	08:04 1.0								
003	198b003	X	DSL_500			17-JUL-2006	08:39 1.0			3			1		
004	198b004	X	MO_500			17-JUL-2006	09:06 1.0			5			2		
005	198b005	X	MO_500			17-JUL-2006	09:40 1.0			5			2		
006	198b006	X	IB			17-JUL-2006	12:00 1.0			3					
007	198b007	CCV	DSL_500			17-JUL-2006	12:28 1.0			3			1		
008	198b008	CCV	MO_500			17-JUL-2006	12:55 1.0			5			2		
009	198b009	CCV	MO_500			17-JUL-2006	13:42 1.0			5			2		
010	198b010	X	PRIMER			17-JUL-2006	14:39 1.0								
011	198b011	X	IB			17-JUL-2006	15:07 1.0								
012	198b012	X	CM			17-JUL-2006	15:34 1.0						3		
013	198b013	X	CM			17-JUL-2006	16:02 1.0						4		
014	198b014	CCV	DSL_500			17-JUL-2006	16:29 1.0			7			1		
015	198b015	CCV	MO_500			17-JUL-2006	16:57 1.0			5			2		88
016	198b016	X	IB			17-JUL-2006	18:07 1.0			3					
017	198b017	ICAL	DSL_10			17-JUL-2006	18:35 1.0						5		
018	198b018	ICAL	DSL_100			17-JUL-2006	19:02 1.0						6		
019	198b019	ICAL	DSL_250			17-JUL-2006	19:29 1.0						7		
020	198b020	ICAL	DSL_500			17-JUL-2006	19:57 1.0						8		
021	198b021	ICAL	DSL_1000			17-JUL-2006	20:25 1.0						9		
022	198b022	ICAL	DSL_2500			17-JUL-2006	20:52 1.0						10		
023	198b023	ICAL	DSL_5000			17-JUL-2006	21:20 1.0						11		
024	198b024	X	IB			17-JUL-2006	21:47 1.0								
025	198b025	ICV	DSL_500			17-JUL-2006	22:15 1.0			3			1		
026	198b026	X	ICV			17-JUL-2006	22:42 1.0						1		
027	198b027	X	IB			17-JUL-2006	23:10 1.0								
028	198b028	X	IB			17-JUL-2006	23:37 1.0								
029	198b029	ICAL	MO_50			18-JUL-2006	00:05 1.0						12		
030	198b030	ICAL	MO_250			18-JUL-2006	00:33 1.0						13		

StdS used: 1=S3718 2=S3741 3=03SS315 4=03SS316 5=S3433 6=S3434 7=S3435 8=S3436 9=S3437 10=S3438 11=S3432 12=S3326 13=S3327 14=S3328 15=S3329 16=S3330 17=S3325 18=S3671
19=S3672 20=S3673 21=S3674 22=S3675

SEQUENCE SUMMARY FOR 188802 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 166285577 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 17-JUL-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Std's	Used	>LR
031	198b031	ICAL	MO_500			18-JUL-2006 01:00	1.0						14		
032	198b032	ICAL	MO_1000			18-JUL-2006 01:28	1.0						15		
033	198b033	ICAL	MO_2500			18-JUL-2006 01:56	1.0						16		
034	198b034	ICAL	MO_5000			18-JUL-2006 02:24	1.0						17		
035	198b035	X	IB			18-JUL-2006 02:51	1.0								
036	198b036	X	IB			18-JUL-2006 03:19	1.0								
037	198b037	ICAL	HEX_5			18-JUL-2006 03:47	1.0						18		
038	198b038	ICAL	HEX_10			18-JUL-2006 04:14	1.0						19		
039	198b039	ICAL	HEX_25			18-JUL-2006 04:42	1.0						20		
040	198b040	ICAL	HEX_50			18-JUL-2006 05:10	1.0						21		
041	198b041	ICAL	HEX_75			18-JUL-2006 05:38	1.0						22		
042	198b042	X	IB			18-JUL-2006 06:06	1.0								
043	198b043	X	IB			18-JUL-2006 06:33	1.0								

Std's used: 1=S3718 2=S3741 3=03SS315 4=03SS316 5=S3433 6=S3434 7=S3435 8=S3436 9=S3437 10=S3438 11=S3432 12=S3326 13=S3327 14=S3328 15=S3329 16=S3330 17=S3325 18=S3671
19=S3672 20=S3673 21=S3674 22=S3675

SEQUENCE SUMMARY FOR 188802 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 176290175 Instrument: GC17A Gas Chromatograph #17 (Channel A) TEH Begun: 20-JUL-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>IR
001	201a001	X	PRIMER			20-JUL-2006	12:15	1.0							
002	201a002	X	IB			20-JUL-2006	12:43	1.0							
003	201a003	X	CM			20-JUL-2006	13:22	1.0					1		
004	201a004	X	CM			20-JUL-2006	13:49	1.0					2		
005	201a005	CCV	DSL_500			20-JUL-2006	14:17	1.0					3		
006	201a006	CCV	MO_500			20-JUL-2006	14:44	1.0	2				3		
007	201a007	X	IB			20-JUL-2006	18:09	1.0					4		
008	201a008	X	IB			20-JUL-2006	18:36	1.0							
009	201a009	ICAL	MO_50			20-JUL-2006	19:04	1.0					5		
010	201a010	ICAL	MO_250			20-JUL-2006	19:31	1.0					6		
011	201a011	ICAL	MO_500			20-JUL-2006	19:58	1.0					7		
012	201a012	ICAL	MO_1000			20-JUL-2006	20:25	1.0					8		
013	201a013	ICAL	MO_2500			20-JUL-2006	20:53	1.0					9		
014	201a014	ICAL	MO_5000			20-JUL-2006	21:20	1.0					10		
015	201a015	X	IB			20-JUL-2006	21:47	1.0							
016	201a016	X	IB			20-JUL-2006	22:14	1.0							16

Stds used: 1=03SS315 2=03SS316 3=S3623 4=S3741 5=S3326 6=S3327 7=S3328 8=S3329 9=S3330 10=S3325

SEQUENCE SUMMARY FOR 188802 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 176338855 Instrument: GC17A Gas Chromatograph #17 (Channel A) TEH Begun: 23-AUG-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used	>LR
001	235a001	X	PRIMER			23-AUG-2006 07:35	1.0						
002	235a002	X	IB			23-AUG-2006 08:02	1.0						
003	235a003	CCV	DSL_500			23-AUG-2006 08:29	1.0	1.0				1	
004	235a004	CCV	MO_500			23-AUG-2006 08:57	1.0	1.0				2	
005	235a005	X	QC352816			23-AUG-2006 09:54	1.0						
006	235a006	CCV	KERO_250			23-AUG-2006 10:22	1.0	1.0				3	
007	235a007	BLANK	QC352816 S			23-AUG-2006 10:56	1.0	0.09936	16				
008	235a008	BLANK	QC352561 S			23-AUG-2006 11:23	1.0	0.005	10				
009	235a009	SAMPLE	188857-001			23-AUG-2006 11:51	1.0	0.1005					
010	235a010	SAMPLE	188857-004			23-AUG-2006 12:18	25.0	0.09982					
011	235a011	SAMPLE	188825-005 S			23-AUG-2006 12:51	1.0	0.005					
012	235a012	X	TC			23-AUG-2006 14:00	1.0						
013	235a013	X	TC			23-AUG-2006 14:27	1.0						
014	235a014	CCV	DSL_1000			23-AUG-2006 14:54	1.0	1.0				4	
015	235a015	CCV	MO_500			23-AUG-2006 15:21	1.0	1.0	2			5	
016	235a016	CCV	KERO_250			23-AUG-2006 16:06	1.0	1.0				3	
017	235a017	SAMPLE	188774-002 S			23-AUG-2006 19:12	1.0	0.005					
018	235a018	SAMPLE	188774-004 S			23-AUG-2006 19:39	1.0	0.005					
019	235a019	SAMPLE	188774-007 S			23-AUG-2006 20:06	1.0	0.005					
020	235a020	SAMPLE	188774-008 S			23-AUG-2006 20:34	1.0	0.005					
021	235a021	X	IB			23-AUG-2006 21:02	1.0						
022	235a022	SAMPLE	188774-009 S			23-AUG-2006 21:29	1.0	0.005					
023	235a023	SAMPLE	188774-010 S			23-AUG-2006 21:56	1.0	0.005					
024	235a024	SAMPLE	188774-012 S			23-AUG-2006 22:24	1.0	0.005					
025	235a025	X	IB			23-AUG-2006 22:51	1.0						
026	235a026	XCCV	DSL_250			23-AUG-2006 23:19	1.0	1.0				6	
027	235a027	CCV	MO_500			23-AUG-2006 23:46	1.0	1.0	2			5	
028	235a028	CCV	KERO_250			24-AUG-2006 00:13	1.0	1.0				3	
029	235a029	CCV	DSL_250			24-AUG-2006 00:40	1.0	1.0				3	
030	235a030	X	CCV			24-AUG-2006 01:08	1.0					6	
031	235a031	X	CCV			24-AUG-2006 01:35	1.0					5	

Stds used: 1=S4053 2=S3933 3=S3880 4=S4054 5=S3934 6=S3717

SEQUENCE SUMMARY FOR 188802 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 176338855 Instrument: GC17A Gas Chromatograph #17 (Channel A) TEH Begun: 23-AUG-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used	>LR
032	235a032	SAMPLE	188886-001	116686	Soil	24-AUG-2006	02:02	1.0	0.09913		3	1:BUNKC:=5036.33	
033	235a033	SAMPLE	188886-005	116686	Soil	24-AUG-2006	02:29	1.0	0.1002		3		
034	235a034	SAMPLE	188886-002	116686	Soil	24-AUG-2006	02:57	1.0	0.09909	2	1	18:BUNKC:=77465.6	
035	235a035	SAMPLE	188885-001	116686	Soil	24-AUG-2006	03:24	1.0	0.0995	3	1	22:BUNKC:=100742	
036	235a036	X	IB			24-AUG-2006	03:52	1.0					
037	235a037	SAMPLE	188910-001	116686	Soil	24-AUG-2006	04:19	1.0	0.1005		3		
038	235a038	SAMPLE	188910-002	116686	Soil	24-AUG-2006	04:46	1.0	0.1009		3		
039	235a039	X	IB			24-AUG-2006	05:14	1.0					
040	235a040	CCV	DSL_500			24-AUG-2006	05:41	1.0	1.0		3	1	
041	235a041	CCV	MO_500			24-AUG-2006	06:08	1.0	1.0	2	3	5	
042	235a042	CCV	KERO_250			24-AUG-2006	06:36	1.0	1.0		3	3	
043	235a043	X	TC			24-AUG-2006	10:04	1.0					
044	235a044	X	TC			24-AUG-2006	10:32	1.0					
045	235a045	SAMPLE	188886-002	116686	Soil	24-AUG-2006	10:59	10.0	0.09909		3	3:BUNKC:=7369.86	
046	235a046	SAMPLE	188885-001	116686	Soil	24-AUG-2006	11:27	20.0	0.0995		3	5	
047	235a047	X	IB			24-AUG-2006	11:54	1.0					
048	235a048	SAMPLE	188770-001	116686	Soil	24-AUG-2006	12:21	20.0	0.09988		3		
049	235a049	XCCV	DSL_1000			24-AUG-2006	12:59	1.0	1.0		3	4	
050	235a050	CCV	MO_500			24-AUG-2006	13:26	1.0	1.0	2	3	5	
051	235a051	CCV	DSL_1000			24-AUG-2006	13:53	1.0	1.0		3	4	
052	235a052	CCV	KERO_250			24-AUG-2006	14:21	1.0	1.0		3	3	
053	235a053	X	TC			24-AUG-2006	15:22	1.0					
054	235a054	X	TC			24-AUG-2006	15:49	1.0					
055	235a055	BLANK	QC353210	S	116727	Soil	24-AUG-2006	16:16	1.0	0.1000	10	1	
056	235a056	LCS	QC353211	S	116727	Soil	24-AUG-2006	16:47	1.0	0.1009		2	
057	235a057	MSS	188870-006	S	116727	Soil	24-AUG-2006	17:14	1.0	0.1003	10		7:BUNKC:=11475.6
058	235a058	MS	QC353212	S	116727	Soil	24-AUG-2006	17:41	1.0	0.1004		3	7:BUNKC:=11517.6
059	235a059	MSD	QC353213	S	116727	Soil	24-AUG-2006	18:09	1.0	0.1004		3	10:BUNKC:=14634.1
060	235a060	X	IB			24-AUG-2006	18:37	1.0					
061	235a061	SAMPLE	188902-001	116727	Soil	24-AUG-2006	19:04	1.0	0.09921		3		
062	235a062	SAMPLE	188902-002	116727	Soil	24-AUG-2006	19:32	1.0	0.09964	1	3	12:BUNKC:=13477.1	

Stds used: 1=S4053 2=S3933 3=S3880 4=S4054 5=S3934 6=S3717

SEQUENCE SUMMARY FOR 188802 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 176338855 Instrument: GC17A Gas Chromatograph #17 (Channel A) TEH Begun: 23-AUG-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Samplerum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used	>LR
063	235a063	SAMPLE	188902-003	116727	Soil	24-AUG-2006 20:00	1.0	0.09976		3			
064	235a064	SAMPLE	188902-005	116727	Soil	24-AUG-2006 20:27	1.0	0.1009		3			
065	235a065	SAMPLE	188895-001	116727	Soil	24-AUG-2006 20:55	5.0	0.1002		3			
066	235a066	X	IB			24-AUG-2006 21:22	1.0						
067	235a067	CCV	MO_500			24-AUG-2006 21:49	1.0	1.0		3			
068	235a068	CCV	DSL_250			24-AUG-2006 22:16	1.0	1.0		3			
069	235a069	CCV	KERO_250			24-AUG-2006 22:44	1.0	1.0		3			
070	235a070	X	CCV			24-AUG-2006 23:11	1.0						
071	235a071	X	CCV			24-AUG-2006 23:38	1.0						
072	235a072	X	CCV			25-AUG-2006 00:05	1.0						
073	235a073	SAMPLE	188769-001	S	116727 Miscel	25-AUG-2006 00:32	1.0	0.1001		3			
074	235a074	SAMPLE	188837-001	S	116703 Water	25-AUG-2006 01:00	1.0	0.005		3			
075	235a075	SAMPLE	188837-008	S	116703 Water	25-AUG-2006 01:27	1.0	0.005		3			
076	235a076	SAMPLE	188837-010	S	116703 Water	25-AUG-2006 01:54	1.0	0.005		3			
077	235a077	X	IB			25-AUG-2006 02:22	1.0						
078	235a078	SAMPLE	188802-004	S	116703 Water	25-AUG-2006 02:49	1.0	0.005		3			
079	235a079	SAMPLE	188802-005	S	116703 Water	25-AUG-2006 03:16	1.0	0.005		3			
080	235a080	SAMPLE	188837-012	S	116703 Water	25-AUG-2006 03:44	1.0	0.005		3			
081	235a081	SAMPLE	188802-020	S	116703 Water	25-AUG-2006 04:11	1.0	0.005		3			
082	235a082	SAMPLE	188837-005	S	116703 Water	25-AUG-2006 04:38	1.0	0.005		3			
083	235a083	CCV	MO_500			25-AUG-2006 05:05	1.0	1.0		3			
084	235a084	CCV	DSL_250			25-AUG-2006 05:33	1.0	1.0		3			

Stds used: 1=S4053 2=S3933 3=S3880 4=S4054 5=S3934 6=S3717

SEQUENCE SUMMARY FOR 188802 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 116340404 Instrument: GC11A Gas Chromatograph #11 (Channel A) TEH Begun: 24-AUG-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used	>LR
001	236a001	X	PRIMER			24-AUG-2006 09:24	1.0						
002	236a002	X	IB			24-AUG-2006 09:52	1.0						
003	236a003	CCV	DSL_500			24-AUG-2006 10:20	1.0	1.0			3	1	
004	236a004	CCV	MO_500			24-AUG-2006 10:48	1.0	1.0	1		3	2	
005	236a005	X	TANK1-RECHEC			24-AUG-2006 12:12	1.0						
006	236a006	X	TANK3-CHECK			24-AUG-2006 12:40	1.0						
007	236a007	X	TANK2-RECHEC			24-AUG-2006 13:08	1.0						
008	236a008	SAMPLE	188899-008		Soil	24-AUG-2006 15:17	1.0	0.09915			3		2: BUNKC:=9023.96
009	236a009	SAMPLE	188884-001		Soil	24-AUG-2006 15:44	1.0	0.09913	1	1	3		20: BUNKC:=109757
010	236a010	SAMPLE	188899-007		Soil	24-AUG-2006 16:12	20.0	0.09921			3		
011	236a011	X	IB			24-AUG-2006 16:40	1.0						
012	236a012	SAMPLE	188875-005		Soil	24-AUG-2006 17:08	1.0	0.1000			3		2: BUNKC:=5826.57
013	236a013	SAMPLE	188884-002		Soil	24-AUG-2006 17:36	40.0	0.2014			3		
014	236a014	X	IB			24-AUG-2006 18:03	1.0						
015	236a015	CCV	DSL_1000			24-AUG-2006 19:15	1.0	1.0			3	3	5
016	236a016	CCV	MO_500			24-AUG-2006 19:43	1.0	1.0			3	2	
017	236a017	CCV	KERO_250			24-AUG-2006 20:11	1.0	1.0			3	4	
018	236a018	X	CCV			24-AUG-2006 20:39	1.0					3	
019	236a019	X	CCV			24-AUG-2006 21:07	1.0					2	
020	236a020	X	CCV			24-AUG-2006 21:35	1.0					4	
021	236a021	BLANK	QC353116 S		Water	24-AUG-2006 22:03	1.0	0.005			3		
022	236a022	LCS	QC353117 S		Water	24-AUG-2006 22:31	1.0	0.005			3		
023	236a023	MSS	188802-001 S		Water	24-AUG-2006 22:59	1.0	0.005	15		3		14: BUNKC:=20778.5
024	236a024	MS	QC353118 S		Water	24-AUG-2006 23:27	1.0	0.005		1	3		13: BUNKC:=16570.5
025	236a025	MSD	QC353119 S		Water	24-AUG-2006 23:55	1.0	0.005			3		14: BUNKC:=33193.9
026	236a026	X	IB			25-AUG-2006 00:22	1.0						
027	236a027	MSS	188837-009 S		Water	25-AUG-2006 00:50	1.0	0.005	7		3		
028	236a028	MS	QC353120 S		Water	25-AUG-2006 01:18	1.0	0.005			3		
029	236a029	MSD	QC353121 S		Water	25-AUG-2006 01:46	1.0	0.005			3		
030	236a030	SAMPLE	188869-001 S		Water	25-AUG-2006 02:14	1.0	0.005			3		
031	236a031	SAMPLE	188802-002 S		Water	25-AUG-2006 02:41	1.0	0.005			3		

Stds used: 1=S4053 2=S3934 3=S4054 4=S3880 5=S3717

SEQUENCE SUMMARY FOR 188802 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 116340404 Instrument: GC11A Gas Chromatograph #11 (Channel A) TEH Begun: 24-AUG-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
032	236a032	X	IB			25-AUG-2006 03:09	1.0							
033	236a033	CCV	DSL_250			25-AUG-2006 03:37	1.0	1.0			3	5		
034	236a034	CCV	MO_500			25-AUG-2006 04:05	1.0	1.0			3	2		
035	236a035	X	CCV			25-AUG-2006 04:33	1.0					5		
036	236a036	X	CCV			25-AUG-2006 05:01	1.0					2		

Std's used: 1=S4053 2=S3934 3=S4054 4=S3880 5=S3717

SEQUENCE SUMMARY FOR 188802 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 116341767 Instrument: GC11A
Analytical Method: EPA 8015B

Gas Chromatograph #11 (Channel A) TEH Begun: 25-AUG-2006
SOP Version: TEH_rv12

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	237a001	X	PRIMER			25-AUG-2006 08:07	1.0						
002	237a002	X	IB			25-AUG-2006 08:35	1.0						
003	237a003	CCV	DSL_500			25-AUG-2006 09:03	1.0	1.0			3	1	
004	237a004	CCV	MO_500			25-AUG-2006 09:31	1.0	1.0			3	2	
005	237a005	CCV	KERO_250			25-AUG-2006 09:59	1.0	1.0			3	3	
006	237a006	BLANK	QC353210 S			25-AUG-2006 10:27	1.0	0.1000		9	3		
007	237a007	LCS	QC353211 S			25-AUG-2006 10:55	1.0	0.1009			3		
008	237a008	SAMPLE	188902-002			25-AUG-2006 11:23	2.0	0.09964			3		2: BUNKC:=6407.57
009	237a009	X	IB			25-AUG-2006 12:08	1.0						
010	237a010	CCV	DSL_1000			25-AUG-2006 12:36	1.0	1.0			3	4	
011	237a011	CCV	MO_500			25-AUG-2006 13:04	1.0	1.0		2	3	2	
012	237a012	CCV	KERO_250			25-AUG-2006 13:32	1.0	1.0			3	3	
013	237a013	SAMPLE	188961-003 S			25-AUG-2006 21:13	1.0	0.1003			3		
014	237a014	SAMPLE	188961-002 S			25-AUG-2006 21:41	1.0	0.1003			3		
015	237a015	SAMPLE	188961-001 S			25-AUG-2006 22:09	1.0	0.0997			3		
016	237a016	CCV	DSL_1000			25-AUG-2006 22:36	1.0	1.0			3	4	
017	237a017	CCV	MO_500			25-AUG-2006 23:04	1.0	1.0			3	2	
018	237a018	X	CCV			25-AUG-2006 23:32	1.0	1.0		1		4	
019	237a019	X	CCV			26-AUG-2006 00:00	1.0					2	
020	237a020	SAMPLE	188802-008 S			26-AUG-2006 00:28	1.0	0.005			3		
021	237a021	SAMPLE	188802-006 S			26-AUG-2006 00:56	1.0	0.005			3		
022	237a022	SAMPLE	188802-009 S			26-AUG-2006 01:24	1.0	0.005			3		
023	237a023	SAMPLE	188802-013 S			26-AUG-2006 01:52	1.0	0.005			3		
024	237a024	SAMPLE	188802-014 S			26-AUG-2006 02:20	1.0	0.005			3		
025	237a025	SAMPLE	188802-015 S			26-AUG-2006 02:48	1.0	0.005			3		
026	237a026	X	IB			26-AUG-2006 03:16	1.0						
027	237a027	SAMPLE	188961-005 S			26-AUG-2006 03:44	1.0	0.1004			3		
028	237a028	SAMPLE	188916-002			26-AUG-2006 04:11	1.0	0.1007		2	3		14: BUNKC:=47998.7
029	237a029	SAMPLE	188889-001			26-AUG-2006 04:39	1.0	0.1008			3		3: JP8:10=5967.83
030	237a030	SAMPLE	188961-004 S			26-AUG-2006 05:07	2.0						
031	237a031	X	IB			26-AUG-2006 05:35	1.0	0.09972			3		

Stds used: 1=S4053 2=S3934 3=S3880 4=S4054 5=S3717

SEQUENCE SUMMARY FOR 188802 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 116341767 Instrument: GC11A Gas Chromatograph #11 (Channel A) TEH Begun: 25-AUG-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Std's	Used	>LR
032	237a032	CCV	DSL_250			26-AUG-2006	06:03 1.0	1.0			3	5		
033	237a033	CCV	MO_500			26-AUG-2006	06:32 1.0	1.0	1		3	2		
034	237a034	X	CCV			26-AUG-2006	07:00 1.0					5		
035	237a035	X	CCV			26-AUG-2006	07:28 1.0					2		

Std's used: 1=S4053 2=S3934 3=S3880 4=S4054 5=S3717

SEQUENCE SUMMARY FOR 188802 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 176341750 Instrument: GC17A Gas Chromatograph #17 (Channel A) TEH Begun: 25-AUG-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	stds Used	>LR
001	237a001	X	PRIMER			25-AUG-2006 07:50	1.0						
002	237a002	X	IB			25-AUG-2006 08:18	1.0						
003	237a003	XCCV	DSL_500			25-AUG-2006 08:45	1.0					1	
004	237a004	XCCV	MO_500			25-AUG-2006 09:12	1.0					2	
005	237a005	X	IB			25-AUG-2006 11:40	1.0						
006	237a006	XCCV	DSL_500			25-AUG-2006 12:07	1.0	1.0			3	1	
007	237a007	XCCV	MO_500			25-AUG-2006 12:34	1.0	1.0			3	2	
008	237a008	CCV	DSL_500			25-AUG-2006 13:44	1.0	1.0			3	1	
009	237a009	CCV	MO_500			25-AUG-2006 14:11	1.0	1.0			3	2	
010	237a010	SAMPLE	188870-003 S	116727	Soil	25-AUG-2006 15:20	2.0	0.1003	2		3		15:BUNKC:=28222.3
011	237a011	MSS	188802-001 S	116703	Water	25-AUG-2006 15:47	5.0	0.005	9		3		
012	237a012	MS	QC353118 S	116703	Water	25-AUG-2006 16:15	5.0	0.005		1	3		
013	237a013	MSD	QC353119 S	116703	Water	25-AUG-2006 16:42	5.0	0.005		1	3		2:BUNKC:=6167.60
014	237a014	SAMPLE	188884-001	116686	Soil	25-AUG-2006 17:09	20.0	0.09913			3		3:BUNKC:=8765.23
015	237a015	X	IB			25-AUG-2006 17:36	1.0						
016	237a016	CCV	MO_500			25-AUG-2006 18:04	1.0	1.0			3	2	
017	237a017	CCV	DSL_500			25-AUG-2006 18:31	1.0	1.0			3	1	
018	237a018	CCV	KERO_250			25-AUG-2006 20:49	1.0	1.0			3	3	
019	237a019	XBLANK	QC353534 S	116805	Soil	25-AUG-2006 21:27	1.0	0.0993	8		3		
020	237a020	LCS	QC353535 S	116805	Soil	25-AUG-2006 21:55	1.0	0.1003			3		
021	237a021	SAMPLE	188831-001 S	116805	Miscel	25-AUG-2006 22:22	1.0	0.09988	3		3	sh	5:BUNKC:=7846.27
022	237a022	SAMPLE	188878-006 S	116805	Soil	25-AUG-2006 22:50	1.0	0.0998			3		2:BUNKC:=6081.70
023	237a023	MSS	188878-005 S	116805	Soil	25-AUG-2006 23:17	10.0	0.1007	8		3		2:BUNKC:=5239.04
024	237a024	X	IB			25-AUG-2006 23:44	1.0						
025	237a025	SAMPLE	188922-001	116805	Soil	26-AUG-2006 00:11	1.0	0.09956			3		
026	237a026	SAMPLE	188919-001	116805	Soil	26-AUG-2006 00:38	1.0	0.1008			3		
027	237a027	SAMPLE	188919-002	116805	Soil	26-AUG-2006 01:06	1.0	0.1001			3		
028	237a028	SAMPLE	188919-004	116805	Soil	26-AUG-2006 01:33	1.0	0.1006			3		
029	237a029	SAMPLE	188919-003	116805	Soil	26-AUG-2006 02:00	1.0	0.1005			3		1:BUNKC:=5035.25
030	237a030	X	IB			26-AUG-2006 02:27	1.0						

StdS used: 1=S4053 2=S3933 3=S3880 4=S4054
Flags used: sh=out of sample hold

SEQUENCE SUMMARY FOR 188802 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 176341750 Instrument: GC17A Gas Chromatograph #17 (Channel A) TEH Begun: 25-AUG-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Std's	Used	>LR
031	237a031	CCV	DSL_500			26-AUG-2006 02:55	1.0	1.0		3		1		
032	237a032	CCV	MO_500			26-AUG-2006 03:22	1.0	1.0		3		2		
033	237a033	CCV	KERO_250			26-AUG-2006 03:49	1.0	1.0		3		3		
034	237a034	X	CCV			26-AUG-2006 04:16	1.0					2		
035	237a035	X	CCV			26-AUG-2006 04:43	1.0					4		
036	237a036	X	CCV			26-AUG-2006 05:11	1.0					3		
037	237a037	SAMPLE	188760-001 S	116511	Water	26-AUG-2006 05:38	1.0	0.005		3				
038	237a038	SAMPLE	188760-003 S	116511	Water	26-AUG-2006 06:05	1.0	0.005		3				
039	237a039	SAMPLE	188760-002 S	116511	Water	26-AUG-2006 06:33	1.0	0.005		3				
040	237a040	CCV	MO_500			26-AUG-2006 07:00	1.0	1.0		3		2		
041	237a041	CCV	DSL_1000			26-AUG-2006 07:27	1.0					4		
042	237a042	X	CCV			26-AUG-2006 07:55	1.0	1.0				2		
043	237a043	X	CCV			26-AUG-2006 08:22	1.0					4		

Std's used: 1=S4053 2=S3933 3=S3880 4=S4054
Flags used: sh-out of sample hold

SEQUENCE SUMMARY FOR 188802 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 166346092 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 28-AUG-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used	>LR
001	240b001	X	PRIMER			28-AUG-2006 08:12	1.0						
002	240b002	X	IB			28-AUG-2006 08:40	1.0						
003	240b003	CCV	DSL_500			28-AUG-2006 09:08	1.0	1.0				1	
004	240b004	CCV	MO_500			28-AUG-2006 09:36	1.0	1.0	2			2	
005	240b005	CCV	KERO_250			28-AUG-2006 10:21	1.0	1.0				3	
006	240b006	SAMPLE	188897-002			28-AUG-2006 11:17	1.0	0.1006					
007	240b007	SAMPLE	188897-006			28-AUG-2006 11:45	1.0	0.1008					
008	240b008	SAMPLE	188897-003			28-AUG-2006 12:13	1.0	0.09976					
009	240b009	SAMPLE	188897-001			28-AUG-2006 12:40	2.0	0.1000					
010	240b010	SAMPLE	188897-005			28-AUG-2006 13:08	5.0	0.1005					
011	240b011	SAMPLE	188897-004			28-AUG-2006 13:35	5.0	0.1003					
012	240b012	X	IB			28-AUG-2006 14:42	1.0						
013	240b013	CCV	DSL_500			28-AUG-2006 15:09	1.0	1.0				1	
014	240b014	CCV	MO_500			28-AUG-2006 15:37	1.0	1.0	2			2	
015	240b015	CCV	KERO_250			28-AUG-2006 16:04	1.0	1.0				3	
016	240b016	SAMPLE	188930-005	S		28-AUG-2006 18:26	1.0	0.1006					
017	240b017	SAMPLE	188930-006	S		28-AUG-2006 18:54	1.0	0.1003					
018	240b018	SAMPLE	188930-007	S		28-AUG-2006 19:21	1.0	0.1002					
019	240b019	SAMPLE	188930-008	S		28-AUG-2006 19:49	1.0	0.1002					
020	240b020	SAMPLE	188930-009	S		28-AUG-2006 20:16	1.0	0.0996					
021	240b021	X	IB			28-AUG-2006 20:45	1.0						
022	240b022	SAMPLE	188930-010	S		28-AUG-2006 21:12	1.0	0.1002					
023	240b023	SAMPLE	188930-011	S		28-AUG-2006 21:40	1.0	0.09986					
024	240b024	SAMPLE	188930-012	S		28-AUG-2006 22:07	1.0	0.1009					
025	240b025	SAMPLE	188930-014	S		28-AUG-2006 22:35	1.0	0.1005					
026	240b026	X	IB			28-AUG-2006 23:03	1.0						
027	240b027	CCV	DSL_1000			28-AUG-2006 23:30	1.0	1.0				4	
028	240b028	CCV	MO_500			28-AUG-2006 23:58	1.0	1.0	2			2	
029	240b029	X	CCV			29-AUG-2006 00:26	1.0					4	
030	240b030	X	CCV			29-AUG-2006 00:53	1.0					2	
031	240b031	BS	QC353548 S			29-AUG-2006 01:21	1.0	0.005				3	

Stds used: 1=S4053 2=S3934 3=S3880 4=S4054 5=S3717 6=S3523 7=S4077

SEQUENCE SUMMARY FOR 188802 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 166346092 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 28-AUG-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used	>LR
032	240b032	BSD	QC353549 S	116807	Water	29-AUG-2006 01:48	1.0	0.005			3		
033	240b033	BLANK	QC353547 S	116807	Water	29-AUG-2006 02:16	1.0	0.005			3		
034	240b034	SAMPLE	188941-001 S	116807	Water	29-AUG-2006 02:44	1.0	0.005			3		
035	240b035	SAMPLE	188941-002 S	116807	Water	29-AUG-2006 03:11	1.0	0.005			3		
036	240b036	SAMPLE	188941-003 S	116807	Water	29-AUG-2006 03:39	1.0	0.005			3		
037	240b037	SAMPLE	188941-004 S	116807	Water	29-AUG-2006 04:06	1.0	0.005			3		
038	240b038	X	IB			29-AUG-2006 04:34	1.0						
039	240b039	CCV	DSL_250			29-AUG-2006 06:24	1.0	1.0			3		5
040	240b040	CCV	MO_500			29-AUG-2006 06:51	1.0	1.0		2	3		2
041	240b041	SAMPLE	188941-009 S	116807	Water	29-AUG-2006 09:48	1.0	0.005			3		
042	240b042	SAMPLE	188982-002 S	116866	Soil	29-AUG-2006 11:33	1.0	0.1009			3		
043	240b043	SAMPLE	188982-004 S	116866	Soil	29-AUG-2006 12:01	1.0	0.0994			3		
044	240b044	SAMPLE	188982-005 S	116866	Soil	29-AUG-2006 12:29	1.0	0.1009			3		
045	240b045	SAMPLE	188982-006 S	116866	Soil	29-AUG-2006 12:56	1.0	0.0994			3		
046	240b046	X	IB			29-AUG-2006 13:25	1.0						
047	240b047	SAMPLE	188982-008 S	116866	Soil	29-AUG-2006 13:52	1.0	0.1005			3		
048	240b048	SAMPLE	188982-009 S	116866	Soil	29-AUG-2006 14:20	1.0	0.1009			3		
049	240b049	SAMPLE	188982-010 S	116866	Soil	29-AUG-2006 14:48	1.0	0.1005			3		
050	240b050	SAMPLE	188982-001 S	116866	Soil	29-AUG-2006 15:16	1.0	0.0995			3		
051	240b051	SAMPLE	188982-007 S	116866	Soil	29-AUG-2006 15:43	1.0	0.09964			3		
052	240b052	X	IB			29-AUG-2006 16:11	1.0						
053	240b053	CCV	DSL_500			29-AUG-2006 16:39	1.0	1.0			3		1
054	240b054	CCV	MO_500			29-AUG-2006 17:07	1.0	1.0		2	3		2
055	240b055	CCV	BUNK_1250			29-AUG-2006 17:35	1.0	1.0			3		6
056	240b056	CCV	JP5_250			29-AUG-2006 18:02	1.0	1.0			3		7
057	240b057	BS	QC353698 S	116838	Water	29-AUG-2006 18:59	1.0	0.005			3		
058	240b058	BSD	QC353699 S	116838	Water	29-AUG-2006 19:26	1.0	0.005			3		
059	240b059	BLANK	QC353697 S	116838	Water	29-AUG-2006 19:54	1.0	0.005		5	3		
060	240b060	SAMPLE	188965-002 S	116838	Water	29-AUG-2006 20:21	1.0	0.005		2	3		15: BUNKC:=33542.9
061	240b061	SAMPLE	188965-003 S	116838	Water	29-AUG-2006 20:49	5.0	0.005		2	3		16: BUNKC:=34878.3
062	240b062	X	IB			29-AUG-2006 21:16	1.0			1	3		

Stds used: 1=S4053 2=S3934 3=S3880 4=S4054 5=S3717 6=S3523 7=S4077

SEQUENCE SUMMARY FOR 188802 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 166346092 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 28-AUG-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Std's Used	>LR
063	240b063	SAMPLE	188965-002	116838	Water	29-AUG-2006 21:44	3.0	0.005	1		3	6:BUNKC:=11118.6	
064	240b064	SAMPLE	188965-003	116838	Water	29-AUG-2006 22:12	10.0	0.005	2		3	13:BUNKC:=15743.2	
065	240b065	X	IB			29-AUG-2006 22:39	1.0						
066	240b066	SAMPLE	188973-006	116838	Water	29-AUG-2006 23:07	1.0	0.005			3		
067	240b067	SAMPLE	188953-001 S	116838	Water	29-AUG-2006 23:34	10.0	0.005	1		3	12:BUNKC:=16709.6	
068	240b068	X	IB			30-AUG-2006 00:02	1.0						
069	240b069	CCV	DSL_1000			30-AUG-2006 00:29	1.0	1.0			3		
070	240b070	CCV	MO_500			30-AUG-2006 00:57	1.0	1.0	2		3		
071	240b071	CCV	BUNK_1250			30-AUG-2006 01:24	1.0	1.0			3		
072	240b072	CCV	JP5_250			30-AUG-2006 01:52	1.0	1.0			3		
073	240b073	X	CCV			30-AUG-2006 02:20	1.0						
074	240b074	X	CCV			30-AUG-2006 02:48	1.0						
075	240b075	X	CCV			30-AUG-2006 03:15	1.0						
076	240b076	X	CCV			30-AUG-2006 03:43	1.0						
077	240b077	SAMPLE	188998-018 S	116908	Soil	30-AUG-2006 04:11	1.0	0.09905			3		
078	240b078	SAMPLE	188998-009 S	116908	Soil	30-AUG-2006 04:38	1.0	0.09938	2	1	3	14:BUNKC:=40499.3	
079	240b079	SAMPLE	188998-013 S	116908	Soil	30-AUG-2006 05:06	1.0	0.09976	2	1	3	19:BUNKC:=84193.8	
080	240b080	X	IB			30-AUG-2006 05:34	1.0						
081	240b081	CCV	DSL_250			30-AUG-2006 06:02	1.0	1.0			3		
082	240b082	CCV	MO_500			30-AUG-2006 06:30	1.0	1.0	2		3		

Std's used: 1=S4053 2=S3934 3=S3880 4=S4054 5=S3717 6=S3523 7=S4077

SEQUENCE SUMMARY FOR 188802 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 176346093 Instrument: GC17A Gas Chromatograph #17 (Channel A) TEH Begun: 28-AUG-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds Used	>LR
001	240a001	X	PRIMER			28-AUG-2006 08:13	1.0						
002	240a002	X	IB			28-AUG-2006 08:41	1.0						
003	240a003	CCV	DSL_500			28-AUG-2006 09:08	1.0	1.0			3	1	
004	240a004	CCV	MO_500			28-AUG-2006 09:35	1.0	1.0			3	2	
005	240a005	CCV	KERO_250			28-AUG-2006 10:21	1.0	1.0			3	3	
006	240a006	BLANK	QC353534 S			28-AUG-2006 11:18	1.0	0.0993	8		3		
007	240a007	SAMPLE	188870-003 S			28-AUG-2006 11:45	10.0	0.1003			3		
008	240a008	IDOC	QC353326			28-AUG-2006 12:54	1.0	0.1001		7	3		2: BUNKC: =6350.20
009	240a009	SAMPLE	188916-002			28-AUG-2006 13:21	10.0	0.1007			3		
010	240a010	X	IB			28-AUG-2006 14:39	1.0						
011	240a011	CCV	DSL_500			28-AUG-2006 15:06	1.0	1.0			3	1	
012	240a012	CCV	MO_500			28-AUG-2006 15:34	1.0	1.0			3	2	
013	240a013	CCV	KERO_250			28-AUG-2006 16:01	1.0	1.0			3	3	
014	240a014	BLANK	QC353611 S			28-AUG-2006 18:19	1.0	0.1008	8		3		
015	240a015	LCS	QC353612 S			28-AUG-2006 18:46	1.0	0.101			3		
016	240a016	MSS	188979-005			28-AUG-2006 19:13	1.0	0.09994	8		3		104
017	240a017	MS	QC353613			28-AUG-2006 19:41	1.0	0.1008			3		
018	240a018	MSD	QC353614			28-AUG-2006 20:08	1.0	0.1008			3		
019	240a019	X	IB			28-AUG-2006 20:36	1.0						
020	240a020	SAMPLE	188802-010 S			28-AUG-2006 21:03	1.0	0.005			3		
021	240a021	SAMPLE	188990-019			28-AUG-2006 21:30	20.0	0.1003			3		
022	240a022	SAMPLE	188990-009			28-AUG-2006 21:57	10.0	0.1005			3		
023	240a023	X	IB			28-AUG-2006 22:25	1.0						
024	240a024	SAMPLE	188990-010			28-AUG-2006 22:52	20.0	0.1006			3		
025	240a025	SAMPLE	188990-020			28-AUG-2006 23:19	10.0	0.09954			3		
026	240a026	X	IB			28-AUG-2006 23:46	1.0						
027	240a027	CCV	DSL_1000			29-AUG-2006 00:13	1.0	1.0			3	4	
028	240a028	CCV	MO_500			29-AUG-2006 00:40	1.0	1.0			3	2	
029	240a029	CCV	KERO_250			29-AUG-2006 01:08	1.0	1.0			3	3	
030	240a030	X	CCV			29-AUG-2006 01:35	1.0					4	
031	240a031	X	CCV			29-AUG-2006 02:02	1.0					2	

Stds used: 1=S4053 2=S3933 3=S3880 4=S4054 5=S3717

SEQUENCE SUMMARY FOR 188802 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 176346093 Instrument: GC17A Gas Chromatograph #17 (Channel A) TEH Begun: 28-AUG-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Std's	Used	>LR
032	240a032	X	CCV			29-AUG-2006 02:29	1.0					3		
033	240a033	SAMPLE	188930-001	S	116822	Soil	29-AUG-2006 02:56	1.0	0.09994		3			
034	240a034	SAMPLE	188930-002	S	116822	Soil	29-AUG-2006 03:23	1.0	0.1008		3			
035	240a035	SAMPLE	188930-003	S	116822	Soil	29-AUG-2006 03:51	1.0	0.09992		3			
036	240a036	SAMPLE	188930-004	S	116822	Soil	29-AUG-2006 04:18	1.0	0.09932		3			
037	240a037	X	IB			29-AUG-2006 04:45	1.0							
038	240a038	CCV	MO_500			29-AUG-2006 05:13	1.0	1.0			3			
039	240a039	CCV	DSL_250			29-AUG-2006 05:41	1.0	1.0			3			
040	240a040	LCS	QC353808	S	116866	Soil	29-AUG-2006 11:12	1.0	0.1002		3			
041	240a041	BLANK	QC353807	S	116866	Soil	29-AUG-2006 11:39	1.0	0.1008		3			
042	240a042	SAMPLE	188916-001	S	116866	Soil	29-AUG-2006 12:07	1.0	0.09952		2			18:BUNKC:=33429.2
043	240a043	X	IB			29-AUG-2006 12:35	1.0							
044	240a044	SAMPLE	188916-001	S	116866	Soil	29-AUG-2006 13:18	5.0	0.09952		3			3:BUNKC:=7213.08
045	240a045	SAMPLE	188997-005	S	116866	Soil	29-AUG-2006 13:45	1.0	0.0997		3			
046	240a046	MS	QC353809	S	116866	Soil	29-AUG-2006 14:13	1.0	0.1007		3			
047	240a047	MSD	QC353810	S	116866	Soil	29-AUG-2006 14:40	1.0	0.09944		3			
048	240a048	MSS	188997-007	S	116866	Soil	29-AUG-2006 15:07	1.0	0.1001		8			
049	240a049	MS	QC353811	S	116866	Soil	29-AUG-2006 15:34	1.0	0.0996		3			
050	240a050	MSD	QC353812	S	116866	Soil	29-AUG-2006 16:01	1.0	0.1004		3			
051	240a051	X	IB			29-AUG-2006 16:29	1.0							
052	240a052	CCV	DSL_500			29-AUG-2006 16:56	1.0	1.0			3			
053	240a053	CCV	MO_500			29-AUG-2006 17:23	1.0	1.0			3			
054	240a054	BS	QC353829		116870	Water	29-AUG-2006 18:59	1.0	0.005		3			
055	240a055	BSD	QC353830		116870	Water	29-AUG-2006 19:26	1.0	0.005		3			
056	240a056	BLANK	QC353828		116870	Water	29-AUG-2006 19:53	1.0	0.005		8			
057	240a057	SAMPLE	189013-002		116870	Water	29-AUG-2006 20:20	1.0	0.005		3			
058	240a058	SAMPLE	189013-005		116870	Water	29-AUG-2006 20:48	1.0	0.005		3			
059	240a059	SAMPLE	189013-008		116870	Water	29-AUG-2006 21:15	1.0	0.005		3			
060	240a060	MSS	188997-005	S	116866	Soil	29-AUG-2006 21:50	1.0	0.0997		9			
061	240a061	X	IB			29-AUG-2006 22:18	1.0							
062	240a062	XBLANK	QC353992		116899	Soil	29-AUG-2006 22:45	1.0	0.09921		9			

Std's used: 1=S4053 2=S3933 3=S3880 4=S4054 5=S3717

SEQUENCE SUMMARY FOR 188802 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 176346093 Instrument: GC17A Gas Chromatograph #17 (Channel A) TEH Begun: 28-AUG-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	UL	Stds	Used	>LR
063	240a063	LCS	QC353993	116899	Soil	29-AUG-2006 23:12	1.0	0.0996		3				
064	240a064	SAMPLE	189022-002	116899	Soil	29-AUG-2006 23:40	3.0	0.1002		3				2:JP8:10=3348.58
065	240a065	X	IB			30-AUG-2006 00:07	1.0							
066	240a066	CCV	DSL_1000			30-AUG-2006 00:34	1.0	1.0		3				4
067	240a067	CCV	MO_500			30-AUG-2006 01:01	1.0	1.0		3				2
068	240a068	X	CCV			30-AUG-2006 01:28	1.0							4
069	240a069	X	CCV			30-AUG-2006 01:56	1.0							2
070	240a070	SAMPLE	189022-009	116899	Soil	30-AUG-2006 02:23	1.0	0.0995		3				
071	240a071	SAMPLE	189022-008	116899	Soil	30-AUG-2006 02:51	1.0	0.0994		3				
072	240a072	SAMPLE	189022-010	116899	Soil	30-AUG-2006 03:19	1.0	0.1007		3				
073	240a073	SAMPLE	189022-007	116899	Soil	30-AUG-2006 03:46	2.0	0.1006		3				
074	240a074	SAMPLE	189022-006	116899	Soil	30-AUG-2006 04:13	5.0	0.1004		3				2:BUNKC:=5976.68
075	240a075	X	IB			30-AUG-2006 04:40	1.0							
076	240a076	MSS	189022-001	116899	Soil	30-AUG-2006 05:08	5.0	0.0994	9	3				
077	240a077	MS	QC353994	116899	Soil	30-AUG-2006 05:35	5.0	0.0996		1	3			9
078	240a078	MSD	QC353995	116899	Soil	30-AUG-2006 06:02	5.0	0.09976		1	3			
079	240a079	X	IB			30-AUG-2006 06:30	1.0							
080	240a080	CCV	DSL_250			30-AUG-2006 06:57	1.0	1.0		3				5
081	240a081	CCV	MO_500			30-AUG-2006 07:25	1.0	1.0		3				2

Stds used: 1=S4053 2=S3933 3=S3880 4=S4054 5=S3717

REPORTING SUMMARY FOR 188802 TEHM Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	D S L :	M O :	H X C S
188802-001	GC11A	08/24/06 22:59	1.0			+
188802-001	GC17A	08/25/06 15:47	5.0	+	+	
188802-002	GC11A	08/25/06 02:41	1.0	+	+	+
188802-004	GC17A	08/25/06 02:49	1.0	+	+	+
188802-005	GC17A	08/25/06 03:16	1.0	+	+	+
188802-006	GC11A	08/26/06 00:56	1.0	+	+	+
188802-008	GC11A	08/26/06 00:28	1.0	+		+
188802-009	GC11A	08/26/06 01:24	1.0	+	+	+
188802-010	GC17A	08/28/06 21:03	1.0	+		+
188802-013	GC11A	08/26/06 01:52	1.0	+	+	+
188802-014	GC11A	08/26/06 02:20	1.0	+	+	+
188802-015	GC11A	08/26/06 02:48	1.0	+	+	+
188802-020	GC17A	08/25/06 04:11	1.0	+	+	+
QC353116	GC11A	08/24/06 22:03	1.0	+	+	+
QC353117	GC11A	08/24/06 22:31	1.0	+		+
QC353118	GC11A	08/24/06 23:27	1.0			
QC353118	GC17A	08/25/06 16:15	5.0			
QC353119	GC11A	08/24/06 23:55	1.0			
QC353119	GC17A	08/25/06 16:42	5.0			
QC353120	GC11A	08/25/06 01:18	1.0	+		+
QC353121	GC11A	08/25/06 01:46	1.0	+		+
QC353547	GC15B	08/29/06 02:16	1.0	+		+
QC353548	GC15B	08/29/06 01:21	1.0	+		+
QC353549	GC15B	08/29/06 01:48	1.0	+		+

Curtis & Tompkins Laboratories

Sample Preparation Summary

24-AUG-2006 19:15

Batch Number : 116703 ✓
Date Extracted: 23-AUG-2006
Extracted by : Kevin Riley
Prep Method : 3520C ✓

Analysis : N/A
Bq Group : TEH
Units : mL
Clean-up :

Spike #1 ID : S4026C ✓
Spike #2 ID : S4117A ✓
Spike #3 ID :
SDP Version : TEH50LL rv10

Sample	Type	Client	Matrix	Init	Units	Final	Prep	Clean	pH	Sp 1	Sp 2	Sp 3	Analyses	Clean	Comments
188802-001		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	mss ✓
188802-002		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	
188802-004		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	
188802-005		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	
188802-006		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	
188802-008		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEH	3630C	
188802-009		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	
188802-013		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	
188802-014		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	
188802-015		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	5.5	0			TEHM	3630C	
188802-020		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	
188837-001		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	
188837-005		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	
188837-008		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	
188837-009		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	
188837-010		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	
188837-012		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	6.5	0			TEHM	3630C	
188869-001		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	5.5	0			TEHM	3630C	
QC353116	BLANK		Water	500	mL	2.5	0.005000	1	5.5	0			TEH	3630C	
QC353117	LCS		Water	500	mL	2.5	0.005000	1	5.5	0			TEH	3630C	
QC353118	MS	of 188802-001 ✓	Water	500	mL	2.5	0.005000	1	7.5	0			TEH	3630C	
QC353119	MSD	of 188802-001 ✓	Water	500	mL	2.5	0.005000	1	7.5	0			TEH	3630C	
QC353120	MS	of 188837-009 ✓	Water	500	mL	2.5	0.005000	1	7.5	0			TEH	3630C	
QC353121	MSD	of 188837-009 ✓	Water	500	mL	2.5	0.005000	1	7.5	0			TEH	3630C	

mss ✓

Prep Chemist:

Reviewed By:

Date: 8/24/06

Relinquished By:

Received By:

Date: 8/28/06

LIMS Batch No: 116703
 LIMS Analysis: TEH/M
 Extracted by: KR
 Date Extracted: 8/23/06

Extraction Method:

☐ mod. EPA 3510 sep. funnel
☒ mod. EPA 3520 cont. L/L
☐ _____

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Cleanup Method (if needed):

☒ EPA 3630 Silica Gel
☐ Other _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
188802-001 AK	500	7	2.5	X *MSS	
-002 G					
-004 D					
-005 I					
-006 J					
-008 I					
-009 J					
-010 I	MCC 8/24/06				
-013 J			2.5		
-014					
-015		5			
-010		7			
188837-001 D					
-005 H					
-008 J					
-009 S					MSS
-010 G					
-012 R		6			
188869-001		5			
NB QC353116		N/A			
LCS 17					
MS 18		7			*188802-001 AL
MSD 19					
MS 20					188837-009 T
MSD 21					

0.5 mL of TEH_SURR was added to all samples

0.5 mL of TEH_SP was added to all spikes

pH of all samples adjusted to pH ≤ 2 with H₂SO₄☒ Samples were continually extracted about 450 mL of CH₂Cl₂

Extraction Start Time:

Extraction End Time:

☐ Samples were extracted 3 times with 60 mL of CH₂Cl₂Extracts filtered through baked, CH₂Cl₂-rinsed granular Na₂SO₄

Concentrated to volumes as noted above

Mfg & Lot# / LIMS# / Time Date/ Initials

S4026 C 8/23/06 KR

S4117 A

FS054 S22

EM46130

K115

0900

N/A

EM 4611620

✓

Extraction Chemist KR Date 23 Aug 06Continued from Page 109
Continued on Page 110Reviewed by Parvath Manigat Date 8/24/06

Prep Chemist: MCCCleanup Date: 8/24/06Benchbook # **BK 2356**

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Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
188802-001	116703	6.0	1.0	mss ☺
-002				
-004				
-005				
-006				
-008				
-009				
-013				
-014				
-015				
-020				
188857-001				
-005				
-008				
-009				mss
-010				
-012				
188869-001				*
MB Qc353116				
LCS 17				
MS 18				☺
MSD 19				☺
MS 20				
MSD 21				
mcc 8/24/06				

- * ☒ Extracts were cleaned up using C&T assembled 1.0 g columns
☒ Extracts were cleaned up using 1.0 g cartridges
 Extracts were eluted with 40 mL CH_2Cl_2
 Concentrated to volumes as noted above

Mfg & Lot # / Time / Program	Initials / Date
SP43219426	mcc 8/24/06
SP7335	
EM 45139	

Michael Chen 8/24/06
 Extraction Chemist / Date

Continued from page
 Continued 140 page

Pamela Manghit 8/24/06
 Reviewed by / Date

28-AUG-2006 16:57

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Spike #1 ID : S4026C ✓
Spike #2 ID : S4117C ✓
Spike #3 ID :
SOP Version : TEH50LL rv10

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Spike #1 ID S4026C ✓
Spike #2 ID S4117C ✓
Spike #3 ID TEH50LL
SOP Version

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Sample	Type	Client	Matrix	Init W/V	Units	Final Prep Vol	D.F.	Clean pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
88802-010		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
888941-001		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-002		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-003		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-004		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-005		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-007		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-008		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-009		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-010		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-011		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-012		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-013		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-014		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-015		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-016		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-017		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-018		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-019		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-020		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-021		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-022		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-023		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-024		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-025		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-026		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-027		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-028		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-029		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-030		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-031		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-032		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-033		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-034		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-035		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-036		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-037		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-038		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-039		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-040		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-041		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-042		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-043		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-044		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-045		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-046		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-047		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-048		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-049		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-050		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-051		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-052		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-053		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-054		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-055		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-056		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-057		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-058		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-059		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-060		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-061		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-062		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-063		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-064		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-065		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-066		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-067		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-068		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-069		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-070		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-071		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-072		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-073		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-074		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-075		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-076		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-077		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-078		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-079		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-080		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-081		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-082		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-083		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-084		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-085		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-086		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-087		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-088		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-089		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-090		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-091		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-092		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-093		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-094		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-095		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-096		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-097		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-098		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-099		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-100		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-101		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-102		ENSR Consulting & Engineering	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
88941-103														

Reviewed By:

Date:

Received By:

Date:

90/62/8

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Cleanup Method (if needed):

☒ EPA 3630 Silica Gel

☐ Other

Reviewed by John Lee 8/29/06

Prep Chemist: MCC
 Cleanup Date: 8/28/06

Benchbook # **BK 2356**
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Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
188802-010	116807	1.0	1.0	
188941-001				
002				
003				
004				
005				
007				
008				
009				
010				
011				
012				
013				
014				
015				
016				
017				
018				
019				
020				
MS Qc353547				
BS	8			
BSD	9			
MCC 8/28/06				

- ☐ Extracts were cleaned up using C&T assembled g columns
- ☒ Extracts were cleaned up using 1.0 g cartridges
- Extracts were eluted with 40 mL CH_2Cl_2
- Concentrated to volumes as noted above

Mfg & Lot # / Time / Program	Initials / Date
N/A	MCC 8/28/06
SP7716	
EM4621	
✓	✓

Michael Chu 8/28/06

8/29/06

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 09/24/06

Analyte	Units	GC11A	GC13B B	GC15B	GC17A	GC14B B
JP-5 C10-C16	ug/L	17	16	7.9	5.4	
Jet Fuel A C10-C16	ug/L	14	30	24	33	
Diesel C12-C32	ug/L	22	14	25	23	
Diesel C12-C36	ug/L	13	17			
Diesel C12-C28	ug/L		31			
Diesel C12-C24	ug/L	20	13	20	33	
Diesel C12-C22	ug/L	19	17	20	25	
Diesel C10-C28	ug/L	18	11	22	37	
Diesel C10-C24	ug/L	21	15	18	33	
Diesel C10-C22	ug/L	21	18	19	27	
Diesel C10-C20	ug/L		16	13	19	
Motor Oil C22-C36	ug/L	120	110	120	140	89
Motor Oil C24-C36	ug/L	150	140	140	170	99
Motor Oil C22-C32	ug/L	140	130	21	160	99
Motor Oil C28-C40	ug/L	67	68	63	78	
Motor Oil C28-C36	ug/L	64	74	64	69	
Motor Oil C20-C36	ug/L	120	99	110	130	76
Hexacosane	ug/L	4.5	16	4.2	3.1	

VOLATILE ORGANIC COMPOUNDS

Purgeable Organics by GC/MS

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1349MW100	Batch#:	116581
Lab ID:	188802-001	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Analyzed:	08/21/06
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	23	0.5	0.1
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-120
1,2-Dichloroethane-d4	101	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	93	86-115

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

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Purgeable Organics by GC/MS

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1213GW101	Batch#:	116581
Lab ID:	188802-005	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Analyzed:	08/21/06
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	6.9	0.5	
Benzene	24	0.5	0.1
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	1.9	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	0.5	0.5	

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-120
1,2-Dichloroethane-d4	93	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	88	86-115

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

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Purgeable Organics by GC/MS

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DUP0816063A	Batch#:	116581
Lab ID:	188802-006	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Analyzed:	08/21/06
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	9.7	0.5	
Benzene	36	0.5	0.1
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	0.7	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	3.2	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	0.9	0.5	

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-120
1,2-Dichloroethane-d4	92	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	89	86-115

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

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Purgeable Organics by GC/MS

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1065MW101	Batch#:	116581
Lab ID:	188802-009	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Analyzed:	08/21/06
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	95	80-120
1,2-Dichloroethane-d4	92	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	91	86-115

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

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Purgeable Organics by GC/MS

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1065MW102	Batch#:	116582
Lab ID:	188802-012	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Analyzed:	08/21/06
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	0.04 J	0.5	0.03
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-120
1,2-Dichloroethane-d4	104	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	104	86-115

J= Estimated value

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1047MW101	Batch#:	116582
Lab ID:	188802-016	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Analyzed:	08/21/06
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.03
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-120
1,2-Dichloroethane-d4	106	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	105	86-115

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

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Purgeable Organics by GC/MS

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	TB081606A	Batch#:	116582
Lab ID:	188802-019	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Analyzed:	08/21/06
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.03
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-120
1,2-Dichloroethane-d4	106	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	105	86-115

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

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Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC352612	Batch#:	116581
Matrix:	Water	Analyzed:	08/21/06
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-120
1,2-Dichloroethane-d4	95	76-114
Toluene-d8	104	88-110
Bromofluorobenzene	93	86-115

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

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Batch QC Report

Purgeable Organics by GC/MS

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC352614	Batch#:	116582
Matrix:	Water	Analyzed:	08/21/06
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.03
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-120
1,2-Dichloroethane-d4	104	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	105	86-115

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

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Batch QC Report

Purgeable Organics by GC/MS

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC352611	Batch#:	116581
Matrix:	Water	Analyzed:	08/21/06
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	25.07	100	65-135
Benzene	25.00	25.96	104	65-135
Trichloroethene	25.00	26.76	107	65-135
Toluene	25.00	28.04	112	65-135
Chlorobenzene	25.00	26.74	107	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-120
1,2-Dichloroethane-d4	94	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	92	86-115

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC352613	Batch#:	116582
Matrix:	Water	Analyzed:	08/21/06
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	25.55	102	65-135
Benzene	25.00	26.94	108	65-135
Trichloroethene	25.00	26.89	108	65-135
Toluene	25.00	27.42	110	65-135
Chlorobenzene	25.00	26.34	105	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-120
1,2-Dichloroethane-d4	105	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	103	86-115

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1349MW100	Batch#:	116581
MSS Lab ID:	188802-001	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Analyzed:	08/21/06
Diln Fac:	1.000		

Type: MS Lab ID: QC352630

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.1745	25.00	29.24	117	65-135
Benzene	23.31	25.00	47.19	96	65-135
Trichloroethene	<0.1292	25.00	27.88	112	65-135
Toluene	0.2404	25.00	29.32	116	65-135
Chlorobenzene	<0.09805	25.00	26.95	108	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-120
1,2-Dichloroethane-d4	99	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	95	86-115

Type: MSD Lab ID: QC352631

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	25.71	103	65-135	13	35
Benzene	25.00	43.89	82	65-135	7	35
Trichloroethene	25.00	26.47	106	65-135	5	35
Toluene	25.00	27.21	108	65-135	7	35
Chlorobenzene	25.00	25.72	103	65-135	5	35

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-120
1,2-Dichloroethane-d4	89	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	92	86-115

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1047MW101	Batch#:	116582
MSS Lab ID:	188802-016	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Analyzed:	08/21/06
Diln Fac:	1.000		

Type: MS Lab ID: QC352632

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.08940	25.00	26.50	106	65-135
Benzene	<0.02734	25.00	27.82	111	65-135
Trichloroethene	<0.08663	25.00	27.18	109	65-135
Toluene	<0.05252	25.00	27.85	111	65-135
Chlorobenzene	<0.04954	25.00	26.83	107	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	112	80-120
1,2-Dichloroethane-d4	111	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	105	86-115

Type: MSD Lab ID: QC352633

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	23.76	95	65-135	11	35
Benzene	25.00	25.35	101	65-135	9	35
Trichloroethene	25.00	24.80	99	65-135	9	35
Toluene	25.00	25.71	103	65-135	8	35
Chlorobenzene	25.00	24.83	99	65-135	8	35

Surrogate	%REC	Limits
Dibromofluoromethane	110	80-120
1,2-Dichloroethane-d4	108	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	106	86-115

RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 188802 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name: BFB IDF : 1.0
Seqnum : 486258514001.1 File : ifs01 Time : 28-JUN-2006 12:34

Standards: S3716

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	28728	19.83	
75	30.00% - 60.00% of mass 95	65034	44.90	
95		144848		
96	5.00% - 9.00% of mass 95	9591	6.62	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	99208	68.49	
175	5.00% - 9.00% of mass 174	7217	7.27	
176	> 95.00% and < 101.00% of mass 174	95056	95.81	
177	5.00% - 9.00% of mass 176	6300	6.63	

Analyst: BO

Date: 08/22/06

Reviewer: AMK

Date: 08/22/06

CURTIS & TOMPKINS BFB TUNE FOR 188802 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name: BFB IDF : 1.0
Seqnum : 486259923001.1 File : ift01 Time : 29-JUN-2006 12:03

Standards: S3716

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	56496	19.41	
75	30.00% - 60.00% of mass 95	133952	46.02	
95		291072		
96	5.00% - 9.00% of mass 95	19056	6.55	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	186368	64.03	
175	5.00% - 9.00% of mass 174	14055	7.54	
176	> 95.00% and < 101.00% of mass 174	179840	96.50	
177	5.00% - 9.00% of mass 176	13015	7.24	

Analyst: BO Date: 08/22/06 Reviewer: AMK Date: 08/22/06

CURTIS & TOMPKINS BFB TUNE FOR 188802 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name: BFB IDF : 1.0
Seqnum : 486335982002 File : ihl02 Time : 21-AUG-2006 08:29

Standards: S3716

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	128829	17.46	
75	30.00% - 60.00% of mass 95	319338	43.28	
95		737792		
96	5.00% - 9.00% of mass 95	49708	6.74	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	612650	83.04	
175	5.00% - 9.00% of mass 174	46077	7.52	
176	> 95.00% and < 101.00% of mass 174	603029	98.43	
177	5.00% - 9.00% of mass 176	39682	6.58	

CURTIS & TOMPKINS BFB TUNE FOR 188802 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name: BFB IDF : 1.0
Seqnum : 496317897002 File : jh802 Time : 08-AUG-2006 18:51

Standards: S3716

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	56621	21.02	
75	30.00% - 60.00% of mass 95	119317	44.30	
95		269354		
96	5.00% - 9.00% of mass 95	17986	6.68	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	218176	81.00	
175	5.00% - 9.00% of mass 174	16811	7.71	
176	> 95.00% and < 101.00% of mass 174	214656	98.39	
177	5.00% - 9.00% of mass 176	14628	6.81	

Analyst: AMK Date: 08/11/06 Reviewer: ACM Date: 08/18/06

CURTIS & TOMPKINS BFB TUNE FOR 188802 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name: BFB IDF : 1.0
Seqnum : 496335998002 File : jhl02 Time : 21-AUG-2006 08:28

Standards: S3716

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	122112	22.41	
75	30.00% - 60.00% of mass 95	250880	46.05	
95		544789		
96	5.00% - 9.00% of mass 95	37464	6.88	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	417792	76.69	
175	5.00% - 9.00% of mass 174	32085	7.68	
176	> 95.00% and < 101.00% of mass 174	405461	97.05	
177	5.00% - 9.00% of mass 176	27101	6.68	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188802 MSVOA Water: EPA 8260B

Inst : MSVOA09
 Calnum : 486258514006
 Units : ug/L

Name : 826GOX9W
 Date : 28-JUN-2006 14:11
 X Axis : R

Reviewer: AMK
 Type : WATER

Level	File	Segment	Sample ID	Analyzed	Std's
L1	ifs04	486258514004	0.25/0.5PPB	28-JUN-2006 14:11	S3638 (1000000X), S3760 (2000000X), S2864 (2000000X), S3579 (1000X)
L2	ifs05	486258514005	0.5/1PPB	28-JUN-2006 14:45	S3638 (5000000X), S3760 (10000000X), S2864 (10000000X), S3579 (1000X)
L3	ifs06	486258514006	2PPB	28-JUN-2006 15:20	S3638 (2500000X), S3760 (2500000X), S2864 (5000000X), S3579 (1000X)
L4	ifs07	486258514007	5PPB	28-JUN-2006 15:55	S3638 (1000000X), S3760 (1000000X), S2864 (2000000X), S3579 (1000X)
L5	ifs08	486258514008	10PPB	28-JUN-2006 16:29	S3638 (500000X), S3760 (500000X), S2864 (1000000X), S3579 (1000X)
L6	ifs09	486258514009	20PPB	28-JUN-2006 17:04	S3638 (250000X), S3760 (250000X), S2864 (500000X), S3579 (1000X)
L7	ifs10	486258514010	50PPB	28-JUN-2006 17:38	S3638 (100000X), S3760 (100000X), S2864 (200000X), S3579 (1000X)
L8	ifs11	486258514011	75PPB	28-JUN-2006 18:12	S3638 (6667X), S3760 (6667X), S2864 (13330X), S3579 (1000X)
L9	ifs12	486258514012	100PPB	28-JUN-2006 18:47	S3638 (5000X), S3760 (5000X), S2864 (10000X), S3579 (1000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ²	Max	Min	r ²	Flg
Chloromethane		2.5386	2.4700m	2.3131	2.2781	2.3606	2.0497			AVRG	0.42826			2.3350	7	15	0.10	0.99	
Vinyl Chloride	1.5770	1.6802	1.7533m	1.7413	1.6511	1.8647	1.6245	1.6784		AVRG	0.58951			1.6963	5	15	0.050	0.99	
Bromomethane		1.3160m	1.1422m	1.0212m	0.9921	1.0788	1.0100	1.0611	1.0668	AVRG	0.92080			1.0860	10	15	0.050	0.99	
Chloroethane		0.8519m	0.9064m	1.0022	0.9497m	1.0305	0.9231	0.9644	0.9587	AVRG	1.05444			0.9484	6	15	0.050	0.99	
Acetone				0.5722	0.5863	0.5123	0.5119	0.5200	0.4672	AVRG	1.89281			0.5283	8	15	0.050	0.99	
1,1-Dichloroethene		0.7017	0.9361	0.9037	0.8818	0.9843	1.0489	0.9848	0.9999	AVRG	1.07512			0.9301	12	15	0.050	0.99	
Methylene Chloride			1.7740	1.6468	1.6793	1.6383	1.5686	1.5197	1.5056	AVRG	0.61770			1.6189	6	15	0.050	0.99	
Carbon Disulfide		3.4716	4.2664	4.4908	4.4673	4.7765	5.0136	4.6531	4.8403	AVRG	0.22235			4.4974	11	15	0.050	0.99	
MTBE		2.9531	3.4747	3.6507	3.6964	3.6720	3.4662	3.3827	3.3399	AVRG	0.28948			3.4544	7	15	0.050	0.99	
trans-1,2-Dichloroethene		0.9917m	1.0468	1.1269	1.1529m	1.1820	1.2050	1.1368	1.1454	AVRG	0.89013			1.1234	6	15	0.050	0.99	
Vinyl Acetate		2.9107	3.4615	2.8821	2.9667	3.4793	2.8685			AVRG	0.32260			3.0998	9	15	0.050	0.99	
1,1-Dichloroethane		2.0115	2.3466	2.3531	2.3854	2.4518	2.3924	2.2772	2.2486	AVRG	0.43322			2.3083	6	15	0.10	0.99	
2-Butanone				0.7464	0.7876	0.7580	0.7094	0.6950	0.6836	AVRG	1.36985			0.7300	6	15	0.050	0.99	
cis-1,2-Dichloroethene		1.1512	1.2096	1.2703	1.2946	1.2790	1.2881	1.2580	1.2537	AVRG	0.79965			1.2506	4	15	0.050	0.99	
Chloroform		1.9176	2.0466	2.1552	2.1022	2.1671	2.1369	2.0711	2.0327	AVRG	0.48107			2.0787	4	15	0.050	0.99	
1,1,1-Trichloroethane		1.1295	1.2244	1.2586	1.2864	1.3923	1.4371	1.3535	1.4155	AVRG	0.76123			1.3137	8	15	0.050	0.99	
Carbon Tetrachloride		0.4533	0.6134	0.6077	0.5931	0.6755	0.7249	0.6720	0.7449	AVRG	1.57333			0.6356	14	15	0.050	0.99	
1,2-Dichloroethane		0.8117	0.9759	0.9596	0.9690	0.9736	0.9349	0.8899	0.8968	AVRG	1.07943			0.9264	6	15	0.050	0.99	
Benzene		2.4844	2.7759	2.8113	2.7833	2.9013	2.8094	2.6489	2.6639	AVRG	0.36566			2.7348	5	15	0.050	0.99	
Trichloroethene		0.5429	0.6496	0.6932	0.6529	0.6798	0.7027	0.6672	0.6844	AVRG	1.51724			0.6591	8	15	0.050	0.99	
1,2-Dichloropropane		0.7619	0.9083	0.8699	0.8719	0.8890	0.8716	0.8188	0.8137	AVRG	1.17557			0.8507	6	15	0.050	0.99	
Bromodichloromethane		0.7816	0.8713	0.9537	0.9335	0.9548	0.9464	0.9046	0.9270	AVRG	1.09999			0.9091	6	15	0.050	0.99	
4-Methyl-2-Pentanone				0.8882	0.9692	0.9866	0.8958	0.8592	0.8847	AVRG	1.09415			0.9139	6	15	0.050	0.99	
cis-1,3-Dichloropropene		0.9967	1.2047	1.2563	1.2446	1.2554	1.2229	1.1717	1.1759	AVRG	0.83961			1.1910	7	15	0.050	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	AVG	r ²	Max	Min	r ²	Fig
Toluene		1.3757	1.6286	1.6722	1.5717	1.6746	1.6043	1.5244	1.5729	AVRG		0.63369		1.5781	6	15	0.050	0.99	
trans-1,3-Dichloropropene		0.8345	1.0666	1.0844	1.1106	1.1304	1.1034	1.0494	1.0755	AVRG		0.94621		1.0568	9	15	0.050	0.99	
1,1,2-Trichloroethane		0.3073	0.4057	0.3965	0.3891	0.3919	0.3824	0.3702	0.3770	AVRG		2.64881		0.3775	8	15	0.050	0.99	
2-Hexanone				0.6608	0.7567	0.7602	0.7162	0.6997	0.6901	AVRG		1.40066		0.7139	5	15	0.050	0.99	
Tetrachloroethene		0.5753	0.5342	0.5847	0.5575	0.6295	0.6797	0.6286	0.6858	AVRG		1.64094		0.6094	9	15	0.050	0.99	
Dibromochloromethane		0.6318	0.7873	0.8110	0.8316	0.8451	0.8518	0.8250	0.8533	AVRG		1.24281		0.8046	9	15	0.050	0.99	
Chlorobenzene		1.9818	2.1248	2.1427	2.1391	2.1331	2.1264	1.9993	2.0167	AVRG		0.48008		2.0830	3	15	0.30	0.99	
Ethylbenzene		2.9678	3.1429	3.3533	3.2565	3.3951	3.3250	3.0395	3.0690	AVRG		0.31312		3.1937	5	15	0.050	0.99	
m,p-Xylenes	1.1413	1.1504	1.2283	1.3082	1.2572	1.3333	1.2769	1.1615	1.1946	AVRG		0.81435		1.2280	6	15	0.050	0.99	
o-Xylene		1.1081	1.2324	1.3308	1.3028	1.3334	1.2978	1.2208	1.2369	AVRG		0.79499		1.2579	6	15	0.050	0.99	
Styrene		1.9591	2.1509	2.3080	2.3255	2.4001	2.3287	2.1934	2.1833	AVRG		0.44820		2.2311	6	15	0.050	0.99	
Bromoforn		0.5078	0.5556	0.5478	0.5778	0.5998	0.6023	0.5938	0.6081	AVRG		1.74179		0.5741	6	15	0.10	0.99	
1,1,2,2-Tetrachloroethane		1.6740	2.1748	2.1640	2.2451	2.2870	2.1277	2.0143	2.0970	AVRG		0.47665		2.0980	9	15	0.30	0.99	
Dibromofluoromethane	0.5916	0.5985	0.5988	0.5963	0.6034	0.5996	0.6088	0.6191	0.6111	AVRG		1.65833		0.6030	1	15	0.050	0.99	
1,2-Dichloroethane-d4	0.3556	0.3623	0.3632	0.3652	0.3717	0.3776	0.3510	0.3528	0.3525	AVRG		2.76759		0.3613	3	15	0.050	0.99	
Toluene-d8	1.1130	1.1010	1.1331	1.1437	1.1176	1.1351	1.1152	1.0991	1.1345	AVRG		0.89176		1.1214	1	15	0.050	0.99	
Bromofluorobenzene	1.1332	1.1339	1.1198	1.1183	1.1250	1.1099	1.1065	1.0730	1.0932	AVRG		0.89884		1.1125	2	15	0.050	0.99	

Analyst: SJDDate: 08/17/06Reviewer: AMKDate: 08/17/06

m>manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor
Page 2 of 2

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188802 MSVOA Water
EPA 8260B

Inst : MSVOA09
Calnum : 486258514006

Name : 826GOX9W
Cal Date: 28-JUN-2006

Type : WATER

ICV 486259923003 (ift03 29-JUN-2006) stds: S3391 (10000X), S3600 (10000X),
S3604 (10000X), S3579 (1000X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	2.3350	2.0185	25.00	22	ug/L	-14	30	
Vinyl Chloride	1.6963	1.6099	25.00	24	ug/L	-5	20	
Bromomethane	1.0860	1.1482	25.00	26	ug/L	6	30	
Chloroethane	0.9484	0.9109	25.00	24	ug/L	-4	30	
Acetone	0.5283	0.4203	25.00	20	ug/L	-20	40	
1,1-Dichloroethene	0.9301	1.0122	25.00	27	ug/L	9	20	
Methylene Chloride	1.6189	1.6072	25.00	25	ug/L	-1	30	
Carbon Disulfide	4.4974	4.0850	25.00	23	ug/L	-9	30	
MTBE	3.4544	3.2589	25.00	24	ug/L	-6	30	
trans-1,2-Dichloroethene	1.1234	1.1492	25.00	26	ug/L	2	30	
Vinyl Acetate	3.0998	2.4668	25.00	20	ug/L	-20	40	
1,1-Dichloroethane	2.3083	2.2544	25.00	24	ug/L	-2	30	
2-Butanone	0.7300	0.6510	25.00	22	ug/L	-11	40	
cis-1,2-Dichloroethene	1.2506	1.2929	25.00	26	ug/L	3	30	
Chloroform	2.0787	2.0786	25.00	25	ug/L	0	20	
1,1,1-Trichloroethane	1.3137	1.4425	25.00	27	ug/L	10	30	
Carbon Tetrachloride	0.6356	0.7740	25.00	30	ug/L	22	30	!v+
1,2-Dichloroethane	0.9264	0.9236	25.00	25	ug/L	0	30	
Benzene	2.7348	2.8319	25.00	26	ug/L	4	30	
Trichloroethene	0.6591	0.7086	25.00	27	ug/L	8	30	
1,2-Dichloropropane	0.8507	0.8370	25.00	25	ug/L	-2	20	
Bromodichloromethane	0.9091	0.9928	25.00	27	ug/L	9	30	
4-Methyl-2-Pentanone	0.9139	0.8620	25.00	24	ug/L	-6	40	
cis-1,3-Dichloropropene	1.1910	1.2632	25.00	27	ug/L	6	30	
Toluene	1.5781	1.6809	25.00	27	ug/L	7	20	
trans-1,3-Dichloropropene	1.0568	1.0622	25.00	25	ug/L	1	30	
1,1,2-Trichloroethane	0.3775	0.3912	25.00	26	ug/L	4	30	
2-Hexanone	0.7139	0.6508	25.00	23	ug/L	-9	40	
Tetrachloroethene	0.6094	0.7151	25.00	29	ug/L	17	30	
Dibromochloromethane	0.8046	0.8681	25.00	27	ug/L	8	30	
Chlorobenzene	2.0830	2.2015	25.00	26	ug/L	6	30	
Ethylbenzene	3.1937	3.5869	25.00	28	ug/L	12	20	
m,p-Xylenes	1.2280	1.4097	50.00	57	ug/L	15	30	
o-Xylene	1.2579	1.4044	25.00	28	ug/L	12	30	
Styrene	2.2311	2.4733	25.00	28	ug/L	11	30	
Bromoform	0.5741	0.5896	25.00	26	ug/L	3	30	
1,1,2,2-Tetrachloroethane	2.0980	2.0665	25.00	25	ug/L	-2	30	

!=warning +=high bias v=ICV

Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS04.D
Report Date: 29-Jun-2006 12:25

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS04.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 28-JUN-2006 14:11 MS Autotune Date: 30-MAY-2006 10:57
Operator : VOC Inst ID: MSVOA09.i
Smp Info : ICAL,S3638,0.001/1000,S3760,0.0005/1000,
Misc Info : S2864,0.0005/1000,0.25/0.5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\826GOX9W.m
Meth Date : 29-Jun-2006 12:25 target Quant Type: ISTD
Cal Date : 28-JUN-2006 14:11 Cal File: IFS04.D
Als bottle: 4 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.086	4.088 (0.368)		2694	0.50000	0.2531 (a)
2 Chloromethane	50	4.529	4.542 (0.407)		4330	0.50000	0.2561 (a)
3 Vinyl Chloride	62	4.737	4.749 (0.426)		5709	0.50000	0.4648 (a)
4 Bromomethane	94	5.466	5.469 (0.492)		3814	0.50000	0.4850 (a)
5 Chloroethane	64	5.674	5.676 (0.510)		3302	0.50000	0.4808 (a)
6 Trichlorofluoromethane	101	6.117	6.120 (0.550)		5380	0.50000	0.4386 (a)
7 Ethanol	45	6.532	6.534 (0.588)		2104	25.0000	12.4445 (A)
8 Freon 113	101	7.044	7.067 (0.634)		464	0.25000	0.0811 (a)
9 1,1-Dichloroethene	96	7.143	7.155 (0.643)		1258	0.25000	0.1868 (a)
10 Acetone	43	7.320	7.333 (0.658)		1459	0.25000	0.3814 (a)
11 Isopropanol	45	7.498	7.510 (0.674)		1143	2.50000	1.5756 (A)
12 Carbon Disulfide	76	7.567	7.579 (0.681)		5802	0.25000	0.1781 (a)
13 Methylene Chloride	84	8.119	8.122 (0.730)		3407	0.25000	0.2906 (a)
14 tert-Butyl Alcohol (TBA)	59	8.198	8.221 (0.737)		716	2.50000	0.8584 (A)
15 MTBE	73	8.455	8.467 (0.760)		3829	0.25000	0.1530 (a)
16 trans-1,2-Dichloroethene	96	8.514	8.526 (0.766)		1469	0.25000	0.1806 (a)
17 Isopropyl Ether (DIPE)	45	9.253	9.256 (0.832)		6887	0.25000	0.1810 (aA)
18 1,1-Dichloroethane	63	9.313	9.335 (0.838)		2638	0.25000	0.1578 (a)
19 Vinyl Acetate	43	9.323	9.335 (0.839)		3796	0.25000	0.1691 (a)
20 Ethyl tert-Butyl Ether (ETBE)	59	9.855	9.867 (0.886)		5113	0.25000	0.1718 (aA)
21 2,2-Dichloropropane	77	10.279	10.292 (0.925)		1762	0.25000	0.1865 (a)
22 cis-1,2-Dichloroethene	96	10.319	10.321 (0.928)		1650	0.25000	0.1822 (a)

						AMOUNTS	
QUANT SIG						CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
23 2-Butanone	43	10.328	10.341	(0.929)	518	0.25000	0.0980 (a)
24 Bromochloromethane	128	10.733	10.745	(0.965)	372	0.25000	0.0772 (a)
25 Tetrahydrofuran	42	10.743	10.745	(0.966)	9025	2.50000	2.9609 (A)
26 Chloroform	83	10.812	10.824	(0.973)	3330	0.25000	0.2212 (a)
27 Dibromofluoromethane	113	11.088	11.100	(0.997)	214147	50.0000	49.0498
28 1,1,1-Trichloroethane	97	11.108	11.110	(0.999)	1872	0.25000	0.1968 (a)
* 29 Pentafluorobenzene	168	11.117	11.130	(1.000)	362006	50.0000	
30 Carbon Tetrachloride	117	11.325	11.337	(0.916)	1266	0.25000	0.1734 (a)
31 1,1-Dichloropropene	75	11.374	11.376	(0.920)	2225	0.25000	0.2279 (a)
32 1,2-Dichloroethane-d4	65	11.719	11.731	(0.948)	211978	50.0000	49.2140
33 Benzene	78	11.719	11.731	(0.948)	6298	0.25000	0.1931 (a)
34 Methyl tert-Amyl Ether (TAME)	73	11.798	11.800	(0.955)	3792	0.25000	0.1595 (aA)
35 1,2-Dichloroethane	62	11.837	11.860	(0.958)	1440	0.25000	0.1303 (a)
* 36 1,4-Difluorobenzene	114	12.360	12.373	(1.000)	596037	50.0000	
37 Trichloroethene	95	12.784	12.787	(1.034)	1568	0.25000	0.1995 (a)
38 1,2-Dichloropropane	63	13.248	13.250	(1.072)	2133	0.25000	0.2103 (a)
39 Trifluorotoluene	146	13.258	13.260	(1.073)	1644	0.25000	0.1747 (aA)
40 Dibromomethane	93	13.445	13.467	(1.088)	433	0.25000	0.0706 (a)
41 Bromodichloromethane	83	13.672	13.664	(1.106)	1763	0.25000	0.1626 (a)
42 2-Chloroethylvinylether	63	14.135	14.138	(1.144)	1844	0.25000	0.3178 (a)
43 Tetramethyl THF	43	14.402	14.404	(1.165)	3735	0.25000	0.1712 (aA)
44 cis-1,3-Dichloropropene	75	14.411	14.424	(1.166)	2529	0.25000	0.1781 (a)
45 4-Methyl-2-Pentanone	43	14.619	14.621	(1.183)	1283	0.25000	0.1177 (a)
46 Toluene-d8	98	14.786	14.799	(1.196)	663413	50.0000	49.6280
47 Toluene	92	14.895	14.907	(1.205)	3919	0.25000	0.2083 (a)
48 trans-1,3-Dichloropropene	75	15.299	15.302	(1.238)	1897	0.25000	0.1505 (a)
49 1,1,2-Trichloroethane	85	15.585	15.597	(1.261)	756	0.25000	0.1679 (a)
50 Tetrachloroethene	166	15.694	15.706	(0.927)	1554	0.25000	0.2370 (a)
51 1,3-Dichloropropane	76	15.851	15.864	(0.936)	2235	0.25000	0.1636 (a)
52 2-Hexanone	43	15.881	15.883	(0.938)	974	0.25000	0.1268 (a)
53 Dibromochloromethane	129	16.137	16.149	(0.953)	1346	0.25000	0.1555 (a)
54 1,2-Dibromoethane	107	16.344	16.357	(1.322)	969	0.25000	0.1146 (a)
* 55 Chlorobenzene-d5	117	16.936	16.949	(1.000)	537824	50.0000	
56 Chlorobenzene	112	16.976	16.988	(1.002)	4973	0.25000	0.2219 (a)
57 Ethylbenzene	91	17.055	17.067	(1.007)	8174	0.25000	0.2379 (a)
58 1,1,1,2-Tetrachloroethane	131	17.074	17.087	(1.008)	1561	0.25000	0.2130 (a)
59 m,p-Xylenes	106	17.212	17.215	(1.016)	6138	0.50000	0.4646 (a)
60 o-Xylene	106	17.735	17.747	(1.047)	2862	0.25000	0.2115 (a)
61 Styrene	104	17.765	17.777	(1.049)	4023	0.25000	0.1676 (a)
62 Bromoform	173	18.060	18.063	(1.066)	1329	0.25000	0.2152 (a)
63 Isopropylbenzene	105	18.169	18.172	(0.919)	7319	0.25000	0.2441 (a)
64 Cyclohexanone	55	18.416	18.418	(0.932)	1944	2.50000	1.4884 (A)
65 Bromofluorobenzene	95	18.425	18.438	(0.932)	302720	50.0000	50.9266
66 1,1,2,2-Tetrachloroethane	83	18.593	18.596	(0.941)	1928	0.25000	0.1719 (a)
67 Bromobenzene	156	18.632	18.635	(0.943)	1919	0.25000	0.2181 (a)
68 Propylbenzene	91	18.662	18.665	(0.944)	9526	0.25000	0.2422 (a)
69 1,2,3-Trichloropropane	110	18.682	18.684	(0.945)	378	0.25000	0.1403 (a)
70 2-Chlorotoluene	91	18.830	18.832	(0.953)	7298	0.25000	0.2586 (a)
71 1,3,5-Trimethylbenzene	105	18.859	18.862	(0.954)	6451	0.25000	0.2380 (a)
72 4-Chlorotoluene	91	18.958	18.960	(0.959)	6966	0.25000	0.2578 (a)
73 tert-Butylbenzene	119	19.234	19.237	(0.973)	5027	0.25000	0.2357 (a)
74 1,2,4-Trimethylbenzene	105	19.303	19.306	(0.977)	6803	0.25000	0.2387 (a)
75 sec-Butylbenzene	105	19.481	19.483	(0.986)	7102	0.25000	0.2175 (a)
76 para-Isopropyl Toluene	119	19.629	19.631	(0.993)	5053	0.25000	0.1945 (a)

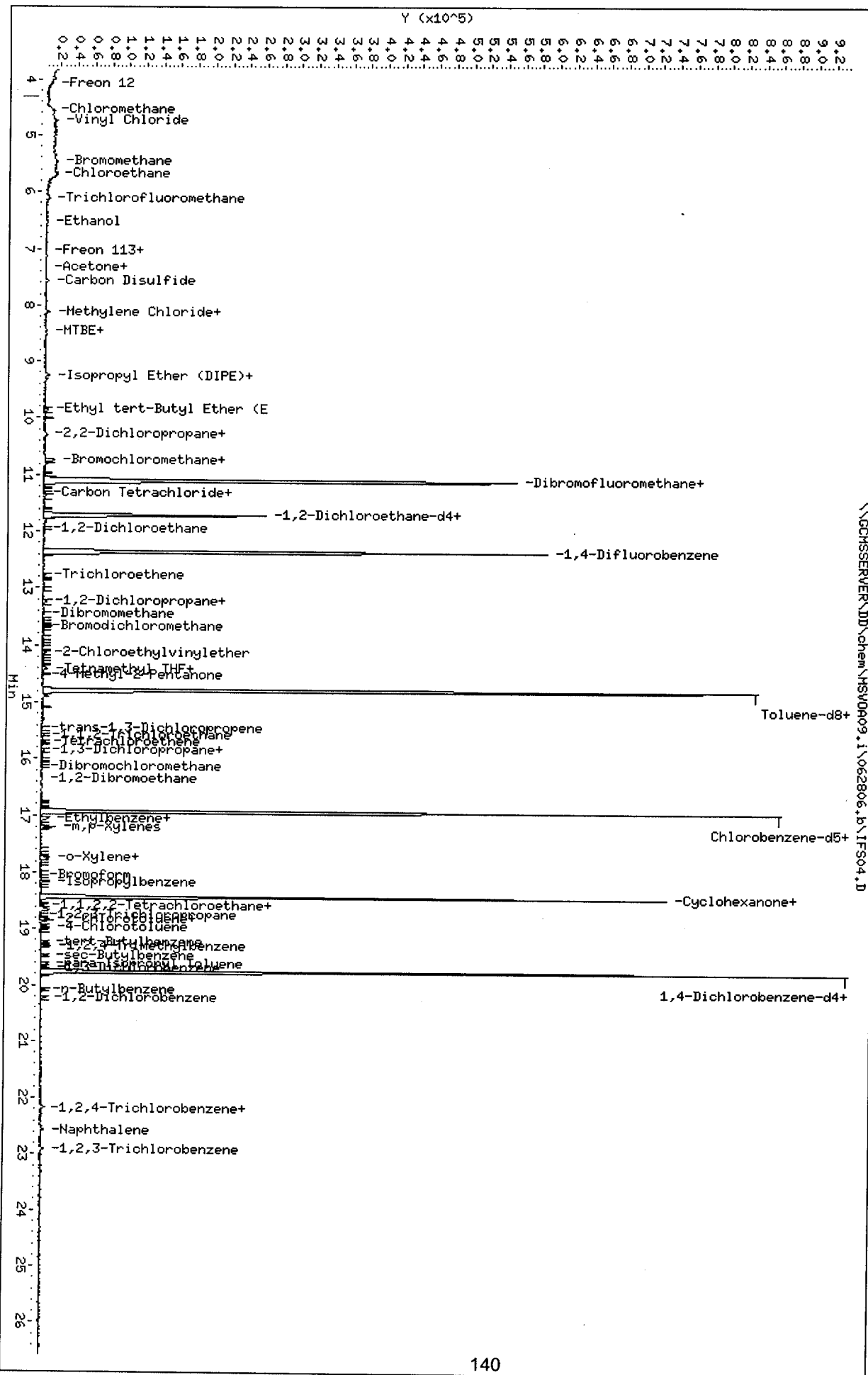
Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
77 1,3-Dichlorobenzene	146	19.688	19.690	(0.996)	4224	0.25000	0.2442(a)
* 78 1,4-Dichlorobenzene-d4	152	19.767	19.769	(1.000)	267147	50.0000	
79 1,4-Dichlorobenzene	146	19.786	19.799	(1.001)	4294	0.25000	0.2425(a)
80 n-Butylbenzene	91	20.092	20.095	(1.016)	5509	0.25000	0.2260(a)
81 1,2-Dichlorobenzene	146	20.230	20.243	(1.023)	3680	0.25000	0.2216(a)
83 1,2,4-Trichlorobenzene	180	22.183	22.185	(1.122)	2511	0.25000	0.2582(a)
84 Hexachlorobutadiene	225	22.301	22.294	(1.128)	346	0.25000	0.1202(a)
85 Naphthalene	128	22.568	22.570	(1.142)	6016	0.25000	0.2499(a)
86 1,2,3-Trichlorobenzene	180	22.913	22.915	(1.159)	2013	0.25000	0.2237(a)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount
exceeded maximum amount.

Data File: \\GCHSERVER\JD\chem\MSV0A09.i\062806.b\IFS04.D
 Date : 28-JUN-2006 14:11
 Client ID: DYNA P&T
 Sample Info: ICPL,S3638,0.001/1000,S3760,0.0005/1000,
 Purge Volume: 5.0
 Column phase: RTX Volatiles

Instrument: MSV0A09.i
 Operator: WOC
 Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS05.D
Report Date: 29-Jun-2006 12:26

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS05.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 28-JUN-2006 14:45 MS Autotune Date: 30-MAY-2006 10:57
Operator : VOC Inst ID: MSVOA09.i
Smp Info : ICAL,S3638,0.002/1000,S3760,0.001/1000,
Misc Info : S2864,0.001/1000,0.5/1PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\826GOX9W.m
Meth Date : 29-Jun-2006 12:26 target Quant Type: ISTD
Cal Date : 28-JUN-2006 14:45 Cal File: IFS05.D
Als bottle: 5 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
1 Freon 12	85	4.079	4.088	(0.367)	11615	1.00000	1.1232 (M)
2 Chloromethane	50	4.523	4.542	(0.407)	17858	1.00000	1.0871
3 Vinyl Chloride	62	4.730	4.749	(0.426)	11820	1.00000	0.9905
4 Bromomethane	94	5.469	5.469	(0.492)	9258	1.00000	1.2118 (M)
5 Chloroethane	64	5.667	5.676	(0.510)	5993	1.00000	0.8983 (M)
6 Trichlorofluoromethane	101	6.101	6.120	(0.549)	11155	1.00000	0.9360
7 Ethanol	45	6.525	6.534	(0.587)	7854	50.0000	47.8104 (AM)
8 Freon 113	101	7.057	7.067	(0.635)	1903	0.50000	0.3426 (a)
9 1,1-Dichloroethene	96	7.136	7.155	(0.642)	2468	0.50000	0.3771 (a)
10 Acetone	43	7.323	7.333	(0.659)	2701	0.50000	0.7267
11 Isopropanol	45	7.491	7.510	(0.674)	3117	5.00000	4.4223 (A)
12 Carbon Disulfide	76	7.570	7.579	(0.681)	12211	0.50000	0.3859 (a)
13 Methylene Chloride	84	8.103	8.122	(0.729)	7234	0.50000	0.6352 (M)
14 tert-Butyl Alcohol (TBA)	59	8.201	8.221	(0.738)	3377	5.00000	4.1672 (A)
15 MTBE	73	8.448	8.467	(0.760)	10387	0.50000	0.4274 (a)
16 trans-1,2-Dichloroethene	96	8.527	8.526	(0.767)	3488	0.50000	0.4413 (aM)
17 Isopropyl Ether (DIPE)	45	9.247	9.256	(0.832)	17087	0.50000	0.4623 (aA)
18 1,1-Dichloroethane	63	9.316	9.335	(0.838)	7075	0.50000	0.4357 (a)
19 Vinyl Acetate	43	9.325	9.335	(0.839)	10238	0.50000	0.4694 (a)
20 Ethyl tert-Butyl Ether (ETBE)	59	9.858	9.867	(0.887)	11865	0.50000	0.4103 (aA)
21 2,2-Dichloropropane	77	10.272	10.292	(0.925)	3817	0.50000	0.4160 (a)
22 cis-1,2-Dichloroethene	96	10.312	10.321	(0.928)	4049	0.50000	0.4602 (a)

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 2-Butanone	43	10.341	10.341	(0.931)	2386		0.50000	0.4646 (aM)
24 Bromochloromethane	128	10.716	10.745	(0.964)	1879		0.50000	0.4015 (a)
25 Tetrahydrofuran	42	10.736	10.745	(0.966)	18014		5.00000	6.0825 (A)
26 Chloroform	83	10.805	10.824	(0.972)	6745		0.50000	0.4612 (a)
27 Dibromofluoromethane	113	11.091	11.100	(0.998)	210521		50.0000	49.6273
28 1,1,1-Trichloroethane	97	11.101	11.110	(0.999)	3973		0.50000	0.4299 (a)
* 29 Pentafluorobenzene	168	11.111	11.130	(1.000)	351735		50.0000	
30 Carbon Tetrachloride	117	11.328	11.337	(0.916)	2680		0.50000	0.3702 (a)
31 1,1-Dichloropropene	75	11.367	11.376	(0.919)	3955		0.50000	0.4085 (a)
32 1,2-Dichloroethane-d4	65	11.722	11.731	(0.948)	214205		50.0000	50.1336
33 Benzene	78	11.712	11.731	(0.947)	14689		0.50000	0.4542 (a)
34 Methyl tert-Amyl Ether (TAME)	73	11.801	11.800	(0.955)	9874		0.50000	0.4188 (aA)
35 1,2-Dichloroethane	62	11.850	11.860	(0.959)	4799		0.50000	0.4380 (a)
* 36 1,4-Difluorobenzene	114	12.363	12.373	(1.000)	591251		50.0000	
37 Trichloroethene	95	12.777	12.787	(1.034)	3210		0.50000	0.4118 (a)
38 1,2-Dichloropropane	63	13.251	13.250	(1.072)	4505		0.50000	0.4478 (a)
39 Trifluorotoluene	146	13.251	13.260	(1.072)	3302		0.50000	0.3538 (aA)
40 Dibromomethane	93	13.448	13.467	(1.088)	2452		0.50000	0.4032 (a)
41 Bromodichloromethane	83	13.665	13.664	(1.105)	4621		0.50000	0.4298 (a)
42 2-Chloroethylvinylether	63	14.138	14.138	(1.144)	5516		1.00000	0.9586
43 Tetramethyl THF	43	14.395	14.404	(1.164)	9780		0.50000	0.4519 (aA)
44 cis-1,3-Dichloropropene	75	14.414	14.424	(1.166)	5893		0.50000	0.4184 (a)
45 4-Methyl-2-Pentanone	43	14.612	14.621	(1.182)	4094		0.50000	0.3788 (a)
46 Toluene-d8	98	14.789	14.799	(1.196)	650983		50.0000	49.0923
47 Toluene	92	14.898	14.907	(1.205)	8134		0.50000	0.4358 (a)
48 trans-1,3-Dichloropropene	75	15.302	15.302	(1.238)	4934		0.50000	0.3948 (a)
49 1,1,2-Trichloroethane	85	15.588	15.597	(1.261)	1817		0.50000	0.4070 (a)
50 Tetrachloroethene	166	15.696	15.706	(0.927)	2992		0.50000	0.4720 (a)
51 1,3-Dichloropropane	76	15.854	15.864	(0.936)	5546		0.50000	0.4198 (a)
52 2-Hexanone	43	15.894	15.883	(0.938)	2415		0.50000	0.3251 (a)
53 Dibromochloromethane	129	16.140	16.149	(0.953)	3286		0.50000	0.3926 (a)
54 1,2-Dibromoethane	107	16.357	16.357	(1.323)	3312		0.50000	0.3949 (a)
* 55 Chlorobenzene-d5	117	16.939	16.949	(1.000)	520082		50.0000	
56 Chlorobenzene	112	16.979	16.988	(1.002)	10307		0.50000	0.4757 (a)
57 Ethylbenzene	91	17.057	17.067	(1.007)	15435		0.50000	0.4646 (a)
58 1,1,1,2-Tetrachloroethane	131	17.077	17.087	(1.008)	3216		0.50000	0.4539 (a)
59 m,p-Xylenes	106	17.215	17.215	(1.016)	11966		1.00000	0.9368
60 o-Xylene	106	17.738	17.747	(1.047)	5763		0.50000	0.4404 (a)
61 Styrene	104	17.768	17.777	(1.049)	10189		0.50000	0.4390 (a)
62 Bromoform	173	18.063	18.063	(1.066)	2641		0.50000	0.4422 (a)
63 Isopropylbenzene	105	18.172	18.172	(0.920)	13584		0.50000	0.4583 (a)
64 Cyclohexanone	55	18.409	18.418	(0.932)	5274		5.00000	4.0845 (A)
65 Bromofluorobenzene	95	18.428	18.438	(0.933)	299470		50.0000	50.9602
66 1,1,2,2-Tetrachloroethane	83	18.596	18.596	(0.941)	4421		0.50000	0.3989 (a)
67 Bromobenzene	156	18.635	18.635	(0.943)	3793		0.50000	0.4361 (a)
68 Propylbenzene	91	18.665	18.665	(0.945)	18564		0.50000	0.4774 (a)
69 1,2,3-Trichloropropane	110	18.675	18.684	(0.945)	1241		0.50000	0.4659 (a)
70 2-Chlorotoluene	91	18.823	18.832	(0.953)	13291		0.50000	0.4765 (a)
71 1,3,5-Trimethylbenzene	105	18.862	18.862	(0.955)	12415		0.50000	0.4633 (a)
72 4-Chlorotoluene	91	18.961	18.960	(0.960)	13271		0.50000	0.4968 (a)
73 tert-Butylbenzene	119	19.237	19.237	(0.974)	9771		0.50000	0.4635 (a)
74 1,2,4-Trimethylbenzene	105	19.306	19.306	(0.977)	13777		0.50000	0.4891 (a)
75 sec-Butylbenzene	105	19.484	19.483	(0.986)	15356		0.50000	0.4757 (a)
76 para-Isopropyl Toluene	119	19.622	19.631	(0.993)	11700		0.50000	0.4556 (a)

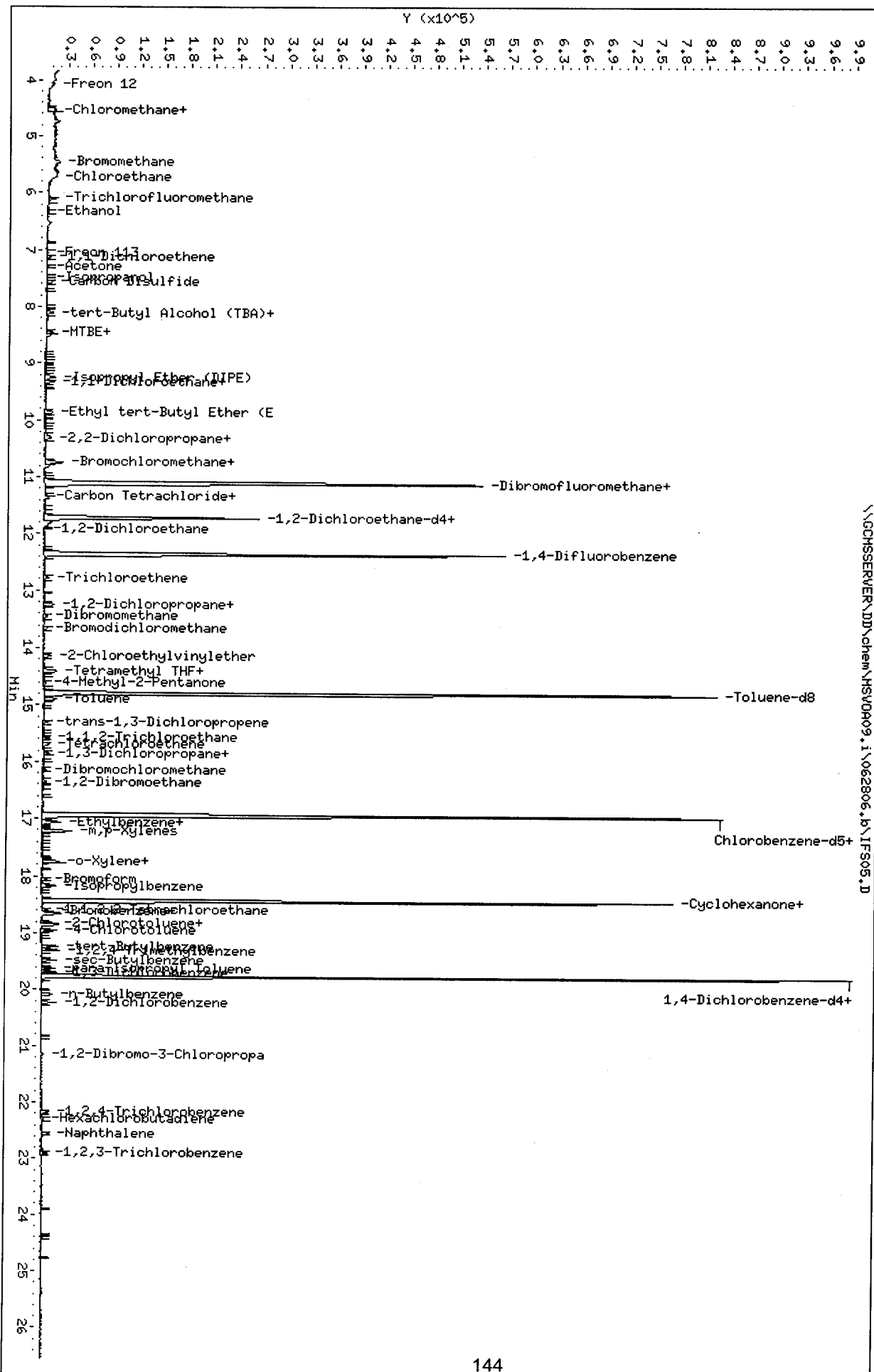
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON- COL
						(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
77 1,3-Dichlorobenzene	146	19.691	19.690	(0.997)	8617	0.50000	0.5039
* 78 1,4-Dichlorobenzene-d4	152	19.760	19.769	(1.000)	264105	50.0000	
79 1,4-Dichlorobenzene	146	19.789	19.799	(1.001)	8130	0.50000	0.4646 (a)
80 n-Butylbenzene	91	20.085	20.095	(1.016)	10787	0.50000	0.4477 (a)
81 1,2-Dichlorobenzene	146	20.233	20.243	(1.024)	7557	0.50000	0.4603 (a)
82 1,2-Dibromo-3-Chloropropane	75	21.160	21.160	(1.071)	870	0.50000	0.4641 (a)
83 1,2,4-Trichlorobenzene	180	22.176	22.185	(1.122)	5041	0.50000	0.5243
84 Hexachlorobutadiene	225	22.294	22.294	(1.128)	974	0.50000	0.3425 (a)
85 Naphthalene	128	22.561	22.570	(1.142)	10497	0.50000	0.4410 (a)
86 1,2,3-Trichlorobenzene	180	22.916	22.915	(1.160)	4059	0.50000	0.4563 (a)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount
exceeded maximum amount.
- M - Compound response manually integrated.

Data File: \\GCHSSERVER\JD\chem\MSV0A09.i\062806.b\IFS05.D
 Date : 28-JUN-2006 14:45
 Client ID: DYNA P&T
 Sample Info: ICAL,S3638,0.002/1000,S3760,0.001/1000,
 Purge Volume: 5.0
 Column phase: RTX Volatiles

Instrument: MSV0A09.i
 Operator: WOC
 Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS06.D
Report Date: 29-Jun-2006 12:28

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS06.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 28-JUN-2006 15:20 MS Autotune Date: 30-MAY-2006 10:57
Operator : VOC Inst ID: MSVOA09.i
Smp Info : ICAL,S3638,0.002/500,S3760,0.002/500,
Misc Info : S2864,0.001/500,2PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\826GOX9W.m
Meth Date : 29-Jun-2006 12:27 target Quant Type: ISTD
Cal Date : 28-JUN-2006 15:20 Cal File: IFS06.D
Als bottle: 6 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.086	4.088 (0.368)		20028	2.00000	1.8865 (M)
2 Chloromethane	50	4.520	4.542 (0.407)		35678	2.00000	2.1156 (M)
3 Vinyl Chloride	62	4.727	4.749 (0.425)		25325	2.00000	2.0671 (M)
4 Bromomethane	94	5.457	5.469 (0.491)		16498	2.00000	2.1033 (M)
5 Chloroethane	64	5.674	5.676 (0.510)		13093	2.00000	1.9115 (M)
6 Trichlorofluoromethane	101	6.108	6.120 (0.549)		23247	2.00000	1.8999
7 Ethanol	45	6.522	6.534 (0.587)		33674	200.000	199.6627 (AM)
8 Freon 113	101	7.055	7.067 (0.635)		8989	2.00000	1.5766
9 1,1-Dichloroethene	96	7.134	7.155 (0.642)		13521	2.00000	2.0127
10 Acetone	43	7.321	7.333 (0.659)		7866	2.00000	2.0615
11 Isopropanol	45	7.489	7.510 (0.674)		12881	20.0000	17.8004 (A)
12 Carbon Disulfide	76	7.568	7.579 (0.681)		61626	2.00000	1.8972
13 Methylene Chloride	84	8.110	8.122 (0.729)		25625	2.00000	2.1916
14 tert-Butyl Alcohol (TBA)	59	8.209	8.221 (0.738)		15475	20.0000	18.6004 (A)
15 MTBE	73	8.455	8.467 (0.761)		50190	2.00000	2.0116
16 trans-1,2-Dichloroethene	96	8.514	8.526 (0.766)		15120	2.00000	1.8635
17 Isopropyl Ether (DIPE)	45	9.244	9.256 (0.831)		77156	2.00000	2.0334 (A)
18 1,1-Dichloroethane	63	9.323	9.335 (0.839)		33895	2.00000	2.0331
19 Vinyl Acetate	43	9.323	9.335 (0.839)		50000	2.00000	2.2333
20 Ethyl tert-Butyl Ether (ETBE)	59	9.865	9.867 (0.887)		61473	2.00000	2.0709 (A)
21 2,2-Dichloropropane	77	10.280	10.292 (0.925)		18592	2.00000	1.9737
22 cis-1,2-Dichloroethene	96	10.319	10.321 (0.928)		17472	2.00000	1.9344

Compounds	QUANT SIG	AMOUNTS					
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
23 2-Butanone	43	10.339	10.341	(0.930)	9971	2.00000	1.8911
24 Bromochloromethane	128	10.723	10.745	(0.965)	9077	2.00000	1.8892
25 Tetrahydrofuran	42	10.743	10.745	(0.966)	74927	20.0000	24.6425 (A)
26 Chloroform	83	10.812	10.824	(0.973)	29563	2.00000	1.9691
27 Dibromofluoromethane	113	11.088	11.100	(0.997)	216225	50.0000	49.6480
28 1,1,1-Trichloroethane	97	11.108	11.110	(0.999)	17686	2.00000	1.8640
* 29 Pentafluorobenzene	168	11.118	11.130	(1.000)	361115	50.0000	
30 Carbon Tetrachloride	117	11.325	11.337	(0.916)	14509	2.00000	2.0039
31 1,1-Dichloropropene	75	11.374	11.376	(0.920)	17979	2.00000	1.8568
32 1,2-Dichloroethane-d4	65	11.720	11.731	(0.948)	214775	50.0000	50.2579
33 Benzene	78	11.720	11.731	(0.948)	65661	2.00000	2.0300
34 Methyl tert-Amyl Ether (TAME)	73	11.798	11.800	(0.955)	49169	2.00000	2.0854 (A)
35 1,2-Dichloroethane	62	11.848	11.860	(0.959)	23085	2.00000	2.1069
* 36 1,4-Difluorobenzene	114	12.361	12.373	(1.000)	591358	50.0000	
37 Trichloroethene	95	12.775	12.787	(1.034)	15367	2.00000	1.9713
38 1,2-Dichloropropane	63	13.238	13.250	(1.071)	21486	2.00000	2.1356
39 Trifluorotoluene	146	13.258	13.260	(1.073)	18095	2.00000	1.9384 (A)
40 Dibromomethane	93	13.445	13.467	(1.088)	12409	2.00000	2.0404
41 Bromodichloromethane	83	13.662	13.664	(1.105)	20610	2.00000	1.9168
42 2-Chloroethylvinylether	63	14.136	14.138	(1.144)	10592	2.00000	1.8404
43 Tetramethyl THF	43	14.392	14.404	(1.164)	44135	2.00000	2.0391 (A)
44 cis-1,3-Dichloropropene	75	14.412	14.424	(1.166)	28497	2.00000	2.0229
45 4-Methyl-2-Pentanone	43	14.619	14.621	(1.183)	21203	2.00000	1.9615
46 Toluene-d8	98	14.787	14.799	(1.196)	670078	50.0000	50.5232
47 Toluene	92	14.895	14.907	(1.205)	38524	2.00000	2.0640
48 trans-1,3-Dichloropropene	75	15.300	15.302	(1.238)	25229	2.00000	2.0183
49 1,1,2-Trichloroethane	85	15.586	15.597	(1.261)	9596	2.00000	2.1491
50 Tetrachloroethene	166	15.694	15.706	(0.927)	11449	2.00000	1.7530
51 1,3-Dichloropropane	76	15.852	15.864	(0.936)	27561	2.00000	2.0253
52 2-Hexanone	43	15.881	15.883	(0.938)	13459	2.00000	1.7590
53 Dibromochloromethane	129	16.138	16.149	(0.953)	16875	2.00000	1.9569
54 1,2-Dibromoethane	107	16.355	16.357	(1.323)	16627	2.00000	1.9824
* 55 Chlorobenzene-d5	117	16.937	16.949	(1.000)	535835	50.0000	
56 Chlorobenzene	112	16.976	16.988	(1.002)	45541	2.00000	2.0401
57 Ethylbenzene	91	17.055	17.067	(1.007)	67363	2.00000	1.9682
58 1,1,1,2-Tetrachloroethane	131	17.075	17.087	(1.008)	13742	2.00000	1.8828
59 m,p-Xylenes	106	17.213	17.215	(1.016)	52652	4.00000	4.0009
60 o-Xylene	106	17.736	17.747	(1.047)	26415	2.00000	1.9595
61 Styrene	104	17.765	17.777	(1.049)	46102	2.00000	1.9281
62 Bromoform	173	18.061	18.063	(1.066)	11909	2.00000	1.9355
63 Isopropylbenzene	105	18.169	18.172	(0.919)	55781	2.00000	1.8512
64 Cyclohexanone	55	18.406	18.418	(0.931)	23336	20.0000	17.7745 (A)
65 Bromofluorobenzene	95	18.426	18.438	(0.932)	300716	50.0000	50.3271
66 1,1,2,2-Tetrachloroethane	83	18.594	18.596	(0.941)	23361	2.00000	2.0732
67 Bromobenzene	156	18.633	18.635	(0.943)	17465	2.00000	1.9752
68 Propylbenzene	91	18.663	18.665	(0.944)	75403	2.00000	1.9074
69 1,2,3-Trichloropropane	110	18.682	18.684	(0.945)	5248	2.00000	1.9379
70 2-Chlorotoluene	91	18.830	18.832	(0.953)	58388	2.00000	2.0589
71 1,3,5-Trimethylbenzene	105	18.860	18.862	(0.954)	54154	2.00000	1.9876
72 4-Chlorotoluene	91	18.958	18.960	(0.959)	54480	2.00000	2.0059
73 tert-Butylbenzene	119	19.235	19.237	(0.973)	39122	2.00000	1.8255
74 1,2,4-Trimethylbenzene	105	19.304	19.306	(0.977)	55320	2.00000	1.9317
75 sec-Butylbenzene	105	19.481	19.483	(0.986)	59166	2.00000	1.8027
76 para-Isopropyl Toluene	119	19.629	19.631	(0.993)	46583	2.00000	1.7841

Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS06.D
 Report Date: 29-Jun-2006 12:28

						AMOUNTS	
		QUANT SIG				CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
77 1,3-Dichlorobenzene	146	19.688	19.690	(0.996)	34723	2.00000	1.9970
* 78 1,4-Dichlorobenzene-d4	152	19.767	19.769	(1.000)	268540	50.0000	
79 1,4-Dichlorobenzene	146	19.787	19.799	(1.001)	36446	2.00000	2.0483
80 n-Butylbenzene	91	20.083	20.095	(1.016)	43211	2.00000	1.7640
81 1,2-Dichlorobenzene	146	20.231	20.243	(1.023)	32202	2.00000	1.9291
82 1,2-Dibromo-3-Chloropropane	75	21.158	21.160	(1.070)	3541	2.00000	1.8580
83 1,2,4-Trichlorobenzene	180	22.174	22.185	(1.122)	17677	2.00000	1.8083
84 Hexachlorobutadiene	225	22.292	22.294	(1.128)	5197	2.00000	1.7973
85 Naphthalene	128	22.558	22.570	(1.141)	44966	2.00000	1.8581
86 1,2,3-Trichlorobenzene	180	22.903	22.915	(1.159)	15651	2.00000	1.7306

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.

Data File: \\GCHSERVER\JD\chem\MSV0A09.i\062806.b\IFS06.D

Date: 28-JUN-2006 15:20

Client ID: DYNA P&T

Sample Info: ICAL, S3638, 0.002/500, S3760, 0.002/500,

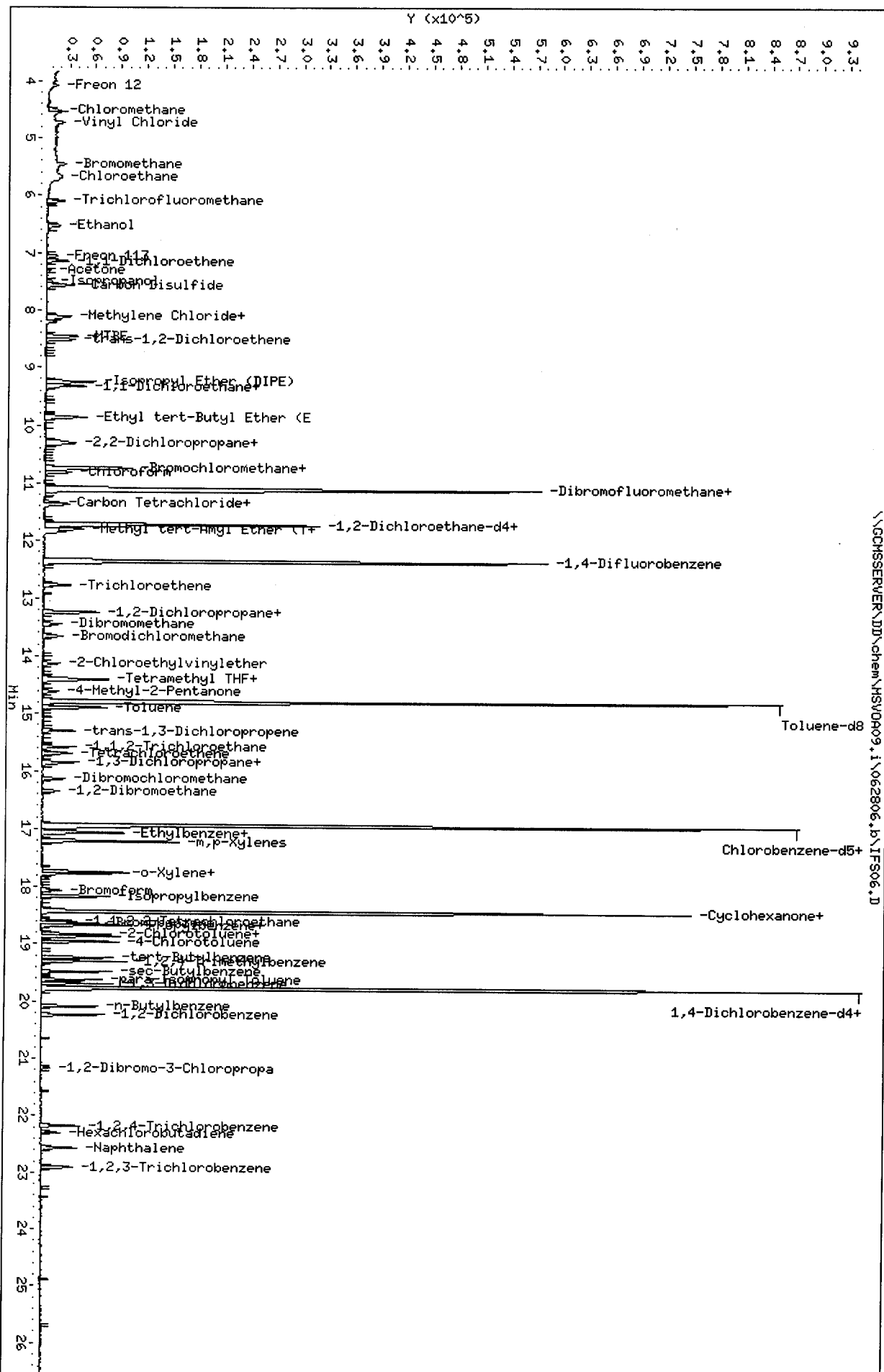
Purge Volume: 5.0

Column phase: RTX Volatiles

Instrument: MSV0A09.i

Operator: VOC

Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS07.D
Report Date: 29-Jun-2006 12:29

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS07.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 28-JUN-2006 15:55 MS Autotune Date: 30-MAY-2006 10:57
Operator : VOC Inst ID: MSVOA09.i
Smp Info : ICAL,S3638,0.005/500,S3760,0.005/500,
Misc Info : S2864,0.0025/500,5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\826GOX9W.m
Meth Date : 29-Jun-2006 12:29 target Quant Type: ISTD
Cal Date : 28-JUN-2006 15:55 Cal File: IFS07.D
Als bottle: 7 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.082	4.088 (0.367)		55827		5.00000	5.2727
2 Chloromethane	50	4.526	4.542 (0.407)		83307		5.00000	4.9531
3 Vinyl Chloride	62	4.733	4.749 (0.426)		62714		5.00000	5.1326
4 Bromomethane	94	5.462	5.469 (0.492)		36778		5.00000	4.7015 (M)
5 Chloroethane	64	5.660	5.676 (0.509)		36095		5.00000	5.2839
6 Trichlorofluoromethane	101	6.104	6.120 (0.549)		61751		5.00000	5.0604
7 Ethanol	45	6.528	6.534 (0.587)		88314		500.000	525.0434 (AM)
8 Freon 113	101	7.060	7.067 (0.635)		26026		5.00000	4.5771
9 1,1-Dichloroethene	96	7.139	7.155 (0.642)		32546		5.00000	4.8578
10 Acetone	43	7.317	7.333 (0.658)		20609		5.00000	5.4156
11 Isopropanol	45	7.494	7.510 (0.674)		36275		50.0000	50.2634 (AM)
12 Carbon Disulfide	76	7.563	7.579 (0.681)		161734		5.00000	4.9925
13 Methylene Chloride	84	8.115	8.122 (0.730)		59311		5.00000	5.0863
14 tert-Butyl Alcohol (TBA)	59	8.194	8.221 (0.737)		42034		50.0000	50.6589 (A)
15 MTBE	73	8.451	8.467 (0.760)		131479		5.00000	5.2840
16 trans-1,2-Dichloroethene	96	8.510	8.526 (0.766)		40586		5.00000	5.0155
17 Isopropyl Ether (DIPE)	45	9.250	9.256 (0.832)		198044		5.00000	5.2334 (A)
18 1,1-Dichloroethane	63	9.319	9.335 (0.838)		84746		5.00000	5.0969
19 Vinyl Acetate	43	9.328	9.335 (0.839)		103797		5.00000	4.6487
20 Ethyl tert-Butyl Ether (ETBE)	59	9.861	9.867 (0.887)		153876		5.00000	5.1976 (A)
21 2,2-Dichloropropane	77	10.275	10.292 (0.925)		48824		5.00000	5.1969
22 cis-1,2-Dichloroethene	96	10.315	10.321 (0.928)		45750		5.00000	5.0789

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 2-Butanone	43	10.325	10.341	(0.929)	26881		5.00000	5.1121
24 Bromochloromethane	128	10.729	10.745	(0.965)	23505		5.00000	4.9054
25 Tetrahydrofuran	42	10.739	10.745	(0.966)	164334		50.0000	54.1924 (A)
26 Chloroform	83	10.808	10.824	(0.972)	77619		5.00000	5.1840
27 Dibromofluoromethane	113	11.084	11.100	(0.997)	214766		50.0000	49.4452
28 1,1,1-Trichloroethane	97	11.104	11.110	(0.999)	45329		5.00000	4.7904
* 29 Pentafluorobenzene	168	11.114	11.130	(1.000)	360149		50.0000	
30 Carbon Tetrachloride	117	11.330	11.337	(0.916)	36190		5.00000	4.9634
31 1,1-Dichloropropene	75	11.370	11.376	(0.919)	47551		5.00000	4.8766
32 1,2-Dichloroethane-d4	65	11.715	11.731	(0.947)	217495		50.0000	50.5385
33 Benzene	78	11.715	11.731	(0.947)	167421		5.00000	5.1398
34 Methyl tert-Amyl Ether (TAME)	73	11.794	11.800	(0.954)	125600		5.00000	5.2899 (A)
35 1,2-Dichloroethane	62	11.843	11.860	(0.958)	57144		5.00000	5.1789
* 36 1,4-Difluorobenzene	114	12.366	12.373	(1.000)	595523		50.0000	
37 Trichloroethene	95	12.780	12.787	(1.033)	41279		5.00000	5.2584
38 1,2-Dichloropropane	63	13.244	13.250	(1.071)	51804		5.00000	5.1130
39 Trifluorotoluene	146	13.254	13.260	(1.072)	45953		5.00000	4.8884 (A)
40 Dibromomethane	93	13.451	13.467	(1.088)	31290		5.00000	5.1090
41 Bromodichloromethane	83	13.658	13.664	(1.104)	56793		5.00000	5.2451
42 2-Chloroethylvinylether	63	14.131	14.138	(1.143)	30023		5.00000	5.1801
43 Tetramethyl THF	43	14.388	14.404	(1.163)	115738		5.00000	5.3100 (A)
44 cis-1,3-Dichloropropene	75	14.417	14.424	(1.166)	74816		5.00000	5.2740
45 4-Methyl-2-Pentanone	43	14.615	14.621	(1.182)	52895		5.00000	4.8591
46 Toluene-d8	98	14.792	14.799	(1.196)	681082		50.0000	50.9937
47 Toluene	92	14.891	14.907	(1.204)	99586		5.00000	5.2984
48 trans-1,3-Dichloropropene	75	15.295	15.302	(1.237)	64580		5.00000	5.1304
49 1,1,2-Trichloroethane	85	15.581	15.597	(1.260)	23610		5.00000	5.2507
50 Tetrachloroethene	166	15.699	15.706	(0.927)	31613		5.00000	4.7969
51 1,3-Dichloropropane	76	15.847	15.864	(0.935)	70482		5.00000	5.1328
52 2-Hexanone	43	15.877	15.883	(0.937)	35729		5.00000	4.6276
53 Dibromochloromethane	129	16.143	16.149	(0.953)	43851		5.00000	5.0396
54 1,2-Dibromoethane	107	16.350	16.357	(1.322)	43119		5.00000	5.1051
* 55 Chlorobenzene-d5	117	16.942	16.949	(1.000)	540703		50.0000	
56 Chlorobenzene	112	16.982	16.988	(1.002)	115857		5.00000	5.1433
57 Ethylbenzene	91	17.060	17.067	(1.007)	181316		5.00000	5.2499
58 1,1,1,2-Tetrachloroethane	131	17.080	17.087	(1.008)	39314		5.00000	5.3380
59 m,p-Xylenes	106	17.208	17.215	(1.016)	141470		10.0000	10.6534
60 o-Xylene	106	17.741	17.747	(1.047)	71958		5.00000	5.2899
61 Styrene	104	17.771	17.777	(1.049)	124795		5.00000	5.1722
62 Bromoform	173	18.057	18.063	(1.066)	29621		5.00000	4.7709
63 Isopropylbenzene	105	18.165	18.172	(0.919)	158290		5.00000	5.1960
64 Cyclohexanone	55	18.402	18.418	(0.931)	71148		50.0000	53.6016 (A)
65 Bromofluorobenzene	95	18.431	18.438	(0.933)	303610		50.0000	50.2578
66 1,1,2,2-Tetrachloroethane	83	18.599	18.596	(0.941)	58753		5.00000	5.1574
67 Bromobenzene	156	18.629	18.635	(0.943)	45055		5.00000	5.0401
68 Propylbenzene	91	18.658	18.665	(0.944)	206679		5.00000	5.1712
69 1,2,3-Trichloropropane	110	18.678	18.684	(0.945)	13921		5.00000	5.0847
70 2-Chlorotoluene	91	18.826	18.832	(0.953)	149119		5.00000	5.2012
71 1,3,5-Trimethylbenzene	105	18.855	18.862	(0.954)	139606		5.00000	5.0681
72 4-Chlorotoluene	91	18.954	18.960	(0.959)	149030		5.00000	5.4274
73 tert-Butylbenzene	119	19.240	19.237	(0.974)	109767		5.00000	5.0661
74 1,2,4-Trimethylbenzene	105	19.299	19.306	(0.977)	148930		5.00000	5.1438
75 sec-Butylbenzene	105	19.477	19.483	(0.986)	162387		5.00000	4.8940
76 para-Isopropyl Toluene	119	19.625	19.631	(0.993)	131857		5.00000	4.9952

Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS07.D
 Report Date: 29-Jun-2006 12:29

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
* 77 1,3-Dichlorobenzene	146	19.684	19.690	(0.996)	89201	5.00000	5.0744
78 1,4-Dichlorobenzene-d4	152	19.763	19.769	(1.000)	271498	50.0000	
79 1,4-Dichlorobenzene	146	19.792	19.799	(1.001)	92556	5.00000	5.1452
80 n-Butylbenzene	91	20.088	20.095	(1.016)	125053	5.00000	5.0494
81 1,2-Dichlorobenzene	146	20.236	20.243	(1.024)	87377	5.00000	5.1774
82 1,2-Dibromo-3-Chloropropane	75	21.163	21.160	(1.071)	9529	5.00000	4.9455
83 1,2,4-Trichlorobenzene	180	22.179	22.185	(1.122)	47100	5.00000	4.7657
84 Hexachlorobutadiene	225	22.297	22.294	(1.128)	15083	5.00000	5.1594
85 Naphthalene	128	22.564	22.570	(1.142)	112190	5.00000	4.5856
86 1,2,3-Trichlorobenzene	180	22.909	22.915	(1.159)	43828	5.00000	4.7936

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.

Data File: \\GCHSSERVER\JD\chem\MSV0A09.i\062806.b\IFS07.D

Date : 28-JUN-2006 15:55

Client ID: DYNA P&T

Sample Info: ICAL,S3638,0.005/500,S3760,0.005/500,

Purge Volume: 5.0

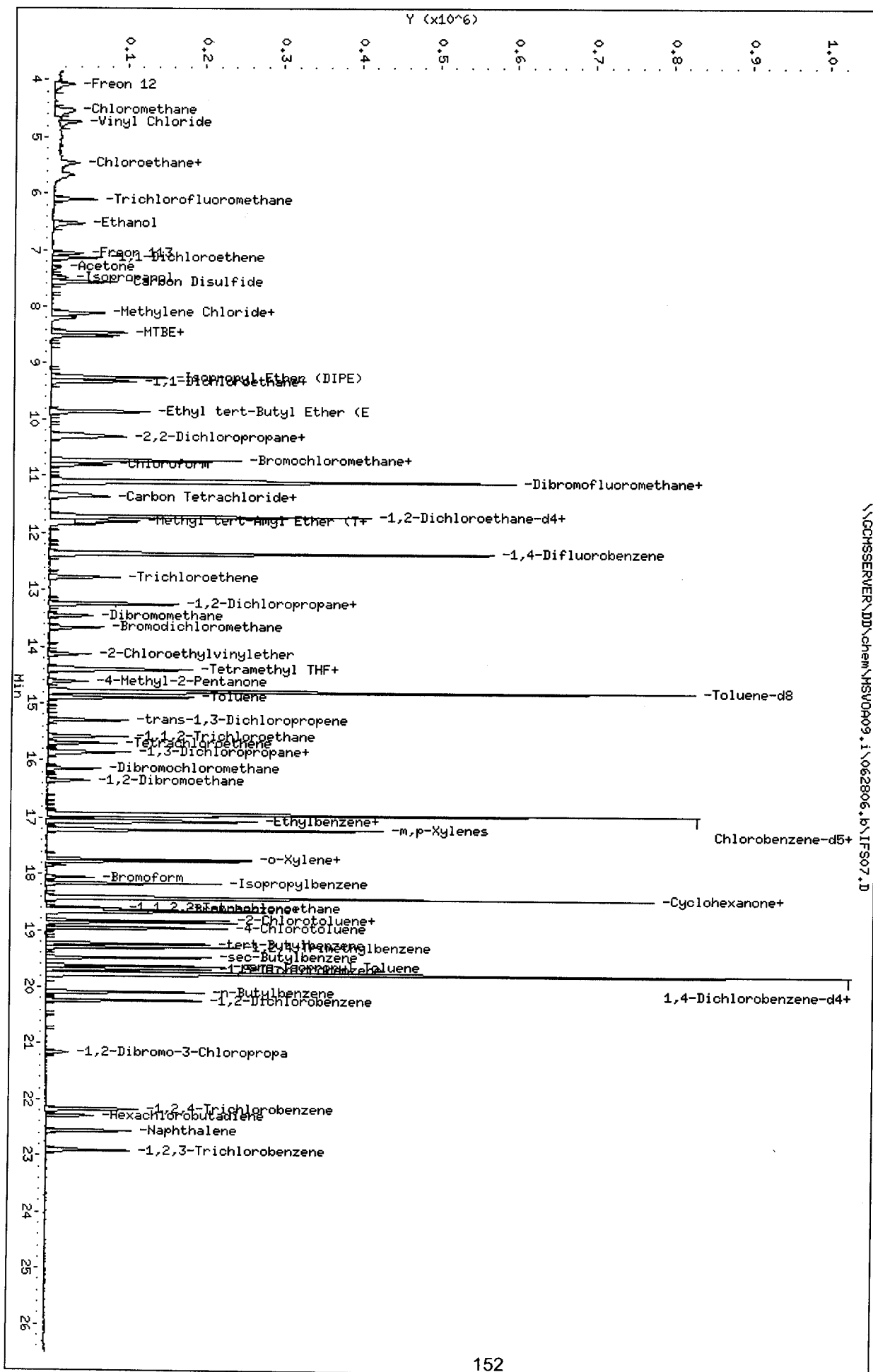
Column phase: RTX Volatiles

Instrument: MSV0A09.i

Operator: VOC

Column diameter: 0.25

\\GCHSSERVER\JD\chem\MSV0A09.i\062806.b\IFS07.D



Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS08.D
Report Date: 29-Jun-2006 12:30

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS08.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 28-JUN-2006 16:29 MS Autotune Date: 30-MAY-2006 10:57
Operator : VOC Inst ID: MSVOA09.i
Smp Info : ICAL,S3638,0.002/100,S3760,0.002/100,
Misc Info : S2864,0.001/100,10PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\826GOX9W.m
Meth Date : 29-Jun-2006 12:30 target Quant Type: ISTD
Cal Date : 28-JUN-2006 16:29 Cal File: IFS08.D
Als bottle: 8 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.085	4.088 (0.367)		83265		10.0000	7.9355
2 Chloromethane	50	4.529	4.542 (0.407)		162617		10.0000	9.7563
3 Vinyl Chloride	62	4.736	4.749 (0.426)		117856		10.0000	9.7331
4 Bromomethane	94	5.466	5.469 (0.492)		70819		10.0000	9.1353
5 Chloroethane	64	5.663	5.676 (0.509)		67791		10.0000	10.0139 (M)
6 Trichlorofluoromethane	101	6.107	6.120 (0.549)		106069		10.0000	8.7712
7 Ethanol	45	6.521	6.534 (0.587)		180551		1000.00	1083.1482 (AM)
8 Freon 113	101	7.064	7.067 (0.635)		48483		10.0000	8.6040
9 1,1-Dichloroethene	96	7.142	7.155 (0.643)		62944		10.0000	9.4802
10 Acetone	43	7.310	7.333 (0.658)		41853		10.0000	11.0980
11 Isopropanol	45	7.488	7.510 (0.674)		74416		100.000	104.0480 (AM)
12 Carbon Disulfide	76	7.567	7.579 (0.681)		318886		10.0000	9.9329
13 Methylene Chloride	84	8.109	8.122 (0.729)		119871		10.0000	10.3729
14 tert-Butyl Alcohol (TBA)	59	8.198	8.221 (0.737)		91829		100.000	111.6754 (A)
15 MTBE	73	8.454	8.467 (0.760)		263856		10.0000	10.7003
16 trans-1,2-Dichloroethene	96	8.513	8.526 (0.766)		82300		10.0000	10.2627 (M)
17 Isopropyl Ether (DIPE)	45	9.243	9.256 (0.831)		401008		10.0000	10.6929 (A)
18 1,1-Dichloroethane	63	9.312	9.335 (0.838)		170272		10.0000	10.3338
19 Vinyl Acetate	43	9.322	9.335 (0.839)		213913		10.0000	9.6674
20 Ethyl tert-Butyl Ether (ETBE)	59	9.855	9.867 (0.886)		316654		10.0000	10.7931 (A)
21 2,2-Dichloropropane	77	10.279	10.292 (0.925)		90593		10.0000	9.7305
22 cis-1,2-Dichloroethene	96	10.308	10.321 (0.927)		92413		10.0000	10.3524

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
23 2-Butanone	43	10.318	10.341	(0.928)	56224	10.0000	10.7895
24 Bromochloromethane	128	10.732	10.745	(0.965)	49362	10.0000	10.3951
25 Tetrahydrofuran	42	10.732	10.745	(0.965)	328120	100.0000	109.1858 (A)
26 Chloroform	83	10.811	10.824	(0.973)	150063	10.0000	10.1133
27 Dibromofluoromethane	113	11.087	11.100	(0.997)	215369	50.0000	50.0339
28 1,1,1-Trichloroethane	97	11.107	11.110	(0.999)	92681	10.0000	9.8835
* 29 Pentafluorobenzene	168	11.117	11.130	(1.000)	356911	50.0000	
30 Carbon Tetrachloride	117	11.324	11.337	(0.916)	71034	10.0000	9.6890
31 1,1-Dichloropropene	75	11.373	11.376	(0.920)	93746	10.0000	9.5615
32 1,2-Dichloroethane-d4	65	11.719	11.731	(0.948)	222595	50.0000	51.4407
33 Benzene	78	11.719	11.731	(0.948)	333329	10.0000	10.1773
34 Methyl tert-Amyl Ether (TAME)	73	11.797	11.800	(0.955)	247103	10.0000	10.3503 (A)
35 1,2-Dichloroethane	62	11.847	11.860	(0.959)	116045	10.0000	10.4595
* 36 1,4-Difluorobenzene	114	12.360	12.373	(1.000)	598797	50.0000	
37 Trichloroethene	95	12.784	12.787	(1.034)	78191	10.0000	9.9060
38 1,2-Dichloropropane	63	13.247	13.250	(1.072)	104417	10.0000	10.2496
39 Trifluorotoluene	146	13.257	13.260	(1.073)	86910	10.0000	9.1948 (A)
40 Dibromomethane	93	13.454	13.467	(1.089)	64235	10.0000	10.4310
41 Bromodichloromethane	83	13.661	13.664	(1.105)	111792	10.0000	10.2681
42 2-Chloroethylvinylether	63	14.135	14.138	(1.144)	59737	10.0000	10.2506
43 Tetramethyl THF	43	14.391	14.404	(1.164)	234357	10.0000	10.6935 (A)
44 cis-1,3-Dichloropropene	75	14.411	14.424	(1.166)	149048	10.0000	10.4494
45 4-Methyl-2-Pentanone	43	14.618	14.621	(1.183)	116067	10.0000	10.6041
46 Toluene-d8	98	14.786	14.799	(1.196)	669245	50.0000	49.8335
47 Toluene	92	14.894	14.907	(1.205)	188227	10.0000	9.9597
48 trans-1,3-Dichloropropene	75	15.299	15.302	(1.238)	133010	10.0000	10.5090
49 1,1,2-Trichloroethane	85	15.585	15.597	(1.261)	46604	10.0000	10.3077
50 Tetrachloroethene	166	15.693	15.706	(0.927)	59156	10.0000	9.1488
51 1,3-Dichloropropane	76	15.851	15.864	(0.936)	141742	10.0000	10.5206
52 2-Hexanone	43	15.880	15.883	(0.938)	80289	10.0000	10.5990
53 Dibromochloromethane	129	16.137	16.149	(0.953)	88236	10.0000	10.3354
54 1,2-Dibromoethane	107	16.354	16.357	(1.323)	88505	10.0000	10.4213
* 55 Chlorobenzene-d5	117	16.936	16.949	(1.000)	530508	50.0000	
56 Chlorobenzene	112	16.975	16.988	(1.002)	226962	10.0000	10.2693
57 Ethylbenzene	91	17.054	17.067	(1.007)	345523	10.0000	10.1968
58 1,1,1,2-Tetrachloroethane	131	17.074	17.087	(1.008)	74011	10.0000	10.2422
59 m,p-Xylenes	106	17.212	17.215	(1.016)	266782	20.0000	20.4761
60 o-Xylene	106	17.744	17.747	(1.048)	138229	10.0000	10.3571
61 Styrene	104	17.764	17.777	(1.049)	246743	10.0000	10.4230
62 Bromoform	173	18.060	18.063	(1.066)	61307	10.0000	10.0642
63 Isopropylbenzene	105	18.168	18.172	(0.919)	292015	10.0000	9.7650
64 Cyclohexanone	55	18.405	18.418	(0.931)	144958	100.0000	111.2526 (A)
65 Bromofluorobenzene	95	18.425	18.438	(0.932)	299832	50.0000	50.5614
66 1,1,2,2-Tetrachloroethane	83	18.593	18.596	(0.941)	119669	10.0000	10.7012
67 Bromobenzene	156	18.632	18.635	(0.943)	90266	10.0000	10.2867
68 Propylbenzene	91	18.662	18.665	(0.944)	386119	10.0000	9.8417
69 1,2,3-Trichloropropane	110	18.681	18.684	(0.945)	28393	10.0000	10.5648
70 2-Chlorotoluene	91	18.829	18.832	(0.953)	288109	10.0000	10.2372
71 1,3,5-Trimethylbenzene	105	18.859	18.862	(0.954)	267615	10.0000	9.8971
72 4-Chlorotoluene	91	18.957	18.960	(0.959)	270266	10.0000	10.0269
73 tert-Butylbenzene	119	19.234	19.237	(0.973)	204107	10.0000	9.5965
74 1,2,4-Trimethylbenzene	105	19.303	19.306	(0.977)	288308	10.0000	10.1441
75 sec-Butylbenzene	105	19.480	19.483	(0.986)	305081	10.0000	9.3665
76 para-Isopropyl Toluene	119	19.628	19.631	(0.993)	246315	10.0000	9.5060

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
* 77 1,3-Dichlorobenzene	146	19.687	19.690	(0.996)	171679	10.0000	9.9492
78 1,4-Dichlorobenzene-d4	152	19.766	19.769	(1.000)	266510	50.0000	
79 1,4-Dichlorobenzene	146	19.796	19.799	(1.001)	178786	10.0000	10.1249
80 n-Butylbenzene	91	20.092	20.095	(1.016)	232534	10.0000	9.5651
81 1,2-Dichlorobenzene	146	20.230	20.243	(1.023)	171402	10.0000	10.3462
82 1,2-Dibromo-3-Chloropropane	75	21.157	21.160	(1.070)	20308	10.0000	10.7370
83 1,2,4-Trichlorobenzene	180	22.173	22.185	(1.122)	93850	10.0000	9.6738
84 Hexachlorobutadiene	225	22.291	22.294	(1.128)	28367	10.0000	9.8851
85 Naphthalene	128	22.557	22.570	(1.141)	246143	10.0000	10.2491
86 1,2,3-Trichlorobenzene	180	22.912	22.915	(1.159)	89843	10.0000	10.0103

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.

Data File: \\GCHSERVER\DD\chem\MSV0A09.i\062806.b\IFS08.D

Date: 28-JUN-2006 16:29

Client ID: DYNA P&T

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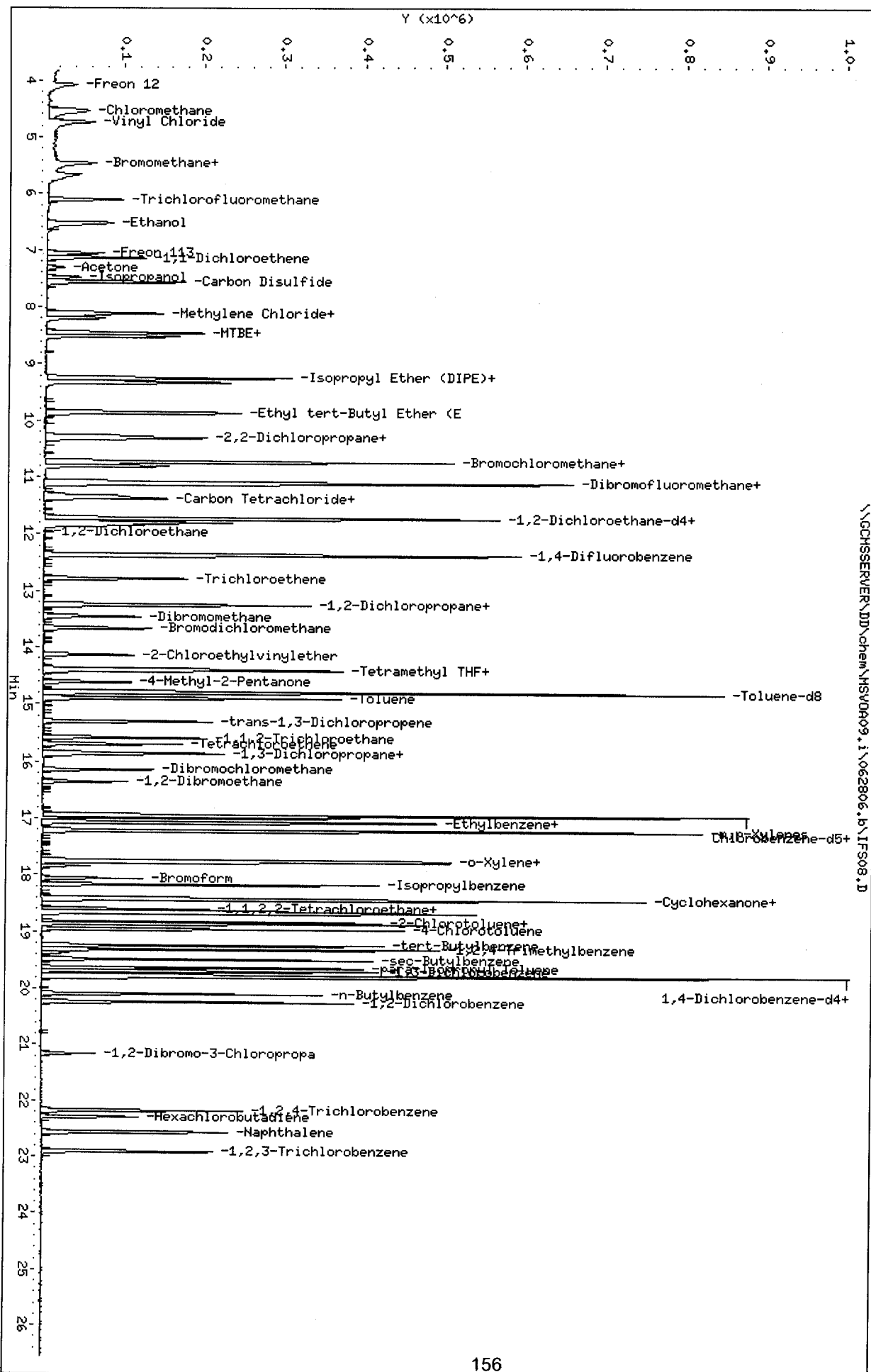
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Column phase: RTX Volatiles

Instrument: MSV0A09.i

Operator: WOC

Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS09.D
Report Date: 29-Jun-2006 12:31

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS09.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 28-JUN-2006 17:04 MS Autotune Date: 30-MAY-2006 10:57
Operator : VOC Inst ID: MSVOA09.i
Smp Info : ICAL,S3638,0.004/100,S3760,0.004/100,
Misc Info : S2864,0.002/100,20PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\826GOX9W.m
Meth Date : 29-Jun-2006 12:31 target Quant Type: ISTD
Cal Date : 28-JUN-2006 17:04 Cal File: IFS09.D
Als bottle: 9 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.082	4.088 (0.367)		222225	20.0000	20.7893
2 Chloromethane	50	4.535	4.542 (0.408)		343329	20.0000	20.2192
3 Vinyl Chloride	62	4.732	4.749 (0.426)		271203	20.0000	21.9851
4 Bromomethane	94	5.462	5.469 (0.492)		156895	20.0000	19.8662
5 Chloroethane	64	5.659	5.676 (0.509)		149874	20.0000	21.7316
6 Trichlorofluoromethane	101	6.103	6.120 (0.549)		256594	20.0000	20.8281
7 Ethanol	45	6.527	6.534 (0.587)		368625	2000.00	2170.7332 (A)
8 Freon 113	101	7.060	7.067 (0.635)		124631	20.0000	21.7105
9 1,1-Dichloroethene	96	7.139	7.155 (0.642)		143155	20.0000	21.1644
10 Acetone	43	7.316	7.333 (0.658)		74504	20.0000	19.3923
11 Isopropanol	45	7.484	7.510 (0.673)		156647	200.000	214.9924 (A)
12 Carbon Disulfide	76	7.573	7.579 (0.681)		694695	20.0000	21.2408
13 Methylene Chloride	84	8.115	8.122 (0.730)		238276	20.0000	20.2396
14 tert-Butyl Alcohol (TBA)	59	8.194	8.221 (0.737)		185893	200.000	221.9088 (A)
15 MTBE	73	8.450	8.467 (0.760)		534054	20.0000	21.2593
16 trans-1,2-Dichloroethene	96	8.510	8.526 (0.766)		171907	20.0000	21.0421
17 Isopropyl Ether (DIPE)	45	9.249	9.256 (0.832)		816009	20.0000	21.3586 (A)
18 1,1-Dichloroethane	63	9.318	9.335 (0.838)		356591	20.0000	21.2432
19 Vinyl Acetate	43	9.328	9.335 (0.839)		506039	20.0000	22.4487
20 Ethyl tert-Butyl Ether (ETBE)	59	9.861	9.867 (0.887)		645385	20.0000	21.5930 (A)
21 2,2-Dichloropropane	77	10.275	10.292 (0.925)		201232	20.0000	21.2163
22 cis-1,2-Dichloroethene	96	10.314	10.321 (0.928)		186016	20.0000	20.4546

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
23 2-Butanone	43	10.324	10.341	(0.929)	110242	20.0000	20.7665
24 Bromochloromethane	128	10.729	10.745	(0.965)	104492	20.0000	21.5999
25 Tetrahydrofuran	42	10.739	10.745	(0.966)	660275	200.0000	215.6712 (A)
26 Chloroform	83	10.808	10.824	(0.972)	315180	20.0000	20.8503
27 Dibromofluoromethane	113	11.094	11.100	(0.998)	218011	50.0000	49.7157
28 1,1,1-Trichloroethane	97	11.103	11.110	(0.999)	202497	20.0000	21.1970
* 29 Pentafluorobenzene	168	11.113	11.130	(1.000)	363602	50.0000	
30 Carbon Tetrachloride	117	11.330	11.337	(0.916)	162429	20.0000	22.0673
31 1,1-Dichloropropene	75	11.370	11.376	(0.919)	209097	20.0000	21.2419
32 1,2-Dichloroethane-d4	65	11.715	11.731	(0.947)	227016	50.0000	52.2539
33 Benzene	78	11.725	11.731	(0.948)	697698	20.0000	21.2178
34 Methyl tert-Amyl Ether (TAME)	73	11.794	11.800	(0.954)	510508	20.0000	21.2985 (A)
35 1,2-Dichloroethane	62	11.843	11.860	(0.958)	234116	20.0000	21.0178
* 36 1,4-Difluorobenzene	114	12.366	12.373	(1.000)	601186	50.0000	
37 Trichloroethene	95	12.780	12.787	(1.033)	163478	20.0000	20.6288
38 1,2-Dichloropropane	63	13.244	13.250	(1.071)	213793	20.0000	20.9026
39 Trifluorotoluene	146	13.253	13.260	(1.072)	204664	20.0000	21.5668 (A)
40 Dibromomethane	93	13.451	13.467	(1.088)	130124	20.0000	21.0467
41 Bromodichloromethane	83	13.668	13.664	(1.105)	229615	20.0000	21.0063
42 2-Chloroethylvinylether	63	14.131	14.138	(1.143)	124614	20.0000	21.2983
43 Tetramethyl THF	43	14.388	14.404	(1.163)	483024	20.0000	21.9525 (A)
44 cis-1,3-Dichloropropene	75	14.417	14.424	(1.166)	301899	20.0000	21.0813
45 4-Methyl-2-Pentanone	43	14.614	14.621	(1.182)	237261	20.0000	21.5906
46 Toluene-d8	98	14.792	14.799	(1.196)	682435	50.0000	50.6137
47 Toluene	92	14.900	14.907	(1.205)	402698	20.0000	21.2234
48 trans-1,3-Dichloropropene	75	15.295	15.302	(1.237)	271835	20.0000	21.3921
49 1,1,2-Trichloroethane	85	15.581	15.597	(1.260)	94247	20.0000	20.7624
50 Tetrachloroethene	166	15.699	15.706	(0.927)	136328	20.0000	20.6600
51 1,3-Dichloropropane	76	15.847	15.864	(0.935)	288236	20.0000	20.9638
52 2-Hexanone	43	15.877	15.883	(0.937)	164619	20.0000	21.2944
53 Dibromochloromethane	129	16.143	16.149	(0.953)	183023	20.0000	21.0071
54 1,2-Dibromoethane	107	16.350	16.357	(1.322)	182631	20.0000	21.4190
* 55 Chlorobenzene-d5	117	16.942	16.949	(1.000)	541396	50.0000	
56 Chlorobenzene	112	16.981	16.988	(1.002)	461949	20.0000	20.4814
57 Ethylbenzene	91	17.060	17.067	(1.007)	735245	20.0000	21.2616
58 1,1,1,2-Tetrachloroethane	131	17.080	17.087	(1.008)	151553	20.0000	20.5513
59 m,p-Xylenes	106	17.208	17.215	(1.016)	577494	40.0000	43.4325
60 o-Xylene	106	17.741	17.747	(1.047)	288766	20.0000	21.2012
61 Styrene	104	17.770	17.777	(1.049)	519755	20.0000	21.5143
62 Bromoform	173	18.056	18.063	(1.066)	129883	20.0000	20.8930
63 Isopropylbenzene	105	18.165	18.172	(0.919)	658992	20.0000	21.5355
64 Cyclohexanone	55	18.401	18.418	(0.931)	242802	200.0000	182.1063 (A)
65 Bromofluorobenzene	95	18.431	18.438	(0.933)	302688	50.0000	49.8816
66 1,1,2,2-Tetrachloroethane	83	18.599	18.596	(0.941)	249476	20.0000	21.8015
67 Bromobenzene	156	18.628	18.635	(0.943)	191233	20.0000	21.2971
68 Propylbenzene	91	18.658	18.665	(0.944)	865850	20.0000	21.5674
69 1,2,3-Trichloropropane	110	18.678	18.684	(0.945)	58695	20.0000	21.3430
70 2-Chlorotoluene	91	18.826	18.832	(0.953)	610163	20.0000	21.1873
71 1,3,5-Trimethylbenzene	105	18.865	18.862	(0.955)	597145	20.0000	21.5815
72 4-Chlorotoluene	91	18.954	18.960	(0.959)	571401	20.0000	20.7167
73 tert-Butylbenzene	119	19.240	19.237	(0.974)	470493	20.0000	21.6180
74 1,2,4-Trimethylbenzene	105	19.299	19.306	(0.977)	622176	20.0000	21.3931
75 sec-Butylbenzene	105	19.486	19.483	(0.986)	730292	20.0000	21.9112
76 para-Isopropyl Toluene	119	19.624	19.631	(0.993)	581734	20.0000	21.9401

Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS09.D
 Report Date: 29-Jun-2006 12:31

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
77 1,3-Dichlorobenzene	146	19.684	19.690	(0.996)	367677	20.0000	20.8229
* 78 1,4-Dichlorobenzene-d4	152	19.762	19.769	(1.000)	272715	50.0000	
79 1,4-Dichlorobenzene	146	19.792	19.799	(1.001)	381425	20.0000	21.1092
80 n-Butylbenzene	91	20.088	20.095	(1.016)	554869	20.0000	22.3047
81 1,2-Dichlorobenzene	146	20.236	20.243	(1.024)	357715	20.0000	21.1013
82 1,2-Dibromo-3-Chloropropane	75	21.163	21.160	(1.071)	41138	20.0000	21.2552
83 1,2,4-Trichlorobenzene	180	22.179	22.185	(1.122)	204975	20.0000	20.6476
84 Hexachlorobutadiene	225	22.297	22.294	(1.128)	70100	20.0000	23.8722
85 Naphthalene	128	22.563	22.570	(1.142)	532598	20.0000	21.6723
86 1,2,3-Trichlorobenzene	180	22.909	22.915	(1.159)	195499	20.0000	21.2869

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\GCHSSERVER\JD\chem\MSV0A09.i\062806.b\IFS09.D

Date : 28-JUN-2006 17:04

Client ID: DYNA P&T

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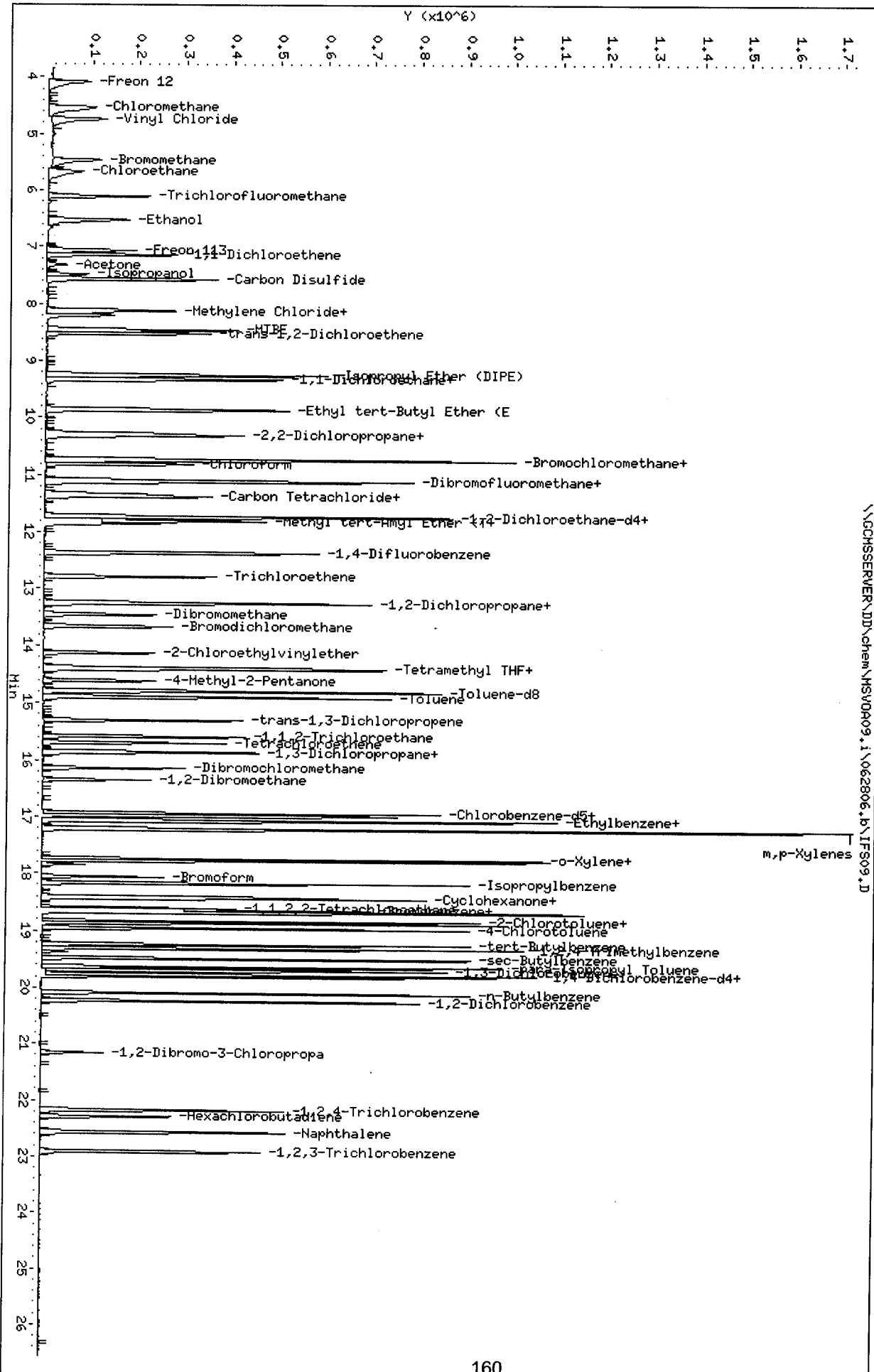
Purge Volume: 5.0

Column phase: RTX Volatiles

Instrument: MSV0A09.i

Operator: WDC

Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS10.D
 Report Date: 29-Jun-2006 12:32

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS10.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 28-JUN-2006 17:38 MS Autotune Date: 30-MAY-2006 10:57
 Operator : VOC Inst ID: MSVOA09.i
 Smp Info : ICAL,S3638,0.01/100,S3760,0.01/100,
 Misc Info : S2864,0.005/100,50PPB
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\826GOX9W.m
 Meth Date : 29-Jun-2006 12:32 target Quant Type: ISTD
 Cal Date : 28-JUN-2006 17:38 Cal File: IFS10.D
 Als bottle: 10 Calibration Sample, Level: 6
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
1 Freon 12	85	4.086	4.088	(0.368)	555733	50.0000	49.4544
2 Chloromethane	50	4.530	4.542	(0.407)	783459	50.0000	43.8896
3 Vinyl Chloride	62	4.737	4.749	(0.426)	620967	50.0000	47.8842
4 Bromomethane	94	5.467	5.469	(0.492)	386057	50.0000	46.4995
5 Chloroethane	64	5.664	5.676	(0.509)	352855	50.0000	48.6691
6 Trichlorofluoromethane	101	6.108	6.120	(0.549)	667064	50.0000	51.5065
7 Ethanol	45	6.532	6.534	(0.588)	814107	5000.00	4560.2987 (AM)
8 Freon 113	101	7.065	7.067	(0.635)	382260	50.0000	63.3424
9 1,1-Dichloroethene	96	7.144	7.155	(0.643)	400928	50.0000	56.3840
10 Acetone	43	7.311	7.333	(0.658)	195680	50.0000	48.4494
11 Isopropanol	45	7.489	7.510	(0.674)	351900	500.000	459.4206 (A)
12 Carbon Disulfide	76	7.568	7.579	(0.681)	1916386	50.0000	55.7380
13 Methylene Chloride	84	8.110	8.122	(0.729)	599592	50.0000	48.4473
14 tert-Butyl Alcohol (TBA)	59	8.199	8.221	(0.737)	422946	500.000	480.2712 (A)
15 MTBE	73	8.455	8.467	(0.761)	1324934	50.0000	50.1706
16 trans-1,2-Dichloroethene	96	8.515	8.526	(0.766)	460609	50.0000	53.6315
17 Isopropyl Ether (DIPE)	45	9.244	9.256	(0.831)	2024871	50.0000	50.4158 (A)
18 1,1-Dichloroethane	63	9.323	9.335	(0.839)	914482	50.0000	51.8222
19 Vinyl Acetate	43	9.323	9.335	(0.839)	1096453	50.0000	46.2689
20 Ethyl tert-Butyl Ether (ETBE)	59	9.866	9.867	(0.887)	1597617	50.0000	50.8461 (A)
21 2,2-Dichloropropane	77	10.280	10.292	(0.925)	534508	50.0000	53.6066
22 cis-1,2-Dichloroethene	96	10.319	10.321	(0.928)	492379	50.0000	51.5028

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	====	----	-----	-----	-----	-----	-----
23 2-Butanone	43	10.329	10.341	(0.929)	271179	50.0000	48.5917
24 Bromochloromethane	128	10.734	10.745	(0.965)	271037	50.0000	53.2952
25 Tetrahydrofuran	42	10.734	10.745	(0.965)	1522039	500.000	472.9152 (A)
26 Chloroform	83	10.812	10.824	(0.973)	816806	50.0000	51.4001
27 Dibromofluoromethane	113	11.098	11.100	(0.998)	232689	50.0000	50.4755
28 1,1,1-Trichloroethane	97	11.108	11.110	(0.999)	549333	50.0000	54.6995
* 29 Pentafluorobenzene	168	11.118	11.130	(1.000)	382240	50.0000	
30 Carbon Tetrachloride	117	11.335	11.337	(0.916)	458654	50.0000	59.2069
31 1,1-Dichloropropene	75	11.375	11.376	(0.919)	585078	50.0000	56.4758
32 1,2-Dichloroethane-d4	65	11.720	11.731	(0.947)	222066	50.0000	48.5675
33 Benzene	78	11.720	11.731	(0.947)	1777551	50.0000	51.3638
34 Methyl tert-Amyl Ether (TAME)	73	11.799	11.800	(0.954)	1281501	50.0000	50.8005 (A)
35 1,2-Dichloroethane	62	11.848	11.860	(0.958)	591546	50.0000	50.4600
* 36 1,4-Difluorobenzene	114	12.371	12.373	(1.000)	632714	50.0000	
37 Trichloroethene	95	12.785	12.787	(1.033)	444579	50.0000	53.3048
38 1,2-Dichloropropane	63	13.248	13.250	(1.071)	551503	50.0000	51.2338
39 Trifluorotoluene	146	13.258	13.260	(1.072)	572834	50.0000	57.3556 (A)
40 Dibromomethane	93	13.456	13.467	(1.088)	333244	50.0000	51.2143
41 Bromodichloromethane	83	13.663	13.664	(1.104)	598777	50.0000	52.0495
42 2-Chloroethylvinylether	63	14.136	14.138	(1.143)	314454	50.0000	51.0667
43 Tetramethyl THF	43	14.392	14.404	(1.163)	1141210	50.0000	49.2814 (A)
44 cis-1,3-Dichloropropene	75	14.412	14.424	(1.165)	773753	50.0000	51.3381
45 4-Methyl-2-Pentanone	43	14.609	14.621	(1.181)	566790	50.0000	49.0075
46 Toluene-d8	98	14.787	14.799	(1.195)	705598	50.0000	49.7240
47 Toluene	92	14.895	14.907	(1.204)	1015055	50.0000	50.8309
48 trans-1,3-Dichloropropene	75	15.300	15.302	(1.237)	698121	50.0000	52.2012
49 1,1,2-Trichloroethane	85	15.586	15.597	(1.260)	241971	50.0000	50.6496
50 Tetrachloroethene	166	15.704	15.706	(0.927)	375912	50.0000	55.7655
51 1,3-Dichloropropane	76	15.852	15.864	(0.936)	727714	50.0000	51.8102
52 2-Hexanone	43	15.872	15.883	(0.937)	396115	50.0000	50.1581
53 Dibromochloromethane	129	16.148	16.149	(0.953)	471114	50.0000	52.9321
54 1,2-Dibromoethane	107	16.355	16.357	(1.322)	469856	50.0000	52.3590
* 55 Chlorobenzene-d5	117	16.937	16.949	(1.000)	553073	50.0000	
56 Chlorobenzene	112	16.976	16.988	(1.002)	1176072	50.0000	51.0426
57 Ethylbenzene	91	17.055	17.067	(1.007)	1838988	50.0000	52.0567
58 1,1,1,2-Tetrachloroethane	131	17.075	17.087	(1.008)	387232	50.0000	51.4020
59 m,p-Xylenes	106	17.213	17.215	(1.016)	1412401	100.000	103.9820
60 o-Xylene	106	17.746	17.747	(1.048)	717754	50.0000	51.5851
61 Styrene	104	17.765	17.777	(1.049)	1287949	50.0000	52.1867
62 Bromoform	173	18.061	18.063	(1.066)	333094	50.0000	52.4505
63 Isopropylbenzene	105	18.170	18.172	(0.919)	1676352	50.0000	53.6464
64 Cyclohexanone	55	18.406	18.418	(0.931)	683380	500.000	501.9218 (A)
65 Bromofluorobenzene	95	18.426	18.438	(0.932)	308160	50.0000	49.7305
66 1,1,2,2-Tetrachloroethane	83	18.594	18.596	(0.941)	592540	50.0000	50.7081
67 Bromobenzene	156	18.633	18.635	(0.943)	472547	50.0000	51.5353
68 Propylbenzene	91	18.663	18.665	(0.944)	2177590	50.0000	53.1169
69 1,2,3-Trichloropropane	110	18.683	18.684	(0.945)	141844	50.0000	50.5088
70 2-Chlorotoluene	91	18.830	18.832	(0.953)	1503241	50.0000	51.1163
71 1,3,5-Trimethylbenzene	105	18.860	18.862	(0.954)	1478626	50.0000	52.3314
72 4-Chlorotoluene	91	18.959	18.960	(0.959)	1432784	50.0000	50.8700
73 tert-Butylbenzene	119	19.235	19.237	(0.973)	1195632	50.0000	53.7975
74 1,2,4-Trimethylbenzene	105	19.304	19.306	(0.977)	1521542	50.0000	51.2326
75 sec-Butylbenzene	105	19.481	19.483	(0.986)	1880354	50.0000	55.2473
76 para-Isopropyl Toluene	119	19.629	19.631	(0.993)	1495975	50.0000	55.2509

Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS10.D
 Report Date: 29-Jun-2006 12:32

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
77 1,3-Dichlorobenzene	146	19.688	19.690	(0.996)	918403	50.0000	50.9343
* 78 1,4-Dichlorobenzene-d4	152	19.767	19.769	(1.000)	278489	50.0000	
79 1,4-Dichlorobenzene	146	19.797	19.799	(1.001)	948370	50.0000	51.3974
80 n-Butylbenzene	91	20.093	20.095	(1.016)	1443550	50.0000	56.8251
81 1,2-Dichlorobenzene	146	20.241	20.243	(1.024)	894502	50.0000	51.6719
82 1,2-Dibromo-3-Chloropropane	75	21.158	21.160	(1.070)	101058	50.0000	51.1322
83 1,2,4-Trichlorobenzene	180	22.174	22.185	(1.122)	533617	50.0000	52.6381
84 Hexachlorobutadiene	225	22.292	22.294	(1.128)	189722	50.0000	63.2693
85 Naphthalene	128	22.568	22.570	(1.142)	1335318	50.0000	53.2098
86 1,2,3-Trichlorobenzene	180	22.913	22.915	(1.159)	510216	50.0000	54.4031

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.

Data File: \\GCHSERVER\JD\chem\MSV0409.1\062806.b\IFS10.D

Date : 28-JUN-2006 17:38

Client ID: DYNA P&T

Sample Info: ICAL,S3638,0.01/100,S3760,0.01/100,

Purge Volume: 5.0

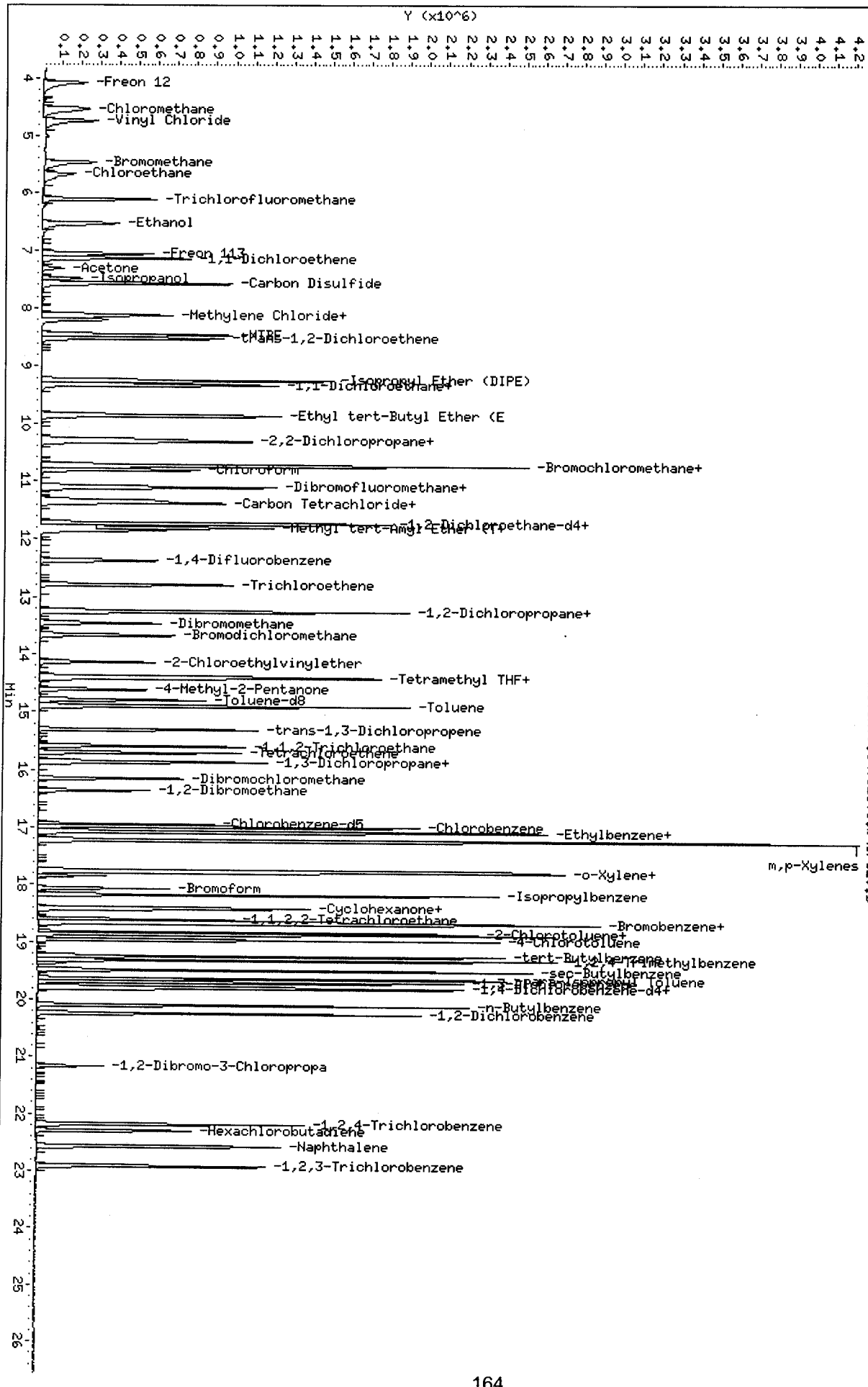
Column phase: RTX Volatiles

Instrument: MSV0409.1

Operator: WOC

Column diameter: 0.25

\\GCHSERVER\JD\chem\MSV0409.1\062806.b\IFS10.D



Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS11.D
 Report Date: 29-Jun-2006 12:34

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS11.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 28-JUN-2006 18:12 MS Autotune Date: 30-MAY-2006 10:57
 Operator : VOC Inst ID: MSVOA09.i
 Smp Info : ICAL,S3638,0.015/100,S3760,0.015/100,
 Misc Info : S2864,0.0075/100,75PPB
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\826GOX9W.m
 Meth Date : 29-Jun-2006 12:33 target Quant Type: ISTD
 Cal Date : 28-JUN-2006 18:12 Cal File: IFS11.D
 Als bottle: 11 Calibration Sample, Level: 7
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.076	4.088 (0.367)		874623		75.0000	77.6029
2 Chloromethane	50	4.529	4.542 (0.407)		1198464		75.0000	66.9404
3 Vinyl Chloride	62	4.736	4.749 (0.426)		965196		75.0000	74.2092
4 Bromomethane	94	5.456	5.469 (0.491)		610201		75.0000	73.2805
5 Chloroethane	64	5.663	5.676 (0.509)		554576		75.0000	76.2669
6 Trichlorofluoromethane	101	6.107	6.120 (0.549)		1058185		75.0000	81.4656
7 Ethanol	45	6.531	6.534 (0.588)		1251722		7500.00	6990.9742 (AM)
8 Freon 113	101	7.064	7.067 (0.635)		507900		75.0000	83.9135
9 1,1-Dichloroethene	96	7.143	7.155 (0.643)		566324		75.0000	79.4095
10 Acetone	43	7.310	7.333 (0.658)		299013		75.0000	73.8159
11 Isopropanol	45	7.488	7.510 (0.674)		559121		750.000	727.8050 (A)
12 Carbon Disulfide	76	7.577	7.579 (0.682)		2675766		75.0000	77.5951
13 Methylene Chloride	84	8.109	8.122 (0.729)		873893		75.0000	70.4028
14 tert-Butyl Alcohol (TBA)	59	8.198	8.221 (0.737)		661992		750.000	749.5013 (A)
15 MTBE	73	8.445	8.467 (0.760)		1945234		75.0000	73.4420
16 trans-1,2-Dichloroethene	96	8.514	8.526 (0.766)		653721		75.0000	75.8923
17 Isopropyl Ether (DIPE)	45	9.243	9.256 (0.831)		2856927		75.0000	70.9229 (A)
18 1,1-Dichloroethane	63	9.322	9.335 (0.839)		1309488		75.0000	73.9879
19 Vinyl Acetate	43	9.322	9.335 (0.839)		1469796		75.0000	61.8406
20 Ethyl tert-Butyl Ether (ETBE)	59	9.855	9.867 (0.886)		2305489		75.0000	73.1587 (A)
21 2,2-Dichloropropane	77	10.279	10.292 (0.925)		755661		75.0000	75.5630
22 cis-1,2-Dichloroethene	96	10.309	10.321 (0.927)		723394		75.0000	75.4440

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
23 2-Butanone	43	10.318	10.341	(0.928)	399678	75.0000	71.4060
24 Bromochloromethane	128	10.733	10.745	(0.965)	400685	75.0000	78.5563
25 Tetrahydrofuran	42	10.733	10.745	(0.965)	2217557	750.000	686.9898 (A)
26 Chloroform	83	10.811	10.824	(0.973)	1190975	75.0000	74.7249
27 Dibromofluoromethane	113	11.088	11.100	(0.997)	237363	50.0000	51.3377
28 1,1,1-Trichloroethane	97	11.107	11.110	(0.999)	778321	75.0000	77.2724
* 29 Pentafluorobenzene	168	11.117	11.130	(1.000)	383370	50.0000	
30 Carbon Tetrachloride	117	11.334	11.337	(0.917)	645401	75.0000	82.3339
31 1,1-Dichloropropene	75	11.374	11.376	(0.920)	802531	75.0000	76.5546
32 1,2-Dichloroethane-d4	65	11.719	11.731	(0.948)	225876	50.0000	48.8197
33 Benzene	78	11.719	11.731	(0.948)	2543944	75.0000	72.6447
34 Methyl tert-Amyl Ether (TAME)	73	11.798	11.800	(0.955)	1862608	75.0000	72.9679 (A)
35 1,2-Dichloroethane	62	11.847	11.860	(0.959)	854626	75.0000	72.0437
* 36 1,4-Difluorobenzene	114	12.360	12.373	(1.000)	640245	50.0000	
37 Trichloroethene	95	12.784	12.787	(1.034)	640766	75.0000	75.9238
38 1,2-Dichloropropane	63	13.247	13.250	(1.072)	786358	75.0000	72.1923
39 Trifluorotoluene	146	13.257	13.260	(1.073)	785774	75.0000	77.7510 (A)
40 Dibromomethane	93	13.455	13.467	(1.089)	495101	75.0000	75.1941
41 Bromodichloromethane	83	13.662	13.664	(1.105)	868721	75.0000	74.6265
42 2-Chloroethylvinylether	63	14.135	14.138	(1.144)	455848	75.0000	73.1580
43 Tetramethyl THF	43	14.382	14.404	(1.164)	1645504	75.0000	70.2227 (A)
44 cis-1,3-Dichloropropene	75	14.411	14.424	(1.166)	1125264	75.0000	73.7825
45 4-Methyl-2-Pentanone	43	14.608	14.621	(1.182)	825120	75.0000	70.5048
46 Toluene-d8	98	14.786	14.799	(1.196)	703695	50.0000	49.0065
47 Toluene	92	14.894	14.907	(1.205)	1463994	75.0000	72.4501
48 trans-1,3-Dichloropropene	75	15.299	15.302	(1.238)	1007792	75.0000	74.4701
49 1,1,2-Trichloroethane	85	15.585	15.597	(1.261)	355569	75.0000	73.5526
50 Tetrachloroethene	166	15.703	15.706	(0.927)	529219	75.0000	77.3631
51 1,3-Dichloropropane	76	15.851	15.864	(0.936)	1055719	75.0000	74.0666
52 2-Hexanone	43	15.871	15.883	(0.937)	589054	75.0000	73.5011
53 Dibromochloromethane	129	16.147	16.149	(0.953)	694565	75.0000	76.8998
54 1,2-Dibromoethane	107	16.354	16.357	(1.323)	686301	75.0000	75.5792
* 55 Chlorobenzene-d5	117	16.936	16.949	(1.000)	561259	50.0000	
56 Chlorobenzene	112	16.975	16.988	(1.002)	1683184	75.0000	71.9863
57 Ethylbenzene	91	17.054	17.067	(1.007)	2558961	75.0000	71.3807
58 1,1,1,2-Tetrachloroethane	131	17.074	17.087	(1.008)	566939	75.0000	74.1591
59 m,p-Xylenes	106	17.212	17.215	(1.016)	1955745	150.000	141.8834
60 o-Xylene	106	17.745	17.747	(1.048)	1027752	75.0000	72.7874
61 Styrene	104	17.764	17.777	(1.049)	1846584	75.0000	73.7309
62 Bromoform	173	18.060	18.063	(1.066)	499936	75.0000	77.5740
63 Isopropylbenzene	105	18.169	18.172	(0.919)	2337352	75.0000	72.8656
64 Cyclohexanone	55	18.396	18.418	(0.931)	1061181	750.000	759.2521 (A)
65 Bromofluorobenzene	95	18.435	18.438	(0.933)	306754	50.0000	48.2235
66 1,1,2,2-Tetrachloroethane	83	18.593	18.596	(0.941)	863768	75.0000	72.0078
67 Bromobenzene	156	18.632	18.635	(0.943)	693668	75.0000	73.6944
68 Propylbenzene	91	18.662	18.665	(0.944)	2976822	75.0000	70.7347
69 1,2,3-Trichloropropane	110	18.682	18.684	(0.945)	209263	75.0000	72.5891
70 2-Chlorotoluene	91	18.829	18.832	(0.953)	2100241	75.0000	69.5702
71 1,3,5-Trimethylbenzene	105	18.859	18.862	(0.954)	2071956	75.0000	71.4344
72 4-Chlorotoluene	91	18.958	18.960	(0.959)	2011266	75.0000	69.5622
73 tert-Butylbenzene	119	19.234	19.237	(0.973)	1669972	75.0000	73.1975
74 1,2,4-Trimethylbenzene	105	19.303	19.306	(0.977)	2147961	75.0000	70.4550
75 sec-Butylbenzene	105	19.480	19.483	(0.986)	2537867	75.0000	72.6379
76 para-Isopropyl Toluene	119	19.628	19.631	(0.993)	2031440	75.0000	73.0873

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
77 1,3-Dichlorobenzene	146	19.687	19.690	(0.996)	1312507	75.0000	70.9090
* 78 1,4-Dichlorobenzene-d4	152	19.766	19.769	(1.000)	285881	50.0000	
79 1,4-Dichlorobenzene	146	19.796	19.799	(1.001)	1346728	75.0000	71.0995
80 n-Butylbenzene	91	20.092	20.095	(1.016)	1964311	75.0000	75.3254
81 1,2-Dichlorobenzene	146	20.230	20.243	(1.023)	1285563	75.0000	72.3418
82 1,2-Dibromo-3-Chloropropane	75	21.157	21.160	(1.070)	148399	75.0000	73.1438
83 1,2,4-Trichlorobenzene	180	22.173	22.185	(1.122)	772959	75.0000	74.2762
84 Hexachlorobutadiene	225	22.291	22.294	(1.128)	260297	75.0000	84.5605
85 Naphthalene	128	22.567	22.570	(1.142)	1954560	75.0000	75.8716
86 1,2,3-Trichlorobenzene	180	22.903	22.915	(1.159)	730506	75.0000	75.8781

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.

Data File: \\GCHSERVER\DD\chem\MSV0A09.i\062806.b\IFS11.D

Date : 28-JUN-2006 18:12

Client ID: DYNA P&T

Sample Info: ICAL,S3638,0.015/100,S3760,0.015/100,

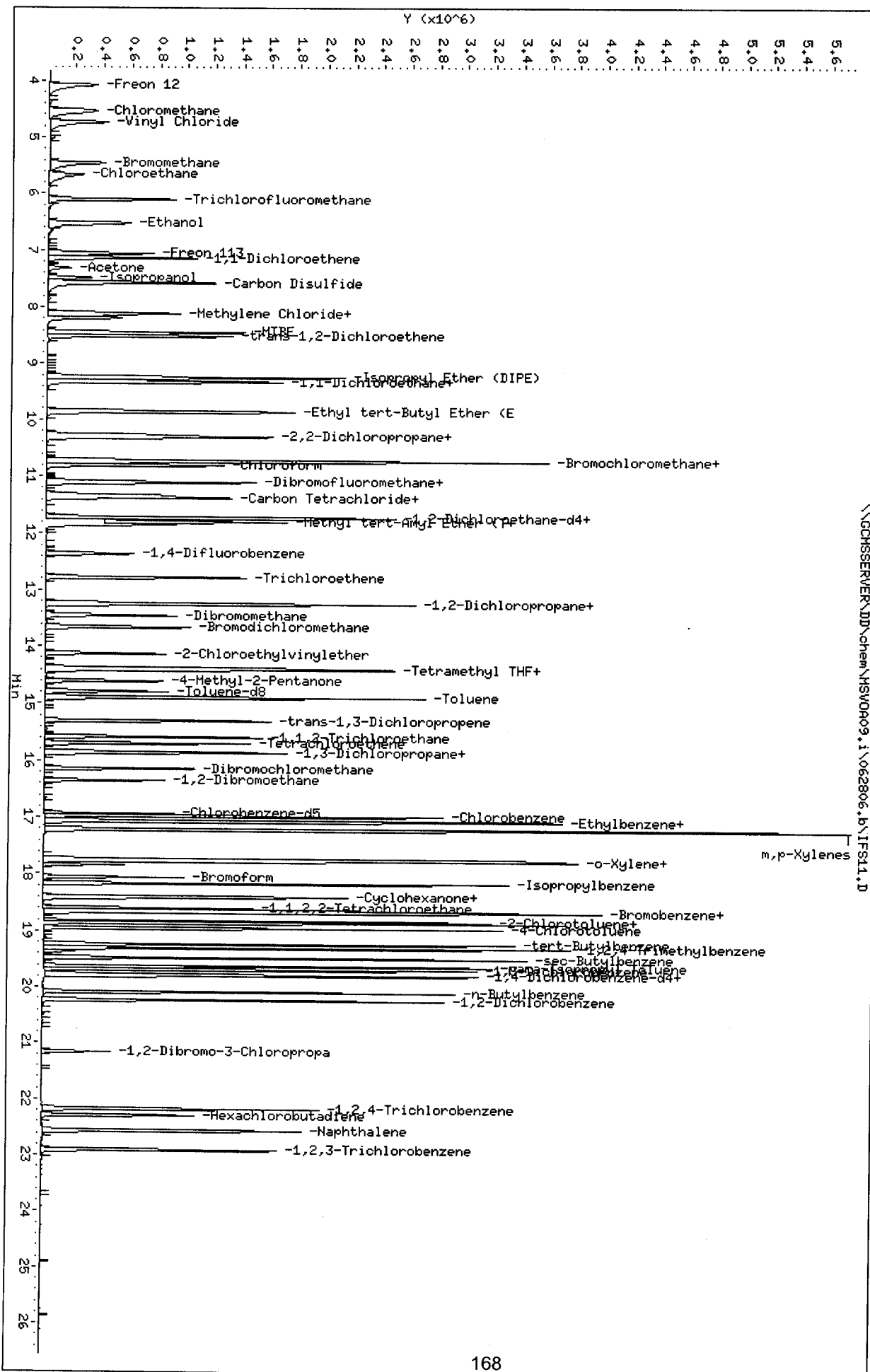
Purge Volume: 5.0

Column phase: RTX Volatiles

Instrument: MSV0A09.i

Operator: VDC

Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS12.D
Report Date: 29-Jun-2006 12:35

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS12.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 28-JUN-2006 18:47 MS Autotune Date: 30-MAY-2006 10:57
Operator : VOC Inst ID: MSVOA09.i
Smp Info : ICAL,S3638,0.02/100,S3760,0.02/100,
Misc Info : S2864,0.01/100,100PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\826GOX9W.m
Meth Date : 29-Jun-2006 12:35 target Quant Type: ISTD
Cal Date : 28-JUN-2006 18:47 Cal File: IFS12.D
Als bottle: 12 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS						AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.081	4.088 (0.367)		1170756		100.000	102.2100
2 Chloromethane	50	4.535	4.542 (0.408)		1590152		100.000	87.3921
3 Vinyl Chloride	62	4.732	4.749 (0.426)		1302750		100.000	98.5538
4 Bromomethane	94	5.462	5.469 (0.492)		831281		100.000	98.2276
5 Chloroethane	64	5.669	5.676 (0.510)		747056		100.000	101.0877
6 Trichlorofluoromethane	101	6.103	6.120 (0.549)		1408593		100.000	106.7010
7 Ethanol	45	6.527	6.534 (0.587)		1705439		10000.0	9372.0846 (AM)
8 Freon 113	101	7.059	7.067 (0.635)		786914		100.000	127.9237
9 1,1-Dichloroethene	96	7.138	7.155 (0.642)		779144		100.000	107.4968
10 Acetone	43	7.316	7.333 (0.658)		364034		100.000	88.4244
11 Isopropanol	45	7.484	7.510 (0.673)		772989		1000.00	990.0400 (A)
12 Carbon Disulfide	76	7.572	7.579 (0.681)		3771839		100.000	107.6241
13 Methylene Chloride	84	8.115	8.122 (0.730)		1173204		100.000	92.9984
14 tert-Butyl Alcohol (TBA)	59	8.194	8.221 (0.737)		931019		1000.00	1037.1662 (A)
15 MTBE	73	8.450	8.467 (0.760)		2602621		100.000	96.6839
16 trans-1,2-Dichloroethene	96	8.519	8.526 (0.767)		892528		100.000	101.9524
17 Isopropyl Ether (DIPE)	45	9.249	9.256 (0.832)		3769487		100.000	92.0746 (A)
18 1,1-Dichloroethane	63	9.318	9.335 (0.838)		1752221		100.000	97.4133
19 Vinyl Acetate	43	9.328	9.335 (0.839)		2428938		100.000	100.5550
20 Ethyl tert-Butyl Ether (ETBE)	59	9.860	9.867 (0.887)		3052053		100.000	95.2939 (A)
21 2,2-Dichloropropane	77	10.275	10.292 (0.925)		1045032		100.000	102.8211
22 cis-1,2-Dichloroethene	96	10.314	10.321 (0.928)		976929		100.000	100.2497

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
-----	----	----	-----	-----	-----	-----	-----
23 2-Butanone	43	10.324	10.341	(0.929)	532660	100.000	93.6364
24 Bromochloromethane	128	10.728	10.745	(0.965)	538296	100.000	103.8411
25 Tetrahydrofuran	42	10.728	10.745	(0.965)	2900446	1000.00	884.1186 (A)
26 Chloroform	83	10.807	10.824	(0.972)	1584016	100.000	97.7896
27 Dibromofluoromethane	113	11.093	11.100	(0.998)	238082	50.0000	50.6664
28 1,1,1-Trichloroethane	97	11.103	11.110	(0.999)	1103030	100.000	107.7515
* 29 Pentafluorobenzene	168	11.113	11.130	(1.000)	389626	50.0000	
30 Carbon Tetrachloride	117	11.330	11.337	(0.916)	949432	100.000	121.6775
31 1,1-Dichloropropene	75	11.369	11.376	(0.919)	1159008	100.000	111.0692
32 1,2-Dichloroethane-d4	65	11.714	11.731	(0.947)	224627	50.0000	48.7736
33 Benzene	78	11.724	11.731	(0.948)	3395467	100.000	97.4077
34 Methyl tert-Amyl Ether (TAME)	73	11.793	11.800	(0.954)	2471508	100.000	97.2680 (A)
35 1,2-Dichloroethane	62	11.852	11.860	(0.959)	1143018	100.000	96.7989
* 36 1,4-Difluorobenzene	114	12.365	12.373	(1.000)	637307	50.0000	
37 Trichloroethene	95	12.780	12.787	(1.033)	872379	100.000	103.8439
38 1,2-Dichloropropane	63	13.243	13.250	(1.071)	1037119	100.000	95.6526
39 Trifluorotoluene	146	13.253	13.260	(1.072)	1170817	100.000	116.3844 (A)
40 Dibromomethane	93	13.450	13.467	(1.088)	674499	100.000	102.9127
41 Bromodichloromethane	83	13.667	13.664	(1.105)	1181577	100.000	101.9700
42 2-Chloroethylvinylether	63	14.131	14.138	(1.143)	619242	100.000	99.8389
43 Tetramethyl THF	43	14.387	14.404	(1.163)	2158881	100.000	92.5561 (A)
44 cis-1,3-Dichloropropene	75	14.417	14.424	(1.166)	1498864	100.000	98.7322
45 4-Methyl-2-Pentanone	43	14.614	14.621	(1.182)	1127652	100.000	96.7997
46 Toluene-d8	98	14.791	14.799	(1.196)	723022	50.0000	50.5846
47 Toluene	92	14.900	14.907	(1.205)	2004820	100.000	99.6719
48 trans-1,3-Dichloropropene	75	15.294	15.302	(1.237)	1370815	100.000	101.7624
49 1,1,2-Trichloroethane	85	15.580	15.597	(1.260)	480569	100.000	99.8683
50 Tetrachloroethene	166	15.699	15.706	(0.927)	774494	100.000	112.5334
51 1,3-Dichloropropane	76	15.847	15.864	(0.935)	1429645	100.000	99.6935
52 2-Hexanone	43	15.876	15.883	(0.937)	779412	100.000	96.6653
53 Dibromochloromethane	129	16.143	16.149	(0.953)	963657	100.000	106.0472
54 1,2-Dibromoethane	107	16.350	16.357	(1.322)	930874	100.000	102.9856
* 55 Chlorobenzene-d5	117	16.941	16.949	(1.000)	564675	50.0000	
56 Chlorobenzene	112	16.981	16.988	(1.002)	2277563	100.000	96.8175
57 Ethylbenzene	91	17.060	17.067	(1.007)	3466000	100.000	96.0972
58 1,1,1,2-Tetrachloroethane	131	17.079	17.087	(1.008)	780215	100.000	101.4396
59 m,p-Xylenes	106	17.208	17.215	(1.016)	2698349	200.000	194.5728
60 o-Xylene	106	17.740	17.747	(1.047)	1396929	100.000	98.3347
61 Styrene	104	17.770	17.777	(1.049)	2465736	100.000	97.8569
62 Bromoform	173	18.066	18.063	(1.066)	686717	100.000	105.9118
63 Isopropylbenzene	105	18.164	18.172	(0.919)	3301790	100.000	102.0646
64 Cyclohexanone	55	18.401	18.418	(0.931)	1219458	1000.00	865.1482 (A)
65 Bromofluorobenzene	95	18.431	18.438	(0.933)	315180	50.0000	49.1309
66 1,1,2,2-Tetrachloroethane	83	18.598	18.596	(0.941)	1209172	100.000	99.9534
67 Bromobenzene	156	18.638	18.635	(0.943)	973111	100.000	102.5114
68 Propylbenzene	91	18.667	18.665	(0.945)	4197742	100.000	98.9059
69 1,2,3-Trichloropropane	110	18.687	18.684	(0.946)	285049	100.000	98.0450
70 2-Chlorotoluene	91	18.825	18.832	(0.953)	2874369	100.000	94.4112
71 1,3,5-Trimethylbenzene	105	18.865	18.862	(0.955)	2919385	100.000	99.8034
72 4-Chlorotoluene	91	18.953	18.960	(0.959)	2724702	100.000	93.4436
73 tert-Butylbenzene	119	19.239	19.237	(0.974)	2425890	100.000	105.4351
74 1,2,4-Trimethylbenzene	105	19.298	19.306	(0.977)	3009810	100.000	97.8931
75 sec-Butylbenzene	105	19.486	19.483	(0.986)	3744198	100.000	106.2626
76 para-Isopropyl Toluene	119	19.624	19.631	(0.993)	3000445	100.000	107.0412

Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\062806.b\IFS12.D
 Report Date: 29-Jun-2006 12:35

						AMOUNTS		
		QUANT	SIG				CAL-AMT	ON-COL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====		=====	====	=====	=====	=====	=====	=====
* 77	1,3-Dichlorobenzene	146	19.693	19.690	(0.997)	1826592	100.000	97.8517
	78 1,4-Dichlorobenzene-d4	152	19.762	19.769	(1.000)	288309	50.0000	
	79 1,4-Dichlorobenzene	146	19.792	19.799	(1.001)	1859867	100.000	97.3634
	80 n-Butylbenzene	91	20.087	20.095	(1.016)	2890223	100.000	109.8980
	81 1,2-Dichlorobenzene	146	20.235	20.243	(1.024)	1777187	100.000	99.1646
	82 1,2-Dibromo-3-Chloropropane	75	21.162	21.160	(1.071)	208535	100.000	101.9184
	83 1,2,4-Trichlorobenzene	180	22.178	22.185	(1.122)	1103122	100.000	105.1100
	84 Hexachlorobutadiene	225	22.297	22.294	(1.128)	412356	100.000	132.8305
	85 Naphthalene	128	22.563	22.570	(1.142)	2824775	100.000	108.7279
86 1,2,3-Trichlorobenzene	180	22.908	22.915	(1.159)	1066109	100.000	109.8048	

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.

Data File: \\GCHSSERVER\DD\chem\MSV0A09.i\062806.b\IFS12.D

Date : 28-JUN-2006 18:47

Client ID: DYN4 P&T

Sample Info: ICAL, S3638, 0.02/100, S3760, 0.02/100,

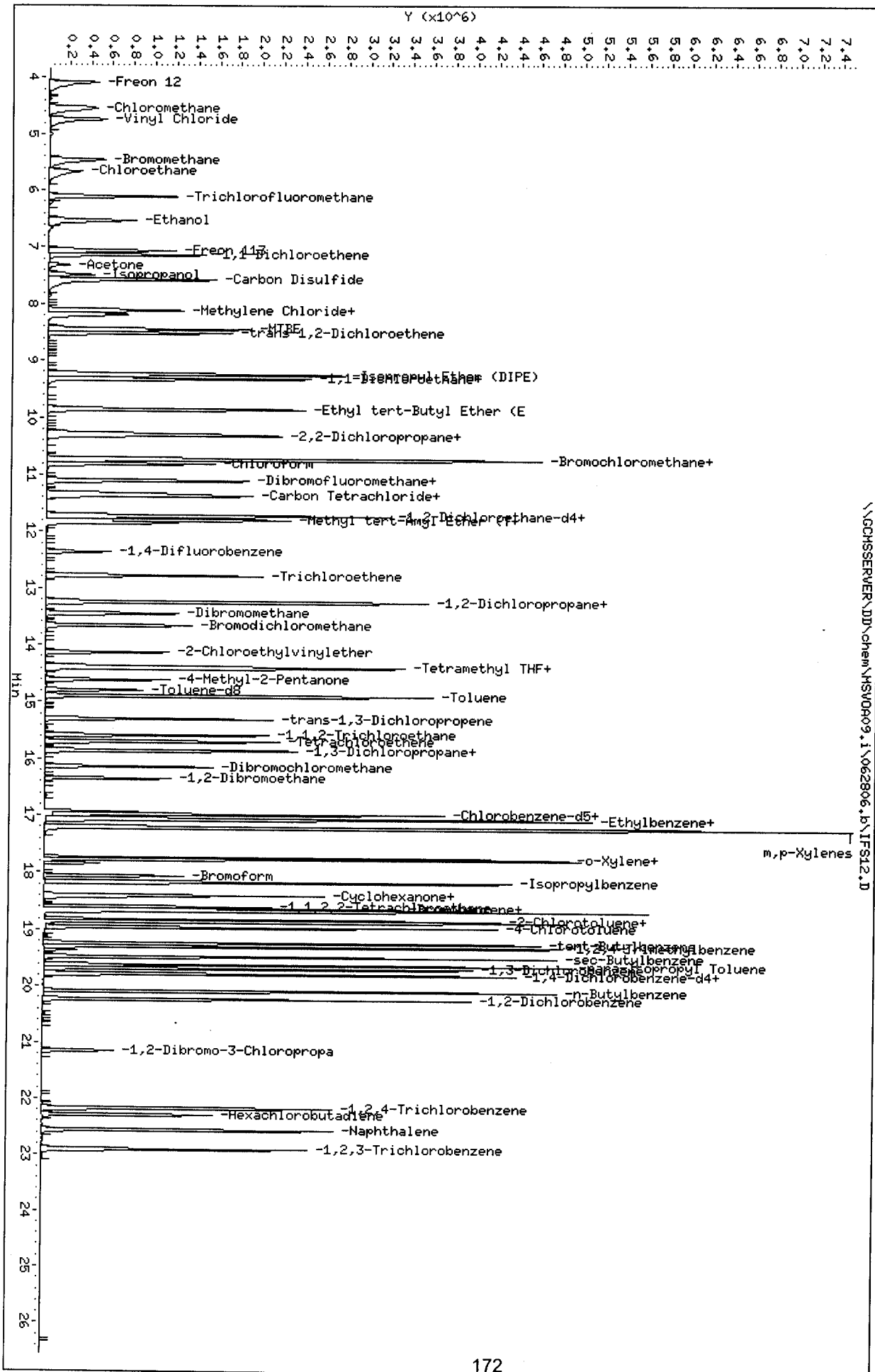
Purge Volume: 5.0

Column phase: RTX Volatiles

Instrument: MSV0A09.i

Operator: VOC

Column diameter: 0.25



CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188802 MSVOA Water: EPA 8260B

Inst : MSVOA10
 Calnum : 496317897003
 Units : ug/L

Name : 826GOX10
 Date : 08-AUG-2006 19:56
 X Axis : R

Reviewer: AMK
 Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Std's
L1	jh804	496317897004	08-AUG-2006 19:56	S3980 (200000X), S3942 (1000000X), S3053 (2000000X), S3894 (5000X)	
L2	jh805	496317897005	08-AUG-2006 20:29	S3980 (1000000X), S3942 (500000X), S3053 (1000000X), S3894 (5000X)	
L3	jh806	496317897006	08-AUG-2006 21:03	S3980 (250000X), S3942 (250000X), S3053 (500000X), S3894 (5000X)	
L4	jh807	496317897007	08-AUG-2006 21:36	S3980 (1000000X), S3942 (1000000X), S3053 (2000000X), S3894 (5000X)	
L5	jh808	496317897008	08-AUG-2006 22:09	S3980 (500000X), S3942 (500000X), S3053 (1000000X), S3894 (5000X)	
L6	jh809	496317897009	08-AUG-2006 22:42	S3980 (250000X), S3942 (250000X), S3053 (500000X), S3894 (5000X)	
L7	jh810	496317897010	08-AUG-2006 23:15	S3980 (100000X), S3942 (100000X), S3053 (200000X), S3894 (5000X)	
L8	jh811	496317897011	08-AUG-2006 23:48	S3980 (6667X), S3942 (6667X), S3053 (13330X), S3894 (5000X)	
L9	jh812	496317897012	09-AUG-2006 00:21	S3980 (5000X), S3942 (5000X), S3053 (100000X), S3894 (5000X)	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ²	Max	Min	r ²	Min
Chloromethane	0.3943	0.3674	0.3655	0.3879	0.3442	0.3800	0.3705	0.3664	AVRG	2.68790		0.3720	4	0.3720	4	15	0.10	0.99	
Vinyl Chloride	0.3248m	0.3231	0.2941m	0.3130	0.3199	0.2764	0.3050	0.3122	0.2920	AVRG	3.26028		0.3067	5	0.3067	5	15	0.050	0.99
Bromomethane	0.1575	0.1748m	0.1780m	0.1968	0.1866	0.2041	0.2211	0.2324	AVRG	5.16650		0.1939	13	0.1939	13	15	0.050	0.99	
Chloroethane	0.2154	0.2244	0.2384	0.2374	0.2178	0.2235	0.2332	0.2328	AVRG	4.38848		0.2279	4	0.2279	4	15	0.050	0.99	
Acetone			0.2210	0.1791	0.1399	0.1236	0.1296	0.1168	QUAD	7.81415	0.071242	0.1517	0.936	0.2139	6	15	0.050	0.99	
1,1-Dichloroethene	0.2064	0.2240	0.2290	0.2065	0.1955	0.2033	0.2274	0.2195	AVRG	4.67421		0.3054	5	0.3054	5	15	0.050	0.99	
Methylene Chloride	0.3189	0.3137	0.3187	0.3172	0.2936	0.2829	0.3042	0.2935	AVRG	3.27484		0.9714	6	0.9714	6	15	0.050	0.99	
Carbon Disulfide	1.0682	0.9780	1.0050	0.9500	0.8874	0.9076	0.9945	0.9807	AVRG	1.02943		0.8322	4	0.8322	4	15	0.050	0.99	
MTBE	0.8229	0.8466	0.8706	0.8627	0.8208	0.7890	0.8477	0.7972	AVRG	1.20164		0.2554	5	0.2554	5	15	0.050	0.99	
trans-1,2-Dichloroethene	0.2561	0.2644	0.2760	0.2489	0.2365	0.2466	0.2595	0.2550	AVRG	3.91575		0.8925	8	0.8925	8	15	0.050	0.99	
Vinyl Acetate			0.9268m	0.9680m	0.8009m	0.8619	0.9667	0.8305m	AVRG	1.12048		0.4961	7	0.4961	7	15	0.10	0.99	
1,1-Dichloroethane	0.5326	0.5210	0.5425	0.5119	0.4634	0.4605	0.4823	0.4545	AVRG	2.01584		0.1985	7	0.1985	7	15	0.050	0.99	
2-Butanone		0.2202	0.2019	0.2126	0.1932	0.1832	0.1970	0.1813	AVRG	5.03838		0.2754	4	0.2754	4	15	0.050	0.99	
cis-1,2-Dichloroethene	0.2764	0.2754	0.2941	0.2858	0.2650	0.2616	0.2771	0.2678	AVRG	3.63092		0.4417	5	0.4417	5	15	0.050	0.99	
Chloroform	0.4267	0.4549	0.4852	0.4552	0.4221	0.4176	0.4470	0.4249	AVRG	2.26401		0.3118	7	0.3118	7	15	0.050	0.99	
1,1,1-Trichloroethane	0.3423	0.3018	0.3323	0.2975	0.2764	0.2921	0.3266	0.3257	AVRG	3.20685		0.2473	5	0.2473	5	15	0.050	0.99	
Carbon Tetrachloride	0.1660	0.1657	0.1784	0.1588	0.1491	0.1644	0.1765	0.1835	AVRG	5.95930		0.6572	5	0.6572	5	15	0.050	0.99	
1,2-Dichloroethane	0.2245	0.2591	0.2605	0.2562	0.2461	0.2392	0.2495	0.2435	AVRG	4.04311		0.1721	5	0.1721	5	15	0.050	0.99	
Benzene	0.7167	0.6568	0.7010	0.6541	0.6324	0.6266	0.6432	0.6284	AVRG	5.80897		0.2063	4	0.2063	4	15	0.050	0.99	
Trichloroethene	0.1856	0.1735	0.1847	0.1657	0.1592	0.1634	0.1730	0.1721	AVRG	4.84682		0.2293	2	0.2293	2	15	0.050	0.99	
1,2-Dichloropropane	0.2133	0.2140	0.2160	0.2085	0.1986	0.1975	0.2050	0.1977	AVRG	4.36130		0.2895	5	0.2895	5	15	0.050	0.99	
Bromodichloromethane	0.2254	0.2251	0.2380	0.2313	0.2269	0.2251	0.2338	0.2286	AVRG	3.45478		0.2977	2	0.2977	2	15	0.050	0.99	
4-Methyl-2-Pentanone		0.2945	0.2890	0.2883	0.3102	0.2727	0.3009	0.2705	AVRG	3.35943						15	0.050	0.99	
cis-1,3-Dichloropropene	0.3056	0.2966	0.3055	0.2964	0.2940	0.2912	0.3018	0.2902	AVRG							15	0.050	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ²	Max	Min	Min	Fig
Toluene		0.4233	0.3831	0.4061	0.3746	0.3561	0.3672	0.3745	0.3761	AVRG		2.61351		0.3826	6	15	0.050	0.99	
trans-1,3-Dichloropropene		0.2498	0.2509	0.2674	0.2659	0.2632	0.2649	0.2739	0.2638	AVRG		3.80995		0.2625	3	15	0.050	0.99	
1,1,2-Trichloroethane		0.0944	0.0910	0.0968	0.0976	0.0942	0.0920	0.0973	0.0923	AVRG		10.5884		0.0944	3	15	0.050	0.99	
2-Hexanone			0.2064m	0.2036	0.2180	0.2088	0.2040	0.2136	0.1997	AVRG		4.81398		0.2077	3	15	0.050	0.99	
Tetrachloroethene		0.2183	0.1844	0.2080	0.1735	0.1620	0.1753	0.1952	0.2052	AVRG		5.25666		0.1902	10	15	0.050	0.99	
Dibromochloromethane		0.1780	0.2255	0.2292	0.2230	0.2187	0.2158	0.2364	0.2299	AVRG		4.55469		0.2196	8	15	0.050	0.99	
Chlorobenzene		0.5460	0.5325	0.5658	0.5123	0.4905	0.5012	0.5228	0.5162	AVRG		1.91051		0.5234	5	15	0.30	0.99	
Ethylbenzene		0.8855	0.8107	0.9065	0.7938	0.7424	0.7750	0.8083	0.8091	AVRG		1.22484		0.8164	7	15	0.050	0.99	
m,p-Xylenes		0.2785	0.3314	0.3000	0.3402	0.2948	0.2910	0.2958	0.2938	AVRG		3.32544		0.3007	7	15	0.050	0.99	
o-Xylene			0.3183	0.3185	0.3413	0.3013	0.2864	0.2852	0.2890	AVRG		3.29747		0.3033	7	15	0.050	0.99	
Styrene			0.5314	0.5297	0.5890	0.5299	0.5179	0.5142	0.5091	AVRG		1.88889		0.5294	5	15	0.050	0.99	
Bromoforn			0.2120	0.1821	0.1875	0.1749	0.1783	0.1750	0.1847	AVRG		5.38872		0.1856	6	15	0.10	0.99	
1,1,2,2-Tetrachloroethane			0.5453	0.5485	0.5774	0.5742	0.5291	0.5273	0.5616	AVRG		1.81247		0.5517	3	15	0.30	0.99	
Dibromofluoromethane		0.5595	0.5636	0.5618	0.5685	0.5662	0.5482	0.5597	0.5702	AVRG		1.77945		0.5620	1	15	0.050	0.99	
1,2-Dichloroethane-d4		0.4040	0.3975	0.3960	0.4024	0.4007	0.4015	0.4024	0.3943	AVRG		2.50570		0.3991	1	15	0.050	0.99	
Toluene-d8		1.0892	1.0797	1.0660	1.0741	1.0777	1.0807	1.0844	1.0685	AVRG		0.93007		1.0752	1	15	0.050	0.99	
Bromofluorobenzene		1.1217	1.1122	1.1049	1.1091	1.1330	1.1162	1.1051	1.1073	AVRG		0.89703		1.1148	1	15	0.050	0.99	

Analyst: ACMDate: 08/18/06Reviewer: AMKDate: 08/18/06

m>manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188802 MSVOA Water
EPA 8260B

Inst : MSVOA10 Name : 826GOX10
Calnum : 496317897003 Cal Date: 08-AUG-2006 Type : WATER

ICV 496317897013 (jh813 09-AUG-2006) stds: S3979 (10000X), S3894 (5000X)
ICV 496317897014 (jh814 09-AUG-2006) stds: S3978 (10000X), S3843 (10000X),
S3894 (5000X)

Analyte	ICV Seqnum	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	496317897013	0.3720	0.3512	25.00	23.60	ug/L	-6	30	
Vinyl Chloride	496317897013	0.3067	0.2847	25.00	23.21	ug/L	-7	20	
Bromomethane	496317897013	0.1939	0.2102	25.00	27.10	ug/L	8	30	
Chloroethane	496317897013	0.2279	0.2186	25.00	23.98	ug/L	-4	30	
Acetone	496317897014	0.1517	0.1456	25.00	26.04	ug/L	4	40	
1,1-Dichloroethene	496317897014	0.2139	0.2331	25.00	27.24	ug/L	9	20	
Methylene Chloride	496317897014	0.3054	0.3224	25.00	26.39	ug/L	6	30	
Carbon Disulfide	496317897014	0.9714	0.9231	25.00	23.76	ug/L	-5	30	
MTBE	496317897014	0.8322	0.7669	25.00	23.04	ug/L	-8	30	
trans-1,2-Dichloroethene	496317897014	0.2554	0.2694	25.00	26.38	ug/L	6	30	
Vinyl Acetate	496317897014	0.8925	0.8360	25.00	23.42	ug/L	-6	40	
1,1-Dichloroethane	496317897014	0.4961	0.5093	25.00	25.67	ug/L	3	30	
2-Butanone	496317897014	0.1985	0.2063	25.00	25.99	ug/L	4	40	
cis-1,2-Dichloroethene	496317897014	0.2754	0.3033	25.00	27.53	ug/L	10	30	
Chloroform	496317897014	0.4417	0.4536	25.00	25.67	ug/L	3	20	
1,1,1-Trichloroethane	496317897014	0.3118	0.3304	25.00	26.49	ug/L	6	30	
Carbon Tetrachloride	496317897014	0.1678	0.1896	25.00	28.24	ug/L	13	30	
1,2-Dichloroethane	496317897014	0.2473	0.2484	25.00	25.11	ug/L	0	30	
Benzene	496317897014	0.6572	0.6818	25.00	25.94	ug/L	4	30	
Trichloroethene	496317897014	0.1721	0.1728	25.00	25.09	ug/L	0	30	
1,2-Dichloropropane	496317897014	0.2063	0.2016	25.00	24.43	ug/L	-2	20	
Bromodichloromethane	496317897014	0.2293	0.2497	25.00	27.23	ug/L	9	30	
4-Methyl-2-Pentanone	496317897014	0.2895	0.3281	25.00	28.34	ug/L	13	40	
cis-1,3-Dichloropropene	496317897014	0.2977	0.2941	25.00	24.70	ug/L	-1	30	
Toluene	496317897014	0.3826	0.4058	25.00	26.51	ug/L	6	20	
trans-1,3-Dichloropropene	496317897014	0.2625	0.2527	25.00	24.07	ug/L	-4	30	
1,1,2-Trichloroethane	496317897014	0.0944	0.0958	25.00	25.35	ug/L	1	30	
2-Hexanone	496317897014	0.2077	0.2317	25.00	27.88	ug/L	12	40	
Tetrachloroethene	496317897014	0.1902	0.2175	25.00	28.58	ug/L	14	30	
Dibromochloromethane	496317897014	0.2196	0.2455	25.00	27.96	ug/L	12	30	
Chlorobenzene	496317897014	0.5234	0.5441	25.00	25.99	ug/L	4	30	
Ethylbenzene	496317897014	0.8164	0.9257	25.00	28.35	ug/L	13	20	
m,p-Xylenes	496317897014	0.3007	0.3401	50.00	56.55	ug/L	13	30	
o-Xylene	496317897014	0.3033	0.3297	25.00	27.18	ug/L	9	30	
Styrene	496317897014	0.5294	0.5857	25.00	27.66	ug/L	11	30	
Bromoform	496317897014	0.1856	0.1907	25.00	25.69	ug/L	3	30	
1,1,2,2-Tetrachloroethane	496317897014	0.5517	0.5463	25.00	24.76	ug/L	-1	30	

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\JH804.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 08-AUG-2006 19:56 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S3980,0.0005/1000,S3942,0.001/1000
Misc Info : S3053,0.0005/1000
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\826GOX10.m
Meth Date : 09-Aug-2006 13:57 msvoa10 Quant Type: ISTD
Cal Date : 08-AUG-2006 19:56 Cal File: JH804.D
Als bottle: 4 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.600	4.628 (0.429)		2884	0.50000	0.4003
2 Chloromethane	50	5.073	5.091 (0.473)		1489	0.50000	0.1609
3 Vinyl Chloride	62	5.260	5.278 (0.491)		4037	0.50000	0.5294 (M)
4 Bromomethane	94	5.950	5.957 (0.555)		2280	0.50000	0.4729
5 Chloroethane	64	6.127	6.134 (0.572)		2650	0.50000	0.4677
6 Trichlorofluoromethane	101	6.580	6.597 (0.614)		4268	0.50000	0.4569
7 Ethanol	45	6.758	6.754 (0.630)		1616	25.0000	12.8715
8 Freon 113	101	7.428	7.434 (0.693)		701	0.25000	0.1333
10 1,1-Dichloroethene	96	7.457	7.463 (0.696)		1455	0.25000	0.2735
11 Isopropanol	45	7.585	7.581 (0.708)		1778	2.50000	2.9906
12 Carbon Disulfide	76	7.901	7.906 (0.737)		6316	0.25000	0.2615
13 Methylene Chloride	84	8.157	8.172 (0.761)		2371	0.25000	0.3123
14 tert-Butyl Alcohol (TBA)	59	8.176	8.192 (0.763)		1501	2.50000	2.1011
15 MTBE	73	8.551	8.566 (0.798)		4986	0.25000	0.2409
16 trans-1,2-Dichloroethene	96	8.600	8.615 (0.802)		1623	0.25000	0.2556
18 Vinyl Acetate	43	9.201	9.206 (0.858)		3658	0.25000	0.1648
19 1,1-Dichloroethane	63	9.221	9.235 (0.860)		2779	0.25000	0.2253
20 Isopropyl Ether (DIPE)	45	9.231	9.245 (0.861)		7947	0.25000	0.2584
21 Ethyl tert-Butyl Ether (ETBE)	59	9.763	9.787 (0.911)		5863	0.25000	0.2394
22 2-Butanone	43	10.029	10.023 (0.936)		2819	0.25000	0.5713
23 cis-1,2-Dichloroethene	96	10.068	10.082 (0.939)		1796	0.25000	0.2623
24 2,2-Dichloropropane	77	10.098	10.121 (0.942)		1938	0.25000	0.2589

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
25 Bromochloromethane	128	10.442	10.446	(0.974)	598	0.25000	0.1580
26 Chloroform	83	10.502	10.515	(0.980)	3127	0.25000	0.2847
27 Tetrahydrofuran	42	10.521	10.525	(0.982)	37132	2.50000	13.3039
* 28 Pentafluorobenzene	168	10.718	10.742	(1.000)	1243046	50.0000	
29 Dibromofluoromethane	113	10.748	10.761	(1.003)	695536	50.0000	49.7838
30 1,1,1-Trichloroethane	97	10.876	10.889	(1.015)	1680	0.25000	0.2167
31 1,1-Dichloropropene	75	11.093	11.126	(0.932)	1754	0.25000	0.2185
32 Carbon Tetrachloride	117	11.152	11.165	(0.937)	1036	0.25000	0.1666
33 1,2-Dichloroethane-d4	65	11.290	11.303	(0.949)	748410	50.0000	50.6091
34 1,2-Dichloroethane	62	11.408	11.421	(0.959)	1984	0.25000	0.2164
35 Benzene	78	11.438	11.460	(0.961)	6661	0.25000	0.2735
36 Methyl tert-Amyl Ether (TAME)	73	11.497	11.510	(0.966)	4950	0.25000	0.2496
* 37 1,4-Difluorobenzene	114	11.901	11.923	(1.000)	1852715	50.0000	
38 Trichloroethene	95	12.364	12.376	(1.039)	1273	0.25000	0.1995
39 Trifluorotoluene	146	12.669	12.691	(1.065)	2132	0.25000	0.2443
40 1,2-Dichloropropane	63	12.689	12.691	(1.066)	2053	0.25000	0.2685
41 Dibromomethane	93	12.866	12.868	(1.081)	878	0.25000	0.1862
42 Bromodichloromethane	83	13.024	13.036	(1.094)	1807	0.25000	0.2126
43 2-Chloroethylvinylether	63	13.359	13.361	(1.123)	1709	0.50000	0.4225
44 cis-1,3-Dichloropropene	75	13.635	13.646	(1.146)	2408	0.25000	0.2183
45 Tetramethyl THF	43	13.713	13.725	(1.152)	5443	0.25000	0.2578
46 4-Methyl-2-Pentanone	43	13.773	13.774	(1.157)	2385	0.25000	0.2223
47 Toluene-d8	98	14.039	14.050	(1.180)	2017885	50.0000	50.6494
48 Toluene	92	14.127	14.138	(1.187)	3297	0.25000	0.2325
49 trans-1,3-Dichloropropene	75	14.344	14.345	(1.205)	1995	0.25000	0.2051
50 1,1,2-Trichloroethane	85	14.610	14.611	(1.228)	698	0.25000	0.1994
51 1,3-Dichloropropane	76	14.837	14.847	(0.933)	2490	0.25000	0.2307
52 2-Hexanone	43	14.876	14.857	(0.936)	1242	0.25000	0.1873
53 Tetrachloroethene	166	14.876	14.887	(0.936)	1382	0.25000	0.2276
54 Dibromochloromethane	129	15.162	15.162	(0.954)	1299	0.25000	0.1854
55 1,2-Dibromoethane	107	15.349	15.359	(1.290)	1286	0.25000	0.1848
* 56 Chlorobenzene-d5	117	15.901	15.911	(1.000)	1595255	50.0000	
57 Chlorobenzene	112	15.940	15.950	(1.002)	4100	0.25000	0.2455
58 1,1,1,2-Tetrachloroethane	131	15.999	16.009	(1.006)	1125	0.25000	0.1984
59 Ethylbenzene	91	16.019	16.039	(1.007)	5371	0.25000	0.2061
60 m,p-Xylenes	106	16.167	16.166	(1.017)	4442	0.50000	0.4629
61 o-Xylene	106	16.640	16.649	(1.046)	2338	0.25000	0.2416
62 Styrene	104	16.649	16.649	(1.047)	3558	0.25000	0.2106
63 Bromoform	173	16.915	16.915	(1.064)	1994	0.25000	0.3367
64 Isopropylbenzene	105	17.043	17.053	(0.916)	5227	0.25000	0.2237
65 Cyclohexanone	55	17.181	17.190	(0.924)	1882	2.50000	3.3416
66 Bromofluorobenzene	95	17.241	17.248	(0.927)	909303	50.0000	50.3111
67 1,1,2,2-Tetrachloroethane	83	17.339	17.347	(0.932)	1869	0.25000	0.2089
68 1,2,3-Trichloropropane	75	17.418	17.427	(0.936)	2332	0.25000	0.2826
69 Bromobenzene	156	17.467	17.476	(0.939)	1863	0.25000	0.2528
70 Propylbenzene	91	17.507	17.515	(0.941)	7116	0.25000	0.2368
71 2-Chlorotoluene	91	17.654	17.663	(0.949)	5427	0.25000	0.2624
72 1,3,5-Trimethylbenzene	105	17.684	17.683	(0.951)	4641	0.25000	0.2326
73 4-Chlorotoluene	91	17.773	17.771	(0.956)	5036	0.25000	0.2536
74 tert-Butylbenzene	119	18.078	18.086	(0.972)	3777	0.25000	0.2240
75 1,2,4-Trimethylbenzene	105	18.137	18.136	(0.975)	5012	0.25000	0.2477
76 sec-Butylbenzene	105	18.334	18.342	(0.986)	6162	0.25000	0.2494
77 para-Isopropyl Toluene	119	18.472	18.480	(0.993)	5256	0.25000	0.2736
78 1,3-Dichlorobenzene	146	18.531	18.539	(0.996)	3385	0.25000	0.2537

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\JH804.D
 Report Date: 09-Aug-2006 13:57

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	
* 79 1,4-Dichlorobenzene-d4	152	18.600	18.608	(1.000)	810628	50.0000		
80 1,4-Dichlorobenzene	146	18.630	18.638	(1.002)	3531	0.25000	0.2543	
81 n-Butylbenzene	91	18.965	18.972	(1.020)	5249	0.25000	0.3043	
82 1,2-Dichlorobenzene	146	19.112	19.110	(1.028)	3169	0.25000	0.2465	
84 1,2,4-Trichlorobenzene	180	21.319	21.316	(1.146)	3444	0.25000	0.4282	
85 Hexachlorobutadiene	225	21.536	21.532	(1.158)	442	0.25000	0.1559	
86 Naphthalene	128	21.763	21.768	(1.170)	5658	0.25000	0.2995	
87 1,2,3-Trichlorobenzene	180	22.167	22.172	(1.192)	2620	0.25000	0.3439	

QC Flag Legend

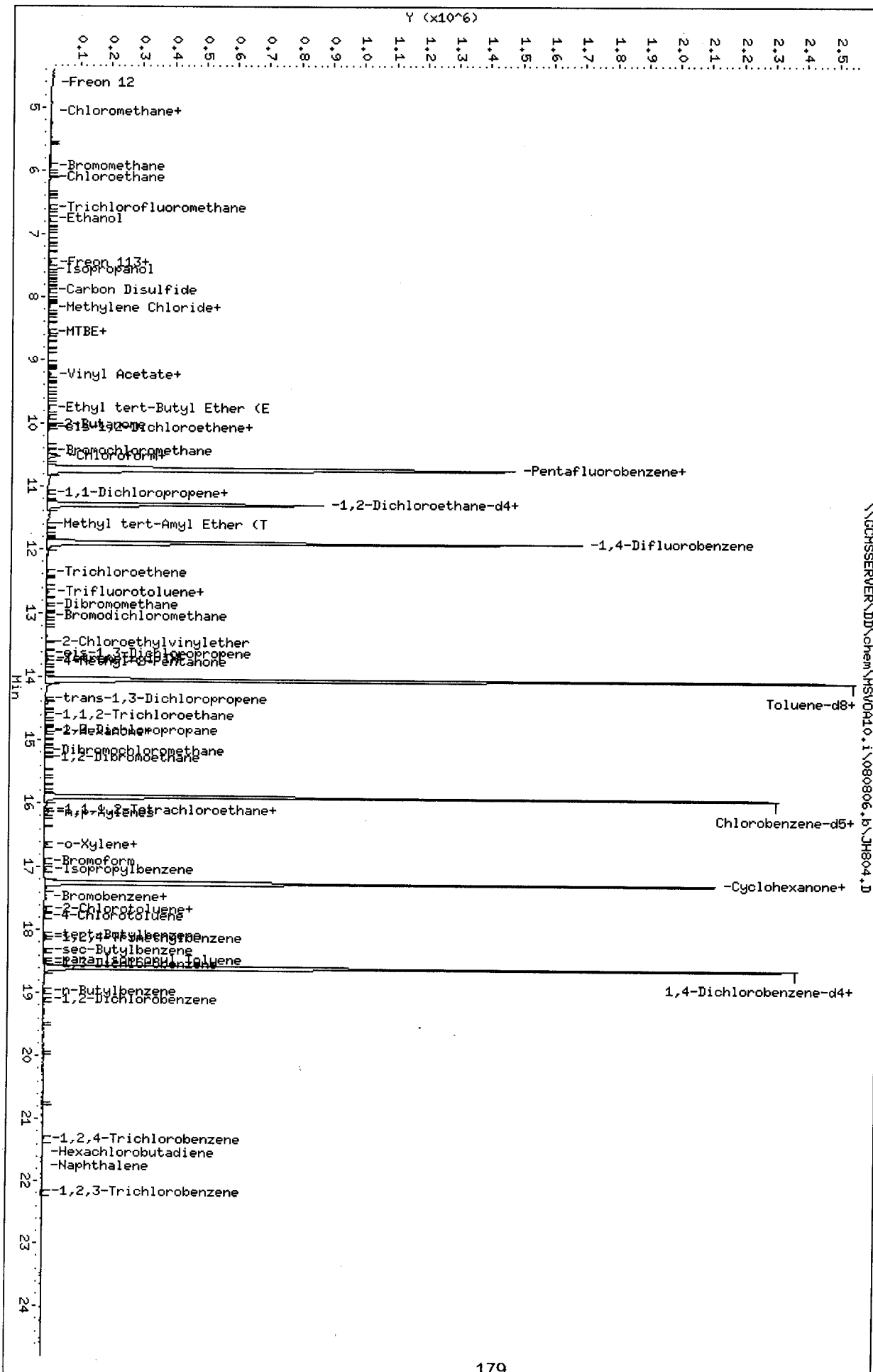
M - Compound response manually integrated.

Data File: \\GCHSERVER\DD\chem\MSV0410.i\080806.b\JH804.D
Date : 08-AUG-2006 19:56

Client ID: DYNA P&T
Sample Info: ICAL, S3980, 0.0005/1000, S3942, 0.001/1000
Purge Volume: 5.0
Column phase: RTX Volatiles

Instrument: MSV0410.i

Operator: VDA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\JH805.D
 Report Date: 09-Aug-2006 14:25

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\JH805.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 08-AUG-2006 20:29 MS Autotune Date: 10-JUL-2006 15:50
 Operator : VOA Inst ID: MSVOA10.i
 Smp Info : ICAL,S3980,0.001/1000,S3942,0.002/1000
 Misc Info : S3053,0.001/1000
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\826GOX10.m
 Meth Date : 09-Aug-2006 14:25 msvoa10 Quant Type: ISTD
 Cal Date : 08-AUG-2006 20:29 Cal File: JH805.D
 Als bottle: 5 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.614	4.628 (0.431)		7372	1.00000	0.9678
2 Chloromethane	50	5.047	5.091 (0.471)		10363	1.00000	1.0597
3 Vinyl Chloride	62	5.264	5.278 (0.491)		8492	1.00000	1.0533
4 Bromomethane	94	5.934	5.957 (0.554)		4141	1.00000	0.8123
5 Chloroethane	64	6.121	6.134 (0.571)		5662	1.00000	0.9453
6 Trichlorofluoromethane	101	6.584	6.597 (0.615)		9198	1.00000	0.9313
7 Ethanol	45	6.752	6.754 (0.630)		6406	50.0000	48.2615 (M)
8 Freon 113	101	7.412	7.434 (0.692)		2722	0.50000	0.4896
10 1,1-Dichloroethene	96	7.451	7.463 (0.696)		2712	0.50000	0.4822
11 Isopropanol	45	7.569	7.581 (0.707)		3785	5.00000	6.0216 (M)
12 Carbon Disulfide	76	7.894	7.906 (0.737)		14038	0.50000	0.5498
13 Methylene Chloride	84	8.160	8.172 (0.762)		4191	0.50000	0.5221
14 tert-Butyl Alcohol (TBA)	59	8.180	8.192 (0.764)		3492	5.00000	4.6235
15 MTBE	73	8.545	8.566 (0.798)		10814	0.50000	0.4943
16 trans-1,2-Dichloroethene	96	8.594	8.615 (0.802)		3366	0.50000	0.5014
18 Vinyl Acetate	43	9.205	9.206 (0.859)		16366	0.50000	0.6976
19 1,1-Dichloroethane	63	9.215	9.235 (0.860)		6999	0.50000	0.5367
20 Isopropyl Ether (DIPE)	45	9.234	9.245 (0.862)		16680	0.50000	0.5131
21 Ethyl tert-Butyl Ether (ETBE)	59	9.766	9.787 (0.912)		13556	0.50000	0.5237
22 2-Butanone	43	10.013	10.023 (0.935)		3842	0.50000	0.7364
23 cis-1,2-Dichloroethene	96	10.072	10.082 (0.940)		3632	0.50000	0.5017
24 2,2-Dichloropropane	77	10.101	10.121 (0.943)		3981	0.50000	0.5030

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	----	----	-----	-----	-----	-----	-----
25 Bromochloromethane	128	10.436	10.446	(0.974)	1964	0.50000	0.4911
26 Chloroform	83	10.505	10.515	(0.981)	5608	0.50000	0.4830
27 Tetrahydrofuran	42	10.515	10.525	(0.982)	41948	5.00000	14.2156
* 28 Pentafluorobenzene	168	10.712	10.742	(1.000)	1314204	50.0000	
29 Dibromofluoromethane	113	10.742	10.761	(1.003)	740741	50.0000	50.1486
30 1,1,1-Trichloroethane	97	10.870	10.889	(1.015)	4498	0.50000	0.5487
31 1,1-Dichloropropene	75	11.106	11.126	(0.934)	4877	0.50000	0.5710
32 Carbon Tetrachloride	117	11.146	11.165	(0.937)	3273	0.50000	0.4947
33 1,2-Dichloroethane-d4	65	11.284	11.303	(0.949)	783522	50.0000	49.7976
34 1,2-Dichloroethane	62	11.402	11.421	(0.959)	4425	0.50000	0.4537
35 Benzene	78	11.431	11.460	(0.961)	14127	0.50000	0.5452
36 Methyl tert-Amyl Ether (TAME)	73	11.491	11.510	(0.966)	11145	0.50000	0.5282
* 37 1,4-Difluorobenzene	114	11.894	11.923	(1.000)	1971243	50.0000	
38 Trichloroethene	95	12.358	12.376	(1.039)	3658	0.50000	0.5389
39 Trifluorotoluene	146	12.663	12.691	(1.065)	5378	0.50000	0.5793
40 1,2-Dichloropropane	63	12.673	12.691	(1.065)	4204	0.50000	0.5168
41 Dibromomethane	93	12.860	12.868	(1.081)	2117	0.50000	0.4220
42 Bromodichloromethane	83	13.027	13.036	(1.095)	4444	0.50000	0.4916
43 2-Chloroethylvinylether	63	13.353	13.361	(1.123)	3247	1.00000	0.7545
44 cis-1,3-Dichloropropene	75	13.638	13.646	(1.147)	6024	0.50000	0.5133
45 Tetramethyl THF	43	13.707	13.725	(1.152)	11110	0.50000	0.4946
46 4-Methyl-2-Pentanone	43	13.766	13.774	(1.157)	5589	0.50000	0.4897
47 Toluene-d8	98	14.032	14.050	(1.180)	2128313	50.0000	50.2090
48 Toluene	92	14.131	14.138	(1.188)	8344	0.50000	0.5531
49 trans-1,3-Dichloropropene	75	14.338	14.345	(1.205)	4924	0.50000	0.4758
50 1,1,2-Trichloroethane	85	14.604	14.611	(1.228)	1860	0.50000	0.4995
51 1,3-Dichloropropane	76	14.840	14.847	(0.934)	5403	0.50000	0.4719
52 2-Hexanone	43	14.870	14.857	(0.936)	3071	0.50000	0.4367
53 Tetrachloroethene	166	14.880	14.887	(0.936)	3694	0.50000	0.5736
54 Dibromochloromethane	129	15.156	15.162	(0.954)	3012	0.50000	0.4052
55 1,2-Dibromoethane	107	15.343	15.359	(1.290)	3361	0.50000	0.4540
* 56 Chlorobenzene-d5	117	15.894	15.911	(1.000)	1692522	50.0000	
57 Chlorobenzene	112	15.934	15.950	(1.002)	9241	0.50000	0.5215
58 1,1,1,2-Tetrachloroethane	131	16.003	16.009	(1.007)	2951	0.50000	0.4906
59 Ethylbenzene	91	16.023	16.039	(1.008)	14988	0.50000	0.5423
60 m,p-Xylenes	106	16.161	16.166	(1.017)	11217	1.00000	1.1019
61 o-Xylene	106	16.643	16.649	(1.047)	5388	0.50000	0.5248
62 Styrene	104	16.643	16.649	(1.047)	8994	0.50000	0.5018
63 Bromoform	173	16.909	16.915	(1.064)	3588	0.50000	0.5711
64 Isopropylbenzene	105	17.037	17.053	(0.916)	13460	0.50000	0.5420
65 Cyclohexanone	55	17.185	17.190	(0.924)	3254	5.00000	5.4363
66 Bromofluorobenzene	95	17.244	17.248	(0.927)	958210	50.0000	49.8842
67 1,1,2,2-Tetrachloroethane	83	17.333	17.347	(0.932)	4698	0.50000	0.4941
68 1,2,3-Trichloropropane	75	17.422	17.427	(0.937)	5313	0.50000	0.6060
69 Bromobenzene	156	17.461	17.476	(0.939)	4055	0.50000	0.5178
70 Propylbenzene	91	17.510	17.515	(0.942)	17523	0.50000	0.5488
71 2-Chlorotoluene	91	17.658	17.663	(0.950)	12468	0.50000	0.5672
72 1,3,5-Trimethylbenzene	105	17.678	17.683	(0.951)	11374	0.50000	0.5365
73 4-Chlorotoluene	91	17.776	17.771	(0.956)	11673	0.50000	0.5532
74 tert-Butylbenzene	119	18.082	18.086	(0.972)	10038	0.50000	0.5603
75 1,2,4-Trimethylbenzene	105	18.131	18.136	(0.975)	11535	0.50000	0.5365
76 sec-Butylbenzene	105	18.328	18.342	(0.986)	14461	0.50000	0.5507
77 para-Isopropyl Toluene	119	18.466	18.480	(0.993)	11457	0.50000	0.5612
78 1,3-Dichlorobenzene	146	18.525	18.539	(0.996)	7833	0.50000	0.5525

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\JH805.D
 Report Date: 09-Aug-2006 14:25

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	
=====	====	====	=====	=====	=====	=====	=====	
* 79 1,4-Dichlorobenzene-d4	152	18.594	18.608	(1.000)	861537	50.0000		
80 1,4-Dichlorobenzene	146	18.624	18.638	(1.002)	8612	0.50000	0.5837	
81 n-Butylbenzene	91	18.968	18.972	(1.020)	10661	0.50000	0.5815	
82 1,2-Dichlorobenzene	146	19.106	19.110	(1.028)	7049	0.50000	0.5159	
83 1,2-Dibromo-3-Chloropropane	75	20.082	20.085	(1.080)	833	0.50000	0.5173	
84 1,2,4-Trichlorobenzene	180	21.313	21.316	(1.146)	5265	0.50000	0.6159	
85 Hexachlorobutadiene	225	21.520	21.532	(1.157)	1905	0.50000	0.6323	
86 Naphthalene	128	21.766	21.768	(1.171)	10478	0.50000	0.5220	
87 1,2,3-Trichlorobenzene	180	22.170	22.172	(1.192)	4489	0.50000	0.5545	

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NOCHSERVER\DD\chem\MSVD010.i\080806.b\JH805.D

Date : 08-AUG-2006 20:29

Client ID: DYNA P&I

Sample Info: ICAL,S3980,0.001/1000,S3942,0.002/1000

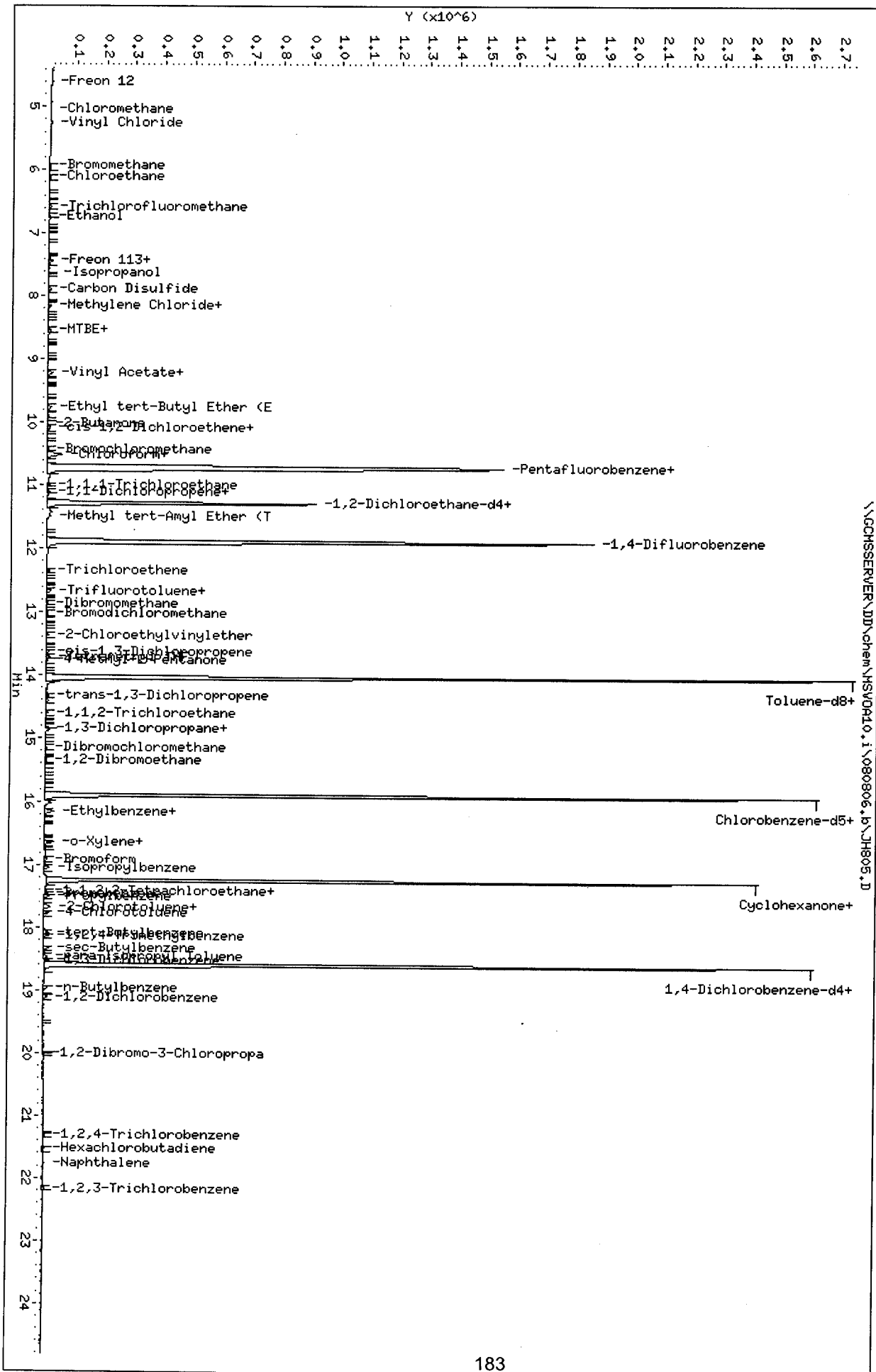
Purge Volume: 5.0

Column phase: RTX Volatiles

Instrument: MSVD010.i

Operator: VOA

Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\JH806.D
 Report Date: 09-Aug-2006 14:00

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\JH806.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 08-AUG-2006 21:03 MS Autotune Date: 10-JUL-2006 15:50
 Operator : VOA Inst ID: MSVOA10.i
 Smp Info : ICAL,S3980,0.002/500,S3942,0.002/500
 Misc Info : S3053,0.001/500
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\826GOX10.m
 Meth Date : 09-Aug-2006 13:59 msvoa10 Quant Type: ISTD
 Cal Date : 08-AUG-2006 21:03 Cal File: JH806.D
 Als bottle: 6 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	AMOUNTS						
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
							(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	
1 Freon 12	85	4.610	4.628	(0.431)	12847	2.00000	1.6716 (M)	
2 Chloromethane	50	5.064	5.091	(0.473)	19490	2.00000	1.9753	
3 Vinyl Chloride	62	5.261	5.278	(0.491)	15600	2.00000	1.9177 (M)	
4 Bromomethane	94	5.940	5.957	(0.555)	9269	2.00000	1.8022 (M)	
5 Chloroethane	64	6.118	6.134	(0.571)	11900	2.00000	1.9691	
6 Trichlorofluoromethane	101	6.581	6.597	(0.615)	19433	2.00000	1.9501	
7 Ethanol	45	6.748	6.754	(0.630)	25631	200.000	191.3759	
8 Freon 113	101	7.408	7.434	(0.692)	10618	2.00000	1.8927	
9 Acetone	43	7.448	7.453	(0.695)	19423	2.00000	1.1395	
10 1,1-Dichloroethene	96	7.448	7.463	(0.695)	11881	2.00000	2.0939	
11 Isopropanol	45	7.576	7.581	(0.707)	13418	20.0000	21.1566	
12 Carbon Disulfide	76	7.891	7.906	(0.737)	51873	2.00000	2.0135	
13 Methylene Chloride	84	8.157	8.172	(0.762)	16641	2.00000	2.0548	
14 tert-Butyl Alcohol (TBA)	59	8.177	8.192	(0.764)	15110	20.0000	19.8278	
15 MTBE	73	8.551	8.566	(0.799)	44906	2.00000	2.0346	
16 trans-1,2-Dichloroethene	96	8.600	8.615	(0.803)	14025	2.00000	2.0707	
18 Vinyl Acetate	43	9.201	9.206	(0.859)	70269	2.00000	2.9688	
19 1,1-Dichloroethane	63	9.211	9.235	(0.860)	27632	2.00000	2.1003	
20 Isopropyl Ether (DIPE)	45	9.231	9.245	(0.862)	69073	2.00000	2.1060	
21 Ethyl tert-Butyl Ether (ETBE)	59	9.763	9.787	(0.912)	51311	2.00000	1.9647	
22 2-Butanone	43	10.029	10.023	(0.937)	11681	2.00000	2.2191	
23 cis-1,2-Dichloroethene	96	10.068	10.082	(0.940)	14609	2.00000	2.0001	

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
24 2,2-Dichloropropane	77	10.098	10.121	(0.943)	16444	2.00000	2.0594
25 Bromochloromethane	128	10.443	10.446	(0.975)	7625	2.00000	1.8897
26 Chloroform	83	10.502	10.515	(0.981)	24126	2.00000	2.0595
27 Tetrahydrofuran	42	10.512	10.525	(0.982)	89357	20.0000	30.0118
* 28 Pentafluorobenzene	168	10.709	10.742	(1.000)	1326035	50.0000	
29 Dibromofluoromethane	113	10.738	10.761	(1.003)	745017	50.0000	49.9881
30 1,1,1-Trichloroethane	97	10.866	10.889	(1.015)	16006	2.00000	1.9354
31 1,1-Dichloropropene	75	11.103	11.126	(0.933)	17175	2.00000	2.0045
32 Carbon Tetrachloride	117	11.152	11.165	(0.937)	13106	2.00000	1.9745
33 1,2-Dichloroethane-d4	65	11.290	11.303	(0.949)	783185	50.0000	49.6134
34 1,2-Dichloroethane	62	11.408	11.421	(0.959)	20497	2.00000	2.0951
35 Benzene	78	11.438	11.460	(0.961)	51958	2.00000	1.9989
36 Methyl tert-Amyl Ether (TAME)	73	11.497	11.510	(0.966)	42937	2.00000	2.0285
* 37 1,4-Difluorobenzene	114	11.901	11.923	(1.000)	1977711	50.0000	
38 Trichloroethene	95	12.354	12.376	(1.038)	13727	2.00000	2.0159
39 Trifluorotoluene	146	12.669	12.691	(1.065)	18272	2.00000	1.9620
40 1,2-Dichloropropane	63	12.679	12.691	(1.065)	16926	2.00000	2.0740
41 Dibromomethane	93	12.866	12.868	(1.081)	9520	2.00000	1.8917
42 Bromodichloromethane	83	13.024	13.036	(1.094)	17806	2.00000	1.9633
43 2-Chloroethylvinylether	63	13.359	13.361	(1.123)	7011	2.00000	1.6239
44 cis-1,3-Dichloropropene	75	13.635	13.646	(1.146)	23463	2.00000	1.9927
45 Tetramethyl THF	43	13.714	13.725	(1.152)	44952	2.00000	1.9948
46 4-Methyl-2-Pentanone	43	13.763	13.774	(1.156)	23296	2.00000	2.0347
47 Toluene-d8	98	14.039	14.050	(1.180)	2108152	50.0000	49.5707
48 Toluene	92	14.128	14.138	(1.187)	30306	2.00000	2.0024
49 trans-1,3-Dichloropropene	75	14.334	14.345	(1.204)	19849	2.00000	1.9119
50 1,1,2-Trichloroethane	85	14.600	14.611	(1.227)	7196	2.00000	1.9263
51 1,3-Dichloropropane	76	14.837	14.847	(0.933)	22989	2.00000	2.0370
52 2-Hexanone	43	14.857	14.857	(0.934)	13775	2.00000	1.9873 (M)
53 Tetrachloroethene	166	14.876	14.887	(0.936)	12308	2.00000	1.9389
54 Dibromochloromethane	129	15.162	15.162	(0.954)	15047	2.00000	2.0539
55 1,2-Dibromoethane	107	15.349	15.359	(1.290)	14109	2.00000	1.8998
* 56 Chlorobenzene-d5	117	15.901	15.911	(1.000)	1668366	50.0000	
57 Chlorobenzene	112	15.931	15.950	(1.002)	35538	2.00000	2.0347
58 1,1,1,2-Tetrachloroethane	131	16.000	16.009	(1.006)	11902	2.00000	2.0077
59 Ethylbenzene	91	16.019	16.039	(1.007)	54104	2.00000	1.9860
60 m,p-Xylenes	106	16.157	16.166	(1.016)	40037	4.00000	3.9901
61 o-Xylene	106	16.640	16.649	(1.046)	21255	2.00000	2.1004
62 Styrene	104	16.640	16.649	(1.046)	35347	2.00000	2.0009
63 Bromoform	173	16.916	16.915	(1.064)	12152	2.00000	1.9625
64 Isopropylbenzene	105	17.044	17.053	(0.917)	48367	2.00000	1.9984
65 Cyclohexanone	55	17.182	17.190	(0.924)	11405	20.0000	19.5504
66 Bromofluorobenzene	95	17.241	17.248	(0.927)	927695	50.0000	49.5542
67 1,1,2,2-Tetrachloroethane	83	17.339	17.347	(0.933)	18421	2.00000	1.9881
68 1,2,3-Trichloropropane	75	17.418	17.427	(0.937)	17890	2.00000	2.0937
69 Bromobenzene	156	17.468	17.476	(0.940)	14959	2.00000	1.9603
70 Propylbenzene	91	17.507	17.515	(0.942)	60815	2.00000	1.9543
71 2-Chlorotoluene	91	17.655	17.663	(0.950)	43250	2.00000	2.0190
72 1,3,5-Trimethylbenzene	105	17.674	17.683	(0.951)	41256	2.00000	1.9969
73 4-Chlorotoluene	91	17.773	17.771	(0.956)	41123	2.00000	1.9999
74 tert-Butylbenzene	119	18.078	18.086	(0.972)	34930	2.00000	2.0005
75 1,2,4-Trimethylbenzene	105	18.128	18.136	(0.975)	40438	2.00000	1.9298
76 sec-Butylbenzene	105	18.335	18.342	(0.986)	48324	2.00000	1.8884
77 para-Isopropyl Toluene	119	18.472	18.480	(0.994)	37399	2.00000	1.8796

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\JH806.D
 Report Date: 09-Aug-2006 14:00

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT	ON-COL
							(ug/L)	(ug/L)
78 1,3-Dichlorobenzene	146	18.532	18.539	(0.997)	27156		2.00000	1.9654
* 79 1,4-Dichlorobenzene-d4	152	18.591	18.608	(1.000)	839655		50.0000	
80 1,4-Dichlorobenzene	146	18.630	18.638	(1.002)	28566		2.00000	1.9865
81 n-Butylbenzene	91	18.965	18.972	(1.020)	32656		2.00000	1.8277
82 1,2-Dichlorobenzene	146	19.103	19.110	(1.028)	25728		2.00000	1.9320
83 1,2-Dibromo-3-Chloropropane	75	20.078	20.085	(1.080)	2897		2.00000	1.8461
84 1,2,4-Trichlorobenzene	180	21.320	21.316	(1.147)	15320		2.00000	1.8391
85 Hexachlorobutadiene	225	21.527	21.532	(1.158)	5378		2.00000	1.8317
86 Naphthalene	128	21.753	21.768	(1.170)	37823		2.00000	1.9335
87 1,2,3-Trichlorobenzene	180	22.167	22.172	(1.192)	14478		2.00000	1.8351

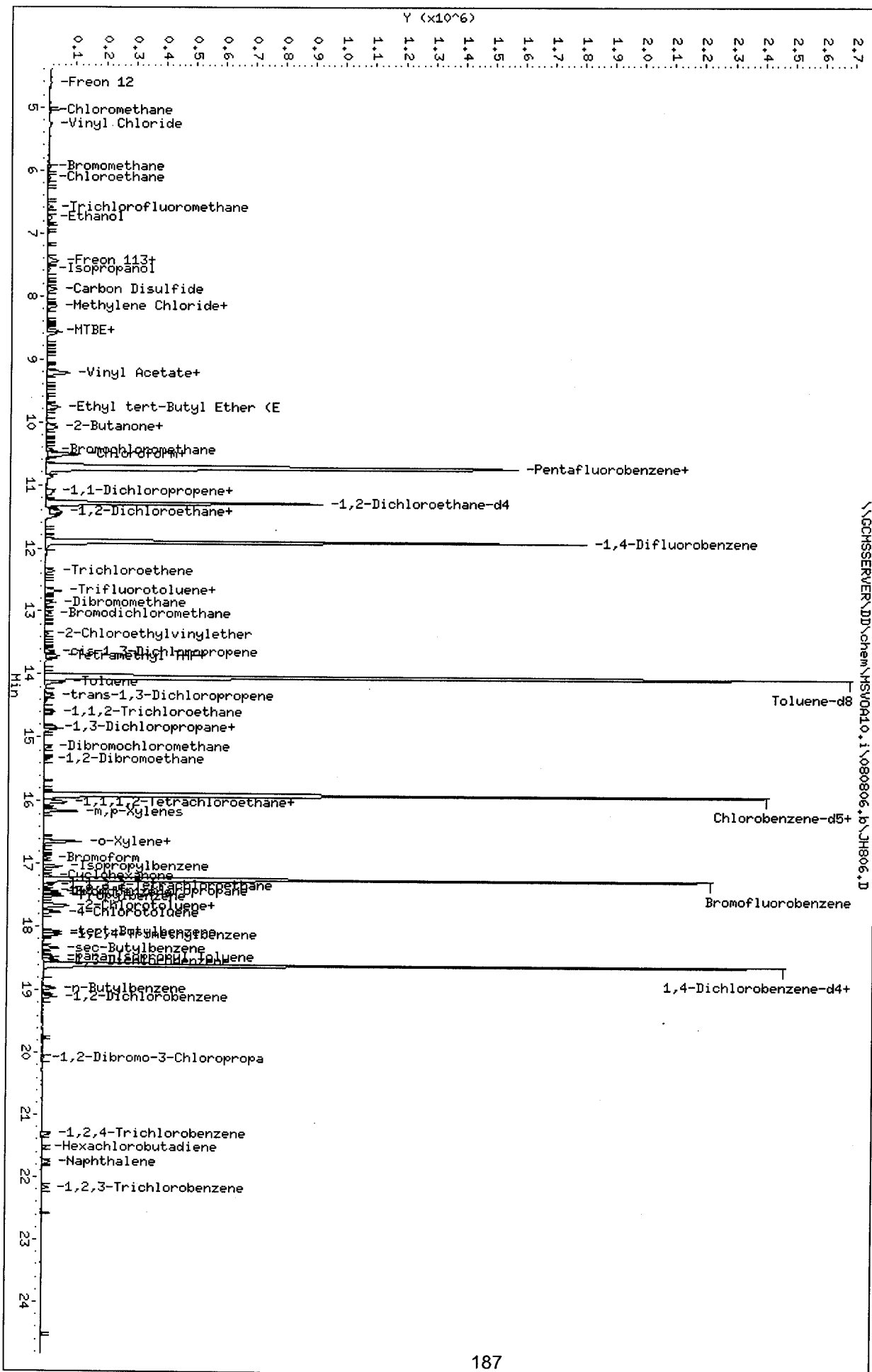
QC Flag Legend

M - Compound response manually integrated.

Data File: \\NCHSERVER\JD\chem\MSV0410.i\080806.b\JH806.D
Date : 08-AUG-2006 21:03

Client ID: DYNA P&T
Sample Info: ICAL,S3980,0.002/500,S3942,0.002/500
Purge Volume: 5.0
Column phase: RTX Volatiles

Instrument: MSV0410.i
Operator: WDA
Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\JH807.D
 Report Date: 09-Aug-2006 14:01

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\JH807.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 08-AUG-2006 21:36 MS Autotune Date: 10-JUL-2006 15:50
 Operator : VOA Inst ID: MSVOA10.i
 Smp Info : ICAL,S3980,0.005/500,S3942,0.005/500
 Misc Info : S3053,0.0025/500
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\826GOX10.m
 Meth Date : 09-Aug-2006 14:00 msvoa10 Quant Type: ISTD
 Cal Date : 08-AUG-2006 21:36 Cal File: JH807.D
 Als bottle: 7 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	AMOUNTS					
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
1 Freon 12	85	4.603	4.628	(0.430)	37869	5.00000	5.3289
2 Chloromethane	50	5.047	5.091	(0.471)	44811	5.00000	4.9116
3 Vinyl Chloride	62	5.263	5.278	(0.491)	38378	5.00000	5.1022
4 Bromomethane	94	5.943	5.957	(0.555)	21823	5.00000	4.5887 (M)
5 Chloroethane	64	6.111	6.134	(0.570)	29234	5.00000	5.2315
6 Trichlorofluoromethane	101	6.584	6.597	(0.615)	48290	5.00000	5.2408
7 Ethanol	45	6.741	6.754	(0.629)	67956	500.000	548.7320 (M)
8 Freon 113	101	7.411	7.434	(0.692)	28288	5.00000	5.4534
9 Acetone	43	7.441	7.453	(0.695)	27096	5.00000	4.7298
10 1,1-Dichloroethene	96	7.451	7.463	(0.696)	28079	5.00000	5.3519
11 Isopropanol	45	7.569	7.581	(0.707)	30211	50.0000	51.5152
12 Carbon Disulfide	76	7.894	7.906	(0.737)	123225	5.00000	5.1727
13 Methylene Chloride	84	8.160	8.172	(0.762)	39082	5.00000	5.2190
14 tert-Butyl Alcohol (TBA)	59	8.180	8.192	(0.764)	36441	50.0000	51.7145
15 MTBE	73	8.554	8.566	(0.799)	106745	5.00000	5.2305
16 trans-1,2-Dichloroethene	96	8.593	8.615	(0.802)	33838	5.00000	5.4031
18 Vinyl Acetate	43	9.194	9.206	(0.858)	113635	5.00000	5.1921 (M)
19 1,1-Dichloroethane	63	9.214	9.235	(0.860)	66520	5.00000	5.4680
20 Isopropyl Ether (DIPE)	45	9.224	9.245	(0.861)	162141	5.00000	5.3463
21 Ethyl tert-Butyl Ether (ETBE)	59	9.766	9.787	(0.912)	125479	5.00000	5.1961
22 2-Butanone	43	10.022	10.023	(0.936)	24750	5.00000	5.0850
23 cis-1,2-Dichloroethene	96	10.071	10.082	(0.940)	36058	5.00000	5.3388

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
24 2,2-Dichloropropane	77	10.101	10.121	(0.943)	40844	5.00000	5.5319
25 Bromochloromethane	128	10.436	10.446	(0.974)	18678	5.00000	5.0061
26 Chloroform	83	10.495	10.515	(0.980)	59497	5.00000	5.4928
27 Tetrahydrofuran	42	10.515	10.525	(0.982)	161841	50.0000	58.7845
* 28 Pentafluorobenzene	168	10.712	10.742	(1.000)	1226152	50.0000	
29 Dibromofluoromethane	113	10.741	10.761	(1.003)	697013	50.0000	50.5769
30 1,1,1-Trichloroethane	97	10.869	10.889	(1.015)	40750	5.00000	5.3288
31 1,1-Dichloropropene	75	11.106	11.126	(0.934)	42899	5.00000	5.3473
32 Carbon Tetrachloride	117	11.145	11.165	(0.937)	33031	5.00000	5.3148
33 1,2-Dichloroethane-d4	65	11.283	11.303	(0.949)	745207	50.0000	50.4169
34 1,2-Dichloroethane	62	11.401	11.421	(0.959)	48236	5.00000	5.2657
35 Benzene	78	11.431	11.460	(0.961)	129816	5.00000	5.3337
36 Methyl tert-Amyl Ether (TAME)	73	11.500	11.510	(0.967)	100663	5.00000	5.0791
* 37 1,4-Difluorobenzene	114	11.894	11.923	(1.000)	1851819	50.0000	
38 Trichloroethene	95	12.357	12.376	(1.039)	34201	5.00000	5.3642
39 Trifluorotoluene	146	12.662	12.691	(1.065)	46095	5.00000	5.2861
40 1,2-Dichloropropane	63	12.672	12.691	(1.065)	40006	5.00000	5.2354
41 Dibromomethane	93	12.859	12.868	(1.081)	24092	5.00000	5.1127
42 Bromodichloromethane	83	13.027	13.036	(1.095)	44082	5.00000	5.1909
43 2-Chloroethylvinylether	63	13.352	13.361	(1.123)	19405	5.00000	4.8003
44 cis-1,3-Dichloropropene	75	13.628	13.646	(1.146)	56570	5.00000	5.1312
45 Tetramethyl THF	43	13.707	13.725	(1.152)	112129	5.00000	5.3143
46 4-Methyl-2-Pentanone	43	13.766	13.774	(1.157)	53521	5.00000	4.9924
47 Toluene-d8	98	14.032	14.050	(1.180)	1989015	50.0000	49.9489
48 Toluene	92	14.130	14.138	(1.188)	75194	5.00000	5.3061
49 trans-1,3-Dichloropropene	75	14.337	14.345	(1.205)	49520	5.00000	5.0941
50 1,1,2-Trichloroethane	85	14.603	14.611	(1.228)	17918	5.00000	5.1226
51 1,3-Dichloropropane	76	14.840	14.847	(0.934)	55204	5.00000	5.1919
52 2-Hexanone	43	14.850	14.857	(0.934)	32005	5.00000	4.9010
53 Tetrachloroethene	166	14.879	14.887	(0.936)	32695	5.00000	5.4670
54 Dibromochloromethane	129	15.155	15.162	(0.954)	36024	5.00000	5.2193
55 1,2-Dibromoethane	107	15.342	15.359	(1.290)	35623	5.00000	5.1227
* 56 Chlorobenzene-d5	117	15.894	15.911	(1.000)	1571828	50.0000	
57 Chlorobenzene	112	15.933	15.950	(1.002)	88940	5.00000	5.4051
58 1,1,1,2-Tetrachloroethane	131	16.002	16.009	(1.007)	28456	5.00000	5.0950
59 Ethylbenzene	91	16.022	16.039	(1.008)	142486	5.00000	5.5515
60 m,p-Xylenes	106	16.150	16.166	(1.016)	106946	10.0000	11.3130
61 o-Xylene	106	16.643	16.649	(1.047)	53648	5.00000	5.6272
62 Styrene	104	16.643	16.649	(1.047)	92581	5.00000	5.5628
63 Bromoform	173	16.909	16.915	(1.064)	29472	5.00000	5.0519
64 Isopropylbenzene	105	17.037	17.053	(0.916)	126803	5.00000	5.5347
65 Cyclohexanone	55	17.185	17.190	(0.924)	27477	50.0000	49.7575
66 Bromofluorobenzene	95	17.244	17.248	(0.927)	881541	50.0000	49.7446
67 1,1,2,2-Tetrachloroethane	83	17.332	17.347	(0.932)	45896	5.00000	5.2329
68 1,2,3-Trichloropropane	75	17.421	17.427	(0.937)	41281	5.00000	5.1038
69 Bromobenzene	156	17.460	17.476	(0.939)	38436	5.00000	5.3209
70 Propylbenzene	91	17.500	17.515	(0.941)	163150	5.00000	5.5386
71 2-Chlorotoluene	91	17.657	17.663	(0.950)	113698	5.00000	5.6072
72 1,3,5-Trimethylbenzene	105	17.677	17.683	(0.951)	108659	5.00000	5.5562
73 4-Chlorotoluene	91	17.766	17.771	(0.955)	107215	5.00000	5.5082
74 tert-Butylbenzene	119	18.081	18.086	(0.972)	88718	5.00000	5.3676
75 1,2,4-Trimethylbenzene	105	18.130	18.136	(0.975)	105545	5.00000	5.3211
76 sec-Butylbenzene	105	18.327	18.342	(0.986)	133355	5.00000	5.5052
77 para-Isopropyl Toluene	119	18.475	18.480	(0.994)	99432	5.00000	5.2793

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\JH807.D
 Report Date: 09-Aug-2006 14:01

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
78 1,3-Dichlorobenzene	146	18.534	18.539	(0.997)	71180	5.00000	5.4421
* 79 1,4-Dichlorobenzene-d4	152	18.593	18.608	(1.000)	794827	50.0000	
80 1,4-Dichlorobenzene	146	18.623	18.638	(1.002)	73547	5.00000	5.4032
81 n-Butylbenzene	91	18.968	18.972	(1.020)	83760	5.00000	4.9525
82 1,2-Dichlorobenzene	146	19.106	19.110	(1.028)	69381	5.00000	5.5041
83 1,2-Dibromo-3-Chloropropane	75	20.081	20.085	(1.080)	7693	5.00000	5.1789
84 1,2,4-Trichlorobenzene	180	21.313	21.316	(1.146)	37759	5.00000	4.7884
85 Hexachlorobutadiene	225	21.529	21.532	(1.158)	14282	5.00000	5.1387
86 Naphthalene	128	21.756	21.768	(1.170)	92347	5.00000	4.9870
87 1,2,3-Trichlorobenzene	180	22.170	22.172	(1.192)	37028	5.00000	4.9581

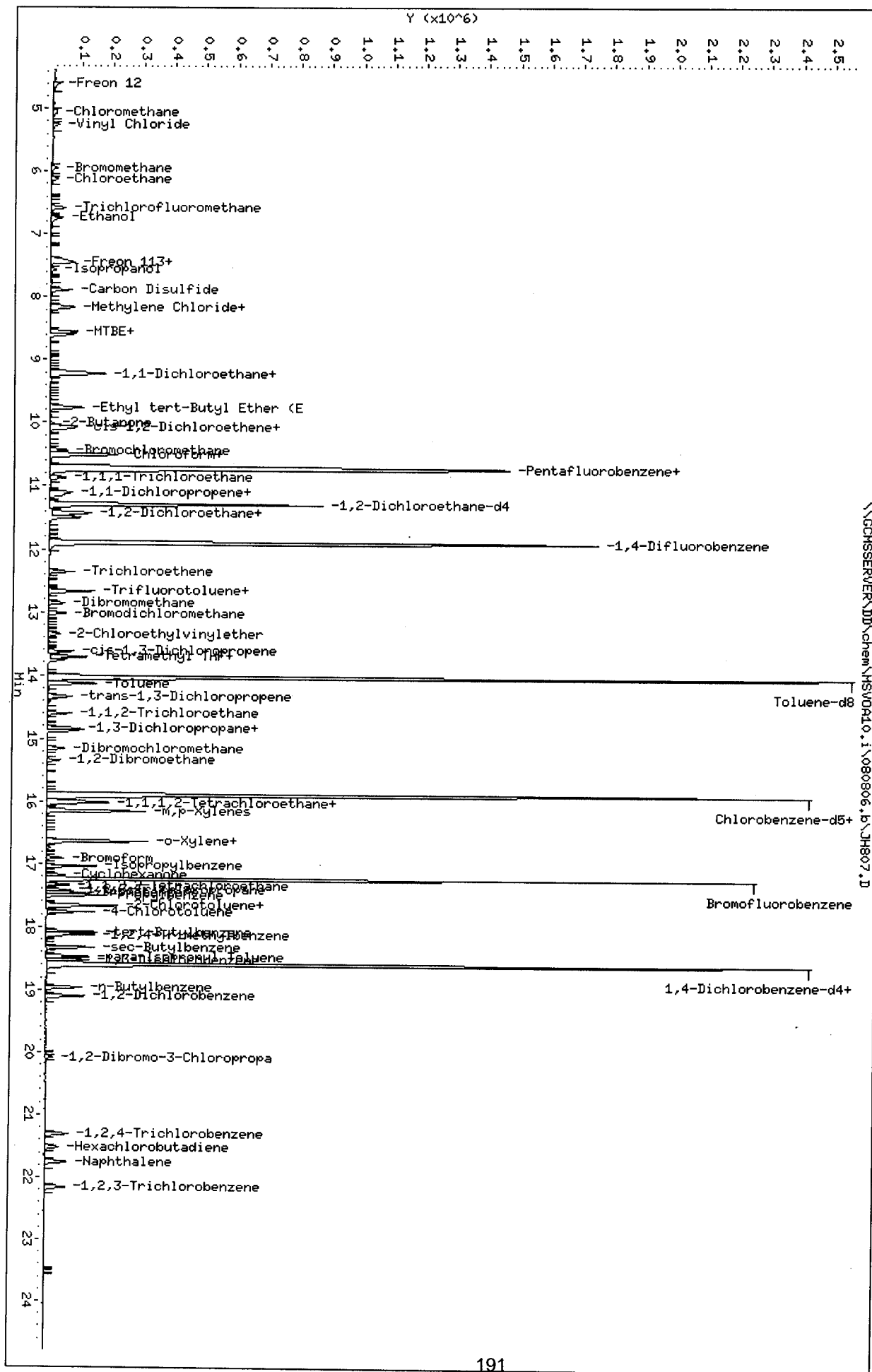
QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCHSERVER\JD\chem\MSV0410.i\080806.b\JH807.D
 Date : 08-AUG-2006 21:36
 Client ID: DYNA P&T

Sample Info: ICAL,S3980,0.005/500,S3942,0.005/500
 Purge Volume: 5.0
 Column phase: RTX Volatiles

Instrument: MSV0410.i
 Operator: VOA
 Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\JH808.D
 Report Date: 09-Aug-2006 14:02

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\JH808.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 08-AUG-2006 22:09 MS Autotune Date: 10-JUL-2006 15:50
 Operator : VOA Inst ID: MSVOA10.i
 Smp Info : ICAL,S3980,0.002/100,S3942,0.002/100
 Misc Info : S3053,0.001/100
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\826GOX10.m
 Meth Date : 09-Aug-2006 14:02 msvoa10 Quant Type: ISTD
 Cal Date : 08-AUG-2006 22:09 Cal File: JH808.D
 Als bottle: 8 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
1 Freon 12	85	4.603	4.628	(0.430)	60992	10.0000	8.6711
2 Chloromethane	50	5.056	5.091	(0.472)	94158	10.0000	10.4265
3 Vinyl Chloride	62	5.253	5.278	(0.490)	77643	10.0000	10.4286
4 Bromomethane	94	5.943	5.957	(0.555)	47770	10.0000	10.1480
5 Chloroethane	64	6.120	6.134	(0.571)	57619	10.0000	10.4171
6 Trichlorofluoromethane	101	6.583	6.597	(0.615)	90970	10.0000	9.9744
7 Ethanol	45	6.741	6.754	(0.629)	131613	1000.00	1073.6829
8 Freon 113	101	7.411	7.434	(0.692)	47897	10.0000	9.3287
9 Acetone	43	7.440	7.453	(0.695)	43473	10.0000	11.2242
10 1,1-Dichloroethene	96	7.450	7.463	(0.696)	50135	10.0000	9.6542
11 Isopropanol	45	7.558	7.581	(0.706)	62094	100.000	106.9706
12 Carbon Disulfide	76	7.893	7.906	(0.737)	230585	10.0000	9.7791
13 Methylene Chloride	84	8.159	8.172	(0.762)	77007	10.0000	10.3894
14 tert-Butyl Alcohol (TBA)	59	8.179	8.192	(0.764)	75489	100.000	108.2307
15 MTBE	73	8.544	8.566	(0.798)	209418	10.0000	10.3671
16 trans-1,2-Dichloroethene	96	8.593	8.615	(0.802)	60417	10.0000	9.7464
18 Vinyl Acetate	43	9.184	9.206	(0.857)	234971	10.0000	10.8465 (M)
19 1,1-Dichloroethane	63	9.214	9.235	(0.860)	124263	10.0000	10.3197
20 Isopropyl Ether (DIPE)	45	9.223	9.245	(0.861)	316849	10.0000	10.5550
21 Ethyl tert-Butyl Ether (ETBE)	59	9.765	9.787	(0.912)	247030	10.0000	10.3348
22 2-Butanone	43	10.012	10.023	(0.935)	51606	10.0000	10.7117
23 cis-1,2-Dichloroethene	96	10.071	10.082	(0.940)	69385	10.0000	10.3789

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
24 2,2-Dichloropropane	77	10.100	10.121	(0.943)	72504	10.0000	9.9209
25 Bromochloromethane	128	10.435	10.446	(0.974)	37755	10.0000	10.2232
26 Chloroform	83	10.494	10.515	(0.980)	110487	10.0000	10.3053
27 Tetrahydrofuran	42	10.514	10.525	(0.982)	303829	100.000	111.4932
* 28 Pentafluorobenzene	168	10.711	10.742	(1.000)	1213667	50.0000	
29 Dibromofluoromethane	113	10.741	10.761	(1.003)	687144	50.0000	50.3737
30 1,1,1-Trichloroethane	97	10.869	10.889	(1.015)	72210	10.0000	9.5399
31 1,1-Dichloropropene	75	11.105	11.126	(0.934)	74124	10.0000	9.4345
32 Carbon Tetrachloride	117	11.145	11.165	(0.937)	57595	10.0000	9.4627
33 1,2-Dichloroethane-d4	65	11.283	11.303	(0.949)	726758	50.0000	50.2059
34 1,2-Dichloroethane	62	11.401	11.421	(0.959)	92940	10.0000	10.3599
35 Benzene	78	11.430	11.460	(0.961)	237251	10.0000	9.9535
36 Methyl tert-Amyl Ether (TAME)	73	11.489	11.510	(0.966)	195980	10.0000	10.0972
* 37 1,4-Difluorobenzene	114	11.893	11.923	(1.000)	1813563	50.0000	
38 Trichloroethene	95	12.356	12.376	(1.039)	60112	10.0000	9.6271
39 Trifluorotoluene	146	12.662	12.691	(1.065)	78347	10.0000	9.1742
40 1,2-Dichloropropane	63	12.672	12.691	(1.065)	75633	10.0000	10.1066
41 Dibromomethane	93	12.859	12.868	(1.081)	50296	10.0000	10.8988
42 Bromodichloromethane	83	13.017	13.036	(1.094)	83880	10.0000	10.0858
43 2-Chloroethylvinylether	63	13.352	13.361	(1.123)	42717	10.0000	10.7901
44 cis-1,3-Dichloropropene	75	13.627	13.646	(1.146)	107505	10.0000	9.9570
45 Tetramethyl THF	43	13.706	13.725	(1.152)	223406	10.0000	10.8116
46 4-Methyl-2-Pentanone	43	13.765	13.774	(1.157)	104553	10.0000	9.9585
47 Toluene-d8	98	14.031	14.050	(1.180)	1954455	50.0000	50.1163
48 Toluene	92	14.130	14.138	(1.188)	135870	10.0000	9.7900
49 trans-1,3-Dichloropropene	75	14.337	14.345	(1.205)	96448	10.0000	10.1309
50 1,1,2-Trichloroethane	85	14.603	14.611	(1.228)	35408	10.0000	10.3364
51 1,3-Dichloropropane	76	14.829	14.847	(0.933)	107490	10.0000	10.2933
52 2-Hexanone	43	14.849	14.857	(0.934)	67302	10.0000	10.4937
53 Tetrachloroethene	166	14.879	14.887	(0.936)	53559	10.0000	9.1188
54 Dibromochloromethane	129	15.155	15.162	(0.954)	68859	10.0000	10.1582
55 1,2-Dibromoethane	107	15.342	15.359	(1.290)	69273	10.0000	10.1720
* 56 Chlorobenzene-d5	117	15.893	15.911	(1.000)	1543734	50.0000	
57 Chlorobenzene	112	15.933	15.950	(1.002)	158174	10.0000	9.7877
58 1,1,1,2-Tetrachloroethane	131	16.002	16.009	(1.007)	54670	10.0000	9.9667
59 Ethylbenzene	91	16.022	16.039	(1.008)	245094	10.0000	9.7232
60 m,p-Xylenes	106	16.150	16.166	(1.016)	182026	20.0000	19.6055
61 o-Xylene	106	16.642	16.649	(1.047)	93029	10.0000	9.9356
62 Styrene	104	16.642	16.649	(1.047)	163609	10.0000	10.0094
63 Bromoform	173	16.908	16.915	(1.064)	54008	10.0000	9.4262
64 Isopropylbenzene	105	17.036	17.053	(0.916)	212137	10.0000	9.4999
65 Cyclohexanone	55	17.184	17.190	(0.924)	50312	100.000	93.4749
66 Bromofluorobenzene	95	17.243	17.248	(0.927)	877753	50.0000	50.8171
67 1,1,2,2-Tetrachloroethane	83	17.332	17.347	(0.932)	88964	10.0000	10.4068
68 1,2,3-Trichloropropane	75	17.421	17.427	(0.937)	77107	10.0000	9.7807
69 Bromobenzene	156	17.460	17.476	(0.939)	67396	10.0000	9.5723
70 Propylbenzene	91	17.499	17.515	(0.941)	274008	10.0000	9.5436
71 2-Chlorotoluene	91	17.657	17.663	(0.950)	192151	10.0000	9.7224
72 1,3,5-Trimethylbenzene	105	17.677	17.683	(0.951)	184895	10.0000	9.7000
73 4-Chlorotoluene	91	17.765	17.771	(0.955)	184428	10.0000	9.7210
74 tert-Butylbenzene	119	18.081	18.086	(0.972)	150959	10.0000	9.3706
75 1,2,4-Trimethylbenzene	105	18.120	18.136	(0.975)	185830	10.0000	9.6121
76 sec-Butylbenzene	105	18.327	18.342	(0.986)	216919	10.0000	9.1874
77 para-Isopropyl Toluene	119	18.465	18.480	(0.993)	167026	10.0000	9.0985

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\JH808.D
 Report Date: 09-Aug-2006 14:02

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	
78 1,3-Dichlorobenzene	146	18.524	18.539	(0.996)	123622	10.0000	9.6971	
* 79 1,4-Dichlorobenzene-d4	152	18.593	18.608	(1.000)	774709	50.0000		
80 1,4-Dichlorobenzene	146	18.623	18.638	(1.002)	127552	10.0000	9.6141	
81 n-Butylbenzene	91	18.967	18.972	(1.020)	142793	10.0000	8.6623	
82 1,2-Dichlorobenzene	146	19.095	19.110	(1.027)	119388	10.0000	9.7173	
83 1,2-Dibromo-3-Chloropropane	75	20.081	20.085	(1.080)	14732	10.0000	10.1751	
84 1,2,4-Trichlorobenzene	180	21.312	21.316	(1.146)	67866	10.0000	8.8300	
85 Hexachlorobutadiene	225	21.529	21.532	(1.158)	24335	10.0000	8.9831	
86 Naphthalene	128	21.756	21.768	(1.170)	169906	10.0000	9.4136	
87 1,2,3-Trichlorobenzene	180	22.169	22.172	(1.192)	66605	10.0000	9.1501	

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NCHSERVER\JD\chem\MSV010.i\080806.b\JH808.D
 Date : 08-AUG-2006 22:09

Client ID: DYNA P&T

Sample Info: ICAL,S3980,0.002/100,S3942,0.002/100

Purge Volume: 5.0

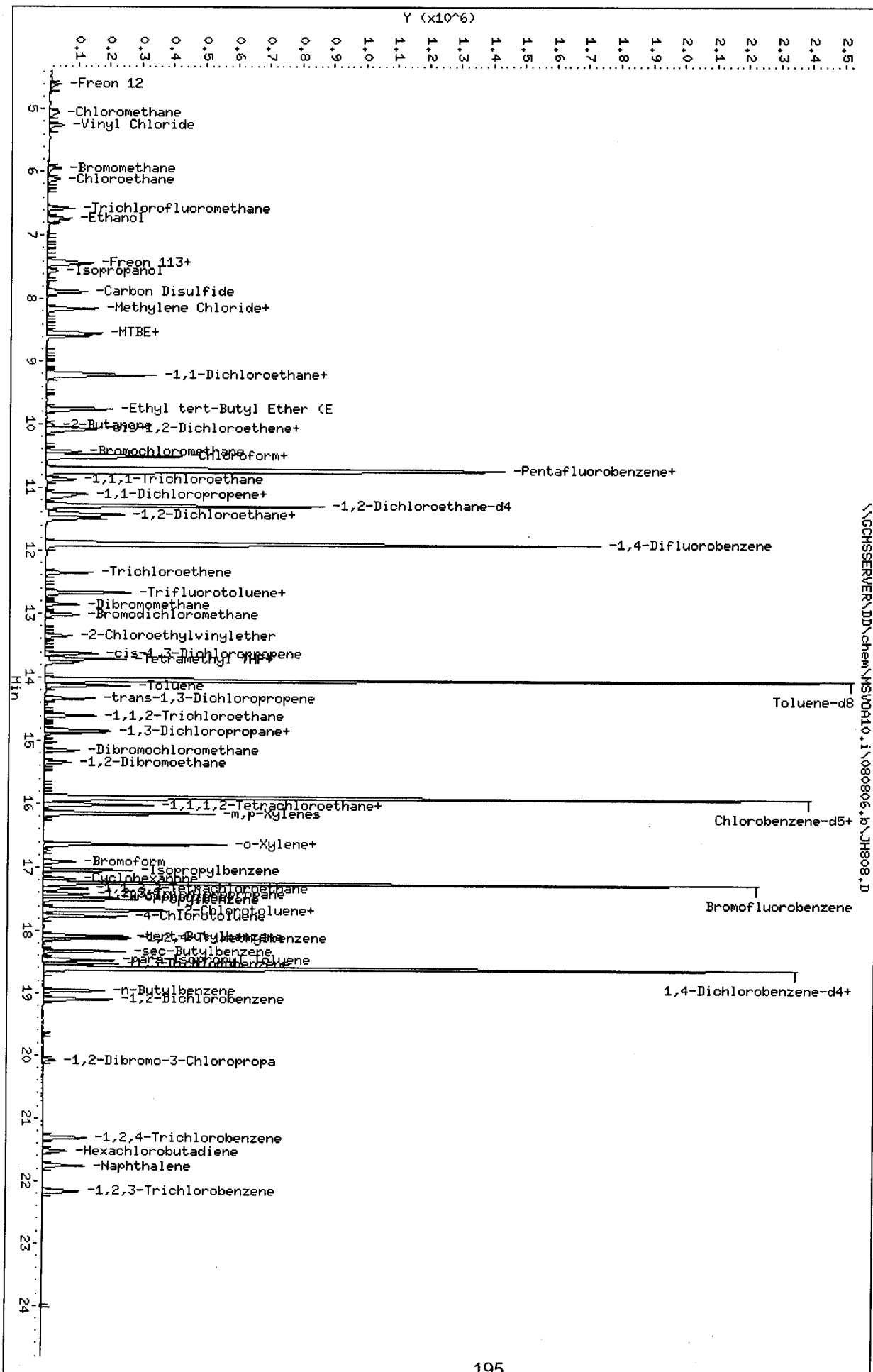
Column phase: RTX Volatiles

Instrument: MSV010.i

Operator: VOA

Column diameter: 0.32

\\NCHSERVER\JD\chem\MSV010.i\080806.b\JH808.D



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\JH809.D
Report Date: 09-Aug-2006 14:03

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\JH809.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 08-AUG-2006 22:42 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S3980,0.004/100,S3942,0.004/100
Misc Info : S3053,0.002/100
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\826GOX10.m
Meth Date : 09-Aug-2006 14:03 msvoa10 Quant Type: ISTD
Cal Date : 08-AUG-2006 22:42 Cal File: JH809.D
Als bottle: 9 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.604	4.628	(0.430)	141974	20.0000	19.1362
2 Chloromethane	50	5.058	5.091	(0.472)	176261	20.0000	18.5047
3 Vinyl Chloride	62	5.255	5.278	(0.491)	141552	20.0000	18.0253
4 Bromomethane	94	5.934	5.957	(0.554)	95573	20.0000	19.2487
5 Chloroethane	64	6.112	6.134	(0.571)	111532	20.0000	19.1172
6 Trichlorofluoromethane	101	6.585	6.597	(0.615)	177042	20.0000	18.4039
7 Ethanol	45	6.742	6.754	(0.629)	250673	2000.00	1938.7742
8 Freon 113	101	7.412	7.434	(0.692)	90039	20.0000	16.6260
9 Acetone	43	7.442	7.453	(0.695)	71645	20.0000	20.4844
10 1,1-Dichloroethene	96	7.452	7.463	(0.696)	100088	20.0000	18.2727
11 Isopropanol	45	7.560	7.581	(0.706)	117173	200.000	191.3749
12 Carbon Disulfide	76	7.895	7.906	(0.737)	454409	20.0000	18.2708
13 Methylene Chloride	84	8.151	8.172	(0.761)	150342	20.0000	19.2301
14 tert-Butyl Alcohol (TBA)	59	8.171	8.192	(0.763)	145064	200.000	197.1828
15 MTBE	73	8.545	8.566	(0.798)	420304	20.0000	19.7264
16 trans-1,2-Dichloroethene	96	8.595	8.615	(0.802)	121093	20.0000	18.5202
18 Vinyl Acetate	43	9.186	9.206	(0.857)	410099	20.0000	17.9476 (M)
19 1,1-Dichloroethane	63	9.215	9.235	(0.860)	237276	20.0000	18.6820
20 Isopropyl Ether (DIPE)	45	9.225	9.245	(0.861)	622160	20.0000	19.6495
21 Ethyl tert-Butyl Ether (ETBE)	59	9.767	9.787	(0.912)	497157	20.0000	19.7192
22 2-Butanone	43	10.003	10.023	(0.934)	98925	20.0000	19.4674
23 cis-1,2-Dichloroethene	96	10.072	10.082	(0.940)	135708	20.0000	19.2457

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
24 2,2-Dichloropropane	77	10.102	10.121	(0.943)	139991	20.0000	18.1607
25 Bromochloromethane	128	10.437	10.446	(0.974)	76127	20.0000	19.5432
26 Chloroform	83	10.496	10.515	(0.980)	216140	20.0000	19.1129
27 Tetrahydrofuran	42	10.506	10.525	(0.981)	565437	200.000	196.7189
* 28 Pentafluorobenzene	168	10.713	10.742	(1.000)	1280139	50.0000	
29 Dibromofluoromethane	113	10.742	10.761	(1.003)	701759	50.0000	48.7738
30 1,1,1-Trichloroethane	97	10.870	10.889	(1.015)	141543	20.0000	17.7288
31 1,1-Dichloropropene	75	11.107	11.126	(0.934)	143778	20.0000	17.6743
32 Carbon Tetrachloride	117	11.146	11.165	(0.937)	111989	20.0000	17.7704
33 1,2-Dichloroethane-d4	65	11.284	11.303	(0.949)	753964	50.0000	50.3044
34 1,2-Dichloroethane	62	11.402	11.421	(0.959)	184876	20.0000	19.9032
35 Benzene	78	11.432	11.460	(0.961)	474964	20.0000	19.2451
36 Methyl tert-Amyl Ether (TAME)	73	11.491	11.510	(0.966)	393296	20.0000	19.5704
* 37 1,4-Difluorobenzene	114	11.895	11.923	(1.000)	1877770	50.0000	
38 Trichloroethene	95	12.358	12.376	(1.039)	119550	20.0000	18.4916
39 Trifluorotoluene	146	12.664	12.691	(1.065)	150327	20.0000	17.0011
40 1,2-Dichloropropane	63	12.673	12.691	(1.065)	149138	20.0000	19.2474
41 Dibromomethane	93	12.851	12.868	(1.080)	98330	20.0000	20.5790
42 Bromodichloromethane	83	13.018	13.036	(1.094)	170461	20.0000	19.7955
43 2-Chloroethylvinylether	63	13.353	13.361	(1.123)	87602	20.0000	21.3712
44 cis-1,3-Dichloropropene	75	13.629	13.646	(1.146)	220845	20.0000	19.7551
45 Tetramethyl THF	43	13.708	13.725	(1.152)	410355	20.0000	19.1798
46 4-Methyl-2-Pentanone	43	13.767	13.774	(1.157)	233017	20.0000	21.4356
47 Toluene-d8	98	14.033	14.050	(1.180)	2029359	50.0000	50.2577
48 Toluene	92	14.122	14.138	(1.187)	267485	20.0000	18.6145
49 trans-1,3-Dichloropropene	75	14.329	14.345	(1.205)	197684	20.0000	20.0548
50 1,1,2-Trichloroethane	85	14.595	14.611	(1.227)	70766	20.0000	19.9518
51 1,3-Dichloropropane	76	14.831	14.847	(0.933)	217073	20.0000	20.0049
52 2-Hexanone	43	14.841	14.857	(0.934)	133965	20.0000	20.1017
53 Tetrachloroethene	166	14.870	14.887	(0.936)	103939	20.0000	17.0304
54 Dibromochloromethane	129	15.156	15.162	(0.954)	140298	20.0000	19.9181
55 1,2-Dibromoethane	107	15.343	15.359	(1.290)	144276	20.0000	20.4610
* 56 Chlorobenzene-d5	117	15.895	15.911	(1.000)	1604101	50.0000	
57 Chlorobenzene	112	15.934	15.950	(1.002)	314718	20.0000	18.7417
58 1,1,1,2-Tetrachloroethane	131	16.003	16.009	(1.007)	111472	20.0000	19.5573
59 Ethylbenzene	91	16.023	16.039	(1.008)	476377	20.0000	18.1873
60 m,p-Xylenes	106	16.151	16.166	(1.016)	360648	40.0000	37.3826
61 o-Xylene	106	16.634	16.649	(1.046)	183785	20.0000	18.8898
62 Styrene	104	16.644	16.649	(1.047)	332332	20.0000	19.5666
63 Bromoform	173	16.910	16.915	(1.064)	114380	20.0000	19.2120
64 Isopropylbenzene	105	17.038	17.053	(0.916)	408677	20.0000	17.4311
65 Cyclohexanone	55	17.176	17.190	(0.924)	100183	200.000	177.2791
66 Bromofluorobenzene	95	17.245	17.248	(0.927)	907920	50.0000	50.0640
67 1,1,2,2-Tetrachloroethane	83	17.334	17.347	(0.932)	172130	20.0000	19.1778
68 1,2,3-Trichloropropane	75	17.422	17.427	(0.937)	154204	20.0000	18.6300
69 Bromobenzene	156	17.462	17.476	(0.939)	140729	20.0000	19.0373
70 Propylbenzene	91	17.501	17.515	(0.941)	525500	20.0000	17.4326
71 2-Chlorotoluene	91	17.649	17.663	(0.949)	372957	20.0000	17.9733
72 1,3,5-Trimethylbenzene	105	17.678	17.683	(0.951)	357954	20.0000	17.8860
73 4-Chlorotoluene	91	17.767	17.771	(0.955)	365410	20.0000	18.3446
74 tert-Butylbenzene	119	18.082	18.086	(0.972)	291455	20.0000	17.2314
75 1,2,4-Trimethylbenzene	105	18.122	18.136	(0.975)	371700	20.0000	18.3120
76 sec-Butylbenzene	105	18.329	18.342	(0.986)	418487	20.0000	16.8818
77 para-Isopropyl Toluene	119	18.467	18.480	(0.993)	330275	20.0000	17.1356

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\JH809.D
 Report Date: 09-Aug-2006 14:03

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	
78 1,3-Dichlorobenzene	146	18.526	18.539	(0.996)	243267	20.0000	18.1749	
* 79 1,4-Dichlorobenzene-d4	152	18.595	18.608	(1.000)	813390	50.0000		
80 1,4-Dichlorobenzene	146	18.624	18.638	(1.002)	251105	20.0000	18.0267	
81 n-Butylbenzene	91	18.959	18.972	(1.020)	291639	20.0000	16.8504	
82 1,2-Dichlorobenzene	146	19.097	19.110	(1.027)	242799	20.0000	18.8222	
83 1,2-Dibromo-3-Chloropropane	75	20.072	20.085	(1.079)	29570	20.0000	19.4522	
84 1,2,4-Trichlorobenzene	180	21.304	21.316	(1.146)	146842	20.0000	18.1970	
85 Hexachlorobutadiene	225	21.521	21.532	(1.157)	45453	20.0000	15.9808	
86 Naphthalene	128	21.757	21.768	(1.170)	355839	20.0000	18.7777	
87 1,2,3-Trichlorobenzene	180	22.161	22.172	(1.192)	141388	20.0000	18.5000	

QC Flag Legend

M - Compound response manually integrated.

Data File: \NCHSERVER\JD\chem\MSV010.i\080806.b\JH809.D
 Date : 08-AUG-2006 22:42

Client ID: DYNA P&I

Sample Info: ICAL,S3980,0.004/100,S3942,0.004/100

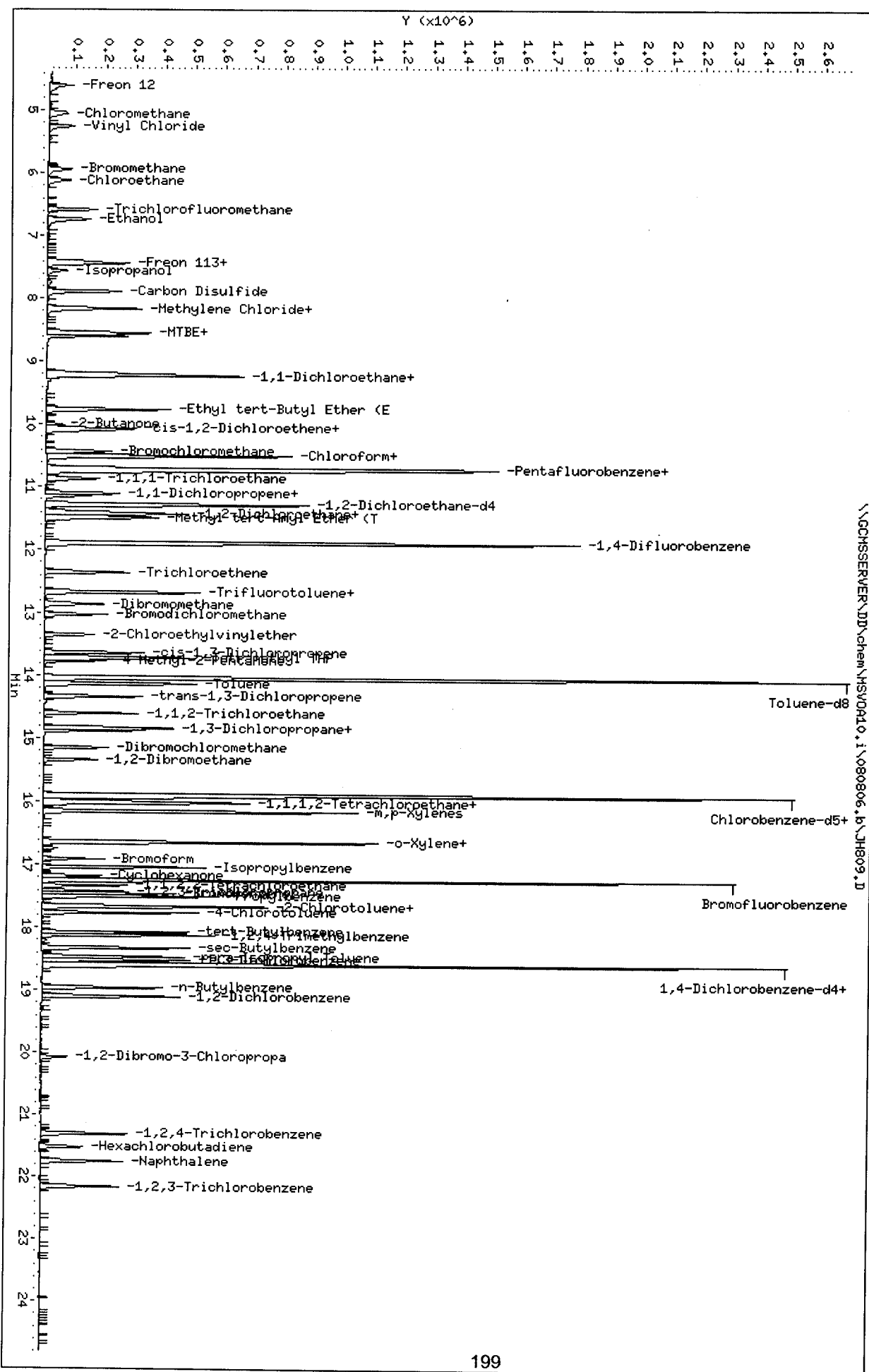
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Column phase: RTX Volatiles

Instrument: MSV010.i

Operator: VQA

Column diameter: 0.32



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\JH810.D
Report Date: 09-Aug-2006 14:04

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\JH810.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 08-AUG-2006 23:15 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S3980,0.01/100,S3942,0.01/100
Misc Info : S3053,0.005/100
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\826GOX10.m
Meth Date : 09-Aug-2006 14:04 msvoa10 Quant Type: ISTD
Cal Date : 08-AUG-2006 23:15 Cal File: JH810.D
Als bottle: 10 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.599	4.628	(0.430)	378277	50.0000	51.9278
2 Chloromethane	50	5.052	5.091	(0.472)	477689	50.0000	51.0755
3 Vinyl Chloride	62	5.259	5.278	(0.491)	383417	50.0000	49.7256
4 Bromomethane	94	5.939	5.957	(0.555)	256576	50.0000	52.6290
5 Chloroethane	64	6.116	6.134	(0.571)	280981	50.0000	49.0507
6 Trichlorofluoromethane	101	6.579	6.597	(0.614)	468698	50.0000	49.6214
7 Ethanol	45	6.737	6.754	(0.629)	632934	5000.00	4985.6254
8 Freon 113	101	7.407	7.434	(0.692)	251069	50.0000	47.2165
9 Acetone	43	7.437	7.453	(0.695)	155297	50.0000	49.1535
10 1,1-Dichloroethene	96	7.446	7.463	(0.695)	255535	50.0000	47.5130
11 Isopropanol	45	7.555	7.581	(0.706)	291370	500.000	484.6674
12 Carbon Disulfide	76	7.890	7.906	(0.737)	1140850	50.0000	46.7176
13 Methylene Chloride	84	8.156	8.172	(0.762)	355552	50.0000	46.3178
14 tert-Butyl Alcohol (TBA)	59	8.166	8.192	(0.763)	352179	500.000	487.5448
15 MTBE	73	8.550	8.566	(0.798)	991772	50.0000	47.4066
16 trans-1,2-Dichloroethene	96	8.589	8.615	(0.802)	309994	50.0000	48.2861
18 Vinyl Acetate	43	9.180	9.206	(0.857)	1083357	50.0000	48.2871
19 1,1-Dichloroethane	63	9.210	9.235	(0.860)	578765	50.0000	46.4101
20 Isopropyl Ether (DIPE)	45	9.230	9.245	(0.862)	1455958	50.0000	46.8318
21 Ethyl tert-Butyl Ether (ETBE)	59	9.762	9.787	(0.912)	1176131	50.0000	47.5109
22 2-Butanone	43	9.998	10.023	(0.934)	230305	50.0000	46.1582
23 cis-1,2-Dichloroethene	96	10.067	10.082	(0.940)	328797	50.0000	47.4896

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
24 2,2-Dichloropropane	77	10.097	10.121	(0.943)	355253		50.0000	46.9367
25 Bromochloromethane	128	10.432	10.446	(0.974)	189538		50.0000	49.5560
26 Chloroform	83	10.501	10.515	(0.981)	524925		50.0000	47.2749
27 Tetrahydrofuran	42	10.510	10.525	(0.982)	1307925		500.000	463.4323
* 28 Pentafluorobenzene	168	10.707	10.742	(1.000)	1256943		50.0000	
29 Dibromofluoromethane	113	10.737	10.761	(1.003)	703529		50.0000	49.7991
30 1,1,1-Trichloroethane	97	10.875	10.889	(1.016)	367164		50.0000	46.8374
31 1,1-Dichloropropene	75	11.102	11.126	(0.933)	374902		50.0000	46.7432
32 Carbon Tetrachloride	117	11.151	11.165	(0.937)	304406		50.0000	48.9920
33 1,2-Dichloroethane-d4	65	11.289	11.303	(0.949)	744933		50.0000	50.4106
34 1,2-Dichloroethane	62	11.397	11.421	(0.958)	442927		50.0000	48.3643
35 Benzene	78	11.437	11.460	(0.961)	1160106		50.0000	47.6768
36 Methyl tert-Amyl Ether (TAME)	73	11.496	11.510	(0.966)	953695		50.0000	48.1327
* 37 1,4-Difluorobenzene	114	11.900	11.923	(1.000)	1851368		50.0000	
38 Trichloroethene	95	12.353	12.376	(1.038)	302543		50.0000	47.4639
39 Trifluorotoluene	146	12.668	12.691	(1.065)	408535		50.0000	46.8618
40 1,2-Dichloropropane	63	12.678	12.691	(1.065)	365603		50.0000	47.8567
41 Dibromomethane	93	12.855	12.868	(1.080)	237519		50.0000	50.4182
42 Bromodichloromethane	83	13.023	13.036	(1.094)	416807		50.0000	49.0939
43 2-Chloroethylvinylether	63	13.348	13.361	(1.122)	222758		50.0000	55.1186
44 cis-1,3-Dichloropropene	75	13.624	13.646	(1.145)	539152		50.0000	48.9164
45 Tetramethyl THF	43	13.703	13.725	(1.152)	1040296		50.0000	49.3165
46 4-Methyl-2-Pentanone	43	13.762	13.774	(1.156)	504885		50.0000	47.1075
47 Toluene-d8	98	14.038	14.050	(1.180)	2007619		50.0000	50.4284
48 Toluene	92	14.126	14.138	(1.187)	679875		50.0000	47.9878
49 trans-1,3-Dichloropropene	75	14.333	14.345	(1.204)	490404		50.0000	50.4603
50 1,1,2-Trichloroethane	85	14.599	14.611	(1.227)	170382		50.0000	48.7227
51 1,3-Dichloropropane	76	14.826	14.847	(0.933)	518566		50.0000	47.9067
52 2-Hexanone	43	14.845	14.857	(0.934)	326433		50.0000	49.1018
53 Tetrachloroethene	166	14.875	14.887	(0.936)	280525		50.0000	46.0766
54 Dibromochloromethane	129	15.151	15.162	(0.953)	345313		50.0000	49.1440
55 1,2-Dibromoethane	107	15.338	15.359	(1.289)	351983		50.0000	50.6295
* 56 Chlorobenzene-d5	117	15.890	15.911	(1.000)	1600186		50.0000	
57 Chlorobenzene	112	15.929	15.950	(1.002)	802052		50.0000	47.8797
58 1,1,1,2-Tetrachloroethane	131	15.998	16.009	(1.007)	273576		50.0000	48.1153
59 Ethylbenzene	91	16.018	16.039	(1.008)	1240154		50.0000	47.4630
60 m,p-Xylenes	106	16.146	16.166	(1.016)	931360		100.000	96.7756
61 o-Xylene	106	16.639	16.649	(1.047)	456317		50.0000	47.0161
62 Styrene	104	16.639	16.649	(1.047)	822843		50.0000	48.5650
63 Bromoform	173	16.905	16.915	(1.064)	280007		50.0000	47.1469
64 Isopropylbenzene	105	17.042	17.053	(0.917)	1099274		50.0000	46.8798
65 Cyclohexanone	55	17.180	17.190	(0.924)	316204		500.000	559.4566
66 Bromofluorobenzene	95	17.240	17.248	(0.927)	899040		50.0000	49.5669
67 1,1,2,2-Tetrachloroethane	83	17.338	17.347	(0.933)	428968		50.0000	47.7862
68 1,2,3-Trichloropropane	75	17.417	17.427	(0.937)	377377		50.0000	45.5857
69 Bromobenzene	156	17.466	17.476	(0.940)	354384		50.0000	47.9326
70 Propylbenzene	91	17.506	17.515	(0.942)	1424922		50.0000	47.2625
71 2-Chlorotoluene	91	17.653	17.663	(0.950)	969943		50.0000	46.7361
72 1,3,5-Trimethylbenzene	105	17.673	17.683	(0.951)	947979		50.0000	47.3611
73 4-Chlorotoluene	91	17.762	17.771	(0.955)	927562		50.0000	46.5593
74 tert-Butylbenzene	119	18.077	18.086	(0.972)	784580		50.0000	46.3791
75 1,2,4-Trimethylbenzene	105	18.126	18.136	(0.975)	987008		50.0000	48.6184
76 sec-Butylbenzene	105	18.323	18.342	(0.986)	1181316		50.0000	47.6475
77 para-Isopropyl Toluene	119	18.471	18.480	(0.994)	937368		50.0000	48.6263

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\JH810.D
 Report Date: 09-Aug-2006 14:04

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	
=====	=====	=====	=====	=====	=====	=====	=====	
78 1,3-Dichlorobenzene	146	18.530	18.539	(0.997)	635999	50.0000	47.5095	
* 79 1,4-Dichlorobenzene-d4	152	18.589	18.608	(1.000)	813511	50.0000		
80 1,4-Dichlorobenzene	146	18.619	18.638	(1.002)	653294	50.0000	46.8928	
81 n-Butylbenzene	91	18.964	18.972	(1.020)	871735	50.0000	50.3600	
82 1,2-Dichlorobenzene	146	19.102	19.110	(1.028)	626445	50.0000	48.5560	
83 1,2-Dibromo-3-Chloropropane	75	20.077	20.085	(1.080)	77013	50.0000	50.6545	
84 1,2,4-Trichlorobenzene	180	21.309	21.316	(1.146)	395778	50.0000	49.0386	
85 Hexachlorobutadiene	225	21.525	21.532	(1.158)	131949	50.0000	46.3852	
86 Naphthalene	128	21.752	21.768	(1.170)	941171	50.0000	49.6586	
87 1,2,3-Trichlorobenzene	180	22.166	22.172	(1.192)	381733	50.0000	49.9407	

Date: 08-AUG-2006 23:15

Client ID: DYNA P&T

Sample Info: ICAL, S3980, 0.01/100, S3942, 0.01/100

Purge Volume: 5.0

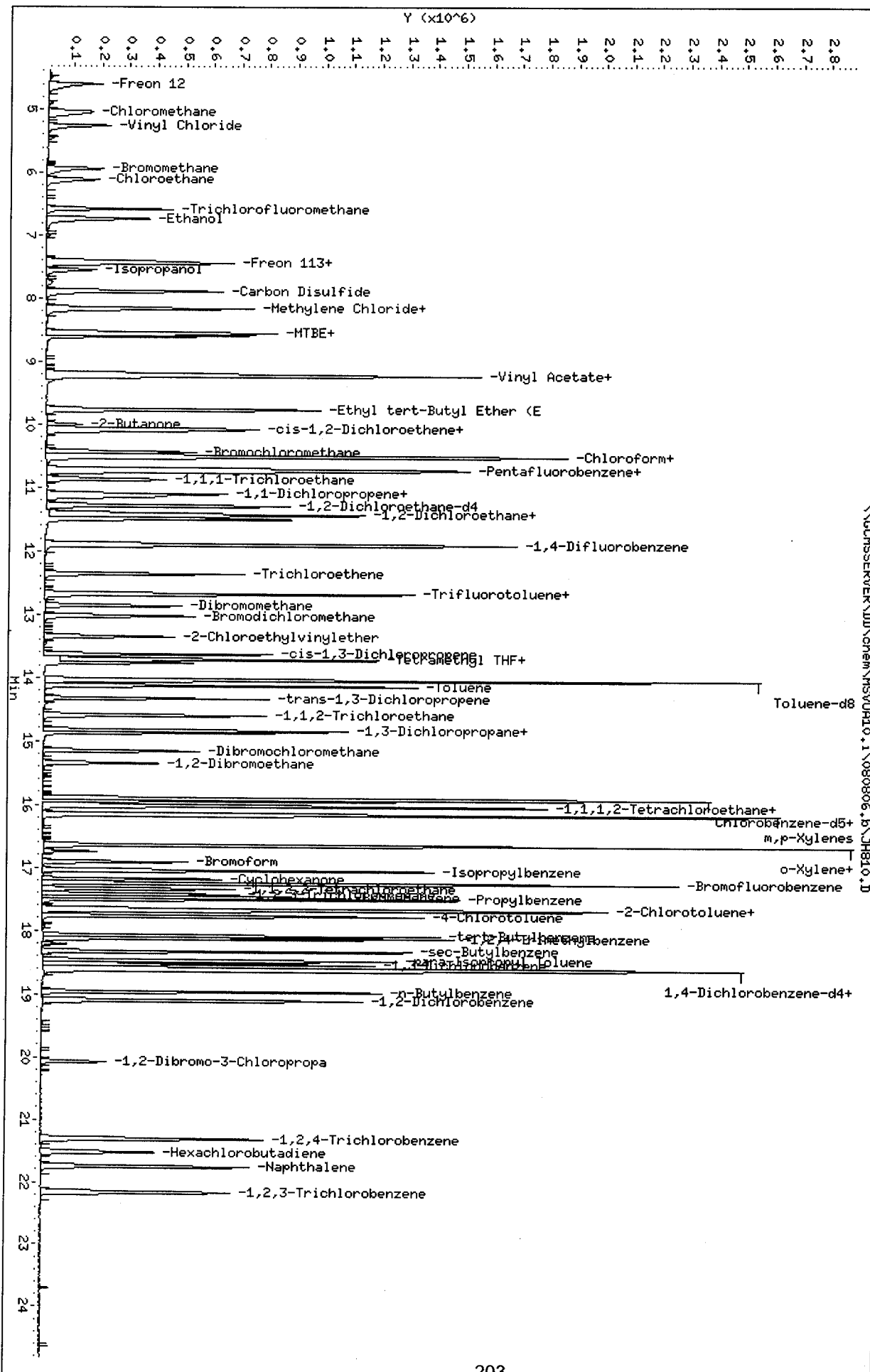
Column phase: RTX Volatiles

Instrument: MSV0A10.i

Operator: VOA

Column diameter: 0.32

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Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\JH811.D
Report Date: 09-Aug-2006 14:05

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\JH811.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 08-AUG-2006 23:48 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S3980,0.015/100,S3942,0.015/100
Misc Info : S3053,0.0075/100
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\826GOX10.m
Meth Date : 09-Aug-2006 14:05 msvoa10 Quant Type: ISTD
Cal Date : 08-AUG-2006 23:48 Cal File: JH811.D
Als bottle: 11 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	AMOUNTS						
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
							(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	
1 Freon 12	85	4.604	4.628	(0.430)	620632	75.0000	85.7625	
2 Chloromethane	50	5.037	5.091	(0.470)	693957	75.0000	74.6920	
3 Vinyl Chloride	62	5.264	5.278	(0.491)	584712	75.0000	76.3351	
4 Bromomethane	94	5.944	5.957	(0.555)	414197	75.0000	85.5244	
5 Chloroethane	64	6.121	6.134	(0.571)	436797	75.0000	76.7576	
6 Trichlorofluoromethane	101	6.584	6.597	(0.615)	757859	75.0000	80.7677	
7 Ethanol	45	6.732	6.754	(0.628)	933583	7500.00	7402.6570	
8 Freon 113	101	7.412	7.434	(0.692)	442794	75.0000	83.8254	
9 Acetone	43	7.432	7.453	(0.694)	242822	75.0000	75.2683	
10 1,1-Dichloroethene	96	7.451	7.463	(0.696)	425840	75.0000	79.7045	
11 Isopropanol	45	7.560	7.581	(0.706)	434356	750.000	727.3079	
12 Carbon Disulfide	76	7.895	7.906	(0.737)	1862607	75.0000	76.7798	
13 Methylene Chloride	84	8.161	8.172	(0.762)	569804	75.0000	74.7212	
14 tert-Butyl Alcohol (TBA)	59	8.170	8.192	(0.763)	558619	750.000	778.4671	
15 MTBE	73	8.545	8.566	(0.798)	1587801	75.0000	76.4007	
16 trans-1,2-Dichloroethene	96	8.594	8.615	(0.802)	486060	75.0000	76.2136	
18 Vinyl Acetate	43	9.185	9.206	(0.857)	1810637	75.0000	81.2391	
19 1,1-Dichloroethane	63	9.215	9.235	(0.860)	903323	75.0000	72.9168	
20 Isopropyl Ether (DIPE)	45	9.225	9.245	(0.861)	2249629	75.0000	72.8410	
21 Ethyl tert-Butyl Ether (ETBE)	59	9.767	9.787	(0.912)	1855963	75.0000	75.4710	
22 2-Butanone	43	10.003	10.023	(0.934)	368944	75.0000	74.4354	
23 cis-1,2-Dichloroethene	96	10.072	10.082	(0.940)	519063	75.0000	75.4683	

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	----	----	-----	-----	-----	-----	-----
24 2,2-Dichloropropane	77	10.101	10.121	(0.943)	572471	75.0000	76.1381
25 Bromochloromethane	128	10.436	10.446	(0.974)	304402	75.0000	80.1163
26 Chloroform	83	10.496	10.515	(0.980)	837137	75.0000	75.8933
27 Tetrahydrofuran	42	10.505	10.525	(0.981)	1996047	750.000	711.9470
* 28 Pentafluorobenzene	168	10.712	10.742	(1.000)	1248654	50.0000	
29 Dibromofluoromethane	113	10.742	10.761	(1.003)	712037	50.0000	50.7360
30 1,1,1-Trichloroethane	97	10.870	10.889	(1.015)	611640	75.0000	78.5420
31 1,1-Dichloropropene	75	11.106	11.126	(0.934)	613928	75.0000	74.9036
32 Carbon Tetrachloride	117	11.146	11.165	(0.937)	500930	75.0000	78.8922
33 1,2-Dichloroethane-d4	65	11.284	11.303	(0.949)	746081	50.0000	49.4056
34 1,2-Dichloroethane	62	11.402	11.421	(0.959)	707918	75.0000	75.6416
35 Benzene	78	11.432	11.460	(0.961)	1825485	75.0000	73.4129
36 Methyl tert-Amyl Ether (TAME)	73	11.491	11.510	(0.966)	1512511	75.0000	74.6989
* 37 1,4-Difluorobenzene	114	11.895	11.923	(1.000)	1891942	50.0000	
38 Trichloroethene	95	12.358	12.376	(1.039)	491054	75.0000	75.3860
39 Trifluorotoluene	146	12.663	12.691	(1.065)	686343	75.0000	77.0399
40 1,2-Dichloropropane	63	12.673	12.691	(1.065)	581793	75.0000	74.5224
41 Dibromomethane	93	12.850	12.868	(1.080)	377105	75.0000	78.3314
42 Bromodichloromethane	83	13.018	13.036	(1.094)	663435	75.0000	76.4674
43 2-Chloroethylvinylether	63	13.343	13.361	(1.122)	353236	75.0000	85.5293
44 cis-1,3-Dichloropropene	75	13.629	13.646	(1.146)	856533	75.0000	76.0453
45 Tetramethyl THF	43	13.707	13.725	(1.152)	1573036	75.0000	72.9724
46 4-Methyl-2-Pentanone	43	13.757	13.774	(1.157)	854058	75.0000	77.9777
47 Toluene-d8	98	14.033	14.050	(1.180)	2021567	50.0000	49.6897
48 Toluene	92	14.121	14.138	(1.187)	1062844	75.0000	73.4102
49 trans-1,3-Dichloropropene	75	14.328	14.345	(1.205)	777208	75.0000	78.2562
50 1,1,2-Trichloroethane	85	14.594	14.611	(1.227)	276125	75.0000	77.2678
51 1,3-Dichloropropane	76	14.831	14.847	(0.933)	830031	75.0000	77.7695
52 2-Hexanone	43	14.840	14.857	(0.934)	505575	75.0000	77.1279
53 Tetrachloroethene	166	14.870	14.887	(0.936)	461927	75.0000	76.9494
54 Dibromochloromethane	129	15.156	15.162	(0.954)	559592	75.0000	80.7704
55 1,2-Dibromoethane	107	15.343	15.359	(1.290)	556328	75.0000	78.3066
* 56 Chlorobenzene-d5	117	15.895	15.911	(1.000)	1577785	50.0000	
57 Chlorobenzene	112	15.934	15.950	(1.002)	1237329	75.0000	74.9129
58 1,1,1,2-Tetrachloroethane	131	15.993	16.009	(1.006)	437799	75.0000	78.0913
59 Ethylbenzene	91	16.023	16.039	(1.008)	1912884	75.0000	74.2491
60 m,p-Xylenes	106	16.151	16.166	(1.016)	1400189	150.000	147.5562
61 o-Xylene	106	16.634	16.649	(1.046)	684077	75.0000	71.4838
62 Styrene	104	16.634	16.649	(1.046)	1216541	75.0000	72.8208
63 Bromoform	173	16.909	16.915	(1.064)	449846	75.0000	76.8194
64 Isopropylbenzene	105	17.037	17.053	(0.916)	1714139	75.0000	75.3385
65 Cyclohexanone	55	17.175	17.190	(0.924)	572882	750.000	1044.6126
66 Bromofluorobenzene	95	17.244	17.248	(0.927)	874072	50.0000	49.6651
67 1,1,2,2-Tetrachloroethane	83	17.333	17.347	(0.932)	664921	75.0000	76.3377
68 1,2,3-Trichloropropane	75	17.422	17.427	(0.937)	587213	75.0000	73.1038
69 Bromobenzene	156	17.461	17.476	(0.939)	547832	75.0000	76.3653
70 Propylbenzene	91	17.501	17.515	(0.941)	2200277	75.0000	75.2132
71 2-Chlorotoluene	91	17.648	17.663	(0.949)	1453384	75.0000	72.1735
72 1,3,5-Trimethylbenzene	105	17.668	17.683	(0.950)	1443845	75.0000	74.3421
73 4-Chlorotoluene	91	17.767	17.771	(0.955)	1421523	75.0000	73.5374
74 tert-Butylbenzene	119	18.072	18.086	(0.972)	1269985	75.0000	77.3704
75 1,2,4-Trimethylbenzene	105	18.121	18.136	(0.975)	1504459	75.0000	76.3750
76 sec-Butylbenzene	105	18.328	18.342	(0.986)	1867688	75.0000	77.6372
77 para-Isopropyl Toluene	119	18.466	18.480	(0.993)	1470584	75.0000	78.6216

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\JH811.D
 Report Date: 09-Aug-2006 14:05

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL	
						(ug/L)	(ug/L)	
=====	=====	=====	=====	=====	=====	=====	=====	
78 1,3-Dichlorobenzene	146	18.525	18.539	(0.996)	967956	75.0000	74.5196	
* 79 1,4-Dichlorobenzene-d4	152	18.594	18.608	(1.000)	789355	50.0000		
80 1,4-Dichlorobenzene	146	18.624	18.638	(1.002)	992964	75.0000	73.4551	
81 n-Butylbenzene	91	18.959	18.972	(1.020)	1352253	75.0000	80.5102	
82 1,2-Dichlorobenzene	146	19.097	19.110	(1.027)	949918	75.0000	75.8818	
83 1,2-Dibromo-3-Chloropropane	75	20.072	20.085	(1.079)	115617	75.0000	78.3731	
84 1,2,4-Trichlorobenzene	180	21.304	21.316	(1.146)	623534	75.0000	79.6229	
85 Hexachlorobutadiene	225	21.520	21.532	(1.157)	212584	75.0000	77.0185	
86 Naphthalene	128	21.747	21.768	(1.170)	1479179	75.0000	80.4336	
87 1,2,3-Trichlorobenzene	180	22.161	22.172	(1.192)	599601	75.0000	80.8442	

Data File: \\GCHSERVER\JD\chem\MSV0010.i\080806.b\JH811.D

Date : 08-AUG-2006 23:48

Client ID: JYNA P&T

Sample Info: ICAL,S3980,0.015/100,S3942,0.015/100

Purge Volume: 5.0

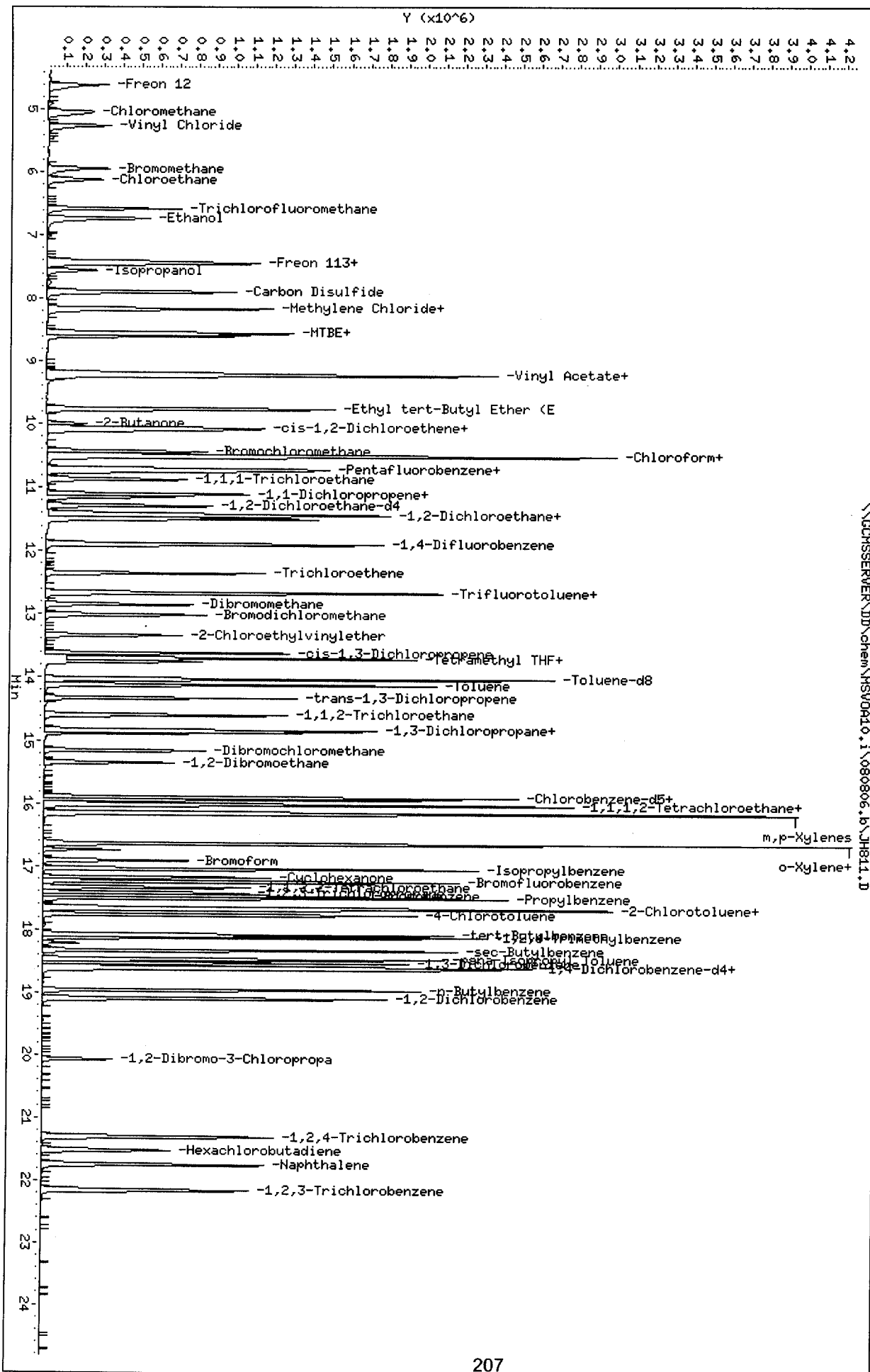
Column phase: RTX Volatiles

Instrument: MSV0010.i

Operator: VOA

Column diameter: 0.32

\\GCHSERVER\JD\chem\MSV0010.i\080806.b\JH811.D



Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\JH812.D
Report Date: 09-Aug-2006 14:06

Laboratory Name

Data file : \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\JH812.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-AUG-2006 00:21 MS Autotune Date: 10-JUL-2006 15:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S3980,0.02/100,S3942,0.02/100
Misc Info : S3053,0.01/100
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\826GOX10.m
Meth Date : 09-Aug-2006 14:06 msvoa10 Quant Type: ISTD
Cal Date : 09-AUG-2006 00:21 Cal File: JH812.D
Als bottle: 12 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA10

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.609	4.628	(0.430)	820432		100.000	112.4475
2 Chloromethane	50	5.042	5.091	(0.471)	922637		100.000	98.4954
3 Vinyl Chloride	62	5.259	5.278	(0.491)	735245		100.000	95.2046
4 Bromomethane	94	5.939	5.957	(0.554)	585260		100.000	119.8603
5 Chloroethane	64	6.116	6.134	(0.571)	586218		100.000	102.1749
6 Trichlorofluoromethane	101	6.579	6.597	(0.614)	1001266		100.000	105.8382
7 Ethanol	45	6.737	6.754	(0.629)	1212021		10000.0	9532.0975
8 Freon 113	101	7.407	7.434	(0.691)	616466		100.000	115.7516
9 Acetone	43	7.436	7.453	(0.694)	294141		100.000	87.9537
10 1,1-Dichloroethene	96	7.446	7.463	(0.695)	552658		100.000	102.5974
11 Isopropanol	45	7.555	7.581	(0.705)	569728		1000.00	946.2017
12 Carbon Disulfide	76	7.890	7.906	(0.736)	2469195		100.000	100.9542
13 Methylene Chloride	84	8.156	8.172	(0.761)	739098		100.000	96.1311
14 tert-Butyl Alcohol (TBA)	59	8.175	8.192	(0.763)	700577		1000.00	968.3315
15 MTBE	73	8.550	8.566	(0.798)	2007212		100.000	95.7939
16 trans-1,2-Dichloroethene	96	8.599	8.615	(0.802)	642044		100.000	99.8507
18 Vinyl Acetate	43	9.180	9.206	(0.857)	2091179		100.000	93.0611 (M)
19 1,1-Dichloroethane	63	9.210	9.235	(0.859)	1144304		100.000	91.6156
20 Isopropyl Ether (DIPE)	45	9.229	9.245	(0.861)	2819863		100.000	90.5601
21 Ethyl tert-Butyl Ether (ETBE)	59	9.761	9.787	(0.911)	2367715		100.000	95.4957
22 2-Butanone	43	9.998	10.023	(0.933)	456372		100.000	91.3233
23 cis-1,2-Dichloroethene	96	10.067	10.082	(0.939)	674381		100.000	97.2508

Compounds	QUANT SIG	AMOUNTS					
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
24 2,2-Dichloropropane	77	10.096	10.121	(0.942)	760904	100.000	100.3743
25 Bromochloromethane	128	10.441	10.446	(0.974)	387985	100.000	101.2820
26 Chloroform	83	10.500	10.515	(0.980)	1069787	100.000	96.1940
27 Tetrahydrofuran	42	10.510	10.525	(0.981)	2401714	1000.00	849.6535
* 28 Pentafluorobenzene	168	10.717	10.742	(1.000)	1258921	50.0000	
29 Dibromofluoromethane	113	10.747	10.761	(1.003)	704927	50.0000	49.8197
30 1,1,1-Trichloroethane	97	10.875	10.889	(1.015)	820109	100.000	104.4531
31 1,1-Dichloropropene	75	11.101	11.126	(0.933)	841012	100.000	102.5286
32 Carbon Tetrachloride	117	11.151	11.165	(0.937)	695033	100.000	109.3754
33 1,2-Dichloroethane-d4	65	11.289	11.303	(0.949)	744106	50.0000	49.2359
34 1,2-Dichloroethane	62	11.407	11.421	(0.959)	922288	100.000	98.4695
35 Benzene	78	11.436	11.460	(0.961)	2372282	100.000	95.3274
36 Methyl tert-Amyl Ether (TAME)	73	11.495	11.510	(0.966)	1958377	100.000	96.6427
* 37 1,4-Difluorobenzene	114	11.899	11.923	(1.000)	1893436	50.0000	
38 Trichloroethene	95	12.353	12.376	(1.038)	651562	100.000	99.9480
39 Trifluorotoluene	146	12.668	12.691	(1.065)	954969	100.000	107.1078
40 1,2-Dichloropropane	63	12.678	12.691	(1.065)	748831	100.000	95.8428
41 Dibromomethane	93	12.855	12.868	(1.080)	489446	100.000	101.5864
42 Bromodichloromethane	83	13.023	13.036	(1.094)	865791	100.000	99.7122
43 2-Chloroethylvinylether	63	13.348	13.361	(1.122)	447647	100.000	108.3037
44 cis-1,3-Dichloropropene	75	13.624	13.646	(1.145)	1099063	100.000	97.5007
45 Tetramethyl THF	43	13.712	13.725	(1.152)	2051521	100.000	95.0941
46 4-Methyl-2-Pentanone	43	13.761	13.774	(1.156)	1024485	100.000	93.4643
47 Toluene-d8	98	14.037	14.050	(1.180)	2000351	50.0000	49.1294
48 Toluene	92	14.126	14.138	(1.187)	1424309	100.000	98.2988
49 trans-1,3-Dichloropropene	75	14.333	14.345	(1.204)	998979	100.000	100.5067
50 1,1,2-Trichloroethane	85	14.599	14.611	(1.227)	349523	100.000	97.7296
51 1,3-Dichloropropane	76	14.835	14.847	(0.933)	1054150	100.000	97.4633
52 2-Hexanone	43	14.845	14.857	(0.934)	638537	100.000	96.1249
53 Tetrachloroethene	166	14.875	14.887	(0.936)	656314	100.000	107.8865
54 Dibromochloromethane	129	15.151	15.162	(0.953)	735141	100.000	104.7068
55 1,2-Dibromoethane	107	15.338	15.359	(1.289)	725591	100.000	102.0508
* 56 Chlorobenzene-d5	117	15.899	15.911	(1.000)	1598910	50.0000	
57 Chlorobenzene	112	15.929	15.950	(1.002)	1650620	100.000	98.6149
58 1,1,1,2-Tetrachloroethane	131	15.998	16.009	(1.006)	578175	100.000	101.7680
59 Ethylbenzene	91	16.018	16.039	(1.007)	2587478	100.000	99.1067
60 m,p-Xylenes	106	16.146	16.166	(1.015)	1878881	200.000	195.3862
61 o-Xylene	106	16.638	16.649	(1.046)	914572	100.000	94.3072
62 Styrene	104	16.638	16.649	(1.046)	1628085	100.000	96.1679
63 Bromoform	173	16.904	16.915	(1.063)	590794	100.000	99.5560
64 Isopropylbenzene	105	17.042	17.053	(0.917)	2409411	100.000	104.6121
65 Cyclohexanone	55	17.180	17.190	(0.924)	641427	1000.00	1155.4133
66 Bromofluorobenzene	95	17.239	17.248	(0.927)	897760	50.0000	50.3923
67 1,1,2,2-Tetrachloroethane	83	17.338	17.347	(0.933)	879819	100.000	99.7844
68 1,2,3-Trichloropropane	75	17.417	17.427	(0.937)	751582	100.000	92.4317
69 Bromobenzene	156	17.466	17.476	(0.940)	750831	100.000	103.3929
70 Propylbenzene	91	17.505	17.515	(0.942)	3089784	100.000	104.3386
71 2-Chlorotoluene	91	17.653	17.663	(0.950)	1970182	100.000	96.6505
72 1,3,5-Trimethylbenzene	105	17.673	17.683	(0.951)	1994259	100.000	101.4369
73 4-Chlorotoluene	91	17.761	17.771	(0.955)	1938872	100.000	99.0840
74 tert-Butylbenzene	119	18.077	18.086	(0.972)	1740959	100.000	104.7767
75 1,2,4-Trimethylbenzene	105	18.126	18.136	(0.975)	2054344	100.000	103.0254
76 sec-Butylbenzene	105	18.333	18.342	(0.986)	2684233	100.000	110.2264
77 para-Isopropyl Toluene	119	18.471	18.480	(0.994)	2072229	100.000	109.4435

Data File: \\GCMSSERVER\DD\chem\MSVOA10.i\080806.b\JH812.D
 Report Date: 09-Aug-2006 14:06

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
78 1,3-Dichlorobenzene	146	18.530	18.539	(0.997)	1316960		100.000	100.1585
* 79 1,4-Dichlorobenzene-d4	152	18.589	18.608	(1.000)	799047		50.0000	
80 1,4-Dichlorobenzene	146	18.619	18.638	(1.002)	1339162		100.000	97.8638
81 n-Butylbenzene	91	18.963	18.972	(1.020)	1943457		100.000	114.3057
82 1,2-Dichlorobenzene	146	19.101	19.110	(1.028)	1274262		100.000	100.5565
83 1,2-Dibromo-3-Chloropropane	75	20.077	20.085	(1.080)	148279		100.000	99.2944
84 1,2,4-Trichlorobenzene	180	21.308	21.316	(1.146)	836710		100.000	105.5487
85 Hexachlorobutadiene	225	21.525	21.532	(1.158)	318444		100.000	113.9719
86 Naphthalene	128	21.752	21.768	(1.170)	1947060		100.000	104.5915
87 1,2,3-Trichlorobenzene	180	22.165	22.172	(1.192)	799560		100.000	106.4971

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCHSERVER\JD\chem\MSV010.i\080806.b\JH812.D

Date : 09-AUG-2006 00:21

Client ID: DYNA P&T

Sample Info: ICAL.S3980.0.02/100.S3942.0.02/100

Purge Volume: 5.0

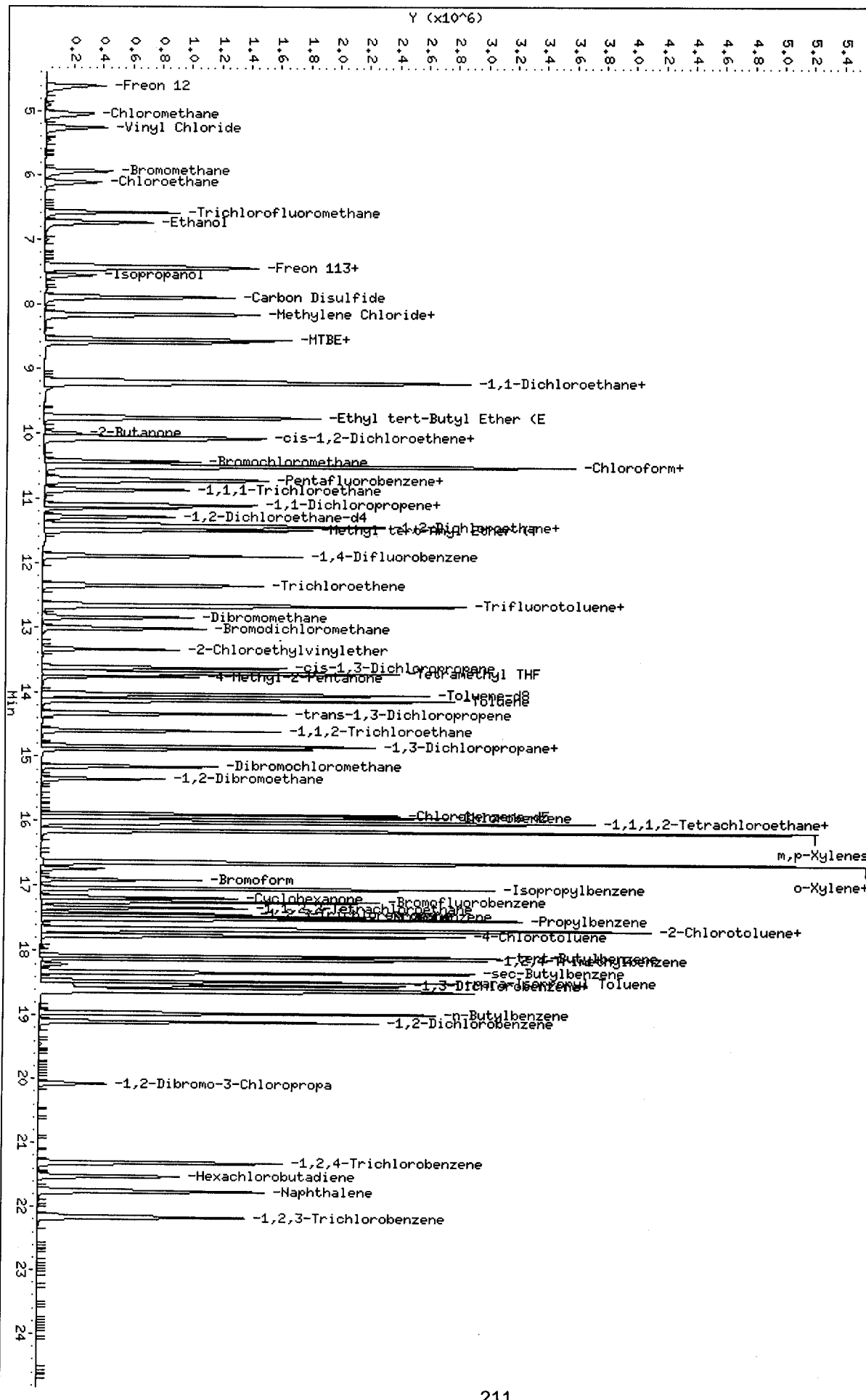
Column phase: RTX Volatiles

Instrument: MSV010.i

Operator: WOA

Column diameter: 0.32

\\GCHSERVER\JD\chem\MSV010.i\080806.b\JH812.D



CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188802 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name: 20PPB IDF : 1.0
 Seqnum : 486335982003 File : ihl03 Time : 21-AUG-2006 08:47
 Cal : 486258514006 Caldate : 28-JUN-2006 Caltype : WATER
 Standards: S3053 (50000X), S3980 (25000X), S3942 (25000X), S3967 (1000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	2.3350	1.9048	20.00	16.32	ug/L	-18	30	0.1000	
Vinyl Chloride	1.6963	1.5896	20.00	18.74	ug/L	-6	20	0.0500	
Bromomethane	1.0860	0.7973	20.00	14.68	ug/L	-27	30	0.0500	!c-
Chloroethane	0.9484	0.8399	20.00	17.71	ug/L	-11	30	0.0500	
Acetone	0.5283	0.4562	20.00	17.27	ug/L	-14	40	0.0500	
1,1-Dichloroethene	0.9301	0.8008	20.00	17.22	ug/L	-14	20	0.0500	
Methylene Chloride	1.6189	1.5222	20.00	18.80	ug/L	-6	30	0.0500	
Carbon Disulfide	4.4974	3.7734	20.00	16.78	ug/L	-16	30	0.0500	
MTBE	3.4544	3.0610	20.00	17.72	ug/L	-11	30	0.0500	
trans-1,2-Dichloroethene	1.1234	1.0579	20.00	18.83	ug/L	-6	30	0.0500	
Vinyl Acetate	3.0998	2.8289	20.00	18.25	ug/L	-9	40	0.0500	
1,1-Dichloroethane	2.3083	1.9958	20.00	17.29	ug/L	-14	30	0.1000	
2-Butanone	0.7300	0.5541	20.00	15.18	ug/L	-24	40	0.0500	
cis-1,2-Dichloroethene	1.2506	1.1870	20.00	18.98	ug/L	-5	30	0.0500	
Chloroform	2.0787	2.0002	20.00	19.24	ug/L	-4	20	0.0500	
1,1,1-Trichloroethane	1.3137	1.1555	20.00	17.59	ug/L	-12	30	0.0500	
Carbon Tetrachloride	0.6356	0.5803	20.00	18.26	ug/L	-9	30	0.0500	
1,2-Dichloroethane	0.9264	0.9117	20.00	19.68	ug/L	-2	30	0.0500	
Benzene	2.7348	2.6541	20.00	19.41	ug/L	-3	30	0.0500	
Trichloroethene	0.6591	0.6388	20.00	19.38	ug/L	-3	30	0.0500	
1,2-Dichloropropane	0.8507	0.7930	20.00	18.64	ug/L	-7	20	0.0500	
Bromodichloromethane	0.9091	0.9245	20.00	20.34	ug/L	2	30	0.0500	
4-Methyl-2-Pentanone	0.9139	0.7483	20.00	16.37	ug/L	-18	40	0.0500	
cis-1,3-Dichloropropene	1.1910	1.1891	20.00	19.97	ug/L	0	30	0.0500	
Toluene	1.5781	1.6053	20.00	20.34	ug/L	2	20	0.0500	
trans-1,3-Dichloropropene	1.0568	1.0899	20.00	20.63	ug/L	3	30	0.0500	
1,1,2-Trichloroethane	0.3775	0.3862	20.00	20.46	ug/L	2	30	0.0500	
2-Hexanone	0.7139	0.5368	20.00	15.04	ug/L	-25	40	0.0500	
Tetrachloroethene	0.6094	0.5936	20.00	19.48	ug/L	-3	30	0.0500	
Dibromochloromethane	0.8046	0.8234	20.00	20.47	ug/L	2	30	0.0500	
Chlorobenzene	2.0830	2.1211	20.00	20.37	ug/L	2	30	0.3000	
Ethylbenzene	3.1937	3.0302	20.00	18.98	ug/L	-5	20	0.0500	
m,p-Xylenes	1.2280	1.2258	40.00	39.93	ug/L	0	30	0.0500	
o-Xylene	1.2579	1.2679	20.00	20.16	ug/L	1	30	0.0500	
Styrene	2.2311	2.2721	20.00	20.37	ug/L	2	30	0.0500	
Bromoform	0.5741	0.6291	20.00	21.91	ug/L	10	30	0.1000	
1,1,2,2-Tetrachloroethane	2.0980	1.9051	20.00	18.16	ug/L	-9	30	0.3000	
Dibromofluoromethane	0.6030	0.5927	50.00	49.14	ug/L	-2	30	0.0500	
1,2-Dichloroethane-d4	0.3613	0.3432	50.00	47.49	ug/L	-5	30	0.0500	
Toluene-d8	1.1214	1.1555	50.00	51.52	ug/L	3	30	0.0500	
Bromofluorobenzene	1.1125	1.0327	50.00	46.41	ug/L	-7	30	0.0500	

ISTD (ICAL ifsl0)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	382240	431890	12.99	11.12	11.11	-0.01
1,4-Difluorobenzene	632714	687548	8.67	12.37	12.36	-0.01
Chlorobenzene-d5	553073	658869	19.13	16.94	16.94	0.00
1,4-Dichlorobenzene-d4	278489	359020	28.92	19.77	19.76	-0.01

BO: 08/21/06 AMK: 08/22/06 AM: 08/22/06

!=warning -=low bias c=CCV

Page 2 of 2

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188802 MSVOA Water
EPA 8260B

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Inst      : MSVOA10                      IDF      : 1.0
Seqnum    : 496335998003                 File     : jhl03      Time      : 21-AUG-2006 08:45
Cal       : 496317897003                 Caldate  : 08-AUG-2006  Caltype  : WATER
Standards: S3053 (50000X), S3980 (25000X), S3942 (25000X), S3894 (5000X)

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Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.3720	0.4429	20.00	23.81	ug/L	19	30	0.1000	
Vinyl Chloride	0.3067	0.3421	20.00	22.31	ug/L	12	20	0.0500	
Bromomethane	0.1939	0.2263	20.00	23.34	ug/L	17	30	0.0500	
Chloroethane	0.2279	0.2787	20.00	24.46	ug/L	22	30	0.0500	!c+
Acetone	0.1517	0.1580	20.00	22.06	ug/L	10	40	0.0500	
1,1-Dichloroethene	0.2139	0.2010	20.00	18.80	ug/L	-6	20	0.0500	
Methylene Chloride	0.3054	0.3480	20.00	22.80	ug/L	14	30	0.0500	
Carbon Disulfide	0.9714	0.9775	20.00	20.13	ug/L	1	30	0.0500	
MTBE	0.8322	0.9509	20.00	22.85	ug/L	14	30	0.0500	
trans-1,2-Dichloroethene	0.2554	0.2713	20.00	21.25	ug/L	6	30	0.0500	
Vinyl Acetate	0.8925	1.0369	20.00	23.24	ug/L	16	40	0.0500	m
1,1-Dichloroethane	0.4961	0.5797	20.00	23.37	ug/L	17	30	0.1000	
2-Butanone	0.1985	0.2258	20.00	22.75	ug/L	14	40	0.0500	
cis-1,2-Dichloroethene	0.2754	0.3155	20.00	22.91	ug/L	15	30	0.0500	
Chloroform	0.4417	0.5125	20.00	23.20	ug/L	16	20	0.0500	
1,1,1-Trichloroethane	0.3118	0.3003	20.00	19.26	ug/L	-4	30	0.0500	
Carbon Tetrachloride	0.1678	0.1421	20.00	16.93	ug/L	-15	30	0.0500	
1,2-Dichloroethane	0.2473	0.2750	20.00	22.23	ug/L	11	30	0.0500	
Benzene	0.6572	0.6931	20.00	21.09	ug/L	5	30	0.0500	.
Trichloroethene	0.1721	0.1724	20.00	20.03	ug/L	0	30	0.0500	
1,2-Dichloropropane	0.2063	0.2285	20.00	22.15	ug/L	11	20	0.0500	
Bromodichloromethane	0.2293	0.2475	20.00	21.59	ug/L	8	30	0.0500	
4-Methyl-2-Pentanone	0.2895	0.3038	20.00	20.99	ug/L	5	40	0.0500	
cis-1,3-Dichloropropene	0.2977	0.3311	20.00	22.25	ug/L	11	30	0.0500	
Toluene	0.3826	0.3976	20.00	20.78	ug/L	4	20	0.0500	
trans-1,3-Dichloropropene	0.2625	0.2948	20.00	22.46	ug/L	12	30	0.0500	
1,1,2-Trichloroethane	0.0944	0.1022	20.00	21.65	ug/L	8	30	0.0500	
2-Hexanone	0.2077	0.2300	20.00	22.14	ug/L	11	40	0.0500	
Tetrachloroethene	0.1902	0.1668	20.00	17.54	ug/L	-12	30	0.0500	
Dibromochloromethane	0.2196	0.2299	20.00	20.94	ug/L	5	30	0.0500	
Chlorobenzene	0.5234	0.5528	20.00	21.12	ug/L	6	30	0.3000	
Ethylbenzene	0.8164	0.8513	20.00	20.85	ug/L	4	20	0.0500	
m,p-Xylenes	0.3007	0.3157	40.00	42.00	ug/L	5	30	0.0500	
o-Xylene	0.3033	0.3253	20.00	21.45	ug/L	7	30	0.0500	
Styrene	0.5294	0.5782	20.00	21.84	ug/L	9	30	0.0500	
Bromoform	0.1856	0.1717	20.00	18.51	ug/L	-7	30	0.1000	
1,1,2,2-Tetrachloroethane	0.5517	0.5896	20.00	21.37	ug/L	7	30	0.3000	
Dibromofluoromethane	0.5620	0.5904	50.00	52.53	ug/L	5	30	0.0500	
1,2-Dichloroethane-d4	0.3991	0.4246	50.00	53.19	ug/L	6	30	0.0500	
Toluene-d8	1.0752	1.0977	50.00	51.05	ug/L	2	30	0.0500	
Bromofluorobenzene	1.1148	1.1776	50.00	52.82	ug/L	6	30	0.0500	

ISTD (ICAL jh810)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1256943	1726661	37.37	10.71	10.72	0.01
1,4-Difluorobenzene	1851368	2731663	47.55	11.90	11.90	0.00
Chlorobenzene-d5	1600186	2311718	44.47	15.89	15.89	0.00
1,4-Dichlorobenzene-d4	813511	1124063	38.17	18.59	18.59	0.00

BO: 08/21/06 AMK: 08/22/06 AM: 08/22/06

!=warning +=high bias c=CCV m=manual integration

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 486335982

Date : 08/21/06
Sequence : MSVOA09 ihl

ICAL Filename: ifs10
ICAL Analyzed: 06/28/06 17:38

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	382240	11.12	632714	12.37	553073	16.94	278489	19.77
		LOWER LIMIT	191120	10.62	316357	11.87	276537	16.44	139245	19.27
		UPPER LIMIT	764480	11.62	1265428	12.87	1106146	17.44	556978	20.27
003	CCV	20PPB	431890	11.11	687548	12.36	658869	16.94	359020	19.76
004	LCS	QC352611	452433	11.11	730678	12.35	688745	16.94	373325	19.76
006	BLANK	QC352612	460703	11.11	744389	12.36	706640	16.94	379821	19.76
007	SAMPLE	188847-023	455494	11.12	731774	12.36	699933	16.93	369277	19.76
008	SAMPLE	188847-022	435549	11.11	722319	12.35	688973	16.94	360047	19.76
009	SAMPLE	188829-013	430807	11.11	715900	12.35	681792	16.94	351955	19.76
010	MSS	188802-001	423784	11.12	706986	12.36	666590	16.93	371074	19.76
011	SAMPLE	188802-005	475449	11.11	739542	12.36	702270	16.94	387641	19.76
012	SAMPLE	188802-006	478808	11.11	748358	12.36	687051	16.94	384229	19.77
013	SAMPLE	188802-009	474009	11.11	750498	12.36	709149	16.94	382831	19.77
014	SAMPLE	188847-017	455493	11.11	725346	12.36	680970	16.94	367551	19.77
015	SAMPLE	188847-018	440379	11.11	711027	12.36	672313	16.94	363805	19.77
016	SAMPLE	188847-019	445014	11.12	727874	12.36	686861	16.94	367046	19.77
017	SAMPLE	188847-020	435136	11.12	722105	12.36	674330	16.94	360653	19.76
018	SAMPLE	188847-021	429862	11.12	712504	12.36	678520	16.93	359333	19.76
019	SAMPLE	188868-001	424774	11.12	718646	12.36	672419	16.94	352025	19.77
020	SAMPLE	188732-004	413288	11.12	698962	12.37	664749	16.94	341836	19.76
021	MS	QC352630	431304	11.12	719344	12.36	679485	16.94	364405	19.77
022	MSD	QC352631	478576	11.12	758584	12.36	710257	16.94	389514	19.77

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 496335998

Date : 08/21/06
Sequence : MSVOA10 jhl

ICAL Filename: jh810
ICAL Analyzed: 08/08/06 23:15

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1256943	10.71	1851368	11.90	1600186	15.89	813511	18.59
		LOWER LIMIT	628472	10.21	925684	11.40	800093	15.39	406756	18.09
		UPPER LIMIT	2513886	11.21	3702736	12.40	3200372	16.39	1627022	19.09
003	CCV		1726661	10.72	2731663	11.90	2311718	15.89	1124063	18.59
004	LCS	QC352613	1694442	10.72	2677656	11.90	2279166	15.89	1126671	18.59
006	BLANK	QC352614	1582027	10.71	2507146	11.90	2140084	15.90	1066777	18.59
007	SAMPLE	188802-019	1643738	10.71	2613438	11.90	2232612	15.90	1105221	18.60
008	SAMPLE	188802-012	1640524	10.72	2594898	11.90	2237094	15.89	1096575	18.59
009	MSS	188802-016	1559628	10.71	2482819	11.90	2125545	15.90	1046493	18.60
010	SAMPLE	188847-006	1585272	10.72	2496902	11.90	2132918	15.89	1036731	18.59
011	SAMPLE	188847-007	1621650	10.71	2558768	11.89	2178116	15.89	1062813	18.59
012	SAMPLE	188847-008	1542785	10.72	2444816	11.90	2118062	15.90	1022058	18.59
013	SAMPLE	188847-009	1600722	10.72	2558216	11.90	2186898	15.90	1062645	18.59
014	SAMPLE	188847-010	1537610	10.72	2464434	11.90	2100341	15.90	1010399	18.60
015	SAMPLE	188847-011	1536468	10.72	2441648	11.89	2075838	15.89	1022297	18.59
016	SAMPLE	188847-012	1544286	10.72	2479111	11.90	2129857	15.90	1037047	18.59
017	SAMPLE	188847-014	1581852	10.72	2533384	11.90	2176707	15.90	1064644	18.60
018	SAMPLE	188847-015	1524873	10.72	2486089	11.90	2123968	15.89	1048218	18.59
019	SAMPLE	188794-002	1492301	10.73	2424021	11.91	2106573	15.90	1021422	18.60
020	SAMPLE	188868-002	1476377	10.72	2401584	11.90	2074121	15.89	1005096	18.59
021	MS	QC352632	1486850	10.72	2408950	11.90	2053439	15.89	1014315	18.59
022	MSD	QC352633	1577689	10.72	2554680	11.90	2161179	15.89	1047292	18.59

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 486258514

Instrument : MSVOA09

Begun : 06/28/06 12:34

Method : EPA 8260B

SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	ifs01	TUN	BFB			06/28/06 12:34	1.0	1	
002	ifs02	X	IB			06/28/06 13:02	1.0	2	
003	ifs03	IB	CALIB			06/28/06 13:36	1.0	2	
004	ifs04	ICAL	0.25/0.5PPB			06/28/06 14:11	1.0	3 4 5 2	
005	ifs05	ICAL	0.5/1PPB			06/28/06 14:45	1.0	3 4 5 2	
006	ifs06	ICAL	2PPB			06/28/06 15:20	1.0	3 4 5 2	
007	ifs07	ICAL	5PPB			06/28/06 15:55	1.0	3 4 5 2	
008	ifs08	ICAL	10PPB			06/28/06 16:29	1.0	3 4 5 2	
009	ifs09	ICAL	20PPB			06/28/06 17:04	1.0	3 4 5 2	
010	ifs10	ICAL	50PPB			06/28/06 17:38	1.0	3 4 5 2	
011	ifs11	ICAL	75PPB			06/28/06 18:12	1.0	3 4 5 2	
012	ifs12	ICAL	100PPB			06/28/06 18:47	1.0	3 4 5 2	
013	ifs13	X				06/28/06 19:22	1.0	6 2	
014	ifs14	X				06/28/06 19:56	1.0	7 8 2	
015	ifs15	X	IB			06/28/06 20:31	1.0	2	
016	ifs16	X	IB			06/28/06 21:05	1.0	2	
017	ifs17	X	IB			06/28/06 21:40	1.0	2	

Analyst: ACMDate: 08/17/06Reviewer: SJDDate: 08/17/06

Standards used: 1=S3716 2=S3579 3=S3638 4=S3760 5=S2864 6=S3600 7=S3604 8=S3391

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 486259923

Instrument : MSVOA09
Method : EPA 8260B

Begun : 06/29/06 12:03
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	ift01	TUN	BFB			06/29/06 12:03	1.0	1	
002	ift02	CCV				06/29/06 12:20	1.0	2 3 4 5	
003	ift03	ICV/BS	QC345730	Water	114853	06/29/06 13:30	1.0	6 7 8 5	
004	ift04	BSD	QC345731	Water	114853	06/29/06 14:04	1.0	6 7 8 5	
005	ift05	X	IB			06/29/06 14:39	1.0	5	
006	ift06	BLANK	QC345732	Water	114853	06/29/06 15:13	1.0	5	
007	ift07	SAMPLE	187722-015	Water	114853	06/29/06 15:48	1.0	5	
008	ift08	SAMPLE	187722-016	Water	114853	06/29/06 16:22	1.0	5	
009	ift09	SAMPLE	187706-009	Water	114853	06/29/06 16:59	1.0	5	
010	ift10	SAMPLE	187734-014	Water	114853	06/29/06 17:33	1.0	5	
011	ift11	SAMPLE	187734-015	Water	114853	06/29/06 18:08	1.0	5	
012	ift12	SAMPLE	187737-001	Water	114853	06/29/06 18:43	1.0	5	
013	ift13	SAMPLE	187737-002	Water	114853	06/29/06 19:17	1.0	5	
014	ift14	SAMPLE	187737-003	Water	114853	06/29/06 19:52	1.0	5	
015	ift15	SAMPLE	187737-005	Water	114853	06/29/06 20:26	1.0	5	
016	ift16	SAMPLE	187737-010	Water	114853	06/29/06 21:01	1.0	5	
017	ift17	SAMPLE	187737-004	Water	114853	06/29/06 21:35	1.429	5	
018	ift18	SAMPLE	187737-006	Water	114853	06/29/06 22:10	3.333	5	
019	ift19	SAMPLE	187737-007	Water	114853	06/29/06 22:44	2.500	5	
020	ift20	SAMPLE	187737-009	Water	114853	06/29/06 23:19	1.429	5	
021	ift21	X	IB			06/29/06 23:54	1.0	5	
022	ift22	X	IB			06/30/06 00:28	1.0	5	
023	ift23	X	IB			06/30/06 01:03	1.0	5	

Analyst: ACM

Date: 08/17/06

Reviewer: SJD

Date: 08/17/06

Standards used: 1=S3716 2=S3760 3=S3638 4=S2864 5=S3579 6=S3391 7=S3600 8=S3604

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 486335982

Instrument : MSVOA09
Method : EPA 8260B

Begun : 08/21/06 07:42
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	ihl01	X	IB			08/21/06 07:42	1.0	1	
002	ihl02	TUN	BFB			08/21/06 08:29	1.0	2	
003	ihl03	CCV	20PPB			08/21/06 08:47	1.0	3 4 5 1	
004	ihl04	LCS	QC352611	Water	116581	08/21/06 09:35	1.0	6 7 8 1	
005	ihl05	X	IB			08/21/06 10:10	1.0	1	
006	ihl06	BLANK	QC352612	Water	116581	08/21/06 10:44	1.0	1	
007	ihl07	SAMPLE	188847-023	Water	116581	08/21/06 11:18	1.0	1	
008	ihl08	SAMPLE	188847-022	Water	116581	08/21/06 11:54	1.0	1	
009	ihl09	SAMPLE	188829-013	Water	116581	08/21/06 12:29	1.0	1	
010	ihl10	MSS	188802-001	Water	116581	08/21/06 13:05	1.0	1	
011	ihl11	SAMPLE	188802-005	Water	116581	08/21/06 13:40	1.0	1	
012	ihl12	SAMPLE	188802-006	Water	116581	08/21/06 14:15	1.0	1	
013	ihl13	SAMPLE	188802-009	Water	116581	08/21/06 14:49	1.0	1	
014	ihl14	SAMPLE	188847-017	Water	116581	08/21/06 15:24	1.0	1	
015	ihl15	SAMPLE	188847-018	Water	116581	08/21/06 15:58	1.0	1	
016	ihl16	SAMPLE	188847-019	Water	116581	08/21/06 16:33	1.0	1	
017	ihl17	SAMPLE	188847-020	Water	116581	08/21/06 17:07	1.0	1	
018	ihl18	SAMPLE	188847-021	Water	116581	08/21/06 17:41	1.0	1	
019	ihl19	SAMPLE	188868-001	Water	116581	08/21/06 18:17	8.333	1	pH > 2, headspace > 1 mL
020	ihl20	SAMPLE	188732-004	Water	116581	08/21/06 18:52	250.0	1	
021	ihl21	MS	QC352630	Water	116581	08/21/06 19:27	1.0	1 6 7 8	
022	ihl22	MSD	QC352631	Water	116581	08/21/06 20:01	1.0	1 6 7 8	
023	ihl23	X	IB			08/21/06 20:36	1.0	1	
024	ihl24	X	IB			08/21/06 21:11	1.0	1	
025	ihl25	X	IB			08/21/06 21:46	1.0	1	

Analyst: BO

Date: 08/22/06

Reviewer: AMK

Date: 08/22/06

Standards used: 1=S3967 2=S3716 3=S3053 4=S3980 5=S3942 6=S3979 7=S4023 8=S3978

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 496317897

Instrument : MSVOA10
Method : EPA 8260B

Begun : 08/08/06 18:17
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	jh801	X	IB			08/08/06 18:17	1.0	1	
002	jh802	TUN	BFB			08/08/06 18:51	1.0	2	
003	jh803	X	CALIB IB			08/08/06 19:23	1.0	1	
004	jh804	ICAL				08/08/06 19:56	1.0	3 4 5 1	
005	jh805	ICAL				08/08/06 20:29	1.0	3 4 5 1	
006	jh806	ICAL				08/08/06 21:03	1.0	3 4 5 1	
007	jh807	ICAL				08/08/06 21:36	1.0	3 4 5 1	
008	jh808	ICAL				08/08/06 22:09	1.0	3 4 5 1	
009	jh809	ICAL				08/08/06 22:42	1.0	3 4 5 1	
010	jh810	ICAL				08/08/06 23:15	1.0	3 4 5 1	
011	jh811	ICAL				08/08/06 23:48	1.0	3 4 5 1	
012	jh812	ICAL				08/09/06 00:21	1.0	3 4 5 1	
013	jh813	ICV				08/09/06 00:55	1.0	6 1	
014	jh814	ICV				08/09/06 01:28	1.0	7 8 1	
015	jh815	X	IB			08/09/06 02:00	1.0	1	
016	jh816	X	IB			08/09/06 02:34	1.0	1	
017	jh817	X	IB			08/09/06 03:06	1.0	1	

Analyst: ACMDate: 08/18/06Reviewer: AMKDate: 08/21/06

Standards used: 1=S3894 2=S3716 3=S3980 4=S3942 5=S3053 6=S3979 7=S3978 8=S3843

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 496335998

Instrument : MSVOA10
Method : EPA 8260B

Begun : 08/21/06 07:58
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	jhl01	X	IB			08/21/06 07:58	1.0	1	
002	jhl02	TUN	BFB			08/21/06 08:28	1.0	2	
003	jhl03	CCV				08/21/06 08:45	1.0	3 4 5 1	
004	jhl04	LCS	QC352613	Water	116582	08/21/06 09:35	1.0	6 7 8 1	
005	jhl05	X	IB			08/21/06 10:08	1.0	1	
006	jhl06	BLANK	QC352614	Water	116582	08/21/06 10:41	1.0	1	
007	jhl07	SAMPLE	188802-019	Water	116582	08/21/06 11:15	1.0	1	
008	jhl08	SAMPLE	188802-012	Water	116582	08/21/06 11:48	1.0	1	
009	jhl09	MSS	188802-016	Water	116582	08/21/06 12:21	1.0	1	
010	jhl10	SAMPLE	188847-006	Water	116582	08/21/06 12:54	1.0	1	pH > 2
011	jhl11	SAMPLE	188847-007	Water	116582	08/21/06 13:27	1.0	1	
012	jhl12	SAMPLE	188847-008	Water	116582	08/21/06 14:00	1.0	1	
013	jhl13	SAMPLE	188847-009	Water	116582	08/21/06 14:33	1.0	1	
014	jhl14	SAMPLE	188847-010	Water	116582	08/21/06 15:06	1.0	1	
015	jhl15	SAMPLE	188847-011	Water	116582	08/21/06 15:40	1.0	1	
016	jhl16	SAMPLE	188847-012	Water	116582	08/21/06 16:12	1.0	1	
017	jhl17	SAMPLE	188847-014	Water	116582	08/21/06 16:46	1.0	1	
018	jhl18	SAMPLE	188847-015	Water	116582	08/21/06 17:19	1.0	1	
019	jhl19	SAMPLE	188794-002	Water	116582	08/21/06 17:52	166.7	1	
020	jhl20	SAMPLE	188868-002	Water	116582	08/21/06 18:25	6.25	1	headspace > 1 mL
021	jhl21	MS	QC352632	Water	116582	08/21/06 18:59	1.0	6 1 8 7	
022	jhl22	MSD	QC352633	Water	116582	08/21/06 19:33	1.0	6 1 8 7	
023	jhl23	X	IB			08/21/06 20:06	1.0	1	
024	jhl24	X	IB			08/21/06 20:39	1.0	1	
025	jhl25	X	IB			08/21/06 21:12	1.0	1	

Analyst: BO Date: 08/22/06 Reviewer: AMK Date: 08/22/06

Standards used: 1=S3894 2=S3716 3=S3053 4=S3980 5=S3942 6=S4023 7=S3979 8=S3978

CURTIS & TOMPKINS, LTD.

PREPPED BY.

116581

WATER

SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
188802-1		CDEF	<2			9	IX MSS/MS/MPD	
-5		B						
-6								
-9								
188847-17		B					IX	
-18							IX	
-19							IX	
-20								
-21								
-22							ER	
-23		A					TR	
-24		B					IX Put OFF	
188829-12		B					IX Put OFF	
-13		A	<2				ER	
188732-4		C				9	Mn 250X	
188868-1		A	9	3ml			Acetone 8.3X	

PREPFORM.XLS

7/21/98

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 8/21/01

PREPPED BY.

116582

WATER

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	188802-12		B	<2			10	1x	
2	-16		BCDE	<2				1x, MS5/MS/MSD	
3	-19		A	↓				TB	
4	188847-6		B	2.5				1x	
5	-7			<2					
6	-8								
7	-9								
8	-10								
9	-11								
10	-12			↓					
11	-13			<2				6.25x Put off	
12	-14			↓				1x	
13	-15			↓					
14	-16			↓				on MS 5	
15	188794-2		D	<2			10	m 167x, OBEM?	
16	188868-2		A	<2	3mL		10	Acetax 6.25x	
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									
41									
42									

PREPFORM.XLS

7/21/98

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 09/24/06

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
Ethanol	ug/L	55	22	23	50	11	22	36	10
1,1-Dichloroethene	ug/L	0.27	0.22	0.062	0.17	0.10	0.17	0.089	0.11
Benzene	ug/L	0.11	0.041	0.060	0.061	0.12	0.10	0.027	0.084
Trichloroethene	ug/L	0.21	0.076	0.18	0.17	0.11	0.13	0.087	0.086
Toluene	ug/L	0.083	0.083	0.12	0.092	0.062	0.085	0.053	0.14
Chlorobenzene	ug/L	0.10	0.090	0.11	0.16	0.16	0.098	0.050	0.075
Freon 12	ug/L	0.18	0.099	0.22	0.062	0.15	0.47	0.18	0.20
Chloromethane	ug/L	0.12	0.16	0.12	0.18	0.13	0.34	0.089	0.20
Vinyl Chloride	ug/L	0.19	0.23	0.10	0.066	0.10	0.097	0.16	0.039
Bromomethane	ug/L	0.29	0.30	0.31	0.13	0.31	0.34	0.20	0.23
Chloroethane	ug/L	0.33	0.33	0.15	0.16	0.13	0.45	0.12	0.18
Trichlorofluoromethane	ug/L	0.16	0.057	0.17	0.10	0.080	0.46	0.10	0.19
Acetone	ug/L	0.39	0.87	0.21	0.85	0.16	0.20	0.49	0.15
Freon 113	ug/L	0.062	0.12	0.13	0.25	0.071	0.19	0.091	0.16
Methylene Chloride	ug/L	0.15	0.21	0.11	0.12	0.16	0.29	0.22	0.086
MTBE	ug/L	0.069	0.074	0.065	0.045	0.040	0.15	0.052	0.068
Carbon Disulfide	ug/L	0.039	0.031	0.086	0.076	0.11	0.14	0.037	0.066
trans-1,2-Dichloroethene	ug/L	0.37	0.13	0.18	0.051	0.064	0.15	0.093	0.094
Vinyl Acetate	ug/L	0.076	0.36	0.084	0.99	0.40	0.13	0.10	0.13
1,1-Dichloroethane	ug/L	0.088	0.061	0.048	0.090	0.11	0.14	0.063	0.10
2-Butanone	ug/L	0.16	0.17	0.20	0.50	0.099	0.23	0.26	0.081
cis-1,2-Dichloroethene	ug/L	0.26	0.18	0.083	0.12	0.042	0.12	0.11	0.16
2,2-Dichloropropane	ug/L	0.093	0.17	0.077	0.12	0.066	0.15	0.083	0.14
Chloroform	ug/L	0.082	0.055	0.086	0.060	0.11	0.16	0.044	0.084
Bromochloromethane	ug/L	0.091	0.090	0.10	0.18	0.11	0.18	0.15	0.11
1,1,1-Trichloroethane	ug/L	0.084	0.066	0.14	0.11	0.061	0.12	0.041	0.096
1,1-Dichloropropene	ug/L	0.12	0.11	0.081	0.16	0.16	0.11	0.055	0.084
Carbon Tetrachloride	ug/L	0.089	0.11	0.098	0.17	0.15	0.14	0.056	0.14
1,2-Dichloroethane	ug/L	0.090	0.088	0.099	0.096	0.12	0.18	0.056	0.094
1,2-Dichloropropane	ug/L	0.093	0.060	0.079	0.071	0.14	0.16	0.12	0.086
Bromodichloromethane	ug/L	0.086	0.039	0.067	0.074	0.10	0.14	0.069	0.094
Dibromomethane	ug/L	0.16	0.061	0.092	0.16	0.11	0.18	0.13	0.089
4-Methyl-2-Pentanone	ug/L	0.044	0.076	0.057	0.20	0.13	0.14	0.25	0.067
cis-1,3-Dichloropropene	ug/L	0.068	0.065	0.056	0.20	0.16	0.094	0.044	0.080
trans-1,3-Dichloropropene	ug/L	0.074	0.074	0.044	0.073	0.14	0.13	0.060	0.059
1,1,2-Trichloroethane	ug/L	0.12	0.12	0.14	0.19	0.15	0.21	0.058	0.12
2-Hexanone	ug/L	0.043	0.31	0.047	0.34	0.11	0.13	0.14	0.097
1,3-Dichloropropane	ug/L	0.064	0.067	0.061	0.063	0.10	0.14	0.068	0.049
Tetrachloroethene	ug/L	0.13	0.14	0.12	0.22	0.14	0.092	0.093	0.089
Dibromochloromethane	ug/L	0.099	0.054	0.10	0.085	0.056	0.15	0.063	0.094
1,2-Dibromoethane	ug/L	0.16	0.061	0.10	0.073	0.11	0.13	0.070	0.088
2-Chloroethylvinylether	ug/L	0.093	0.18	0.24	0.17	0.14	0.19	0.23	0.14
1,1,1,2-Tetrachloroethane	ug/L	0.11	0.087	0.10	0.11	0.14	0.10	0.088	0.16
Ethylbenzene	ug/L	0.059	0.076	0.075	0.17	0.041	0.11	0.11	0.069
m,p-Xylenes	ug/L	0.24	0.22	0.14	0.27	0.17	0.19	0.20	0.14

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 09/24/06

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
o-Xylene	ug/L	0.10	0.058	0.092	0.11	0.16	0.087	0.13	0.078
Styrene	ug/L	0.12	0.092	0.098	0.085	0.16	0.11	0.061	0.055
Bromoform	ug/L	0.12	0.088	0.11	0.18	0.094	0.12	0.15	0.10
Isopropylbenzene	ug/L	0.12	0.059	0.090	0.18	0.059	0.11	0.10	0.089
1,1,2,2-Tetrachloroethane	ug/L	0.13	0.096	0.086	0.047	0.13	0.20	0.055	0.11
1,2,3-Trichloropropane	ug/L	0.31	0.28	0.074	0.11	0.17	0.19	0.16	0.072
Propylbenzene	ug/L	0.075	0.10	0.063	0.21	0.023	0.12	0.11	0.088
Bromobenzene	ug/L	0.12	0.12	0.10	0.19	0.12	0.17	0.085	0.088
1,3,5-Trimethylbenzene	ug/L	0.060	0.095	0.047	0.14	0.057	0.13	0.13	0.069
2-Chlorotoluene	ug/L	0.12	0.11	0.068	0.15	0.025	0.10	0.12	0.080
4-Chlorotoluene	ug/L	0.079	0.069	0.043	0.14	0.037	0.14	0.069	0.078
tert-Butylbenzene	ug/L	0.11	0.15	0.075	0.19	0.038	0.13	0.079	0.082
1,2,4-Trimethylbenzene	ug/L	0.091	0.088	0.066	0.12	0.069	0.082	0.10	0.099
sec-Butylbenzene	ug/L	0.11	0.12	0.062	0.17	0.088	0.088	0.076	0.097
para-Isopropyl Toluene	ug/L	0.058	0.12	0.12	0.14	0.056	0.071	0.045	0.075
1,3-Dichlorobenzene	ug/L	0.080	0.16	0.097	0.18	0.060	0.13	0.10	0.094
1,4-Dichlorobenzene	ug/L	0.068	0.14	0.095	0.18	0.038	0.10	0.17	0.072
n-Butylbenzene	ug/L	0.12	0.15	0.11	0.18	0.21	0.11	0.12	0.073
1,2-Dichlorobenzene	ug/L	0.072	0.14	0.080	0.14	0.16	0.16	0.061	0.081
1,2-Dibromo-3-Chloropropane	ug/L	0.39	0.25	0.21	0.22	0.13	0.17	0.098	0.18
1,2,4-Trichlorobenzene	ug/L	0.12	0.17	0.14	0.16	0.10	0.12	0.17	0.061
Hexachlorobutadiene	ug/L	0.19	0.19	0.29	0.21	0.11	0.065	0.25	0.17
Naphthalene	ug/L	0.12	0.13	0.060	0.10	0.091	0.11	0.16	0.052
1,2,3-Trichlorobenzene	ug/L	0.063	0.17	0.10	0.20	0.095	0.10	0.29	0.15
tert-Butyl Alcohol (TBA)	ug/L	1.3	1.6	0.83	2.5	1.3	1.1	1.3	1.3
Isopropyl Ether (DIPE)	ug/L	0.068	0.070	0.063	0.027	0.030	0.14	0.027	0.089
Ethyl tert-Butyl Ether (ETBE)	ug/L	0.089	0.045	0.024	0.20	0.033	0.13	0.034	0.079
Methyl tert-Amyl Ether (TAME)	ug/L	0.094	0.13	0.055	0.054	0.048	0.10	0.057	0.17
Isopropanol	ug/L	4.6	2.7	1.6	6.6	1.5	1.4	1.1	1.3
Hexane	ug/L				0.33		0.15		
Cyclohexanone	ug/L	3.8	2.4	0.21	1.6	1.6	1.3		1.0
Tetrahydrofuran	ug/L	0.64	1.2	1.1	0.79	1.4	2.1	3.5	0.70
Tetramethyl THF	ug/L	0.067	0.061	0.062	0.20	0.10	0.13	0.078	0.079
Gasoline C6-C10	ug/L		15		4.8	15	8.5		
Gasoline C7-C12	ug/L		18		2.4	13	7.7		
Dibromofluoromethane	ug/L	3.1	2.9	1.8	2.4	1.5	1.1	3.2	1.1
1,2-Dichloroethane-d4	ug/L	3.0	3.9		2.4	1.2	1.7	3.0	1.0
Toluene-d8	ug/L	1.7	3.8		1.1	1.0	1.5	1.1	0.96
Bromofluorobenzene	ug/L	2.5	2.6		1.2	1.2	2.5	1.5	0.62
Trifluorotoluene	ug/L	0.12	0.43	0.065	0.21	0.13		0.14	

PESTICIDES



Organochlorine Pesticides

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	1349MW100	Batch#:	116604
Lab ID:	188802-001	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Prepared:	08/21/06
Diln Fac:	3.000	Analyzed:	08/24/06

Analyte	Result	RL
alpha-BHC	ND	0.1
beta-BHC	ND	0.1
gamma-BHC	2.4	0.1
delta-BHC	ND	0.1
Heptachlor	2.2 C	0.1
Aldrin	ND	0.1
Heptachlor epoxide	0.4 C	0.1
Endosulfan I	ND	0.1
Dieldrin	ND	0.3
4,4'-DDE	ND	0.3
Endrin	0.7 C	0.3
Endosulfan II	ND	0.3
Endosulfan sulfate	ND	0.3
4,4'-DDD	ND	0.3
4,4'-DDT	0.4	0.3
alpha-Chlordane	ND	0.1
gamma-Chlordane	ND	0.1
Methoxychlor	ND	1.4
Endrin ketone	ND	0.3
Toxaphene	ND	2.8

Surrogate	%REC	Limits
TCMX	61 *	65-135
Decachlorobiphenyl	63 *	65-135

* = Value outside of QC limits; see narrative

C = Presence confirmed, but RPD between columns exceeds 40%

ND = Not Detected

RL = Reporting Limit

Organochlorine Pesticides

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	LF6GW103	Batch#:	116604
Lab ID:	188802-008	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Prepared:	08/21/06
Diln Fac:	1.000	Analyzed:	08/24/06

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND #	0.05
delta-BHC	ND	0.05
Heptachlor	ND #	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND #	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND #	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND #	0.1
4,4'-DDD	ND #	0.1
4,4'-DDT	ND #	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND #	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	99	65-135
Decachlorobiphenyl	65	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements

ND= Not Detected

RL= Reporting Limit

Organochlorine Pesticides

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DUP0816061A	Batch#:	116604
Lab ID:	188802-010	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Prepared:	08/21/06
Diln Fac:	1.000	Analyzed:	08/24/06

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND #	0.05
delta-BHC	ND	0.05
Heptachlor	ND #	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND #	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND #	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND #	0.09
4,4'-DDD	ND #	0.09
4,4'-DDT	ND #	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND #	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.09
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	100	65-135
Decachlorobiphenyl	65	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements

ND= Not Detected

RL= Reporting Limit

Organochlorine Pesticides

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	1349MW100 RE	Batch#:	116818
Lab ID:	188802-021	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Prepared:	08/25/06

Analyte	Result	RL	Diln Fac	Analyzed
alpha-BHC	ND b	0.1	3.000	08/29/06
beta-BHC	ND b	0.1	3.000	08/29/06
gamma-BHC	1.6 b	0.2	5.000	08/30/06
delta-BHC	ND b	0.1	3.000	08/29/06
Heptachlor	0.3 C b	0.1	3.000	08/29/06
Aldrin	ND b	0.1	3.000	08/29/06
Heptachlor epoxide	0.2 C b	0.1	3.000	08/29/06
Endosulfan I	ND b	0.1	3.000	08/29/06
Dieldrin	ND b	0.3	3.000	08/29/06
4,4'-DDE	ND b	0.3	3.000	08/29/06
Endrin	0.6 C b	0.3	3.000	08/29/06
Endosulfan II	ND b	0.3	3.000	08/29/06
Endosulfan sulfate	ND b	0.3	3.000	08/29/06
4,4'-DDD	ND b	0.3	3.000	08/29/06
4,4'-DDT	ND # b	0.3	3.000	08/29/06
alpha-Chlordane	0.3 b	0.1	3.000	08/29/06
gamma-Chlordane	0.3 b	0.1	3.000	08/29/06
Methoxychlor	ND # b	1.4	3.000	08/29/06
Endrin ketone	ND b	0.3	3.000	08/29/06
Toxaphene	ND b	2.9	3.000	08/29/06

Surrogate	%REC	Limits	Diln Fac	Analyzed
TCMX	19 * b	65-135	3.000	08/29/06
Decachlorobiphenyl	28 * b	65-135	3.000	08/29/06

#= CCV drift outside limits; average CCV drift within limits per method requirements

*= Value outside of QC limits; see narrative

C= Presence confirmed, but RPD between columns exceeds 40%

b= See narrative

ND= Not Detected

RL= Reporting Limit

Batch QC Report
Organochlorine Pesticides

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC352721	Batch#:	116604
Matrix:	Water	Prepared:	08/21/06
Units:	ug/L	Analyzed:	08/23/06

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND #	0.05
delta-BHC	ND	0.05
Heptachlor	ND #	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND #	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND #	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND #	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND #	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	84	65-135
Decachlorobiphenyl	83	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Organochlorine Pesticides

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC353598	Batch#:	116818
Matrix:	Water	Prepared:	08/25/06
Units:	ug/L	Analyzed:	08/28/06

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	*REC	Limits
TCMX	71	65-135
Decachlorobiphenyl	43 *	65-135

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC352722	Batch#:	116604
Matrix:	Water	Prepared:	08/21/06
Units:	ug/L	Analyzed:	08/23/06

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	0.2000	0.1872 #	94	65-135
Heptachlor	0.2000	0.1698 #	85	65-135
Aldrin	0.2000	0.1738	87	65-135
Dieldrin	0.4000	0.3904	98	65-135
Endrin	0.4000	0.3791 #	95	65-135
4,4'-DDT	0.4000	0.3170 #	79	65-135

Surrogate	%REC	Limits
TCMX	83	65-135
Decachlorobiphenyl	82	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements

Batch QC Report

Organochlorine Pesticides			
Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Matrix:	Water	Batch#:	116818
Units:	ug/L	Prepared:	08/25/06
Diln Fac:	1.000	Analyzed:	08/28/06

Type: BS Lab ID: QC353599

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	0.2000	0.1690	84	65-135
Heptachlor	0.2000	0.1565	78	65-135
Aldrin	0.2000	0.1568	78	65-135
Dieldrin	0.4000	0.3153	79	65-135
Endrin	0.4000	0.2967	74	65-135
4,4'-DDT	0.4000	0.3279	82	65-135

Surrogate	%REC	Limits
TCMX	76	65-135
Decachlorobiphenyl	56 *	65-135

Type: BSD Lab ID: QC353600

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.2000	0.1790	90	65-135	6	35
Heptachlor	0.2000	0.1701	85	65-135	8	35
Aldrin	0.2000	0.1686	84	65-135	7	35
Dieldrin	0.4000	0.3553	89	65-135	12	35
Endrin	0.4000	0.3412	85	65-135	14	35
4,4'-DDT	0.4000	0.3837	96	65-135	16	35

Surrogate	%REC	Limits
TCMX	82	65-135
Decachlorobiphenyl	50 *	65-135

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Batch QC Report

Organochlorine Pesticides			
Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	1349MW100	Batch#:	116604
MSS Lab ID:	188802-001	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Prepared:	08/21/06
Diln Fac:	3.000	Analyzed:	08/24/06

Type: MS Lab ID: QC352723

Analyte	MSS Result	Spiked	Result	%REC	Limits
gamma-BHC	2.398	0.1887	2.224	-93 NM	65-135
Heptachlor	2.236	0.1887	0.9742	-669 NM	65-135
Aldrin	<0.01743	0.1887	0.2427	129	65-135
Dieldrin	<0.01171	0.3774	0.8591	228 *	65-135
Endrin	0.7497	0.3774	0.5316	-58 *	65-135
4,4'-DDT	0.4441	0.3774	0.5653	32 *	65-135

Surrogate	%REC	Limits
TCMX	88	65-135
Decachlorobiphenyl	58 *	65-135

Type: MSD Lab ID: QC352724

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.1887	2.175	-118 NM	65-135	2	35
Heptachlor	0.1887	0.6838	-823 NM	65-135	35	35
Aldrin	0.1887	0.1890	100	65-135	25	35
Dieldrin	0.3774	0.7054	187 *	65-135	20	35
Endrin	0.3774	0.5249	-60 *	65-135	1	35
4,4'-DDT	0.3774	0.6285	49 *	65-135	11	35

Surrogate	%REC	Limits
TCMX	99	65-135
Decachlorobiphenyl	79	65-135

*= Value outside of QC limits; see narrative

NM= Not Meaningful: Sample concentration > 4X spike concentration

RPD= Relative Percent Difference

Confirmation Report for 188802 PEST Water
Curtis & Tompkins Laboratories

Units: ug/L

Lab ID	Client ID	Analyte	Result	Confirmation	RPD	%D
188802-001	1349MW100	gamma-BHC	2.398	1.907	23	-20
188802-001	1349MW100	Heptachlor	2.236 C	0.7062	104	-68
188802-001	1349MW100	Heptachlor epoxide	0.3981 C	0.2654	40	-33
188802-001	1349MW100	Endrin	0.7497 C	0.3191	81	-57
188802-001	1349MW100	4,4'-DDT	0.4441	0.4327	3	-3
188802-021	1349MW100	RE gamma-BHC	1.649	1.318	22	-20
188802-021	1349MW100	RE Heptachlor	0.3419 C	0.5440	46	59
188802-021	1349MW100	RE Heptachlor epoxide	0.1726 C	0.3877	77	125
188802-021	1349MW100	RE Endrin	0.6392 C	0.3788	51	-41
188802-021	1349MW100	RE alpha-Chlordane	0.2718	0.3712	31	37
188802-021	1349MW100	RE gamma-Chlordane	0.3240	0.2712	18	-16

C=RPD between columns exceeds 40%

Page 1 of 1

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188802 PEST Water: EPA 8081A

Inst : GC23
Calnum : 806336455001
Units : pg

Name : gc23pest 233
Date : 21-AUG-2006 20:12
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	233_017	806336455017	PEST_1	21-AUG-2006 20:12	S2827
L2	233_018	806336455018	PEST_2	21-AUG-2006 20:29	S3833
L3	233_019	806336455019	PEST_3	21-AUG-2006 20:47	S3698
L4	233_020	806336455020	PEST_4	21-AUG-2006 21:04	S3699
L5	233_021	806336455021	PEST_5	21-AUG-2006 21:21	S3834
L6	233_022	806336455022	PEST_6	21-AUG-2006 21:39	S4042
L7	233_023	806336455023	PEST_7	21-AUG-2006 21:56	S4043

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	MNR ²	MXRSD	Fig
alpha-BHC	A	15077	15147	14852	14984	15751	15577	15354	AVRG		6.56E-5		15249	2	0.995	20	
gamma-BHC	A	15247	13559	12980	12947	13824	13432	13685	AVRG		7.32E-5		13668	6	0.995	20	
beta-BHC	A	6121.5	5625.6	5222.6	4973.1	5238.0	4670.4	5277.3	AVRG		1.89E-4		5304.1	9	0.995	20	
delta-BHC	A	13455	14050	13107	13034	14055	13345	13623	AVRG		7.39E-5		13524	3	0.995	20	
Heptachlor	A	10256	11727	11059	10679	11636	11021	12033	AVRG		8.92E-5		11210	6	0.995	20	
Aldrin	A	11823	11800	11174	10988	11673	11195	12070	AVRG		8.67E-5		11532	4	0.995	20	
Heptachlor epoxide	A	10924	10997	10315	9793.7	10514	9701.9	10742	AVRG		9.59E-5		10427	5	0.995	20	
gamma-Chlordane	A	10519	10892	10097	9585.7	10239	9618.1	10886	AVRG		9.74E-5		10271	5	0.995	20	
alpha-Chlordane	A	9772.0	10456	9538.0	9081.1	9715.8	9085.6	10609	AVRG		1.03E-4		9751.0	6	0.995	20	
4,4'-DDE	A	9263.3	9937.1	9443.4	9519.6	10744	9971.1	8841.8	AVRG		1.03E-4		9674.3	6	0.995	20	
Endosulfan I	A	9241.5	9640.8	9137.9	8648.8	9349.3	8551.8	9764.5	AVRG		1.09E-4		9190.7	5	0.995	20	
Dieldrin	A	9570.0	10307	9930.9	10022	11164	10333	9046.3	AVRG		9.95E-5		10053	7	0.995	20	
Endrin	A	6767.3	7782.6	7393.3	7076.9	7973.4	7238.6	7444.9	AVRG		1.35E-4		7382.4	6	0.995	20	
4,4'-DDD	A	8408.0	8768.4	8276.0	8206.9	9053.9	8493.1	8287.8	AVRG		1.18E-4		8499.2	4	0.995	20	
Endosulfan II	A	7678.0	8723.2	8263.8	8129.0	9088.1	8495.1	8342.4	AVRG		1.19E-4		8388.5	5	0.995	20	
4,4'-DDT	A	4073.3	5945.7	5980.4	5759.3	6875.7	6632.8	7346.3	AVRG		1.64E-4		6087.6	17	0.995	20	
Methoxychlor	A	2056.3	2905.6	2949.9	3034.1	3630.2	2850.8		AVRG		3.44E-4		2904.5	17	0.995	20	
Endosulfan sulfate	A	6946.3	7302.0	6820.5	6521.7	7202.7	6589.1	7098.2	AVRG		1.44E-4		6925.8	4	0.995	20	
Endrin ketone	A	7975.5	8503.9	8006.9	8056.2	9318.9	8598.2	7933.6	AVRG		1.20E-4		8341.9	6	0.995	20	
TCMX	A	9509.5	9717.2	9364.3	9445.0	10312	9878.0	8953.6	AVRG		1.04E-4		9597.1	4	0.995	20	
Decachlorobiphenyl	A	5020.3	5681.5	4958.3	4418.7	5249.8	4214.7	4976.7	AVRG		2.03E-4		4931.4	10	0.995	20	
alpha-BHC	B	9023.0	7977.4	7856.0	7654.7	7381.5	8056.1	10258	AVRG		1.20E-4		8315.2	12	0.995	20	
gamma-BHC	B	7869.5	7066.2	6835.4	6627.7	6396.3	6966.4	8932.7	AVRG		1.38E-4		7242.0	12	0.995	20	
beta-BHC	B	3432.5	2980.4	2793.2	2708.7	2582.2	2634.5	3064.0	AVRG		3.47E-4		2885.1	10	0.995	20	
delta-BHC	B	8735.5	7257.0	6813.4	6555.4	6425.2	6940.8	8983.5	AVRG		1.35E-4		7387.3	14	0.995	20	
Heptachlor	B	6854.5	6166.8	5944.1	5667.9	5506.0	5956.6	7726.9	AVRG		1.60E-4		6260.4	12	0.995	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	MUR ²	MXRSD	Flg
Aldrin	B	7288.5	6231.6	5952.8	5684.7	5526.8	5847.3	7455.8	AVRG		1.59E-4		6283.9	12	0.995	20	
Heptachlor epoxide	B	6533.5	5558.6	5462.2	5137.4	5020.7	5216.0	6421.1	AVRG		1.78E-4		5621.4	11	0.995	20	
gamma-Chlordane	B	6399.0	5513.6	5253.6	4993.3	4938.1	5164.9	6584.5	AVRG		1.80E-4		5549.6	12	0.995	20	
alpha-Chlordane	B	6301.5	5289.8	5053.1	4777.3	4711.9	4921.8	6232.2	AVRG		1.88E-4		5326.8	13	0.995	20	
4,4'-DDE	B	5937.0	5105.0	4863.1	4713.3	4740.1	5384.7	6759.4	AVRG		1.87E-4		5357.5	14	0.995	20	
Endosulfan I	B	5845.5	5044.0	4810.2	4531.9	4459.6	4623.9	5697.8	AVRG		2.00E-4		5001.8	11	0.995	20	
Dieldrin	B	6085.5	5324.5	5110.0	4922.1	4910.0	5505.6	6730.3	AVRG		1.81E-4		5512.6	12	0.995	20	
Endrin	B	4104.5	3782.3	3748.2	3312.7	3341.8	3683.3	4759.3	AVRG		2.62E-4		3818.9	13	0.995	20	
4,4'-DDD	B	5459.8	4477.7	4228.6	4106.1	4089.7	4393.1	5730.9	AVRG		2.15E-4		4640.8	14	0.995	20	
Endosulfan II	B	5218.3	4434.1	4242.6	4051.6	4001.3	4338.0	5593.6	AVRG		2.20E-4		4554.2	13	0.995	20	
4,4'-DDT	B	3150.0	3201.1	3205.3	3013.3	3074.0	3592.8		AVRG		3.12E-4		3206.1	6	0.995	20	
Methoxychlor	B	1321.8	1360.0	1316.6	1327.5	1391.9	1647.3	1700.8	AVRG		6.95E-4		1438.0	11	0.995	20	
Endosulfan sulfate	B	4250.8	3626.9	3410.6	3293.8	3261.0	3444.3	4498.2	AVRG		2.71E-4		3683.6	13	0.995	20	
Endrin ketone	B	4809.3	4108.3	3853.6	3919.2	3882.0	4205.4	5377.3	AVRG		2.32E-4		4307.9	13	0.995	20	
TCMX	B	6084.0	5326.8	5088.4	4928.8	4844.2	5293.1	6480.0	AVRG		1.84E-4		5435.1	11	0.995	20	
Decachlorobiphenyl	B	3204.0	2622.1	2297.8	2286.9	2382.8	2225.6	2951.6	AVRG		3.90E-4		2567.2	15	0.995	20	
Average EPA 8081A	A												(n=22)	7		20	
Average EPA 8081A	B												(n=22)	13		20	

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188802 PEST Water
EPA 8081A

Inst : GC23
Calnum : 806336455001

Name : gc23pest_233
Cal Date: 21-AUG-2006

ICV 806336455025 (233_025 21-AUG-2006) stds: S3877

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	15249	14259	25.00	23.38	pg	-6	15	
gamma-BHC	A	13668	12418	25.00	22.71	pg	-9	15	
beta-BHC	A	5304.1	4654.0	25.00	21.94	pg	-12	15	
delta-BHC	A	13524	12927	25.00	23.90	pg	-4	15	
Heptachlor	A	11210	10234	25.00	22.82	pg	-9	15	
Aldrin	A	11532	10353	25.00	22.45	pg	-10	15	
Heptachlor epoxide	A	10427	9170.9	25.00	21.99	pg	-12	15	
gamma-Chlordane	A	10271	8897.4	25.00	21.66	pg	-13	15	
alpha-Chlordane	A	9751.0	8564.0	25.00	21.96	pg	-12	15	
4,4'-DDE	A	9674.3	8711.6	25.00	22.51	pg	-10	15	
Endosulfan I	A	9190.7	8330.9	25.00	22.66	pg	-9	15	
Dieldrin	A	10053	8854.7	25.00	22.02	pg	-12	15	
Endrin	A	7382.4	6327.8	25.00	21.43	pg	-14	15	
4,4'-DDD	A	8499.2	7557.9	25.00	22.23	pg	-11	15	
Endosulfan II	A	8388.5	7452.0	25.00	22.21	pg	-11	15	
4,4'-DDT	A	6087.6	4958.6	25.00	20.36	pg	-19	15	v- ***
Methoxychlor	A	2904.5	2436.6	25.00	20.97	pg	-16	15	v- ***
Endosulfan sulfate	A	6925.8	5998.4	25.00	21.65	pg	-13	15	
Endrin ketone	A	8341.9	7397.5	25.00	22.17	pg	-11	15	
alpha-BHC	B	8315.2	7937.2	25.00	23.86	pg	-5	15	
gamma-BHC	B	7242.0	6924.0	25.00	23.90	pg	-4	15	
beta-BHC	B	2885.1	2777.4	25.00	24.07	pg	-4	15	
delta-BHC	B	7387.3	7272.6	25.00	24.61	pg	-2	15	
Heptachlor	B	6260.4	6125.9	25.00	24.46	pg	-2	15	
Aldrin	B	6283.9	5999.4	25.00	23.87	pg	-5	15	
Heptachlor epoxide	B	5621.4	5308.0	25.00	23.61	pg	-6	15	
gamma-Chlordane	B	5549.6	5154.8	25.00	23.22	pg	-7	15	
alpha-Chlordane	B	5326.8	4987.1	25.00	23.41	pg	-6	15	
4,4'-DDE	B	5357.5	5001.0	25.00	23.34	pg	-7	15	
Endosulfan I	B	5001.8	4794.9	25.00	23.97	pg	-4	15	
Dieldrin	B	5512.6	5093.9	25.00	23.10	pg	-8	15	
Endrin	B	3818.9	3705.2	25.00	24.26	pg	-3	15	
4,4'-DDD	B	4640.8	4279.2	25.00	23.05	pg	-8	15	
Endosulfan II	B	4554.2	4238.8	25.00	23.27	pg	-7	15	
4,4'-DDT	B	3206.1	3080.1	25.00	24.02	pg	-4	15	
Methoxychlor	B	1438.0	1393.4	25.00	24.23	pg	-3	15	
Endosulfan sulfate	B	3683.6	3419.0	25.00	23.20	pg	-7	15	
Endrin ketone	B	4307.9	4070.8	25.00	23.62	pg	-6	15	
Average EPA 8081A	A	n=20					11	15	
Average EPA 8081A	B	n=20					5	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188802 PEST Water: EPA 8081A

Inst : GC23
 Calnum : 806346113001
 Units : pg

Name : gc23pest240
 Date : 28-AUG-2006 12:27
 X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	stds
L1	240_008	806346113008	PEST1	28-AUG-2006 12:27	S2827
L2	240_009	806346113009	PEST2	28-AUG-2006 12:45	S3833
L3	240_010	806346113010	PEST_3	28-AUG-2006 13:02	S4177
L4	240_011	806346113011	PEST_4	28-AUG-2006 13:20	S3699
L5	240_012	806346113012	PEST_5	28-AUG-2006 13:37	S3834
L6	240_013	806346113013	PEST_6	28-AUG-2006 13:54	S4042
L7	240_014	806346113014	PEST_7	28-AUG-2006 14:12	S4043

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	%RSD	MnR ²	MxRSD	Fig
alpha-BHC	A	18764	16616	18218	19551	19100	22202		AVRG		5.24E-5		19075	10	0.995		20	
gamma-BHC	A	16832	14599	16028	17210	16699	19510		AVRG		5.95E-5		16813	10	0.995		20	
beta-BHC	A	7176.5	5968.2	6396.4	6398.4	6044.3	6443.2	7144.1	AVRG		1.54E-4		6510.1	7	0.995		20	
delta-BHC	A	17959	14756	16659	17665	17058	19935		AVRG		5.77E-5		17339	10	0.995		20	
Heptachlor	A	15202	12718	14079	14857	14410	16879		AVRG		6.81E-5		14691	9	0.995		20	
Aldrin	A	15158	12348	13570	14166	13798	15993		AVRG		7.06E-5		14172	9	0.995		20	
Heptachlor epoxide	A	13199	11306	12355	12789	12314	14004		AVRG		7.90E-5		12661	7	0.995		20	
gamma-Chlordane	A	13267	11046	12224	12336	12057	13948		AVRG		8.01E-5		12480	8	0.995		20	
alpha-Chlordane	A	12047	10469	11248	11760	11325	13093		AVRG		8.58E-5		11657	8	0.995		20	
4,4'-DDE	A	12294	10172	11657	12938	13133	14848		AVRG		8.00E-5		12507	13	0.995		20	
Endosulfan I	A	11714	9893.2	11094	11041	10824	12482		AVRG		8.95E-5		11175	8	0.995		20	
Dieldrin	A	12764	10575	12231	13665	13783	15367		AVRG		7.65E-5		13064	12	0.995		20	
Endrin	A	10437	8345.6	9611.6	10509	10517	12513		AVRG		9.69E-5		10322	13	0.995		20	
4,4'-DDD	A	10211	8314.3	9554.9	10306	10462	12575		AVRG		9.77E-5		10237	14	0.995		20	
Endosulfan II	A	10409	8675.0	9654.4	11013	10946	13247		AVRG		9.38E-5		10657	14	0.995		20	
4,4'-DDT	A	7364.5	6549.6	7693.3	8904.2	9036.5			AVRG		1.26E-4		7909.6	13	0.995		20	
Methoxychlor	A	3530.9	3098.7	3931.1	4842.8	4857.6			AVRG		2.47E-4		4052.2	19	0.995		20	
Endosulfan sulfate	A	9216.3	7332.1	8225.9	8504.7	8605.3	10235		AVRG		1.15E-4		8686.6	11	0.995		20	
Endrin ketone	A	10233	8269.4	9642.1	10818	11241	12882		AVRG		9.51E-5		10514	15	0.995		20	
TCMX	A	11625	10760	11666	12388	12449	13860		AVRG		8.25E-5		12125	9	0.995		20	
Decachlorobiphenyl	A	6798.0	5569.7	6053.8	5747.7	5847.2	6171.9	6576.7	AVRG		1.64E-4		6109.3	7	0.995		20	
alpha-BHC	B	12215	11189	11287	10800	10392	12128	12883	AVRG		8.65E-5		11556	8	0.995		20	
gamma-BHC	B	10902	9804.4	9918.8	9463.7	9079.0	10547	11263	AVRG		9.86E-5		10140	8	0.995		20	
beta-BHC	B	4767.5	4109.0	4139.7	3831.7	3632.2	3833.1	3929.4	AVRG		2.48E-4		4034.7	9	0.995		20	
delta-BHC	B	11729	10123	10247	9625.9	9282.2	10806	11480	AVRG		9.55E-5		10467	9	0.995		20	
Heptachlor	B	9957.0	9111.0	9183.5	8586.8	8308.9	9459.6	10081	AVRG		1.08E-4		9241.1	7	0.995		20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	\$RSD	MNR ²	MKRSD	Flg
Aldrin	B	9591.0	8649.4	8792.3	8121.3	7828.1	8846.6	9475.1	AVRG		1.14E-4		8757.7	7	0.995		20	
Heptachlor epoxide	B	8519.5	7781.0	7872.4	7262.4	6993.8	7746.2	8186.5	AVRG		1.29E-4		7766.0	7	0.995		20	
gamma-Chlordane	B	8691.5	7774.0	7905.7	7275.5	6949.6	7855.4	8441.2	AVRG		1.28E-4		7841.9	8	0.995		20	
alpha-Chlordane	B	8146.0	7397.6	7458.5	6887.4	6568.5	7342.6	7919.4	AVRG		1.35E-4		7388.6	7	0.995		20	
4,4'-DDE	B	7950.8	7226.8	7449.6	7027.3	6866.1	8392.4	8076.7	AVRG		1.32E-4		7569.9	8	0.995		20	
Endosulfan I	B	8003.0	7125.0	7141.0	6540.8	6238.1	6885.2	7252.1	AVRG		1.42E-4		7026.4	8	0.995		20	
Dieldrin	B	8289.5	7491.1	7661.4	7343.0	7087.7	8468.4	8189.2	AVRG		1.28E-4		7790.0	7	0.995		20	
Endrin	B	7192.8	6168.8	6340.1	5887.3	5689.2	6795.4	6775.6	AVRG		1.56E-4		6407.0	8	0.995		20	
4,4'-DDD	B	6879.3	5959.0	6163.5	5697.3	5488.7	6654.7	6891.5	AVRG		1.60E-4		6247.7	9	0.995		20	
Endosulfan II	B	6007.5	5802.5	5861.6	5631.3	5360.3	6114.1	6587.1	AVRG		1.69E-4		5909.2	7	0.995		20	
4,4'-DDT	B	6086.5	5643.7	5796.8	5450.8	5286.5	6558.1	6770.0	AVRG		1.68E-4		5941.8	9	0.995		20	
Methoxychlor	B	2659.0	2460.4	2603.1	2667.3	2607.1			AVRG		3.85E-4		2599.4	3	0.995		20	
Endosulfan sulfate	B	5789.8	5158.2	5258.8	4827.1	4635.5	5385.8	5675.6	AVRG		1.91E-4		5247.3	8	0.995		20	
Endrin ketone	B	7218.3	5715.8	5924.9	5544.4	5213.3	6232.7	6264.1	AVRG		1.66E-4		6016.2	11	0.995		20	
TCMX	B	7547.8	7277.5	7237.9	6808.0	6708.5	7775.1	7969.4	AVRG		1.36E-4		7332.0	6	0.995		20	
Decachlorobiphenyl	B	4126.8	3773.8	3912.7	3440.4	3357.8	3645.9	3751.5	AVRG		2.69E-4		3715.6	7	0.995		20	
Average EPA 8081A	A													(n=22)	11		20	
Average EPA 8081A	B													(n=22)	8		20	

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188802 PEST Water
EPA 8081A

Inst : GC23
Calnum : 806346113001

Name : gc23pest240
Cal Date: 28-AUG-2006

ICV 806346113016 (240_016 28-AUG-2006) stds: S3877

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	19075	16975	25.00	22.25	pg	-11	15	
gamma-BHC	A	16813	14896	25.00	22.15	pg	-11	15	
beta-BHC	A	6510.1	5503.2	25.00	21.13	pg	-15	15	
delta-BHC	A	17339	16103	25.00	23.22	pg	-7	15	
Heptachlor	A	14691	12799	25.00	21.78	pg	-13	15	
Aldrin	A	14172	12373	25.00	21.83	pg	-13	15	
Heptachlor epoxide	A	12661	10889	25.00	21.50	pg	-14	15	
gamma-Chlordane	A	12480	10549	25.00	21.13	pg	-15	15	
alpha-Chlordane	A	11657	10276	25.00	22.04	pg	-12	15	
4,4'-DDE	A	12507	10409	25.00	20.81	pg	-17	15	v- ***
Endosulfan I	A	11175	9788.6	25.00	21.90	pg	-12	15	
Dieldrin	A	13064	10505	25.00	20.10	pg	-20	15	v- ***
Endrin	A	10322	8682.6	25.00	21.03	pg	-16	15	v- ***
4,4'-DDD	A	10237	8742.7	25.00	21.35	pg	-15	15	
Endosulfan II	A	10657	8929.9	25.00	20.95	pg	-16	15	v- ***
4,4'-DDT	A	7909.6	7243.1	25.00	22.89	pg	-8	15	
Methoxychlor	A	4052.2	3327.2	25.00	20.53	pg	-18	15	v- ***
Endosulfan sulfate	A	8686.6	7398.1	25.00	21.29	pg	-15	15	
Endrin ketone	A	10514	8938.2	25.00	21.25	pg	-15	15	
alpha-BHC	B	11556	10074	25.00	21.79	pg	-13	15	
gamma-BHC	B	10140	8900.1	25.00	21.94	pg	-12	15	
beta-BHC	B	4034.7	3539.3	25.00	21.93	pg	-12	15	
delta-BHC	B	10467	9321.1	25.00	22.26	pg	-11	15	
Heptachlor	B	9241.1	8164.0	25.00	22.09	pg	-12	15	
Aldrin	B	8757.7	7667.6	25.00	21.89	pg	-12	15	
Heptachlor epoxide	B	7766.0	6802.8	25.00	21.90	pg	-12	15	
gamma-Chlordane	B	7841.9	6712.2	25.00	21.40	pg	-14	15	
alpha-Chlordane	B	7388.6	6473.8	25.00	21.90	pg	-12	15	
4,4'-DDE	B	7569.9	6644.1	25.00	21.94	pg	-12	15	
Endosulfan I	B	7026.4	6282.0	25.00	22.35	pg	-11	15	
Dieldrin	B	7790.0	6755.8	25.00	21.68	pg	-13	15	
Endrin	B	6407.0	5533.6	25.00	21.59	pg	-14	15	
4,4'-DDD	B	6247.7	5399.9	25.00	21.61	pg	-14	15	
Endosulfan II	B	5909.2	5109.6	25.00	21.62	pg	-14	15	
4,4'-DDT	B	5941.8	5094.6	25.00	21.44	pg	-14	15	
Methoxychlor	B	2599.4	2395.7	25.00	23.04	pg	-8	15	
Endosulfan sulfate	B	5247.3	4634.8	25.00	22.08	pg	-12	15	
Endrin ketone	B	6016.2	5263.8	25.00	21.87	pg	-13	15	
Average EPA 8081A	A	n=20					14	15	
Average EPA 8081A	B	n=20					12	15	

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188802 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 806338937005 File : 235_005 Time : 23-AUG-2006 10:07

Standards: S3952

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	533686	13	15	
4,4'-DDE	A	4404			
4,4'-DDD	A	75451			
Endrin	A	293191	16	15	
Endrin aldehyde	A	21901			
Endrin ketone	A	31920			
4,4'-DDT	B	376314	11	15	
4,4'-DDE	B	3354			
4,4'-DDD	B	41497			
Endrin	B	209739	14	15	
Endrin aldehyde	B	14294			
Endrin ketone	B	21127			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188802 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 806338937017 File : 235_017 Time : 23-AUG-2006 15:27

Standards: S3952

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	670357	12	15	
4,4'-DDE	A	4743			
4,4'-DDD	A	89655			
Endrin	A	377332	12	15	
Endrin aldehyde	A	13875			
Endrin ketone	A	35925			
4,4'-DDT	B	358956	12	15	
4,4'-DDE	B	3006			
4,4'-DDD	B	46678			
Endrin	B	210271	11	15	
Endrin aldehyde	B	8127			
Endrin ketone	B	19188			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188802 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 806338937030 File : 235_030 Time : 24-AUG-2006 09:58

Standards: S3952

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	730765	12	15	
4,4'-DDE	A	5129			
4,4'-DDD	A	94844			
Endrin	A	415541	10	15	
Endrin aldehyde	A	10076			
Endrin ketone	A	35653			
4,4'-DDT	B	383904	12	15	
4,4'-DDE	B	3200			
4,4'-DDD	B	49535			
Endrin	B	225068	11	15	
Endrin aldehyde	B	7368			
Endrin ketone	B	20100			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188802 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 806338937037 File : 235_037 Time : 24-AUG-2006 12:39

Standards: S3952

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	588148	17	15	
4,4'-DDE	A	4708			
4,4'-DDD	A	117429			
Endrin	A	385554	12	15	
Endrin aldehyde	A	9657			
Endrin ketone	A	41673			
4,4'-DDT	B	428674	13	15	
4,4'-DDE	B	3685			
4,4'-DDD	B	60309			
Endrin	B	256623	10	15	
Endrin aldehyde	B	5639			
Endrin ketone	B	24209			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188802 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 806338937045 File : 235_045 Time : 24-AUG-2006 18:27

Standards: S3952

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	696457	16	15	
4,4'-DDE	A	3476			
4,4'-DDD	A	130047			
Endrin	A	454332	11	15	
Endrin aldehyde	A	9976			
Endrin ketone	A	46025			
4,4'-DDT	B	354562	14	15	
4,4'-DDE	B	2548			
4,4'-DDD	B	57422			
Endrin	B	220960	11	15	
Endrin aldehyde	B	6471			
Endrin ketone	B	20786			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188802 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 806346113019 File : 240_019 Time : 28-AUG-2006 15:39

Standards: S3952

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	1025227	5	15	
4,4'-DDE	A	4372			
4,4'-DDD	A	45128			
Endrin	A	488268	9	15	
Endrin aldehyde	A	17472			
Endrin ketone	A	30321			
4,4'-DDT	B	604538	3	15	
4,4'-DDE	B	2343			
4,4'-DDD	B	17163			
Endrin	B	283024	9	15	
Endrin aldehyde	B	15313			
Endrin ketone	B	13547			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188802 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 806346113033 File : 240_033 Time : 28-AUG-2006 22:18

Standards: S3952

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	892754	8	15	
4,4'-DDE	A	5545			
4,4'-DDD	A	69758			
Endrin	A	463613	10	15	
Endrin aldehyde	A	18043			
Endrin ketone	A	31113			
4,4'-DDT	B	556975	5	15	
4,4'-DDE	B	2647			
4,4'-DDD	B	25721			
Endrin	B	286131	6	15	
Endrin aldehyde	B	9072			
Endrin ketone	B	10814			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188802 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 806346113048 File : 240_048 Time : 29-AUG-2006 02:39

Standards: S3952

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	697117	15	15	
4,4'-DDE	A	5704			
4,4'-DDD	A	117654			
Endrin	A	462678	7	15	
Endrin aldehyde	A	12942			
Endrin ketone	A	22624			
4,4'-DDT	B	449655	13	15	
4,4'-DDE	B	2690			
4,4'-DDD	B	65481			
Endrin	B	282750	5	15	
Endrin aldehyde	B	5804			
Endrin ketone	B	10327			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188802 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 806346113055 File : 240_055 Time : 29-AUG-2006 12:23

Standards: S4175

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	735880	12	15	
4,4'-DDE	A	4466			
4,4'-DDD	A	99157			
Endrin	A	468626	6	15	
Endrin aldehyde	A	7049			
Endrin ketone	A	22662			
4,4'-DDT	B	459201	9	15	
4,4'-DDE	B	2293			
4,4'-DDD	B	42505			
Endrin	B	265242	5	15	
Endrin aldehyde	B	3991			
Endrin ketone	B	11281			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188802 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 806346113088 File : 240_088 Time : 30-AUG-2006 03:01

Standards: S4175

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	478387	31	15	
4,4'-DDE	A	6828			
4,4'-DDD	A	210419			
Endrin	A	434387	11	15	
Endrin aldehyde	A	15038			
Endrin ketone	A	40539			
4,4'-DDT	B	371514	20	15	
4,4'-DDE	B	2086			
4,4'-DDD	B	88142			
Endrin	B	261503	8	15	
Endrin aldehyde	B	8240			
Endrin ketone	B	14727			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188802 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 806346113101 File : 240_101 Time : 30-AUG-2006 06:48

Standards: S4175

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	450927	33	15	
4,4'-DDE	A	4386			
4,4'-DDD	A	222093			
Endrin	A	431049	12	15	
Endrin aldehyde	A	19029			
Endrin ketone	A	40016			
4,4'-DDT	B	381295	20	15	
4,4'-DDE	B	2300			
4,4'-DDD	B	93327			
Endrin	B	272134	9	15	
Endrin aldehyde	B	8172			
Endrin ketone	B	17404			

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188802 PEST Water
EPA 8081A

Inst : GC23
Seqnum : 806338937006
Cal : 806336455001
Standards: S3698

Run Name: PEST_3
File : 235_006
Caldate : 21-AUG-2006

IDF : 1.0
Time : 23-AUG-2006 10:28

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	15249	15324	10.00	10.05	pg	0	15	
gamma-BHC	A	13668	13396	10.00	9.801	pg	-2	15	
beta-BHC	A	5304.1	5754.8	10.00	10.85	pg	8	15	
delta-BHC	A	13524	13576	10.00	10.04	pg	0	15	
Heptachlor	A	11210	11273	10.00	10.06	pg	1	15	
Aldrin	A	11532	11434	10.00	9.915	pg	-1	15	
Heptachlor epoxide	A	10427	10571	10.00	10.14	pg	1	15	
gamma-Chlordane	A	10271	10103	10.00	9.837	pg	-2	15	
alpha-Chlordane	A	9751.0	9775.5	10.00	10.03	pg	0	15	
4,4'-DDE	A	9674.3	9709.3	20.00	20.07	pg	0	15	
Endosulfan I	A	9190.7	9122.5	10.00	9.926	pg	-1	15	
Dieldrin	A	10053	10049	20.00	19.99	pg	0	15	
Endrin	A	7382.4	7644.8	20.00	20.71	pg	4	15	
4,4'-DDD	A	8499.2	8416.5	20.00	19.81	pg	-1	15	
Endosulfan II	A	8388.5	8636.3	20.00	20.59	pg	3	15	
4,4'-DDT	A	6087.6	6277.4	20.00	20.62	pg	3	15	
Methoxychlor	A	2904.5	3089.6	100.0	106.4	pg	6	15	
Endosulfan sulfate	A	6925.8	6965.9	20.00	20.12	pg	1	15	
Endrin ketone	A	8341.9	8296.8	20.00	19.89	pg	-1	15	
TCMX	A	9597.1	9440.0	20.00	19.67	pg	-2	15	
Decachlorobiphenyl	A	4931.4	4932.4	20.00	20.00	pg	0	15	
alpha-BHC	B	8315.2	9237.6	10.00	11.11	pg	11	15	
gamma-BHC	B	7242.0	8122.2	10.00	11.22	pg	12	15	
beta-BHC	B	2885.1	3348.3	10.00	11.61	pg	16	15	c+ ***
delta-BHC	B	7387.3	8074.3	10.00	10.93	pg	9	15	
Heptachlor	B	6260.4	7191.4	10.00	11.49	pg	15	15	
Aldrin	B	6283.9	7038.4	10.00	11.20	pg	12	15	
Heptachlor epoxide	B	5621.4	6352.9	10.00	11.30	pg	13	15	
gamma-Chlordane	B	5549.6	6273.2	10.00	11.30	pg	13	15	
alpha-Chlordane	B	5326.8	6046.5	10.00	11.35	pg	14	15	
4,4'-DDE	B	5357.5	5847.7	20.00	21.83	pg	9	15	
Endosulfan I	B	5001.8	5716.6	10.00	11.43	pg	14	15	
Dieldrin	B	5512.6	6109.6	20.00	22.17	pg	11	15	
Endrin	B	3818.9	4675.8	20.00	24.49	pg	22	15	c+ ***
4,4'-DDD	B	4640.8	4960.0	20.00	21.38	pg	7	15	
Endosulfan II	B	4554.2	5075.4	20.00	22.29	pg	11	15	
4,4'-DDT	B	3206.1	4093.2	20.00	25.53	pg	28	15	c+ ***
Methoxychlor	B	1438.0	1735.1	100.0	120.7	pg	21	15	c+ ***
Endosulfan sulfate	B	3683.6	4163.2	20.00	22.60	pg	13	15	
Endrin ketone	B	4307.9	4706.0	20.00	21.85	pg	9	15	
TCMX	B	5435.1	5889.2	20.00	21.67	pg	8	15	
Decachlorobiphenyl	B	2567.2	2747.0	20.00	21.40	pg	7	15	
Average EPA 8081A	A	(n=22)					2	15	
Average EPA 8081A	B	(n=22)					13	15	

+ = high bias c = CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188802 PEST Water
EPA 8081A

Inst : GC23
 Segnum : 806338937018
 Cal : 806336455001
 Standards: S3699

Run Name: PEST_4
 File : 235_018
 Caldate : 21-AUG-2006

IDF : 1.0
 Time : 23-AUG-2006 15:44

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	15249	13285	20.00	17.42	pg	-13	15	
gamma-BHC	A	13668	11484	20.00	16.80	pg	-16	15	c- ***
beta-BHC	A	5304.1	4507.8	20.00	17.00	pg	-15	15	
delta-BHC	A	13524	11543	20.00	17.07	pg	-15	15	
Heptachlor	A	11210	9367.2	20.00	16.71	pg	-16	15	c- ***
Aldrin	A	11532	9905.3	20.00	17.18	pg	-14	15	
Heptachlor epoxide	A	10427	8833.8	20.00	16.94	pg	-15	15	
gamma-Chlordane	A	10271	8668.4	20.00	16.88	pg	-16	15	c- ***
alpha-Chlordane	A	9751.0	8382.3	20.00	17.19	pg	-14	15	
4,4'-DDE	A	9674.3	8456.6	40.00	34.97	pg	-13	15	
Endosulfan I	A	9190.7	7756.1	20.00	16.88	pg	-16	15	c- ***
Dieldrin	A	10053	8897.1	40.00	35.40	pg	-11	15	
Endrin	A	7382.4	6138.2	40.00	33.26	pg	-17	15	c- ***
4,4'-DDD	A	8499.2	7129.9	40.00	33.56	pg	-16	15	c- ***
Endosulfan II	A	8388.5	7201.9	40.00	34.34	pg	-14	15	
4,4'-DDT	A	6087.6	5004.0	40.00	32.88	pg	-18	15	c- ***
Methoxychlor	A	2904.5	2631.5	200.0	181.2	pg	-9	15	
Endosulfan sulfate	A	6925.8	5817.3	40.00	33.60	pg	-16	15	c- ***
Endrin ketone	A	8341.9	7142.8	40.00	34.25	pg	-14	15	
TCMX	A	9597.1	8290.2	40.00	34.55	pg	-14	15	
Decachlorobiphenyl	A	4931.4	4123.4	40.00	33.45	pg	-16	15	c-
alpha-BHC	B	8315.2	8845.4	20.00	21.28	pg	6	15	
gamma-BHC	B	7242.0	7788.0	20.00	21.51	pg	8	15	
beta-BHC	B	2885.1	3183.3	20.00	22.07	pg	10	15	
delta-BHC	B	7387.3	7946.8	20.00	21.51	pg	8	15	
Heptachlor	B	6260.4	6669.2	20.00	21.31	pg	7	15	
Aldrin	B	6283.9	6779.0	20.00	21.58	pg	8	15	
Heptachlor epoxide	B	5621.4	6147.9	20.00	21.87	pg	9	15	
gamma-Chlordane	B	5549.6	6098.2	20.00	21.98	pg	10	15	
alpha-Chlordane	B	5326.8	5848.3	20.00	21.96	pg	10	15	
4,4'-DDE	B	5357.5	5938.6	40.00	44.34	pg	11	15	
Endosulfan I	B	5001.8	5535.2	20.00	22.13	pg	11	15	
Dieldrin	B	5512.6	6132.9	40.00	44.50	pg	11	15	
Endrin	B	3818.9	4440.8	40.00	46.51	pg	16	15	c+ ***
4,4'-DDD	B	4640.8	5152.0	40.00	44.41	pg	11	15	
Endosulfan II	B	4554.2	5064.3	40.00	44.48	pg	11	15	
4,4'-DDT	B	3206.1	3819.5	40.00	47.65	pg	19	15	c+ ***
Methoxychlor	B	1438.0	1710.4	200.0	237.9	pg	19	15	c+ ***
Endosulfan sulfate	B	3683.6	4098.9	40.00	44.51	pg	11	15	
Endrin ketone	B	4307.9	4877.9	40.00	45.29	pg	13	15	
TCMX	B	5435.1	5599.3	40.00	41.21	pg	3	15	
Decachlorobiphenyl	B	2567.2	2915.4	40.00	45.42	pg	14	15	
Average EPA 8081A	A	(n=22)					15	15	
Average EPA 8081A	B	(n=22)					10	15	

+ = high bias - = low bias c = CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188802 PEST Water
EPA 8081A

Inst : GC23
Seqnum : 806338937031
Cal : 806336455001
Standards: S3834

Run Name: PEST_5
File : 235_031
Caldate : 21-AUG-2006

IDF : 1.0
Time : 24-AUG-2006 10:16

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	15249	17003	25.00	27.88	pg	12	15	
gamma-BHC	A	13668	14732	25.00	26.95	pg	8	15	
beta-BHC	A	5304.1	5612.2	25.00	26.45	pg	6	15	
delta-BHC	A	13524	15191	25.00	28.08	pg	12	15	
Heptachlor	A	11210	12392	25.00	27.64	pg	11	15	
Aldrin	A	11532	12605	25.00	27.33	pg	9	15	
Heptachlor epoxide	A	10427	11320	25.00	27.14	pg	9	15	
gamma-Chlordane	A	10271	11183	25.00	27.22	pg	9	15	
alpha-Chlordane	A	9751.0	10605	25.00	27.19	pg	9	15	
4,4'-DDE	A	9674.3	11582	50.00	59.86	pg	20	15	c+ ***
Endosulfan I	A	9190.7	9996.2	25.00	27.19	pg	9	15	
Dieldrin	A	10053	12138	50.00	60.37	pg	21	15	c+ ***
Endrin	A	7382.4	8559.1	50.00	57.97	pg	16	15	c+ ***
4,4'-DDD	A	8499.2	10072	50.00	59.25	pg	19	15	c+ ***
Endosulfan II	A	8388.5	9812.8	50.00	58.49	pg	17	15	c+ ***
4,4'-DDT	A	6087.6	6744.1	50.00	55.39	pg	11	15	
Methoxychlor	A	2904.5	3540.1	250.0	304.7	pg	22	15	c+ ***
Endosulfan sulfate	A	6925.8	7660.0	50.00	55.30	pg	11	15	
Endrin ketone	A	8341.9	9992.9	50.00	59.90	pg	20	15	c+ ***
TCMX	A	9597.1	10828	50.00	56.41	pg	13	15	
Decachlorobiphenyl	A	4931.4	5019.0	50.00	50.89	pg	2	15	
alpha-BHC	B	8315.2	8923.6	25.00	26.83	pg	7	15	
gamma-BHC	B	7242.0	7756.3	25.00	26.78	pg	7	15	
beta-BHC	B	2885.1	3088.5	25.00	26.76	pg	7	15	
delta-BHC	B	7387.3	7767.0	25.00	26.28	pg	5	15	
Heptachlor	B	6260.4	6558.4	25.00	26.19	pg	5	15	
Aldrin	B	6283.9	6606.4	25.00	26.28	pg	5	15	
Heptachlor epoxide	B	5621.4	5887.1	25.00	26.18	pg	5	15	
gamma-Chlordane	B	5549.6	5822.7	25.00	26.23	pg	5	15	
alpha-Chlordane	B	5326.8	5531.3	25.00	25.96	pg	4	15	
4,4'-DDE	B	5357.5	5617.4	50.00	52.43	pg	5	15	
Endosulfan I	B	5001.8	5237.8	25.00	26.18	pg	5	15	
Dieldrin	B	5512.6	5836.4	50.00	52.94	pg	6	15	
Endrin	B	3818.9	4099.5	50.00	53.67	pg	7	15	
4,4'-DDD	B	4640.8	4818.9	50.00	51.92	pg	4	15	
Endosulfan II	B	4554.2	4744.5	50.00	52.09	pg	4	15	
4,4'-DDT	B	3206.1	3464.3	50.00	54.03	pg	8	15	
Methoxychlor	B	1438.0	1538.7	250.0	267.5	pg	7	15	
Endosulfan sulfate	B	3683.6	3724.3	50.00	50.55	pg	1	15	
Endrin ketone	B	4307.9	4417.2	50.00	51.27	pg	3	15	
TCMX	B	5435.1	5864.8	50.00	53.95	pg	8	15	
Decachlorobiphenyl	B	2567.2	2385.2	50.00	46.45	pg	-7	15	
Average EPA 8081A	A	(n=22)					12	15	
Average EPA 8081A	B	(n=22)					5	15	

+ = high bias c = CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188802 PEST Water
EPA 8081A

Inst : GC23
 Segnum : 806338937038
 Cal : 806336455001
 Standards: S4177

Run Name: PEST_3
 File : 235_038
 Caldate : 21-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 12:56

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	15249	16700	10.00	10.95	pg	10	15	
gamma-BHC	A	13668	14607	10.00	10.69	pg	7	15	
beta-BHC	A	5304.1	5862.8	10.00	11.05	pg	11	15	
delta-BHC	A	13524	14636	10.00	10.82	pg	8	15	
Heptachlor	A	11210	11827	10.00	10.55	pg	6	15	
Aldrin	A	11532	12760	10.00	11.07	pg	11	15	
Heptachlor epoxide	A	10427	11496	10.00	11.02	pg	10	15	
gamma-Chlordane	A	10271	11414	10.00	11.11	pg	11	15	
alpha-Chlordane	A	9751.0	10916	10.00	11.19	pg	12	15	
4,4'-DDE	A	9674.3	10942	20.00	22.62	pg	13	15	
Endosulfan I	A	9190.7	10130	10.00	11.02	pg	10	15	
Dieldrin	A	10053	11287	20.00	22.46	pg	12	15	
Endrin	A	7382.4	8441.8	20.00	22.87	pg	14	15	
4,4'-DDD	A	8499.2	10079	20.00	23.72	pg	19	15	c+ ***
Endosulfan II	A	8388.5	9188.5	20.00	21.91	pg	10	15	
4,4'-DDT	A	6087.6	5325.2	20.00	17.49	pg	-13	15	
Methoxychlor	A	2904.5	2721.7	100.0	93.71	pg	-6	15	
Endosulfan sulfate	A	6925.8	7495.9	20.00	21.65	pg	8	15	
Endrin ketone	A	8341.9	9142.7	20.00	21.92	pg	10	15	
TCMX	A	9597.1	10642	20.00	22.18	pg	11	15	
Decachlorobiphenyl	A	4931.4	5206.4	20.00	21.12	pg	6	15	
alpha-BHC	B	8315.2	9194.4	10.00	11.06	pg	11	15	
gamma-BHC	B	7242.0	8036.2	10.00	11.10	pg	11	15	
beta-BHC	B	2885.1	3257.0	10.00	11.29	pg	13	15	
delta-BHC	B	7387.3	7992.6	10.00	10.82	pg	8	15	
Heptachlor	B	6260.4	6701.5	10.00	10.70	pg	7	15	
Aldrin	B	6283.9	6879.7	10.00	10.95	pg	9	15	
Heptachlor epoxide	B	5621.4	6163.4	10.00	10.96	pg	10	15	
gamma-Chlordane	B	5549.6	6060.4	10.00	10.92	pg	9	15	
alpha-Chlordane	B	5326.8	5775.0	10.00	10.84	pg	8	15	
4,4'-DDE	B	5357.5	5662.7	20.00	21.14	pg	6	15	
Endosulfan I	B	5001.8	5495.1	10.00	10.99	pg	10	15	
Dieldrin	B	5512.6	5838.4	20.00	21.18	pg	6	15	
Endrin	B	3818.9	4164.6	20.00	21.81	pg	9	15	
4,4'-DDD	B	4640.8	5159.9	20.00	22.24	pg	11	15	
Endosulfan II	B	4554.2	4764.8	20.00	20.92	pg	5	15	
4,4'-DDT	B	3206.1	2860.2	20.00	17.84	pg	-11	15	
Methoxychlor	B	1438.0	1225.1	100.0	85.20	pg	-15	15	
Endosulfan sulfate	B	3683.6	3734.3	20.00	20.28	pg	1	15	
Endrin ketone	B	4307.9	4275.3	20.00	19.85	pg	-1	15	
TCMX	B	5435.1	6040.2	20.00	22.23	pg	11	15	
Decachlorobiphenyl	B	2567.2	2381.7	20.00	18.55	pg	-7	15	
Average EPA 8081A	A	(n=22)					10	15	
Average EPA 8081A	B	(n=22)					8	15	

+ = high bias c = CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188802 PEST Water
EPA 8081A

Inst : GC23
 Segnum : 806338937046
 Cal : 806336455001
 Standards: S3699

Run Name: PEST_4
 File : 235_046
 Caldate : 21-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 18:44

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	15249	17238	20.00	22.61	pg	13	15	
gamma-BHC	A	13668	14933	20.00	21.85	pg	9	15	
beta-BHC	A	5304.1	5730.0	20.00	21.61	pg	8	15	
delta-BHC	A	13524	14966	20.00	22.13	pg	11	15	
Heptachlor	A	11210	11830	20.00	21.11	pg	6	15	
Aldrin	A	11532	12645	20.00	21.93	pg	10	15	
Heptachlor epoxide	A	10427	11340	20.00	21.75	pg	9	15	
gamma-Chlordane	A	10271	11001	20.00	21.42	pg	7	15	
alpha-Chlordane	A	9751.0	10623	20.00	21.79	pg	9	15	
4,4'-DDE	A	9674.3	11386	40.00	47.08	pg	18	15	c+ ***
Endosulfan I	A	9190.7	10078	20.00	21.93	pg	10	15	
Dieldrin	A	10053	11859	40.00	47.19	pg	18	15	c+ ***
Endrin	A	7382.4	8134.7	40.00	44.08	pg	10	15	
4,4'-DDD	A	8499.2	10250	40.00	48.24	pg	21	15	c+ ***
Endosulfan II	A	8388.5	9498.0	40.00	45.29	pg	13	15	
4,4'-DDT	A	6087.6	5703.3	40.00	37.47	pg	-6	15	
Methoxychlor	A	2904.5	3042.5	200.0	209.5	pg	5	15	
Endosulfan sulfate	A	6925.8	7398.6	40.00	42.73	pg	7	15	
Endrin ketone	A	8341.9	9508.3	40.00	45.59	pg	14	15	
TCMX	A	9597.1	10571	40.00	44.06	pg	10	15	
Decachlorobiphenyl	A	4931.4	4699.0	40.00	38.11	pg	-5	15	
alpha-BHC	B	8315.2	9435.4	20.00	22.69	pg	13	15	
gamma-BHC	B	7242.0	8173.4	20.00	22.57	pg	13	15	
beta-BHC	B	2885.1	3273.7	20.00	22.69	pg	13	15	
delta-BHC	B	7387.3	8178.4	20.00	22.14	pg	11	15	
Heptachlor	B	6260.4	6950.1	20.00	22.20	pg	11	15	
Aldrin	B	6283.9	6990.1	20.00	22.25	pg	11	15	
Heptachlor epoxide	B	5621.4	6253.1	20.00	22.25	pg	11	15	
gamma-Chlordane	B	5549.6	6150.8	20.00	22.17	pg	11	15	
alpha-Chlordane	B	5326.8	5865.7	20.00	22.02	pg	10	15	
4,4'-DDE	B	5357.5	5921.6	40.00	44.21	pg	11	15	
Endosulfan I	B	5001.8	5582.7	20.00	22.32	pg	12	15	
Dieldrin	B	5512.6	6167.4	40.00	44.75	pg	12	15	
Endrin	B	3818.9	4395.0	40.00	46.03	pg	15	15	
4,4'-DDD	B	4640.8	5136.5	40.00	44.27	pg	11	15	
Endosulfan II	B	4554.2	4923.7	40.00	43.25	pg	8	15	
4,4'-DDT	B	3206.1	3336.4	40.00	41.63	pg	4	15	
Methoxychlor	B	1438.0	1492.7	200.0	207.6	pg	4	15	
Endosulfan sulfate	B	3683.6	3848.3	40.00	41.79	pg	4	15	
Endrin ketone	B	4307.9	4422.1	40.00	41.06	pg	3	15	
TCMX	B	5435.1	6045.5	40.00	44.49	pg	11	15	
Decachlorobiphenyl	B	2567.2	2391.6	40.00	37.26	pg	-7	15	
Average EPA 8081A	A	(n=22)					10	15	
Average EPA 8081A	B	(n=22)					10	15	

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188802 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEST_3 IDF : 1.0
 Seqnum : 806346113020 File : 240_020 Time : 28-AUG-2006 15:56
 Cal : 806346113001 Caldate : 28-AUG-2006
 Standards: S4177

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	19075	17790	10.00	9.326	pg	-7	15	
gamma-BHC	A	16813	15648	10.00	9.307	pg	-7	15	
beta-BHC	A	6510.1	6267.5	10.00	9.627	pg	-4	15	
delta-BHC	A	17339	15874	10.00	9.155	pg	-8	15	
Heptachlor	A	14691	13410	10.00	9.128	pg	-9	15	
Aldrin	A	14172	13233	10.00	9.337	pg	-7	15	
Heptachlor epoxide	A	12661	11965	10.00	9.450	pg	-5	15	
gamma-Chlordane	A	12480	11622	10.00	9.313	pg	-7	15	
alpha-Chlordane	A	11657	11100	10.00	9.522	pg	-5	15	
4,4'-DDE	A	12507	11063	20.00	17.69	pg	-12	15	
Endosulfan I	A	11175	10475	10.00	9.374	pg	-6	15	
Dieldrin	A	13064	11616	20.00	17.78	pg	-11	15	
Endrin	A	10322	8985.7	20.00	17.41	pg	-13	15	
4,4'-DDD	A	10237	9479.5	20.00	18.52	pg	-7	15	
Endosulfan II	A	10657	9538.8	20.00	17.90	pg	-10	15	
4,4'-DDT	A	7909.6	7232.5	20.00	18.29	pg	-9	15	
Methoxychlor	A	4052.2	3619.0	100.0	89.31	pg	-11	15	
Endosulfan sulfate	A	8686.6	7759.4	20.00	17.87	pg	-11	15	
Endrin ketone	A	10514	9291.4	20.00	17.67	pg	-12	15	
TCMX	A	12125	11365	20.00	18.75	pg	-6	15	
Decachlorobiphenyl	A	6109.3	5673.0	20.00	18.57	pg	-7	15	
alpha-BHC	B	11556	10248	10.00	8.868	pg	-11	15	
gamma-BHC	B	10140	9053.9	10.00	8.929	pg	-11	15	
beta-BHC	B	4034.7	3820.2	10.00	9.468	pg	-5	15	
delta-BHC	B	10467	9179.2	10.00	8.769	pg	-12	15	
Heptachlor	B	9241.1	8187.6	10.00	8.860	pg	-11	15	
Aldrin	B	8757.7	7969.8	10.00	9.100	pg	-9	15	
Heptachlor epoxide	B	7766.0	7087.1	10.00	9.126	pg	-9	15	
gamma-Chlordane	B	7841.9	7192.0	10.00	9.171	pg	-8	15	
alpha-Chlordane	B	7388.6	6801.2	10.00	9.205	pg	-8	15	
4,4'-DDE	B	7569.9	6619.6	20.00	17.49	pg	-13	15	
Endosulfan I	B	7026.4	6487.1	10.00	9.232	pg	-8	15	
Dieldrin	B	7790.0	6896.0	20.00	17.70	pg	-11	15	
Endrin	B	6407.0	5315.7	20.00	16.59	pg	-17	15	c- ***
4,4'-DDD	B	6247.7	5432.0	20.00	17.39	pg	-13	15	
Endosulfan II	B	5909.2	5651.7	20.00	19.13	pg	-4	15	
4,4'-DDT	B	5941.8	4816.4	20.00	16.21	pg	-19	15	c- ***
Methoxychlor	B	2599.4	2109.0	100.0	81.14	pg	-19	15	c- ***
Endosulfan sulfate	B	5247.3	4584.1	20.00	17.47	pg	-13	15	
Endrin ketone	B	6016.2	4987.9	20.00	16.58	pg	-17	15	c- ***
TCMX	B	7332.0	6646.0	20.00	18.13	pg	-9	15	
Decachlorobiphenyl	B	3715.6	3208.4	20.00	17.27	pg	-14	15	
Average EPA 8081A	A	(n=22)					8	15	
Average EPA 8081A	B	(n=22)					11	15	

--low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188802 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEST_4 IDF : 1.0
 Seqnum : 806346113034 File : 240_034 Time : 28-AUG-2006 22:35
 Cal : 806346113001 Caldate : 28-AUG-2006
 Standards: S3699

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	19075	18411	20.00	19.30	pg	-3	15	
gamma-BHC	A	16813	16073	20.00	19.12	pg	-4	15	
beta-BHC	A	6510.1	6086.9	20.00	18.70	pg	-7	15	
delta-BHC	A	17339	16611	20.00	19.16	pg	-4	15	
Heptachlor	A	14691	13652	20.00	18.59	pg	-7	15	
Aldrin	A	14172	13389	20.00	18.90	pg	-6	15	
Heptachlor epoxide	A	12661	11976	20.00	18.92	pg	-5	15	
gamma-Chlordane	A	12480	11764	20.00	18.85	pg	-6	15	
alpha-Chlordane	A	11657	11045	20.00	18.95	pg	-5	15	
4,4'-DDE	A	12507	12332	40.00	39.44	pg	-1	15	
Endosulfan I	A	11175	10689	20.00	19.13	pg	-4	15	
Dieldrin	A	13064	12950	40.00	39.65	pg	-1	15	
Endrin	A	10322	9553.0	40.00	37.02	pg	-7	15	
4,4'-DDD	A	10237	10274	40.00	40.14	pg	0	15	
Endosulfan II	A	10657	10494	40.00	39.38	pg	-2	15	
4,4'-DDT	A	7909.6	7969.3	40.00	40.30	pg	1	15	
Methoxychlor	A	4052.2	4450.1	200.0	219.6	pg	10	15	
Endosulfan sulfate	A	8686.6	8222.0	40.00	37.86	pg	-5	15	
Endrin ketone	A	10514	10478	40.00	39.86	pg	0	15	
TCMX	A	12125	11528	40.00	38.03	pg	-5	15	
Decachlorobiphenyl	A	6109.3	5384.8	40.00	35.26	pg	-12	15	
alpha-BHC	B	11556	10182	20.00	17.62	pg	-12	15	
gamma-BHC	B	10140	8936.7	20.00	17.63	pg	-12	15	
beta-BHC	B	4034.7	3612.3	20.00	17.91	pg	-10	15	
delta-BHC	B	10467	9020.1	20.00	17.23	pg	-14	15	
Heptachlor	B	9241.1	8012.1	20.00	17.34	pg	-13	15	
Aldrin	B	8757.7	7617.4	20.00	17.40	pg	-13	15	
Heptachlor epoxide	B	7766.0	6831.0	20.00	17.59	pg	-12	15	
gamma-Chlordane	B	7841.9	6768.8	20.00	17.26	pg	-14	15	
alpha-Chlordane	B	7388.6	6428.5	20.00	17.40	pg	-13	15	
4,4'-DDE	B	7569.9	6527.8	40.00	34.49	pg	-14	15	
Endosulfan I	B	7026.4	6101.9	20.00	17.37	pg	-13	15	
Dieldrin	B	7790.0	6768.3	40.00	34.75	pg	-13	15	
Endrin	B	6407.0	5208.1	40.00	32.52	pg	-19	15	c- ***
4,4'-DDD	B	6247.7	5354.9	40.00	34.28	pg	-14	15	
Endosulfan II	B	5909.2	5451.8	40.00	36.90	pg	-8	15	
4,4'-DDT	B	5941.8	4700.0	40.00	31.64	pg	-21	15	c- ***
Methoxychlor	B	2599.4	2255.6	200.0	173.6	pg	-13	15	
Endosulfan sulfate	B	5247.3	4366.8	40.00	33.29	pg	-17	15	c- ***
Endrin ketone	B	6016.2	4835.5	40.00	32.15	pg	-20	15	c- ***
TCMX	B	7332.0	6426.8	40.00	35.06	pg	-12	15	
Decachlorobiphenyl	B	3715.6	3112.0	40.00	33.50	pg	-16	15	c-
Average EPA 8081A	A	(n=22)					5	15	
Average EPA 8081A	B	(n=22)					14	15	

--low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188802 PEST Water
EPA 8081A

Inst : GC23
Seqnum : 806346113049
Cal : 806346113001
Standards: S3834

Run Name: PEST_5
File : 240_049
Caldate : 28-AUG-2006

IDF : 1.0
Time : 29-AUG-2006 02:56

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	19075	18370	25.00	24.08	pg	-4	15	
gamma-BHC	A	16813	15907	25.00	23.65	pg	-5	15	
beta-BHC	A	6510.1	5881.8	25.00	22.59	pg	-10	15	
delta-BHC	A	17339	16275	25.00	23.47	pg	-6	15	
Heptachlor	A	14691	13475	25.00	22.93	pg	-8	15	
Aldrin	A	14172	13023	25.00	22.97	pg	-8	15	
Heptachlor epoxide	A	12661	11549	25.00	22.80	pg	-9	15	
gamma-Chlordane	A	12480	11296	25.00	22.63	pg	-9	15	
alpha-Chlordane	A	11657	10566	25.00	22.66	pg	-9	15	
4,4'-DDE	A	12507	12131	50.00	48.50	pg	-3	15	
Endosulfan I	A	11175	10195	25.00	22.81	pg	-9	15	
Dieldrin	A	13064	12696	50.00	48.59	pg	-3	15	
Endrin	A	10322	9980.2	50.00	48.34	pg	-3	15	
4,4'-DDD	A	10237	10863	50.00	53.06	pg	6	15	
Endosulfan II	A	10657	10290	50.00	48.27	pg	-3	15	
4,4'-DDT	A	7909.6	6599.4	50.00	41.72	pg	-17	15	c- ***
Methoxychlor	A	4052.2	3731.6	250.0	230.2	pg	-8	15	
Endosulfan sulfate	A	8686.6	7893.8	50.00	45.44	pg	-9	15	
Endrin ketone	A	10514	9848.2	50.00	46.83	pg	-6	15	
TCMX	A	12125	11883	50.00	49.00	pg	-2	15	
Decachlorobiphenyl	A	6109.3	5057.8	50.00	41.39	pg	-17	15	c-
alpha-BHC	B	11556	10147	25.00	21.95	pg	-12	15	
gamma-BHC	B	10140	8815.3	25.00	21.73	pg	-13	15	
beta-BHC	B	4034.7	3533.7	25.00	21.90	pg	-12	15	
delta-BHC	B	10467	8958.5	25.00	21.40	pg	-14	15	
Heptachlor	B	9241.1	7854.2	25.00	21.25	pg	-15	15	
Aldrin	B	8757.7	7602.4	25.00	21.70	pg	-13	15	
Heptachlor epoxide	B	7766.0	6796.2	25.00	21.88	pg	-12	15	
gamma-Chlordane	B	7841.9	6777.8	25.00	21.61	pg	-14	15	
alpha-Chlordane	B	7388.6	6426.8	25.00	21.75	pg	-13	15	
4,4'-DDE	B	7569.9	6768.8	50.00	44.71	pg	-11	15	
Endosulfan I	B	7026.4	6076.8	25.00	21.62	pg	-14	15	
Dieldrin	B	7790.0	6955.1	50.00	44.64	pg	-11	15	
Endrin	B	6407.0	5525.1	50.00	43.12	pg	-14	15	
4,4'-DDD	B	6247.7	5985.6	50.00	47.90	pg	-4	15	
Endosulfan II	B	5909.2	5630.8	50.00	47.64	pg	-5	15	
4,4'-DDT	B	5941.8	4184.0	50.00	35.21	pg	-30	15	c- ***
Methoxychlor	B	2599.4	2159.4	250.0	207.7	pg	-17	15	c- ***
Endosulfan sulfate	B	5247.3	4523.5	50.00	43.10	pg	-14	15	
Endrin ketone	B	6016.2	5023.2	50.00	41.75	pg	-17	15	c- ***
TCMX	B	7332.0	6552.7	50.00	44.69	pg	-11	15	
Decachlorobiphenyl	B	3715.6	3262.8	50.00	43.91	pg	-12	15	
Average EPA 8081A	A	(n=22)					7	15	
Average EPA 8081A	B	(n=22)					13	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188802 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEST_3 IDF : 1.0
Seqnum : 806346113056 File : 240_056 Time : 29-AUG-2006 12:41
Cal : 806346113001 Caldate : 28-AUG-2006
Standards: S4177

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	19075	17319	10.00	9.079	pg	-9	15	
gamma-BHC	A	16813	15241	10.00	9.065	pg	-9	15	
beta-BHC	A	6510.1	6118.2	10.00	9.398	pg	-6	15	
delta-BHC	A	17339	15554	10.00	8.971	pg	-10	15	
Heptachlor	A	14691	13062	10.00	8.891	pg	-11	15	
Aldrin	A	14172	12937	10.00	9.128	pg	-9	15	
Heptachlor epoxide	A	12661	11631	10.00	9.186	pg	-8	15	
gamma-Chlordane	A	12480	11372	10.00	9.112	pg	-9	15	
alpha-Chlordane	A	11657	10834	10.00	9.294	pg	-7	15	
4,4'-DDE	A	12507	10959	20.00	17.52	pg	-12	15	
Endosulfan I	A	11175	10278	10.00	9.198	pg	-8	15	
Dieldrin	A	13064	11297	20.00	17.29	pg	-14	15	
Endrin	A	10322	9109.5	20.00	17.65	pg	-12	15	
4,4'-DDD	A	10237	10152	20.00	19.83	pg	-1	15	
Endosulfan II	A	10657	9726.7	20.00	18.25	pg	-9	15	
4,4'-DDT	A	7909.6	6238.2	20.00	15.77	pg	-21	15	c- ***
Methoxychlor	A	4052.2	3102.7	100.0	76.57	pg	-23	15	c- ***
Endosulfan sulfate	A	8686.6	7708.7	20.00	17.75	pg	-11	15	
Endrin ketone	A	10514	8887.4	20.00	16.91	pg	-15	15	
TCMX	A	12125	11008	20.00	18.16	pg	-9	15	
Decachlorobiphenyl	A	6109.3	5266.1	20.00	17.24	pg	-14	15	
alpha-BHC	B	11556	9632.1	10.00	8.335	pg	-17	15	c- ***
gamma-BHC	B	10140	8461.3	10.00	8.345	pg	-17	15	c- ***
beta-BHC	B	4034.7	3516.3	10.00	8.715	pg	-13	15	
delta-BHC	B	10467	8564.4	10.00	8.182	pg	-18	15	c- ***
Heptachlor	B	9241.1	7651.8	10.00	8.280	pg	-17	15	c- ***
Aldrin	B	8757.7	7342.5	10.00	8.384	pg	-16	15	c- ***
Heptachlor epoxide	B	7766.0	6557.2	10.00	8.443	pg	-16	15	c- ***
gamma-Chlordane	B	7841.9	6560.5	10.00	8.366	pg	-16	15	c- ***
alpha-Chlordane	B	7388.6	6213.8	10.00	8.410	pg	-16	15	c- ***
4,4'-DDE	B	7569.9	6050.4	20.00	15.99	pg	-20	15	c- ***
Endosulfan I	B	7026.4	5944.1	10.00	8.460	pg	-15	15	
Dieldrin	B	7790.0	6307.7	20.00	16.19	pg	-19	15	c- ***
Endrin	B	6407.0	5126.4	20.00	16.00	pg	-20	15	c- ***
4,4'-DDD	B	6247.7	5231.3	20.00	16.75	pg	-16	15	c- ***
Endosulfan II	B	5909.2	5184.4	20.00	17.55	pg	-12	15	
4,4'-DDT	B	5941.8	3985.7	20.00	13.42	pg	-33	15	c- ***
Methoxychlor	B	2599.4	1801.2	100.0	69.29	pg	-31	15	c- ***
Endosulfan sulfate	B	5247.3	4173.7	20.00	15.91	pg	-20	15	c- ***
Endrin ketone	B	6016.2	4525.2	20.00	15.04	pg	-25	15	c- ***
TCMX	B	7332.0	6211.1	20.00	16.94	pg	-15	15	
Decachlorobiphenyl	B	3715.6	2931.3	20.00	15.78	pg	-21	15	c-
Average EPA 8081A	A	(n=22)					11	15	
Average EPA 8081A	B	(n=22)					19	15	ac ***

--low bias ac=average CCV drift out c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188802 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEST_5 IDF : 1.0
Seqnum : 806346113087 File : 240_087 Time : 30-AUG-2006 02:43
Cal : 806346113001 Caldate : 28-AUG-2006
Standards: S3834

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	19075	18394	25.00	24.11	pg	-4	15	
gamma-BHC	A	16813	15665	25.00	23.29	pg	-7	15	
beta-BHC	A	6510.1	5840.1	25.00	22.43	pg	-10	15	
delta-BHC	A	17339	16262	25.00	23.45	pg	-6	15	
Heptachlor	A	14691	12700	25.00	21.61	pg	-14	15	
Aldrin	A	14172	13211	25.00	23.30	pg	-7	15	
Heptachlor epoxide	A	12661	11672	25.00	23.05	pg	-8	15	
gamma-Chlordane	A	12480	11469	25.00	22.98	pg	-8	15	
alpha-Chlordane	A	11657	10731	25.00	23.01	pg	-8	15	
4,4'-DDE	A	12507	12157	50.00	48.60	pg	-3	15	
Endosulfan I	A	11175	10350	25.00	23.16	pg	-7	15	
Dieldrin	A	13064	12720	50.00	48.68	pg	-3	15	
Endrin	A	10322	9011.0	50.00	43.65	pg	-13	15	
4,4'-DDD	A	10237	11799	50.00	57.63	pg	15	15	
Endosulfan II	A	10657	10128	50.00	47.51	pg	-5	15	
4,4'-DDT	A	7909.6	5086.6	50.00	32.15	pg	-36	15	c- ***
Methoxychlor	A	4052.2	2961.5	250.0	182.7	pg	-27	15	c- ***
Endosulfan sulfate	A	8686.6	7854.2	50.00	45.21	pg	-10	15	
Endrin ketone	A	10514	9631.8	50.00	45.80	pg	-8	15	
TCMX	A	12125	11930	50.00	49.20	pg	-2	15	
Decachlorobiphenyl	A	6109.3	4883.0	50.00	39.96	pg	-20	15	c-
alpha-BHC	B	11556	9594.3	25.00	20.76	pg	-17	15	c- ***
gamma-BHC	B	10140	8342.1	25.00	20.57	pg	-18	15	c- ***
beta-BHC	B	4034.7	3320.6	25.00	20.58	pg	-18	15	c- ***
delta-BHC	B	10467	8373.2	25.00	20.00	pg	-20	15	c- ***
Heptachlor	B	9241.1	7380.5	25.00	19.97	pg	-20	15	c- ***
Aldrin	B	8757.7	7188.4	25.00	20.52	pg	-18	15	c- ***
Heptachlor epoxide	B	7766.0	6345.3	25.00	20.43	pg	-18	15	c- ***
gamma-Chlordane	B	7841.9	6368.3	25.00	20.30	pg	-19	15	c- ***
alpha-Chlordane	B	7388.6	6046.2	25.00	20.46	pg	-18	15	c- ***
4,4'-DDE	B	7569.9	6237.0	50.00	41.20	pg	-18	15	c- ***
Endosulfan I	B	7026.4	5754.1	25.00	20.47	pg	-18	15	c- ***
Dieldrin	B	7790.0	6452.8	50.00	41.42	pg	-17	15	c- ***
Endrin	B	6407.0	4947.5	50.00	38.61	pg	-23	15	c- ***
4,4'-DDD	B	6247.7	5675.7	50.00	45.42	pg	-9	15	
Endosulfan II	B	5909.2	5318.3	50.00	45.00	pg	-10	15	
4,4'-DDT	B	5941.8	3632.9	50.00	30.57	pg	-39	15	c- ***
Methoxychlor	B	2599.4	1856.5	250.0	178.5	pg	-29	15	c- ***
Endosulfan sulfate	B	5247.3	4199.8	50.00	40.02	pg	-20	15	c- ***
Endrin ketone	B	6016.2	4726.0	50.00	39.28	pg	-21	15	c- ***
TCMX	B	7332.0	6299.6	50.00	42.96	pg	-14	15	
Decachlorobiphenyl	B	3715.6	2955.3	50.00	39.77	pg	-20	15	c-
Average EPA 8081A	A	(n=22)					10	15	
Average EPA 8081A	B	(n=22)					19	15	ac ***

--low bias ac=average CCV drift out c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188802 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEST_3 IDF : 1.0
 Seqnum : 806346113099 File : 240_099 Time : 30-AUG-2006 06:13
 Cal : 806346113001 Caldate : 28-AUG-2006
 Standards: S4177

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	19075	18686	10.00	9.796	pg	-2	15	
gamma-BHC	A	16813	16010	10.00	9.522	pg	-5	15	
beta-BHC	A	6510.1	6424.8	10.00	9.869	pg	-1	15	
delta-BHC	A	17339	16577	10.00	9.561	pg	-4	15	
Heptachlor	A	14691	13070	10.00	8.896	pg	-11	15	
Aldrin	A	14172	13822	10.00	9.753	pg	-2	15	
Heptachlor epoxide	A	12661	12258	10.00	9.682	pg	-3	15	
gamma-Chlordane	A	12480	11820	10.00	9.471	pg	-5	15	
alpha-Chlordane	A	11657	11204	10.00	9.611	pg	-4	15	
4,4'-DDE	A	12507	11428	20.00	18.27	pg	-9	15	
Endosulfan I	A	11175	10833	10.00	9.695	pg	-3	15	
Dieldrin	A	13064	11544	20.00	17.67	pg	-12	15	
Endrin	A	10322	9747.5	20.00	18.89	pg	-6	15	
4,4'-DDD	A	10237	11258	20.00	21.99	pg	10	15	
Endosulfan II	A	10657	9672.5	20.00	18.15	pg	-9	15	
4,4'-DDT	A	7909.6	4268.9	20.00	10.79	pg	-46	15	c- ***
Methoxychlor	A	4052.2	2232.8	100.0	55.10	pg	-45	15	c- ***
Endosulfan sulfate	A	8686.6	7831.5	20.00	18.03	pg	-10	15	
Endrin ketone	A	10514	8495.3	20.00	16.16	pg	-19	15	c- ***
TCMX	A	12125	11877	20.00	19.59	pg	-2	15	
Decachlorobiphenyl	A	6109.3	5304.9	20.00	17.37	pg	-13	15	
alpha-BHC	B	11556	10800	10.00	9.346	pg	-7	15	
gamma-BHC	B	10140	9378.1	10.00	9.249	pg	-8	15	
beta-BHC	B	4034.7	3869.7	10.00	9.591	pg	-4	15	
delta-BHC	B	10467	9538.7	10.00	9.113	pg	-9	15	
Heptachlor	B	9241.1	8177.0	10.00	8.849	pg	-12	15	
Aldrin	B	8757.7	8369.4	10.00	9.557	pg	-4	15	
Heptachlor epoxide	B	7766.0	7384.8	10.00	9.509	pg	-5	15	
gamma-Chlordane	B	7841.9	7347.6	10.00	9.370	pg	-6	15	
alpha-Chlordane	B	7388.6	6947.9	10.00	9.404	pg	-6	15	
4,4'-DDE	B	7569.9	6831.8	20.00	18.05	pg	-10	15	
Endosulfan I	B	7026.4	6595.7	10.00	9.387	pg	-6	15	
Dieldrin	B	7790.0	7109.8	20.00	18.25	pg	-9	15	
Endrin	B	6407.0	5663.7	20.00	17.68	pg	-12	15	
4,4'-DDD	B	6247.7	6492.4	20.00	20.78	pg	4	15	
Endosulfan II	B	5909.2	6107.5	20.00	20.67	pg	3	15	
4,4'-DDT	B	5941.8	3388.5	20.00	11.41	pg	-43	15	c- ***
Methoxychlor	B	2599.4	1613.9	100.0	62.09	pg	-38	15	c- ***
Endosulfan sulfate	B	5247.3	4719.8	20.00	17.99	pg	-10	15	
Endrin ketone	B	6016.2	4881.6	20.00	16.23	pg	-19	15	c- ***
TCMX	B	7332.0	6987.8	20.00	19.06	pg	-5	15	
Decachlorobiphenyl	B	3715.6	3297.4	20.00	17.75	pg	-11	15	
Average EPA 8081A	A	(n=22)					10	15	
Average EPA 8081A	B	(n=22)					11	15	

--low bias c=CCV

SEQUENCE SUMMARY FOR 188802 PEST Water
Curtis & Tompkins Laboratories

Sequence: 806336455 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Begun: 21-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds	Used	>LR
001	233_001	X	HEX			21-AUG-2006 15:35	1.0								
002	233_002	X	PRIMER			21-AUG-2006 15:52	1.0								
003	233_003	X	PRIMER			21-AUG-2006 16:09	1.0								
004	233_004	X	PRIMER			21-AUG-2006 16:27	1.0								
005	233_005	X	PRIMER			21-AUG-2006 16:44	1.0								
006	233_006	X	PRIMER			21-AUG-2006 17:02	1.0								
007	233_007	X	PRIMER			21-AUG-2006 17:19	1.0								
008	233_008	X	PRIMER			21-AUG-2006 17:36	1.0								
009	233_009	X	PRIMER			21-AUG-2006 17:53	1.0								
010	233_010	X	PRIMER			21-AUG-2006 18:11	1.0								
011	233_011	X	PRIMER			21-AUG-2006 18:28	1.0								
012	233_012	X	HEX			21-AUG-2006 18:45	1.0								
013	233_013	X	HEX			21-AUG-2006 19:03	1.0								
014	233_014	X	HEX			21-AUG-2006 19:20	1.0								
015	233_015	PEM	PEM			21-AUG-2006 19:37	1.0			1					
016	233_016	X	HEX			21-AUG-2006 19:55	1.0								
017	233_017	ICAL	PEST_1			21-AUG-2006 20:12	1.0								
018	233_018	ICAL	PEST_2			21-AUG-2006 20:29	1.0								
019	233_019	ICAL	PEST_3			21-AUG-2006 20:47	1.0								
020	233_020	ICAL	PEST_4			21-AUG-2006 21:04	1.0								
021	233_021	ICAL	PEST_5			21-AUG-2006 21:21	1.0								
022	233_022	ICAL	PEST_6			21-AUG-2006 21:39	1.0								
023	233_023	ICAL	PEST_7			21-AUG-2006 21:56	1.0								
024	233_024	X	HEX			21-AUG-2006 22:13	1.0								
025	233_025	ICV	ICV			21-AUG-2006 22:31	1.0			2					
026	233_026	ICV	ICV			21-AUG-2006 22:48	1.0								
027	233_027	PEM	PEM			21-AUG-2006 23:05	1.0			1					
028	233_028	X	HEX			21-AUG-2006 23:23	1.0								

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Stds used: 1=S3952 2=S2827 3=S3833 4=S3698 5=S3699 6=S3834 7=S4042 8=S4043 9=S3877

SEQUENCE SUMMARY FOR 188802 PEST Water
Curtis & Tompkins Laboratories

Sequence: 806338937 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Begun: 23-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	UL	Stds	Used	>LR
001	235_001	X	PRIMER			23-AUG-2006 08:57	1.0							
002	235_002	X	PRIMER			23-AUG-2006 09:15	1.0							
003	235_003	X	PRIMER			23-AUG-2006 09:32	1.0							
004	235_004	X	HEX			23-AUG-2006 09:50	1.0							
005	235_005	PEM	PEM			23-AUG-2006 10:07	1.0	1.0			1	1	DDT44=117.376	
006	235_006	CCV	PEST_3			23-AUG-2006 10:28	1.0	1.0	4		1	2		
007	235_007	X	PEST_3			23-AUG-2006 10:49	1.0	1.0	17		1	2	ac	
008	235_008	BLANK	QC351924		116415 Soil	23-AUG-2006 11:09	1.0	0.6673	9		1			
009	235_009	BLANK	QC352721		116604 Water	23-AUG-2006 11:26	1.0	0.01	8		1			
010	235_010	LCS	QC352722		116604 Water	23-AUG-2006 11:44	1.0	0.01	12		1			
011	235_011	BLANK	QC352451		116545 Soil	23-AUG-2006 13:43	1.0	0.6667	9		1			
012	235_012	LCS	QC352452		116545 Soil	23-AUG-2006 14:00	1.0	0.6667	13		1			
013	235_013	BLANK	QC352676		116590 Soil	23-AUG-2006 14:18	1.0	0.6667	9		1			
014	235_014	LCS	QC352677		116590 Soil	23-AUG-2006 14:35	1.0	0.6766	13		1			
015	235_015	PREPBLK	QC352725		116604 TCLP L	23-AUG-2006 14:52	1.0	0.009709	8		1			
016	235_016	X	HEX			23-AUG-2006 15:10	1.0							
017	235_017	PEM	PEM			23-AUG-2006 15:27	1.0	1.0			1	1	DDT44=111.962	
018	235_018	CCV	PEST_4			23-AUG-2006 15:44	1.0	1.0	12		1	3		
019	235_019	X	HEX			23-AUG-2006 17:15	1.0							
020	235_020	SAMPLE	188757-004		116460 Soil	23-AUG-2006 17:32	10.0	0.6709	12		1			
021	235_021	SAMPLE	188759-028		116460 Soil	23-AUG-2006 17:49	2.0	0.6669	11		1		1:DDT44=204.040	
022	235_022	SAMPLE	188775-029		116604 Water	23-AUG-2006 18:07	1.0	0.009709	9		1			
023	235_023	SAMPLE	188774-001		116604 Water	23-AUG-2006 18:24	1.0	0.009804	8		1			
024	235_024	SAMPLE	188774-002		116604 Water	23-AUG-2006 18:41	1.0	0.009524	8		1			
025	235_025	MSS	188802-001		116604 Water	23-AUG-2006 18:59	1.0	0.009434	14	3	1		4:BHCBE=804.888	
026	235_026	SAMPLE	188802-008		116604 Water	24-AUG-2006 08:48	1.0	0.009524	8	1	1			
027	235_027	SAMPLE	188802-010		116604 Water	24-AUG-2006 09:06	1.0	0.009434	8		1			
028	235_028	SAMPLE	188808-031		116604 Water	24-AUG-2006 09:23	10.0	0.009524	9		1			
029	235_029	X	HEX			24-AUG-2006 09:41	1.0							
030	235_030	PEM	PEM			24-AUG-2006 09:58	1.0	1.0			1	1	1:DDT44=119.743	

Stds used: 1=S3952 2=S3698 3=S3699 4=S3834 5=S4177

Flags used: >=closing ac=average CCV drift out

SEQUENCE SUMMARY FOR 188802 PEST Water
Curtis & Tompkins Laboratories

Sequence: 806338937 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Begun: 23-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds	Used	>LR
031	235_031	CCV	PEST_5			24-AUG-2006 10:16	1.0	1.0	7		1	4		
032	235_032	X	HEX			24-AUG-2006 11:06	1.0							
033	235_033	SAMPLE	188846-005		116590 Soil	24-AUG-2006 11:23	10.0	0.6725			1			
034	235_034	MS	QC352723		116604 Water	24-AUG-2006 11:40	1.0	0.009434	20	22	1			16:BHCBE=783.002
035	235_035	MSD	QC352724		116604 Water	24-AUG-2006 11:58	1.0	0.009434	20	20	1			16:BHCBE=794.076
036	235_036	X	HEX			24-AUG-2006 12:22	1.0							
037	235_037	PEM	PEM			24-AUG-2006 12:39	1.0	1.0			1	1		
038	235_038	CCV	PEST_3			24-AUG-2006 12:56	1.0	1.0	1		1	5		
039	235_039	X	HEX			24-AUG-2006 13:27	1.0							
040	235_040	MSS	188771-002		116545 Soil	24-AUG-2006 13:45	1.0	0.6777			1			
041	235_041	MSS	188802-001		116604 Water	24-AUG-2006 17:17	3.0	0.009434		2	1			
042	235_042	MS	QC352723		116604 Water	24-AUG-2006 17:34	3.0	0.009434	4	25	1			2:BHCBE=374.456
043	235_043	MSD	QC352724		116604 Water	24-AUG-2006 17:52	3.0	0.009434	4	21	1			1:BHCBE=356.910
044	235_044	X	HEX			24-AUG-2006 18:09	1.0							
045	235_045	PEM	PEM			24-AUG-2006 18:27	1.0	1.0			1	1		
046	235_046	CCV	PEST_4			24-AUG-2006 18:44	1.0	1.0	3		1	3		1:DDT44=110.891
047	235_047	X	PEST_4			24-AUG-2006 19:01	1.0							
048	235_048	X	PEM			24-AUG-2006 19:18	1.0	1.0			1	1		
049	235_049	X	HEX			24-AUG-2006 19:36	1.0							
050	235_050	SAMPLE	188808-006		116590 Soil	24-AUG-2006 19:53	3.0	0.6696	6	1	1			
051	235_051	SAMPLE	188808-007		116590 Soil	24-AUG-2006 20:10	5.0	0.7273	3		1			
052	235_052	SAMPLE	188808-008		116590 Soil	24-AUG-2006 20:28	10.0	0.6649	5		1			
053	235_053	SAMPLE	188808-009		116590 Soil	24-AUG-2006 20:45	5.0	0.6633	5		1			
054	235_054	SAMPLE	188808-011		116590 Soil	24-AUG-2006 21:03	2.0	0.6651	6		1			
055	235_055	MSS	188808-012		116590 Soil	24-AUG-2006 21:20	3.0	0.6709	3		1			
056	235_056	SAMPLE	188808-022		116590 Soil	24-AUG-2006 21:38	10.0	0.675	6		1			
057	235_057	SAMPLE	188808-023		116590 Soil	24-AUG-2006 21:55	20.0	0.6656	3		1			
058	235_058	MSS	188808-029		116590 Soil	24-AUG-2006 22:12	1.0	0.6566	3		1			
059	235_059	SAMPLE	188808-030		116590 Soil	24-AUG-2006 22:30	1.0	0.6709	4		1			
060	235_060	X	HEX			24-AUG-2006 22:47	1.0							

Stds used: 1=S3952 2=S3698 3=S3699 4=S3834 5=S4177
Flags used: >=closing ac=average CCV drift out

SEQUENCE SUMMARY FOR 188802 PEST Water
Curtis & Tompkins Laboratories

Sequence: 806338937 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Begun: 23-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds	Used	>LR
061	235_061	PEM	PEM			24-AUG-2006 23:05	1.0	1.0			1	1		
062	235_062	X	PEST_5			24-AUG-2006 23:22	1.0	1.0			1	4	ac	
063	235_063	CCV	PEST_5			24-AUG-2006 23:39	1.0	1.0			1	4		
064	235_064	X	PEMS3952			24-AUG-2006 23:57	1.0				1			
065	235_065	X	HEX			25-AUG-2006 00:14	1.0							
066	235_066	MSS	188808-032		Soil	25-AUG-2006 00:32	20.0	0.6689	6		1		>ac	
067	235_067	SAMPLE	188808-033		Soil	25-AUG-2006 00:49	1.0	0.6649	4		1		>ac	
068	235_068	SAMPLE	188808-034		Soil	25-AUG-2006 01:06	1.0	0.6743	9	1	1		>ac	
069	235_069	SAMPLE	188808-035		Soil	25-AUG-2006 01:24	2.0	0.6649	5	2	1		>ac	
070	235_070	SAMPLE	188808-036		Soil	25-AUG-2006 01:41	5.0	0.6601	14	3	1		>ac	
071	235_071	SAMPLE	188808-037		Soil	25-AUG-2006 01:59	2.0	0.6727	7	1	1		>ac	1:HEPT-E=114.357
072	235_072	MS	QC352678		Soil	25-AUG-2006 02:16	3.0	0.6647	23	3	1		>ac	
073	235_073	MSD	QC352679		Soil	25-AUG-2006 02:33	3.0	0.6711	23	5	1		>ac	
074	235_074	MS	QC352680		Soil	25-AUG-2006 02:51	1.0	0.6693	23	4	1		>ac	
075	235_075	MSD	QC352681		Soil	25-AUG-2006 03:08	1.0	0.6627	23	2	1		>ac	
076	235_076	X	HEX			25-AUG-2006 03:26	1.0							270
077	235_077	X	PEM			25-AUG-2006 03:43	1.0	1.0			1			
078	235_078	CCV	PEST_3			25-AUG-2006 04:00	1.0	1.0			1		ac	
079	235_079	CCV	PEST_3			25-AUG-2006 04:18	1.0	1.0			1		ac	
080	235_080	PEM	PEM			25-AUG-2006 04:35	1.0	1.0			1			
081	235_081	X	HEX			25-AUG-2006 04:53	1.0							

Stds used: 1=S3952 2=S3698 3=S3699 4=S3834 5=S4177
Flags used: >=closing ac=average CCV drift out

SEQUENCE SUMMARY FOR 188802 PEST Water
Curtis & Tompkins Laboratories

Sequence: 806346113 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Begun: 28-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
001	240_001	X	PRIMER			28-AUG-2006 08:33	1.0							
002	240_002	X	PRIMER			28-AUG-2006 08:51	1.0							
003	240_003	X	PRIMER			28-AUG-2006 09:08	1.0							
004	240_004	X	HEX			28-AUG-2006 09:26	1.0							
005	240_005	X	HEX			28-AUG-2006 09:43	1.0							
006	240_006	PEM	PEM			28-AUG-2006 11:53	1.0	1.0			1	1	1:DDT44=164.004	
007	240_007	X	HEX			28-AUG-2006 12:10	1.0							
008	240_008	ICAL	PEST1			28-AUG-2006 12:27	1.0	1.0				2		
009	240_009	ICAL	PEST2			28-AUG-2006 12:45	1.0	1.0				3		
010	240_010	ICAL	PEST_3			28-AUG-2006 13:02	1.0	1.0				4		
011	240_011	ICAL	PEST_4			28-AUG-2006 13:20	1.0	1.0				5		
012	240_012	ICAL	PEST_5			28-AUG-2006 13:37	1.0	1.0				6		
013	240_013	ICAL	PEST_6			28-AUG-2006 13:54	1.0	1.0				7		
014	240_014	ICAL	PEST_7			28-AUG-2006 14:12	1.0	1.0				8		
015	240_015	X	HEX			28-AUG-2006 14:29	1.0							
016	240_016	ICV	ICV			28-AUG-2006 14:47	1.0	1.0			5	1	1	271
017	240_017	X	IVC			28-AUG-2006 15:04	1.0					9		
018	240_018	X	HEX			28-AUG-2006 15:21	1.0							
019	240_019	PEM	PEM			28-AUG-2006 15:39	1.0	1.0			1	1	1	3:MTXXYL=293.878
020	240_020	CCV	PEST_3			28-AUG-2006 15:56	1.0	1.0			4	1	1	14
021	240_021	X	HEX			28-AUG-2006 16:14	1.0							
022	240_022	BLANK	QC353598			28-AUG-2006 19:07	1.0	0.01			5	2	1	
023	240_023	BS	QC353599			28-AUG-2006 19:24	1.0	0.01			5	1	1	
024	240_024	BSD	QC353600			28-AUG-2006 19:42	1.0	0.01			5	2	1	
025	240_025	SAMPLE	188802-021			28-AUG-2006 19:59	1.0	0.009524			44	3	1	
026	240_026	SAMPLE	188870-001			28-AUG-2006 20:16	25.0	0.6673			8	1	1	sh 1:BHCGAM=161.140
027	240_027	SAMPLE	188870-002			28-AUG-2006 20:34	100.0	0.6734			6	1	1	3:MTXXYL=315.278
028	240_028	MSS	188870-003			28-AUG-2006 20:51	100.0	0.6718			6	1	1	1:MTXXYL=316.486
029	240_029	SAMPLE	188870-004			28-AUG-2006 21:09	25.0	0.657			6	1	1	
030	240_030	SAMPLE	188870-005			28-AUG-2006 21:26	25.0	0.6716			6	1	1	1:MTXXYL=263.513

Stds used: 1=S3952 2=S2827 3=S3833 4=S4177 5=S3699 6=S3834 7=S4042 8=S4043 9=S3877 10=S4175 11=S4178
Flags used: <=opening >=closing ac=average CCV drift out sh=out of sample hold

SEQUENCE SUMMARY FOR 188802 PEST Water
Curtis & Tompkins Laboratories

Sequence: 806346113 Instrument: GC23 Gas Chromatograph #23 ECD
Analytical Method: EPA 8081A SOP Version: 8081_rv7

Begun: 28-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
031	240_031	SAMPLE	188870-006	116694	Soil	28-AUG-2006 21:44	25.0	0.6579	8		1		3:MTXXYL=331.796	
032	240_032	X	HEX			28-AUG-2006 22:01	1.0							
033	240_033	PEM	PEM			28-AUG-2006 22:18	1.0	1.0			1		2:MTXXYL=258.462	
034	240_034	CCV	PEST_4			28-AUG-2006 22:35	1.0	1.0	5		1			
035	240_035	X	PEST_4			28-AUG-2006 22:53	1.0							
036	240_036	X	PEM			28-AUG-2006 23:10	1.0							
037	240_037	X	HEX			28-AUG-2006 23:28	1.0							
038	240_038	MS	QC352453	116545	Soil	28-AUG-2006 23:45	1.0	0.6757	7		1			
039	240_039	MSD	QC352454	116545	Soil	29-AUG-2006 00:02	1.0	0.6773	7	2	1			
040	240_040	MS	QC353321	116753	Water	29-AUG-2006 00:20	1.0	0.009434	7	5	1			
041	240_041	MSD	QC353322	116753	Water	29-AUG-2006 00:37	1.0	0.009615	7	13	1			
042	240_042	SAMPLE	188839-001	116650	Soil	29-AUG-2006 00:55	1.0	0.672	6	2	1		1:DDT44=135.855	
043	240_043	MSS	188839-030	116650	Soil	29-AUG-2006 01:12	5.0	0.6651	7	1	1			
044	240_044	SAMPLE	188839-032	116650	Soil	29-AUG-2006 01:29	5.0	0.6757	6	4	1			
045	240_045	SAMPLE	188839-034	116694	Soil	29-AUG-2006 01:47	5.0	0.6739	6	1	1			
046	240_046	SAMPLE	188839-035	116694	Soil	29-AUG-2006 02:04	5.0	0.6627	6		1			272
047	240_047	X	HEX			29-AUG-2006 02:22	1.0							
048	240_048	PEM	PEM			29-AUG-2006 02:39	1.0	1.0			1		1:DDT44=88.1353	
049	240_049	CCV	PEST_5			29-AUG-2006 02:56	1.0	1.0	5		1			
050	240_050	X	PEST_5			29-AUG-2006 03:14	1.0							
051	240_051	X	PEM			29-AUG-2006 03:31	1.0							
052	240_052	X	HEX			29-AUG-2006 03:49	1.0							
053	240_053	SAMPLE	188802-021	116818	Water	29-AUG-2006 11:17	3.0	0.009524	44	4	1		sh >ac 1:BHCGAM=79.4911	
054	240_054	X	HEX			29-AUG-2006 12:06	1.0							
055	240_055	PEM	PEM			29-AUG-2006 12:23	1.0	1.0			1		10 1:DDT44=93.0360	
056	240_056	CCV	PEST_3			29-AUG-2006 12:41	1.0	1.0	19		1		4 ac	
057	240_057	X	PEST_3			29-AUG-2006 13:40	1.0	1.0	27		1		4 ac	
058	240_058	BLANK	QC353068	116693	Soil	29-AUG-2006 18:19	1.0	0.664	19		1		<ac	
059	240_059	LCS	QC353069	116693	Soil	29-AUG-2006 18:37	1.0	0.6757	19		1		<ac	
060	240_060	SAMPLE	188839-002	116693	Soil	29-AUG-2006 18:54	1.0	0.6651	21		1		<ac 6:CL10BZ=599.078	

Stds used: 1=S3952 2=S2827 3=S3833 4=S4177 5=S3699 6=S3834 7=S4042 8=S4043 9=S3877 10=S4175 11=S4178
Flags used: <=opening >=closing ac=average CCV drift out sh=out of sample hold

SEQUENCE SUMMARY FOR 188802 PEST Water
Curtis & Tompkins Laboratories

Sequence: 80634613 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Begun: 28-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Std's	Used	>LR
061	240_061	SAMPLE	188839-003	116693	Soil	29-AUG-2006 19:11	1.0	0.6766	19		1	<ac	4: DDT44=265.556	
062	240_062	SAMPLE	188839-004	116693	Soil	29-AUG-2006 19:29	1.0	0.6773	19		1	<ac	2: DDT44=141.188	
063	240_063	SAMPLE	188839-005	116693	Soil	29-AUG-2006 19:46	1.0	0.6709	19		1	<ac	2: DDT44=134.587	
064	240_064	SAMPLE	188839-006	116693	Soil	29-AUG-2006 20:04	1.0	0.6775	19		1	<ac	3: DDT44=223.572	
065	240_065	SAMPLE	188839-007	116693	Soil	29-AUG-2006 20:21	1.0	0.6752	18		1	<ac		
066	240_066	SAMPLE	188839-008	116693	Soil	29-AUG-2006 20:38	1.0	0.675	18		1	<ac		
067	240_067	SAMPLE	188839-009	116693	Soil	29-AUG-2006 20:56	1.0	0.6592	18		1	<ac		
068	240_068	X	HEX			29-AUG-2006 21:13	1.0							
069	240_069	X	PEM			29-AUG-2006 21:30	1.0	1.0			1	10	1: DDT44=81.9631	
070	240_070	CCV	PEST_4			29-AUG-2006 21:48	1.0	1.0	4		1	11		
071	240_071	X	PEST_4			29-AUG-2006 22:05	1.0	1.0	6		1	11		
072	240_072	PEM	PEM			29-AUG-2006 22:23	1.0	1.0			1	10	1: DDT44=91.8319	
073	240_073	X	HEX			29-AUG-2006 22:40	1.0							
074	240_074	SAMPLE	188839-010	116693	Soil	29-AUG-2006 22:57	1.0	0.664	19		1	>ac	1: DDT44=70.6849	
075	240_075	SAMPLE	188839-011	116693	Soil	29-AUG-2006 23:15	1.0	0.6764	19		1	>ac		
076	240_076	SAMPLE	188839-012	116693	Soil	29-AUG-2006 23:32	1.0	0.6693	19		1	>ac		
077	240_077	SAMPLE	188839-013	116693	Soil	29-AUG-2006 23:50	1.0	0.6727	19		1	>ac		
078	240_078	SAMPLE	188839-014	116693	Soil	30-AUG-2006 00:07	1.0	0.6658	19		1	>ac		
079	240_079	SAMPLE	188839-015	116693	Soil	30-AUG-2006 00:24	5.0	0.6759	19		1	>ac		
080	240_080	SAMPLE	188839-016	116693	Soil	30-AUG-2006 00:42	5.0	0.6777	19		1	>ac		
081	240_081	MSS	188839-017	116693	Soil	30-AUG-2006 00:59	5.0	0.6642	20		1	>ac		
082	240_082	SAMPLE	188839-018	116693	Soil	30-AUG-2006 01:16	1.0	0.6718	19		1	>ac		
083	240_083	SAMPLE	188839-019	116693	Soil	30-AUG-2006 01:34	1.0	0.6732	19		1	>ac		
084	240_084	X	HEX			30-AUG-2006 01:51	1.0							
085	240_085	X	PEM			30-AUG-2006 02:09	1.0	1.0			1	10	1: DDT44=60.9086	
086	240_086	X	PEST_5			30-AUG-2006 02:26	1.0	1.0	21		1	6 ac		
087	240_087	CCV	PEST_5			30-AUG-2006 02:43	1.0	1.0	20		1	10		
088	240_088	PEM	PEM			30-AUG-2006 03:01	1.0	1.0			1	10	1: DDT44=60.4816	
089	240_089	X	HEX			30-AUG-2006 03:18	1.0							
090	240_090	SAMPLE	188839-031	116693	Soil	30-AUG-2006 03:36	5.0	0.6745	19		1	<ac		

Std's used: 1=S3952 2=S2827 3=S3833 4=S4177 5=S3699 6=S3834 7=S4042 8=S4043 9=S3877 10=S4175 11=S4178
Flags used: <=opening >=closing ac=average CCV drift out sh=out of sample hold

SEQUENCE SUMMARY FOR 188802 PEST Water
Curtis & Tompkins Laboratories

Sequence: 806346113 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Begun: 28-AUG-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used	>LR
091	240_091	SAMPLE	188839-033	116693	Soil	30-AUG-2006 03:53	5.0	0.6752	19		1	<ac	
092	240_092	MS	QC353070	116693	Soil	30-AUG-2006 04:10	5.0	0.6684	21	1	1	<ac	
093	240_093	MSD	QC353071	116693	Soil	30-AUG-2006 04:28	5.0	0.6588	21	1	1	<ac	
094	240_094	X	HEX			30-AUG-2006 04:45	1.0						
095	240_095	SAMPLE	188839-032	116650	Soil	30-AUG-2006 05:03	5.0	0.6757	19	4	1	<ac	
096	240_096	SAMPLE	188802-021	116818	Water	30-AUG-2006 05:20	5.0	0.009524	44	3	1	sh <ac	1:ENDOSU=53.2503
097	240_097	X	HEX			30-AUG-2006 05:38	1.0						
098	240_098	X	PEM			30-AUG-2006 05:55	1.0	1.0			1	10	1:DDT44=61.0332
099	240_099	CCV	PEST_3			30-AUG-2006 06:13	1.0	1.0	6		1	4	
100	240_100	X	PEST_3			30-AUG-2006 06:30	1.0					4	
101	240_101	PEM	PEM			30-AUG-2006 06:48	1.0	1.0			1	10	1:DDT44=57.0099
102	240_102	X	HEX			30-AUG-2006 07:05	1.0						

Stds used: 1=S3952 2=S2827 3=S3833 4=S4177 5=S3699 6=S3834 7=S4042 8=S4043 9=S3877 10=S4175 11=S4178
Flags used: <=opening >=closing ac=average CCV drift out sh=out of sample hold

REPORTING SUMMARY FOR 188802 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
188802-001	alpha-BHC	GC23	A	08/24/06 17:17
188802-001	beta-BHC	GC23	A	08/24/06 17:17
188802-001	gamma-BHC	GC23	A	08/24/06 17:17
188802-001	delta-BHC	GC23	A	08/24/06 17:17
188802-001	Heptachlor	GC23	A	08/24/06 17:17
188802-001	Aldrin	GC23	A	08/24/06 17:17
188802-001	Heptachlor epoxide	GC23	B	08/24/06 17:17
188802-001	Endosulfan I	GC23	A	08/24/06 17:17
188802-001	Dieldrin	GC23	A	08/24/06 17:17
188802-001	4,4'-DDE	GC23	B	08/24/06 17:17
188802-001	Endrin	GC23	A	08/24/06 17:17
188802-001	Endosulfan II	GC23	A	08/24/06 17:17
188802-001	Endosulfan sulfate	GC23	A	08/24/06 17:17
188802-001	4,4'-DDD	GC23	B	08/24/06 17:17
188802-001	4,4'-DDT	GC23	B	08/24/06 17:17
188802-001	alpha-Chlordane	GC23	A	08/24/06 17:17
188802-001	gamma-Chlordane	GC23	A	08/24/06 17:17
188802-001	Methoxychlor	GC23	A	08/24/06 17:17
188802-001	Endrin ketone	GC23	A	08/24/06 17:17
188802-001	Toxaphene	GC23	A	08/24/06 17:17
188802-001	TCMX	GC23	A	08/24/06 17:17
188802-001	Decachlorobiphenyl	GC23	A	08/24/06 17:17
188802-008	alpha-BHC	GC23	A	08/24/06 08:48
188802-008	beta-BHC	GC23	A	08/24/06 08:48
188802-008	gamma-BHC	GC23	A	08/24/06 08:48
188802-008	delta-BHC	GC23	A	08/24/06 08:48
188802-008	Heptachlor	GC23	A	08/24/06 08:48
188802-008	Aldrin	GC23	A	08/24/06 08:48
188802-008	Heptachlor epoxide	GC23	A	08/24/06 08:48
188802-008	Endosulfan I	GC23	A	08/24/06 08:48
188802-008	Dieldrin	GC23	A	08/24/06 08:48
188802-008	4,4'-DDE	GC23	A	08/24/06 08:48
188802-008	Endrin	GC23	A	08/24/06 08:48
188802-008	Endosulfan II	GC23	A	08/24/06 08:48
188802-008	Endosulfan sulfate	GC23	A	08/24/06 08:48
188802-008	4,4'-DDD	GC23	A	08/24/06 08:48
188802-008	4,4'-DDT	GC23	A	08/24/06 08:48
188802-008	alpha-Chlordane	GC23	A	08/24/06 08:48
188802-008	gamma-Chlordane	GC23	A	08/24/06 08:48
188802-008	Methoxychlor	GC23	A	08/24/06 08:48
188802-008	Endrin ketone	GC23	A	08/24/06 08:48
188802-008	Toxaphene	GC23	A	08/24/06 08:48
188802-008	TCMX	GC23	B	08/24/06 08:48
188802-008	Decachlorobiphenyl	GC23	B	08/24/06 08:48
188802-010	alpha-BHC	GC23	A	08/24/06 09:06
188802-010	beta-BHC	GC23	A	08/24/06 09:06
188802-010	gamma-BHC	GC23	A	08/24/06 09:06
188802-010	delta-BHC	GC23	A	08/24/06 09:06
188802-010	Heptachlor	GC23	A	08/24/06 09:06
188802-010	Aldrin	GC23	A	08/24/06 09:06
188802-010	Heptachlor epoxide	GC23	A	08/24/06 09:06
188802-010	Endosulfan I	GC23	A	08/24/06 09:06

REPORTING SUMMARY FOR 188802 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
188802-010	Dieldrin	GC23	A	08/24/06 09:06
188802-010	4,4'-DDE	GC23	A	08/24/06 09:06
188802-010	Endrin	GC23	A	08/24/06 09:06
188802-010	Endosulfan II	GC23	A	08/24/06 09:06
188802-010	Endosulfan sulfate	GC23	A	08/24/06 09:06
188802-010	4,4'-DDD	GC23	A	08/24/06 09:06
188802-010	4,4'-DDT	GC23	A	08/24/06 09:06
188802-010	alpha-Chlordane	GC23	A	08/24/06 09:06
188802-010	gamma-Chlordane	GC23	A	08/24/06 09:06
188802-010	Methoxychlor	GC23	A	08/24/06 09:06
188802-010	Endrin ketone	GC23	A	08/24/06 09:06
188802-010	Toxaphene	GC23	A	08/24/06 09:06
188802-010	TCMX	GC23	A	08/24/06 09:06
188802-010	Decachlorobiphenyl	GC23	A	08/24/06 09:06
188802-021	alpha-BHC	GC23	A	08/29/06 11:17
188802-021	beta-BHC	GC23	A	08/29/06 11:17
188802-021	gamma-BHC	GC23	A	08/30/06 05:20
188802-021	delta-BHC	GC23	A	08/29/06 11:17
188802-021	Heptachlor	GC23	A	08/29/06 11:17
188802-021	Aldrin	GC23	A	08/29/06 11:17
188802-021	Heptachlor epoxide	GC23	A	08/29/06 11:17
188802-021	Endosulfan I	GC23	A	08/29/06 11:17
188802-021	Dieldrin	GC23	A	08/29/06 11:17
188802-021	4,4'-DDE	GC23	A	08/29/06 11:17
188802-021	Endrin	GC23	A	08/29/06 11:17
188802-021	Endosulfan II	GC23	A	08/29/06 11:17
188802-021	Endosulfan sulfate	GC23	A	08/29/06 11:17
188802-021	4,4'-DDD	GC23	A	08/29/06 11:17
188802-021	4,4'-DDT	GC23	A	08/29/06 11:17
188802-021	alpha-Chlordane	GC23	A	08/29/06 11:17
188802-021	gamma-Chlordane	GC23	A	08/29/06 11:17
188802-021	Methoxychlor	GC23	A	08/29/06 11:17
188802-021	Endrin ketone	GC23	A	08/29/06 11:17
188802-021	Toxaphene	GC23	A	08/29/06 11:17
188802-021	TCMX	GC23	A	08/29/06 11:17
188802-021	Decachlorobiphenyl	GC23	A	08/29/06 11:17
QC352721	alpha-BHC	GC23	A	08/23/06 11:26
QC352721	beta-BHC	GC23	A	08/23/06 11:26
QC352721	gamma-BHC	GC23	A	08/23/06 11:26
QC352721	delta-BHC	GC23	A	08/23/06 11:26
QC352721	Heptachlor	GC23	A	08/23/06 11:26
QC352721	Aldrin	GC23	A	08/23/06 11:26
QC352721	Heptachlor epoxide	GC23	A	08/23/06 11:26
QC352721	Endosulfan I	GC23	A	08/23/06 11:26
QC352721	Dieldrin	GC23	A	08/23/06 11:26
QC352721	4,4'-DDE	GC23	A	08/23/06 11:26
QC352721	Endrin	GC23	B	08/23/06 11:26
QC352721	Endosulfan II	GC23	A	08/23/06 11:26
QC352721	Endosulfan sulfate	GC23	A	08/23/06 11:26
QC352721	4,4'-DDD	GC23	B	08/23/06 11:26
QC352721	4,4'-DDT	GC23	A	08/23/06 11:26
QC352721	alpha-Chlordane	GC23	A	08/23/06 11:26

REPORTING SUMMARY FOR 188802 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC352721	gamma-Chlordane	GC23	A	08/23/06 11:26
QC352721	Methoxychlor	GC23	A	08/23/06 11:26
QC352721	Endrin ketone	GC23	B	08/23/06 11:26
QC352721	Toxaphene	GC23	A	08/23/06 11:26
QC352721	TCMX	GC23	A	08/23/06 11:26
QC352721	Decachlorobiphenyl	GC23	A	08/23/06 11:26
QC352722	gamma-BHC	GC23	A	08/23/06 11:44
QC352722	Heptachlor	GC23	A	08/23/06 11:44
QC352722	Aldrin	GC23	A	08/23/06 11:44
QC352722	Dieldrin	GC23	A	08/23/06 11:44
QC352722	Endrin	GC23	B	08/23/06 11:44
QC352722	4,4'-DDT	GC23	A	08/23/06 11:44
QC352722	TCMX	GC23	A	08/23/06 11:44
QC352722	Decachlorobiphenyl	GC23	A	08/23/06 11:44
QC352723	gamma-BHC	GC23	B	08/24/06 17:34
QC352723	Heptachlor	GC23	B	08/24/06 17:34
QC352723	Aldrin	GC23	B	08/24/06 17:34
QC352723	Dieldrin	GC23	B	08/24/06 17:34
QC352723	Endrin	GC23	B	08/24/06 17:34
QC352723	4,4'-DDT	GC23	B	08/24/06 17:34
QC352723	TCMX	GC23	B	08/24/06 17:34
QC352723	Decachlorobiphenyl	GC23	B	08/24/06 17:34
QC352724	gamma-BHC	GC23	B	08/24/06 17:52
QC352724	Heptachlor	GC23	B	08/24/06 17:52
QC352724	Aldrin	GC23	B	08/24/06 17:52
QC352724	Dieldrin	GC23	B	08/24/06 17:52
QC352724	Endrin	GC23	B	08/24/06 17:52
QC352724	4,4'-DDT	GC23	B	08/24/06 17:52
QC352724	TCMX	GC23	B	08/24/06 17:52
QC352724	Decachlorobiphenyl	GC23	B	08/24/06 17:52
QC353598	alpha-BHC	GC23	A	08/28/06 19:07
QC353598	beta-BHC	GC23	A	08/28/06 19:07
QC353598	gamma-BHC	GC23	A	08/28/06 19:07
QC353598	delta-BHC	GC23	A	08/28/06 19:07
QC353598	Heptachlor	GC23	A	08/28/06 19:07
QC353598	Aldrin	GC23	A	08/28/06 19:07
QC353598	Heptachlor epoxide	GC23	A	08/28/06 19:07
QC353598	Endosulfan I	GC23	A	08/28/06 19:07
QC353598	Dieldrin	GC23	A	08/28/06 19:07
QC353598	4,4'-DDE	GC23	A	08/28/06 19:07
QC353598	Endrin	GC23	A	08/28/06 19:07
QC353598	Endosulfan II	GC23	A	08/28/06 19:07
QC353598	Endosulfan sulfate	GC23	A	08/28/06 19:07
QC353598	4,4'-DDD	GC23	A	08/28/06 19:07
QC353598	4,4'-DDT	GC23	A	08/28/06 19:07
QC353598	alpha-Chlordane	GC23	A	08/28/06 19:07
QC353598	gamma-Chlordane	GC23	A	08/28/06 19:07
QC353598	Methoxychlor	GC23	A	08/28/06 19:07
QC353598	Endrin ketone	GC23	A	08/28/06 19:07
QC353598	Toxaphene	GC23	A	08/28/06 19:07

REPORTING SUMMARY FOR 188802 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC353598	TCMX	GC23	A	08/28/06 19:07
QC353598	Decachlorobiphenyl	GC23	A	08/28/06 19:07
QC353599	gamma-BHC	GC23	A	08/28/06 19:24
QC353599	Heptachlor	GC23	A	08/28/06 19:24
QC353599	Aldrin	GC23	A	08/28/06 19:24
QC353599	Dieldrin	GC23	A	08/28/06 19:24
QC353599	Endrin	GC23	A	08/28/06 19:24
QC353599	4,4'-DDT	GC23	A	08/28/06 19:24
QC353599	TCMX	GC23	A	08/28/06 19:24
QC353599	Decachlorobiphenyl	GC23	A	08/28/06 19:24
QC353600	gamma-BHC	GC23	A	08/28/06 19:42
QC353600	Heptachlor	GC23	A	08/28/06 19:42
QC353600	Aldrin	GC23	A	08/28/06 19:42
QC353600	Dieldrin	GC23	A	08/28/06 19:42
QC353600	Endrin	GC23	A	08/28/06 19:42
QC353600	4,4'-DDT	GC23	A	08/28/06 19:42
QC353600	TCMX	GC23	A	08/28/06 19:42
QC353600	Decachlorobiphenyl	GC23	A	08/28/06 19:42

Curtis & Tompkins Laboratories

Sample Preparation Summary

22-AUG-2006 13:02

Batch Number : 116604
Date Extracted : 21-AUG-2006
Extracted by : Jessie O'Brien Mee
Prep Method : 3520C

Analysis : 8081
Bqgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S4064A
Spike #2 ID : S4098A
Spike #3 ID :
SOP Version : 8081w rv14

Sample	Type	Client	Matrix	Init Units		Final Prep	Clean	pH	Sp 1	Sp 2	Sp 3	Analytes	Clean	Comments
				W/V	Vol	D.F.	D.F.		Vol	Vol	Vol		Method	
188758-001		Tetra Tech EC, Inc.	TCIP Leach 1000' mL	10	0.010000	1	7	.025	0			8081		
188758-002		Tetra Tech EC, Inc.	TCIP Leach 1040' mL	10	0.009615	1	7	.025	0			8081		
188758-003		Tetra Tech EC, Inc.	TCIP Leach 1040' mL	10	0.009615	1	7	.025	0			8081		
188758-004		Tetra Tech EC, Inc.	TCIP Leach 1040' mL	10	0.009615	1	7	.025	0			8081		
188758-005		Tetra Tech EC, Inc.	TCIP Leach 1040' mL	10	0.009615	1	7	.025	0			8081		
188758-006		Tetra Tech EC, Inc.	TCIP Leach 1030' mL	10	0.009709	1	7	.025	0			8081		
188774-001		Treadwell & Rollo	Water 1020' mL	10	0.009804	1	7	.025	0			8081		
188774-002		Treadwell & Rollo	Water 1050' mL	10	0.009524	1	7	.025	0			8081		
188775-029		Innovative Technical Solutions	Water 1030' mL	10	0.009709	1	7	.025	0			8081		
188802-001		Treadwell & Rollo	Water 1060' mL	10	0.009434	1	7	.025	0			8081		
188802-008		Treadwell & Rollo	Water 1050' mL	10	0.009524	1	7	.025	0			8081		
188802-010		Treadwell & Rollo	Water 1060' mL	10	0.009434	1	7	.025	0			8081		
188808-031		Innovative Technical Solutions	Water 1050' mL	10	0.009524	1	7	.025	0			8081		
QC352721	BLANK		Water 1000' mL	10	0.010000	1	7	.025	0			8081		
QC352722	LCS		Water 1000' mL	10	0.010000	1	7	.025	.025			8081		
QC352723	MS	of 188802-001	Water 1060' mL	10	0.009434	1	7	.025	.025			8081		
QC352724	MSD	of 188802-001	Water 1060' mL	10	0.009434	1	7	.025	.025			8081		
QC352725	PREPBLK		TCIP Leach 1030' mL	10	0.009709	1	7	.025	0			8081		

MSS

Prep Chemist: Jessie O'Brien Mee
Relinquished By: Jessie O'Brien Mee

Reviewed By: Jessie O'Brien Mee Date: 8/23/06
Received By: Jessie O'Brien Mee Date: 09/02/06

JLM 8/23/06

NA	✓
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Reviewed by John M. [Signature] Date 8/23/06

TCLP EXTRACTION LOG

Curtis & Tompkins, Ltd.

LIMS Batch #: 116577
 Extraction Method: 1311
 Rotator #'s: 24

Date/ Time ON: 8/21/06 12:00pm
 Temp (F) ON: 13.2
 Date/ Time OFF: 8/21/06 7:45am
 Temp (F) OFF: 23.2

Page: 2
 Benchbook#: BK 2380

Sample # / Letter	Vessel #	Sample Mass (g)	Free Liq (y/n)*	Sieved? (y/n)*	Sample pH	pH after +1N HCl	Fluid #	Extract Vol (mL)	Final pH	*Comments
Blank -	1	-	-	-	T	T	1	200mL	5	
1887581 E	2	100g	N	N	T	T	1		7	
-2	3								7	
-3	4								7	
-4	5								7	
-5	6								7	
-6	7								7	

TCLP Fluid # 1 USED FOR ORGANICS EXTRACTION

3.5 mL of 1 N HCl was added to all samples

Used Sodium Hydroxide (NaOH)

Used Acetic acid (HOAc)

Temperature Limits: 21 - 25 C

Fluid #1 pH Limits: 4.88 - 4.98 su

Fluid #2 pH Limits: 2.83 - 3.03 su

Extract filtered through 0.7um x 142mm TCLP filter paper

Mfg & Lot # / LIMS #

Date/ Initials

ND	8/21/06 chr
VWR 6067	
Baker B49828	
4.88/4.94	
Env. Exp. TCLP 605831	8/21/06 chr

Chr 8/21/06
 Extraction Chemist Date

AS 8/21/06
 Reviewed by Date

Curtis & Tompkins Laboratories

Sample Preparation Summary

26-AUG-2006 14:35

Batch Number : 116818
Date Extracted: 25-AUG-2006
Extracted by : Jessie O'Brien Mee
Prep Method : 3520C

Analysis : 8081
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S4187A
Spike #2 ID : S4098B
Spike #3 ID :
SOP Version : 8081w rv14

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
188802 021		Treadwell & Rolio	Water	1050	mL	10	0.009524	1	7	.025	0		8081		
QC353598	BLANK		Water	1000	mL	10	0.010000	1		.025	0		8081		
QC353599	BS		Water	1000	mL	10	0.010000	1		.025	.025		8081		
QC353600	BSD		Water	1000	mL	10	0.010000	1		.025	.025		8081		

Prep Chemist: Jessie O'Brien Mee
Relinquished By: Andy

Reviewed By: Wey

Date: 26 Aug 06

Received By: MSB

Date: 8/31/06

Reviewed by KLJ Date 26 AUG 06

Curtis & Tompkins Laboratories
MDL Summary for EPA 8081A Water
As of 09/24/06

Analyte	Units	GC21 A	GC21 B	GC16 A	GC16 B	GC23 A	GC23 B
gamma-BHC	ug/L	0.0065	0.0039	0.0032	0.0025	0.0029	0.0039
Heptachlor	ug/L	0.0083	0.0056	0.0057	0.0061	0.0029	0.0055
Aldrin	ug/L	0.0094	0.0070	0.0066	0.0066	0.0062	0.0077
Dieldrin	ug/L	0.011	0.0051	0.0074	0.0070	0.0041	0.0097
Endrin	ug/L	0.012	0.011	0.0095	0.0083	0.0054	0.011
4,4'-DDT	ug/L	0.012	0.0071	0.011	0.0099	0.0088	0.0087
alpha-BHC	ug/L	0.0063	0.0040	0.0029	0.0027	0.0032	0.0049
beta-BHC	ug/L	0.0061	0.011	0.0033	0.0052	0.0029	0.0055
delta-BHC	ug/L	0.0065	0.0023	0.0040	0.0026	0.0018	0.0041
Heptachlor epoxide	ug/L	0.0066	0.0097	0.0033	0.0032	0.0028	0.0044
gamma-Chlordane	ug/L	0.0064	0.011	0.0041	0.0037	0.0020	0.0042
alpha-Chlordane	ug/L	0.010	0.0052	0.0045	0.0036	0.0023	0.0052
Endosulfan I	ug/L	0.0062	0.0033	0.0043	0.0032	0.0026	0.0048
4,4'-DDE	ug/L	0.011	0.0057	0.010	0.0082	0.0045	0.0097
Endosulfan II	ug/L	0.013	0.0077	0.0088	0.0073	0.0066	0.0097
Endosulfan sulfate	ug/L	0.0096	0.0054	0.015	0.0087	0.0054	0.0093
4,4'-DDD	ug/L	0.011	0.0096	0.0088	0.0090	0.0033	0.010
Endrin aldehyde	ug/L	0.010	0.0092	0.0084	0.0086	0.0052	0.0088
Chlordane (Technical)	ug/L	0.26	0.21	0.19	0.19	0.17	0.21
Methoxychlor	ug/L	0.050	0.018	0.057	0.080	0.043	0.051
Endrin ketone	ug/L	0.0083	0.023	0.027	0.0095	0.0051	0.015
Toxaphene	ug/L	0.49	0.26	0.39	0.34	0.54	0.29

PCBs

Polychlorinated Biphenyls (PCBs)

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Sampled:	08/16/06
Units:	ug/L	Received:	08/17/06
Diln Fac:	1.000		

Field ID:	1349MW100	Prepared:	08/20/06
Type:	SAMPLE	Analyzed:	08/23/06
Lab ID:	188802-001	Cleanup Method:	EPA 3665A
Batch#:	116568		

Analyte	Result	RL
Aroclor-1016	ND	0.47
Aroclor-1221	ND	0.94
Aroclor-1232	ND	0.47
Aroclor-1242	ND	0.47
Aroclor-1248	ND	0.47
Aroclor-1254	ND	0.47
Aroclor-1260	ND	0.47

Surrogate	%REC	Limits
TCMX	21 *	65-135
Decachlorobiphenyl	14 *	65-135

Field ID:	LF6GW103	Prepared:	08/20/06
Type:	SAMPLE	Analyzed:	08/23/06
Lab ID:	188802-008	Cleanup Method:	EPA 3665A
Batch#:	116568		

Analyte	Result	RL
Aroclor-1016	ND	0.47
Aroclor-1221	ND	0.94
Aroclor-1232	ND	0.47
Aroclor-1242	ND	0.47
Aroclor-1248	ND	0.47
Aroclor-1254	ND	0.47
Aroclor-1260	ND	0.47

Surrogate	%REC	Limits
TCMX	96	65-135
Decachlorobiphenyl	39 *	65-135

*= Value outside of QC limits; see narrative
 b= See narrative
 ND= Not Detected
 RL= Reporting Limit
 Page 1 of 4



Polychlorinated Biphenyls (PCBs)

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Sampled:	08/16/06
Units:	ug/L	Received:	08/17/06
Diln Fac:	1.000		

Field ID: DUP0816061A
Type: SAMPLE
Lab ID: 188802-010
Batch#: 116568

Prepared: 08/20/06
Analyzed: 08/23/06
Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.48
Aroclor-1221	ND	0.95
Aroclor-1232	ND	0.48
Aroclor-1242	ND	0.48
Aroclor-1248	ND	0.48
Aroclor-1254	ND	0.48
Aroclor-1260	ND	0.48

Surrogate	%REC	Limits
TCMX	83	65-135
Decachlorobiphenyl	70	65-135

Field ID: LF4GW103
Type: SAMPLE
Lab ID: 188802-017
Batch#: 116568

Prepared: 08/20/06
Analyzed: 08/23/06
Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.47
Aroclor-1221	ND	0.94
Aroclor-1232	ND	0.47
Aroclor-1242	ND	0.47
Aroclor-1248	ND	0.47
Aroclor-1254	ND	0.47
Aroclor-1260	ND	0.47

Surrogate	%REC	Limits
TCMX	89	65-135
Decachlorobiphenyl	90	65-135

*= Value outside of QC limits; see narrative

b= See narrative

ND= Not Detected

RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs)

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Sampled:	08/16/06
Units:	ug/L	Received:	08/17/06
Diln Fac:	1.000		

Field ID: LF4GW104 Prepared: 08/20/06
Type: SAMPLE Analyzed: 08/23/06
Lab ID: 188802-018 Cleanup Method: EPA 3665A
Batch#: 116568

Analyte	Result	RL
Aroclor-1016	ND	0.47
Aroclor-1221	ND	0.94
Aroclor-1232	ND	0.47
Aroclor-1242	ND	0.47
Aroclor-1248	ND	0.47
Aroclor-1254	ND	0.47
Aroclor-1260	ND	0.47

Surrogate	%REC	Limits
TCMX	86	65-135
Decachlorobiphenyl	80	65-135

Field ID: 1349MW100 RE Prepared: 08/25/06
Type: SAMPLE Analyzed: 08/28/06
Lab ID: 188802-021 Cleanup Method: EPA 3665A
Batch#: 116817

Analyte	Result	RL
Aroclor-1016	ND b	0.40
Aroclor-1221	ND b	0.80
Aroclor-1232	ND b	0.40
Aroclor-1242	ND b	0.40
Aroclor-1248	ND b	0.40
Aroclor-1254	ND b	0.40
Aroclor-1260	ND b	0.40

Surrogate	%REC	Limits
TCMX	31 *	b 65-135
Decachlorobiphenyl	37 *	b 65-135

*= Value outside of QC limits; see narrative

b= See narrative

ND= Not Detected

RL= Reporting Limit

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Polychlorinated Biphenyls (PCBs)

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Sampled:	08/16/06
Units:	ug/L	Received:	08/17/06
Diln Fac:	1.000		

Type:	BLANK	Prepared:	08/20/06
Lab ID:	QC352557	Analyzed:	08/22/06
Batch#:	116568	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	83	65-135
Decachlorobiphenyl	96	65-135

Type:	BLANK	Prepared:	08/25/06
Lab ID:	QC353595	Analyzed:	08/29/06
Batch#:	116817	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	98	65-135
Decachlorobiphenyl	73	65-135

*= Value outside of QC limits; see narrative
b= See narrative
ND= Not Detected
RL= Reporting Limit

Batch QC Report

Polychlorinated Biphenyls (PCBs)			
Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC352558	Batch#:	116568
Matrix:	Water	Prepared:	08/20/06
Units:	ug/L	Analyzed:	08/22/06

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	5.000	5.168	103	77-131
Aroclor-1260	5.000	5.199	104	65-135

Surrogate	%REC	Limits
TCMX	92	65-135
Decachlorobiphenyl	76	65-135

Batch QC Report

Polychlorinated Biphenyls (PCBs)			
Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Batch#:	116817
Units:	ug/L	Prepared:	08/25/06
Diln Fac:	1.000	Analyzed:	08/28/06

Type: BS
Lab ID: QC353596

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	5.000	6.187	124	77-131
Aroclor-1260	5.000	6.726	135	65-135

Surrogate	%REC	Limits
TCMX	101	65-135
Decachlorobiphenyl	107	65-135

Type: BSD
Lab ID: QC353597

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	5.000	5.833	117	77-131	6	28
Aroclor-1260	5.000	6.176	124	65-135	9	35

Surrogate	%REC	Limits
TCMX	95	65-135
Decachlorobiphenyl	101	65-135

RPD= Relative Percent Difference

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Field ID:	1349MW100	Batch#:	116568
MSS Lab ID:	188802-001	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Prepared:	08/20/06
Diln Fac:	1.000	Analyzed:	08/22/06

Type: MS
Lab ID: QC352559

Cleanup Method: EPA 3665A

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<0.06449	4.717	3.866	82	68-143
Aroclor-1260	<0.1205	4.717	5.003	106	65-135

Surrogate	%REC	Limits
TCMX	59 *	65-135
Decachlorobiphenyl	73	65-135

Type: MSD
Lab ID: QC352560

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	4.717	3.988	85	68-143	3	38
Aroclor-1260	4.717	5.219	111	65-135	4	39

Surrogate	%REC	Limits
TCMX	55 *	65-135
Decachlorobiphenyl	70	65-135

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188802 PCBS Water: EPA 8082

Inst : GC06 Name : ar16/60_235
 Calnum : 206339326001 Date : 23-AUG-2006 21:59
 Units : pg X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Std's
L1	235_010	206339326010	PCB10_2	23-AUG-2006 21:59	S3538
L2	235_011	206339326011	PCB25_5	23-AUG-2006 22:26	S3537
L3	235_012	206339326012	PCB100_20	23-AUG-2006 22:54	S3535
L4	235_013	206339326013	PCB250_50	23-AUG-2006 23:21	S4052
L5	235_014	206339326014	PCB500_100	23-AUG-2006 23:49	S3524
L6	235_015	206339326015	PCB750_150	24-AUG-2006 00:17	S3511
L7	235_021	206339326021	PCB1000_200	24-AUG-2006 10:51	S3856

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	MNR ²	MXRSD	Fig
Aroclor-1016 Peak # 1	A	391.50	304.64	336.59	287.52	310.90	304.85	461.42	AVRG		0.00292		342.49	18	.99	20	
Aroclor-1016 Peak # 2	A	811.30	650.80	674.53	532.61	581.34	557.45	502.37	AVRG		0.00162		615.77	17	.99	20	
Aroclor-1016 Peak # 3	A	635.80	517.24	591.17	505.48	655.63	664.34	608.37	AVRG		0.00168		596.86	11	.99	20	
Aroclor-1016 Peak # 4	A	464.10	378.16	428.59	353.92	407.53	403.78	381.09	AVRG		0.00248		402.45	9	.99	20	
Aroclor-1016 Peak # 5	A	404.70	317.12	348.87	291.28	335.76	329.38	309.03	AVRG		0.00300		333.73	11	.99	20	
Aroclor-1260 Peak # 1	A	1312.6	1001.8	1066.2	856.41	936.75	866.10	867.70	AVRG		0.00101		986.79	17	.99	20	
Aroclor-1260 Peak # 2	A	610.70	459.32	553.40	519.74	477.23	441.58	452.83	AVRG		0.00199		502.11	12	.99	20	
Aroclor-1260 Peak # 3	A	699.50	504.64	533.42	508.08	509.68	470.95	512.13	AVRG		0.00187		534.06	14	.99	20	
Aroclor-1260 Peak # 4	A	1367.1	1016.5	1121.7	1074.9	1083.2	989.67	1060.0	AVRG		9.08E-4		1101.8	11	.99	20	
Aroclor-1260 Peak # 5	A	686.40	506.36	571.38	517.89	588.00	545.21	604.24	AVRG		0.00174		574.21	11	.99	20	
TCMX	A	11622	9439.6	11925	11525	13558	13718	12693	AVRG		8.29E-5		12069	12	.99	20	
Decachlorobiphenyl	A		13902	14089	11436	11771	10070	11213	AVRG		8.28E-5		12080	13	.99	20	
Aroclor-1016 Peak # 1	B	235.70	186.44	208.04	178.08	198.60	194.30	180.43	AVRG		0.00507		197.37	10	.99	20	
Aroclor-1016 Peak # 2	B	294.70	235.92	262.21	216.26	252.22	248.30	233.11	AVRG		0.00402		248.96	10	.99	20	
Aroclor-1016 Peak # 3	B	719.10	562.40	646.30	555.04	695.55	703.66	680.36	AVRG		0.00153		651.77	10	.99	20	
Aroclor-1016 Peak # 4	B	351.70	275.48	310.10	257.36	305.25	302.81	293.39	AVRG		0.00334		299.44	10	.99	20	
Aroclor-1016 Peak # 5	B	242.70	191.68	215.70	180.34	213.54	211.02	205.14	AVRG		0.00479		208.59	9	.99	20	
Aroclor-1260 Peak # 1	B	679.50	520.44	565.42	473.96	515.31	476.35	479.87	AVRG		0.00189		530.12	14	.99	20	
Aroclor-1260 Peak # 2	B	448.80	333.28	366.83	360.13	340.26	314.40	318.29	AVRG		0.00282		354.57	13	.99	20	
Aroclor-1260 Peak # 3	B	394.50	294.92	326.86	319.36	315.22	304.53	309.27	AVRG		0.00309		323.52	10	.99	20	
Aroclor-1260 Peak # 4	B	953.00	710.08	802.97	788.42	809.72	746.62	802.53	AVRG		0.00125		801.90	9	.99	20	
Aroclor-1260 Peak # 5	B	455.70	338.88	380.79	348.48	411.84	385.85	430.84	AVRG		0.00254		393.20	11	.99	20	
TCMX	B	7136.0	5864.6	7589.4	7653.8	9462.4	9736.1	9121.1	AVRG		1.24E-4		8080.5	17	.99	20	
Decachlorobiphenyl	B		9845.6	10503	8716.5	9020.9	7722.6	8571.8	AVRG		1.10E-4		9063.4	11	.99	20	

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188802 PCBS Water
EPA 8082

Inst : GC06
Calnum : 206339326001

Name : ar16/60_235
Cal Date: 23-AUG-2006

ICV 206339326023 (235_023 24-AUG-2006) stds: S3643

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1016	A	342.49		250.0	217.2	pg	-13	15	
Aroclor-1260	A	986.79		250.0	229.5	pg	-8	15	
Aroclor-1016	B	197.37		250.0	222.8	pg	-11	15	
Aroclor-1260	B	530.12		250.0	236.2	pg	-6	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188802 PCBS Water: EPA 8082

Inst : GC22
 Calnum : 256308840001
 Units : pg

Name : ar16/60
 Date : 02-AUG-2006 22:27
 X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	214_016	256308840016	PCB10_2	02-AUG-2006 22:27	S3538
L2	214_017	256308840017	PCB25_5	02-AUG-2006 22:54	S3537
L3	214_018	256308840018	PCB100_20	02-AUG-2006 23:20	S3535
L4	214_019	256308840019	PCB250_50	02-AUG-2006 23:46	S4052
L5	214_020	256308840020	PCB500_100	03-AUG-2006 00:13	S3524
L6	214_021	256308840021	PCB750_150	03-AUG-2006 00:39	S3511
L7	214_022	256308840022	PCB1000_200	03-AUG-2006 01:06	S3856

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	MNR ²	MxRSD	Fig
Aroclor-1016 Peak # 1	A	392.20	437.68	383.46	358.42	313.42	302.87	455.23	AVRG	0.00265			377.61	15	.99	20	
Aroclor-1016 Peak # 2	A	840.50	714.16	642.88	626.80	531.98	512.42	532.44	AVRG	0.00159			628.74	19	.99	20	
Aroclor-1016 Peak # 3	A	1188.6	1059.9	878.69	848.94	747.66	723.08	783.74	AVRG	0.00112			890.08	19	.99	20	
Aroclor-1016 Peak # 4	A	654.80	629.52	556.46	528.24	448.26	434.37	460.09	AVRG	0.00189			530.25	17	.99	20	
Aroclor-1016 Peak # 5	A	480.90	467.00	392.96	373.73	311.97	302.99	323.92	AVRG	0.00264			379.07	19	.99	20	
Aroclor-1260 Peak # 1	A	1478.2	1469.8	1259.3	1187.5	1011.7	1015.7	1138.4	AVRG	8.18E-4			1223.0	16	.99	20	
Aroclor-1260 Peak # 2	A	1424.0	1244.2	1101.9	1052.7	881.55	869.75	991.83	AVRG	9.25E-4			1080.9	18	.99	20	
Aroclor-1260 Peak # 3	A	858.90	818.92	690.93	647.86	539.02	516.00	577.46	AVRG	0.00151			664.16	20	.99	20	
Aroclor-1260 Peak # 4	A	2097.3	1969.1	1666.8	1600.1	1368.0	1373.1	1534.6	AVRG	6.03E-4			1658.4	17	.99	20	
Aroclor-1260 Peak # 5	A	1069.0	1011.9	865.17	813.00	671.06	661.42	749.48	AVRG	0.00120			834.43	19	.99	20	
TCMX	A	20367	19465	17151	16815	15283	15607	16222	AVRG	5.79E-5			17273	11	.99	20	
Decachlorobiphenyl	A	15507	14096	11770	11331	9571.8	9437.7	10603	AVRG	8.50E-5			11759	19	.99	20	
Aroclor-1016 Peak # 1	B	210.20	219.24	234.13	216.96	217.83	195.25	171.51	AVRG	0.00478			209.30	10	.99	20	
Aroclor-1016 Peak # 2	B	296.60	323.32	310.65	276.64	248.51	278.23	202.89	AVRG	0.00361			276.69	15	.99	20	
Aroclor-1016 Peak # 3	B	918.20	974.52	939.86	835.81	838.30	858.67	733.63	AVRG	0.00115			871.28	9	.99	20	
Aroclor-1016 Peak # 4	B	179.20	199.16	202.25	176.13	175.43	178.45	146.54	AVRG	0.00557			179.60	10	.99	20	
Aroclor-1016 Peak # 5	B	229.60	261.68	253.85	225.47	217.59	227.11	180.91	AVRG	0.00439			228.03	12	.99	20	
Aroclor-1260 Peak # 1	B	772.50	830.84	794.86	674.42	672.28	699.37	575.72	AVRG	0.00139			717.14	12	.99	20	
Aroclor-1260 Peak # 2	B	829.20	928.24	891.72	764.32	755.59	793.84	654.03	AVRG	0.00125			802.42	11	.99	20	
Aroclor-1260 Peak # 3	B	461.50	525.28	501.11	426.66	417.80	434.48	352.62	AVRG	0.00224			445.64	13	.99	20	
Aroclor-1260 Peak # 4	B	1605.4	1463.9	1310.6	1110.8	1111.2	1186.8	970.12	AVRG	7.99E-4			1251.3	18	.99	20	
Aroclor-1260 Peak # 5	B	798.80	760.00	692.08	574.38	562.66	593.43	479.03	AVRG	0.00157			637.20	18	.99	20	
TCMX	B	13066	12142	11350	10489	10568	10627	9014.0	AVRG	9.06E-5			11036	12	.99	20	
Decachlorobiphenyl	B	11717	10835	9554.9	8034.7	8041.6	8847.2	7138.4	AVRG	1.09E-4			9167.0	18	.99	20	

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Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188802 PCBS Water
EPA 8082

Inst : GC22
Calnum : 256308840001

Name : ar16/60
Cal Date: 02-AUG-2006

ICV 256308840024 (214_024 03-AUG-2006) stds: S3643

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1016	A	377.61		250.0	232.5	pg	-7	15	
Aroclor-1260	A	1223.0		250.0	230.0	pg	-8	15	
Aroclor-1016	B	209.30		250.0	241.2	pg	-4	15	
Aroclor-1260	B	717.14		250.0	243.9	pg	-2	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188802 PCBS Water: EPA 8082

Inst : GC25
 Calnum : 826336380001
 Units : pg

Name : ar16/60 233
 Date : 21-AUG-2006 16:57
 X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Std
L1	233_007	826336380007	PCB10_2	21-AUG-2006 16:57	S3538
L2	233_008	826336380008	PCB25_5	21-AUG-2006 17:24	S3537
L3	233_009	826336380009	PCB100_20	21-AUG-2006 17:50	S3535
L4	233_010	826336380010	PCB250_50	21-AUG-2006 18:16	S4052
L5	233_011	826336380011	PCB500_100	21-AUG-2006 18:43	S3524
L6	233_012	826336380012	PCB750_150	21-AUG-2006 19:09	S3511
L7	233_013	826336380013	PCB1000_200	21-AUG-2006 19:35	S3856

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	MR ²	MRSD	Flg
Atroclor-1016 Peak # 1	A	249.30	284.52	250.24	220.10	221.79	224.91	229.48	AVRG	0.00417			240.05	10	.99	20	
Atroclor-1016 Peak # 2	A	408.60	480.68	448.71	389.86	411.12	416.56	449.12	AVRG	0.00233			429.24	7	.99	20	
Atroclor-1016 Peak # 3	A	192.50	233.84	238.88	217.40	233.67	225.18	235.86	AVRG	0.00449			222.48	7	.99	20	
Atroclor-1016 Peak # 4	A	93.500	165.48	155.99	140.10	144.14	145.49	148.29	AVRG	0.00705			141.86	16	.99	20	
Atroclor-1016 Peak # 5	A	174.10	210.36	183.86	170.59	169.24	174.35	180.68	AVRG	0.00554			180.45	8	.99	20	
Atroclor-1260 Peak # 1	A	955.40	1149.3	978.81	849.47	900.86	991.89	1102.6	AVRG	0.00101			989.77	11	.99	20	
Atroclor-1260 Peak # 2	A	572.20	653.96	617.15	638.06	541.70	597.07	643.29	AVRG	0.00164			609.06	7	.99	20	
Atroclor-1260 Peak # 3	A	456.50	529.12	495.03	491.31	425.42	491.03	552.18	AVRG	0.00203			491.51	9	.99	20	
Atroclor-1260 Peak # 4	A	1078.0	1381.0	1178.5	1167.6	1079.2	1218.4	1383.3	AVRG	8.25E-4			1212.3	10	.99	20	
Atroclor-1260 Peak # 5	A	455.30	534.60	469.52	438.94	440.36	493.73	576.73	AVRG	0.00205			487.03	11	.99	20	
TCMX	A	9269.0	10271	8540.6	8074.4	7985.8	8067.8	8274.5	AVRG	1.16E-4			8640.5	10	.99	20	
Decachlorobiphenyl	A	7847.0	9925.4	7866.4	6575.7	7168.9	7803.6	9122.9	AVRG	1.24E-4			8044.3	14	.99	20	
Atroclor-1016 Peak # 1	B	270.60	248.72	262.25	247.94	240.70	230.62	211.00	AVRG	0.00409			244.55	8	.99	20	
Atroclor-1016 Peak # 2	B	330.30	344.52	313.88	283.66	293.37	273.63	242.99	AVRG	0.00336			297.48	12	.99	20	
Atroclor-1016 Peak # 3	B	1077.9	1122.9	956.84	883.92	927.23	879.80	800.78	AVRG	0.00105			949.91	12	.99	20	
Atroclor-1016 Peak # 4	B	489.40	474.36	396.96	377.09	399.11	365.05	316.79	AVRG	0.00248			402.68	15	.99	20	
Atroclor-1016 Peak # 5	B	274.10	284.64	256.51	236.52	250.45	230.15	204.61	AVRG	0.00403			248.14	11	.99	20	
Atroclor-1260 Peak # 1	B	881.90	955.16	837.25	1020.3	788.40	984.41	915.68	AVRG	0.00110			911.88	9	.99	20	
Atroclor-1260 Peak # 2	B	1092.0	1181.4	992.36	887.40	955.35	911.99	857.28	AVRG	0.00102			982.54	12	.99	20	
Atroclor-1260 Peak # 3	B	637.10	702.72	592.06	659.28	566.05	536.78	500.01	AVRG	0.00167			599.14	12	.99	20	
Atroclor-1260 Peak # 4	B	522.00	599.84	505.93	539.97	482.33	458.39	423.14	AVRG	0.00198			504.52	11	.99	20	
Atroclor-1260 Peak # 5	B	678.30	680.60	593.59	626.20	607.03	576.83	541.86	AVRG	0.00163			614.92	8	.99	20	
TCMX	B	15143	14994	12841	12167	11360	10475	9053.8	AVRG	8.14E-5			12290	18	.99	20	
Decachlorobiphenyl	B	10939	11502	8847.6	9028.4	8879.9	8141.9	7579.4	AVRG	1.08E-4			9274.1	15	.99	20	

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188802 PCBS Water
EPA 8082

Inst : GC25
Calnum : 826336380001

Name : ar16/60_233
Cal Date: 21-AUG-2006

ICV 826336380015 (233_015 21-AUG-2006) stds: S3643

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1016	A	240.05		250.0	250.5	pg	0	15	
Aroclor-1260	A	989.77		250.0	260.6	pg	4	15	
Aroclor-1016	B	244.55		250.0	238.5	pg	-5	15	
Aroclor-1260	B	911.88		250.0	246.3	pg	-1	15	

CONTINUING CALIBRATION SUMMARY FOR 188802 PCBS Water
Curtis & Tompkins Laboratories

Analyte: Aroclor-1016

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D	Flags
						RF/CF	RF/CF						
GC06	A	206346249007	28-AUG-2006 16:09	206339326001	23-AUG-2006			250.00	236.89	pg	-5	15	
GC06	B	206346249007	28-AUG-2006 16:09	206339326001	23-AUG-2006			250.00	249.95	pg	0	15	
GC06	A	206346249022	29-AUG-2006 00:15	206339326001	23-AUG-2006			500.00	558.19	pg	12	15	
GC06	B	206346249022	29-AUG-2006 00:15	206339326001	23-AUG-2006			500.00	596.78	pg	19	15	c+ ***
GC06	A	206346249038	29-AUG-2006 07:36	206339326001	23-AUG-2006			250.00	229.67	pg	-8	15	
GC06	B	206346249038	29-AUG-2006 07:36	206339326001	23-AUG-2006			250.00	243.75	pg	-2	15	
GC06	A	206346249045	29-AUG-2006 12:03	206339326001	23-AUG-2006			100.00	112.60	pg	13	15	
GC06	B	206346249045	29-AUG-2006 12:03	206339326001	23-AUG-2006			100.00	116.23	pg	16	15	c+ ***
GC22	A	256337872033	23-AUG-2006 10:44	256308840001	02-AUG-2006			500.00	506.26	pg	1	15	
GC22	B	256337872033	23-AUG-2006 10:44	256308840001	02-AUG-2006			500.00	460.84	pg	-8	15	
GC22	A	256337872040	23-AUG-2006 14:37	256308840001	02-AUG-2006			250.00	254.72	pg	2	15	
GC22	B	256337872040	23-AUG-2006 14:37	256308840001	02-AUG-2006			250.00	230.75	pg	-8	15	
GC25	A	826337691003	22-AUG-2006 13:04	826336380001	21-AUG-2006			500.00	484.91	pg	-3	15	
GC25	B	826337691003	22-AUG-2006 13:04	826336380001	21-AUG-2006			500.00	507.06	pg	1	15	
GC25	A	826337691019	22-AUG-2006 22:16	826336380001	21-AUG-2006			250.00	233.88	pg	-6	15	
GC25	B	826337691019	22-AUG-2006 22:16	826336380001	21-AUG-2006			250.00	239.34	pg	-4	15	
GC25	A	826337691034	23-AUG-2006 04:49	826336380001	21-AUG-2006			500.00	483.27	pg	-3	15	
GC25	B	826337691034	23-AUG-2006 04:49	826336380001	21-AUG-2006			500.00	478.88	pg	-4	15	

reported
from
A 08/24/06

+ = high bias c = CCV

CONTINUING CALIBRATION SUMMARY FOR 188802 PCBS Water
Curtis & Tompkins Laboratories

Analyte: Aroclor-1260

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	OntAmt	Units	%D Max	%D Flags
						RF/CF	RF/CF					
GC06	A	206346249007	28-AUG-2006 16:09	206339326001	23-AUG-2006			250.00	245.48	pg	-2	15
GC06	B	206346249007	28-AUG-2006 16:09	206339326001	23-AUG-2006			250.00	255.24	pg	2	15
GC06	A	206346249022	29-AUG-2006 00:15	206339326001	23-AUG-2006			500.00	515.86	pg	3	15
GC06	B	206346249022	29-AUG-2006 00:15	206339326001	23-AUG-2006			500.00	555.67	pg	11	15
GC06	A	206346249038	29-AUG-2006 07:36	206339326001	23-AUG-2006			250.00	224.35	pg	-10	15
GC06	B	206346249038	29-AUG-2006 07:36	206339326001	23-AUG-2006			250.00	226.99	pg	-9	15
GC06	A	206346249045	29-AUG-2006 12:03	206339326001	23-AUG-2006			100.00	107.20	pg	7	15
GC06	B	206346249045	29-AUG-2006 12:03	206339326001	23-AUG-2006			100.00	109.03	pg	9	15
GC22	A	256337872033	23-AUG-2006 10:44	256308840001	02-AUG-2006			500.00	483.41	pg	-3	15
GC22	B	256337872033	23-AUG-2006 10:44	256308840001	02-AUG-2006			500.00	528.29	pg	6	15
GC22	A	256337872040	23-AUG-2006 14:37	256308840001	02-AUG-2006			250.00	245.57	pg	-2	15
GC22	B	256337872040	23-AUG-2006 14:37	256308840001	02-AUG-2006			250.00	258.87	pg	4	15
GC25	A	826337691003	22-AUG-2006 13:04	826336380001	21-AUG-2006			500.00	473.84	pg	-5	15
GC25	B	826337691003	22-AUG-2006 13:04	826336380001	21-AUG-2006			500.00	494.38	pg	-1	15
GC25	A	826337691019	22-AUG-2006 22:16	826336380001	21-AUG-2006			250.00	238.61	pg	-5	15
GC25	B	826337691019	22-AUG-2006 22:16	826336380001	21-AUG-2006			250.00	254.12	pg	2	15
GC25	A	826337691034	23-AUG-2006 04:49	826336380001	21-AUG-2006			500.00	452.85	pg	-9	15
GC25	B	826337691034	23-AUG-2006 04:49	826336380001	21-AUG-2006			500.00	464.62	pg	-7	15

CONTINUING CALIBRATION SUMMARY FOR 188802 PCBS Water
Curtis & Tompkins Laboratories

Analyte: TCMX

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D Flags
						RF/CF	RF/CF					
GC06	A	206346249007	28-AUG-2006 16:09	206339326001	23-AUG-2006	12069	12658	50.000	52.442	pg	5 15	
GC06	B	206346249007	28-AUG-2006 16:09	206339326001	23-AUG-2006	8080.5	8949.9	50.000	55.380	pg	11 15	
GC06	A	206346249022	29-AUG-2006 00:15	206339326001	23-AUG-2006	12069	15158	100.00	125.59	pg	26 15	c+
GC06	B	206346249022	29-AUG-2006 00:15	206339326001	23-AUG-2006	8080.5	11075	100.00	137.06	pg	37 15	c+
GC06	A	206346249038	29-AUG-2006 07:36	206339326001	23-AUG-2006	12069	11847	50.000	49.083	pg	-2 15	
GC06	B	206346249038	29-AUG-2006 07:36	206339326001	23-AUG-2006	8080.5	8243.9	50.000	51.011	pg	2 15	
GC06	A	206346249045	29-AUG-2006 12:03	206339326001	23-AUG-2006	12069	12857	20.000	21.306	pg	7 15	
GC06	B	206346249045	29-AUG-2006 12:03	206339326001	23-AUG-2006	8080.5	8535.5	20.000	21.126	pg	6 15	
GC22	A	256337872033	23-AUG-2006 10:44	256308840001	02-AUG-2006	17273	19038	100.00	110.22	pg	10 15	
GC22	B	256337872033	23-AUG-2006 10:44	256308840001	02-AUG-2006	11036	10625	100.00	96.268	pg	-4 15	
GC22	A	256337872040	23-AUG-2006 14:37	256308840001	02-AUG-2006	17273	19231	50.000	55.669	pg	11 15	
GC22	B	256337872040	23-AUG-2006 14:37	256308840001	02-AUG-2006	11036	10068	50.000	45.613	pg	-9 15	
GC25	A	826337691003	22-AUG-2006 13:04	826336380001	21-AUG-2006	8640.5	7856.2	100.00	90.923	pg	-9 15	
GC25	B	826337691003	22-AUG-2006 13:04	826336380001	21-AUG-2006	12290	11864	100.00	96.530	pg	-3 15	
GC25	A	826337691019	22-AUG-2006 22:16	826336380001	21-AUG-2006	8640.5	8326.6	50.000	48.184	pg	-4 15	
GC25	B	826337691019	22-AUG-2006 22:16	826336380001	21-AUG-2006	12290	12171	50.000	49.515	pg	-1 15	
GC25	A	826337691034	23-AUG-2006 04:49	826336380001	21-AUG-2006	8640.5	8380.5	100.00	96.991	pg	-3 15	
GC25	B	826337691034	23-AUG-2006 04:49	826336380001	21-AUG-2006	12290	11500	100.00	93.572	pg	-6 15	

+ = high bias c = CCV

CONTINUING CALIBRATION SUMMARY FOR 188802 PCBS Water
Curtis & Tompkins Laboratories

Analyte: Decachlorobiphenyl

Instid	Ch	Segnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D	Flags
						RF/CF	RF/CF						
GC06	A	206346249007	28-AUG-2006 16:09	206339326001	23-AUG-2006	12080	11998	50.000	49.659	pg	-1	15	
GC06	B	206346249007	28-AUG-2006 16:09	206339326001	23-AUG-2006	9063.4	9370.9	50.000	51.697	pg	3	15	
GC06	A	206346249022	29-AUG-2006 00:15	206339326001	23-AUG-2006	12080	12650	100.00	104.72	pg	5	15	
GC06	B	206346249022	29-AUG-2006 00:15	206339326001	23-AUG-2006	9063.4	10077	100.00	111.19	pg	11	15	
GC06	A	206346249038	29-AUG-2006 07:36	206339326001	23-AUG-2006	12080	10346	50.000	42.823	pg	-14	15	
GC06	B	206346249038	29-AUG-2006 07:36	206339326001	23-AUG-2006	9063.4	8165.7	50.000	45.048	pg	-10	15	
GC06	A	206346249045	29-AUG-2006 12:03	206339326001	23-AUG-2006	12080	14897	20.000	24.664	pg	23	15	c+
GC06	B	206346249045	29-AUG-2006 12:03	206339326001	23-AUG-2006	9063.4	11473	20.000	25.318	pg	27	15	c+
GC22	A	256337872033	23-AUG-2006 10:44	256308840001	02-AUG-2006	11759	11113	100.00	94.500	pg	-5	15	
GC22	B	256337872033	23-AUG-2006 10:44	256308840001	02-AUG-2006	9167.0	9952.3	100.00	108.57	pg	9	15	
GC22	A	256337872040	23-AUG-2006 14:37	256308840001	02-AUG-2006	11759	10770	50.000	45.793	pg	-8	15	
GC22	B	256337872040	23-AUG-2006 14:37	256308840001	02-AUG-2006	9167.0	9274.5	50.000	50.586	pg	1	15	
GC25	A	826337691003	22-AUG-2006 13:04	826336380001	21-AUG-2006	8044.3	7532.4	100.00	93.636	pg	-6	15	
GC25	B	826337691003	22-AUG-2006 13:04	826336380001	21-AUG-2006	9274.1	9334.9	100.00	100.66	pg	1	15	
GC25	A	826337691019	22-AUG-2006 22:16	826336380001	21-AUG-2006	8044.3	6880.6	50.000	42.767	pg	-14	15	
GC25	B	826337691019	22-AUG-2006 22:16	826336380001	21-AUG-2006	9274.1	8999.8	50.000	48.521	pg	-3	15	
GC25	A	826337691034	23-AUG-2006 04:49	826336380001	21-AUG-2006	8044.3	7105.0	100.00	88.323	pg	-12	15	
GC25	B	826337691034	23-AUG-2006 04:49	826336380001	21-AUG-2006	9274.1	8822.3	100.00	95.129	pg	-5	15	

+ = high bias c = CCV

SEQUENCE SUMMARY FOR 188802 PCBs Water
Curtis & Tompkins Laboratories

Sequence: 256308840 Instrument: GC22 Gas Chromatograph #22 ECD
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

Begun: 02-AUG-2006

#	Filename	Type	Samplemum	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
002	214_002	CCV	PCB250_50			02-AUG-2006 11:20	1.0						1		
003	214_003	CCV	PCB250_50			02-AUG-2006 13:37	1.0						1		
004	214_004	CCV	PCB250_50			02-AUG-2006 14:04	1.0						1		
005	214_005	CCV	PCB250_50			02-AUG-2006 16:29	1.0			1			1		
006	214_006	CCV	PCB250_50			02-AUG-2006 17:05	1.0						1		
007	214_007	X	PRIMER			02-AUG-2006 18:29	1.0								
008	214_008	X	PRIMER			02-AUG-2006 18:55	1.0								
009	214_009	X	PRIMER			02-AUG-2006 19:22	1.0								
010	214_010	X	PRIMER			02-AUG-2006 19:48	1.0								
011	214_011	X	PRIMER			02-AUG-2006 20:15	1.0								
012	214_012	X	PRIMER			02-AUG-2006 20:42	1.0								
013	214_013	X	HEX			02-AUG-2006 21:08	1.0								
014	214_014	X	HEX			02-AUG-2006 21:35	1.0								
015	214_015	X	HEX			02-AUG-2006 22:01	1.0								
016	214_016	ICAL	PCB10_2			02-AUG-2006 22:27	1.0						2		
017	214_017	ICAL	PCB25_5			02-AUG-2006 22:54	1.0						3		
018	214_018	ICAL	PCB100_20			02-AUG-2006 23:20	1.0						4		
019	214_019	ICAL	PCB250_50			02-AUG-2006 23:46	1.0						5		
020	214_020	ICAL	PCB500_100			03-AUG-2006 00:13	1.0						6		
021	214_021	ICAL	PCB750_150			03-AUG-2006 00:39	1.0						7		
022	214_022	ICAL	PCB1000_200			03-AUG-2006 01:06	1.0						8		
023	214_023	X	HEX			03-AUG-2006 01:32	1.0								
024	214_024	ICV	ULTRA16/60			03-AUG-2006 01:58	1.0			1			9		
025	214_025	ICV	ULTRA16/60			03-AUG-2006 02:25	1.0						9		

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Stds used: 1=S3525 2=S3538 3=S3537 4=S3535 5=S4052 6=S3524 7=S3511 8=S3856 9=S3643

SEQUENCE SUMMARY FOR 188802 PCBs Water
Curtis & Tompkins Laboratories

Sequence: 826336380 Instrument: GC25
Analytical Method: EPA 8082

Gas Chromatograph #25 ECD
SOP Version: 8082_rv.6

Begun: 21-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	UL	VL	pH	Stds	Used	>LR
001	233_001	X	PRIMER			21-AUG-2006	14:20	1.0							
002	233_002	X	PRIMER			21-AUG-2006	14:47	1.0							
003	233_003	X	PRIMER			21-AUG-2006	15:13	1.0							
004	233_004	X	HEX			21-AUG-2006	15:39	1.0							
005	233_005	X	HEX			21-AUG-2006	16:05	1.0							
006	233_006	X	HEX			21-AUG-2006	16:31	1.0							
007	233_007	ICAL	PCB10_2			21-AUG-2006	16:57	1.0						1	
008	233_008	ICAL	PCB25_5			21-AUG-2006	17:24	1.0						2	
009	233_009	ICAL	PCB100_20			21-AUG-2006	17:50	1.0						3	
010	233_010	ICAL	PCB250_50			21-AUG-2006	18:16	1.0						4	
011	233_011	ICAL	PCB500_100			21-AUG-2006	18:43	1.0						5	
012	233_012	ICAL	PCB750_150			21-AUG-2006	19:09	1.0						6	
013	233_013	ICAL	PCB1000_200			21-AUG-2006	19:35	1.0						7	
014	233_014	X	HEX			21-AUG-2006	20:01	1.0							
015	233_015	ICV	ULTRA_1660			21-AUG-2006	20:28	1.0						8	
016	233_016	ICV	ULTRA_1660			21-AUG-2006	20:54	1.0						8	
017	233_017	X	HEX			21-AUG-2006	21:21	1.0							

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Stds used: 1=S3538 2=S3537 3=S3535 4=S4052 5=S3524 6=S3511 7=S3856 8=S3643

SEQUENCE SUMMARY FOR 188802 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 256337872 Instrument: GC22
Analytical Method: EPA 8082

Gas Chromatograph #22 ECD
SOP Version: 8082_rv.6

Begun: 22-AUG-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds Used	>LR
001	234_001	CCV	PCB500_100			22-AUG-2006 15:12	1.0	1.0		1		1	
002	234_002	X	PCB500_100			22-AUG-2006 15:39	1.0	1.0		1		1	
003	234_003	X	CCV			22-AUG-2006 19:10	1.0					2	
004	234_004	CCV	AR2154			22-AUG-2006 19:36	1.0					2	
005	234_005	CCV	AR1248			22-AUG-2006 20:03	1.0					3	
006	234_006	X	HEX			22-AUG-2006 20:29	1.0						
007	234_007	BLANK	QC352676			22-AUG-2006 20:55	1.0	0.6667		1			
008	234_008	LCS	QC352682			22-AUG-2006 21:22	1.0	0.6757		1			
009	234_009	SAMPLE	188808-002			22-AUG-2006 21:48	1.0	0.672		2			
010	234_010	MSS	188808-032			22-AUG-2006 22:14	1.0						
011	234_011	X	HEX			22-AUG-2006 22:40	1.0						
012	234_012	SAMPLE	188701-003			22-AUG-2006 23:07	1.0	100.0		1			
013	234_013	SAMPLE	188701-004			22-AUG-2006 23:33	1.0	100.0		1			
014	234_014	SAMPLE	188701-005			22-AUG-2006 23:59	1.0	100.0		1			
015	234_015	SAMPLE	188701-006			23-AUG-2006 00:25	1.0	100.0		1			
016	234_016	SAMPLE	188701-007			23-AUG-2006 00:52	1.0	100.0		1			
017	234_017	X	HEX			23-AUG-2006 01:18	1.0						
018	234_018	CCV	PCB250_50			23-AUG-2006 01:44	1.0	1.0		1		4	
019	234_019	X	PCB250_50			23-AUG-2006 02:10	1.0					4	
020	234_020	X	CCV			23-AUG-2006 02:37	1.0					2	
021	234_021	CCV	AR2154			23-AUG-2006 03:03	1.0					2	
022	234_022	CCV	AR1248			23-AUG-2006 03:29	1.0					3	
023	234_023	X	HEX			23-AUG-2006 03:56	1.0						
024	234_024	SAMPLE	188701-008			23-AUG-2006 04:22	1.0	100.0		1			
025	234_025	SAMPLE	188701-009			23-AUG-2006 04:48	1.0	100.0		1			
026	234_026	SAMPLE	188701-010			23-AUG-2006 05:15	1.0	100.0		1			
027	234_027	SAMPLE	188701-011			23-AUG-2006 08:06	1.0	100.0		1			
028	234_028	SAMPLE	188701-012			23-AUG-2006 08:32	1.0	142.0		1			
029	234_029	SAMPLE	188808-014			23-AUG-2006 08:58	1.0	100.0		1			
030	234_030	X	HEX			23-AUG-2006 09:25	1.0						
031	234_031	SAMPLE	188437-009			23-AUG-2006 09:51	10.0						

Stds used: 1=S3524 2=S4085 3=S3783 4=S4052

SEQUENCE SUMMARY FOR 188802 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 256337872 Instrument: GC22
Analytical Method: EPA 8082

Gas Chromatograph #22 ECD
SOP Version: 8082_rv.6

Begun: 22-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
032	234_032	X	HEX			23-AUG-2006	10:18	1.0						
033	234_033	CCV	PCB500_100			23-AUG-2006	10:44	1.0	1.0		1	1		
034	234_034	X	PCB500_100			23-AUG-2006	11:11	1.0			1	1		
035	234_035	CCV	AR2154			23-AUG-2006	11:37	1.0	1.0		1	2		
036	234_036	X	HEX			23-AUG-2006	12:10	1.0						
037	234_037	MSS	188802-001		116568 Water	23-AUG-2006	12:37	1.0	0.02358	4	1			
038	234_038	MSS	188808-032		116590 Soil	23-AUG-2006	13:03	1.0	0.6689	2	1			4:PCB122=1705.25
039	234_039	X	HEX			23-AUG-2006	14:11	1.0						
040	234_040	CCV	PCB250_50			23-AUG-2006	14:37	1.0	1.0		1	4		
041	234_041	X	PCB250_50			23-AUG-2006	15:03	1.0	1.0		1	4		
042	234_042	CCV	AR2154			23-AUG-2006	15:30	1.0	1.0		1	2		

Std's used: 1=S3524 2=S4085 3=S3783 4=S4052

SEQUENCE SUMMARY FOR 188802 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 826337691 Instrument: GC25
Analytical Method: EPA 8082

Gas Chromatograph #25 ECD
SOP Version: 8082_rv.6

Begun: 22-AUG-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds Used	>LR
001	234_001	X	HEX			22-AUG-2006 12:11	1.0						
002	234_002	X	PCB500_100			22-AUG-2006 12:37	1.0					1	
003	234_003	CCV	PCB500_100			22-AUG-2006 13:04	1.0	1.0			1	1	
004	234_004	X	CCV			22-AUG-2006 13:52	1.0					2	
005	234_005	X	CCV			22-AUG-2006 14:18	1.0					3	
006	234_006	X	HEX			22-AUG-2006 15:37	1.0						
007	234_007	SAMPLE	188878-007		Wipe	22-AUG-2006 16:04	1.0	50.0			1		
008	234_008	SAMPLE	188878-008		Wipe	22-AUG-2006 16:30	1.0	50.0			1		
009	234_009	BLANK	QC352895		Wipe	22-AUG-2006 17:03	1.0	50.0			1		
010	234_010	BS	QC352896		Wipe	22-AUG-2006 17:29	1.0	50.0			1		
011	234_011	BSD	QC352897		Wipe	22-AUG-2006 17:56	1.0	50.0			1		
012	234_012	X	188802-001		Water	22-AUG-2006 19:12	1.0	0.02358			4		
013	234_013	BLANK	QC352557		Water	22-AUG-2006 19:38	1.0	0.025			1		
014	234_014	LCS	QC352558		Water	22-AUG-2006 20:04	1.0	0.025			1		
015	234_015	MS	QC352559		Water	22-AUG-2006 20:31	1.0	0.02358			2		
016	234_016	MSD	QC352560		Water	22-AUG-2006 20:57	1.0	0.02358			2		
017	234_017	X	HEX			22-AUG-2006 21:23	1.0				1		
018	234_018	X	PCB250_50			22-AUG-2006 21:49	1.0					4	
019	234_019	CCV	PCB250_50			22-AUG-2006 22:16	1.0				1		
020	234_020	X	CCV			22-AUG-2006 22:42	1.0					2	
021	234_021	X	CCV			22-AUG-2006 23:08	1.0					2	
022	234_022	ICAL	AR1248			22-AUG-2006 23:34	1.0	1.0				3	
023	234_023	X	HEX			23-AUG-2006 00:01	1.0						
024	234_024	MDLCHEC	187656-009		Water	23-AUG-2006 00:27	1.0	0.025			1		
025	234_025	SAMPLE	188801-003		Water	23-AUG-2006 00:53	1.0	0.025			1		
026	234_026	SAMPLE	188808-031		Water	23-AUG-2006 01:19	1.0	0.02475			2		
027	234_027	SAMPLE	188802-008		Water	23-AUG-2006 01:46	1.0	0.02358			2		
028	234_028	SAMPLE	188802-010		Water	23-AUG-2006 02:12	1.0	0.02381			1		
029	234_029	SAMPLE	188802-017		Water	23-AUG-2006 02:38	1.0	0.02358			1		
030	234_030	SAMPLE	188802-018		Water	23-AUG-2006 03:04	1.0	0.02358			1		

Stds used: 1=S3524 2=S4085 3=S3783 4=S4052
Flags used: sh=out of sample hold

SEQUENCE SUMMARY FOR 188802 PCBs Water
Curtis & Tompkins Laboratories

Sequence: 826337691 Instrument: GC25
Analytical Method: EPA 8082

Gas Chromatograph #25 ECD
SOP Version: 8082_rv.6

Begun: 22-AUG-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Std's Used	>LR
031	234_031	SAMPLE	188837-012	116568	Water	23-AUG-2006	03:30 1.0	0.02404			1		
032	234_032	SAMPLE	188437-009	116513	Soil	23-AUG-2006	03:56 10.0	0.6664	28		1	sh	12:PCB125=1387.12
033	234_033	X	HEX			23-AUG-2006	04:23 1.0						
034	234_034	CCV	PCB500_100			23-AUG-2006	04:49 1.0	1.0			1		
035	234_035	X	PCB500_100			23-AUG-2006	05:15 1.0	1.0	3		1		
036	234_036	X	CCV			23-AUG-2006	08:06 1.0						
037	234_037	X	CCV			23-AUG-2006	08:32 1.0						
038	234_038	CCV	AR1248			23-AUG-2006	08:58 1.0	1.0			1		
039	234_039	X	HEX			23-AUG-2006	09:25 1.0						

Std's used: 1=S3524 2=S4085 3=S3783 4=S4052
Flags used: sh=out of sample hold

SEQUENCE SUMMARY FOR 188802 PCBs Water
Curtis & Tompkins Laboratories

Sequence: 206339326 Instrument: GC06
Analytical Method: EPA 8082

Gas Chromatograph #6 ECD
SOP Version: 8082_rv.6

Begun: 23-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds Used	>LR
001	235_001	X	PRIMER			23-AUG-2006	15:26	1.0					
002	235_002	X	PRIMER			23-AUG-2006	15:53	1.0					
003	235_003	X	PRIMER			23-AUG-2006	18:46	1.0					
004	235_004	X	PRIMER			23-AUG-2006	19:14	1.0					
005	235_005	X	PRIMER			23-AUG-2006	19:41	1.0					
006	235_006	X	PRIMER			23-AUG-2006	20:09	1.0					
007	235_007	X	HEX			23-AUG-2006	20:36	1.0					
008	235_008	X	HEX			23-AUG-2006	21:04	1.0					
009	235_009	X	HEX			23-AUG-2006	21:31	1.0					
010	235_010	ICAL	PCB10_2			23-AUG-2006	21:59	1.0					
011	235_011	ICAL	PCB25_5			23-AUG-2006	22:26	1.0					
012	235_012	ICAL	PCB100_20			23-AUG-2006	22:54	1.0					
013	235_013	ICAL	PCB250_50			23-AUG-2006	23:21	1.0					
014	235_014	ICAL	PCB500_100			23-AUG-2006	23:49	1.0					
015	235_015	ICAL	PCB750_150			24-AUG-2006	00:17	1.0					
016	235_016	ICAL	PCB1000_200			24-AUG-2006	00:44	1.0					
017	235_017	X	HEX			24-AUG-2006	01:12	1.0					
018	235_018	ICV	ULTRA_1660			24-AUG-2006	01:39	1.0					
019	235_019	ICV	ULTRA_1660			24-AUG-2006	02:07	1.0					
020	235_020	X	HEX			24-AUG-2006	02:34	1.0					
021	235_021	ICAL	PCB1000_200			24-AUG-2006	10:51	1.0					
022	235_022	X	HEX			24-AUG-2006	11:19	1.0					
023	235_023	ICV	ULTRA_1660			24-AUG-2006	11:46	1.0					
024	235_024	ICV	ULTRA_1660			24-AUG-2006	12:14	1.0					
026	235_026	BLANK	QC353351			24-AUG-2006	14:22	1.0					
027	235_027	BLANK	QC353352			24-AUG-2006	14:49	1.0					
028	235_028	LCS	QC353353			24-AUG-2006	15:17	1.0					
029	235_029	SAMPLE	188870-001			24-AUG-2006	15:45	10.0					
030	235_030	X	HEX			24-AUG-2006	17:55	1.0					
031	235_031	X	CCV			24-AUG-2006	18:26	1.0					
032	235_032	X	HEX			24-AUG-2006	18:54	1.0					

Stds used: 1=S3538 2=S3537 3=S3535 4=S4052 5=S3524 6=S3511 7=S3856 8=S3643 9=S4085

SEQUENCE SUMMARY FOR 188802 PCBs Water
Curtis & Tompkins Laboratories

Sequence: 206346249 Instrument: GC06
Analytical Method: EPA 8082

Gas Chromatograph #6 ECD
SOP Version: 8082_rv.6

Begun: 28-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
001	240_001	X	PCB500_100			28-AUG-2006 10:49	1.0	1.0			1	1		
002	240_002	X	PCB500_100			28-AUG-2006 11:17	1.0	1.0	1		1	1		
003	240_003	X	HEX			28-AUG-2006 12:05	1.0							
004	240_004	MSS	188770-001			28-AUG-2006 12:33	1.0	0.6633		3	1			
005	240_005	X	HEX			28-AUG-2006 15:14	1.0							
006	240_006	X	PCB250_50			28-AUG-2006 15:41	1.0	1.0	3		1	2		
007	240_007	CCV	PCB250_50			28-AUG-2006 16:09	1.0	1.0			1	2		
008	240_008	CCV	AR2154			28-AUG-2006 17:50	1.0	1.0	1		1	3		
009	240_009	CCV	AR1248			28-AUG-2006 18:17	1.0					4		
010	240_010	X	HEX			28-AUG-2006 18:45	1.0							
011	240_011	X	QC353595			28-AUG-2006 19:12	1.0	0.025			1			
012	240_012	SAMPLE	188802-021			28-AUG-2006 19:40	1.0	0.02	18	4	1	sh		
013	240_013	SAMPLE	188869-001			28-AUG-2006 20:08	1.0	0.02427			1			
014	240_014	SAMPLE	188878-005			28-AUG-2006 20:35	1.0	0.6743	19		1			
015	240_015	SAMPLE	188878-006			28-AUG-2006 21:03	1.0	0.6711	4		1			
016	240_016	SAMPLE	188935-001			28-AUG-2006 21:30	1.0	0.6732			1			
017	240_017	SAMPLE	188935-002			28-AUG-2006 21:58	1.0	0.664			1			
018	240_018	SAMPLE	188947-005			28-AUG-2006 22:25	1.0	0.6651			1			
019	240_019	BS	QC353596			28-AUG-2006 22:53	1.0	0.025	1	2	1			
020	240_020	BSD	QC353597			28-AUG-2006 23:20	1.0	0.025	1		1			
021	240_021	X	HEX			28-AUG-2006 23:48	1.0				1			
022	240_022	CCV	PCB500_100			29-AUG-2006 00:15	1.0	1.0	1		1	1		
023	240_023	X	PCB500_100			29-AUG-2006 00:43	1.0	1.0	2		1	1		
024	240_024	ICAL	AR2154			29-AUG-2006 01:10	1.0	1.0			1	3		
025	240_025	CCV	AR1248			29-AUG-2006 01:38	1.0				1	4		
026	240_026	X	HEX			29-AUG-2006 02:05	1.0							
027	240_027	BLANK	QC353680			29-AUG-2006 02:33	1.0	0.675			1			
028	240_028	SAMPLE	188947-006			29-AUG-2006 03:00	1.0	0.6757			1			
029	240_029	SAMPLE	188437-009			29-AUG-2006 03:28	20.0	0.6664	18		1	sh		
030	240_030	MSS	188935-008			29-AUG-2006 03:56	1.0	0.6727			1			

Stds used: 1=S3524 2=S4052 3=S4085 4=S4185 5=S3535
Flags used: sh-out of sample hold

SEQUENCE SUMMARY FOR 188802 PCBs Water
Curtis & Tompkins Laboratories

Sequence: 206346249 Instrument: GC06
Analytical Method: EPA 8082

Gas Chromatograph #6 ECD
SOP Version: 8082_rv.6

Begun: 28-AUG-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used	>LR
031	240_031	MS	188935-019	116835	Soil	29-AUG-2006 04:23	1.0	0.6579			1		
032	240_032	LCS	QC353686	116835	Soil	29-AUG-2006 04:51	1.0	0.6696	1		1		
033	240_033	MS	QC353687	116835	Soil	29-AUG-2006 05:18	1.0	0.6709	1		1		
034	240_034	MSD	QC353688	116835	Soil	29-AUG-2006 05:46	1.0	0.6725	1		1		
035	240_035	MS	QC353689	116835	Soil	29-AUG-2006 06:13	1.0	0.675	1		1		
036	240_036	MSD	QC353690	116835	Soil	29-AUG-2006 06:41	1.0	0.6725	1		1		
037	240_037	X	HEX			29-AUG-2006 07:08	1.0						
038	240_038	CCV	PCB250_50			29-AUG-2006 07:36	1.0	1.0			1		
039	240_039	X	PCB250_50			29-AUG-2006 08:03	1.0	1.0	3		1		
040	240_040	CCV	AR2154			29-AUG-2006 08:31	1.0	1.0			1		
041	240_041	CCV	AR1248			29-AUG-2006 08:58	1.0						
042	240_042	X	HEX			29-AUG-2006 09:26	1.0						
043	240_043	BLANK	QC353595	116817	Water	29-AUG-2006 11:08	1.0	0.025			1		
044	240_044	X	HEX			29-AUG-2006 11:36	1.0						
045	240_045	CCV	PCB100_20			29-AUG-2006 12:03	1.0	1.0	1		1		

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Stds used: 1=S3524 2=S4052 3=S4085 4=S4185 5=S3535
Flags used: sh=out of sample hold

REPORTING SUMMARY FOR 188802 PCBS Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
188802-001	Aroclor-1016	GC22	A	08/23/06 12:37
188802-001	Aroclor-1221	GC22	A	08/23/06 12:37
188802-001	Aroclor-1232	GC22	A	08/23/06 12:37
188802-001	Aroclor-1242	GC22	A	08/23/06 12:37
188802-001	Aroclor-1248	GC22	A	08/23/06 12:37
188802-001	Aroclor-1254	GC22	A	08/23/06 12:37
188802-001	Aroclor-1260	GC22	A	08/23/06 12:37
188802-001	TCMX	GC22	A	08/23/06 12:37
188802-001	Decachlorobiphenyl	GC22	A	08/23/06 12:37
188802-008	Aroclor-1016	GC25	A	08/23/06 01:46
188802-008	Aroclor-1221	GC25	A	08/23/06 01:46
188802-008	Aroclor-1232	GC25	A	08/23/06 01:46
188802-008	Aroclor-1242	GC25	A	08/23/06 01:46
188802-008	Aroclor-1248	GC25	A	08/23/06 01:46
188802-008	Aroclor-1254	GC25	A	08/23/06 01:46
188802-008	Aroclor-1260	GC25	A	08/23/06 01:46
188802-008	TCMX	GC25	A	08/23/06 01:46
188802-008	Decachlorobiphenyl	GC25	A	08/23/06 01:46
188802-010	Aroclor-1016	GC25	A	08/23/06 02:12
188802-010	Aroclor-1221	GC25	A	08/23/06 02:12
188802-010	Aroclor-1232	GC25	A	08/23/06 02:12
188802-010	Aroclor-1242	GC25	A	08/23/06 02:12
188802-010	Aroclor-1248	GC25	A	08/23/06 02:12
188802-010	Aroclor-1254	GC25	A	08/23/06 02:12
188802-010	Aroclor-1260	GC25	A	08/23/06 02:12
188802-010	TCMX	GC25	B	08/23/06 02:12
188802-010	Decachlorobiphenyl	GC25	B	08/23/06 02:12
188802-017	Aroclor-1016	GC25	A	08/23/06 02:38
188802-017	Aroclor-1221	GC25	A	08/23/06 02:38
188802-017	Aroclor-1232	GC25	A	08/23/06 02:38
188802-017	Aroclor-1242	GC25	A	08/23/06 02:38
188802-017	Aroclor-1248	GC25	A	08/23/06 02:38
188802-017	Aroclor-1254	GC25	A	08/23/06 02:38
188802-017	Aroclor-1260	GC25	A	08/23/06 02:38
188802-017	TCMX	GC25	A	08/23/06 02:38
188802-017	Decachlorobiphenyl	GC25	A	08/23/06 02:38
188802-018	Aroclor-1016	GC25	A	08/23/06 03:04
188802-018	Aroclor-1221	GC25	A	08/23/06 03:04
188802-018	Aroclor-1232	GC25	A	08/23/06 03:04
188802-018	Aroclor-1242	GC25	A	08/23/06 03:04
188802-018	Aroclor-1248	GC25	A	08/23/06 03:04
188802-018	Aroclor-1254	GC25	A	08/23/06 03:04
188802-018	Aroclor-1260	GC25	A	08/23/06 03:04
188802-018	TCMX	GC25	A	08/23/06 03:04
188802-018	Decachlorobiphenyl	GC25	A	08/23/06 03:04
188802-021	Aroclor-1016	GC06	A	08/28/06 19:40
188802-021	Aroclor-1221	GC06	A	08/28/06 19:40
188802-021	Aroclor-1232	GC06	A	08/28/06 19:40
188802-021	Aroclor-1242	GC06	A	08/28/06 19:40

REPORTING SUMMARY FOR 188802 PCBS Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
188802-021	Aroclor-1248	GC06	A	08/28/06 19:40
188802-021	Aroclor-1254	GC06	A	08/28/06 19:40
188802-021	Aroclor-1260	GC06	A	08/28/06 19:40
188802-021	TCMX	GC06	A	08/28/06 19:40
188802-021	Decachlorobiphenyl	GC06	A	08/28/06 19:40
QC352557	Aroclor-1016	GC25	A	08/22/06 19:38
QC352557	Aroclor-1221	GC25	A	08/22/06 19:38
QC352557	Aroclor-1232	GC25	A	08/22/06 19:38
QC352557	Aroclor-1242	GC25	A	08/22/06 19:38
QC352557	Aroclor-1248	GC25	A	08/22/06 19:38
QC352557	Aroclor-1254	GC25	A	08/22/06 19:38
QC352557	Aroclor-1260	GC25	A	08/22/06 19:38
QC352557	TCMX	GC25	A	08/22/06 19:38
QC352557	Decachlorobiphenyl	GC25	A	08/22/06 19:38
QC353595	Aroclor-1016	GC06	A	08/29/06 11:08
QC353595	Aroclor-1221	GC06	A	08/29/06 11:08
QC353595	Aroclor-1232	GC06	A	08/29/06 11:08
QC353595	Aroclor-1242	GC06	A	08/29/06 11:08
QC353595	Aroclor-1248	GC06	A	08/29/06 11:08
QC353595	Aroclor-1254	GC06	A	08/29/06 11:08
QC353595	Aroclor-1260	GC06	A	08/29/06 11:08
QC353595	TCMX	GC06	A	08/29/06 11:08
QC353595	Decachlorobiphenyl	GC06	A	08/29/06 11:08
QC352558	Aroclor-1016	GC25	A	08/22/06 20:04
QC352558	Aroclor-1260	GC25	A	08/22/06 20:04
QC352558	TCMX	GC25	A	08/22/06 20:04
QC352558	Decachlorobiphenyl	GC25	A	08/22/06 20:04
QC352559	Aroclor-1016	GC25	A	08/22/06 20:31
QC352559	Aroclor-1260	GC25	A	08/22/06 20:31
QC352559	TCMX	GC25	A	08/22/06 20:31
QC352559	Decachlorobiphenyl	GC25	A	08/22/06 20:31
QC352560	Aroclor-1016	GC25	A	08/22/06 20:57
QC352560	Aroclor-1260	GC25	A	08/22/06 20:57
QC352560	TCMX	GC25	A	08/22/06 20:57
QC352560	Decachlorobiphenyl	GC25	A	08/22/06 20:57
QC353596	Aroclor-1016	GC06	A	08/28/06 22:53
QC353596	Aroclor-1260	GC06	A	08/28/06 22:53
QC353596	TCMX	GC06	A	08/28/06 22:53
QC353596	Decachlorobiphenyl	GC06	A	08/28/06 22:53
QC353597	Aroclor-1016	GC06	A	08/28/06 23:20
QC353597	Aroclor-1260	GC06	A	08/28/06 23:20
QC353597	TCMX	GC06	A	08/28/06 23:20
QC353597	Decachlorobiphenyl	GC06	A	08/28/06 23:20

Curtis & Tompkins Laboratories

Sample Preparation Summary

22-AUG-2006 16:48

Batch Number : 1165668
Date Extracted: 20-AUG-2006
Extracted by : Kevin Riley
Prep Method : 3520C

Analysis : PCB
Bg group : N/A
Units : mL
Clean-up :

Spike #1 ID : S4064A
Spike #2 ID : S4092A
Spike #3 ID :
SOP Version : PCB w rv7

Sample	Type	Client	Matrix	Init	Units	Final	Prep	Clean	pH	Sp 1	Sp 2	Sp 3	Analyses	Clean	Comments
				W/V		Vol	D.F.	D.F.		Vol	Vol	Vol		Method	
188801-003		LFR Levine Fricke	Water	1000	mL	25	0.025000	1	7	.05	0		PCB	3665A	
188802-001		Treadwell & Rollo	Water	1060	mL	25	0.023585	1	7	.05	0		PCB	3665A	ms
188802-008		Treadwell & Rollo	Water	1060	mL	25	0.023585	1	7	.05	0		PCB	3665A	
188802-010		Treadwell & Rollo	Water	1050	mL	25	0.023810	1	7	.05	0		PCB	3665A	
188802-017		Treadwell & Rollo	Water	1060	mL	25	0.023585	1	7	.05	0		PCB	3665A	
188802-018		Treadwell & Rollo	Water	1060	mL	25	0.023585	1	7	.05	0		PCB	3665A	
188808-031		Innovative Technical Solutions	Water	1010	mL	25	0.024752	1	7	.05	0		PCB	3665A	
188837-012		Treadwell & Rollo	Water	1040	mL	25	0.024038	1	7	.05	0		PCB	3665A	
QC352557	BLANK		Water	1000	mL	25	0.025000	1		.05			PCB	3665A	
QC352558	LCS		Water	1000	mL	25	0.025000	1		.05	.05		PCB	3665A	
QC352559	MS	of 188802-001	Water	1060	mL	25	0.023585	1	7	.05	.05		PCB	3665A	
QC352560	MSD	of 188802-001	Water	1060	mL	25	0.023585	1	7	.05	.05		PCB	3665A	

Prep Chemist:

JOM for KP

Reviewed By:

[Signature]

Date:

8/22/06

Relinquished By:

JOM for RFM

Received By:

[Signature]

Date:

8/22/06

LIMS Batch No: 116568
LIMS Analysis: PCB
Extracted by: KR
Date Extracted: 20 Aug 06

Extraction Method:

☐ EPA 3510c Sep. Funnel

☒ EPA 3520c Continuous L/L

☐ Other _____

BK 2374
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[illegible]

Mfg & Lot# / LIMS # / Time	Date/ Initials
005 mL of surrogate solution was added to all samples	8/20/16
0.05 mL of spike solution 4r 16/160 was added to all spikes	
☒ Samples were continuously extracted with about 450 mL CH ₂ Cl ₂ Extraction Start Time: 1330 Extraction End Time: 1055	8/20/16
☐ Samples were extracted 3 times with 60 mL of CH ₂ Cl ₂ Extracts filtered through baked, CH ₂ Cl ₂ -rinsed granular Na ₂ SO ₄ Concentrated to volumes noted above after 2x exchange w/ Hexane lot#	8/22/16
EPA 3665A Clean-up: Vortexed w/ 10mL H ₂ SO ₄ lot #	
Centrifuged for 1min; 10mL transferred to labelled vial	

K. R. J. 20 AUG 06
Extraction Chemist Date

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Continued from Page 1
Continued on Page 2

Reviewed by Kurt M Date 8/22/00

Curtis & Tompkins Laboratories Sample Preparation Summary 26-AUG-2006 14:34

Batch Number : 116817
 Date Extracted: 25-AUG-2006
 Extracted by : Jessie O'Brien Mee
 Prep Method : 3520C

Analysis : PCB
 Bgroup : N/A
 Units : mL
 Clean-up :

Spike #1 ID : S4187A
 Spike #2 ID : S4092A
 Spike #3 ID :
 SOP Version : PCB w rv7

Sample	Type	Client	Matrix	Init W/V	Units mL	Final Vol	Prep D.F.	Clean pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
188802-021		Treadwell & Rollo	Water	500	mL	10	0.020000	1	7	.025	0	PCB	3665A	
188869-001		Treadwell & Rollo	Water	1030	mL	25	0.024272	1	5	.05	0	PCB	3665A	
QC353595	BLANK		Water	1000	mL	25	0.025000	1		.05	0	PCB	3665A	
QC353596	BS		Water	1000	mL	25	0.025000	1		.05	.05	PCB	3665A	
QC353597	BSD		Water	1000	mL	25	0.025000	1		.05	.05	PCB	3665A	

Prep Chemist: Jessie O'Brien Mee Reviewed By: Hley Date: 26 AUG 06

Relinquished By: Hley Received By: Mark Date: 26 AUG 06

LIMS Batch No: 116217
LIMS Analysis: PCB
Extracted by: IDM
Date Extracted: 25 Aug 06

Extraction Method:

☐ EPA 3510c Sep. Funnel

☒ EPA 3520c Continuous L/L

☐ Other _____

BK 2374
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[illegible]

① leaky funnel lost
~ 5.0 mL

0.05/0.025*
mL of surro

0.05 mL of spike solution APR 16/60

☒ Samples were continuously extracted with about 450 mL CH_2Cl_2

Extraction Start Time: 1740

Extraction End Time: 1140

☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2

Extracts filtered through baked, CH₂Cl₂-rinsed granular Na₂SO₄

Concentrated to volumes noted above after 2x exchange w/ Hexane lot#

EPA 3665A Clean-up: Vortexed w/ 10mL H₂SO₄ lot #

Centrifuged for 1min; 10mL transferred to labelled vial

Mfg & Lot# / LIMS # / Time	Date/ Initials
S4187A	8/25/06
S4092A	
EM46121	
1740	
1140	8/26/06 K
NA	
EM46111630	
EM46137	
ES054522	
1K	

Jessie Mee 8/25/06
Extraction Chemist Date

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Continued on Page

Reviewed by RLy Date 26 AUG 06

Curtis & Tompkins Laboratories
MDL Summary for EPA 8082 Water
As of 09/24/06

Analyte	Units	GC06 A	GC06 B	GC16 A	GC16 B	GC22 A	GC22 B	GC25 A	GC25 B
Aroclor-1016	ug/L	0.12	0.091	0.044	0.049	0.068	0.18	0.15	0.22
Aroclor-1221	ug/L	0.29	0.43	0.29	0.43	0.20	0.48	0.23	0.49
Aroclor-1232	ug/L	0.11	0.088			0.075	0.21	0.16	0.087
Aroclor-1242	ug/L	0.15	0.16			0.24	0.22	0.14	0.15
Aroclor-1248	ug/L	0.15	0.14	0.073	0.051	0.080	0.19	0.11	0.16
Aroclor-1254	ug/L	0.086	0.11			0.11	0.14	0.12	0.13
Aroclor-1260	ug/L	0.12	0.095	0.036	0.061	0.13	0.15	0.17	0.13

POLYAROMATIC HYDROCARBONS

Polynuclear Aromatics by HPLC

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	1349MW100	Batch#:	116658
Lab ID:	188802-001	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Prepared:	08/22/06

Analyte	Result	RL	MDL	Diln Fac	Analyzed
Naphthalene	ND	0.94		1.000	08/24/06
Acenaphthylene	ND	1.9		1.000	08/24/06
Acenaphthene	4.9	0.94		1.000	08/24/06
Fluorene	13	0.94		1.000	08/24/06
Phenanthrene	17	1.9		4.000	08/26/06
Anthracene	0.71	0.47	0.02	1.000	08/24/06
Fluoranthene	4.7	0.38	0.01	1.000	08/24/06
Pyrene	1.5	0.19		1.000	08/24/06
Benzo(a)anthracene	1.1	0.09		1.000	08/24/06
Chrysene	1.1	0.09		1.000	08/24/06
Benzo(b)fluoranthene	ND	0.19		1.000	08/24/06
Benzo(k)fluoranthene	ND	0.09		1.000	08/24/06
Benzo(a)pyrene	ND	0.09		1.000	08/24/06
Dibenz(a,h)anthracene	ND	0.19		1.000	08/24/06
Benzo(g,h,i)perylene	ND	0.19		1.000	08/24/06
Indeno(1,2,3-cd)pyrene	ND	0.13		1.000	08/24/06

Surrogate	%REC	Limits	Diln Fac	Analyzed
1-Methylnaphthalene (UV)	166 *	65-135	1.000	08/24/06
1-Methylnaphthalene (F)	126	65-135	1.000	08/24/06

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Polynuclear Aromatics by HPLC

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	LF6GW106	Batch#:	116658
Lab ID:	188802-004	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Prepared:	08/22/06
Diln Fac:	1.000	Analyzed:	08/24/06

Analyte	Result	RL	MDL
Naphthalene	ND	0.94	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.94	
Fluorene	ND	0.94	
Phenanthrene	ND	0.47	
Anthracene	ND	0.47	0.02
Fluoranthene	ND	0.38	0.01
Pyrene	ND	0.19	
Benzo (a) anthracene	ND	0.09	
Chrysene	ND	0.09	
Benzo (b) fluoranthene	ND	0.19	
Benzo (k) fluoranthene	ND	0.09	
Benzo (a) pyrene	ND	0.09	
Dibenz (a,h) anthracene	ND	0.19	
Benzo (g,h,i) perylene	ND	0.19	
Indeno (1,2,3-cd) pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	94	65-135
1-Methylnaphthalene (F)	95	65-135

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit



Polynuclear Aromatics by HPLC

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	1213GW101	Batch#:	116658
Lab ID:	188802-005	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Prepared:	08/22/06
Diln Fac:	1.000	Analyzed:	08/24/06

Analyte	Result	RL	MDL
Naphthalene	ND	0.94	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.94	
Fluorene	ND	0.94	
Phenanthrene	ND	0.47	
Anthracene	ND	0.47	0.02
Fluoranthene	ND	0.38	0.01
Pyrene	ND	0.19	
Benzo(a) anthracene	ND	0.09	
Chrysene	ND	0.09	
Benzo(b) fluoranthene	ND	0.19	
Benzo(k) fluoranthene	ND	0.09	
Benzo(a) pyrene	ND	0.09	
Dibenz(a,h) anthracene	ND	0.19	
Benzo(g,h,i) perylene	ND	0.19	
Indeno(1,2,3-cd) pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	94	65-135
1-Methylnaphthalene (F)	95	65-135

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Polynuclear Aromatics by HPLC

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DUP0816063A	Batch#:	116658
Lab ID:	188802-006	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Prepared:	08/22/06
Diln Fac:	1.000	Analyzed:	08/24/06

Analyte	Result	RL	MDL
Naphthalene	ND	0.94	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.94	
Fluorene	ND	0.94	
Phenanthrene	ND	0.47	
Anthracene	ND	0.47	0.02
Fluoranthene	ND	0.38	0.01
Pyrene	ND	0.19	
Benzo (a) anthracene	ND	0.09	
Chrysene	ND	0.09	
Benzo (b) fluoranthene	ND	0.19	
Benzo (k) fluoranthene	ND	0.09	
Benzo (a) pyrene	ND	0.09	
Dibenz (a, h) anthracene	ND	0.19	
Benzo (g, h, i) perylene	ND	0.19	
Indeno (1, 2, 3-cd) pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	86	65-135
1-Methylnaphthalene (F)	87	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit



Polynuclear Aromatics by HPLC

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	LF6GW103	Batch#:	116658
Lab ID:	188802-008	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Prepared:	08/22/06
Diln Fac:	1.000	Analyzed:	08/24/06

Analyte	Result	RL	MDL
Naphthalene	ND	0.94	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.94	
Fluorene	ND	0.94	
Phenanthrene	ND	0.47	
Anthracene	ND	0.47	0.02
Fluoranthene	ND	0.38	0.01
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.09	
Chrysene	ND	0.09	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.09	
Benzo(a)pyrene	ND	0.09	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	88	65-135
1-Methylnaphthalene (F)	89	65-135

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Polynuclear Aromatics by HPLC

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DUP0816061A	Batch#:	116658
Lab ID:	188802-010	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Prepared:	08/22/06
Diln Fac:	1.000	Analyzed:	08/25/06

Analyte	Result	RL	MDL
Naphthalene	ND	0.94	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.94	
Fluorene	ND	0.94	
Phenanthrene	ND	0.47	
Anthracene	ND	0.47	0.02
Fluoranthene	ND	0.38	0.01
Pyrene	ND	0.19	
Benzo (a) anthracene	ND	0.09	
Chrysene	ND	0.09	
Benzo (b) fluoranthene	ND	0.19	
Benzo (k) fluoranthene	ND	0.09	
Benzo (a) pyrene	ND	0.09	
Dibenz (a, h) anthracene	ND	0.19	
Benzo (g, h, i) perylene	ND	0.19	
Indeno (1, 2, 3-cd) pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	92	65-135
1-Methylnaphthalene (F)	94	65-135

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC352946	Batch#:	116658
Matrix:	Water	Prepared:	08/22/06
Units:	ug/L	Analyzed:	08/24/06

Analyte	Result	RL	MDL
Naphthalene	ND	1.0	
Acenaphthylene	ND	2.0	
Acenaphthene	ND	1.0	
Fluorene	ND	1.0	
Phenanthrene	ND	0.50	
Anthracene	ND	0.50	0.02
Fluoranthene	ND	0.40	0.01
Pyrene	ND	0.20	
Benzo (a) anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo (b) fluoranthene	ND	0.20	
Benzo (k) fluoranthene	ND	0.10	
Benzo (a) pyrene	ND	0.10	
Dibenz (a, h) anthracene	ND	0.20	
Benzo (g, h, i) perylene	ND	0.20	
Indeno (1, 2, 3-cd) pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	88	65-135
1-Methylnaphthalene (F)	89	65-135

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC352947	Batch#:	116658
Matrix:	Water	Prepared:	08/22/06
Units:	ug/L	Analyzed:	08/24/06

Analyte	Spiked	Result	%REC	Limits
Naphthalene	10.00	8.668	87	50-135
Fluorene	2.000	1.786	89	65-135
Pyrene	1.000	0.9056	91	65-135
Benzo(a)pyrene	1.000	0.8693	87	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	88	65-135
1-Methylnaphthalene (F)	90	65-135

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	1349MW100	Batch#:	116658
MSS Lab ID:	188802-001	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Prepared:	08/22/06
Diln Fac:	1.000	Analyzed:	08/24/06

Type: MS Lab ID: QC352948

Analyte	MSS Result	Spiked	Result	%REC	Limits
Naphthalene	<0.09154	9.434	0	0 *	50-135
Fluorene	12.92	1.887	21.22 >LR	440 NM	65-135
Pyrene	1.527	0.9434	1.698	18 *	65-135
Benzo(a)pyrene	<0.02358	0.9434	0.2358	25 *	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	174 *	65-135
1-Methylnaphthalene (F)	126	65-135

Type: MSD Lab ID: QC352949

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Naphthalene	9.434	0	0 *	50-135	NC	35
Fluorene	1.887	16.56	193 NM	65-135	NC	35
Pyrene	0.9434	2.935	149 *	65-135	53 *	35
Benzo(a)pyrene	0.9434	0.2432	26 *	65-135	3	35

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	204 *	65-135
1-Methylnaphthalene (F)	141 *	65-135

*= Value outside of QC limits; see narrative

NC= Not Calculated

NM= Not Meaningful: Sample concentration > 4X spike concentration

>LR= Response exceeds instrument's linear range

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 8310

Inst : HPLC04
 Calnum: 296199754001
 Units : ug/L

Date : 18-MAY-2006 19:52
 X Axis: R

Area 8/23/06

Level	File	Seqnum	Sample ID	Analyzed	Scds
L1	13800006	296199754006		18-MAY-2006 19:52	S3065
L2	13800007	296199754007		18-MAY-2006 20:24	S3064
L3	13800008	296199754008		18-MAY-2006 20:56	S3063
L4	13800009	296199754009		18-MAY-2006 21:27	S3062
L5	13800010	296199754010		18-MAY-2006 21:59	S3061
L6	13800011	296199754011		18-MAY-2006 22:31	S3060
L7	13800012	296199754012		18-MAY-2006 23:02	S3059

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	MR ²	MRSD	Fig
Naphthalene	1	0.0127	0.0132	0.0131	0.0132	0.0131	0.0130	0.0129	LINR	-52.228	77.4002		0.0130	1.000	0.99	20	
Acenaphthylene	1	0.0092	0.0093	0.0094	0.0095	0.0094	0.0092	0.0091	LINR	-269.75	109.800		0.0093	1.000	0.99	20	
2-Methylnaphthalene	1	0.0119	0.0120	0.0119	0.0122	0.0120	0.0119		LINR	-40.069	84.0456		0.0120	1.000	0.99	20	
Acenaphthene	1	0.0052	0.0052	0.0052	0.0054	0.0053	0.0052	0.0051	LINR	-189.44	195.810		0.0052	1.000	0.99	20	
Fluorene	1	0.0627	0.0624	0.0622	0.0635	0.0628	0.0627	0.0625	LINR	-5.8158	16.0057		0.0627	1.000	0.99	20	
Phenanthrene	1	0.1770	0.1795	0.1810	0.1828	0.1804	0.1795	0.1796	LINR	-2.6724	5.57221		0.1800	1.000	0.99	20	
Anthracene	1	0.4152	0.4253	0.4257	0.4310	0.4281	0.4249	0.4232	LINR	-4.5965	2.36313		0.4248	1.000	0.99	20	
Fluoranthene	1	0.0412	0.0411	0.0410	0.0412	0.0406	0.0406	0.0407	LINR	-3.4660	24.6116		0.0409	1.000	0.99	20	
Pyrene	1	0.0368	0.0344	0.0333	0.0343	0.0336	0.0336	0.0338	LINR	-0.0362	29.6394		0.0342	1.000	0.99	20	
Benzo (a) anthracene	1	0.0900	0.0968	0.0940	0.0956	0.0948	0.0945	0.0948	LINR	0.57638	10.5497		0.0943	1.000	0.99	20	
Chrysene	1	0.1270	0.1360	0.1344	0.1356	0.1346	0.1336	0.1335	LINR	-3.4437	7.49542		0.1335	1.000	0.99	20	
Benzo (b) fluoranthene	1	0.1037	0.1043	0.1063	0.1075	0.1067	0.1065	0.1063	LINR	-2.9110	9.40726		0.1059	1.000	0.99	20	
Benzo (k) fluoranthene	1	0.0788	0.0790	0.0823	0.0837	0.0837	0.0836	0.0835	LINR	1.73999	11.9711		0.0821	1.000	0.99	20	
Benzo (a) pyrene	1	0.0878	0.0823	0.0860	0.0884	0.0876	0.0881	0.0886	LINR	6.09778	11.2895		0.0870	1.000	0.99	20	
Dibenz (a, h) anthracene	1	0.0186	0.0202	0.0213	0.0218	0.0220	0.0221	0.0223	LINR	23.8574	44.7933		0.0212	1.000	0.99	20	
Benzo (g, h, i) perylene	1	0.0317	0.0340	0.0353	0.0359	0.0358	0.0363	0.0368	LINR	28.4784	27.1931		0.0351	1.000	0.99	20	
Indeno (1, 2, 3-cd) pyrene	1	0.0880	0.0965	0.0978	0.1005	0.0999	0.1003	0.1005	LINR	4.90163	9.94487		0.0976	1.000	0.99	20	
1-Methylnaphthalene (UV)	1	0.0086	0.0086	0.0086	0.0087	0.0085	0.0084	0.0084	LINR	-341.04	119.464		0.0085	1.000	0.99	20	
Acenaphthylene	2	0.0277	0.0280	0.0280	0.0283	0.0280	0.0278	0.0278	LINR	-84.965	36.0430		0.0279	1.000	0.99	20	
1-Methylnaphthalene (UV)	2	0.0030	0.0031	0.0031	0.0031	0.0031	0.0030	0.0030	LINR	-288.17	330.724		0.0031	1.000	0.99	20	
Naphthalene	3	0.0110	0.0111	0.0111	0.0112	0.0110	0.0110	0.0109	LINR	-50.394	91.4049		0.0110	1.000	0.99	20	
2-Methylnaphthalene	3	0.0155	0.0155	0.0155	0.0157	0.0155	0.0153		LINR	-54.966	65.4368		0.0155	1.000	0.99	20	
Acenaphthene	3	0.0234	0.0236	0.0235	0.0239	0.0233	0.0231	0.0226	LINR	-178.43	44.2064		0.0233	1.000	0.99	20	
Fluorene	3	0.1279	0.1273	0.1274	0.1284	0.1285	0.1243	0.1225	LINR	-32.341	8.16717		0.1263	1.000	0.99	20	
Phenanthrene	3	0.1354	0.1366	0.1364	0.1377	0.1361	0.1356	0.1354	LINR	-3.3588	7.38874		0.1362	1.000	0.99	20	
Anthracene	3	0.4199	0.4224	0.4266	0.4322	0.4290	0.4269	0.4268	LINR	-1.7330	2.34358		0.4263	1.000	0.99	20	

Chn 22 MAY 2006

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	%RSD	MNR ²	MKRSD	Fig
Fluoranthene	3	0.0382	0.0384	0.0386	0.0392	0.0388	0.0387	0.0387	LINR	-1.5194	25.8283		0.0387	1.000	0.99	20		
Pyrene	3	0.1308	0.1311	0.1332	0.1355	0.1333	0.1340	0.1343	LINR	1.83815	7.44901		0.1332	1.000	0.99	20		
Benzo(a)anthracene	3	0.1489	0.1515	0.1523	0.1536	0.1520	0.1512	0.1508	LINR	-3.9150	6.63150		0.1515	1.000	0.99	20		
Chrysene	3	0.1787	0.1811	0.1815	0.1828	0.1806	0.1793	0.1780	LINR	-7.8225	5.62009		0.1803	1.000	0.99	20		
Benzo(b)fluoranthene	3	0.0628	0.0642	0.0647	0.0654	0.0646	0.0644	0.0641	LINR	-9.1941	15.6059		0.0643	1.000	0.99	20		
Benzo(k)fluoranthene	3	0.3857	0.3920	0.3949	0.3978	0.3926	0.3879	0.3820	LINR	-13.766	2.61710		0.3904	1.000	0.99	20		
Benzo(a)pyrene	3	0.2089	0.2127	0.2141	0.2165	0.2143	0.2129	0.2128	LINR	-3.0160	4.70028		0.2132	1.000	0.99	20		
Dibenz(a,h)anthracene	3	0.0303	0.0301	0.0308	0.0318	0.0315	0.0316	0.0317	LINR	9.18553	31.5065		0.0311	1.000	0.99	20		
Benzo(g,h,i)perylene	3	0.0608	0.0590	0.0602	0.0618	0.0617	0.0624	0.0631	LINR	24.3223	15.8303		0.0613	1.000	0.99	20		
Indeno(1,2,3-cd)pyrene	3	0.0962	0.0968	0.0965	0.0983	0.0975	0.0975	0.0971	LINR	-1.8455	10.2902		0.0971	1.000	0.99	20		
1-Methylanthracene (F)	3	0.0122	0.0123	0.0123	0.0124	0.0122	0.0120	0.0118	LINR	-661.87	84.7083		0.0122	1.000	0.99	20		

Ch 22 MAY 2006

Calibration Table

NEW ICAL FOLLOWING REPLACEMENT OF OVLAMP. *gm*
HPLC04 METHOD 8310 *22 MAY 2006*

Calib. Data Modified : 5/22/2006 4:16:03 PM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 1.000 %
Abs. Reference Window : 0.200 min
Rel. Non-ref. Window : 1.000 %
Abs. Non-ref. Window : 0.250 min
Do not use Multiplier & Dilution Factor with ISTDs
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
Origin : Ignored
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :

Printout of recalibrations within a sequence:

Calibration Table after Recalibration

Normal Report after Recalibration

If the sequence is done with bracketing:

Results of first cycle (ending previous bracket)

Signal 1: DAD1 A, Sig=254,4 Ref=480,80
Signal 2: DAD1 B, Sig=305,4 Ref=480,80
Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime	Lvl	Amount	Area	Amt/Area	Ref Grp Name
[min]	Sig	[ug/l]			
4.752	1	1 500.00000	6.35383	78.69275	Naphthalene
		2 1000.00000	13.15704	76.00496	
		3 2500.00000	32.77972	76.26668	
		4 5000.00000	66.00784	75.74857	
		5 1.00000e4	130.71696	76.50116	
		6 2.50000e4	323.77454	77.21423	
		7 5.00000e4	646.40033	77.35145	
4.790	3	1 500.00000	5.48376	91.17835	Naphthalene
		2 1000.00000	11.08296	90.22864	
		3 2500.00000	27.68407	90.30465	
		4 5000.00000	55.85367	89.51963	
		5 1.00000e4	110.44406	90.54357	
		6 2.50000e4	274.47531	91.08287	
		7 5.00000e4	547.22638	91.36986	
6.004	1	1 1000.00000	9.18307	108.89603	Acenaphthylene
		2 2000.00000	18.68859	107.01715	
		3 5000.00000	46.93712	106.52549	
		4 1.00000e4	94.78723	105.49944	
		5 2.00000e4	187.08742	106.90190	
		6 5.00000e4	462.20984	108.17598	
		7 1.00000e5	910.50854	109.82873	
6.005	2	1 1000.00000	27.65381	36.16138	Acenaphthylene
		2 2000.00000	56.04304	35.68686	
		3 5000.00000	140.16672	35.67181	

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RetTime [min]	Lvl Sig	Amount [ug/l]	Area	Amt/Area	Ref Grp Name
6.773	1	4 1.00000e4	282.77841	35.36338	
		5 2.00000e4	559.61334	35.73896	
		6 5.00000e4	1390.57104	35.95645	
		7 1.00000e5	2775.66528	36.02740	
		1 2000.00000	17.19066	116.34227	1-Methylnaphthalene (UV)
		2 4000.00000	34.41462	116.22969	
		3 1.00000e4	85.94093	116.35899	
		4 2.00000e4	173.09207	115.54544	
		5 4.00000e4	340.84924	117.35394	
		6 1.00000e5	839.48529	119.12061	
		7 2.00000e5	1676.38977	119.30400	
6.774	2	1 2000.00000	6.06443	329.79188	1-Methylnaphthalene (UV)
		2 4000.00000	12.31411	324.83055	
		3 1.00000e4	30.67977	325.94769	
		4 2.00000e4	61.92251	322.98433	
		5 4.00000e4	122.83121	325.65012	
		6 1.00000e5	304.35931	328.55903	
		7 2.00000e5	604.82648	330.67335	
6.811	3	1 2000.00000	24.40978	81.93437	1-Methylnaphthalene (F)
		2 4000.00000	49.21495	81.27612	
		3 1.00000e4	122.94567	81.33674	
		4 2.00000e4	247.30377	80.87220	
		5 4.00000e4	488.69351	81.85089	
		6 1.00000e5	1199.20923	83.38828	
		7 2.00000e5	2361.67969	84.68549	
7.233	1	1 500.00000	5.96680	83.79698	2-Methylnaphthalene
		2 1000.00000	11.99022	83.40130	
		3 2500.00000	29.85911	83.72654	
		4 5000.00000	60.88431	82.12296	
		5 1.00000e4	120.14920	83.22985	
		6 2.50000e4	297.53644	84.02332	
7.269	3	1 500.00000	7.74911	64.52351	2-Methylnaphthalene
		2 1000.00000	15.52372	64.41757	
		3 2500.00000	38.81281	64.41172	
		4 5000.00000	78.28068	63.87272	
		5 1.00000e4	154.78474	64.60585	
		6 2.50000e4	382.29327	65.39482	
7.613	1	1 500.00000	2.59693	192.53514	Acenaphthene
		2 1000.00000	5.17957	193.06637	
		3 2500.00000	13.08239	191.09658	
		4 5000.00000	26.89059	185.93866	
		5 1.00000e4	53.03941	188.53907	
		6 2.50000e4	131.16444	190.60043	
		7 5.00000e4	254.87729	196.17283	
7.651	3	1 500.00000	11.70526	42.71583	Acenaphthene
		2 1000.00000	23.56936	42.42797	
		3 2500.00000	58.84945	42.48128	
		4 5000.00000	119.32713	41.90162	
		5 1.00000e4	233.17419	42.88639	
		6 2.50000e4	577.51837	43.28867	
		7 5.00000e4	1130.49866	44.22827	
8.138	1	1 100.00000	6.27447	15.93759	Fluorene
		2 200.00000	12.48572	16.01830	
		3 500.00000	31.10701	16.07355	
		4 1000.00000	63.54686	15.73642	
		5 2000.00000	125.67238	15.91440	
		6 5000.00000	313.25665	15.96135	
		7 1.00000e4	624.78467	16.00551	
8.176	3	1 100.00000	12.79477	7.81570	Fluorene
		2 200.00000	25.46982	7.85243	
		3 500.00000	63.67719	7.85210	
		4 1000.00000	128.43744	7.78589	
		5 2000.00000	252.91112	7.90792	

RetTime [min]	Lvl Sig	Amount [ug/l]	Area	Amt/Area	Ref Grp Name
9.260	1	6 5000.00000	621.43634	8.04588	
		7 1.00000e4	1224.89038	8.16400	
	1	1 50.00000	8.85156	5.64872	Phenanthrene
	2	2 100.00000	17.94612	5.57224	
	3	3 250.00000	45.25932	5.52372	
	4	4 500.00000	91.37579	5.47191	
	5	5 1000.00000	180.36794	5.54422	
	6	6 2500.00000	448.64795	5.57230	
	7	7 5000.00000	897.85052	5.56886	
9.297	3	1 50.00000	6.77231	7.38301	Phenanthrene
	2	2 100.00000	13.66179	7.31969	
	3	3 250.00000	34.08815	7.33393	
	4	4 500.00000	68.83022	7.26425	
	5	5 1000.00000	136.09827	7.34763	
	6	6 2500.00000	338.96707	7.37535	
	7	7 5000.00000	676.96960	7.38586	
10.285	1	1 50.00000	20.75930	2.40856	Anthracene
	2	2 100.00000	42.52945	2.35131	
	3	3 250.00000	106.41690	2.34925	
	4	4 500.00000	215.48436	2.32035	
	5	5 1000.00000	428.09290	2.33594	
	6	6 2500.00000	1062.12512	2.35377	
	7	7 5000.00000	2115.98950	2.36296	
10.323	3	1 50.00000	20.99740	2.38125	Anthracene
	2	2 100.00000	42.23863	2.36750	
	3	3 250.00000	106.64105	2.34431	
	4	4 500.00000	216.08749	2.31388	
	5	5 1000.00000	428.97952	2.33111	
	6	6 2500.00000	1067.30798	2.34234	
	7	7 5000.00000	2133.87500	2.34316	
11.435	1	1 100.00000	4.12269	24.25600	Fluoranthene
	2	2 200.00000	8.21146	24.35620	
	3	3 500.00000	20.48045	24.41353	
	4	4 1000.00000	41.23911	24.24883	
	5	5 2000.00000	81.15630	24.64380	
	6	6 5000.00000	203.07642	24.62127	
	7	7 1.00000e4	406.56757	24.59616	
11.472	3	1 100.00000	3.82083	26.17234	Fluoranthene
	2	2 200.00000	7.68846	26.01302	
	3	3 500.00000	19.30645	25.89808	
	4	4 1000.00000	39.23374	25.48827	
	5	5 2000.00000	77.62599	25.76457	
	6	6 5000.00000	193.25951	25.87195	
	7	7 1.00000e4	387.35989	25.81579	
12.208	1	1 50.00000	1.83995	27.17468	Pyrene
	2	2 100.00000	3.43952	29.07386	
	3	3 250.00000	8.33079	30.00916	
	4	4 500.00000	17.14116	29.16955	
	5	5 1000.00000	33.56740	29.79081	
	6	6 2500.00000	83.91055	29.79363	
	7	7 5000.00000	168.92415	29.59908	
12.245	3	1 50.00000	6.53807	7.64751	Pyrene
	2	2 100.00000	13.11404	7.62541	
	3	3 250.00000	33.29245	7.50921	
	4	4 500.00000	67.75372	7.37967	
	5	5 1000.00000	133.33412	7.49996	
	6	6 2500.00000	334.87701	7.46543	
	7	7 5000.00000	671.27612	7.44850	
15.039	1	1 50.00000	4.49803	11.11598	Benzo(a)anthracene
	2	2 100.00000	9.67921	10.33142	
	3	3 250.00000	23.48936	10.64311	
	4	4 500.00000	47.78680	10.46314	
	5	5 1000.00000	94.79131	10.54949	

RetTime [min]	Lvl Sig	Amount [ug/l]	Area	Amt/Area	Ref Grp Name
15.077	3	6 2500.00000	236.18423	10.58496	Benzo(a)anthracene
		7 5000.00000	474.20624	10.54394	
		1 50.00000	7.44724	6.71390	
		2 100.00000	15.15430	6.59879	
		3 250.00000	38.07673	6.56569	
		4 500.00000	76.80959	6.50960	
		5 1000.00000	151.99316	6.57924	
15.539	1	6 2500.00000	377.89438	6.61561	Chrysene
		7 5000.00000	754.23340	6.62925	
		1 50.00000	6.35061	7.87325	
		2 100.00000	13.59609	7.35506	
		3 250.00000	33.59677	7.44119	
		4 500.00000	67.79062	7.37565	
		5 1000.00000	134.58353	7.43033	
15.577	3	6 2500.00000	334.09467	7.48291	Chrysene
		7 5000.00000	667.30255	7.49285	
		1 50.00000	8.93709	5.59467	
		2 100.00000	18.11283	5.52095	
		3 250.00000	45.37164	5.51005	
		4 500.00000	91.38473	5.47137	
		5 1000.00000	180.56219	5.53826	
17.772	1	6 2500.00000	448.13257	5.57871	Benzo(b)fluoranthene
		7 5000.00000	889.81403	5.61915	
		1 100.00000	10.36747	9.64555	
		2 200.00000	20.85804	9.58863	
		3 500.00000	53.17228	9.40340	
		4 1000.00000	107.52938	9.29978	
		5 2000.00000	213.44913	9.36991	
17.810	3	6 5000.00000	532.37317	9.39191	Benzo(b)fluoranthene
		7 1.00000e4	1062.87402	9.40845	
		1 100.00000	6.27574	15.93439	
		2 200.00000	12.83850	15.57814	
		3 500.00000	32.34958	15.45615	
		4 1000.00000	65.39377	15.29198	
		5 2000.00000	129.20119	15.47973	
18.726	1	6 5000.00000	322.01157	15.52739	Benzo(k)fluoranthene
		7 1.00000e4	640.72485	15.60732	
		1 50.00000	3.94109	12.68686	
		2 100.00000	7.89588	12.66483	
		3 250.00000	20.57043	12.15337	
		4 500.00000	41.83699	11.95115	
		5 1000.00000	83.72203	11.94429	
18.764	3	6 2500.00000	208.88004	11.96859	Benzo(k)fluoranthene
		7 5000.00000	417.35922	11.98009	
		1 50.00000	19.28471	2.59273	
		2 100.00000	39.20409	2.55075	
		3 250.00000	98.73430	2.53205	
		4 500.00000	198.87831	2.51410	
		5 1000.00000	392.59399	2.54716	
19.676	1	6 2500.00000	969.84100	2.57774	Benzo(a)pyrene
		7 5000.00000	1910.04431	2.61774	
		1 50.00000	4.38903	11.39205	
		2 100.00000	8.22974	12.15105	
		3 250.00000	21.51167	11.62160	
		4 500.00000	44.20454	11.31105	
		5 1000.00000	87.60189	11.41528	
19.714	3	6 2500.00000	220.13969	11.35643	Benzo(a)pyrene
		7 5000.00000	442.77490	11.29242	
		1 50.00000	10.44253	4.78811	
		2 100.00000	21.26584	4.70238	
		3 250.00000	53.53555	4.66979	
		4 500.00000	108.22565	4.61998	
		5 1000.00000	214.33957	4.66549	

RetTime	Lvl	Amount	Area	Amt/Area	Ref Grp Name
[min]	Sig	[ug/l]			
----- --- ----- ----- --- -----					
21.294	1	6 2500.00000	532.33307	4.69631	Dibenz(a,h)anthracene
		7 5000.00000	1064.23083	4.69823	
		1 100.00000	1.86005	53.76185	
		2 200.00000	4.03761	49.53425	
		3 500.00000	10.67297	46.84733	
		4 1000.00000	21.81421	45.84168	
		5 2000.00000	44.01789	45.43607	
21.332	3	6 5000.00000	110.60422	45.20623	Dibenz(a,h)anthracene
		7 1.00000e4	222.97006	44.84907	
		1 100.00000	3.03149	32.98710	
		2 200.00000	6.02086	33.21784	
		3 500.00000	15.37518	32.51994	
		4 1000.00000	31.83378	31.41317	
		5 2000.00000	63.06483	31.71339	
22.074	1	6 5000.00000	158.06801	31.63195	Benzo(g,h,i)perylene
		7 1.00000e4	317.26797	31.51910	
		1 100.00000	3.17288	31.51711	
		2 200.00000	6.79410	29.43731	
		3 500.00000	17.66954	28.29729	
		4 1000.00000	35.90152	27.85397	
		5 2000.00000	71.56614	27.94618	
22.111	3	6 5000.00000	181.34886	27.57117	Benzo(g,h,i)perylene
		7 1.00000e4	367.56784	27.20586	
		1 100.00000	6.08162	16.44298	
		2 200.00000	11.79889	16.95075	
		3 500.00000	30.11854	16.60107	
		4 1000.00000	61.84187	16.17027	
		5 2000.00000	123.34122	16.21518	
22.588	1	6 5000.00000	312.19437	16.01566	Indeno(1,2,3-cd)pyrene
		7 1.00000e4	631.46387	15.83622	
		1 50.00000	4.39845	11.36763	
		2 100.00000	9.64680	10.36613	
		3 250.00000	24.43922	10.22946	
		4 500.00000	50.25140	9.94997	
		5 1000.00000	99.94793	10.00521	
22.626	3	6 2500.00000	250.73134	9.97083	Indeno(1,2,3-cd)pyrene
		7 5000.00000	502.34595	9.95330	
		1 50.00000	4.81022	10.39454	
		2 100.00000	9.68046	10.33008	
		3 250.00000	24.11350	10.36764	
		4 500.00000	49.15816	10.17125	
		5 1000.00000	97.53080	10.25317	
		6 2500.00000	243.71762	10.25777	
		7 5000.00000	485.73682	10.29364	

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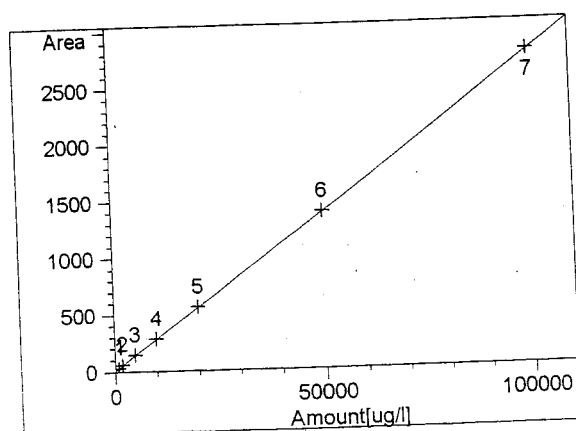
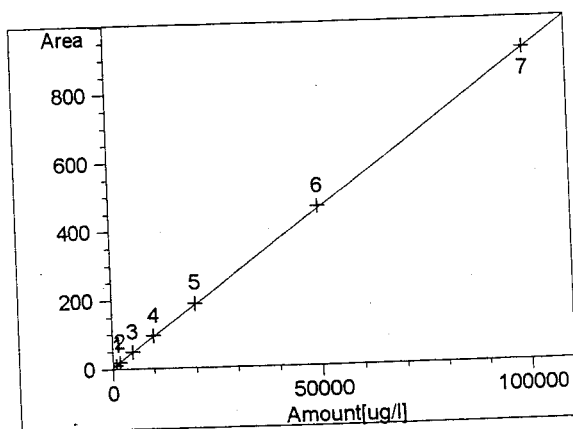
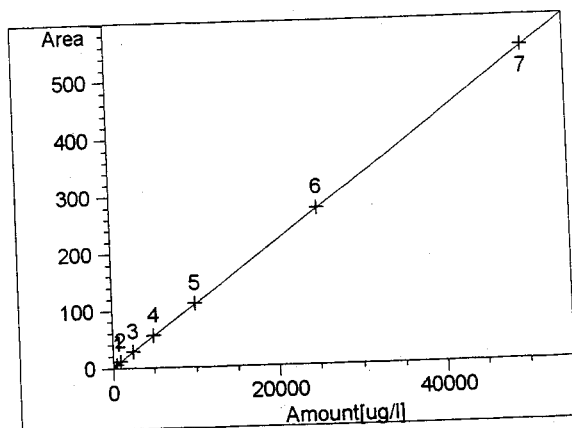
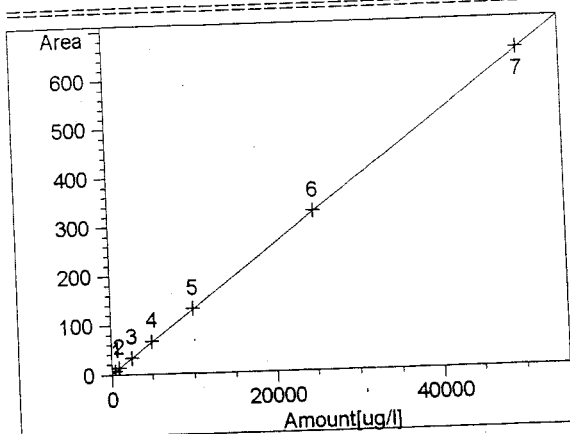
Peak Sum Table

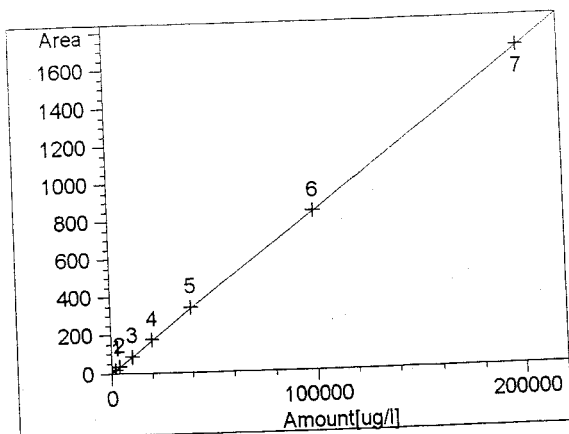
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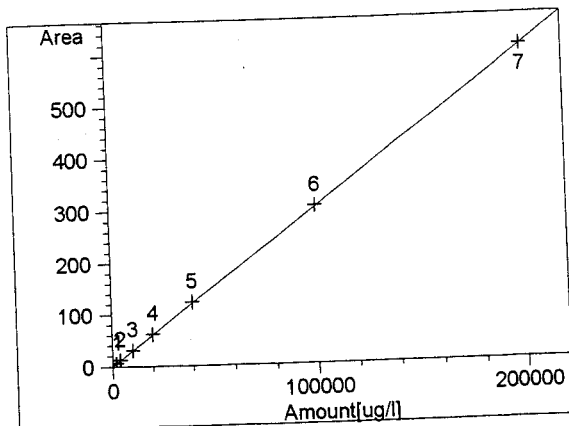
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Calibration Curves

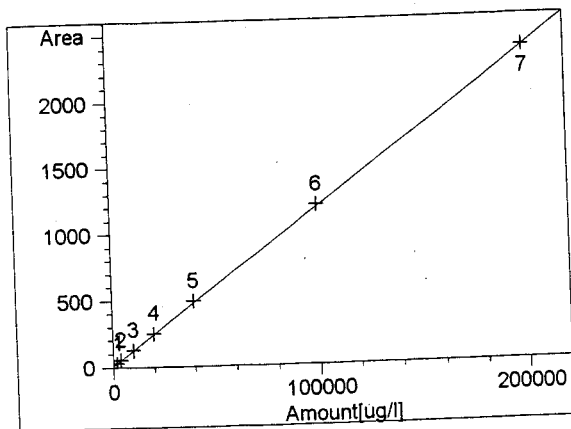




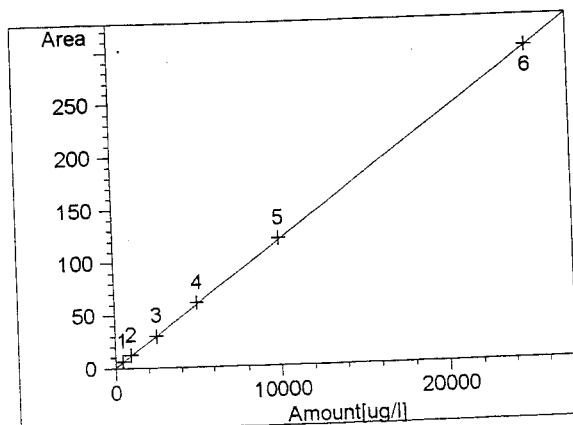
1-Methylnaphthalene (UV) at exp. RT: 6.773
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 0.99999
 Residual Std. Dev.: 2.38438
 Formula: $y = mx + b$
 m: $8.37069e-3$
 b: 2.85473
 x: Amount[ug/l]
 y: Area



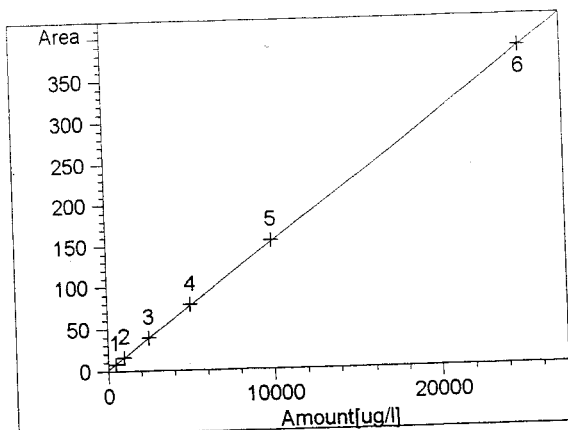
1-Methylnaphthalene (UV) at exp. RT: 6.774
 DAD1 B, Sig=305,4 Ref=480,80
 Correlation: 0.99999
 Residual Std. Dev.: 0.95514
 Formula: $y = mx + b$
 m: $3.02367e-3$
 b: $8.71326e-1$
 x: Amount[ug/l]
 y: Area



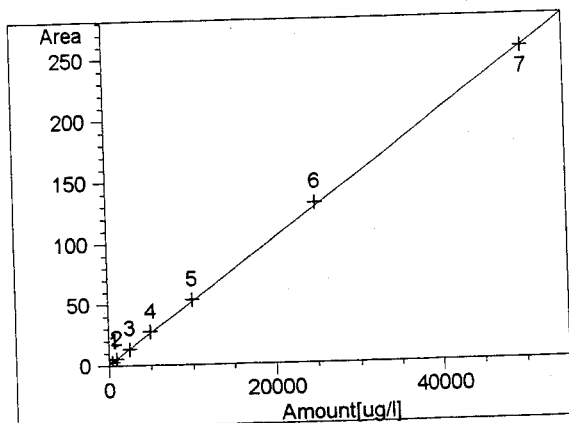
1-Methylnaphthalene (F) at exp. RT: 6.811
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99996
 Residual Std. Dev.: 8.34271
 Formula: $y = mx + b$
 m: $1.18052e-2$
 b: 7.81357
 x: Amount[ug/l]
 y: Area



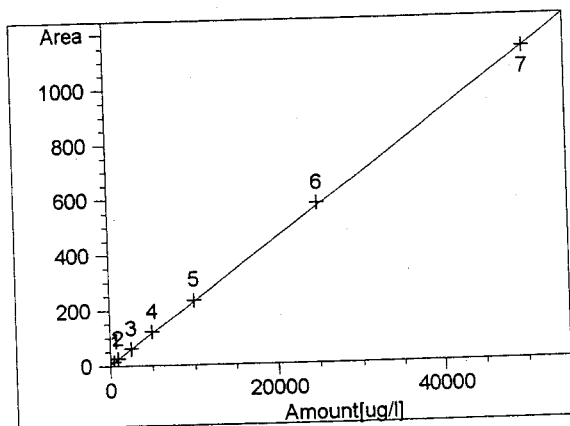
2-Methylnaphthalene at exp. RT: 7.233
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 0.99998
 Residual Std. Dev.: 0.70066
 Formula: $y = mx + b$
 m: $1.18983e-2$
 b: $4.76749e-1$
 x: Amount[ug/l]
 y: Area



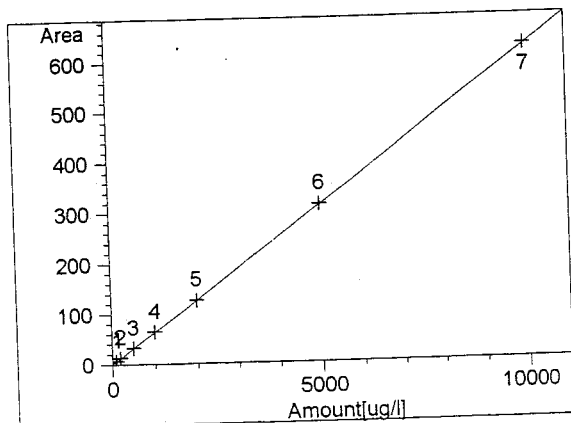
2-Methylnaphthalene at exp. RT: 7.269
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99998
 Residual Std. Dev.: 0.95275
 Formula: $y = mx + b$
 m: $1.52819e-2$
 b: $8.39982e-1$
 x: Amount[ug/l]
 y: Area



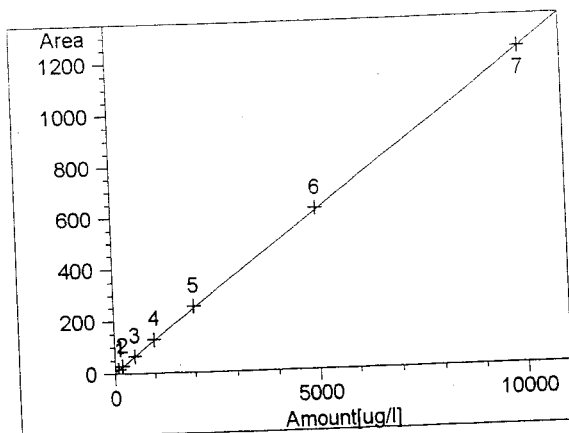
Acenaphthene at exp. RT: 7.613
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 0.99989
 Residual Std. Dev.: 1.52771
 Formula: $y = mx + b$
 m: $5.10700e-3$
 b: $9.67465e-1$
 x: Amount[ug/l]
 y: Area



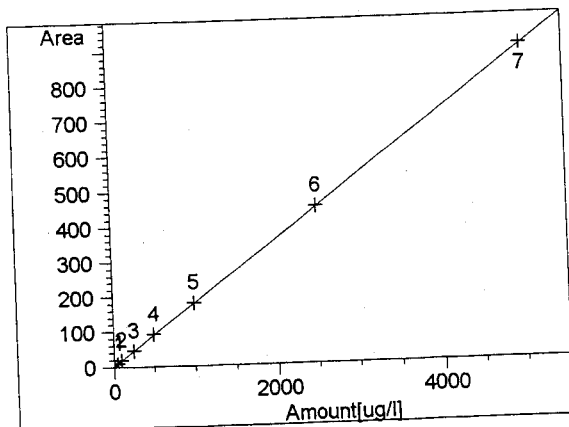
Acenaphthene at exp. RT: 7.651
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99994
 Residual Std. Dev.: 4.97058
 Formula: $y = mx + b$
 m: $2.26212e-2$
 b: 4.03630
 x: Amount[ug/l]
 y: Area



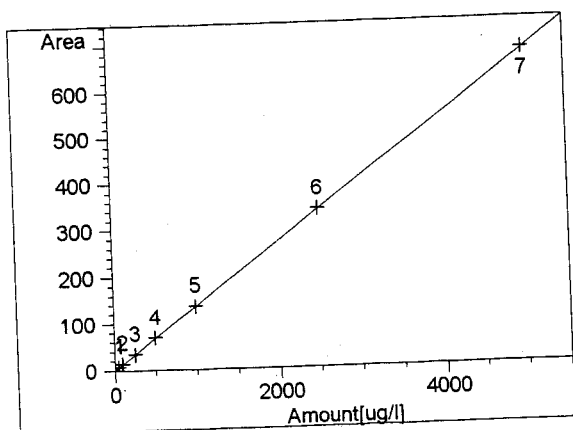
Fluorene at exp. RT: 8.138
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.54815
 Formula: $y = mx + b$
 m: $6.24779e-2$
 b: $3.63360e-1$
 x: Amount[ug/l]
 y: Area



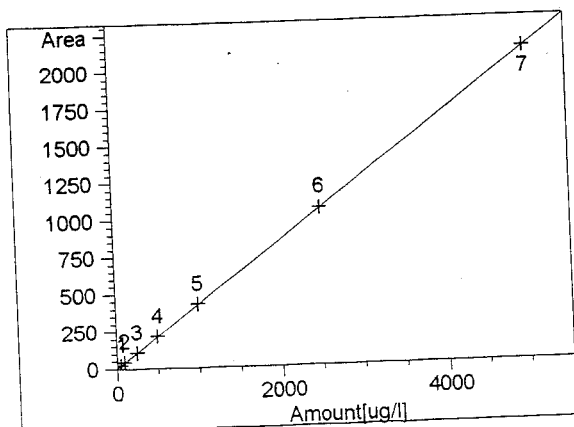
Fluorene at exp. RT: 8.176
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99997
 Residual Std. Dev.: 4.08298
 Formula: $y = mx + b$
 m: $1.22441e-1$
 b: 3.95988
 x: Amount[ug/l]
 y: Area



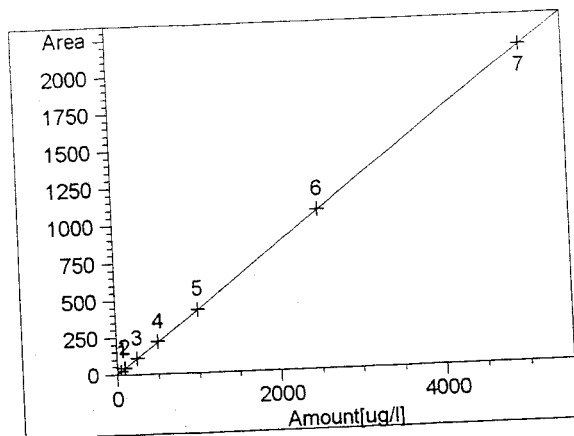
Phenanthrene at exp. RT: 9.260
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.68975
 Formula: $y = mx + b$
 m: $1.79462e-1$
 b: $4.79584e-1$
 x: Amount[ug/l]
 y: Area



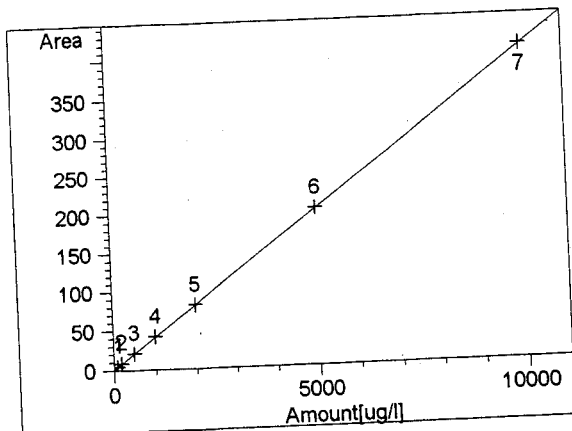
Phenanthrene at exp. RT: 9.297
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 0.44720
 Formula: $y = mx + b$
 m: $1.35341e-1$
 b: $4.54582e-1$
 x: Amount[ug/l]
 y: Area



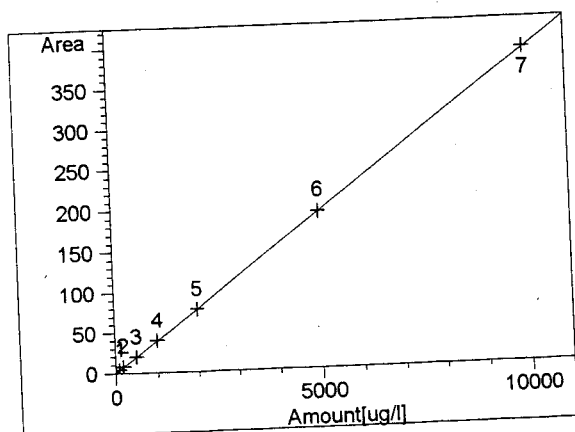
Anthracene at exp. RT: 10.285
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 2.50095
 Formula: $y = mx + b$
 m: $4.23168e-1$
 b: 1.94511
 x: Amount[ug/l]
 y: Area



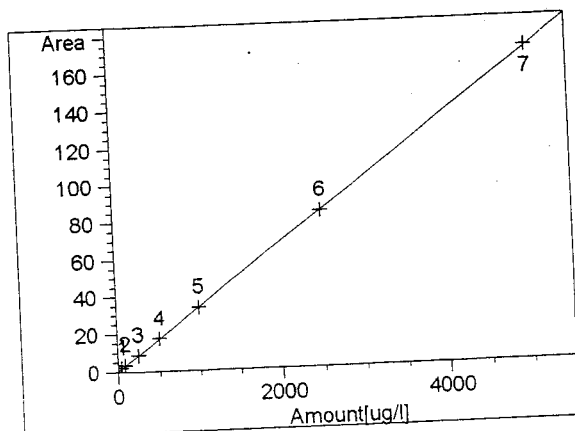
Anthracene at exp. RT: 10.323
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 1.38985
 Formula: $y = mx + b$
 m: $4.26697e-1$
 b: $7.39476e-1$
 x: Amount[ug/l]
 y: Area



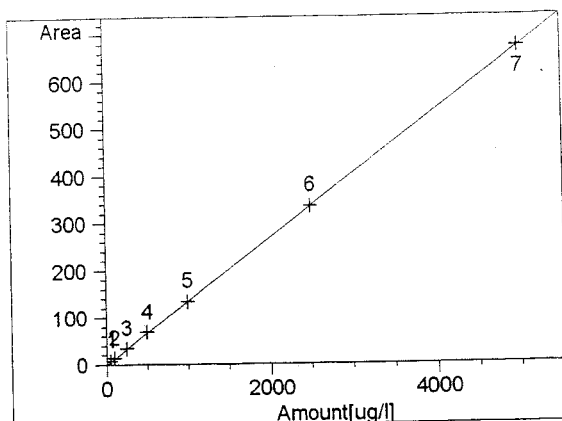
Fluoranthene at exp. RT: 11.435
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.26501
 Formula: $y = mx + b$
 m: $4.06313e-2$
 b: $1.40829e-1$
 x: Amount[ug/l]
 y: Area



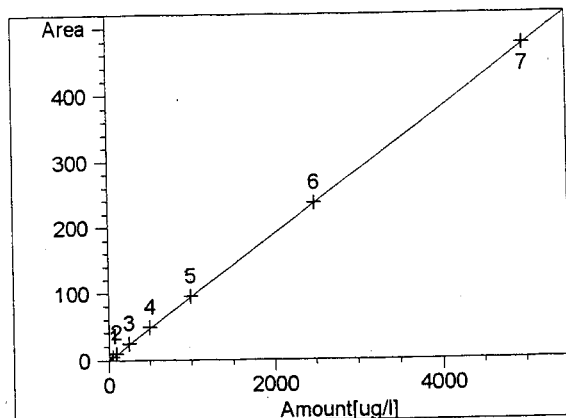
Fluoranthene at exp. RT: 11.472
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 0.29311
 Formula: $y = mx + b$
 m: $3.87172e-2$
 b: $5.88250e-2$
 x: Amount[ug/l]
 y: Area



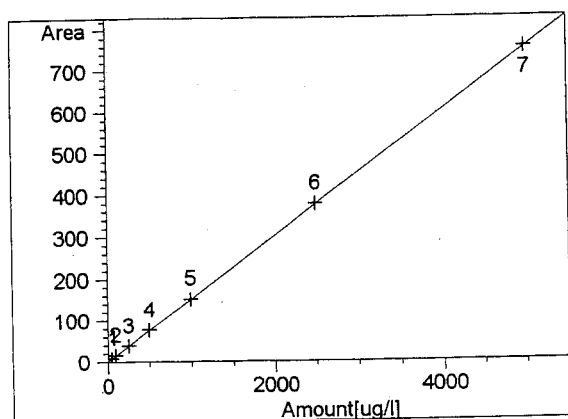
Pyrene at exp. RT: 12.208
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 0.99999
 Residual Std. Dev.: 0.27756
 Formula: $y = mx + b$
 m: $3.37388e-2$
 b: $1.22142e-3$
 x: Amount[ug/l]
 y: Area



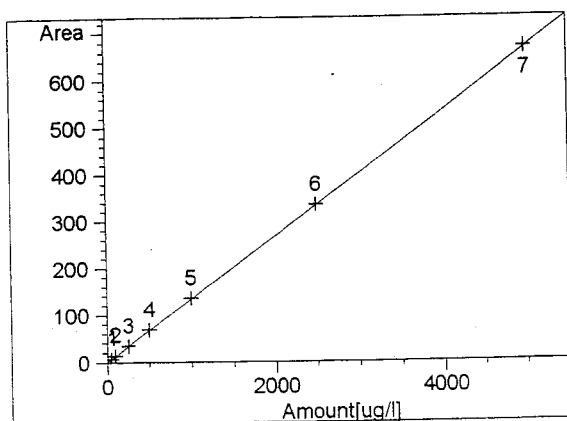
Pyrene at exp. RT: 12.245
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 0.55665
 Formula: $y = mx + b$
 m: $1.34246e-1$
 b: $-2.46762e-1$
 x: Amount[ug/l]
 y: Area



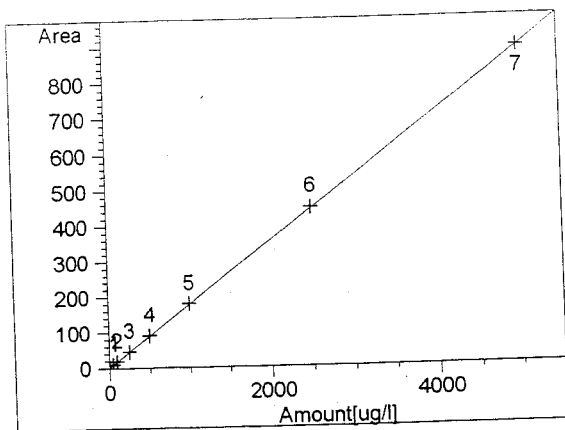
Benzo(a)anthracene at exp. RT: 15.039
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.43917
 Formula: $y = mx + b$
 m: $9.47891e-2$
 b: $-5.46320e-2$
 x: Amount[ug/l]
 y: Area



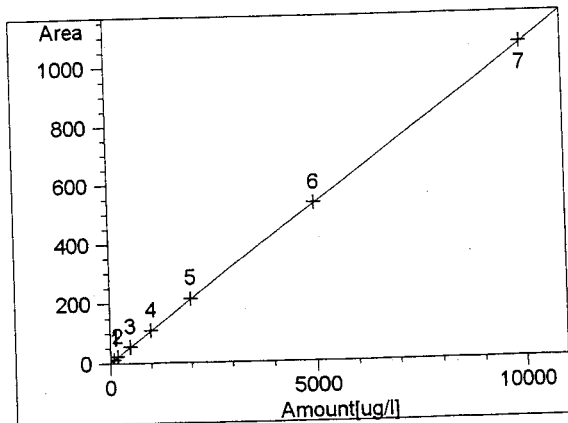
Benzo(a)anthracene at exp. RT: 15.077
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 0.63754
 Formula: $y = mx + b$
 m: $1.50795e-1$
 b: $5.90358e-1$
 x: Amount[ug/l]
 y: Area



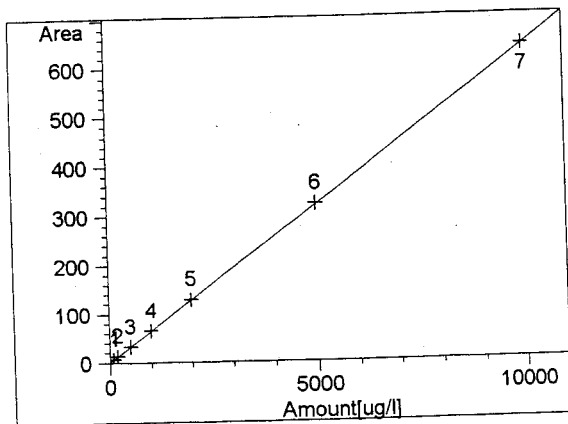
Chrysene at exp. RT: 15.539
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.57474
 Formula: $y = mx + b$
 m: $1.33415e-1$
 b: $4.59439e-1$
 x: Amount[ug/l]
 y: Area



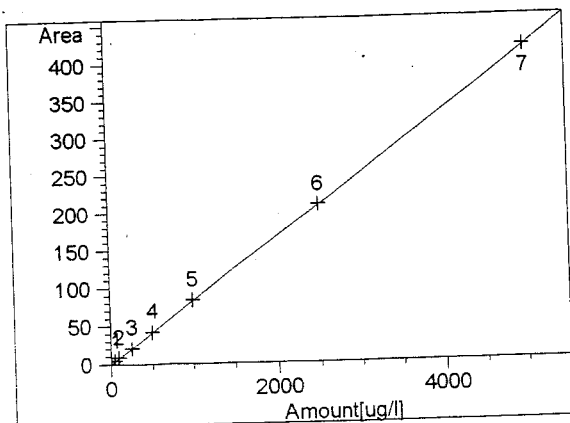
Chrysene at exp. RT: 15.577
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99999
 Residual Std. Dev.: 1.48324
 Formula: $y = mx + b$
 m: $1.77933e-1$
 b: 1.39188
 x: Amount[ug/l]
 y: Area



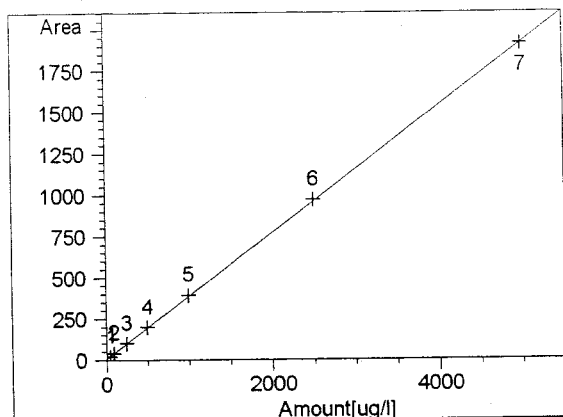
Benzo(b)fluoranthene at exp. RT: 17.772
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.71561
 Formula: $y = mx + b$
 m: $1.06301e-1$
 b: $3.09438e-1$
 x: Amount[ug/l]
 y: Area



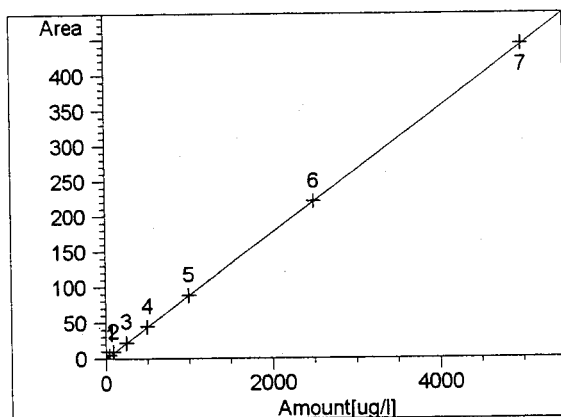
Benzo(b)fluoranthene at exp. RT: 17.810
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 0.79187
 Formula: $y = mx + b$
 m: $6.40783e-2$
 b: $5.89141e-1$
 x: Amount[ug/l]
 y: Area



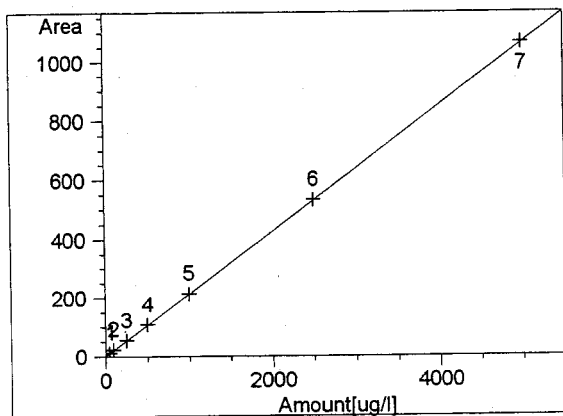
Benzo(k)fluoranthene at exp. RT: 18.726
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.26640
 Formula: $y = mx + b$
 m: $8.35344e-2$
 b: $-1.45349e-1$
 x: Amount[ug/l]
 y: Area



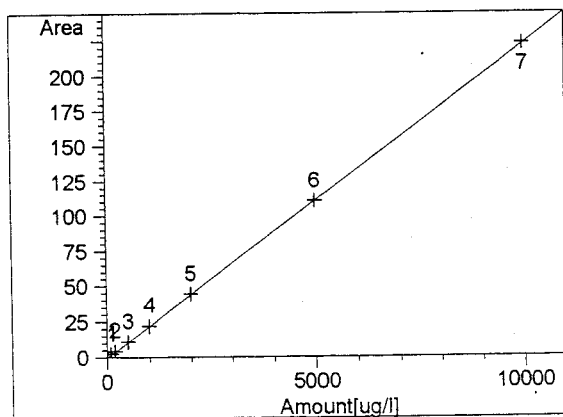
Benzo(k)fluoranthene at exp. RT: 18.764
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99997
 Residual Std. Dev.: 6.35516
 Formula: $y = mx + b$
 m: 3.82102e-1
 b: 5.25986
 x: Amount[ug/l]
 y: Area



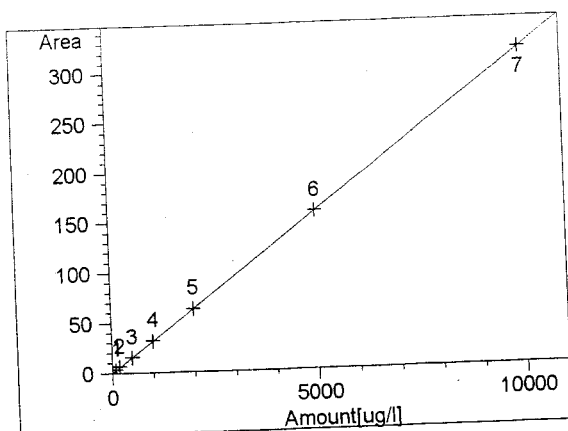
Benzo(a)pyrene at exp. RT: 19.676
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.53487
 Formula: $y = mx + b$
 m: 8.85779e-2
 b: -5.40129e-1
 x: Amount[ug/l]
 y: Area



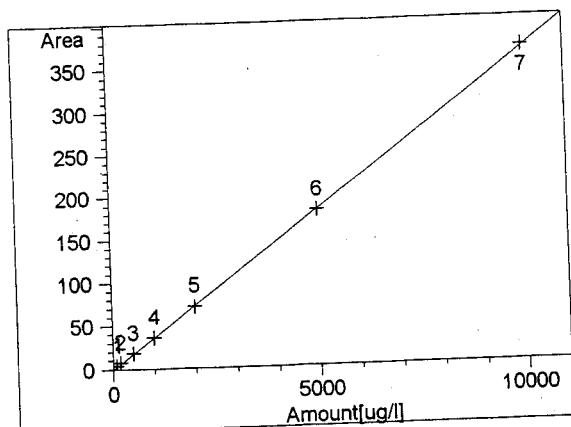
Benzo(a)pyrene at exp. RT: 19.714
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 0.85195
 Formula: $y = mx + b$
 m: 2.12753e-1
 b: 6.41655e-1
 x: Amount[ug/l]
 y: Area



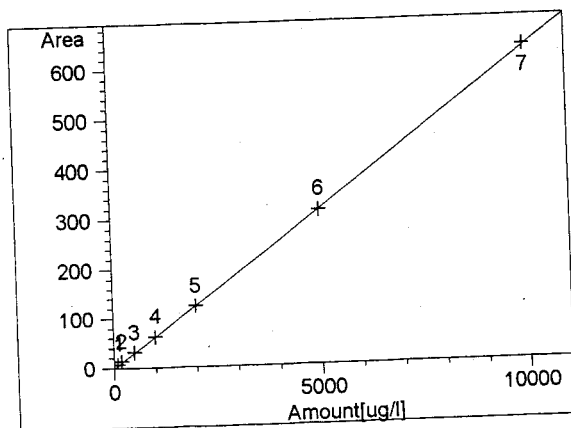
Dibenz(a,h)anthracene at exp. RT: 21.294
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.26499
 Formula: $y = mx + b$
 m: 2.23247e-2
 b: -5.32610e-1
 x: Amount[ug/l]
 y: Area



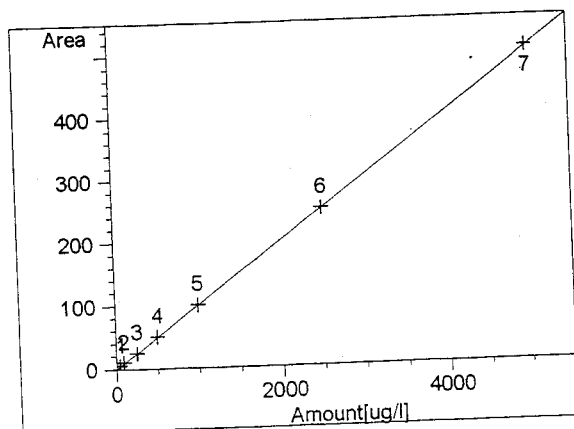
Dibenzo(a,h)anthracene at exp. RT: 21.332
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 0.27198
 Formula: $y = mx + b$
 m: $3.17395e-2$
 b: $-2.91544e-1$
 x: Amount[ug/l]
 y: Area



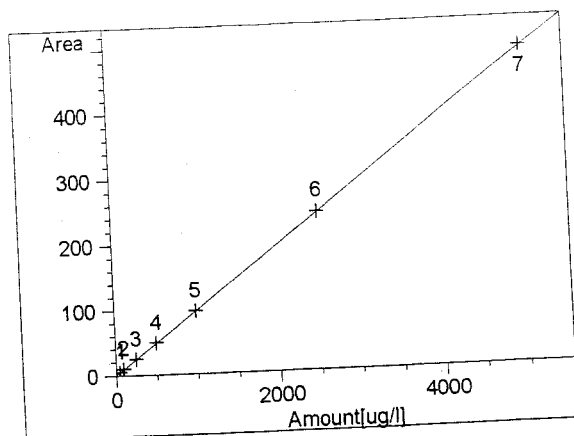
Benzo(g,h,i)perylene at exp. RT: 22.074
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 0.99998
 Residual Std. Dev.: 0.94681
 Formula: $y = mx + b$
 m: $3.67740e-2$
 b: -1.04727
 x: Amount[ug/l]
 y: Area



Benzo(g,h,i)perylene at exp. RT: 22.111
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99998
 Residual Std. Dev.: 1.45280
 Formula: $y = mx + b$
 m: $6.31700e-2$
 b: -1.53644
 x: Amount[ug/l]
 y: Area



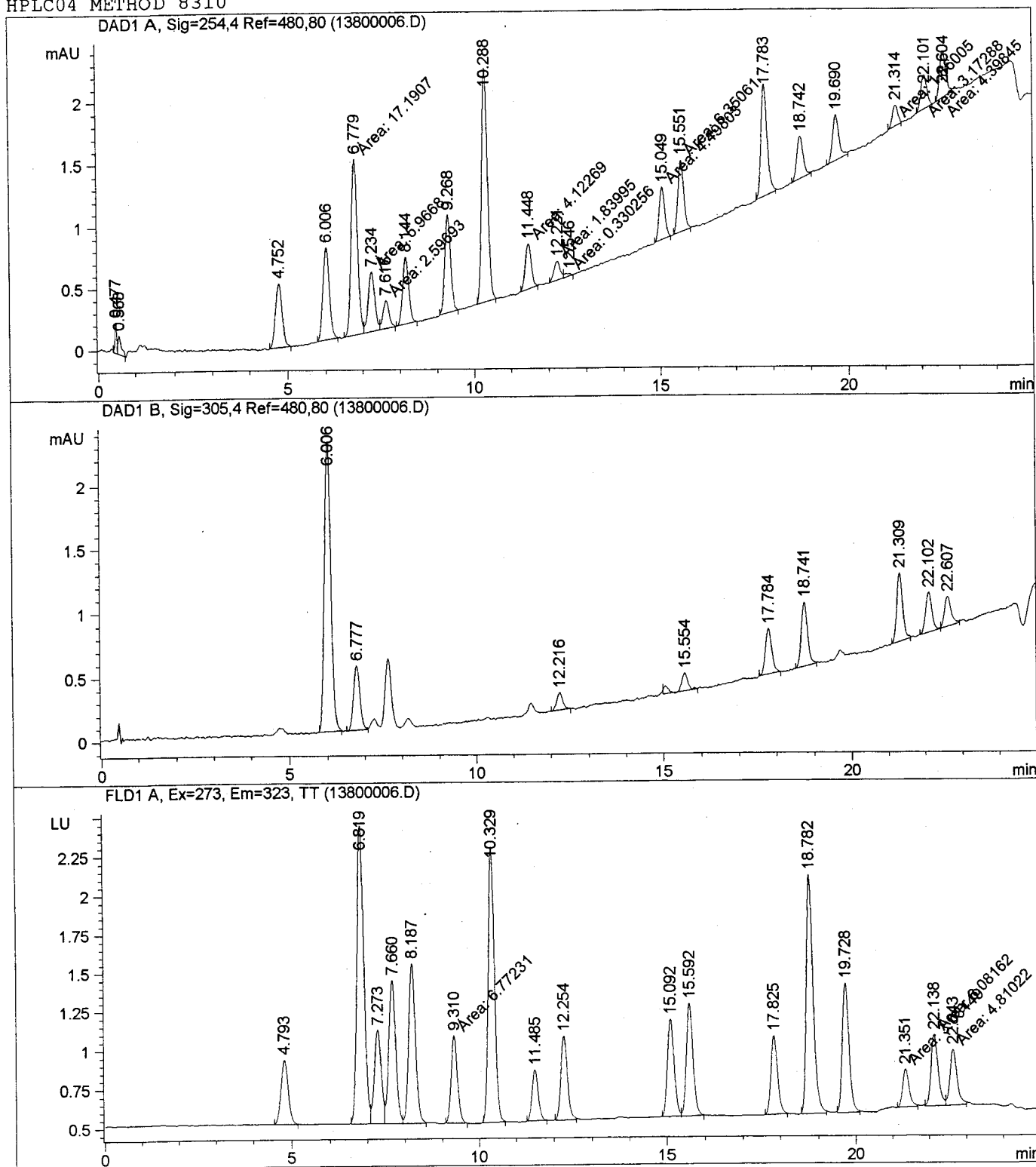
Indeno(1,2,3-cd)pyrene at exp. RT: 22.588
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.25692
 Formula: $y = mx + b$
 m: $1.00554e-1$
 b: $-4.92879e-1$
 x: Amount[ug/l]
 y: Area



Indeno(1,2,3-cd)pyrene at exp. RT: 22.626
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.41791
Formula: $y = mx + b$
m: $9.71800e-2$
b: $1.79343e-1$
x: Amount[ug/l]
y: Area

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Injection Date	: 5/18/2006 7:52:48 PM	Seq. Line	: 6
Sample Name	: ICAL,S3065	Location	: Vial 6
Acq. Operator	:	Inj	: 1
Acq. Instrument	: HPLC 4	Inj Volume	: 10 µl
Method	: G:\HPLC4\METHODS\8310-315.M		
Last changed	: 11/14/2005 4:15:05 PM by HPL		
HPLC04 METHOD 8310			



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External Standard Report

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Sorted By : Signal
 Calib. Data Modified : 11/14/2005 4:07:02 PM
 Multiplier : 1.0000
 Dilution : 1.0000
 Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 A, Sig=254,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
4.752	BP	6.35383	73.22840	465.28047		Naphthalene
6.006	BB	9.18307	86.07316	790.41598		Acenaphthylene
6.779	MF	17.19066	103.84860	1785.22554		1-Methylnaphthalene (UV)
7.234	MF	5.96680	80.69614	481.49793		2-Methylnaphthalene
7.616	FM	2.59693	167.38480	434.68637		Acenaphthene
8.144	VP	6.27447	15.44981	96.93942		Fluorene
9.268	BP	8.85156	5.43133	48.07574		Phenanthrene
10.288	BB	20.75930	2.30524	47.85517		Anthracene
11.448	MM	4.12269	25.48087	105.04978		Fluoranthene
12.221	MF	1.83995	34.43634	63.36108		Pyrene
15.049	MM	4.49803	12.28219	55.24568		Benzo(a)anthracene
15.551	MM	6.35061	7.91518	50.26628		Chrysene
17.783	BB	10.36747	9.89141	102.54895		Benzo(b)fluoranthene
18.742	PB	3.94109	14.59363	57.51478		Benzo(k)fluoranthene
19.690	PB	4.38903	13.34166	58.55689		Benzo(a)pyrene
21.314	MM	1.86005	61.87980	115.09983		Dibenz(a,h)anthracene
22.101	MM	3.17288	33.45332	106.14337		Benzo(g,h,i)perylene
22.604	MM	4.39845	12.46554	54.82910		Indeno(1,2,3-cd)pyrene

Totals : 4918.59235

Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=305,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
6.006	BB	27.65381	36.14769	999.62119		Acenaphthylene
6.777	PV	6.06443	308.61277	1871.56076		1-Methylnaphthalene (UV)

Totals : 2871.18195

Results obtained with enhanced integrator!

Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime [min]	Type	Area LU *s	Amt/Area	Amount [ug/l]	Grp	Name
4.793	BB	5.48376	68.97480	378.24111		Naphthalene
6.819	BV	24.40978	59.67094	1456.55443		1-Methylnaphthalene (F)
7.273	VV	7.74911	55.20738	427.80829		2-Methylnaphthalene
7.660	VV	11.70526	36.25836	424.41367		Acenaphthene
8.187	VB	12.79477	6.28187	80.37502		Fluorene
9.310	MM	6.77231	5.92673	40.13766		Phenanthrene
10.329	BB	20.99740	2.31053	48.51518		Anthracene
11.485	BB	3.82083	23.80183	90.94271		Fluoranthene
12.254	BB	6.53807	7.19858	47.06487		Pyrene
15.092	BV	7.44724	6.41390	47.76587		Benzo(a)anthracene
15.592	VB	8.93709	4.83163	43.18071		Chrysene

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RetTime [min]	Type	Area LU	Amt/Area *s	Amount [ug/l]	Grp	Name
17.825	BB	6.27574	14.89507	93.47751		Benzo(b)fluoranthene
18.782	BB	19.28471	2.18916	42.21724		Benzo(k)fluoranthene
19.728	BB	10.44253	4.30052	44.90832		Benzo(a)pyrene
21.351	MF	3.03149	36.12993	109.52744		Dibenz(a,h)anthracene
22.138	FM	6.08162	17.06152	103.76167		Benzo(g,h,i)perylene
22.643	MF	4.81022	11.56582	55.63411		Indeno(1,2,3-cd)pyrene

Totals : 3534.52582

Results obtained with enhanced integrator!

1 Warnings or Errors :

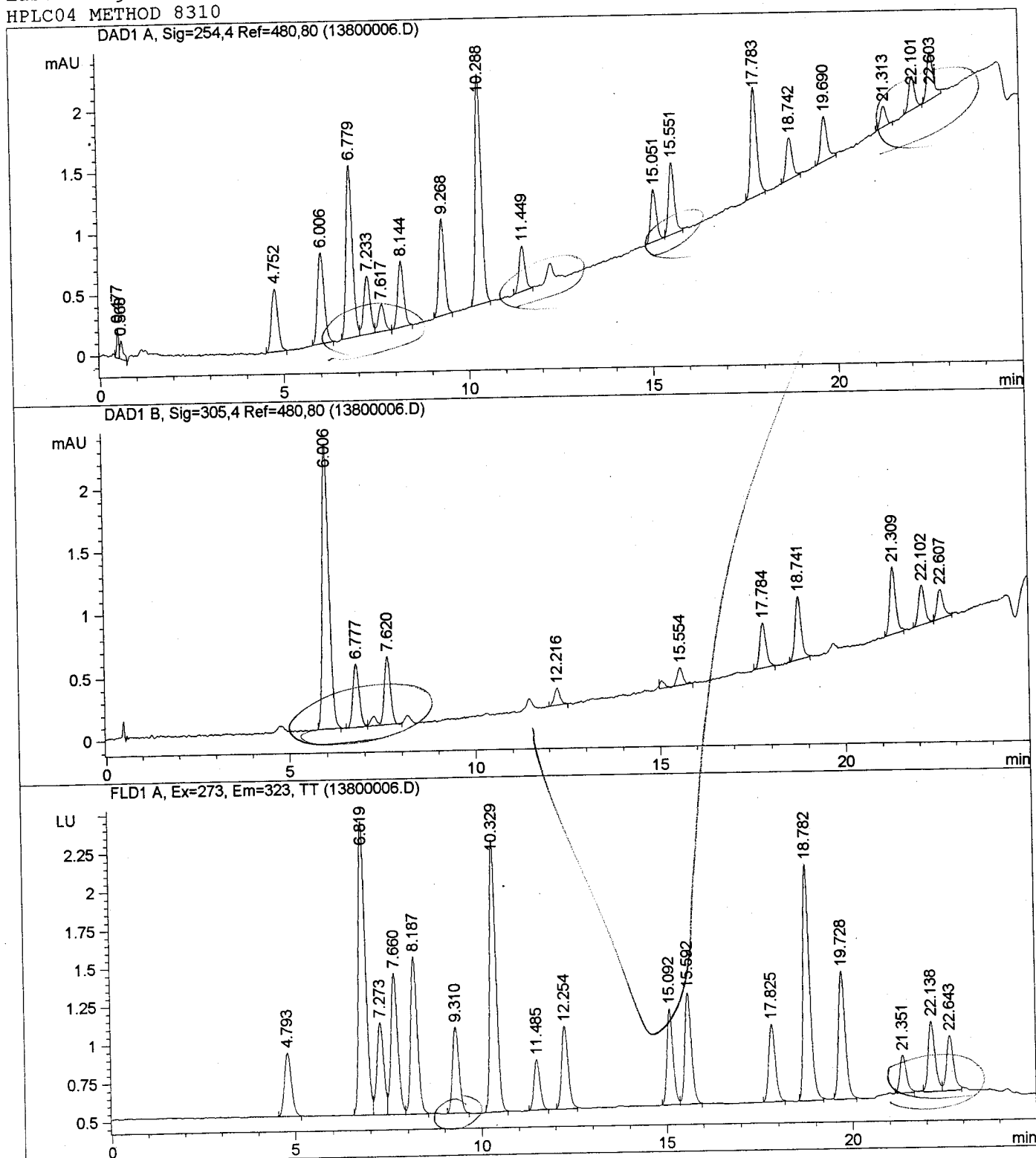
Warning : Elution order of calibrated compounds may have changed

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*** End of Report ***

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Injection Date : 5/18/2006 7:52:48 PM
Sample Name : ICAL,S3065
Acq. Operator :
Acq. Instrument : HPLC 4
Sequence File : G:\HPLC4\SEQUENCE\051806.S
Method : G:\HPLC4\METHODS\8310-315.M
Last changed : 11/14/2005 4:15:05 PM by HPL
HPLC04 METHOD 8310

Seq. Line : 6
Location : Vial 6
Inj : 1
Inj Volume : 10 µl



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External Standard Report

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Sorted By : Signal
 Calib. Data Modified : 11/14/2005 4:07:02 PM
 Multiplier : 1.0000
 Dilution : 1.0000
 Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 A, Sig=254,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
4.752	BP	6.35383	73.22840	465.28047		Naphthalene
6.006	BB	9.18307	86.07316	790.41598		Acenaphthylene
6.779	BV	16.96911	103.64911	1758.83363		1-Methylnaphthalene (UV)
7.233	VV	5.86789	80.58486	472.86303		2-Methylnaphthalene
7.617	VP	2.58632	167.24952	432.56006		Acenaphthene
8.144	VP	6.27447	15.44981	96.93942		Fluorene
9.268	BP	8.85156	5.43133	48.07574		Phenanthrene
10.288	BB	20.75930	2.30524	47.85517		Anthracene
11.449	BB	4.17647	25.46600	106.35808		Fluoranthene
12.274		-	-	-		Pyrene
15.051	PB	4.66044	12.23445	57.01786		Benzo(a)anthracene
15.551	BB	6.65766	7.89598	52.56868		Chrysene
17.783	BB	10.36747	9.89141	102.54895		Benzo(b)fluoranthene
18.742	PB	3.94109	14.59363	57.51478		Benzo(k)fluoranthene
19.690	PB	4.38903	13.34166	58.55689		Benzo(a)pyrene
21.313	BB	1.89148	61.62125	116.55565		Dibenz(a,h)anthracene
22.101	BB	3.27987	33.27520	109.13825		Benzo(g,h,i)perylene
22.603	BB	4.80412	12.29839	59.08288		Indeno(1,2,3-cd)pyrene

Totals : 4832.16552

Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=305,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
6.006	BB	27.65381	36.14769	999.62119		Acenaphthylene
6.777	PV	6.06443	308.61277	1871.56076		1-Methylnaphthalene (UV)

Totals : 2871.18195

Results obtained with enhanced integrator!

Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime [min]	Type	Area LU *s	Amt/Area	Amount [ug/l]	Grp	Name
4.793	BB	5.48376	68.97480	378.24111		Naphthalene
6.819	BV	24.40978	59.67094	1456.55443		1-Methylnaphthalene (F)
7.273	VV	7.74911	55.20738	427.80829		2-Methylnaphthalene
7.660	VV	11.70526	36.25836	424.41367		Acenaphthene
8.187	VB	12.79477	6.28187	80.37502		Fluorene
9.310	BB	6.73184	5.91894	39.84533		Phenanthrene
10.329	BB	20.99740	2.31053	48.51518		Anthracene
11.485	BB	3.82083	23.80183	90.94271		Fluoranthene
12.254	BB	6.53807	7.19858	47.06487		Pyrene
15.092	BV	7.44724	6.41390	47.76587		Benzo(a)anthracene
15.592	VB	8.93709	4.83163	356.18071		Chrysene

RetTime [min]	Type	Area LU	Amt/Area *s	Amount [ug/l]	Grp	Name
17.825	BB	6.27574	14.89507	93.47751		Benzo(b)fluoranthene
18.782	BB	19.28471	2.18916	42.21724		Benzo(k)fluoranthene
19.728	BB	10.44253	4.30052	44.90832		Benzo(a)pyrene
21.351	BB	3.01997	36.14844	109.16736		Dibenz(a,h)anthracene
22.138	BV	6.04372	17.07027	103.16802		Benzo(g,h,i)perylene
22.643	VB	4.78746	11.57190	55.40001		Indeno(1,2,3-cd)pyrene

Totals : 3533.04566

Results obtained with enhanced integrator!

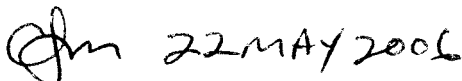
2 Warnings or Errors :

Warning : Calibrated compound(s) not found

Warning : Elution order of calibrated compounds may have changed

*** End of Report ***

HPLC04 METHOD 8310



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External Standard Report

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Sorted By : Signal
 Calib. Data Modified : Monday, May 22, 2006 3:04:08 PM
 Multiplier : 1.0000
 Dilution : 1.0000
 Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 A, Sig=254,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
4.741	PP	13.15704	75.44715	992.66081		Naphthalene
5.994	BB	18.68859	97.96462	1830.82099		Acenaphthylene
6.762	BV	34.41462	111.26010	3828.97360		1-Methylnaphthalene (UV)
7.212	VV	11.99022	83.23805	998.04267		2-Methylnaphthalene
7.594	VB	5.17957	182.34076	944.44598		Acenaphthene
8.115	BP	12.48572	15.66499	195.58864		Fluorene
9.237	BB	17.94612	5.51656	99.00091		Phenanthrene
10.262	BB	42.52945	2.38255	101.32866		Anthracene
11.425	MM	8.21146	24.85880	204.12706		Fluoranthene
12.199	MF	3.43952	31.84936	109.54636		Pyrene
15.041	BB	9.67921	11.48192	111.13591		Benzo(a)anthracene
15.540	BB	13.59609	7.71104	104.83992		Chrysene
17.782	BB	20.85804	9.58304	199.88339		Benzo(b)fluoranthene
18.739	PB	7.89588	13.47462	106.39401		Benzo(k)fluoranthene
19.690	BP	8.22974	12.32704	101.44830		Benzo(a)pyrene
21.311	PP	4.03761	53.19287	214.77209		Dibenz(a,h)anthracene
22.101	MF	6.79410	30.67938	208.43875		Benzo(g,h,i)perylene
22.603	BB	9.64680	11.34406	109.43393		Indeno(1,2,3-cd)pyrene

Totals : 1.04609e4

Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=305,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
5.994	BP	56.04304	35.96343	2015.49979		Acenaphthylene
6.763	BV	12.31411	319.16952	3930.28943		1-Methylnaphthalene (UV)

Totals : 5945.78921

Results obtained with enhanced integrator!

Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime [min]	Type	Area LU *s	Amt/Area	Amount [ug/l]	Grp	Name
4.779	BB	11.08296	78.41449	869.06430		Naphthalene
6.801	BV	49.21495	69.93486	3441.84074		1-Methylnaphthalene (F)
7.249	VV	15.52372	59.51698	923.92465		2-Methylnaphthalene
7.632	VV	23.56936	39.24141	924.89482		Acenaphthene
8.153	VB	25.46982	7.01892	178.77070		Fluorene
9.275	BB	13.66179	6.60992	90.30337		Phenanthrene
10.300	BB	42.23863	2.36471	99.88196		Anthracene
11.462	BB	7.68846	24.34096	187.14448		Fluoranthene
12.236	BB	13.11404	7.39696	97.00398		Pyrene
15.078	BV	15.15430	6.51482	98.72748		Benzo(a)anthracene
15.578	VB	18.11283	5.14692	333.22533		Chrysene

RetTime [min]	Type	Area LU	Amt/Area *s	Amount [ug/l]	Grp	Name
17.821	BB	12.83850	15.01359	192.75198		Benzo(b)fluoranthene
18.774	BB	39.20409	2.38224	93.39338		Benzo(k)fluoranthene
19.726	BB	21.26584	4.49830	95.66009		Benzo(a)pyrene
21.349	BB	6.02086	33.66053	202.66539		Dibenz(a,h)anthracene
22.136	BV	11.79889	16.41176	193.64051		Benzo(g,h,i)perylene
22.641	VB	9.68046	10.88148	105.33775		Indeno(1,2,3-cd)pyrene

Totals : 7888.23092

Results obtained with enhanced integrator!

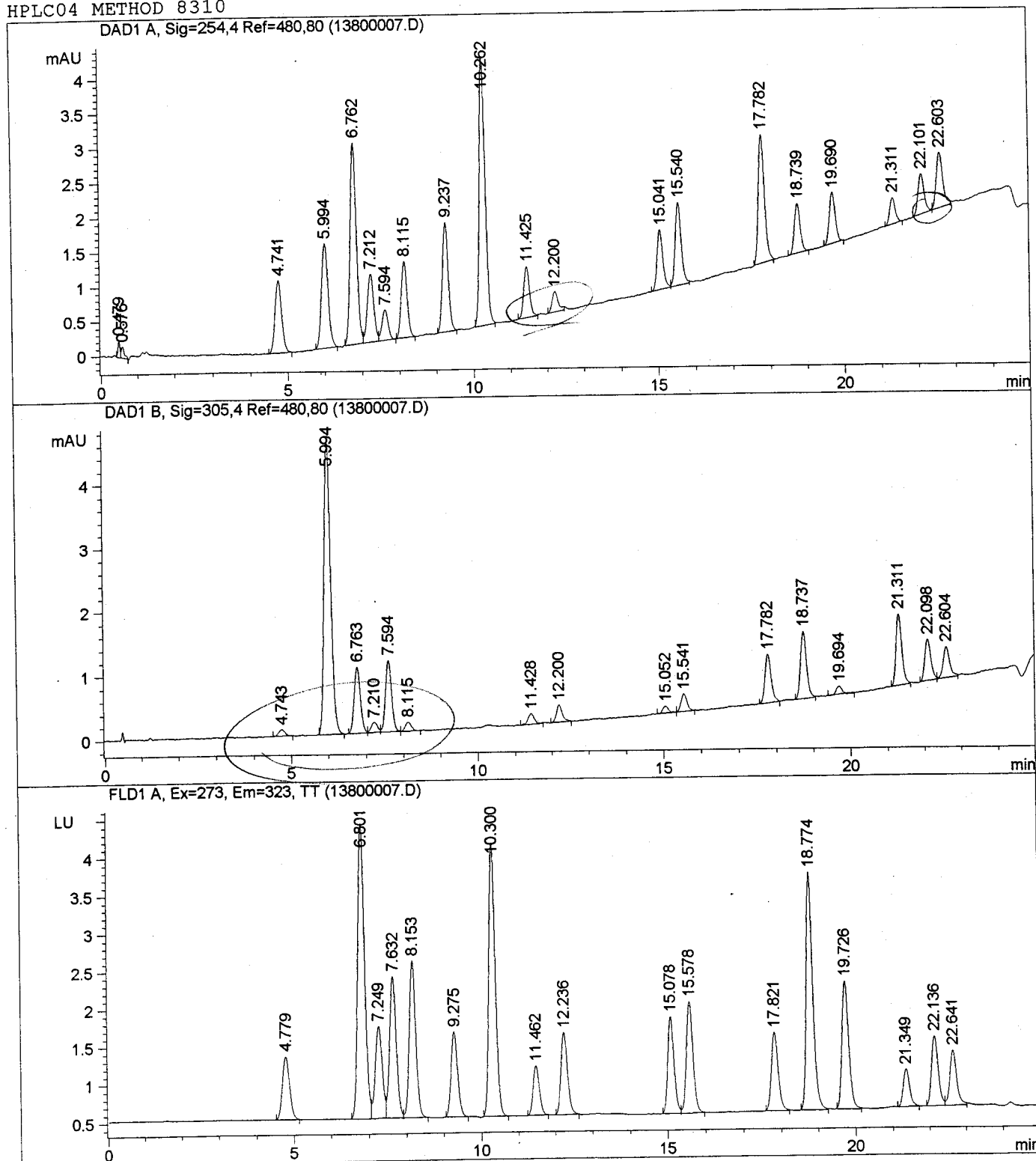
1 Warnings or Errors :

Warning : Elution order of calibrated compounds may have changed

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*** End of Report ***

Injection Date : 5/18/2006 8:24:25 PM
Sample Name : ICAL,S3064
Acq. Operator :
Acq. Instrument : HPLC 4
Sequence File : G:\HPLC4\SEQUENCE\051806.S
Method : G:\HPLC4\METHODS\8310-315.M
Last changed : 11/14/2005 4:15:05 PM by HPL
HPLC04 METHOD 8310

Seq. Line : 7
Location : Vial 7
Inj : 1
Inj Volume : 10 µl



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External Standard Report

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Sorted By : Signal
 Calib. Data Modified : 11/14/2005 4:07:02 PM
 Multiplier : 1.0000
 Dilution : 1.0000
 Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 A, Sig=254,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
4.741	PP	13.15704	75.23966	989.93094		Naphthalene
5.994	BB	18.68859	97.95052	1830.55734		Acenaphthylene
6.762	BV	34.41462	111.49571	3837.08215		1-Methylnaphthalene (UV)
7.212	VV	11.99022	84.01255	1007.32908		2-Methylnaphthalene
7.594	VB	5.17957	183.82214	952.11889		Acenaphthene
8.115	BP	12.48572	15.67684	195.73657		Fluorene
9.237	BB	17.94612	5.50602	98.81159		Phenanthrene
10.262	BB	42.52945	2.39039	101.66206		Anthracene
11.425	BB	8.33177	24.89745	207.43969		Fluoranthene
12.200	BB	3.63215	32.14049	116.73924		Pyrene
15.041	BB	9.67921	11.54875	111.78279		Benzo(a)anthracene
15.540	BB	13.59609	7.69321	104.59755		Chrysene
17.782	BB	20.85804	9.63082	200.87998		Benzo(b)fluoranthene
18.739	PB	7.89588	13.44291	106.14363		Benzo(k)fluoranthene
19.690	BP	8.22974	12.47815	102.69193		Benzo(a)pyrene
21.311	PP	4.03761	53.48821	215.96454		Dibenz(a,h)anthracene
22.101	PB	6.88324	30.50981	210.00617		Benzo(g,h,i)perylene
22.603	BB	9.64680	11.38859	109.86342		Indeno(1,2,3-cd)pyrene

Totals : 1.04993e4

Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=305,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
5.994	BP	56.04304	36.00954	2018.08416		Acenaphthylene
6.763	BV	12.31411	319.09832	3929.41268		1-Methylnaphthalene (UV)

Totals : 5947.49684

Results obtained with enhanced integrator!

Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime [min]	Type	Area LU *s	Amt/Area	Amount [ug/l]	Grp	Name
4.779	BB	11.08296	77.69214	861.05854		Naphthalene
6.801	BV	49.21495	69.11596	3401.53860		1-Methylnaphthalene (F)
7.249	VV	15.52372	59.25143	919.80224		2-Methylnaphthalene
7.632	VV	23.56936	39.05561	920.51559		Acenaphthene
8.153	VB	25.46982	6.97885	177.75006		Fluorene
9.275	BB	13.66179	6.58089	89.90669		Phenanthrene
10.300	BB	42.23863	2.37078	100.13855		Anthracene
11.462	BB	7.68846	24.15496	185.71436		Fluoranthene
12.236	BB	13.11404	7.36549	96.59133		Pyrene
15.078	BV	15.15430	6.50643	98.60035		Benzo(a)anthracene
15.578	VB	18.11283	5.13250	92.96409		Chrysene

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RetTime [min]	Type	Area LU	Amt/Area *s	Amount [ug/l]	Grp	Name
17.821	BB	12.83850	14.92551	191.62111		Benzo(b)fluoranthene
18.774	BB	39.20409	2.37879	93.25822		Benzo(k)fluoranthene
19.726	BB	21.26584	4.48946	95.47213		Benzo(a)pyrene
21.349	BB	6.02086	33.71974	203.02184		Dibenz(a,h)anthracene
22.136	BV	11.79889	16.38463	193.32039		Benzo(g,h,i)perylene
22.641	VB	9.68046	10.92153	105.72548		Indeno(1,2,3-cd)pyrene

Totals : 7826.99958

Results obtained with enhanced integrator!

1 Warnings or Errors :

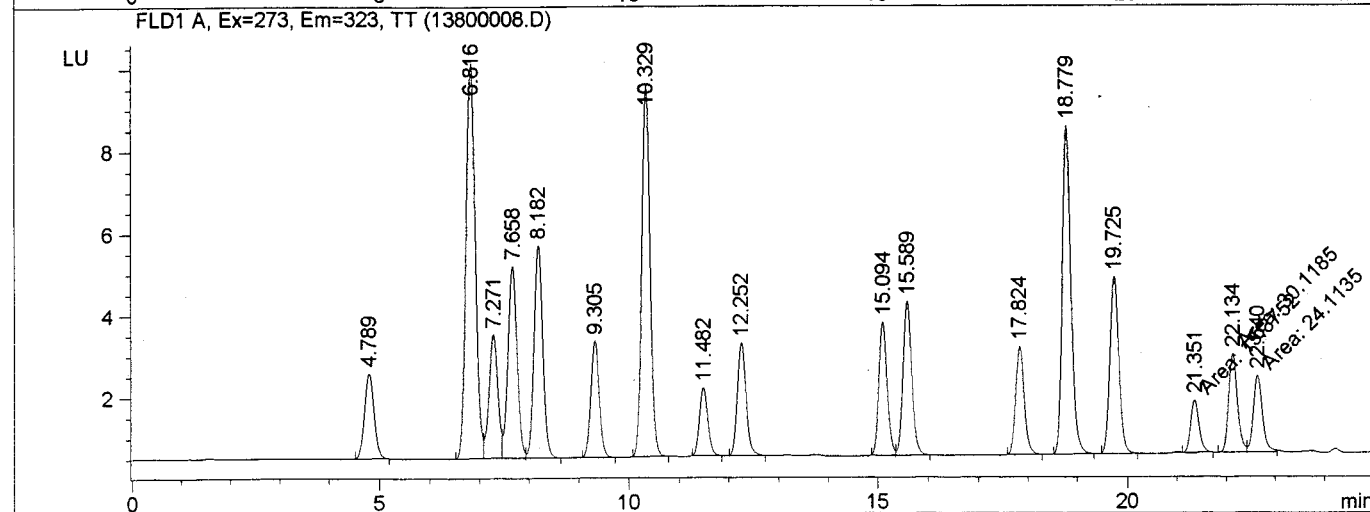
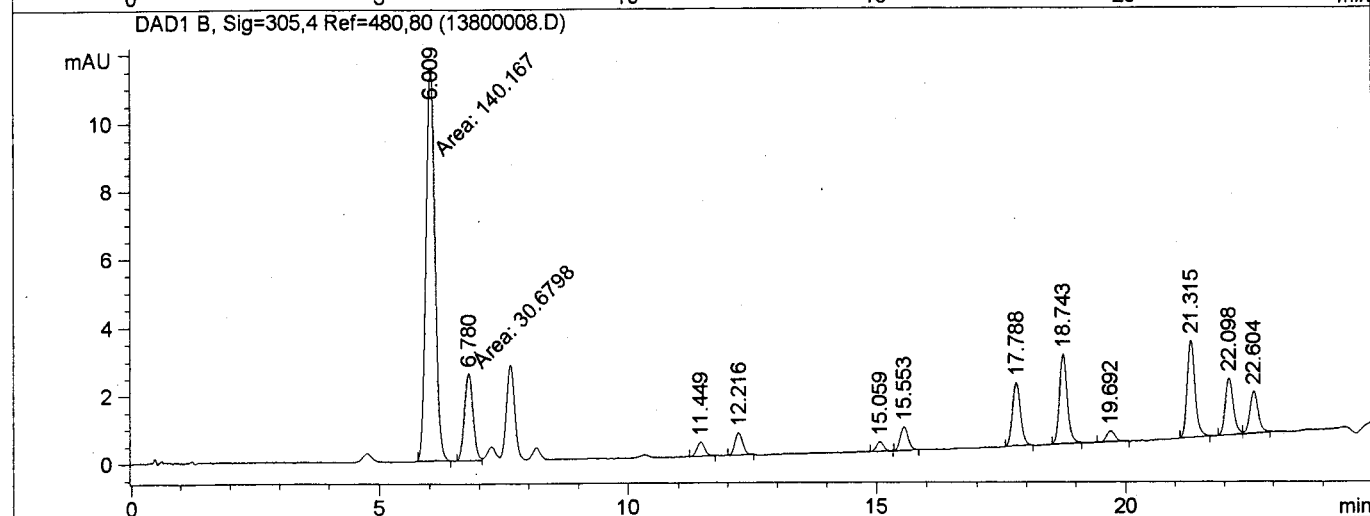
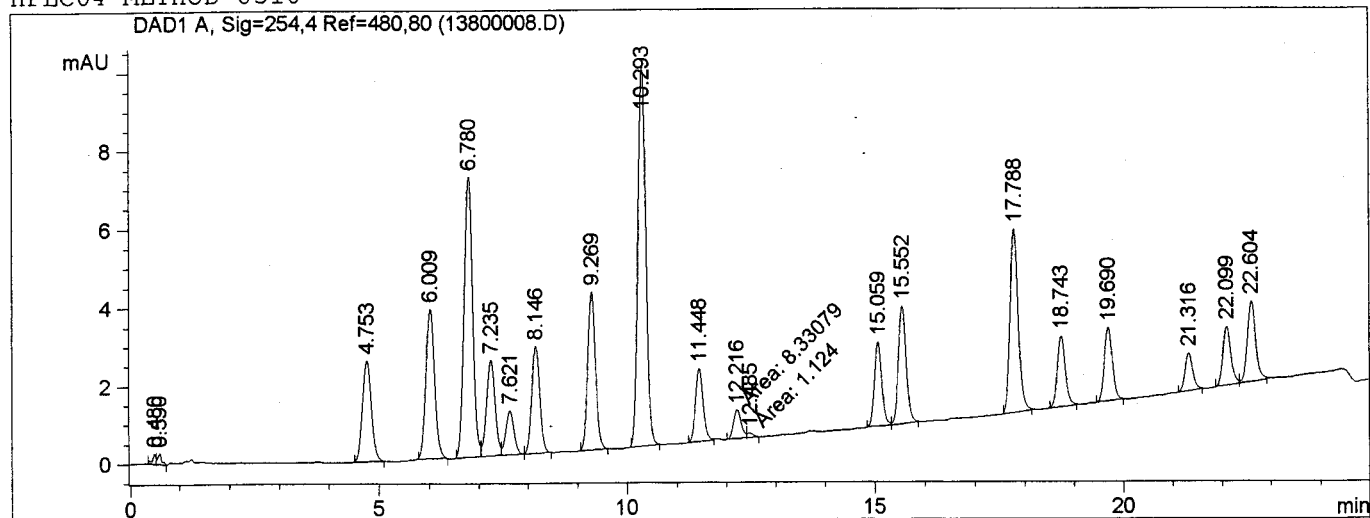
Warning : Elution order of calibrated compounds may have changed

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*** End of Report ***

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Injection Date	: 5/18/2006 8:56:04 PM	Seq. Line	: 8
Sample Name	: ICAL,S3063	Location	: Vial 8
Acq. Operator	:	Inj	: 1
Acq. Instrument	: HPLC 4	Inj Volume	: 10 µl
Acq. Method	: G:\HPLC4\METHODS\8310-315.M		
Last changed	: 11/14/2005 4:15:05 PM by HPL		
Analysis Method	: G:\HPLC4\METHODS\8310-315.M		
Last changed	: 5/22/2006 3:08:40 PM		
	(modified after loading)		

HPLC04 METHOD 8310



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External Standard Report

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Sorted By : Signal
 Calib. Data Modified : Monday, May 22, 2006 3:08:39 PM
 Multiplier : 1.0000
 Dilution : 1.0000
 Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 A, Sig=254,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
4.753	BB	32.77972	76.37793	2503.64698		Naphthalene
6.009	BP	46.93712	104.60774	4909.98650		Acenaphthylene
6.780	BV	85.94093	115.82409	9954.03067		1-Methylnaphthalene (UV)
7.235	VV	29.85911	85.16072	2542.82320		2-Methylnaphthalene
7.621	VB	13.08239	192.22136	2514.71478		Acenaphthene
8.146	BP	31.10701	15.79700	491.39753		Fluorene
9.269	BB	45.25932	5.54654	251.03249		Phenanthrene
10.293	BB	106.41690	2.42535	258.09860		Anthracene
11.448	BB	20.48045	24.49211	501.60948		Fluoranthene
12.216	MF	8.33079	30.45653	253.72692		Pyrene
15.059	BV	23.48936	11.08579	260.39827		Benzo(a)anthracene
15.552	VB	33.59677	7.55520	253.83040		Chrysene
17.788	BB	53.17228	9.44279	502.09453		Benzo(b)fluoranthene
18.743	BB	20.57043	12.70764	261.40174		Benzo(k)fluoranthene
19.690	BB	21.51167	11.80156	253.87126		Benzo(a)pyrene
21.316	PB	10.67297	49.06117	523.62828		Dibenz(a,h)anthracene
22.099	BV	17.66954	29.06294	513.52874		Benzo(g,h,i)perylene
22.604	VB	24.43922	10.71133	261.77653		Indeno(1,2,3-cd)pyrene

Totals : 2.70116e4

Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=305,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
6.009	MM	140.16672	35.82836	5021.94384		Acenaphthylene
6.780	MF	30.67977	324.56337	9957.52924		1-Methylnaphthalene (UV)

Totals : 1.49795e4

Results obtained with enhanced integrator!

Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime [min]	Type	Area LU *s	Amt/Area	Amount [ug/l]	Grp	Name
4.789	BB	27.68407	83.52975	2312.44313		Naphthalene
6.816	BV	122.94567	75.46335	9277.89216		1-Methylnaphthalene (F)
7.271	VV	38.81281	61.91813	2403.21689		2-Methylnaphthalene
7.658	VV	58.84945	40.87067	2405.21631		Acenaphthene
8.182	VP	63.67719	7.44721	474.21718		Fluorene
9.305	BP	34.08815	6.99887	238.57836		Phenanthrene
10.329	BB	106.64105	2.39799	255.72394		Anthracene
11.482	BB	19.30645	24.53096	473.60574		Fluoranthene
12.252	BP	33.29245	7.48167	249.08298		Pyrene
15.094	BV	38.07673	6.55493	249.59029		Benzo(a)anthracene
15.589	VB	45.37164	5.31771	241.27313		Chrysene

RetTime [min]	Type	Area LU *s	Amt/Area	Amount [ug/l]	Grp	Name
17.824	BB	32.34958	15.00282	485.33482		Benzo(b) fluoranthene
18.779	BB	98.73430	2.48862	245.71240		Benzo(k) fluoranthene
19.725	BB	53.53555	4.60008	246.26762		Benzo(a)pyrene
21.351	FM	15.37518	32.19158	494.95134		Dibenz(a,h)anthracene
22.134	MF	30.11854	16.00712	482.11107		Benzo(g,h,i)perylene
22.640	FM	24.11350	10.49065	252.96625		Indeno(1,2,3-cd)pyrene

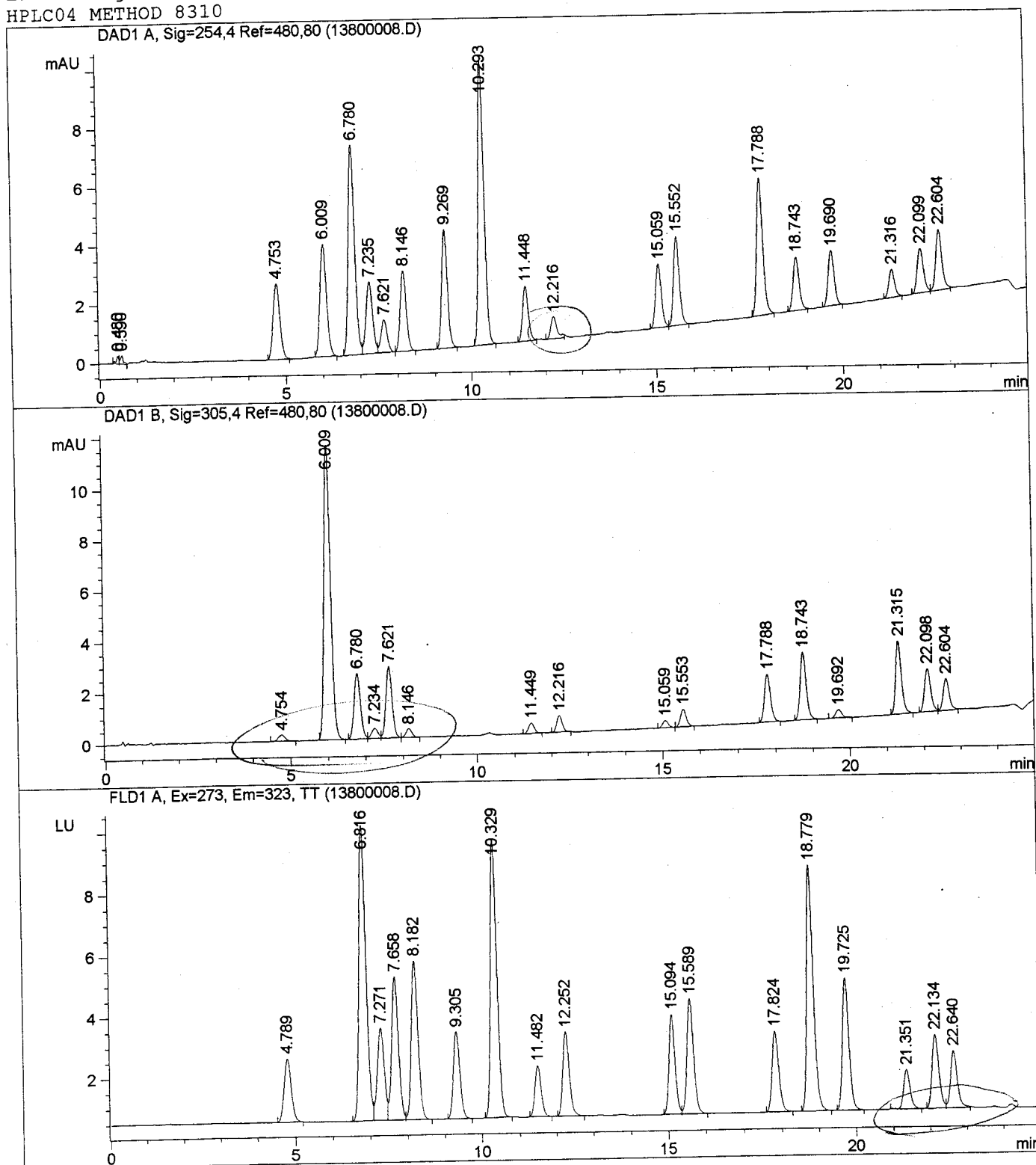
Totals : 2.07882e4

Results obtained with enhanced integrator!

*** End of Report ***

Injection Date : 5/18/2006 8:56:04 PM
Sample Name : ICAL,S3063
Acq. Operator :
Acq. Instrument : HPLC 4
Sequence File : G:\HPLC4\SEQUENCE\051806.S
Method : G:\HPLC4\METHODS\8310-315.M
Last changed : 11/14/2005 4:15:05 PM by HPL
HPLC04 METHOD 8310

Seq. Line : 8
Location : Vial 8
Inj : 1
Inj Volume : 10 µl



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External Standard Report

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Sorted By : Signal
 Calib. Data Modified : 11/14/2005 4:07:02 PM
 Multiplier : 1.0000
 Dilution : 1.0000
 Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 A, Sig=254,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
4.753	BB	32.77972	76.36412	2503.19429		Naphthalene
6.009	BP	46.93712	104.85627	4921.65160		Acenaphthylene
6.780	BV	85.94093	116.07172	9975.31178		1-Methylnaphthalene (UV)
7.235	VV	29.85911	85.97857	2567.24355		2-Methylnaphthalene
7.621	VB	13.08239	193.80657	2535.45315		Acenaphthene
8.146	BP	31.10701	15.81412	491.93013		Fluorene
9.269	BB	45.25932	5.54988	251.18387		Phenanthrene
10.293	BB	106.41690	2.43914	259.56562		Anthracene
11.448	BB	20.48045	24.55847	502.96849		Fluoranthene
12.216	BB	9.07741	30.72660	278.91797		Pyrene
15.059	BV	23.48936	11.17440	262.47948		Benzo(a)anthracene
15.552	VB	33.59677	7.57739	254.57574		Chrysene
17.788	BB	53.17228	9.47431	503.77063		Benzo(b)fluoranthene
18.743	BB	20.57043	12.73634	261.99202		Benzo(k)fluoranthene
19.690	BB	21.51167	11.86888	255.31947		Benzo(a)pyrene
21.316	PB	10.67297	49.03186	523.31537		Dibenz(a,h)anthracene
22.099	BV	17.66954	28.97324	511.94371		Benzo(g,h,i)perylene
22.604	VB	24.43922	10.84229	264.97718		Indeno(1,2,3-cd)pyrene

Totals : 2.71258e4

Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=305,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
6.009	BB	140.42299	35.92868	5045.21256		Acenaphthylene
6.780	BV	30.85767	325.21271	1.00353e4		1-Methylnaphthalene (UV)

Totals : 1.50805e4

Results obtained with enhanced integrator!

Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime [min]	Type	Area LU *s	Amt/Area	Amount [ug/l]	Grp	Name
4.789	BB	27.68407	82.81183	2292.56834		Naphthalene
6.816	BV	122.94567	74.68987	9182.79644		1-Methylnaphthalene (F)
7.271	VV	38.81281	61.67004	2393.58779		2-Methylnaphthalene
7.658	VV	58.84945	40.71010	2395.76673		Acenaphthene
8.182	VP	63.67719	7.40100	471.27502		Fluorene
9.305	BP	34.08815	6.96620	237.46500		Phenanthrene
10.329	BB	106.64105	2.40675	256.65820		Anthracene
11.482	BB	19.30645	24.36488	470.39931		Fluoranthene
12.252	BP	33.29245	7.46607	248.56366		Pyrene
15.094	BV	38.07673	6.56025	249.79276		Benzo(a)anthracene
15.589	VB	45.37164	5.30856	240.85792		Chrysene

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RetTime [min]	Type	Area LU	Amt/Area *s	Amount [ug/l]	Grp	Name
17.824	BB	32.34958	14.94306	483.40187		Benzo(b)fluoranthene
18.779	BB	98.73430	2.48948	245.79718		Benzo(k)fluoranthene
19.725	BB	53.53555	4.59934	246.22808		Benzo(a)pyrene
21.351	BB	15.91616	32.20018	512.50327		Dibenz(a,h)anthracene
22.134	BV	30.24633	15.94548	482.29231		Benzo(g,h,i)perylene
22.640	VB	24.45337	10.53710	257.66761		Indeno(1,2,3-cd)pyrene

Totals : 2.06676e4

Results obtained with enhanced integrator!

1 Warnings or Errors :

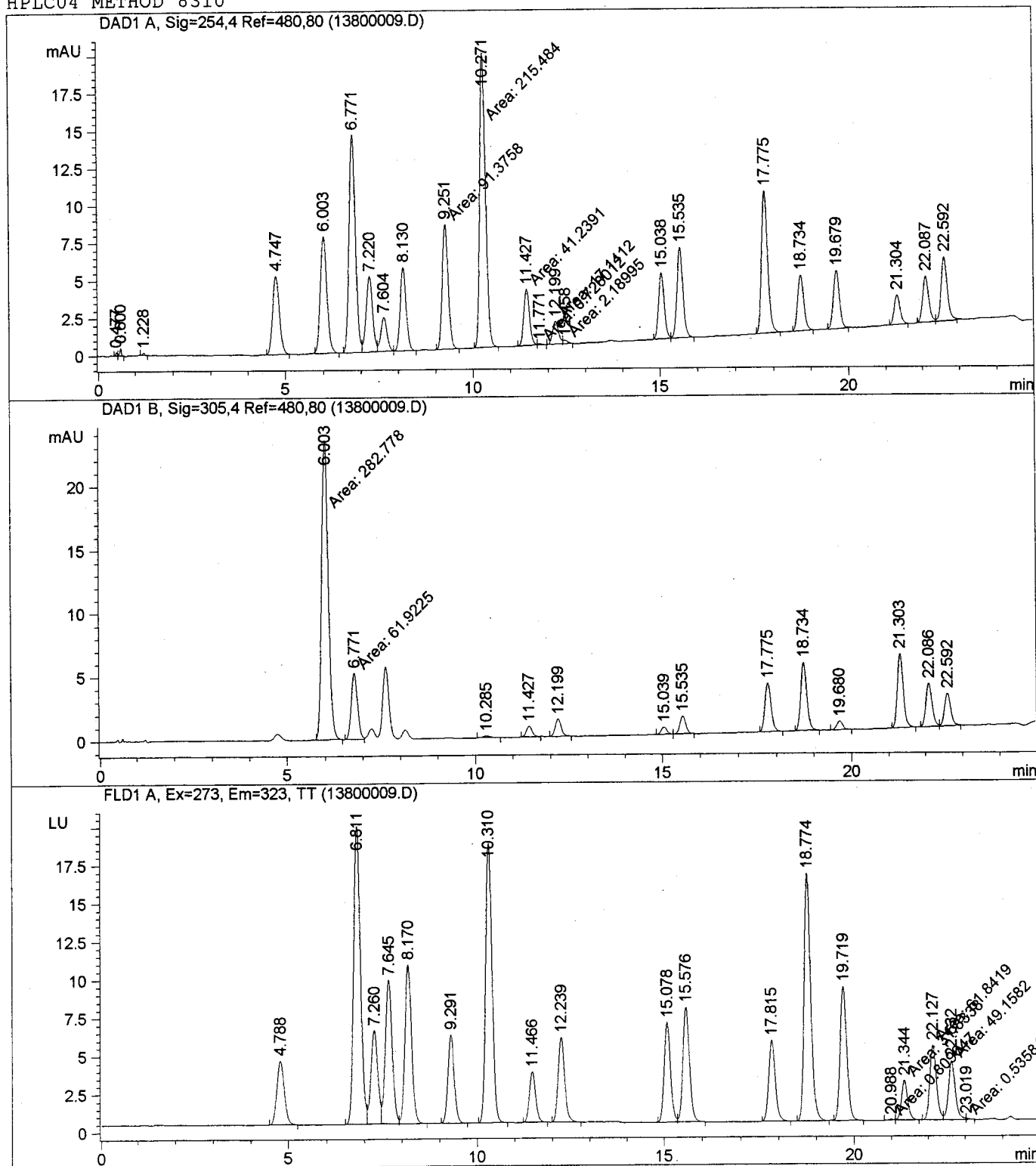
Warning : Elution order of calibrated compounds may have changed

*** End of Report ***

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Injection Date	: 5/18/2006 9:27:42 PM	Seq. Line	: 9
Sample Name	: ICAL,S3062	Location	: Vial 9
Acq. Operator	:	Inj	: 1
Acq. Instrument	: HPLC 4	Inj Volume	: 10 µl
Acq. Method	: G:\HPLC4\METHODS\8310-315.M		
Last changed	: 11/14/2005 4:15:05 PM by HPL		
Analysis Method	: G:\HPLC4\METHODS\8310-315.M		
Last changed	: 5/22/2006 3:12:31 PM		
	(modified after loading)		

HPLC04 METHOD 8310



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External Standard Report

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Sorted By : Signal
 Calib. Data Modified : Monday, May 22, 2006 3:12:30 PM
 Multiplier : 1.0000
 Dilution : 1.0000
 Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 A, Sig=254,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
4.747	BB	66.00784	76.67739	5061.30895		Naphthalene
6.003	BP	94.78723	106.93527	1.01361e4		Acenaphthylene
6.771	BV	173.09207	117.45247	2.03301e4		1-Methylnaphthalene (UV)
7.220	VV	60.88431	86.05257	5239.25141		2-Methylnaphthalene
7.604	VV	26.89059	195.94097	5268.96792		Acenaphthene
8.130	VP	63.54686	15.87401	1008.74328		Fluorene
9.251	MM	91.37579	5.56085	508.12697		Phenanthrene
10.271	MM	215.48436	2.43979	525.73592		Anthracene
11.427	MF	41.23911	24.39645	1006.08770		Fluoranthene
12.199	MF	17.14116	30.11218	516.15780		Pyrene
15.038	BV	47.78680	10.96489	523.97718		Benzo(a)anthracene
15.535	VB	67.79062	7.51456	509.41699		Chrysene
17.775	BB	107.52938	9.40124	1010.90932		Benzo(b)fluoranthene
18.734	BB	41.83699	12.44716	520.75155		Benzo(k)fluoranthene
19.679	BB	44.20454	11.62273	513.77751		Benzo(a)pyrene
21.304	BB	21.81421	47.45179	1035.12328		Dibenz(a,h)anthracene
22.087	BV	35.90152	28.47010	1022.11981		Benzo(g,h,i)perylene
22.592	VB	50.25140	10.54000	529.64997		Indeno(1,2,3-cd)pyrene

Totals : 5.52663e4

Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=305,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
6.003	MM	282.77841	35.83417	1.01331e4		Acenaphthylene
6.771	MF	61.92251	327.20946	2.02616e4		1-Methylnaphthalene (UV)

Totals : 3.03948e4

Results obtained with enhanced integrator!

Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime [min]	Type	Area LU *s	Amt/Area	Amount [ug/l]	Grp	Name
4.788	BB	55.85367	85.40601	4770.23924		Naphthalene
6.811	BV	247.30377	77.41538	1.91451e4		1-Methylnaphthalene (F)
7.260	VV	78.28068	62.77767	4914.27847		2-Methylnaphthalene
7.645	VV	119.32713	41.45016	4946.12834		Acenaphthene
8.170	VB	128.43744	7.59911	976.01003		Fluorene
9.291	BB	68.83022	7.13713	491.24997		Phenanthrene
10.310	BB	216.08749	2.40817	520.37505		Anthracene
11.466	BB	39.23374	24.64805	967.03499		Fluoranthene
12.239	BP	67.75372	7.51160	508.93881		Pyrene
15.078	BV	76.80959	6.57644	505.13344		Benzo(a)anthracene
15.576	VB	91.38473	5.38541	4365.14433		Chrysene

RetTime [min]	Type	Area LU *s	Amt/Area	Amount [ug/l]	Grp	Name
17.815	BB	65.39377	15.02906	982.80711		Benzo(b)fluoranthene
18.774	BB	198.87831	2.52646	502.45906		Benzo(k)fluoranthene
19.719	BB	108.22565	4.64045	502.21596		Benzo(a)pyrene
21.344	MF	31.83378	31.75456	1010.86765		Dibenz(a,h)anthracene
22.127	FM	61.84187	15.88598	982.41888		Benzo(g,h,i)perylene
22.632	FM	49.15816	10.36973	509.75698		Indeno(1,2,3-cd)pyrene

Totals : 4.27272e4

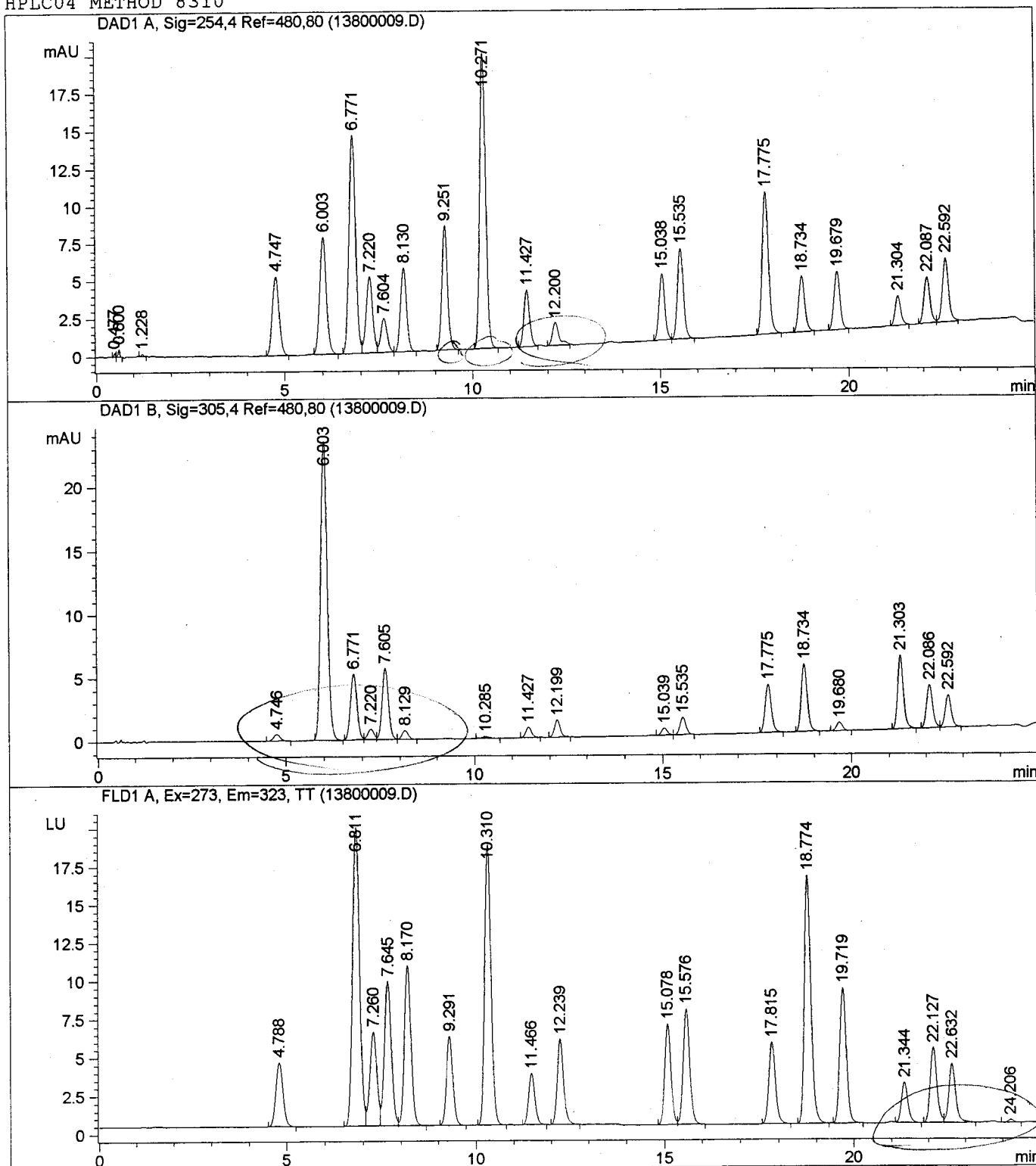
Results obtained with enhanced integrator!

*** End of Report ***

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Injection Date : 5/18/2006 9:27:42 PM
Sample Name : ICAL, S3062
Acq. Operator :
Acq. Instrument : HPLC 4
Sequence File : G:\HPLC4\SEQUENCE\051806.S
Method : G:\HPLC4\METHODS\8310-315.M
Last changed : 11/14/2005 4:15:05 PM by HPL
HPLC04 METHOD 8310

Seq. Line : 9
Location : Vial 9
Inj : 1
Inj Volume : 10 µl



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External Standard Report

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Sorted By : Signal
 Calib. Data Modified : 11/14/2005 4:07:02 PM
 Multiplier : 1.0000
 Dilution : 1.0000
 Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 A, Sig=254,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
4.747	BB	66.00784	76.74366	5065.68344		Naphthalene
6.003	BP	94.78723	107.16262	1.01576e4		Acenaphthylene
6.771	BV	173.09207	117.61057	2.03575e4		1-Methylnaphthalene (UV)
7.220	VV	60.88431	86.65081	5275.67504		2-Methylnaphthalene
7.604	VV	26.89059	197.16682	5301.93189		Acenaphthene
8.130	VP	63.54686	15.86111	1007.92400		Fluorene
9.251	BB	90.80871	5.56434	505.29050		Phenanthrene
10.271	BB	215.28198	2.45555	528.63544		Anthracene
11.427	BB	41.29040	24.44131	1009.19134		Fluoranthene
12.200	BB	19.25382	30.22813	582.00685		Pyrene
15.038	BV	47.78680	11.04099	527.61359		Benzo(a)anthracene
15.535	VB	67.79062	7.53767	510.98350		Chrysene
17.775	BB	107.52938	9.42324	1013.27528		Benzo(b)fluoranthene
18.734	BB	41.83699	12.51259	523.48920		Benzo(k)fluoranthene
19.679	BB	44.20454	11.67508	516.09156		Benzo(a)pyrene
21.304	BB	21.81421	47.64691	1039.37946		Dibenz(a,h)anthracene
22.087	BV	35.90152	28.47528	1022.30574		Benzo(g,h,i)perylene
22.592	VB	50.25140	10.65929	535.64450		Indeno(1,2,3-cd)pyrene

Totals : 5.54802e4

Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=305,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
6.003	BB	283.36636	35.90159	1.01733e4		Acenaphthylene
6.771	BV	62.20593	327.25890	2.03574e4		1-Methylnaphthalene (UV)

Totals : 3.05307e4

Results obtained with enhanced integrator!

Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime [min]	Type	Area LU *s	Amt/Area	Amount [ug/l]	Grp	Name
4.788	BB	55.85367	84.53565	4721.62655		Naphthalene
6.811	BV	247.30377	76.56078	1.89338e4		1-Methylnaphthalene (F)
7.260	VV	78.28068	62.48287	4891.20145		2-Methylnaphthalene
7.645	VV	119.32713	41.27029	4924.66503		Acenaphthene
8.170	VB	128.43744	7.54290	968.79023		Fluorene
9.291	BB	68.83022	7.09628	488.43876		Phenanthrene
10.310	BB	216.08749	2.41870	522.65006		Anthracene
11.466	BB	39.23374	24.43544	958.69373		Fluoranthene
12.239	BP	67.75372	7.49931	508.10642		Pyrene
15.078	BV	76.80959	6.57819	505.26812		Benzo(a)anthracene
15.576	VB	91.38473	5.36746	490.50382		Chrysene

RetTime [min]	Type	Area LU *s	Amt/Area	Amount [ug/l]	Grp	Name
17.815	BB	65.39377	14.94890	977.56498		Benzo(b)fluoranthene
18.774	BB	198.87831	2.52619	502.40408		Benzo(k)fluoranthene
19.719	BB	108.22565	4.63593	501.72649		Benzo(a)pyrene
21.344	VB	32.08181	31.73429	1018.09339		Dibenz(a,h)anthracene
22.127	BV	61.99461	15.80164	979.61673		Benzo(g,h,i)perylene
22.632	VB	50.43483	10.40733	524.89177		Indeno(1,2,3-cd)pyrene

Totals : 4.24180e4

Results obtained with enhanced integrator!
1 Warnings or Errors :

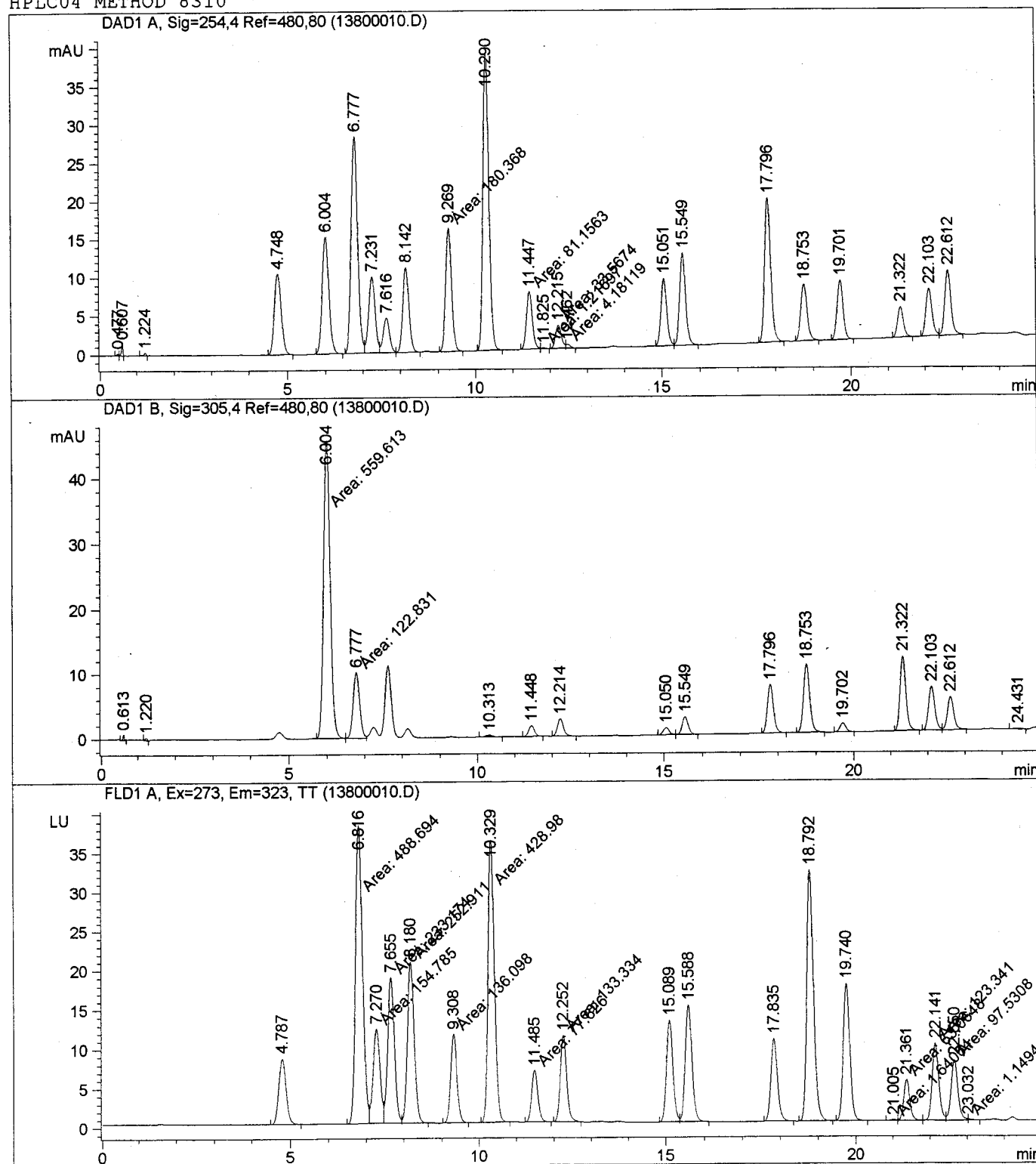
Warning : Elution order of calibrated compounds may have changed

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*** End of Report ***

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Injection Date	: 5/18/2006 9:59:20 PM	Seq. Line	: 10
Sample Name	: ICAL,S3061	Location	: Vial 10
Acq. Operator	:	Inj	: 1
Acq. Instrument	: HPLC 4	Inj Volume	: 10 µl
Acq. Method	: G:\HPLC4\METHODS\8310-315.M		
Last changed	: 11/14/2005 4:15:05 PM by HPL		
Analysis Method	: G:\HPLC4\METHODS\8310-315.M		
Last changed	: 5/22/2006 3:16:08 PM		
	(modified after loading)		

HPLC04 METHOD 8310



Jm 22 MAY 2006

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External Standard Report

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Sorted By : Signal
 Calib. Data Modified : Monday, May 22, 2006 3:16:07 PM
 Multiplier : 1.0000
 Dilution : 1.0000
 Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 A, Sig=254,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
4.748	BB	130.71696	76.88265	1.00499e4		Naphthalene
6.004	BP	187.08742	108.17547	2.02383e4		Acenaphthylene
6.777	BV	340.84924	118.27930	4.03154e4		1-Methylnaphthalene (UV)
7.231	VV	120.14920	86.52629	1.03961e4		2-Methylnaphthalene
7.616	VV	53.03941	197.59528	1.04803e4		Acenaphthene
8.142	VP	125.67238	15.89615	1997.70672		Fluorene
9.269	MM	180.36794	5.56956	1004.56957		Phenanthrene
10.290	BB	428.09290	2.44898	1048.38885		Anthracene
11.447	MF	81.15630	24.38102	1978.67352		Fluoranthene
12.215	MF	33.56740	29.90175	1003.72397		Pyrene
15.051	BV	94.79131	10.90985	1034.15935		Benzo(a)anthracene
15.549	VB	134.58353	7.50648	1010.24825		Chrysene
17.796	BB	213.44913	9.38973	2004.22920		Benzo(b)fluoranthene
18.753	BB	83.72203	12.33911	1033.05512		Benzo(k)fluoranthene
19.701	BB	87.60189	11.54393	1011.26973		Benzo(a)pyrene
21.322	BB	44.01789	46.74019	2057.40421		Dibenz(a,h)anthracene
22.103	BV	71.56614	28.20060	2018.20777		Benzo(g,h,i)perylene
22.612	VB	99.94793	10.47655	1047.10941		Indeno(1,2,3-cd)pyrene

Totals : 1.09729e5

Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=305,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
6.004	MF	559.61334	35.84867	2.00614e4		Acenaphthylene
6.777	MF	122.83121	328.29217	4.03245e4		1-Methylnaphthalene (UV)

Totals : 6.03859e4

Results obtained with enhanced integrator!

Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime [min]	Type	Area LU *s	Amt/Area	Amount [ug/l]	Grp	Name
4.787	BB	110.44406	86.23241	9523.85763		Naphthalene
6.816	MF	488.69351	78.25434	3.82424e4		1-Methylnaphthalene (F)
7.270	MF	154.78474	63.16158	9776.44914		2-Methylnaphthalene
7.655	FM	233.17419	41.70006	9723.37784		Acenaphthene
8.180	FM	252.91112	7.66160	1937.70495		Fluorene
9.308	MM	136.09827	7.20018	979.93250		Phenanthrene
10.329	MF	428.97952	2.41475	1035.87975		Anthracene
11.485	MM	77.62599	24.67740	1915.60790		Fluoranthene
12.252	MM	133.33412	7.52665	1003.55946		Pyrene
15.089	BV	151.99316	6.59134	1001.83827		Benzo(a)anthracene
15.588	VB	180.56219	5.42067	9371.76878		Chrysene

RetTime [min]	Type	Area LU	Amt/Area *s	Amount [ug/l]	Grp	Name
17.835	BB	129.20119	15.03529	1942.57735		Benzo(b)fluoranthene
18.792	BB	392.59399	2.54606	999.56844		Benzo(k)fluoranthene
19.740	BB	214.33957	4.66052	998.93354		Benzo(a)pyrene
21.361	MF	63.06483	31.52180	1987.91703		Dibenz(a,h)anthracene
22.141	MF	123.34122	15.81446	1950.57435		Benzo(g,h,i)perylene
22.650	FM	97.53080	10.31825	1006.34760		Indeno(1,2,3-cd)pyrene

Totals : 8.50053e4

Results obtained with enhanced integrator!

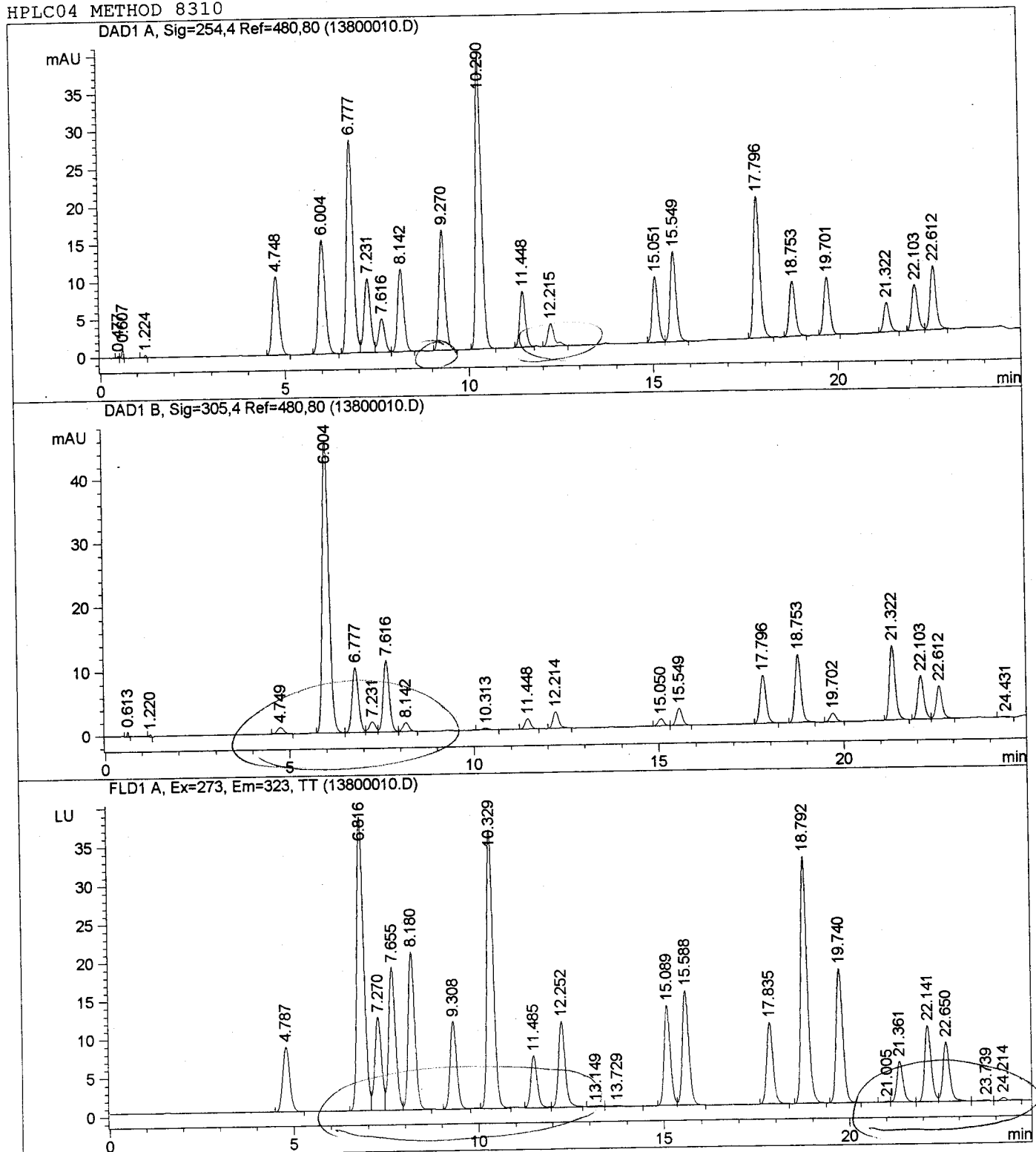
1 Warnings or Errors :

Warning : Elution order of calibrated compounds may have changed

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*** End of Report ***

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Injection Date	: 5/18/2006 9:59:20 PM	Seq. Line	: 10
Sample Name	: ICAL,S3061	Location	: Vial 10
Acq. Operator	:	Inj	: 1
Acq. Instrument	: HPLC 4	Inj Volume	: 10 µl
Sequence File	: G:\HPLC4\SEQUENCE\051806.S		
Method	: G:\HPLC4\METHODS\8310-315.M		
Last changed	: 11/14/2005 4:15:05 PM by HPL		
HPLC04 METHOD 8310			



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External Standard Report

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Sorted By : Signal
 Calib. Data Modified : 11/14/2005 4:07:02 PM
 Multiplier : 1.0000
 Dilution : 1.0000
 Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 A, Sig=254,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
4.748	BB	130.71696	76.92901	1.00559e4		Naphthalene
6.004	BP	187.08742	108.27875	2.02576e4		Acenaphthylene
6.777	BV	340.84924	118.35743	4.03420e4		1-Methylnaphthalene (UV)
7.231	VV	120.14920	86.96994	1.04494e4		2-Methylnaphthalene
7.616	VV	53.03941	198.73637	1.05409e4		Acenaphthene
8.142	VP	125.67238	15.88339	1996.10338		Fluorene
9.270	BP	179.71016	5.57145	1001.24549		Phenanthrene
10.290	BB	428.09290	2.46352	1054.61671		Anthracene
11.448	BB	81.31540	24.38455	1982.83926		Fluoranthene
12.215	BP	37.75097	30.01026	1132.91647		Pyrene
15.051	BV	94.79131	10.97704	1040.52767		Benzo(a)anthracene
15.549	VB	134.58353	7.51831	1011.84027		Chrysene
17.796	BB	213.44913	9.39845	2006.09135		Benzo(b)fluoranthene
18.753	BB	83.72203	12.40432	1038.51473		Benzo(k)fluoranthene
19.701	BB	87.60189	11.58407	1014.78632		Benzo(a)pyrene
21.322	BB	44.01789	46.97767	2067.85759		Dibenz(a,h)anthracene
22.103	BV	71.56614	28.23478	2020.65405		Benzo(g,h,i)perylene
22.612	VB	99.94793	10.57314	1056.76374		Indeno(1,2,3-cd)pyrene

Totals : 1.10071e5

Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=305,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
6.004	BV	560.06903	35.88844	2.01000e4		Acenaphthylene
6.777	VV	123.09278	328.25519	4.04058e4		1-Methylnaphthalene (UV)

Totals : 6.05058e4

Results obtained with enhanced integrator!

Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime [min]	Type	Area LU *s	Amt/Area	Amount [ug/l]	Grp	Name
4.787	BB	110.44406	85.37302	9428.94253		Naphthalene
6.816	BV	487.92715	77.47294	3.78012e4		1-Methylnaphthalene (F)
7.270	VV	154.79007	62.87797	9732.88474		2-Methylnaphthalene
7.655	VV	234.63596	41.53818	9746.35004		Acenaphthene
8.180	VB	254.35931	7.61197	1936.17458		Fluorene
9.308	BB	137.84933	7.16019	987.02705		Phenanthrene
10.329	BB	432.64206	2.42452	1048.95086		Anthracene
11.485	BV	81.53288	24.47091	1995.18350		Fluoranthene
12.252	VB	138.32648	7.51570	1039.62037		Pyrene
15.089	BV	151.99316	6.58692	1001.16622		Benzo(a)anthracene
15.588	VB	180.56219	5.39615	974.33987		Chrysene

RetTime [min]	Type	Area LU	Amt/Area *s	Amount [ug/l]	Grp	Name
17.835	BB	129.20119	14.95172	1931.78042		Benzo(b) fluoranthene
18.792	BB	392.59399	2.54405	998.77704		Benzo(k) fluoranthene
19.740	BB	214.33957	4.65366	997.46401		Benzo(a)pyrene
21.361	VV	63.13339	31.50868	1989.24982		Dibenz(a,h)anthracene
22.141	VV	123.19981	15.73356	1938.37214		Benzo(g,h,i)perylene
22.650	VB	99.28861	10.34723	1027.36199		Indeno(1,2,3-cd)pyrene

Totals : 8.45748e4

Results obtained with enhanced integrator!

1 Warnings or Errors :

Warning : Elution order of calibrated compounds may have changed

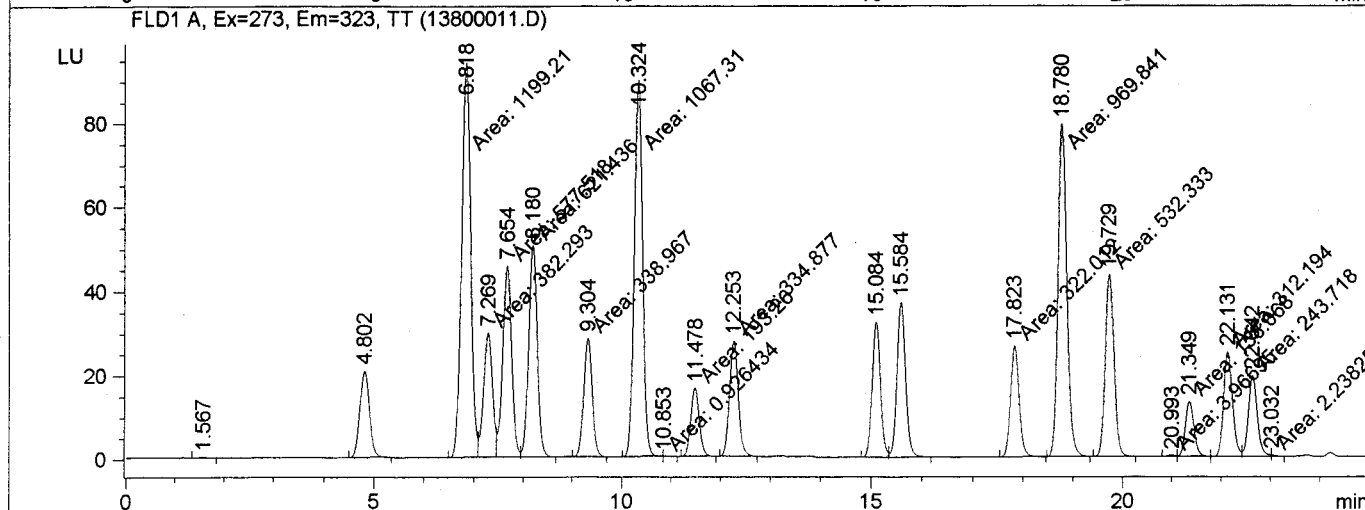
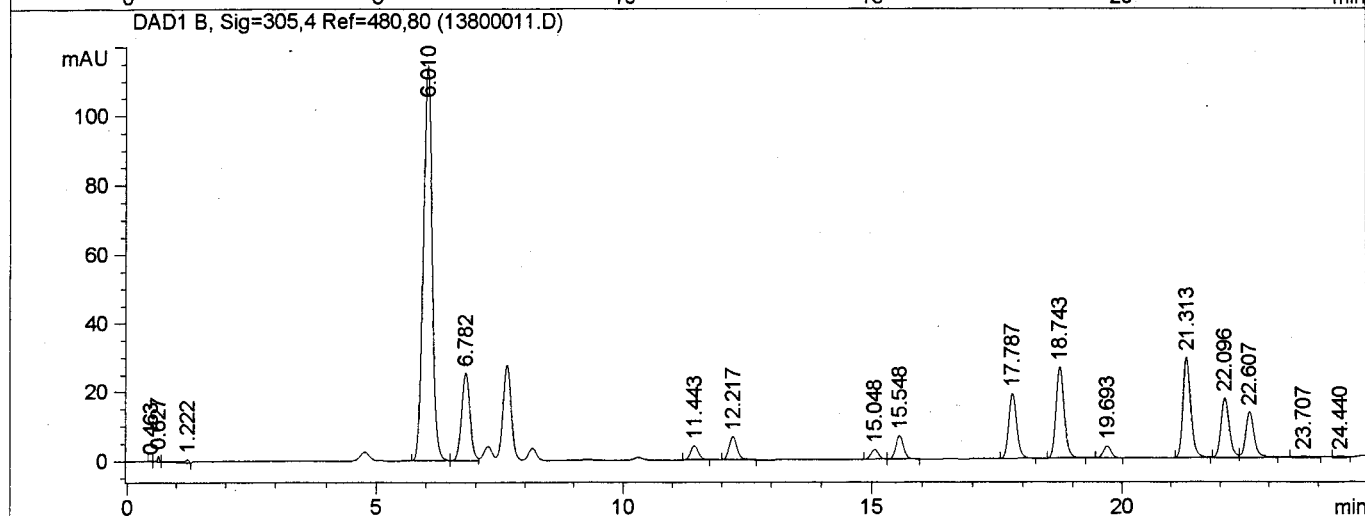
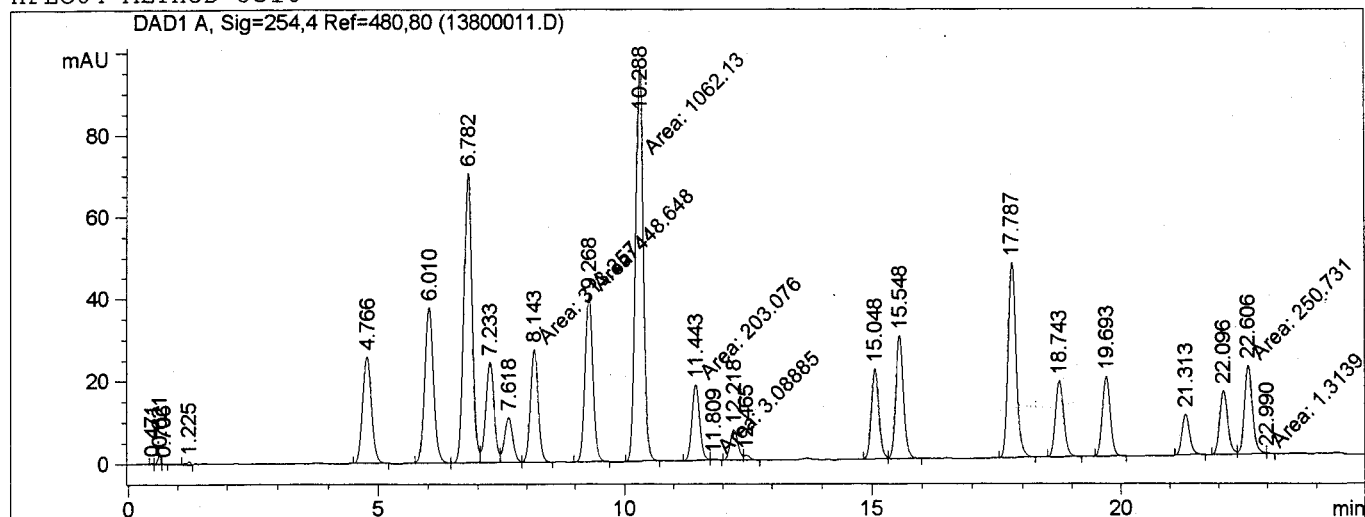
*** End of Report ***

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Injection Date	: 5/18/2006 10:31:01 PM	Seq. Line	: 11
Sample Name	: ICAL,S3060	Location	: Vial 11
Acq. Operator	:	Inj	: 1
Acq. Instrument	: HPLC 4	Inj Volume	: 10 µl
Acq. Method	: G:\HPLC4\METHODS\8310-315.M		
Last changed	: 11/14/2005 4:15:05 PM by HPL		
Analysis Method	: G:\HPLC4\METHODS\8310-315.M		
Last changed	: 5/22/2006 3:21:32 PM		

(modified after loading)

HPLC04 METHOD 8310



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External Standard Report

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Sorted By : Signal
 Calib. Data Modified : Monday, May 22, 2006 3:21:31 PM
 Multiplier : 1.0000
 Dilution : 1.0000
 Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 A, Sig=254,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
4.766	BB	323.77454	77.03473	2.49419e4		Naphthalene
6.010	BP	462.20984	108.95921	5.03620e4		Acenaphthylene
6.782	VV	839.48529	118.81344	9.97421e4		1-Methylnaphthalene (UV)
7.233	VV	297.53644	86.84626	2.58399e4		2-Methylnaphthalene
7.618	VV	131.16444	199.10257	2.61152e4		Acenaphthene
8.143	MF	313.25665	15.90514	4982.38958		Fluorene
9.268	MM	448.64795	5.57507	2501.24265		Phenanthrene
10.288	MM	1062.12512	2.45979	2612.60556		Anthracene
11.443	MF	203.07642	24.36420	4947.79342		Fluoranthene
12.218	BV	83.91055	29.83193	2503.21375		Pyrene
15.048	BV	236.18423	10.90322	2575.16825		Benzo(a)anthracene
15.548	VB	334.09467	7.50045	2505.86040		Chrysene
17.787	BB	532.37317	9.38267	4995.07946		Benzo(b)fluoranthene
18.743	BB	208.88004	12.30105	2569.44342		Benzo(k)fluoranthene
19.693	BB	220.13969	11.51181	2534.20720		Benzo(a)pyrene
21.313	BP	110.60422	46.44187	5136.66707		Dibenz(a,h)anthracene
22.096	BV	181.34886	28.06000	5088.64952		Benzo(g,h,i)perylene
22.606	MF	250.73134	10.47541	2626.51304		Indeno(1,2,3-cd)pyrene

Totals : 2.72580e5

Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=305,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
6.010	BV	1390.57104	35.87315	4.98842e4		Acenaphthylene
6.782	VV	304.35931	328.83554	1.00084e5		1-Methylnaphthalene (UV)

Totals : 1.49968e5

Results obtained with enhanced integrator!

Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime [min]	Type	Area LU *s	Amt/Area	Amount [ug/l]	Grp	Name
4.802	BB	274.47531	86.40738	2.37167e4		Naphthalene
6.818	MF	1199.20923	78.75727	9.44464e4		1-Methylnaphthalene (F)
7.269	MF	382.29327	63.42093	2.42454e4		2-Methylnaphthalene
7.654	MF	577.51837	41.92597	2.42130e4		Acenaphthene
8.180	FM	621.43634	7.70284	4786.82712		Fluorene
9.304	MM	338.96707	7.22229	2448.12001		Phenanthrene
10.324	MF	1067.30798	2.42183	2584.83993		Anthracene
11.478	MM	193.25951	24.60893	4755.90941		Fluoranthene
12.253	MM	334.87701	7.52983	2521.56751		Pyrene
15.084	BV	377.89438	6.59466	2492.08549		Benzo(a)anthracene
15.584	VB	448.13257	5.42929	2437.04015		Chrysene

RetTime [min]	Type	Area LU	Amt/Area *s	Amount [ug/l]	Grp	Name
17.823	MM	322.01157	15.00203	4830.82609		Benzo(b)fluoranthene
18.780	MF	969.84100	2.55700	2479.88194		Benzo(k)fluoranthene
19.729	FM	532.33307	4.66865	2485.27878		Benzo(a)pyrene
21.349	MF	158.06801	31.38061	4960.27030		Dibenz(a,h)anthracene
22.131	MF	312.19437	15.73373	4911.98087		Benzo(g,h,i)perylene
22.642	FM	243.71762	10.29974	2510.22694		Indeno(1,2,3-cd)pyrene

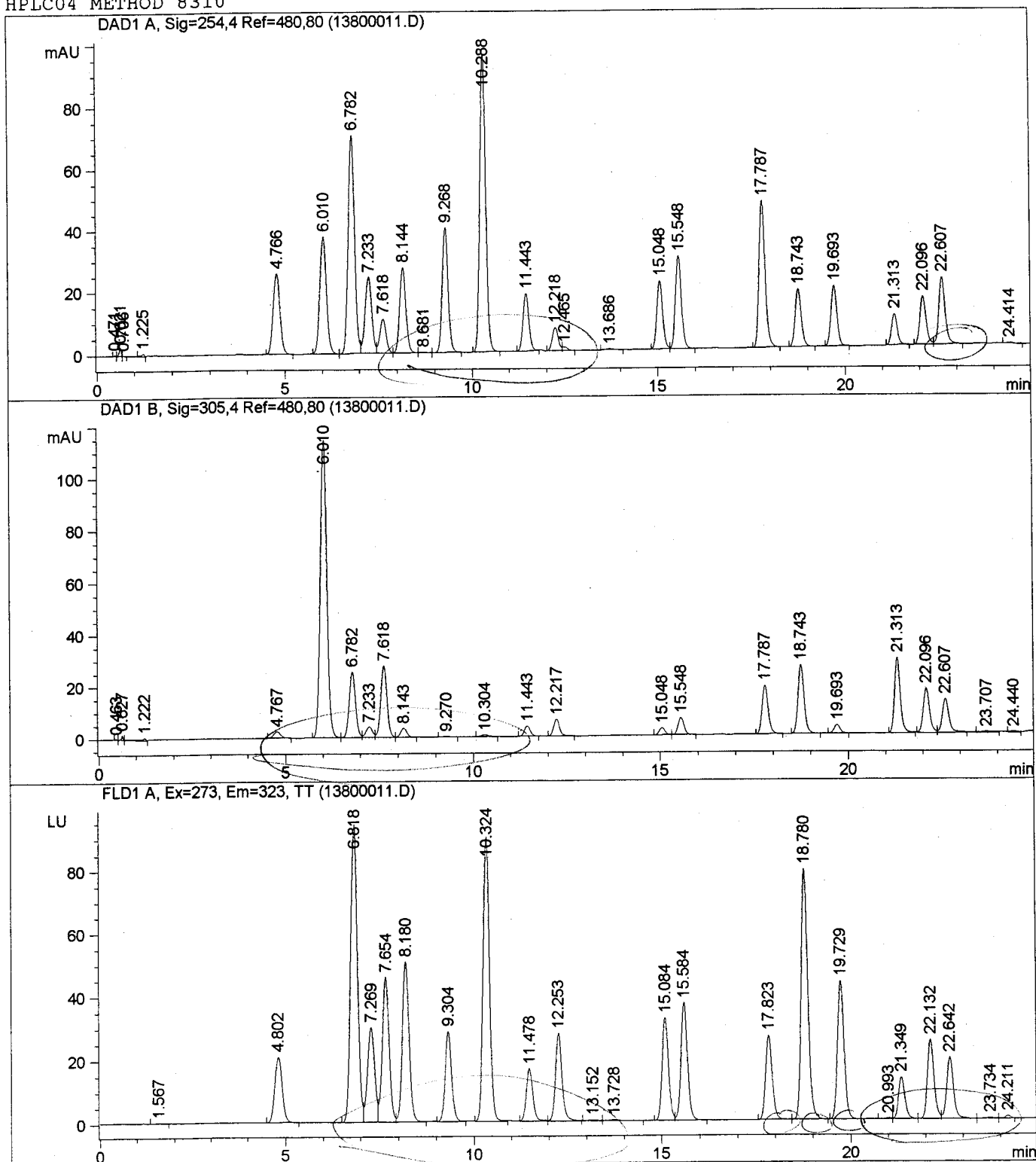
Totals : 2.10822e5

Results obtained with enhanced integrator!

*** End of Report ***

Injection Date : 5/18/2006 10:31:01 PM
Sample Name : ICAL,S3060
Acq. Operator :
Acq. Instrument : HPLC 4
Sequence File : G:\HPLC4\SEQUENCE\051806.S
Method : G:\HPLC4\METHODS\8310-315.M
Last changed : 11/14/2005 4:15:05 PM by HPL
HPLC04 METHOD 8310

Seq. Line : 11
Location : Vial 11
Inj : 1
Inj Volume : 10 µl



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External Standard Report

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Sorted By : Signal
 Calib. Data Modified : 11/14/2005 4:07:02 PM
 Multiplier : 1.0000
 Dilution : 1.0000
 Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 A, Sig=254,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
4.766	BB	323.77454	77.04174	2.49442e4		Naphthalene
6.010	BP	462.20984	108.96101	5.03629e4		Acenaphthylene
6.782	VV	839.48529	118.81516	9.97436e4		1-Methylnaphthalene (UV)
7.233	VV	297.53644	87.16540	2.59349e4		2-Methylnaphthalene
7.618	VV	131.16444	199.69775	2.61932e4		Acenaphthene
8.144	VB	313.39435	15.89704	4982.04190		Fluorene
9.268	VP	448.48541	5.57580	2500.66337		Phenanthrene
10.288	BB	1061.97949	2.46834	2621.32432		Anthracene
11.443	BB	203.57274	24.34938	4956.87079		Fluoranthene
12.218	BV	83.91055	29.88551	2507.70959		Pyrene
15.048	BV	236.18423	10.93811	2583.40986		Benzo(a)anthracene
15.548	VB	334.09467	7.50657	2507.90488		Chrysene
17.787	BB	532.37317	9.38338	4995.45759		Benzo(b)fluoranthene
18.743	BB	208.88004	12.33952	2577.47867		Benzo(k)fluoranthene
19.693	BB	220.13969	11.52826	2537.82663		Benzo(a)pyrene
21.313	BP	110.60422	46.58184	5152.14743		Dibenz(a,h)anthracene
22.096	BV	181.34886	28.08822	5093.76675		Benzo(g,h,i)perylene
22.607	VB	252.14905	10.52056	2652.74918		Indeno(1,2,3-cd)pyrene

Totals : 2.72848e5

Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=305,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
6.010	BV	1390.57104	35.88040	4.98942e4		Acenaphthylene
6.782	VV	304.35931	328.86140	1.00092e5		1-Methylnaphthalene (UV)

Totals : 1.49986e5

Results obtained with enhanced integrator!

Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime [min]	Type	Area LU *s	Amt/Area	Amount [ug/l]	Grp	Name
4.802	BB	274.47531	85.88502	2.35733e4		Naphthalene
6.818	BV	1198.31677	78.02871	9.35031e4		1-Methylnaphthalene (F)
7.269	VV	383.06503	63.11886	2.41786e4		2-Methylnaphthalene
7.654	VV	579.99280	41.70325	2.41876e4		Acenaphthene
8.180	VB	625.75739	7.65378	4789.40940		Fluorene
9.304	BB	344.67456	7.19843	2481.11505		Phenanthrene
10.324	BB	1075.74207	2.42800	2611.90128		Anthracene
11.478	BV	202.66354	24.49057	4963.34569		Fluoranthene
12.253	VB	346.76657	7.52516	2609.47292		Pyrene
15.084	BV	377.89438	6.59224	2491.17223		Benzo(a)anthracene
15.584	VB	448.13257	5.41370	2426.05403		Chrysene

RetTime [min]	Type	Area LU *s	Amt/Area	Amount [ug/l]	Grp	Name
17.823	BV	322.26624	14.95346	4818.99407		Benzo(b)fluoranthene
18.780	VB	971.35138	2.55497	2481.77271		Benzo(k)fluoranthene
19.729	BB	534.24500	4.66449	2491.98169		Benzo(a)pyrene
21.349	VV	159.44664	31.36788	5001.50353		Dibenz(a,h)anthracene
22.132	VV	312.34949	15.69181	4901.32775		Benzo(g,h,i)perylene
22.642	VP	247.08812	10.31012	2547.50745		Indeno(1,2,3-cd)pyrene

Totals : 2.10058e5

Results obtained with enhanced integrator!

1 Warnings or Errors :

Warning : Elution order of calibrated compounds may have changed

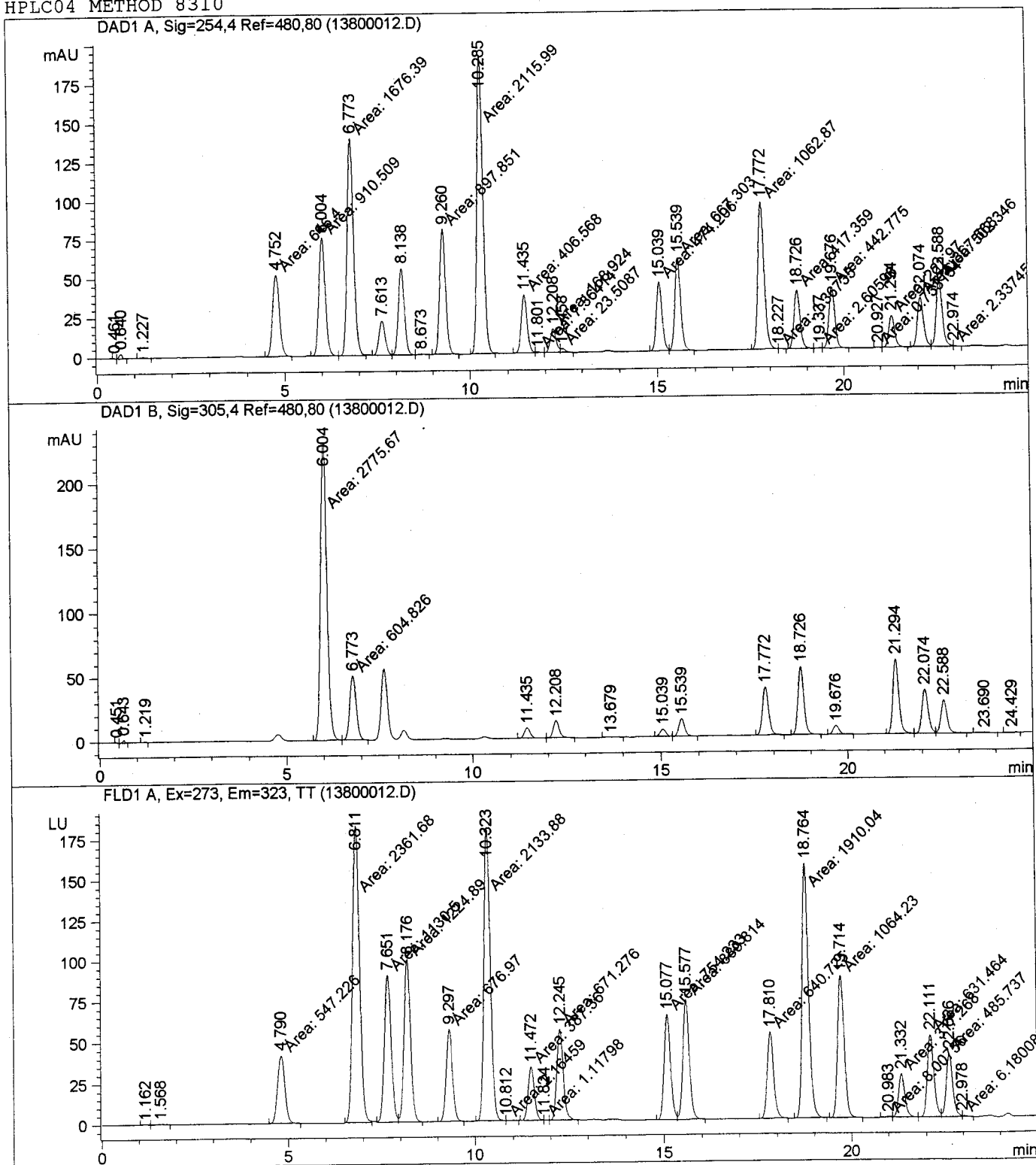
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*** End of Report ***

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Injection Date	: 5/18/2006 11:02:39 PM	Seq. Line	: 12
Sample Name	: ICAL, S3059	Location	: Vial 12
Acq. Operator	:	Inj	: 1
Acq. Instrument	: HPLC 4	Inj Volume	: 10 µl
Acq. Method	: G:\HPLC4\METHODS\8310-315.M		
Last changed	: 11/14/2005 4:15:05 PM by HPL		
Analysis Method	: G:\HPLC4\METHODS\8310-315.M		
Last changed	: 5/22/2006 3:28:39 PM		

(modified after loading)

HPLC04 METHOD 8310



22 MAY 2006

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External Standard Report

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Sorted By : Signal
 Calib. Data Modified : Monday, May 22, 2006 3:28:38 PM
 Multiplier : 1.0000
 Dilution : 1.0000
 Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 A, Sig=254,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
4.752	MF	646.40033	77.07612	4.98220e4		Naphthalene
6.004	FM	910.50854	109.18851	9.94171e4		Acenaphthylene
6.773	MF	1676.38977	118.98882	1.99472e5		1-Methylnaphthalene (UV)
7.233		-	-	-		2-Methylnaphthalene
7.613	VV	254.87729	198.40751	5.05696e4		Acenaphthene
8.138	VV	624.78467	15.90421	9936.70941		Fluorene
9.260	MM	897.85052	5.57146	5002.33922		Phenanthrene
10.285	MM	2115.98950	2.44709	5178.02103		Anthracene
11.435	MF	406.56757	24.35786	9903.11580		Fluoranthene
12.208	MF	168.92415	29.76318	5027.71993		Pyrene
15.039	MF	474.20624	10.83458	5137.82420		Benzo(a)anthracene
15.539	FM	667.30255	7.48652	4995.77581		Chrysene
17.772	MF	1062.87402	9.37069	9959.86236		Benzo(b)fluoranthene
18.726	MF	417.35922	12.22679	5102.96369		Benzo(k)fluoranthene
19.676	FM	442.77490	11.46298	5075.52159		Benzo(a)pyrene
21.294	FM	222.97006	46.12782	1.02851e4		Dibenz(a,h)anthracene
22.074	MF	367.56784	27.89437	1.02531e4		Benzo(g,h,i)perylene
22.588	MF	502.34595	10.39287	5220.81462		Indeno(1,2,3-cd)pyrene

Totals : 4.90359e5

Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=305,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
6.004	MF	2775.66528	35.86107	9.95383e4		Acenaphthylene
6.773	FM	604.82648	328.74202	1.98832e5		1-Methylnaphthalene (UV)

Totals : 2.98370e5

Results obtained with enhanced integrator!

Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime [min]	Type	Area LU *s	Amt/Area	Amount [ug/l]	Grp	Name
4.790	MM	547.22638	87.08962	4.76577e4		Naphthalene
6.811	MF	2361.67969	83.32765	1.96793e5		1-Methylnaphthalene (F)
7.269		-	-	-		2-Methylnaphthalene
7.651	MF	1130.49866	43.28515	4.89338e4		Acenaphthene
8.176	FM	1224.89038	8.04138	9849.80577		Fluorene
9.297	MM	676.96960	7.24241	4902.89295		Phenanthrene
10.323	MF	2133.87500	2.41150	5145.83830		Anthracene
11.472	MF	387.35989	24.72890	9578.98339		Fluoranthene
12.245	FM	671.27612	7.50107	5035.28740		Pyrene
15.077	MF	754.23340	6.59027	4970.60031		Benzo(a)anthracene
15.577	FM	889.81403	5.44895	4848.55299		Chrysene

RetTime [min]	Type	Area LU	Amt/Area *s	Amount [ug/l]	Grp	Name
17.810	MF	640.72485	15.04099	9637.13468		Benzo(b)fluoranthene
18.764	MF	1910.04431	2.56418	4897.69612		Benzo(k)fluoranthene
19.714	FM	1064.23083	4.67173	4971.79629		Benzo(a)pyrene
21.332	MF	317.26797	31.32419	9938.16173		Dibenz(a,h)anthracene
22.111	MF	631.46387	15.72006	9926.65107		Benzo(g,h,i)perylene
22.626	MF	485.73682	10.27600	4991.42935		Indeno(1,2,3-cd)pyrene

Totals : 3.82080e5

Results obtained with enhanced integrator!
1 Warnings or Errors :

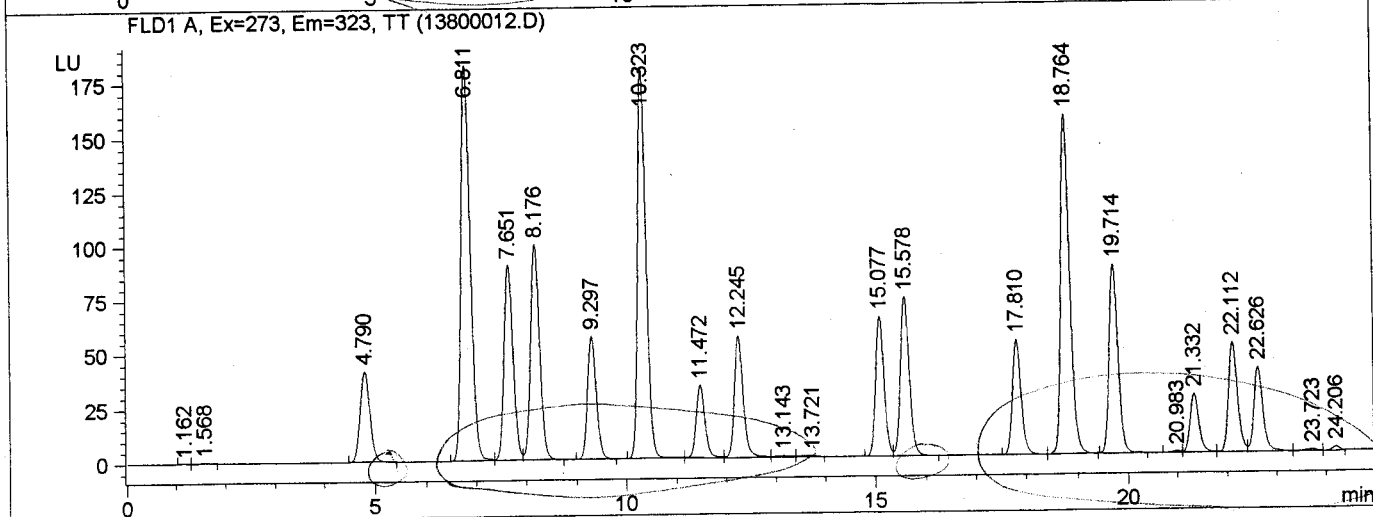
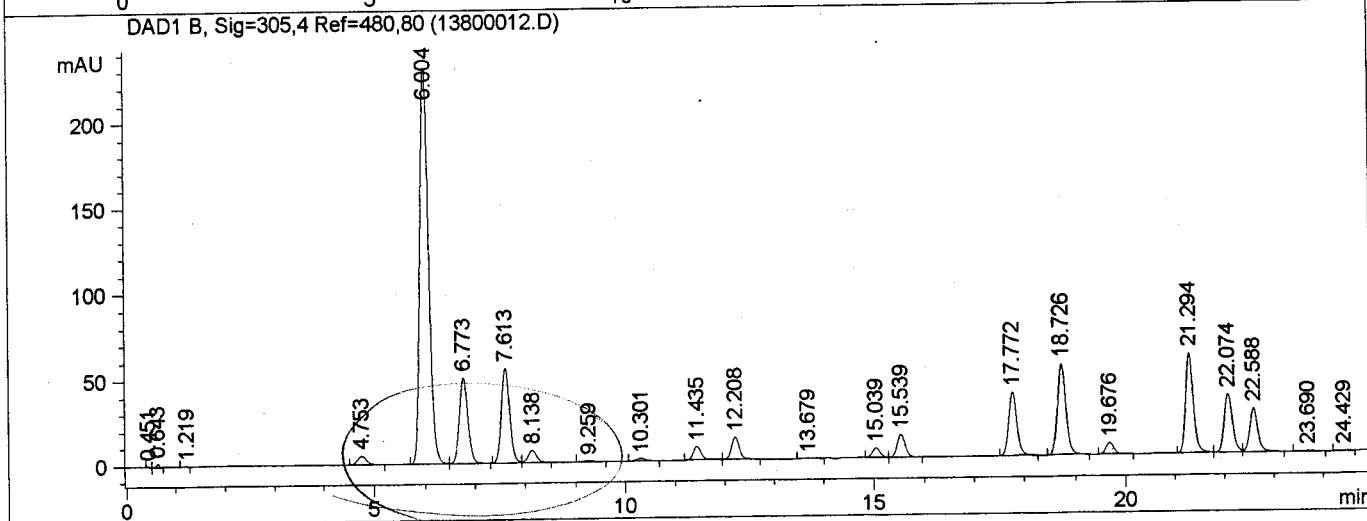
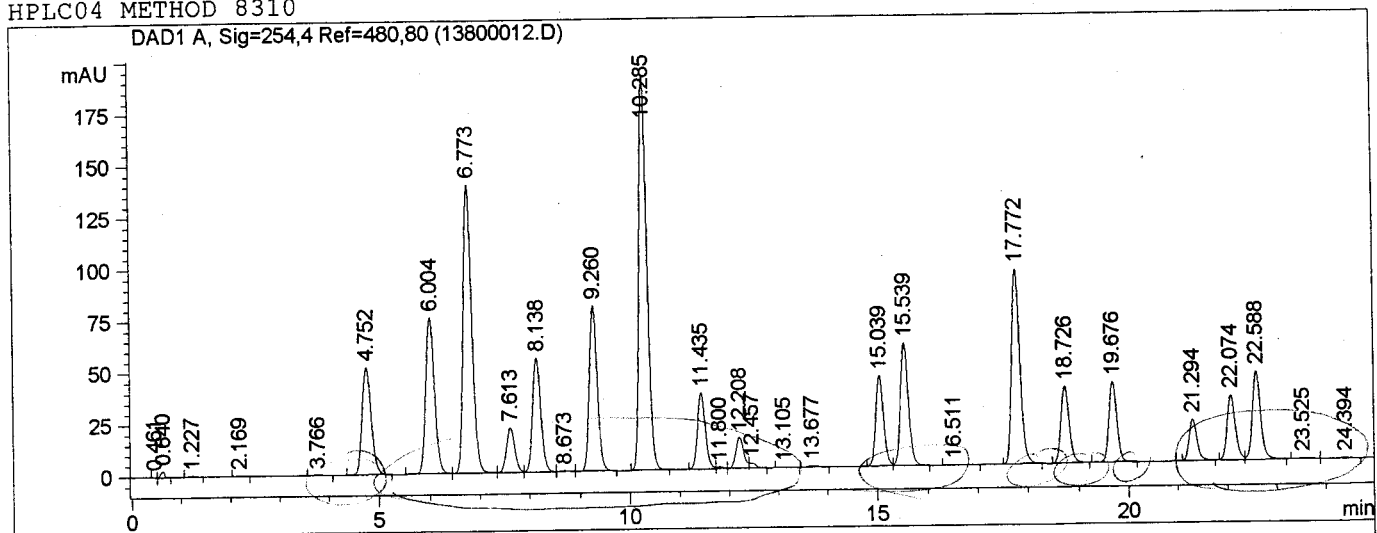
Warning : Calibrated compound(s) not found

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*** End of Report ***

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Injection Date	: 5/18/2006 11:02:39 PM	Seq. Line	: 12
Sample Name	: ICAL,S3059	Location	: Vial 12
Acq. Operator	:	Inj	: 1
Acq. Instrument	: HPLC 4	Inj Volume	: 10 µl
Sequence File	: G:\HPLC4\SEQUENCE\051806.S		
Method	: G:\HPLC4\METHODS\8310-315.M		
Last changed	: 11/14/2005 4:15:05 PM by HPL		
HPLC04 METHOD 8310			

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External Standard Report

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Sorted By : Signal
 Calib. Data Modified : 11/14/2005 4:07:02 PM
 Multiplier : 1.0000
 Dilution : 1.0000
 Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 A, Sig=254,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
4.752	BB	647.11890	77.07988	4.98798e4		Naphthalene
6.004	BV	912.25122	109.18989	9.96086e4		Acenaphthylene
6.773	VV	1680.09778	118.97171	1.99884e5		1-Methylnaphthalene (UV)
7.280		-	-	-		2-Methylnaphthalene
7.613	VV	254.87729	200.01456	5.09792e4		Acenaphthene
8.138	VV	624.78467	15.90159	9935.07086		Fluorene
9.260	VP	897.27557	5.57725	5004.33135		Phenanthrene
10.285	BB	2119.75391	2.46996	5235.70870		Anthracene
11.435	BV	408.83698	24.33764	9950.12774		Fluoranthene
12.208	VV	170.09651	29.83382	5074.62814		Pyrene
15.039	BV	473.34891	10.92504	5171.35520		Benzo(a)anthracene
15.539	VB	667.50586	7.50261	5008.03940		Chrysene
17.772	BB	1063.61365	9.37834	9974.92650		Benzo(b)fluoranthene
18.726	BB	418.83893	12.31779	5159.16865		Benzo(k)fluoranthene
19.676	BB	446.29416	11.50956	5136.65018		Benzo(a)pyrene
21.294	BB	225.02155	46.44878	1.04520e4		Dibenz(a,h)anthracene
22.074	BV	371.40533	28.03933	1.04140e4		Benzo(g,h,i)perylene
22.588	VB	515.19666	10.50293	5411.07420		Indeno(1,2,3-cd)pyrene

Totals : 4.92279e5

Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=305,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
6.004	BV	2778.81055	35.87769	9.96973e4		Acenaphthylene
6.773	VB	611.06848	329.06802	2.01083e5		1-Methylnaphthalene (UV)

Totals : 3.00780e5

Results obtained with enhanced integrator!

Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime [min]	Type	Area LU *s	Amt/Area	Amount [ug/l]	Grp	Name
4.790	PB	547.48273	86.05693	4.71147e4		Naphthalene
6.811	BV	2369.09570	78.21735	1.85304e5		1-Methylnaphthalene (F)
7.335		-	-	-		2-Methylnaphthalene
7.651	VV	1133.23621	41.75800	4.73217e4		Acenaphthene
8.176	VB	1233.21008	7.66789	9456.11427		Fluorene
9.297	BB	689.82300	7.21118	4974.43826		Phenanthrene
10.323	BV	2161.75854	2.42917	5251.28847		Anthracene
11.472	VV	409.37646	24.49725	1.00286e4		Fluoranthene
12.245	VB	697.09406	7.52831	5247.94082		Pyrene
15.077	BV	753.48712	6.59403	4968.51811		Benzo(a)anthracene
15.578	VB	891.79449	5.41959	4833.16022		Chrysene

RetTime [min]	Type	Area LU	Amt/Area *s	Amount [ug/l]	Grp	Name
17.810	BV	642.02924	14.95403	9600.92695		Benzo(b)fluoranthene
18.764	VB	1914.31885	2.55862	4898.01258		Benzo(k)fluoranthene
19.714	BB	1070.08130	4.66813	4995.27412		Benzo(a)pyrene
21.332	VV	322.53784	31.32121	1.01023e4		Dibenz(a,h)anthracene
22.112	VV	634.13263	15.67801	9941.93455		Benzo(g,h,i)perylene
22.626	VV	498.78516	10.29754	5136.25837		Indeno(1,2,3-cd)pyrene

Totals : 3.69175e5

Results obtained with enhanced integrator!

2 Warnings or Errors :

Warning : Calibrated compound(s) not found

Warning : Elution order of calibrated compounds may have changed

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*** End of Report ***

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 8310

Inst : HPLC04
 Seqnum : 296199754015
 Cal : 296199754001
 Standards: S3051

Run Name: ICV
 File : 13800015
 Caldate : 18-MAY-2006

IDF : 1.0
 Time : 19-MAY-2006 00:37

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Naphthalene	1	0.0130	0.0134	5000	5126	ug/L	3	15	
Acenaphthylene	1	0.0093	0.0100	10000	10680	ug/L	7	15	
2-Methylnaphthalene	1	0.0120	0.0114	20000	19140	ug/L	-4	15	
Acenaphthene	1	0.0052	0.0057	5000	5392	ug/L	8	15	
Fluorene	1	0.0627	0.0646	1000	1028	ug/L	3	15	
Phenanthrene	1	0.1800	0.1815	500.0	503.1	ug/L	1	15	
Anthracene	1	0.4248	0.4384	500.0	513.4	ug/L	3	15	
Fluoranthene	1	0.0409	0.0422	1000	1034	ug/L	3	15	
Pyrene	1	0.0342	0.0343	500.0	508.5	ug/L	2	15	
Benzo(a)anthracene	1	0.0943	0.0969	500.0	511.5	ug/L	2	15	
Chrysene	1	0.1335	0.1357	500.0	505.0	ug/L	1	15	
Benzo(b)fluoranthene	1	0.1059	0.1090	1000	1023	ug/L	2	15	
Benzo(k)fluoranthene	1	0.0821	0.0850	500.0	510.7	ug/L	2	15	
Benzo(a)pyrene	1	0.0870	0.0890	500.0	508.4	ug/L	2	15	
Dibenz(a,h)anthracene	1	0.0212	0.0222	1000	1017	ug/L	2	15	
Benzo(g,h,i)perylene	1	0.0351	0.0359	1000	1004	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	1	0.0976	0.1026	500.0	515.2	ug/L	3	15	
Acenaphthylene	2	0.0279	0.0285	10000	10180	ug/L	2	15	
Naphthalene	3	0.0110	0.0113	5000	5130	ug/L	3	15	
2-Methylnaphthalene	3	0.0155	0.0147	20000	19170	ug/L	-4	15	
Acenaphthene	3	0.0233	0.0248	5000	5302	ug/L	6	15	
Fluorene	3	0.1263	0.1289	1000	1020	ug/L	2	15	
Phenanthrene	3	0.1362	0.1386	500.0	508.6	ug/L	2	15	
Anthracene	3	0.4263	0.4399	500.0	513.7	ug/L	3	15	
Fluoranthene	3	0.0387	0.0407	1000	1050	ug/L	5	15	
Pyrene	3	0.1332	0.1384	500.0	517.2	ug/L	3	15	
Benzo(a)anthracene	3	0.1515	0.1558	500.0	512.8	ug/L	3	15	
Chrysene	3	0.1803	0.1841	500.0	509.6	ug/L	2	15	
Benzo(b)fluoranthene	3	0.0643	0.0664	1000	1027	ug/L	3	15	
Benzo(k)fluoranthene	3	0.3904	0.4029	500.0	513.5	ug/L	3	15	
Benzo(a)pyrene	3	0.2132	0.2200	500.0	513.9	ug/L	3	15	
Dibenz(a,h)anthracene	3	0.0311	0.0322	1000	1025	ug/L	3	15	
Benzo(g,h,i)perylene	3	0.0613	0.0619	1000	1004	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	3	0.0971	0.1010	500.0	517.9	ug/L	4	15	

ICV SATISFIES SOP. *gm* 22 MAY 2006

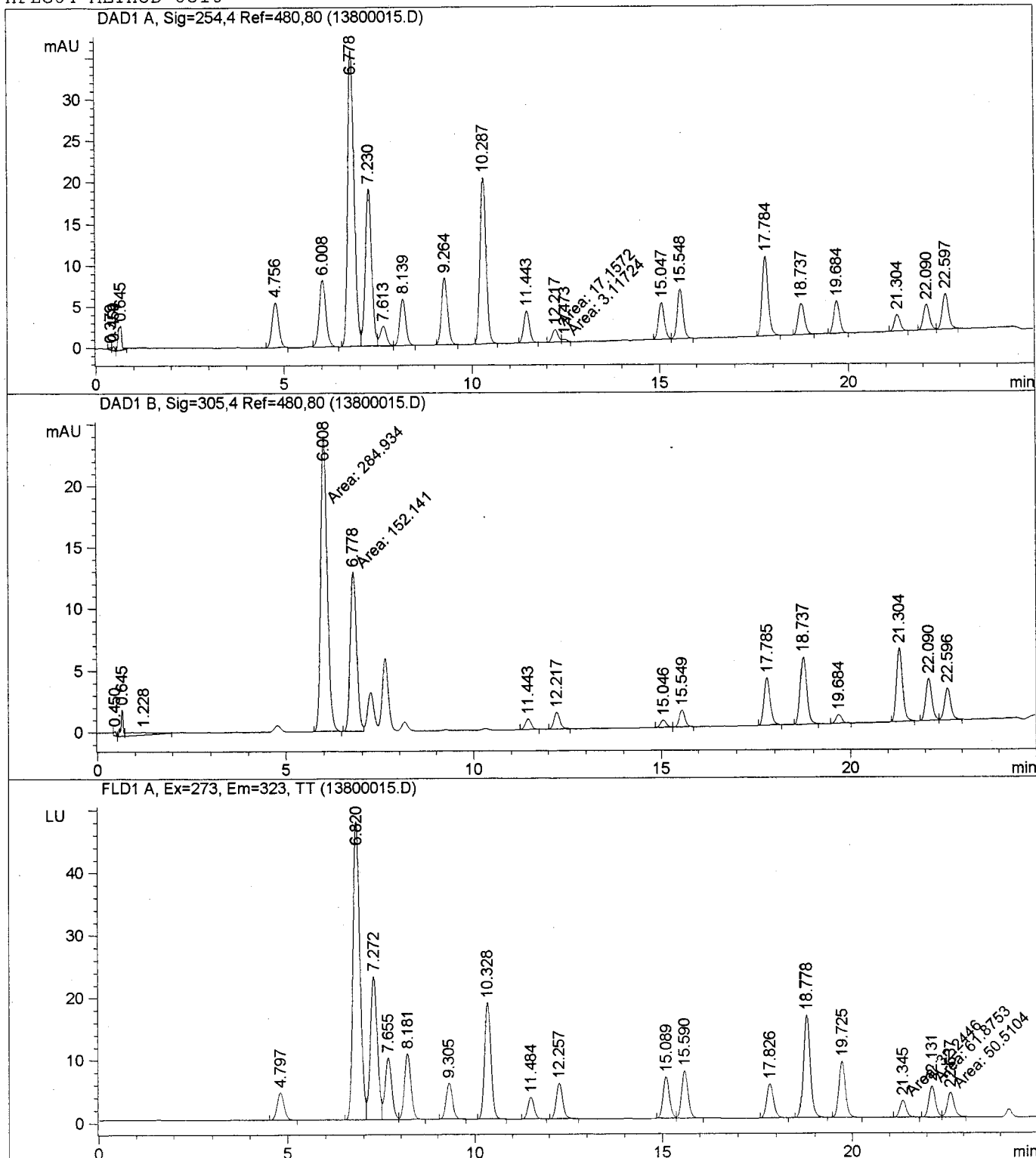
meur 123/06

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Injection Date : 5/19/2006 12:37:31 AM
Sample Name : IVC, S3051
Acq. Operator : IVC *gm*
Acq. Instrument : HPLC 4
Acq. Method : G:\HPLC4\METHODS\8310-315.M
Last changed : 11/14/2005 4:15:05 PM by HPL
Analysis Method : G:\HPLC4\METHODS\8310-138.M
Last changed : 5/22/2006 4:18:07 PM
HPLC04 METHOD 8310

Seq. Line : 15
Location : Vial 15
Inj : 1
Inj Volume : 10 µl

ICU gm
22 MAY 2006



ICV SATISFIES SOP. *gm* 22 MAY 2006

ICV 

External Standard Report

Sorted By : Signal
 Calib. Data Modified : 5/22/2006 4:16:03 PM
 Multiplier : 1.0000
 Dilution : 1.0000
 Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 A, Sig=254,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
4.756	BB	66.89763	76.61951	5125.66337		Naphthalene
6.008	BP	99.69094	107.09408	1.06763e4		Acenaphthylene
6.778	BV	422.50162	118.65727	5.01329e4		1-Methylnaphthalene (UV)
7.230	VV	228.17683	83.86995	1.91372e4		2-Methylnaphthalene
7.613	VV	28.50307	189.16327	5391.73432		Acenaphthene
8.139	VB	64.60548	15.91564	1028.23781		Fluorene
9.264	BB	90.76343	5.54277	503.08077		Phenanthrene
10.287	BB	219.20799	2.34216	513.41960		Anthracene
11.443	BB	42.15321	24.52935	1033.99081		Fluoranthene
12.217	MF	17.15724	29.63733	508.49494		Pyrene
15.047	BV	48.43151	10.56164	511.51601		Benzo(a)anthracene
15.548	VB	67.83893	7.44466	505.03774		Chrysene
17.784	BB	109.01851	9.38055	1022.65403		Benzo(b)fluoranthene
18.737	BB	42.51260	12.01205	510.66345		Benzo(k)fluoranthene
19.684	BB	44.49632	11.42654	508.43885		Benzo(a)pyrene
21.304	BB	22.17400	45.86925	1017.10501		Dibenz(a,h)anthracene
22.090	BV	35.88884	27.98662	1004.40740		Benzo(g,h,i)perylene
22.597	VB	51.30901	10.04040	515.16292		Indeno(1,2,3-cd)pyrene

Totals : 9.96460e4

Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=305,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
6.008	MM	284.93390	35.74482	1.01849e4		Acenaphthylene
6.778	MF	152.14120	328.83023	5.00286e4		1-Methylnaphthalene (UV)

Totals : 6.02135e4

Results obtained with enhanced integrator!

Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime [min]	Type	Area LU *s	Amt/Area	Amount [ug/l]	Grp	Name
4.797	BB	56.67323	90.51572	5129.81808		Naphthalene
6.820	BV	603.44818	83.61149	5.04552e4		1-Methylnaphthalene (F)
7.272	VV	293.75247	65.24969	1.91673e4		2-Methylnaphthalene
7.655	VV	123.98242	42.76725	5302.38768		Acenaphthene
8.181	VB	128.89386	7.91626	1020.35751		Fluorene
9.305	BB	69.28621	7.34027	508.57930		Phenanthrene
10.328	BB	219.93626	2.33570	513.70608		Anthracene
11.484	BB	40.71990	25.79101	1050.20736		Fluoranthene
12.257	BB	69.18472	7.47558	517.19568		Pyrene
15.089	BV	77.91756	6.58126	512.79564		Benzo(a)anthracene
15.590	VB	92.06094	5.53512	509.56802		Chrysene

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RetTime [min]	Type	Area LU	Amt/Area *s	Amount [ug/l]	Grp	Name
17.826	BB	66.37421	15.46740	1026.63634		Benzo(b)fluoranthene
18.778	BB	201.46185	2.54877	513.48027		Benzo(k)fluoranthene
19.725	BB	109.98317	4.67286	513.93558		Benzo(a)pyrene
21.345	FM	32.24464	31.79133	1025.10001		Dibenz(a,h)anthracene
22.131	MF	61.87526	16.22339	1003.82666		Benzo(g,h,i)perylene
22.637	MF	50.51044	10.25364	517.91615		Indeno(1,2,3-cd)pyrene

Totals : 8.92880e4

Results obtained with enhanced integrator!

1 Warnings or Errors :

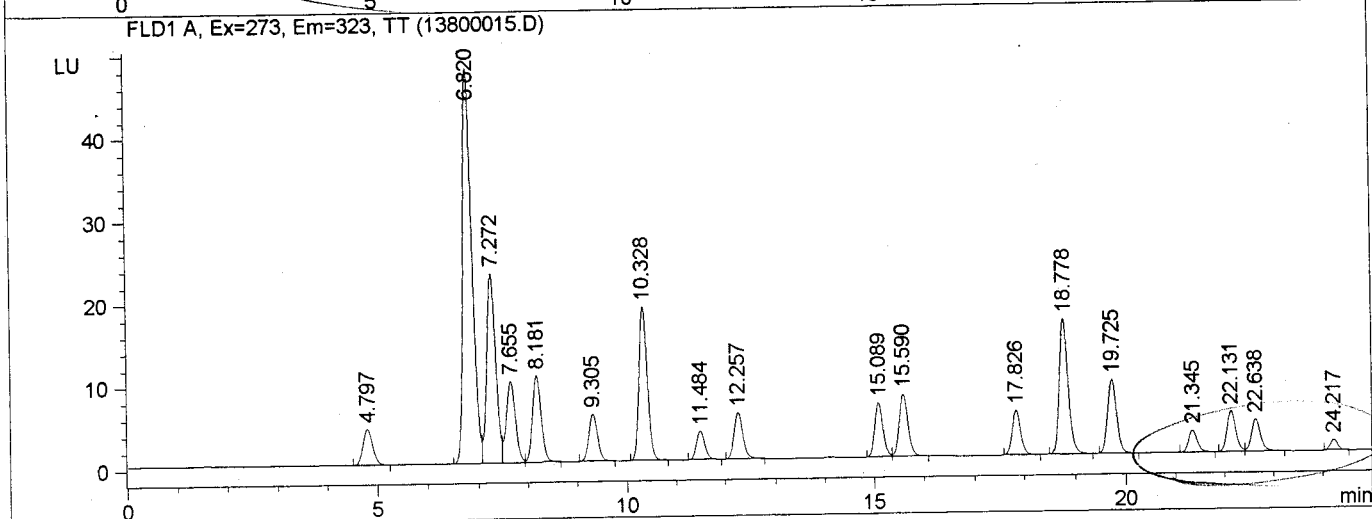
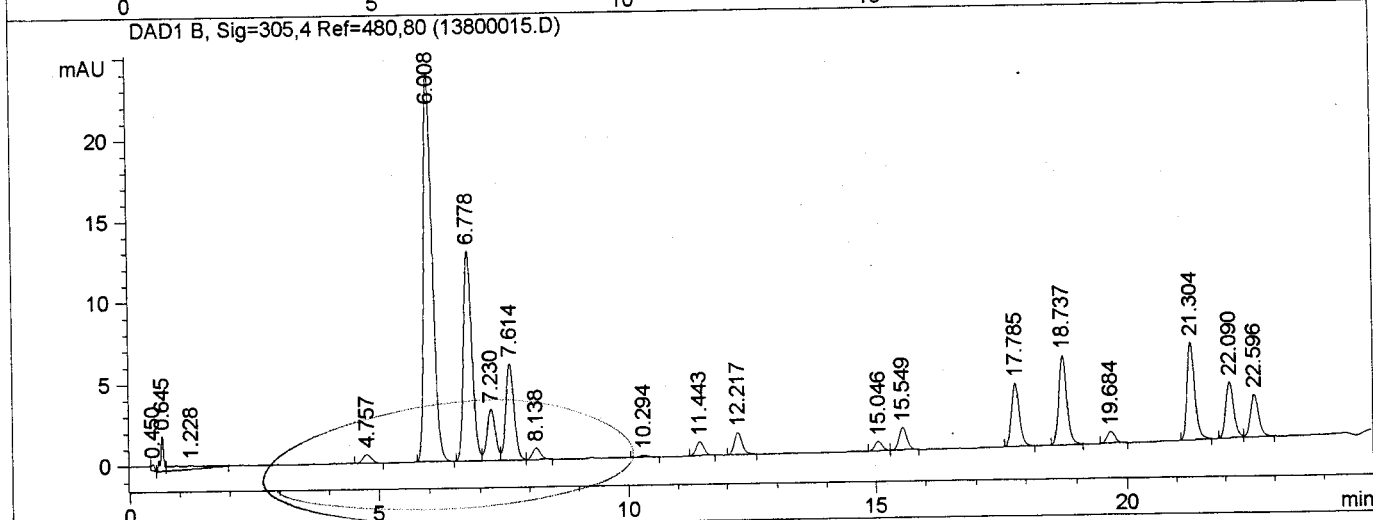
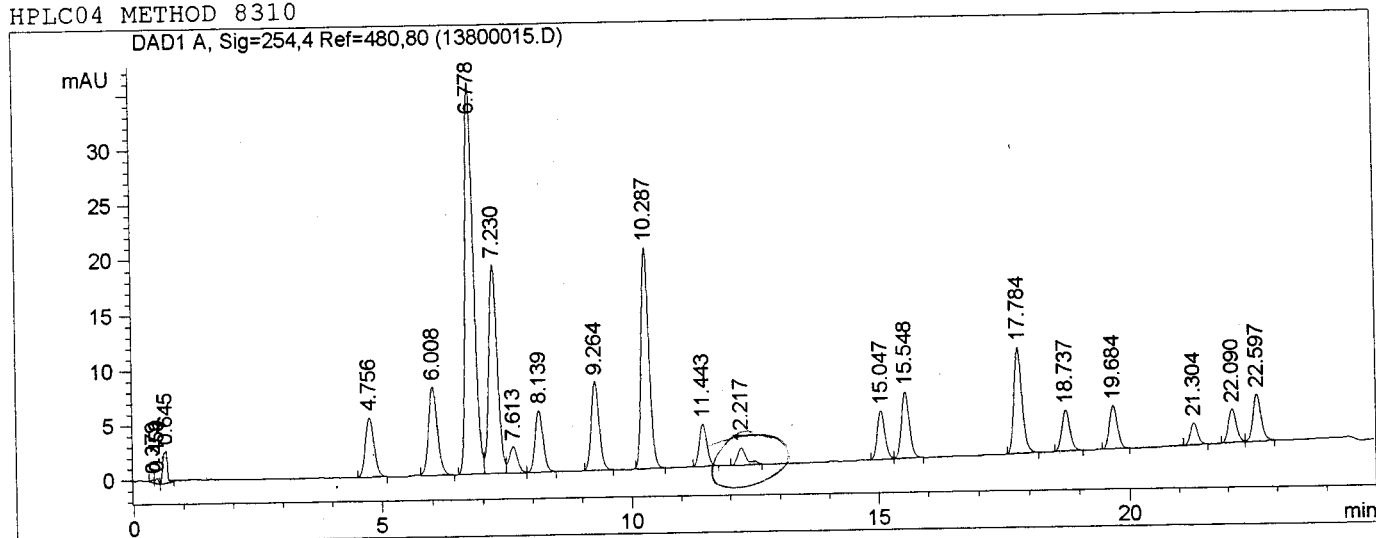
Warning : Elution order of calibrated compounds may have changed

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*** End of Report ***

ICU
22MAY2006

Injection Date : 5/19/2006 12:37:31 AM
Sample Name : IVC, S3051
Acq. Operator : ICU
Acq. Instrument : HPLC 4
Acq. Method : G:\HPLC4\METHODS\8310-315.M
Last changed : 11/14/2005 4:15:05 PM by HPL
Analysis Method : G:\HPLC4\METHODS\8310-138.M
Last changed : 5/22/2006 4:18:07 PM
HPLC04 METHOD 8310

Seq. Line : 15
Location : Vial 15
Inj : 1
Inj Volume : 10 µl



ICU *gm*

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External Standard Report

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Sorted By : Signal
 Calib. Data Modified : 5/22/2006 4:16:03 PM
 Multiplier : 1.0000
 Dilution : 1.0000
 Do not use Multiplier & Dilution Factor with ISTDs

Signal 1: DAD1 A, Sig=254,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
4.756	BB	66.89763	76.61951	5125.66337		Naphthalene
6.008	BP	99.69094	107.09408	1.06763e4		Acenaphthylene
6.778	BV	422.50162	118.65727	5.01329e4		1-Methylnaphthalene (UV)
7.230	VV	228.17683	83.86995	1.91372e4		2-Methylnaphthalene
7.613	VV	28.50307	189.16327	5391.73432		Acenaphthene
8.139	VB	64.60548	15.91564	1028.23781		Fluorene
9.264	BB	90.76343	5.54277	503.08077		Phenanthrene
10.287	BB	219.20799	2.34216	513.41960		Anthracene
11.443	BB	42.15321	24.52935	1033.99081		Fluoranthene
12.217	BB	20.27144	29.63766	600.79805		Pyrene
15.047	BV	48.43151	10.56164	511.51601		Benzo(a)anthracene
15.548	VB	67.83893	7.44466	505.03774		Chrysene
17.784	BB	109.01851	9.38055	1022.65403		Benzo(b)fluoranthene
18.737	BB	42.51260	12.01205	510.66345		Benzo(k)fluoranthene
19.684	BB	44.49632	11.42654	508.43885		Benzo(a)pyrene
21.304	BB	22.17400	45.86925	1017.10501		Dibenz(a,h)anthracene
22.090	BV	35.88884	27.98662	1004.40740		Benzo(g,h,i)perylene
22.597	VB	51.30901	10.04040	515.16292		Indeno(1,2,3-cd)pyrene

Totals : 9.97383e4

Results obtained with enhanced integrator!

Signal 2: DAD1 B, Sig=305,4 Ref=480,80

RetTime [min]	Type	Area [mAU*s]	Amt/Area	Amount [ug/l]	Grp	Name
6.008	BB	285.72659	35.74565	1.02135e4		Acenaphthylene
6.778	BV	152.51297	328.83485	5.01516e4		1-Methylnaphthalene (UV)

Totals : 6.03651e4

Results obtained with enhanced integrator!

Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime [min]	Type	Area LU *s	Amt/Area	Amount [ug/l]	Grp	Name
4.797	BB	56.67323	90.51572	5129.81808		Naphthalene
6.820	BV	603.44818	83.61149	5.04552e4		1-Methylnaphthalene (F)
7.272	VV	293.75247	65.24969	1.91673e4		2-Methylnaphthalene
7.655	VV	123.98242	42.76725	5302.38768		Acenaphthene
8.181	VB	128.89386	7.91626	1020.35751		Fluorene
9.305	BB	69.28621	7.34027	508.57930		Phenanthrene
10.328	BB	219.93626	2.33570	513.70608		Anthracene
11.484	BB	40.71990	25.79101	1050.20736		Fluoranthene
12.257	BB	69.18472	7.47558	517.19568		Pyrene
15.089	BV	77.91756	6.58126	512.79564		Benzo(a)anthracene
15.590	VB	92.06094	5.53512	503.56802		Chrysene

RetTime [min]	Type	Area LU	Amt/Area *s	Amount [ug/l]	Grp	Name
17.826	BB	66.37421	15.46740	1026.63634		Benzo(b)fluoranthene
18.778	BB	201.46185	2.54877	513.48027		Benzo(k)fluoranthene
19.725	BB	109.98317	4.67286	513.93558		Benzo(a)pyrene
21.345	VB	32.39024	31.79005	1029.68745		Dibenz(a,h)anthracene
22.131	BV	61.95169	16.22291	1005.03659		Benzo(g,h,i)perylene
22.638	VB	50.87698	10.25391	521.68790		Indeno(1,2,3-cd)pyrene

Totals : 8.92975e4

Results obtained with enhanced integrator!

1 Warnings or Errors :

Warning : Elution order of calibrated compounds may have changed

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*** End of Report ***

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188802 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: L IDF : 1.0
Seqnum : 296340469002 File : 23600002 Time : 24-AUG-2006 11:01
Cal : 296199754001 Caldate : 18-MAY-2006
Standards: S3190

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0128	2500	2430	ug/L	-3	15	
Acenaphthylene	1	0.0093	0.0090	5000	4696	ug/L	-6	15	
Acenaphthene	1	0.0052	0.0052	2500	2341	ug/L	-6	15	
Fluorene	1	0.0627	0.0610	500.0	482.1	ug/L	-4	15	
Phenanthrene	1	0.1800	0.1744	250.0	240.3	ug/L	-4	15	
Anthracene	1	0.4248	0.4115	250.0	238.5	ug/L	-5	15	
Fluoranthene	1	0.0409	0.0400	500.0	488.2	ug/L	-2	15	
Pyrene	1	0.0342	0.0331	250.0	245.3	ug/L	-2	15	
Benzo(a)anthracene	1	0.0943	0.0910	250.0	240.6	ug/L	-4	15	
Chrysene	1	0.1335	0.1310	250.0	242.0	ug/L	-3	15	
Benzo(b)fluoranthene	1	0.1059	0.1023	500.0	478.4	ug/L	-4	15	
Benzo(k)fluoranthene	1	0.0821	0.0805	250.0	242.7	ug/L	-3	15	
Benzo(a)pyrene	1	0.0870	0.0848	250.0	245.5	ug/L	-2	15	
Dibenz(a,h)anthracene	1	0.0212	0.0209	500.0	492.5	ug/L	-2	15	
Benzo(g,h,i)perylene	1	0.0351	0.0348	500.0	502.0	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	1	0.0976	0.0984	250.0	249.6	ug/L	0	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0084	50000	49810	ug/L	0	15	
Acenaphthylene	2	0.0279	0.0272	5000	4808	ug/L	-4	15	
1-Methylnaphthalene (UV)	2	0.0031	0.0030	50000	49580	ug/L	-1	15	
Naphthalene	3	0.0110	0.0110	2500	2473	ug/L	-1	15	
Acenaphthene	3	0.0233	0.0233	2500	2395	ug/L	-4	15	
Fluorene	3	0.1263	0.1230	500.0	469.8	ug/L	-6	15	
Phenanthrene	3	0.1362	0.1346	250.0	245.3	ug/L	-2	15	
Anthracene	3	0.4263	0.4204	250.0	244.6	ug/L	-2	15	
Fluoranthene	3	0.0387	0.0380	500.0	488.9	ug/L	-2	15	
Pyrene	3	0.1332	0.1327	250.0	248.9	ug/L	0	15	
Benzo(a)anthracene	3	0.1515	0.1499	250.0	244.7	ug/L	-2	15	
Chrysene	3	0.1803	0.1798	250.0	244.9	ug/L	-2	15	
Benzo(b)fluoranthene	3	0.0643	0.0638	500.0	488.5	ug/L	-2	15	
Benzo(k)fluoranthene	3	0.3904	0.3876	250.0	239.8	ug/L	-4	15	
Benzo(a)pyrene	3	0.2132	0.2128	250.0	247.0	ug/L	-1	15	
Dibenz(a,h)anthracene	3	0.0311	0.0297	500.0	477.0	ug/L	-5	15	
Benzo(g,h,i)perylene	3	0.0613	0.0599	500.0	498.3	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	3	0.0971	0.0944	250.0	241.1	ug/L	-4	15	
1-Methylnaphthalene (F)	3	0.0122	0.0123	50000	51320	ug/L	3	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188802 HPLC Water
EPA 8310

Inst : HPLC04	Run Name: M	IDF : 1.0
Seqnum : 296340469020	File : 23600020	Time : 24-AUG-2006 20:30
Cal : 296199754001	Caldate : 18-MAY-2006	
Standards: S3192		

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0134	5000	5146	ug/L	3	15	
Acenaphthylene	1	0.0093	0.0095	10000	10210	ug/L	2	15	
Acenaphthene	1	0.0052	0.0054	5000	5128	ug/L	3	15	
Fluorene	1	0.0627	0.0643	1000	1024	ug/L	2	15	
Phenanthrene	1	0.1800	0.1848	500.0	512.1	ug/L	2	15	
Anthracene	1	0.4248	0.4359	500.0	510.4	ug/L	2	15	
Fluoranthene	1	0.0409	0.0422	1000	1036	ug/L	4	15	
Pyrene	1	0.0342	0.0357	500.0	529.6	ug/L	6	15	
Benzo(a)anthracene	1	0.0943	0.0966	500.0	510.2	ug/L	2	15	
Chrysene	1	0.1335	0.1381	500.0	514.1	ug/L	3	15	
Benzo(b)fluoranthene	1	0.1059	0.1094	1000	1026	ug/L	3	15	
Benzo(k)fluoranthene	1	0.0821	0.0852	500.0	511.9	ug/L	2	15	
Benzo(a)pyrene	1	0.0870	0.0892	500.0	509.6	ug/L	2	15	
Dibenz(a,h)anthracene	1	0.0212	0.0220	1000	1007	ug/L	1	15	
Benzo(g,h,i)perylene	1	0.0351	0.0361	1000	1010	ug/L	1	15	
Indeno(1,2,3-cd)pyrene	1	0.0976	0.1005	500.0	504.5	ug/L	1	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0086	50000	50900	ug/L	2	15	
Acenaphthylene	2	0.0279	0.0287	10000	10250	ug/L	3	15	
1-Methylnaphthalene (UV)	2	0.0031	0.0031	50000	50760	ug/L	2	15	
Naphthalene	3	0.0110	0.0112	5000	5086	ug/L	2	15	
Acenaphthene	3	0.0233	0.0239	5000	5111	ug/L	2	15	
Fluorene	3	0.1263	0.1284	1000	1016	ug/L	2	15	
Phenanthrene	3	0.1362	0.1370	500.0	502.6	ug/L	1	15	
Anthracene	3	0.4263	0.4422	500.0	516.5	ug/L	3	15	
Fluoranthene	3	0.0387	0.0393	1000	1013	ug/L	1	15	
Pyrene	3	0.1332	0.1310	500.0	489.7	ug/L	-2	15	
Benzo(a)anthracene	3	0.1515	0.1544	500.0	508.0	ug/L	2	15	
Chrysene	3	0.1803	0.1832	500.0	507.0	ug/L	1	15	
Benzo(b)fluoranthene	3	0.0643	0.0664	1000	1027	ug/L	3	15	
Benzo(k)fluoranthene	3	0.3904	0.4043	500.0	515.3	ug/L	3	15	
Benzo(a)pyrene	3	0.2132	0.2187	500.0	510.9	ug/L	2	15	
Dibenz(a,h)anthracene	3	0.0311	0.0327	1000	1040	ug/L	4	15	
Benzo(g,h,i)perylene	3	0.0613	0.0624	1000	1012	ug/L	1	15	
Indeno(1,2,3-cd)pyrene	3	0.0971	0.1014	500.0	519.8	ug/L	4	15	
1-Methylnaphthalene (F)	3	0.0122	0.0122	50000	50990	ug/L	2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188802 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: H IDF : 1.0
Seqnum : 296340469031 File : 23600031 Time : 25-AUG-2006 02:18
Cal : 296199754001 Caldate : 18-MAY-2006
Standards: S2954

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0132	10000	10140	ug/L	1	15	
Acenaphthylene	1	0.0093	0.0094	20000	20280	ug/L	1	15	
Acenaphthene	1	0.0052	0.0052	10000	10070	ug/L	1	15	
Fluorene	1	0.0627	0.0631	2000	2014	ug/L	1	15	
Phenanthrene	1	0.1800	0.1816	1000	1009	ug/L	1	15	
Anthracene	1	0.4248	0.4299	1000	1011	ug/L	1	15	
Fluoranthene	1	0.0409	0.0411	2000	2022	ug/L	1	15	
Pyrene	1	0.0342	0.0352	1000	1042	ug/L	4	15	
Benzo(a)anthracene	1	0.0943	0.0956	1000	1009	ug/L	1	15	
Chrysene	1	0.1335	0.1360	1000	1016	ug/L	2	15	
Benzo(b)fluoranthene	1	0.1059	0.1080	2000	2030	ug/L	1	15	
Benzo(k)fluoranthene	1	0.0821	0.0842	1000	1010	ug/L	1	15	
Benzo(a)pyrene	1	0.0870	0.0884	1000	1004	ug/L	0	15	
Dibenz(a,h)anthracene	1	0.0212	0.0220	2000	1993	ug/L	0	15	
Benzo(g,h,i)perylene	1	0.0351	0.0358	2000	1978	ug/L	-1	15	
Indeno(1,2,3-cd)pyrene	1	0.0976	0.1001	1000	1000	ug/L	0	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0085	50000	50580	ug/L	1	15	
Acenaphthylene	2	0.0279	0.0282	20000	20280	ug/L	1	15	
1-Methylnaphthalene (UV)	2	0.0031	0.0031	50000	50260	ug/L	1	15	
Naphthalene	3	0.0110	0.0111	10000	10130	ug/L	1	15	
Acenaphthene	3	0.0233	0.0236	10000	10260	ug/L	3	15	
Fluorene	3	0.1263	0.1256	2000	2019	ug/L	1	15	
Phenanthrene	3	0.1362	0.1381	1000	1017	ug/L	2	15	
Anthracene	3	0.4263	0.4349	1000	1018	ug/L	2	15	
Fluoranthene	3	0.0387	0.0393	2000	2029	ug/L	1	15	
Pyrene	3	0.1332	0.1367	1000	1020	ug/L	2	15	
Benzo(a)anthracene	3	0.1515	0.1540	1000	1017	ug/L	2	15	
Chrysene	3	0.1803	0.1827	1000	1019	ug/L	2	15	
Benzo(b)fluoranthene	3	0.0643	0.0656	2000	2038	ug/L	2	15	
Benzo(k)fluoranthene	3	0.3904	0.3968	1000	1025	ug/L	2	15	
Benzo(a)pyrene	3	0.2132	0.2168	1000	1016	ug/L	2	15	
Dibenz(a,h)anthracene	3	0.0311	0.0321	2000	2030	ug/L	1	15	
Benzo(g,h,i)perylene	3	0.0613	0.0626	2000	2006	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	3	0.0971	0.0994	1000	1021	ug/L	2	15	
1-Methylnaphthalene (F)	3	0.0122	0.0123	50000	51430	ug/L	3	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188802 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: M IDF : 1.0
 Seqnum : 296342211018 File : 23700018 Time : 26-AUG-2006 00:28
 Cal : 296199754001 Caldate : 18-MAY-2006
 Standards: S3192

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0133	5000	5110	ug/L	2	15	
Acenaphthylene	1	0.0093	0.0094	10000	10100	ug/L	1	15	
Acenaphthene	1	0.0052	0.0053	5000	5045	ug/L	1	15	
Fluorene	1	0.0627	0.0637	1000	1015	ug/L	1	15	
Phenanthrene	1	0.1800	0.1830	500.0	507.3	ug/L	1	15	
Anthracene	1	0.4248	0.4359	500.0	510.4	ug/L	2	15	
Fluoranthene	1	0.0409	0.0417	1000	1023	ug/L	2	15	
Pyrene	1	0.0342	0.0354	500.0	524.7	ug/L	5	15	
Benzo(a)anthracene	1	0.0943	0.0958	500.0	505.8	ug/L	1	15	
Chrysene	1	0.1335	0.1364	500.0	507.7	ug/L	2	15	
Benzo(b)fluoranthene	1	0.1059	0.1089	1000	1021	ug/L	2	15	
Benzo(k)fluoranthene	1	0.0821	0.0850	500.0	510.7	ug/L	2	15	
Benzo(a)pyrene	1	0.0870	0.0895	500.0	511.5	ug/L	2	15	
Dibenz(a,h)anthracene	1	0.0212	0.0224	1000	1027	ug/L	3	15	
Benzo(g,h,i)perylene	1	0.0351	0.0368	1000	1028	ug/L	3	15	
Indeno(1,2,3-cd)pyrene	1	0.0976	0.1015	500.0	509.7	ug/L	2	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0085	50000	50440	ug/L	1	15	
Acenaphthylene	2	0.0279	0.0284	10000	10160	ug/L	2	15	
1-Methylnaphthalene (UV)	2	0.0031	0.0031	50000	50380	ug/L	1	15	
Naphthalene	3	0.0110	0.0114	5000	5151	ug/L	3	15	
Acenaphthene	3	0.0233	0.0241	5000	5151	ug/L	3	15	
Fluorene	3	0.1263	0.1278	1000	1012	ug/L	1	15	
Phenanthrene	3	0.1362	0.1406	500.0	516.1	ug/L	3	15	
Anthracene	3	0.4263	0.4423	500.0	516.5	ug/L	3	15	
Fluoranthene	3	0.0387	0.0398	1000	1025	ug/L	3	15	
Pyrene	3	0.1332	0.1407	500.0	526.0	ug/L	5	15	
Benzo(a)anthracene	3	0.1515	0.1571	500.0	516.9	ug/L	3	15	
Chrysene	3	0.1803	0.1858	500.0	514.4	ug/L	3	15	
Benzo(b)fluoranthene	3	0.0643	0.0663	1000	1026	ug/L	3	15	
Benzo(k)fluoranthene	3	0.3904	0.4018	500.0	512.0	ug/L	2	15	
Benzo(a)pyrene	3	0.2132	0.2194	500.0	512.5	ug/L	3	15	
Dibenz(a,h)anthracene	3	0.0311	0.0322	1000	1025	ug/L	2	15	
Benzo(g,h,i)perylene	3	0.0613	0.0631	1000	1023	ug/L	2	15	
Indeno(1,2,3-cd)pyrene	3	0.0971	0.0999	500.0	512.2	ug/L	2	15	
1-Methylnaphthalene (F)	3	0.0122	0.0124	50000	51680	ug/L	3	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188802 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: H IDF : 1.0
Seqnum : 296342211036 File : 23700036 Time : 26-AUG-2006 09:57
Cal : 296199754001 Caldate : 18-MAY-2006
Standards: S2954

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0132	10000	10130	ug/L	1	15	
Acenaphthylene	1	0.0093	0.0094	20000	20280	ug/L	1	15	
Acenaphthene	1	0.0052	0.0052	10000	10070	ug/L	1	15	
Fluorene	1	0.0627	0.0635	2000	2025	ug/L	1	15	
Phenanthrene	1	0.1800	0.1833	1000	1019	ug/L	2	15	
Anthracene	1	0.4248	0.4336	1000	1020	ug/L	2	15	
Fluoranthene	1	0.0409	0.0413	2000	2028	ug/L	1	15	
Pyrene	1	0.0342	0.0358	1000	1062	ug/L	6	15	
Benzo(a)anthracene	1	0.0943	0.0957	1000	1010	ug/L	1	15	
Chrysene	1	0.1335	0.1364	1000	1019	ug/L	2	15	
Benzo(b)fluoranthene	1	0.1059	0.1082	2000	2032	ug/L	2	15	
Benzo(k)fluoranthene	1	0.0821	0.0842	1000	1010	ug/L	1	15	
Benzo(a)pyrene	1	0.0870	0.0888	1000	1009	ug/L	1	15	
Dibenz(a,h)anthracene	1	0.0212	0.0222	2000	2015	ug/L	1	15	
Benzo(g,h,i)perylene	1	0.0351	0.0363	2000	2005	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	1	0.0976	0.1004	1000	1003	ug/L	0	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0085	50000	50510	ug/L	1	15	
Acenaphthylene	2	0.0279	0.0283	20000	20320	ug/L	2	15	
1-Methylnaphthalene (UV)	2	0.0031	0.0031	50000	50520	ug/L	1	15	
Naphthalene	3	0.0110	0.0110	10000	9980	ug/L	0	15	
Acenaphthene	3	0.0233	0.0234	10000	10170	ug/L	2	15	
Fluorene	3	0.1263	0.1261	2000	2027	ug/L	1	15	
Phenanthrene	3	0.1362	0.1364	1000	1004	ug/L	0	15	
Anthracene	3	0.4263	0.4400	1000	1029	ug/L	3	15	
Fluoranthene	3	0.0387	0.0394	2000	2032	ug/L	2	15	
Pyrene	3	0.1332	0.1332	1000	993.9	ug/L	-1	15	
Benzo(a)anthracene	3	0.1515	0.1533	1000	1013	ug/L	1	15	
Chrysene	3	0.1803	0.1806	1000	1007	ug/L	1	15	
Benzo(b)fluoranthene	3	0.0643	0.0655	2000	2035	ug/L	2	15	
Benzo(k)fluoranthene	3	0.3904	0.3975	1000	1027	ug/L	3	15	
Benzo(a)pyrene	3	0.2132	0.2162	1000	1013	ug/L	1	15	
Dibenz(a,h)anthracene	3	0.0311	0.0321	2000	2035	ug/L	2	15	
Benzo(g,h,i)perylene	3	0.0613	0.0621	2000	1991	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	3	0.0971	0.1003	1000	1031	ug/L	3	15	
1-Methylnaphthalene (F)	3	0.0122	0.0121	50000	50660	ug/L	1	15	

Confirmation Report for 188802 HPLC Water
Curtis & Tompkins Laboratories

Units: ug/L

Lab ID	Client ID	Analyte	Result	Confirmation	RPD	%D
188802-001	1349MW100	Acenaphthene	4.863	4.408	10	-9
188802-001	1349MW100	Fluorene	12.92	9.008	36	-30
188802-001	1349MW100	Phenanthrene	17.02	15.48	9	-9
188802-001	1349MW100	Anthracene	0.7108	2.447	110	244
188802-001	1349MW100	Fluoranthene	4.662	19.05	121	309
188802-001	1349MW100	Pyrene	1.527	58.16	190	3708
188802-001	1349MW100	Benzo (a) anthracene	1.117	5.959	137	433
188802-001	1349MW100	Chrysene	1.085	2.367	74	118

SEQUENCE SUMMARY FOR 188802 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 296199754 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 18-MAY-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	VL	pH	Stds	Used	>LR
001	13800001	X	PRIMER	- 138		18-MAY-2006	17:14 1.0							
002	13800002	X	PRIMER			18-MAY-2006	17:46 1.0							
003	13800003	X	IB - 138			18-MAY-2006	18:17 1.0							
004	13800004	X	IB			18-MAY-2006	18:49 1.0							
005	13800005	X	IB			18-MAY-2006	19:21 1.0							
006	13800006	ICAL				18-MAY-2006	19:52 1.0							
007	13800007	ICAL				18-MAY-2006	20:24 1.0							
008	13800008	ICAL				18-MAY-2006	20:56 1.0							
009	13800009	ICAL				18-MAY-2006	21:27 1.0							
010	13800010	ICAL				18-MAY-2006	21:59 1.0							
011	13800011	ICAL				18-MAY-2006	22:31 1.0							
012	13800012	ICAL				18-MAY-2006	23:02 1.0							
013	13800013	X	IB			18-MAY-2006	23:34 1.0							
014	13800014	X	IB			19-MAY-2006	00:05 1.0							
015	13800015	ICV	ICV			19-MAY-2006	00:37 1.0							
016	13800016	X	ICV			19-MAY-2006	01:09 1.0							
017	13800017	X	IB			19-MAY-2006	01:40 1.0							

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Stds used: 1=S3065 2=S3064 3=S3063 4=S3062 5=S3061 6=S3060 7=S3059 8=S3051

SEQUENCE SUMMARY FOR 188802 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 296340469 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 24-AUG-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
001	23600001	X	IB - 236			24-AUG-2006	10:29 1.0							
002	23600002	CCV	L			24-AUG-2006	11:01 1.0	1.0			10	1		
003	23600003	X	CCV			24-AUG-2006	11:33 1.0					1		
004	23600004	X	IB			24-AUG-2006	12:04 1.0							
005	23600005	BLANK	QC352946			24-AUG-2006	12:36 1.0	0.002			10			
006	23600006	LCS	QC352947			24-AUG-2006	13:07 1.0	0.002			10			
007	23600007	X	IB			24-AUG-2006	13:39 1.0							
008	23600008	SAMPLE	188774-001			24-AUG-2006	14:11 1.0	0.001887			10			
009	23600009	SAMPLE	188774-007			24-AUG-2006	14:42 1.0	0.001887			10			
010	23600010	SAMPLE	188774-002			24-AUG-2006	15:14 1.0	0.001887			10			
011	23600011	SAMPLE	188774-008			24-AUG-2006	15:45 1.0	0.001887			10			
012	23600012	SAMPLE	188774-009			24-AUG-2006	16:17 1.0	0.001887			10			
013	23600013	MSS	188802-001			24-AUG-2006	16:49 1.0	0.001887	6	1	10			4:PYR=30823.2
014	23600014	MS	QC352948			24-AUG-2006	17:20 1.0	0.001887	1	24	10			5:PYR=26940.5
015	23600015	MSD	QC352949			24-AUG-2006	17:52 1.0	0.001887	3	23	10			5:PYR=48189.2
016	23600016	X	IB			24-AUG-2006	18:24 1.0							
017	23600017	X	IB			24-AUG-2006	18:55 1.0							
018	23600018	X	IB			24-AUG-2006	19:27 1.0							
019	23600019	X	IB			24-AUG-2006	19:58 1.0							
020	23600020	CCV	M			24-AUG-2006	20:30 1.0	1.0			10	2		
021	23600021	X	CCV			24-AUG-2006	21:01 1.0					2		
022	23600022	X	IB			24-AUG-2006	21:33 1.0							
023	23600023	SAMPLE	188802-004			24-AUG-2006	22:05 1.0	0.001887			10			
024	23600024	SAMPLE	188802-005			24-AUG-2006	22:36 1.0	0.001887			10			
025	23600025	SAMPLE	188802-006			24-AUG-2006	23:08 1.0	0.001887			10			
026	23600026	SAMPLE	188802-008			24-AUG-2006	23:40 1.0	0.001887			10			
027	23600027	SAMPLE	188802-010			25-AUG-2006	00:11 1.0	0.001887			10			
028	23600028	SAMPLE	188837-012			25-AUG-2006	00:43 1.0	0.001905			10			
029	23600029	SAMPLE	188869-001			25-AUG-2006	01:14 1.0	0.001905			10			
030	23600030	X	IB			25-AUG-2006	01:46 1.0							
031	23600031	CCV	H			25-AUG-2006	02:18 1.0	1.0			10	3		

Stds used: 1=S3190 2=S3192 3=S2954

SEQUENCE SUMMARY FOR 188802 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 296340469 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 24-AUG-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Std's Used	>LR
032	23600032	X	CCV			25-AUG-2006	02:49	1.0				3	
033	23600033	X	IB			25-AUG-2006	03:21	1.0					

Std's used: 1=S3190 2=S3192 3=S2954

SEQUENCE SUMMARY FOR 188802 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 296342211 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 25-AUG-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used	>LR
001	23700001	X	IB - 237			25-AUG-2006 15:31	1.0						
002	23700002	CCV	L			25-AUG-2006 16:02	1.0	1.0				1	
003	23700003	X	CCV			25-AUG-2006 16:34	1.0					1	
004	23700004	X	IB			25-AUG-2006 17:06	1.0						
005	23700005	BLANK	QC353397			25-AUG-2006 17:37	1.0	0.002	2		10		
006	23700006	SAMPLE	188774-020			25-AUG-2006 18:09	1.0	0.001905	35		10	sh	
007	23700007	SAMPLE	188774-021			25-AUG-2006 18:41	1.0	0.001905	35	3	10	sh	
008	23700008	BS	QC353398			25-AUG-2006 19:12	1.0	0.002			10		
009	23700009	BSD	QC353399			25-AUG-2006 19:44	1.0	0.002			10		
010	23700010	X	IB			25-AUG-2006 20:15	1.0				10		
011	23700011	BLANK	QC353512			25-AUG-2006 20:47	1.0	0.06572	2		10		
012	23700012	MSS	188961-005			25-AUG-2006 21:19	1.0	0.06739	2		10		
013	23700013	LCS	QC353513			25-AUG-2006 21:50	1.0	0.06645			10		
014	23700014	MS	QC353514			25-AUG-2006 22:22	1.0	0.06775		1	10		
015	23700015	MSD	QC353515			25-AUG-2006 22:53	1.0	0.06727		1	10		
016	23700016	X	IB			25-AUG-2006 23:25	1.0						
017	23700017	X	IB			25-AUG-2006 23:57	1.0						
018	23700018	CCV	M			26-AUG-2006 00:28	1.0	1.0			10	2	
019	23700019	X	CCV			26-AUG-2006 01:00	1.0					2	
020	23700020	X	IB			26-AUG-2006 01:31	1.0						
021	23700021	SAMPLE	188437-019			26-AUG-2006 02:03	1.0	0.06667	30	1	10		
022	23700022	X	IB			26-AUG-2006 02:35	1.0						
023	23700023	SAMPLE	188961-003			26-AUG-2006 03:06	1.0	0.06579			10		
024	23700024	SAMPLE	188961-002			26-AUG-2006 03:38	1.0	0.06768			10		
025	23700025	SAMPLE	188961-001			26-AUG-2006 04:10	1.0	0.06662			10		
026	23700026	X	IB			26-AUG-2006 04:41	1.0						
027	23700027	SAMPLE	188961-004			26-AUG-2006 05:13	1.0	0.06711			10		
028	23700028	X	IB			26-AUG-2006 05:44	1.0						
029	23700029	X	IB			26-AUG-2006 06:16	1.0						
030	23700030	MS	QC352948			26-AUG-2006 06:48	1.0	0.001887	1	24	10		
													5:PYR=27451.4

Stds used: 1=S3190 2=S3192 3=S2954
Flags used: sh=out of sample hold

SEQUENCE SUMMARY FOR 188802 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 296342211 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 25-AUG-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Std	Used	>LR
031	23700031	MSD	QC352949	116658	Water	26-AUG-2006	07:19 1.0	0.001887	3	25	10			5:PYR=48678.1
032	23700032	X	IB			26-AUG-2006	07:51 1.0							
033	23700033	X	IB			26-AUG-2006	08:23 1.0							
034	23700034	MSS	188802-001	116658	Water	26-AUG-2006	08:54 4.0	0.001887	3	1	10			1:PYR=7611.20
035	23700035	X	IB			26-AUG-2006	09:26 1.0							
036	23700036	CCV	H			26-AUG-2006	09:57 1.0	1.0			10			
037	23700037	X	CCV			26-AUG-2006	10:29 1.0							
038	23700038	X	IB			26-AUG-2006	11:01 1.0							

Std used: 1=S3190 2=S3192 3=S2954
Flags used: sh=out of sample hold

REPORTING SUMMARY FOR 188802 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
188802-001	Naphthalene	HPLC04	1	08/24/06 16:49
188802-001	Acenaphthylene	HPLC04	1	08/24/06 16:49
188802-001	Acenaphthene	HPLC04	1	08/24/06 16:49
188802-001	Fluorene	HPLC04	1	08/24/06 16:49
188802-001	Phenanthrene	HPLC04	3	08/26/06 08:54
188802-001	Anthracene	HPLC04	3	08/24/06 16:49
188802-001	Fluoranthene	HPLC04	3	08/24/06 16:49
188802-001	Pyrene	HPLC04	3	08/24/06 16:49
188802-001	Benzo(a)anthracene	HPLC04	3	08/24/06 16:49
188802-001	Chrysene	HPLC04	3	08/24/06 16:49
188802-001	Benzo(b)fluoranthene	HPLC04	3	08/24/06 16:49
188802-001	Benzo(k)fluoranthene	HPLC04	3	08/24/06 16:49
188802-001	Benzo(a)pyrene	HPLC04	3	08/24/06 16:49
188802-001	Dibenz(a,h)anthracene	HPLC04	3	08/24/06 16:49
188802-001	Benzo(g,h,i)perylene	HPLC04	3	08/24/06 16:49
188802-001	Indeno(1,2,3-cd)pyrene	HPLC04	3	08/24/06 16:49
188802-001	1-Methylnaphthalene (UV)	HPLC04	1	08/24/06 16:49
188802-001	1-Methylnaphthalene (F)	HPLC04	3	08/24/06 16:49
188802-004	Naphthalene	HPLC04	1	08/24/06 22:05
188802-004	Acenaphthylene	HPLC04	1	08/24/06 22:05
188802-004	Acenaphthene	HPLC04	1	08/24/06 22:05
188802-004	Fluorene	HPLC04	1	08/24/06 22:05
188802-004	Phenanthrene	HPLC04	3	08/24/06 22:05
188802-004	Anthracene	HPLC04	3	08/24/06 22:05
188802-004	Fluoranthene	HPLC04	3	08/24/06 22:05
188802-004	Pyrene	HPLC04	3	08/24/06 22:05
188802-004	Benzo(a)anthracene	HPLC04	3	08/24/06 22:05
188802-004	Chrysene	HPLC04	3	08/24/06 22:05
188802-004	Benzo(b)fluoranthene	HPLC04	3	08/24/06 22:05
188802-004	Benzo(k)fluoranthene	HPLC04	3	08/24/06 22:05
188802-004	Benzo(a)pyrene	HPLC04	3	08/24/06 22:05
188802-004	Dibenz(a,h)anthracene	HPLC04	3	08/24/06 22:05
188802-004	Benzo(g,h,i)perylene	HPLC04	3	08/24/06 22:05
188802-004	Indeno(1,2,3-cd)pyrene	HPLC04	3	08/24/06 22:05
188802-004	1-Methylnaphthalene (UV)	HPLC04	1	08/24/06 22:05
188802-004	1-Methylnaphthalene (F)	HPLC04	3	08/24/06 22:05
188802-005	Naphthalene	HPLC04	1	08/24/06 22:36
188802-005	Acenaphthylene	HPLC04	1	08/24/06 22:36
188802-005	Acenaphthene	HPLC04	1	08/24/06 22:36
188802-005	Fluorene	HPLC04	1	08/24/06 22:36
188802-005	Phenanthrene	HPLC04	3	08/24/06 22:36
188802-005	Anthracene	HPLC04	3	08/24/06 22:36
188802-005	Fluoranthene	HPLC04	3	08/24/06 22:36
188802-005	Pyrene	HPLC04	3	08/24/06 22:36
188802-005	Benzo(a)anthracene	HPLC04	3	08/24/06 22:36
188802-005	Chrysene	HPLC04	3	08/24/06 22:36
188802-005	Benzo(b)fluoranthene	HPLC04	3	08/24/06 22:36
188802-005	Benzo(k)fluoranthene	HPLC04	3	08/24/06 22:36
188802-005	Benzo(a)pyrene	HPLC04	3	08/24/06 22:36
188802-005	Dibenz(a,h)anthracene	HPLC04	3	08/24/06 22:36
188802-005	Benzo(g,h,i)perylene	HPLC04	3	08/24/06 22:36
188802-005	Indeno(1,2,3-cd)pyrene	HPLC04	3	08/24/06 22:36

REPORTING SUMMARY FOR 188802 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
188802-005	1-Methylnaphthalene (UV)	HPLC04	1	08/24/06 22:36
188802-005	1-Methylnaphthalene (F)	HPLC04	3	08/24/06 22:36
188802-006	Naphthalene	HPLC04	1	08/24/06 23:08
188802-006	Acenaphthylene	HPLC04	1	08/24/06 23:08
188802-006	Acenaphthene	HPLC04	1	08/24/06 23:08
188802-006	Fluorene	HPLC04	1	08/24/06 23:08
188802-006	Phenanthrene	HPLC04	3	08/24/06 23:08
188802-006	Anthracene	HPLC04	3	08/24/06 23:08
188802-006	Fluoranthene	HPLC04	3	08/24/06 23:08
188802-006	Pyrene	HPLC04	3	08/24/06 23:08
188802-006	Benzo(a)anthracene	HPLC04	3	08/24/06 23:08
188802-006	Chrysene	HPLC04	3	08/24/06 23:08
188802-006	Benzo(b)fluoranthene	HPLC04	3	08/24/06 23:08
188802-006	Benzo(k)fluoranthene	HPLC04	3	08/24/06 23:08
188802-006	Benzo(a)pyrene	HPLC04	3	08/24/06 23:08
188802-006	Dibenz(a,h)anthracene	HPLC04	3	08/24/06 23:08
188802-006	Benzo(g,h,i)perylene	HPLC04	3	08/24/06 23:08
188802-006	Indeno(1,2,3-cd)pyrene	HPLC04	3	08/24/06 23:08
188802-006	1-Methylnaphthalene (UV)	HPLC04	1	08/24/06 23:08
188802-006	1-Methylnaphthalene (F)	HPLC04	3	08/24/06 23:08
188802-008	Naphthalene	HPLC04	1	08/24/06 23:40
188802-008	Acenaphthylene	HPLC04	1	08/24/06 23:40
188802-008	Acenaphthene	HPLC04	1	08/24/06 23:40
188802-008	Fluorene	HPLC04	1	08/24/06 23:40
188802-008	Phenanthrene	HPLC04	3	08/24/06 23:40
188802-008	Anthracene	HPLC04	3	08/24/06 23:40
188802-008	Fluoranthene	HPLC04	3	08/24/06 23:40
188802-008	Pyrene	HPLC04	3	08/24/06 23:40
188802-008	Benzo(a)anthracene	HPLC04	3	08/24/06 23:40
188802-008	Chrysene	HPLC04	3	08/24/06 23:40
188802-008	Benzo(b)fluoranthene	HPLC04	3	08/24/06 23:40
188802-008	Benzo(k)fluoranthene	HPLC04	3	08/24/06 23:40
188802-008	Benzo(a)pyrene	HPLC04	3	08/24/06 23:40
188802-008	Dibenz(a,h)anthracene	HPLC04	3	08/24/06 23:40
188802-008	Benzo(g,h,i)perylene	HPLC04	3	08/24/06 23:40
188802-008	Indeno(1,2,3-cd)pyrene	HPLC04	3	08/24/06 23:40
188802-008	1-Methylnaphthalene (UV)	HPLC04	1	08/24/06 23:40
188802-008	1-Methylnaphthalene (F)	HPLC04	3	08/24/06 23:40
188802-010	Naphthalene	HPLC04	1	08/25/06 00:11
188802-010	Acenaphthylene	HPLC04	1	08/25/06 00:11
188802-010	Acenaphthene	HPLC04	1	08/25/06 00:11
188802-010	Fluorene	HPLC04	1	08/25/06 00:11
188802-010	Phenanthrene	HPLC04	3	08/25/06 00:11
188802-010	Anthracene	HPLC04	3	08/25/06 00:11
188802-010	Fluoranthene	HPLC04	3	08/25/06 00:11
188802-010	Pyrene	HPLC04	3	08/25/06 00:11
188802-010	Benzo(a)anthracene	HPLC04	3	08/25/06 00:11
188802-010	Chrysene	HPLC04	3	08/25/06 00:11
188802-010	Benzo(b)fluoranthene	HPLC04	3	08/25/06 00:11
188802-010	Benzo(k)fluoranthene	HPLC04	3	08/25/06 00:11
188802-010	Benzo(a)pyrene	HPLC04	3	08/25/06 00:11

REPORTING SUMMARY FOR 188802 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
188802-010	Dibenz(a,h)anthracene	HPLC04	3	08/25/06 00:11
188802-010	Benzo(g,h,i)perylene	HPLC04	3	08/25/06 00:11
188802-010	Indeno(1,2,3-cd)pyrene	HPLC04	3	08/25/06 00:11
188802-010	1-Methylnaphthalene (UV)	HPLC04	1	08/25/06 00:11
188802-010	1-Methylnaphthalene (F)	HPLC04	3	08/25/06 00:11
QC352946	Naphthalene	HPLC04	1	08/24/06 12:36
QC352946	Acenaphthylene	HPLC04	1	08/24/06 12:36
QC352946	Acenaphthene	HPLC04	1	08/24/06 12:36
QC352946	Fluorene	HPLC04	1	08/24/06 12:36
QC352946	Phenanthrene	HPLC04	3	08/24/06 12:36
QC352946	Anthracene	HPLC04	3	08/24/06 12:36
QC352946	Fluoranthene	HPLC04	3	08/24/06 12:36
QC352946	Pyrene	HPLC04	3	08/24/06 12:36
QC352946	Benzo(a)anthracene	HPLC04	3	08/24/06 12:36
QC352946	Chrysene	HPLC04	3	08/24/06 12:36
QC352946	Benzo(b)fluoranthene	HPLC04	3	08/24/06 12:36
QC352946	Benzo(k)fluoranthene	HPLC04	3	08/24/06 12:36
QC352946	Benzo(a)pyrene	HPLC04	3	08/24/06 12:36
QC352946	Dibenz(a,h)anthracene	HPLC04	3	08/24/06 12:36
QC352946	Benzo(g,h,i)perylene	HPLC04	3	08/24/06 12:36
QC352946	Indeno(1,2,3-cd)pyrene	HPLC04	3	08/24/06 12:36
QC352946	1-Methylnaphthalene (UV)	HPLC04	1	08/24/06 12:36
QC352946	1-Methylnaphthalene (F)	HPLC04	3	08/24/06 12:36
QC352947	Naphthalene	HPLC04	1	08/24/06 13:07
QC352947	Fluorene	HPLC04	1	08/24/06 13:07
QC352947	Pyrene	HPLC04	3	08/24/06 13:07
QC352947	Benzo(a)pyrene	HPLC04	3	08/24/06 13:07
QC352947	1-Methylnaphthalene (UV)	HPLC04	1	08/24/06 13:07
QC352947	1-Methylnaphthalene (F)	HPLC04	3	08/24/06 13:07
QC352948	Naphthalene	HPLC04	1	08/24/06 17:20
QC352948	Fluorene	HPLC04	1	08/24/06 17:20
QC352948	Pyrene	HPLC04	3	08/24/06 17:20
QC352948	Benzo(a)pyrene	HPLC04	3	08/24/06 17:20
QC352948	1-Methylnaphthalene (UV)	HPLC04	1	08/24/06 17:20
QC352948	1-Methylnaphthalene (F)	HPLC04	3	08/24/06 17:20
QC352949	Naphthalene	HPLC04	1	08/24/06 17:52
QC352949	Fluorene	HPLC04	1	08/24/06 17:52
QC352949	Pyrene	HPLC04	3	08/24/06 17:52
QC352949	Benzo(a)pyrene	HPLC04	3	08/24/06 17:52
QC352949	1-Methylnaphthalene (UV)	HPLC04	1	08/24/06 17:52
QC352949	1-Methylnaphthalene (F)	HPLC04	3	08/24/06 17:52

Curtis & Tompkins Laboratories Sample Preparation Summary

23-AUG-2006 17:56

Batch Number : 116658
 Date Extracted : 22-AUG-2006
 Extracted by : Jessie O'Brien Mee
 Prep Method : 3520C

Analysis : 8310
 Bq Group : N/A
 Units : mL
 Clean-up :

Spike #1 ID : S4149D
 Spike #2 ID : S3553B
 Spike #3 ID :
 SGP Version : 8310w_rv6

Sample	Type	Client	Matrix	Init Units	Final Prep	Clean	pH	Sp 1	Sp 2	Sp 3	Analyses	Clean	Comments
				μ/y	D.F.	D.F.		Vol	Vol	Vol		Method	
188774-001		Treadwell & Rollo	Water	1060 mL	2	0.001887	1	7	.1	0	8310		
188774-002		Treadwell & Rollo	Water	1060 mL	2	0.001887	1	7	.1	0	8310		
188774-007		Treadwell & Rollo	Water	1060 mL	2	0.001887	1	7	.1	0	8310		
188774-008		Treadwell & Rollo	Water	1060 mL	2	0.001887	1	7	.1	0	8310		
188774-009		Treadwell & Rollo	Water	1060 mL	2	0.001887	1	7	.1	0	8310		
188802-001		Treadwell & Rollo	Water	1060 mL	2	0.001887	1	7	.1	0	8310		
188802-004		Treadwell & Rollo	Water	1060 mL	2	0.001887	1	7	.1	0	8310		
188802-005		Treadwell & Rollo	Water	1060 mL	2	0.001887	1	7	.1	0	8310		
188802-006		Treadwell & Rollo	Water	1060 mL	2	0.001887	1	7	.1	0	8310		
188802-008		Treadwell & Rollo	Water	1060 mL	2	0.001887	1	7	.1	0	8310		
188802-010		Treadwell & Rollo	Water	1050 mL	2	0.001905	1	5	.1	0	8310		
188837-012		Treadwell & Rollo	Water	1050 mL	2	0.001905	1	6	.1	0	8310		
188869-001		Treadwell & Rollo	Water	1000 mL	2	0.002000	1	.1	.1	0	8310		
QC352946	BLANK		Water	1000 mL	2	0.002000	1	.1	.1	0	8310		
QC352947	LCS		Water	1000 mL	2	0.002000	1	.1	.1	0	8310		
QC352948	MS		Water	1060 mL	2	0.001887	1	7	.1	1	8310		
QC352949	MSD		Water	1060 mL	2	0.001887	1	7	.1	1	8310		
of 188802-001 of 188802-001													

MSS

Prep Chemist: *[Signature]*

Reviewed By: *[Signature]*

Date: 8/24/06

Relinquished By: *[Signature]*

Received By: *[Signature]*

Date: 24 AUG 2006



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories
MDL Summary for EPA 8310 Water 3520C
As of 09/24/06

Analyte	Units	HPLC02 1	HPLC02 2	HPLC02 3	HPLC04 1	HPLC04 2	HPLC04 3
Naphthalene	ug/L	0.16		0.069	0.097		0.10
Acenaphthylene	ug/L	0.37	0.29		0.24	0.16	
2-Methylnaphthalene	ug/L				0.072		0.10
Acenaphthene	ug/L	0.36		0.098	0.33		0.085
Fluorene	ug/L	0.051		0.054	0.028		0.017
Phenanthrene	ug/L	0.030		0.0086	0.0082		0.0078
Anthracene	ug/L	0.021		0.0077	0.024		0.023
Fluoranthene	ug/L	0.13		0.011	0.042		0.013
Pyrene	ug/L	0.066		0.0048	0.036		0.010
Benzo(a)anthracene	ug/L	0.044		0.0046	0.022		0.013
Chrysene	ug/L	0.036		0.0059	0.021		0.0096
Benzo(b)fluoranthene	ug/L	0.032		0.0081	0.015		0.013
Benzo(k)fluoranthene	ug/L	0.037		0.0044	0.013		0.0080
Benzo(a)pyrene	ug/L	0.055		0.0045	0.017		0.025
Dibenz(a,h)anthracene	ug/L	0.12		0.026	0.037		0.025
Benzo(g,h,i)perylene	ug/L	0.066		0.014	0.047		0.017
Indeno(1,2,3-cd)pyrene	ug/L	0.065		0.011	0.013		0.0096
1-Methylnaphthalene (UV)	ug/L	1.2	1.9		9.0	9.1	
1-Methylnaphthalene (F)	ug/L			0.72			9.8

METALS

Dissolved Target Analyte List Metals

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1349MW100	Batch#:	116736
Lab ID:	188802-001	Sampled:	08/16/06
Matrix:	Filtrate	Received:	08/17/06
Units:	ug/L	Prepared:	08/24/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	08/24/06
Antimony	ND	1.0	1.000	08/24/06
Arsenic	8.9	5.0	1.000	08/24/06
Barium	560	10	10.00	08/25/06
Beryllium	ND	2.0	1.000	08/24/06
Cadmium	ND	1.0	1.000	08/24/06
Calcium	160,000	500	10.00	08/25/06
Chromium	ND	10	1.000	08/24/06
Cobalt	ND	10	1.000	08/24/06
Copper	ND	1.0	1.000	08/24/06
Iron	42,000	500	10.00	08/25/06
Lead	ND	3.0	1.000	08/24/06
Magnesium	230,000	5,000	100.0	08/25/06
Manganese	14,000	25	100.0	08/28/06
Nickel	ND	20	1.000	08/24/06
Potassium	2,800	500	1.000	08/24/06
Selenium	ND	5.0	1.000	08/24/06
Silver	ND	1.0	1.000	08/24/06
Sodium	480,000	5,000	100.0	08/28/06
Thallium	ND	1.0	1.000	08/24/06
Vanadium	ND	10	1.000	08/25/06
Zinc	ND	20	1.000	08/24/06

ND= Not Detected
 RL= Reporting Limit

**Dissolved Metals**

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ5AR	Batch#:	116736
Lab ID:	188802-002	Sampled:	08/16/06
Matrix:	Filtrate	Received:	08/17/06
Units:	ug/L	Prepared:	08/24/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	08/25/06
Antimony	ND	1.0	1.000	08/25/06
Arsenic	40	5.0	1.000	08/25/06
Cadmium	ND	1.0	1.000	08/25/06
Calcium	87,000	500	10.00	08/28/06
Chromium	ND	10	1.000	08/25/06
Copper	ND	1.0	1.000	08/25/06
Iron	24,000	500	10.00	08/28/06
Lead	ND	3.0	1.000	08/25/06
Magnesium	85,000	500	10.00	08/28/06
Manganese	1,900	10	20.00	08/28/06
Nickel	ND	20	1.000	08/25/06
Potassium	7,500	500	1.000	08/25/06
Sodium	94,000	500	10.00	08/28/06
Vanadium	ND	10	1.000	08/25/06
Zinc	ND	20	1.000	08/25/06

ND= Not Detected

RL= Reporting Limit

**Dissolved Target Analyte List Metals**

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF6GW105	Sampled:	08/16/06
Lab ID:	188802-003	Received:	08/17/06
Matrix:	Filtrate	Prepared:	08/24/06
Units:	ug/L	Analyzed:	08/25/06
Batch#:	116736		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	1.000
Antimony	ND	1.0	1.000
Arsenic	ND	5.0	1.000
Barium	41	10	1.000
Beryllium	ND	2.0	1.000
Cadmium	ND	1.0	1.000
Calcium	39,000	500	10.00
Chromium	28	10	1.000
Cobalt	ND	10	1.000
Copper	ND	1.0	1.000
Iron	ND	100	1.000
Lead	ND	3.0	1.000
Magnesium	65,000	500	10.00
Manganese	32	10	1.000
Nickel	ND	20	1.000
Potassium	810	500	1.000
Selenium	ND	5.0	1.000
Silver	ND	1.0	1.000
Sodium	82,000	500	10.00
Thallium	ND	1.0	1.000
Vanadium	ND	10	1.000
Zinc	ND	20	1.000

ND= Not Detected

RL= Reporting Limit

Dissolved Target Analyte List Metals

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF6GW106	Sampled:	08/16/06
Lab ID:	188802-004	Received:	08/17/06
Matrix:	Filtrate	Prepared:	08/24/06
Units:	ug/L	Analyzed:	08/25/06
Batch#:	116736		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	1.000
Antimony	ND	1.0	1.000
Arsenic	ND	5.0	1.000
Barium	38	10	1.000
Beryllium	ND	2.0	1.000
Cadmium	ND	1.0	1.000
Calcium	37,000	500	10.00
Chromium	22	10	1.000
Cobalt	ND	10	1.000
Copper	ND	1.0	1.000
Iron	130	100	1.000
Lead	ND	3.0	1.000
Magnesium	67,000	500	10.00
Manganese	ND	10	1.000
Nickel	ND	20	1.000
Potassium	610	500	1.000
Selenium	ND	5.0	1.000
Silver	ND	1.0	1.000
Sodium	91,000	500	10.00
Thallium	ND	1.0	1.000
Vanadium	ND	10	1.000
Zinc	ND	20	1.000

**Dissolved Target Analyte List Metals**

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1213GW101	Sampled:	08/16/06
Lab ID:	188802-005	Received:	08/17/06
Matrix:	Filtrate	Prepared:	08/24/06
Units:	ug/L	Analyzed:	08/25/06
Batch#:	116736		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	1.000
Antimony	ND	1.0	1.000
Arsenic	6.0	5.0	1.000
Barium	17	10	1.000
Beryllium	ND	2.0	1.000
Cadmium	ND	1.0	1.000
Calcium	17,000	500	1.000
Chromium	22	10	1.000
Cobalt	ND	10	1.000
Copper	1.0	1.0	1.000
Iron	ND	100	1.000
Lead	ND	3.0	1.000
Magnesium	87,000	1,000	20.00
Manganese	33	10	1.000
Nickel	ND	20	1.000
Potassium	1,500	500	1.000
Selenium	ND	5.0	1.000
Silver	ND	1.0	1.000
Sodium	310,000	1,000	20.00
Thallium	ND	1.0	1.000
Vanadium	ND	10	1.000
Zinc	ND	20	1.000

ND= Not Detected

RL= Reporting Limit

Dissolved Target Analyte List Metals

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP0816063A	Sampled:	08/16/06
Lab ID:	188802-006	Received:	08/17/06
Matrix:	Filtrate	Prepared:	08/24/06
Units:	ug/L	Analyzed:	08/25/06
Batch#:	116736		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	1.000
Antimony	ND	1.0	1.000
Arsenic	7.2	5.0	1.000
Barium	17	10	1.000
Beryllium	ND	2.0	1.000
Cadmium	ND	1.0	1.000
Calcium	17,000	500	1.000
Chromium	24	10	1.000
Cobalt	ND	10	1.000
Copper	ND	1.0	1.000
Iron	ND	100	1.000
Lead	ND	3.0	1.000
Magnesium	88,000	1,000	20.00
Manganese	28	10	1.000
Nickel	ND	20	1.000
Potassium	1,500	500	1.000
Selenium	ND	5.0	1.000
Silver	ND	1.0	1.000
Sodium	310,000	1,000	20.00
Thallium	ND	1.0	1.000
Vanadium	ND	10	1.000
Zinc	ND	20	1.000

**Dissolved Target Analyte List Metals**

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF6GW103	Sampled:	08/16/06
Lab ID:	188802-008	Received:	08/17/06
Matrix:	Filtrate	Prepared:	08/24/06
Units:	ug/L	Analyzed:	08/25/06
Batch#:	116736		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	1.000
Antimony	ND	1.0	1.000
Arsenic	ND	5.0	1.000
Barium	71	10	1.000
Beryllium	ND	2.0	1.000
Cadmium	ND	1.0	1.000
Calcium	38,000	500	10.00
Chromium	26	10	1.000
Cobalt	ND	10	1.000
Copper	ND	1.0	1.000
Iron	ND	100	1.000
Lead	ND	3.0	1.000
Magnesium	62,000	500	10.00
Manganese	ND	10	1.000
Nickel	ND	20	1.000
Potassium	580	500	1.000
Selenium	ND	5.0	1.000
Silver	ND	1.0	1.000
Sodium	68,000	500	10.00
Thallium	ND	1.0	1.000
Vanadium	ND	10	1.000
Zinc	ND	20	1.000

ND= Not Detected

RL= Reporting Limit

**Dissolved Metals**

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065MW101	Sampled:	08/16/06
Lab ID:	188802-009	Received:	08/17/06
Matrix:	Filtrate	Prepared:	08/24/06
Units:	ug/L	Analyzed:	08/25/06
Batch#:	116736		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	1.000
Antimony	ND	1.0	1.000
Arsenic	31	5.0	1.000
Cadmium	ND	1.0	1.000
Calcium	22,000	1,000	20.00
Chromium	ND	10	1.000
Copper	ND	1.0	1.000
Iron	18,000	100	1.000
Lead	ND	3.0	1.000
Magnesium	42,000	1,000	20.00
Manganese	64	10	1.000
Nickel	ND	20	1.000
Potassium	7,300	500	1.000
Sodium	230,000	1,000	20.00
Vanadium	ND	10	1.000
Zinc	ND	20	1.000

ND= Not Detected

RL= Reporting Limit

**Dissolved Target Analyte List Metals**

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP0816061A	Sampled:	08/16/06
Lab ID:	188802-010	Received:	08/17/06
Matrix:	Filtrate	Prepared:	08/24/06
Units:	ug/L	Analyzed:	08/25/06
Batch#:	116736		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	1.000
Antimony	ND	1.0	1.000
Arsenic	ND	5.0	1.000
Barium	71	10	1.000
Beryllium	ND	2.0	1.000
Cadmium	ND	1.0	1.000
Calcium	38,000	500	10.00
Chromium	26	10	1.000
Cobalt	ND	10	1.000
Copper	ND	1.0	1.000
Iron	ND	100	1.000
Lead	ND	3.0	1.000
Magnesium	63,000	500	10.00
Manganese	ND	10	1.000
Nickel	ND	20	1.000
Potassium	590	500	1.000
Selenium	ND	5.0	1.000
Silver	ND	1.0	1.000
Sodium	69,000	500	10.00
Thallium	ND	1.0	1.000
Vanadium	ND	10	1.000
Zinc	ND	20	1.000

ND= Not Detected

RL= Reporting Limit

**Dissolved Metals**

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065MW102	Batch#:	116736
Lab ID:	188802-012	Sampled:	08/16/06
Matrix:	Filtrate	Received:	08/17/06
Units:	ug/L	Prepared:	08/24/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	08/25/06
Antimony	ND	1.0	1.000	08/25/06
Arsenic	9.6	5.0	1.000	08/25/06
Cadmium	ND	1.0	1.000	08/25/06
Calcium	29,000	500	5.000	08/25/06
Chromium	ND	10	1.000	08/25/06
Copper	1.3	1.0	1.000	08/25/06
Iron	130	100	1.000	08/25/06
Lead	ND	3.0	1.000	08/25/06
Magnesium	24,000	500	5.000	08/25/06
Manganese	390	10	20.00	08/28/06
Nickel	ND	20	1.000	08/25/06
Potassium	7,900	500	1.000	08/25/06
Sodium	190,000	1,000	20.00	08/28/06
Vanadium	ND	10	1.000	08/25/06
Zinc	ND	20	1.000	08/25/06

ND= Not Detected

RL= Reporting Limit

**Dissolved Metals**

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065MW9A	Sampled:	08/16/06
Lab ID:	188802-013	Received:	08/17/06
Matrix:	Filtrate	Prepared:	08/24/06
Units:	ug/L	Analyzed:	08/25/06
Batch#:	116736		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	1.000
Antimony	ND	1.0	1.000
Arsenic	10	5.0	1.000
Cadmium	ND	1.0	1.000
Calcium	58,000	500	10.00
Chromium	ND	10	1.000
Copper	ND	1.0	1.000
Iron	5,100	100	1.000
Lead	ND	3.0	1.000
Magnesium	94,000	500	10.00
Manganese	460	10	10.00
Nickel	ND	20	1.000
Potassium	18,000	500	1.000
Sodium	75,000	500	10.00
Vanadium	ND	10	1.000
Zinc	ND	20	1.000

ND= Not Detected

RL= Reporting Limit

Dissolved Metals

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065MW9B	Sampled:	08/16/06
Lab ID:	188802-014	Received:	08/17/06
Matrix:	Filtrate	Prepared:	08/24/06
Units:	ug/L	Analyzed:	08/25/06
Batch#:	116736		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	1.000
Antimony	ND	1.0	1.000
Arsenic	ND	5.0	1.000
Cadmium	ND	1.0	1.000
Calcium	37,000	500	5.000
Chromium	34	10	1.000
Copper	1.0	1.0	1.000
Iron	ND	100	1.000
Lead	ND	3.0	1.000
Magnesium	54,000	500	5.000
Manganese	ND	10	1.000
Nickel	ND	20	1.000
Potassium	750	500	1.000
Sodium	56,000	500	5.000
Vanadium	12	10	1.000
Zinc	ND	20	1.000

**Dissolved Metals**

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065MW9BRB9A	Batch#:	116736
Lab ID:	188802-015	Sampled:	08/16/06
Matrix:	Filtrate	Received:	08/17/06
Units:	ug/L	Prepared:	08/24/06
Diln Fac:	1.000	Analyzed:	08/25/06

Analyte**Result****RL**

Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Cadmium	ND	1.0
Calcium	ND	500
Chromium	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	ND	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Sodium	600	500
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected

RL= Reporting Limit

**Dissolved Metals**

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF4GW103	Batch#:	116736
Lab ID:	188802-017	Sampled:	08/16/06
Matrix:	Filtrate	Received:	08/17/06
Units:	ug/L	Prepared:	08/24/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	08/25/06
Arsenic	6.2	5.0	1.000	08/25/06
Cadmium	ND	1.0	1.000	08/25/06
Calcium	150,000	2,000	40.00	08/28/06
Chromium	ND	10	1.000	08/25/06
Copper	2.6	1.0	1.000	08/25/06
Iron	240	100	1.000	08/25/06
Lead	ND	3.0	1.000	08/25/06
Magnesium	410,000	2,000	40.00	08/28/06
Manganese	16	10	1.000	08/25/06
Nickel	100	20	1.000	08/25/06
Potassium	2,100	500	1.000	08/25/06
Sodium	160,000	2,000	40.00	08/28/06
Zinc	ND	20	1.000	08/25/06

ND= Not Detected

RL= Reporting Limit

**Dissolved Metals**

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF4GW104	Batch#:	116736
Lab ID:	188802-018	Sampled:	08/16/06
Matrix:	Filtrate	Received:	08/17/06
Units:	ug/L	Prepared:	08/24/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	08/25/06
Arsenic	5.3	5.0	1.000	08/25/06
Cadmium	ND	1.0	1.000	08/25/06
Calcium	92,000	1,000	20.00	08/28/06
Chromium	ND	10	1.000	08/25/06
Copper	1.1	1.0	1.000	08/25/06
Iron	140	100	1.000	08/25/06
Lead	ND	3.0	1.000	08/25/06
Magnesium	230,000	1,000	20.00	08/28/06
Manganese	41	10	1.000	08/25/06
Nickel	22	20	1.000	08/25/06
Potassium	1,700	500	1.000	08/25/06
Sodium	100,000	1,000	20.00	08/28/06
Zinc	ND	20	1.000	08/25/06

ND= Not Detected
RL= Reporting Limit

**Dissolved Metals**

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP0816062A	Batch#:	116736
Lab ID:	188802-020	Sampled:	08/16/06
Matrix:	Filtrate	Received:	08/17/06
Units:	ug/L	Prepared:	08/24/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	08/25/06
Antimony	ND	1.0	1.000	08/25/06
Arsenic	ND	5.0	1.000	08/25/06
Cadmium	ND	1.0	1.000	08/25/06
Calcium	38,000	500	10.00	08/28/06
Chromium	33	10	1.000	08/25/06
Copper	ND	1.0	1.000	08/25/06
Iron	ND	100	1.000	08/25/06
Lead	ND	3.0	1.000	08/25/06
Magnesium	56,000	500	10.00	08/28/06
Manganese	ND	10	1.000	08/25/06
Nickel	ND	20	1.000	08/25/06
Potassium	710	500	1.000	08/25/06
Sodium	60,000	500	10.00	08/28/06
Vanadium	11	10	1.000	08/25/06
Zinc	ND	20	1.000	08/25/06

ND= Not Detected

RL= Reporting Limit

Batch QC Report
Dissolved Target Analyte List Metals

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC353240	Batch#:	116736
Matrix:	Filtrate	Prepared:	08/24/06
Units:	ug/L		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	08/24/06
Antimony	ND	1.0	08/24/06
Arsenic	ND	5.0	08/24/06
Barium	ND	10	08/24/06
Beryllium	ND	2.0	08/24/06
Cadmium	ND	1.0	08/24/06
Calcium	ND	500	08/24/06
Chromium	ND	10	08/24/06
Cobalt	ND	10	08/24/06
Copper	ND	1.0	08/24/06
Iron	ND	100	08/24/06
Lead	ND	3.0	08/24/06
Magnesium	ND	500	08/24/06
Manganese	ND	10	08/25/06
Nickel	ND	20	08/24/06
Potassium	ND	500	08/24/06
Selenium	ND	5.0	08/24/06
Silver	ND	1.0	08/24/06
Sodium	ND	500	08/24/06
Thallium	ND	1.0	08/24/06
Vanadium	ND	10	08/25/06
Zinc	ND	20	08/24/06

ND= Not Detected
 RL= Reporting Limit

Dissolved Mercury by Cold Vapor AA

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Sampled:	08/16/06
Units:	ug/L	Received:	08/17/06
Diln Fac:	1.000	Prepared:	08/21/06
Batch#:	116599	Analyzed:	08/21/06

Field ID	Type	Lab ID	Matrix	Result	RL
1349MW100	SAMPLE	188802-001	Filtrate	ND	0.20
LF6GW105	SAMPLE	188802-003	Filtrate	ND	0.20
LF6GW106	SAMPLE	188802-004	Filtrate	ND	0.20
LF6GW103	SAMPLE	188802-008	Filtrate	ND	0.20
DUP0816061A	SAMPLE	188802-010	Filtrate	ND	0.20
	BLANK	QC352691	Water	ND	0.20

ND= Not Detected
 RL= Reporting Limit



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Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Filtrate	Batch#:	116736
Units:	ug/L	Prepared:	08/24/06
Diln Fac:	1.000		

Type: BS Lab ID: QC353241

Analyte	Spiked	Result	%REC	Limits	Analyzed
Aluminum	10,100	11,140	110	80-120	08/24/06
Antimony	100.0	97.02	97	80-120	08/24/06
Arsenic	100.0	96.44	96	80-120	08/24/06
Barium	100.0	98.89	99	80-120	08/24/06
Beryllium	100.0	108.2	108	80-120	08/24/06
Cadmium	100.0	97.48	97	80-120	08/24/06
Calcium	10,000	10,230	102	80-120	08/24/06
Chromium	100.0	95.26	95	80-120	08/24/06
Cobalt	100.0	95.43	95	80-120	08/24/06
Copper	100.0	100.4	100	80-120	08/24/06
Iron	10,000	10,110	101	80-120	08/24/06
Lead	100.0	94.52	95	80-120	08/24/06
Magnesium	10,000	10,930	109	80-120	08/24/06
Manganese	100.0	95.09	95	80-120	08/25/06
Nickel	100.0	100.8	101	80-120	08/24/06
Potassium	10,000	10,410	104	80-120	08/24/06
Selenium	100.0	86.54	87	80-120	08/24/06
Silver	100.0	104.4	104	80-120	08/24/06
Sodium	10,000	11,040	110	80-120	08/24/06
Thallium	50.00	48.33	97	80-120	08/24/06
Vanadium	100.0	94.77	95	80-120	08/25/06
Zinc	100.0	100.2	100	80-120	08/24/06

Type: BSD Lab ID: QC353242

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
Aluminum	10,100	10,920	108	80-120	2	20	08/24/06
Antimony	100.0	94.53	95	80-120	3	20	08/24/06
Arsenic	100.0	95.02	95	80-120	1	20	08/24/06
Barium	100.0	97.69	98	80-120	1	20	08/24/06
Beryllium	100.0	106.4	106	80-120	2	20	08/24/06
Cadmium	100.0	93.32	93	80-120	4	20	08/24/06
Calcium	10,000	9,865	99	80-120	4	20	08/24/06
Chromium	100.0	93.20	93	80-120	2	20	08/24/06
Cobalt	100.0	93.41	93	80-120	2	20	08/24/06
Copper	100.0	98.13	98	80-120	2	20	08/24/06
Iron	10,000	9,999	100	80-120	1	20	08/24/06
Lead	100.0	92.93	93	80-120	2	20	08/24/06
Magnesium	10,000	10,820	108	80-120	1	20	08/24/06
Manganese	100.0	95.22	95	80-120	0	20	08/25/06
Nickel	100.0	99.70	100	80-120	1	20	08/24/06
Potassium	10,000	10,230	102	80-120	2	20	08/24/06
Selenium	100.0	85.50	86	80-120	1	20	08/24/06
Silver	100.0	102.0	102	80-120	2	20	08/24/06
Sodium	10,000	10,840	108	80-120	2	20	08/24/06
Thallium	50.00	47.80	96	80-120	1	20	08/24/06
Vanadium	100.0	95.94	96	80-120	1	20	08/25/06
Zinc	100.0	92.08	92	80-120	8	20	08/24/06

RPD= Relative Percent Difference

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Batch QC Report

Dissolved Mercury by Cold Vapor AA

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	116599
Field ID:	1349MW100	Sampled:	08/16/06
MSS Lab ID:	188802-001	Received:	08/17/06
Units:	ug/L	Prepared:	08/21/06
Diln Fac:	1.000	Analyzed:	08/21/06

Type	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC352692	Water		5.000	4.190	84	80-120		
BSD	QC352693	Water		5.000	4.240	85	80-120	1	20
MS	QC352695	Filtrate	<0.05753	5.000	3.590	72 *	75-125		
MSD	QC352696	Filtrate		5.000	3.520	70 *	75-125	2	20

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1349MW100	Batch#:	116736
MSS Lab ID:	188802-001	Sampled:	08/16/06
Matrix:	Filtrate	Received:	08/17/06
Units:	ug/L	Prepared:	08/24/06
Diln Fac:	1.000	Analyzed:	08/25/06

Type: MS Lab ID: QC353243

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aluminum	13.30	10,100	11,860	117	75-125
Antimony	0.1830	100.0	96.70	97	75-125
Arsenic	8.896	100.0	100.6	92	75-125
Barium	561.0	100.0	674.1 >LR	113 NM	75-125
Beryllium	<0.1228	100.0	108.1	108	75-125
Cadmium	<0.1659	100.0	84.79	85	75-125
Calcium	160,500	10,000	158,400 >LR	-21 NM	75-125
Chromium	0.6128	100.0	88.35	88	75-125
Cobalt	0.9793	100.0	87.43	86	75-125
Copper	0.8633	100.0	90.66	90	75-125
Iron	42,410	10,000	51,430 >LR	90 NM	75-125
Lead	0.09851	100.0	96.18	96	75-125
Magnesium	227,600	10,000	251,000 >LR	234 NM	75-125
Manganese	14,030	100.0	12,110 >LR	-1920 NM	75-125
Nickel	7.130	100.0	97.39	90	75-125
Potassium	2,752	10,000	13,330	106	75-125
Selenium	<0.3462	100.0	76.07	76	75-125
Silver	<0.06797	100.0	90.11	90	75-125
Sodium	476,800	10,000	466,300 >LR	-105 NM	75-125
Thallium	0.3658	50.00	49.87	99	75-125
Vanadium	1.032	100.0	94.17	93	75-125
Zinc	5.542	100.0	86.98	81	75-125

NC= Not Calculated

NM= Not Meaningful: Sample concentration > 4X spike concentration

>LR= Response exceeds instrument's linear range

RPD= Relative Percent Difference

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1349MW100	Batch#:	116736
MSS Lab ID:	188802-001	Sampled:	08/16/06
Matrix:	Filtrate	Received:	08/17/06
Units:	ug/L	Prepared:	08/24/06
Diln Fac:	1.000	Analyzed:	08/25/06

Type: MSD Lab ID: QC353244

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,100	11,750	116	75-125	1	20
Antimony	100.0	96.85	97	75-125	0	20
Arsenic	100.0	100.0	91	75-125	1	20
Barium	100.0	657.2 >LR	96 NM	75-125	NC	20
Beryllium	100.0	106.8	107	75-125	1	20
Cadmium	100.0	82.78	83	75-125	2	20
Calcium	10,000	153,100 >LR	-74 NM	75-125	NC	20
Chromium	100.0	86.92	86	75-125	2	20
Cobalt	100.0	86.32	85	75-125	1	20
Copper	100.0	90.63	90	75-125	0	20
Iron	10,000	50,290 >LR	79 NM	75-125	NC	20
Lead	100.0	95.98	96	75-125	0	20
Magnesium	10,000	244,700 >LR	171 NM	75-125	NC	20
Manganese	100.0	11,500 >LR	-2530 NM	75-125	NC	20
Nickel	100.0	96.77	90	75-125	1	20
Potassium	10,000	13,100	103	75-125	2	20
Selenium	100.0	75.11	75	75-125	1	20
Silver	100.0	88.85	89	75-125	1	20
Sodium	10,000	457,400 >LR	-194 NM	75-125	NC	20
Thallium	50.00	49.40	98	75-125	1	20
Vanadium	100.0	91.69	91	75-125	3	20
Zinc	100.0	85.81	80	75-125	1	20

NC= Not Calculated

NM= Not Meaningful: Sample concentration > 4X spike concentration

>LR= Response exceeds instrument's linear range

RPD= Relative Percent Difference

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1349MW100	Units:	ug/L
Type:	Serial Dilution	Batch#:	116736
MSS Lab ID:	188802-001	Sampled:	08/16/06
Lab ID:	QC353245	Received:	08/17/06
Matrix:	Filtrate		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln	Fac	Analyzed
Aluminum	ND	100.0	ND	250.0	NC	10	5.000		08/25/06
Antimony	ND	1.000	ND	1.250	NC	10	5.000		08/25/06
Arsenic	8.896	5.000	10.32	5.000	NC	10	5.000		08/25/06
Barium	561.0	10.00	585.4	12.50	4	10	50.00		08/25/06
Beryllium	ND	2.000	ND	2.000	NC	10	5.000		08/25/06
Cadmium	ND	1.000	ND	1.250	NC	10	5.000		08/25/06
Calcium	160,500	500.0	160,900	2,500	0	10	50.00		08/25/06
Chromium	ND	10.00	ND	10.00	NC	10	5.000		08/25/06
Cobalt	ND	10.00	1.045 J	10.00	NC	10	5.000		08/25/06
Copper	ND	1.000	ND	2.500	NC	10	5.000		08/25/06
Iron	42,410	500.0	45,360	2,500	7	10	50.00		08/25/06
Lead	ND	3.000	ND	3.000	NC	10	5.000		08/25/06
Magnesium	227,600	5,000	217,200	25,000	5	10	500.0		08/25/06
Manganese	14,030	25.00	13,090	125.0	7	10	500.0		08/28/06
Nickel	ND	20.00	7.567 J	20.00	NC	10	5.000		08/25/06
Potassium	2,752	500.0	2,933	500.0	7	10	5.000		08/25/06
Selenium	ND	5.000	ND	5.000	NC	10	5.000		08/25/06
Silver	ND	1.000	ND	1.250	NC	10	5.000		08/25/06
Sodium	476,800	5,000	488,600	25,000	2	10	500.0		08/28/06
Thallium	ND	1.000	0.6472 J	1.250	NC	10	5.000		08/25/06
Vanadium	ND	10.00	ND	10.00	NC	10	5.000		08/25/06
Zinc	ND	20.00	7.926 J	20.00	NC	10	5.000		08/25/06

J= Estimated value
 NC= Not Calculated
 ND= Not Detected
 RL= Reporting Limit



Batch QC Report

Dissolved Mercury by Cold Vapor AA

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	1349MW100	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	116599
MSS Lab ID:	188802-001	Sampled:	08/16/06
Lab ID:	QC352694	Received:	08/17/06
Matrix:	Filtrate	Analyzed:	08/21/06

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
 Inst : MET05
 Seqnum: 56340782088
 File : h2415088
 IDF : 1.0
 Lab ID: 188802-001
 Matrix: Filtrate
 Batch : 116736
 Time : 24-AUG-2006 23:55
 Cal : 56340782001
 Units : ug/L

Type : PDS
 Inst : MET05
 Seqnum: 56340782092
 File : h2415092
 IDF : 1.0
 Lab ID: QC353246
 Matrix: Filtrate
 Batch : 116736
 Time : 25-AUG-2006 00:17
 Cal : 56340782001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S3780 (100X)

Analyte	MSS	Spiked	PDS	%Rec	Limits	Flags
Aluminum	13.30	10000	10460	104	75-125	u
Antimony	0.1830	100.0	83.99	84	75-125	u
Arsenic	8.896	100.0	89.80	81	75-125	u
Beryllium	ND	100.0	94.98	95	75-125	u
Cadmium	ND	100.0	74.97	75	75-125	u
Chromium	0.6128	100.0	75.76	75	75-125	u
Cobalt	0.9793	100.0	76.27	75	75-125	u
Copper	0.8633	100.0	78.56	78	75-125	u
Lead	0.09851	100.0	85.09	85	75-125	u
Molybdenum	1.101	100.0	85.42	84	75-125	u
Nickel	7.130	100.0	85.85	79	75-125	u
Potassium	2752	10000	12170	94	75-125	u
Selenium	ND	100.0	66.53	67*	75-125	u
Silver	ND	100.0	72.78	73*	75-125	u
Thallium	0.3658	50.00	44.68	89	75-125	u
Zinc	5.542	100.0	74.49	69*	75-125	u

ISTD (ICALBLK h2415005)	ICALBLK Abund	PDS Abund	%Drift
Lithium	336846	254659	-24.40
Scandium	366577	270144	-26.31
Germanium	82555	64648	-21.69
Indium	571579	391969	-31.42
Bismuth	478991	325492	-32.05

MISSING READINGS: BA CA FE MG MN NA V

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
 Inst : MET05
 Seqnum: 56340782094
 File : h2415094
 IDF : 10.0
 Lab ID: 188802-001
 Matrix: Filtrate
 Batch : 116736
 Time : 25-AUG-2006 00:28
 Cal : 56340782001
 Units : ug/L

Type : PDS
 Inst : MET05
 Seqnum: 56340782103
 File : h2415103
 IDF : 10.0
 Lab ID: QC353246
 Matrix: Filtrate
 Batch : 116736
 Time : 25-AUG-2006 01:19
 Cal : 56340782001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S3780 (1000X)

Analyte	MSS	Spiked	PDS	%Rec	Limits	Flags
Aluminum	ND	1000	958.4	96	75-125	
Antimony	ND	10.00	8.250	83	75-125	
Arsenic	1.211	10.00	9.503	83	75-125	>ib b*
Barium	56.10	10.00	62.45	64	75-125	: u
Beryllium	ND	10.00	9.196	92	75-125	
Cadmium	ND	10.00	8.341	83	75-125	
Calcium	16050	1000	16030	-2	75-125	: u
Chromium	ND	10.00	7.952	80	75-125	
Cobalt	0.1078	10.00	7.984	79	75-125	
Copper	ND	10.00	8.485	85	75-125	
Iron	4241	1000	5142	90	75-125	: u
Lead	0.09821	10.00	8.080	80	75-125	
Molybdenum	ND	10.00	8.250	83	75-125	
Nickel	0.7568	10.00	9.166	84	75-125	
Potassium	319.8	1000	1177	86	75-125	
Selenium	ND	10.00	8.510	85	75-125	
Silver	ND	10.00	7.881	79	75-125	
Thallium	0.1644	5.000	3.952	76	75-125	
Zinc	0.8893	10.00	9.949	91	75-125	

ISTD (ICALBLK h2415005)	ICALBLK Abund	PDS Abund	%Drift
Lithium	336846	297802	-11.59
Scandium	366577	320727	-12.51
Germanium	82555	73791	-10.62
Indium	571579	483556	-15.40
Bismuth	478991	405397	-15.36

MISSING READINGS: MG MN NA V

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 7470A

Type : MSS
Inst : MET04
Seqnum : 46336367014
File : 116599
IDF : 1.0
Lab ID : 188802-001
Matrix : Filtrate
Batch : 116599
Time : 21-AUG-2006 14:41
Cal : 46336367002
Caltype: WATER
Units : ug/L

Type : PDS
Inst : MET04
Seqnum : 46336367041
File : 116599
IDF : 1.0
Lab ID : QC352697
Matrix : Filtrate
Batch : 116599
Time : 21-AUG-2006 17:47
Cal : 46336367002
Caltype: WATER

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S4162 (20X)

Analyte	MSS	Spiked	PDS	%Rec	Limits	Flags
Mercury	ND	5.000	4.560	91	75-125	u

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET05
 Calnum : 56340782001
 Units : ug/L

Date : 24-AUG-2006 16:09
 X Axis : R

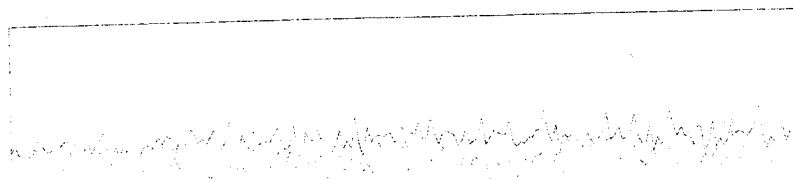
Reviewer: ---

Level	File	Segnum	Sample ID	Analyzed	Stds
L1	h2415006	56340782006	CS1	24-AUG-2006 16:14	S4004
L2	h2415007	56340782007	CS2	24-AUG-2006 16:20	S4005
L3	h2415008	56340782008	CS3	24-AUG-2006 16:26	S4006
L4	h2415009	56340782009	CS4	24-AUG-2006 16:31	S4007
L5	h2415010	56340782010	CS5	24-AUG-2006 16:37	S4001
L6	h2415011	56340782011	CS6	24-AUG-2006 16:43	S4002

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ²	%RSD	MnR ²	Fig
Aluminum		0.6786	0.6324	0.6275	0.6239	0.6407	BLNK	-5.4809	1.56966		0.6406	1.000	0.995		
Antimony	0.3369	0.3273	0.3130	0.3019	0.3101	0.3176	BLNK	-0.0477	3.16472		0.3178	1.000	0.995		
Arsenic		0.8745	0.7153	0.5595	0.5517	0.5486	BLNK	-0.1165	1.82192		0.6499	1.000	0.995		
Barium	0.2068	0.1763	0.1400	0.1215	0.1264	0.1285	BLNK	-0.0585	7.81229		0.1499	1.000	0.995		
Beryllium	0.1941	0.1923	0.1774	0.1708	0.1732	0.1761	BLNK	-0.0301	5.69865		0.1806	1.000	0.995		
Cadmium	0.6623	0.6110	0.6077	0.5570	0.5335	0.5195	BLNK	-0.0664	1.91507		0.5818	1.000	0.995		
Calcium		0.0389	0.0303	0.0231	0.0232	0.0229	BLNK	-31.949	43.6110		0.0277	1.000	0.995		
Chromium		9.7505	6.6843	4.2922	4.0465	4.2110	BLNK	-0.6442	0.24028		5.7969	1.000	0.995		
Cobalt	5.2046	4.7560	4.7394	4.6149	4.6133	4.9128	BLNK	-0.0225	0.20611		4.8068	0.999	0.995		
Copper		1.8229	1.5823	1.1826	1.1320	1.1218	BLNK	-0.2165	0.89093		1.3683	1.000	0.995		
Iron		0.1608	0.1321	0.1078	0.1121	0.1100	BLNK	-24.393	9.07068		0.1246	1.000	0.995		
Lead	1.5576	1.3911	1.3109	1.2127	1.2422	1.3051	BLNK	-0.0377	0.77396		1.3366	0.999	0.995		
Magnesium		0.0864	0.0802	0.0769	0.0811	0.0824	BLNK	-4.5733	12.1820		0.0814	1.000	0.995		
Manganese		6.8843	5.8042	5.2856	5.5718	5.5097	BLNK	-0.0871	0.18120		6.1347	1.000	0.995		
Molybdenum		1.4708	1.2344	1.0983	1.0947	1.0937	BLNK	-0.1989	0.91532		1.1983	1.000	0.995		
Nickel	2.0452	1.2913	1.2123	1.0382	0.9983	0.9851	BLNK	-0.1343	1.01313		1.2617	1.000	0.995		
Potassium		2.0010	1.4090	0.7772	0.7192	0.7218	BLNK	-87.792	1.39368		1.1257	1.000	0.995		
Selenium		0.0895	0.0613	0.0462	0.0423	0.0407	BLNK	-0.5758	24.4449		0.0560	1.000	0.995		
Silver	2.5931	2.8483	2.7247	2.5965	2.6192	2.5611	BLNK	-0.0228	0.38875		2.6572	1.000	0.995		
Sodium		2.5747	1.7397	0.9295	0.8652	0.8743	BLNK	-136.66	1.15570		1.3667	1.000	0.995		
Thallium		0.9506	0.9117	0.8033	0.8682	0.9039	BLNK	-0.0281	1.11578		0.8875	1.000	0.995		
Vanadium		5.9254	5.2396	4.4634	4.5089	4.8836	BLNK	-0.1756	0.20821		5.0042	0.998	0.995		
Zinc		3.7612	2.5154	0.7509	0.6010	0.5830	BLNK	-2.3793	1.72885		1.6423	1.000	0.995		

Tune Report

Tune File : Autotune.u



m/z:	7	89	205
Range:	20,000	50,000	50,000
Count:	14,391	33,765	20,120
Mean:	14397.2	33122.7	20127.7
RSD%:	3.03	3.19	2.76
n:	200		

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec

Oxide: 156/140 0.35%
Doubly Charged: 70/140 1.09%

Background:

m/z:	7	89	205
Cps:	61.2	25.1	20.7

m/z:	7	89	205
Height:	14,497	33,045	20,553
Axis:	7.00	89.00	205.00
W-50%:	0.60	0.55	0.60
W-10%:	0.7500	0.7500	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Tuning Parameters

===Plasma Condition===

RF Power: 1300 W
RF Matching: 1.7 V
Smpl Depth: 8 mm
Torch-H: -0.1 mm
Torch-V: 0.4 mm
Carrier Gas: 1.05 L/min
Makeup Gas: 0 L/min
Optional Gas: --- %
PeriPump1: 0.1 rps
PeriPump2: --- rps
S/C Temp: 2 degC

===Ion Lenses===

Extract 1: -150 V
Extract 2: -70 V
Einzel 1,3: -100 V
Einzel 2: 7 V
Omega Bias: -55 V
Omega (+): 5 V
Omega (-): -5 V
QP Focus: 5 V
Plate Bias: -5 V

===Q-Pole Parameters===

AMU Gain: 130
AMU Offset: 126
Axis Gain: 0.9993
Axis Offset: -0.1
QP Bias: 1.6 V

===Detector Parameters===

Discriminator: 8.8 mV
Analog HV: 1860 V
Pulse HV: 1590 V

Temp.p\$\$

P/A Factor Tuning Report

Acquired:Aug 24 2006 09:20 am

Mass[amu]	Element	P/A Factor
6	Li	0.071639
9	Be	0.080651
23	Na	Sensitivity too high
25	Mg	Sensitivity too high
26	Mg	Sensitivity too high
27	Al	0.096325
39	K	Sensitivity too high
43	Ca	0.095971
44	Ca	Sensitivity too high
45	Sc	Sensitivity too low
51	V	0.100797
52	Cr	0.101920
53	Cr	Sensitivity too low
54	Fe	Sensitivity too high
55	Mn	0.104041
57	Fe	Sensitivity too high
59	Co	0.106422
60	Ni	0.103663
63	Cu	0.106948
65	Cu	0.104915
66	Zn	0.104555
72	Ge	Sensitivity too low
75	As	0.103001
77	(As)	Sensitivity too low
82	Se	Sensitivity too low
83	(As)	Sensitivity too low
88	(Ca)	Sensitivity too low
89	Y	0.101087
95	Mo	0.102155
98	Mo	0.103616
99	(Mo)	Sensitivity too low
106	(Cd)	Sensitivity too low
108	(Cd)	Sensitivity too low
109	Ag	0.109169
111	Cd	Sensitivity too low
114	Cd	0.108070
115	In	0.106323
118	(In)	Sensitivity too high
121	Sb	0.109243
135	Ba	Sensitivity too low
137	Ba	0.106705
159	Tb	0.109176
166	Er	Sensitivity too low

Page 1

Temp.p\$\$

205	Tl	0.117216
206	(Pb)	0.114399
207	(Pb)	0.113484
208	Pb	0.116170
209	Bi	0.111481

===Detector Parameters===

Discriminator: 8.8 mV

Analog HV: 1860 V

Pulse HV: 1590 V

6020 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\06H2415a.B\001TUNE.D
Date Acquired: Aug 24 2006 03:42 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s4021
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	1.42	5.00	
59 Co	0.90	5.00	
115 In	0.45	5.00	
205 Tl	1.33	5.00	

7 Li

Mass Calib.

Actual: 7.00

Required: 6.90 - 7.10

Flag:

Peak Width

Actual: 0.55

Required: 0.90

Flag:

59 Co

Mass Calib.

Actual: 59.05

Required: 58.90 - 59.10

Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:

115 In

Mass Calib.

Actual: 115.05

Required: 114.90 - 115.10

Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:

205 T1

Mass Calib.

Actual: 205.00

Required: 204.90 - 205.10

Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06H2415a.B\005CAL
 Date Acquired: Aug 24 2006 04:09 pm
 Operator:
 Sample Name: std-blank
 Misc Info:
 Vial Number: 1101
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\602001
 Last Cal Update: Aug 24 2006 03:59 pm
 Sample Type: CalBlk
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	336845.50 P	1096.00	0.33
9 Be	35.56 P	1.93	5.41
23 Na	866887.19 A	3325.00	0.38
26 Mg	2752.22 P	18.36	0.67
27 Al	25597.78 P	209.20	0.82
39 K	461832.19 P	3325.00	0.72
44 Ca	5370.95 P	80.58	1.50
45 Sc	366576.69 P	2807.00	0.77
51 V	1393.33 P	774.90	55.62
52 Cr	4426.67 P	87.18	1.97
55 Mn	793.33 P	29.63	3.73
57 Fe	4440.00 P	80.90	1.82
59 Co	180.00 P	29.63	16.46
60 Ni	218.89 P	34.21	15.63
65 Cu	401.10 P	68.83	17.16
66 Zn	2272.22 P	65.77	2.89
72 Ge	82555.33 P	178.40	0.22
75 As	105.32 P	179.10	170.05
82 Se	38.89 P	13.47	34.64
95 Mo	358.89 P	54.19	15.10
109 Ag	96.67 P	10.00	10.35
111 Cd	57.26 P	22.57	39.42
115 In	571578.69 P	2659.00	0.47
121 Sb	172.22 P	15.75	9.15
137 Ba	85.56 P	13.88	16.22
205 Tl	241.11 P	16.78	6.96
208 Pb	466.67 P	27.28	5.85
209 Bi	478991.09 P	5055.00	1.06

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2415a.B\006CALI.D\006CALI.D#
 Date Acquired: Aug 24 2006 04:14 pm
 Operator:
 Sample Name: cs1,s4004
 Misc Info:
 Vial Number: 1102
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 24 2006 04:10 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	338942.19 P	531.70	0.16
9 Be	328.89 P	11.71	3.56
23 Na	709985.00 M	54370.00	7.66
26 Mg	17223.33 P	171.00	0.99
27 Al	141285.59 P	799.00	0.57
39 K	592775.50 P	3681.00	0.62
44 Ca	9914.47 P	285.30	2.88
45 Sc	368162.19 P	4472.00	1.21
51 V	3315.84 P	495.80	14.95
52 Cr	6217.78 P	125.40	2.02
55 Mn	3222.22 P	24.11	0.75
57 Fe	8796.67 P	37.86	0.43
59 Co	2163.33 P	123.40	5.70
60 Ni	850.00 P	20.82	2.45
65 Cu	1042.15 P	78.48	7.53
66 Zn	2878.89 P	32.72	1.14
72 Ge	83128.89 P	436.50	0.53
75 As	532.20 P	107.50	20.20
82 Se	69.78 P	13.17	18.87
95 Mo	836.67 P	26.03	3.11
109 Ag	1077.78 P	1.93	0.18
111 Cd	275.16 P	52.47	19.07
115 In	575906.88 P	1651.00	0.29
121 Sb	970.00 P	29.63	3.05
137 Ba	595.56 P	48.34	8.12
205 Tl	1278.89 P	58.53	4.58
208 Pb	3783.33 P	250.50	6.62
209 Bi	485894.41 P	3386.00	0.70

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	338942.19	0.16	336845.53	100.6	80 - 120	

45	Sc	368162.19	1.21	366576.66	100.4	80 -	120
72	Ge	83128.89	0.53	82555.34	100.7	80 -	120
115	In	575906.88	0.29	571578.75	100.8	80 -	120
209	Bi	485894.41	0.70	478991.06	101.4	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2415a.B\005CALB.D\005CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2415a.B\007CALI.D\007CALI.D#
 Date Acquired: Aug 24 2006 04:20 pm
 Operator:
 Sample Name: cs2,s4005
 Misc Info:
 Vial Number: 1103
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 24 2006 04:16 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	338741.09 P	2431.00	0.72
9 Be	651.11 P	106.10	16.30
23 Na	953871.50 A	14780.00	1.55
26 Mg	31994.44 P	532.10	1.66
27 Al	251388.91 P	1064.00	0.42
39 K	741376.69 M	22430.00	3.03
44 Ca	14413.69 P	252.60	1.75
45 Sc	370466.69 P	2198.00	0.59
51 V	4889.98 P	279.20	5.71
52 Cr	8044.44 P	283.90	3.53
55 Mn	5680.00 P	34.80	0.61
57 Fe	13263.33 P	121.00	0.91
59 Co	3924.44 P	88.78	2.26
60 Ni	1065.56 P	65.52	6.15
65 Cu	1504.31 P	84.74	5.63
66 Zn	3103.33 P	26.03	0.84
72 Ge	82509.56 P	477.30	0.58
75 As	720.72 P	215.70	29.93
82 Se	73.78 P	35.54	48.17
95 Mo	1213.33 P	90.25	7.44
109 Ag	2350.00 P	57.83	2.46
111 Cd	504.24 P	48.27	9.57
115 In	574722.19 P	2910.00	0.51
121 Sb	1881.11 P	66.69	3.55
137 Ba	1013.33 P	26.67	2.63
205 Tl	2304.44 P	78.48	3.41
208 Pb	6744.44 P	92.52	1.37
209 Bi	484827.69 P	487.00	0.10

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	338741.09	0.72	336845.53	100.6	80 - 120	

45 Sc	370466.66	0.59	366576.66	101.1	80 -	120
72 Ge	82509.56	0.58	82555.34	99.9	80 -	120
115 In	574722.19	0.51	571578.75	100.5	80 -	120
209 Bi	484827.75	0.10	478991.06	101.2	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2415a.B\005CALB.D\005CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2415a.B\008CALI.D\008CALI.D#
 Date Acquired: Aug 24 2006 04:26 pm
 Operator:
 Sample Name: cs3,s4006
 Misc Info:
 Vial Number: 1104
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 24 2006 04:22 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	341086.69 P	2185.00	0.64
9 Be	1210.00 P	20.28	1.68
23 Na	1291676.00 A	34670.00	2.68
26 Mg	59556.66 P	303.70	0.51
27 Al	469483.31 P	1628.00	0.35
39 K	1046133.00 A	15830.00	1.51
44 Ca	22498.45 P	500.90	2.23
45 Sc	371214.41 P	1017.00	0.27
51 V	8650.15 P	558.60	6.46
52 Cr	11034.44 P	300.30	2.72
55 Mn	9581.11 P	22.69	0.24
57 Fe	21814.44 P	578.30	2.65
59 Co	7823.33 P	105.00	1.34
60 Ni	2001.11 P	86.69	4.33
65 Cu	2611.96 P	13.88	0.53
66 Zn	4152.22 P	52.32	1.26
72 Ge	82536.89 P	239.60	0.29
75 As	1180.79 P	30.91	2.62
82 Se	101.11 P	12.01	11.88
95 Mo	2037.78 P	80.71	3.96
109 Ag	4497.78 P	28.35	0.63
111 Cd	1003.10 P	47.39	4.72
115 In	577395.13 P	956.90	0.17
121 Sb	3614.44 P	90.70	2.51
137 Ba	1616.67 P	31.80	1.97
205 Tl	4440.00 P	135.00	3.04
208 Pb	12770.00 P	216.70	1.70
209 Bi	487092.19 P	2975.00	0.61

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	341086.66	0.64	336845.53	101.3	80 - 120	

45	Sc	371214.44	0.27	366576.66	101.3	80 -	120
72	Ge	82536.89	0.29	82555.34	100.0	80 -	120
115	In	577395.06	0.17	571578.75	101.0	80 -	120
209	Bi	487092.22	0.61	478991.06	101.7	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2415a.B\005CALB.D\005CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2415a.B\009CALI.D\009CALI.D#
 Date Acquired: Aug 24 2006 04:31 pm
 Operator:
 Sample Name: cs4,s4007
 Misc Info:
 Vial Number: 1105
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 24 2006 04:27 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	345950.00 P	1100.00	0.32
9 Be	11818.89 P	97.54	0.83
23 Na	6975215.00 A	5865.00	0.08
26 Mg	576925.50 P	569.10	0.10
27 Al	4709040.00 A	22100.00	0.47
39 K	5832077.00 A	15380.00	0.26
44 Ca	173525.59 P	509.70	0.29
45 Sc	375203.31 P	1032.00	0.28
51 V	74616.33 P	1383.00	1.85
52 Cr	71755.55 P	676.90	0.94
55 Mn	88363.33 P	845.00	0.96
57 Fe	180158.91 P	965.90	0.54
59 Co	77150.00 P	728.00	0.94
60 Ni	17355.55 P	94.30	0.54
65 Cu	19769.71 P	417.50	2.11
66 Zn	12553.33 P	292.60	2.33
72 Ge	83587.78 P	66.75	0.08
75 As	9352.64 P	171.50	1.83
82 Se	773.11 P	19.58	2.53
95 Mo	18360.00 P	200.40	1.09
109 Ag	43407.77 P	276.90	0.64
111 Cd	9311.21 P	118.30	1.27
115 In	580668.63 P	1762.00	0.30
121 Sb	35061.11 P	207.70	0.59
137 Ba	14112.22 P	152.50	1.08
205 Tl	39436.67 P	729.20	1.85
208 Pb	119067.80 P	975.70	0.82
209 Bi	490925.59 P	1062.00	0.22

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	345950.00	0.32	336845.53	102.7	80 - 120	

45	Sc	375203.31	0.28	366576.66	102.4	80 -	120
72	Ge	83587.77	0.08	82555.34	101.3	80 -	120
115	In	580668.56	0.30	571578.75	101.6	80 -	120
209	Bi	490925.56	0.22	478991.06	102.5	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2415a.B\005CALB.D\005CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2415a.B\010CALI.D\010CALI.D#
 Date Acquired: Aug 24 2006 04:37 pm
 Operator:
 Sample Name: cs5,s4001
 Misc Info:
 Vial Number: 1106
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 24 2006 04:33 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	345050.00 P	2666.00	0.77
9 Be	119528.90 P	527.90	0.44
23 Na	64889780.00 A	1099000.00	1.69
26 Mg	6084264.00 A	47120.00	0.77
27 Al	46795140.00 A	265000.00	0.57
39 K	53946800.00 A	196000.00	0.36
44 Ca	1738749.00 A	21420.00	1.23
45 Sc	375058.91 P	4061.00	1.08
51 V	758144.81 P	4424.00	0.58
52 Cr	680396.63 P	3487.00	0.51
55 Mn	936857.00 A	6628.00	0.71
57 Fe	1885164.00 A	13580.00	0.72
59 Co	775695.50 P	2102.00	0.27
60 Ni	167860.00 P	1264.00	0.75
65 Cu	190346.50 P	553.40	0.29
66 Zn	101058.90 P	1484.00	1.47
72 Ge	84072.44 P	152.30	0.18
75 As	92759.92 P	787.60	0.85
82 Se	7111.11 P	74.88	1.05
95 Mo	184063.30 P	1540.00	0.84
109 Ag	440411.09 P	1781.00	0.40
111 Cd	89710.60 P	804.30	0.90
115 In	560482.31 P	4895.00	0.87
121 Sb	347601.09 P	2539.00	0.73
137 Ba	141632.20 P	1248.00	0.88
205 Tl	410840.00 P	4793.00	1.17
208 Pb	1175641.00 P	10380.00	0.88
209 Bi	473221.09 P	2700.00	0.57

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	345050.00	0.77	336845.53	102.4	80 - 120	

45	Sc	375058.88	1.08	366576.66	102.3	80 -	120
72	Ge	84072.45	0.18	82555.34	101.8	80 -	120
115	In	560482.25	0.87	571578.75	98.1	80 -	120
209	Bi	473221.06	0.57	478991.06	98.8	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2415a.B\005CALB.D\005CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2415a.B\011CALI.D\011CALI.D#
 Date Acquired: Aug 24 2006 04:43 pm
 Operator:
 Sample Name: cs6,s4002
 Misc Info:
 Vial Number: 1107
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 24 2006 04:38 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	336894.41 P	535.60	0.16
9 Be	237306.70 P	736.40	0.31
23 Na	128810100.00 A	385400.00	0.30
26 Mg	12135810.00 A	14820.00	0.12
27 Al	94387272.00 A	342000.00	0.36
39 K	106344300.00 A	89610.00	0.08
44 Ca	3377323.00 A	28160.00	0.83
45 Sc	368320.00 P	1431.00	0.39
51 V	1631169.00 A	19320.00	1.18
52 Cr	1406495.00 A	12360.00	0.88
55 Mn	1840231.00 A	5400.00	0.29
57 Fe	3673730.00 A	17340.00	0.47
59 Co	1640857.00 A	5731.00	0.35
60 Ni	329028.91 P	552.20	0.17
65 Cu	374659.91 P	736.70	0.20
66 Zn	194717.80 P	1464.00	0.75
72 Ge	83500.22 P	403.60	0.48
75 As	183244.00 P	631.90	0.34
82 Se	13604.44 P	71.02	0.52
95 Mo	365278.91 P	1658.00	0.45
109 Ag	855377.69 P	1993.00	0.23
111 Cd	173514.70 P	664.30	0.38
115 In	537968.69 P	1568.00	0.29
121 Sb	683452.19 P	2224.00	0.33
137 Ba	276493.31 P	1262.00	0.46
205 Tl	820244.38 P	5831.00	0.71
208 Pb	2368597.00 A	7570.00	0.32
209 Bi	453742.19 P	3617.00	0.80

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	336894.44	0.16	336845.53	100.0	80 - 120	

45	Sc	368320.00	0.39	366576.66	100.5	80 -	120
72	Ge	83500.23	0.48	82555.34	101.1	80 -	120
115	In	537968.75	0.29	571578.75	94.1	80 -	120
209	Bi	453742.22	0.80	478991.06	94.7	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2415a.B\005CALB.D\005CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

Calibration Summary

Calibration : C:\ICPCHEM\1\DATA\06G1718A.B\60200111.C
 Last Calib: Aug 24, 2006 16:44
 Cal Type : External Calibration Method
 Cal Title :

Standard Data Files

Level	DataPath	DataFile	Date Acquired
1	...hem\1\data\06h2415a.b\005calb.d\	005calb.d#	Aug 24 2006 04:09 pm
2	...hem\1\data\06h2415a.b\006cali.d\	006cali.d#	Aug 24 2006 04:14 pm
3	...hem\1\data\06h2415a.b\007cali.d\	007cali.d#	Aug 24 2006 04:20 pm
4	...hem\1\data\06h2415a.b\008cali.d\	008cali.d#	Aug 24 2006 04:26 pm
5	...hem\1\data\06h2415a.b\009cali.d\	009cali.d#	Aug 24 2006 04:31 pm
6	...hem\1\data\06h2415a.b\010cali.d\	010cali.d#	Aug 24 2006 04:37 pm
7	...hem\1\data\06h2415a.b\011cali.d\	011cali.d#	Aug 24 2006 04:43 pm
8	---		
9	---		
10	---		
11	---		
12	---		
13	---		
14	---		
15	---		
16	---		
17	---		
18	---		
19	---		
20	---		

Level	BkgPath	BkgFile	Interference Correction
1	---	---	ON
2	---	---	ON
3	---	---	ON
4	---	---	ON
5	---	---	ON
6	---	---	ON
7	---	---	ON
8	---		
9	---		
10	---		
11	---		
12	---		
13	---		
14	---		
15	---		
16	---		
17	---		
18	---		
19	---		
20	---		

Name	m/z	IS	Equation	r	Units
Li	6	---	Excluded	---	ppb
Be	9	6	$Y = 1.755E-1 * X + 5.278E-3$ (blank)	---	ppb
Na	23	45	$Y = 8.653E-1 * X + 1.182E+2$ (blank)	---	ppb
Mg	25	45	Excluded	---	ppb
Mg	26	45	$Y = 8.209E-2 * X + 3.754E-1$ (blank)	---	ppb
Al	27	45	$Y = 6.371E-1 * X + 3.492E+0$ (blank)	---	ppb
K	39	45	$Y = 7.175E-1 * X + 6.299E+1$ (blank)	---	ppb
Ca	43	45	Excluded	---	ppb
Ca	44	45	$Y = 2.293E-2 * X + 7.326E-1$ (blank)	---	ppb
Sc	45	---	Excluded	---	ppb
V	51	72	$Y = 4.803E+0 * X + 8.432E-1$ (blank)	---	ppb
Cr	52	72	$Y = 4.162E+0 * X + 2.681E+0$ (blank)	---	ppb
Cr	53	72	Excluded	---	ppb
Fe	54	72	Excluded	---	ppb
Mn	55	72	$Y = 5.519E+0 * X + 4.805E-1$ (blank)	---	ppb
Fe	57	72	$Y = 1.102E-1 * X + 2.689E+0$ (blank)	---	ppb
Co	59	72	$Y = 4.852E+0 * X + 1.090E-1$ (blank)	---	ppb
Ni	60	72	$Y = 9.870E-1 * X + 1.326E-1$ (blank)	---	ppb
Cu	63	72	Excluded	---	ppb
Cu	65	72	$Y = 1.122E+0 * X + 2.430E-1$ (blank)	---	ppb
Zn	66	72	$Y = 5.784E-1 * X + 1.376E+0$ (blank)	---	ppb
Ge	72	---	Excluded	---	ppb
As	75	72	$Y = 5.489E-1 * X + 6.394E-2$ (blank)	---	ppb
(As)	77	72	Excluded	---	ppb
Se	82	72	$Y = 4.091E-2 * X + 2.355E-2$ (blank)	---	ppb
(As)	83	72	Excluded	---	ppb
(Ca)	88	72	Excluded	---	ppb
Y	89	72	Excluded	---	ppb
Mo	95	72	$Y = 1.093E+0 * X + 2.173E-1$ (blank)	---	ppb
Mo	98	72	Excluded	---	ppb
(Mo)	99	72	Excluded	---	ppb
(Cd)	106	72	Excluded	---	ppb
(Cd)	108	72	Excluded	---	ppb
Ag	109	72	$Y = 2.572E+0 * X + 5.855E-2$ (blank)	---	ppb
Cd	111	72	$Y = 5.222E-1 * X + 3.470E-2$ (blank)	---	ppb
Cd	114	72	Excluded	---	ppb
In	115	---	Excluded	---	ppb
(In)	118	---	Excluded	---	ppb
Sb	121	115	$Y = 3.160E-1 * X + 1.506E-2$ (blank)	---	ppb
Ba	135	115	Excluded	---	ppb
Ba	137	115	$Y = 1.280E-1 * X + 7.487E-3$ (blank)	---	ppb
Tb	159	---	Excluded	---	ppb
Er	166	115	Excluded	---	ppb
Tl	205	209	$Y = 8.962E-1 * X + 2.517E-2$ (blank)	---	ppb
(Pb)	206	209	Excluded	---	ppb
(Pb)	207	209	Excluded	---	ppb
Pb	208	209	$Y = 1.292E+0 * X + 4.873E-2$ (blank)	---	ppb
Bi	209	---	Excluded	---	ppb

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56340782030
 Cal : 56340782001
 Standards: S4009

File : h2415030
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 18:28

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6406	0.6830	10000	10710	ug/L	7	10	
Antimony	0.3178	0.3058	100.0	96.73	ug/L	-3	10	
Arsenic	0.6499	0.5483	100.0	99.79	ug/L	0	10	
Barium	0.1499	0.1246	100.0	97.29	ug/L	-3	10	
Beryllium	0.1806	0.1866	100.0	106.3	ug/L	6	10	
Cadmium	0.5818	0.5186	100.0	99.25	ug/L	-1	10	
Calcium	0.0277	0.0232	10000	10100	ug/L	1	10	
Chromium	5.7969	3.8872	100.0	92.76	ug/L	-7	10	
Cobalt	4.8068	4.5236	100.0	93.22	ug/L	-7	10	
Copper	1.3683	1.1290	100.0	100.4	ug/L	0	10	
Iron	0.1246	0.1100	10000	9953	ug/L	0	10	
Lead	1.3366	1.2276	100.0	94.97	ug/L	-5	10	
Magnesium	0.0814	0.0879	10000	10700	ug/L	7	10	
Manganese	6.1347	5.0851	100.0	92.06	ug/L	-8	10	
Molybdenum	1.1983	1.0861	100.0	99.21	ug/L	-1	10	
Nickel	1.2617	0.9829	100.0	99.45	ug/L	-1	10	
Potassium	1.1257	0.7396	10000	10220	ug/L	2	10	
Selenium	0.0560	0.0410	100.0	99.71	ug/L	0	10	
Silver	2.6572	2.5188	100.0	97.90	ug/L	-2	10	
Sodium	1.1022	0.9388	10000	10710	ug/L	7	10	
Thallium	0.8875	0.8673	50.00	48.36	ug/L	-3	10	
Vanadium	5.0042	4.3215	100.0	89.80	ug/L	-10	10	
Zinc	1.6423	0.5910	100.0	99.80	ug/L	0	10	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	298533	-11.37
Scandium	366577	336070	-8.32
Germanium	82555	78733	-4.63
Indium	571579	515579	-9.80
Bismuth	478991	441916	-7.74

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56340782036
 Cal : 56340782001
 Standards: S4009

File : h2415036
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 19:02

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6406	0.6242	10000	9792	ug/L	-2	10	
Antimony	0.3178	0.3056	100.0	96.65	ug/L	-3	10	
Arsenic	0.6499	0.5437	100.0	98.94	ug/L	-1	10	
Barium	0.1499	0.1244	100.0	97.10	ug/L	-3	10	
Beryllium	0.1806	0.1742	100.0	99.21	ug/L	-1	10	
Cadmium	0.5818	0.5227	100.0	100.0	ug/L	0	10	
Calcium	0.0277	0.0231	10000	10030	ug/L	0	10	
Chromium	5.7969	3.9720	100.0	94.80	ug/L	-5	10	
Cobalt	4.8068	4.5548	100.0	93.86	ug/L	-6	10	
Copper	1.3683	1.1178	100.0	99.37	ug/L	-1	10	
Iron	0.1246	0.1114	10000	10080	ug/L	1	10	
Lead	1.3366	1.2261	100.0	94.86	ug/L	-5	10	
Magnesium	0.0814	0.0806	10000	9812	ug/L	-2	10	
Manganese	6.1347	5.2800	100.0	95.59	ug/L	-4	10	
Molybdenum	1.1983	1.0806	100.0	98.71	ug/L	-1	10	
Nickel	1.2617	0.9771	100.0	98.85	ug/L	-1	10	
Potassium	1.1257	0.7119	10000	9834	ug/L	-2	10	
Selenium	0.0560	0.0410	100.0	99.56	ug/L	0	10	
Silver	2.6572	2.5658	100.0	99.72	ug/L	0	10	
Sodium	1.1022	0.8616	10000	9821	ug/L	-2	10	
Thallium	0.8875	0.8620	50.00	48.06	ug/L	-4	10	
Vanadium	5.0042	4.4329	100.0	92.12	ug/L	-8	10	
Zinc	1.6423	0.5926	100.0	100.1	ug/L	0	10	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	309546	-8.10
Scandium	366577	348538	-4.92
Germanium	82555	78038	-5.47
Indium	571579	520020	-9.02
Bismuth	478991	437778	-8.60

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56340782053
 Cal : 56340782001
 Standards: S4009

File : h2415053
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 20:37

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6406	0.7560	10000	11860	ug/L	19	10	c+ ***
Antimony	0.3178	0.2983	100.0	94.37	ug/L	-6	10	
Arsenic	0.6499	0.5471	100.0	99.56	ug/L	0	10	
Barium	0.1499	0.1187	100.0	92.65	ug/L	-7	10	
Beryllium	0.1806	0.2007	100.0	114.4	ug/L	14	10	c+ ***
Cadmium	0.5818	0.4961	100.0	94.94	ug/L	-5	10	
Calcium	0.0277	0.0230	10000	9990	ug/L	0	10	
Chromium	5.7969	3.6585	100.0	87.26	ug/L	-13	10	c- ***
Cobalt	4.8068	4.3782	100.0	90.22	ug/L	-10	10	
Copper	1.3683	1.0950	100.0	97.34	ug/L	-3	10	
Iron	0.1246	0.1049	10000	9489	ug/L	-5	10	
Lead	1.3366	1.2164	100.0	94.11	ug/L	-6	10	
Magnesium	0.0814	0.0971	10000	11820	ug/L	18	10	c+ ***
Manganese	6.1347	5.1249	100.0	92.78	ug/L	-7	10	
Molybdenum	1.1983	1.0289	100.0	93.98	ug/L	-6	10	
Nickel	1.2617	0.9539	100.0	96.50	ug/L	-4	10	
Potassium	1.1257	0.7653	10000	10580	ug/L	6	10	
Selenium	0.0560	0.0400	100.0	97.17	ug/L	-3	10	
Silver	2.6572	2.4114	100.0	93.72	ug/L	-6	10	
Sodium	1.1022	1.0685	10000	12210	ug/L	22	10	c+ ***
Thallium	0.8875	0.8720	50.00	48.62	ug/L	-3	10	
Vanadium	5.0042	4.4281	100.0	92.02	ug/L	-8	10	
Zinc	1.6423	0.5731	100.0	96.70	ug/L	-3	10	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	357041	6.00
Scandium	366577	392718	7.13
Germanium	82555	96949	17.44
Indium	571579	610742	6.85
Bismuth	478991	489814	2.26

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56340782068
 Cal : 56340782001
 Standards: S4009

File : h2415068
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 22:01

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6406	0.7506	10000	11780	ug/L	18	10	c+ ***
Antimony	0.3178	0.3044	100.0	96.30	ug/L	-4	10	
Arsenic	0.6499	0.5462	100.0	99.40	ug/L	-1	10	
Barium	0.1499	0.1225	100.0	95.61	ug/L	-4	10	
Beryllium	0.1806	0.1988	100.0	113.2	ug/L	13	10	c+ ***
Cadmium	0.5818	0.5045	100.0	96.55	ug/L	-3	10	
Calcium	0.0277	0.0229	10000	9946	ug/L	-1	10	
Chromium	5.7969	3.6615	100.0	87.33	ug/L	-13	10	c- ***
Cobalt	4.8068	4.3685	100.0	90.02	ug/L	-10	10	
Copper	1.3683	1.0968	100.0	97.50	ug/L	-3	10	
Iron	0.1246	0.1053	10000	9530	ug/L	-5	10	
Lead	1.3366	1.2109	100.0	93.68	ug/L	-6	10	
Magnesium	0.0814	0.0965	10000	11750	ug/L	18	10	c+ ***
Manganese	6.1347	4.9110	100.0	88.90	ug/L	-11	10	c- ***
Molybdenum	1.1983	1.0233	100.0	93.47	ug/L	-7	10	
Nickel	1.2617	0.9527	100.0	96.38	ug/L	-4	10	
Potassium	1.1257	0.7704	10000	10650	ug/L	7	10	
Selenium	0.0560	0.0398	100.0	96.61	ug/L	-3	10	
Silver	2.6572	2.4397	100.0	94.82	ug/L	-5	10	
Sodium	1.1022	1.0406	10000	11890	ug/L	19	10	c+ ***
Thallium	0.8875	0.8716	50.00	48.60	ug/L	-3	10	
Vanadium	5.0042	4.1773	100.0	86.80	ug/L	-13	10	c- ***
Zinc	1.6423	0.5703	100.0	96.21	ug/L	-4	10	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	316576	-6.02
Scandium	366577	338731	-7.60
Germanium	82555	82845	0.35
Indium	571579	528366	-7.56
Bismuth	478991	449277	-6.20

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Segnum : 56340782077
 Cal : 56340782001
 Standards: S4009

File : h2415077
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 22:51

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6406	0.6927	10000	10870	ug/L	9	10	
Antimony	0.3178	0.2996	100.0	94.76	ug/L	-5	10	
Arsenic	0.6499	0.5418	100.0	98.60	ug/L	-1	10	
Barium	0.1499	0.1217	100.0	95.00	ug/L	-5	10	
Beryllium	0.1806	0.1913	100.0	109.0	ug/L	9	10	
Cadmium	0.5818	0.5000	100.0	95.68	ug/L	-4	10	
Calcium	0.0277	0.0226	10000	9818	ug/L	-2	10	
Chromium	5.7969	3.7684	100.0	89.90	ug/L	-10	10	
Cobalt	4.8068	4.4184	100.0	91.05	ug/L	-9	10	
Copper	1.3683	1.0939	100.0	97.24	ug/L	-3	10	
Iron	0.1246	0.1075	10000	9729	ug/L	-3	10	
Lead	1.3366	1.1966	100.0	92.57	ug/L	-7	10	
Magnesium	0.0814	0.0894	10000	10880	ug/L	9	10	
Manganese	6.1347	4.9116	100.0	88.91	ug/L	-11	10	c- ***
Molybdenum	1.1983	1.0384	100.0	94.85	ug/L	-5	10	
Nickel	1.2617	0.9634	100.0	97.47	ug/L	-3	10	
Potassium	1.1257	0.7417	10000	10250	ug/L	3	10	
Selenium	0.0560	0.0397	100.0	96.58	ug/L	-3	10	
Silver	2.6572	2.4325	100.0	94.54	ug/L	-5	10	
Sodium	1.1022	0.9540	10000	10890	ug/L	9	10	
Thallium	0.8875	0.8580	50.00	47.84	ug/L	-4	10	
Vanadium	5.0042	4.1723	100.0	86.70	ug/L	-13	10	c- ***
Zinc	1.6423	0.5741	100.0	96.87	ug/L	-3	10	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	299719	-11.02
Scandium	366577	337550	-7.92
Germanium	82555	79502	-3.70
Indium	571579	516408	-9.65
Bismuth	478991	433537	-9.49

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56340782097
 Cal : 56340782001
 Standards: S4009

File : h2415097
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 00:45

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6406	0.6886	10000	10800	ug/L	8	10	
Antimony	0.3178	0.2992	100.0	94.65	ug/L	-5	10	
Arsenic	0.6499	0.5372	100.0	97.75	ug/L	-2	10	
Barium	0.1499	0.1222	100.0	95.37	ug/L	-5	10	
Beryllium	0.1806	0.1826	100.0	104.0	ug/L	4	10	
Cadmium	0.5818	0.5042	100.0	96.48	ug/L	-4	10	
Calcium	0.0277	0.0226	10000	9827	ug/L	-2	10	
Chromium	5.7969	3.7893	100.0	90.41	ug/L	-10	10	
Cobalt	4.8068	4.4240	100.0	91.16	ug/L	-9	10	
Copper	1.3683	1.0958	100.0	97.41	ug/L	-3	10	
Iron	0.1246	0.1082	10000	9791	ug/L	-2	10	
Lead	1.3366	1.1923	100.0	92.24	ug/L	-8	10	
Magnesium	0.0814	0.0894	10000	10880	ug/L	9	10	
Manganese	6.1347	4.9933	100.0	90.39	ug/L	-10	10	
Molybdenum	1.1983	1.0243	100.0	93.55	ug/L	-6	10	
Nickel	1.2617	0.9655	100.0	97.68	ug/L	-2	10	
Potassium	1.1257	0.7380	10000	10200	ug/L	2	10	
Selenium	0.0560	0.0397	100.0	96.48	ug/L	-4	10	
Silver	2.6572	2.4412	100.0	94.88	ug/L	-5	10	
Sodium	1.1022	0.9495	10000	10840	ug/L	8	10	
Thallium	0.8875	0.8573	50.00	47.80	ug/L	-4	10	
Vanadium	5.0042	4.2177	100.0	87.64	ug/L	-12	10	c- ***
Zinc	1.6423	0.5736	100.0	96.79	ug/L	-3	10	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	296080	-12.10
Scandium	366577	320631	-12.53
Germanium	82555	74168	-10.16
Indium	571579	487109	-14.78
Bismuth	478991	422734	-11.74

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56340782112
 Cal : 56340782001
 Standards: S4009

File : h2415112
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 02:09

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6406	0.7006	10000	10990	ug/L	10	10	
Antimony	0.3178	0.3008	100.0	95.16	ug/L	-5	10	
Arsenic	0.6499	0.5360	100.0	97.54	ug/L	-2	10	
Barium	0.1499	0.1223	100.0	95.48	ug/L	-5	10	
Beryllium	0.1806	0.1890	100.0	107.7	ug/L	8	10	
Cadmium	0.5818	0.4969	100.0	95.10	ug/L	-5	10	
Calcium	0.0277	0.0226	10000	9834	ug/L	-2	10	
Chromium	5.7969	3.7773	100.0	90.12	ug/L	-10	10	
Cobalt	4.8068	4.4012	100.0	90.69	ug/L	-9	10	
Copper	1.3683	1.0825	100.0	96.23	ug/L	-4	10	
Iron	0.1246	0.1080	10000	9769	ug/L	-2	10	
Lead	1.3366	1.2059	100.0	93.30	ug/L	-7	10	
Magnesium	0.0814	0.0910	10000	11080	ug/L	11	10	c+ ***
Manganese	6.1347	4.9736	100.0	90.04	ug/L	-10	10	
Molybdenum	1.1983	1.0097	100.0	92.22	ug/L	-8	10	
Nickel	1.2617	0.9544	100.0	96.56	ug/L	-3	10	
Potassium	1.1257	0.7489	10000	10350	ug/L	4	10	
Selenium	0.0560	0.0393	100.0	95.52	ug/L	-4	10	
Silver	2.6572	2.4267	100.0	94.31	ug/L	-6	10	
Sodium	1.1022	0.9874	10000	11270	ug/L	13	10	c+ ***
Thallium	0.8875	0.8686	50.00	48.43	ug/L	-3	10	
Vanadium	5.0042	4.1962	100.0	87.20	ug/L	-13	10	c- ***
Zinc	1.6423	0.5665	100.0	95.56	ug/L	-4	10	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	315022	-6.48
Scandium	366577	342352	-6.61
Germanium	82555	79807	-3.33
Indium	571579	516312	-9.67
Bismuth	478991	442422	-7.63

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56340782126
 Cal : 56340782001
 Standards: S4009

File : h2415126
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 03:28

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6406	0.7013	10000	11000	ug/L	10	10	
Antimony	0.3178	0.3080	100.0	97.43	ug/L	-3	10	
Arsenic	0.6499	0.5386	100.0	98.02	ug/L	-2	10	
Barium	0.1499	0.1262	100.0	98.56	ug/L	-1	10	
Beryllium	0.1806	0.1829	100.0	104.2	ug/L	4	10	
Cadmium	0.5818	0.5136	100.0	98.29	ug/L	-2	10	
Calcium	0.0277	0.0234	10000	10160	ug/L	2	10	
Chromium	5.7969	3.9040	100.0	93.16	ug/L	-7	10	
Cobalt	4.8068	4.4643	100.0	91.99	ug/L	-8	10	
Copper	1.3683	1.0960	100.0	97.43	ug/L	-3	10	
Iron	0.1246	0.1114	10000	10080	ug/L	1	10	
Lead	1.3366	1.2169	100.0	94.14	ug/L	-6	10	
Magnesium	0.0814	0.0918	10000	11180	ug/L	12	10	c+ ***
Manganese	6.1347	5.1308	100.0	92.88	ug/L	-7	10	
Molybdenum	1.1983	1.0252	100.0	93.64	ug/L	-6	10	
Nickel	1.2617	0.9668	100.0	97.81	ug/L	-2	10	
Potassium	1.1257	0.7519	10000	10390	ug/L	4	10	
Selenium	0.0560	0.0397	100.0	96.42	ug/L	-4	10	
Silver	2.6572	2.4671	100.0	95.88	ug/L	-4	10	
Sodium	1.1022	0.9973	10000	11390	ug/L	14	10	c+ ***
Thallium	0.8875	0.8713	50.00	48.58	ug/L	-3	10	
Vanadium	5.0042	4.3205	100.0	89.78	ug/L	-10	10	
Zinc	1.6423	0.5751	100.0	97.05	ug/L	-3	10	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	287181	-14.74
Scandium	366577	301214	-17.83
Germanium	82555	68372	-17.18
Indium	571579	449540	-21.35
Bismuth	478991	400857	-16.31

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56340782016
 Cal : 56340782001

File : h2415016
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 17:10

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	50.00	2.123	ug/L	
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.3352]	0.5000	0.09029	ug/L	!ib
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	[0.01573]	0.2500	0.009674	ug/L	!ib
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	[0.1354]	0.5000	0.03860	ug/L	!ib
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	[0.01657]	0.2500	0.005283	ug/L	!ib
Magnesium	ND	50.00	3.054	ug/L	
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	ND	0.2500	0.01266	ug/L	
Sodium	[18.95]	100.0	9.919	ug/L	!ib
Thallium	[0.1479]	0.2500	0.02100	ug/L	!ib
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	366672	8.85
Scandium	366577	390434	6.51
Germanium	82555	87125	5.54
Indium	571579	594888	4.08
Bismuth	478991	489444	2.18

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56340782033
 Cal : 56340782001

File : h2415033
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 18:45

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[7.299]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.2835]	0.5000	0.09029	ug/L	!ib
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	ND	0.2500	0.009674	ug/L	
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	[19.99]	50.00	7.739	ug/L	!ib
Chromium	[0.08906]	0.5000	0.03860	ug/L	!ib
Cobalt	[0.009526]	0.2500	0.008548	ug/L	!ib
Copper	ND	0.5000	0.04426	ug/L	
Iron	[18.20]	50.00	6.980	ug/L	!ib
Lead	[0.01591]	0.2500	0.005283	ug/L	!ib
Magnesium	[7.369]	50.00	3.054	ug/L	!ib
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	0.7295	0.5000	0.4994	ug/L	ib ***
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	[7.264]	50.00	6.379	ug/L	!ib
Selenium	ND	0.5000	0.1891	ug/L	
Silver	ND	0.2500	0.01266	ug/L	
Sodium	[61.96]	100.0	9.919	ug/L	!ib
Thallium	[0.07468]	0.2500	0.02100	ug/L	!ib
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	307454	-8.73
Scandium	366577	342692	-6.52
Germanium	82555	77666	-5.92
Indium	571579	534508	-6.49
Bismuth	478991	448957	-6.27

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56340782039
 Cal : 56340782001

File : h2415039
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 19:19

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[5.602]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.3531]	0.5000	0.09029	ug/L	!ib
Barium	[0.02415]	0.2500	0.02391	ug/L	!ib
Beryllium	[0.01814]	0.2500	0.009674	ug/L	!ib
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	[14.06]	50.00	7.739	ug/L	!ib
Chromium	[0.1008]	0.5000	0.03860	ug/L	!ib
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	[15.28]	50.00	6.980	ug/L	!ib
Lead	[0.01784]	0.2500	0.005283	ug/L	!ib
Magnesium	[5.874]	50.00	3.054	ug/L	!ib
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	[0.2339]	0.5000	0.1891	ug/L	!ib
Silver	[0.01677]	0.2500	0.01266	ug/L	!ib
Sodium	[71.50]	100.0	9.919	ug/L	!ib
Thallium	[0.09232]	0.2500	0.02100	ug/L	!ib
Vanadium	[0.1630]	0.5000	0.08283	ug/L	!ib
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	328348	-2.52
Scandium	366577	361759	-1.31
Germanium	82555	80850	-2.07
Indium	571579	556692	-2.60
Bismuth	478991	457317	-4.52

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56340782056
 Cal : 56340782001

File : h2415056
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 20:54

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[19.04]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.3473]	0.5000	0.09029	ug/L	!ib
Barium	[0.06090]	0.2500	0.02391	ug/L	!ib
Beryllium	[0.04520]	0.2500	0.009674	ug/L	!ib
Cadmium	[0.1129]	0.2500	0.04566	ug/L	!ib
Calcium	[47.56]	50.00	7.739	ug/L	!ib
Chromium	ND	0.5000	0.03860	ug/L	
Cobalt	[0.04187]	0.2500	0.008548	ug/L	!ib
Copper	[0.06811]	0.5000	0.04426	ug/L	!ib
Iron	[31.91]	50.00	6.980	ug/L	!ib
Lead	[0.04008]	0.2500	0.005283	ug/L	!ib
Magnesium	[36.77]	50.00	3.054	ug/L	!ib
Manganese	[0.2314]	0.2500	0.01838	ug/L	!ib
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	[0.04364]	0.2500	0.03982	ug/L	!ib
Potassium	[12.77]	50.00	6.379	ug/L	!ib
Selenium	[0.2083]	0.5000	0.1891	ug/L	!ib
Silver	[0.03768]	0.2500	0.01266	ug/L	!ib
Sodium	332.5	100.0	9.919	ug/L	ib ***
Thallium	[0.1272]	0.2500	0.02100	ug/L	!ib
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	344809	2.36
Scandium	366577	374512	2.16
Germanium	82555	90766	9.95
Indium	571579	603490	5.58
Bismuth	478991	496312	3.62

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Segnum : 56340782070
 Cal : 56340782001

File : h2415070
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 22:12

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[9.409]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.2812]	0.5000	0.09029	ug/L	!ib
Barium	[0.04398]	0.2500	0.02391	ug/L	!ib
Beryllium	[0.03870]	0.2500	0.009674	ug/L	!ib
Cadmium	[0.07099]	0.2500	0.04566	ug/L	!ib
Calcium	[18.73]	50.00	7.739	ug/L	!ib
Chromium	ND	0.5000	0.03860	ug/L	
Cobalt	[0.02462]	0.2500	0.008548	ug/L	!ib
Copper	[0.04590]	0.5000	0.04426	ug/L	!ib
Iron	[12.62]	50.00	6.980	ug/L	!ib
Lead	[0.04060]	0.2500	0.005283	ug/L	!ib
Magnesium	[19.05]	50.00	3.054	ug/L	!ib
Manganese	[0.1562]	0.2500	0.01838	ug/L	!ib
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	[0.02628]	0.2500	0.01266	ug/L	!ib
Sodium	185.4	100.0	9.919	ug/L	ib ***
Thallium	[0.1278]	0.2500	0.02100	ug/L	!ib
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	326810	-2.98
Scandium	366577	348477	-4.94
Germanium	82555	84121	1.90
Indium	571579	563317	-1.45
Bismuth	478991	467719	-2.35

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56340782080
 Cal : 56340782001

File : h2415080
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 23:08

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[5.733]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.2895]	0.5000	0.09029	ug/L	!ib
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	[0.01458]	0.2500	0.009674	ug/L	!ib
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	[12.01]	50.00	7.739	ug/L	!ib
Chromium	[0.05599]	0.5000	0.03860	ug/L	!ib
Cobalt	[0.01014]	0.2500	0.008548	ug/L	!ib
Copper	ND	0.5000	0.04426	ug/L	
Iron	[12.87]	50.00	6.980	ug/L	!ib
Lead	[0.01247]	0.2500	0.005283	ug/L	!ib
Magnesium	[7.028]	50.00	3.054	ug/L	!ib
Manganese	[0.03368]	0.2500	0.01838	ug/L	!ib
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	ND	0.2500	0.01266	ug/L	
Sodium	[50.51]	100.0	9.919	ug/L	!ib
Thallium	[0.05956]	0.2500	0.02100	ug/L	!ib
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	312018	-7.37
Scandium	366577	345521	-5.74
Germanium	82555	81117	-1.74
Indium	571579	543857	-4.85
Bismuth	478991	445530	-6.99

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Segnum : 56340782099
 Cal : 56340782001

File : h2415099
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 00:56

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	50.00	2.123	ug/L	
Antimony	[0.03406]	0.2500	0.03394	ug/L	!ib
Arsenic	[0.1516]	0.5000	0.09029	ug/L	!ib
Barium	[0.03157]	0.2500	0.02391	ug/L	!ib
Beryllium	[0.02895]	0.2500	0.009674	ug/L	!ib
Cadmium	[0.07339]	0.2500	0.04566	ug/L	!ib
Calcium	ND	50.00	7.739	ug/L	
Chromium	ND	0.5000	0.03860	ug/L	
Cobalt	[0.01257]	0.2500	0.008548	ug/L	!ib
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	[0.02252]	0.2500	0.005283	ug/L	!ib
Magnesium	[3.590]	50.00	3.054	ug/L	!ib
Manganese	[0.2156]	0.2500	0.01838	ug/L	!ib
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	[0.01576]	0.2500	0.01266	ug/L	!ib
Sodium	ND	100.0	9.919	ug/L	
Thallium	[0.1302]	0.2500	0.02100	ug/L	!ib
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	295061	-12.40
Scandium	366577	320166	-12.66
Germanium	82555	72872	-11.73
Indium	571579	501067	-12.34
Bismuth	478991	423976	-11.49

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56340782114
 Cal : 56340782001

File : h2415114
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 02:20

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[3.005]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	0.5798	0.5000	0.09029	ug/L	ib ***
Barium	[0.03264]	0.2500	0.02391	ug/L	!ib
Beryllium	[0.03369]	0.2500	0.009674	ug/L	!ib
Cadmium	[0.08275]	0.2500	0.04566	ug/L	!ib
Calcium	ND	50.00	7.739	ug/L	
Chromium	[0.2053]	0.5000	0.03860	ug/L	!ib
Cobalt	[0.02724]	0.2500	0.008548	ug/L	!ib
Copper	[0.04855]	0.5000	0.04426	ug/L	!ib
Iron	ND	50.00	6.980	ug/L	
Lead	[0.04510]	0.2500	0.005283	ug/L	!ib
Magnesium	[11.82]	50.00	3.054	ug/L	!ib
Manganese	0.2711	0.2500	0.01838	ug/L	ib ***
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	[0.02263]	0.2500	0.01266	ug/L	!ib
Sodium	[46.47]	100.0	9.919	ug/L	!ib
Thallium	[0.09725]	0.2500	0.02100	ug/L	!ib
Vanadium	[0.09390]	0.5000	0.08283	ug/L	!ib
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	317920	-5.62
Scandium	366577	343380	-6.33
Germanium	82555	79910	-3.20
Indium	571579	538009	-5.87
Bismuth	478991	449660	-6.12

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56340782128
 Cal : 56340782001

File : h2415128
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 03:39

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[2.656]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	0.5480	0.5000	0.09029	ug/L	ib ***
Barium	[0.05811]	0.2500	0.02391	ug/L	!ib
Beryllium	[0.04799]	0.2500	0.009674	ug/L	!ib
Cadmium	[0.07511]	0.2500	0.04566	ug/L	!ib
Calcium	ND	50.00	7.739	ug/L	
Chromium	[0.09652]	0.5000	0.03860	ug/L	!ib
Cobalt	[0.03166]	0.2500	0.008548	ug/L	!ib
Copper	[0.05604]	0.5000	0.04426	ug/L	!ib
Iron	ND	50.00	6.980	ug/L	
Lead	[0.04480]	0.2500	0.005283	ug/L	!ib
Magnesium	[13.73]	50.00	3.054	ug/L	!ib
Manganese	[0.1409]	0.2500	0.01838	ug/L	!ib
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	[0.2807]	0.5000	0.1891	ug/L	!ib
Silver	[0.04128]	0.2500	0.01266	ug/L	!ib
Sodium	[14.71]	100.0	9.919	ug/L	!ib
Thallium	[0.08668]	0.2500	0.02100	ug/L	!ib
Vanadium	[0.1466]	0.5000	0.08283	ug/L	!ib
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	291944	-13.33
Scandium	366577	307571	-16.10
Germanium	82555	70469	-14.64
Indium	571579	476316	-16.67
Bismuth	478991	413726	-13.63

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56340782017 File : h2415017
 Cal : 56340782001 Caldate: 24-AUG-2006
 Standards: S4011, S3310

IDF : 1.0
 Time : 24-AUG-2006 17:16

Analyte	Quant	RL	Units	Flags
Antimony	2.129	0.2500	ug/L	
Arsenic	[0.4137]	0.5000	ug/L	
Barium	1.012	0.2500	ug/L	
Beryllium	[0.04513]	0.2500	ug/L	
Cadmium	[0.1426]	0.2500	ug/L	
Chromium	1.095	0.5000	ug/L	
Cobalt	2.481	0.2500	ug/L	
Copper	1.516	0.5000	ug/L	
Lead	1.195	0.2500	ug/L	
Manganese	0.9071	0.2500	ug/L	
Nickel	1.275	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1378]	0.2500	ug/L	
Thallium	[0.1510]	0.2500	ug/L	
Vanadium	[0.1056]	0.5000	ug/L	
Zinc	2.235	0.5000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	102000	ug/L	102
Calcium	300000	295500	ug/L	99
Iron	250000	230400	ug/L	92
Magnesium	100000	100700	ug/L	101
Molybdenum	2000	1906	ug/L	95
Potassium	100000	97660	ug/L	98
Sodium	250000	243100	ug/L	97

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	311213	-7.61
Scandium	366577	359864	-1.83
Germanium	82555	84081	1.85
Indium	571579	489173	-14.42
Bismuth	478991	386249	-19.36

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Segnum : 56340782018 File : h2415018
 Cal : 56340782001 Caldate: 24-AUG-2006
 Standards: S4012, S3310

IDF : 1.0
 Time : 24-AUG-2006 17:21

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	108400	ug/L	8		
Arsenic	100.0	100.3	ug/L	0	20	
Cadmium	100.0	85.95	ug/L	-14	20	
Calcium	300000	296400	ug/L	-1		
Chromium	200.0	198.4	ug/L	-1	20	
Cobalt	200.0	197.9	ug/L	-1	20	
Copper	200.0	187.9	ug/L	-6	20	
Iron	250000	227100	ug/L	-9		
Magnesium	100000	106900	ug/L	7		
Manganese	200.0	196.1	ug/L	-2	20	
Molybdenum	2000	1905	ug/L	-5		
Nickel	200.0	190.9	ug/L	-5	20	
Potassium	100000	100500	ug/L	1		
Selenium	100.0	88.06	ug/L	-12	20	
Silver	50.00	44.30	ug/L	-11	20	
Sodium	250000	259300	ug/L	4		
Vanadium	200.0	203.6	ug/L	2	20	
Zinc	100.0	100.5	ug/L	1	20	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Scandium	366577	341021	-6.97
Germanium	82555	83180	0.76

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56340782027
 Cal : 56340782001
 Standards: S4011, S3310

File : h2415027
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 18:12

Analyte	Quant	RL	Units	Flags
Antimony	2.099	0.2500	ug/L	
Arsenic	0.5818	0.5000	ug/L	
Barium	0.9801	0.2500	ug/L	
Beryllium	[0.05229]	0.2500	ug/L	
Cadmium	[0.1352]	0.2500	ug/L	
Chromium	1.115	0.5000	ug/L	
Cobalt	2.466	0.2500	ug/L	
Copper	1.517	0.5000	ug/L	
Lead	1.180	0.2500	ug/L	
Manganese	0.9134	0.2500	ug/L	
Nickel	1.359	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1298]	0.2500	ug/L	
Thallium	[0.05144]	0.2500	ug/L	
Vanadium	[0.1241]	0.5000	ug/L	
Zinc	2.265	0.5000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	107600	ug/L	108
Calcium	300000	296800	ug/L	99
Iron	250000	228300	ug/L	91
Magnesium	100000	105900	ug/L	106
Molybdenum	2000	1918	ug/L	96
Potassium	100000	100100	ug/L	100
Sodium	250000	259100	ug/L	104

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	292002	-13.31
Scandium	366577	336201	-8.29
Germanium	82555	81129	-1.73
Indium	571579	470977	-17.60
Bismuth	478991	378844	-20.91

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56340782028
 Cal : 56340782001
 Standards: S4012, S3310

File : h2415028
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 18:17

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	111200	ug/L	11		
Arsenic	100.0	99.76	ug/L	0	20	
Cadmium	100.0	85.65	ug/L	-14	20	
Calcium	300000	294500	ug/L	-2		
Chromium	200.0	194.0	ug/L	-3	20	
Cobalt	200.0	195.5	ug/L	-2	20	
Copper	200.0	187.4	ug/L	-6	20	
Iron	250000	221600	ug/L	-11		
Magnesium	100000	109500	ug/L	10		
Manganese	200.0	193.2	ug/L	-3	20	
Molybdenum	2000	1886	ug/L	-6		
Nickel	200.0	189.4	ug/L	-5	20	
Potassium	100000	101600	ug/L	2		
Selenium	100.0	88.19	ug/L	-12	20	
Silver	50.00	44.44	ug/L	-11	20	
Sodium	250000	266800	ug/L	7		
Vanadium	200.0	200.7	ug/L	0	20	
Zinc	100.0	99.34	ug/L	-1	20	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Scandium	366577	324293	-11.53
Germanium	82555	80828	-2.09

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56340782073
 Cal : 56340782001
 Standards: S4011, S3310

File : h2415073
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 22:29

Analyte	Quant	RL	Units	Flags
Antimony	2.021	0.2500	ug/L	
Arsenic	[0.4836]	0.5000	ug/L	
Barium	0.9191	0.2500	ug/L	
Beryllium	[0.04094]	0.2500	ug/L	
Cadmium	[0.1971]	0.2500	ug/L	
Chromium	1.033	0.5000	ug/L	
Cobalt	2.388	0.2500	ug/L	
Copper	1.519	0.5000	ug/L	
Lead	1.196	0.2500	ug/L	
Manganese	0.9953	0.2500	ug/L	
Nickel	1.388	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1327]	0.2500	ug/L	
Thallium	[0.08988]	0.2500	ug/L	
Vanadium	[0.06302]	0.5000	ug/L	
Zinc	2.125	0.5000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	115300	ug/L	115
Calcium	300000	286800	ug/L	96
Iron	250000	212700	ug/L	85
Magnesium	100000	113800	ug/L	114
Molybdenum	2000	1833	ug/L	92
Potassium	100000	102400	ug/L	102
Sodium	250000	274200	ug/L	110

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	298629	-11.35
Scandium	366577	343660	-6.25
Germanium	82555	87885	6.46
Indium	571579	499909	-12.54
Bismuth	478991	382931	-20.05

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56340782074
 Cal : 56340782001
 Standards: S4012, S3310

File : h2415074
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 22:35

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	116000	ug/L	16		
Arsenic	100.0	97.56	ug/L	-2	20	
Cadmium	100.0	82.88	ug/L	-17	20	
Calcium	300000	283800	ug/L	-5		
Chromium	200.0	180.0	ug/L	-10	20	
Cobalt	200.0	185.4	ug/L	-7	20	
Copper	200.0	178.0	ug/L	-11	20	
Iron	250000	208100	ug/L	-17		
Magnesium	100000	114300	ug/L	14		
Manganese	200.0	178.1	ug/L	-11	20	
Molybdenum	2000	1812	ug/L	-9		
Nickel	200.0	179.6	ug/L	-10	20	
Potassium	100000	102100	ug/L	2		
Selenium	100.0	84.78	ug/L	-15	20	
Silver	50.00	41.99	ug/L	-16	20	
Sodium	250000	274600	ug/L	10		
Vanadium	200.0	186.4	ug/L	-7	20	
Zinc	100.0	94.77	ug/L	-5	20	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Scandium	366577	335399	-8.51
Germanium	82555	86927	5.30

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56340782130
 Cal : 56340782001
 Standards: S4011, S3310

File : h2415130
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 03:50

Analyte	Quant	RL	Units	Flags
Antimony	2.086	0.2500	ug/L	
Arsenic	0.7242	0.5000	ug/L	
Barium	0.9328	0.2500	ug/L	
Beryllium	[0.007509]	0.2500	ug/L	
Cadmium	[0.1063]	0.2500	ug/L	
Chromium	1.096	0.5000	ug/L	
Cobalt	2.416	0.2500	ug/L	
Copper	1.454	0.5000	ug/L	
Lead	1.133	0.2500	ug/L	
Manganese	0.9927	0.2500	ug/L	
Nickel	1.277	0.2500	ug/L	
Selenium	0.5260	0.5000	ug/L	
Silver	[0.1129]	0.2500	ug/L	
Thallium	[0.06881]	0.2500	ug/L	
Vanadium	[0.1327]	0.5000	ug/L	
Zinc	2.193	0.5000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	108900	ug/L	109
Calcium	300000	292900	ug/L	98
Iron	250000	224100	ug/L	90
Magnesium	100000	107300	ug/L	107
Molybdenum	2000	1888	ug/L	94
Potassium	100000	100800	ug/L	101
Sodium	250000	265100	ug/L	106

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	252539	-25.03
Scandium	366577	286572	-21.82
Germanium	82555	68345	-17.21
Indium	571579	408101	-28.60
Bismuth	478991	337712	-29.50

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56340782131
 Cal : 56340782001
 Standards: S4012, S3310

File : h2415131
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 03:55

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	112500	ug/L	13		
Arsenic	100.0	97.61	ug/L	-2	20	
Cadmium	100.0	84.40	ug/L	-16	20	
Calcium	300000	289000	ug/L	-4		
Chromium	200.0	189.0	ug/L	-6	20	
Cobalt	200.0	191.8	ug/L	-4	20	
Copper	200.0	178.9	ug/L	-11	20	
Iron	250000	217200	ug/L	-13		
Magnesium	100000	110500	ug/L	11		
Manganese	200.0	189.3	ug/L	-5	20	
Molybdenum	2000	1843	ug/L	-8		
Nickel	200.0	182.4	ug/L	-9	20	
Potassium	100000	102200	ug/L	2		
Selenium	100.0	85.02	ug/L	-15	20	
Silver	50.00	42.66	ug/L	-15	20	
Sodium	250000	271600	ug/L	9		
Vanadium	200.0	196.1	ug/L	-2	20	
Zinc	100.0	95.96	ug/L	-4	20	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Scandium	366577	290120	-20.86
Germanium	82555	71952	-12.84

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56340782 Instrument: MET05
Analytical Method: EPA 6020

Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 24-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds	Used	>LR
001	h2415001	TUN				24-AUG-2006	15:42	1.0				1		
002	h2415002	X	RINSE			24-AUG-2006	15:48	1.0				2		
003	h2415003	X	STD-BLANK			24-AUG-2006	15:58	1.0				2		
004	h2415004	X	RINSE			24-AUG-2006	16:03	1.0				2		
005	h2415005	ICALBLK	STD-BLANK			24-AUG-2006	16:09	1.0				2		
006	h2415006	ICAL	CS1			24-AUG-2006	16:14	1.0				3		
007	h2415007	ICAL	CS2			24-AUG-2006	16:20	1.0				4		
008	h2415008	ICAL	CS3			24-AUG-2006	16:26	1.0				5		
009	h2415009	ICAL	CS4			24-AUG-2006	16:31	1.0				6		
010	h2415010	ICAL	CS5			24-AUG-2006	16:37	1.0				7		
011	h2415011	ICAL	CS6			24-AUG-2006	16:43	1.0				8		
012	h2415012	X	RINSE			24-AUG-2006	16:48	1.0				2		
013	h2415013	ICV				24-AUG-2006	16:54	1.0			1	9		
014	h2415014	X	RINSE			24-AUG-2006	16:59	1.0				2		
015	h2415015	X				24-AUG-2006	17:05	1.0				2		
016	h2415016	ICB				24-AUG-2006	17:10	1.0			1	10		
017	h2415017	ICSA				24-AUG-2006	17:16	1.0			1	10		
018	h2415018	ICSAB				24-AUG-2006	17:21	1.0			1	11		
019	h2415019	X	RINSE			24-AUG-2006	17:27	1.0				2		
020	h2415020	X	RINSE			24-AUG-2006	17:33	1.0				2		
021	h2415021	SAMPLE	188762-004		116533	Water	24-AUG-2006	17:38	50.0		1	2		1:NA=81740.0
022	h2415022	SAMPLE	188762-005		116533	Water	24-AUG-2006	17:44	50.0		1	2		1:NA=80420.0
023	h2415023	SAMPLE	188762-006		116533	Water	24-AUG-2006	17:49	1.0		1	2		
024	h2415024	SAMPLE	188762-007		116533	Water	24-AUG-2006	17:55	5.0		1	2		1:NA=94960.0
025	h2415025	SAMPLE	188762-008		116533	Water	24-AUG-2006	18:01	50.0		1	2		1:NA=54300.0
026	h2415026	SAMPLE	188762-009		116533	Water	24-AUG-2006	18:06	50.0		1	2		
027	h2415027	ICSA				24-AUG-2006	18:12	1.0			1	10		7:CA=296800
028	h2415028	ICSAB				24-AUG-2006	18:17	1.0			1	11		8:CA=294500
029	h2415029	X	RINSE			24-AUG-2006	18:23	1.0				2		
030	h2415030	CCV				24-AUG-2006	18:28	1.0			1	12		
031	h2415031	X	RINSE			24-AUG-2006	18:34	1.0				2		

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S4009 13=S3780

Analyst: *[Signature]*

Date: *8/25/06*

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56340782 Instrument: MET05
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 24-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
032	h2415032	X				24-AUG-2006 18:40	1.0					2		
033	h2415033	CCB				24-AUG-2006 18:45	1.0	1.0	2		1	2		
034	h2415034	X	RINSE			24-AUG-2006 18:51	1.0					2		
035	h2415035	X	RINSE			24-AUG-2006 18:56	1.0					2		
036	h2415036	CCV				24-AUG-2006 19:02	1.0	1.0			1	12		
037	h2415037	X	RINSE			24-AUG-2006 19:08	1.0					2		
038	h2415038	X				24-AUG-2006 19:13	1.0					2		
039	h2415039	CCB				24-AUG-2006 19:19	1.0	1.0	1		1	2		
040	h2415040	BLANK	QC353251			24-AUG-2006 19:25	1.0	1.0	2		1	2		
041	h2415041	BS	QC353252			24-AUG-2006 19:30	1.0	1.0	5		1	2		
042	h2415042	BSD	QC353253			24-AUG-2006 19:36	1.0	1.0	5		1	2		
043	h2415043	X	RINSE			24-AUG-2006 19:41	1.0					2		
044	h2415044	MSS	188837-009			24-AUG-2006 19:47	1.0	1.0	5		1	2		4:NA=60310.0
045	h2415045	X	NO SAMPLE			24-AUG-2006 19:52	5.0	1.0		3	1	2		
046	h2415046	MS	QC353254			24-AUG-2006 19:58	1.0	1.0	4		1	2		5:NA=73740.0
047	h2415047	MSD	QC353255			24-AUG-2006 20:04	1.0	1.0	4		1	2		5:NA=72530.0
048	h2415048	PDS	QC353257			24-AUG-2006 20:09	1.0	1.0	3		1	13		5:NA=68690.0
049	h2415049	X	RINSE			24-AUG-2006 20:15	1.0					2		
050	h2415050	SAMPLE	188837-005			24-AUG-2006 20:20	1.0	1.0	6		1	2		4:MG=367400
051	h2415051	SAMPLE	188837-008			24-AUG-2006 20:26	1.0	1.0	4		1	2		3:NA=235700
052	h2415052	X	RINSE			24-AUG-2006 20:31	1.0					2		
053	h2415053	CCV				24-AUG-2006 20:37	1.0	1.0	5		1	12		
054	h2415054	X	RINSE			24-AUG-2006 20:43	1.0					2		
055	h2415055	X				24-AUG-2006 20:48	1.0					2		
056	h2415056	CCB				24-AUG-2006 20:54	1.0	1.0	1		1	2		
057	h2415057	SAMPLE	188837-010			24-AUG-2006 20:59	1.0	1.0	7		1	2		6:NA=126700
058	h2415058	SAMPLE	188837-005			24-AUG-2006 21:05	1.0	1.0	8		1	2		7:MG=391800
059	h2415059	SAMPLE	188837-012			24-AUG-2006 21:11	1.0	1.0	4		1	2		
060	h2415060	SAMPLE	188869-001			24-AUG-2006 21:16	1.0	1.0	4		1	2		
061	h2415061	MSS	188837-009			24-AUG-2006 21:22	10.0	1.0	5		1	2		
062	h2415062	SER	QC353256			24-AUG-2006 21:27	50.0	1.0	2		1	2		

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S4009 13=S3780

Analyst: *Valley* Date: *8/25/06*

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56340782 Instrument: MET05
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 24-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
063	h2415063	MS	QC353254	116738	Filtira	24-AUG-2006	21:33	10.0	1.0	3	1	2		
064	h2415064	MSD	QC353255	116738	Filtira	24-AUG-2006	21:39	10.0	1.0	3	1	2		
065	h2415065	PDS	QC353257	116738	Filtira	24-AUG-2006	21:44	10.0	1.0	2	1	13		
066	h2415066	SAMPLE	188837-012	116738	Water	24-AUG-2006	21:50	10.0	1.0	4	1	2		
067	h2415067	X	RINSE			24-AUG-2006	21:56	1.0				2		
068	h2415068	CCV				24-AUG-2006	22:01	1.0	1.0	7	1	12		
069	h2415069	X	RINSE			24-AUG-2006	22:07	1.0				2		
070	h2415070	CCB				24-AUG-2006	22:12	1.0	1.0	1	1	2		
071	h2415071	X				24-AUG-2006	22:18	1.0				2		
072	h2415072	SAMPLE	188869-001	116738	Water	24-AUG-2006	22:24	10.0	1.0	5	1	2		
073	h2415073	ICSA				24-AUG-2006	22:29	1.0	1.0		1	10 2	7:CA=286800	
074	h2415074	ICSAB				24-AUG-2006	22:35	1.0	1.0		1	11 2	7:CA=283800	
075	h2415075	X	RINSE			24-AUG-2006	22:40	1.0				2		
076	h2415076	X	RINSE			24-AUG-2006	22:46	1.0				2		
077	h2415077	CCV				24-AUG-2006	22:51	1.0	1.0	2	1	12		
078	h2415078	X	RINSE			24-AUG-2006	22:57	1.0				2		
079	h2415079	X				24-AUG-2006	23:03	1.0				2		
080	h2415080	CCB				24-AUG-2006	23:08	1.0	1.0	1	1	2		
081	h2415081	TUN				24-AUG-2006	23:14	1.0	1.0			1		
082	h2415082	TUN				24-AUG-2006	23:21	1.0	1.0			2		
083	h2415083	X	RINSE			24-AUG-2006	23:27	1.0				2		
084	h2415084	BLANK	QC353240	116736	Filtira	24-AUG-2006	23:33	1.0	1.0	3	1	2		
085	h2415085	BS	QC353241	116736	Filtira	24-AUG-2006	23:38	1.0	1.0	3	1	2		
086	h2415086	BSD	QC353242	116736	Filtira	24-AUG-2006	23:44	1.0	1.0	3	1	2		
087	h2415087	X	RINSE			24-AUG-2006	23:49	1.0				2		
088	h2415088	MSS	188802-001	116736	Filtira	24-AUG-2006	23:55	1.0	1.0	7	1	2	6:NA=435000	
089	h2415089	SER	QC353245	116736	Filtira	25-AUG-2006	00:01	5.0	1.0		1	2	4:NA=94040.0	
090	h2415090	MS	QC353243	116736	Filtira	25-AUG-2006	00:06	1.0	1.0		1	2	6:NA=466300	
091	h2415091	MSD	QC353244	116736	Filtira	25-AUG-2006	00:12	1.0	1.0		1	2	6:NA=457400	
092	h2415092	PDS	QC353246	116736	Filtira	25-AUG-2006	00:17	1.0	1.0	3	1	13	6:NA=475100	
093	h2415093	X	RINSE			25-AUG-2006	00:23	1.0				2		

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S4009 13=S3780

Analyst: *W. G. G.*

Date: 8/25/06

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56340782 Instrument: MET05 Agilent ICP-MS
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 24-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
094	h2415094	MSS	188802-001	116736	Filt	25-AUG-2006 00:28	10.0	1.0	4	1	1	2	3:NA=52090.0	
095	h2415095	SER	QC353245	116736	Filt	25-AUG-2006 00:34	50.0	1.0		1	1	2	1:MN=274.800	
096	h2415096	X	RINSE			25-AUG-2006 00:40	1.0					2		
097	h2415097	CCV				25-AUG-2006 00:45	1.0	1.0	1	1	1	12		
098	h2415098	X	RINSE			25-AUG-2006 00:51	1.0					2		
099	h2415099	CCB				25-AUG-2006 00:56	1.0	1.0		1	1	2		
100	h2415100	X				25-AUG-2006 01:02	1.0					2		
101	h2415101	MS	QC353243	116736	Filt	25-AUG-2006 01:08	10.0	1.0	1	1	1	2	3:NA=44790.0	
102	h2415102	MSD	QC353244	116736	Filt	25-AUG-2006 01:13	10.0	1.0	1	1	1	2	3:NA=45160.0	
103	h2415103	PDS	QC353246	116736	Filt	25-AUG-2006 01:19	10.0	1.0	1	1	1	13	3:NA=47390.0	
104	h2415104	SAMPLE	188802-002	116736	Filt	25-AUG-2006 01:24	1.0	1.0	6	1	1	2	6:NA=98760.0	
105	h2415105	SAMPLE	188802-003	116736	Filt	25-AUG-2006 01:30	1.0	1.0	4	1	1	2	3:NA=94050.0	
106	h2415106	SAMPLE	188802-004	116736	Filt	25-AUG-2006 01:35	1.0	1.0	4	1	1	2	3:NA=102900	
107	h2415107	SAMPLE	188802-005	116736	Filt	25-AUG-2006 01:41	1.0	1.0	3	1	1	2	2:NA=324900	
108	h2415108	SAMPLE	188802-006	116736	Filt	25-AUG-2006 01:47	1.0	1.0	3	1	1	2	2:NA=333080	
109	h2415109	SAMPLE	188802-008	116736	Filt	25-AUG-2006 01:52	1.0	1.0	4	1	1	2	3:NA=75910.0	
110	h2415110	SAMPLE	188802-009	116736	Filt	25-AUG-2006 01:58	1.0	1.0	4	1	1	2	3:NA=261700	
111	h2415111	X	RINSE			25-AUG-2006 02:03	1.0					2		
112	h2415112	CCV				25-AUG-2006 02:09	1.0	1.0	3	1	1	12		
113	h2415113	X	RINSE			25-AUG-2006 02:14	1.0					2		
114	h2415114	CCB				25-AUG-2006 02:20	1.0	1.0	2	1	1	2		
115	h2415115	X				25-AUG-2006 02:26	1.0					2		
116	h2415116	SAMPLE	188802-010	116736	Filt	25-AUG-2006 02:31	1.0	1.0	4	1	1	2	3:NA=78140.0	
117	h2415117	SAMPLE	188802-012	116736	Filt	25-AUG-2006 02:37	1.0	1.0	5	1	1	2	4:NA=199000	
118	h2415118	SAMPLE	188802-013	116736	Filt	25-AUG-2006 02:43	1.0	1.0	5	1	1	2	4:MG=101200	
119	h2415119	SAMPLE	188802-014	116736	Filt	25-AUG-2006 02:49	1.0	1.0	4	1	1	2	3:NA=63310.0	
120	h2415120	SAMPLE	188802-015	116736	Filt	25-AUG-2006 02:54	1.0	1.0	2	1	1	2	3:MG=435400	
121	h2415121	SAMPLE	188802-017	116736	Filt	25-AUG-2006 03:00	1.0	1.0	3	1	1	2	4:MG=249000	
122	h2415122	SAMPLE	188802-018	116736	Filt	25-AUG-2006 03:05	1.0	1.0	3	1	1	2	3:NA=62740.0	
123	h2415123	SAMPLE	188802-020	116736	Filt	25-AUG-2006 03:11	1.0	1.0	4	1	1	2	3:NA=323500	
124	h2415124	SAMPLE	188867-002	116736	Water	25-AUG-2006 03:16	1.0	1.0	3	1	1	2		

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S4009 13=S3780

Analyst: *W. C. C. C.* Date: *8/25/06*

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56340782 Instrument: MET05 Agilent ICP-MS
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 24-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Std	Used	>LR
125	h2415125	X	RINSE			25-AUG-2006 03:22	1.0					2		
126	h2415126	CCV				25-AUG-2006 03:28	1.0	1.0	2	1		12		
127	h2415127	X	RINSE			25-AUG-2006 03:33	1.0					2		
128	h2415128	CCB				25-AUG-2006 03:39	1.0	1.0	1	1		2		
129	h2415129	X				25-AUG-2006 03:44	1.0					2		
130	h2415130	ICSA				25-AUG-2006 03:50	1.0	1.0		1		10 2		7:CA=292900
131	h2415131	ICSAB				25-AUG-2006 03:55	1.0	1.0		1		11 2		7:CA=289000

StdS used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S4009 13=S3780

Analyst: *W. Carlson* Date: *8/25/06*

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET05

Calnum : 56341908001

Units : ug/L

Date : 25-AUG-2006 10:40

X Axis : R

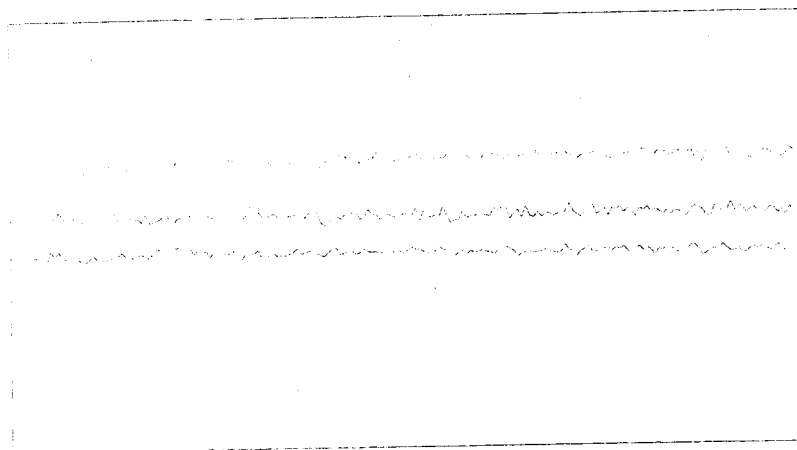
Reviewer: ---

Level	File	Segment	Sample ID	Analyzed	Stds
L1	h2510004	56341908004	CS1	25-AUG-2006 10:46	S4004
L2	h2510005	56341908005	CS2	25-AUG-2006 10:51	S4005
L3	h2510006	56341908006	CS3	25-AUG-2006 10:57	S4006
L4	h2510007	56341908007	CS4	25-AUG-2006 11:03	S4007
L5	h2510008	56341908008	CS5	25-AUG-2006 11:08	S4001
L6	h2510009	56341908009	CS6	25-AUG-2006 11:14	S4002

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	AVG	r ²	MR ²	Fig
Aluminum	0.6841	0.6341	0.6278	0.6167	0.6310	BLNK	BLNK	-4.6391	1.59239		0.6387	1.000	0.995	
Antimony	0.3162	0.2938	0.2440	0.2402	0.2479	0.2523	BLNK	-0.0813	3.97991		0.2657	1.000	0.995	
Arsenic	0.7013	0.6232	0.4585	0.4487	0.4509	BLNK	BLNK	-0.3562	2.22490		0.5365	1.000	0.995	
Barium	0.1841	0.1497	0.1141	0.0982	0.1020	0.1031	BLNK	-0.0815	9.72584		0.1252	1.000	0.995	
Beryllium	0.1769	0.1849	0.1645	0.1609	0.1612	0.1653	BLNK	-0.0459	6.08235		0.1690	1.000	0.995	
Cadmium	0.8217	0.5960	0.4699	0.4189	0.4057	0.3991	BLNK	-0.1990	2.50028		0.5186	1.000	0.995	
Calcium	0.0327	0.0249	0.0185	0.0189	0.0189	0.0186	BLNK	-32.336	53.6811		0.0227	1.000	0.995	
Chromium	7.6991	5.2022	3.2559	3.0245	3.1236	BLNK	BLNK	-0.7204	0.32359		4.4611	1.000	0.995	
Cobalt	4.1096	4.0174	3.8102	3.6254	3.5637	3.7742	BLNK	-0.0462	0.26804		3.8167	0.999	0.995	
Copper	1.5733	1.2439	0.9343	0.8915	0.8744	BLNK	BLNK	-0.2359	1.14068		1.1035	1.000	0.995	
Iron	0.1309	0.1040	0.0831	0.0861	0.0838	BLNK	BLNK	-28.529	11.8936		0.0976	1.000	0.995	
Lead	1.3485	1.2163	1.1017	0.9836	1.0026	1.0237	BLNK	-0.0722	0.98143		1.1127	1.000	0.995	
Magnesium	0.0914	0.0823	0.0760	0.0799	0.0807	BLNK	BLNK	-8.3406	12.4207		0.0821	1.000	0.995	
Manganese	7.5920	5.9652	4.9035	4.0136	3.9481	4.1398	BLNK	-0.1809	0.24410		5.0937	0.999	0.995	
Molybdenum	0.9561	0.8992	0.8187	0.8334	0.8390	BLNK	BLNK	-0.1112	1.19430		0.8693	1.000	0.995	
Nickel	1.7645	1.0306	0.9862	0.7966	0.7818	0.7641	BLNK	-0.1546	1.30391		1.0206	1.000	0.995	
Potassium	1.8248	1.2955	0.6951	0.6357	0.6388	BLNK	BLNK	-96.445	1.57607		1.0180	1.000	0.995	
Selenium	0.1006	0.0644	0.0379	0.0326	0.0322	BLNK	BLNK	-0.8774	31.1651		0.0535	1.000	0.995	
Silver	2.2062	2.0888	1.9497	1.9724	1.9284	BLNK	BLNK	-0.0402	0.51633		2.0367	1.000	0.995	
Sodium	1.7096	1.3794	0.8729	0.8346	0.8468	BLNK	BLNK	-45.784	1.18756		1.1287	1.000	0.995	
Thallium	1.0275	0.8281	0.6794	0.7208	0.7384	BLNK	BLNK	-0.1385	1.36328		0.7988	1.000	0.995	
Vanadium	4.4426	3.9089	3.4192	3.3647	3.6067	BLNK	BLNK	-0.1911	0.28139		3.7484	0.999	0.995	
Zinc	3.4605	2.1121	0.6016	0.4635	0.4452	BLNK	BLNK	-3.0425	2.26825		1.4166	1.000	0.995	

Tune Report

Tune File : ATUNE.U

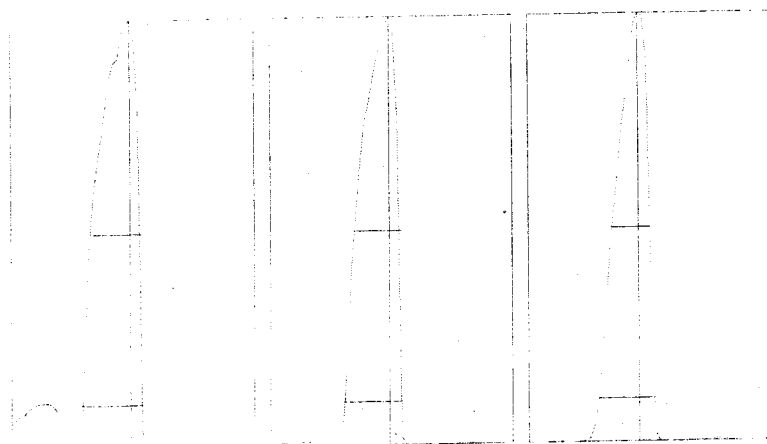


m/z:	7	89	205
Range:	20,000	50,000	20,000
Count:	10,686	22,653	13,556
Mean:	10813.5	22682.2	13373.3
RSD%:	1.51	1.53	1.43
n:	200		

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec

Oxide: 156/140 0.40%
Doubly Charged: 70/140 1.24%

m/z:	7	89	205
Cps:	21.0	8.6	8.0



m/z:	7	89	205
Height:	10,908	22,575	15,738
Axis:	7.00	89.00	204.90
W-50%:	0.65	0.60	0.50
W-10%:	0.7500	0.700	0.700

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Tuning Parameters

===Plasma Condition===

RF Power: 1300 W
RF Matching: 1.7 V
Smpl Depth: 8 mm
Torch-H: -0.1 mm
Torch-V: 0.4 mm
Carrier Gas: 1.1 L/min
Makeup Gas: 0 L/min
Optional Gas: --- %
PeriPump1: 0.1 rps
PeriPump2: --- rps
S/C Temp: 2 degC

===Ion Lenses===

Extract 1: -150 V
Extract 2: -70 V
Einzel 1,3: -100 V
Einzel 2: 7 V
Omega Bias: -55 V
Omega (+): 5 V
Omega (-): -5 V
QP Focus: 5 V
Plate Bias: -5 V

===Q-Pole Parameters===

AMU Gain: 130
AMU Offset: 126
Axis Gain: 0.9993
Axis Offset: -0.1
QP Bias: 1.6 V

===Detector Parameters===

Discriminator: 8.8 mV
Analog HV: 1860 V
Pulse HV: 1590 V

Temp.p\$\$

P/A Factor Tuning Report

Acquired:Aug 25 2006 09:57 am

Mass[amu]	Element	P/A Factor
6	Li	0.072534
9	Be	0.080069
23	Na	Sensitivity too high
25	Mg	Sensitivity too high
26	Mg	Sensitivity too high
27	Al	0.094120
39	K	Sensitivity too high
43	Ca	0.094340
44	Ca	Sensitivity too high
45	Sc	Sensitivity too low
51	V	0.099200
52	Cr	0.100360
53	Cr	Sensitivity too low
54	Fe	Sensitivity too high
55	Mn	0.101921
57	Fe	Sensitivity too high
59	Co	0.103661
60	Ni	0.100858
63	Cu	0.103981
65	Cu	0.101713
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
77	(As)	Sensitivity too low
82	Se	Sensitivity too low
83	(As)	Sensitivity too low
88	(Ca)	Sensitivity too low
89	Y	0.100017
95	Mo	0.100297
98	Mo	0.100281
99	(Mo)	Sensitivity too low
106	(Cd)	Sensitivity too low
108	(Cd)	Sensitivity too low
109	Ag	0.104933
111	Cd	Sensitivity too low
114	Cd	0.103605
115	In	0.105161
118	(In)	Sensitivity too high
121	Sb	0.104050
135	Ba	Sensitivity too low
137	Ba	0.104848
159	Tb	0.107952
166	Er	Sensitivity too low

Page 1

Temp.p\$\$
205 Tl 0.110323
206 (Pb) 0.111701
207 (Pb) 0.110845
208 Pb 0.108988
209 Bi Sensitivity too low

===Detector Parameters===

Discriminator: 8.8 mV

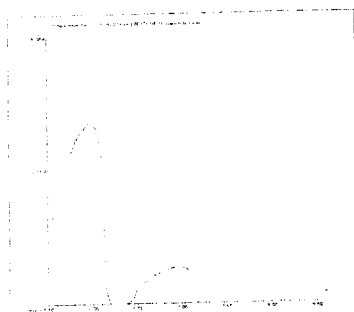
Analog HV: 1860 V

Pulse HV: 1590 V

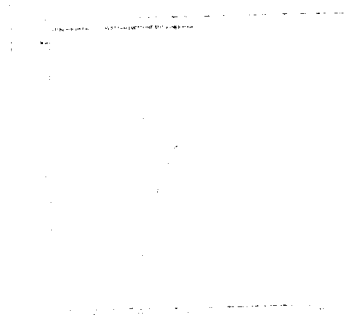
6020 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\06H2510a.B\001TUNE.D
Date Acquired: Aug 25 2006 10:28 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s4021
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

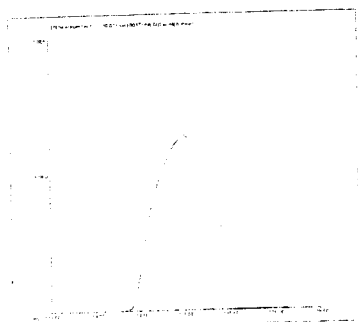
RSD (%)	Element	Actual	Required	Flag
	7 Li	0.26	5.00	
	59 Co	1.44	5.00	
	115 In	0.88	5.00	
	205 Tl	1.30	5.00	



7 Li
Mass Calib.
Actual: 6.95
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.55
Required: 0.90
Flag:



59 Co
Mass Calib.
Actual: 59.00
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.55
Required: 0.90
Flag:



115 In

Mass Calib.

Actual: 115.00

Required: 114.90 - 115.10

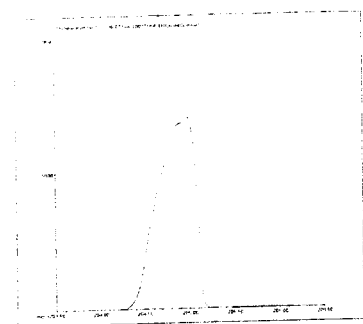
Flag:

Peak Width

Actual: 0.55

Required: 0.90

Flag:



205 Tl

Mass Calib.

Actual: 205.00

Required: 204.90 - 205.10

Flag:

Peak Width

Actual: 0.55

Required: 0.90

Flag:

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06H2510a.B\003CAL
 Date Acquired: Aug 25 2006 10:40 am
 Operator:
 Sample Name: std-blank
 Misc Info:
 Vial Number: 1101
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\602001
 Last Cal Update: Aug 24 2006 04:44 pm
 Sample Type: CalBlk
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	323251.09 P	1860.00	0.58
9 Be	48.89 P	25.24	51.63
23 Na	263663.31 P	4035.00	1.53
26 Mg	4592.22 P	276.70	6.03
27 Al	19923.33 P	880.00	4.42
39 K	418508.91 P	5147.00	1.23
44 Ca	4119.52 P	82.13	1.99
45 Sc	341956.69 P	1165.00	0.34
51 V	1094.67 P	347.40	31.74
52 Cr	3588.89 P	181.00	5.04
55 Mn	1194.44 P	38.63	3.23
57 Fe	3866.67 P	60.64	1.57
59 Co	277.78 P	10.72	3.86
60 Ni	191.11 P	24.57	12.86
65 Cu	333.31 P	29.63	8.89
66 Zn	2162.22 P	71.21	3.29
72 Ge	80605.78 P	393.40	0.49
75 As	257.89 P	60.45	23.44
82 Se	45.33 P	16.04	35.38
95 Mo	150.00 P	23.33	15.55
109 Ag	125.56 P	3.85	3.07
111 Cd	128.21 P	34.20	26.68
115 In	530308.38 P	2777.00	0.52
121 Sb	216.67 P	43.33	20.00
137 Ba	88.89 P	5.09	5.73
205 Tl	888.89 P	44.01	4.95
208 Pb	643.33 P	44.10	6.85
209 Bi	437483.31 P	161.50	0.04

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2510a.B\004CALI.D\004CALI.D#
 Date Acquired: Aug 25 2006 10:46 am
 Operator:
 Sample Name: cs1,s4004
 Misc Info:
 Vial Number: 1102
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 25 2006 10:42 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	327737.81 P	1389.00	0.42
9 Be	290.00 P	37.86	13.06
23 Na	444228.91 P	4374.00	0.98
26 Mg	17433.33 P	437.80	2.51
27 Al	129914.40 P	1023.00	0.79
39 K	522311.09 P	3456.00	0.66
44 Ca	8146.98 P	103.60	1.27
45 Sc	345367.81 P	2893.00	0.84
51 V	3023.46 P	150.70	4.98
52 Cr	4916.67 P	38.44	0.78
55 Mn	3097.78 P	68.50	2.21
57 Fe	7313.33 P	127.20	1.74
59 Co	1676.67 P	35.12	2.09
60 Ni	720.00 P	32.83	4.56
65 Cu	888.81 P	10.72	1.21
66 Zn	2501.11 P	118.60	4.74
72 Ge	81604.22 P	342.70	0.42
75 As	451.56 P	75.42	16.70
82 Se	53.33 P	9.26	17.37
95 Mo	484.44 P	36.57	7.55
109 Ag	900.00 P	53.64	5.96
111 Cd	335.42 P	53.19	15.86
115 In	533605.19 P	3223.00	0.60
121 Sb	843.33 P	37.12	4.40
137 Ba	491.11 P	41.41	8.43
205 Tl	1543.33 P	81.92	5.31
208 Pb	3024.44 P	85.79	2.84
209 Bi	448524.41 P	3781.00	0.84

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	327737.78	0.42	323251.09	101.4	80 - 120	

C:\ICPCHEM\1\DATA\06H2510a.B\004CALI.D\004CALI.D#

45 Sc	345367.78	0.84	341956.66	101.0	80 -	120
72 Ge	81604.23	0.42	80605.77	101.2	80 -	120
115 In	533605.25	0.60	530308.44	100.6	80 -	120
209 Bi	448524.41	0.84	437483.31	102.5	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2510a.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass

ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2510a.B\005CALI.D\005CALI.D#
 Date Acquired: Aug 25 2006 10:51 am
 Operator:
 Sample Name: cs2,s4005
 Misc Info:
 Vial Number: 1103
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 25 2006 10:47 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	325665.50 P	1237.00	0.38
9 Be	602.22 P	5.09	0.85
23 Na	582522.19 P	4295.00	0.74
26 Mg	31135.56 P	100.20	0.32
27 Al	233094.41 P	1257.00	0.54
39 K	621784.38 P	3668.00	0.59
44 Ca	11152.61 P	212.80	1.91
45 Sc	340738.91 P	491.80	0.14
51 V	3572.71 P	462.20	12.94
52 Cr	6192.22 P	155.40	2.51
55 Mn	4797.78 P	15.40	0.32
57 Fe	10528.89 P	95.30	0.91
59 Co	3231.11 P	43.50	1.35
60 Ni	828.89 P	15.75	1.90
65 Cu	1265.42 P	44.76	3.54
66 Zn	2783.33 P	56.96	2.05
72 Ge	80429.78 P	134.50	0.17
75 As	564.14 P	56.76	10.06
82 Se	80.89 P	8.04	9.94
95 Mo	768.89 P	54.19	7.05
109 Ag	1680.00 P	14.53	0.86
111 Cd	479.34 P	50.37	10.51
115 In	529120.88 P	121.20	0.02
121 Sb	1554.44 P	59.29	3.81
137 Ba	792.22 P	62.92	7.94
205 Tl	2273.33 P	6.67	0.29
208 Pb	5382.22 P	137.90	2.56
209 Bi	442511.09 P	838.50	0.19

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	325665.53	0.38	323251.09	100.7	80 - 120	

C:\ICPCHEM\1\DATA\06H2510a.B\005CALI.D\005CALI.D#

45	Sc	340738.88	0.14	341956.66	99.6	80 -	120
72	Ge	80429.77	0.17	80605.77	99.8	80 -	120
115	In	529120.94	0.02	530308.44	99.8	80 -	120
209	Bi	442511.06	0.19	437483.31	101.1	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2510a.B\003CALB.D\003CALB.D#

---	:Element Failures	---	:Max. Number of Failures Allowed
0	:ISTD Failures	0	:Max. Number of ISTD Failures Allowed

Data Results:

Analytes:	Pass
ISTD:	Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2510a.B\006CALI.D\006CALI.D#
 Date Acquired: Aug 25 2006 10:57 am
 Operator:
 Sample Name: cs3,s4006
 Misc Info:
 Vial Number: 1104
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 25 2006 10:53 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	324680.00 P	1742.00	0.54
9 Be	1067.78 P	60.77	5.69
23 Na	939175.69 A	6872.00	0.73
26 Mg	56034.44 P	316.60	0.57
27 Al	431695.50 P	3183.00	0.74
39 K	882026.69 A	4980.00	0.56
44 Ca	16968.46 P	347.20	2.05
45 Sc	340418.91 P	1618.00	0.48
51 V	6284.03 P	370.70	5.90
52 Cr	8363.33 P	202.60	2.42
55 Mn	7883.33 P	265.10	3.36
57 Fe	16712.22 P	300.60	1.80
59 Co	6125.56 P	125.10	2.04
60 Ni	1585.56 P	10.18	0.64
65 Cu	1999.75 P	37.56	1.88
66 Zn	3395.55 P	63.63	1.87
72 Ge	80383.11 P	130.00	0.16
75 As	1001.97 P	93.38	9.32
82 Se	103.56 P	11.28	10.89
95 Mo	1445.56 P	78.62	5.44
109 Ag	3335.55 P	24.57	0.74
111 Cd	755.55 P	104.90	13.88
115 In	530072.88 P	1616.00	0.30
121 Sb	2586.67 P	117.90	4.56
137 Ba	1210.00 P	31.80	2.63
205 Tl	3691.11 P	92.52	2.51
208 Pb	9821.11 P	105.10	1.07
209 Bi	445743.31 P	596.70	0.13

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	324680.00	0.54	323251.09	100.4	80 - 120	

45 Sc	340418.88	0.48	341956.66	99.6	80 -	120
72 Ge	80383.11	0.16	80605.77	99.7	80 -	120
115 In	530072.94	0.30	530308.44	100.0	80 -	120
209 Bi	445743.31	0.13	437483.31	101.9	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2510a.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2510a.B\007CALI.D\007CALI.D#
 Date Acquired: Aug 25 2006 11:03 am
 Operator:
 Sample Name: cs4,s4007
 Misc Info:
 Vial Number: 1105
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 25 2006 10:59 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	323711.09 P	3205.00	0.99
9 Be	10418.89 P	79.54	0.76
23 Na	5894217.00 A	71290.00	1.21
26 Mg	513137.69 P	1602.00	0.31
27 Al	4239315.00 A	52540.00	1.24
39 K	4693735.00 A	43600.00	0.93
44 Ca	125160.10 P	281.30	0.22
45 Sc	337633.31 P	1915.00	0.57
51 V	54159.45 P	929.60	1.72
52 Cr	51575.55 P	422.70	0.82
55 Mn	63577.78 P	803.40	1.26
57 Fe	131646.70 P	1560.00	1.19
59 Co	57427.78 P	336.80	0.59
60 Ni	12618.89 P	114.40	0.91
65 Cu	14798.85 P	259.30	1.75
66 Zn	9528.89 P	187.70	1.97
72 Ge	79202.22 P	330.60	0.42
75 As	7261.47 P	273.90	3.77
82 Se	600.00 P	18.05	3.01
95 Mo	12968.89 P	255.10	1.97
109 Ag	30884.44 P	221.30	0.72
111 Cd	6635.03 P	112.70	1.70
115 In	522689.91 P	5334.00	1.02
121 Sb	25114.44 P	362.30	1.44
137 Ba	10260.00 P	95.39	0.93
205 Tl	30061.11 P	334.20	1.11
208 Pb	87050.00 P	801.80	0.92
209 Bi	442484.41 P	1381.00	0.31

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	323711.09	0.99	323251.09	100.1	80 - 120	

45 Sc	337633.31	0.57	341956.66	98.7	80 -	120
72 Ge	79202.23	0.42	80605.77	98.3	80 -	120
115 In	522689.94	1.02	530308.44	98.6	80 -	120
209 Bi	442484.41	0.31	437483.31	101.1	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2510a.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass

ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2510a.B\008CALI.D\008CALI.D#
 Date Acquired: Aug 25 2006 11:08 am
 Operator:
 Sample Name: cs5,s4001
 Misc Info:
 Vial Number: 1106
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 25 2006 11:04 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	320703.31 P	2971.00	0.93
9 Be	103377.80 P	1165.00	1.13
23 Na	56339460.00 A	428800.00	0.76
26 Mg	5391598.00 A	30990.00	0.57
27 Al	41629980.00 A	133900.00	0.32
39 K	42914200.00 A	157900.00	0.37
44 Ca	1272504.00 A	7679.00	0.60
45 Sc	337531.09 P	1999.00	0.59
51 V	536769.50 P	3863.00	0.72
52 Cr	482506.59 P	5544.00	1.15
55 Mn	629844.38 P	7978.00	1.27
57 Fe	1372861.00 A	9474.00	0.69
59 Co	568515.63 P	3995.00	0.70
60 Ni	124716.70 P	1138.00	0.91
65 Cu	142227.30 P	1903.00	1.34
66 Zn	73946.66 P	891.10	1.21
72 Ge	79766.22 P	629.70	0.79
75 As	71582.34 P	736.80	1.03
82 Se	5194.44 P	114.00	2.19
95 Mo	132967.80 P	2282.00	1.72
109 Ag	314660.00 P	3517.00	1.12
111 Cd	64729.07 P	864.70	1.34
115 In	507977.09 P	5650.00	1.11
121 Sb	251897.80 P	2886.00	1.15
137 Ba	103583.30 P	994.30	0.96
205 Tl	313468.91 P	4569.00	1.46
208 Pb	871993.31 P	7097.00	0.81
209 Bi	434858.91 P	4145.00	0.95

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	320703.31	0.93	323251.09	99.2	80 - 120	

C:\ICPCHEM\1\DATA\06H2510a.B\008CALI.D\008CALI.D#

45 Sc	337531.09	0.59	341956.66	98.7	80 -	120
72 Ge	79766.23	0.79	80605.77	99.0	80 -	120
115 In	507977.06	1.11	530308.44	95.8	80 -	120
209 Bi	434858.88	0.95	437483.31	99.4	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2510a.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass

ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2510a.B\009CALI.D\009CALI.D#
 Date Acquired: Aug 25 2006 11:14 am
 Operator:
 Sample Name: cs6,s4002
 Misc Info:
 Vial Number: 1107
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 25 2006 11:10 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	316653.31 P	1680.00	0.53
9 Be	209353.30 P	1287.00	0.61
23 Na	114750900.00 A	576200.00	0.50
26 Mg	10940220.00 A	80900.00	0.74
27 Al	85509040.00 A	368800.00	0.43
39 K	86558008.00 A	263000.00	0.30
44 Ca	2523201.00 A	23300.00	0.92
45 Sc	338775.50 P	2325.00	0.69
51 V	1182423.00 A	7345.00	0.62
52 Cr	1024078.00 A	6688.00	0.65
55 Mn	1357270.00 A	10990.00	0.81
57 Fe	2746466.00 A	4254.00	0.15
59 Co	1237331.00 A	15130.00	1.22
60 Ni	250498.91 P	1449.00	0.58
65 Cu	286682.41 P	2399.00	0.84
66 Zn	145957.80 P	1288.00	0.88
72 Ge	81963.11 P	365.00	0.45
75 As	147818.80 P	1190.00	0.81
82 Se	10548.00 P	142.00	1.35
95 Mo	275085.50 P	2223.00	0.81
109 Ag	632227.69 P	4394.00	0.70
111 Cd	130840.10 P	751.10	0.57
115 In	508229.59 P	830.20	0.16
121 Sb	512860.00 P	1006.00	0.20
137 Ba	209614.41 P	691.70	0.33
205 Tl	629866.63 P	3314.00	0.53
208 Pb	1746300.00 A	5820.00	0.33
209 Bi	426503.31 P	2584.00	0.61

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	316653.31	0.53	323251.09	98.0	80 - 120	

45	Sc	338775.53	0.69	341956.66	99.1	80 -	120
72	Ge	81963.11	0.45	80605.77	101.7	80 -	120
115	In	508229.56	0.16	530308.44	95.8	80 -	120
209	Bi	426503.31	0.61	437483.31	97.5	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2510a.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Summary

Calibration : C:\ICPCHEM\1\DATA\06G1718A.B\60200111.C
 Last Calib: Aug 25, 2006 11:15
 Cal Type : External Calibration Method
 Cal Title :

Standard Data Files

Level	DataPath	DataFile	Date Acquired
1	...hem\1\data\06h2510a.b\003calb.d\	003calb.d#	Aug 25 2006 10:40 am
2	...hem\1\data\06h2510a.b\004cali.d\	004cali.d#	Aug 25 2006 10:46 am
3	...hem\1\data\06h2510a.b\005cali.d\	005cali.d#	Aug 25 2006 10:51 am
4	...hem\1\data\06h2510a.b\006cali.d\	006cali.d#	Aug 25 2006 10:57 am
5	...hem\1\data\06h2510a.b\007cali.d\	007cali.d#	Aug 25 2006 11:03 am
6	...hem\1\data\06h2510a.b\008cali.d\	008cali.d#	Aug 25 2006 11:08 am
7	...hem\1\data\06h2510a.b\009cali.d\	009cali.d#	Aug 25 2006 11:14 am
8	---		
9	---		
10	---		
11	---		
12	---		
13	---		
14	---		
15	---		
16	---		
17	---		
18	---		
19	---		
20	---		

Level	BkgPath	BkgFile	Interference Correction
1	---	---	ON
2	---	---	ON
3	---	---	ON
4	---	---	ON
5	---	---	ON
6	---	---	ON
7	---	---	ON
8	---		
9	---		
10	---		
11	---		
12	---		
13	---		
14	---		
15	---		
16	---		
17	---		
18	---		
19	---		
20	---		

Name	m/z	IS	Equation	r	Units
Li	6	---	Excluded	---	ppb
Be	9	6	$Y = 1.644E-1 * X + 7.554E-3$ (blank)	---	ppb
Na	23	45	$Y = 8.421E-1 * X + 3.855E+1$ (blank)	---	ppb
Mg	25	45	Excluded	---	ppb
Mg	26	45	$Y = 8.051E-2 * X + 6.715E-1$ (blank)	---	ppb
Al	27	45	$Y = 6.280E-1 * X + 2.913E+0$ (blank)	---	ppb
K	39	45	$Y = 6.345E-1 * X + 6.119E+1$ (blank)	---	ppb
Ca	43	45	Excluded	---	ppb
Ca	44	45	$Y = 1.863E-2 * X + 6.024E-1$ (blank)	---	ppb
Sc	45	---	Excluded	---	ppb
V	51	72	$Y = 3.554E+0 * X + 6.793E-1$ (blank)	---	ppb
Cr	52	72	$Y = 3.090E+0 * X + 2.226E+0$ (blank)	---	ppb
Cr	53	72	Excluded	---	ppb
Fe	54	72	Excluded	---	ppb
Mn	55	72	$Y = 4.097E+0 * X + 7.410E-1$ (blank)	---	ppb
Fe	57	72	$Y = 8.408E-2 * X + 2.399E+0$ (blank)	---	ppb
Co	59	72	$Y = 3.731E+0 * X + 1.723E-1$ (blank)	---	ppb
Ni	60	72	$Y = 7.669E-1 * X + 1.186E-1$ (blank)	---	ppb
Cu	63	72	Excluded	---	ppb
Cu	65	72	$Y = 8.767E-1 * X + 2.068E-1$ (blank)	---	ppb
Zn	66	72	$Y = 4.409E-1 * X + 1.341E+0$ (blank)	---	ppb
Ge	72	---	Excluded	---	ppb
As	75	72	$Y = 4.495E-1 * X + 1.601E-1$ (blank)	---	ppb
(As)	77	72	Excluded	---	ppb
Se	82	72	$Y = 3.209E-2 * X + 2.815E-2$ (blank)	---	ppb
(As)	83	72	Excluded	---	ppb
(Ca)	88	72	Excluded	---	ppb
Y	89	72	Excluded	---	ppb
Mo	95	72	$Y = 8.373E-1 * X + 9.308E-2$ (blank)	---	ppb
Mo	98	72	Excluded	---	ppb
(Mo)	99	72	Excluded	---	ppb
(Cd)	106	72	Excluded	---	ppb
(Cd)	108	72	Excluded	---	ppb
Ag	109	72	$Y = 1.937E+0 * X + 7.788E-2$ (blank)	---	ppb
Cd	111	72	$Y = 4.000E-1 * X + 7.960E-2$ (blank)	---	ppb
Cd	114	72	Excluded	---	ppb
In	115	---	Excluded	---	ppb
(In)	118	---	Excluded	---	ppb
Sb	121	115	$Y = 2.513E-1 * X + 2.043E-2$ (blank)	---	ppb
Ba	135	115	Excluded	---	ppb
Ba	137	115	$Y = 1.028E-1 * X + 8.380E-3$ (blank)	---	ppb
Tb	159	---	Excluded	---	ppb
Er	166	115	Excluded	---	ppb
Tl	205	209	$Y = 7.335E-1 * X + 1.016E-1$ (blank)	---	ppb
(Pb)	206	209	Excluded	---	ppb
(Pb)	207	209	Excluded	---	ppb
Pb	208	209	$Y = 1.019E+0 * X + 7.353E-2$ (blank)	---	ppb
Bi	209	---	Excluded	---	ppb

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET05
 Seqnum : 56341908011
 Cal : 56341908001
 Standards: S4008

File : h2510011
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 11:25

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	0.6387	0.6221	10000	9901	ug/L	-1	10	
Antimony	0.2657	0.2448	100.0	97.36	ug/L	-3	10	
Arsenic	0.5365	0.4495	100.0	99.65	ug/L	0	10	
Barium	0.1252	0.0999	100.0	97.03	ug/L	-3	10	
Beryllium	0.1690	0.1629	100.0	99.05	ug/L	-1	10	
Cadmium	0.5186	0.4024	100.0	100.4	ug/L	0	10	
Calcium	0.0227	0.0187	10000	9999	ug/L	0	10	
Chromium	4.4611	2.9686	100.0	95.34	ug/L	-5	10	
Cobalt	3.8167	3.5490	100.0	95.08	ug/L	-5	10	
Copper	1.1035	0.8921	100.0	101.5	ug/L	2	10	
Iron	0.0976	0.0854	10000	10130	ug/L	1	10	
Lead	1.1127	0.9970	100.0	97.78	ug/L	-2	10	
Magnesium	0.0821	0.0805	10000	9989	ug/L	0	10	
Manganese	5.0937	3.9151	100.0	95.38	ug/L	-5	10	
Molybdenum	0.8693	0.8302	100.0	99.04	ug/L	-1	10	
Nickel	1.0206	0.7724	100.0	100.6	ug/L	1	10	
Potassium	1.0180	0.6366	10000	9937	ug/L	-1	10	
Selenium	0.0535	0.0326	100.0	100.7	ug/L	1	10	
Silver	2.0367	1.9488	100.0	100.6	ug/L	1	10	
Sodium	1.1287	0.8423	10000	9957	ug/L	0	10	
Thallium	0.7988	0.7242	50.00	49.22	ug/L	-2	10	
Vanadium	3.7484	3.3024	100.0	92.74	ug/L	-7	10	
Zinc	1.4166	0.4575	100.0	100.7	ug/L	1	10	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	322159	-0.34
Scandium	341957	341860	-0.03
Germanium	80606	81880	1.58
Indium	530308	518535	-2.22
Bismuth	437483	435888	-0.36

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56341908029
 Cal : 56341908001
 Standards: S4009

File : h2510029
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 13:05

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6387	0.6348	10000	10100	ug/L	1	10	
Antimony	0.2657	0.2425	100.0	96.42	ug/L	-4	10	
Arsenic	0.5365	0.4436	100.0	98.33	ug/L	-2	10	
Barium	0.1252	0.1006	100.0	97.76	ug/L	-2	10	
Beryllium	0.1690	0.1613	100.0	98.05	ug/L	-2	10	
Cadmium	0.5186	0.3961	100.0	98.84	ug/L	-1	10	
Calcium	0.0227	0.0186	10000	9967	ug/L	0	10	
Chromium	4.4611	2.8931	100.0	92.90	ug/L	-7	10	
Cobalt	3.8167	3.4522	100.0	92.49	ug/L	-8	10	
Copper	1.1035	0.8697	100.0	98.97	ug/L	-1	10	
Iron	0.0976	0.0831	10000	9851	ug/L	-1	10	
Lead	1.1127	0.9933	100.0	97.41	ug/L	-3	10	
Magnesium	0.0821	0.0819	10000	10160	ug/L	2	10	
Manganese	5.0937	3.7669	100.0	91.77	ug/L	-8	10	
Molybdenum	0.8693	0.8256	100.0	98.49	ug/L	-2	10	
Nickel	1.0206	0.7561	100.0	98.44	ug/L	-2	10	
Potassium	1.0180	0.6446	10000	10060	ug/L	1	10	
Selenium	0.0535	0.0325	100.0	100.4	ug/L	0	10	
Silver	2.0367	1.9183	100.0	99.01	ug/L	-1	10	
Sodium	1.1287	0.8439	10000	9976	ug/L	0	10	
Thallium	0.7988	0.7145	50.00	48.56	ug/L	-3	10	
Vanadium	3.7484	3.2255	100.0	90.57	ug/L	-9	10	
Zinc	1.4166	0.4473	100.0	98.42	ug/L	-2	10	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	312323	-3.38
Scandium	341957	328006	-4.08
Germanium	80606	79508	-1.36
Indium	530308	503523	-5.05
Bismuth	437483	436229	-0.29

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Segnum : 56341908046
 Cal : 56341908001
 Standards: S4009, S3310

File : h2510046
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 15:06

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6387	0.6727	10000	10710	ug/L	7	10	
Antimony	0.2657	0.2519	100.0	100.2	ug/L	0	10	
Arsenic	0.5365	0.4670	100.0	103.5	ug/L	4	10	
Barium	0.1252	0.1055	100.0	102.6	ug/L	3	10	
Beryllium	0.1690	0.1676	100.0	101.9	ug/L	2	10	
Cadmium	0.5186	0.4121	100.0	102.8	ug/L	3	10	
Calcium	0.0227	0.0195	10000	10430	ug/L	4	10	
Chromium	4.4611	2.9959	100.0	96.22	ug/L	-4	10	
Cobalt	3.8167	3.6211	100.0	97.01	ug/L	-3	10	
Copper	1.1035	0.9133	100.0	103.9	ug/L	4	10	
Iron	0.0976	0.0865	10000	10260	ug/L	3	10	
Lead	1.1127	1.0314	100.0	101.2	ug/L	1	10	
Magnesium	0.0821	0.0864	10000	10730	ug/L	7	10	
Manganese	5.0937	3.9438	100.0	96.09	ug/L	-4	10	
Molybdenum	0.8693	0.8633	100.0	103.0	ug/L	3	10	
Nickel	1.0206	0.7990	100.0	104.0	ug/L	4	10	
Potassium	1.0180	0.6735	10000	10520	ug/L	5	10	
Selenium	0.0535	0.0346	100.0	107.1	ug/L	7	10	
Silver	2.0367	2.0061	100.0	103.5	ug/L	4	10	
Sodium	1.1287	0.8958	10000	10590	ug/L	6	10	
Thallium	0.7988	0.7417	50.00	50.42	ug/L	1	10	
Vanadium	3.7484	3.3584	100.0	94.31	ug/L	-6	10	
Zinc	1.4166	0.4715	100.0	103.9	ug/L	4	10	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	322233	-0.31
Scandium	341957	330318	-3.40
Germanium	80606	79506	-1.36
Indium	530308	504921	-4.79
Bismuth	437483	446747	2.12

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56341908052
 Cal : 56341908001
 Standards: S4009, S3310

File : h2510052
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 15:39

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6387	0.6753	10000	10750	ug/L	7	10	
Antimony	0.2657	0.2507	100.0	99.69	ug/L	0	10	
Arsenic	0.5365	0.4627	100.0	102.6	ug/L	3	10	
Barium	0.1252	0.1053	100.0	102.3	ug/L	2	10	
Beryllium	0.1690	0.1687	100.0	102.5	ug/L	3	10	
Cadmium	0.5186	0.4114	100.0	102.7	ug/L	3	10	
Calcium	0.0227	0.0195	10000	10430	ug/L	4	10	
Chromium	4.4611	2.9994	100.0	96.34	ug/L	-4	10	
Cobalt	3.8167	3.5956	100.0	96.33	ug/L	-4	10	
Copper	1.1035	0.9063	100.0	103.1	ug/L	3	10	
Iron	0.0976	0.0857	10000	10160	ug/L	2	10	
Lead	1.1127	1.0348	100.0	101.5	ug/L	2	10	
Magnesium	0.0821	0.0869	10000	10780	ug/L	8	10	
Manganese	5.0937	3.9084	100.0	95.22	ug/L	-5	10	
Molybdenum	0.8693	0.8620	100.0	102.8	ug/L	3	10	
Nickel	1.0206	0.7900	100.0	102.8	ug/L	3	10	
Potassium	1.0180	0.6777	10000	10580	ug/L	6	10	
Selenium	0.0535	0.0337	100.0	104.2	ug/L	4	10	
Silver	2.0367	1.9911	100.0	102.8	ug/L	3	10	
Sodium	1.1287	0.8948	10000	10580	ug/L	6	10	
Thallium	0.7988	0.7419	50.00	50.43	ug/L	1	10	
Vanadium	3.7484	3.3596	100.0	94.34	ug/L	-6	10	
Zinc	1.4166	0.4664	100.0	102.8	ug/L	3	10	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	318859	-1.36
Scandium	341957	326357	-4.56
Germanium	80606	79166	-1.79
Indium	530308	502214	-5.30
Bismuth	437483	443934	1.47

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56341908073
 Cal : 56341908001
 Standards: S4009, S3310

File : h2510073
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 17:48

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6387	0.6606	10000	10520	ug/L	5	10	
Antimony	0.2657	0.2479	100.0	98.56	ug/L	-1	10	
Arsenic	0.5365	0.4566	100.0	101.2	ug/L	1	10	
Barium	0.1252	0.1041	100.0	101.1	ug/L	1	10	
Beryllium	0.1690	0.1607	100.0	97.70	ug/L	-2	10	
Cadmium	0.5186	0.4053	100.0	101.1	ug/L	1	10	
Calcium	0.0227	0.0191	10000	10210	ug/L	2	10	
Chromium	4.4611	2.9442	100.0	94.55	ug/L	-5	10	
Cobalt	3.8167	3.5356	100.0	94.72	ug/L	-5	10	
Copper	1.1035	0.8924	100.0	101.6	ug/L	2	10	
Iron	0.0976	0.0848	10000	10060	ug/L	1	10	
Lead	1.1127	1.0151	100.0	99.55	ug/L	0	10	
Magnesium	0.0821	0.0851	10000	10570	ug/L	6	10	
Manganese	5.0937	3.8567	100.0	93.96	ug/L	-6	10	
Molybdenum	0.8693	0.8468	100.0	101.0	ug/L	1	10	
Nickel	1.0206	0.7763	100.0	101.1	ug/L	1	10	
Potassium	1.0180	0.6716	10000	10490	ug/L	5	10	
Selenium	0.0535	0.0340	100.0	105.1	ug/L	5	10	
Silver	2.0367	1.9536	100.0	100.8	ug/L	1	10	
Sodium	1.1287	0.8768	10000	10370	ug/L	4	10	
Thallium	0.7988	0.7239	50.00	49.20	ug/L	-2	10	
Vanadium	3.7484	3.3240	100.0	93.34	ug/L	-7	10	
Zinc	1.4166	0.4579	100.0	100.8	ug/L	1	10	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	302769	-6.34
Scandium	341957	304897	-10.84
Germanium	80606	72090	-10.56
Indium	530308	461548	-12.97
Bismuth	437483	419799	-4.04

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05	File : h2510092	IDF : 1.0
Seqnum : 56341908092	Caldate: 25-AUG-2006	Time : 25-AUG-2006 19:35
Cal : 56341908001		
Standards: S4009, S3310		

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6387	0.6262	10000	9967	ug/L	0	10	
Antimony	0.2657	0.2450	100.0	97.43	ug/L	-3	10	
Arsenic	0.5365	0.4475	100.0	99.21	ug/L	-1	10	
Barium	0.1252	0.1055	100.0	102.6	ug/L	3	10	
Beryllium	0.1690	0.1552	100.0	94.38	ug/L	-6	10	
Cadmium	0.5186	0.4007	100.0	100.0	ug/L	0	10	
Calcium	0.0227	0.0191	10000	10240	ug/L	2	10	
Chromium	4.4611	3.0615	100.0	98.35	ug/L	-2	10	
Cobalt	3.8167	3.5867	100.0	96.09	ug/L	-4	10	
Copper	1.1035	0.8923	100.0	101.5	ug/L	2	10	
Iron	0.0976	0.0868	10000	10300	ug/L	3	10	
Lead	1.1127	1.0023	100.0	98.29	ug/L	-2	10	
Magnesium	0.0821	0.0804	10000	9979	ug/L	0	10	
Manganese	5.0937	4.0227	100.0	98.01	ug/L	-2	10	
Molybdenum	0.8693	0.8277	100.0	98.74	ug/L	-1	10	
Nickel	1.0206	0.7835	100.0	102.0	ug/L	2	10	
Potassium	1.0180	0.6446	10000	10060	ug/L	1	10	
Selenium	0.0535	0.0331	100.0	102.4	ug/L	2	10	
Silver	2.0367	1.9417	100.0	100.2	ug/L	0	10	
Sodium	1.1287	0.8506	10000	10060	ug/L	1	10	
Thallium	0.7988	0.7089	50.00	48.18	ug/L	-4	10	
Vanadium	3.7484	3.4464	100.0	96.79	ug/L	-3	10	
Zinc	1.4166	0.4631	100.0	102.0	ug/L	2	10	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	274244	-15.16
Scandium	341957	278748	-18.48
Germanium	80606	63657	-21.03
Indium	530308	410682	-22.56
Bismuth	437483	384224	-12.17

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56341908109
 Cal : 56341908001
 Standards: S4009, S3310

File : h2510109
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 21:10

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6387	0.6458	10000	10280	ug/L	3	10	
Antimony	0.2657	0.2483	100.0	98.74	ug/L	-1	10	
Arsenic	0.5365	0.4482	100.0	99.35	ug/L	-1	10	
Barium	0.1252	0.1036	100.0	100.7	ug/L	1	10	
Beryllium	0.1690	0.1605	100.0	97.60	ug/L	-2	10	
Cadmium	0.5186	0.3974	100.0	99.16	ug/L	-1	10	
Calcium	0.0227	0.0193	10000	10320	ug/L	3	10	
Chromium	4.4611	3.0099	100.0	96.68	ug/L	-3	10	
Cobalt	3.8167	3.5418	100.0	94.89	ug/L	-5	10	
Copper	1.1035	0.8817	100.0	100.3	ug/L	0	10	
Iron	0.0976	0.0861	10000	10210	ug/L	2	10	
Lead	0.0976	0.0861	100.0	98.65	ug/L	-1	10	
Magnesium	1.1127	1.0059	100.0	98.65	ug/L	-1	10	
Manganese	0.0821	0.0837	10000	10390	ug/L	4	10	
Molybdenum	5.0937	3.9745	100.0	96.84	ug/L	-3	10	
Nickel	0.8693	0.8308	100.0	99.11	ug/L	-1	10	
Potassium	1.0206	0.7730	100.0	100.6	ug/L	1	10	
Selenium	1.0180	0.6567	10000	10250	ug/L	3	10	
Silver	0.0535	0.0335	100.0	103.6	ug/L	4	10	
Sodium	2.0367	1.9338	100.0	99.81	ug/L	0	10	
Thallium	1.1287	0.8810	10000	10420	ug/L	4	10	
Vanadium	0.7988	0.7177	50.00	48.78	ug/L	-2	10	
Zinc	3.7484	3.3824	100.0	94.99	ug/L	-5	10	
	1.4166	0.4571	100.0	100.6	ug/L	1	10	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	301920	-6.60
Scandium	341957	301043	-11.96
Germanium	80606	69543	-13.72
Indium	530308	440966	-16.85
Bismuth	437483	402190	-8.07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05	File : h2510125	IDF : 1.0
Seqnum : 56341908125	Caldate: 25-AUG-2006	Time : 25-AUG-2006 22:40
Cal : 56341908001		
Standards: S4009, S3310		

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6387	0.6088	10000	9690	ug/L	-3	10	
Antimony	0.2657	0.2462	100.0	97.91	ug/L	-2	10	
Arsenic	0.5365	0.4432	100.0	98.26	ug/L	-2	10	
Barium	0.1252	0.1040	100.0	101.1	ug/L	1	10	
Beryllium	0.1690	0.1519	100.0	92.37	ug/L	-8	10	
Cadmium	0.5186	0.3999	100.0	99.80	ug/L	0	10	
Calcium	0.0227	0.0188	10000	10060	ug/L	1	10	
Chromium	4.4611	3.0866	100.0	99.16	ug/L	-1	10	
Cobalt	3.8167	3.5453	100.0	94.98	ug/L	-5	10	
Copper	1.1035	0.8797	100.0	100.1	ug/L	0	10	
Iron	0.0976	0.0870	10000	10320	ug/L	3	10	
Lead	1.1127	1.0004	100.0	98.11	ug/L	-2	10	
Magnesium	0.0821	0.0794	10000	9859	ug/L	-1	10	
Manganese	5.0937	4.0296	100.0	98.18	ug/L	-2	10	
Molybdenum	0.8693	0.8092	100.0	96.53	ug/L	-3	10	
Nickel	1.0206	0.7678	100.0	99.96	ug/L	0	10	
Potassium	1.0180	0.6342	10000	9898	ug/L	-1	10	
Selenium	0.0535	0.0329	100.0	101.7	ug/L	2	10	
Silver	2.0367	1.9290	100.0	99.56	ug/L	0	10	
Sodium	1.1287	0.8324	10000	9840	ug/L	-2	10	
Thallium	0.7988	0.7052	50.00	47.93	ug/L	-4	10	
Vanadium	3.7484	3.4620	100.0	97.23	ug/L	-3	10	
Zinc	1.4166	0.4570	100.0	100.6	ug/L	1	10	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	279746	-13.46
Scandium	341957	281557	-17.66
Germanium	80606	63059	-21.77
Indium	530308	407454	-23.17
Bismuth	437483	381107	-12.89

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56341908140
 Cal : 56341908001
 Standards: S4009, S3310

File : h2510140
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 26-AUG-2006 00:04

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6387	0.6378	10000	10150	ug/L	1	10	
Antimony	0.2657	0.2479	100.0	98.57	ug/L	-1	10	
Arsenic	0.5365	0.4488	100.0	99.49	ug/L	-1	10	
Barium	0.1252	0.1055	100.0	102.5	ug/L	3	10	
Beryllium	0.1690	0.1569	100.0	95.40	ug/L	-5	10	
Cadmium	0.5186	0.3951	100.0	98.60	ug/L	-1	10	
Calcium	0.0227	0.0194	10000	10380	ug/L	4	10	
Chromium	4.4611	3.0624	100.0	98.38	ug/L	-2	10	
Cobalt	3.8167	3.5921	100.0	96.24	ug/L	-4	10	
Copper	1.1035	0.8847	100.0	100.7	ug/L	1	10	
Iron	0.0976	0.0878	10000	10410	ug/L	4	10	
Lead	1.1127	1.0161	100.0	99.65	ug/L	0	10	
Magnesium	0.0821	0.0826	10000	10260	ug/L	3	10	
Manganese	5.0937	4.0043	100.0	97.56	ug/L	-2	10	
Molybdenum	0.8693	0.8286	100.0	98.85	ug/L	-1	10	
Nickel	1.0206	0.7796	100.0	101.5	ug/L	2	10	
Potassium	1.0180	0.6607	10000	10320	ug/L	3	10	
Selenium	0.0535	0.0327	100.0	100.9	ug/L	1	10	
Silver	2.0367	1.9156	100.0	98.87	ug/L	-1	10	
Sodium	1.1287	0.8652	10000	10230	ug/L	2	10	
Thallium	0.7988	0.7183	50.00	48.82	ug/L	-2	10	
Vanadium	3.7484	3.4401	100.0	96.61	ug/L	-3	10	
Zinc	1.4166	0.4608	100.0	101.5	ug/L	2	10	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	280561	-13.21
Scandium	341957	287857	-15.82
Germanium	80606	65759	-18.42
Indium	530308	413642	-22.00
Bismuth	437483	375640	-14.14

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05	File : h2510147	IDF : 1.0
Seqnum : 56341908147	Caldate: 25-AUG-2006	Time : 26-AUG-2006 00:43
Cal : 56341908001		
Standards: S4009, S3310		

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6387	0.6425	10000	10230	ug/L	2	10	
Antimony	0.2657	0.2460	100.0	97.83	ug/L	-2	10	
Arsenic	0.5365	0.4507	100.0	99.92	ug/L	0	10	
Barium	0.1252	0.1052	100.0	102.2	ug/L	2	10	
Beryllium	0.1690	0.1594	100.0	96.88	ug/L	-3	10	
Cadmium	0.5186	0.3944	100.0	98.42	ug/L	-2	10	
Calcium	0.0227	0.0193	10000	10310	ug/L	3	10	
Chromium	4.4611	3.0246	100.0	97.15	ug/L	-3	10	
Cobalt	3.8167	3.5502	100.0	95.11	ug/L	-5	10	
Copper	1.1035	0.8914	100.0	101.4	ug/L	1	10	
Iron	0.0976	0.0873	10000	10360	ug/L	4	10	
Lead	1.1127	0.9969	100.0	97.77	ug/L	-2	10	
Magnesium	0.0821	0.0831	10000	10310	ug/L	3	10	
Manganese	5.0937	3.9275	100.0	95.69	ug/L	-4	10	
Molybdenum	0.8693	0.8326	100.0	99.33	ug/L	-1	10	
Nickel	1.0206	0.7720	100.0	100.5	ug/L	1	10	
Potassium	1.0180	0.6614	10000	10330	ug/L	3	10	
Selenium	0.0535	0.0336	100.0	103.9	ug/L	4	10	
Silver	2.0367	1.9215	100.0	99.17	ug/L	-1	10	
Sodium	1.1287	0.8578	10000	10140	ug/L	1	10	
Thallium	0.7988	0.7035	50.00	47.82	ug/L	-4	10	
Vanadium	3.7484	3.3688	100.0	94.60	ug/L	-5	10	
Zinc	1.4166	0.4571	100.0	100.6	ug/L	1	10	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	275671	-14.72
Scandium	341957	284589	-16.78
Germanium	80606	65117	-19.22
Indium	530308	411108	-22.48
Bismuth	437483	377754	-13.65

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05	File : h2510164	IDF : 1.0
Seqnum : 56341908164	Caldate: 25-AUG-2006	Time : 26-AUG-2006 02:19
Cal : 56341908001		
Standards: S4009, S3310		

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6387	0.6416	10000	10210	ug/L	2	10	
Antimony	0.2657	0.2464	100.0	97.98	ug/L	-2	10	
Arsenic	0.5365	0.4486	100.0	99.46	ug/L	-1	10	
Barium	0.1252	0.1038	100.0	100.9	ug/L	1	10	
Beryllium	0.1690	0.1583	100.0	96.22	ug/L	-4	10	
Cadmium	0.5186	0.3945	100.0	98.44	ug/L	-2	10	
Calcium	0.0227	0.0191	10000	10200	ug/L	2	10	
Chromium	4.4611	3.0351	100.0	97.49	ug/L	-3	10	
Cobalt	3.8167	3.5527	100.0	95.18	ug/L	-5	10	
Copper	1.1035	0.8805	100.0	100.2	ug/L	0	10	
Iron	0.0976	0.0859	10000	10180	ug/L	2	10	
Lead	1.1127	0.9972	100.0	97.80	ug/L	-2	10	
Magnesium	0.0821	0.0831	10000	10310	ug/L	3	10	
Manganese	5.0937	3.9481	100.0	96.19	ug/L	-4	10	
Molybdenum	0.8693	0.8189	100.0	97.69	ug/L	-2	10	
Nickel	1.0206	0.7717	100.0	100.5	ug/L	1	10	
Potassium	1.0180	0.6588	10000	10290	ug/L	3	10	
Selenium	0.0535	0.0329	100.0	101.5	ug/L	2	10	
Silver	2.0367	1.9087	100.0	98.51	ug/L	-1	10	
Sodium	1.1287	0.8598	10000	10170	ug/L	2	10	
Thallium	0.7988	0.6984	50.00	47.47	ug/L	-5	10	
Vanadium	3.7484	3.4054	100.0	95.63	ug/L	-4	10	
Zinc	1.4166	0.4526	100.0	99.61	ug/L	0	10	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	278311	-13.90
Scandium	341957	280570	-17.95
Germanium	80606	63379	-21.37
Indium	530308	400189	-24.54
Bismuth	437483	366963	-16.12

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05	File : h2510173	IDF : 1.0
Seqnum : 56341908173	Caldate: 25-AUG-2006	Time : 26-AUG-2006 03:09
Cal : 56341908001		
Standards: S4009, S3310		

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6387	0.6470	10000	10300	ug/L	3	10	
Antimony	0.2657	0.2475	100.0	98.42	ug/L	-2	10	
Arsenic	0.5365	0.4472	100.0	99.14	ug/L	-1	10	
Barium	0.1252	0.1048	100.0	101.9	ug/L	2	10	
Beryllium	0.1690	0.1573	100.0	95.60	ug/L	-4	10	
Cadmium	0.5186	0.3942	100.0	98.37	ug/L	-2	10	
Calcium	0.0227	0.0193	10000	10330	ug/L	3	10	
Chromium	4.4611	3.0551	100.0	98.14	ug/L	-2	10	
Cobalt	3.8167	3.5457	100.0	94.99	ug/L	-5	10	
Copper	1.1035	0.8808	100.0	100.2	ug/L	0	10	
Iron	0.0976	0.0866	10000	10280	ug/L	3	10	
Lead	1.1127	0.9981	100.0	97.89	ug/L	-2	10	
Magnesium	0.0821	0.0833	10000	10330	ug/L	3	10	
Manganese	5.0937	3.9564	100.0	96.39	ug/L	-4	10	
Molybdenum	0.8693	0.8157	100.0	97.30	ug/L	-3	10	
Nickel	1.0206	0.7703	100.0	100.3	ug/L	0	10	
Potassium	1.0180	0.6579	10000	10270	ug/L	3	10	
Selenium	0.0535	0.0325	100.0	100.4	ug/L	0	10	
Silver	2.0367	1.9140	100.0	98.79	ug/L	-1	10	
Sodium	1.1287	0.8641	10000	10220	ug/L	2	10	
Thallium	0.7988	0.7036	50.00	47.82	ug/L	-4	10	
Vanadium	3.7484	3.4292	100.0	96.30	ug/L	-4	10	
Zinc	1.4166	0.4520	100.0	99.49	ug/L	-1	10	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	272994	-15.55
Scandium	341957	273592	-19.99
Germanium	80606	61636	-23.53
Indium	530308	388023	-26.83
Bismuth	437483	361192	-17.44

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56341908013
 Cal : 56341908001

File : h2510013
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 11:36

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[5.199]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.2935]	0.5000	0.09029	ug/L	!ib
Barium	[0.1082]	0.2500	0.02391	ug/L	!ib
Beryllium	[0.01016]	0.2500	0.009674	ug/L	!ib
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	[7.782]	50.00	7.739	ug/L	!ib
Chromium	[0.1688]	0.5000	0.03860	ug/L	!ib
Cobalt	[0.01040]	0.2500	0.008548	ug/L	!ib
Copper	[0.1766]	0.5000	0.04426	ug/L	!ib
Iron	ND	50.00	6.980	ug/L	
Lead	[0.02944]	0.2500	0.005283	ug/L	!ib
Magnesium	ND	50.00	3.054	ug/L	
Manganese	[0.04879]	0.2500	0.01838	ug/L	!ib
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	[0.01992]	0.2500	0.01266	ug/L	!ib
Sodium	ND	50.00	9.919	ug/L	
Thallium	[0.04866]	0.2500	0.02100	ug/L	!ib
Vanadium	[0.09718]	0.5000	0.08283	ug/L	!ib
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	330743	2.32
Scandium	341957	345158	0.94
Germanium	80606	81572	1.20
Indium	530308	538528	1.55
Bismuth	437483	450909	3.07

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56341908032
 Cal : 56341908001

File : h2510032
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 13:22

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	50.00	2.123	ug/L	
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.2988]	0.5000	0.09029	ug/L	!ib
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	ND	0.2500	0.009674	ug/L	
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	[0.2721]	0.5000	0.03860	ug/L	!ib
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	ND	50.00	3.054	ug/L	
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	[0.2258]	0.5000	0.1891	ug/L	!ib
Silver	ND	0.2500	0.01266	ug/L	
Sodium	ND	50.00	9.919	ug/L	
Thallium	ND	0.2500	0.02100	ug/L	
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	310667	-3.89
Scandium	341957	321206	-6.07
Germanium	80606	76632	-4.93
Indium	530308	503028	-5.14
Bismuth	437483	439702	0.51

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56341908049
 Cal : 56341908001

File : h2510049
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 15:23

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	50.00	2.123	ug/L	
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.2357]	0.5000	0.09029	ug/L	!ib
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	ND	0.2500	0.009674	ug/L	
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	[0.2140]	0.5000	0.03860	ug/L	!ib
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	ND	50.00	3.054	ug/L	
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	[0.3328]	0.5000	0.1891	ug/L	!ib
Silver	ND	0.2500	0.01266	ug/L	
Sodium	ND	50.00	9.919	ug/L	
Thallium	ND	0.2500	0.02100	ug/L	
Vanadium	[0.1496]	0.5000	0.08283	ug/L	!ib
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	338508	4.72
Scandium	341957	341442	-0.15
Germanium	80606	80983	0.47
Indium	530308	535560	0.99
Bismuth	437483	473139	8.15

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56341908054
 Cal : 56341908001

File : h2510054
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 15:51

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	50.00	2.123	ug/L	
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.4083]	0.5000	0.09029	ug/L	!ib
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	[0.02156]	0.2500	0.009674	ug/L	!ib
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	[0.2300]	0.5000	0.03860	ug/L	!ib
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	ND	50.00	3.054	ug/L	
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	ND	0.2500	0.01266	ug/L	
Sodium	ND	50.00	9.919	ug/L	
Thallium	ND	0.2500	0.02100	ug/L	
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	331087	2.42
Scandium	341957	332599	-2.74
Germanium	80606	79531	-1.33
Indium	530308	522128	-1.54
Bismuth	437483	464050	6.07

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56341908075
 Cal : 56341908001

File : h2510075
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 17:59

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[4.388]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.3001]	0.5000	0.09029	ug/L	!ib
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	ND	0.2500	0.009674	ug/L	
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	[0.05610]	0.5000	0.03860	ug/L	!ib
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	ND	50.00	3.054	ug/L	
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	[0.2271]	0.5000	0.1891	ug/L	!ib
Silver	ND	0.2500	0.01266	ug/L	
Sodium	[28.09]	50.00	9.919	ug/L	!ib
Thallium	ND	0.2500	0.02100	ug/L	
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	308846	-4.46
Scandium	341957	311108	-9.02
Germanium	80606	73695	-8.57
Indium	530308	485421	-8.46
Bismuth	437483	440889	0.78

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05	File : h2510095	IDF : 1.0
Seqnum : 56341908095	Caldate: 25-AUG-2006	Time : 25-AUG-2006 19:52
Cal : 56341908001		

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[4.111]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	ND	0.5000	0.09029	ug/L	
Barium	[0.04865]	0.2500	0.02391	ug/L	!ib
Beryllium	ND	0.2500	0.009674	ug/L	
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	[12.12]	50.00	7.739	ug/L	!ib
Chromium	ND	0.5000	0.03860	ug/L	
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	[10.14]	50.00	3.054	ug/L	!ib
Manganese	0.4970	0.2500	0.01838	ug/L	ib ***
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	ND	0.2500	0.01266	ug/L	
Sodium	50.94	50.00	9.919	ug/L	ib ***
Thallium	ND	0.2500	0.02100	ug/L	
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	285616	-11.64
Scandium	341957	290280	-15.11
Germanium	80606	66846	-17.07
Indium	530308	444700	-16.14
Bismuth	437483	404591	-7.52

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05	File : h2510112	IDF : 1.0
Seqnum : 56341908112	Caldate: 25-AUG-2006	Time : 25-AUG-2006 21:27
Cal : 56341908001		

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	50.00	2.123	ug/L	
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.4429]	0.5000	0.09029	ug/L	!ib
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	ND	0.2500	0.009674	ug/L	
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	[0.1622]	0.5000	0.03860	ug/L	!ib
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	ND	50.00	3.054	ug/L	
Manganese	[0.09152]	0.2500	0.01838	ug/L	!ib
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	ND	0.2500	0.01266	ug/L	
Sodium	ND	50.00	9.919	ug/L	
Thallium	ND	0.2500	0.02100	ug/L	
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	284168	-12.09
Scandium	341957	288190	-15.72
Germanium	80606	65147	-19.18
Indium	530308	431001	-18.73
Bismuth	437483	393121	-10.14

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56341908127
 Cal : 56341908001

File : h2510127
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 22:51

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[2.433]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.4360]	0.5000	0.09029	ug/L	!ib
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	ND	0.2500	0.009674	ug/L	
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	[0.1972]	0.5000	0.03860	ug/L	!ib
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	ND	50.00	3.054	ug/L	
Manganese	[0.05030]	0.2500	0.01838	ug/L	!ib
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	ND	0.2500	0.01266	ug/L	
Sodium	ND	50.00	9.919	ug/L	
Thallium	ND	0.2500	0.02100	ug/L	
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	288640	-10.71
Scandium	341957	288941	-15.50
Germanium	80606	65158	-19.16
Indium	530308	430096	-18.90
Bismuth	437483	392938	-10.18

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56341908143
 Cal : 56341908001

File : h2510143
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 26-AUG-2006 00:21

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[2.590]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	ND	0.5000	0.09029	ug/L	
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	ND	0.2500	0.009674	ug/L	
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	ND	0.5000	0.03860	ug/L	
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	ND	50.00	3.054	ug/L	
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	[0.2735]	0.5000	0.1891	ug/L	!ib
Silver	ND	0.2500	0.01266	ug/L	
Sodium	ND	50.00	9.919	ug/L	
Thallium	ND	0.2500	0.02100	ug/L	
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	280602	-13.19
Scandium	341957	285186	-16.60
Germanium	80606	64949	-19.42
Indium	530308	426141	-19.64
Bismuth	437483	387502	-11.42

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56341908149
 Cal : 56341908001

File : h2510149
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 26-AUG-2006 00:54

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[5.667]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.3676]	0.5000	0.09029	ug/L	!ib
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	ND	0.2500	0.009674	ug/L	
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	[0.06742]	0.5000	0.03860	ug/L	!ib
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	ND	50.00	3.054	ug/L	
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	[0.3084]	0.5000	0.1891	ug/L	!ib
Silver	ND	0.2500	0.01266	ug/L	
Sodium	ND	50.00	9.919	ug/L	
Thallium	ND	0.2500	0.02100	ug/L	
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	279019	-13.68
Scandium	341957	285780	-16.43
Germanium	80606	64901	-19.48
Indium	530308	424184	-20.01
Bismuth	437483	379320	-13.29

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56341908166
 Cal : 56341908001

File : h2510166
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 26-AUG-2006 02:30

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[4.331]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.3038]	0.5000	0.09029	ug/L	!ib
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	[0.02097]	0.2500	0.009674	ug/L	!ib
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	[0.2216]	0.5000	0.03860	ug/L	!ib
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	ND	50.00	3.054	ug/L	
Manganese	[0.02361]	0.2500	0.01838	ug/L	!ib
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	[0.2277]	0.5000	0.1891	ug/L	!ib
Silver	ND	0.2500	0.01266	ug/L	
Sodium	ND	50.00	9.919	ug/L	
Thallium	ND	0.2500	0.02100	ug/L	
Vanadium	[0.1415]	0.5000	0.08283	ug/L	!ib
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	283210	-12.39
Scandium	341957	282598	-17.36
Germanium	80606	64451	-20.04
Indium	530308	421094	-20.59
Bismuth	437483	380367	-13.06

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56341908176
 Cal : 56341908001

File : h2510176
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 26-AUG-2006 03:26

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[2.383]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.3311]	0.5000	0.09029	ug/L	!ib
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	ND	0.2500	0.009674	ug/L	
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	[0.2350]	0.5000	0.03860	ug/L	!ib
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	ND	50.00	3.054	ug/L	
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	ND	0.2500	0.01266	ug/L	
Sodium	ND	50.00	9.919	ug/L	
Thallium	ND	0.2500	0.02100	ug/L	
Vanadium	[0.1267]	0.5000	0.08283	ug/L	!ib
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	279756	-13.46
Scandium	341957	271702	-20.54
Germanium	80606	60665	-24.74
Indium	530308	393682	-25.76
Bismuth	437483	362610	-17.11

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56341908015
 Cal : 56341908001
 Standards: S4011, S3310

File : h2510015
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 11:47

Analyte	Quant	RL	Units	Flags
Antimony	2.096	0.2500	ug/L	
Arsenic	[0.2745]	0.5000	ug/L	
Barium	0.8940	0.2500	ug/L	
Beryllium	[0.01137]	0.2500	ug/L	
Cadmium	[0]	0.2500	ug/L	
Chromium	1.128	0.5000	ug/L	
Cobalt	2.459	0.2500	ug/L	
Copper	1.572	0.5000	ug/L	
Lead	1.180	0.2500	ug/L	
Manganese	0.8620	0.2500	ug/L	
Nickel	1.587	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1231]	0.2500	ug/L	
Thallium	[0.02564]	0.2500	ug/L	
Vanadium	[0.09319]	0.5000	ug/L	
Zinc	1.811	0.5000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	98970	ug/L	99
Calcium	300000	286100	ug/L	95
Iron	250000	218600	ug/L	87
Magnesium	100000	97390	ug/L	97
Molybdenum	2000	1963	ug/L	98
Potassium	100000	97100	ug/L	97
Sodium	250000	237600	ug/L	95

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	288781	-10.66
Scandium	341957	324404	-5.13
Germanium	80606	83583	3.69
Indium	530308	482377	-9.04
Bismuth	437483	377109	-13.80

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56341908016
 Cal : 56341908001
 Standards: S4012, S3310

File : h2510016
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 11:53

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	99440	ug/L	-1		
Arsenic	100.0	98.06	ug/L	-2	20	
Cadmium	100.0	88.16	ug/L	-12	20	
Calcium	300000	286500	ug/L	-5		
Chromium	200.0	192.6	ug/L	-4	20	
Cobalt	200.0	190.0	ug/L	-5	20	
Copper	200.0	181.4	ug/L	-9	20	
Iron	250000	215800	ug/L	-14		
Magnesium	100000	98710	ug/L	-1		
Manganese	200.0	190.5	ug/L	-5	20	
Molybdenum	2000	1955	ug/L	-2		
Nickel	200.0	183.1	ug/L	-8	20	
Potassium	100000	97270	ug/L	-3		
Selenium	100.0	88.84	ug/L	-11	20	
Silver	50.00	45.55	ug/L	-9	20	
Sodium	250000	237500	ug/L	-5		
Vanadium	200.0	198.8	ug/L	-1	20	
Zinc	100.0	98.62	ug/L	-1	20	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Scandium	341957	318101	-6.98
Germanium	80606	82303	2.11

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56341908069
 Cal : 56341908001
 Standards: S4011, S3310

File : h2510069
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 17:18

Analyte	Quant	RL	Units	Flags
Antimony	1.931	0.2500	ug/L	
Arsenic	[0.1344]	0.5000	ug/L	
Barium	0.9864	0.2500	ug/L	
Beryllium	[0.009709]	0.2500	ug/L	
Cadmium	[0.08450]	0.2500	ug/L	
Chromium	0.9977	0.5000	ug/L	
Cobalt	2.418	0.2500	ug/L	
Copper	1.548	0.5000	ug/L	
Lead	1.133	0.2500	ug/L	
Manganese	0.9306	0.2500	ug/L	
Nickel	1.423	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.09473]	0.2500	ug/L	
Thallium	[0]	0.2500	ug/L	
Vanadium	[0]	0.5000	ug/L	
Zinc	1.797	0.5000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	101400	ug/L	101
Calcium	300000	284600	ug/L	95
Iron	250000	211400	ug/L	85
Magnesium	100000	99350	ug/L	99
Molybdenum	2000	1954	ug/L	98
Potassium	100000	97920	ug/L	98
Sodium	250000	241400	ug/L	97

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	267803	-17.15
Scandium	341957	283813	-17.00
Germanium	80606	72556	-9.99
Indium	530308	428075	-19.28
Bismuth	437483	371229	-15.14

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56341908070
 Cal : 56341908001
 Standards: S4012, S3310

File : h2510070
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 17:24

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	100900	ug/L	1		
Arsenic	100.0	95.82	ug/L	-4	20	
Cadmium	100.0	86.27	ug/L	-14	20	
Calcium	300000	280400	ug/L	-7		
Chromium	200.0	181.9	ug/L	-9	20	
Cobalt	200.0	183.8	ug/L	-8	20	
Copper	200.0	175.9	ug/L	-12	20	
Iron	250000	205900	ug/L	-18		
Magnesium	100000	98510	ug/L	-1		
Manganese	200.0	180.5	ug/L	-10	20	
Molybdenum	2000	1943	ug/L	-3		
Nickel	200.0	175.5	ug/L	-12	20	
Potassium	100000	97040	ug/L	-3		
Selenium	100.0	87.80	ug/L	-12	20	
Silver	50.00	44.96	ug/L	-10	20	
Sodium	250000	237500	ug/L	-5		
Vanadium	200.0	192.8	ug/L	-4	20	
Zinc	100.0	94.07	ug/L	-6	20	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Scandium	341957	293606	-14.14
Germanium	80606	75737	-6.04

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
Seqnum : 56341908138 File : h2510138
Cal : 56341908001 Caldate: 25-AUG-2006
Standards: S4011, S3310

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IDF      : 1.0
Time     : 25-AUG-2006 23:53
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Analyte	Quant	RL	Units	Flags
Antimony	2.032	0.2500	ug/L	
Arsenic	0.6304	0.5000	ug/L	
Barium	0.9731	0.2500	ug/L	
Beryllium	[0]	0.2500	ug/L	
Cadmium	[0]	0.2500	ug/L	
Chromium	1.141	0.5000	ug/L	
Cobalt	2.442	0.2500	ug/L	
Copper	1.457	0.5000	ug/L	
Lead	1.127	0.2500	ug/L	
Manganese	1.097	0.2500	ug/L	
Nickel	1.339	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.09744]	0.2500	ug/L	
Thallium	[0]	0.2500	ug/L	
Vanadium	[0.03751]	0.5000	ug/L	
Zinc	1.724	0.5000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	93320	ug/L	93
Calcium	300000	286300	ug/L	95
Iron	250000	228000	ug/L	91
Magnesium	100000	92250	ug/L	92
Molybdenum	2000	1935	ug/L	97
Potassium	100000	95140	ug/L	95
Sodium	250000	228900	ug/L	92

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	246467	-23.75
Scandium	341957	264221	-22.73
Germanium	80606	62276	-22.74
Indium	530308	371444	-29.96
Bismuth	437483	328797	-24.84

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56341908144
 Cal : 56341908001
 Standards: S4012, S3310

File : h2510144
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 26-AUG-2006 00:27

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	99210	ug/L	-1		
Arsenic	100.0	96.04	ug/L	-4	20	
Cadmium	100.0	86.24	ug/L	-14	20	
Calcium	300000	288800	ug/L	-4		
Chromium	200.0	184.7	ug/L	-8	20	
Cobalt	200.0	186.1	ug/L	-7	20	
Copper	200.0	178.9	ug/L	-11	20	
Iron	250000	218700	ug/L	-13		
Magnesium	100000	96920	ug/L	-3		
Manganese	200.0	194.0	ug/L	-3	20	
Molybdenum	2000	1921	ug/L	-4		
Nickel	200.0	181.3	ug/L	-9	20	
Potassium	100000	98330	ug/L	-2		
Selenium	100.0	86.83	ug/L	-13	20	
Silver	50.00	44.30	ug/L	-11	20	
Sodium	250000	237800	ug/L	-5		
Vanadium	200.0	202.6	ug/L	1	20	
Zinc	100.0	96.92	ug/L	-3	20	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Scandium	341957	258071	-24.53
Germanium	80606	63640	-21.05

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56341908177
 Cal : 56341908001
 Standards: S4011, S3310

File : h2510177
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 26-AUG-2006 03:32

Analyte	Quant	RL	Units	Flags
Antimony	1.992	0.2500	ug/L	
Arsenic	[0.1743]	0.5000	ug/L	
Barium	0.9553	0.2500	ug/L	
Beryllium	[0.006285]	0.2500	ug/L	
Cadmium	[0.06245]	0.2500	ug/L	
Chromium	1.147	0.5000	ug/L	
Cobalt	2.324	0.2500	ug/L	
Copper	1.463	0.5000	ug/L	
Lead	1.095	0.2500	ug/L	
Manganese	0.8956	0.2500	ug/L	
Nickel	1.448	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1030]	0.2500	ug/L	
Thallium	[0]	0.2500	ug/L	
Vanadium	[0.2144]	0.5000	ug/L	
Zinc	1.772	0.5000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	100100	ug/L	100
Calcium	300000	287300	ug/L	96
Iron	250000	214000	ug/L	86
Magnesium	100000	97810	ug/L	98
Molybdenum	2000	1930	ug/L	97
Potassium	100000	97920	ug/L	98
Sodium	250000	238500	ug/L	95

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	239521	-25.90
Scandium	341957	252016	-26.30
Germanium	80606	61354	-23.88
Indium	530308	355876	-32.89
Bismuth	437483	310677	-28.99

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

nst : MET05
 eqnum : 56341908178
 al : 56341908001
 standards: S4012, S3310

File : h2510178
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 26-AUG-2006 03:37

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	101300	ug/L	1		
Arsenic	100.0	94.15	ug/L	-6	20	
Cadmium	100.0	84.33	ug/L	-16	20	
Calcium	300000	285700	ug/L	-5		
Chromium	200.0	174.7	ug/L	-13	20	
Cobalt	200.0	167.9	ug/L	-16	20	
Copper	200.0	170.7	ug/L	-15	20	
Iron	250000	205600	ug/L	-18		
Magnesium	100000	99150	ug/L	-1		
Manganese	200.0	181.9	ug/L	-9	20	
Molybdenum	2000	1923	ug/L	-4		
Nickel	200.0	173.0	ug/L	-14	20	
Potassium	100000	98650	ug/L	-1		
Selenium	100.0	85.31	ug/L	-15	20	
Silver	50.00	43.01	ug/L	-14	20	
Sodium	250000	237900	ug/L	-5		
Vanadium	200.0	189.0	ug/L	-6	20	
Zinc	100.0	90.97	ug/L	-9	20	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Scandium	341957	246936	-27.79
Germanium	80606	61390	-23.84

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56341908 Instrument: MET05 Agilent ICP-MS
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 25-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
001	h2510001	TUN				25-AUG-2006 10:28	1.0	1.0				1		
002	h2510002	X	RINSE			25-AUG-2006 10:35	1.0					2		
003	h2510003	ICALBLK	STD-BLANK			25-AUG-2006 10:40	1.0	1.0				2		
004	h2510004	ICAL	CS1			25-AUG-2006 10:46	1.0	1.0				3		
005	h2510005	ICAL	CS2			25-AUG-2006 10:51	1.0	1.0				4		
006	h2510006	ICAL	CS3			25-AUG-2006 10:57	1.0	1.0				5		
007	h2510007	ICAL	CS4			25-AUG-2006 11:03	1.0	1.0				6		
008	h2510008	ICAL	CS5			25-AUG-2006 11:08	1.0	1.0				7		
009	h2510009	ICAL	CS6			25-AUG-2006 11:14	1.0	1.0				8		
010	h2510010	X	RINSE			25-AUG-2006 11:19	1.0					9		
011	h2510011	ICV				25-AUG-2006 11:25	1.0	1.0			1	1		
012	h2510012	X	RINSE			25-AUG-2006 11:30	1.0					2		
013	h2510013	ICB				25-AUG-2006 11:36	1.0	1.0			1	2		
014	h2510014	X				25-AUG-2006 11:42	1.0	1.0			1	2		
015	h2510015	ICSA				25-AUG-2006 11:47	1.0	1.0			1	10	2	7:CA=285400
016	h2510016	ICSAB				25-AUG-2006 11:53	1.0	1.0			1	11	2	7:CA=286500
017	h2510017	X	RINSE			25-AUG-2006 11:58	1.0					2		
018	h2510018	X	RINSE			25-AUG-2006 12:04	1.0					2		
019	h2510019	BLANK	QC353251			25-AUG-2006 12:10	1.0	1.0			1	2		
020	h2510020	BS	QC353252			25-AUG-2006 12:15	1.0	1.0			1	2		
021	h2510021	BSD	QC353253			25-AUG-2006 12:21	1.0	1.0			1	2		
022	h2510022	X	RINSE			25-AUG-2006 12:26	1.0					2		
023	h2510023	MSS	188837-009			25-AUG-2006 12:32	1.0	1.0			4	2		4:NA=61250.0
024	h2510024	SER	QC353256			25-AUG-2006 12:37	5.0	1.0			1	2		
025	h2510025	MS	QC353254			25-AUG-2006 12:43	1.0	1.0			1	2		5:NA=72310.0
026	h2510026	MSD	QC353255			25-AUG-2006 12:49	1.0	1.0			1	2		5:NA=73570.0
027	h2510027	PDS	QC353257			25-AUG-2006 12:54	1.0	1.0			1	12	2	5:NA=70530.0
028	h2510028	X	RINSE			25-AUG-2006 13:00	1.0					2		
029	h2510029	CCV				25-AUG-2006 13:05	1.0	1.0			1	13		
030	h2510030	X	RINSE			25-AUG-2006 13:11	1.0					2		
031	h2510031	X				25-AUG-2006 13:16	1.0	1.0			1	2		

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S3780 13=S4009

Analyst: Date: 2/28/06

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

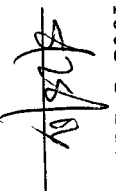
Sequence: 56341908 Instrument: MET05 Agilent ICP-MS
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 25-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
032	h2510032	CCB				25-AUG-2006 13:22 1.0	1.0	1.0			1	2		
033	h2510033	X	RINSE			25-AUG-2006 13:28 1.0						2		
034	h2510034	MSS	188837-009	116738	Filtira	25-AUG-2006 13:33 10.0	1.0	1.0			1	2		
035	h2510035	SER	QC353256	116738	Filtira	25-AUG-2006 13:39 50.0	1.0	1.0			1	2		
036	h2510036	MS	QC353254	116738	Filtira	25-AUG-2006 13:45 10.0	1.0	1.0			1	2		
037	h2510037	MSD	QC353255	116738	Filtira	25-AUG-2006 13:50 10.0	1.0	1.0			1	2		
038	h2510038	PDS	QC353257	116738	Filtira	25-AUG-2006 13:56 10.0	1.0	1.0			1	12 2		
039	h2510039	X	RINSE			25-AUG-2006 14:26 1.0						2		
040	h2510040	SAMPLE	188837-012	116738	Water	25-AUG-2006 14:32 1.0	1.0	1.0			1	2		
041	h2510041	SAMPLE	188869-001	116738	Water	25-AUG-2006 14:38 1.0	1.0	1.0			1	2		
042	h2510042	SAMPLE	188837-008	116738	Filtira	25-AUG-2006 14:43 1.0	1.0	1.0			3	2		3:NA=201500
043	h2510043	SAMPLE	188837-008	116738	Filtira	25-AUG-2006 14:49 20.0	1.0	1.0			1	2		
044	h2510044	SAMPLE	188837-010	116738	Filtira	25-AUG-2006 14:55 1.0	1.0	1.0			5	2		6:NA=112700
045	h2510045	X	RINSE			25-AUG-2006 15:00 1.0						2		
046	h2510046	CCV				25-AUG-2006 15:06 1.0	1.0	1.0			1	13 2		548
047	h2510047	X	RINSE			25-AUG-2006 15:11 1.0						2		
048	h2510048	X				25-AUG-2006 15:17 1.0	1.0	1.0			1	2		
049	h2510049	CCB				25-AUG-2006 15:23 1.0	1.0	1.0				2		
050	h2510050	SAMPLE	188837-010	116738	Filtira	25-AUG-2006 15:28 10.0	1.0	1.0			1	2		
051	h2510051	X	RINSE			25-AUG-2006 15:34 1.0						13 2		
052	h2510052	CCV				25-AUG-2006 15:39 1.0	1.0	1.0			1	2		
053	h2510053	X	RINSE			25-AUG-2006 15:45 1.0						2		
054	h2510054	CCB				25-AUG-2006 15:51 1.0	1.0	1.0			1	2		
055	h2510055	X				25-AUG-2006 15:57 1.0	1.0	1.0			1	2		4:MG=367300
056	h2510056	SAMPLE	188837-005	116738	Filtira	25-AUG-2006 16:05 1.0	1.0	1.0			5	2		7:MG=350900
057	h2510057	SAMPLE	188837-005	116738	Water	25-AUG-2006 16:11 1.0	1.0	1.0			7	2		
058	h2510058	X	RINSE			25-AUG-2006 16:16 1.0						2		
059	h2510059	X	RINSE			25-AUG-2006 16:22 1.0						2		
060	h2510060	X	RINSE			25-AUG-2006 16:28 1.0						2		1:NA=132920
061	h2510061	SAMPLE	188837-005	116738	Filtira	25-AUG-2006 16:33 25.0	1.0	1.0			1	2		4:NA=615200
062	h2510062	SAMPLE	188837-005	116738	Water	25-AUG-2006 16:39 5.0	1.0	1.0			4	2		

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S3780 13=S4009

Analyst: 

Date: 

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

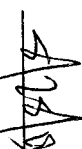
Sequence: 56341908 Instrument: MET05 Agilent ICP-MS
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 25-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds	Used	>LR
063	h2510063	SAMPLE	188837-005	116738	Water	25-AUG-2006 16:44	25.0	1.0	1		1	2	1:NA=144960	
064	h2510064	X	RINSE			25-AUG-2006 16:50	1.0					2		
065	h2510065	X	RINSE			25-AUG-2006 16:56	1.0					2		
066	h2510066	SAMPLE	188837-005	116738	Filtira	25-AUG-2006 17:01	250.0	1.0	1		1	2		
067	h2510067	SAMPLE	188837-005	116738	Water	25-AUG-2006 17:07	250.0	1.0			1	2		
068	h2510068	X	RINSE			25-AUG-2006 17:12	1.0					2		
069	h2510069	ICSA				25-AUG-2006 17:18	1.0	1.0			1	10 2	7:CA=284600	
070	h2510070	ICSAB				25-AUG-2006 17:24	1.0	1.0			1	11 2	7:CA=280400	
071	h2510071	X	RINSE			25-AUG-2006 17:29	1.0					2		
072	h2510072	X	RINSE			25-AUG-2006 17:35	1.0					2		
073	h2510073	CCV				25-AUG-2006 17:48	1.0	1.0			1	13 2		
074	h2510074	X	RINSE			25-AUG-2006 17:54	1.0					2		
075	h2510075	CCB				25-AUG-2006 17:59	1.0	1.0			1	2		
076	h2510076	X				25-AUG-2006 18:05	1.0					2		
077	h2510077	TUN				25-AUG-2006 18:11	1.0	1.0				1	546	
078	h2510078	X	RINSE			25-AUG-2006 18:17	1.0					2		
079	h2510079	BLANK	QC353240	116736	Filtira	25-AUG-2006 18:23	1.0	1.0	2		1	2		
080	h2510080	BS	QC353241	116736	Filtira	25-AUG-2006 18:28	1.0	1.0	1		1	2		
081	h2510081	BSD	QC353242	116736	Filtira	25-AUG-2006 18:34	1.0	1.0	1		1	2		
082	h2510082	X	RINSE			25-AUG-2006 18:39	1.0					2		
083	h2510083	MSS	188802-001	116736	Filtira	25-AUG-2006 18:45	1.0	1.0	6		1	2	6:NA=401300	
084	h2510084	SER	QC353245	116736	Filtira	25-AUG-2006 18:51	5.0	1.0			1	2	4:NA=86340.0	
085	h2510085	MS	QC353243	116736	Filtira	25-AUG-2006 18:56	1.0	1.0			1	2	6:NA=413600	
086	h2510086	MSD	QC353244	116736	Filtira	25-AUG-2006 19:02	1.0	1.0			1	2	6:NA=399000	
087	h2510087	PDS	QC353246	116736	Filtira	25-AUG-2006 19:07	1.0	1.0			1	12 2	6:NA=392500	
088	h2510088	X	RINSE			25-AUG-2006 19:13	1.0					2		
089	h2510089	MSS	188802-001	116736	Filtira	25-AUG-2006 19:18	10.0	1.0	3		1	2	3:NA=44480.0	
090	h2510090	SER	QC353245	116736	Filtira	25-AUG-2006 19:24	50.0	1.0			1	2	1:MN=273.400	
091	h2510091	X	RINSE			25-AUG-2006 19:29	1.0					2		
092	h2510092	CCV				25-AUG-2006 19:35	1.0	1.0			1	13 2		
093	h2510093	X	RINSE			25-AUG-2006 19:41	1.0					2		

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S3780 13=S4009

Analyst: 

Date: 

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56341908 Instrument: MET05 Agilent ICP-MS
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 25-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used	>LR
094	h2510094	X				25-AUG-2006 19:46	1.0	1.0	2	1	1	2	
095	h2510095	CCB				25-AUG-2006 19:52	1.0	1.0	2	1	1	2	
096	h2510096	MS	QC353243			25-AUG-2006 19:58	10.0	1.0	1	1	1	2	3:NA=42710.0
097	h2510097	MSD	QC353244			25-AUG-2006 20:03	10.0	1.0	1	1	1	2	3:NA=42160.0
098	h2510098	PDS	QC353246			25-AUG-2006 20:09	10.0	1.0	1	1	1	12 2	3:NA=41400.0
099	h2510099	X	RINSE			25-AUG-2006 20:14	1.0					2	
100	h2510100	MSS	188802-001			25-AUG-2006 20:20	100.0	1.0	2	1	1	2	
101	h2510101	SER	QC353245			25-AUG-2006 20:26	500.0	1.0	1	1	1	2	
102	h2510102	PDS	QC353246			25-AUG-2006 20:31	100.0	1.0				12 2	1:MN=238.400
103	h2510103	X	RINSE			25-AUG-2006 20:37	1.0					2	
104	h2510104	SAMPLE	188802-003			25-AUG-2006 20:42	1.0	1.0	3	1	1	2	3:NA=79380.0
105	h2510105	SAMPLE	188802-002			25-AUG-2006 20:48	1.0	1.0	5	1	1	2	6:NA=85730.0
106	h2510106	SAMPLE	188802-004			25-AUG-2006 20:53	1.0	1.0	3	1	1	2	3:NA=87540.0
107	h2510107	SAMPLE	188802-005			25-AUG-2006 20:59	1.0	1.0	2	1	1	2	2:NA=291100
108	h2510108	X	RINSE			25-AUG-2006 21:05	1.0					2	
109	h2510109	CCV				25-AUG-2006 21:10	1.0	1.0				13 2	
110	h2510110	X	RINSE			25-AUG-2006 21:16	1.0					2	
111	h2510111	X				25-AUG-2006 21:21	1.0	1.0				2	
112	h2510112	CCB				25-AUG-2006 21:27	1.0	1.0				2	
113	h2510113	SAMPLE	188802-006			25-AUG-2006 21:33	1.0	1.0	2	1	1	2	2:NA=282200
114	h2510114	SAMPLE	188802-008			25-AUG-2006 21:38	1.0	1.0	3	1	1	2	3:NA=66270.0
115	h2510115	SAMPLE	188802-009			25-AUG-2006 21:44	1.0	1.0	3	1	1	2	3:NA=221900
116	h2510116	SAMPLE	188802-010			25-AUG-2006 21:50	1.0	1.0	3	1	1	2	3:NA=65950.0
117	h2510117	SAMPLE	188802-012			25-AUG-2006 21:55	1.0	1.0	4	1	1	2	4:NA=166100
118	h2510118	SAMPLE	188802-013			25-AUG-2006 22:01	1.0	1.0	4	1	1	2	4:MG=84340.0
119	h2510119	SAMPLE	188802-014			25-AUG-2006 22:06	1.0	1.0	3	1	1	2	3:NA=53340.0
120	h2510120	SAMPLE	188802-015			25-AUG-2006 22:12	1.0	1.0				2	
121	h2510121	SAMPLE	188802-020			25-AUG-2006 22:18	1.0	1.0	3	1	1	2	3:NA=53950.0
122	h2510122	X	RINSE			25-AUG-2006 22:23	1.0					2	
123	h2510123	SAMPLE	188802-004			25-AUG-2006 22:29	10.0	1.0				2	
124	h2510124	X	RINSE			25-AUG-2006 22:34	1.0					2	

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S3780 13=S4009

Analyst: Date: 8/28/06

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56341908 Instrument: MET05
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 25-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
125	h2510125	CCV				25-AUG-2006	22:40	1.0	1.0		1	13	2	
126	h2510126	X	RINSE			25-AUG-2006	22:46	1.0				2		
127	h2510127	CCB				25-AUG-2006	22:51	1.0			1	2		
128	h2510128	X				25-AUG-2006	22:57	1.0			1	2		
129	h2510129	SAMPLE	188802-003			25-AUG-2006	23:03	10.0			1	2		
130	h2510130	SAMPLE	188802-005			25-AUG-2006	23:08	20.0			1	2		
131	h2510131	SAMPLE	188802-006			25-AUG-2006	23:14	20.0			1	2		
132	h2510132	SAMPLE	188802-008			25-AUG-2006	23:19	10.0			1	2		
133	h2510133	SAMPLE	188802-009			25-AUG-2006	23:25	20.0			1	2		
134	h2510134	SAMPLE	188802-010			25-AUG-2006	23:31	10.0			1	2		
135	h2510135	SAMPLE	188802-012			25-AUG-2006	23:36	5.0			1	2		1:NA=35830.0
136	h2510136	SAMPLE	188802-013			25-AUG-2006	23:42	10.0			1	2		
137	h2510137	SAMPLE	188802-014			25-AUG-2006	23:47	5.0			1	2		
138	h2510138	ICSA				25-AUG-2006	23:53	1.0			1	10	2	7:CA=286300
139	h2510139	X	RINSE			25-AUG-2006	23:58	1.0				2		
140	h2510140	CCV				26-AUG-2006	00:04	1.0			1	13	2	
141	h2510141	X	RINSE			26-AUG-2006	00:10	1.0				2		
142	h2510142	X				26-AUG-2006	00:15	1.0			1	2		
143	h2510143	CCB				26-AUG-2006	00:21	1.0			1	2		
144	h2510144	ICSA				26-AUG-2006	00:27	1.0			1	11	2	8:CA=288800
145	h2510145	X	RINSE			26-AUG-2006	00:32	1.0				2		
146	h2510146	X	RINSE			26-AUG-2006	00:38	1.0				2		
147	h2510147	CCV				26-AUG-2006	00:43	1.0			1	13	2	
148	h2510148	X	RINSE			26-AUG-2006	00:49	1.0				2		
149	h2510149	CCB				26-AUG-2006	00:54	1.0			1	2		
150	h2510150	X				26-AUG-2006	01:00	1.0			1	2		
151	h2510151	BLANK	QC353487			26-AUG-2006	01:06	1.0			1	2		
152	h2510152	BS	QC353488			26-AUG-2006	01:11	1.0			1	2		
153	h2510153	BSD	QC353489			26-AUG-2006	01:17	1.0			1	2		
154	h2510154	X	RINSE			26-AUG-2006	01:22	1.0				2		
155	h2510155	MSS	188926-006			26-AUG-2006	01:28	1.0			1	2		

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S3780 13=S4009

Analyst: MD Date: 8/28/06

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56341908 Instrument: MET05
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 25-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
156	h2510156	SER	QC353492	116795	Filtira	26-AUG-2006 01:34	5.0	1.0	1	1	1	2		
157	h2510157	MS	QC353490	116795	Filtira	26-AUG-2006 01:39	1.0	1.0		1	1	2		
158	h2510158	MSD	QC353491	116795	Filtira	26-AUG-2006 01:45	1.0	1.0		1	1	2		
159	h2510159	PDS	QC353493	116795	Filtira	26-AUG-2006 01:51	1.0	1.0		1	1	12	2	
160	h2510160	X	RINSE			26-AUG-2006 01:56	1.0					2		
161	h2510161	SAMPLE	188926-019	116795	Filtira	26-AUG-2006 02:02	1.0	1.0	1	1	1	2		
162	h2510162	SAMPLE	188926-024	116795	Filtira	26-AUG-2006 02:07	1.0	1.0		1	1	2		
163	h2510163	X	RINSE			26-AUG-2006 02:13	1.0					2		
164	h2510164	CCV				26-AUG-2006 02:19	1.0			1	1	13	2	
165	h2510165	X	RINSE			26-AUG-2006 02:24	1.0	1.0				2		
166	h2510166	CCB				26-AUG-2006 02:30	1.0	1.0		1	1	2		
167	h2510167	X				26-AUG-2006 02:36	1.0	1.0		1	1	2		
168	h2510168	SAMPLE	188927-007	116795	Filtira	26-AUG-2006 02:41	1.0	1.0		1	1	2		
169	h2510169	SAMPLE	188917-001	116795	Water	26-AUG-2006 02:47	1.0	1.0	1	1	1	2		
170	h2510170	SAMPLE	188917-002	116795	Water	26-AUG-2006 02:53	1.0	1.0	1	1	1	2		
171	h2510171	SAMPLE	188917-003	116795	Water	26-AUG-2006 02:58	1.0	1.0		1	1	2		
172	h2510172	X	RINSE			26-AUG-2006 03:04	1.0					2		
173	h2510173	CCV				26-AUG-2006 03:09	1.0	1.0			1	13	2	
174	h2510174	X	RINSE			26-AUG-2006 03:15	1.0					2		
175	h2510175	X				26-AUG-2006 03:20	1.0	1.0	1	1	1	2		
176	h2510176	CCB				26-AUG-2006 03:26	1.0	1.0			1	10	2	7:CA=287300
177	h2510177	ICSA				26-AUG-2006 03:32	1.0	1.0		1	1	11	2	7:CA=285700
178	h2510178	ICSAB				26-AUG-2006 03:37	1.0	1.0		1	1			

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S3780 13=S4009

Analyst: Date: 8/28/06

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET05
 Calnum : 56346042001
 Units : ug/L

Date : 28-AUG-2006 07:34
 X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	stds
L1	h2807004	56346042004	CS1	28-AUG-2006 07:40	S4004
L2	h2807005	56346042005	CS2	28-AUG-2006 07:45	S4005
L3	h2807006	56346042006	CS3	28-AUG-2006 07:52	S4006
L4	h2807007	56346042007	CS4	28-AUG-2006 07:59	S4007
L5	h2807008	56346042008	CS5	28-AUG-2006 08:05	S4001
L6	h2807009	56346042009	CS6	28-AUG-2006 08:10	S4002

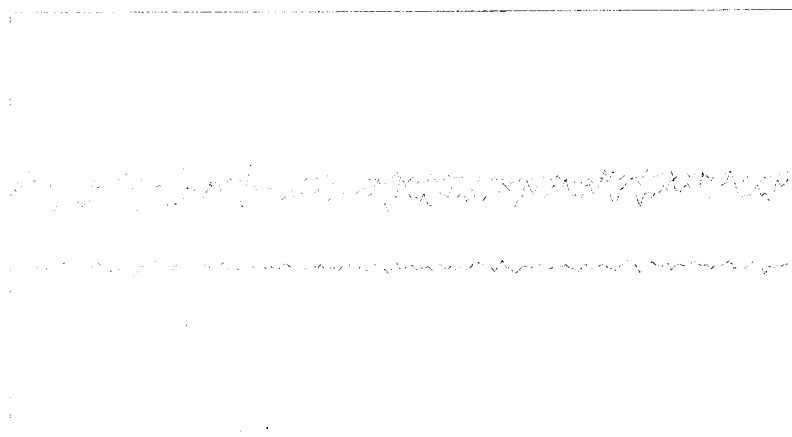
Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ²	%RD	MWR ²	Fig
Aluminum		1.1765	1.1445	0.9782	0.9578	0.9350	BLNK	-6.9207	1.06474		1.0384	1.000	0.995		
Antimony	0.3412	0.3024	0.3006	0.2742	0.2833	0.2871	BLNK	-0.0847	3.49494		0.2981	1.000	0.995		
Arsenic		0.9080	0.7472	0.6027	0.5765	0.5719	BLNK	-0.3324	1.74915		0.6813	1.000	0.995		
Barium	0.4278	0.2781	0.2016	0.1165	0.1157	0.1191	BLNK	-0.0968	8.44961		0.2098	1.000	0.995		
Beryllium	0.1963	0.1754	0.1741	0.1780	0.1801	0.1801	BLNK	-0.0392	5.55372		0.1807	1.000	0.995		
Cadmium	0.9145	0.7040	0.6441	0.5738	0.5560	0.5487	BLNK	-0.1446	1.81926		0.6568	1.000	0.995		
Calcium		0.0450	0.0348	0.0238	0.0234	0.0230	BLNK	-26.687	43.3219		0.0300	1.000	0.995		
Chromium		8.7167	6.2264	3.6344	3.4310	3.6299	BLNK	-0.7643	0.27986		5.1277	0.999	0.995		
Cobalt	4.4340	3.9896	4.0208	3.9043	3.8773	4.1736	BLNK	-0.0247	0.24312		4.0666	0.999	0.995		
Copper		1.3242	1.2213	1.0436	1.0313	1.0031	BLNK	-0.1196	0.99203		1.1247	1.000	0.995		
Iron		0.1283	0.1073	0.0870	0.0920	0.0905	BLNK	-25.359	11.0339		0.1010	1.000	0.995		
Lead	1.4740	1.3768	1.5538	1.2258	1.2390	1.2823	BLNK	-0.0628	0.78554		1.3586	1.000	0.995		
Magnesium		0.1205	0.1178	0.1219	0.1154	0.1128	BLNK	-2.6341	8.82136		0.1177	1.000	0.995		
Manganese	6.0358	5.1923	4.7077	4.2066	4.2119	4.5450	BLNK	-0.0884	0.22344		4.8166	0.999	0.995		
Molybdenum		1.3624	1.2567	1.1452	1.1552	1.1745	BLNK	-0.1553	0.85512		1.2188	1.000	0.995		
Nickel	1.2080	0.9109	0.9413	0.8781	0.8582	0.8413	BLNK	-0.0785	1.18441		0.9396	1.000	0.995		
Potassium		2.0366	1.4784	0.8886	0.8283	0.8194	BLNK	-73.826	1.22317		1.2102	1.000	0.995		
Selenium		0.1093	0.0787	0.0537	0.0488	0.0473	BLNK	-0.8012	21.1011		0.0676	1.000	0.995		
Silver	2.6902	2.6997	2.7320	2.7289	2.7110	2.6992	BLNK	-0.0184	0.37019		2.7102	1.000	0.995		
Sodium		1.7549	1.5037	1.0442	1.0030	0.9750	BLNK	-32.415	1.02169		1.2562	1.000	0.995		
Thallium		1.3539	1.0636	0.9089	0.9188	0.9270	BLNK	-0.1842	1.08319		1.0344	1.000	0.995		
Vanadium		4.9362	4.4232	3.7892	3.8873	4.3557	BLNK	-0.1975	0.23497		4.2783	0.997	0.995		
Zinc		1.8751	1.6207	0.5853	0.5106	0.4916	BLNK	-0.9577	2.02989		1.0167	1.000	0.995		

550

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+ [blank]

Tune Report

Tune File : ATUNE.U



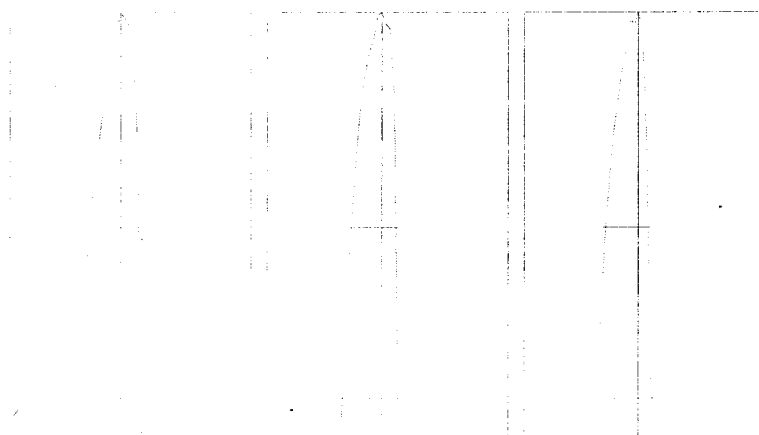
m/z:	7	89	205
Range:	20,000	50,000	20,000
Count:	12,102	20,368	12,442
Mean:	11539.5	20160.0	12171.3
RSD%:	3.48	1.80	1.28
n:	200		

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec

Oxide:	156/140	0.44%
Doubly Charged:	70/140	1.63%

Background:

m/z:	7	89	205
Cps:	11.0	5.2	5.5



m/z:	7	89	205
Height:	12,254	20,054	12,706
Axis:	6.90	88.95	204.95
W-50%:	0.65	0.60	0.60
W-10%:	0.7500	0.700	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Tuning Parameters

===Plasma Condition===

RF Power: 1300 W
RF Matching: 1.7 V
Smpl Depth: 8 mm
Torch-H: -0.1 mm
Torch-V: 0.4 mm
Carrier Gas: 1.14 L/min
Makeup Gas: 0 L/min
Optional Gas: --- %
PeriPump1: 0.1 rps
PeriPump2: --- rps
S/C Temp: 2 degC

===Ion Lenses===

Extract 1: -110 V
Extract 2: -70 V
Einzel 1,3: -100 V
Einzel 2: 7 V
Omega Bias: -55 V
Omega (+): 5 V
Omega (-): -5 V
QP Focus: 7 V
Plate Bias: -5 V

===Q-Pole Parameters===

AMU Gain: 130
AMU Offset: 126
Axis Gain: 0.9993
Axis Offset: -0.1
QP Bias: 1.6 V

===Detector Parameters===

Discriminator: 8.8 mV
Analog HV: 1860 V
Pulse HV: 1590 V

Temp.p\$\$

P/A Factor Tuning Report

Acquired: Aug 28 2006 07:01 am

Mass[amu]	Element	P/A Factor
6	Li	0.071020
9	Be	0.078800
23	Na	0.084430
25	Mg	Sensitivity too high
26	Mg	Sensitivity too high
27	Al	0.092636
39	K	0.090778
43	Ca	0.093302
44	Ca	Sensitivity too high
45	Sc	0.091864
51	V	0.097703
52	Cr	0.098578
53	Cr	Sensitivity too low
54	Fe	Sensitivity too high
55	Mn	0.100101
57	Fe	Sensitivity too high
59	Co	0.101293
60	Ni	0.098382
63	Cu	0.100911
65	Cu	0.099128
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
77	(As)	Sensitivity too low
82	Se	Sensitivity too low
83	(As)	Sensitivity too low
88	(Ca)	Sensitivity too low
89	Y	0.098806
95	Mo	0.097502
98	Mo	0.097621
99	(Mo)	Sensitivity too low
106	(Cd)	Sensitivity too low
108	(Cd)	Sensitivity too low
109	Ag	0.100509
111	Cd	Sensitivity too low
114	Cd	0.099917
115	In	0.102778
118	(In)	0.104435
121	Sb	0.100953
135	Ba	Sensitivity too low
137	Ba	0.103133
159	Tb	0.105374
166	Er	Sensitivity too low

Temp.p\$\$
205 Tl 0.104312
206 (Pb) 0.101671
207 (Pb) 0.107463
208 Pb 0.103502
209 Bi Sensitivity too low

===Detector Parameters===

Discriminator: 8.8 mV

Analog HV: 1860 V

Pulse HV: 1590 V

6020 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\06H2807a.B\001TUNE.D
Date Acquired: Aug 28 2006 07:22 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s4021
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	0.59	5.00	
59 Co	0.96	5.00	
115 In	0.24	5.00	
205 Tl	1.91	5.00	

7 Li

Mass Calib.

Actual: 6.90

Required: 6.90 - 7.10

Flag:

Peak Width

Actual: 0.55

Required: 0.90

Flag:

59 Co

Mass Calib.

Actual: 59.00

Required: 58.90 - 59.10

Flag:

Peak Width

Actual: 0.55

Required: 0.90

Flag:

115 In

Mass Calib.

Actual: 114.95

Required: 114.90 - 115.10

Flag:

Peak Width

Actual: 0.55

Required: 0.90

Flag:

205 T1

Mass Calib.

Actual: 205.00

Required: 204.90 - 205.10

Flag:

Peak Width

Actual: 0.55

Required: 0.90

Flag:

Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06H2807a.B\002BLNK.D\002BLNK.D#
 Date Acquired: Aug 28 2006 07:28 am
 Acq. Method: 60200111.M
 Operator:
 Sample Name: rinse
 Misc Info:
 Vial Number: 1101
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal. Update: Aug 25 2006 11:15 am
 Sample Type: 6-Blank
 Dilution Factor: 1.00

QC Elements

Element	Corr. Conc.	RSD(%)	Raw Conc.	High Limit	Flag
9 Be	-0.01833 ppb	51.72	-0.01833	1.00	
23 Na	-6.75 ppb	23.45	-6.75	1.00	
26 Mg	-4.455 ppb	18.62	-4.455	1.00	
27 Al	5.749 ppb	2.25	5.749	1.00	
39 K	-0.08088 ppb	1267.30	-0.08088	1.00	
44 Ca	1.643 ppb	27.91	1.643	1.00	
51 V	0.002516 ppb	7352.90	0.002516	1.00	
52 Cr	0.2063 ppb	7.94	0.2063	1.00	
55 Mn	-0.08112 ppb	4.78	-0.08112	1.00	
57 Fe	-0.2007 ppb	693.07	-0.2007	1.00	
59 Co	-0.0175 ppb	19.69	-0.0175	1.00	
60 Ni	-0.07113 ppb	32.67	-0.07113	1.00	
65 Cu	-0.09473 ppb	19.43	-0.09473	1.00	
66 Zn	-2.026 ppb	2.87	-2.026	1.00	
75 As	-0.08352 ppb	276.10	-0.08352	1.00	
82 Se	0.0678 ppb	558.11	0.0678	1.00	
95 Mo	0.2365 ppb	13.73	0.2365	1.00	
109 Ag	-0.01065 ppb	68.53	-0.01065	1.00	
111 Cd	0.02698 ppb	193.48	0.02698	1.00	
121 Sb	0.01674 ppb	43.63	0.01674	1.00	
137 Ba	0.009462 ppb	82.96	0.009462	1.00	
205 Tl	0.1926 ppb	13.34	0.1926	1.00	
208 Pb	-0.0002896 ppb	1995.20	-0.00029	1.00	

ISTD Elements

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	417382.19	1.39	---		#VALUE!	80 - 120	
45 Sc	325842.19	0.64	---		#VALUE!	80 - 120	
72 Ge	73668.66	0.89	---		#VALUE!	80 - 120	
115 In	504872.84	0.89	---		#VALUE!	80 - 120	
209 Bi	386883.31	0.32	---		#VALUE!	80 - 120	

ISTD Ref File : ---

2 :Element Failures	0 :Max. Number of Failures Allowed
0 :ISTD Failures	0 :Max. Nnumber of ISTD Failures Allowed

QC Results:

Analytes:	Fail
ISTD:	Pass

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06H2807a.B\003CAL
 Date Acquired: Aug 28 2006 07:34 am
 Operator:
 Sample Name: std-blank
 Misc Info:
 Vial Number: 1101
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\602001
 Last Cal Update: Aug 25 2006 11:15 am
 Sample Type: CalBlk
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	418282.59 M	6906.00	1.65
9 Be	58.89 P	24.57	41.72
23 Na	207555.59 P	7064.00	3.40
26 Mg	1953.33 P	243.70	12.48
27 Al	42524.44 P	517.60	1.22
39 K	394867.81 P	2625.00	0.66
44 Ca	4030.98 P	215.90	5.36
45 Sc	327124.41 P	1992.00	0.61
51 V	1239.37 P	82.51	6.66
52 Cr	4026.67 P	150.60	3.74
55 Mn	583.33 P	56.08	9.61
57 Fe	3388.89 P	201.90	5.96
59 Co	150.00 P	20.82	13.88
60 Ni	97.78 P	3.85	3.94
65 Cu	177.77 P	23.41	13.17
66 Zn	695.56 P	48.80	7.02
72 Ge	73728.44 P	341.00	0.46
75 As	280.15 P	29.83	10.65
82 Se	56.00 P	10.73	19.16
95 Mo	267.78 P	50.92	19.02
109 Ag	73.33 P	16.67	22.73
111 Cd	117.18 P	12.39	10.57
115 In	509454.50 P	3044.00	0.60
121 Sb	246.67 P	37.12	15.05
137 Ba	116.67 P	3.33	2.86
205 Tl	1323.33 P	95.28	7.20
208 Pb	622.22 P	57.19	9.19
209 Bi	389011.09 P	4014.00	1.03

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2807a.B\004CALI.D\004CALI.D#
 Date Acquired: Aug 28 2006 07:40 am
 Operator:
 Sample Name: cs1,s4004
 Misc Info:
 Vial Number: 1102
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 28 2006 07:36 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	435953.19 M	2557.00	0.59
9 Be	427.78 P	53.47	12.50
23 Na	386034.41 P	9531.00	2.47
26 Mg	20888.89 P	460.40	2.20
27 Al	241922.20 P	1499.00	0.62
39 K	550114.38 P	2753.00	0.50
44 Ca	11434.01 P	306.10	2.68
45 Sc	339408.91 P	1570.00	0.46
51 V	2835.83 P	903.80	31.87
52 Cr	5267.78 P	223.00	4.23
55 Mn	2221.11 P	18.36	0.83
57 Fe	6550.00 P	163.30	2.49
59 Co	1632.22 P	138.00	8.45
60 Ni	444.44 P	37.47	8.43
65 Cu	645.47 P	7.70	1.19
66 Zn	1600.00 P	35.28	2.21
72 Ge	73597.78 P	480.90	0.65
75 As	454.12 P	46.84	10.32
82 Se	69.78 P	8.04	11.52
95 Mo	627.78 P	35.64	5.68
109 Ag	990.00 P	39.30	3.97
111 Cd	336.58 P	24.83	7.38
115 In	516376.69 P	1187.00	0.23
121 Sb	881.11 P	53.16	6.03
137 Ba	1104.44 P	89.21	8.08
205 Tl	1927.78 P	101.20	5.25
208 Pb	2903.33 P	46.67	1.61
209 Bi	393950.00 P	2615.00	0.66

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	435953.19	0.59	418282.63	104.2	80 - 120	

45 Sc	339408.88	0.46	327124.44	103.8	80 -	120
72 Ge	73597.77	0.65	73728.45	99.8	80 -	120
115 In	516376.69	0.23	509454.47	101.4	80 -	120
209 Bi	393949.97	0.66	389011.09	101.3	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2807a.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2807a.B\005CALI.D\005CALI.D#
 Date Acquired: Aug 28 2006 07:45 am
 Operator:
 Sample Name: cs2,s4005
 Misc Info:
 Vial Number: 1103
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 28 2006 07:41 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	417858.69 M	6224.00	1.49
9 Be	732.22 P	57.19	7.81
23 Na	571276.63 P	7304.00	1.28
26 Mg	39212.22 P	729.30	1.86
27 Al	383004.41 P	1977.00	0.52
39 K	663016.63 P	3243.00	0.49
44 Ca	14652.45 P	162.90	1.11
45 Sc	325568.91 P	3094.00	0.95
51 V	3624.19 P	352.80	9.73
52 Cr	6398.89 P	120.10	1.88
55 Mn	3812.22 P	178.00	4.67
57 Fe	9416.67 P	29.06	0.31
59 Co	2928.89 P	40.73	1.39
60 Ni	668.89 P	99.57	14.89
65 Cu	972.06 P	31.51	3.24
66 Zn	1376.67 P	52.07	3.78
72 Ge	73414.00 P	315.80	0.43
75 As	666.78 P	81.27	12.19
82 Se	80.22 P	16.00	19.95
95 Mo	1000.00 P	107.40	10.74
109 Ag	1982.22 P	98.56	4.97
111 Cd	516.80 P	24.90	4.82
115 In	506997.50 P	2614.00	0.52
121 Sb	1533.33 P	46.31	3.02
137 Ba	1410.00 P	67.66	4.80
205 Tl	2634.44 P	25.02	0.95
208 Pb	5357.78 P	35.95	0.67
209 Bi	389155.50 P	1513.00	0.39

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	417858.66	1.49	418282.63	99.9	80 - 120	

45 Sc	325568.88	0.95	327124.44	99.5	80 -	120
72 Ge	73414.00	0.43	73728.45	99.6	80 -	120
115 In	506997.47	0.52	509454.47	99.5	80 -	120
209 Bi	389155.53	0.39	389011.09	100.0	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2807a.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2807a.B\006CALI.D\006CALI.D#
 Date Acquired: Aug 28 2006 07:52 am
 Operator:
 Sample Name: cs3,s4006
 Misc Info:
 Vial Number: 1104
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 28 2006 07:47 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	423596.59 P	4349.00	1.03
9 Be	1474.44 P	37.17	2.52
23 Na	990778.88 A	10150.00	1.02
26 Mg	77597.78 P	628.30	0.81
27 Al	754067.38 A	3367.00	0.45
39 K	974153.13 A	9441.00	0.97
44 Ca	22899.74 P	105.20	0.46
45 Sc	329460.00 P	2302.00	0.70
51 V	6493.42 P	234.60	3.61
52 Cr	9143.33 P	90.74	0.99
55 Mn	6913.33 P	259.70	3.76
57 Fe	15752.22 P	200.30	1.27
59 Co	5904.44 P	149.20	2.53
60 Ni	1382.22 P	65.18	4.72
65 Cu	1794.12 P	119.50	6.66
66 Zn	2380.00 P	34.80	1.46
72 Ge	73424.00 P	732.80	1.00
75 As	1097.40 P	27.37	2.49
82 Se	115.56 P	20.66	17.88
95 Mo	1845.56 P	70.66	3.83
109 Ag	4011.11 P	116.60	2.91
111 Cd	946.24 P	64.09	6.77
115 In	506723.50 P	2219.00	0.44
121 Sb	3046.67 P	34.80	1.14
137 Ba	2043.33 P	37.86	1.85
205 Tl	4142.22 P	91.06	2.20
208 Pb	12103.33 P	305.70	2.53
209 Bi	389453.31 P	2851.00	0.73

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	423596.66	1.03	418282.63	101.3	80 - 120	

C:\ICPCHEM\1\DATA\06H2807a.B\006CALI.D\006CALI.D#

45	Sc	329460.00	0.70	327124.44	100.7	80 -	120
72	Ge	73424.00	1.00	73728.45	99.6	80 -	120
115	In	506723.53	0.44	509454.47	99.5	80 -	120
209	Bi	389453.31	0.73	389011.09	100.1	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2807a.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2807a.B\007CALI.D\007CALI.D#
 Date Acquired: Aug 28 2006 07:59 am
 Operator:
 Sample Name: cs4,s4007
 Misc Info:
 Vial Number: 1105
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 28 2006 07:56 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	424523.31 P	2451.00	0.58
9 Be	15110.00 P	486.90	3.22
23 Na	6849631.00 A	34480.00	0.50
26 Mg	799551.69 A	10280.00	1.29
27 Al	6416650.00 A	44130.00	0.69
39 K	5828210.00 A	56150.00	0.96
44 Ca	155966.30 P	582.30	0.37
45 Sc	328017.81 P	4232.00	1.29
51 V	55249.20 P	747.60	1.35
52 Cr	52993.33 P	518.90	0.98
55 Mn	61334.44 P	597.20	0.97
57 Fe	126804.40 P	573.20	0.45
59 Co	56931.11 P	845.60	1.49
60 Ni	12801.11 P	335.60	2.62
65 Cu	15216.87 P	217.30	1.43
66 Zn	8534.44 P	90.33	1.06
72 Ge	72906.67 P	740.00	1.02
75 As	8786.60 P	108.60	1.24
82 Se	782.89 P	8.44	1.08
95 Mo	16697.78 P	163.20	0.98
109 Ag	39790.00 P	814.90	2.05
111 Cd	8366.96 P	102.00	1.22
115 In	500116.81 P	2678.00	0.54
121 Sb	27426.67 P	110.20	0.40
137 Ba	11652.22 P	296.40	2.54
205 Tl	35036.67 P	718.40	2.05
208 Pb	94511.11 P	452.40	0.48
209 Bi	385524.41 P	1558.00	0.40

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	424523.31	0.58	418282.63	101.5	80 - 120	

C:\ICPCHEM\1\DATA\06H2807a.B\007CALI.D\007CALI.D#

45	Sc	328017.78	1.29	327124.44	100.3	80 -	120
72	Ge	72906.66	1.02	73728.45	98.9	80 -	120
115	In	500116.81	0.54	509454.47	98.2	80 -	120
209	Bi	385524.44	0.40	389011.09	99.1	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2807a.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2807a.B\008CALI.D\008CALI.D#
 Date Acquired: Aug 28 2006 08:05 am
 Operator:
 Sample Name: cs5,s4001
 Misc Info:
 Vial Number: 1106
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 28 2006 08:01 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	420431.09 P	4496.00	1.07
9 Be	151410.00 P	1938.00	1.28
23 Na	65538840.00 A	503900.00	0.77
26 Mg	7543311.00 A	84940.00	1.13
27 Al	62581232.00 A	395500.00	0.63
39 K	54121808.00 A	498100.00	0.92
44 Ca	1531792.00 A	42230.00	2.76
45 Sc	326707.81 P	1795.00	0.55
51 V	560130.88 P	3933.00	0.70
52 Cr	494397.69 P	5673.00	1.15
55 Mn	606892.19 P	2994.00	0.49
57 Fe	1325970.00 A	3552.00	0.27
59 Co	558702.19 P	5707.00	1.02
60 Ni	123667.80 P	2099.00	1.70
65 Cu	148599.91 P	1223.00	0.82
66 Zn	73570.00 P	670.30	0.91
72 Ge	72047.56 P	582.70	0.81
75 As	83069.81 P	596.20	0.72
82 Se	7025.11 P	113.80	1.62
95 Mo	166460.00 P	2646.00	1.59
109 Ag	390636.69 P	1076.00	0.28
111 Cd	80117.18 P	1260.00	1.57
115 In	480264.19 P	831.70	0.17
121 Sb	272121.09 P	3326.00	1.22
137 Ba	111121.10 P	700.00	0.63
205 Tl	341935.50 P	3794.00	1.11
208 Pb	922110.00 P	4569.00	0.50
209 Bi	372134.41 P	3698.00	0.99

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	420431.09	1.07	418282.63	100.5	80 - 120	

45	Sc	326707.78	0.55	327124.44	99.9	80 -	120
72	Ge	72047.56	0.81	73728.45	97.7	80 -	120
115	In	480264.19	0.17	509454.47	94.3	80 -	120
209	Bi	372134.44	0.99	389011.09	95.7	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2807a.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2807a.B\009CALI.D\009CALI.D#
 Date Acquired: Aug 28 2006 08:10 am
 Operator:
 Sample Name: cs6,s4002
 Misc Info:
 Vial Number: 1107
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 28 2006 08:06 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	412708.91 P	3838.00	0.93
9 Be	297347.81 P	3405.00	1.15
23 Na	126900600.00 A	613700.00	0.48
26 Mg	14687420.00 A	87750.00	0.60
27 Al	121691300.00 A	296700.00	0.24
39 K	106648700.00 A	1133000.00	1.06
44 Ca	2998783.00 A	26720.00	0.89
45 Sc	325394.41 P	1395.00	0.43
51 V	1234798.00 A	6963.00	0.56
52 Cr	1029055.00 A	747.40	0.07
55 Mn	1288504.00 A	2840.00	0.22
57 Fe	2564816.00 A	24510.00	0.96
59 Co	1183179.00 A	5265.00	0.44
60 Ni	238496.70 P	1881.00	0.79
65 Cu	284369.41 P	486.80	0.17
66 Zn	139356.70 P	413.50	0.30
72 Ge	70875.11 P	311.20	0.44
75 As	162134.70 P	645.90	0.40
82 Se	13418.22 P	165.40	1.23
95 Mo	332967.81 P	3397.00	1.02
109 Ag	765247.69 P	7626.00	1.00
111 Cd	155543.20 P	857.20	0.55
115 In	463060.19 P	3571.00	0.77
121 Sb	531668.88 P	189.70	0.04
137 Ba	220605.50 P	840.10	0.38
205 Tl	671742.19 P	2027.00	0.30
208 Pb	1858405.00 A	3178.00	0.17
209 Bi	362353.31 P	3734.00	1.03

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	412708.88	0.93	418282.63	98.7	80 - 120	

C:\ICPCHEM\1\DATA\06H2807a.B\009CALI.D\009CALI.D#

45	Sc	325394.44	0.43	327124.44	99.5	80 -	120
72	Ge	70875.11	0.44	73728.45	96.1	80 -	120
115	In	463060.19	0.77	509454.47	90.9	80 -	120
209	Bi	362353.31	1.03	389011.09	93.1	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2807a.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Summary

Calibration : C:\ICPCHEM\1\DATA\06G1718A.B\60200111.C

Last Calib: Aug 28, 2006 08:12

Cal Type : External Calibration Method

Cal Title :

Standard Data Files

Level	DataPath	DataFile	Date Acquired
1	...hem\1\data\06h2807a.b\003calb.d\	003calb.d#	Aug 28 2006 07:34 am
2	...hem\1\data\06h2807a.b\004cali.d\	004cali.d#	Aug 28 2006 07:40 am
3	...hem\1\data\06h2807a.b\005cali.d\	005cali.d#	Aug 28 2006 07:45 am
4	...hem\1\data\06h2807a.b\006cali.d\	006cali.d#	Aug 28 2006 07:52 am
5	...hem\1\data\06h2807a.b\007cali.d\	007cali.d#	Aug 28 2006 07:59 am
6	...hem\1\data\06h2807a.b\008cali.d\	008cali.d#	Aug 28 2006 08:05 am
7	...hem\1\data\06h2807a.b\009cali.d\	009cali.d#	Aug 28 2006 08:10 am
8	---		
9	---		
10	---		
11	---		
12	---		
13	---		
14	---		
15	---		
16	---		
17	---		
18	---		
19	---		
20	---		

Level	BkgPath	BkgFile	Interference Correction
1	---	---	ON
2	---	---	ON
3	---	---	ON
4	---	---	ON
5	---	---	ON
6	---	---	ON
7	---	---	ON
8	---		
9	---		
10	---		
11	---		
12	---		
13	---		
14	---		
15	---		
16	---		
17	---		
18	---		
19	---		
20	---		

Name	m/z	IS	Equation	r	Units
Li	6	---	Excluded	---	ppb
Be	9	6	$Y = 1.801E-1 * X + 7.060E-3$ (blank)	---	ppb
Na	23	45	$Y = 9.788E-1 * X + 3.173E+1$ (blank)	---	ppb
Mg	25	45	Excluded	---	ppb
Mg	26	45	$Y = 1.134E-1 * X + 2.986E-1$ (blank)	---	ppb
Al	27	45	$Y = 9.392E-1 * X + 6.500E+0$ (blank)	---	ppb
K	39	45	$Y = 8.175E-1 * X + 6.036E+1$ (blank)	---	ppb
Ca	43	45	Excluded	---	ppb
Ca	44	45	$Y = 2.308E-2 * X + 6.160E-1$ (blank)	---	ppb
Sc	45	---	Excluded	---	ppb
V	51	72	$Y = 4.256E+0 * X + 8.404E-1$ (blank)	---	ppb
Cr	52	72	$Y = 3.573E+0 * X + 2.731E+0$ (blank)	---	ppb
Cr	53	72	Excluded	---	ppb
Fe	54	72	Excluded	---	ppb
Mn	55	72	$Y = 4.475E+0 * X + 3.956E-1$ (blank)	---	ppb
Fe	57	72	$Y = 9.063E-2 * X + 2.298E+0$ (blank)	---	ppb
Co	59	72	$Y = 4.113E+0 * X + 1.017E-1$ (blank)	---	ppb
Ni	60	72	$Y = 8.443E-1 * X + 6.631E-2$ (blank)	---	ppb
Cu	63	72	Excluded	---	ppb
Cu	65	72	$Y = 1.008E+0 * X + 1.205E-1$ (blank)	---	ppb
Zn	66	72	$Y = 4.926E-1 * X + 4.718E-1$ (blank)	---	ppb
Ge	72	---	Excluded	---	ppb
As	75	72	$Y = 5.717E-1 * X + 1.900E-1$ (blank)	---	ppb
(As)	77	72	Excluded	---	ppb
Se	82	72	$Y = 4.739E-2 * X + 3.797E-2$ (blank)	---	ppb
(As)	83	72	Excluded	---	ppb
(Ca)	88	72	Excluded	---	ppb
Y	89	72	Excluded	---	ppb
Mo	95	72	$Y = 1.169E+0 * X + 1.816E-1$ (blank)	---	ppb
Mo	98	72	Excluded	---	ppb
(Mo)	99	72	Excluded	---	ppb
(Cd)	106	72	Excluded	---	ppb
(Cd)	108	72	Excluded	---	ppb
Ag	109	72	$Y = 2.701E+0 * X + 4.972E-2$ (blank)	---	ppb
Cd	111	72	$Y = 5.497E-1 * X + 7.948E-2$ (blank)	---	ppb
Cd	114	72	Excluded	---	ppb
In	115	---	Excluded	---	ppb
(In)	118	---	Excluded	---	ppb
Sb	121	115	$Y = 2.861E-1 * X + 2.422E-2$ (blank)	---	ppb
Ba	135	115	Excluded	---	ppb
Ba	137	115	$Y = 1.183E-1 * X + 1.145E-2$ (blank)	---	ppb
Tb	159	---	Excluded	---	ppb
Er	166	115	Excluded	---	ppb
Tl	205	209	$Y = 9.232E-1 * X + 1.700E-1$ (blank)	---	ppb
(Pb)	206	209	Excluded	---	ppb
(Pb)	207	209	Excluded	---	ppb
Pb	208	209	$Y = 1.273E+0 * X + 7.999E-2$ (blank)	---	ppb
Bi	209	---	Excluded	---	ppb

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET05
 Seqnum : 56346042011
 Cal : 56346042001
 Standards: S4008

File : h2807011
 Caldate: 28-AUG-2006

IDF : 1.0
 Time : 28-AUG-2006 08:21

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	1.0384	0.9225	10000	9816	ug/L	-2	10	
Antimony	0.2981	0.2459	100.0	85.87	ug/L	-14	10	v- ***
Arsenic	0.6813	0.5630	100.0	98.15	ug/L	-2	10	
Barium	0.2098	0.1117	100.0	94.30	ug/L	-6	10	
Beryllium	0.1807	0.1735	100.0	96.31	ug/L	-4	10	
Cadmium	0.6568	0.5523	100.0	100.3	ug/L	0	10	
Calcium	0.0300	0.0229	10000	9887	ug/L	-1	10	
Chromium	5.1277	3.3337	100.0	92.53	ug/L	-7	10	
Cobalt	4.0666	3.7865	100.0	92.03	ug/L	-8	10	
Copper	1.1247	1.0051	100.0	99.59	ug/L	0	10	
Iron	0.1010	0.0908	10000	9992	ug/L	0	10	
Lead	1.3586	1.1967	100.0	93.94	ug/L	-6	10	
Magnesium	0.1177	0.1113	10000	9814	ug/L	-2	10	
Manganese	4.8166	4.1038	100.0	91.61	ug/L	-8	10	
Molybdenum	1.2188	1.1354	100.0	96.94	ug/L	-3	10	
Nickel	0.9396	0.8431	100.0	99.78	ug/L	0	10	
Potassium	1.2102	0.8115	10000	9852	ug/L	-1	10	
Selenium	0.0676	0.0484	100.0	101.3	ug/L	1	10	
Silver	2.7102	2.6422	100.0	97.79	ug/L	-2	10	
Sodium	1.2562	0.9782	10000	9962	ug/L	0	10	
Thallium	1.0344	0.9211	50.00	49.70	ug/L	-1	10	
Vanadium	4.2783	3.8280	100.0	89.75	ug/L	-10	10	
Zinc	1.0167	0.5002	100.0	100.6	ug/L	1	10	

ISTD (ICALBLK h2807003)	ICALBLK Abund	Abund	%Drift
Lithium	418283	430337	2.88
Scandium	327124	330373	0.99
Germanium	73728	71444	-3.10
Indium	509455	488293	-4.15
Bismuth	389011	372438	-4.26

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
Seqnum : 56346042029
Cal : 56346042001
Standards: S4009, S3310

File : h2807029
Caldate: 28-AUG-2006

```
IDF      : 1.0
Time     : 28-AUG-2006 10:15
```

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	1.0384	0.9301	10000	9896	ug/L	-1	10	
Antimony	0.2981	0.2430	100.0	84.83	ug/L	-15	10	c- ***
Arsenic	0.6813	0.5453	100.0	95.05	ug/L	-5	10	
Barium	0.2098	0.1114	100.0	94.04	ug/L	-6	10	
Beryllium	0.1807	0.1735	100.0	96.33	ug/L	-4	10	
Cadmium	0.6568	0.5258	100.0	95.52	ug/L	-4	10	
Calcium	0.0300	0.0228	10000	9856	ug/L	-1	10	
Chromium	5.1277	3.2207	100.0	89.37	ug/L	-11	10	c- ***
Cobalt	4.0666	3.7539	100.0	91.24	ug/L	-9	10	
Copper	1.1247	0.9929	100.0	98.38	ug/L	-2	10	
Iron	0.1010	0.0887	10000	9764	ug/L	-2	10	
Lead	1.3586	1.1806	100.0	92.68	ug/L	-7	10	
Magnesium	0.1177	0.1132	10000	9984	ug/L	0	10	
Manganese	4.8166	4.0274	100.0	89.90	ug/L	-10	10	
Molybdenum	1.2188	1.0920	100.0	93.22	ug/L	-7	10	
Nickel	0.9396	0.8281	100.0	98.00	ug/L	-2	10	
Potassium	1.2102	0.7967	10000	9671	ug/L	-3	10	
Selenium	0.0676	0.0469	100.0	98.06	ug/L	-2	10	
Silver	2.7102	2.5196	100.0	93.25	ug/L	-7	10	
Sodium	1.2562	1.0086	10000	10270	ug/L	3	10	
Thallium	1.0344	0.8916	50.00	48.10	ug/L	-4	10	
Vanadium	4.2783	3.6628	100.0	85.87	ug/L	-14	10	c- ***
Zinc	1.0167	0.4984	100.0	100.2	ug/L	0	10	

ISTD (ICALBLK h2807003)	ICALBLK Abund	Abund	%Drift
Lithium	418283	405941	-2.95
Scandium	327124	305961	-6.47
Germanium	73728	68174	-7.53
Indium	509455	452758	-11.13
Bismuth	389011	364859	-6.21

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56346042040
 Cal : 56346042001
 Standards: S4009, S3310

File : h2807040
 Caldate: 28-AUG-2006

IDF : 1.0
 Time : 28-AUG-2006 11:17

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	1.0384	0.9216	10000	9806	ug/L	-2	10	
Antimony	0.2981	0.2425	100.0	84.65	ug/L	-15	10	c- ***
Arsenic	0.6813	0.5532	100.0	96.43	ug/L	-4	10	
Barium	0.2098	0.1097	100.0	92.58	ug/L	-7	10	
Beryllium	0.1807	0.1707	100.0	94.78	ug/L	-5	10	
Cadmium	0.6568	0.5397	100.0	98.04	ug/L	-2	10	
Calcium	0.0300	0.0224	10000	9659	ug/L	-3	10	
Chromium	5.1277	3.2576	100.0	90.40	ug/L	-10	10	
Cobalt	4.0666	3.7537	100.0	91.23	ug/L	-9	10	
Copper	1.1247	0.9964	100.0	98.72	ug/L	-1	10	
Iron	0.1010	0.0901	10000	9913	ug/L	-1	10	
Lead	1.3586	1.1762	100.0	92.33	ug/L	-8	10	
Magnesium	0.1177	0.1111	10000	9802	ug/L	-2	10	
Manganese	4.8166	4.0770	100.0	91.01	ug/L	-9	10	
Molybdenum	1.2188	1.1030	100.0	94.16	ug/L	-6	10	
Nickel	0.9396	0.8259	100.0	97.74	ug/L	-2	10	
Potassium	1.2102	0.7873	10000	9556	ug/L	-4	10	
Selenium	0.0676	0.0490	100.0	102.6	ug/L	3	10	
Silver	2.7102	2.5356	100.0	93.84	ug/L	-6	10	
Sodium	1.2562	0.9771	10000	9951	ug/L	0	10	
Thallium	1.0344	0.8880	50.00	47.91	ug/L	-4	10	
Vanadium	4.2783	3.7761	100.0	88.53	ug/L	-11	10	c- ***
Zinc	1.0167	0.4943	100.0	99.38	ug/L	-1	10	

ISTD (ICALBLK h2807003)	ICALBLK Abund	Abund	%Drift
Lithium	418283	428249	2.38
Scandium	327124	320048	-2.16
Germanium	73728	68480	-7.12
Indium	509455	461085	-9.49
Bismuth	389011	371267	-4.56

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56346042014
 Cal : 56346042001

File : h2807014
 Caldate: 28-AUG-2006

IDF : 1.0
 Time : 28-AUG-2006 08:38

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	50.00	2.123	ug/L	
Antimony	[0.04621]	0.2500	0.03394	ug/L	!ib
Arsenic	ND	0.5000	0.09029	ug/L	
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	ND	0.2500	0.009674	ug/L	
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	[0.1815]	0.5000	0.03860	ug/L	!ib
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	ND	50.00	3.054	ug/L	
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	ND	0.2500	0.01266	ug/L	
Sodium	ND	50.00	9.919	ug/L	
Thallium	ND	0.2500	0.02100	ug/L	
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2807003)	ICALBLK Abund	Abund	%Drift
Lithium	418283	437178	4.52
Scandium	327124	329302	0.67
Germanium	73728	72640	-1.48
Indium	509455	501484	-1.56
Bismuth	389011	384007	-1.29

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56346042031
 Cal : 56346042001

File : h2807031
 Caldate: 28-AUG-2006

IDF : 1.0
 Time : 28-AUG-2006 10:26

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[3.462]	50.00	2.123	ug/L	!ib
Antimony	[0.09982]	0.2500	0.03394	ug/L	!ib
Arsenic	ND	0.5000	0.09029	ug/L	
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	ND	0.2500	0.009674	ug/L	
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	ND	0.5000	0.03860	ug/L	
Cobalt	[0.009827]	0.2500	0.008548	ug/L	!ib
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	ND	50.00	3.054	ug/L	
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	[0.01492]	0.2500	0.01266	ug/L	!ib
Sodium	ND	50.00	9.919	ug/L	
Thallium	ND	0.2500	0.02100	ug/L	
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2807003)	ICALBLK Abund	Abund	%Drift
Lithium	418283	413360	-1.18
Scandium	327124	298050	-8.89
Germanium	73728	67262	-8.77
Indium	509455	455694	-10.55
Bismuth	389011	373058	-4.10

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56346042042
 Cal : 56346042001

File : h2807042
 Caldate: 28-AUG-2006

IDF : 1.0
 Time : 28-AUG-2006 11:28

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[2.806]	50.00	2.123	ug/L	!ib
Antimony	[0.1187]	0.2500	0.03394	ug/L	!ib
Arsenic	[0.09651]	0.5000	0.09029	ug/L	!ib
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	ND	0.2500	0.009674	ug/L	
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	ND	0.5000	0.03860	ug/L	
Cobalt	[0.009188]	0.2500	0.008548	ug/L	!ib
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	ND	50.00	3.054	ug/L	
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	[0.01359]	0.2500	0.01266	ug/L	!ib
Sodium	ND	50.00	9.919	ug/L	
Thallium	ND	0.2500	0.02100	ug/L	
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2807003)	ICALBLK Abund	Abund	%Drift
Lithium	418283	430831	3.00
Scandium	327124	307987	-5.85
Germanium	73728	66896	-9.27
Indium	509455	461110	-9.49
Bismuth	389011	373531	-3.98

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56346042015 File : h2807015
 Cal : 56346042001 Caldate: 28-AUG-2006
 Standards: S4011, S3310

IDF : 1.0
 Time : 28-AUG-2006 08:49

Analyte	Quant	RL	Units	Flags
Antimony	2.212	0.2500	ug/L	
Arsenic	[0.05930]	0.5000	ug/L	
Barium	1.041	0.2500	ug/L	
Beryllium	[0]	0.2500	ug/L	
Cadmium	[0.03731]	0.2500	ug/L	
Chromium	1.258	0.5000	ug/L	
Cobalt	2.590	0.2500	ug/L	
Copper	1.805	0.5000	ug/L	
Lead	1.217	0.2500	ug/L	
Manganese	1.051	0.2500	ug/L	
Nickel	2.249	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1291]	0.2500	ug/L	
Thallium	[0]	0.2500	ug/L	
Vanadium	[0.08676]	0.5000	ug/L	
Zinc	2.958	0.5000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	97010	ug/L	97
Calcium	300000	308200	ug/L	103
Iron	250000	222800	ug/L	89
Magnesium	100000	95380	ug/L	95
Molybdenum	2000	1939	ug/L	97
Potassium	100000	101200	ug/L	101
Sodium	250000	225500	ug/L	90

ISTD (ICALBLK h2807003)	ICALBLK Abund	Abund	%Drift
Lithium	418283	358673	-14.25
Scandium	327124	315214	-3.64
Germanium	73728	72011	-2.33
Indium	509455	420479	-17.46
Bismuth	389011	308624	-20.66

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56346042016 File : h2807016 IDF : 1.0
 Cal : 56346042001 Caldate: 28-AUG-2006 Time : 28-AUG-2006 08:54
 Standards: S4012, S3310

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	92800	ug/L	-7		
Arsenic	100.0	90.11	ug/L	-10	20	
Cadmium	100.0	84.75	ug/L	-15	20	
Calcium	300000	303800	ug/L	1		
Chromium	200.0	208.1	ug/L	4	20	
Cobalt	200.0	191.2	ug/L	-4	20	
Copper	200.0	171.8	ug/L	-14	20	
Iron	250000	219300	ug/L	-12		
Magnesium	100000	89760	ug/L	-10		
Manganese	200.0	199.2	ug/L	0	20	
Molybdenum	2000	1920	ug/L	-4		
Nickel	200.0	181.3	ug/L	-9	20	
Potassium	100000	100400	ug/L	0		
Selenium	100.0	80.39	ug/L	-20	20	
Silver	50.00	44.15	ug/L	-12	20	
Sodium	250000	210000	ug/L	-16		
Vanadium	200.0	215.3	ug/L	8	20	
Zinc	100.0	87.05	ug/L	-13	20	

ISTD (ICALBLK h2807003)	ICALBLK Abund	Abund	%Drift
Scandium	327124	326676	-0.14
Germanium	73728	72092	-2.22

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56346042044
 Cal : 56346042001
 Standards: S4011, S3310

File : h2807044
 Caldate: 28-AUG-2006

IDF : 1.0
 Time : 28-AUG-2006 11:39

Analyte	Quant	RL	Units	Flags
Antimony	2.130	0.2500	ug/L	
Arsenic	[0.1578]	0.5000	ug/L	
Barium	0.9514	0.2500	ug/L	
Beryllium	[0]	0.2500	ug/L	
Cadmium	[0.09928]	0.2500	ug/L	
Chromium	1.217	0.5000	ug/L	
Cobalt	2.481	0.2500	ug/L	
Copper	1.750	0.5000	ug/L	
Lead	1.189	0.2500	ug/L	
Manganese	1.018	0.2500	ug/L	
Nickel	2.238	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1219]	0.2500	ug/L	
Thallium	[0]	0.2500	ug/L	
Vanadium	[0.2020]	0.5000	ug/L	
Zinc	2.867	0.5000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	97710	ug/L	98
Calcium	300000	304700	ug/L	102
Iron	250000	218800	ug/L	88
Magnesium	100000	95860	ug/L	96
Molybdenum	2000	1893	ug/L	95
Potassium	100000	99800	ug/L	100
Sodium	250000	228300	ug/L	91

ISTD (ICALBLK h2807003)	ICALBLK Abund	Abund	%Drift
Lithium	418283	367428	-12.16
Scandium	327124	308960	-5.55
Germanium	73728	70726	-4.07
Indium	509455	408279	-19.86
Bismuth	389011	310196	-20.26

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05

IDF : 1.0

Seqnum : 56346042045

File : h2807045

Time : 28-AUG-2006 11:45

Cal : 56346042001

Caldate: 28-AUG-2006

Standards: S4012, S3310

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	95110	ug/L	-5		
Arsenic	100.0	90.12	ug/L	-10	20	
Cadmium	100.0	82.12	ug/L	-18	20	
Calcium	300000	301400	ug/L	0		
Chromium	200.0	203.5	ug/L	2	20	
Cobalt	200.0	188.2	ug/L	-6	20	
Copper	200.0	170.7	ug/L	-15	20	
Iron	250000	216200	ug/L	-14		
Magnesium	100000	92100	ug/L	-8		
Manganese	200.0	196.1	ug/L	-2	20	
Molybdenum	2000	1897	ug/L	-5		
Nickel	200.0	179.0	ug/L	-11	20	
Potassium	100000	99860	ug/L	0		
Selenium	100.0	80.39	ug/L	-20	20	
Silver	50.00	42.97	ug/L	-14	20	
Sodium	250000	217400	ug/L	-13		
Vanadium	200.0	209.9	ug/L	5	20	
Zinc	100.0	86.88	ug/L	-13	20	

ISTD (ICALBLK h2807003)	ICALBLK Abund	Abund	%Drift
Scandium	327124	314136	-3.97
Germanium	73728	70340	-4.60

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56346042 Instrument: MET05
 Analytical Method: EPA 6020 Agilent ICP-MS
 SOP Version: 6020_rv2

Begun: 28-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
001	h2807001	TUN				28-AUG-2006 07:22	1.0	1.0				1		
002	h2807002	X	RINSE			28-AUG-2006 07:28	1.0					2		
003	h2807003	ICALBLK	STD-BLANK			28-AUG-2006 07:34	1.0	1.0				2		
004	h2807004	ICAL	CSI			28-AUG-2006 07:40	1.0	1.0				3		
005	h2807005	ICAL	CS2			28-AUG-2006 07:45	1.0	1.0				4		
006	h2807006	ICAL	CS3			28-AUG-2006 07:52	1.0	1.0				5		
007	h2807007	ICAL	CS4			28-AUG-2006 07:59	1.0	1.0				6		
008	h2807008	ICAL	CS5			28-AUG-2006 08:05	1.0	1.0				7		
009	h2807009	ICAL	CS6			28-AUG-2006 08:10	1.0	1.0				8		
010	h2807010	X	RINSE			28-AUG-2006 08:16	1.0					2		
011	h2807011	ICV				28-AUG-2006 08:21	1.0	1.0				9		
012	h2807012	X	RINSE			28-AUG-2006 08:27	1.0					2		
013	h2807013	X				28-AUG-2006 08:33	1.0	1.0				2		
014	h2807014	ICB				28-AUG-2006 08:38	1.0	1.0				2		
015	h2807015	ICSA				28-AUG-2006 08:49	1.0	1.0				10	2	7:CA=308800
016	h2807016	ICSAB				28-AUG-2006 08:54	1.0	1.0				11	2	9:CA=303800
017	h2807017	X	RINSE			28-AUG-2006 09:00	1.0					2		
018	h2807018	X	RINSE			28-AUG-2006 09:05	1.0					2		
019	h2807019	BLANK	QC353487			28-AUG-2006 09:11	1.0	1.0				2		
020	h2807020	MSS	188926-006			28-AUG-2006 09:17	1.0	1.0				2		
021	h2807021	X	RINSE			28-AUG-2006 09:22	1.0					2		
022	h2807022	MSS	188802-001			28-AUG-2006 09:28	100.0	1.0				2		
023	h2807023	SAMPLE	188802-002			28-AUG-2006 09:34	10.0	1.0				2		1:MN=214.100
024	h2807024	XSAMPLE	WRONG CUP			28-AUG-2006 09:39	20.0					2		
025	h2807025	XSAMPLE	WRONG CUP			28-AUG-2006 09:45	40.0					2		
026	h2807026	XSAMPLE	WRONG CUP			28-AUG-2006 09:50	20.0					2		
027	h2807027	XSAMPLE	WRONG CUP			28-AUG-2006 09:56	10.0					2		
028	h2807028	X	RINSE			28-AUG-2006 10:09	1.0					2		
029	h2807029	CCV				28-AUG-2006 10:15	1.0	1.0				12	2	
030	h2807030	X	RINSE			28-AUG-2006 10:20	1.0					2		
031	h2807031	CCB				28-AUG-2006 10:26	1.0	1.0				2		

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S4009 13=S3780

Analyst:  Date: 8/28/06

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 56346042 Instrument: MET05
Analytical Method: EPA 6020 Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 28-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
032	h2807032	X				28-AUG-2006 10:32	1.0	1.0			1	2		
033	h2807033	SAMPLE	188802-012	116736	Filtera	28-AUG-2006 10:37	20.0	1.0	3		1	2		
034	h2807034	SAMPLE	188802-017	116736	Filtera	28-AUG-2006 10:43	40.0	1.0	1		1	2		
035	h2807035	SAMPLE	188802-018	116736	Filtera	28-AUG-2006 10:49	20.0	1.0	2		1	2		
036	h2807036	SAMPLE	188802-020	116736	Filtera	28-AUG-2006 10:54	10.0	1.0	3		1	2		
037	h2807037	SER	QC353245	116736	Filtera	28-AUG-2006 11:00	500.0	1.0	3	1	1	2		
038	h2807038	PDS	QC353246	116736	Filtera	28-AUG-2006 11:06	100.0	1.0	4		1	13	2	1:MN=240.200
039	h2807039	X				28-AUG-2006 11:11	1.0				1	2		
040	h2807040	CCV				28-AUG-2006 11:17	1.0		2		1	12	2	
041	h2807041	X				28-AUG-2006 11:22	1.0				1	2		
042	h2807042	CCB				28-AUG-2006 11:28	1.0				1	2		
043	h2807043	X				28-AUG-2006 11:34	1.0				1	2		
044	h2807044	ICSA				28-AUG-2006 11:39	1.0				1	10	2	7:CA=304700
045	h2807045	ICSAB				28-AUG-2006 11:45	1.0				1	11	2	9:CA=301400
046	h2807046	X				28-AUG-2006 11:50	1.0				1	2		

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Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S4009 13=S3780

Analyst: 

Date: 8/29/06

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET05
 Calnum : 56346351001
 Units : ug/L

Date : 28-AUG-2006 12:43
 X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	h2812004	56346351004	CS1	28-AUG-2006 12:48	S4004
L2	h2812005	56346351005	CS2	28-AUG-2006 12:54	S4005
L3	h2812006	56346351006	CS3	28-AUG-2006 13:00	S4006
L4	h2812007	56346351007	CS4	28-AUG-2006 13:05	S4007
L5	h2812008	56346351008	CS5	28-AUG-2006 13:11	S4001
L6	h2812009	56346351009	CS6	28-AUG-2006 13:16	S4002

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ²	MRSD	MR ²	Fig
Aluminum		1.1506	1.1446	0.9568	0.9405	0.9223	BLNK	-7.7135	1.08046		1.0229	1.000	0.995		
Antimony	0.3287	0.2910	0.2697	0.2679	0.2755	0.2767	BLNK	-0.0546	3.61897		0.2849	1.000	0.995		
Arsenic		0.8888	0.7218	0.5846	0.5722	0.5656	BLNK	-0.3992	1.76820		0.6666	1.000	0.995		
Barium	0.4100	0.2722	0.1892	0.1146	0.1125	0.1152	BLNK	-0.0802	8.72697		0.2023	1.000	0.995		
Beryllium	0.1774	0.1692	0.1700	0.1721	0.1764	0.1721	BLNK	-0.0154	5.78301		0.1729	1.000	0.995		
Cadmium	0.9105	0.6549	0.5903	0.5525	0.5294	0.5266	BLNK	-0.1023	1.89782		0.6274	1.000	0.995		
Calcium		0.0447	0.0341	0.0234	0.0233	0.0227	BLNK	-28.454	43.9663		0.0286	1.000	0.995		
Chromium		10.228	6.7133	3.6417	3.4194	3.6834	BLNK	-0.9117	0.27699		5.5371	0.998	0.995		
Cobalt	4.0201	3.9801	3.9711	3.8516	3.8176	4.1368	BLNK	-0.0234	0.24558		3.9629	0.999	0.995		
Copper		1.4426	1.2450	1.0360	1.0033	0.9858	BLNK	-0.1747	1.01185		1.1425	1.000	0.995		
Iron		0.1351	0.1088	0.0852	0.0903	0.0887	BLNK	-28.291	11.2520		0.1016	1.000	0.995		
Lead	1.3708	1.2639	1.6327	1.1695	1.1940	1.2257	BLNK	-0.0679	0.82053		1.3094	1.000	0.995		
Magnesium		0.1159	0.1140	0.1184	0.1136	0.1098	BLNK	-2.9335	9.04596		0.1143	1.000	0.995		
Manganese	5.5744	4.8346	4.6489	4.0727	4.1380	4.4264	BLNK	-0.0779	0.22904		4.6158	0.999	0.995		
Molybdenum		1.5463	1.2745	1.1383	1.1538	1.1525	BLNK	-0.2836	0.86902		1.2531	1.000	0.995		
Nickel	1.1453	0.9483	0.9177	0.8501	0.8363	0.8294	BLNK	-0.1083	1.20445		0.9212	1.000	0.995		
Potassium		1.9648	1.4447	0.8786	0.8388	0.8138	BLNK	-68.888	1.22630		1.1881	1.000	0.995		
Selenium		0.1148	0.0897	0.0518	0.0490	0.0478	BLNK	-0.6318	20.8819		0.0706	1.000	0.995		
Silver	2.5948	2.6833	2.6605	2.6496	2.6362	2.6159	BLNK	-0.0183	0.38172		2.6400	1.000	0.995		
Sodium		1.5407	1.3779	0.9936	0.9715	0.9380	BLNK	-28.647	1.06027		1.1643	1.000	0.995		
Thallium		0.9175	0.9010	0.8388	0.8669	0.8854	BLNK	-0.0385	1.13483		0.8819	1.000	0.995		
Vanadium	4.2093	3.9146	3.8107	3.9199	4.3748	4.3748	BLNK	-0.2334	0.23383		4.0459	0.997	0.995		
Zinc		1.9444	1.5510	0.5717	0.4914	0.4726	BLNK	-0.6885	2.10975		1.0062	1.000	0.995		

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Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

Tune Report

Tune File : ATUNE.U

m/z:	7	89	205
Range:	20,000	50,000	20,000
Count:	12,102	20,368	12,442
Mean:	11539.5	20160.0	12171.3
RSD%:	3.48	1.80	1.28
n:	200		

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec

Oxide: 156/140 0.44%
Doubly Charged: 70/140 1.63%

Background:			
m/z:	7	89	205
Cps:	11.0	5.2	5.5

m/z:	7	89	205
Height:	12,254	20,054	12,706
Axis:	6.90	88.95	204.95
W-50%:	0.65	0.60	0.60
W-10%:	0.7500	0.700	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Tuning Parameters

===Plasma Condition===

RF Power: 1300 W
RF Matching: 1.7 V
Smpl Depth: 8 mm
Torch-H: -0.1 mm
Torch-V: 0.4 mm
Carrier Gas: 1.14 L/min
Makeup Gas: 0 L/min
Optional Gas: --- %
PeriPump1: 0.1 rps
PeriPump2: --- rps
S/C Temp: 2 degC

===Ion Lenses===

Extract 1: -110 V
Extract 2: -70 V
Einzel 1,3: -100 V
Einzel 2: 7 V
Omega Bias: -55 V
Omega (+): 5 V
Omega (-): -5 V
QP Focus: 7 V
Plate Bias: -5 V

===Q-Pole Parameters===

AMU Gain: 130
AMU Offset: 126
Axis Gain: 0.9993
Axis Offset: -0.1
QP Bias: 1.6 V

===Detector Parameters===

Discriminator: 8.8 mV
Analog HV: 1860 V
Pulse HV: 1590 V

P/A Factor Tuning Report

Acquired: Aug 28 2006 07:01 am

Mass[amu]	Element	P/A Factor
6	Li	0.071020
9	Be	0.078800
23	Na	0.084430
25	Mg	Sensitivity too high
26	Mg	Sensitivity too high
27	Al	0.092636
39	K	0.090778
43	Ca	0.093302
44	Ca	Sensitivity too high
45	Sc	0.091864
51	V	0.097703
52	Cr	0.098578
53	Cr	Sensitivity too low
54	Fe	Sensitivity too high
55	Mn	0.100101
57	Fe	Sensitivity too high
59	Co	0.101293
60	Ni	0.098382
63	Cu	0.100911
65	Cu	0.099128
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
77	(As)	Sensitivity too low
82	Se	Sensitivity too low
83	(As)	Sensitivity too low
88	(Ca)	Sensitivity too low
89	Y	0.098806
95	Mo	0.097502
98	Mo	0.097621
99	(Mo)	Sensitivity too low
106	(Cd)	Sensitivity too low
108	(Cd)	Sensitivity too low
109	Ag	0.100509
111	Cd	Sensitivity too low
114	Cd	0.099917
115	In	0.102778
118	(In)	0.104435
121	Sb	0.100953
135	Ba	Sensitivity too low
137	Ba	0.103133
159	Tb	0.105374
166	Er	Sensitivity too low

Temp.p\$\$
205 Tl 0.104312
206 (Pb) 0.101671
207 (Pb) 0.107463
208 Pb 0.103502
209 Bi Sensitivity too low

===Detector Parameters===

Discriminator: 8.8 mV
Analog HV: 1860 V
Pulse HV: 1590 V

6020 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\06H2812b.B\001TUNE.D
Date Acquired: Aug 28 2006 12:31 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s4021
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	1.16	5.00	
59 Co	1.42	5.00	
115 In	0.50	5.00	
205 Tl	2.27	5.00	

7 Li

Mass Calib.

Actual: 6.95

Required: 6.90 - 7.10

Flag:

Peak Width

Actual: 0.55

Required: 0.90

Flag:

59 Co

Mass Calib.

Actual: 59.00

Required: 58.90 - 59.10

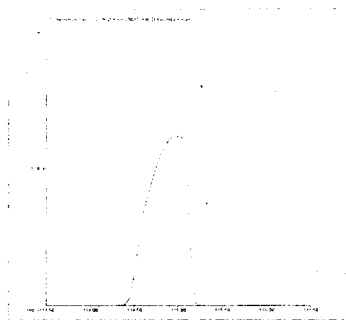
Flag:

Peak Width

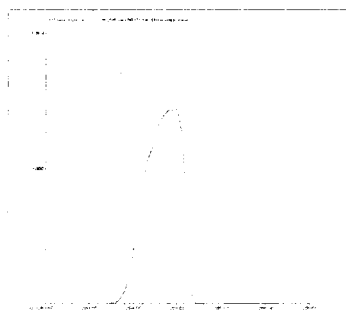
Actual: 0.55

Required: 0.90

Flag:



115 In
Mass Calib.
Actual: 114.95
Required: 114.90 - 115.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



205 Tl
Mass Calib.
Actual: 205.00
Required: 204.90 - 205.10
Flag:
Peak Width
Actual: 0.55
Required: 0.90
Flag:

Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06H2812b.B\002BLNK.D\002BLNK.D#
 Date Acquired: Aug 28 2006 12:37 pm
 Acq. Method: 60200111.M
 Operator:
 Sample Name: rinse
 Misc Info:
 Vial Number: 1101
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal. Update: Aug 28 2006 08:12 am
 Sample Type: 6-Blank
 Dilution Factor: 1.00

QC Elements

Element	Corr. Conc.	RSD(%)	Raw Conc.	High Limit	Flag
9 Be	-0.01576 ppb	13.20	-0.01576	1.00	
23 Na	-3.44 ppb	77.41	-3.44	1.00	
26 Mg	0.8068 ppb	36.07	0.8068	1.00	
27 Al	1.019 ppb	23.30	1.019	1.00	
39 K	-4.473 ppb	41.05	-4.473	1.00	
44 Ca	2.167 ppb	50.53	2.167	1.00	
51 V	0.02392 ppb	81.77	0.02392	1.00	
52 Cr	0.1937 ppb	33.51	0.1937	1.00	
55 Mn	-0.008986 ppb	50.55	-0.008986	1.00	
57 Fe	4.558 ppb	38.90	4.558	1.00	
59 Co	-0.002451 ppb	58.22	-0.002451	1.00	
60 Ni	0.01511 ppb	62.82	0.01511	1.00	
65 Cu	0.05781 ppb	17.18	0.05781	1.00	
66 Zn	-0.07737 ppb	33.48	-0.07737	1.00	
75 As	0.03579 ppb	803.86	0.03579	1.00	
82 Se	-0.1846 ppb	47.07	-0.1846	1.00	
95 Mo	0.2085 ppb	6.13	0.2085	1.00	
109 Ag	-0.004116 ppb	51.07	-0.004116	1.00	
111 Cd	-0.01271 ppb	308.97	-0.01271	1.00	
121 Sb	-0.03882 ppb	21.71	-0.03882	1.00	
137 Ba	-0.002342 ppb	686.59	-0.002342	1.00	
205 Tl	-0.1032 ppb	15.66	-0.1032	1.00	
208 Pb	0.003541 ppb	277.86	0.003541	1.00	

ISTD Elements

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	487098.47	3.95	---		#VALUE!	80 - 120	
45 Sc	368125.53	1.12	---		#VALUE!	80 - 120	
72 Ge	73490.23	6.43	---		#VALUE!	80 - 120	
115 In	523173.78	3.87	---		#VALUE!	80 - 120	
209 Bi	391893.31	5.16	---		#VALUE!	80 - 120	

ISTD Ref File : ---

3 :Element Failures	0 :Max. Number of Failures Allowed
0 :ISTD Failures	0 :Max. Nnumber of ISTD Failures Allowed

QC Results:

Analytes:	Fail
ISTD:	Pass

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06H2812b.B\003CAL
 Date Acquired: Aug 28 2006 12:43 pm
 Operator:
 Sample Name: std-blank
 Misc Info:
 Vial Number: 1101
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\602001
 Last Cal Update: Aug 28 2006 08:12 am
 Sample Type: CalBlk
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	461711.19 M	15170.00	3.29
9 Be	24.44 P	8.39	34.32
23 Na	192646.70 P	4499.00	2.34
26 Mg	2312.22 P	192.80	8.34
27 Al	50901.11 P	277.90	0.55
39 K	400527.81 P	1736.00	0.43
44 Ca	4614.26 P	86.60	1.88
45 Sc	356495.50 P	654.30	0.18
51 V	1503.73 P	800.20	53.21
52 Cr	4955.56 P	117.00	2.36
55 Mn	512.22 P	65.01	12.69
57 Fe	3786.67 P	157.70	4.16
59 Co	143.33 P	26.03	18.16
60 Ni	135.56 P	28.35	20.91
65 Cu	259.99 P	11.55	4.44
66 Zn	634.44 P	65.77	10.37
72 Ge	75288.67 P	698.20	0.93
75 As	339.39 P	120.60	35.53
82 Se	45.56 P	1.02	2.23
95 Mo	491.11 P	60.58	12.34
109 Ag	72.22 P	11.71	16.21
111 Cd	81.06 P	18.07	22.29
115 In	519752.69 P	2408.00	0.46
121 Sb	156.67 P	20.28	12.95
137 Ba	95.56 P	23.41	24.50
205 Tl	266.67 P	60.00	22.50
208 Pb	650.00 P	20.00	3.08
209 Bi	393045.50 P	1131.00	0.29

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2812b.B\004CALI.D\004CALI.D#
 Date Acquired: Aug 28 2006 12:48 pm
 Operator:
 Sample Name: cs1,s4004
 Misc Info:
 Vial Number: 1102
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 28 2006 00:44 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	443940.69 M	7990.00	1.80
9 Be	393.33 P	37.86	9.63
23 Na	358181.09 P	5670.00	1.58
26 Mg	21274.44 P	226.90	1.07
27 Al	247230.00 P	470.30	0.19
39 K	528895.63 P	1039.00	0.20
44 Ca	11513.52 P	247.10	2.15
45 Sc	342558.91 P	2663.00	0.78
51 V	2391.79 P	1144.00	47.83
52 Cr	6236.67 P	43.59	0.70
55 Mn	2044.44 P	21.17	1.04
57 Fe	6907.78 P	217.20	3.14
59 Co	1474.44 P	17.11	1.16
60 Ni	420.00 P	40.41	9.62
65 Cu	645.47 P	71.52	11.08
66 Zn	1567.78 P	67.52	4.31
72 Ge	73360.22 P	707.10	0.96
75 As	556.36 P	110.10	19.79
82 Se	63.78 P	14.26	22.36
95 Mo	868.89 P	42.86	4.93
109 Ag	952.22 P	88.78	9.32
111 Cd	333.71 P	47.76	14.31
115 In	502970.91 P	2413.00	0.48
121 Sb	826.67 P	53.64	6.49
137 Ba	1031.11 P	35.33	3.43
205 Tl	1013.33 P	41.77	4.12
208 Pb	2661.11 P	194.50	7.31
209 Bi	388347.81 P	1976.00	0.51

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	443940.66	1.80	461711.19	96.2	80 - 120	

C:\ICPCHEM\1\DATA\06H2812b.B\004CALI.D\004CALI.D#

45	Sc	342558.88	0.78	356495.53	96.1	80 -	120
72	Ge	73360.23	0.96	75288.66	97.4	80 -	120
115	In	502970.91	0.48	519752.75	96.8	80 -	120
209	Bi	388347.78	0.51	393045.53	98.8	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2812b.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2812b.B\005CALI.D\005CALI.D#
 Date Acquired: Aug 28 2006 12:54 pm
 Operator:
 Sample Name: cs2,s4005
 Misc Info:
 Vial Number: 1103
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 28 2006 00:50 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	440714.41 P	5729.00	1.30
9 Be	745.56 P	25.89	3.47
23 Na	525724.38 P	1913.00	0.36
26 Mg	39540.00 P	336.70	0.85
27 Al	392616.69 P	4478.00	1.14
39 K	670470.00 M	16070.00	2.40
44 Ca	15243.45 P	265.90	1.74
45 Sc	341234.41 P	591.70	0.17
51 V	3063.96 P	414.20	13.52
52 Cr	7440.00 P	166.70	2.24
55 Mn	3516.67 P	72.34	2.06
57 Fe	9826.67 P	18.56	0.19
59 Co	2895.56 P	75.01	2.59
60 Ni	690.00 P	55.48	8.04
65 Cu	1049.83 P	102.10	9.73
66 Zn	1414.44 P	55.51	3.92
72 Ge	72744.44 P	559.80	0.77
75 As	646.88 P	162.20	25.07
82 Se	83.56 P	24.23	29.00
95 Mo	1124.44 P	68.01	6.05
109 Ag	1952.22 P	82.28	4.21
111 Cd	476.48 P	36.01	7.56
115 In	498707.09 P	3983.00	0.80
121 Sb	1451.11 P	29.88	2.06
137 Ba	1357.78 P	65.52	4.83
205 Tl	1751.11 P	75.01	4.28
208 Pb	4824.44 P	74.26	1.54
209 Bi	381705.50 P	237.20	0.06

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	440714.41	1.30	461711.19	95.5	80 - 120	

45	Sc	341234.44	0.17	356495.53	95.7	80 -	120
72	Ge	72744.45	0.77	75288.66	96.6	80 -	120
115	In	498707.13	0.80	519752.75	96.0	80 -	120
209	Bi	381705.53	0.06	393045.53	97.1	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2812b.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2812b.B\006CALI.D\006CALI.D#
 Date Acquired: Aug 28 2006 01:00 pm
 Operator:
 Sample Name: cs3,s4006
 Misc Info:
 Vial Number: 1104
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 28 2006 00:56 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	449092.69 M	5348.00	1.19
9 Be	1526.67 P	73.11	4.79
23 Na	931637.31 A	9985.00	1.07
26 Mg	77044.44 P	373.90	0.49
27 Al	773868.50 A	12210.00	1.58
39 K	976841.13 A	15680.00	1.61
44 Ca	23034.77 P	95.54	0.41
45 Sc	338075.50 P	2966.00	0.88
51 V	5690.03 P	778.40	13.68
52 Cr	9763.33 P	41.77	0.43
55 Mn	6761.11 P	154.10	2.28
57 Fe	15822.22 P	147.70	0.93
59 Co	5775.56 P	153.80	2.66
60 Ni	1334.44 P	38.49	2.88
65 Cu	1810.79 P	95.58	5.28
66 Zn	2255.56 P	23.65	1.05
72 Ge	72718.00 P	522.20	0.72
75 As	1049.51 P	56.84	5.42
82 Se	130.44 P	9.71	7.45
95 Mo	1853.33 P	54.87	2.96
109 Ag	3868.89 P	83.36	2.15
111 Cd	858.46 P	9.74	1.13
115 In	494420.09 P	2328.00	0.47
121 Sb	2666.67 P	72.11	2.70
137 Ba	1871.11 P	124.10	6.63
205 Tl	3443.33 P	129.00	3.75
208 Pb	12478.89 P	125.10	1.00
209 Bi	382145.50 P	2425.00	0.63

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	449092.75	1.19	461711.19	97.3	80 - 120	

45	Sc	338075.53	0.88	356495.53	94.8	80 -	120
72	Ge	72718.00	0.72	75288.66	96.6	80 -	120
115	In	494420.09	0.47	519752.75	95.1	80 -	120
209	Bi	382145.53	0.63	393045.53	97.2	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2812b.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2812b.B\007CALI.D\007CALI.D#
 Date Acquired: Aug 28 2006 01:05 pm
 Operator:
 Sample Name: cs4,s4007
 Misc Info:
 Vial Number: 1105
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 28 2006 01:01 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	447915.91 M	7126.00	1.59
9 Be	15414.44 P	491.80	3.19
23 Na	6690809.00 A	28510.00	0.43
26 Mg	797059.38 A	1537.00	0.19
27 Al	6443666.00 A	4247.00	0.07
39 K	5917537.00 A	63660.00	1.08
44 Ca	157762.41 P	1517.00	0.96
45 Sc	336767.81 P	4909.00	1.46
51 V	55012.13 P	987.30	1.79
52 Cr	52571.11 P	292.70	0.56
55 Mn	58791.11 P	96.40	0.16
57 Fe	122962.20 P	868.80	0.71
59 Co	55598.88 P	122.10	0.22
60 Ni	12273.33 P	347.00	2.83
65 Cu	14955.80 P	260.80	1.74
66 Zn	8254.44 P	258.50	3.13
72 Ge	72179.56 P	527.40	0.73
75 As	8440.48 P	345.30	4.09
82 Se	747.78 P	5.97	0.80
95 Mo	16433.33 P	383.40	2.33
109 Ag	38246.67 P	538.20	1.41
111 Cd	7975.61 P	85.11	1.07
115 In	489495.09 P	4751.00	0.97
121 Sb	26221.11 P	71.83	0.27
137 Ba	11218.89 P	167.40	1.49
205 Tl	31912.22 P	900.10	2.82
208 Pb	88986.66 P	741.70	0.83
209 Bi	380447.81 P	1515.00	0.40

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	447915.88	1.59	461711.19	97.0	80 - 120	

45 Sc	336767.78	1.46	356495.53	94.5	80 -	120
72 Ge	72179.56	0.73	75288.66	95.9	80 -	120
115 In	489495.13	0.97	519752.75	94.2	80 -	120
209 Bi	380447.78	0.40	393045.53	96.8	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2812b.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2812b.B\008CALI.D\008CALI.D#
 Date Acquired: Aug 28 2006 01:11 pm
 Operator:
 Sample Name: cs5,s4001
 Misc Info:
 Vial Number: 1106
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 28 2006 01:07 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	436630.00 P	4583.00	1.05
9 Be	154012.20 P	2844.00	1.85
23 Na	64240940.00 A	179500.00	0.28
26 Mg	7508797.00 A	41690.00	0.56
27 Al	62188160.00 A	350300.00	0.56
39 K	55465880.00 A	551000.00	0.99
44 Ca	1539979.00 A	19820.00	1.29
45 Sc	330631.09 P	379.40	0.11
51 V	552791.31 P	3616.00	0.65
52 Cr	482214.41 P	4087.00	0.85
55 Mn	583526.63 P	2559.00	0.44
57 Fe	1273670.00 A	3056.00	0.24
59 Co	538366.63 P	3398.00	0.63
60 Ni	117928.90 P	1041.00	0.88
65 Cu	141485.59 P	986.70	0.70
66 Zn	69301.11 P	591.60	0.85
72 Ge	70512.22 P	698.20	0.99
75 As	80683.22 P	163.50	0.20
82 Se	6904.22 P	57.12	0.83
95 Mo	162707.80 P	1450.00	0.89
109 Ag	371733.31 P	1916.00	0.52
111 Cd	74660.43 P	678.50	0.91
115 In	466486.09 P	1360.00	0.29
121 Sb	256994.41 P	1887.00	0.73
137 Ba	104991.10 P	1052.00	1.00
205 Tl	319870.00 P	4232.00	1.32
208 Pb	881137.81 P	1846.00	0.21
209 Bi	368982.19 P	1536.00	0.42

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	436629.97	1.05	461711.19	94.6	80 - 120	

45 Sc	330631.09	0.11	356495.53	92.7	80 -	120
72 Ge	70512.23	0.99	75288.66	93.7	80 -	120
115 In	466486.13	0.29	519752.75	89.8	80 -	120
209 Bi	368982.19	0.42	393045.53	93.9	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2812b.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2812b.B\009CALI.D\009CALI.D#
 Date Acquired: Aug 28 2006 01:16 pm
 Operator:
 Sample Name: cs6,s4002
 Misc Info:
 Vial Number: 1107
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 28 2006 01:12 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	436893.31 P	1523.00	0.35
9 Be	300727.81 P	4944.00	1.64
23 Na	124334800.00 A	220200.00	0.18
26 Mg	14553660.00 A	53500.00	0.37
27 Al	122239200.00 A	1121000.00	0.92
39 K	107868800.00 A	759700.00	0.70
44 Ca	3003378.00 A	51950.00	1.73
45 Sc	331381.09 P	2609.00	0.79
51 V	1207324.00 A	1315.00	0.11
52 Cr	1016542.00 A	9805.00	0.96
55 Mn	1221582.00 A	4337.00	0.36
57 Fe	2448382.00 A	15300.00	0.62
59 Co	1141680.00 A	8451.00	0.74
60 Ni	228897.80 P	1454.00	0.64
65 Cu	272056.69 P	3190.00	1.17
66 Zn	130436.70 P	1362.00	1.04
72 Ge	68996.22 P	560.30	0.81
75 As	156094.00 P	765.70	0.49
82 Se	13203.56 P	79.25	0.60
95 Mo	318084.41 P	3480.00	1.09
109 Ag	721923.31 P	1811.00	0.25
111 Cd	145349.30 P	1741.00	1.20
115 In	450118.31 P	2854.00	0.63
121 Sb	498148.91 P	4072.00	0.82
137 Ba	207355.59 P	724.00	0.35
205 Tl	633533.31 P	4339.00	0.68
208 Pb	1754010.00 A	10150.00	0.58
209 Bi	357765.50 P	1695.00	0.47

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	436893.31	0.35	461711.19	94.6	80 - 120	

45	Sc	331381.09	0.79	356495.53	93.0	80 -	120
72	Ge	68996.23	0.81	75288.66	91.6	80 -	120
115	In	450118.31	0.63	519752.75	86.6	80 -	120
209	Bi	357765.53	0.47	393045.53	91.0	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2812b.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06H2812b.B\010BLNK.D\010BLNK.D#
 Date Acquired: Aug 28 2006 01:22 pm
 Acq. Method: 60200111.M
 Operator:
 Sample Name: rinse
 Misc Info:
 Vial Number: 1303
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal. Update: Aug 28 2006 01:18 pm
 Sample Type: 6-Blank
 Dilution Factor: 1.00

QC Elements

Element	Corr. Conc.	RSD(%)	Raw Conc.	High Limit	Flag
9 Be	0.13 ppb	2.95	0.13	1.00	
23 Na	9.438 ppb	6.87	9.438	1.00	
26 Mg	10.38 ppb	7.60	10.38	1.00	
27 Al	10.45 ppb	3.76	10.45	1.00	
39 K	7.813 ppb	3.68	7.813	1.00	
44 Ca	10.82 ppb	8.65	10.82	1.00	
51 V	-0.02122 ppb	1237.50	-0.02122	1.00	
52 Cr	0.2779 ppb	1.70	0.2779	1.00	
55 Mn	0.1031 ppb	8.10	0.1031	1.00	
57 Fe	11.69 ppb	5.02	11.69	1.00	
59 Co	0.08667 ppb	13.13	0.08667	1.00	
60 Ni	0.05703 ppb	7.89	0.05703	1.00	
65 Cu	0.0375 ppb	32.21	0.0375	1.00	
66 Zn	0.06199 ppb	33.33	0.06199	1.00	
75 As	0.1412 ppb	27.59	0.1412	1.00	
82 Se	0.2313 ppb	5.43	0.2313	1.00	
95 Mo	1.003 ppb	17.92	1.003	1.00	
109 Ag	0.09822 ppb	10.79	0.09822	1.00	
111 Cd	0.1368 ppb	24.67	0.1368	1.00	
121 Sb	0.2041 ppb	2.19	0.2041	1.00	
137 Ba	0.1064 ppb	42.90	0.1064	1.00	
205 Tl	0.322 ppb	20.66	0.322	1.00	
208 Pb	0.08789 ppb	6.65	0.08789	1.00	

ISTD Elements

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	446662.22	0.51	461711.19	96.7	80 - 120		
45 Sc	333711.09	0.29	356495.53	93.6	80 - 120		
72 Ge	70422.45	0.95	75288.66	93.5	80 - 120		
115 In	485795.72	0.32	519752.75	93.5	80 - 120		
209 Bi	378381.09	0.89	393045.53	96.3	80 - 120		

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2812b.B\003CALB.D\003CALB.D#

7 :Element Failures	0 :Max. Number of Failures Allowed
0 :ISTD Failures	0 :Max. Nnumber of ISTD Failures Allowed

QC Results:

Analytes:	Fail
ISTD:	Pass

ICV QC Report

Data File: C:\ICPCHEM\1\DATA\06H2812b.B\011_ICV.D\011_ICV.D#
 Date Acquired: Aug 28 2006 01:27 pm
 Acq. Method: 60200111.M
 Operator:
 Sample Name: icv,s4008
 Misc Info:
 Vial Number: 1202
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal. Update: Aug 28 2006 01:18 pm
 Sample Type: 6-ICV
 Dilution Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	Expected	QC Range(%)	Flag
9 Be	0.00 ppb	233.64	100.00	89.5 - 110	Fail
23 Na	0.11 ppb	2621.60	10000.00	89.5 - 110	Fail
26 Mg	-1.39 ppb	9.78	10000.00	89.5 - 110	Fail
27 Al	-6.00 ppb	2.33	10000.00	89.5 - 110	Fail
39 K	-51.50 ppb	2.87	10000.00	89.5 - 110	Fail
44 Ca	-21.08 ppb	2.25	10000.00	89.5 - 110	Fail
51 V	-0.18 ppb	6.81	100.00	89.5 - 110	Fail
52 Cr	-0.59 ppb	7.70	100.00	89.5 - 110	Fail
55 Mn	0.02 ppb	54.16	100.00	89.5 - 110	Fail
57 Fe	-19.66 ppb	5.65	10000.00	89.5 - 110	Fail
59 Co	0.00 ppb	140.58	100.00	89.5 - 110	Fail
60 Ni	-0.05 ppb	22.67	100.00	89.5 - 110	Fail
65 Cu	-0.08 ppb	6.87	100.00	89.5 - 110	Fail
66 Zn	-0.13 ppb	23.82	100.00	89.5 - 110	Fail
75 As	-0.35 ppb	0.72	100.00	89.5 - 110	Fail
82 Se	-0.50 ppb	24.62	100.00	89.5 - 110	Fail
95 Mo	-0.25 ppb	1.71	100.00	89.5 - 110	Fail
109 Ag	0.00 ppb	81.06	100.00	89.5 - 110	Fail
111 Cd	-0.03 ppb	30.36	100.00	89.5 - 110	Fail
121 Sb	-0.02 ppb	9.97	100.00	89.5 - 110	Fail
137 Ba	-0.05 ppb	13.04	100.00	89.5 - 110	Fail
205 Tl	-0.01 ppb	25.18	50.00	89.5 - 110	Fail
208 Pb	-0.03 ppb	11.10	100.00	89.5 - 110	Fail

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1089151.90	9.26	461711.19	235.9	80 - 120	ISFail
45 Sc	958196.31	9.56	356495.53	268.8	80 - 120	ISFail
72 Ge	221124.83	10.76	75288.66	293.7	80 - 120	ISFail
115 In	1561905.30	6.76	519752.75	300.5	80 - 120	ISFail
209 Bi	1330477.80	7.29	393045.53	338.5	80 - 120	ISFail

C:\ICPCHEM\1\DATA\06H2812b.B\011_ICV.D\011_ICV.D#

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2812b.B\003CALB.D\003CALB.D#

22 :Element Failures	0 :Max. Number of Failures Allowed
5 :ISTD Failures	0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes:	Fail
ISTD:	Fail

Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06H2812b.B\012BLNK.D\012BLNK.D#
 Date Acquired: Aug 28 2006 01:33 pm
 Acq. Method: 60200111.M
 Operator:
 Sample Name: rinse
 Misc Info:
 Vial Number: 1207
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal. Update: Aug 28 2006 01:18 pm
 Sample Type: 6-Blank
 Dilution Factor: 1.00

QC Elements

Element	Corr. Conc.	RSD(%)	Raw Conc.	High Limit	Flag
9 Be	0.02311 ppb	12.93	0.02311	1.00	
23 Na	-0.3774 ppb	144.28	-0.3774	1.00	
26 Mg	2.098 ppb	5.35	2.098	1.00	
27 Al	2.927 ppb	7.95	2.927	1.00	
39 K	-1.248 ppb	39.79	-1.248	1.00	
44 Ca	1.386 ppb	20.87	1.386	1.00	
51 V	0.007667 ppb	3136.80	0.007667	1.00	
52 Cr	0.2438 ppb	16.91	0.2438	1.00	
55 Mn	0.01628 ppb	44.17	0.01628	1.00	
57 Fe	4.542 ppb	20.34	4.542	1.00	
59 Co	0.01494 ppb	27.60	0.01494	1.00	
60 Ni	-0.02413 ppb	70.16	-0.02413	1.00	
65 Cu	-0.02784 ppb	68.89	-0.02784	1.00	
66 Zn	0.01067 ppb	706.37	0.01067	1.00	
75 As	0.2808 ppb	64.85	0.2808	1.00	
82 Se	0.01986 ppb	1274.40	0.01986	1.00	
95 Mo	0.2034 ppb	33.77	0.2034	1.00	
109 Ag	0.01282 ppb	48.25	0.01282	1.00	
111 Cd	0.0258 ppb	134.96	0.0258	1.00	
121 Sb	0.04202 ppb	38.51	0.04202	1.00	
137 Ba	0.02074 ppb	111.62	0.02074	1.00	
205 Tl	0.04651 ppb	20.30	0.04651	1.00	
208 Pb	-0.003649 ppb	65.72	-0.003649	1.00	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	459294.41	1.41	461711.19	99.5	80 - 120	
45 Sc	337684.44	0.35	356495.53	94.7	80 - 120	
72 Ge	71569.56	0.15	75288.66	95.1	80 - 120	
115 In	489395.28	0.61	519752.75	94.2	80 - 120	
209 Bi	384840.00	0.17	393045.53	97.9	80 - 120	

C:\ICPCHEM\1\DATA\06H2812b.B\012BLNK.D\012BLNK.D#

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2812b.B\003CALB.D\003CALB.D#

4 :Element Failures	0 :Max. Number of Failures Allowed
0 :ISTD Failures	0 :Max..Nnumber of ISTD Failures Allowed

QC Results:

Analytes:	Fail
ISTD:	Pass

ICB QC Report

Data File: C:\ICPCHEM\1\DATA\06H2812b.B\013_ICB.D\013_ICB.D#
 Date Acquired: Aug 28 2006 01:39 pm
 Acq. Method: 60200111.M
 Operator:
 Sample Name: icb
 Misc Info:
 Vial Number: 1203
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal. Update: Aug 28 2006 01:18 pm
 Sample Type: 6-ICB
 Dilution Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
9 Be	0.00 ppb	299.04	1.00	
23 Na	-3.65 ppb	22.82	50.00	
26 Mg	-0.53 ppb	40.79	50.00	
27 Al	0.07 ppb	177.65	50.00	
39 K	-2.31 ppb	31.20	50.00	
44 Ca	12.54 ppb	8.60	50.00	
51 V	-0.04 ppb	502.76	1.00	
52 Cr	0.19 ppb	26.60	1.00	
55 Mn	0.00 ppb	333.76	1.00	
57 Fe	-0.34 ppb	181.88	50.00	
59 Co	0.00 ppb	155.32	1.00	
60 Ni	-0.05 ppb	12.20	1.00	
65 Cu	-0.03 ppb	66.32	1.00	
66 Zn	0.83 ppb	17.64	1.00	
75 As	0.24 ppb	108.95	1.00	
82 Se	0.09 ppb	146.40	1.00	
95 Mo	-0.03 ppb	86.13	1.00	
109 Ag	0.00 ppb	28.25	1.00	
111 Cd	0.04 ppb	29.53	1.00	
121 Sb	0.00 ppb	347.32	1.00	
137 Ba	0.01 ppb	37.57	1.00	
205 Tl	0.01 ppb	22.39	1.00	
208 Pb	-0.02 ppb	45.52	1.00	

ISTD Elements

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	45522	2.16	1.85	461711.19	98.6	80 - 120	
45 Sc	33407	7.78	0.94	356495.53	93.7	80 - 120	
72 Ge	72565	5.56	0.58	75288.66	96.4	80 - 120	
115 In	49542	4.50	0.35	519752.75	95.3	80 - 120	
209 Bi	38713	2.19	0.62	393045.53	98.5	80 - 120	

C:\ICPCHEM\1\DATA\06H2812b.B\013_ICB.D\013_ICB.D#

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2812b.B\003CALB.D\003CALB.D#

0 :Element Failures	0 :Max. Number of Failures Allowed
0 :ISTD Failures	0 :Max. Nnumber of ISTD Failures Allowed

Data Results:

Analytes:	Pass
ISTD:	Pass

ICB QC Report

Data File: C:\ICPCHEM\1\DATA\06H2812b.B\014_ICB.D\014_ICB.D#
 Date Acquired: Aug 28 2006 01:44 pm
 Acq. Method: 60200111.M
 Operator:
 Sample Name: icb
 Misc Info:
 Vial Number: 1305
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal. Update: Aug 28 2006 01:18 pm
 Sample Type: 6-ICB
 Dilution Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
9 Be	0.00 ppb	288.81	1.00	
23 Na	5.64 ppb	17.36	50.00	
26 Mg	3.22 ppb	6.11	50.00	
27 Al	3.99 ppb	6.95	50.00	
39 K	0.36 ppb	75.34	50.00	
44 Ca	7.21 ppb	11.16	50.00	
51 V	-0.14 ppb	107.98	1.00	
52 Cr	0.20 ppb	7.62	1.00	
55 Mn	0.00 ppb	73.98	1.00	
57 Fe	9.43 ppb	12.86	50.00	
59 Co	0.00 ppb	94.24	1.00	
60 Ni	-0.05 ppb	28.93	1.00	
65 Cu	-0.06 ppb	54.74	1.00	
66 Zn	0.01 ppb	583.25	1.00	
75 As	0.23 ppb	99.08	1.00	
82 Se	-0.01 ppb	586.10	1.00	
95 Mo	-0.01 ppb	41.70	1.00	
109 Ag	-0.01 ppb	23.52	1.00	
111 Cd	0.01 ppb	168.01	1.00	
121 Sb	0.00 ppb	252.86	1.00	
137 Ba	-0.02 ppb	82.07	1.00	
205 Tl	0.00 ppb	407.80	1.00	
208 Pb	-0.03 ppb	15.46	1.00	

ISTD Elements

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	455246.66	1.89	461711.19	98.6	80 - 120		
45 Sc	334940.00	0.48	356495.53	94.0	80 - 120		
72 Ge	72817.77	0.38	75288.66	96.7	80 - 120		
115 In	494298.88	0.22	519752.75	95.1	80 - 120		
209 Bi	389156.66	0.47	393045.53	99.0	80 - 120		

C:\ICPCHEM\1\DATA\06H2812b.B\014_ICB.D\014_ICB.D#

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2812b.B\003CALB.D\003CALB.D#

0 :Element Failures	0 :Max Number of Failures Allowed
0 :ISTD Failures	0 :Max. Nnumber of ISTD Failures Allowed

Data Results:

Analytes:	Pass
ISTD:	Pass

ICS-A QC Report

Data File: C:\ICPCHEM\1\DATA\06H2812b.B\015ICSA.D\015ICSA.D#
 Date Acquired: Aug 28 2006 01:50 pm
 Acq. Method: 60200111.M
 Operator:
 Sample Name: icsa,s4011
 Misc Info:
 Vial Number: 1204
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal. Update: Aug 28 2006 01:18 pm
 Sample Type: 6-ICSA
 Dilution Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
9 Be	0.01 ppb	28.79	2.00	
23 Na	233300.00 ppb	1.35	2.00	
26 Mg	97230.00 ppb	0.82	2.00	
27 Al	98660.00 ppb	0.64	2.00	
39 K	101700.00 ppb	0.18	2.00	
44 Ca	309700.00 ppb	0.35	2.00	
51 V	0.00 ppb	11083.00	2.00	
52 Cr	1.02 ppb	5.39	5.00	
55 Mn	1.01 ppb	1.77	2.00	
57 Fe	222300.00 ppb	1.36	2.00	
59 Co	2.50 ppb	2.69	2.00	**
60 Ni	2.44 ppb	5.05	2.00	**
65 Cu	1.82 ppb	6.21	2.00	
66 Zn	3.14 ppb	5.65	2.00	**
75 As	0.04 ppb	278.95	2.00	
82 Se	-1.97 ppb	1.77	2.00	
95 Mo	1950.00 ppb	0.75	2.00	
109 Ag	0.11 ppb	11.10	2.00	
111 Cd	0.09 ppb	63.08	2.00	
121 Sb	2.16 ppb	1.97	2.00	**
137 Ba	1.04 ppb	11.01	2.00	
205 Tl	0.04 ppb	26.44	2.00	
208 Pb	1.25 ppb	4.47	2.00	

ISTD Elements

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	362434.44	0.57	461711.19	78.5	30 - 120		
45 Sc	310168.88	1.25	356495.53	87.0	30 - 120		
72 Ge	70030.89	1.49	75288.66	93.0	30 - 120		
115 In	404496.38	0.70	519752.75	77.8	30 - 120		
209 Bi	310478.88	1.09	393045.53	79.0	30 - 120		

C:\ICPCHEM\1\DATA\06H2812b.B\015ICSA.D\015ICSA.D#

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2812b.B\003CALB.D\003CALB.D#

4 :Element Failures 0 :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Nnumber of ISTD Failures Allowed

Data Results:

Analytes:	Fail
ISTD:	Pass

ICS-AB QC Report

Data File: C:\ICPCHEM\1\DATA\06H2812b.B\016ICSB.D\016ICSB.D#
 Date Acquired: Aug 28 2006 01:55 pm
 Acq. Method: 60200111.M
 Operator:
 Sample Name: icsab,s4012
 Misc Info:
 Vial Number: 1205
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal. Update: Aug 28 2006 01:18 pm
 Sample Type: 6-ICSAB
 Dilution Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	Expected QC	Range(%)	Flag
9 Be	0.03 ppb	55.44	---	80 - 120	
23 Na	219200.00 ppb	1.48	---	80 - 120	
26 Mg	92790.00 ppb	0.96	---	80 - 120	
27 Al	95600.00 ppb	0.71	---	80 - 120	
39 K	101600.00 ppb	0.02	---	80 - 120	
44 Ca	308600.00 ppb	0.97	---	80 - 120	
51 V	215.20 ppb	0.72	200.00	80 - 120	
52 Cr	205.60 ppb	1.80	200.00	80 - 120	
55 Mn	202.50 ppb	1.94	200.00	80 - 120	
57 Fe	221600.00 ppb	0.91	---	80 - 120	
59 Co	191.10 ppb	0.19	200.00	80 - 120	
60 Ni	183.30 ppb	0.46	200.00	80 - 120	
65 Cu	172.50 ppb	0.59	200.00	80 - 120	
66 Zn	88.57 ppb	1.80	100.00	80 - 120	
75 As	90.10 ppb	0.69	100.00	80 - 120	
82 Se	77.14 ppb	0.85	100.00	80 - 120	Fail
95 Mo	1941.00 ppb	0.45	2000.00	80 - 120	
109 Ag	44.46 ppb	0.31	50.00	80 - 120	
111 Cd	84.58 ppb	0.97	100.00	80 - 120	
121 Sb	2.14 ppb	1.94	---	80 - 120	
137 Ba	0.96 ppb	2.74	---	80 - 120	
205 Tl	0.05 ppb	22.25	---	80 - 120	
208 Pb	1.24 ppb	2.81	---	80 - 120	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	371917.78	1.51	461711.19	80.6	30 - 120	
45 Sc	314667.78	0.88	356495.53	88.3	30 - 120	
72 Ge	68718.00	0.87	75288.66	91.3	30 - 120	
115 In	397777.28	0.07	519752.75	76.5	30 - 120	
209 Bi	304324.44	1.45	393045.53	77.4	30 - 120	

C:\ICPCHEM\1\DATA\06H2812b.B\016ICSB.D\016ICSB.D#

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2812b.B\003CALB.D\003CALB.D#

1 :Element Failures	0 :Max. Number of Failures Allowed
0 :ISTD Failures	0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes:	Fail
ISTD:	Pass

Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06H2812b.B\017BLNK.D\017BLNK.D#
 Date Acquired: Aug 28 2006 02:04 pm
 Acq. Method: 60200111.M
 Operator:
 Sample Name: rinse
 Misc Info:
 Vial Number: 2512
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal. Update: Aug 28 2006 01:18 pm
 Sample Type: 6-Blank
 Dilution Factor: 1.00

QC Elements

Element	Corr. Conc.	RSD(%)	Raw Conc.	High Limit	Flag
9 Be	-0.01054 ppb	26.38	-0.01054	1.00	
23 Na	1.497 ppb	80.09	1.497	1.00	
26 Mg	-0.9922 ppb	37.49	-0.9922	1.00	
27 Al	-5.59 ppb	6.03	-5.59	1.00	
39 K	-50.4 ppb	1.16	-50.4	1.00	
44 Ca	-17.55 ppb	5.41	-17.55	1.00	
51 V	-0.1543 ppb	14.87	-0.1543	1.00	
52 Cr	-0.6307 ppb	4.95	-0.6307	1.00	
55 Mn	-0.002142 ppb	655.93	-0.002142	1.00	
57 Fe	-17.28 ppb	13.04	-17.28	1.00	
59 Co	-0.01151 ppb	27.29	-0.01151	1.00	
60 Ni	-0.05762 ppb	20.27	-0.05762	1.00	
65 Cu	-0.08895 ppb	15.35	-0.08895	1.00	
66 Zn	-0.1882 ppb	40.48	-0.1882	1.00	
75 As	-0.3581 ppb	5.33	-0.3581	1.00	
82 Se	-0.4047 ppb	18.92	-0.4047	1.00	
95 Mo	-0.04968 ppb	396.34	-0.04968	1.00	
109 Ag	-0.01194 ppb	7.71	-0.01194	1.00	
111 Cd	-0.04563 ppb	41.29	-0.04563	1.00	
121 Sb	-0.0451 ppb	3.36	-0.0451	1.00	
137 Ba	-0.06124 ppb	8.70	-0.06124	1.00	
205 Tl	-0.02805 ppb	8.39	-0.02805	1.00	
208 Pb	-0.04508 ppb	6.62	-0.04508	1.00	

ISTD Elements

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	1017848.10	6.78	461711.19	220.5	80 - 120	ISFail	
45 Sc	890441.75	6.64	356495.53	249.8	80 - 120	ISFail	
72 Ge	220271.38	14.30	75288.66	292.6	80 - 120	ISFail	
115 In	1437050.90	8.05	519752.75	276.5	80 - 120	ISFail	
209 Bi	1221411.80	8.55	393045.53	310.8	80 - 120	ISFail	

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2812b.B\003CALB.D\003CALB.D#

1 :Element Failures	0 :Max. Number of Failures Allowed
5 :ISTD Failures	0 :Max. Nnumber of ISTD Failures Allowed

QC Results:

Analytes:	Fail
ISTD:	Fail

Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06H2812b.B\018BLNK.D\018BLNK.D#
 Date Acquired: Aug 28 2006 02:10 pm
 Acq. Method: 60200111.M
 Operator:
 Sample Name: rinse
 Misc Info:
 Vial Number: 1303
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal. Update: Aug 28 2006 01:18 pm
 Sample Type: 6-Blank
 Dilution Factor: 1.00

QC Elements

Element	Corr. Conc.	RSD(%)	Raw Conc.	High Limit	Flag
9 Be	0.02462 ppb	67.38	0.02462	1.00	
23 Na	36.31 ppb	50.87	36.31	1.00	
26 Mg	13.05 ppb	43.19	13.05	1.00	
27 Al	12.75 ppb	38.97	12.75	1.00	
39 K	13.26 ppb	68.84	13.26	1.00	
44 Ca	38.48 ppb	51.04	38.48	1.00	
51 V	-0.01024 ppb	357.32	-0.01024	1.00	
52 Cr	-0.08803 ppb	8.84	-0.08803	1.00	
55 Mn	0.03322 ppb	29.88	0.03322	1.00	
57 Fe	28.95 ppb	47.63	28.95	1.00	
59 Co	0.02427 ppb	51.42	0.02427	1.00	
60 Ni	0.02304 ppb	129.08	0.02304	1.00	
65 Cu	-0.003385 ppb	397.34	-0.003385	1.00	
66 Zn	0.0402 ppb	105.47	0.0402	1.00	
75 As	-0.1368 ppb	43.01	-0.1368	1.00	
82 Se	0.2564 ppb	50.16	0.2564	1.00	
95 Mo	3.655 ppb	4.67	3.655	1.00	
109 Ag	0.009322 ppb	41.47	0.009322	1.00	
111 Cd	0.03779 ppb	55.70	0.03779	1.00	
121 Sb	0.008454 ppb	121.72	0.008454	1.00	
137 Ba	0.01752 ppb	93.04	0.01752	1.00	
205 Tl	-0.003785 ppb	262.83	-0.003785	1.00	
208 Pb	-0.008725 ppb	44.67	-0.008725	1.00	

ISTD Elements

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	441463.06		1.24	461711.19	95.6	80 - 120	
45 Sc	326044.44		0.74	356495.53	91.5	80 - 120	
72 Ge	65260.22		0.69	75288.66	86.7	80 - 120	
115 In	456304.19		0.15	519752.75	87.8	80 - 120	
209 Bi	356162.19		0.48	393045.53	90.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2812b.B\003CALB.D\003CALB.D#

7 :Element Failures	0 :Max. Number of Failures Allowed
0 :ISTD Failures	0 :Max. Nnumber of ISTD Failures Allowed

QC Results:

Analytes:	Fail
ISTD:	Pass

Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06H2812b.B\019BLNK.D\019BLNK.D#
 Date Acquired: Aug 28 2006 02:15 pm
 Acq. Method: 60200111.M
 Operator:
 Sample Name: rinse
 Misc Info:
 Vial Number: 1207
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal. Update: Aug 28 2006 01:18 pm
 Sample Type: 6-Blank
 Dilution Factor: 1.00

QC Elements

Element	Corr. Conc.	RSD(%)	Raw Conc.	High Limit	Flag
9 Be	0.0007619 ppb	881.22	0.0007619	1.00	
23 Na	23.16 ppb	12.03	23.16	1.00	
26 Mg	9.931 ppb	12.02	9.931	1.00	
27 Al	10.01 ppb	9.39	10.01	1.00	
39 K	9.349 ppb	29.58	9.349	1.00	
44 Ca	27.96 ppb	7.79	27.96	1.00	
51 V	0.04017 ppb	195.39	0.04017	1.00	
52 Cr	-0.1106 ppb	33.13	-0.1106	1.00	
55 Mn	0.02008 ppb	15.97	0.02008	1.00	
57 Fe	21.63 ppb	15.70	21.63	1.00	
59 Co	0.009681 ppb	72.52	0.009681	1.00	
60 Ni	-0.03142 ppb	56.56	-0.03142	1.00	
65 Cu	-0.0288 ppb	82.40	-0.0288	1.00	
66 Zn	0.001577 ppb	2734.90	0.001577	1.00	
75 As	-0.02448 ppb	471.41	-0.02448	1.00	
82 Se	0.2029 ppb	67.57	0.2029	1.00	
95 Mo	1.538 ppb	2.94	1.538	1.00	
109 Ag	0.004377 ppb	90.88	0.004377	1.00	
111 Cd	0.06101 ppb	42.85	0.06101	1.00	
121 Sb	0.0125 ppb	74.46	0.0125	1.00	
137 Ba	0.01198 ppb	53.77	0.01198	1.00	
205 Tl	-0.0132 ppb	21.80	-0.0132	1.00	
208 Pb	-0.02295 ppb	31.32	-0.02295	1.00	

ISTD Elements

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	438765.34		0.70	461711.19	95.0	80 - 120	
45 Sc	313993.31		0.67	356495.53	88.1	80 - 120	
72 Ge	63600.67		0.80	75288.66	84.5	80 - 120	
115 In	446858.72		0.37	519752.75	86.0	80 - 120	
209 Bi	356215.53		0.68	393045.53	90.6	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2812b.B\003CALB.D\003CALB.D#

7 :Element Failures	0 :Max. Number of Failures Allowed
0 :ISTD Failures	0 :Max. Nnumber of ISTD Failures Allowed

QC Results:

Analytes:	Fail
ISTD:	Pass

ICV QC Report

Data File: C:\ICPCHEM\1\DATA\06H2812b.B\020_ICV.D\020_ICV.D#
 Date Acquired: Aug 28 2006 02:23 pm
 Acq. Method: 60200111.M
 Operator:
 Sample Name: icv,s4008
 Misc Info:
 Vial Number: 1202
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal. Update: Aug 28 2006 01:18 pm
 Sample Type: 6-ICV
 Dilution Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	Expected	QC Range(%)	Flag
9 Be	99.44 ppb	0.41	100.00	89.5 - 110	
23 Na	9671.00 ppb	0.98	10000.00	89.5 - 110	
26 Mg	9725.00 ppb	0.55	10000.00	89.5 - 110	
27 Al	9577.00 ppb	1.91	10000.00	89.5 - 110	
39 K	9963.00 ppb	1.61	10000.00	89.5 - 110	
44 Ca	10150.00 ppb	0.47	10000.00	89.5 - 110	
51 V	95.59 ppb	0.86	100.00	89.5 - 110	
52 Cr	96.37 ppb	1.43	100.00	89.5 - 110	
55 Mn	96.19 ppb	0.95	100.00	89.5 - 110	
57 Fe	10080.00 ppb	1.01	10000.00	89.5 - 110	
59 Co	93.91 ppb	0.72	100.00	89.5 - 110	
60 Ni	101.10 ppb	0.51	100.00	89.5 - 110	
65 Cu	100.80 ppb	1.43	100.00	89.5 - 110	
66 Zn	101.40 ppb	1.06	100.00	89.5 - 110	
75 As	100.90 ppb	1.03	100.00	89.5 - 110	
82 Se	102.50 ppb	0.94	100.00	89.5 - 110	
95 Mo	100.50 ppb	0.98	100.00	89.5 - 110	
109 Ag	101.90 ppb	1.03	100.00	89.5 - 110	
111 Cd	102.60 ppb	1.21	100.00	89.5 - 110	
121 Sb	97.44 ppb	0.33	100.00	89.5 - 110	
137 Ba	97.62 ppb	0.48	100.00	89.5 - 110	
205 Tl	48.95 ppb	0.88	50.00	89.5 - 110	
208 Pb	97.04 ppb	0.96	100.00	89.5 - 110	

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	436158.47	0.76	461711.19	94.5	80 - 120	
45 Sc	325365.53	1.28	356495.53	91.3	80 - 120	
72 Ge	65181.56	1.61	75288.66	86.6	80 - 120	
115 In	437419.88	0.90	519752.75	84.2	80 - 120	
209 Bi	351104.44	1.10	393045.53	89.3	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2812b.B\003CALB.D\003CALB.D#

0 :Element Failures	0 :Max. Number of Failures Allowed
0 :ISTD Failures	0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes:	Pass
ISTD:	Pass

Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06H2812b.B\021BLNK.D\021BLNK.D#
 Date Acquired: Aug 28 2006 02:29 pm
 Acq. Method: 60200111.M
 Operator:
 Sample Name: rinse
 Misc Info:
 Vial Number: 1207
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal. Update: Aug 28 2006 01:18 pm
 Sample Type: 6-Blank
 Dilution Factor: 1.00

QC Elements

Element	Corr. Conc.	RSD(%)	Raw Conc.	High Limit	Flag
9 Be	0.05617 ppb	24.36	0.05617	1.00	
23 Na	16.6 ppb	30.89	16.6	1.00	
26 Mg	11.89 ppb	20.29	11.89	1.00	
27 Al	11.79 ppb	20.72	11.79	1.00	
39 K	9.918 ppb	41.12	9.918	1.00	
44 Ca	21.8 ppb	25.20	21.8	1.00	
51 V	0.07469 ppb	221.72	0.07469	1.00	
52 Cr	0.1737 ppb	23.43	0.1737	1.00	
55 Mn	0.0628 ppb	42.93	0.0628	1.00	
57 Fe	21.65 ppb	23.34	21.65	1.00	
59 Co	0.06078 ppb	36.74	0.06078	1.00	
60 Ni	0.04177 ppb	58.22	0.04177	1.00	
65 Cu	0.0203 ppb	46.22	0.0203	1.00	
66 Zn	0.09199 ppb	45.74	0.09199	1.00	
75 As	0.1656 ppb	78.20	0.1656	1.00	
82 Se	0.307 ppb	51.53	0.307	1.00	
95 Mo	1.03 ppb	2.69	1.03	1.00	
109 Ag	0.06525 ppb	30.38	0.06525	1.00	
111 Cd	0.09709 ppb	24.65	0.09709	1.00	
121 Sb	0.08744 ppb	12.49	0.08744	1.00	
137 Ba	0.03916 ppb	41.19	0.03916	1.00	
205 Tl	0.0792 ppb	10.36	0.0792	1.00	
208 Pb	0.0293 ppb	62.94	0.0293	1.00	

ISTD Elements

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	445058.88		0.88	461711.19	96.4	80 - 120	
45 Sc	323342.19		1.12	356495.53	90.7	80 - 120	
72 Ge	65984.89		0.68	75288.66	87.6	80 - 120	
115 In	463092.91		0.41	519752.75	89.1	80 - 120	
209 Bi	365343.31		0.56	393045.53	93.0	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2812b.B\003CALB.D\003CALB.D#

7 :Element Failures	0 :Max. Number of Failures Allowed
0 :ISTD Failures	0 :Max. Nnumber of ISTD Failures Allowed

QC Results:

Analytes:	Fail
ISTD:	Pass

ICB QC Report

Data File: C:\ICPCHEM\1\DATA\06H2812b.B\022_ICB.D\022_ICB.D#
 Date Acquired: Aug 28 2006 02:35 pm
 Acq. Method: 60200111.M
 Operator:
 Sample Name: icb
 Misc Info:
 Vial Number: 1203
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal. Update: Aug 28 2006 01:18 pm
 Sample Type: 6-ICB
 Dilution Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
9 Be	0.01 ppb	195.62	1.00	
23 Na	5.33 ppb	38.58	50.00	
26 Mg	4.42 ppb	16.81	50.00	
27 Al	4.67 ppb	15.68	50.00	
39 K	1.83 ppb	36.57	50.00	
44 Ca	25.49 ppb	4.06	50.00	
51 V	0.04 ppb	322.47	1.00	
52 Cr	0.12 ppb	15.38	1.00	
55 Mn	0.02 ppb	62.19	1.00	
57 Fe	9.74 ppb	18.85	50.00	
59 Co	0.00 ppb	109.08	1.00	
60 Ni	-0.04 ppb	52.03	1.00	
65 Cu	-0.02 ppb	31.27	1.00	
66 Zn	0.90 ppb	10.88	1.00	
75 As	0.13 ppb	182.42	1.00	
82 Se	0.21 ppb	110.83	1.00	
95 Mo	0.46 ppb	8.76	1.00	
109 Ag	0.00 ppb	169.57	1.00	
111 Cd	0.04 ppb	56.63	1.00	
121 Sb	0.00 ppb	18.04	1.00	
137 Ba	0.01 ppb	99.61	1.00	
205 Tl	-0.01 ppb	79.06	1.00	
208 Pb	-0.02 ppb	14.34	1.00	

ISTD Elements

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	448123.16	0.96	461711.19	97.1	80 - 120		
45 Sc	320958.88	0.38	356495.53	90.0	80 - 120		
72 Ge	65945.34	0.34	75288.66	87.6	80 - 120		
115 In	458911.59	0.48	519752.75	88.3	80 - 120		
209 Bi	367602.19	0.81	393045.53	93.5	80 - 120		

C:\ICPCHEM\1\DATA\06H2812b.B\022_ICB.D\022_ICB.D#

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2812b.B\003CALB.D\003CALB.D#

0 :Element Failures	0 :Max. Number of Failures Allowed
0 :ISTD Failures	0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes:	Pass
ISTD:	Pass

ICB QC Report

Data File: C:\ICPCHEM\1\DATA\06H2812b.B\023_ICB.D\023_ICB.D#
 Date Acquired: Aug 28 2006 02:40 pm
 Acq. Method: 60200111.M
 Operator:
 Sample Name: icb
 Misc Info:
 Vial Number: 1305
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal. Update: Aug 28 2006 01:18 pm
 Sample Type: 6-ICB
 Dilution Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
9 Be	0.00 ppb	218.62	1.00	
23 Na	12.58 ppb	12.97	50.00	
26 Mg	7.55 ppb	8.18	50.00	
27 Al	7.96 ppb	6.29	50.00	
39 K	3.15 ppb	9.38	50.00	
44 Ca	19.67 ppb	3.37	50.00	
51 V	-0.04 ppb	267.86	1.00	
52 Cr	0.05 ppb	54.85	1.00	
55 Mn	0.02 ppb	55.34	1.00	
57 Fe	18.84 ppb	7.44	50.00	
59 Co	0.01 ppb	89.23	1.00	
60 Ni	-0.04 ppb	37.08	1.00	
65 Cu	-0.04 ppb	18.20	1.00	
66 Zn	-0.04 ppb	110.48	1.00	
75 As	0.22 ppb	75.97	1.00	
82 Se	0.21 ppb	116.14	1.00	
95 Mo	0.37 ppb	16.12	1.00	
109 Ag	0.00 ppb	2141.10	1.00	
111 Cd	0.03 ppb	90.36	1.00	
121 Sb	-0.01 ppb	136.64	1.00	
137 Ba	-0.01 ppb	455.21	1.00	
205 Tl	-0.01 ppb	14.47	1.00	
208 Pb	-0.03 ppb	25.99	1.00	

ISTD Elements

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	444838.94	2.22		461711.19	96.3	80 - 120	
45 Sc	319386.66	0.91		356495.53	89.6	80 - 120	
72 Ge	66190.89	1.23		75288.66	87.9	80 - 120	
115 In	458990.66	0.20		519752.75	88.3	80 - 120	
209 Bi	366411.09	0.48		393045.53	93.2	80 - 120	

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2812b.B\003CALB.D\003CALB.D#

0 :Element Failures	0 :Max. Number of Failures Allowed
0 :ISTD Failures	0 :Max. Nnumber of ISTD Failures Allowed

Data Results:

Analytes:	Pass
ISTD:	Pass

ICS-A QC Report

Data File: C:\ICPCHEM\1\DATA\06H2812b.B\024ICSA.D\024ICSA.D#
 Date Acquired: Aug 28 2006 02:46 pm
 Acq. Method: 60200111.M
 Operator:
 Sample Name: icsa,s4011
 Misc Info:
 Vial Number: 1204
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal. Update: Aug 28 2006 01:18 pm
 Sample Type: 6-ICSA
 Dilution Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	High Limit	Flag
9 Be	0.03 ppb	13.15	2.00	
23 Na	223400.00 ppb	0.90	2.00	
26 Mg	94440.00 ppb	1.07	2.00	
27 Al	96220.00 ppb	0.52	2.00	
39 K	100600.00 ppb	0.57	2.00	
44 Ca	309100.00 ppb	0.96	2.00	
51 V	0.11 ppb	15.89	2.00	
52 Cr	1.05 ppb	2.14	5.00	
55 Mn	1.04 ppb	3.57	2.00	
57 Fe	222100.00 ppb	0.84	2.00	
59 Co	2.54 ppb	0.60	2.00	**
60 Ni	2.39 ppb	2.46	2.00	**
65 Cu	1.74 ppb	2.86	2.00	
66 Zn	3.00 ppb	6.20	2.00	**
75 As	-0.02 ppb	649.36	2.00	
82 Se	-1.82 ppb	10.82	2.00	
95 Mo	1942.00 ppb	1.25	2.00	
109 Ag	0.12 ppb	13.17	2.00	
111 Cd	0.16 ppb	21.09	2.00	
121 Sb	2.14 ppb	2.16	2.00	**
137 Ba	0.95 ppb	6.93	2.00	
205 Tl	0.02 ppb	17.34	2.00	
208 Pb	1.21 ppb	3.83	2.00	

ISTD Elements

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	371884.44	0.85	461711.19	80.5	30 -	120	
45 Sc	311910.00	1.97	356495.53	87.5	30 -	120	
72 Ge	68098.45	0.91	75288.66	90.4	30 -	120	
115 In	394468.41	1.11	519752.75	75.9	30 -	120	
209 Bi	308394.44	0.59	393045.53	78.5	30 -	120	

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2812b.B\003CALB.D\003CALB.D#

4 :Element Failures	0 :Max. Number of Failures Allowed
0 :ISTD Failures	0 :Max. Nnumber of ISTD Failures Allowed

Data Results:

Analytes:	Fail
ISTD:	Pass

ICS-AB QC Report

Data File: C:\ICPCHEM\1\DATA\06H2812b.B\025ICSB.D\025ICSB.D#
 Date Acquired: Aug 28 2006 02:51 pm
 Acq. Method: 60200111.M
 Operator:
 Sample Name: icsab,s4012
 Misc Info:
 Vial Number: 1205
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal. Update: Aug 28 2006 01:18 pm
 Sample Type: 6-ICSAB
 Dilution Factor: 1.00

QC Elements

Element	Conc.	RSD(%)	Expected QC	Range(%)	Flag
9 Be	0.03 ppb	17.88	---	80 - 120	
23 Na	196100.00 ppb	1.60	---	80 - 120	
26 Mg	84400.00 ppb	0.84	---	80 - 120	
27 Al	87880.00 ppb	0.98	---	80 - 120	
39 K	98420.00 ppb	1.22	---	80 - 120	
44 Ca	297000.00 ppb	0.88	---	80 - 120	
51 V	218.20 ppb	1.28	200.00	80 - 120	
52 Cr	208.30 ppb	1.03	200.00	80 - 120	
55 Mn	202.50 ppb	2.34	200.00	80 - 120	
57 Fe	219400.00 ppb	2.01	---	80 - 120	
59 Co	187.50 ppb	1.58	200.00	80 - 120	
60 Ni	178.10 ppb	1.53	200.00	80 - 120	
65 Cu	166.10 ppb	1.39	200.00	80 - 120	
66 Zn	83.70 ppb	1.93	100.00	80 - 120	
75 As	86.96 ppb	1.60	100.00	80 - 120	
82 Se	75.04 ppb	3.07	100.00	80 - 120	Fail
95 Mo	1885.00 ppb	0.84	2000.00	80 - 120	
109 Ag	43.31 ppb	1.50	50.00	80 - 120	
111 Cd	82.66 ppb	1.05	100.00	80 - 120	
121 Sb	2.09 ppb	1.49	---	80 - 120	
137 Ba	0.90 ppb	7.21	---	80 - 120	
205 Tl	0.03 ppb	20.84	---	80 - 120	
208 Pb	1.17 ppb	2.28	---	80 - 120	

ISTD Elements

Element	CPS	Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	375386.66	2.06	461711.19	81.3	30 - 120		
45 Sc	324412.19	1.34	356495.53	91.0	30 - 120		
72 Ge	67131.34	1.08	75288.66	89.2	30 - 120		
115 In	389899.75	0.37	519752.75	75.0	30 - 120		
209 Bi	299765.53	1.04	393045.53	76.3	30 - 120		

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2812b.B\003CALB.D\003CALB.D#

1 :Element Failures	0 :Max. Number of Failures Allowed
0 :ISTD Failures	0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes:	Fail
ISTD:	Pass

Calibration Summary

Calibration : C:\ICPCHEM\1\DATA\06G1718A.B\60200111.C

Last Calib: Aug 28, 2006 13:18

Cal Type : External Calibration Method

Cal Title :

Standard Data Files

Level	DataPath	DataFile	Date Acquired
1	...hem\1\data\06h2812b.b\003calb.d\	003calb.d#	Aug 28 2006 12:43 pm
2	...hem\1\data\06h2812b.b\004cali.d\	004cali.d#	Aug 28 2006 12:48 pm
3	...hem\1\data\06h2812b.b\005cali.d\	005cali.d#	Aug 28 2006 12:54 pm
4	...hem\1\data\06h2812b.b\006cali.d\	006cali.d#	Aug 28 2006 01:00 pm
5	...hem\1\data\06h2812b.b\007cali.d\	007cali.d#	Aug 28 2006 01:05 pm
6	...hem\1\data\06h2812b.b\008cali.d\	008cali.d#	Aug 28 2006 01:11 pm
7	...hem\1\data\06h2812b.b\009cali.d\	009cali.d#	Aug 28 2006 01:16 pm
8	---		
9	---		
10	---		
11	---		
12	---		
13	---		
14	---		
15	---		
16	---		
17	---		
18	---		
19	---		
20	---		

Level	BkgPath	BkgFile	Interference Correction
1	---	---	ON
2	---	---	ON
3	---	---	ON
4	---	---	ON
5	---	---	ON
6	---	---	ON
7	---	---	ON
8	---		
9	---		
10	---		
11	---		
12	---		
13	---		
14	---		
15	---		
16	---		
17	---		
18	---		
19	---		
20	---		

Name	m/z	IS	Equation	r	Units
Li	6	---	Excluded	---	ppb
Be	9	6	$Y = 1.729E-1 * X + 2.655E-3$ (blank)	---	ppb
Na	23	45	$Y = 9.432E-1 * X + 2.702E+1$ (blank)	---	ppb
Mg	25	45	Excluded	---	ppb
Mg	26	45	$Y = 1.105E-1 * X + 3.243E-1$ (blank)	---	ppb
Al	27	45	$Y = 9.255E-1 * X + 7.139E+0$ (blank)	---	ppb
K	39	45	$Y = 8.155E-1 * X + 5.618E+1$ (blank)	---	ppb
Ca	43	45	Excluded	---	ppb
Ca	44	45	$Y = 2.274E-2 * X + 6.472E-1$ (blank)	---	ppb
Sc	45	---	Excluded	---	ppb
V	51	72	$Y = 4.277E+0 * X + 9.980E-1$ (blank)	---	ppb
Cr	52	72	$Y = 3.610E+0 * X + 3.291E+0$ (blank)	---	ppb
Cr	53	72	Excluded	---	ppb
Fe	54	72	Excluded	---	ppb
Mn	55	72	$Y = 4.366E+0 * X + 3.403E-1$ (blank)	---	ppb
Fe	57	72	$Y = 8.887E-2 * X + 2.514E+0$ (blank)	---	ppb
Co	59	72	$Y = 4.072E+0 * X + 9.521E-2$ (blank)	---	ppb
Ni	60	72	$Y = 8.303E-1 * X + 8.991E-2$ (blank)	---	ppb
Cu	63	72	Excluded	---	ppb
Cu	65	72	$Y = 9.883E-1 * X + 1.727E-1$ (blank)	---	ppb
Zn	66	72	$Y = 4.740E-1 * X + 4.211E-1$ (blank)	---	ppb
Ge	72	---	Excluded	---	ppb
As	75	72	$Y = 5.655E-1 * X + 2.258E-1$ (blank)	---	ppb
(As)	77	72	Excluded	---	ppb
Se	82	72	$Y = 4.789E-2 * X + 3.026E-2$ (blank)	---	ppb
(As)	83	72	Excluded	---	ppb
(Ca)	88	72	Excluded	---	ppb
Y	89	72	Excluded	---	ppb
Mo	95	72	$Y = 1.151E+0 * X + 3.264E-1$ (blank)	---	ppb
Mo	98	72	Excluded	---	ppb
(Mo)	99	72	Excluded	---	ppb
(Cd)	106	72	Excluded	---	ppb
(Cd)	108	72	Excluded	---	ppb
Ag	109	72	$Y = 2.620E+0 * X + 4.792E-2$ (blank)	---	ppb
Cd	111	72	$Y = 5.269E-1 * X + 5.391E-2$ (blank)	---	ppb
Cd	114	72	Excluded	---	ppb
In	115	---	Excluded	---	ppb
(In)	118	---	Excluded	---	ppb
Sb	121	115	$Y = 2.763E-1 * X + 1.507E-2$ (blank)	---	ppb
Ba	135	115	Excluded	---	ppb
Ba	137	115	$Y = 1.146E-1 * X + 9.193E-3$ (blank)	---	ppb
Tb	159	---	Excluded	---	ppb
Er	166	115	Excluded	---	ppb
Tl	205	209	$Y = 8.812E-1 * X + 3.393E-2$ (blank)	---	ppb
(Pb)	206	209	Excluded	---	ppb
(Pb)	207	209	Excluded	---	ppb
Pb	208	209	$Y = 1.219E+0 * X + 8.269E-2$ (blank)	---	ppb
Bi	209	---	Excluded	---	ppb

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET05
 Seqnum : 56346351020
 Cal : 56346351001
 Standards: S4008

File : h2812020
 Caldate: 28-AUG-2006

IDF : 1.0
 Time : 28-AUG-2006 14:23

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	1.0229	0.8871	10000	9577	ug/L	-4	10	
Antimony	0.2849	0.2694	100.0	97.44	ug/L	-3	10	
Arsenic	0.6666	0.5727	100.0	100.9	ug/L	1	10	
Barium	0.2023	0.1120	100.0	97.62	ug/L	-2	10	
Beryllium	0.1729	0.1720	100.0	99.44	ug/L	-1	10	
Cadmium	0.6274	0.5409	100.0	102.6	ug/L	3	10	
Calcium	0.0296	0.0231	10000	10150	ug/L	2	10	
Chromium	5.5371	3.5120	100.0	96.37	ug/L	-4	10	
Cobalt	3.9629	3.8250	100.0	93.91	ug/L	-6	10	
Copper	1.1425	0.9975	100.0	100.8	ug/L	1	10	
Iron	0.1016	0.0899	10000	10080	ug/L	1	10	
Lead	1.3094	1.1835	100.0	97.04	ug/L	-3	10	
Magnesium	0.1143	0.1075	10000	9725	ug/L	-3	10	
Manganese	4.6158	4.2032	100.0	96.19	ug/L	-4	10	
Molybdenum	1.2531	1.1597	100.0	100.5	ug/L	1	10	
Nickel	0.9212	0.8406	100.0	101.1	ug/L	1	10	
Potassium	1.1881	0.8180	10000	9963	ug/L	0	10	
Selenium	0.0706	0.0494	100.0	102.5	ug/L	3	10	
Silver	2.6400	2.6711	100.0	101.9	ug/L	2	10	
Sodium	1.1643	0.9148	10000	9671	ug/L	-3	10	
Thallium	0.8819	0.8634	50.00	48.95	ug/L	-2	10	
Vanadium	4.0459	4.0981	100.0	95.59	ug/L	-4	10	
Zinc	1.0062	0.4846	100.0	101.4	ug/L	1	10	

ISTD (ICALBLK h2812003)	ICALBLK Abund	Abund	%Drift
Lithium	461711	436159	-5.53
Scandium	356496	325366	-8.73
Germanium	75289	65182	-13.42
Indium	519753	437420	-15.84
Bismuth	393046	351104	-10.67

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56346351034
 Cal : 56346351001
 Standards: S4009

File : h2812034
 Caldate: 28-AUG-2006

IDF : 1.0
 Time : 28-AUG-2006 15:41

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	1.0229	0.8796	10000	9496	ug/L	-5	10	
Antimony	0.2849	0.2684	100.0	97.08	ug/L	-3	10	
Arsenic	0.6666	0.5762	100.0	101.5	ug/L	2	10	
Barium	0.2023	0.1114	100.0	97.11	ug/L	-3	10	
Beryllium	0.1729	0.1696	100.0	98.06	ug/L	-2	10	
Cadmium	0.6274	0.5453	100.0	103.4	ug/L	3	10	
Calcium	0.0296	0.0234	10000	10260	ug/L	3	10	
Chromium	5.5371	3.6136	100.0	99.18	ug/L	-1	10	
Cobalt	3.9629	3.8666	100.0	94.93	ug/L	-5	10	
Copper	1.1425	0.9920	100.0	100.2	ug/L	0	10	
Iron	0.1016	0.0929	10000	10430	ug/L	4	10	
Lead	1.3094	1.1573	100.0	94.89	ug/L	-5	10	
Magnesium	0.1143	0.1075	10000	9719	ug/L	-3	10	
Manganese	4.6158	4.3316	100.0	99.13	ug/L	-1	10	
Molybdenum	1.2531	1.1646	100.0	100.9	ug/L	1	10	
Nickel	0.9212	0.8484	100.0	102.1	ug/L	2	10	
Potassium	1.1881	0.8350	10000	10170	ug/L	2	10	
Selenium	0.0706	0.0503	100.0	104.4	ug/L	4	10	
Silver	2.6400	2.7067	100.0	103.3	ug/L	3	10	
Sodium	1.1643	0.8994	10000	9507	ug/L	-5	10	
Thallium	0.8819	0.8446	50.00	47.89	ug/L	-4	10	
Vanadium	4.0459	4.2148	100.0	98.32	ug/L	-2	10	
Zinc	1.0062	0.4895	100.0	102.4	ug/L	2	10	

ISTD (ICALBLK h2812003)	ICALBLK Abund	Abund	%Drift
Lithium	461711	432084	-6.42
Scandium	356496	312573	-12.32
Germanium	75289	60921	-19.08
Indium	519753	416232	-19.92
Bismuth	393046	342786	-12.79

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56346351050
 Cal : 56346351001
 Standards: S4009

File : h2812050
 Caldate: 28-AUG-2006

IDF : 1.0
 Time : 28-AUG-2006 17:11

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	1.0229	0.9030	10000	9749	ug/L	-3	10	
Antimony	0.2849	0.2664	100.0	96.37	ug/L	-4	10	
Arsenic	0.6666	0.5636	100.0	99.25	ug/L	-1	10	
Barium	0.2023	0.1111	100.0	96.89	ug/L	-3	10	
Beryllium	0.1729	0.1709	100.0	98.83	ug/L	-1	10	
Cadmium	0.6274	0.5307	100.0	100.6	ug/L	1	10	
Calcium	0.0296	0.0237	10000	10410	ug/L	4	10	
Chromium	5.5371	3.5663	100.0	97.87	ug/L	-2	10	
Cobalt	3.9629	3.7999	100.0	93.29	ug/L	-7	10	
Copper	1.1425	0.9725	100.0	98.22	ug/L	-2	10	
Iron	0.1016	0.0922	10000	10350	ug/L	4	10	
Lead	1.3094	1.1623	100.0	95.30	ug/L	-5	10	
Magnesium	0.1143	0.1087	10000	9832	ug/L	-2	10	
Manganese	4.6158	4.2913	100.0	98.21	ug/L	-2	10	
Molybdenum	1.2531	1.1354	100.0	98.39	ug/L	-2	10	
Nickel	0.9212	0.8259	100.0	99.37	ug/L	-1	10	
Potassium	1.1881	0.8560	10000	10430	ug/L	4	10	
Selenium	0.0706	0.0495	100.0	102.7	ug/L	3	10	
Silver	2.6400	2.6545	100.0	101.3	ug/L	1	10	
Sodium	1.1643	0.9087	10000	9607	ug/L	-4	10	
Thallium	0.8819	0.8309	50.00	47.11	ug/L	-6	10	
Vanadium	4.0459	4.1080	100.0	95.82	ug/L	-4	10	
Zinc	1.0062	0.4847	100.0	101.4	ug/L	1	10	

ISTD (ICALBLK h2812003)	ICALBLK Abund	Abund	%Drift
Lithium	461711	426358	-7.66
Scandium	356496	302013	-15.28
Germanium	75289	59761	-20.62
Indium	519753	403716	-22.33
Bismuth	393046	335983	-14.52

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56346351068
 Cal : 56346351001
 Standards: S4009, S3310

File : h2812068
 Caldate: 28-AUG-2006

IDF : 1.0
 Time : 28-AUG-2006 18:51

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	1.0229	0.8973	10000	9688	ug/L	-3	10	
Antimony	0.2849	0.2639	100.0	95.46	ug/L	-5	10	
Arsenic	0.6666	0.5561	100.0	97.93	ug/L	-2	10	
Barium	0.2023	0.1105	100.0	96.38	ug/L	-4	10	
Beryllium	0.1729	0.1662	100.0	96.07	ug/L	-4	10	
Cadmium	0.6274	0.5160	100.0	97.82	ug/L	-2	10	
Calcium	0.0296	0.0226	10000	9907	ug/L	-1	10	
Chromium	5.5371	3.4182	100.0	93.77	ug/L	-6	10	
Cobalt	3.9629	3.7335	100.0	91.66	ug/L	-8	10	
Copper	1.1425	0.9667	100.0	97.64	ug/L	-2	10	
Iron	0.1016	0.0898	10000	10070	ug/L	1	10	
Lead	1.3094	1.1565	100.0	94.82	ug/L	-5	10	
Magnesium	0.1143	0.1096	10000	9908	ug/L	-1	10	
Manganese	4.6158	4.1421	100.0	94.79	ug/L	-5	10	
Molybdenum	1.2531	1.1025	100.0	95.53	ug/L	-4	10	
Nickel	0.9212	0.8194	100.0	98.59	ug/L	-1	10	
Potassium	1.1881	0.8199	10000	9985	ug/L	0	10	
Selenium	0.0706	0.0479	100.0	99.32	ug/L	-1	10	
Silver	2.6400	2.5313	100.0	96.61	ug/L	-3	10	
Sodium	1.1643	0.9383	10000	9920	ug/L	-1	10	
Thallium	0.8819	0.8310	50.00	47.12	ug/L	-6	10	
Vanadium	4.0459	4.0090	100.0	93.51	ug/L	-6	10	
Zinc	1.0062	0.4753	100.0	99.39	ug/L	-1	10	

ISTD (ICALBLK h2812003)	ICALBLK Abund	Abund	%Drift
Lithium	461711	450708	-2.38
Scandium	356496	313077	-12.18
Germanium	75289	62100	-17.52
Indium	519753	409715	-21.17
Bismuth	393046	340087	-13.47

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56346351081
 Cal : 56346351001
 Standards: S4009, S3310

File : h2812081
 Caldate: 28-AUG-2006

IDF : 1.0
 Time : 28-AUG-2006 20:04

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	1.0229	0.9369	10000	10120	ug/L	1	10	
Antimony	0.2849	0.2667	100.0	96.48	ug/L	-4	10	
Arsenic	0.6666	0.5588	100.0	98.42	ug/L	-2	10	
Barium	0.2023	0.1121	100.0	97.74	ug/L	-2	10	
Beryllium	0.1729	0.1696	100.0	98.09	ug/L	-2	10	
Cadmium	0.6274	0.5091	100.0	96.51	ug/L	-3	10	
Calcium	0.0296	0.0231	10000	10120	ug/L	1	10	
Chromium	5.5371	3.3615	100.0	92.20	ug/L	-8	10	
Cobalt	3.9629	3.7274	100.0	91.52	ug/L	-8	10	
Copper	1.1425	0.9735	100.0	98.33	ug/L	-2	10	
Iron	0.1016	0.0898	10000	10080	ug/L	1	10	
Lead	1.3094	1.1509	100.0	94.36	ug/L	-6	10	
Magnesium	0.1143	0.1148	10000	10380	ug/L	4	10	
Manganese	4.6158	4.1039	100.0	93.92	ug/L	-6	10	
Molybdenum	1.2531	1.0841	100.0	93.93	ug/L	-6	10	
Nickel	0.9212	0.8178	100.0	98.40	ug/L	-2	10	
Potassium	1.1881	0.8330	10000	10150	ug/L	2	10	
Selenium	0.0706	0.0485	100.0	100.6	ug/L	1	10	
Silver	2.6400	2.5052	100.0	95.61	ug/L	-4	10	
Sodium	1.1643	0.9885	10000	10450	ug/L	5	10	
Thallium	0.8819	0.8244	50.00	46.74	ug/L	-7	10	
Vanadium	4.0459	3.8833	100.0	90.57	ug/L	-9	10	
Zinc	1.0062	0.4881	100.0	102.1	ug/L	2	10	

ISTD (ICALBLK h2812003)	ICALBLK Abund	Abund	%Drift
Lithium	461711	439559	-4.80
Scandium	356496	297790	-16.47
Germanium	75289	62022	-17.62
Indium	519753	399138	-23.21
Bismuth	393046	335332	-14.68

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56346351023
 Cal : 56346351001

File : h2812023
 Caldate: 28-AUG-2006

IDF : 1.0
 Time : 28-AUG-2006 14:40

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[7.964]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.2185]	0.5000	0.09029	ug/L	!ib
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	ND	0.2500	0.009674	ug/L	
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	[19.67]	50.00	7.739	ug/L	!ib
Chromium	[0.05245]	0.5000	0.03860	ug/L	!ib
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	[18.84]	50.00	6.980	ug/L	!ib
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	[7.554]	50.00	3.054	ug/L	!ib
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	[0.2107]	0.5000	0.1891	ug/L	!ib
Silver	ND	0.2500	0.01266	ug/L	
Sodium	[12.58]	50.00	9.919	ug/L	!ib
Thallium	ND	0.2500	0.02100	ug/L	
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2812003)	ICALBLK Abund	Abund	%Drift
Lithium	461711	444839	-3.65
Scandium	356496	319387	-10.41
Germanium	75289	66191	-12.08
Indium	519753	458991	-11.69
Bismuth	393046	366411	-6.78

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56346351036
 Cal : 56346351001

File : h2812036
 Caldate: 28-AUG-2006

IDF : 1.0
 Time : 28-AUG-2006 15:53

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[8.462]	50.00	2.123	ug/L	!ib
Antimony	[0.05604]	0.2500	0.03394	ug/L	!ib
Arsenic	ND	0.5000	0.09029	ug/L	
Barium	[0.1116]	0.2500	0.02391	ug/L	!ib
Beryllium	[0.01720]	0.2500	0.009674	ug/L	!ib
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	[22.13]	50.00	7.739	ug/L	!ib
Chromium	ND	0.5000	0.03860	ug/L	
Cobalt	[0.02498]	0.2500	0.008548	ug/L	!ib
Copper	ND	0.5000	0.04426	ug/L	
Iron	[14.47]	50.00	6.980	ug/L	!ib
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	[9.418]	50.00	3.054	ug/L	!ib
Manganese	[0.03959]	0.2500	0.01838	ug/L	!ib
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	[10.91]	50.00	6.379	ug/L	!ib
Selenium	ND	0.5000	0.1891	ug/L	
Silver	[0.01964]	0.2500	0.01266	ug/L	!ib
Sodium	[13.40]	50.00	9.919	ug/L	!ib
Thallium	[0.1184]	0.2500	0.02100	ug/L	!ib
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2812003)	ICALBLK Abund	Abund	%Drift
Lithium	461711	434074	-5.99
Scandium	356496	300151	-15.81
Germanium	75289	60955	-19.04
Indium	519753	427014	-17.84
Bismuth	393046	349023	-11.20

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56346351052
 Cal : 56346351001

File : h2812052
 Caldate: 28-AUG-2006

IDF : 1.0
 Time : 28-AUG-2006 17:22

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[7.102]	50.00	2.123	ug/L	!ib
Antimony	[0.09584]	0.2500	0.03394	ug/L	!ib
Arsenic	[0.1277]	0.5000	0.09029	ug/L	!ib
Barium	[0.1040]	0.2500	0.02391	ug/L	!ib
Beryllium	[0.02951]	0.2500	0.009674	ug/L	!ib
Cadmium	[0.07325]	0.2500	0.04566	ug/L	!ib
Calcium	[34.36]	50.00	7.739	ug/L	!ib
Chromium	ND	0.5000	0.03860	ug/L	
Cobalt	[0.02202]	0.2500	0.008548	ug/L	!ib
Copper	ND	0.5000	0.04426	ug/L	
Iron	[12.71]	50.00	6.980	ug/L	!ib
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	[9.097]	50.00	3.054	ug/L	!ib
Manganese	[0.2281]	0.2500	0.01838	ug/L	!ib
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	[20.36]	50.00	6.379	ug/L	!ib
Selenium	[0.1905]	0.5000	0.1891	ug/L	!ib
Silver	[0.02406]	0.2500	0.01266	ug/L	!ib
Sodium	ND	50.00	9.919	ug/L	
Thallium	ND	0.2500	0.02100	ug/L	
Vanadium	[0.1428]	0.5000	0.08283	ug/L	!ib
Zinc	0.5685	0.5000	0.09577	ug/L	ib ***

ISTD (ICALBLK h2812003)	ICALBLK Abund	Abund	%Drift
Lithium	461711	436968	-5.36
Scandium	356496	304391	-14.62
Germanium	75289	60089	-20.19
Indium	519753	418419	-19.50
Bismuth	393046	340460	-13.38

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56346351070
 Cal : 56346351001

File : h2812070
 Caldate: 28-AUG-2006

IDF : 1.0
 Time : 28-AUG-2006 19:02

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[5.962]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.1079]	0.5000	0.09029	ug/L	!ib
Barium	[0.1328]	0.2500	0.02391	ug/L	!ib
Beryllium	[0.04501]	0.2500	0.009674	ug/L	!ib
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	[10.15]	50.00	7.739	ug/L	!ib
Chromium	ND	0.5000	0.03860	ug/L	
Cobalt	[0.02669]	0.2500	0.008548	ug/L	!ib
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	[5.618]	50.00	3.054	ug/L	!ib
Manganese	[0.08289]	0.2500	0.01838	ug/L	!ib
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	[7.758]	50.00	6.379	ug/L	!ib
Selenium	[0.2229]	0.5000	0.1891	ug/L	!ib
Silver	[0.01874]	0.2500	0.01266	ug/L	!ib
Sodium	ND	50.00	9.919	ug/L	
Thallium	[0.1032]	0.2500	0.02100	ug/L	!ib
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	[0.1471]	0.5000	0.09577	ug/L	!ib

ISTD (ICALBLK h2812003)	ICALBLK Abund	Abund	%Drift
Lithium	461711	441281	-4.42
Scandium	356496	287837	-19.26
Germanium	75289	60780	-19.27
Indium	519753	414065	-20.33
Bismuth	393046	346621	-11.81

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56346351083
 Cal : 56346351001

File : h2812083
 Caldate: 28-AUG-2006

IDF : 1.0
 Time : 28-AUG-2006 20:15

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[4.006]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.3319]	0.5000	0.09029	ug/L	!ib
Barium	[0.1010]	0.2500	0.02391	ug/L	!ib
Beryllium	[0.01237]	0.2500	0.009674	ug/L	!ib
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	ND	0.5000	0.03860	ug/L	
Cobalt	[0.01160]	0.2500	0.008548	ug/L	!ib
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	ND	50.00	3.054	ug/L	
Manganese	[0.05083]	0.2500	0.01838	ug/L	!ib
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	[0.2084]	0.5000	0.1891	ug/L	!ib
Silver	[0.01964]	0.2500	0.01266	ug/L	!ib
Sodium	ND	50.00	9.919	ug/L	
Thallium	[0.03191]	0.2500	0.02100	ug/L	!ib
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2812003)	ICALBLK Abund	Abund	%Drift
Lithium	461711	450685	-2.39
Scandium	356496	290929	-18.39
Germanium	75289	61576	-18.21
Indium	519753	411944	-20.74
Bismuth	393046	338544	-13.87

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56346351024
 Cal : 56346351001
 Standards: S4011, S3310

File : h2812024
 Caldate: 28-AUG-2006

IDF : 1.0
 Time : 28-AUG-2006 14:46

Analyte	Quant	RL	Units	Flags
Antimony	2.140	0.2500	ug/L	
Arsenic	[0]	0.5000	ug/L	
Barium	0.9514	0.2500	ug/L	
Beryllium	[0.02527]	0.2500	ug/L	
Cadmium	[0.1567]	0.2500	ug/L	
Chromium	1.053	0.5000	ug/L	
Cobalt	2.535	0.2500	ug/L	
Copper	1.739	0.5000	ug/L	
Lead	1.212	0.2500	ug/L	
Manganese	1.041	0.2500	ug/L	
Nickel	2.389	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1171]	0.2500	ug/L	
Thallium	[0.02119]	0.2500	ug/L	
Vanadium	[0.1066]	0.5000	ug/L	
Zinc	3.004	0.5000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	96220	ug/L	96
Calcium	300000	309100	ug/L	103
Iron	250000	222100	ug/L	89
Magnesium	100000	94440	ug/L	94
Molybdenum	2000	1942	ug/L	97
Potassium	100000	100600	ug/L	101
Sodium	250000	223400	ug/L	89

ISTD (ICALBLK h2812003)	ICALBLK Abund	Abund	%Drift
Lithium	461711	371884	-19.46
Scandium	356496	311910	-12.51
Germanium	75289	68098	-9.55
Indium	519753	394468	-24.10
Bismuth	393046	308394	-21.54

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56346351025
 Cal : 56346351001
 Standards: S4012, S3310

File : h2812025
 Caldate: 28-AUG-2006

IDF : 1.0
 Time : 28-AUG-2006 14:51

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	87880	ug/L	-12		
Arsenic	100.0	86.96	ug/L	-13	20	
Cadmium	100.0	82.66	ug/L	-17	20	
Calcium	300000	297000	ug/L	-1		
Chromium	200.0	208.3	ug/L	4	20	
Cobalt	200.0	187.5	ug/L	-6	20	
Copper	200.0	166.1	ug/L	-17	20	
Iron	250000	219400	ug/L	-12		
Magnesium	100000	84400	ug/L	-16		
Manganese	200.0	202.5	ug/L	1	20	
Molybdenum	2000	1885	ug/L	-6		
Nickel	200.0	178.1	ug/L	-11	20	
Potassium	100000	98420	ug/L	-2		
Selenium	100.0	75.04	ug/L	-25	20	ab- ***
Silver	50.00	43.31	ug/L	-13	20	
Sodium	250000	196100	ug/L	-22		
Vanadium	200.0	218.2	ug/L	9	20	
Zinc	100.0	83.70	ug/L	-16	20	

ISTD (ICALBLK h2812003)	ICALBLK Abund	Abund	%Drift
Scandium	356496	324412	-9.00
Germanium	75289	67131	-10.84

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56346351085
 Cal : 56346351001
 Standards: S4011, S3310

File : h2812085
 Caldate: 28-AUG-2006

IDF : 1.0
 Time : 28-AUG-2006 20:27

Analyte	Quant	RL	Units	Flags
Antimony	2.044	0.2500	ug/L	
Arsenic	[0.04078]	0.5000	ug/L	
Barium	1.218	0.2500	ug/L	
Beryllium	[0.003799]	0.2500	ug/L	
Cadmium	[0.09657]	0.2500	ug/L	
Chromium	1.004	0.5000	ug/L	
Cobalt	2.384	0.2500	ug/L	
Copper	1.494	0.5000	ug/L	
Lead	1.160	0.2500	ug/L	
Manganese	1.001	0.2500	ug/L	
Nickel	2.142	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1051]	0.2500	ug/L	
Thallium	[0.03242]	0.2500	ug/L	
Vanadium	[0.1723]	0.5000	ug/L	
Zinc	2.794	0.5000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	95380	ug/L	95
Calcium	300000	296500	ug/L	99
Iron	250000	211700	ug/L	85
Magnesium	100000	93760	ug/L	94
Molybdenum	2000	1838	ug/L	92
Potassium	100000	97640	ug/L	98
Sodium	250000	225500	ug/L	90

ISTD (ICALBLK h2812003)	ICALBLK Abund	Abund	%Drift
Lithium	461711	386138	-16.37
Scandium	356496	292568	-17.93
Germanium	75289	63425	-15.76
Indium	519753	352735	-32.13
Bismuth	393046	279889	-28.79

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56346351086
 Cal : 56346351001
 Standards: S4012, S3310

File : h2812086
 Caldate: 28-AUG-2006

IDF : 1.0
 Time : 28-AUG-2006 20:32

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	93620	ug/L	-6		
Arsenic	100.0	85.21	ug/L	-15	20	
Cadmium	100.0	78.62	ug/L	-21	20	ab- ***
Calcium	300000	295900	ug/L	-1		
Chromium	200.0	197.6	ug/L	-1	20	
Cobalt	200.0	182.0	ug/L	-9	20	
Copper	200.0	162.9	ug/L	-19	20	
Iron	250000	211300	ug/L	-15		
Magnesium	100000	91130	ug/L	-9		
Manganese	200.0	195.2	ug/L	-2	20	
Molybdenum	2000	1833	ug/L	-8		
Nickel	200.0	172.0	ug/L	-14	20	
Potassium	100000	97990	ug/L	-2		
Selenium	100.0	74.19	ug/L	-26	20	ab- ***
Silver	50.00	40.88	ug/L	-18	20	
Sodium	250000	216900	ug/L	-13		
Vanadium	200.0	207.9	ug/L	4	20	
Zinc	100.0	83.56	ug/L	-16	20	

ISTD (ICALBLK h2812003)	ICALBLK Abund	Abund	%Drift
Scandium	356496	296816	-16.74
Germanium	75289	63636	-15.48

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56346351 Instrument: MET05 Agilent ICP-MS
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 28-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
001	h2812001	TVN				28-AUG-2006	12:31	1.0	1.0			1		
002	h2812002	X	RINSE			28-AUG-2006	12:37	1.0				2		
003	h2812003	ICALBLK	STD-BLANK			28-AUG-2006	12:43	1.0	1.0			2		
004	h2812004	ICAL	CS1			28-AUG-2006	12:48	1.0	1.0			3		
005	h2812005	ICAL	CS2			28-AUG-2006	12:54	1.0	1.0			4		
006	h2812006	ICAL	CS3			28-AUG-2006	13:00	1.0	1.0			5		
007	h2812007	ICAL	CS4			28-AUG-2006	13:05	1.0	1.0			6		
008	h2812008	ICAL	CS5			28-AUG-2006	13:11	1.0	1.0			7		
009	h2812009	ICAL	CS6			28-AUG-2006	13:16	1.0	1.0			8		
010	h2812010	X	RINSE			28-AUG-2006	13:22	1.0				2		
011	h2812011	X				28-AUG-2006	13:27	1.0	1.0	23	1	9		
012	h2812012	X	RINSE			28-AUG-2006	13:33	1.0				2		
013	h2812013	X				28-AUG-2006	13:39	1.0	1.0	1	1	2		
014	h2812014	X				28-AUG-2006	13:44	1.0	1.0		1	2		
015	h2812015	X				28-AUG-2006	13:50	1.0	1.0		1	10 2		7:CA=309700
016	h2812016	X				28-AUG-2006	13:55	1.0	1.0	1	1	11 2		10:CA=308600
017	h2812017	X	RINSE			28-AUG-2006	14:04	1.0				2		
018	h2812018	X	RINSE			28-AUG-2006	14:10	1.0				2		
019	h2812019	X	RINSE			28-AUG-2006	14:15	1.0				2		
020	h2812020	ICV				28-AUG-2006	14:23	1.0	1.0		1	9		
021	h2812021	X	RINSE			28-AUG-2006	14:29	1.0				2		
022	h2812022	X				28-AUG-2006	14:35	1.0	1.0			2		
023	h2812023	ICB				28-AUG-2006	14:40	1.0	1.0		1	2		
024	h2812024	ICSA				28-AUG-2006	14:46	1.0	1.0		1	10 2		7:CA=309100
025	h2812025	ICSAB				28-AUG-2006	14:51	1.0	1.0	1	1	11 2		10:CA=297000
026	h2812026	BLANK	QC353411			28-AUG-2006	14:57	5.0	50.0	1	1	2		
027	h2812027	BS	QC353412			28-AUG-2006	15:02	5.0	50.0	1	1	2		
028	h2812028	BSD	QC353413			28-AUG-2006	15:08	5.0	50.0	1	1	2		
029	h2812029	X	RINSE			28-AUG-2006	15:13	1.0				2		
030	h2812030	MSS	188835-001			28-AUG-2006	15:19	5.0	47.62	3	1	2		2:CA=24800.0
031	h2812031	MS	QC353414			28-AUG-2006	15:25	5.0	51.55	3	1	2		5:CA=37740.0

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S4009 13=S3780

Analyst:  Date: 8/29/06

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

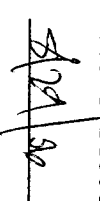
Sequence: 56346351 Instrument: MET05
Analytical Method: EPA 6020 Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 28-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
032	h2812032	MSD	QC353415	116776	Miscel	28-AUG-2006	15:30	5.0	49.50	3	1	2	5:CA=38200.0	
033	h2812033	X	RINSE			28-AUG-2006	15:36	1.0				2		
034	h2812034	CCV				28-AUG-2006	15:41	1.0	1.0		1	12		
035	h2812035	X	RINSE			28-AUG-2006	15:47	1.0				2		
036	h2812036	CCB				28-AUG-2006	15:53	1.0	1.0		1	2		
037	h2812037	X				28-AUG-2006	15:58	1.0	1.0		1	2		
038	h2812038	X	RINSE			28-AUG-2006	16:04	1.0				2		
039	h2812039	SAMPLE	188835-002	116776	Miscel	28-AUG-2006	16:09	5.0	54.35		1	2	3:K=59080.0	
040	h2812040	SAMPLE	188835-003	116776	Miscel	28-AUG-2006	16:15	5.0	39.68		1	2	1:CA=249600	
041	h2812041	SAMPLE	188835-004	116776	Miscel	28-AUG-2006	16:21	5.0	54.95		1	2	2:K=25480.0	
042	h2812042	SAMPLE	188835-005	116776	Miscel	28-AUG-2006	16:26	5.0	28.57		1	2	1:K=308200	
043	h2812043	SAMPLE	188835-006	116776	Miscel	28-AUG-2006	16:32	5.0	51.02		1	2	1:K=75520.0	
044	h2812044	SAMPLE	188835-007	116776	Miscel	28-AUG-2006	16:37	5.0	50.0		1	2	2:K=38000.0	
045	h2812045	SAMPLE	188835-008	116776	Miscel	28-AUG-2006	16:43	5.0	33.56		1	2	5:MG=78040.0	
046	h2812046	SAMPLE	188835-009	116776	Miscel	28-AUG-2006	16:48	5.0	54.95		1	2	2:CA=429600	
047	h2812047	SAMPLE	188835-010	116776	Miscel	28-AUG-2006	16:54	5.0	48.08		1	2	3:K=62520.0	
048	h2812048	SAMPLE	188835-011	116776	Miscel	28-AUG-2006	16:59	5.0	44.25		1	2	2:CA=54180.0	
049	h2812049	X	RINSE			28-AUG-2006	17:05	1.0				2		
050	h2812050	CCV				28-AUG-2006	17:11	1.0	1.0		1	12		
051	h2812051	X	RINSE			28-AUG-2006	17:16	1.0				2		
052	h2812052	CCB				28-AUG-2006	17:22	1.0	1.0		1	2		
053	h2812053	X				28-AUG-2006	17:27	1.0	1.0		1	2		
054	h2812054	SAMPLE	188835-012	116776	Miscel	28-AUG-2006	17:33	5.0	51.02		1	2	2:K=49760.0	
055	h2812055	SAMPLE	188835-013	116776	Miscel	28-AUG-2006	17:39	5.0	34.97		1	2	3:K=63740.0	
056	h2812056	SAMPLE	188835-014	116776	Miscel	28-AUG-2006	17:44	5.0	38.46		1	2	4:K=128100	
057	h2812057	X	RINSE			28-AUG-2006	17:50	1.0				2		
058	h2812058	X	RINSE			28-AUG-2006	17:55	1.0				2		
059	h2812059	BLANK	QC353636	116827	Filtira	28-AUG-2006	18:01	1.0	1.0		1	2		
060	h2812060	BS	QC353637	116827	Filtira	28-AUG-2006	18:07	1.0	1.0		1	2		
061	h2812061	BSD	QC353638	116827	Filtira	28-AUG-2006	18:12	1.0	1.0		1	2		
062	h2812062	X	RINSE			28-AUG-2006	18:18	1.0				2		

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S4009 13=S3780

Analyst: 

Date: 

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56346351 Instrument: MET05 Agilent ICP-MS
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 28-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used	>LR
063	h2812063	MSS	188974-014	116827	Filttra	28-AUG-2006 18:23	1.0	1.0	1	1	1	2	
064	h2812064	SER	QC353641	116827	Filttra	28-AUG-2006 18:29	5.0	1.0	2	1	1	2	
065	h2812065	MS	QC353639	116827	Filttra	28-AUG-2006 18:35	1.0	1.0	2		1	2	2:CA=23280.0
066	h2812066	MSD	QC353640	116827	Filttra	28-AUG-2006 18:40	1.0	1.0	1		1	2	1:CA=22530.0
067	h2812067	X	RINSE			28-AUG-2006 18:46	1.0				1	2	
068	h2812068	CCV				28-AUG-2006 18:51	1.0				1	12 2	
069	h2812069	X	RINSE			28-AUG-2006 18:57	1.0					2	
070	h2812070	CCB				28-AUG-2006 19:02	1.0				1	2	
071	h2812071	X				28-AUG-2006 19:08	1.0				1	2	
072	h2812072	PDS	QC353642	116827	Filttra	28-AUG-2006 19:14	1.0	1.0	2		1	13 2	2:CA=23560.0
073	h2812073	X	RINSE			28-AUG-2006 19:19	1.0					2	
074	h2812074	SAMPLE	188974-015	116827	Filttra	28-AUG-2006 19:25	1.0	1.0	2		1	2	
075	h2812075	SAMPLE	188974-016	116827	Filttra	28-AUG-2006 19:31	1.0	1.0	3		1	2	2:NA=38120.0
076	h2812076	SAMPLE	188975-015	116827	Filttra	28-AUG-2006 19:36	1.0	1.0	1		1	2	
077	h2812077	SAMPLE	188975-016	116827	Filttra	28-AUG-2006 19:42	1.0	1.0	1		1	2	9
078	h2812078	SAMPLE	188975-017	116827	Water	28-AUG-2006 19:47	1.0	1.0	1		1	2	8
079	h2812079	SAMPLE	188802-002	116736	Filttra	28-AUG-2006 19:53	20.0	1.0			1	2	
080	h2812080	X	RINSE			28-AUG-2006 19:59	1.0					2	
081	h2812081	CCV				28-AUG-2006 20:04	1.0				1	12 2	
082	h2812082	X	RINSE			28-AUG-2006 20:10	1.0					2	
083	h2812083	CCB				28-AUG-2006 20:15	1.0	1.0			1	2	
084	h2812084	X				28-AUG-2006 20:21	1.0	1.0			1	2	
085	h2812085	ICSA				28-AUG-2006 20:27	1.0	1.0			1	10 2	7:CA=296500
086	h2812086	ICSA				28-AUG-2006 20:32	1.0	1.0	2		1	11 2	8:CA=295900

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S4009 13=S3780

Analyst:

Date:



Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 188802 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S G	A A	N L	T A	V L	Z N
188802-001	MET04	08/21/06 14:41	1.0															+								
188802-001	MET05	08/24/06 23:55	1.0	+	+	+		+	+		+	+	+		+					+	+	+	+		+	+
188802-001	MET05	08/25/06 00:28	10.0				+			+				+												
188802-001	MET05	08/25/06 18:45	1.0																						+	
188802-001	MET05	08/25/06 19:18	10.0																							
188802-001	MET05	08/25/06 20:20	100.0													+										
188802-001	MET05	08/28/06 09:28	100.0														+						+			
188802-002	MET05	08/25/06 01:24	1.0	+	+	+			+		+		+		+				+	+						+
188802-002	MET05	08/25/06 20:48	1.0																						+	
188802-002	MET05	08/28/06 09:34	10.0						+					+		+							+			
188802-002	MET05	08/28/06 19:53	20.0														+									
188802-003	MET04	08/21/06 15:17	1.0															+								
188802-003	MET05	08/25/06 01:30	1.0	+	+	+	+	+	+		+	+	+	+	+		+		+	+	+	+		+	+	
188802-003	MET05	08/25/06 20:42	1.0																						+	
188802-003	MET05	08/25/06 23:03	10.0						+							+							+			
188802-004	MET04	08/21/06 15:20	1.0															+								
188802-004	MET05	08/25/06 01:35	1.0	+	+	+	+	+	+		+	+	+	+	+		+		+	+	+	+		+	+	
188802-004	MET05	08/25/06 20:53	1.0																						+	
188802-004	MET05	08/25/06 22:29	10.0						+					+		+	+						+			
188802-005	MET05	08/25/06 01:41	1.0	+	+	+	+	+	+	+	+	+	+	+	+		+		+	+	+	+		+	+	
188802-005	MET05	08/25/06 20:59	1.0																						+	
188802-005	MET05	08/25/06 23:08	20.0						+							+							+			
188802-006	MET05	08/25/06 01:47	1.0	+	+	+	+	+	+	+	+	+	+	+	+		+		+	+	+	+		+	+	
188802-006	MET05	08/25/06 21:33	1.0																						+	
188802-006	MET05	08/25/06 23:14	20.0													+							+			
188802-008	MET04	08/21/06 15:22	1.0															+								
188802-008	MET05	08/25/06 01:52	1.0	+	+	+	+	+	+		+	+	+	+	+		+		+	+	+	+		+	+	
188802-008	MET05	08/25/06 21:38	1.0																						+	
188802-008	MET05	08/25/06 23:19	10.0													+							+			
188802-009	MET05	08/25/06 01:58	1.0	+	+	+			+		+		+	+	+		+		+	+					+	
188802-009	MET05	08/25/06 21:44	1.0																						+	
188802-009	MET05	08/25/06 23:25	20.0						+							+							+			
188802-010	MET04	08/21/06 15:24	1.0															+								
188802-010	MET05	08/25/06 02:31	1.0	+	+	+	+	+	+		+	+	+	+	+		+		+	+	+	+		+	+	
188802-010	MET05	08/25/06 21:50	1.0																						+	
188802-010	MET05	08/25/06 23:31	10.0						+							+							+			
188802-012	MET05	08/25/06 02:37	1.0	+	+	+			+		+		+	+	+				+	+					+	
188802-012	MET05	08/25/06 21:55	1.0																						+	
188802-012	MET05	08/25/06 23:36	5.0						+							+										

REPORTING SUMMARY FOR 188802 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S A	A G	N A	T L	V A	Z N
188802-012	MET05	08/28/06 10:37	20.0														+						+			
188802-013	MET05	08/25/06 02:43	1.0	+	+	+			+		+		+	+	+				+	+						+
188802-013	MET05	08/25/06 22:01	1.0																						+	
188802-013	MET05	08/25/06 23:42	10.0						+							+	+						+			
188802-014	MET05	08/25/06 02:49	1.0	+	+	+			+		+		+	+	+		+		+	+						+
188802-014	MET05	08/25/06 22:06	1.0																						+	
188802-014	MET05	08/25/06 23:47	5.0						+							+	+						+			
188802-015	MET05	08/25/06 02:54	1.0	+	+	+			+	+	+		+	+	+	+	+		+	+						+
188802-015	MET05	08/25/06 22:12	1.0																				+	+		
188802-017	MET05	08/25/06 03:00	1.0	+		+			+		+		+	+	+		+		+	+						+
188802-017	MET05	08/28/06 10:43	40.0						+							+							+			
188802-018	MET05	08/25/06 03:05	1.0	+		+			+		+		+	+	+		+		+	+						+
188802-018	MET05	08/28/06 10:49	20.0						+							+							+			
188802-020	MET05	08/25/06 03:11	1.0	+	+	+			+		+		+	+	+		+		+	+						+
188802-020	MET05	08/25/06 22:18	1.0																						+	
188802-020	MET05	08/28/06 10:54	10.0						+							+							+			
QC352691	MET04	08/21/06 14:33	1.0															+								
QC352692	MET04	08/21/06 14:37	1.0															+								
QC352693	MET04	08/21/06 14:39	1.0															+								
QC352694	MET04	08/21/06 14:44	5.0															+								
QC352695	MET04	08/21/06 14:46	1.0															+								
QC352696	MET04	08/21/06 14:49	1.0															+								
QC352697	MET04	08/21/06 17:47	1.0															+								
QC353240	MET05	08/24/06 23:33	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
QC353240	MET05	08/25/06 18:23	1.0														+								+	
QC353241	MET05	08/24/06 23:38	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
QC353241	MET05	08/25/06 18:28	1.0														+								+	
QC353242	MET05	08/24/06 23:44	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
QC353242	MET05	08/25/06 18:34	1.0														+								+	
QC353243	MET05	08/25/06 00:06	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
QC353243	MET05	08/25/06 01:08	10.0																							

REPORTING SUMMARY FOR 188802 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	A	S	A	B	B	C	C	C	C	C	F	P	M	M	H	N	K	S	A	N	T	V	Z
				L	B	S	A	E	D	A	R	O	U	E	B	G	N	G	I	E	G	A	L	N		
QC353243	MET05	08/25/06 18:56	1.0														+								+	
QC353243	MET05	08/25/06 19:58	10.0																							
QC353244	MET05	08/25/06 00:12	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	+
QC353244	MET05	08/25/06 01:13	10.0																							
QC353244	MET05	08/25/06 19:02	1.0														+								+	
QC353244	MET05	08/25/06 20:03	10.0																							
QC353245	MET05	08/25/06 00:01	5.0	+	+	+		+	+		+	+	+		+				+	+	+	+		+		+
QC353245	MET05	08/25/06 00:34	50.0											+												
QC353245	MET05	08/25/06 18:51	5.0																						+	
QC353245	MET05	08/25/06 19:24	50.0				+		+																	
QC353245	MET05	08/25/06 20:26	500.0													+										
QC353245	MET05	08/28/06 11:00	500.0														+						+			
QC353246	MET05	08/25/06 00:17	1.0	+	+	+		+	+		+	+	+		+				+	+	+	+		+		+
QC353246	MET05	08/25/06 01:19	10.0				+		+					+												
QC353246	MET05	08/25/06 19:07	1.0																						+	
QC353246	MET05	08/25/06 20:09	10.0																							
QC353246	MET05	08/25/06 20:31	100.0													+										
QC353246	MET05	08/28/06 11:06	100.0																				+			

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 24-AUG-2006
Sequence: 56340782 (h2415)
Instrument ID: MET05

ICALBLK Filename: h2415005
Date Analyzed: 24-AUG-2006
Time Analyzed: 16:09

	ISI (LI READING	IS2 (SC READING	IS3 (GE READING	IS4 (IN READING	IS5 (BI READING	IS6 (TB READING
ICALBLK STD	336846	366577	82555	571579	478991	780388
LOWER LIMIT	101054	109973	24767	171474	143697	234116
UPPER LIMIT	404215	439892	99066	685895	574789	936465

TYPE	SAMPLE	#	IS1 (LI READING	IS2 (SC READING	IS3 (GE READING	IS4 (IN READING	IS5 (BI READING	IS6 (TB READING
ICB		016	366672	390434	87125	594888	489444	809744
ICSA		017	311213	359864	84081	489173	386249	705154
SAMPLE	188762-004	021	323059	364650	86603	549319	427476	743098
SAMPLE	188762-005	022	333396	370457	88908	553540	424810	740479
SAMPLE	188762-006	023	298940	319178	77879	484298	407778	647966
SAMPLE	188762-007	024	312796	334983	80335	517963	435736	716289
SAMPLE	188762-008	025	326650	355444	84524	545223	443460	742224
SAMPLE	188762-009	026	333586	352718	84744	555471	469266	749554
ICSA		027	292002	336201	81129	470977	378844	682266
CCV		030	298533	336070	78733	515579	441916	723859
CCB		033	307454	342692	77666	534508	448957	726551
CCV		036	309546	348538	78038	520020	437778	736201
CCB		039	328348	361759	80850	556692	457317	753057
BLANK	QC353251	040	256551	272534	63508	416273	367251	577616
BS	QC353252	041	264539	283907	67286	417464	373417	608739
BSD	QC353253	042	273640	298140	65636	443681	387170	636669
MSS	188837-009	044	273061	308181	69235	437937	364797	617413
MS	QC353254	046	270844	307119	69318	421512	358474	606366
MSD	QC353255	047	271246	307914	69254	425967	356961	609856
PDS	QC353257	048	272836	310112	69075	434239	359221	615100
SAMPLE	188837-005	050	318856	340540	76177	405294	283327	551913
SAMPLE	188837-008	051	343187	378344	93632	546649	412678	728292
CCV		053	357041	392718	96949	610742	489814	821287
CCB		056	344809	374512	90766	603490	496312	794703
SAMPLE	188837-010	057	286642	319621	75526	464872	386962	648491
SAMPLE	188837-005	058	310910	405298	80144	420992	300529	594362
SAMPLE	188837-012	059	358033	364160	95519	564957	428157	705079
SAMPLE	188869-001	060	314994	326618	84273	515298	413198	662722

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 24-AUG-2006
Sequence: 56340782
Instrument ID: MET05

(h2415)

ICALBLK Filename: h2415005
Date Analyzed: 24-AUG-2006
Time Analyzed: 16:09

TYPE	SAMPLE	#							
MSS	188837-009	061	335019	356371	88882	574049	464263	756463	
SER	QC353256	062	337232	357104	89646	581396	472816	753004	
MS	QC353254	063	318638	337688	83598	542143	449407	724718	
MSD	QC353255	064	319046	338513	83511	542852	453816	729190	
PDS	QC353257	065	320289	340426	84044	547467	454737	732170	
SAMPLE	188837-012	066	325538	341376	84130	554360	460753	725623	
CCV		068	316576	338731	82845	528366	449277	728773	
CCB		070	326810	348477	84121	563317	467719	743312	
SAMPLE	188869-001	072	321720	341528	82717	549900	457167	723811	
ICSA		073	298629	343660	87885	499909	382931	695604	
CCV		077	299719	337550	79502	516408	433537	708986	
CCB		080	312018	345521	81117	543857	445530	717929	
BLANK	QC353240	084	269103	289864	67759	446314	389323	608686	
BS	QC353241	085	266899	291683	66889	437089	383062	618443	
BSD	QC353242	086	272556	298839	67995	443303	388360	628080	
MSS	188802-001	088	271153	296701	68416	415311	337939	587429	
SER	QC353245	089	304607	336817	78538	503786	406223	694599	
MS	QC353243	090	261666	280624	66427	394558	328604	566093	
MSD	QC353244	091	254286	275327	65446	387853	324744	557574	
PDS	QC353246	092	254659	270144	64648	391969	325492	549458	
MSS	188802-001	094	292223	308861	74779	482315	404827	659992	
SER	QC353245	095	280307	299464	67953	459750	389080	630422	
CCV		097	296080	320631	74168	487109	422734	682537	
CCB		099	295061	320166	72872	501067	423976	677192	
MS	QC353243	101	285356	309829	69643	460290	384786	643143	
MSD	QC353244	102	282427	304880	68535	450780	384573	630583	
PDS	QC353246	103	297802	320727	73791	483556	405397	669998	
SAMPLE	188802-002	104	253519	274850	63267	395891	342407	567227	
SAMPLE	188802-003	105	271079	288350	67441	417017	359796	587769	
SAMPLE	188802-004	106	264573	273658	63362	389359	344178	555913	
SAMPLE	188802-005	107	272047	284937	65056	398717	328054	554222	
SAMPLE	188802-006	108	285691	298453	70374	420568	350016	589800	
SAMPLE	188802-008	109	273592	286246	66163	403498	359559	582658	
SAMPLE	188802-009	110	260847	278352	66142	392789	342061	555807	

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 24-AUG-2006
Sequence: 56340782
Instrument ID: MET05

(h2415)

ICALBLK Filename: h2415005
Date Analyzed: 24-AUG-2006
Time Analyzed: 16:09

TYPE	SAMPLE	#								
CCV		112	315022	342352	79807	516312	442422	723504		
CCB		114	317920	343380	79910	538009	449660	721689		
SAMPLE	188802-010	116	257906	270210	63458	388972	343502	551041		
SAMPLE	188802-012	117	275878	285980	66577	411101	354740	580448		
SAMPLE	188802-013	118	263701	273976	64551	378718	343137	549327		
SAMPLE	188802-014	119	258499	268321	61903	384533	345378	551172		
SAMPLE	188802-015	120	284449	274760	65694	413010	372787	575460		
SAMPLE	188802-017	121	279012	280540	67466	388831	340848	561117		
SAMPLE	188802-018	122	274491	283068	68423	389415	340216	559584		
SAMPLE	188802-020	123	282090	289403	67338	403677	356352	581094		
SAMPLE	188867-002	124	264024	268674	61080	377244	322764	539146		
CCV		126	287181	301214	68372	449540	400857	643120		
CCB		128	291944	307571	70469	476316	413726	649859		
ICSA		130	252539	286572	68345	408101	337712	586723		
										62

INTERNAL STANDARD SUMMARY

Curtis & Tompkins Laboratories

Sequence Date: 25-AUG-2006
 Sequence: 56341908
 Instrument ID: MET05

(h2510)
 ICALBLK Filename: h2510003
 Date Analyzed: 25-AUG-2006
 Time Analyzed: 10:40

	IS1 (LI READING	IS2 (SC READING	IS3 (GE READING	IS4 (IN READING	IS5 (BI READING	IS6 (TB READING
ICALBLK STD	323251	341957	80606	530308	437483	697614
LOWER LIMIT	96975	102587	24182	159093	131245	209284
UPPER LIMIT	387901	410348	96727	636370	524980	837137

TYPE	SAMPLE	#							
ICB		013	330743	345158	81572	538528	450909	712002	
ICSA		015	288781	324404	83583	482377	377109	661668	
BLANK	QC353251	019	262537	272984	64769	421685	375546	575790	
BS	QC353252	020	258138	259306	63033	374774	351711	542189	
BSD	QC353253	021	273628	286020	65815	421404	375392	598800	
MSS	188837-009	023	273494	295252	69855	424869	368389	595893	
SER	QC353256	024	314717	331702	79289	508064	428348	687562	
MS	QC353254	025	263160	282449	66803	400343	354060	574291	
MSD	QC353255	026	274972	292829	69820	414997	364946	595568	
PDS	QC353257	027	285974	300450	71332	432939	370956	609287	
CCV		029	312323	328006	79508	503523	436229	695663	
CCB		032	310667	321206	76632	503028	439702	679858	
MSS	188837-009	034	317298	328928	79449	509833	443784	698441	
SER	QC353256	035	324677	337694	82190	533056	463663	717108	
MS	QC353254	036	313819	327800	79092	506764	439429	695512	
MSD	QC353255	037	315869	327507	78835	505281	442337	694903	
PDS	QC353257	038	317206	327509	79300	509275	442337	693890	
SAMPLE	188837-012	040	292543	277822	68458	422013	382611	577321	
SAMPLE	188869-001	041	293269	279909	68593	426988	387017	589511	
SAMPLE	188837-008	042	288809	300540	72604	439014	367664	613414	
SAMPLE	188837-008	043	351937	352198	86046	549362	467950	736664	
SAMPLE	188837-010	044	281388	288466	67746	413913	365902	594276	
CCV		046	322233	330318	79506	504921	446747	707828	
CCB		049	338508	341442	80983	535560	473139	749532	
SAMPLE	188837-010	050	316716	322586	77331	500449	444572	694716	
CCV		052	318859	326357	79166	502214	443934	703836	
CCB		054	331087	332599	79531	522128	464050	709387	
SAMPLE	188837-005	056	274720	279636	69514	397636	299504	527064	

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 25-AUG-2006
Sequence: 56341908
Instrument ID: MET05

(h2510)
ICALBLK Filename: h2510003
Date Analyzed: 25-AUG-2006
Time Analyzed: 10:40

TYPE	SAMPLE	#							
SAMPLE	188837-005	057	250922	300392	62812	359908	280138	491943	
SAMPLE	188837-005	061	341739	336043	83482	520054	417131	682949	
SAMPLE	188837-005	062	288228	305293	72522	442367	360888	607617	
SAMPLE	188837-005	063	324526	325781	81622	502640	414569	675256	
SAMPLE	188837-005	066	355811	339840	85585	547637	463314	714018	
SAMPLE	188837-005	067	347633	332696	83297	535571	462454	704552	
ICSA		069	267803	283813	72556	428075	371229	616159	
CCV		073	302769	304897	72090	461548	419799	658217	
CCB		075	308846	311108	73695	485421	440889	666724	
BLANK	QC353240	079	263262	261277	61286	391775	376369	548429	
BS	QC353241	080	259869	260863	59721	378053	363489	551070	
BSD	QC353242	081	258441	261297	58696	373565	357452	544690	
MSS	188802-001	083	263490	265536	60776	367544	325214	539838	
SER	QC353245	084	293253	300072	69368	439339	388747	630108	
MS	QC353243	085	252441	251402	58043	345080	310753	513633	
MSD	QC353244	086	256103	258643	59980	358806	319896	526954	
PDS	QC353246	087	240468	246910	56604	341101	308073	506061	
MSS	188802-001	089	294418	292274	68352	434958	384557	612834	
SER	QC353245	090	296904	293784	68902	450305	406103	624950	
CCV		092	274244	278748	63657	410682	384224	596753	
CCB		095	285616	290280	66846	444700	404591	618469	
MS	QC353243	096	280030	284656	65236	418825	378479	596288	
MSD	QC353244	097	280946	284349	65342	420037	380147	603053	
PDS	QC353246	098	271876	280434	63343	411908	370918	590628	
MSS	188802-001	100	291496	291519	67363	441860	397549	612159	
SER	QC353245	101	300339	296849	69335	454739	410241	621750	
PDS	QC353246	102	278206	283368	64784	420112	385452	600500	
SAMPLE	188802-003	104	243122	247677	55736	341261	316411	497269	
SAMPLE	188802-002	105	244478	244737	54886	337027	316958	496264	
SAMPLE	188802-004	106	250843	246244	55188	336094	308586	480149	
SAMPLE	188802-005	107	261767	257097	58950	354687	313799	504954	
CCV		109	301920	301043	69543	440966	402190	631513	
CCB		112	284168	288190	65147	431001	393121	599368	
SAMPLE	188802-006	113	235131	238793	54951	328574	295369	472123	

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 25-AUG-2006
Sequence: 56341908
Instrument ID: MET05

(h2510)
ICALBLK Filename: h2510003
Date Analyzed: 25-AUG-2006
Time Analyzed: 10:40

TYPE	SAMPLE	#							
SAMPLE	188802-008	114	249341	246483	55950	333166	309308	482843	
SAMPLE	188802-009	115	248789	247752	56284	330954	295017	473330	
SAMPLE	188802-010	116	245607	247642	55631	341549	314076	489316	
SAMPLE	188802-012	117	246619	248426	55615	343306	315394	498456	
SAMPLE	188802-013	118	245404	243199	54334	321511	302396	473394	
SAMPLE	188802-014	119	253413	251667	55390	336434	312928	485268	
SAMPLE	188802-015	120	285651	255776	58550	362598	338883	503210	
SAMPLE	188802-020	121	285519	268656	60120	356662	330552	515763	
SAMPLE	188802-004	123	297496	287866	65941	424371	384684	592330	
CCV		125	279746	281557	63059	407454	381107	594899	
CCB		127	288640	288941	65158	430096	392938	600919	
SAMPLE	188802-003	129	284764	284227	65370	421727	384506	592530	
SAMPLE	188802-005	130	299227	293537	68602	440977	394986	608486	
SAMPLE	188802-006	131	302317	295723	69020	439381	388808	606072	
SAMPLE	188802-008	132	290912	282996	65334	413183	426486	575373	
SAMPLE	188802-009	133	298738	288774	66457	426919	389343	593878	
SAMPLE	188802-010	134	290528	283061	65678	418052	382316	585788	
SAMPLE	188802-012	135	286107	277804	64484	407081	365363	565519	
SAMPLE	188802-013	136	299247	285101	66296	416283	374118	580273	
SAMPLE	188802-014	137	293818	279177	64607	407069	366724	562938	
ICSA		138	246467	264221	62276	371444	328797	551669	
CCV		140	280561	287857	65759	413642	375640	590614	
CCB		143	280602	285186	64949	426141	387502	591650	
CCV		147	275671	284589	65117	411108	377754	584336	
CCB		149	279019	285780	64901	424184	379320	581043	
BLANK	QC353487	151	237034	225797	53708	319668	306896	447663	
BS	QC353488	152	255734	259231	58097	368535	342854	528583	
BSD	QC353489	153	255270	255876	57619	360093	334540	513733	
MSS	188926-006	155	258212	254873	58500	370415	342073	503262	
SER	QC353492	156	280168	286574	66280	429322	380873	580141	
MS	QC353490	157	252758	252329	57219	354867	329307	504802	
MSD	QC353491	158	248664	248434	56403	348885	325466	494878	
PDS	QC353493	159	249594	247309	56076	351152	325981	490789	
SAMPLE	188926-019	161	262549	256779	58746	370443	338824	505212	

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 25-AUG-2006
Sequence: 56341908
Instrument ID: MET05

(h2510)
ICALBLK Filename: h2510003
Date Analyzed: 25-AUG-2006
Time Analyzed: 10:40

TYPE	SAMPLE	#							
SAMPLE	188926-024	162	261160	250120	56541	359896	335076	490098	
CCV		164	278311	280570	63379	400189	366963	569003	
CCB		166	283210	282598	64451	421094	380367	576041	
SAMPLE	188927-007	168	261096	245299	55993	352315	330827	481963	
SAMPLE	188917-001	169	265794	257853	58286	364510	339816	507696	
SAMPLE	188917-002	170	261647	250536	56849	355971	331979	493192	
SAMPLE	188917-003	171	254587	245758	55290	347623	327932	481330	
CCV		173	272994	273592	61636	388023	361192	555074	
CCB		176	279756	271702	60665	393682	362610	546042	
ICSA		177	239521	252016	61354	355876	310677	515042	

Sequence Date: 28-AUG-2006
Sequence: 56346042
Instrument ID: MET05

ICALBLK Filename: h2807003
Date Analyzed: 28-AUG-2006
Time Analyzed: 07:34

TYPE	SAMPLE	#
ICB		014
ICSA		015
B.LANK	QC353487	019
MSS	188926-006	020
MSS	188802-001	022
SAMPLE	188802-002	023
CCV		029
CCB		031
SAMPLE	188802-012	033
SAMPLE	188802-017	034
SAMPLE	188802-018	035
SAMPLE	188802-020	036
SER	QC353245	037
PDS	QC353246	038
CCV		040
CCB		042
ICSA		044
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INTERNAL STANDARD SUMMARY Curtis & Tompkins Laboratories

Sequence Date: 28-AUG-2006
Sequence: 56346351 (h2812)
Instrument ID: MET05
ICALBLK Filename: h2812003
Date Analyzed: 28-AUG-2006
Time Analyzed: 12:43

	IS1 (LI READING	IS2 (SC READING	IS3 (GE READING	IS4 (IN READING	IS5 (BI READING	IS6 (TB READING
ICALBLK STD	461711	356496	75289	519753	393046	625618
LOWER LIMIT	138513	106949	22587	155926	117914	187685
UPPER LIMIT	554053	427795	90346	623703	471655	750741

TYPE	SAMPLE	#							
ICB		023	444839	319387	66191	458991	366411	552453	
ICSA		024	371884	311910	68098	394468	308394	510562	
BLANK	QC353411	026	432166	325144	60421	437932	344037	504834	
BS	QC353412	027	430702	311646	57955	414186	328981	483732	
BSD	QC353413	028	429788	310058	57758	410599	324233	482347	
MSS	188835-001	030	459078	307706	63005	433696	344909	512877	
MS	QC353414	031	438731	286664	61873	426157	344016	518632	
MSD	QC353415	032	445742	280672	61620	425693	343259	520229	
CCV		034	432084	312573	60921	416232	342786	511899	
CCB		036	434074	300151	60955	427014	349023	507256	
SAMPLE	188835-002	039	463428	323516	66712	438888	348576	539802	
SAMPLE	188835-003	040	437101	302573	62201	419420	342522	518601	
SAMPLE	188835-004	041	446887	306158	64346	432477	355632	527840	
SAMPLE	188835-005	042	459062	369360	67826	453192	354012	572210	
SAMPLE	188835-006	043	448000	337804	62379	432857	345259	514862	
SAMPLE	188835-007	044	442568	320536	61691	423576	345847	508293	
SAMPLE	188835-008	045	426788	307810	57561	404599	328216	489754	
SAMPLE	188835-009	046	430828	311416	60023	410910	326179	504734	
SAMPLE	188835-010	047	458246	289854	64583	440049	356414	535214	
SAMPLE	188835-011	048	441343	317609	61691	424456	345457	508944	
CCV		050	426358	302013	59761	403716	335983	494859	
CCB		052	436968	304391	60089	418419	340460	487728	
SAMPLE	188835-012	054	448603	270691	60084	408858	339899	489720	
SAMPLE	188835-013	055	461919	300739	63709	434107	353150	530173	
SAMPLE	188835-014	056	455172	334477	61746	414636	329926	502772	
BLANK	QC353636	059	410192	282886	52139	340107	277307	390056	
BS	QC353637	060	413356	275838	53545	349864	295932	429196	
BSD	QC353638	061	410712	276226	53109	353702	295484	426958	

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 28-AUG-2006
Sequence: 56346351
Instrument ID: MET05
(h2812)
ICALBLK Filename: h2812003
Date Analyzed: 28-AUG-2006
Time Analyzed: 12:43

TYPE	SAMPLE	#							
MSS	188974-014	063	425690	275503	53723	364776	299778	425178	
SER	QC353641	064	446981	295813	60195	409667	335392	477871	
MS	QC353639	065	416270	274603	53444	348520	289448	426626	
MSD	QC353640	066	418628	280308	53808	351508	293180	430814	
CCV		068	450708	313077	62100	409715	340087	504163	
CCB		070	441281	287837	60780	414065	346621	493182	
PDS	QC353642	072	413080	270044	53240	352112	288077	423782	
SAMPLE	188974-015	074	422518	276121	55602	366996	304671	436216	
SAMPLE	188974-016	075	430106	280204	54894	364574	297227	437140	
SAMPLE	188975-015	076	430218	275483	54491	360494	296307	424770	
SAMPLE	188975-016	077	422642	273994	53964	360713	296947	420873	
SAMPLE	188975-017	078	427927	272353	53912	357496	296720	421700	
SAMPLE	188802-002	079	454790	297262	62726	412694	343191	500684	
CCV		081	439559	297790	62022	399138	335332	495763	
CCB		083	450685	290929	61576	411944	338544	492144	
ICSA		085	386138	292568	63425	352735	279889	451562	

24-AUG-2006 10:14

Spike #1	ID	..	S3379
Spike #2	ID	..	S4130
Spike #3	ID	..	
SDP Version		..	

670

2/25/06

8/25/06

LIMS Batch #: 116734
 Date Digested: 8/24/06
 Digested by: HLA

Digestion Method

☒ EPA 200.8 for ICP-MS
☐

BK BK 2382

Page 7

Continued From:

Continued On:

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
B1K	50	50	N	
105				
B51D				
MS-01				
MSD-01				
188800-01				
-02				
-03				
-04				
-05				
-06				
-08				
-09				
-10				
-12				
-13				
-14				
-15				
-17				
-18				
-20				
✓ 367-02	✓	✓	✓	

110/15 digestion temperature (90-95 degrees C)
 mL of spike solution was added to all spikes

concentrated HCl

concentrated HNO₃☐ filtered thru' Whatman # 541

Reagent ID or LIMS #

Initials / Date

95	HLA 8/24/06
33375	
34130	
01075	
016035	
	✓

HLA 8/24/06
 Prep Chemist Signature / Date

K. Carlson 8/24/06
 Reviewer Signature / Date

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 7470A

Inst : MET04
 alnum : 46336367002
 nits : ug/L

Date : 21-AUG-2006 14:07
 X Axis : R

Reviewer: ---
 Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	116599	46336367002	STD02REP1 21-AUG-2006 14:09	S4162 (500X)	
L2	116599	46336367003	STD03REP1 21-AUG-2006 14:11	S4162 (200X)	
L3	116599	46336367004	STD04REP1 21-AUG-2006 14:13	S4162 (50X)	
L4	116599	46336367005	STD05REP1 21-AUG-2006 14:15	S4162 (20X)	
L5	116599	46336367006	STD06REP1 21-AUG-2006 14:17	S4162 (10X)	

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ²	MRSD	MNR ²	Fig
Mercury	4160.0	2772.0	2563.0	2431.2	2552.1	LINR	-0.0511	3.98E-4		2895.7	0.999		.99	

Stratum amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression
 Page 1 of 1

File Utility Help

RN > RN ?

Protocol hgppb

Dataset/Proto 082106 /hgppb

Protocol | Line info | Cal Curve | Report | Ctrl Chart | Viewer

Reset

Calib Coeffs

New Cal

Update Coeffs

Spike Coeffs

A

B

C

Rho

Type

Linear

☒ Calibrated☒ Accepted

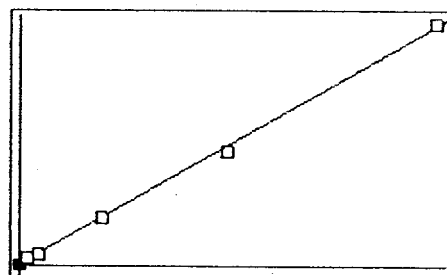
Accept

 μ Abs.

25521

Accepted

New



Include S1

Rep 1 ☒☐☐☐☐

21-Aug-06 14:18

Conc.

10.1

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3
01	0.0000	0.45	0.45	243	0	242		
02	20.000	.280	.080	832	0%	832		
03	50.000	.500	.000	1386	0%	1386		
04	2.0000	1.99	-.012	5126	0%	5126		
05	5.0000	4.78	-.215	12157	0%	12156		
06	10.000	10.1	.102	25522	0%	25521		

Ready

NUM

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1								
				Seq: 1		14:07:04	21 Aug 06	HG
Hg	.000	ppb	242					
		Bkgd 1	18163654					
*** Standard: 2 Rep: 1								
				Seq: 2		14:09:13	21 Aug 06	HG
Hg	.200	ppb	832					
		Bkgd 1	18165975					
*** Standard: 3 Rep: 1								
				Seq: 3		14:11:21	21 Aug 06	HG
Hg	.500	ppb	1386					
		Bkgd 1	18152305					
*** Standard: 4 Rep: 1								
				Seq: 4		14:13:29	21 Aug 06	HG
Hg	2.00	ppb	5126					
		Bkgd 1	18151982					
*** Standard: 5 Rep: 1								
				Seq: 5		14:15:34	21 Aug 06	HG
Hg	5.00	ppb	12156					
		Bkgd 1	18153405					
*** Standard: 6 Rep: 1								
				Seq: 6		14:17:41	21 Aug 06	HG
Hg	10.0	ppb	25521					
		Bkgd 1	18150793					
*** Check Standard: 2								
Line	Flag		Ck2S4164	Seq: 7		14:20:58	21 Aug 06	HG
			Intensities					
Hg			10278					
		Bkgd 1	18151021					
*** Check Standard: 1								
Line	Flag		Ck1ICB	Seq: 8		14:25:14	21 Aug 06	HG
			Intensities					
Hg			178					
		Bkgd 1	18154824					
*** Check Standard: 2								
Line	Flag		Ck2S4164	Seq: 9		14:27:27	21 Aug 06	HG
			Intensities					
Hg			12486					
		Bkgd 1	18146858					

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 46336367 Instrument: MET04
Analytical Method: EPA 7470A
Analyte: Mercury

HydraAA HG Analyzer
SOP Version: HG_water_rv7

Begun: 21-AUG-2006

#	Filename	Type	Sample	Subj	Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	Rec	RPD	Flags
001	116599	ICBLBLK	STD01REP1					21-AUG-2006 14:07 1.0	1.0							ug/L	98		
002	116599	ICAL	STD02REP1					21-AUG-2006 14:09 1.0	1.0							ug/L			
003	116599	ICAL	STD03REP1					21-AUG-2006 14:11 1.0	1.0							ug/L			
004	116599	ICAL	STD04REP1					21-AUG-2006 14:13 1.0	1.0							ug/L			
005	116599	ICAL	STD05REP1					21-AUG-2006 14:15 1.0	1.0							ug/L			
006	116599	ICAL	STD06REP1					21-AUG-2006 14:17 1.0	1.0							ug/L			
007	116599	X						21-AUG-2006 14:20 1.0								ug/L			
008	116599	X						21-AUG-2006 14:25 1.0								ug/L			
009	116599	ICV						21-AUG-2006 14:27 1.0	1.0		2	5.000	46336367001	4.920		ug/L			
010	116599	ICV						21-AUG-2006 14:30 1.0	1.0				46336367001	[0.03500]	0.20	ug/L			
011	116599	BLANK	QC352691					21-AUG-2006 14:33 1.0	1.0				46336367001	ND	0.20	ug/L			
012	116599	BS	QC352692					21-AUG-2006 14:37 1.0	1.0			5.000	46336367001	4.190	0.20	ug/L	84		
013	116599	BSD	QC352693					21-AUG-2006 14:39 1.0	1.0			5.000	46336367001	4.240	0.20	ug/L	85	1	
014	116599	MSS	188802-001					21-AUG-2006 14:41 1.0	1.0				46336367001	ND	0.20	ug/L			
015	116599	SER	QC352694					21-AUG-2006 14:44 5.0	1.0				46336367001	ND	1.0	ug/L			
016	116599	MS	QC352695					21-AUG-2006 14:46 1.0	1.0			5.000	46336367001	3.590	0.20	ug/L	72*		
017	116599	MSD	QC352696					21-AUG-2006 14:49 1.0	1.0			5.000	46336367001	3.520	0.20	ug/L	70*	2	
018	116599	SAMPLE	188734-001					21-AUG-2006 14:51 1.0	1.0				46336367001	ND	0.20	ug/L			
019	116599	SAMPLE	188736-014					21-AUG-2006 14:54 1.0	1.0				46336367001	ND	0.20	ug/L			
020	116599	SAMPLE	188736-015					21-AUG-2006 14:56 1.0	1.0				46336367001	ND	0.20	ug/L			
021	116599	CCV						21-AUG-2006 14:58 1.0	1.0		3	2.500	46336367001	2.880		ug/L	115		
022	116599	CCV						21-AUG-2006 15:00 1.0	1.0				46336367001	[0.02200]	0.20	ug/L			
023	116599	SAMPLE	188736-016					21-AUG-2006 15:02 1.0	1.0				46336367001	ND	0.20	ug/L			
024	116599	SAMPLE	188774-001					21-AUG-2006 15:04 1.0	1.0				46336367001	0.89	0.20	ug/L			
025	116599	SAMPLE	188774-002					21-AUG-2006 15:06 1.0	1.0				46336367001	0.23	0.20	ug/L			
026	116599	SAMPLE	188774-001					21-AUG-2006 15:08 1.0	1.0				46336367001	ND	0.20	ug/L			
027	116599	SAMPLE	188774-002					21-AUG-2006 15:12 1.0	1.0				46336367001	ND	0.20	ug/L			
028	116599	SAMPLE	188774-010					21-AUG-2006 15:15 1.0	1.0				46336367001	ND	0.20	ug/L			
029	116599	SAMPLE	188802-003					21-AUG-2006 15:17 1.0	1.0				46336367001	ND	0.20	ug/L			
030	116599	SAMPLE	188802-004					21-AUG-2006 15:20 1.0	1.0				46336367001	ND	0.20	ug/L			
031	116599	SAMPLE	188802-008					21-AUG-2006 15:22 1.0	1.0				46336367001	ND	0.20	ug/L			
032	116599	SAMPLE	188802-010					21-AUG-2006 15:24 1.0	1.0				46336367001	ND	0.20	ug/L			
033	116599	CCV						21-AUG-2006 15:26 1.0	1.0		4	5.000	46336367001	4.950		ug/L	99		
034	116599	CCV						21-AUG-2006 15:28 1.0	1.0				46336367001	ND	0.20	ug/L			
035	116599	SAMPLE	188809-001					21-AUG-2006 15:31 1.0	1.0				46336367001	ND	0.20	ug/L			
036	116599	SAMPLE	188818-001					21-AUG-2006 15:33 1.0	1.0				46336367001	ND	0.20	ug/L			
037	116599	SAMPLE	188837-012					21-AUG-2006 15:35 1.0	1.0				46336367001	ND	0.20	ug/L			
038	116599	SAMPLE	188840-001					21-AUG-2006 15:38 1.0	1.0				46336367001	2.4	0.20	ug/L			
039	116599	CCV						21-AUG-2006 15:40 1.0	1.0		5	7.500	46336367001	7.490		ug/L	100		
040	116599	CCV						21-AUG-2006 15:42 1.0	1.0				46336367001	ND	0.20	ug/L			
041	116599	PDS	QC352697					21-AUG-2006 17:47 1.0	1.0		1	5.000	46336367001	4.560	0.20	ug/L	91		
042	116599	CCV						21-AUG-2006 17:50 1.0	1.0		3	2.500	46336367001	2.700		ug/L	108		
043	116599	CCV						21-AUG-2006 17:52 1.0	1.0				46336367001	[0.009000]	0.20	ug/L			

Stds used: 1=S4162 2=S4164 3=S4165 4=S4166 5=S4167
Flags used: u=use

Analyst: John A. Smith Date: 8/2/06

Curtis & Tompkins Laboratories

Sample Preparation Summary

21-AUG-2006 14:03

Batch Number : 116599
Date Extracted : 21-AUG-2006
Extracted by : Zachary Abbott
Prep Method : METHOD

Analysis : N/A
Bgroup : HG
Units : mL
Clean-up :

Spike #1 ID : S4162
Spike #2 ID :
Spike #3 ID :
SDP Version :

Sample	Type	Client	Matrix	Init	Units	Final	Prep	Clean	pH	Sp 1	Sp 2	Sp 3	Analyses	Clean	Comments
				W/V		Vol	D.F.	D.F.		Vol	Vol	Vol		Method	
188734-001		Polymatrix	Water	50	mL	50	1.000000	1					HG		
188736-014		U.S. Army Corps of Engineers	Water	50	mL	50	1.000000	1					T26/HG		
188736-015		U.S. Army Corps of Engineers	Water	50	mL	50	1.000000	1					T26/HG		
188736-016		U.S. Army Corps of Engineers	Water	50	mL	50	1.000000	1					T26/HG		
188774-001		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
188774-002		Treadwell & Rollo	Water	50	mL	50	1.000000	1					HG		
188774-002		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
188774-010		Treadwell & Rollo	Water	50	mL	50	1.000000	1					HG		
188802-001		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
188802-003		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
188802-004		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
188802-008		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
188802-010		Treadwell & Rollo	Water	50	mL	50	1.000000	1					HG		
188809-001		Kensington Laboratories	Water	50	mL	50	1.000000	1					HG		
188818-001		Arcadis G&M	Water	50	mL	50	1.000000	1					HG		
188837-012		Treadwell & Rollo	Water	50	mL	50	1.000000	1					HG		
188840-001		ConocoPhillips Company	Water	50	mL	50	1.000000	1					T26/HG		
QC352691	BLANK														
QC352692	BS		Water	50	mL	50	1.000000	1					HG		
QC352693	BSD		Water	50	mL	50	1.000000	1					HG		
QC352694	SER		Water	50	mL	50	1.000000	1					HG		
QC352695	MS	of 188802-001	Filtrate	50	mL	50	1.000000	1					HG		
QC352696	MSD	of 188802-001	Filtrate	50	mL	50	1.000000	1					HG		
QC352697	PDS	of 188802-001	Filtrate	50	mL	50	1.000000	1					HG		

Prep Chemist: Julie Abbott

8/21/06

Reviewed By: AKDate: 8/21/06Relinquished By: Julie Abbott

8/21/06

Received By: Julie AbbottDate: 8/21/06

Water Digestion for Mercury

Curtis & Tompkins, L

W

LIMS Batch #: 116599
 Date Digested: 8/21/06
 Digested by: EA

Digestion Method
☒ EPA 7470A/ EPA 245.1
☐

BK 2335
 Page 60

LIMS
 Date []
 Dig

Sample # and letter		Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
20 8/21	188732-001				water
	188734-001 B	50	50		water
	188736-014 A				
	↓ -015 ↓				
	↓ -016 ↓				
5	188774-001				
	↓ -002 ↓				
	188774-001 B				Filtrate (F.F.)
	-002 B				
	-010 H				
10	188802-001 MSS S				Filtrate (F.F.)
	-003 A				
	-004 A				
	-008 D				
	-010 D				
15	188809-001 A				water
	188818-001 S				
	188837-012 K				
	188837-012				Filtrate
	188840-001 A				water → reacted violently w/ H ₂ SO ₄
20	Blank				
	BS				
	BSD				
	MS 188802-001 S				Filtrate (F.F.)
	MSD				

2.5 mL of spike solution was added to all spikes

Reagent ID/ LIMS# / Time

Initials / Date

ICAL Source WS#

ICV / CCV WS#

Digestion of Samples & Standards: Time ON / Temperature ON

Time OFF/ Temperature OFF

concentrated H₂SO₄concentrated HNO₃5% KMnO₄5% K₂S₂O₈

NaCl.hydroxylamine hydrochloride

Stannous Chloride

☒ filtered thru' 0.45 um syringe filter

S4162

S4162

S4164/65/66/67

12:30 | 95°C

2:30 | 95°C

B41041

C22079

K081406

K2072706

K4081506

S416082106

millipore R6AN47832

20 8/21/06

AA 8/21/06

Curtis & Tompkins Laboratories
MDL Summary for EPA 6020 Water 200.8
As of 09/24/06

Analyte	Units	MET06 A	MET06 E	MET06 H	MET05
Aluminum	ug/L	0.40			9.6
Antimony	ug/L	0.0093			0.062
Arsenic	ug/L		0.034		0.34
Barium	ug/L	0.023			0.13
Beryllium	ug/L	0.017			0.12
Cadmium	ug/L	0.0058			0.17
Calcium	ug/L	5.6			15
Chromium	ug/L		0.038		0.18
Cobalt	ug/L		0.0072		0.069
Copper	ug/L		0.028		0.24
Iron	ug/L			1.9	16
Lead	ug/L	0.013			0.088
Magnesium	ug/L	0.73			11
Manganese	ug/L		0.011		0.050
Molybdenum	ug/L	0.0063			0.24
Nickel	ug/L		0.029		0.21
Potassium	ug/L	5.3			8.7
Selenium	ug/L			0.027	0.35
Silver	ug/L	0.0079			0.068
Sodium	ug/L		2.7		14
Thallium	ug/L	0.030			0.030
Vanadium	ug/L		0.026		0.24
Zinc	ug/L		0.062		0.23



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories
MDL Summary for EPA 7470A Water
As of 09/24/06

Analyte	Units	MET04	MET14
Mercury	ug/L	0.058	0.021

GENERAL CHEMISTRY

**Alkalinity**

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	08/16/06
Units:	mg/L	Received:	08/17/06
Diln Fac:	1.000	Analyzed:	08/29/06
Batch#:	116895		

Field ID: 1349MW100
Type: SAMPLE

Lab ID: 188802-001

Analyte	Result	RL
Alkalinity, Bicarbonate	850	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	850	6.7

Field ID: 1065PZ5AR
Type: SAMPLE

Lab ID: 188802-002

Analyte	Result	RL
Alkalinity, Bicarbonate	730	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	730	6.7

Field ID: LF6GW105
Type: SAMPLE

Lab ID: 188802-003

Analyte	Result	RL
Alkalinity, Bicarbonate	280	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	280	6.7

Field ID: LF6GW106
Type: SAMPLE

Lab ID: 188802-004

Analyte	Result	RL
Alkalinity, Bicarbonate	270	4.0
Alkalinity, Carbonate	ND	4.0
Alkalinity, Hydroxide	ND	4.0
Alkalinity, Total as CaCO ₃	270	4.0

Field ID: 1213GW101
Type: SAMPLE

Lab ID: 188802-005

Analyte	Result	RL
Alkalinity, Bicarbonate	420	4.0
Alkalinity, Carbonate	ND	4.0
Alkalinity, Hydroxide	ND	4.0
Alkalinity, Total as CaCO ₃	420	4.0



Alkalinity			
Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	08/16/06
Units:	mg/L	Received:	08/17/06
Diln Fac:	1.000	Analyzed:	08/29/06
Batch#:	116895		

Field ID: DUP0816063A
Type: SAMPLE

Lab ID: 188802-006

Analyte	Result	RL
Alkalinity, Bicarbonate	420	4.0
Alkalinity, Carbonate	ND	4.0
Alkalinity, Hydroxide	ND	4.0
Alkalinity, Total as CaCO ₃	420	4.0

Field ID: LF6GW103
Type: SAMPLE

Lab ID: 188802-008

Analyte	Result	RL
Alkalinity, Bicarbonate	300	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	300	6.7

Field ID: 1065MW101
Type: SAMPLE

Lab ID: 188802-009

Analyte	Result	RL
Alkalinity, Bicarbonate	690	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	690	6.7

Field ID: DUP0816061A
Type: SAMPLE

Lab ID: 188802-010

Analyte	Result	RL
Alkalinity, Bicarbonate	310	4.0
Alkalinity, Carbonate	ND	4.0
Alkalinity, Hydroxide	ND	4.0
Alkalinity, Total as CaCO ₃	310	4.0

Field ID: 1065MW102
Type: SAMPLE

Lab ID: 188802-012

Analyte	Result	RL
Alkalinity, Bicarbonate	460	4.0
Alkalinity, Carbonate	ND	4.0
Alkalinity, Hydroxide	ND	4.0
Alkalinity, Total as CaCO ₃	460	4.0



Alkalinity			
Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	08/16/06
Units:	mg/L	Received:	08/17/06
Diln Fac:	1.000	Analyzed:	08/29/06
Batch#:	116895		

Field ID: 1065MW9A
Type: SAMPLE

Lab ID: 188802-013

Analyte	Result	RL
Alkalinity, Bicarbonate	440	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	440	6.7

Field ID: 1065MW9B
Type: SAMPLE

Lab ID: 188802-014

Analyte	Result	RL
Alkalinity, Bicarbonate	170	4.0
Alkalinity, Carbonate	ND	4.0
Alkalinity, Hydroxide	ND	4.0
Alkalinity, Total as CaCO ₃	170	4.0

Field ID: 1065MW9BRB9A
Type: SAMPLE

Lab ID: 188802-015

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO ₃	ND	1.0

Field ID: LF4GW103
Type: SAMPLE

Lab ID: 188802-017

Analyte	Result	RL
Alkalinity, Bicarbonate	1,200	10
Alkalinity, Carbonate	ND	10
Alkalinity, Hydroxide	ND	10
Alkalinity, Total as CaCO ₃	1,200	10

Field ID: LF4GW104
Type: SAMPLE

Lab ID: 188802-018

Analyte	Result	RL
Alkalinity, Bicarbonate	630	4.0
Alkalinity, Carbonate	ND	4.0
Alkalinity, Hydroxide	ND	4.0
Alkalinity, Total as CaCO ₃	630	4.0



Curtis & Tompkins, Ltd.

Alkalinity			
Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	08/16/06
Units:	mg/L	Received:	08/17/06
Diln Fac:	1.000	Analyzed:	08/29/06
Batch#:	116895		

Field ID: DUP0816062A
Type: SAMPLE

Lab ID: 188802-020

Analyte	Result	RL
Alkalinity, Bicarbonate	250	4.0
Alkalinity, Carbonate	ND	4.0
Alkalinity, Hydroxide	ND	4.0
Alkalinity, Total as CaCO ₃	250	4.0

Type: BLANK

Lab ID: QC353932

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO ₃	ND	1.0

Batch QC Report

Alkalinity			
Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO ₃	Units:	mg/L
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC353933	Batch#:	116895
Matrix:	Water	Analyzed:	08/29/06

Spiked	Result	%REC	Limits
200.0	182.7	91	90-110



Batch QC Report

Alkalinity			
Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO ₃	Diln Fac:	1.000
Field ID:	1349MW100	Batch#:	116895
MSS Lab ID:	188802-001	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	mg/L	Analyzed:	08/29/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC353934	850.7	200.0	1,170	96	69-112		
MSD	QC353935		200.0	1,160	93	69-112	1	25

Analysis: Alkalinity
 Method: EPA 310.1 / SMWW 2320B
 SOP#: Alkalinity_rv 7.doc

Analysis Date: 08/29/06
 Batch No: 116895

H₂SO₄ Normality = 0.029
 conc. (mg/L) Na₂CO₃ for QC = 200

Analyst: SJ

QC DATA

Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	Alkalinity as CaCO ₃ (mg/L)	Low Alk Vol (mL)	Low Alk as CaCO ₃ (mg/L)	RL (mg/L)	% Rec.	% RPD
MB	100	0.0	0.0	ND			1.0	91	
LCS	25	1.4	3.2	182.70			4.0		
188802-001	15	0.0	8.8	850.67		n/a	6.7		
MS	15	0.0	12.1	1169.67			6.7	96	
MSD	15	0.0	12.0	1160.00			6.7	93	1

SAMPLE	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	Alkalinity as CaCO ₃ (mg/L)	Low Alkalinity Volume (4.5-4.2) (mL)	Low Alkalinity as CaCO ₃ (mg/L)	Reporting Limit (mg/L)
188802-001	6.20	15	0.0	8.8	850.67		n/a	6.7
188802-002	6.90	15	0.0	7.6	734.67		n/a	6.7
188802-003	6.80	15	0.0	2.9	280.33		n/a	6.7
188802-004	6.70	25	0.0	4.6	266.80		n/a	4.0
188802-005	7.70	25	0.0	7.3	423.40		n/a	4.0
188802-006	7.80	25	0.0	7.3	423.40		n/a	4.0
188802-008	6.90	15	0.0	3.1	299.67		n/a	6.7
188802-009	6.90	15	0.0	7.1	686.33		n/a	6.7
188802-010	6.90	25	0.0	5.4	313.20		n/a	4.0
188802-012	7.40	25	0.0	7.9	458.20		n/a	4.0
188802-013	6.70	15	0.0	4.5	435.00		n/a	6.7
188802-014	7.00	25	0.0	3.0	174.00		n/a	4.0
188802-015	5.00	100	0.0	0.2	rpt low alk		ND	1.0
188802-017	7.00	10	0.0	8.1	1167.25		n/a	10.0
188802-018	7.10	25	0.0	10.8	626.40		n/a	4.0
188802-020	7.30	25	0.0	4.3	249.40		n/a	4.0
188818-001	7.90	25	0.0	9.0	522.00		n/a	4.0

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Reviewed by/ Date:

[Signature] 8/29/06

QC Limits	RPD	Recovery
LCS/BS/BS	20	90 - 110
MS/MSD	25	80 - 120

Analysis:
Method:

Alkalinity
EPA 310.1

Analysis Date: 08/29/06
Batch No: 116895

H₂SO₄ Normality = 0.029
Analyst: SJ

SAMPLE	(P)	(T-P)	Total Alkalinity as CaCO ₃ (mg/L)	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity
188802-001	0.0	850.7	850.666667	850.667	0.000	0.000
188802-002	0.0	734.67	734.667	734.667	0.000	0.000
188802-003	0.0	280.33	280.333	280.333	0.000	0.000
188802-004	0.0	266.80	266.800	266.800	0.000	0.000
188802-005	0.0	423.40	423.400	423.400	0.000	0.000
188802-006	0.0	423.40	423.400	423.400	0.000	0.000
188802-008	0.0	299.67	299.667	299.667	0.000	0.000
188802-009	0.0	686.33	686.333	686.333	0.000	0.000
188802-010	0.0	313.20	313.200	313.200	0.000	0.000
188802-012	0.0	458.20	458.200	458.200	0.000	0.000
188802-013	0.0	435.00	435.000	435.000	0.000	0.000
188802-014	0.0	174.00	174.000	174.000	0.000	0.000
188802-015	0.0	#VALUE!	ND	not applicable	not applicable	not applicable
188802-017	0.0	1167.25	1167.250	1167.250	0.000	0.000
188802-018	0.0	626.40	626.400	626.400	0.000	0.000
188802-020	0.0	249.40	249.400	249.400	0.000	0.000
188818-001	0.0	522.00	522.000	522.000	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J'-flagged' if < 2mL titrant used)

P: Phenolphthalein Alkalinity (using volume to pH 8.3)
T-P: Total Alkalinity minus Phenolphthalein Alkalinity

Carbonate Alkalinity = 2x the smaller of P or (T-P)
Bicarbonate Alkalinity = (T-2P) when P < (T-P)
Hydroxide Alkalinity = (2P-T) when (T-P) < P

Analysis:
Method:

Alkalinity
EPA 310.1

Analysis Date: 08/29/06
Batch No: 116895

H₂SO₄ Normality = 0.029
Analyst: SJ

SAMPLE	Total Alkalinity as CaCO ₃ (mg/L)	Bicarbonate		Carbonate		Hydroxide	
		Alkalinity as HCO ₃ ⁻ (mg/L)	Alkalinity as CO ₃ ²⁻ (mg/L)	Alkalinity as CO ₃ ²⁻ (mg/L)	Alkalinity as OH ⁻ (mg/L)	Alkalinity as OH ⁻ (mg/L)	Alkalinity as OH ⁻ (mg/L)
188802-001	850.667	1037.173	0.000	0.000	0.000	0.000	0.000
188802-002	734.667	895.740	0.000	0.000	0.000	0.000	0.000
188802-003	280.333	341.796	0.000	0.000	0.000	0.000	0.000
188802-004	266.800	325.295	0.000	0.000	0.000	0.000	0.000
188802-005	423.400	516.229	0.000	0.000	0.000	0.000	0.000
188802-006	423.400	516.229	0.000	0.000	0.000	0.000	0.000
188802-008	299.667	365.368	0.000	0.000	0.000	0.000	0.000
188802-009	686.333	836.810	0.000	0.000	0.000	0.000	0.000
188802-010	313.200	381.868	0.000	0.000	0.000	0.000	0.000
188802-012	458.200	558.659	0.000	0.000	0.000	0.000	0.000
188802-013	435.000	530.372	0.000	0.000	0.000	0.000	0.000
188802-014	174.000	212.149	0.000	0.000	0.000	0.000	0.000
188802-015	ND	not applicable	not applicable	not applicable	not applicable	not applicable	not applicable
188802-017	1167.250	1423.166	0.000	0.000	0.000	0.000	0.000
188802-018	626.400	763.736	0.000	0.000	0.000	0.000	0.000
188802-020	249.400	304.080	0.000	0.000	0.000	0.000	0.000
188818-001	522.000	636.447	0.000	0.000	0.000	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

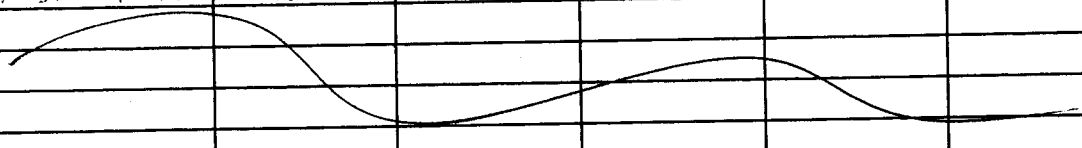
LIMS Batch #: 116815
 Matrix: water

 Date: 8/29/06
 Time: 8:30

 Benchbook#: **BK2384**
 Page: **4**

 CAL-ph 4.0: SS#: 5749
 CAL-ph 7.0: SS#: 3177
 CAL-ph 10.0: SS#: 53822
 Slope: 96.5
 (slope limits: 92 - 102)

 NaCO₃ Vol (mgL) Spiked: 5
 NaCO₃ Conc (mg/L): 1000
 NaCO₃ WS#: 58423
 H₂SO₄ Normality: 0.009
 H₂SO₄ Reagent ID: 12/19106

Sample # / Letter	Initial pH (S.U.)	Sample Vol. Titrated (mL)	H ₂ SO ₄ Vol (mL)		Low Alk Total Vol (mL)	Comments
			to pH 8.3	to pH 4.5 *		
1 HB	8.8	100	—	26.05		
UCS	10.4	25	1.4	3.15		
188802-1 V	6.2	15	—	8.8		
MS-1 ↓	6.6	↓	—	12.1		
MSD-1 ↓	6.6	↓	—	12		
-2 F	6.9	↓	—	7.6		
-3 B	6.8	↓	—	2.9		
-4 B	6.7	25	—	4.6		
-5 H	7.7	↓	—	7.3		
-6 ↓	7.8	↓	—	7.3		
-8 E	6.9	15	—	3.1		
-9 I	6.9	↓	—	7.1		
-10 E	6.9	25	—	5.4		
-12 I	7.4	25	—	7.9		
-13 I	6.7	15	—	4.5		
-14 I	7.0	25	—	3		
-15 ↓	7.6	25	—	1		10 pH = 3.3
-16 ↓	5.2	100	—	0.2	CA	
-17 B	7.0	25 10	—	8.05		
-18 ↓	7.1	25	—	10.5		
-20 I	7.3	25	—	4.3		
188818-1 K	7.9	25	—	9		
						

* If Acid Vol to 4.5 is < 2.0mL, redo using 100mL sample volume. If still < 2.0mL, go on to Low Alkalinity.

 Analyst / Date: 8/29/06

 DMB 8/29/06
 Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 116895
 Date Started: 29-AUG-2006
 Batched by : Stephanie Jim

Analysis : ALKALINITY
 Bgroup : N/A
 Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
188802-001		Treadwell & Rollo	Water	ALKALINITY	29-AUG-2006
188802-002		Treadwell & Rollo	Water	ALKALINITY	29-AUG-2006
188802-003		Treadwell & Rollo	Water	ALKALINITY	29-AUG-2006
188802-004		Treadwell & Rollo	Water	ALKALINITY	29-AUG-2006
188802-005		Treadwell & Rollo	Water	ALKALINITY	29-AUG-2006
188802-006		Treadwell & Rollo	Water	ALKALINITY	29-AUG-2006
188802-008		Treadwell & Rollo	Water	ALKALINITY	29-AUG-2006
188802-009		Treadwell & Rollo	Water	ALKALINITY	29-AUG-2006
188802-010		Treadwell & Rollo	Water	ALKALINITY	29-AUG-2006
188802-012		Treadwell & Rollo	Water	ALKALINITY	29-AUG-2006
188802-013		Treadwell & Rollo	Water	ALKALINITY	29-AUG-2006
188802-014		Treadwell & Rollo	Water	ALKALINITY	29-AUG-2006
188802-015		Treadwell & Rollo	Water	ALKALINITY	29-AUG-2006
188802-017		Treadwell & Rollo	Water	ALKALINITY	29-AUG-2006
188802-018		Treadwell & Rollo	Water	ALKALINITY	29-AUG-2006
188802-020		Treadwell & Rollo	Water	ALKALINITY	29-AUG-2006
188818-001		Arcadis G&M	Water	ALKALINITY	29-AUG-2006
QC353932	BLANK		Water	ALKALINITY	
QC353933	LCS		Water	ALKALINITY	
QC353934	MS	of 188802-001	Water	ALKALINITY	
QC353935	MSD	of 188802-001	Water	ALKALINITY	

Chloride			
Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Batch#:	116514
Matrix:	Water	Received:	08/17/06
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln Fac	Sampled	Analyzed
1349MW100	SAMPLE	188802-001	810	20	100.0	08/16/06 15:20	08/17/06 17:35
1065PZ5AR	SAMPLE	188802-002	66	5.0	25.00	08/16/06 14:10	08/18/06 04:36
LF6GW105	SAMPLE	188802-003	87	5.0	25.00	08/16/06 13:26	08/18/06 04:54
LF6GW106	SAMPLE	188802-004	67	5.0	25.00	08/16/06 12:33	08/18/06 05:11
1213GW101	SAMPLE	188802-005	310	5.0	25.00	08/16/06 10:30	08/18/06 05:29
DUP0816063A	SAMPLE	188802-006	310	5.0	25.00	08/16/06 10:40	08/18/06 05:46
LF6GW103	SAMPLE	188802-008	35	2.0	10.00	08/16/06 10:20	08/18/06 07:13
1065MW101	SAMPLE	188802-009	51	5.0	25.00	08/16/06 14:42	08/18/06 07:31
DUP0816061A	SAMPLE	188802-010	35	2.0	10.00	08/16/06 10:30	08/18/06 07:48
1065MW102	SAMPLE	188802-012	100	5.0	25.00	08/16/06 15:20	08/18/06 08:05
1065MW9A	SAMPLE	188802-013	160	5.0	25.00	08/16/06 12:40	08/18/06 08:23
1065MW9B	SAMPLE	188802-014	130	5.0	25.00	08/16/06 11:15	08/18/06 08:40
1065MW9BRB9A	SAMPLE	188802-015	ND	0.20	1.000	08/16/06 12:10	08/18/06 02:35
LF4GW103	SAMPLE	188802-017	470	20	100.0	08/16/06 14:00	08/17/06 17:52
LF4GW104	SAMPLE	188802-018	340	10	50.00	08/16/06 14:30	08/17/06 18:10
DUP0816062A	SAMPLE	188802-020	52	2.0	10.00	08/16/06 12:50	08/18/06 08:58
	BLANK	QC352330	ND	0.20	1.000		08/17/06 17:17

ND= Not Detected

RL= Reporting Limit



Fluoride

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Diln Fac:	1.000
Matrix:	Water	Batch#:	116514
Units:	mg/L	Received:	08/17/06

Field ID	Type	Lab ID	Result	RL	Sampled	Analyzed
1349MW100	SAMPLE	188802-001	0.20	0.10	08/16/06 15:20	08/17/06 19:37
1065PZ5AR	SAMPLE	188802-002	0.26	0.10	08/16/06 14:10	08/17/06 22:13
LF6GW105	SAMPLE	188802-003	ND	0.10	08/16/06 13:26	08/17/06 22:48
LF6GW106	SAMPLE	188802-004	ND	0.10	08/16/06 12:33	08/17/06 23:06
1213GW101	SAMPLE	188802-005	ND	0.10	08/16/06 10:30	08/17/06 23:23
DUP0816063A	SAMPLE	188802-006	ND	0.10	08/16/06 10:40	08/17/06 23:40
LF6GW103	SAMPLE	188802-008	ND	0.10	08/16/06 10:20	08/17/06 23:58
1065MW101	SAMPLE	188802-009	0.28	0.10	08/16/06 14:42	08/18/06 01:08
DUP0816061A	SAMPLE	188802-010	ND	0.10	08/16/06 10:30	08/18/06 00:15
1065MW102	SAMPLE	188802-012	0.42	0.10	08/16/06 15:20	08/18/06 00:33
1065MW9A	SAMPLE	188802-013	0.19	0.10	08/16/06 12:40	08/18/06 00:50
1065MW9B	SAMPLE	188802-014	ND	0.10	08/16/06 11:15	08/18/06 02:52
1065MW9BRB9A	SAMPLE	188802-015	ND	0.10	08/16/06 12:10	08/18/06 02:35
LF4GW103	SAMPLE	188802-017	ND	0.10	08/16/06 14:00	08/18/06 03:27
LF4GW104	SAMPLE	188802-018	ND	0.10	08/16/06 14:30	08/18/06 04:02
DUP0816062A	SAMPLE	188802-020	ND	0.10	08/16/06 12:50	08/18/06 03:09
	BLANK	QC352330	ND	0.10		08/17/06 17:17

ND= Not Detected

RL= Reporting Limit

Nitrate Nitrogen			
Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Batch#:	116514
Matrix:	Water	Received:	08/17/06
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln	Fac	Sampled		Analyzed	
1349MW100	SAMPLE	188802-001	ND	0.05	1.000		08/16/06	15:20	08/17/06	19:37
1065PZ5AR	SAMPLE	188802-002	ND	0.05	1.000		08/16/06	14:10	08/17/06	22:13
LF6GW105	SAMPLE	188802-003	4.6	0.05	1.000		08/16/06	13:26	08/17/06	22:48
LF6GW106	SAMPLE	188802-004	9.6	1.3	25.00		08/16/06	12:33	08/18/06	05:11
1213GW101	SAMPLE	188802-005	0.83	0.05	1.000		08/16/06	10:30	08/17/06	23:23
DUP0816063A	SAMPLE	188802-006	0.92	0.05	1.000		08/16/06	10:40	08/17/06	23:40
LF6GW103	SAMPLE	188802-008	3.8	0.05	1.000		08/16/06	10:20	08/17/06	23:58
1065MW101	SAMPLE	188802-009	ND	0.05	1.000		08/16/06	14:42	08/18/06	01:08
DUP0816061A	SAMPLE	188802-010	3.8	0.05	1.000		08/16/06	10:30	08/18/06	00:15
1065MW102	SAMPLE	188802-012	0.08	0.05	1.000		08/16/06	15:20	08/18/06	00:33
1065MW9A	SAMPLE	188802-013	ND	0.05	1.000		08/16/06	12:40	08/18/06	00:50
1065MW9B	SAMPLE	188802-014	14	1.3	25.00		08/16/06	11:15	08/18/06	08:40
1065MW9BRB9A	SAMPLE	188802-015	ND	0.05	1.000		08/16/06	12:10	08/18/06	02:35
LF4GW103	SAMPLE	188802-017	0.09	0.05	1.000		08/16/06	14:00	08/18/06	03:27
LF4GW104	SAMPLE	188802-018	0.59	0.05	1.000		08/16/06	14:30	08/18/06	04:02
DUP0816062A	SAMPLE	188802-020	5.7	0.50	10.00		08/16/06	12:50	08/18/06	08:58
	BLANK	QC352330	ND	0.05	1.000				08/17/06	17:17

ND= Not Detected

RL= Reporting Limit



Curtis & Tompkins, Ltd.

Nitrite Nitrogen

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Batch#:	116514
Matrix:	Water	Received:	08/17/06
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln Fac	Sampled		Analyzed	
1349MW100	SAMPLE	188802-001	ND	0.10	2.000	08/16/06	15:20	08/17/06	19:02
1065PZ5AR	SAMPLE	188802-002	ND	0.05	1.000	08/16/06	14:10	08/17/06	22:13
LF6GW105	SAMPLE	188802-003	ND	0.05	1.000	08/16/06	13:26	08/17/06	22:48
LF6GW106	SAMPLE	188802-004	ND	0.05	1.000	08/16/06	12:33	08/17/06	23:06
1213GW101	SAMPLE	188802-005	ND	0.05	1.000	08/16/06	10:30	08/17/06	23:23
DUP0816063A	SAMPLE	188802-006	ND	0.05	1.000	08/16/06	10:40	08/17/06	23:40
LF6GW103	SAMPLE	188802-008	ND	0.05	1.000	08/16/06	10:20	08/17/06	23:58
1065MW101	SAMPLE	188802-009	ND	0.05	1.000	08/16/06	14:42	08/18/06	01:08
DUP0816061A	SAMPLE	188802-010	ND	0.05	1.000	08/16/06	10:30	08/18/06	00:15
1065MW102	SAMPLE	188802-012	0.36	0.05	1.000	08/16/06	15:20	08/18/06	00:33
1065MW9A	SAMPLE	188802-013	ND	0.05	1.000	08/16/06	12:40	08/18/06	00:50
1065MW9B	SAMPLE	188802-014	ND	0.05	1.000	08/16/06	11:15	08/18/06	02:52
1065MW9BRB9A	SAMPLE	188802-015	ND	0.05	1.000	08/16/06	12:10	08/18/06	02:35
LF4GW103	SAMPLE	188802-017	ND	0.05	1.000	08/16/06	14:00	08/18/06	03:27
LF4GW104	SAMPLE	188802-018	ND	0.05	1.000	08/16/06	14:30	08/18/06	04:02
DUP0816062A	SAMPLE	188802-020	ND	0.05	1.000	08/16/06	12:50	08/18/06	03:09
	BLANK	QC352330	ND	0.05	1.000			08/17/06	17:17

ND= Not Detected

RL= Reporting Limit

Page 1 of 1



Sulfate

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Batch#:	116514
Matrix:	Water	Received:	08/17/06
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln Fac	Sampled	Analized
1349MW100	SAMPLE	188802-001	44	0.50	1.000	08/16/06 15:20	08/17/06 19:37
1065PZ5AR	SAMPLE	188802-002	ND	0.50	1.000	08/16/06 14:10	08/17/06 22:13
LF6GW105	SAMPLE	188802-003	100	13	25.00	08/16/06 13:26	08/18/06 04:54
LF6GW106	SAMPLE	188802-004	160	13	25.00	08/16/06 12:33	08/18/06 05:11
1213GW101	SAMPLE	188802-005	110	13	25.00	08/16/06 10:30	08/18/06 05:29
DUP0816063A	SAMPLE	188802-006	110	13	25.00	08/16/06 10:40	08/18/06 05:46
LF6GW103	SAMPLE	188802-008	100	5.0	10.00	08/16/06 10:20	08/18/06 07:13
1065MW101	SAMPLE	188802-009	ND	0.50	1.000	08/16/06 14:42	08/18/06 01:08
DUP0816061A	SAMPLE	188802-010	100	5.0	10.00	08/16/06 10:30	08/18/06 07:48
1065MW102	SAMPLE	188802-012	8.7	0.50	1.000	08/16/06 15:20	08/18/06 00:33
1065MW9A	SAMPLE	188802-013	16	0.50	1.000	08/16/06 12:40	08/18/06 00:50
1065MW9B	SAMPLE	188802-014	180	13	25.00	08/16/06 11:15	08/18/06 08:40
1065MW9BRB9A	SAMPLE	188802-015	ND	0.50	1.000	08/16/06 12:10	08/18/06 02:35
LF4GW103	SAMPLE	188802-017	350	50	100.0	08/16/06 14:00	08/17/06 17:52
LF4GW104	SAMPLE	188802-018	170	25	50.00	08/16/06 14:30	08/17/06 18:10
DUP0816062A	SAMPLE	188802-020	72	5.0	10.00	08/16/06 12:50	08/18/06 08:58
	BLANK	QC352330	ND	0.50	1.000		08/17/06 17:17

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Chloride			
Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Units:	mg/L
Field ID:	1349MW100	Batch#:	116514
MSS Lab ID:	188802-001	Sampled:	08/16/06 15:20
Matrix:	Water	Received:	08/17/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	DiIn	Fac	Analyzed
BS	QC352331		4.000	3.993	100	80-120		1.000			08/17/06 20:29
BSD	QC352332		4.000	3.980	99	80-120	0	20	1.000		08/17/06 20:46
MS	QC352333	808.2	400.0	1,189	95	80-120			200.0		08/17/06 18:27
MSD	QC352334		400.0	1,193	96	80-120	0	25	200.0		08/17/06 18:44



Batch QC Report

Fluoride			
Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Units:	mg/L
Field ID:	1349MW100	Batch#:	116514
MSS Lab ID:	188802-001	Sampled:	08/16/06 15:20
Matrix:	Water	Received:	08/17/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Analyzed
BS	QC352331		2.000	1.997	100	80-120			1.000		08/17/06 20:29
BSD	QC352332		2.000	2.022	101	80-120	1	20	1.000		08/17/06 20:46
MS	QC352333	0.2021	200.0	184.8	92	77-120			200.0		08/17/06 18:27
MSD	QC352334		200.0	189.9	95	77-120	3	20	200.0		08/17/06 18:44

Batch QC Report

Nitrate Nitrogen			
Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Units:	mg/L
Field ID:	1349MW100	Batch#:	116514
MSS Lab ID:	188802-001	Sampled:	08/16/06 15:20
Matrix:	Water	Received:	08/17/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Analyzed
BS	QC352331		1.000	0.9735	97	80-120			1.000		08/17/06 20:29
BSD	QC352332		1.000	0.9654	97	80-120	1	20	1.000		08/17/06 20:46
MS	QC352333	<0.008826	100.0	99.35	99	80-120			200.0		08/17/06 18:27
MSD	QC352334		100.0	100.5	100	80-120	1	25	200.0		08/17/06 18:44

RPD= Relative Percent Difference

Batch QC Report

Nitrite Nitrogen			
Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Units:	mg/L
Field ID:	1349MW100	Batch#:	116514
MSS Lab ID:	188802-001	Sampled:	08/16/06 15:20
Matrix:	Water	Received:	08/17/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Analyzed
BS	QC352331		1.000	0.9690	97	80-120			1.000		08/17/06 20:29
BSD	QC352332		1.000	0.9706	97	80-120	0	20	1.000		08/17/06 20:46
MS	QC352333	<0.02411	100.0	98.94	99	80-120			200.0		08/17/06 18:27
MSD	QC352334		100.0	94.22	94	80-120	5	25	200.0		08/17/06 18:44

Batch QC Report

Sulfate			
Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Units:	mg/L
Field ID:	1349MW100	Batch#:	116514
MSS Lab ID:	188802-001	Sampled:	08/16/06 15:20
Matrix:	Water	Received:	08/17/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Analyzed
BS	QC352331		10.00	9.652	97	80-120			1.000		08/17/06 20:29
BSD	QC352332		10.00	9.695	97	80-120	0	20	1.000		08/17/06 20:46
MS	QC352333	44.49	1,000	1,013	97	80-120			200.0		08/17/06 18:27
MSD	QC352334		1,000	1,005	96	80-120	1	25	200.0		08/17/06 18:44

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188802 IC Water: EPA 300.0

Inst : IC03
 Calnum : 626330641001
 Units : mg/L

Date : 17-AUG-2006 14:58
 X Axis : A

Reviewer: MCH
 Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	229_2.000	626330641002	L1	17-AUG-2006 14:58	S3313 (500X)
L2	229_3.000	626330641003	L2	17-AUG-2006 15:16	S3313 (100X)
L3	229_4.000	626330641004	L3	17-AUG-2006 15:33	S3313 (25X)
L4	229_5.000	626330641005	L4	17-AUG-2006 15:50	S3313 (10X)
L5	229_6.000	626330641006	L5	17-AUG-2006 16:08	S3313 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ²	#RSD	Mmr ²	Fig
Fluoride	0.1524	0.1580	0.1788	0.1831	0.1920	QORG		0.17406	0.001793	0.1728	1.000	0.990		
Chloride	0.1827	0.1444	0.1586	0.1660	0.1787	QORG		0.15313	0.001281	0.1661	1.000	0.990		
Nitrogen, Nitrite	0.3486	0.2909	0.3137	0.3174	0.3272	QORG		0.30795	0.003850	0.3196	1.000	0.990		
Nitrogen, Nitrate	0.4134	0.3338	0.3738	0.3865	0.4029	QORG		0.36802	0.007000	0.3821	1.000	0.990		
Sulfate	0.1046	0.1063	0.1094	0.1177	0.1241	QORG		0.10952	2.929E-4	0.1124	1.000	0.990		

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188802 IC Water
EPA 300.0

Inst : IC03
Calnum : 626330641001

Cal Date: 17-AUG-2006

ICV 626330641007 (229_7.000 17-AUG-2006) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.1728	0.1635	1.000	0.9303	mg/L	-7	10	
Chloride	0.1661	0.1470	2.000	1.890	mg/L	-6	10	
Nitrogen, Nitrite	0.3196	0.3027	0.5000	0.4885	mg/L	-2	10	
Nitrogen, Nitrate	0.3821	0.3435	0.5000	0.4626	mg/L	-7	10	
Sulfate	0.1124	0.1058	5.000	4.771	mg/L	-5	10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 300.0

Inst : IC03

Calnum : 626330641001

Units : mg/L

Date : 17-AUG-2006 14:58

X Axis : A

Inj Vol: 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	229_2.000	626330641002	L1	17-AUG-2006 14:58	S3313 (500X)
L2	229_3.000	626330641003	L2	17-AUG-2006 15:16	S3313 (100X)
L3	229_4.000	626330641004	L3	17-AUG-2006 15:33	S3313 (25X)
L4	229_5.000	626330641005	L4	17-AUG-2006 15:50	S3313 (10X)
L5	229_6.000	626330641006	L5	17-AUG-2006 16:08	S3313 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	%RSD	MNR^2	Flg
Fluoride	0.1524	0.1580	0.1788	0.1831	0.1920	QORG		0.17406	0.001793	0.1728	1.000	0.990	
Chloride	0.1827	0.1444	0.1586	0.1660	0.1787	QORG		0.15313	0.001281	0.1661	1.000	0.990	
Nitrogen, Nitrite	0.3486	0.2909	0.3137	0.3174	0.3272	QORG		0.30795	0.003850	0.3196	1.000	0.990	
Bromide	0.1131	0.0689	0.0670	0.0668	0.0689	QORG		0.06544	1.715E-4	0.0769	1.000	0.990	
Nitrogen, Nitrate	0.4134	0.3338	0.3738	0.3865	0.4029	QORG		0.36802	0.007000	0.3821	1.000	0.990	
Orthophosphate (as P)	0.1692	0.1175	0.1142	0.1219	0.1274	QORG		0.11489	6.294E-4	0.1300	1.000	0.990	
Sulfate	0.1046	0.1063	0.1094	0.1177	0.1241	QORG		0.10952	2.929E-4	0.1124	1.000	0.990	

MS 8/21/06

Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

Sequence: 229
Operator: ic_analyst

Printed: 8/21/2006 12:38:27 PM

Title: Anions
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006
Timebase: IC3_DX120
#Samples: 105

Created: 8/1/2003 11:03:14 AM by ic_analyst
Last Update: 8/21/2006 12:38:13 PM by ic_analyst

No. *Batch	Name	Comment	Dil. Factor	Program	Status	Inj. Date/Time	Method
1 CAL-229	IB		1.0000	IC03-7AN	Finished	8/17/2006 2:41:10 PM	IC03-7AN_CAL
2 CAL-229	ICAL, L1,S3313,500		1.0000	IC03-7AN	Finished	8/17/2006 2:58:35 PM	IC03-7AN_CAL
3 CAL-229	ICAL, L2,S3313,100		1.0000	IC03-7AN	Finished	8/17/2006 3:16:00 PM	IC03-7AN_CAL
4 CAL-229	ICAL, L3,S3313,25		1.0000	IC03-7AN	Finished	8/17/2006 3:33:24 PM	IC03-7AN_CAL
5 CAL-229	ICAL, L4,S3313,10		1.0000	IC03-7AN	Finished	8/17/2006 3:50:49 PM	IC03-7AN_CAL
6 CAL-229	ICAL, L5,S3313,5		1.0000	IC03-7AN	Finished	8/17/2006 4:08:14 PM	IC03-7AN_CAL
7 CAL-229	ICV,S3859,5		1.0000	IC03-7AN	Finished	8/17/2006 4:25:39 PM	IC03-7AN_CAL
8 CAL-229	ICB		1.0000	IC03-7AN	Finished	8/17/2006 4:43:04 PM	IC03-7AN_CAL
9 116514	CCV,L,S3313,100		1.0000	IC03-7AN	Finished	8/17/2006 5:00:29 PM	IC03-7AN_CAL
10 116514	CCB/MB,QC352330		1.0000	IC03-7AN	Finished	8/17/2006 5:17:54 PM	IC03-7AN_CAL
11 116514	MSS,188802-001	V	100.0000	IC03-7AN	Finished	8/17/2006 5:35:18 PM	IC03-7AN_CAL
12 116514	188802-017	B	100.0000	IC03-7AN	Finished	8/17/2006 5:52:42 PM	IC03-7AN_CAL
13 116514	188802-018	B	50.0000	IC03-7AN	Finished	8/17/2006 6:10:07 PM	IC03-7AN_CAL
14 116514	MS,QC352333,S3313,50	V	200.0000	IC03-7AN	Finished	8/17/2006 6:27:31 PM	IC03-7AN_CAL
15 116514	MSD,QC352334,S3313,50	V	200.0000	IC03-7AN	Finished	8/17/2006 6:44:56 PM	IC03-7AN_CAL
16 116514	MSS,188802-001	V	2.0000	IC03-7AN	Finished	8/17/2006 7:02:22 PM	IC03-7AN_CAL
17 116514	BLK		1.0000	IC03-7AN	Finished	8/17/2006 7:19:48 PM	IC03-7AN_CAL
18 116514	MSS,188802-001	V	1.0000	IC03-7AN	Finished	8/17/2006 7:37:13 PM	IC03-7AN_CAL
19 116514	BLK		1.0000	IC03-7AN	Finished	8/17/2006 7:54:38 PM	IC03-7AN_CAL
20 116514	BLK		1.0000	IC03-7AN	Finished	8/17/2006 8:12:02 PM	IC03-7AN_CAL
21 116514	BS,QC352331,S3313,25		1.0000	IC03-7AN	Finished	8/17/2006 8:29:27 PM	IC03-7AN_CAL
22 116514	BSD,QC352332,S3313,25		1.0000	IC03-7AN	Finished	8/17/2006 8:46:52 PM	IC03-7AN_CAL
23 116514	CCV,M,S3313,25		1.0000	IC03-7AN	Finished	8/17/2006 9:04:16 PM	IC03-7AN_CAL
24 116514	CCB		1.0000	IC03-7AN	Finished	8/17/2006 9:21:41 PM	IC03-7AN_CAL
25 116514	X,CCV,M,S3313,25		1.0000	IC03-7AN	Finished	8/17/2006 9:39:06 PM	IC03-7AN_CAL
26 116514	X,CCB		1.0000	IC03-7AN	Finished	8/17/2006 9:56:30 PM	IC03-7AN_CAL
27 116514	188802-002	F	1.0000	IC03-7AN	Finished	8/17/2006 10:13:55 PM	IC03-7AN_CAL
28 116514	BLK		1.0000	IC03-7AN	Finished	8/17/2006 10:31:19 PM	IC03-7AN_CAL
29 116514	188802-003	B	1.0000	IC03-7AN	Finished	8/17/2006 10:48:44 PM	IC03-7AN_CAL
30 116514	188802-004	B	1.0000	IC03-7AN	Finished	8/17/2006 11:06:09 PM	IC03-7AN_CAL
31 116514	188802-005	H	1.0000	IC03-7AN	Finished	8/17/2006 11:23:33 PM	IC03-7AN_CAL
32 116514	188802-006	H	1.0000	IC03-7AN	Finished	8/17/2006 11:40:58 PM	IC03-7AN_CAL
33 116514	188802-008	E	1.0000	IC03-7AN	Finished	8/17/2006 11:58:22 PM	IC03-7AN_CAL
34 116514	188802-010	E	1.0000	IC03-7AN	Finished	8/18/2006 12:15:47 AM	IC03-7AN_CAL
35 116514	188802-012	I	1.0000	IC03-7AN	Finished	8/18/2006 12:33:11 AM	IC03-7AN_CAL
36 116514	188802-013	I	1.0000	IC03-7AN	Finished	8/18/2006 12:50:36 AM	IC03-7AN_CAL
37 116514	188802-009	I	1.0000	IC03-7AN	Finished	8/18/2006 1:08:01 AM	IC03-7AN_CAL
38 116514	CCV,H,S3313,10		1.0000	IC03-7AN	Finished	8/18/2006 1:25:25 AM	IC03-7AN_CAL
39 116514	CCB		1.0000	IC03-7AN	Finished	8/18/2006 1:42:50 AM	IC03-7AN_CAL
40 116514	X,CCV,H,S3313,10		1.0000	IC03-7AN	Finished	8/18/2006 2:00:14 AM	IC03-7AN_CAL
41 116514	X,CCB		1.0000	IC03-7AN	Finished	8/18/2006 2:17:38 AM	IC03-7AN_CAL
42 116514	188802-015	I	1.0000	IC03-7AN	Finished	8/18/2006 2:35:03 AM	IC03-7AN_CAL
43 116514	188802-014	I	1.0000	IC03-7AN	Finished	8/18/2006 2:52:27 AM	IC03-7AN_CAL
44 116514	188802-020	I	1.0000	IC03-7AN	Finished	8/18/2006 3:09:52 AM	IC03-7AN_CAL
45 116514	188802-017	B	1.0000	IC03-7AN	Finished	8/18/2006 3:27:16 AM	IC03-7AN_CAL
46 116514	BLK		1.0000	IC03-7AN	Finished	8/18/2006 3:44:40 AM	IC03-7AN_CAL
47 116514	188802-018	B	1.0000	IC03-7AN	Finished	8/18/2006 4:02:05 AM	IC03-7AN_CAL
48 116514	BLK		1.0000	IC03-7AN	Finished	8/18/2006 4:19:29 AM	IC03-7AN_CAL
49 116514	188802-002	F	25.0000	IC03-7AN	Finished	8/18/2006 4:36:54 AM	IC03-7AN_CAL

Sequence: 229
Operator: ic_analyst

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Printed: 8/21/2006 12:38:27 PM

Title: Anions
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006
Timebase: IC3_DX120
#Samples: 105

Created: 8/1/2003 11:03:14 AM by ic_analyst
Last Update: 8/21/2006 12:38:13 PM by ic_analyst

No.	*Batch	Name	Comment	Type	Inj. Vol.	*operator	*PDF
1	CAL-229	IB		Unknown	25.0 MRS		1
2	CAL-229	ICAL, L1,S3313,500		Standard	25.0 MRS		1
3	CAL-229	ICAL, L2,S3313,100		Standard	25.0 MRS		1
4	CAL-229	ICAL, L3,S3313,25		Standard	25.0 MRS		1
5	CAL-229	ICAL, L4,S3313,10		Standard	25.0 MRS		1
6	CAL-229	ICAL, L5,S3313,5		Standard	25.0 MRS		1
7	CAL-229	ICV,S3859,5		Unknown	25.0 MRS		1
8	CAL-229	ICB		Unknown	25.0 MRS		1
9	116514	CCV,L,S3313,100		Unknown	25.0 MRS		1
10	116514	CCB/MB,QC352330		Unknown	25.0 MRS		1
11	116514	MSS,188802-001	V	Unknown	25.0 MRS		1
12	116514	188802-017	B	Unknown	25.0 MRS		1
13	116514	188802-018	B	Unknown	25.0 MRS		1
14	116514	MS,QC352333,S3313,50	V	Unknown	25.0 MRS		1
15	116514	MSD,QC352334,S3313,50	V	Unknown	25.0 MRS		1
16	116514	MSS,188802-001	V	Unknown	25.0 MRS		1
17	116514	BLK		Unknown	25.0 MRS		1
18	116514	MSS,188802-001	V	Unknown	25.0 MRS		1
19	116514	BLK		Unknown	25.0 MRS		1
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24	116514	CCB		Unknown	25.0 MRS		1
25	116514	X,CCV,M,S3313,25		Unknown	25.0 MRS		1
26	116514	X,CCB		Unknown	25.0 MRS		1
27	116514	188802-002	F	Unknown	25.0 MRS		1
28	116514	BLK		Unknown	25.0 MRS		1
29	116514	188802-003	B	Unknown	25.0 MRS		1
30	116514	188802-004	B	Unknown	25.0 MRS		1
31	116514	188802-005	H	Unknown	25.0 MRS		1
32	116514	188802-006	H	Unknown	25.0 MRS		1
33	116514	188802-008	E	Unknown	25.0 MRS		1
34	116514	188802-010	E	Unknown	25.0 MRS		1
35	116514	188802-012	I	Unknown	25.0 MRS		1
36	116514	188802-013	I	Unknown	25.0 MRS		1
37	116514	188802-009	I	Unknown	25.0 MRS		1
38	116514	CCV,H,S3313,10		Unknown	25.0 MRS		1
39	116514	CCB		Unknown	25.0 MRS		1
40	116514	X,CCV,H,S3313,10		Unknown	25.0 MRS		1
41	116514	X,CCB		Unknown	25.0 MRS		1
42	116514	188802-015	I	Unknown	25.0 MRS		1
43	116514	188802-014	I	Unknown	25.0 MRS		1
44	116514	188802-020	I	Unknown	25.0 MRS		1
45	116514	188802-017	B	Unknown	25.0 MRS		1
46	116514	BLK		Unknown	25.0 MRS		1
47	116514	188802-018	B	Unknown	25.0 MRS		1
48	116514	BLK		Unknown	25.0 MRS		1
49	116514	188802-002	F	Unknown	25.0 MRS		1

Sequence: 229
Operator: ic_analyst

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Printed: 8/21/2006 12:38:28 PM

Title: Anions
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006
Timebase: IC3_DX120
#Samples: 105

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Last Update: 8/21/2006 12:38:13 PM by ic_analyst

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51 116514	188802-004	B	25.0000	IC03-7AN	Finished	8/18/2006 5:11:43 AM	IC03-7AN_CAL
52 116514	188802-005	H	25.0000	IC03-7AN	Finished	8/18/2006 5:29:08 AM	IC03-7AN_CAL
53 116514	188802-006	H	25.0000	IC03-7AN	Finished	8/18/2006 5:46:33 AM	IC03-7AN_CAL
54 116514	CCV,M,S3313,25		1.0000	IC03-7AN	Finished	8/18/2006 6:03:57 AM	IC03-7AN_CAL
55 116514	CCB		1.0000	IC03-7AN	Finished	8/18/2006 6:21:22 AM	IC03-7AN_CAL
56 116514	X,CCV,M,S3313,25		1.0000	IC03-7AN	Finished	8/18/2006 6:38:46 AM	IC03-7AN_CAL
57 116514	X,CCB		1.0000	IC03-7AN	Finished	8/18/2006 6:56:11 AM	IC03-7AN_CAL
58 116514	188802-008	E	10.0000	IC03-7AN	Finished	8/18/2006 7:13:36 AM	IC03-7AN_CAL
59 116514	188802-009	I	25.0000	IC03-7AN	Finished	8/18/2006 7:31:00 AM	IC03-7AN_CAL
60 116514	188802-010	E	10.0000	IC03-7AN	Finished	8/18/2006 7:48:25 AM	IC03-7AN_CAL
61 116514	188802-012	I	25.0000	IC03-7AN	Finished	8/18/2006 8:05:49 AM	IC03-7AN_CAL
62 116514	188802-013	I	25.0000	IC03-7AN	Finished	8/18/2006 8:23:14 AM	IC03-7AN_CAL
63 116514	188802-014	I	25.0000	IC03-7AN	Finished	8/18/2006 8:40:38 AM	IC03-7AN_CAL
64 116514	188802-020	I	10.0000	IC03-7AN	Finished	8/18/2006 8:58:03 AM	IC03-7AN_CAL
65 116514	188792-001	B	10.0000	IC03-7AN	Finished	8/18/2006 9:15:27 AM	IC03-7AN_CAL
66 116514	188792-001	B	1.0000	IC03-7AN	Finished	8/18/2006 9:32:52 AM	IC03-7AN_CAL
67 116514	BLK		1.0000	IC03-7AN	Finished	8/18/2006 9:50:16 AM	IC03-7AN_CAL
68 116514	188805-001	H	1.0000	IC03-7AN	Finished	8/18/2006 10:07:41 AM	IC03-7AN_CAL
69 116514	CCV,H,S3313,10		1.0000	IC03-7AN	Finished	8/18/2006 10:25:05 AM	IC03-7AN_CAL
70 116514	CCB		1.0000	IC03-7AN	Finished	8/18/2006 10:42:30 AM	IC03-7AN_CAL
71 116514	X,CCV,H,S3313,10		1.0000	IC03-7AN	Finished	8/18/2006 10:59:55 AM	IC03-7AN_CAL
72 116514	X,CCB		1.0000	IC03-7AN	Finished	8/18/2006 11:17:20 AM	IC03-7AN_CAL
73 116514	188756-009	G	1.0000	IC03-7AN	Finished	8/18/2006 11:34:44 AM	IC03-7AN_CAL
74 116514	188805-001	H	25.0000	IC03-7AN	Finished	8/18/2006 11:52:09 AM	IC03-7AN_CAL
75 116514	188756-014	F	100.0000	IC03-7AN	Finished	8/18/2006 12:09:34 PM	IC03-7AN_CAL
76 116514	CCV,L,S3313,100		1.0000	IC03-7AN	Finished	8/18/2006 12:26:59 PM	IC03-7AN_CAL
77 116514	CCB		1.0000	IC03-7AN	Finished	8/18/2006 12:44:23 PM	IC03-7AN_CAL
78 116593	CCV,L,S3313,100		1.0000	IC03-7AN	Finished	8/18/2006 1:01:48 PM	IC03-7AN_CAL
79 116593	CCB/MB,QC352648		1.0000	IC03-7AN	Finished	8/18/2006 1:19:12 PM	IC03-7AN_CAL
80 116593	BS,QC352649,S3313,25		1.0000	IC03-7AN	Finished	8/18/2006 3:52:14 PM	IC03-7AN_CAL
81 116593	BSD,QC352650,S3313,25		1.0000	IC03-7AN	Finished	8/18/2006 4:09:39 PM	IC03-7AN_CAL
82 116593	MSS,188837-009	P	1.0000	IC03-7AN	Finished	8/18/2006 4:38:09 PM	IC03-7AN_CAL
83 116593	188837-005	G	500.0000	IC03-7AN	Finished	8/18/2006 4:57:30 PM	IC03-7AN_CAL
84 116593	188837-012	M	1.0000	IC03-7AN	Finished	8/18/2006 5:19:11 PM	IC03-7AN_CAL
85 116593	188837-008	I	1.0000	IC03-7AN	Finished	8/18/2006 5:36:35 PM	IC03-7AN_CAL
86 116593	188837-010	F	1.0000	IC03-7AN	Finished	8/18/2006 5:54:00 PM	IC03-7AN_CAL
87 116593	188837-005	G	20.0000	IC03-7AN	Finished	8/18/2006 6:11:25 PM	IC03-7AN_CAL
88 116593	BLK		1.0000	IC03-7AN	Finished	8/18/2006 6:28:49 PM	IC03-7AN_CAL
89 116593	CCV,H,S3313,10		1.0000	IC03-7AN	Finished	8/18/2006 6:46:14 PM	IC03-7AN_CAL
90 116593	CCB		1.0000	IC03-7AN	Finished	8/18/2006 7:03:39 PM	IC03-7AN_CAL
91 116593	X,CCV,H,S3313,10		1.0000	IC03-7AN	Finished	8/18/2006 7:21:03 PM	IC03-7AN_CAL
92 116593	X,CCB		1.0000	IC03-7AN	Finished	8/18/2006 7:38:28 PM	IC03-7AN_CAL
93 116593	MSS,188837-009	P	10.0000	IC03-7AN	Finished	8/18/2006 7:55:52 PM	IC03-7AN_CAL
94 116593	MS,QC352651,S3313,50		10.0000	IC03-7AN	Finished	8/18/2006 8:13:17 PM	IC03-7AN_CAL
95 116593	MSD,QC352652,S3313,50		10.0000	IC03-7AN	Finished	8/18/2006 8:30:41 PM	IC03-7AN_CAL
96 116593	BLK		1.0000	IC03-7AN	Finished	8/18/2006 8:48:06 PM	IC03-7AN_CAL
97 116593	188837-008	I	25.0000	IC03-7AN	Finished	8/18/2006 9:05:31 PM	IC03-7AN_CAL
98 116593	188837-010	F	25.0000	IC03-7AN	Finished	8/18/2006 9:22:55 PM	IC03-7AN_CAL

Sequence: 229
Operator: ic_analyst

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Printed: 8/21/2006 12:38:28 PM

Title: Anions

Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006
Timebase: IC3_DX120
#Samples: 105

Created: 8/1/2003 11:03:14 AM by ic_analyst
Last Update: 8/21/2006 12:38:13 PM by ic_analyst

No.	*Batch	Name	Comment	Type	Inj. Vol.	*operator	*PDF
50	116514	188802-003	B	Unknown	25.0 MRS	1	
51	116514	188802-004	B	Unknown	25.0 MRS	1	
52	116514	188802-005	H	Unknown	25.0 MRS	1	
53	116514	188802-006	H	Unknown	25.0 MRS	1	
54	116514	CCV,M,S3313,25		Unknown	25.0 MRS	1	
55	116514	CCB		Unknown	25.0 MRS	1	
56	116514	X,CCV,M,S3313,25		Unknown	25.0 MRS	1	
57	116514	X,CCB		Unknown	25.0 MRS	1	
58	116514	188802-008	E	Unknown	25.0 MRS	1	
59	116514	188802-009	I	Unknown	25.0 MRS	1	
60	116514	188802-010	E	Unknown	25.0 MRS	1	
61	116514	188802-012	I	Unknown	25.0 MRS	1	
62	116514	188802-013	I	Unknown	25.0 MRS	1	
63	116514	188802-014	I	Unknown	25.0 MRS	1	
64	116514	188802-020	I	Unknown	25.0 MRS	1	
65	116514	188792-001	B	Unknown	25.0 MRS	1	
66	116514	188792-001	B	Unknown	25.0 MRS	1	
67	116514	BLK		Unknown	25.0 MRS	1	
68	116514	188805-001	H	Unknown	25.0 MRS	1	
69	116514	CCV,H,S3313,10		Unknown	25.0 MRS	1	
70	116514	CCB		Unknown	25.0 MRS	1	
71	116514	X,CCV,H,S3313,10		Unknown	25.0 MRS	1	
72	116514	X,CCB		Unknown	25.0 MRS	1	
73	116514	188756-009	G	Unknown	25.0 MRS	1	
74	116514	188805-001	H	Unknown	25.0 MRS	1	
75	116514	188756-014	F	Unknown	25.0 MRS	1	
76	116514	CCV,L,S3313,100		Unknown	25.0 MRS	1	
77	116514	CCB		Unknown	25.0 MRS	1	
78	116593	CCV,L,S3313,100		Unknown	25.0 MRS	1	
79	116593	CCB/MB,QC352648		Unknown	25.0 MRS	1	
80	116593	BS,QC352649,S3313,25		Unknown	25.0 MRS	1	
81	116593	BSD,QC352650,S3313,25		Unknown	25.0 MRS	1	
82	116593	MSS,188837-009	P	Unknown	25.0 MRS	1	
83	116593	188837-005	G	Unknown	25.0 MRS	1	
84	116593	188837-012	M	Unknown	25.0 MRS	1	
85	116593	188837-008	I	Unknown	25.0 MRS	1	
86	116593	188837-010	F	Unknown	25.0 MRS	1	
87	116593	188837-005	G	Unknown	25.0 MRS	1	
88	116593	BLK		Unknown	25.0 MRS	1	
89	116593	CCV,H,S3313,10		Unknown	25.0 MRS	1	
90	116593	CCB		Unknown	25.0 MRS	1	
91	116593	X,CCV,H,S3313,10		Unknown	25.0 MRS	1	
92	116593	X,CCB		Unknown	25.0 MRS	1	
93	116593	MSS,188837-009	P	Unknown	25.0 MRS	1	
94	116593	MS,QC352651,S3313,50		Unknown	25.0 MRS	1	
95	116593	MSD,QC352652,S3313,50		Unknown	25.0 MRS	1	
96	116593	BLK		Unknown	25.0 MRS	1	
97	116593	188837-008	I	Unknown	25.0 MRS	1	
98	116593	188837-010	F	Unknown	25.0 MRS	1	

Sequence: 229
Operator: ic_analyst

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Printed: 8/21/2006 12:38:29 PM

Title: Anions
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006
Timebase: IC3_DX120
#Samples: 105

Created: 8/1/2003 11:03:14 AM by ic_analyst
Last Update: 8/21/2006 12:38:13 PM by ic_analyst

No.	*Batch	Name	Comment	Dil. Factor	Program	Status	Inj. Date/Time	Method
99	116593	188837-005	G	10.0000	IC03-7AN	Finished	8/18/2006 9:40:20 PM	IC03-7AN_CAL
100	116593	BLK		1.0000	IC03-7AN	Finished	8/18/2006 9:57:44 PM	IC03-7AN_CAL
101	116593	CCV,M,S3313,25		1.0000	IC03-7AN	Finished	8/18/2006 10:15:08 PM	IC03-7AN_CAL
102	116593	CCB		1.0000	IC03-7AN	Finished	8/18/2006 10:32:33 PM	IC03-7AN_CAL
103	116593	X,CCV,M,S3313,25		1.0000	IC03-7AN	Finished	8/18/2006 10:49:57 PM	IC03-7AN_CAL
104	116593	X,CCB		1.0000	IC03-7AN	Finished	8/18/2006 11:07:22 PM	IC03-7AN_CAL
105	116593	SHUTDOWN		1.0000	IC03-7AN_OFF	Finished	8/18/2006 11:24:46 PM	IC03-7AN_CAL

Sequence: 229
Operator: ic_analyst

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Printed: 8/21/2006 12:38:29 PM

Title: Anions

Datasource: DGLD4X01_local

Location: IC3_DX120IC03-ANIONS-2006

Timebase: IC3_DX120

#Samples: 105

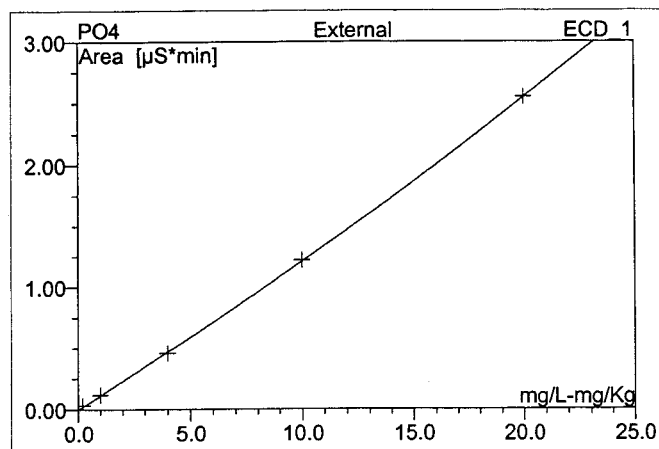
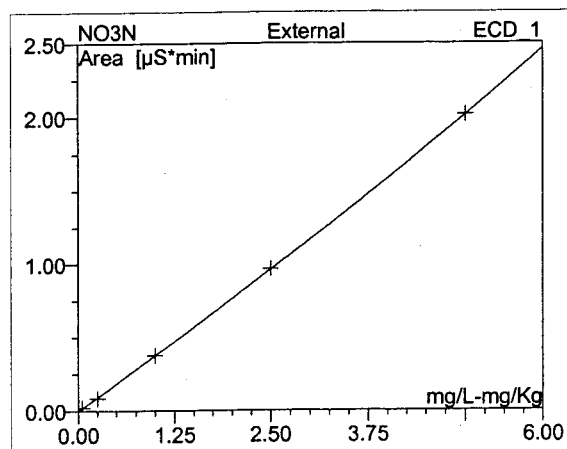
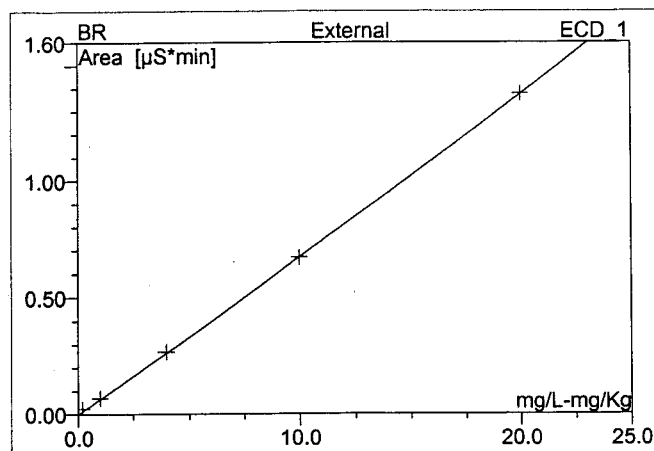
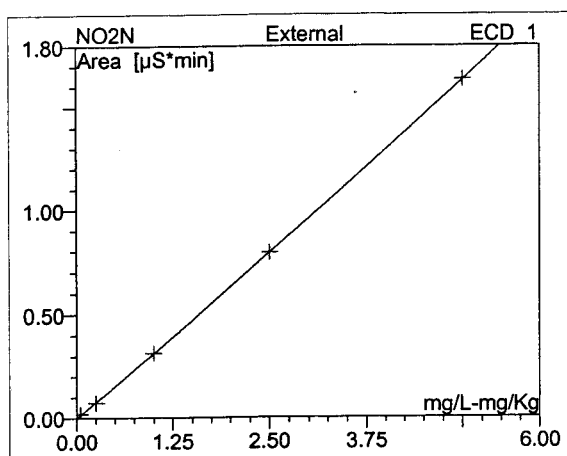
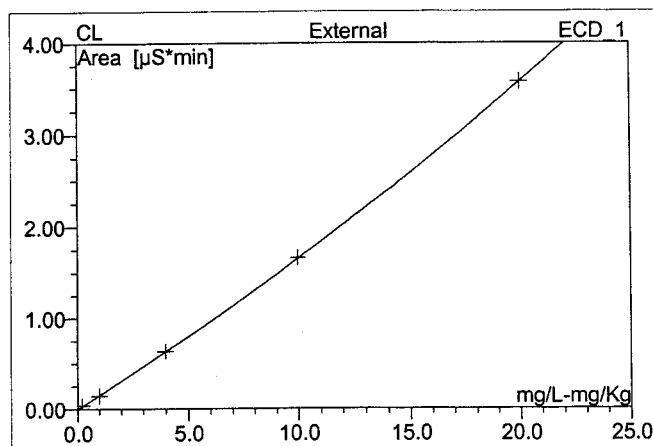
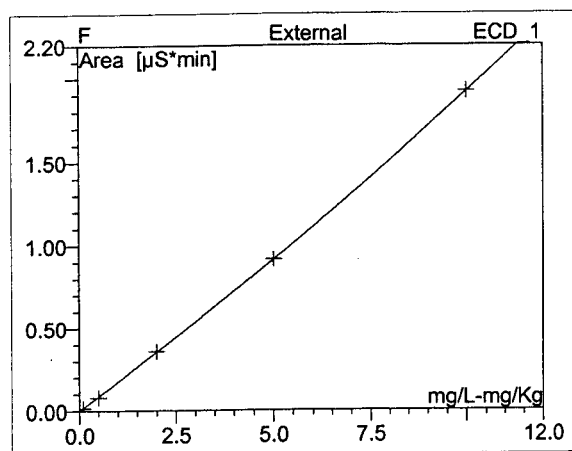
Created: 8/1/2003 11:03:14 AM by ic_analyst
Last Update: 8/21/2006 12:38:13 PM by ic_analyst

No.	*Batch	Name	Comment	Type	Inj. Vol.	*operator	*PDF
99	116593	 188837-005	G	Unknown	25.0 MRS		1
100	116593	 BLK		Unknown	25.0 MRS		1
101	116593	 CCV,M,S3313,25		Unknown	25.0 MRS		1
102	116593	 CCB		Unknown	25.0 MRS		1
103	116593	 X,CCV,M,S3313,25		Unknown	25.0 MRS		1
104	116593	 X,CCB		Unknown	25.0 MRS		1
105	116593	 SHUTDOWN		Unknown	25.0 MRS		1

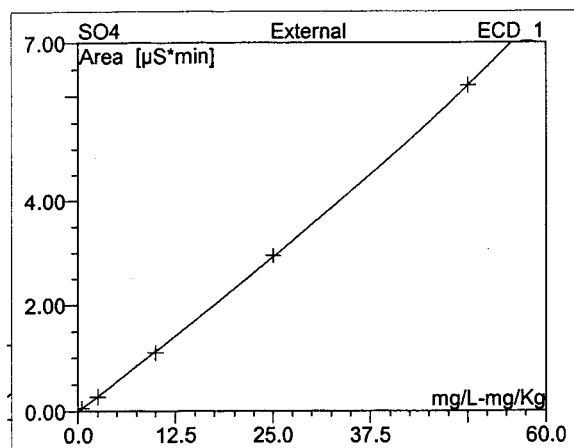
IC03 Calibration Batch Report

Sequence: 229
Program: IC03-7AN
Inl. Date/Time: 08/17/06 15:33

Inj. Vol.: 25.0
Operator: PC_NEWIC
Run Time: 15.00



Sequence:	229	Inj. Vol.:	25.0
Program:	IC03-7AN	Operator:	n.a.
Inj. Date/Time:	08/17/06 15:33	Run Time:	15.00



No.	Ret. Time min	Peak Name	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr.Coeff. %
1	3.027	F	Quad	5	0.000000	0.174064	0.001793	99.974549
2	4.493	CL	Quad	5	0.000000	0.153127	0.001281	99.929476
3	5.340	NO2N	Quad	5	0.000000	0.307949	0.003850	99.987722
4	6.840	BR	Quad	5	0.000000	0.065436	0.000172	99.982031
5	7.707	NO3N	Quad	5	0.000000	0.368022	0.007000	99.976240
6	10.030	PO4	Quad	5	0.000000	0.114893	0.000629	99.959045
7	12.133	SO4	Quad	5	0.000000	0.109518	0.000293	99.956509
AVERAGE:					0.000000	0.184716	0.002145	99.966510

No.	Name	Area $\mu\text{S}\cdot\text{min}$ F ECD 1	Area $\mu\text{S}\cdot\text{min}$ CL ECD 1	Area $\mu\text{S}\cdot\text{min}$ NO2N ECD 1	Area $\mu\text{S}\cdot\text{min}$ BR ECD 1	Area $\mu\text{S}\cdot\text{min}$ NO3N ECD 1	Area $\mu\text{S}\cdot\text{min}$ PO4 ECD 1	Area $\mu\text{S}\cdot\text{min}$ SO4 ECD 1
2	ICAL, L1,S33	0.015239	0.036533	0.017431	0.022616	0.020669	0.033834	0.052315
3	ICAL, L2,S33	0.078978	0.144383	0.072736	0.068926	0.083440	0.117493	0.265659
4	ICAL, L3,S33	0.357537	0.634268	0.313730	0.268063	0.373803	0.456752	1.093531
5	ICAL, L4,S33	0.915410	1.660256	0.793472	0.668224	0.966207	1.219308	2.942806
6	ICAL, L5,S33	1.919788	3.574769	1.636043	1.378013	2.014579	2.548246	6.203955

No.	Name	Height μS F ECD 1	Height μS CL ECD 1	Height μS NO2N ECD 1	Height μS BR ECD 1	Height μS NO3N ECD 1	Height μS PO4 ECD 1	Height μS SO4 ECD 1
2	ICAL, L1,S33	0.096620	0.269740	0.082910	0.084952	0.079450	0.080210	0.138150
3	ICAL, L2,S33	0.449148	1.044038	0.405398	0.314620	0.347972	0.308854	0.732106
4	ICAL, L3,S33	2.052724	4.513930	1.694122	1.257826	1.516334	1.287236	3.087534
5	ICAL, L4,S33	5.881974	12.205264	4.398822	3.222644	4.001614	3.510658	8.321488
6	ICAL, L5,S33	13.415718	26.664738	9.124548	6.763160	8.540492	7.779288	18.193556

No.	Name	Amount mg/L-mg/Kg F ECD 1	Amount mg/L-mg/Kg CL ECD 1	Amount mg/L-mg/Kg NO2N ECD 1	Amount mg/L-mg/Kg BR ECD 1	Amount mg/L-mg/Kg NO3N ECD 1	Amount mg/L-mg/Kg PO4 ECD 1	Amount mg/L-mg/Kg SO4 ECD 1
2	ICAL, L1,S33	0.087471	0.238103	0.056564	0.345304	0.056104	0.294007	0.477076
3	ICAL, L2,S33	0.451631	0.935572	0.235501	1.050430	0.225757	1.016971	2.410169
4	ICAL, L3,S33	2.012349	4.007714	1.006117	4.053465	0.996809	3.892471	9.731655
5	ICAL, L4,S33	5.001403	10.004847	2.498586	9.952166	2.505958	10.058386	25.175461
6	ICAL, L5,S33	9.999355	19.998813	5.000143	20.009285	4.998791	19.990349	49.969842

8/21/06

Method File: IC03-7AN_CAL
Operator: ic_analyst

Printed: 8/21/2006 12:43:37 PM

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006\229.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON
Last Update: 8/7/2006 3:54:14 PM by ic_analyst

Blank Run Subtraction: No Blank Run Subtraction

Detection Table:

No.	Ret. Time [min]	Param. Name	Param. Value	Channel
1	0.000	Inhibit Integration	On	ECD_1
2	2.250	Sensitivity	0.001 "[Signal]"	ECD_1
3	2.250	Minimum Area	0.001 "[Signal]*min"	ECD_1
4	2.250	Peak Slice	0.50 s	ECD_1
5	2.500	Inhibit Integration	Off	ECD_1

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 2 of 6
Printed: 8/21/2006 12:43:37 PM

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPkin
Location: IC3_DX120\IC03-ANIONS-2006\229.SEQ Last Update: 8/7/2006 3:54:14 PM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off
Dead time:
Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Window	Standard	Int.Type	Cal.Type	Peak Type	Group	Amount	
									ICAL, L1,S3313,500	ICAL, L2,S3313,100
1	F	3.000 min	5.000 RG	External	Area	Quad	Auto		0.100000	0.500000
2	CL	4.440 min	5.000 RG	External	Area	Quad	Auto		0.200000	1.000000
3	NO2N	5.267 min	5.000 RG	External	Area	Quad	Auto		0.050000	0.250000
4	BR	6.713 min	5.000 RG	External	Area	Quad	Auto		0.200000	1.000000
5	NO3N	7.560 min	10.000 RG	External	Area	Quad	Auto		0.050000	0.250000
6	PO4	9.993 min	10.000 RG	External	Area	Quad	Auto		0.200000	1.000000
7	SO4	12.113 min	10.000 RG	External	Area	Quad	Auto		0.500000	2.500000

Method File: IC03-7AN_CAL
Operator: ic_analyst

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Printed: 8/21/2006 12:43:37 PM

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006\229.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON
Last Update: 8/7/2006 3:54:14 PM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off
Dead time:
Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Amount	Amount	Amount	Comment
			ICAL, L3,S3313,25	ICAL, L4,S3313,10	ICAL, L5,S3313,5	
1	F	3.000 min	2.000000	5.000000	10.000000	
2	CL	4.440 min	4.000000	10.000000	20.000000	
3	NO2N	5.267 min	1.000000	2.500000	5.000000	
4	BR	6.713 min	4.000000	10.000000	20.000000	
5	NO3N	7.560 min	1.000000	2.500000	5.000000	
6	PO4	9.993 min	4.000000	10.000000	20.000000	
7	SO4	12.113 min	10.000000	25.000000	50.000000	

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 4 of 6
Printed: 8/21/2006 12:43:37 PM

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON
Location: IC3_DX120IC03-ANIONS-2006\229.SEQ Last Update: 8/7/2006 3:54:14 PM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg
Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Resp.Fact.	Amount	Amount	Amount	Amount
				ICAL, L1,S3313,500	ICAL, L2,S3313,100	ICAL, L3,S3313,25	ICAL, L4,S3313,10
1	F	3.000 min	1.000000	0.100000	0.500000	2.000000	5.000000
2	CL	4.440 min	1.000000	0.200000	1.000000	4.000000	10.000000
3	NO2N	5.267 min	1.000000	0.050000	0.250000	1.000000	2.500000
4	BR	6.713 min	1.000000	0.200000	1.000000	4.000000	10.000000
5	NO3N	7.560 min	1.000000	0.050000	0.250000	1.000000	2.500000
6	PO4	9.993 min	1.000000	0.200000	1.000000	4.000000	10.000000
7	SO4	12.113 min	1.000000	0.500000	2.500000	10.000000	25.000000

Method File: IC03-7AN_CAL

Operator: ic_analyst

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Printed: 8/21/2006 12:43:37 PM

Title: IC03-7AN_CAL

Datasource: DGLD4X01_local

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON

Location: IC3_DX120\IC03-ANIONS-2006\229.SEQ

Last Update: 8/7/2006 3:54:14 PM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg

Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Amount	Comment
			ICAL, L5,S3313,5	
1	F	3.000 min	10.000000	
2	CL	4.440 min	20.000000	
3	NO2N	5.267 min	5.000000	
4	BR	6.713 min	20.000000	
5	NO3N	7.560 min	5.000000	
6	PO4	9.993 min	20.000000	
7	SO4	12.113 min	50.000000	

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 6 of 6
Printed: 8/21/2006 12:43:38 PM

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006\229.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON
Last Update: 8/7/2006 3:54:14 PM by ic_analyst

Calibration:

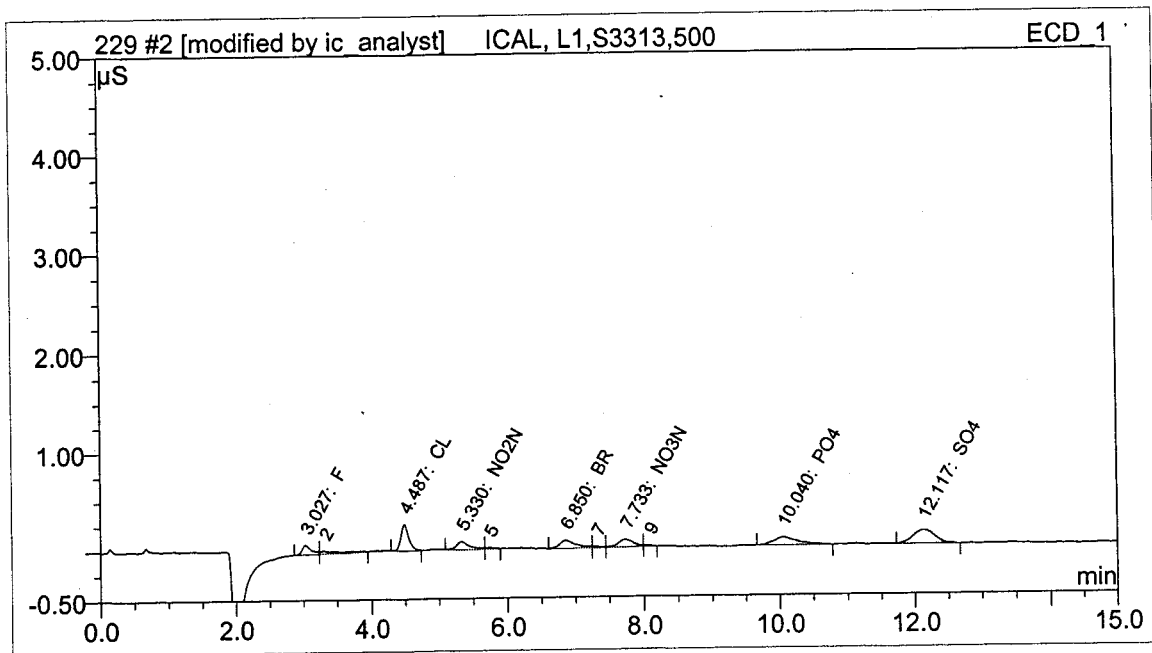
Calibration Mode: Total
Auto Recalibrate: On

No.	Enabled	Name	Smp.No.	Pos.	Inj. Vol.	Weight	ISTD Amount	Dil. Factor	Inj. Date/Time	Calib. Comment
1	☒	 ICAL, L1,S3313,500	2	179	25.0	1.0000	1.0000	1.0000	8/17/2006 2:58:35 PM	Ok
2	☒	 ICAL, L2,S3313,100	3	179	25.0	1.0000	1.0000	1.0000	8/17/2006 3:16:00 PM	Ok
3	☒	 ICAL, L3,S3313,25	4	180	25.0	1.0000	1.0000	1.0000	8/17/2006 3:33:24 PM	Ok
4	☒	 ICAL, L4,S3313,10	5	181	25.0	1.0000	1.0000	1.0000	8/17/2006 3:50:49 PM	Ok
5	☒	 ICAL, L5,S3313,5	6	183	25.0	1.0000	1.0000	1.0000	8/17/2006 4:08:14 PM	Ok

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L1,S3313,500	Sample No.:	2
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 2:58 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S}\cdot\text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.027	0.015239	0.0875	0.0875	
3	CL	4.487	0.036533	0.2381	0.2381	
4	NO2N	5.330	0.017431	0.0566	0.0566	
6	BR	6.850	0.022616	0.3453	0.3453	
8	NO3N	7.733	0.020669	0.0561	0.0561	
10	PO4	10.040	0.033834	0.2940	0.2940	
11	SO4	12.117	0.052315	0.4771	0.4771	



ANALYZED BY:

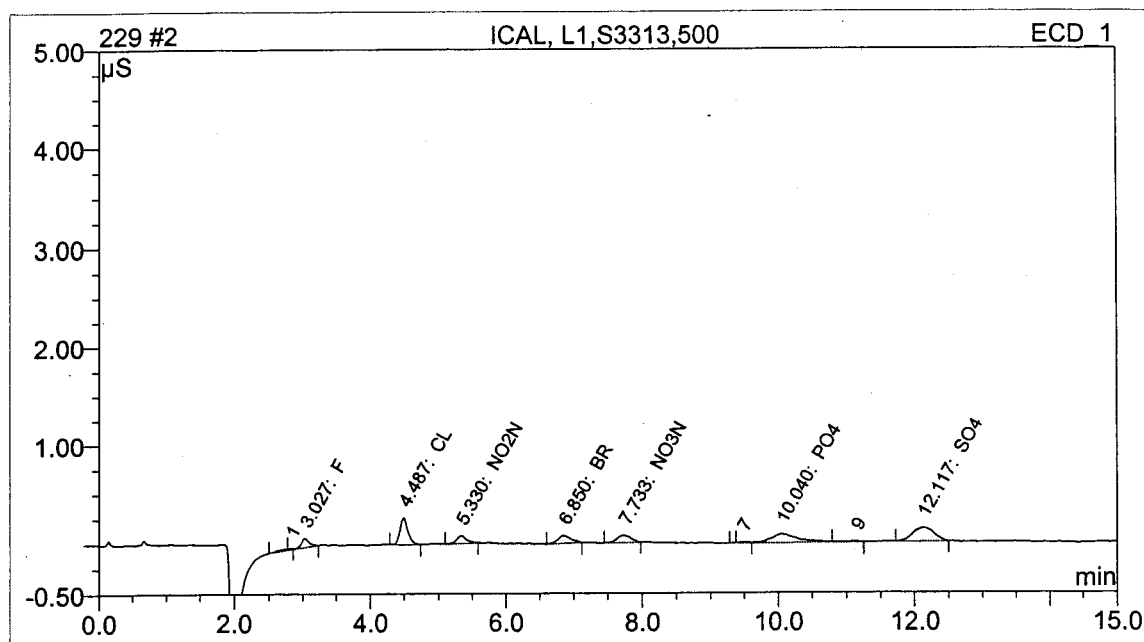
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L1,S3313,500	Sample No.:	2
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 2:58 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
2	F	3.027	0.015901	0.0913	0.0913	
3	CL	4.487	0.036533	0.2381	0.2381	
4	NO2N	5.330	0.013472	0.0437	0.0437	
5	BR	6.850	0.017308	0.2644	0.2644	
6	NO3N	7.733	0.016920	0.0459	0.0459	
8	PO4	10.040	0.041841	0.3633	0.3633	
10	SO4	12.117	0.048316	0.4407	0.4407	



ANALYZED BY:

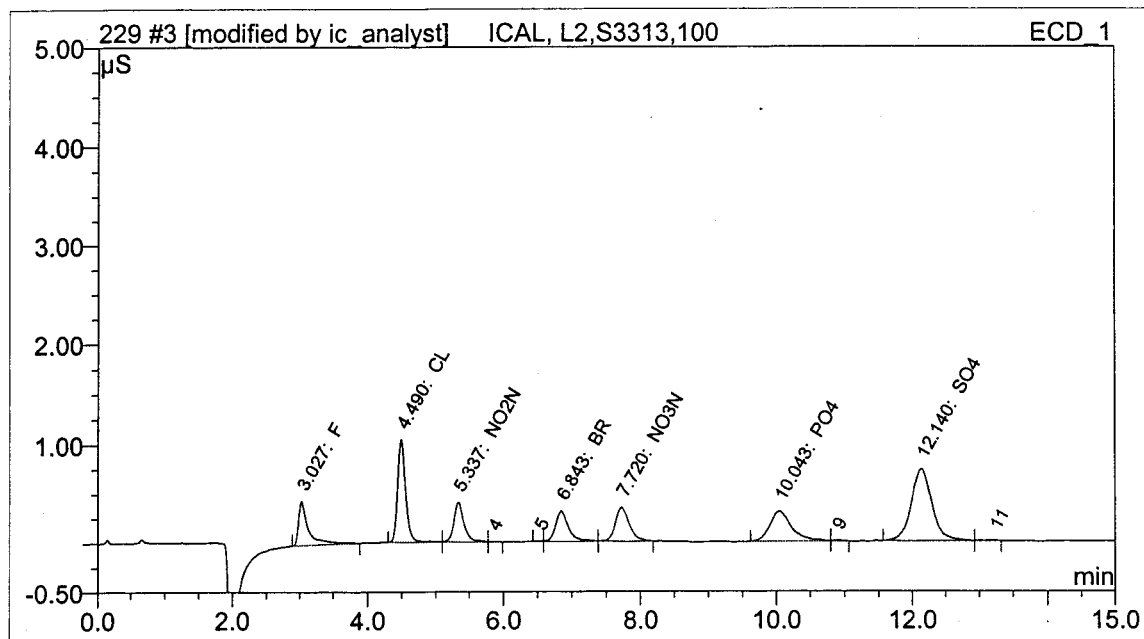
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L2,S3313,100	Sample No.:	3
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 3:16 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.027	0.078978	0.4516	0.4516	
2	CL	4.490	0.144383	0.9356	0.9356	
3	NO2N	5.337	0.072736	0.2355	0.2355	
6	BR	6.843	0.068926	1.0504	1.0504	
7	NO3N	7.720	0.083440	0.2258	0.2258	
8	PO4	10.043	0.117493	1.0170	1.0170	
10	SO4	12.140	0.265659	2.4102	2.4102	



ANALYZED BY:

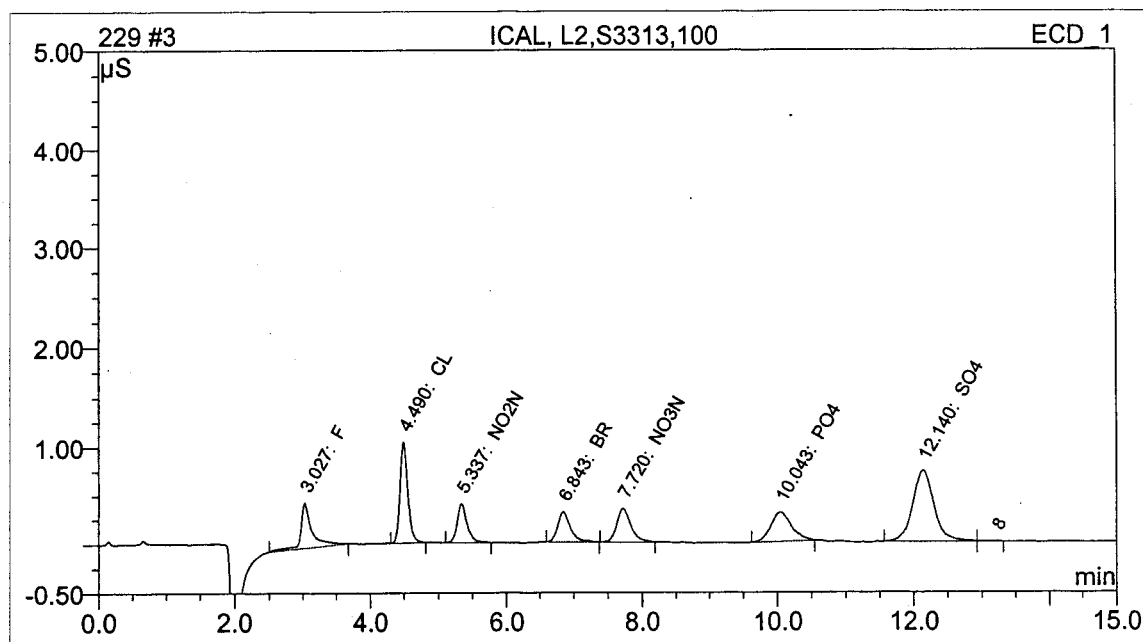
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L2,S3313,100	Sample No.:	3
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 3:16 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.027	0.089671	0.5108	0.5108	
2	CL	4.490	0.139671	0.9060	0.9060	
3	NO2N	5.337	0.070747	0.2292	0.2292	
4	BR	6.843	0.066449	1.0138	1.0138	
5	NO3N	7.720	0.082634	0.2236	0.2236	
6	PO4	10.043	0.105061	0.9125	0.9125	
7	SO4	12.140	0.265659	2.4102	2.4102	



ANALYZED BY:

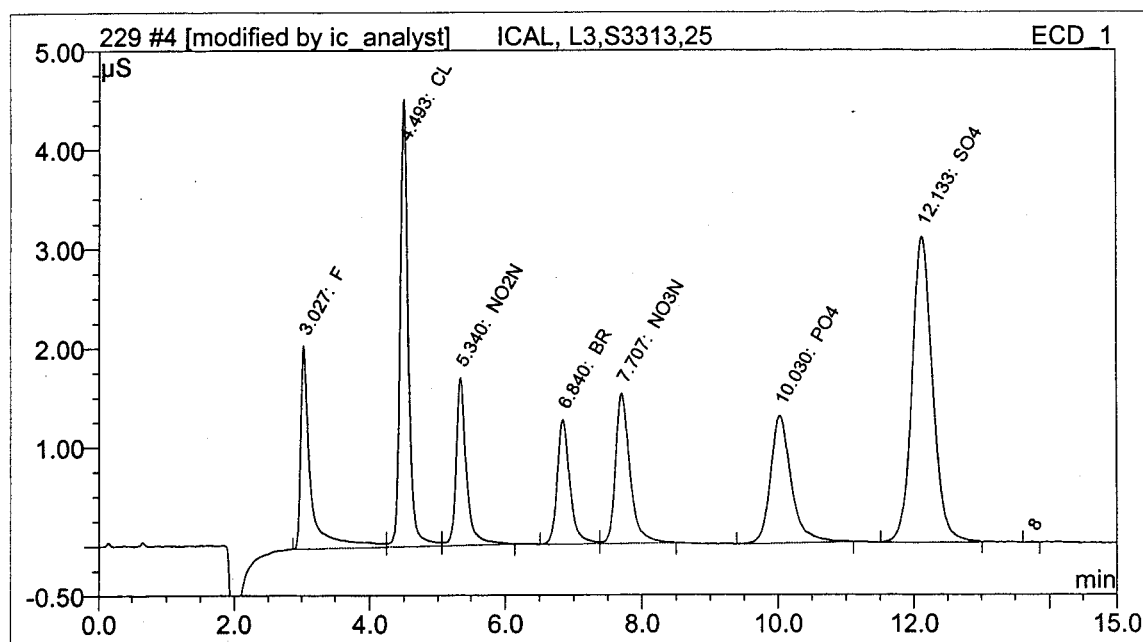
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L3,S3313,25	Sample No.:	4
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 3:33 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.027	0.357537	2.0123	2.0123	
2	CL	4.493	0.634268	4.0077	4.0077	
3	NO2N	5.340	0.313730	1.0061	1.0061	
4	BR	6.840	0.268063	4.0535	4.0535	
5	NO3N	7.707	0.373803	0.9968	0.9968	
6	PO4	10.030	0.456752	3.8925	3.8925	
7	SO4	12.133	1.093531	9.7317	9.7317	



ANALYZED BY:

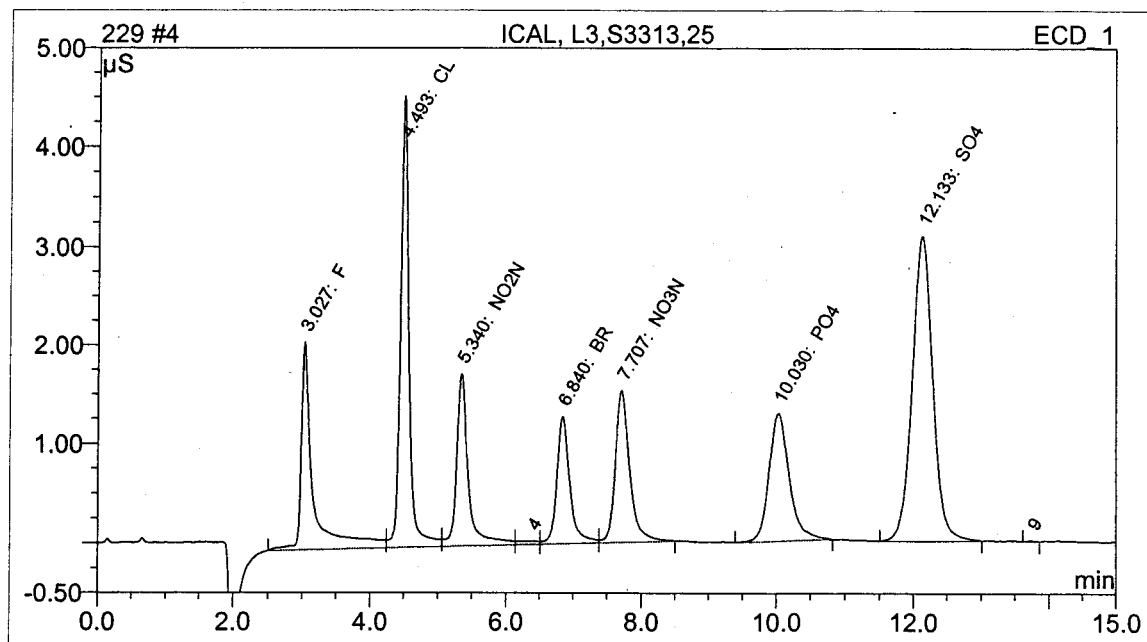
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L3,S3313,25	Sample No.:	4
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 3:33 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.027	0.422952	2.2586	2.2586	
2	CL	4.493	0.664519	4.1377	4.1377	
3	NO2N	5.340	0.350406	1.0865	1.0865	
5	BR	6.840	0.284369	4.2239	4.2239	
6	NO3N	7.707	0.381420	1.0109	1.0109	
7	PO4	10.030	0.444092	3.8163	3.8163	
8	SO4	12.133	1.093531	9.7317	9.7317	



ANALYZED BY:

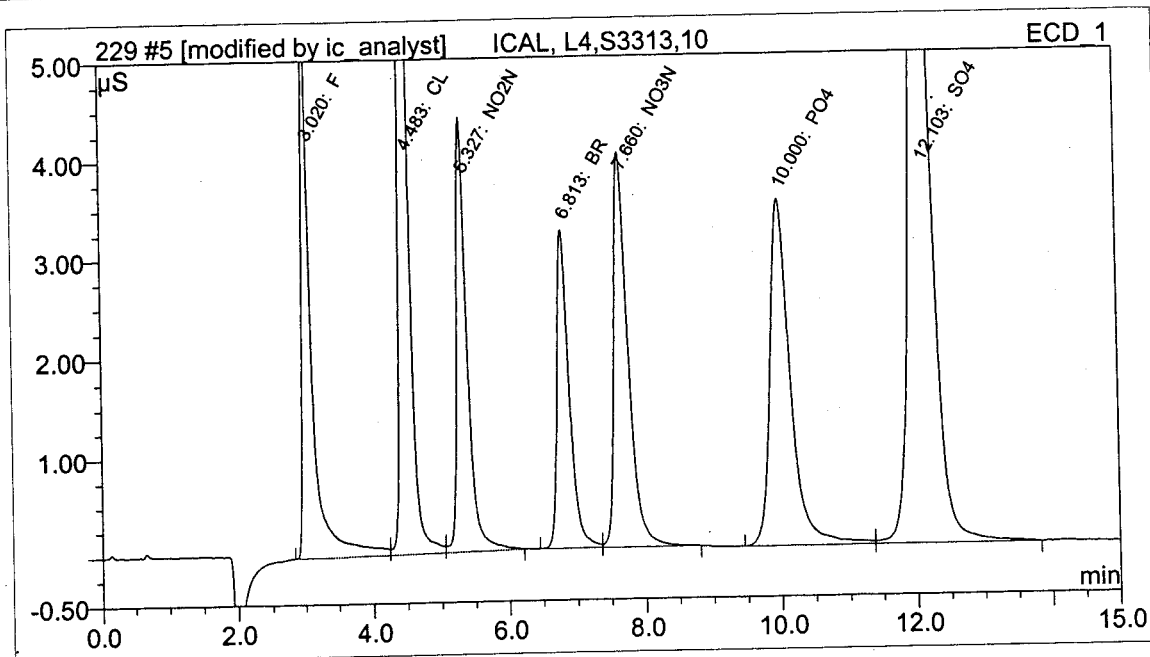
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L4,S3313,10	Sample No.:	5
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 3:50 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.020	0.915410	5.0014	5.0014	
2	CL	4.483	1.660256	10.0048	10.0048	
3	NO2N	5.327	0.793472	2.4986	2.4986	
4	BR	6.813	0.668224	9.9522	9.9522	
5	NO3N	7.660	0.966207	2.5060	2.5060	
6	PO4	10.000	1.219308	10.0584	10.0584	
7	SO4	12.103	2.942806	25.1755	25.1755	



ANALYZED BY:

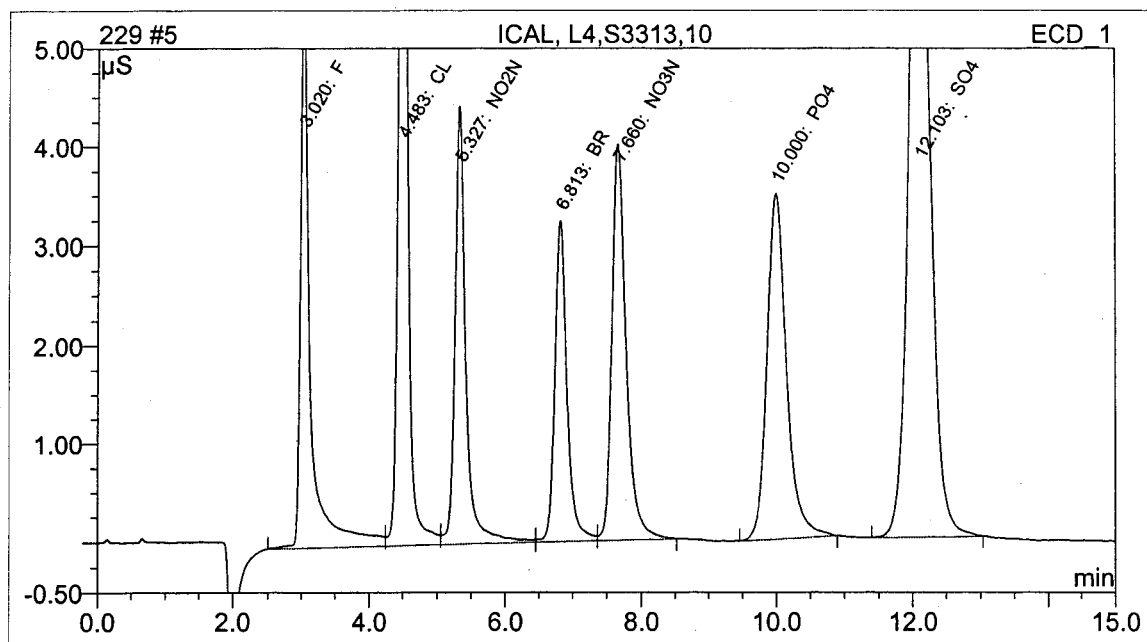
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L4,S3313,10	Sample No.:	5
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 3:50 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.020	0.957720	5.0686	5.0686	
2	CL	4.483	1.682386	10.0427	10.0427	
3	NO2N	5.327	0.832114	2.5346	2.5346	
4	BR	6.813	0.682580	10.0159	10.0159	
5	NO3N	7.660	0.962991	2.5035	2.5035	
6	PO4	10.000	1.163423	9.9243	9.9243	
7	SO4	12.103	2.864991	24.9840	24.9840	



ANALYZED BY:

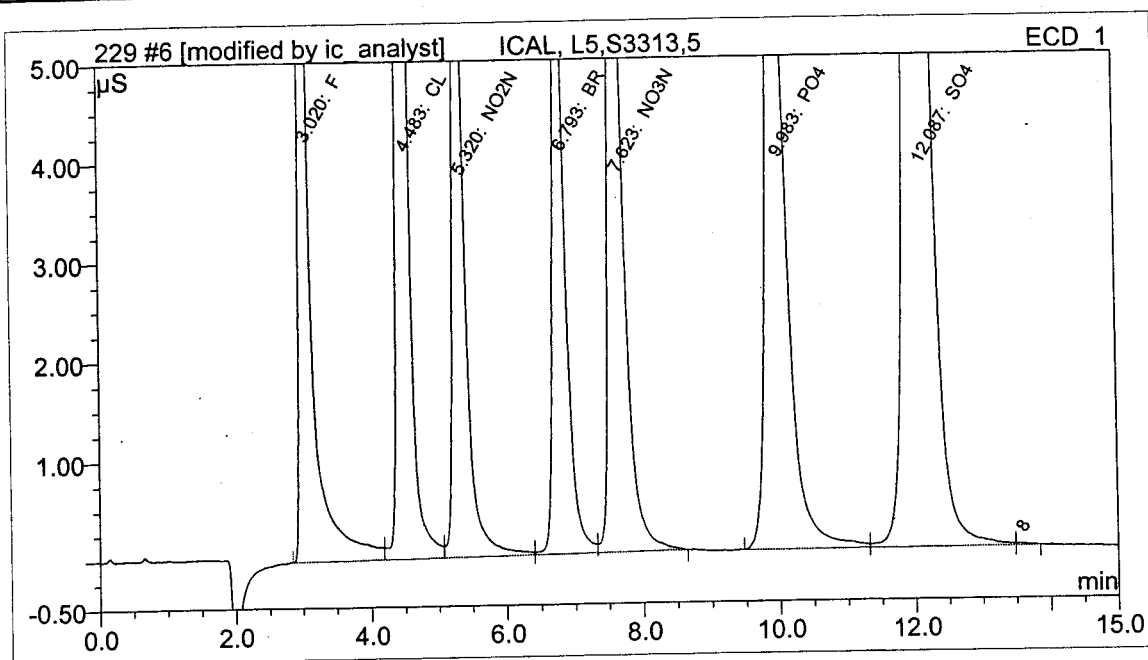
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L5,S3313,5	Sample No.:	6
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 4:08 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.020	1.919788	9.9994	9.9994	
2	CL	4.483	3.574769	19.9988	19.9988	
3	NO2N	5.320	1.636043	5.0001	5.0001	
4	BR	6.793	1.378013	20.0093	20.0093	
5	NO3N	7.623	2.014579	4.9988	4.9988	
6	PO4	9.983	2.548246	19.9903	19.9903	
7	SO4	12.087	6.203955	49.9698	49.9698	



ANALYZED BY:

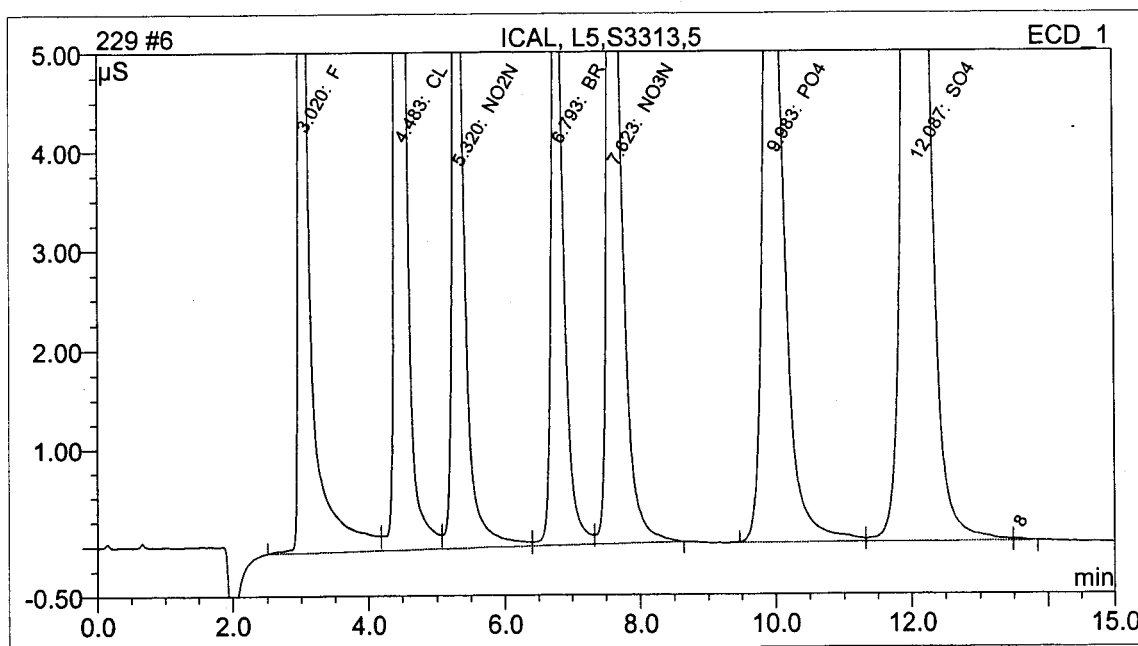
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L5,S3313,5	Sample No.:	6
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 4:08 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S}^*\text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.020	1.967398	10.0018	10.0018	
2	CL	4.483	3.595853	20.0000	20.0000	
3	NO2N	5.320	1.658979	5.0009	5.0009	
4	BR	6.793	1.387672	20.0106	20.0106	
5	NO3N	7.623	2.019742	4.9989	4.9989	
6	PO4	9.983	2.548246	19.9903	19.9903	
7	SO4	12.087	6.203955	49.9698	49.9698	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 300.0

Inst : IC03
Seqnum : 626330641007
Cal : 626330641001
Standards: S3859 (5X)

File : 229_7.000
Caldate: 17-AUG-2006

IDF : 1.0
Time : 17-AUG-2006 16:25

Analyte	Avg		Spiked	Quant	Units	%D	Max	Flags
	RF/CF	RF/CF						
Fluoride	0.1728	0.1635	1.000	0.9303	mg/L	-7	10	
Chloride	0.1661	0.1470	2.000	1.890	mg/L	-6	10	
Nitrogen, Nitrite	0.3196	0.3027	0.5000	0.4885	mg/L	-2	10	
Bromide	0.0769	0.0684	2.000	2.079	mg/L	4	10	
Nitrogen, Nitrate	0.3821	0.3435	0.5000	0.4626	mg/L	-7	10	
Orthophosphate (as P)	0.1300	0.1149	2.000	1.979	mg/L	-1	10	
Sulfate	0.1124	0.1058	5.000	4.771	mg/L	-5	10	

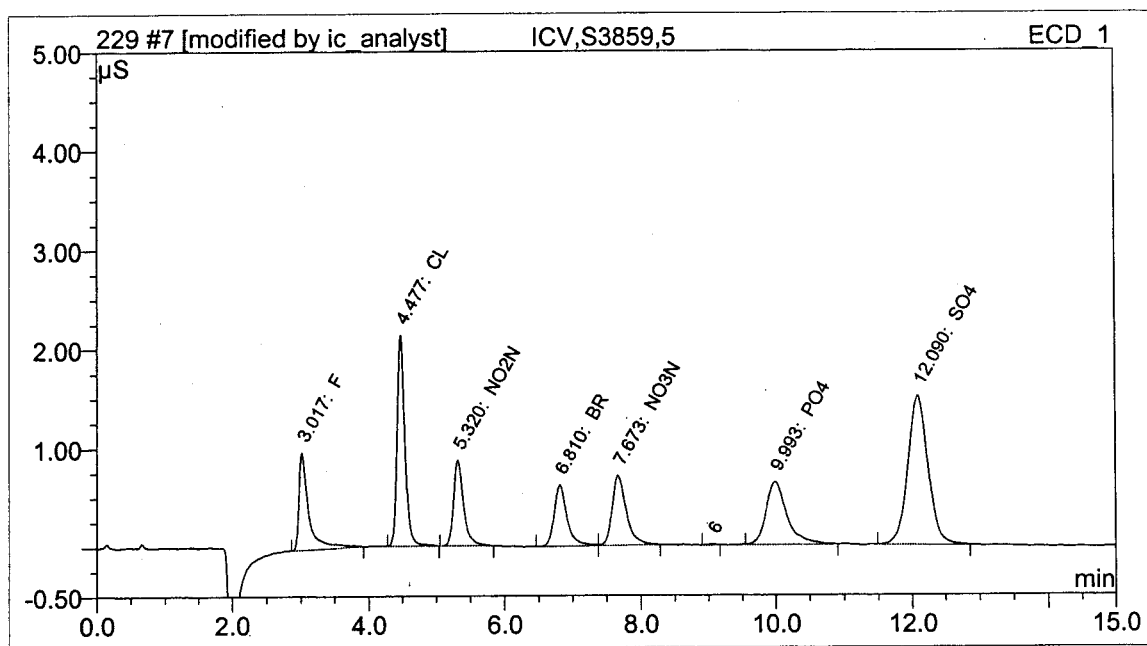
mes 8/21/06

mes 8/21/06

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICV,S3859,5	Sample No.:	7
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 4:25 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.017	0.163489	0.9303	0.9303	
2	CL	4.477	0.293909	1.8895	1.8895	
3	NO2N	5.320	0.151338	0.4885	0.4885	
4	BR	6.810	0.136799	2.0792	2.0792	
5	NO3N	7.673	0.171761	0.4626	0.4626	
7	PO4	9.993	0.229886	1.9794	1.9794	
8	SO4	12.090	0.529192	4.7711	4.7711	



ANALYZED BY:

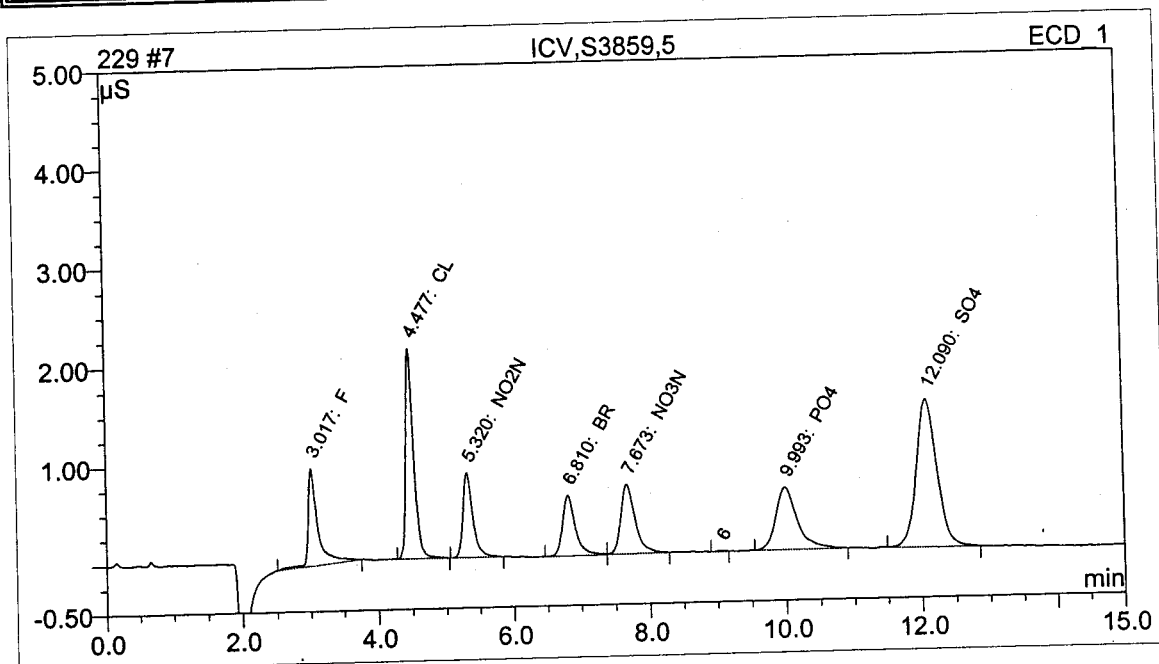
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICV,S3859,5	Sample No.:	7
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 4:25 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.017	0.168917	0.9609	0.9609	
2	CL	4.477	0.293909	1.8895	1.8895	
3	NO2N	5.320	0.151338	0.4885	0.4885	
4	BR	6.810	0.136799	2.0792	2.0792	
5	NO3N	7.673	0.171761	0.4626	0.4626	
7	PO4	9.993	0.229886	1.9794	1.9794	
8	SO4	12.090	0.529192	4.7711	4.7711	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC03
Seqnum : 626330641008
Cal : 626330641001

File : 229_8.000
Caldate: 17-AUG-2006

IDF : 1.0
Time : 17-AUG-2006 16:43

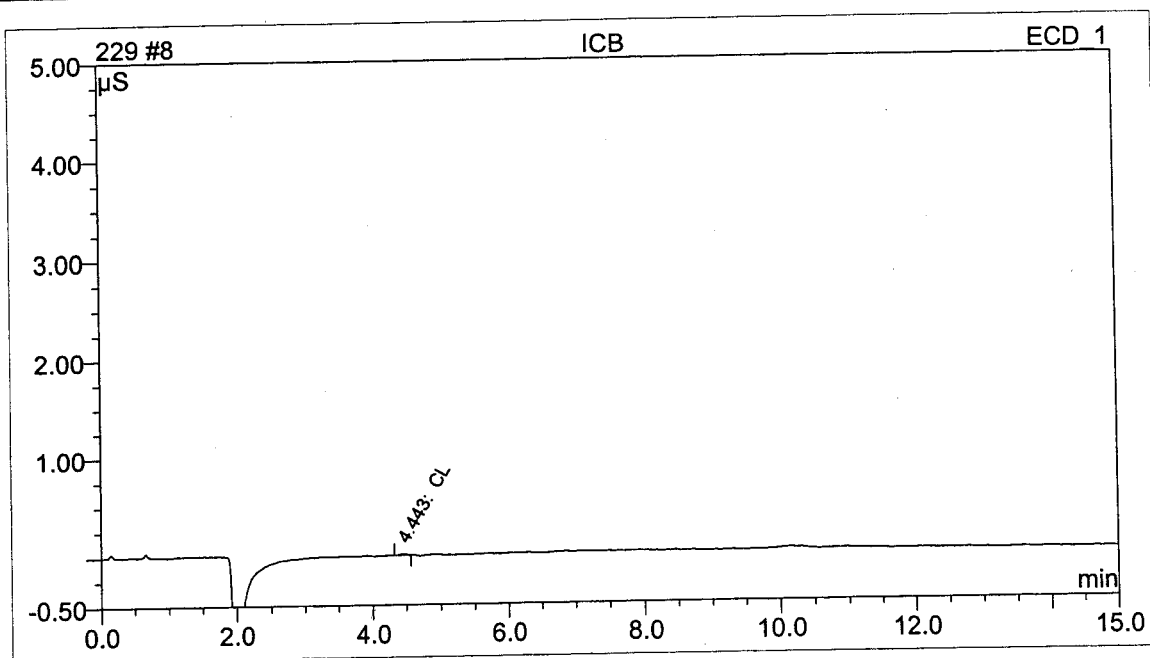
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Bromide	ND	0.2000	0.02767	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Orthophosphate (as P)	ND	0.2000	0.03686	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

MCS 8/21/06

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICB	Sample No.:	8
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 4:43 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
1	CL	4.443	0.001550	0.0101	0.0101	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
n.a.	PO4	n.a.	n.a.	n.a.	n.a.	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC03
Seqnum : 626330641001
Cal : 626316153001

File : 229_1.000
Caldate: 07-AUG-2006

IDF : 1.0
Time : 17-AUG-2006 14:41

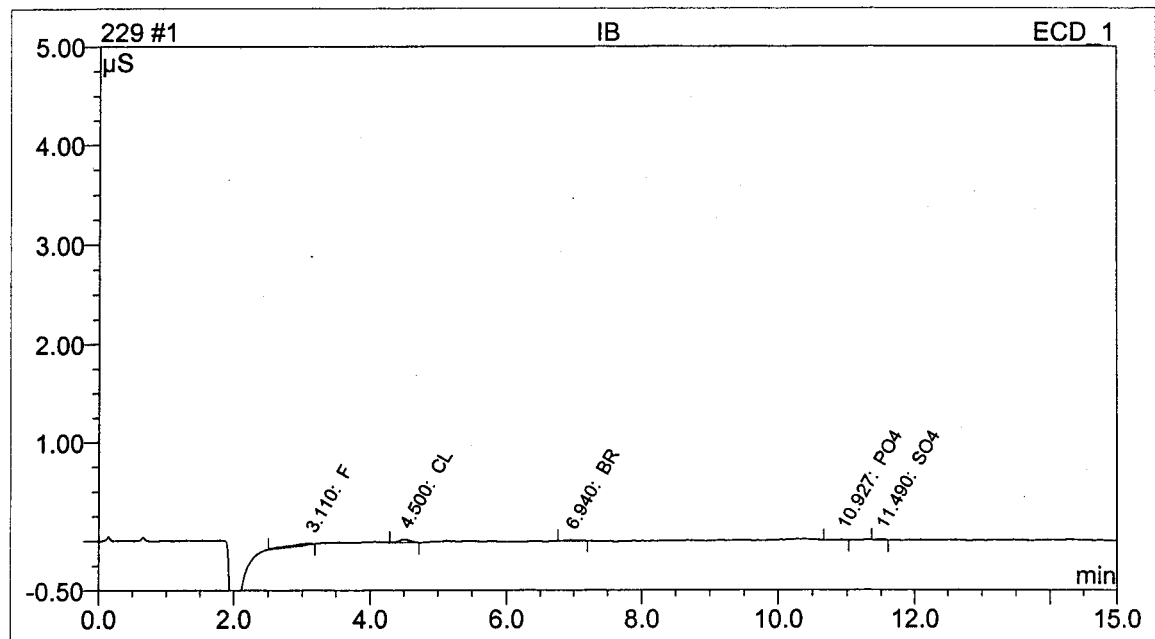
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	[0.04414]	0.1000	0.02324	mg/L	
Chloride	[0.04417]	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Bromide	[0.04290]	0.2000	0.02767	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Orthophosphate (as P)	ND	0.2000	0.03686	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

MAS 8/21/06

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	IB	Sample No.:	1
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 2:41 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.110	0.008364	0.0480	0.0480	
2	CL	4.500	0.006623	0.0432	0.0432	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
3	BR	6.940	0.002657	0.0406	0.0406	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
4	PO4	10.927	0.001547	0.0135	0.0135	
5	SO4	11.490	0.001193	0.0109	0.0109	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

CONTINUING CALIBRATION SUMMARY FOR 188802 IC Water
Curtis & Tompkins Laboratories

Analyte: Fluoride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D	Max	%D	Flags
						RF/CF	RF/CF							
IC03	P	626330641009	17-AUG-2006 17:00	626330641001	17-AUG-2006	0.1728	0.1601	0.5000	0.4578	mg/L	-8	10		
IC03	P	626330641023	17-AUG-2006 21:04	626330641001	17-AUG-2006	0.1728	0.1841	2.0000	2.0717	mg/L	4	10		
IC03	P	626330641038	18-AUG-2006 01:25	626330641001	17-AUG-2006	0.1728	0.1821	5.0000	4.9769	mg/L	0	10		
IC03	P	626330641054	18-AUG-2006 06:03	626330641001	17-AUG-2006	0.1728	0.1837	2.0000	2.0672	mg/L	3	10		

CONTINUING CALIBRATION SUMMARY FOR 188802 IC Water
Curtis & Tompkins Laboratories

Analyte: Chloride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D	Max	%D	Flags
						RF/CF	RF/CF							
IC03	P	626330641009	17-AUG-2006 17:00	626330641001	17-AUG-2006	0.1661	0.1475	1.0000	0.9557	mg/L	-4	10		
IC03	P	626330641023	17-AUG-2006 21:04	626330641001	17-AUG-2006	0.1661	0.1593	4.0000	4.0245	mg/L	1	10		
IC03	P	626330641038	18-AUG-2006 01:25	626330641001	17-AUG-2006	0.1661	0.1636	10.000	9.8672	mg/L	-1	10		
IC03	P	626330641054	18-AUG-2006 06:03	626330641001	17-AUG-2006	0.1661	0.1578	4.0000	3.9898	mg/L	0	10		
IC03	P	626330641069	18-AUG-2006 10:25	626330641001	17-AUG-2006	0.1661	0.1621	10.000	9.7844	mg/L	-2	10		

CONTINUING CALIBRATION SUMMARY FOR 188802 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrite

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D Flags
						RF/CF	RF/CF					
IC03	P	626330641009	17-AUG-2006 17:00	626330641001	17-AUG-2006	0.3196	0.2920	0.2500	0.2364	mg/L	-5	10
IC03	P	626330641023	17-AUG-2006 21:04	626330641001	17-AUG-2006	0.3196	0.3076	1.0000	0.9868	mg/L	-1	10
IC03	P	626330641038	18-AUG-2006 01:25	626330641001	17-AUG-2006	0.3196	0.3118	2.5000	2.4561	mg/L	-2	10
IC03	P	626330641054	18-AUG-2006 06:03	626330641001	17-AUG-2006	0.3196	0.3078	1.0000	0.9873	mg/L	-1	10

CONTINUING CALIBRATION SUMMARY FOR 188802 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D	Flags
						RF/CF	RF/CF						
IC03	P	626330641009	17-AUG-2006 17:00	626330641001	17-AUG-2006	0.3821	0.3353	0.2500	0.2268	mg/L	-9	10	
IC03	P	626330641023	17-AUG-2006 21:04	626330641001	17-AUG-2006	0.3821	0.3638	1.0000	0.9705	mg/L	-3	10	
IC03	P	626330641038	18-AUG-2006 01:25	626330641001	17-AUG-2006	0.3821	0.3808	2.5000	2.4709	mg/L	-1	10	
IC03	P	626330641054	18-AUG-2006 06:03	626330641001	17-AUG-2006	0.3821	0.3663	1.0000	0.9772	mg/L	-2	10	
IC03	P	626330641069	18-AUG-2006 10:25	626330641001	17-AUG-2006	0.3821	0.3759	2.5000	2.4402	mg/L	-2	10	

CONTINUING CALIBRATION SUMMARY FOR 188802 IC Water
Curtis & Tompkins Laboratories

Analyte: Sulfate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	#D	Max	#D	Flags
						RF/CF	RF/CF							
IC03	P	626330641009	17-AUG-2006 17:00	626330641001	17-AUG-2006	0.1124	0.1017	2.5000	2.3074	mg/L	-8	10		
IC03	P	626330641023	17-AUG-2006 21:04	626330641001	17-AUG-2006	0.1124	0.1093	10.000	9.7278	mg/L	-3	10		
IC03	P	626330641038	18-AUG-2006 01:25	626330641001	17-AUG-2006	0.1124	0.1146	25.000	24.539	mg/L	-2	10		
IC03	P	626330641054	18-AUG-2006 06:03	626330641001	17-AUG-2006	0.1124	0.1097	10.000	9.7589	mg/L	-2	10		
IC03	P	626330641069	18-AUG-2006 10:25	626330641001	17-AUG-2006	0.1124	0.1156	25.000	24.745	mg/L	-1	10		

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 188802 IC Water
EPA 300.0

Inst : IC03		IDF : 1.0
Seqnum : 626330641024	File : 229_24.000	Time : 17-AUG-2006 21:21
Cal : 626330641001	Caldate: 17-AUG-2006	

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	[0.03325]	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 188802 IC Water
EPA 300.0

Inst : IC03
Seqnum : 626330641039
Cal : 626330641001
File : 229_39.000
Caldate: 17-AUG-2006
IDF : 1.0
Time : 18-AUG-2006 01:42

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	[0.03554]	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 188802 IC Water
EPA 300.0

Inst : IC03
Seqnum : 626330641055
Cal : 626330641001

File : 229_55.000
Caldate: 17-AUG-2006

IDF : 1.0
Time : 18-AUG-2006 06:21

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 188802 IC Water
EPA 300.0

Inst : IC03
Seqnum : 626330641070
Cal : 626330641001
File : 229_70.000
Caldate: 17-AUG-2006
IDF : 1.0
Time : 18-AUG-2006 10:42

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

SEQUENCE SUMMARY FOR 188802 IC Water
Curtis & Tompkins Laboratories

Sequence: 626330641 Instrument: IC03
Analytical Method: EPA 300.0

Ion Chromatograph
SOP Version: ANIONS_300_rv6

Begun: 17-AUG-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds Used	>LR
001	229_1.00	IB				17-AUG-2006	14:41	1.0		25				
002	229_2.00	ICAL	L1			17-AUG-2006	14:58	1.0				1		
003	229_3.00	ICAL	L2			17-AUG-2006	15:16	1.0				1		
004	229_4.00	ICAL	L3			17-AUG-2006	15:33	1.0				1		
005	229_5.00	ICAL	L4			17-AUG-2006	15:50	1.0				1		
006	229_6.00	ICAL	L5			17-AUG-2006	16:08	1.0				1		
007	229_7.00	ICV				17-AUG-2006	16:25	1.0		25				
008	229_8.00	ICB				17-AUG-2006	16:43	1.0		25				
009	229_9.00	CCV	L			17-AUG-2006	17:00	1.0		25		1		
010	229_10.0	CCB/MB	QC352330	116514	Water	17-AUG-2006	17:17	1.0		25				
011	229_11.0	MSS	188802-001	116514	Water	17-AUG-2006	17:35	100.0		25				
012	229_12.0	SAMPLE	188802-017	116514	Water	17-AUG-2006	17:52	100.0		25				
013	229_13.0	SAMPLE	188802-018	116514	Water	17-AUG-2006	18:10	50.0		25				
014	229_14.0	MS	QC352333	116514	Water	17-AUG-2006	18:27	200.0		25		1		
015	229_15.0	MSD	QC352334	116514	Water	17-AUG-2006	18:44	200.0		25		1		
016	229_16.0	MSS	188802-001	116514	Water	17-AUG-2006	19:02	2.0		25				746
017	229_17.0	X	BLK	116514		17-AUG-2006	19:19	1.0						
018	229_18.0	MSS	188802-001	116514	Water	17-AUG-2006	19:37	1.0		25				
019	229_19.0	X	BLK	116514		17-AUG-2006	19:54	1.0						
020	229_20.0	X	BLK	116514		17-AUG-2006	20:12	1.0						
021	229_21.0	BS	QC352331	116514	Water	17-AUG-2006	20:29	1.0		25		1		
022	229_22.0	BSD	QC352332	116514	Water	17-AUG-2006	20:46	1.0		25		1		
023	229_23.0	CCV	M	116514		17-AUG-2006	21:04	1.0		25		1		
024	229_24.0	CCB		116514		17-AUG-2006	21:21	1.0						
025	229_25.0	X	CCV	116514		17-AUG-2006	21:39	1.0		25				
026	229_26.0	X	CCB	116514		17-AUG-2006	21:56	1.0				1		
027	229_27.0	SAMPLE	188802-002	116514	Water	17-AUG-2006	22:13	1.0	1	25			1:CL=62.6637	
028	229_28.0	X	BLK	116514		17-AUG-2006	22:31	1.0						
029	229_29.0	SAMPLE	188802-003	116514	Water	17-AUG-2006	22:48	1.0	2	25			2:SO4=102.746	
030	229_30.0	SAMPLE	188802-004	116514	Water	17-AUG-2006	23:06	1.0	3	25			3:SO4=153.230	
031	229_31.0	SAMPLE	188802-005	116514	Water	17-AUG-2006	23:23	1.0	2	25			2:SO4=112.745	

Stds used: 1=S3313 2=S3859

SEQUENCE SUMMARY FOR 188802 IC Water
Curtis & Tompkins Laboratories

Sequence: 626330641 Instrument: IC03
Analytical Method: EPA 300.0

Ion Chromatograph
SOP Version: ANIONS_300_rv6

Begun: 17-AUG-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
032	229_32.0	SAMPLE	188802-006	116514	Water	17-AUG-2006 23:40	1.0	2		25					2:CL=119.045
033	229_33.0	SAMPLE	188802-008	116514	Water	17-AUG-2006 23:58	1.0	2		25					2:SO4=102.547
034	229_34.0	SAMPLE	188802-010	116514	Water	18-AUG-2006 00:15	1.0	2		25					2:SO4=102.188
035	229_35.0	SAMPLE	188802-012	116514	Water	18-AUG-2006 00:33	1.0	1		25					1:CL=85.6712
036	229_36.0	SAMPLE	188802-013	116514	Water	18-AUG-2006 00:50	1.0	1		25					1:CL=123.553
037	229_37.0	SAMPLE	188802-009	116514	Water	18-AUG-2006 01:08	1.0	1		25					1:CL=49.8349
038	229_38.0	CCV	H	116514		18-AUG-2006 01:25	1.0			25					
039	229_39.0	CCB		116514		18-AUG-2006 01:42	1.0			25					
040	229_40.0	X	CCV	116514		18-AUG-2006 02:00	1.0								
041	229_41.0	X	CCB	116514		18-AUG-2006 02:17	1.0								
042	229_42.0	SAMPLE	188802-015	116514	Water	18-AUG-2006 02:35	1.0			25					
043	229_43.0	SAMPLE	188802-014	116514	Water	18-AUG-2006 02:52	1.0	3		25					3:SO4=73.1736
044	229_44.0	SAMPLE	188802-020	116514	Water	18-AUG-2006 03:09	1.0	3		25					3:SO4=73.0052
045	229_45.0	SAMPLE	188802-017	116514	Water	18-AUG-2006 03:27	1.0	1		25					1:SO4=306.955
046	229_46.0	X	BLK	116514		18-AUG-2006 03:44	1.0								
047	229_47.0	SAMPLE	188802-018	116514	Water	18-AUG-2006 04:02	1.0	1		25					1:SO4=160.283
048	229_48.0	X	BLK	116514		18-AUG-2006 04:19	1.0								
049	229_49.0	SAMPLE	188802-002	116514	Water	18-AUG-2006 04:36	25.0			25					
050	229_50.0	SAMPLE	188802-003	116514	Water	18-AUG-2006 04:54	25.0			25					
051	229_51.0	SAMPLE	188802-004	116514	Water	18-AUG-2006 05:11	25.0			25					
052	229_52.0	SAMPLE	188802-005	116514	Water	18-AUG-2006 05:29	25.0			25					
053	229_53.0	SAMPLE	188802-006	116514	Water	18-AUG-2006 05:46	25.0			25					
054	229_54.0	CCV	M	116514		18-AUG-2006 06:03	1.0			25					
055	229_55.0	CCB		116514		18-AUG-2006 06:21	1.0			25					
056	229_56.0	X	CCV	116514		18-AUG-2006 06:38	1.0								
057	229_57.0	X	CCB	116514		18-AUG-2006 06:56	1.0								
058	229_58.0	SAMPLE	188802-008	116514	Water	18-AUG-2006 07:13	10.0			25					
059	229_59.0	SAMPLE	188802-009	116514	Water	18-AUG-2006 07:31	25.0			25					
060	229_60.0	SAMPLE	188802-010	116514	Water	18-AUG-2006 07:48	10.0			25					
061	229_61.0	SAMPLE	188802-012	116514	Water	18-AUG-2006 08:05	25.0			25					
062	229_62.0	SAMPLE	188802-013	116514	Water	18-AUG-2006 08:23	25.0			25					

Stds used: 1=S3313 2=S3859

SEQUENCE SUMMARY FOR 188802 IC Water
Curtis & Tompkins Laboratories

Sequence: 626330641 Instrument: IC03
Analytical Method: EPA 300.0

Ion Chromatograph
SOP Version: ANIONS_300_rv6

Begun: 17-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
063	229_63.0	SAMPLE	188802-014	116514	Water	18-AUG-2006	08:40 25.0			25					
064	229_64.0	SAMPLE	188802-020	116514	Water	18-AUG-2006	08:58 10.0			25					
065	229_65.0	SAMPLE	188792-001	116514	Water	18-AUG-2006	09:15 10.0			25					
066	229_66.0	SAMPLE	188792-001	116514	Water	18-AUG-2006	09:32 1.0	2		25					2:SO4=167.993
067	229_67.0	X	BLK	116514		18-AUG-2006	09:50 1.0								
068	229_68.0	SAMPLE	188805-001	116514	Water	18-AUG-2006	10:07 1.0	1		25					2:SO4=388.069
069	229_69.0	CCV	H	116514		18-AUG-2006	10:25 1.0			25					
070	229_70.0	CCB		116514		18-AUG-2006	10:42 1.0			25					
071	229_71.0	X	CCV	116514		18-AUG-2006	10:59 1.0								
072	229_72.0	X	CCB	116514		18-AUG-2006	11:17 1.0								
073	229_73.0	SAMPLE	188756-009	116514	Water	18-AUG-2006	11:34 1.0			25					
074	229_74.0	SAMPLE	188805-001	116514	Water	18-AUG-2006	11:52 25.0			25					
075	229_75.0	SAMPLE	188756-014	116514	Water	18-AUG-2006	12:09 100.0			25					
076	229_76.0	CCV	L	116514		18-AUG-2006	12:26 1.0			25					
077	229_77.0	CCB		116514		18-AUG-2006	12:44 1.0			25					
078	229_78.0	CCV	L	116593		18-AUG-2006	13:01 1.0	2		25					748
079	229_79.0	CCB/MB	QC352648	116593	Water	18-AUG-2006	13:19 1.0	1		25					
080	229_80.0	BS	QC352649	116593	Water	18-AUG-2006	15:52 1.0	2		25					
081	229_81.0	BSD	QC352650	116593	Water	18-AUG-2006	16:09 1.0	2		25					
082	229_82.0	MSS	188837-009	116593	Water	18-AUG-2006	16:38 1.0	3		25					1:CL=48.3396
083	229_83.0	SAMPLE	188837-005	116593	Water	18-AUG-2006	16:57 500.0			25					
084	229_84.0	SAMPLE	188837-012	116593	Water	18-AUG-2006	17:19 1.0			25					
085	229_85.0	SAMPLE	188837-008	116593	Water	18-AUG-2006	17:36 1.0	1		25					1:CL=67.0823
086	229_86.0	SAMPLE	188837-010	116593	Water	18-AUG-2006	17:54 1.0	1		25					1:CL=62.4456
087	229_87.0	SAMPLE	188837-005	116593	Water	18-AUG-2006	18:11 20.0	1		25					1:CL=188.939
088	229_88.0	X	BLK	116593		18-AUG-2006	18:28 1.0								
089	229_89.0	CCV	H	116593		18-AUG-2006	18:46 1.0			25					
090	229_90.0	CCB		116593		18-AUG-2006	19:03 1.0	1		25					
091	229_91.0	X	CCV	116593		18-AUG-2006	19:21 1.0								
092	229_92.0	X	CCB	116593		18-AUG-2006	19:38 1.0								
093	229_93.0	MSS	188837-009	116593	Water	18-AUG-2006	19:55 10.0	1		25					

Stds used: 1=S3313 2=S3859

SEQUENCE SUMMARY FOR 188802 IC Water
Curtis & Tompkins Laboratories

Sequence: 626330641 Instrument: IC03
Analytical Method: EPA 300.0

Ion Chromatograph
SOP Version: ANIONS_300_rv6

Begun: 17-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Std	Used	>LR
094	229_94.0	MS	QC352651	116593	Water	18-AUG-2006 20:13	10.0	1	25				1		
095	229_95.0	MSD	QC352652	116593	Water	18-AUG-2006 20:30	10.0	1	25				1		
096	229_96.0	X	BLK	116593		18-AUG-2006 20:48	1.0								
097	229_97.0	SAMPLE	188837-008	116593	Water	18-AUG-2006 21:05	25.0		25						
098	229_98.0	SAMPLE	188837-010	116593	Water	18-AUG-2006 21:22	25.0		25						
099	229_99.0	SAMPLE	188837-005	116593	Water	18-AUG-2006 21:40	10.0	2	25						2:CL=291.110
100	229_100.	X	BLK	116593		18-AUG-2006 21:57	1.0								
101	229_101.	CCV	M	116593		18-AUG-2006 22:15	1.0		25				1		
102	229_102.	CCB		116593		18-AUG-2006 22:32	1.0		25						
103	229_103.	X	CCV	116593		18-AUG-2006 22:49	1.0						1		
104	229_104.	X	CCB	116593		18-AUG-2006 23:07	1.0								
105	229_105.	X	SHUTDOWN	116593		18-AUG-2006 23:24	1.0								

Std used: 1=S3313 2=S3859



Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 188802 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analized	IDF	F	C	N	N	S
					L	O	O	O
						2	3	4
						N	N	
188802-001	IC03	08/17/06 17:35	100.0		+			
188802-001	IC03	08/17/06 19:02	2.0			+		
188802-001	IC03	08/17/06 19:37	1.0	+			+	+
188802-002	IC03	08/17/06 22:13	1.0	+		+	+	+
188802-002	IC03	08/18/06 04:36	25.0		+			
188802-003	IC03	08/17/06 22:48	1.0	+		+	+	
188802-003	IC03	08/18/06 04:54	25.0		+			+
188802-004	IC03	08/17/06 23:06	1.0	+		+		
188802-004	IC03	08/18/06 05:11	25.0		+		+	+
188802-005	IC03	08/17/06 23:23	1.0	+		+	+	
188802-005	IC03	08/18/06 05:29	25.0		+			+
188802-006	IC03	08/17/06 23:40	1.0	+		+	+	
188802-006	IC03	08/18/06 05:46	25.0		+			+
188802-008	IC03	08/17/06 23:58	1.0	+		+	+	
188802-008	IC03	08/18/06 07:13	10.0		+			+
188802-009	IC03	08/18/06 01:08	1.0	+		+	+	+
188802-009	IC03	08/18/06 07:31	25.0		+			
188802-010	IC03	08/18/06 00:15	1.0	+		+	+	
188802-010	IC03	08/18/06 07:48	10.0		+			+
188802-012	IC03	08/18/06 00:33	1.0	+		+	+	+
188802-012	IC03	08/18/06 08:05	25.0		+			
188802-013	IC03	08/18/06 00:50	1.0	+		+	+	+
188802-013	IC03	08/18/06 08:23	25.0		+			
188802-014	IC03	08/18/06 02:52	1.0	+		+		
188802-014	IC03	08/18/06 08:40	25.0		+		+	+
188802-015	IC03	08/18/06 02:35	1.0	+	+	+	+	+
188802-017	IC03	08/17/06 17:52	100.0		+			+
188802-017	IC03	08/18/06 03:27	1.0	+		+	+	
188802-018	IC03	08/17/06 18:10	50.0		+			+
188802-018	IC03	08/18/06 04:02	1.0	+		+	+	
188802-020	IC03	08/18/06 03:09	1.0	+		+		

REPORTING SUMMARY FOR 188802 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	AnalYZed	IDF	F	C	N	N	S
					L	O	O	O
						2	3	4
						N	N	
188802-020	IC03	08/18/06 08:58	10.0		+		+	+
QC352330	IC03	08/17/06 17:17	1.0	+	+	+	+	+
QC352331	IC03	08/17/06 20:29	1.0	+	+	+	+	+
QC352332	IC03	08/17/06 20:46	1.0	+	+	+	+	+
QC352333	IC03	08/17/06 18:27	200.0	+	+	+	+	+
QC352334	IC03	08/17/06 18:44	200.0	+	+	+	+	+

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 116514
 Date Started: 17-AUG-2006
 Batched by : Micah Smith

Analysis : N/A
 Bgroup : IC
 Department : GC Organics

Sample	Type	Client	Matrix	Analyses	Due Date
188756-009		LFR Levine Fricke	Water	CHLORIDE, SULFATE	21-AUG-2006
188756-014		LFR Levine Fricke	Water	CHLORIDE, SULFATE	21-AUG-2006
188792-001		ERS Corp.	Water	CHLORIDE, NITRATE, SULFATE	29-AUG-2006
188802-001		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	29-AUG-2006
188802-002		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	29-AUG-2006
188802-003		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	29-AUG-2006
188802-004		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	29-AUG-2006
188802-005		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	29-AUG-2006
188802-006		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	29-AUG-2006
188802-008		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	29-AUG-2006
188802-009		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	29-AUG-2006
188802-010		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	29-AUG-2006
188802-012		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	29-AUG-2006
188802-013		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	29-AUG-2006
188802-014		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	29-AUG-2006
188802-015		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	29-AUG-2006
188802-017		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	29-AUG-2006
188802-018		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	29-AUG-2006
188802-020		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	29-AUG-2006
188805-001		Fugro West Inc.	Water	NITRATE, SULFATE	23-AUG-2006
QC352330	BLANK		Water		
QC352331	BS		Water		
QC352332	BSD		Water		
QC352333	MS	of 188802-001	Water		
QC352334	MSD	of 188802-001	Water		

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO₄) EPA 314
☐ Cr6+ EPA 7199

Batch#: 116514
 Date Started: 8/17/06
 Prep Chemist: MRS

BK 2373
 Page 5

	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	188756-009 G	0.01	1X	S	
2	↓ -014 F	4.72	100X	S	
3	188792-001 B	0.89	1X 10X	S	
4	188802-001 V	3.96	100X 2X 1X	S	MSJ
5	↓ -002 F	1.57	1X 25X		
6	↓ -003 B	1.02			
7	↓ -004 B	1.07			
8	↓ -005 H	1.93			
9	↓ -006 H	1.94	↓		
10	↓ -008 E	0.91	10X		
11	↓ -009 I	1.36	25X		
12	↓ -010 E	0.91	10X		
13	↓ -012 I	1.18	25X		
14	↓ -013 I	1.32	25X		
15	↓ -014 ↓	0.82	↓ 10X		
16	↓ -015 ↓	0.03	1X		
17	↓ -017 B	3.55	100X 1X		
18	↓ -018 B	2.29	50X 1X		
19	↓ -020 I	0.81	1X 10X	↓	
20	188805-001 H	1.78	1X 25X	S	
	Blank QC352330	N/A	1X	N/A	
	DS QC352331		↓	↓	
	BSD QC352332				
	MS QC352333 V		200X	S	
	MSD QC352334 V		200X	S	

	Eluent Reagent ID	Mfg & Lot # / Time / Program	Initials / Date
BS/BSD Spiked with	0.2 mL of :	100X M1 8/10/06	MRS 8/17/06
MS/MSD Spiked with	0.1 mL of :	S3313	
Filters Used:	Ag: OnGuard II Ag	S3313	
	Na: OnGuard II Na	N/A	
	P: OnGuard II P		
	RP: OnGuard II RP		
	S: 0.20um/0.45um	Acrodisc lot # A10643613	

MRS 8/17/06
 Extraction Chemist / Date

Continued from page 4
 Continued on page 6

CP 8/21/06
 Reviewed by / Date



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories
MDL Summary for EPA 300.0 Water
As of 09/24/06

Analyte	Units	IC03	IC01
Fluoride	mg/L	0.023	0.0096
Chloride	mg/L	0.032	0.044
Nitrogen, Nitrite	mg/L	0.012	0.0067
Bromide	mg/L	0.028	0.075
Nitrogen, Nitrate	mg/L	0.0088	0.014
Orthophosphate (as P)	mg/L	0.037	0.045
Sulfate	mg/L	0.079	0.046

Sulfide

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Batch#:	116677
Matrix:	Water	Sampled:	08/16/06
Units:	mg/L	Received:	08/17/06
Diln Fac:	1.000	Analyzed:	08/23/06

Field ID	Type	Lab ID	Result	RL
1065PZ5AR	SAMPLE	188802-002	ND	0.04
1065MW101	SAMPLE	188802-009	ND	0.04
1065MW102	SAMPLE	188802-012	0.10	0.04
1065MW9A	SAMPLE	188802-013	ND	0.04
1065MW9B	SAMPLE	188802-014	ND	0.04
1065MW9BRB9A	SAMPLE	188802-015	ND	0.04
DUP0816062A	SAMPLE	188802-020	ND	0.04
	BLANK	QC353015	ND	0.04

Batch QC Report

Sulfide			
Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Diln Fac:	1.000
Field ID:	DUP0816062A	Batch#:	116677
MSS Lab ID:	188802-020	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	mg/L	Analyzed:	08/23/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC353016	<0.04000	0.3025	0.3108	103	75-125		
MSD	QC353017		0.3025	0.3063	101	75-125	1	20
LCS	QC353018		0.4538	0.4397	97	75-125		

RPD= Relative Percent Difference

---) Quantitation Results Report (---

Date : 08-12-2006 ²³
 Time : 12:22:19 8, 23⁰⁶ *per*
 Operator : ~~POW~~ *DA*

File Name : Data not stored yet

Sample Name : sulfide Analytical Wavelength : 626 nm
 Solvent Name : CAL11-15-05 Reference Wavelength : None Selected
 Conc Units : mg/L Confirmation Wavelengths : None Selected
 Dil. Factor : 1.00 Integration Time : 1 seconds

SAMPLE #	Sample Name	Wavelength	Func. Res.	Concentration
1	ICB/MB	Analytical	+0.0000	3.457E-05
2	ICV/LCS	Analytical	+0.1750	0.39662
3	188786-1	Analytical	+0.0200	0.04526
4	188786-2	Analytical	+0.0089	0.02026
5	188786-3X2	Analytical	+0.5493	1.24458
6	188786-4	Analytical	+0.0034	0.00774
7	188786-5	Analytical	+0.0039	0.00875
8	188786-6	Analytical	+0.0038	0.00850
9	188786-7	Analytical	+0.0041	0.00937
10	188786-8	Analytical	+0.0036	0.00823
11	CCV	Analytical	+0.1747	0.39579
12	CCB	Analytical	+0.0019	0.00436
13	188786-9	Analytical	+0.0202	0.04567
14	188786-10	Analytical	+0.0013	0.00287
15	188786-11	Analytical	+0.0014	0.00325
16	188786-12	Analytical	+0.0016	0.00356
17	188786-13	Analytical	+0.0015	0.00342
18	188802-2	Analytical	+0.0102	0.02316
19	188802-9	Analytical	+0.0152	0.03440
		757		
20	188802-12	Analytical	+0.0412	0.09324

22	188802-14	Analytical	+0.0082	0.01863
23	CCV	Analytical	+0.1729	0.39167
24	CCB	Analytical	+0.0031	0.00698
25	188802-15	Analytical	+0.0004	8.643E-04
26	188802-20	Analytical	-0.0054	0.00000
27	188802-20MS	Analytical	+0.1237	0.28035
28	188802-20MSD	Analytical	+0.1219	0.27617
29	CCV	Analytical	+0.1752	0.39703
30	CCB	Analytical	+0.0045	0.01020

---> Standard Calibration Report <---

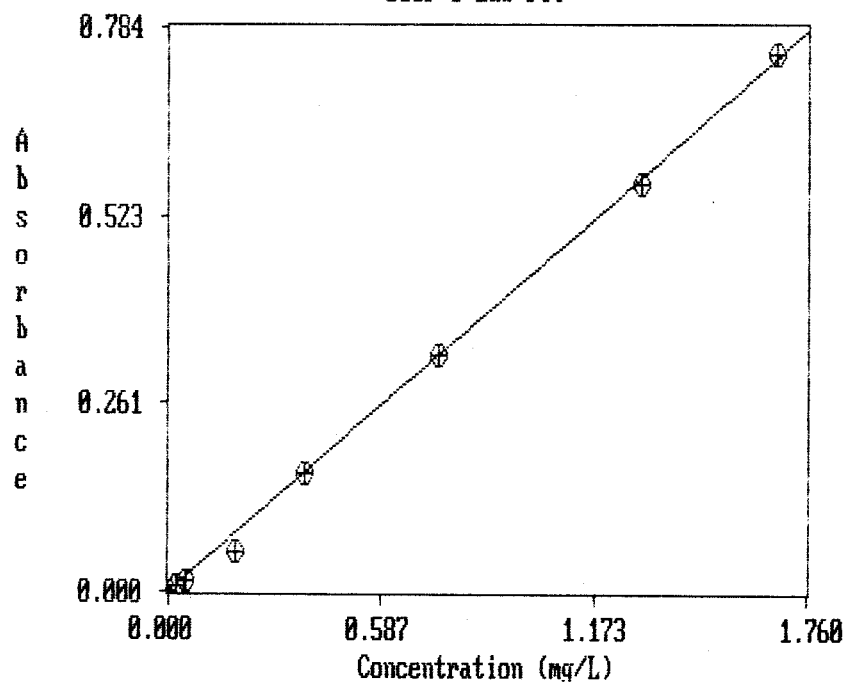
Date : 00-12-2006
 Time : 12:22:47
 Operator : *8.23 06 per*

File Name : C:\UV\DATA\SS1105.STD

Sample Name : sulfide
 Solvent Name : CAL11-15-05
 Conc Units : mg/L

Analytical Wavelength : 626 nm
 Reference Wavelength : None Selected
 Confirmation Wavelengths : None Selected
 Integration Time : 1 seconds

Beer's Law Fit



---> Standard Calibration Report <---

Date : 08-12-2006²³
 Time : 12:22:46^{8-23 PM}
 Operator : PAP DM

File Name : C:\UV\DATA\SS1105.STD

Sample Name : sulfide
 Solvent Name : CAL11-15-05
 Conc Units : mg/L
 Analytical Wavelength : 626 nm
 Reference Wavelength : None Selected
 Confirmation Wavelengths : None Selected
 Integration Time : 1 seconds

Analytical Function Concentration = +2.266E+00 * Absorbance

STD #	Concentration	Absorbance	% Error
1	0.00000	0.0001	*****
2	0.37250	0.1650	-0.366 %
3	0.74500	0.3293	-0.135 %
4	1.30400	0.5687	+1.198 %
5	1.67600	0.7467	-0.933 %
6	0.02330	0.0090	+14.422 %
7	0.04660	0.0156	+31.758 %
8	0.18620	0.0555	+48.042 %

Analysis: **SULFIDE**
 Method: **EPA 376.2**
 Instrument: HP UV-VIS Spectrometer
 Wavelength: 626 nm
 SOP#: sulfide_376_rv 4.doc

Matrix: Water
 Batch: **116677**
 Prep Date: **8/23/2006**
 Analysis Date: **8/23/2006**
 Analyst: DMC

INITIAL CALIBRATION DATA

Calibration Date: 11/15/05

Conc (mg/L)	Absorb	RF					
0.0000	0.0001		Correlation Coefficient (r): Avg Rf: %RSD:	0.9994 0.3980 15.1			
0.0233	0.0090	0.3863					
0.0466	0.0156	0.3348					
0.1862	0.0555	0.2981					
0.3725	0.1650	0.4430					
0.7450	0.3293	0.4420					
1.3040	0.5687	0.4361					
1.6760	0.7467	0.4455					
Note: Average Rf used to calculate sample results.							

Note: Average Rf used to calculate sample results.

CONTINUING CALIBRATION DATA

	Absorb Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.1750	0.4397	97%	90 - 110%
ICB	0.0000	0.0000		
CCV	0.1747	0.4390	97%	90 - 110%
CCB	0.0019	0.0048		
CCV	0.1729	0.4345	96%	90 - 110%
CCB	0.0031	0.0078		
CCV	0.1752	0.4402	97%	90 - 110%
CCB	0.0045	0.0113		

Analysis: **SULFIDE**
 Method: **EPA 376.2**
 Instrument: HP UV-VIS Spectrometer
 Wavelength: 626 nm
 Matrix: Water

Batch: **116677**
 Prep Date: **8/23/2006**
 Analysis Date: **8/23/2006**
 Analyst: DMC

SAMPLE & BATCH QC DATA

Sample ID	Sample Vol (mL)	D.F.	Sample Absorb	Color Blk Absorb	Report mg/L	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	% Rec	% RPD
MB	7.5000	1.0000	0.0000		ND	0.040					
LCS	7.5000	1.0000	0.1750		0.43974	0.040	1.0000	45.3760	0.4538	97	
188802-20	7.5000	1.0000	-0.0054		ND	0.040					
188802-20m	7.5000	1.0000	0.1237		0.31084	0.040	0.0500	45.3760	0.3025	103	
188802-20m	7.5000	1.0000	0.1219		0.30631	0.040	0.0500	45.3760	0.3025	101	1
188786-1	7.5000	1.0000	0.0200		0.05026	0.040					
188786-2	7.5000	1.0000	0.0089		ND	0.040					
188786-3	7.5000	2.0000	0.5493		2.76059	0.080					
188786-4	7.5000	1.0000	0.0034		ND	0.040					
188786-5	7.5000	1.0000	0.0039		ND	0.040					
188786-6	7.5000	1.0000	0.0038		ND	0.040					
188786-7	7.5000	1.0000	0.0041		ND	0.040					
188786-8	7.5000	1.0000	0.0036		ND	0.040					
188786-9	7.5000	1.0000	0.0202		0.05076	0.040					
188786-10	7.5000	1.0000	0.0013		ND	0.040					
188786-11	7.5000	1.0000	0.0014		ND	0.040					
188786-12	7.5000	1.0000	0.0016		ND	0.040					
188786-13	7.5000	1.0000	0.0015		ND	0.040					
188802-2	7.5000	1.0000	0.0102		ND	0.040					
188802-9	7.5000	1.0000	0.0152		ND	0.040					
188802-12	7.5000	1.0000	0.0412		0.10353	0.040					
188802-13	7.5000	1.0000	0.0094		ND	0.040					

QC Limits		RPD		Recovery	
LCS/ BS/ BSD	20	20	90	-	110
MS/ MSD	20	20	42	-	121

ND ✓ 0.040
ND ✓ 0.040

188802-14 7.5000 1.0000 0.0082
188802-15 7.5000 1.0000 0.0004

Reviewed by/ Date: DMP 8/28/06

W199 Sulfide / Sulfide EPA 376.2
Sample Vol (ul) Final Vol (ul) ABS B116677

* 188786-1 c	7.5	7.5	.0200	
-2			.0079	
-3			.5493 X2	
-4			.0074	
-5			.0039	
-6			.0038	
-7			.0041	
-8			.0036	S 8H.
-9			.0202	2.4g 0455292, 50ml DI H ₂ O
-10			.0013	
-11			.0014	1.0ml S ²⁻
-12			.0016	5.0ml I, 02363N .1185
-13			.0015	3.80ml 9203, 02363N .08979
188802-2 d			.0102	.11815
-9 g			.0152	-.08979
-12			.0412	.02036 X 6000 = 453.76 mg/L
-13			.0094	1.0ml
-14			.0082	1:10 = 45.3760 mg/L
-15			.0004	1:05 = 7.5 = 1.3760 mg/L
-20			.0054	1:100 = .4538 mg/L
-20 HS	+0.05 (453760 mg/L	1237		
	FROM 0455292)			
-20 HSD	same as BS	.1219		* Filtered thru WHATMAN .45µ
MB				Filter L + LCO7
ICB/MB 8-23-06		.0000		
ICV/LCS	1ml 45.3760	.1750		
CCV	mg/L → 100ml, use 7.5ml	.1742		
CCB		.0019		
CCV		.1729		
CCB		.0031		
CCV		.1752		
CCB		.0045		

Continued on Page

Read and Understood By

Signed *DM*

8-23-06⁷⁶⁴

Date

DMF

Signed

8/23/06

Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 116677
 Date Started: 23-AUG-2006
 Batched by : Dennis McCanna

Analysis : SULFIDE
 Bgroup : N/A
 Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
188786-001		LFR Levine Fricke	Water	DISS SULFIDE	22-AUG-2006
188786-002		LFR Levine Fricke	Water	DISS SULFIDE	22-AUG-2006
188786-003		LFR Levine Fricke	Water	DISS SULFIDE	22-AUG-2006
188786-004		LFR Levine Fricke	Water	DISS SULFIDE	22-AUG-2006
188786-005		LFR Levine Fricke	Water	DISS SULFIDE	22-AUG-2006
188786-006		LFR Levine Fricke	Water	DISS SULFIDE	22-AUG-2006
188786-007		LFR Levine Fricke	Water	DISS SULFIDE	22-AUG-2006
188786-008		LFR Levine Fricke	Water	DISS SULFIDE	22-AUG-2006
188786-009		LFR Levine Fricke	Water	DISS SULFIDE	22-AUG-2006
188786-010		LFR Levine Fricke	Water	DISS SULFIDE	22-AUG-2006
188786-011		LFR Levine Fricke	Water	DISS SULFIDE	22-AUG-2006
188786-012		LFR Levine Fricke	Water	DISS SULFIDE	22-AUG-2006
188786-013		LFR Levine Fricke	Water	DISS SULFIDE	22-AUG-2006
188802-002		Treadwell & Rollo	Water	SULFIDE	29-AUG-2006
188802-009		Treadwell & Rollo	Water	SULFIDE	29-AUG-2006
188802-012		Treadwell & Rollo	Water	SULFIDE	29-AUG-2006
188802-013		Treadwell & Rollo	Water	SULFIDE	29-AUG-2006
188802-014		Treadwell & Rollo	Water	SULFIDE	29-AUG-2006
188802-015		Treadwell & Rollo	Water	SULFIDE	29-AUG-2006
188802-020		Treadwell & Rollo	Water	SULFIDE	29-AUG-2006
QC353015	BLANK		Water	SULFIDE	
QC353016	MS	of 188802-020	Water	SULFIDE	
QC353017	MSD	of 188802-020	Water	SULFIDE	
QC353018	LCS		Water	SULFIDE	

Analysis: Sulfide
Method: EPA 376.2
Instrument: HP UV/Vis
Wavelength: 626 nm

Analysis Date: 4/14/2005
Analyst: DM

Instrument Calibrated to report sample results in concentration: mg/L

Concentration: 0.1098
Units: mg/L

1	0.100
2	0.104
3	0.105
4	0.096
5	0.096
6	0.095
7	0.092

Average: 0.098 ug/L
Std Deviation: 0.004691
Student T: 3.143

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev: 0.0147 mg/L
Reporting Limit: 0.04 mg/L
Status: PASS >1/3 RL

Total Dissolved Solids (TDS)			
Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Batch#:	116640
Matrix:	Water	Sampled:	08/16/06
Units:	mg/L	Received:	08/17/06
Diln Fac:	1.000	Analyzed:	08/21/06

Field ID	Type	Lab ID	Result	RL
1349MW100	SAMPLE	188802-001	2,160	50
1065PZ5AR	SAMPLE	188802-002	830	50
LF6GW105	SAMPLE	188802-003	670	50
LF6GW106	SAMPLE	188802-004	ND	50
LF6GW103	SAMPLE	188802-008	550	50
1065MW101	SAMPLE	188802-009	910	50
1065MW102	SAMPLE	188802-012	680	50
1065MW9A	SAMPLE	188802-013	710	50
1065MW9B	SAMPLE	188802-014	490	50
1065MW9BRB9A	SAMPLE	188802-015	ND	50
LF4GW103	SAMPLE	188802-017	2,190	50
LF4GW104	SAMPLE	188802-018	1,320	50
DUP0816062A	SAMPLE	188802-020	490	50
	BLANK	QC352872	ND	10

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	188802	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Batch#:	116640
Matrix:	Water	Sampled:	08/16/06
Units:	mg/L	Analyzed:	08/21/06
Diln Fac:	1.000		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	RL	QRSC	Limits RPD	Lim Received
	BS		QC352873		100.0	102.0		102	79-121	
	BSD		QC352874		100.0	106.0		106	79-121	4 20
ZZZZZZZZZZ	SDUP	188767-001	QC352875	12,940		14,020	100.0		8 20	08/16/06
1349MW100	SDUP	188802-001	QC352876	2,160		2,270	50.00		5 20	08/17/06

768

RL= Reporting Limit

RPD= Relative Percent Difference

Page 1 of 1

37.1



Curtis & Tompkins, Ltd.

Analysis: Total Dissolved Solids
Method: EPA160.1 / SMWW 2540c
Matrix: Water
SOP#: tds_lv 9.doc

Analysis Date: 15-Aug-06
Batch #: 116640
Analyst: SJ

BATCH QC DATA

Sample	Sample Vol (mL) (50/vol)	DF	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	Report (mg/L)	Reporting Limit (mg/L)	Spike Std Conc (mg/L)	Spike Vol Used (mL)	Spiking Level (mg/L)	Recovery, %	RPD, %
MB	50	1	51.8013	51.8016	0.0003	ND	10					
BS	50	1	49.3014	49.3065	0.0051	102.0	10	1,000	5	100	102	
BSD	50	1	51.7882	51.7935	0.0053	106.0	10	1,000	5	100	106	3.85
188767-001	5	10	28.2964	28.3611	0.0647	12,940.0	100					
SDUP	5	10	26.5927	26.6628	0.0701	14,020.0	100					8.01
188802-001	10	5	25.1655	25.1871	0.0216	2,160	50					
SDUP	10	5	25.6974	25.7201	0.0227	2,270	50					4.97

QC Limits		
LCS/ BS/ BSD	RPD	Recovery
MS/ MSD	20	79 - 121
	20	69 - 131

SAMPLE DATA

Sample	Sample Vol (mL) (50/vol)	DF	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	Report (mg/L)	Reporting Limit (mg/L)
188767-001	5	10	28.2964	28.3611	0.0647	12,940.0	100
188792-001	10	5	27.1578	27.1636	0.0058	580.0	50
188802-001	10	5	25.1655	25.1871	0.0216	2,160.0	50
188802-002	10	5	24.9963	25.0046	0.0083	830.0	50
188802-003	10	5	27.4072	27.4139	0.0067	670.0	50
188802-004	10	5	26.0929	26.0932	0.0003	ND	50
188802-008	10	5	26.2138	26.2193	0.0055	550.0	50
188802-009	10	5	27.4297	27.4388	0.0091	910.0	50
188802-012	10	5	29.0294	29.0362	0.0068	680.0	50
188802-013	10	5	27.1295	27.1366	0.0071	710.0	50
188802-014	10	5	25.4315	25.4364	0.0049	490.0	50
188802-015	10	5	24.0975	24.0974	-0.0001	ND	50
188802-017	10	5	27.5890	27.6209	0.0219	2,190.0	50
188802-018	10	5	24.4052	24.4184	0.0132	1,320.0	50
188802-020	10	5	27.4534	27.4583	0.0049	490.0	50
188824-003	10	5	27.6338	27.6478	0.0140	1,400.0	50
188824-004	10	5	29.1863	29.2507	0.0644	6,440.0	50
188824-005	10	5	25.4920	25.5041	0.0121	1,210.0	50
188824-006	10	5	27.3950	27.4327	0.0377	3,770.0	50
188824-007	10	5	24.3367	24.3602	0.0235	2,350.0	50

Note: Because the regulatory holding time is based on the prep date, the analysis date referenced above is the prep date.

Reviewed by/ Date:

2008/08/06

TDS (Total Dissolved Solids)
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

LIMS Batch #: 116640

Prep Date: 8/15/06

Prep Time: 16:30

Benchbook#: **BK2254**

Page: 63

Filter Mfg/ Lot#: G-1848457

Spike WS#: 93381

Spike WS Conc (mg/L): 1000

Spike Vol Added (mL): 5

	In	Out	In-2	Out-2	In-3	Out-3	In-4	Out
Date:	8/15/06	8/22/06	8/22/06	8/22/06	8/23/06	8/23/06		8/23/06
Time:	18:30	9:00	11:00	2:00 pm	12:00	16:30		16:30
Temp (C):	90°C	180°C	180°C	180°C	180°C	180°C		180
	In-5 8/23/06 17:00 180	Out-5 8/23/06 18:20 180	In-6 8/23/06 19:30 180	Out-6 8/23/06 19:50 180				

Sample # / Letter	EC Value (µS/cm)	Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*	4th Wt
MB								
RS		50	TAP	51.8013	51.8030	51.8018	51.8016	
BSD			KMA	49.3014	49.3070	49.3065		
188767-1 B	16,580	5	FFF	51.7882	51.7990	51.7935		
SDVP-1 V			DOG	28.2964	28.3686	28.3655		
188792-1 B	818	10	LUX	26.5927	26.6729	26.6678	26.6687	28.3646
188802-1 V	3200		RIP	27.1578	27.1635	27.1636		26.6652
SDVP-1 V			ARG	25.1655	25.1891	25.1876		
-2 F	1291		DMX	25.6974	25.7210	25.7200	25.7201	25.1873
-3 B	898		UK	24.9963	25.0096	25.0096		
-4 J	963		MAS	27.4072	27.4137	27.4139		
-8 E	806		TOE	26.0929	26.0936	26.0932		
-9 I	1227		OPP	26.2138	26.2193	26.2193		
-12	1040		YES	27.4297	27.4387	27.4388		
-13	1166		LMF	29.0294	29.0363	29.0362		
-14	720		ELF	27.1295	27.1369	27.1366		
-15 J	2900		BOM	25.4315	25.4361	25.4364		
-17 B	3100		URU	24.0975	24.0971	24.0974		
-18 J	1976		NEO	27.5990	27.6223	27.6208	27.6209	
-20 I	774		ITA	24.4052	24.4189	24.4184		
188824-3 K	1673		PMP	27.4534	27.4582	27.4583		
-4 G	5480		DAK	27.6338	27.6476	27.6478		
-5 J	1574		GER	29.1863	29.2510	29.2507		
-6 J	3866		RON	25.4920	25.5038	25.5041		
-7 J	2700		NYC	27.3950	27.4325	27.4327		
			GAS	24.3367	24.3600	24.3602		

* Constant weight must be within 0.0005 from previous reading.

STH
 DOG 28.3616
 LUX 26.6632
 ARG 25.1871

8/21/06

Analyst / Date

770

8/24/06

Reviewed by / Date

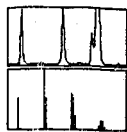
Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 116640
 Date Started: 22-AUG-2006
 Batched by : Stephanie Jim

Analysis : TDS
 Bgroup : N/A
 Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
188767-001		Acme Fill Corp.	Water	TDS	28-AUG-2006
188792-001		ERS Corp.	Water	TDS	29-AUG-2006
188802-001		Treadwell & Rollo	Water	TDS	29-AUG-2006
188802-002		Treadwell & Rollo	Water	TDS	29-AUG-2006
188802-003		Treadwell & Rollo	Water	TDS	29-AUG-2006
188802-004		Treadwell & Rollo	Water	TDS	29-AUG-2006
188802-008		Treadwell & Rollo	Water	TDS	29-AUG-2006
188802-009		Treadwell & Rollo	Water	TDS	29-AUG-2006
188802-012		Treadwell & Rollo	Water	TDS	29-AUG-2006
188802-013		Treadwell & Rollo	Water	TDS	29-AUG-2006
188802-014		Treadwell & Rollo	Water	TDS	29-AUG-2006
188802-015		Treadwell & Rollo	Water	TDS	29-AUG-2006
188802-017		Treadwell & Rollo	Water	TDS	29-AUG-2006
188802-018		Treadwell & Rollo	Water	TDS	29-AUG-2006
188802-020		Treadwell & Rollo	Water	TDS	29-AUG-2006
188824-003		MWH	Water	TDS	23-AUG-2006
188824-004		MWH	Water	TDS	23-AUG-2006
188824-005		MWH	Water	TDS	23-AUG-2006
188824-006		MWH	Water	TDS	23-AUG-2006
188824-007		MWH	Water	TDS	23-AUG-2006
188824-008		MWH	Water	TDS	23-AUG-2006
188824-009		MWH	Water	TDS	23-AUG-2006
188824-010		MWH	Water	TDS	23-AUG-2006
188824-011		MWH	Water	TDS	23-AUG-2006
188824-012		MWH	Water	TDS	23-AUG-2006
QC352872	BLANK		Water	TDS	
QC352873	BS		Water	TDS	
QC352874	BSD		Water	TDS	
QC352875	SDUP	of 188767-001	Water	TDS	
QC352876	SDUP	of 188802-001	Water	TDS	

NDMA



NARRATIVE REPORT
Method 1625M Semivolatiles

Curtis & Tompkins
2323 Fifth Street
Berkeley, CA 94710

08/30/06

Attn: Steve Stanley

PA Reference: 2706

Samples: NKGW04, DUP0816061B

Semivolatiles analysis:

The samples were extracted and analyzed by Method 1625C, modified for the lowest possible detection limits. A 10 gram aliquot was spiked with 0.1 ug of N-Nitrosodimethylamine-d6 and extracted by sonication. The sample extract was concentrated to a final volume of 1.0 mL and spiked with 0.1 ug of 2,2'-Difluorobiphenyl as an internal recovery standard. The extracts were analyzed by GC/MS with the mass spectrometer operating in the "Specific Ion Mode" for greater sensitivity and lower detection limits. The instrument was calibrated with five initial calibration standards ranging from 0.02 ug/mL to 1.00 ug/mL.

On-going Precision and Recovery

A laboratory blank (P&R) was spiked with 0.02 ug of NNDMA and 0.1 ug of its labeled analog, and extracted and analyzed like a sample for each extraction batch. Recoveries for NNDMA and its Label are within the method specified recovery limits for the P&R's associated with the samples.

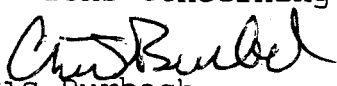
Laboratory Blank

A laboratory blank was extracted and analyzed like the sample with each extraction batch. Laboratory blank 11714 contains NNDMA at a concentration of 0.0006 ug/L. The other laboratory blank associated with the samples has no NNDMA detected.

Samples

None of the sample has NNDMA detected at a concentration which exceeds the method detection limit.

Please contact Steve Parsons at (760) 496-2200 if there are any questions concerning this data package.


Chris Burbach
GC/MS Supervisor

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510) 486-0900
(510) 486-0532

LEVEL III

Project Number: 188802
Site: Presidio

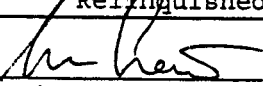
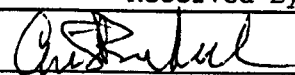
Subcontract Laboratory:
Pacific Analytical, Inc.
6056 Corte del Cedro
Carlsbad, CA 92009
(760) 496-2200
ATTN: Steve Parson

Results due: Report Level: III

Please send report to: Steve Stanley

*** Please report using Sample ID rather than C&T Lab #.

Sample ID	Sampled	Matrix	Analysis	C&T Lab #	Comments
NKGW04	08/16 12:15	Water	NDMA	188802-007	
DUP0816061B	08/16 12:25	Water	NDMA	188802-011	

Notes:	Relinquished By:	Received By:
	Date/Time:	Date/Time:
	 8/17/06 1550	 8/18/06 0740

Signature on this form constitutes a firm Purchase Order for the services requested above.

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

NKGW04

Lab Name: PACIFIC ANALYTICAL, INC.

Matrix: WATER

Sample wt/vol: 1000.000 ml

Concentrated Extract Volume: 100 ul

Injection Volume: 1 ul

Lab Sample ID: 2706-001

Lab File ID: 11H2916

Date Sampled: 08/16/06

Date Extracted: 08/22/06

Date Analyzed: 08/29/06

Time Analyzed: 2002

Compound	Sample Conc ug/L	PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	U	0.0020	31 %

U = Undetected J = Estimated Concentration B = Found in Blank

D = Dilution Results E = Result Exceeds Calibration Curve

na = Compound has no corresponding labeled reference

PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUP0816061B

Lab Name: PACIFIC ANALYTICAL, INC.

Lab Sample ID: 2706-002

Matrix: WATER

Lab File ID: 11H2917

Sample wt/vol: 1000.000 ml

Date Sampled: 08/16/06

Concentrated Extract Volume: 100 ul

Date Extracted: 08/22/06

Injection Volume: 1 ul

Date Analyzed: 08/29/06

Time Analyzed: 2044

Compound	Sample Conc ug/L	PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	U	0.0020	37 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B11713

Lab Name: PACIFIC ANALYTICAL, INC.

Matrix: WATER

Sample wt/vol: 1000.000 ml

Concentrated Extract Volume: 100 ul

Injection Volume: 1 ul

Lab Sample ID: 11713

Lab File ID: 11H2913

Date Sampled:

Date Extracted: 08/22/06

Date Analyzed: 08/29/06

Time Analyzed: 1757

Compound	Sample Conc ug/L	PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	U	0.0020	46 %

U = Undetected J = Estimated Concentration B = Found in Blank

D = Dilution Results E = Result Exceeds Calibration Curve

na = Compound has no corresponding labeled reference

PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B11714

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: 11714
Lab File ID: 11H2914
Date Sampled:
Date Extracted: 08/22/06
Date Analyzed: 08/29/06
Time Analyzed: 1839

Compound	Sample Conc ug/L		PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0006	J	0.0020	62 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

P&R Q01

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: P&R Q01
Lab File ID: 11H2911
Date Sampled:
Date Extracted: 08/22/06
Date Analyzed: 08/29/06
Time Analyzed: 1634

Compound	Sample Conc ug/L	Spike Amt. ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0019 J	0.0020	48 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

P&R Q01DUP

Lab Name: PACIFIC ANALYTICAL, INC.

Matrix: WATER

Sample wt/vol: 1000.000 ml

Concentrated Extract Volume: 100 ul

Injection Volume: 1 ul

Lab Sample ID: P&R Q01DUP

Lab File ID: 11H2912

Date Sampled:

Date Extracted: 08/22/07

Date Analyzed: 08/29/06

Time Analyzed: 1716

Compound	Sample Conc ug/L	Spike Amt. ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0023	0.0020	58 %

U = Undetected J = Estimated Concentration B = Found in Blank

D = Dilution Results E = Result Exceeds Calibration Curve

na = Compound has no corresponding labeled reference

PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

METHOD 1625 ISOTOPE DILUTION
LABELED COMPOUNDS

Lab Name: PACIFIC ANALYTICAL

Instr. ID: VG11

Cal. Date: 08/29/06

LAB FILE IDs: Conc1 = 11H2905
 Conc2 = 11H2906
 Conc3 = 11H2907
 Conc4 = 11H2908
 Conc5 = 11H2909

COMPOUND	RF Conc1	RF Conc2	RF Conc3	RF Conc4	RF Conc5	RF MEAN	% RSD
N-Nitrosodimethylamine-d6	0.195	0.183	0.184	0.185	0.194	0.188	3.1
=====							

METHOD 1625 ISOTOPE DILUTION
COMPOUNDS HAVING A LABELED REFERENCE

Lab Name: PACIFIC ANALYTICAL

Instr. ID: VG11

Cal. Date: 08/29/06

LAB FILE IDs: Conc1 = 11H2905
 Conc2 = 11H2906
 Conc3 = 11H2907
 Conc4 = 11H2908
 Conc5 = 11H2909

COMPOUND	RX	RR Conc1	RR Conc2	RR Conc3	RR Conc4	RR Conc5
N-Nitrosodimethylami	999999	0.191	0.430	0.773	4.168	7.816
=====						

CONCENTRATIONS OF CALIBRATION STANDARDS

Compound	Ical Type	Resp Ref	Calibration Standards				
			Conc1 ug/L	Conc2 ug/L	Conc3 ug/L	Conc4 ug/L	Conc5 ug/L
1 2,2'-Difluorobiphenyl	I	1	0.10	0.10	0.10	0.10	0.10
2 N-Nitrosodimethylamine	L	1	0.10	0.10	0.10	0.10	0.10
3 N-Nitrosodimethylamine	U	2	0.02	0.05	0.10	0.50	1.00

=====

I = internal standard; L = labeled compound; U = unlabeled native
 O = compound referenced to internal standard

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

0.10 PPM 2N SRC

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: NA
Concentrated Extract Volume: NA
Injection Volume: 1 ul

Lab Sample ID: NSTD0.10
Lab File ID: 11H2923
Date Sampled:
Date Extracted:
Date Analyzed: 08/30/06
Time Analyzed: 0054

Compound	Daily Conc ug/mL	Daily Spike ug/mL	Recovery
N-Nitrosodimethylamine	0.1015	0.1000	103 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

GC/MS SEMI-VOLATILES
RUN LOGInstrument: 1611Page: 857Cal File: 11H29Date: 8/24/00

Notes:

Curtis & Tompkins WDMA
 SFL SEC SFI SFZ Q1 QH QIC QIK DIM
 5.0 100 10 100 50 5.0 3.0 0.5 750

Inj port = 200°C
 purge = 0.75 min

200°C Hold 2.5 min 5°C/min to 280°C Hold 1 min

SIR

Taped	Sample ID	File Name	OK	Description	OP
		11H2901		Warm-up	03
		02			
		03			
		04			
	INST00.02	05		0.02 µl/ml NWDH STD	
	INST00.05	06		0.05	
	INST00.10	07		0.10	
	INST00.50	08		0.50	
	INST01.00	09		1.00	
	INST05.00	10		5.00	
	PRRQ 01	11		OPR	
	PRRQ 01dup	12			
	11713	13		Lab Blank	
	11714	14			
	11715	15			
	2706-001	16			
	2706-002	17			
	2710-001	18			
	2711-001	19			
	2711-002	20			
	2711-003	21			
	2711-004	22			
	INST00.10 NWDH	23		0.10 µl/ml NWDH 2nd Src	
		24			
		25	785		

1st 270% 270% 270%

Extraction Lab: 8/22/06

Extraction Method:

1625

Matrix: Ag

UNDER

Extraction Solvent: _____

Don

Lot #: 46/50 Initials: _____

Matrix: 119

function

1

Other Reagents: Ascorbic acid Lot #: 5/22/06

[illegible]

on 1530

QA Review:

2706 Curtis & Tompkins, 2 X NNDMA (TAT: 30)

Lab ID	NDMA
2706-001	P
2706-002	P

Lab ID	Cust ID	Sampled	Rec'd	Login ID
2706-001	188802-007	08/16/06	08/18/06	01850
2706-002	188802-011	08/16/06	08/18/06	01850

Lab ID	Description	Comment
2706-001	2 X AL	OK
2706-002	2 X AL	OK

Login	Loggin by	Shipper	Shipper Code	CofC
01850	Chris J. Burbach	California Overnight	29000030182	OK

SAMPLE LOG-IN SHEET -- Initial

JOB #
2706

LOG-IN DATE
8/18/06

Received By (print name):

Chris Byrbaach

Received By (signature):

Chris Byrbaach

CLIENT		# of Coolers:	TEMP:					
Received From		LAB ID #	SAMPLE #	ANALYSIS	# of Containers	CONTAINER TYPE	MATRIX CODE (see table below)	CONDITION
Custody seals Present Absent* Intact Broken		2706-001	158802-007	NPMA	2	AZ	WW	OK
Custody Seal #'s		2706-002	158802-011	↓	↓	↓	↓	↓
Airbill								
Airbill #								
Date Rec'd								
Time Rec'd								
Chain of Custody Present Absent* or Traffic Reports								
Sample Label Present Absent*								
Sample ID #'s Listed Not Listed on COC								
Sample Condition Intact Broken Leaking								
Does information on Custody records, reports and sample tags agree?								
* COMMENTS								

Matrix Codes: WW = Wastewater S = Soil SL = Sludge O = Other
 Container Types: AL = Amber Liter SJ = Solid Jar BT = Brass Tube OTC = Other Type Container
 VOA = 40 mL vial



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

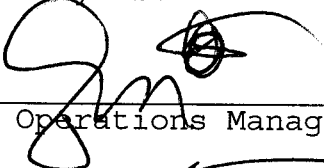
Laboratory Number 188837

Treadwell & Rollo
555 Montgomery Street
San Francisco, CA 94111

Project#: 2893.04.51
Location: Presidio

<u>Sample ID</u>	<u>Lab ID</u>
LF10GW03	188837-001
1349MW03R	188837-002
1349MW101	188837-003
1349MW102	188837-004
610SP01	188837-005
LF5GW101	188837-006
LF5GW100	188837-007
1065PZ1A	188837-008
1065PZ2A	188837-009
1065PZ4A	188837-010
TB081706A	188837-011
DW081706A	188837-012
LF5GW102	188837-013
LF5GW103	188837-014
LF5GW104	188837-015
DUP0817062A	188837-016
NKGW01	188837-017
NKGW02	188837-018
NKGW05	188837-019
LF10GW100	188837-020
LF10GW01	188837-021

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis.

Signature: 
Operations Manager

Date: 9/25/06

Signature: 
Project Manager

Date: 9/24/06

CASE NARRATIVE

Laboratory number: 188837
Client: Treadwell & Rollo
Project: 2893.04.51
Location: Presidio
Request Date: 08/18/06
Samples Received: 08/18/06

This hardcopy data package contains sample and QC results for twenty one water samples, requested for the above referenced project on 08/18/06. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):

No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):

No analytical problems were encountered.

Pesticides (EPA 8081A):

High responses were observed for endrin ketone and methoxychlor in the ICV analyzed 08/25/06 22:36, the ICV analyzed 08/28/06 23:07, and the ICV analyzed 08/29/06 15:22; average ICV drift met method requirements, and these analytes were not detected at or above the RL in the associated samples. Low responses were observed for many analytes in the CCV analyzed 08/29/06 22:33 and the CCV analyzed 08/30/06 02:05. High responses were observed for many analytes in a number of CCVs; average CCV drift met method requirements, and these analytes were not detected at or above the RL in the associated samples. Low surrogate recoveries were observed for decachlorobiphenyl and TCMX in 1349MW102 (lab # 188837-004), LF5GW102 (lab # 188837-013), and the method blank/LCS for batch 116753; the corresponding decachlorobiphenyl surrogate recoveries were within limits. No other analytical problems were encountered.

Polychlorinated Biphenyls (PCBs) (EPA 8082):

Low surrogate recoveries were observed for TCMX in the MS/MSD of 1349MW100 (lab # 188802-001); the corresponding decachlorobiphenyl surrogate recoveries were within limits. No other analytical problems were encountered.

Polynuclear Aromatics by HPLC (EPA 8310):

Low recoveries were observed for benzo(a)pyrene, naphthalene, and pyrene in the MS/MSD of 1349MW100 (lab # 188802-001); the LCS was within limits. High recovery was observed for pyrene in the MSD of 1349MW100 (lab # 188802-001); the LCS was within limits, and this analyte was not detected at or above the RL in the associated sample. High RPD was also observed for pyrene in the MS/MSD of 1349MW100 (lab # 188802-001); this analyte was not detected at or above the RL in the associated sample. Response exceeding the instrument's

CASE NARRATIVE

Laboratory number: 188837
Client: Treadwell & Rollo
Project: 2893.04.51
Location: Presidio
Request Date: 08/18/06
Samples Received: 08/18/06

Polynuclear Aromatics by HPLC (EPA 8310):

linear range was observed for fluorene in the MS of 1349MW100 (lab # 188802-001). High surrogate recoveries were observed for 1-methylnaphthalene (UV) in the MS/MSD of 1349MW100 (lab # 188802-001). High surrogate recovery was observed for 1-methylnaphthalene (F) in the MSD of 1349MW100 (lab # 188802-001). No other analytical problems were encountered.

Metals (EPA 6020 and EPA 7470A) Water:

High responses were observed for aluminum, beryllium, and magnesium in the CCV analyzed 08/24/06 20:37 and the CCV analyzed 08/24/06 22:01; these analytes were not detected at or above the RL in the associated samples. Low recoveries were observed for mercury in the MS/MSD of 1349MW100 (lab # 188802-001); the BS/BSD were within limits, and the associated RPD was within limits. No other analytical problems were encountered.

Metals (EPA 6020) Filtrate:

High % difference was observed for calcium in the serial dilution of 1065PZ2A (lab # 188837-009). No other analytical problems were encountered.

Ion Chromatography (EPA 300.0):

No analytical problems were encountered.

Alkalinity (EPA 310.1):

No analytical problems were encountered.

Sulfide (EPA 376.2):

Low recoveries were observed for sulfide in the MS/MSD of 1065PZ2A (lab # 188837-009); the LCS was within limits, and the associated RPD was within limits. No other analytical problems were encountered.

Total Dissolved Solids (TDS) (EPA 160.1):

No analytical problems were encountered.

NDMA (EPA 1625):

Pacific Analytical, Inc. in Carlsbad, CA performed the analysis. Please see the Pacific Analytical, Inc. case narrative.

Chain of Custody

— 2345

Treadwell & Rollo

Environmental and Geotechnical Consultants

555 Montgomery St., Suite 1300, San Francisco, CA 94111
Ph: 415.955.9040 FAX: 415.955.9041

188837

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. 0P 2140

Page: of

Project Name: Presidio of San Francisco										PROJECT MANAGER: Joshua Graber										TURNAROUND TIME: 10 Days													
Location: Presidio of San Francisco										PROJECT NUMBER: 2893																							
Sampled By (Firm and Samplers): P. Cornish BP																																	
Recorder (signature required): P. Cornish																																	
Sent to Laboratory (Name): CPT																																	
SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix					Number of Containers and Preservation					REQUESTED ANALYSES										COMMENTS / NOTES									
				Soil	Water	Other	HCl	H ₂ SO ₄	HNO ₃	NaOH	Other	TPH (8015M)	TPHd (8015M)	TPHf (8015M)	VOCs (8260)	General Chemistry	OCPs (8081)	Metals - Dissolved (23, 22, 13, 9, 8, 7, 3, Other)	Metals - Total (23, 22, 13, 9, 8, 7, 3, Other)	PAHs (8310)	BTX, MTBE	Totals, H ₂ O	NDMA, PCBs		Dissolved Metals	TPHs							
LF59W101	8/17/06	1415		X																													
LF59W100		1345		X																													
1065P21A		1230		X																													
1065P22A		1130		X																													
1065P23A		920		X																													
1065P24A				X																													
1065P25A				X																													
1065P26A				X																													
1065P27A				X																													
1065P28A				X																													
1065P29A				X																													
1065P30A				X																													
1065P31A				X																													
1065P32A				X																													
1065P33A				X																													
1065P34A				X																													
1065P35A				X																													
1065P36A				X																													
1065P37A				X																													
1065P38A				X																													
1065P39A				X																													
1065P40A				X																													
1065P41A				X																													
1065P42A				X																													
1065P43A				X																													
1065P44A				X																													
1065P45A				X																													
1065P46A				X																													
1065P47A				X																													
1065P48A				X																													
1065P49A				X																													
1065P50A				X																													
1065P51A				X																													
1065P52A				X																													
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1065P56A				X																													
1065P57A				X																													
1065P58A				X																													
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1065P60A				X																													
1065P61A				X																													
1065P62A				X																													
1065P63A				X																													
1065P64A				X																													
1065P65A				X																													
1065P66A				X																													
1065P67A				X																													
1065P68A				X																													
1065P69A				X																													
1065P70A				X																													
1065P71A				X																													
1065P72A				X																													
1065P73A				X																													
1065P74A				X																													
1065P75A				X																													
1065P76A				X																													
1065P77A				X																													
1065P78A				X																													
1065P79A				X																													

Ph: 415.955.9040 FAX: 415.955.9041

18837

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. 0P 2155

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[illegible]

Steven Stanley

From: "Joshua Graber" <jdgraber@treadwellrollo.com>
To: "Steven Stanley" <steve@ctberk.com>
Sent: Monday, August 21, 2006 12:38 PM
Subject: DW Samples

Hey Steve,

Please cancel the dissolved metals analyses associated with both DW samples. I don't think they filtered either.

Thanks.

Joshua D. Graber
Senior Project Manager / Scientist
Treadwell & Rollo, Inc.
Environmental & Geotechnical Consultants
555 Montgomery, Suite 1300
San Francisco, CA 94111
office (415) 955-9040
fax (415) 955-9041
mobile (415) 254-8774
<http://www.treadwellrollo.com/>

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SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 1 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd



COOLER RECEIPT CHECKLIST

Login#: 188837 Date Received: 8-18-06 Number of Coolers: 4
Client: Treadwell & Rollo Project: 2893.04.51

A. Preliminary Examination Phase

Date Opened: 8-18-06 By (print): Troy Windsor (sign) Troy Windsor

1. Did cooler come with a shipping slip (airbill, etc.)?..... YES ☒ NO ☐

If YES, enter carrier name and airbill number: _____

2. Were custody seals on outside of cooler?..... YES ☒ NO ☐

How many and where? 1 per over cooler lip Seal date: 8/18/06 Seal name: see below

3. Were custody seals unbroken and intact at the date and time of arrival?..... YES ☒ NO ☐

4. Were custody papers dry and intact when received?..... YES ☒ NO ☐

5. Were custody papers filled out properly (ink, signed, etc.)?..... YES ☒ NO ☐

6. Did you sign the custody papers in the appropriate place?..... YES ☒ NO ☐

7. Was project identifiable from custody papers?..... YES ☒ NO ☐

If YES, enter project name at the top of this form.

8. If required, was sufficient ice used? Samples should be 2-6 degrees C. YES ☒ NO ☐

Type of ice: wet Temperature: 2.4 2.7 3.1 3.3

B. Login Phase

Date Logged In: 8-18-06 By (print): Troy Windsor (sign) Troy Windsor

1. Describe type of packing in cooler: in ziploc type bags

2. Did all bottles arrive unbroken?..... YES ☒ NO ☐

3. Were labels in good condition and complete (ID, date, time, signature, etc.)?..... YES ☒ NO ☐ *

4. Did bottle labels agree with custody papers?..... YES ☐ NO ☐

5. Were appropriate containers used for the tests indicated?..... YES ☐ NO ☐

6. Were correct preservatives added to samples?..... YES ☐ NO ☐

7. Was sufficient amount of sample sent for tests indicated?..... YES ☐ NO ☐

8. Were bubbles absent in VOA samples? If NO, list sample IDs below..... YES ☐ NO ☐

9. Was the client contacted concerning this sample delivery?..... YES ☐ NO ☐

If YES, give details below.

Who was called? _____ By whom? _____ Date: _____

Additional Comments:

* B3 - No label on two containers for
sample - 008 → ID by process of elimination
No label on two containers for
sample - 009 → ID by association, they
were in a bag w/ a labeled bottle.

Filename: F:\qc\forms\qc\cooler.doc



LOT#	
8/18/06	
SAMPLE ID	
SAMPLED BY	R
LOCATION	
ANALYSIS	
DATE	
TIME	
PRESERVATIVE	
CLIENT	

TOTAL VOLATILE HYDROCARBONS/

BTXE

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	LF10GW03	Batch#:	116541
Lab ID:	188837-001	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Analyzed:	08/19/06
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	91	65-135
Bromofluorobenzene (FID)	94	65-135

ND= Not Detected
RL= Reporting Limit

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	610SP01	Batch#:	116587
Lab ID:	188837-005	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Analyzed:	08/21/06
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	4.3 C	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	92	65-135	EPA 8015B
Bromofluorobenzene (FID)	106	65-135	EPA 8015B
Trifluorotoluene (PID)	96	65-135	EPA 8021B
Bromofluorobenzene (PID)	107	65-135	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1065PZ1A	Batch#:	116541
Lab ID:	188837-008	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Analyzed:	08/19/06
Diln Fac:	1.000		

Analyte**Result****RL**

Gasoline C7-C12	230	50
-----------------	-----	----

Surrogate**%REC****Limits**

Trifluorotoluene (FID)	115	65-135
Bromofluorobenzene (FID)	105	65-135

Chromatogram

Sample Name : 188837-008,116541,tvh only

FileName : G:\GC05\DATA\230g026.raw

Method : TVHBTXE

Start Time : 0.00 min

Scale Factor: 1.0

End Time : 25.00 min

Plot Offset: 7 mV

Sample #: a1.3

Date : 8/21/06 10:51 AM

Time of Injection: 8/19/06 04:16 AM

Low Point : 7.25 mV

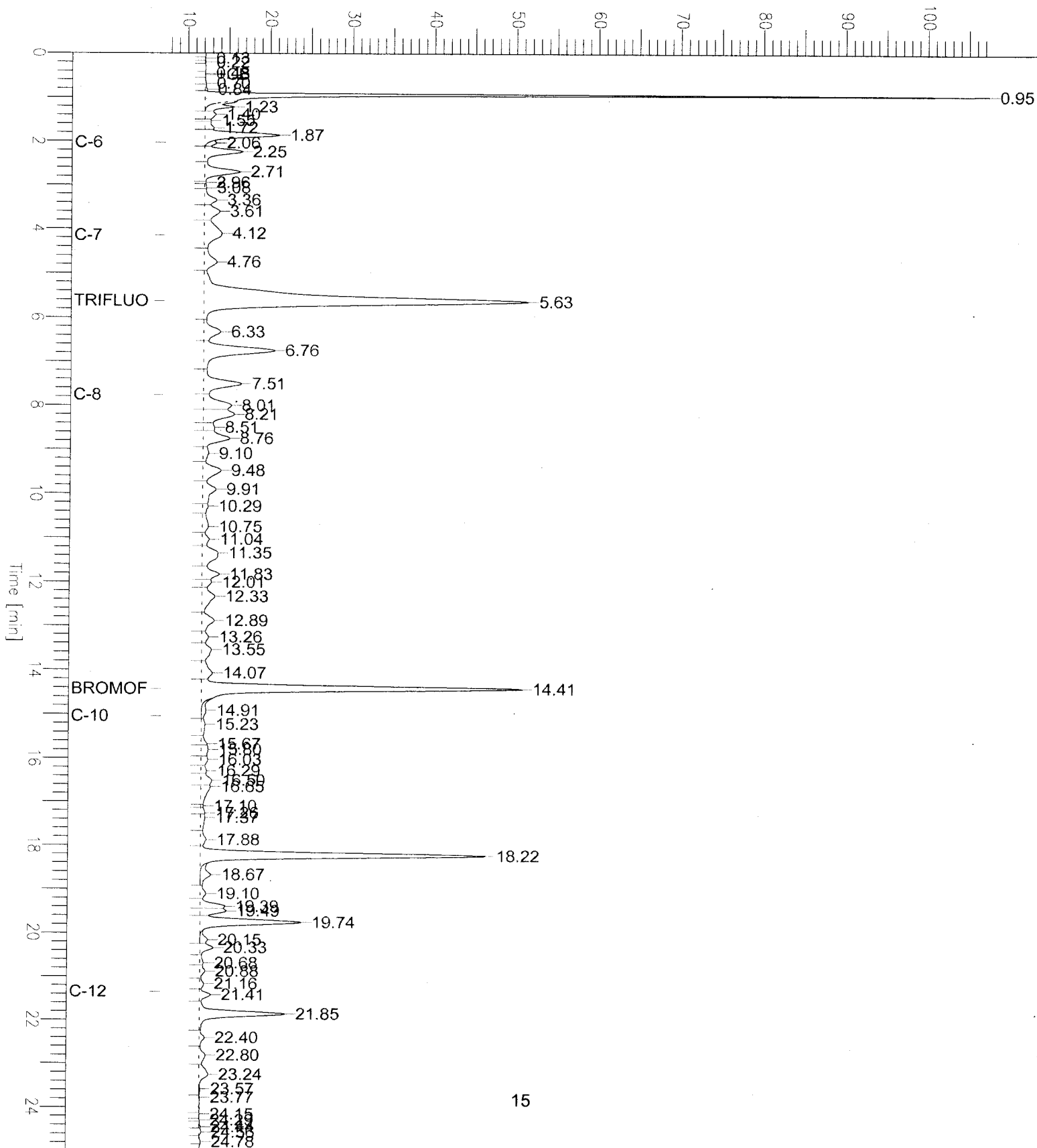
Plot Scale: 100.3 mV

Page 1 of 1

High Point : 107.51 mV

1065 PZ 1A

Response [mV]



**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065PZ2A	Batch#:	116541
Lab ID:	188837-009	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Analyzed:	08/18/06
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	2.7 C	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	90	65-135	EPA 8015B
Bromofluorobenzene (FID)	96	65-135	EPA 8015B
Trifluorotoluene (PID)	90	65-135	EPA 8021B
Bromofluorobenzene (PID)	98	65-135	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065PZ4A	Batch#:	116541
Lab ID:	188837-010	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Analyzed:	08/18/06
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	94	65-135	EPA 8015B
Bromofluorobenzene (FID)	99	65-135	EPA 8015B
Trifluorotoluene (PID)	95	65-135	EPA 8021B
Bromofluorobenzene (PID)	98	65-135	EPA 8021B

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	DW081706A	Batch#:	116541
Lab ID:	188837-012	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Analyzed:	08/18/06
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
Stoddard Solvent C7-C12	ND	50	EPA 8015B
MTBE	6.8 C	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	86	65-135	EPA 8015B
Bromofluorobenzene (FID)	93	65-135	EPA 8015B
Trifluorotoluene (PID)	86	65-135	EPA 8021B
Bromofluorobenzene (PID)	91	65-135	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	LF10GW100	Batch#:	116541
Lab ID:	188837-020	Sampled:	08/18/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Analyzed:	08/19/06
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	90	65-135
Bromofluorobenzene (FID)	93	65-135



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	LF10GW01	Batch#:	116541
Lab ID:	188837-021	Sampled:	08/18/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Analyzed:	08/19/06
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	87	65-135
Bromofluorobenzene (FID)	93	65-135

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report			
Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC352436	Batch#:	116541
Matrix:	Water	Analyzed:	08/18/06
Units:	ug/L		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
Stoddard Solvent C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	89	65-135	EPA 8015B
Bromofluorobenzene (FID)	93	65-135	EPA 8015B
Trifluorotoluene (PID)	90	65-135	EPA 8021B
Bromofluorobenzene (PID)	92	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit



Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC352636	Batch#:	116587
Matrix:	Water	Analyzed:	08/21/06
Units:	ug/L		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	86	65-135	EPA 8015B
Bromofluorobenzene (FID)	92	65-135	EPA 8015B
Trifluorotoluene (PID)	91	65-135	EPA 8021B
Bromofluorobenzene (PID)	94	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

Chromatogram

Sample Name : ccv/lcs,qc352438,116541,s3982,5/5000

FileName : G:\GC05\DATA\230G002.raw

Method : TVHBTXE

Start Time : 0.00 min

Scale Factor : 1.0

End Time : 25.00 min

Plot Offset : -4 mV

Sample #:

Date : 8/21/06 01:12 PM

Time of Injection: 8/18/06 01:45 PM

Low Point : -3.77 mV

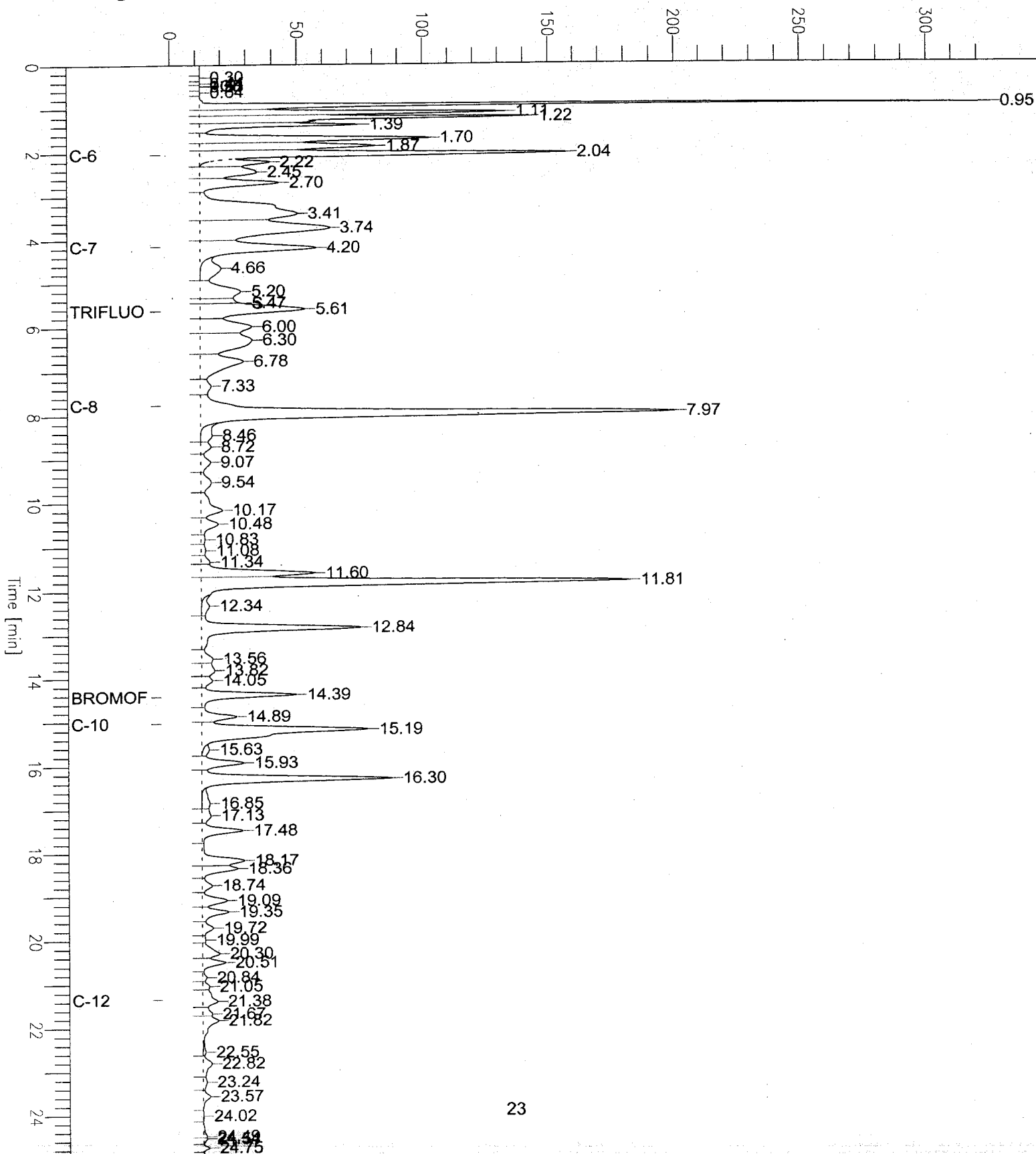
Plot Scale: 329.1 mV

Page 1 of 1

High Point : 325.30 mV

Gasoline

Response [mV]





Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC352437	Batch#:	116541
Matrix:	Water	Analyzed:	08/18/06
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	22.24	111	65-135
Benzene	20.00	17.68	88	65-135
Toluene	20.00	18.34	92	65-135
Ethylbenzene	20.00	19.50	98	65-135

Surrogate	%REC	Limits
Trifluorotoluene (PID)	87	65-135
Bromofluorobenzene (PID)	99	65-135



Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC352438	Batch#:	116541
Matrix:	Water	Analyzed:	08/18/06
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,917	96	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	105	65-135
Bromofluorobenzene (FID)	103	65-135



Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC352637	Batch#:	116587
Matrix:	Water	Analyzed:	08/21/06
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	21.96	110	65-135
Benzene	20.00	20.23	101	65-135
Toluene	20.00	20.11	101	65-135
Ethylbenzene	20.00	20.90	105	65-135

Surrogate	%REC	Limits
Trifluorotoluene (PID)	92	65-135
Bromofluorobenzene (PID)	92	65-135

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report			
Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC352638	Batch#:	116587
Matrix:	Water	Analyzed:	08/21/06
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,005	100	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	107	65-135
Bromofluorobenzene (FID)	106	65-135



Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1065PZ2A	Batch#:	116541
MSS Lab ID:	188837-009	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Analyzed:	08/18/06
Diln Fac:	1.000		

Type: MS Lab ID: QC352530

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	19.10	2,000	1,955	97	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	109	65-135
Bromofluorobenzene (FID)	110	65-135

Type: MSD Lab ID: QC352531

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,962	97	65-135	0	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	108	65-135
Bromofluorobenzene (FID)	110	65-135



Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	610SP01	Batch#:	116587
MSS Lab ID:	188837-005	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Analyzed:	08/21/06
Diln Fac:	1.000		

Type: MS Lab ID: QC352674

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	40.35	2,000	1,811	89	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	108	65-135
Bromofluorobenzene (FID)	112	65-135

Type: MSD Lab ID: QC352675

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,775	87	65-135	2	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	108	65-135
Bromofluorobenzene (FID)	112	65-135

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188837 GCV0A Water: EPA 8015B

Inst : GC05
 Calnum : 315421005001
 Units : ng

Name : stoddard 1pt
 Date : 19-OCT-2005 09:49
 X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	292_003	315421005003	stodd	19-OCT-2005 09:49	S736 (1000X), S1421 (5000X)

Analyte	Ch	L1	Type	a0	a1	a2	Avg	r ² %RSD	MUR ²	MURSD	Fig
Stoddard Solvent C7-C12	G	1843.8	AVRG		5.42E-4		1843.8	0	0.995		20

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor
 Page 1 of 1

315421005001

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188837 GCV0A Water: EPA 8015B

Inst : GC05
Calnum : 316199245001
Units : ng

Name : GAS
Date : 18-MAY-2006 16:47
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Std
L1	138_006	316199245006	tvh 1	18-MAY-2006 16:47	S3460 (1000X), S3248 (5000X)
L2	138_007	316199245007	tvh 2	18-MAY-2006 17:19	S3459 (1000X), S3248 (5000X)
L3	138_008	316199245008	tvh 3	18-MAY-2006 17:51	S3458 (1000X), S3248 (5000X)
L4	138_009	316199245009	tvh 4	18-MAY-2006 18:23	S3457 (2000X), S3248 (5000X)
L5	138_010	316199245010	tvh 5	18-MAY-2006 18:55	S3457 (1000X), S3248 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ²	MnR ²	MxRSD	Flg
Gasoline C7-C12	G	1168.4	1143.2	1104.8	1017.7	1031.8	AVRG		9.15E-4		1093.2	6	0.995	20	

Instrument amount = a0 + response * a1 + response^2 * a2; AVRg-Average response factor
Page 1 of 1

316199245001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188837 GCVOA Water
EPA 8015B

Inst : GC05
Calnum : 316199245001

Name : GAS
Cal Date: 18-MAY-2006

ICV 316199245014 (138_014 18-MAY-2006) stds: S3323 (1000X), S3248 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Gasoline C7-C12	G	1093.2	1144.6	10000	10470	ng	5	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188837 GCV0A Water: EPA 8021B

Inst : GC05
 Calnum : 316256980002
 Units : ng

Name : MBTXE
 Date : 27-JUN-2006 16:28
 X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	stds
L1	178_009	316256980009	BTXE 1	27-JUN-2006 16:28	S3735 (1000X), S3248 (5000X)
L2	178_010	316256980010	MTBE 1	27-JUN-2006 17:00	S3734 (1250X), S3248 (5000X)
L3	178_011	316256980011	BTXE 2	27-JUN-2006 17:32	S3734 (500X), S3248 (5000X)
L4	178_012	316256980012	BTXE 3	27-JUN-2006 18:04	S3734 (125X), S3248 (5000X)
L5	178_013	316256980013	BTXE 4	27-JUN-2006 18:36	S3733 (1000X), S3248 (5000X)
L6	178_014	316256980014	BTXE 5	27-JUN-2006 19:08	S3733 (500X), S3248 (5000X)
L7	178_015	316256980015	BTXE 6	27-JUN-2006 19:40	S3733 (250X), S3248 (5000X)
L8	178_016	316256980016	MTXE 7	27-JUN-2006 20:12	S3732 (500X), S3248 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Type	a0	a1	a2	Avg	r ²	MnR ²	MxRSD	Flg
MTBE	H		560.00	564.60	549.20	648.24	656.83	625.10	603.21	AVRG		0.00166		601.03	7	0.995	20	
Benzene	H	1644.0		1532.6	1540.3	1729.3	1759.0	1690.0		AVRG		6.06E-4		1649.2	6	0.995	20	
Toluene	H	1536.0		1553.2	1518.4	1663.8	1681.2	1582.5		AVRG		6.29E-4		1589.2	4	0.995	20	
Ethylbenzene	H	1184.0		1286.0	1308.1	1478.3	1511.0	1414.6		AVRG		7.33E-4		1363.7	9	0.995	20	
m,p Xylenes	H	1520.0		1563.6	1546.9	1744.1	1743.2	1615.3		AVRG		6.16E-4		1622.2	6	0.995	20	
o-Xylene	H	1273.9		1321.2	1302.8	1445.8	1453.5	1354.3		AVRG		7.36E-4		1358.6	6	0.995	20	
MTBE	I		476.45	453.49	444.88	596.37	647.83	659.37	672.40	AVRG		0.00177		564.40	18	0.995	20	
Benzene	I	1289.0		1312.1	1383.2	1770.1	1882.0	1898.0		AVRG		6.29E-4		1589.1	18	0.995	20	
Toluene	I	1888.0		1184.7	1232.1	1680.9	1802.3	1780.7		AVRG		6.27E-4		1594.8	19	0.995	20	
Ethylbenzene	I	1519.8		1024.4	1142.4	1514.8	1639.4	1619.3		AVRG		7.09E-4		1410.0	18	0.995	20	
m,p Xylenes	I	1360.1		1208.5	1338.5	1759.4	1907.0	1886.4		AVRG		6.34E-4		1576.7	20	0.995	20	
o-Xylene	I	1497.0		1024.6	1082.5	1478.8	1596.4	1590.2		AVRG		7.26E-4		1378.2	19	0.995	20	

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188837 GCVOA Water
EPA 8021B

Inst : GC05
Calnum : 316256980002

Name : MBTXE
Cal Date: 27-JUN-2006

ICV 316256980019 (178_019 27-JUN-2006) stds: S3079 (1000X), S3248 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
MTBE	H	601.03	551.90	100.0	91.83	ng	-8	15	
Benzene	H	1649.2	1657.6	100.0	100.5	ng	1	15	
Toluene	H	1589.2	1640.1	100.0	103.2	ng	3	15	
Ethylbenzene	H	1363.7	1396.6	100.0	102.4	ng	2	15	
m,p-Xylenes	H	1622.2	1736.9	200.0	214.1	ng	7	15	
o-Xylene	H	1358.6	1419.3	100.0	104.5	ng	4	15	
MTBE	I	564.40	507.26	100.0	89.88	ng	-10	15	
Benzene	I	1589.1	1656.4	100.0	104.2	ng	4	15	
Toluene	I	1594.8	1536.9	100.0	96.37	ng	-4	15	
Ethylbenzene	I	1410.0	1327.0	100.0	94.11	ng	-6	15	
m,p-Xylenes	I	1576.7	1644.5	200.0	208.6	ng	4	15	
o-Xylene	I	1378.2	1243.6	100.0	90.23	ng	-10	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188837 GCVOA Water: EPA 8015B / EPA 8021B

Inst : GC05
Calnum : 316256980001
Units : ng

Name : TFT/BFB
Date : 27-JUN-2006 11:32
X Axis : R

Reviewer: MCH

Level	File	Segment	Sample ID	Analyzed	Std
L1	178_002	316256980002	TFT/BFB 1 27-JUN-2006 11:32	S3289 (5000X)	
L2	178_003	316256980003	TFT/BFB 2 27-JUN-2006 12:15	S3290 (5000X)	
L3	178_004	316256980004	TFT/BFB 3 27-JUN-2006 12:48	S3291 (5000X)	
L4	178_005	316256980005	TFT/BFB 4 27-JUN-2006 13:20	S3292 (5000X)	
L5	178_006	316256980006	TFT/BFB 5 27-JUN-2006 14:00	S3293 (5000X)	

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ²	MRSD	MNR ²	MRSD	Fig
Trifluorotoluene (FID)	G	1196.5	1050.6	1047.7	1080.5	1028.7	AVRG		9.25E-4		1080.8	6	0.995		20	
Bromofluorobenzene (FID)	G	715.53	622.35	643.36	685.08	654.33	AVRG		0.00151		664.13	6	0.995		20	
Trifluorotoluene (PID)	H	428.47	388.60	416.82	454.90	440.54	AVRG		0.00235		425.87	6	0.995		20	
Bromofluorobenzene (PID)	H	826.27	773.56	859.00	931.80	902.86	AVRG		0.00116		858.70	7	0.995		20	
Trifluorotoluene (PID)	I	389.06	351.31	377.77	409.07	403.16	AVRG		0.00259		386.07	6	0.995		20	
Bromofluorobenzene (PID)	I	808.06	758.25	827.88	934.38	905.97	AVRG		0.00118		846.91	9	0.995		20	

CONTINUING CALIBRATION SUMMARY FOR 188837 GCVOA Water
Curtis & Tompkins Laboratories

Analyte: Gasoline C7-C12

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D	Max	%D	Flags
						RF/CF	RF/CF							
GC05	G	316331994002	18-AUG-2006 13:45	316199245001	18-MAY-2006	1093.2	1048.0	10000	9586.3	ng	-4	15		u
GC05	G	316331994013	18-AUG-2006 21:19	316199245001	18-MAY-2006	1093.2	1061.6	15000	14567	ng	-3	15		
GC05	G	316331994014	18-AUG-2006 21:51	316199245001	18-MAY-2006	1093.2	1061.5	15000	14565	ng	-3	15		
GC05	G	316331994027	19-AUG-2006 04:48	316199245001	18-MAY-2006	1093.2	1040.5	10000.0	9518.2	ng	-5	15		
GC05	G	316331994028	19-AUG-2006 05:20	316199245001	18-MAY-2006	1093.2	1042.9	10000.0	9540.5	ng	-5	15		
GC05	G	316331994032	19-AUG-2006 07:27	316199245001	18-MAY-2006	1093.2	1111.9	5000.0	5085.5	ng	2	15		
GC05	G	316336234002	21-AUG-2006 12:26	316199245001	18-MAY-2006	1093.2	1095.8	10000	10024	ng	0	15		u
GC05	G	316336234008	21-AUG-2006 19:31	316199245001	18-MAY-2006	1093.2	1064.5	15000	14607	ng	-3	15		

u=use

CONTINUING CALIBRATION SUMMARY FOR 188837 GCVOA Water
Curtis & Tompkins Laboratories

Analyte: Stoddard Solvent C7-C12

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D	Max	%D	Flags
						RF/CF	RF/CF							
GC05	G	316331994004	18-AUG-2006 16:34	315421005001	19-OCT-2005	1843.8	1703.4	10000.0	9238.5	ng	-8	15		
GC05	G	316331994015	18-AUG-2006 22:23	315421005001	19-OCT-2005	1843.8	1831.0	10000.0	9930.6	ng	-1	15		
GC05	G	316336234019	22-AUG-2006 01:52	315421005001	19-OCT-2005	1843.8	1745.1	10000.0	9464.7	ng	-5	15		
GC05	G	316336234023	22-AUG-2006 11:35	315421005001	19-OCT-2005	1843.8	1791.6	10000.0	9716.9	ng	-3	15		

CONTINUING CALIBRATION SUMMARY FOR 188837 GCVOA Water
Curtis & Tompkins Laboratories

Analyte: MTBE

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D	Flags
						RF/CF	RF/CF						
GC05	H	316331994001	18-AUG-2006 13:14	316256980002	27-JUN-2006	601.03	668.40	100.00	111.21	ng	11 15		u
GC05	I	316331994001	18-AUG-2006 13:14	316256980002	27-JUN-2006	564.40	526.23	100.00	93.238	ng	-7 15		
GC05	H	316331994011	18-AUG-2006 20:16	316256980002	27-JUN-2006	601.03	584.73	150.00	145.93	ng	-3 15		
GC05	I	316331994011	18-AUG-2006 20:16	316256980002	27-JUN-2006	564.40	525.58	150.00	139.68	ng	-7 15		
GC05	H	316336234001	21-AUG-2006 11:54	316256980002	27-JUN-2006	601.03	659.80	100.00	109.78	ng	10 15		u
GC05	I	316336234001	21-AUG-2006 11:54	316256980002	27-JUN-2006	564.40	537.66	100.00	95.263	ng	-5 15		
GC05	H	316336234010	21-AUG-2006 21:04	316256980002	27-JUN-2006	601.03	592.00	150.00	147.75	ng	-2 15		
GC05	I	316336234010	21-AUG-2006 21:04	316256980002	27-JUN-2006	564.40	516.72	150.00	137.33	ng	-8 15		

u=use

CONTINUING CALIBRATION SUMMARY FOR 188837 GCVOA Water
Curtis & Tompkins Laboratories

Analyte: Benzene

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D	Max	%D	Flags
						RF/CF	RF/CF							
GC05	H	316331994001	18-AUG-2006 13:14	316256980002	27-JUN-2006	1649.2	1458.0	100.00	88.407	ng	-12	15		u
GC05	I	316331994001	18-AUG-2006 13:14	316256980002	27-JUN-2006	1589.1	1518.7	100.00	95.571	ng	-4	15		
GC05	H	316331994011	18-AUG-2006 20:16	316256980002	27-JUN-2006	1649.2	1523.9	150.00	138.61	ng	-8	15		
GC05	I	316331994011	18-AUG-2006 20:16	316256980002	27-JUN-2006	1589.1	1491.9	150.00	140.82	ng	-6	15		
GC05	H	316336234001	21-AUG-2006 11:54	316256980002	27-JUN-2006	1649.2	1668.3	100.00	101.16	ng	1	15		u
GC05	I	316336234001	21-AUG-2006 11:54	316256980002	27-JUN-2006	1589.1	1449.8	100.00	91.237	ng	-9	15		
GC05	H	316336234010	21-AUG-2006 21:04	316256980002	27-JUN-2006	1649.2	1578.9	150.00	143.61	ng	-4	15		
GC05	I	316336234010	21-AUG-2006 21:04	316256980002	27-JUN-2006	1589.1	1447.3	150.00	136.61	ng	-9	15		

CONTINUING CALIBRATION SUMMARY FOR 188837 GCVOA Water
Curtis & Tompkins Laboratories

Analyte: Toluene

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D	Flags
						RF/CF	RF/CF						
GC05	H	316331994001	18-AUG-2006 13:14	316256980002	27-JUN-2006	1589.2	1456.9	100.00	91.677	ng	-8 15		u
GC05	I	316331994001	18-AUG-2006 13:14	316256980002	27-JUN-2006	1594.8	1404.1	100.00	88.041	ng	-12 15		
GC05	H	316331994011	18-AUG-2006 20:16	316256980002	27-JUN-2006	1589.2	1474.7	150.00	139.20	ng	-7 15		
GC05	I	316331994011	18-AUG-2006 20:16	316256980002	27-JUN-2006	1594.8	1364.6	150.00	128.35	ng	-14 15		
GC05	H	316336234001	21-AUG-2006 11:54	316256980002	27-JUN-2006	1589.2	1597.6	100.00	100.53	ng	1 15		u
GC05	I	316336234001	21-AUG-2006 11:54	316256980002	27-JUN-2006	1594.8	1334.8	100.00	83.696	ng	-16 15		c- *** FV★
GC05	H	316336234010	21-AUG-2006 21:04	316256980002	27-JUN-2006	1589.2	1529.8	150.00	144.40	ng	-4 15		
GC05	I	316336234010	21-AUG-2006 21:04	316256980002	27-JUN-2006	1594.8	1321.6	150.00	124.31	ng	-17 15		c- *** FV★

★ on confirm, samples with
ccv bracket ND for analyte
MSM 8/22/06

--=low bias c=CCV u=use

CONTINUING CALIBRATION SUMMARY FOR 188837 GCVOA Water
Curtis & Tompkins Laboratories

Analyte: Ethylbenzene

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D	Max	%D	Flags
						RF/CF	RF/CF							
GC05	H	316331994001	18-AUG-2006 13:14	316256980002	27-JUN-2006	1363.7	1329.9	100.00	97.521	ng	-2	15		u
GC05	I	316331994001	18-AUG-2006 13:14	316256980002	27-JUN-2006	1410.0	1248.4	100.00	88.537	ng	-11	15		
GC05	H	316331994011	18-AUG-2006 20:16	316256980002	27-JUN-2006	1363.7	1306.4	150.00	143.70	ng	-4	15		
GC05	I	316331994011	18-AUG-2006 20:16	316256980002	27-JUN-2006	1410.0	1206.3	150.00	128.33	ng	-14	15		
GC05	H	316336234001	21-AUG-2006 11:54	316256980002	27-JUN-2006	1363.7	1425.3	100.00	104.52	ng	5	15		u
GC05	I	316336234001	21-AUG-2006 11:54	316256980002	27-JUN-2006	1410.0	1191.8	100.00	84.522	ng	-15	15		
GC05	H	316336234010	21-AUG-2006 21:04	316256980002	27-JUN-2006	1363.7	1374.1	150.00	151.14	ng	1	15		
GC05	I	316336234010	21-AUG-2006 21:04	316256980002	27-JUN-2006	1410.0	1191.2	150.00	126.73	ng	-16	15		c- *** FV on

conf., samples ND
for analyte w/in
CCV bracket
msw-8/22/06

--low bias c=CCV u=use

CONTINUING CALIBRATION SUMMARY FOR 188837 GCVOA Water
Curtis & Tompkins Laboratories

Analyte: m,p-Xylenes

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D	Max	%D	Flags
						RF/CF	RF/CF							
GC05	H	316331994001	18-AUG-2006 13:14	316256980002	27-JUN-2006	1622.2	1807.4	100.00	111.42	ng	11	15		u
GC05	I	316331994001	18-AUG-2006 13:14	316256980002	27-JUN-2006	1576.7	1680.6	100.00	106.59	ng	7	15		
GC05	H	316331994011	18-AUG-2006 20:16	316256980002	27-JUN-2006	1622.2	1739.7	150.00	160.87	ng	7	15		
GC05	I	316331994011	18-AUG-2006 20:16	316256980002	27-JUN-2006	1576.7	1581.7	150.00	150.48	ng	0	15		
GC05	H	316336234001	21-AUG-2006 11:54	316256980002	27-JUN-2006	1622.2	1864.4	100.00	114.93	ng	15	15		u
GC05	I	316336234001	21-AUG-2006 11:54	316256980002	27-JUN-2006	1576.7	1618.5	100.00	102.66	ng	3	15		
GC05	H	316336234010	21-AUG-2006 21:04	316256980002	27-JUN-2006	1622.2	1811.5	150.00	167.51	ng	12	15		
GC05	I	316336234010	21-AUG-2006 21:04	316256980002	27-JUN-2006	1576.7	1586.4	150.00	150.92	ng	1	15		

u=use

CONTINUING CALIBRATION SUMMARY FOR 188837 GCVOA Water
Curtis & Tompkins Laboratories

Analyte: o-Xylene

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D	Flags
						RF/CF	RF/CF						
GC05	H	316331994001	18-AUG-2006 13:14	316256980002	27-JUN-2006	1358.6	1370.1	100.00	100.85	ng	1 15		u
GC05	I	316331994001	18-AUG-2006 13:14	316256980002	27-JUN-2006	1378.2	1255.5	100.00	91.095	ng	-9 15		
GC05	H	316331994011	18-AUG-2006 20:16	316256980002	27-JUN-2006	1358.6	1318.5	150.00	145.58	ng	-3 15		
GC05	I	316331994011	18-AUG-2006 20:16	316256980002	27-JUN-2006	1378.2	1195.0	150.00	130.06	ng	-13 15		
GC05	H	316336234001	21-AUG-2006 11:54	316256980002	27-JUN-2006	1358.6	1406.5	100.00	103.52	ng	4 15		u
GC05	I	316336234001	21-AUG-2006 11:54	316256980002	27-JUN-2006	1378.2	1191.2	100.00	86.430	ng	-14 15		
GC05	H	316336234010	21-AUG-2006 21:04	316256980002	27-JUN-2006	1358.6	1375.3	150.00	151.85	ng	1 15		
GC05	I	316336234010	21-AUG-2006 21:04	316256980002	27-JUN-2006	1378.2	1170.0	150.00	127.33	ng	-15 15		

CONTINUING CALIBRATION SUMMARY FOR 188837 GCVOA Water
Curtis & Tompkins Laboratories

Analyte: Trifluorotoluene (FID)

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D	Max	%D	Flags
						RF/CF	RF/CF							
GC05	G	316331994001	18-AUG-2006 13:14	316256980001	27-JUN-2006	1080.8	987.26	450.00	411.05	ng	-9	15		
GC05	G	316331994002	18-AUG-2006 13:45	316256980001	27-JUN-2006	1080.8	1137.3	450.00	473.54	ng	5	15	u	
GC05	G	316331994011	18-AUG-2006 20:16	316256980001	27-JUN-2006	1080.8	1095.9	450.00	456.30	ng	1	15		
GC05	G	316331994027	19-AUG-2006 04:48	316256980001	27-JUN-2006	1080.8	1150.3	450.00	478.95	ng	6	15		
GC05	G	316331994032	19-AUG-2006 07:27	316256980001	27-JUN-2006	1080.8	1154.2	450.00	480.57	ng	7	15		
GC05	G	316336234001	21-AUG-2006 11:54	316256980001	27-JUN-2006	1080.8	916.57	450.00	381.62	ng	-15	15		
GC05	G	316336234002	21-AUG-2006 12:26	316256980001	27-JUN-2006	1080.8	1158.7	450.00	482.43	ng	7	15	u	
GC05	G	316336234008	21-AUG-2006 19:31	316256980001	27-JUN-2006	1080.8	1142.6	450.00	475.73	ng	6	15		

u=use

CONTINUING CALIBRATION SUMMARY FOR 188837 GCVOA Water
Curtis & Tompkins Laboratories

Analyte: Bromofluorobenzene (FID)

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D	Flags
						RF/CF	RF/CF						
GC05	G	316331994001	18-AUG-2006 13:14	316256980001	27-JUN-2006	664.13	645.78	450.00	437.56	ng	-3	15	
GC05	G	316331994002	18-AUG-2006 13:45	316256980001	27-JUN-2006	664.13	681.07	450.00	461.48	ng	3	15	u
GC05	G	316331994011	18-AUG-2006 20:16	316256980001	27-JUN-2006	664.13	720.69	450.00	488.32	ng	9	15	
GC05	G	316331994027	19-AUG-2006 04:48	316256980001	27-JUN-2006	664.13	686.27	450.00	465.00	ng	3	15	
GC05	G	316331994032	19-AUG-2006 07:27	316256980001	27-JUN-2006	664.13	633.56	450.00	429.28	ng	-5	15	
GC05	G	316336234001	21-AUG-2006 11:54	316256980001	27-JUN-2006	664.13	589.52	450.00	399.44	ng	-11	15	
GC05	G	316336234002	21-AUG-2006 12:26	316256980001	27-JUN-2006	664.13	703.57	450.00	476.73	ng	6	15	u
GC05	G	316336234008	21-AUG-2006 19:31	316256980001	27-JUN-2006	664.13	739.77	450.00	501.25	ng	11	15	

u=use

CONTINUING CALIBRATION SUMMARY FOR 188837 GCVOA Water
Curtis & Tompkins Laboratories

Analyte: Trifluorotoluene (PID)

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D	Flags
						RF/CF	RF/CF						
GC05	H	316331994001	18-AUG-2006 13:14	316256980001	27-JUN-2006	425.87	371.07	450.00	392.09	ng	-13	15	u
GC05	I	316331994001	18-AUG-2006 13:14	316256980001	27-JUN-2006	386.07	345.88	450.00	403.15	ng	-10	15	
GC05	H	316331994011	18-AUG-2006 20:16	316256980001	27-JUN-2006	425.87	448.89	450.00	474.33	ng	5	15	
GC05	I	316331994011	18-AUG-2006 20:16	316256980001	27-JUN-2006	386.07	382.75	450.00	446.12	ng	-1	15	
GC05	H	316336234001	21-AUG-2006 11:54	316256980001	27-JUN-2006	425.87	390.09	450.00	412.19	ng	-8	15	u
GC05	I	316336234001	21-AUG-2006 11:54	316256980001	27-JUN-2006	386.07	309.71	450.00	361.00	ng	-20	15	c- Pass
GC05	H	316336234008	21-AUG-2006 19:31	316256980001	27-JUN-2006	425.87	514.53	450.00	543.69	ng	21	15	c+ ↓
GC05	I	316336234008	21-AUG-2006 19:31	316256980001	27-JUN-2006	386.07	419.69	450.00	489.18	ng	9	15	

Mon 8/22/06

Laboratory Limits:
64-132%
CW 8/30/06

+ = high bias - = low bias c = CCV u = use

CONTINUING CALIBRATION SUMMARY FOR 188837 GCVOA Water
Curtis & Tompkins Laboratories

Analyte: Bromofluorobenzene (PID)

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D	Flags
						RF/CF	RF/CF						
GC05	H	316331994001	18-AUG-2006 13:14	316256980001	27-JUN-2006	858.70	849.21	450.00	445.03	ng	-1 15		u
GC05	I	316331994001	18-AUG-2006 13:14	316256980001	27-JUN-2006	846.91	850.87	450.00	452.11	ng	0 15		
GC05	H	316331994011	18-AUG-2006 20:16	316256980001	27-JUN-2006	858.70	958.09	450.00	502.09	ng	12 15		
GC05	I	316331994011	18-AUG-2006 20:16	316256980001	27-JUN-2006	846.91	900.21	450.00	478.32	ng	6 15		
GC05	H	316336234001	21-AUG-2006 11:54	316256980001	27-JUN-2006	858.70	792.83	450.00	415.48	ng	-8 15		u
GC05	I	316336234001	21-AUG-2006 11:54	316256980001	27-JUN-2006	846.91	718.41	450.00	381.72	ng	-15 15		
GC05	H	316336234008	21-AUG-2006 19:31	316256980001	27-JUN-2006	858.70	855.79	450.00	448.48	ng	0 15		
GC05	I	316336234008	21-AUG-2006 19:31	316256980001	27-JUN-2006	846.91	840.12	450.00	446.40	ng	-1 15		

u=use

SEQUENCE SUMMARY

Curtis & Tompkins Laboratories

Sequence: 316199245 Instrument: GC05 Gas Chromatograph #5 TVH/BTXE Begun: 18-MAY-2006
 Analytical Method: EPA 8015B SOP Version: TVH_BTXE_rv11
 Analytical Method: EPA 8021B SOP Version: TVH_BTXE_rv13

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
001	138_001	X	ib			18-MAY-2006	08:45	1.0					1		
002	138_002	X	QC340572	113573	Water	18-MAY-2006	09:17	1.0					2	1	Not used
003	138_003	X	QC340573	113573	Water	18-MAY-2006	09:49	1.0					3	1	
004	138_004	X	QC340571	113573	Water	18-MAY-2006	10:21	1.0					1		
005	138_005	X	ib			18-MAY-2006	16:15	1.0					1		
006	138_006	ICAL	tvh 1			18-MAY-2006	16:47	1.0					4	1	Pass Use
007	138_007	ICAL	tvh 2			18-MAY-2006	17:19	1.0					5	1	
008	138_008	ICAL	tvh 3			18-MAY-2006	17:51	1.0					6	1	
009	138_009	ICAL	tvh 4			18-MAY-2006	18:23	1.0					7	1	
010	138_010	ICAL	tvh 5			18-MAY-2006	18:55	1.0					7	1	
011	138_011	X	ib			18-MAY-2006	19:27	1.0					1		
012	138_012	X	carbmark			18-MAY-2006	19:58	1.0					8	9	1 Use
013	138_013	X	ib			18-MAY-2006	20:30	1.0					1		
014	138_014	ICV	tvh			18-MAY-2006	21:02	1.0					3	1	Pass Use
										5000					

Std's used: 1=S3248 2=S3406 3=S3323 4=S3460 5=S3459 6=S3458 7=S3457 8=S1645 9=S1646

Analyst: MicaelaDate: 05/22/06

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Date

SEQUENCE SUMMARY

Curtis & Tompkins Laboratories

Sequence: 316256980 Instrument: GC05

Analytical Method: EPA 8015B

Analytical Method: EPA 8021B

Gas Chromatograph #5 TVH/BTXE

SOP Version: TVH BTXE rv11

SOP Version: TVH BTXE rv13

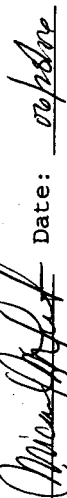
Begun: 27-JUN-2006

#	Filename Type	Sample Name	Batch	Matrix Analyzed	IDF	IOC SPK uL	VL pH Stds Used	>LR
001	178_001 X	IB		27-JUN-2006	11:00 1.0		1	1
002	178_002 ICAL	TFT/BFB 1		27-JUN-2006	11:32 1.0		2	1
003	178_003 ICAL	TFT/BFB 2		27-JUN-2006	12:15 1.0		3	1
004	178_004 ICAL	TFT/BFB 3		27-JUN-2006	12:48 1.0		4	1
005	178_005 ICAL	TFT/BFB 4		27-JUN-2006	13:20 1.0		5	1
006	178_006 ICAL	TFT/BFB 5		27-JUN-2006	14:00 1.0		6	1
007	178_007 X	IB		27-JUN-2006	15:24 1.0		1	1
008	178_008 X	IB		27-JUN-2006	15:56 1.0		1	1
009	178_009 ICAL	BTXE 1		27-JUN-2006	16:28 1.0		7	1
010	178_010 ICAL	MTBE 1		27-JUN-2006	17:00 1.0		8	1
011	178_011 ICAL	BTXE 2		27-JUN-2006	17:32 1.0		8	1
012	178_012 ICAL	BTXE 3		27-JUN-2006	18:04 1.0		8	1
013	178_013 ICAL	BTXE 4		27-JUN-2006	18:36 1.0		9	1
014	178_014 ICAL	BTXE 5		27-JUN-2006	19:08 1.0		9	1
015	178_015 ICAL	BTXE 6		27-JUN-2006	19:40 1.0		9	1
016	178_016 ICAL	BTXE 7		27-JUN-2006	20:12 1.0		10	1
017	178_017 X	IB		27-JUN-2006	20:44 1.0		1	1
018	178_018 X	MTBE		27-JUN-2006	21:16 1.0		11	1
019	178_019 ICV	MTBE		27-JUN-2006	21:48 1.0	5000	11	1

Stds used: 1=S3248 2=S3289 3=S3290 4=S3291 5=S3292 6=S3293 7=S3735 8=S3734 9=S3733 10=S3732 11=S3079

Analyst:

Date:



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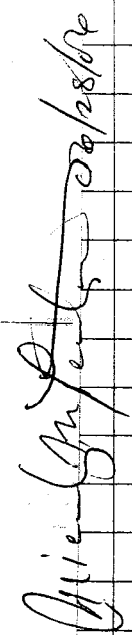
6/28/06

Signed

Date

Signed

Date



SEQUENCE SUMMARY
Curtis & Tompkins LaboratoriesSequence: 316331994 Instrument: GC05
Analytical Method: EPA 8015B
Analytical Method: EPA 8021BGas Chromatograph #5 TVH/BTXE
SOP Version: TVH_BTxE_rv11
SOP Version: TVH_BTxE_rv13

Begun: 18-AUG-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
001	230_001	CCV/LCS	QC352437	116541	Water	18-AUG-2006 13:14	1.0			5000			1 2	Pass / used	
002	230_002	CCV/LCS	QC352438	116541	Water	18-AUG-2006 13:45	1.0			5000			3 2	↓	
003	230_003	X	IB	116541	Water	18-AUG-2006 14:17	1.0						12		
004	230_004	CCV	STODD	116541		18-AUG-2006 16:34	1.0			5000			4 2	Pass / used, BFB FT due to coelution	will studn
005	230_005	BLANK	QC352436	116541	Water	18-AUG-2006 17:06	1.0	2		5000			2	<1% RL	
006	230_006	MSS	188837-009	116541	Water	18-AUG-2006 17:37	1.0	2		5000	A	11.3	12		
007	230_007	MS	QC352530	116541	Water	18-AUG-2006 18:09	1.0			5000			3 2	Pass / used	
008	230_008	MSD	QC352531	116541	Water	18-AUG-2006 18:41	1.0			5000			3 2	↓	
009	230_009	SAMPLE	188837-010	116541	Water	18-AUG-2006 19:12	1.0			5000			12		
010	230_010	SAMPLE	188837-012	116541	Water	18-AUG-2006 19:44	1.0			5000	V	12			
011	230_011	CCV	MBTXE	116541		18-AUG-2006 20:16	1.0			5000			1 2	Pass / used	
012	230_012	X	MBTXE	116541		18-AUG-2006 20:48	1.0	1		5000			1 2	Not used	
013	230_013	CCV	TVH	116541		18-AUG-2006 21:19	1.0			5000			3 2	Pass / used	
014	230_014	CCV	TVH	116541		18-AUG-2006 21:51	1.0			5000			3 2		
015	230_015	CCV	STODD	116541		18-AUG-2006 22:23	1.0			5000			4 2	BFB FT due to coelution w/ std	
016	230_016	CCV	STODD	116541		18-AUG-2006 22:55	1.0			5000			4 2	↓	
017	230_017	SAMPLE	188824-001	116541	Water	18-AUG-2006 23:26	1.0			5000	A	11.3	12		
018	230_018	SAMPLE	188824-002	116541	Water	18-AUG-2006 23:58	1.0			5000			12		
019	230_019	SAMPLE	188824-003	116541	Water	19-AUG-2006 00:31	1.0			5000			12		
020	230_020	SAMPLE	188824-013	116541	Water	19-AUG-2006 01:03	1.0			5000	V	12			
021	230_021	SAMPLE	188825-001	116541	Water	19-AUG-2006 01:35	1.0			5000	C	12			
022	230_022	SAMPLE	188825-003	116541	Water	19-AUG-2006 02:07	1.0			5000			12		
023	230_023	SAMPLE	188825-004	116541	Water	19-AUG-2006 02:39	1.0			5000			12		
024	230_024	SAMPLE	188825-005	116541	Water	19-AUG-2006 03:11	1.0			5000	V	12			
025	230_025	SAMPLE	188837-001	116541	Water	19-AUG-2006 03:43	1.0			5000	A	12			
026	230_026	SAMPLE	188837-008	116541	Water	19-AUG-2006 04:16	1.0			5000	V	12			
027	230_027	CCV	TVH	116541		19-AUG-2006 04:48	1.0			5000			3 2	Pass / used	
028	230_028	CCV	TVH	116541		19-AUG-2006 05:20	1.0			5000			3 2	↓	
029	230_029	SAMPLE	188837-020	116541	Water	19-AUG-2006 05:52	1.0	1		5000	A	11.3	12		
030	230_030	SAMPLE	188837-021	116541	Water	19-AUG-2006 06:23	1.0	1		5000	V	12			

Stds used: 1=S4123 2=S3969 3=S3982 4=S3641

Analyst: M. Awa Date: 08/21/06

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SEQUENCE SUMMARY
Curtis & Tompkins LaboratoriesSequence: 316331994 Instrument: GC05
Analytical Method: EPA 8015B
Analytical Method: EPA 8021BGas Chromatograph #5 TVH/BTXE
SOP Version: TVH_BTxE_rv11
SOP Version: TVH_BTxE_rv13

Begun: 18-AUG-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
031	230_031	SAMPLE	188825-002	116541	Water	19-AUG-2006 06:55	1.0		1	5000	C	11.3	12		
032	230_032	CCV	TVH	116541		19-AUG-2006 07:27	1.0			5000			3 2	Pass / used	
033	230_033	CCV	TVH	116541		19-AUG-2006 07:58	1.0			5000			3 2	↓	
034	230_034	X	IB	116541		21-AUG-2006 11:02	1.0		3	5000			3 2		

Stds used: 1=S4123 2=S3969 3=S3982 4=S3641

Analyst: M. Awa Date: 08/21/06

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Date

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Date

PROJECT GC05 Sequence Logbook

Notebook No. BK 2341

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SEQUENCE SUMMARY

Curtis & Tompkins Laboratories

Begun: 21-AUG-2006

Gas Chromatograph #5 TVH/BTXE

SOP Version: TVH BTXE rv11

SOP Version: TVH BTXE rv13

Sequence: 316336234 Instrument: GC05

Analytical Method: EPA 8015B

Analytical Method: EPA 8021B

#	Filename	Type	Sample/num	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Std's	Used	>LR		
001	233_001	CCV/LCS	QC352637	116587	Water	21-AUG-2006	11:54	1	1	5000	1	2	1	2	PASS / used Toluene F ↓ Conf.		
002	233_002	CCV/LCS	QC352638	116587	Water	21-AUG-2006	12:26	5	3	5000	1	3	2	3	PASS / used		
003	233_003	BLANK	QC352636	116587	Water	21-AUG-2006	12:58	5	2	5000	2	< 1/2	RL	TVH & MBTXE ONLY			
004	233_004	MSS	188837-005	116587	Water	21-AUG-2006	13:34	5	1	5000	B	1,3	2				
005	233_005	MS	QC352674	116587	Water	21-AUG-2006	14:06		1	5000	1	3	2	3	PASS / used		
006	233_006	MSD	QC352675	116587	Water	21-AUG-2006	14:38	3	1	5000	1	3	2	2	↓		
007	233_007	X	MBTXE	116587		21-AUG-2006	18:59		1	5000	1	2	2	3	Not used		
008	233_008	CCV	TVH	116587		21-AUG-2006	19:31		1	5000	1	3	2	3	PASS / used		
009	233_009	CCV	STODD	116587		21-AUG-2006	20:03		1	5000	1	4	2	2	↓		
010	233_010	CCV	MBTXE	116587		21-AUG-2006	21:04	2	1	5000	1	1	2	2	Toluene / Ethyl Benzene F ↓ Conf.		
011	233_011	X	MBTXE	116587		21-AUG-2006	21:36	3	1	5000	1	1	2	2	NOT used		
012	233_012	SAMPLE	188867-001	116587	Water	21-AUG-2006	22:08	3	1	5000	A	1,3	2				
013	233_013	SAMPLE	188867-002	116587	Water	21-AUG-2006	22:40	3	1	5000	1	3	2	3			
014	233_014	SAMPLE	188869-001	116587	Water	21-AUG-2006	23:11	3	1	5000	1	3	2	3			
015	233_015	CCV	MBTXE	116587		21-AUG-2006	23:43	4	1	5000	1	2	2	3	2	PASS / used Toluene / Ethyl Benzene / Dodecane F / Conf.	
016	233_016	X	MBTXE	116587		22-AUG-2006	00:15		1	5000	1	1	2	2	Not used		
017	233_017	CCV	TVH	116587		22-AUG-2006	00:48		1	5000	1	3	2	3	PASS / used		
018	233_018	CCV	TVH	116587		22-AUG-2006	01:20		1	5000	1	4	2	2	↓		
019	233_019	CCV	STODD	116587		22-AUG-2006	01:52	1		5000	1	4	2	2	Not used		
020	233_020	X	STODD	116587		22-AUG-2006	02:24	1		5000	1	2	2	2			
021	233_021	X	IB			22-AUG-2006	10:32		1	5000	1	2	2	2	< 1/2 RL STANDARD ONLY		
022	233_022	BLANK	QC352636	116587	Water	22-AUG-2006	11:04	6	1	5000	1	2	2	2	↓	2	PASS / used
023	233_023	CCV	STODD	116587		22-AUG-2006	11:35			5000	4	2	2	2			

Std's used: 1=S4123 2=S3969 3=S3982 4=S3641

Analyst: *meat* Date: 08/22/2006

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Signed

08/22/06

Date

MJM 8/22/06

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 315421005 Instrument: GC05 Gas Chromatograph #5 TVH/BTXE Begun: 19-OCT-2005
 Analytical Method: EPA 8015B SOP Version: TVH_BTXE_rv11
 Analytical Method: EPA 8021B SOP Version: TVH_BTXE_rv11

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Std's	Used	>LR
001	292_001	CCV/LCS	QC313524	106875	Water	19-OCT-2005	08:45	1.0		5000			1	2	PASS
002	292_002	CCV/LCS	QC313525	106875	Water	19-OCT-2005	09:17	1.0	1	5000			3	2	
003	292_003	CCV	stodd	106875		19-OCT-2005	09:49	1.0		5000			4	2	
004	292_004	BLANK	QC313523	106875	Water	19-OCT-2005	10:20	1.0	5	5000			2	1	PASS
005	292_005	SAMPLE	182533-001	106875	Water	19-OCT-2005	10:52	1.0		5000			1	0	2
006	292_006	SAMPLE	182533-002	106875	Water	19-OCT-2005	11:24	1.0		5000			1	2	
007	292_007	SAMPLE	182533-003	106875	Water	19-OCT-2005	11:56	1.0		5000			1	2	
008	292_008	SAMPLE	182533-004	106875	Water	19-OCT-2005	12:28	1.0		5000			1	2	
009	292_009	SAMPLE	182533-005	106875	Water	19-OCT-2005	12:59	1.0		5000			1	2	
010	292_010	SAMPLE	182578-001	106875	Water	19-OCT-2005	13:32	1.0		5000			1	2	
011	292_011	SAMPLE	182578-002	106875	Water	19-OCT-2005	14:04	1.0		5000			1	2	
012	292_012	CCV	mbtce	106875		19-OCT-2005	14:35	1.0		5000			1	2	PASS
013	292_013	CCV	stodd	106875		19-OCT-2005	15:08	1.0		5000			4	2	
014	292_014	CCV	tvh	106875		19-OCT-2005	15:39	1.0		5000			3	2	
015	292_015	SAMPLE	182586-001	106875	Water	19-OCT-2005	16:12	1.0		5000			1	0	2
016	292_016	MSS	182586-002	106875	Water	19-OCT-2005	16:44	1.0	2	5000			1	2	
017	292_017	SAMPLE	182588-002	106875	Water	19-OCT-2005	17:16	1.0		5000			1	2	
018	292_018	SAMPLE	182590-012	106875	Water	19-OCT-2005	17:47	1.0		5000			1	2	
019	292_019	SAMPLE	182590-013	106875	Water	19-OCT-2005	18:19	1.0		5000			1	2	
020	292_020	MS	QC313667	106875	Water	19-OCT-2005	19:13	1.0		5000			3	2	PASS
021	292_021	MSD	QC313668	106875	Water	19-OCT-2005	19:45	1.0	1	5000			3	2	
022	292_022	CCV	tvh	106875		19-OCT-2005	20:16	1.0		5000			3	2	
023	292_023	CCV	tvh	106875		19-OCT-2005	20:48	1.0		5000			3	2	

Std's used: 1-S17632-S1421 3-S1762 4-S736

Analyst: 

Date: 10/20/05

Page 1 of 1

Continued on Page

Read and Understood By

Signed

Date

Signed

Date

REPORTING SUMMARY FOR 188837 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
188837-001	Gasoline C7-C12	GC05	G	08/19/06 03:43
188837-001	Trifluorotoluene (FID)	GC05	G	08/19/06 03:43
188837-001	Bromofluorobenzene (FID)	GC05	G	08/19/06 03:43
188837-005	Gasoline C7-C12	GC05	G	08/21/06 13:34
188837-005	MTBE	GC05	H	08/21/06 13:34
188837-005	Benzene	GC05	H	08/21/06 13:34
188837-005	Toluene	GC05	H	08/21/06 13:34
188837-005	Ethylbenzene	GC05	H	08/21/06 13:34
188837-005	Trifluorotoluene (FID)	GC05	G	08/21/06 13:34
188837-005	Bromofluorobenzene (FID)	GC05	G	08/21/06 13:34
188837-005	Trifluorotoluene (PID)	GC05	H	08/21/06 13:34
188837-005	Bromofluorobenzene (PID)	GC05	H	08/21/06 13:34
188837-005	Xylene (total)	GC05	H	08/21/06 13:34
188837-008	Gasoline C7-C12	GC05	G	08/19/06 04:16
188837-008	Trifluorotoluene (FID)	GC05	G	08/19/06 04:16
188837-008	Bromofluorobenzene (FID)	GC05	G	08/19/06 04:16
188837-009	Gasoline C7-C12	GC05	G	08/18/06 17:37
188837-009	MTBE	GC05	H	08/18/06 17:37
188837-009	Benzene	GC05	H	08/18/06 17:37
188837-009	Toluene	GC05	H	08/18/06 17:37
188837-009	Ethylbenzene	GC05	H	08/18/06 17:37
188837-009	Trifluorotoluene (FID)	GC05	G	08/18/06 17:37
188837-009	Bromofluorobenzene (FID)	GC05	G	08/18/06 17:37
188837-009	Trifluorotoluene (PID)	GC05	H	08/18/06 17:37
188837-009	Bromofluorobenzene (PID)	GC05	H	08/18/06 17:37
188837-009	Xylene (total)	GC05	H	08/18/06 17:37
188837-010	Gasoline C7-C12	GC05	G	08/18/06 19:12
188837-010	MTBE	GC05	H	08/18/06 19:12
188837-010	Benzene	GC05	H	08/18/06 19:12
188837-010	Toluene	GC05	H	08/18/06 19:12
188837-010	Ethylbenzene	GC05	H	08/18/06 19:12
188837-010	Trifluorotoluene (FID)	GC05	G	08/18/06 19:12
188837-010	Bromofluorobenzene (FID)	GC05	G	08/18/06 19:12
188837-010	Trifluorotoluene (PID)	GC05	H	08/18/06 19:12
188837-010	Bromofluorobenzene (PID)	GC05	H	08/18/06 19:12
188837-010	Xylene (total)	GC05	H	08/18/06 19:12
188837-012	Gasoline C7-C12	GC05	G	08/18/06 19:44
188837-012	Stoddard Solvent C7-C12	GC05	G	08/18/06 19:44
188837-012	MTBE	GC05	H	08/18/06 19:44
188837-012	Benzene	GC05	H	08/18/06 19:44
188837-012	Toluene	GC05	H	08/18/06 19:44
188837-012	Ethylbenzene	GC05	H	08/18/06 19:44
188837-012	Trifluorotoluene (FID)	GC05	G	08/18/06 19:44
188837-012	Bromofluorobenzene (FID)	GC05	G	08/18/06 19:44
188837-012	Trifluorotoluene (PID)	GC05	H	08/18/06 19:44
188837-012	Bromofluorobenzene (PID)	GC05	H	08/18/06 19:44
188837-012	Xylene (total)	GC05	H	08/18/06 19:44
188837-020	Gasoline C7-C12	GC05	G	08/19/06 05:52

REPORTING SUMMARY FOR 188837 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
188837-020	Trifluorotoluene (FID)	GC05	G	08/19/06 05:52
188837-020	Bromofluorobenzene (FID)	GC05	G	08/19/06 05:52
188837-021	Gasoline C7-C12	GC05	G	08/19/06 06:23
188837-021	Trifluorotoluene (FID)	GC05	G	08/19/06 06:23
188837-021	Bromofluorobenzene (FID)	GC05	G	08/19/06 06:23
QC352436	Gasoline C7-C12	GC05	G	08/18/06 17:06
QC352436	Stoddard Solvent C7-C12	GC05	G	08/18/06 17:06
QC352436	MTBE	GC05	H	08/18/06 17:06
QC352436	Benzene	GC05	H	08/18/06 17:06
QC352436	Toluene	GC05	H	08/18/06 17:06
QC352436	Ethylbenzene	GC05	H	08/18/06 17:06
QC352436	Trifluorotoluene (FID)	GC05	G	08/18/06 17:06
QC352436	Bromofluorobenzene (FID)	GC05	G	08/18/06 17:06
QC352436	Trifluorotoluene (PID)	GC05	H	08/18/06 17:06
QC352436	Bromofluorobenzene (PID)	GC05	H	08/18/06 17:06
QC352436	Xylene (total)	GC05	H	08/18/06 17:06
QC352437	MTBE	GC05	H	08/18/06 13:14
QC352437	Benzene	GC05	H	08/18/06 13:14
QC352437	Toluene	GC05	H	08/18/06 13:14
QC352437	Ethylbenzene	GC05	H	08/18/06 13:14
QC352437	Trifluorotoluene (PID)	GC05	H	08/18/06 13:14
QC352437	Bromofluorobenzene (PID)	GC05	H	08/18/06 13:14
QC352438	Gasoline C7-C12	GC05	G	08/18/06 13:45
QC352438	Trifluorotoluene (FID)	GC05	G	08/18/06 13:45
QC352438	Bromofluorobenzene (FID)	GC05	G	08/18/06 13:45
QC352530	Gasoline C7-C12	GC05	G	08/18/06 18:09
QC352530	Trifluorotoluene (FID)	GC05	G	08/18/06 18:09
QC352530	Bromofluorobenzene (FID)	GC05	G	08/18/06 18:09
QC352531	Gasoline C7-C12	GC05	G	08/18/06 18:41
QC352531	Trifluorotoluene (FID)	GC05	G	08/18/06 18:41
QC352531	Bromofluorobenzene (FID)	GC05	G	08/18/06 18:41
QC352636	Gasoline C7-C12	GC05	G	08/21/06 12:58
QC352636	MTBE	GC05	H	08/21/06 12:58
QC352636	Benzene	GC05	H	08/21/06 12:58
QC352636	Toluene	GC05	H	08/21/06 12:58
QC352636	Ethylbenzene	GC05	H	08/21/06 12:58
QC352636	Trifluorotoluene (FID)	GC05	G	08/21/06 12:58
QC352636	Bromofluorobenzene (FID)	GC05	G	08/21/06 12:58
QC352636	Trifluorotoluene (PID)	GC05	H	08/21/06 12:58
QC352636	Bromofluorobenzene (PID)	GC05	H	08/21/06 12:58
QC352636	Xylene (total)	GC05	H	08/21/06 12:58
QC352637	MTBE	GC05	H	08/21/06 11:54
QC352637	Benzene	GC05	H	08/21/06 11:54
QC352637	Toluene	GC05	H	08/21/06 11:54
QC352637	Ethylbenzene	GC05	H	08/21/06 11:54
QC352637	Trifluorotoluene (PID)	GC05	H	08/21/06 11:54

REPORTING SUMMARY FOR 188837 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC352637	Bromofluorobenzene (PID)	GC05	H	08/21/06 11:54
QC352638	Gasoline C7-C12	GC05	G	08/21/06 12:26
QC352638	Trifluorotoluene (FID)	GC05	G	08/21/06 12:26
QC352638	Bromofluorobenzene (FID)	GC05	G	08/21/06 12:26
QC352674	Gasoline C7-C12	GC05	G	08/21/06 14:06
QC352674	Trifluorotoluene (FID)	GC05	G	08/21/06 14:06
QC352674	Bromofluorobenzene (FID)	GC05	G	08/21/06 14:06
QC352675	Gasoline C7-C12	GC05	G	08/21/06 14:38
QC352675	Trifluorotoluene (FID)	GC05	G	08/21/06 14:38
QC352675	Bromofluorobenzene (FID)	GC05	G	08/21/06 14:38

GC05

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 116541
Date Started: 18-AUG-2006
Batched by : Micaela M. Perpetuo

Analysis : N/A
Bgroup : TVH
Department : GC Organics

Sample	Type	Client	Matrix	Analyses	Due Date
188824-001		MWH	Water	TVH	23-AUG-2006
188824-002		MWH	Water	TVH	23-AUG-2006
188824-003		MWH	Water	TVH	23-AUG-2006
188824-013		MWH	Water	TVH	23-AUG-2006
188825-001		Geologica	Water	TVH	23-AUG-2006
188825-002		Geologica	Water	TVH	23-AUG-2006
188825-003		Geologica	Water	TVH	23-AUG-2006
188825-004		Geologica	Water	TVH	23-AUG-2006
188825-005		Geologica	Water	TVH	23-AUG-2006
188837-001		Treadwell & Rollo	Water	TVH	30-AUG-2006
188837-008		Treadwell & Rollo	Water	TVH	30-AUG-2006
188837-009		Treadwell & Rollo	Water	MBTXE, TVH	30-AUG-2006
188837-010		Treadwell & Rollo	Water	MBTXE, TVH	30-AUG-2006
188837-012		Treadwell & Rollo	Water	MBTXE, TVH	30-AUG-2006
188837-020		Treadwell & Rollo	Water	TVH	30-AUG-2006
188837-021		Treadwell & Rollo	Water	TVH	30-AUG-2006
QC352436	BLANK		Water		
QC352437	LCS		Water		
QC352438	LCS		Water		
QC352530	MS	of 188837-009	Water		
QC352531	MSD	of 188837-009	Water		

(16)

GC05

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 116587
Date Started: 21-AUG-2006
Batched by : Micaela M. Perpetuo

Analysis : N/A
Bgroup : TVH
Department : GC Organics

Sample	Type	Client	Matrix	Analyses	Due Date
188837-005		Treadwell & Rollo	Water	MBTXE, TVH	30-AUG-2006
188867-001		Iris Environmental	Water	MBTXE, TVH	25-AUG-2006
188867-002		Iris Environmental	Water	MBTXE, TVH	25-AUG-2006
188869-001		Treadwell & Rollo	Water	MBTXE, TVH	31-AUG-2006
QC352636	BLANK		Water		
QC352637	LCS		Water		
QC352638	LCS		Water		
QC352674	MS	of 188837-005	Water		
QC352675	MSD	of 188837-005	Water		

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Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 09/24/06

Analyte	Units	GC19 A	GC19 X	GC04 A	GC04 J	GC05 G	GC07 A
Gasoline C6-C10	ug/L	21	21	6.7	6.2	14	10
Gasoline C6-C12	ug/L	21	21	5.5	6.8	11	14
Gasoline C7-C12	ug/L	27	27	4.8	7.2	7.4	15
JP-4 C7-C12	ug/L		4.6	12	12	9.9	19
Gasoline C6-C8	ug/L						7.0
Gasoline C8-C10	ug/L						12
Trifluorotoluene (FID)	ug/L			3.9			9.8
Bromofluorobenzene (FID)	ug/L			5.2			7.5

Curtis & Tompkins Laboratories
MDL Summary for EPA 8021B Water
As of 09/24/06

Analyte	Units	GC19 B	GC19 C	GC19 Y	GC19 Z	GC04 B	GC04 C	GC04 K	GC04 L	GC05 H	GC05 I	GC07 B	GC07 C
MTBE	ug/L	0.84	0.85	0.49	0.18	0.48	0.26	0.45	0.83	0.30	0.62	0.35	0.23
Benzene	ug/L	0.24	0.21	0.073	0.033	0.15	0.032	0.094	0.16	0.034	0.057	0.23	0.035
Toluene	ug/L	0.15	0.14	0.13	0.025	0.11	0.098	0.14	0.11	0.048	0.15	0.069	0.024
Ethylbenzene	ug/L	0.12	0.11	0.14	0.024	0.087	0.061	0.038	0.12	0.036	0.17	0.084	0.056
m,p-Xylenes	ug/L	0.11	0.10	0.13	0.039	0.15	0.11	0.10	0.21	0.030	0.17	0.090	0.027
o-Xylene	ug/L	0.19	0.20	0.15	0.015	0.19	0.10	0.12	0.10	0.083	0.19	0.13	0.040



**TOTAL EXTRACTABLE
HYDROCARBONS**

**Total Extractable Hydrocarbons**

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	08/18/06

Field ID:	LF10GW03	Sampled:	08/17/06
Type:	SAMPLE	Prepared:	08/23/06
Lab ID:	188837-001	Analyzed:	08/25/06
Batch#:	116703	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	85	65-135

Field ID:	610SP01	Sampled:	08/17/06
Type:	SAMPLE	Prepared:	08/23/06
Lab ID:	188837-005	Analyzed:	08/25/06
Batch#:	116703	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	79	65-135

Field ID:	1065PZ1A	Sampled:	08/17/06
Type:	SAMPLE	Prepared:	08/23/06
Lab ID:	188837-008	Analyzed:	08/25/06
Batch#:	116703	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	93	65-135

Field ID:	1065PZ2A	Sampled:	08/17/06
Type:	SAMPLE	Prepared:	08/23/06
Lab ID:	188837-009	Analyzed:	08/25/06
Batch#:	116703	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	107	65-135

H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit



Total Extractable Hydrocarbons

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	08/18/06

Field ID:	1065PZ4A	Sampled:	08/17/06
Type:	SAMPLE	Prepared:	08/23/06
Lab ID:	188837-010	Analyzed:	08/25/06
Batch#:	116703	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	90 H Y	50
Motor Oil C24-C36	390	300

Surrogate	%REC	Limits
Hexacosane	90	65-135

Field ID:	DW081706A	Sampled:	08/17/06
Type:	SAMPLE	Prepared:	08/23/06
Lab ID:	188837-012	Analyzed:	08/25/06
Batch#:	116703	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	85	65-135

Field ID:	LF10GW100	Sampled:	08/18/06
Type:	SAMPLE	Prepared:	08/20/06
Lab ID:	188837-020	Analyzed:	08/22/06
Batch#:	116569	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

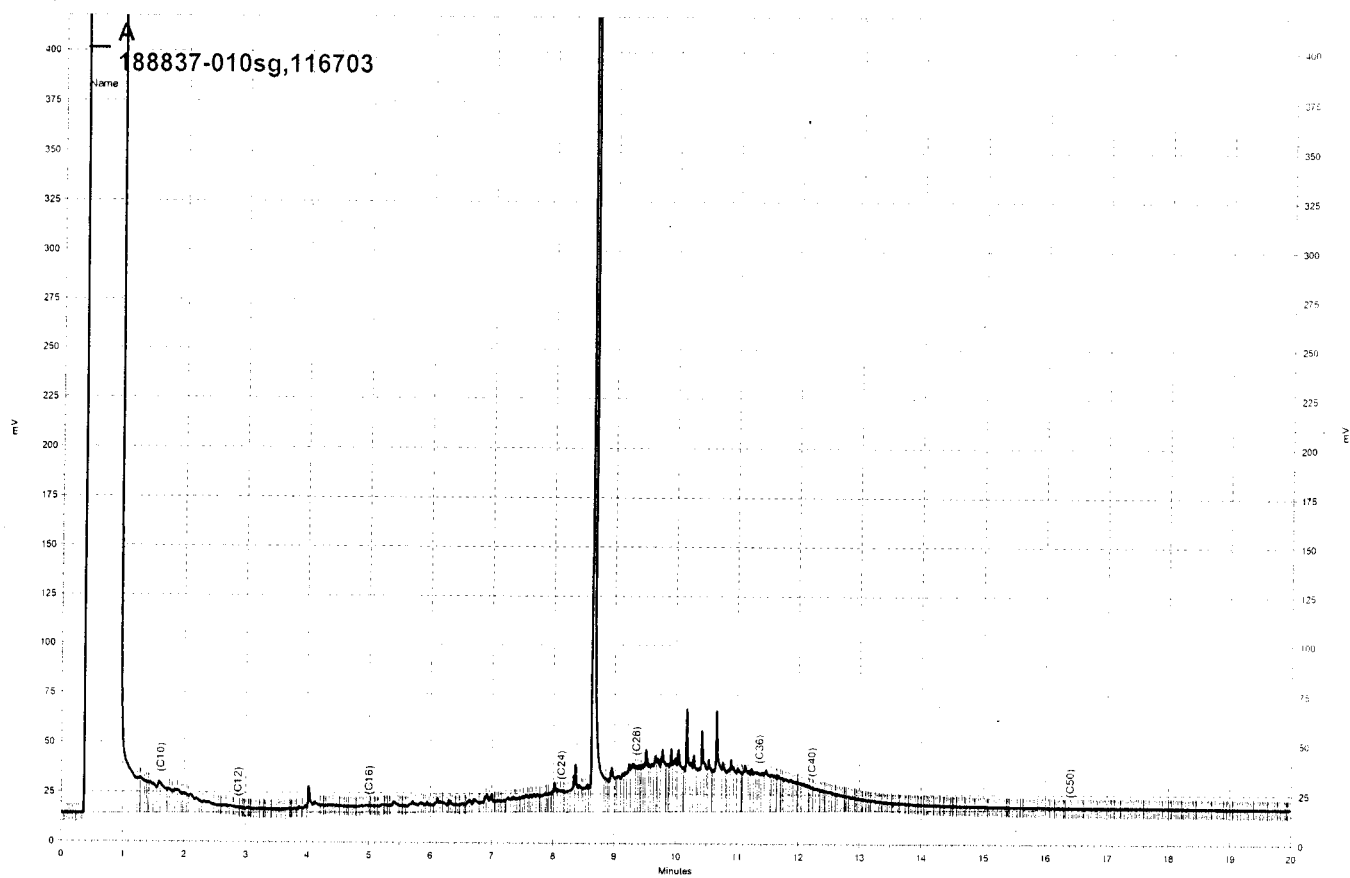
Surrogate	%REC	Limits
Hexacosane	112	65-135

Field ID:	LF10GW01	Sampled:	08/18/06
Type:	SAMPLE	Prepared:	08/20/06
Lab ID:	188837-021	Analyzed:	08/22/06
Batch#:	116569	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	87	65-135

H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit



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1065PZ4A



Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Diln Fac:	1.000
Units:	ug/L	Received:	08/18/06

Type:	BLANK	Prepared:	08/20/06
Lab ID:	QC352561	Analyzed:	08/23/06
Batch#:	116569	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

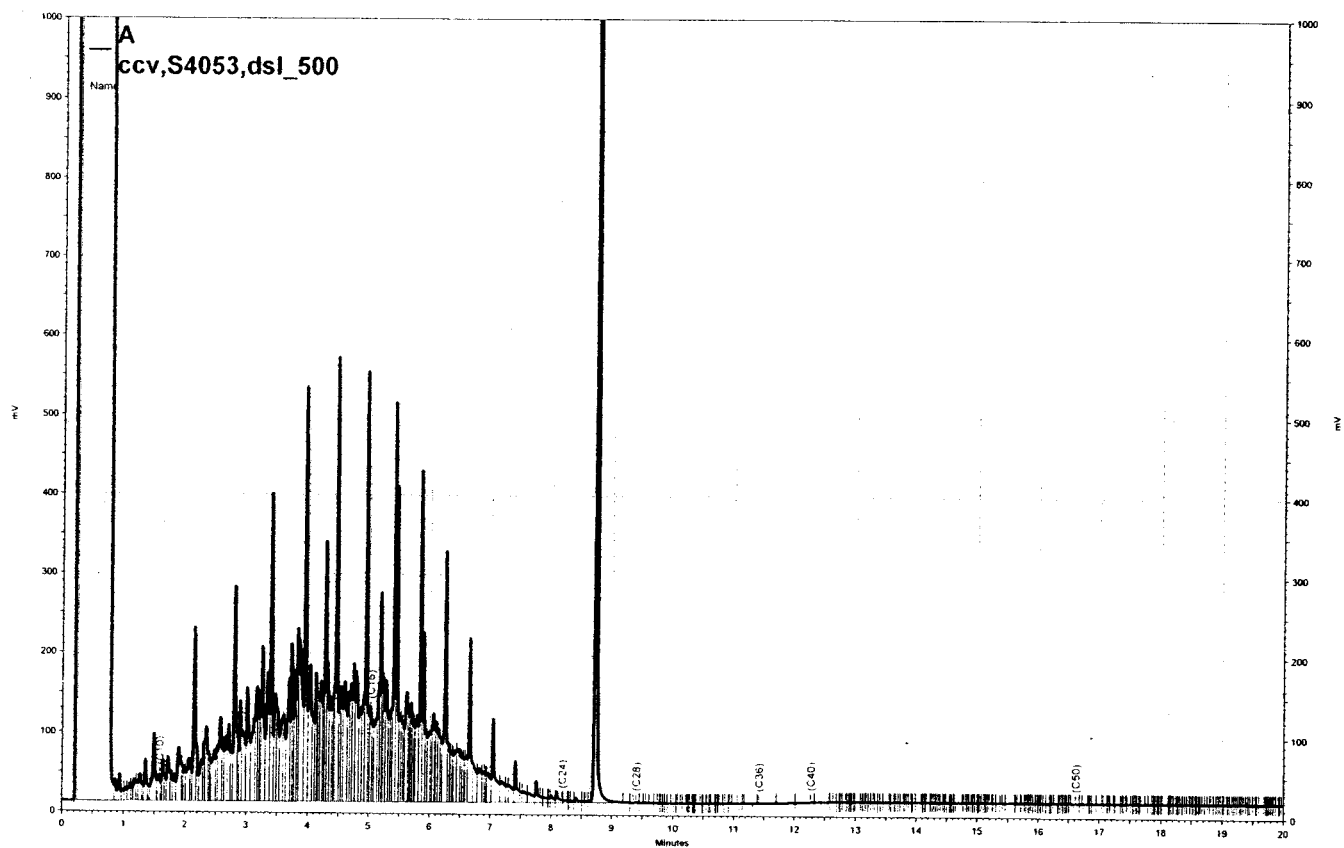
Surrogate	%REC	Limits
Hexacosane	84	65-135

Type:	BLANK	Prepared:	08/23/06
Lab ID:	QC353116	Analyzed:	08/24/06
Batch#:	116703	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

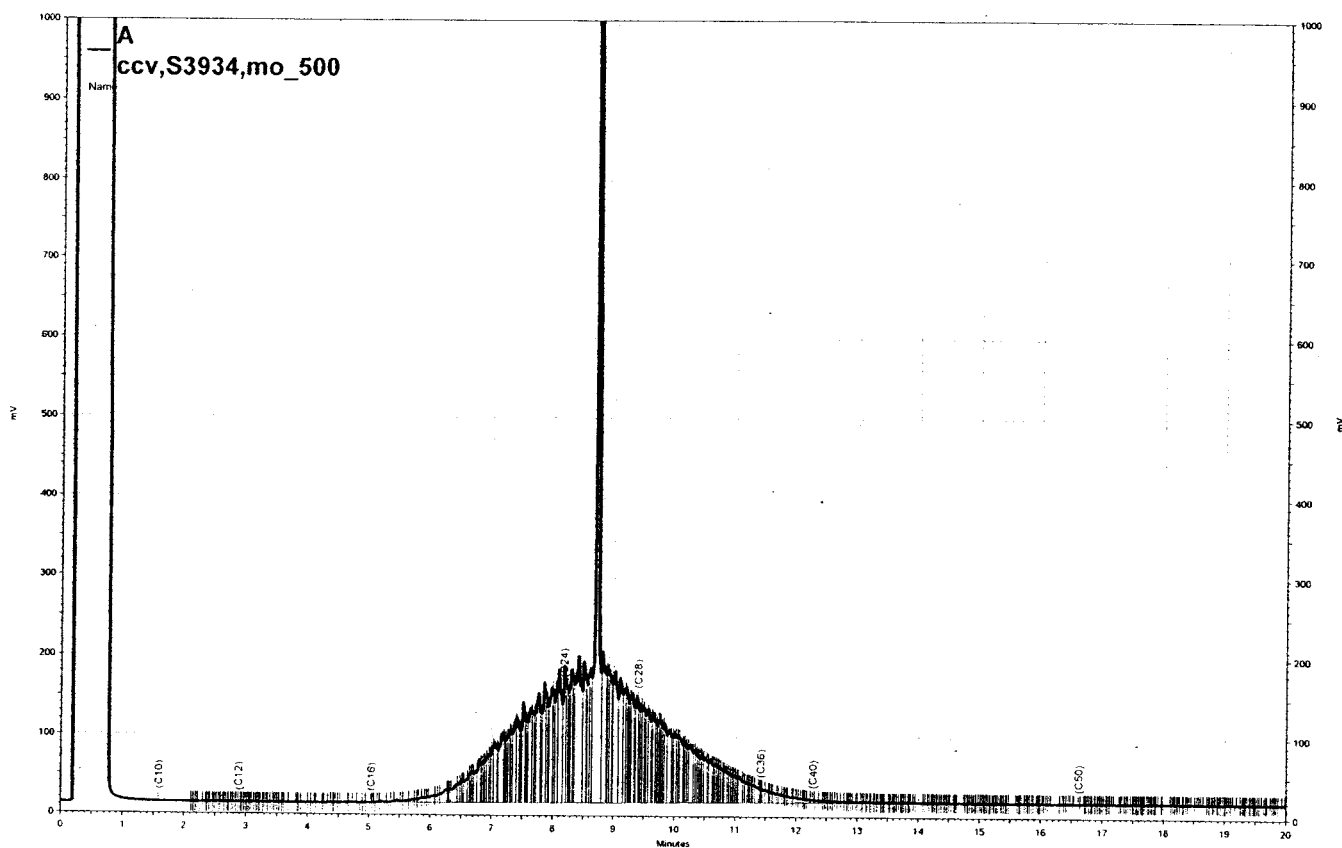
Surrogate	%REC	Limits
Hexacosane	109	65-135

H= Heavier hydrocarbons contributed to the quantitation
Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit



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Diesel



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Motor Oil



Batch QC Report

Total Extractable Hydrocarbons

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC352562	Batch#:	116569
Matrix:	Water	Prepared:	08/20/06
Units:	ug/L	Analyzed:	08/22/06

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,479	99	65-135

Surrogate	%REC	Limits
Hexacosane	100	65-135



Batch QC Report

Total Extractable Hydrocarbons

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC353117	Batch#:	116703
Matrix:	Water	Prepared:	08/23/06
Units:	ug/L	Analyzed:	08/24/06

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,277	91	65-135

Surrogate	%REC	Limits
Hexacosane	106	65-135



Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	116569
MSS Lab ID:	188826-003	Sampled:	08/17/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Prepared:	08/20/06
Diln Fac:	1.000	Analyzed:	08/22/06

Type: MS
Lab ID: QC352563

Cleanup Method: EPA 3630C

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C12-C24	<32.78	2,500	2,778	111	65-135

Surrogate	%REC	Limits
Hexacosane	110	65-135

Type: MSD
Lab ID: QC352564

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,909	116	65-135	5	35

Surrogate	%REC	Limits
Hexacosane	116	65-135

RPD= Relative Percent Difference

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1065PZ2A	Batch#:	116703
MSS Lab ID:	188837-009	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Prepared:	08/23/06
Diln Fac:	1.000	Analyzed:	08/25/06

Type: MS Cleanup Method: EPA 3630C
 Lab ID: QC353120

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C12-C24	21.70	2,500	2,147	85	65-135

Surrogate	%REC	Limits
Hexacosane	105	65-135

Type: MSD Cleanup Method: EPA 3630C
 Lab ID: QC353121

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,437	97	65-135	13	35

Surrogate	%REC	Limits
Hexacosane	112	65-135

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188837 GCSV Water: EPA 8015B

Reviewer: MCH

Inst : GC11A
Calnum : 116235201001
Units : mg/L

Name : gcl1adslcal6/13/06
Date : 13-JUN-2006 07:02
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	163a018	116235201018	DSL_10	13-JUN-2006 07:02	S3433
L2	163a019	116235201019	DSL_100	13-JUN-2006 07:30	S3434
L3	163a020	116235201020	DSL_250	13-JUN-2006 07:58	S3435
L4	163a021	116235201021	DSL_500	13-JUN-2006 08:26	S3436
L5	163a022	116235201022	DSL_1000	13-JUN-2006 08:54	S3437
L6	163a023	116235201023	DSL_2500	13-JUN-2006 09:23	S3438
L7	163a024	116235201024	DSL_5000	13-JUN-2006 09:51	S3432

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	AVG	r ²	%RSD	MIR ²	MRSD	Fig
Diesel C12-C24	70351	61641	59864	60002	59376	59503	59800	AVRG		1.63E-5		61505	6	0.995	20		

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188837 GCSV Water
EPA 8015B

Inst : GC11A
Calnum : 116235201001

Name : gc11adslcal6/13/06
Cal Date: 13-JUN-2006

ICV 116235201026 (163a026 13-JUN-2006) stds: S3623

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	61505	58612	500.0	476.5	mg/L	-5	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188837 GCSV Water: EPA 8015B

Inst : GC11A
Calnum : 116235201003
Units : mg/L

Name : MO
Date : 13-JUN-2006 11:42
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	163a028	116235201028	MO_50	13-JUN-2006 11:42	S3326
L2	163a029	116235201029	MO_250	13-JUN-2006 12:10	S3327
L3	163a030	116235201030	MO_500	13-JUN-2006 12:38	S3328
L4	163a031	116235201031	MO_1000	13-JUN-2006 13:06	S3329
L5	163a032	116235201032	MO_2500	13-JUN-2006 13:33	S3330
L6	163a033	116235201033	MO_5000	13-JUN-2006 14:01	S3325

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ² %RSD	Mmr ²	MKRSD	Flg
Motor Oil C24-C36	37512	40742	39568	39106	40379	40112	AVRG		2.53E-5		39570	3	0.995	20	

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor
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116235201003

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188837 GCSV Water: EPA 8015B

Inst : GC11A
 Calnum : 116235201002
 Units : mg/L

Name : Hex
 Date : 13-JUN-2006 14:57
 X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	163a035	116235201035	HEX_5	13-JUN-2006 14:57	S3671
L2	163a036	116235201036	HEX_10	13-JUN-2006 15:25	S3672
L3	163a037	116235201037	HEX_25	13-JUN-2006 15:52	S3673
L4	163a038	116235201038	HEX_50	13-JUN-2006 16:20	S3674
L5	163a039	116235201039	HEX_75	13-JUN-2006 16:48	S3675

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ² %RSD	MIR ²	MRMSD	Flg
Hexacosane	68290	70892	67660	67747	68862	AVRG		1.46E-5		68690	2	0.995	20	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188837 GCSV Water: EPA 8015B

Reviewer: CW

Inst : GC17A
 Calnum : 176265447001
 Units : mg/L
 Name : diesel
 Date : 03-JUL-2006 09:02
 X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	184a003	176265447003	DSL_10	03-JUL-2006 09:02	S3433
L2	184a004	176265447004	DSL_100	03-JUL-2006 09:29	S3434
L3	184a005	176265447005	DSL_250	03-JUL-2006 09:57	S3435
L4	184a006	176265447006	DSL_500	03-JUL-2006 10:25	S3436
L5	184a007	176265447007	DSL_1000	03-JUL-2006 10:52	S3437
L6	184a008	176265447008	DSL_2500	03-JUL-2006 11:19	S3438
L7	184a009	176265447009	DSL_5000	03-JUL-2006 12:57	S3432

Analyte	L1	L2	L3	L4	L5	L6	L7	TYPE	a0	a1	a2	Avg	r ² %RSD	Mmr ²	MxRSD	F1g
Diesel C12-C24	70879	71444	75567	77980	76533	78376	79841	AVRG		1.32E-5		75803	5	0.995	20	

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188837 GCSV Water
EPA 8015B

Inst : GC17A
Calnum : 176265447001

Name : diesel
Cal Date: 03-JUL-2006

ICV 176265447011 (184a011 03-JUL-2006) stds: S3623

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	75803	78704	500.0	519.1	mg/L	4	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188837 GCSV Water: EPA 8015B

Inst : GC17A
Calnum : 176290175001
Units : mg/L

Name : gc17mocal7/21/06
Date : 20-JUL-2006 19:04
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Std
L1	201a009	176290175009	MO_50	20-JUL-2006 19:04	S3326
L2	201a010	176290175010	MO_250	20-JUL-2006 19:31	S3327
L3	201a011	176290175011	MO_500	20-JUL-2006 19:58	S3328
L4	201a012	176290175012	MO_1000	20-JUL-2006 20:25	S3329
L5	201a013	176290175013	MO_2500	20-JUL-2006 20:53	S3330
L6	201a014	176290175014	MO_5000	20-JUL-2006 21:20	S3325

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2	MR^2	MRSD	Fig
Motor Oil C24-C36	45862	53667	50318	54190	50530	52699	AVRG		1.95E-5		51211	6	0.995	20	

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor
Page 1 of 1

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188837 GCSV water: EPA 8015B

Inst : GC17A Name : hexacosane
 Calnum : 176265447003 Date : 03-JUL-2006 19:19
 Units : mg/L X Axis : R Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	stds
L1	1848023	176265447023	HEX_5	03-JUL-2006 19:19	S3671
L2	1848024	176265447024	HEX_10	03-JUL-2006 19:46	S3672
L3	1848025	176265447025	HEX_25	03-JUL-2006 20:13	S3673
L4	1848026	176265447026	HEX_50	03-JUL-2006 20:41	S3674
L5	1848027	176265447027	HEX_75	03-JUL-2006 21:08	S3675

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ²	Mmr ²	MxrSD	Flg
Hexacosane	97867	96188	94060	92872	105645	AVRG		1.03E-5		97326	5	0.995	20	

CONTINUING CALIBRATION SUMMARY FOR 188837 GCSV Water
Curtis & Tompkins Laboratories

Analyte: Diesel C12-C24

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D	Max	%D	Flags
						RF/CF	RF/CF							
GC11A	A	116340404015	24-AUG-2006 19:15	116235201001	13-JUN-2006	61505	59775	1000.0	971.88	mg/L	-3	15		
GC11A	A	116340404033	25-AUG-2006 03:37	116235201001	13-JUN-2006	61505	63205	250.00	256.91	mg/L	3	15		
GC17A	A	176336052055	22-AUG-2006 14:34	176265447001	03-JUL-2006	75803	70879	1000.0	935.04	mg/L	-6	15		
GC17A	A	176336052069	22-AUG-2006 22:14	176265447001	03-JUL-2006	75803	71532	250.00	235.91	mg/L	-6	15		
GC17A	A	176338855003	23-AUG-2006 08:29	176265447001	03-JUL-2006	75803	70123	500.00	462.54	mg/L	-7	15		
GC17A	A	176338855014	23-AUG-2006 14:54	176265447001	03-JUL-2006	75803	68999	1000.0	910.24	mg/L	-9	15		
GC17A	A	176338855068	24-AUG-2006 22:16	176265447001	03-JUL-2006	75803	69761	250.00	230.07	mg/L	-8	15		
GC17A	A	176338855084	25-AUG-2006 05:33	176265447001	03-JUL-2006	75803	70276	250.00	231.77	mg/L	-7	15		

CONTINUING CALIBRATION SUMMARY FOR 188837 GCSV Water
Curtis & Tompkins Laboratories

Analyte: Motor Oil C24-C36

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	OntAmt	Units	%D Max	%D Flags
						RF/CF	RF/CF					
GC11A	A	116340404016	24-AUG-2006 19:43	116235201003	13-JUN-2006	39570	38721	500.00	489.28	mg/L	-2 15	
GC11A	A	116340404034	25-AUG-2006 04:05	116235201003	13-JUN-2006	39570	39186	500.00	495.15	mg/L	-1 15	
GC17A	A	176336052056	22-AUG-2006 15:01	176290175001	20-JUL-2006	51211	46463	500.00	453.65	mg/L	-9 15	
GC17A	A	176336052070	22-AUG-2006 22:42	176290175001	20-JUL-2006	51211	47170	500.00	460.55	mg/L	-8 15	
GC17A	A	176338855004	23-AUG-2006 08:57	176290175001	20-JUL-2006	51211	45085	500.00	440.19	mg/L	-12 15	
GC17A	A	176338855015	23-AUG-2006 15:21	176290175001	20-JUL-2006	51211	44653	500.00	435.97	mg/L	-13 15	
GC17A	A	176338855067	24-AUG-2006 21:49	176290175001	20-JUL-2006	51211	47009	500.00	458.97	mg/L	-8 15	
GC17A	A	176338855083	25-AUG-2006 05:05	176290175001	20-JUL-2006	51211	46455	500.00	453.57	mg/L	-9 15	

CONTINUING CALIBRATION SUMMARY FOR 188837 GCSV Water
Curtis & Tompkins Laboratories

Analyte: Hexacosane

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D Flags
						RF/CF	RF/CF					
GC11A	A	116340404015	24-AUG-2006 19:15	116235201002	13-JUN-2006	68690	72377	50.000	52.684	mg/L	5 15	
GC11A	A	116340404033	25-AUG-2006 03:37	116235201002	13-JUN-2006	68690	74987	50.000	54.584	mg/L	9 15	
GC17A	A	176336052055	22-AUG-2006 14:34	176265447003	03-JUL-2006	97326	90669	50.000	46.580	mg/L	-7 15	
GC17A	A	176336052069	22-AUG-2006 22:14	176265447003	03-JUL-2006	97326	89384	50.000	45.920	mg/L	-8 15	
GC17A	A	176338855003	23-AUG-2006 08:29	176265447003	03-JUL-2006	97326	86806	50.000	44.595	mg/L	-11 15	
GC17A	A	176338855014	23-AUG-2006 14:54	176265447003	03-JUL-2006	97326	85212	50.000	43.776	mg/L	-12 15	
GC17A	A	176338855067	24-AUG-2006 21:49	176265447003	03-JUL-2006	97326	91492	50.000	47.003	mg/L	-6 15	
GC17A	A	176338855083	25-AUG-2006 05:05	176265447003	03-JUL-2006	97326	88974	50.000	45.709	mg/L	-9 15	

SEQUENCE SUMMARY FOR 188837 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 116235201 Instrument: GC11A Gas Chromatograph #11 (Channel A) TEH Begun: 12-JUN-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds	Used	>LR
001	163a001	X	PRIMER			12-JUN-2006	08:01	1.0						
002	163a002	X	IB			12-JUN-2006	08:29	1.0						
003	163a003	CCV	DSL_500			12-JUN-2006	08:57	1.0	1.0		3	1		
004	163a004	CCV	MO_500			12-JUN-2006	09:25	1.0	1.0		3	2		
005	163a005	LCS	QC343463 S		114293 Soil	12-JUN-2006	11:42	1.0	0.1003		3			
006	163a006	XCCV	DSL_500			12-JUN-2006	12:10	1.0				1		
007	163a007	SAMPLE	187264-002		114250 Water	12-JUN-2006	12:39	3.0	0.005		3			1:JP8:10=3093.46
008	163a008	SAMPLE	187264-001		114250 Water	12-JUN-2006	13:07	10.0	0.005		3			2:JP8:10=3730.48
009	163a009	CCV	DSL_1000			12-JUN-2006	13:34	1.0	1.0		3	3		
010	163a010	X	IB			12-JUN-2006	15:11	1.0						
011	163a011	X	C10			12-JUN-2006	15:39	1.0				4		
012	163a012	X	C12-C60			12-JUN-2006	16:07	1.0				5		
013	163a013	CCV	MO_500			12-JUN-2006	17:12	1.0	1.0	3	3	2		
014	163a014	CCV	DSL_500			12-JUN-2006	17:40	1.0	1.0		3	1		
015	163a015	X	C10			13-JUN-2006	05:39	1.0				4		
016	163a016	X	C12-C60			13-JUN-2006	06:07	1.0				5		
017	163a017	X	IB			13-JUN-2006	06:35	1.0						
018	163a018	ICAL	DSL_10			13-JUN-2006	07:02	1.0	1.0			6		
019	163a019	ICAL	DSL_100			13-JUN-2006	07:30	1.0	1.0			7		
020	163a020	ICAL	DSL_250			13-JUN-2006	07:58	1.0	1.0			8		
021	163a021	ICAL	DSL_500			13-JUN-2006	08:26	1.0	1.0			9		
022	163a022	ICAL	DSL_1000			13-JUN-2006	08:54	1.0	1.0			10		
023	163a023	ICAL	DSL_2500			13-JUN-2006	09:23	1.0	1.0			11		
024	163a024	ICAL	DSL_5000			13-JUN-2006	09:51	1.0	1.0			12		
025	163a025	X	IB			13-JUN-2006	10:19	1.0						
026	163a026	ICV	DSL_500			13-JUN-2006	10:47	1.0	1.0		3	13		
027	163a027	X	IB			13-JUN-2006	11:14	1.0						
028	163a028	ICAL	MO_50			13-JUN-2006	11:42	1.0	1.0			14		
029	163a029	ICAL	MO_250			13-JUN-2006	12:10	1.0	1.0			15		
030	163a030	ICAL	MO_500			13-JUN-2006	12:38	1.0	1.0			16		

Stds used: 1=S3367 2=S3639 3=S3368 4=03SS315 5=03SS316 6=S3433 7=S3434 8=S3435 9=S3436 10=S3437 11=S3438 12=S3432 13=S3623 14=S3326 15=S3327 16=S3328 17=S3329 18=S3330
19=S3325 20=S3671 21=S3672 22=S3673 23=S3674 24=S3675

SEQUENCE SUMMARY FOR 188837 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 116235201 Instrument: GC11A Gas Chromatograph #11 (Channel A) TEH Begun: 12-JUN-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used	>LR
031	163a031	ICAL	MO_1000			13-JUN-2006	13:06 1.0	1.0				17	
032	163a032	ICAL	MO_2500			13-JUN-2006	13:33 1.0	1.0				18	
033	163a033	ICAL	MO_5000			13-JUN-2006	14:01 1.0	1.0				19	
034	163a034	X	IB			13-JUN-2006	14:29 1.0						
035	163a035	ICAL	HEX_5			13-JUN-2006	14:57 1.0	1.0				20	
036	163a036	ICAL	HEX_10			13-JUN-2006	15:25 1.0	1.0				21	
037	163a037	ICAL	HEX_25			13-JUN-2006	15:52 1.0	1.0				22	
038	163a038	ICAL	HEX_50			13-JUN-2006	16:20 1.0	1.0				23	
039	163a039	ICAL	HEX_75			13-JUN-2006	16:48 1.0	1.0				24	
040	163a040	X	IB			13-JUN-2006	17:15 1.0						

Stds used: 1=S3367 2=S3639 3=S3368 4=03SS315 5=03SS316 6=S3433 7=S3434 8=S3435 9=S3436 10=S3437 11=S3438 12=S3432 13=S3623 14=S3326 15=S3327 16=S3328 17=S3329 18=S3330
19=S3325 20=S3671 21=S3672 22=S3673 23=S3674 24=S3675

SEQUENCE SUMMARY FOR 188837 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 176265447 Instrument: GC17A Gas Chromatograph #17 (Channel A) TEH Begun: 03-JUL-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
001	184a001	X	PRIMER			03-JUL-2006	08:07	1.0							
002	184a002	X	IB			03-JUL-2006	08:35	1.0							
003	184a003	ICAL	DSL_10			03-JUL-2006	09:02	1.0					1		
004	184a004	ICAL	DSL_100			03-JUL-2006	09:29	1.0					2		
005	184a005	ICAL	DSL_250			03-JUL-2006	09:57	1.0					3		
006	184a006	ICAL	DSL_500			03-JUL-2006	10:25	1.0					4		
007	184a007	ICAL	DSL_1000			03-JUL-2006	10:52	1.0					5		
008	184a008	ICAL	DSL_2500			03-JUL-2006	11:19	1.0					6		
009	184a009	ICAL	DSL_5000			03-JUL-2006	12:57	1.0					7		
010	184a010	X	IB			03-JUL-2006	13:24	1.0							
011	184a011	ICV	DSL_500			03-JUL-2006	13:52	1.0		1			8		1:HXCS=91.2842
012	184a012	X	IB			03-JUL-2006	14:19	1.0							
013	184a013	ICV	DSL_500			03-JUL-2006	14:46	1.0		1			8		1:HXCS=87.8485
014	184a014	X	IB			03-JUL-2006	15:13	1.0							
015	184a015	ICAL	MO_50			03-JUL-2006	15:40	1.0					9		
016	184a016	ICAL	MO_250			03-JUL-2006	16:08	1.0					10		
017	184a017	ICAL	MO_500			03-JUL-2006	16:35	1.0					11		
018	184a018	ICAL	MO_1000			03-JUL-2006	17:03	1.0					12		
019	184a019	ICAL	MO_2500			03-JUL-2006	17:30	1.0					13		
020	184a020	ICAL	MO_5000			03-JUL-2006	17:57	1.0					14		
021	184a021	X	IB			03-JUL-2006	18:24	1.0							
022	184a022	X	IB			03-JUL-2006	18:52	1.0							
023	184a023	ICAL	HEX_5			03-JUL-2006	19:19	1.0					15		
024	184a024	ICAL	HEX_10			03-JUL-2006	19:46	1.0					16		
025	184a025	ICAL	HEX_25			03-JUL-2006	20:13	1.0					17		
026	184a026	ICAL	HEX_50			03-JUL-2006	20:41	1.0					18		
027	184a027	ICAL	HEX_75			03-JUL-2006	21:08	1.0					19		
028	184a028	X	IB			03-JUL-2006	21:35	1.0							
029	184a029	X	IB			03-JUL-2006	22:02	1.0							
030	184a030	ICAL	JET_10			03-JUL-2006	22:30	1.0					20		

Stds used: 1=S3433 2=S3434 3=S3435 4=S3436 5=S3437 6=S3438 7=S3432 8=S3623 9=S3326 10=S3327 11=S3328 12=S3329 13=S3330 14=S3325 15=S3671 16=S3672 17=S3673 18=S3674 19=S3675
20=S3614 21=S3615 22=S3616 23=S3617 24=S3618 25=S3619 26=S3526

SEQUENCE SUMMARY FOR 188837 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 176265447 Instrument: GC17A Gas Chromatograph #17 (Channel A) TEH Begun: 03-JUL-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
031	184a031	ICAL	JET_100			03-JUL-2006	22:57	1.0					21		
032	184a032	ICAL	JET_500			03-JUL-2006	23:24	1.0					22		
033	184a033	ICAL	JET_1000			03-JUL-2006	23:52	1.0					23		
034	184a034	ICAL	JET_2000			04-JUL-2006	00:19	1.0					24		
035	184a035	ICAL	JET_3000			04-JUL-2006	00:46	1.0					25		
036	184a036	ICAL	JET_5000			04-JUL-2006	01:14	1.0					26		
037	184a037	X	IB			04-JUL-2006	01:41	1.0							
038	184a038	X	IB			04-JUL-2006	02:08	1.0							

Stds used: 1=S3433 2=S3434 3=S3435 4=S3436 5=S3437 6=S3438 7=S3432 8=S3623 9=S3326 10=S3327 11=S3328 12=S3329 13=S3330 14=S3325 15=S3671 16=S3672 17=S3673 18=S3674 19=S3675
20=S3614 21=S3615 22=S3616 23=S3617 24=S3618 25=S3619 26=S3526

SEQUENCE SUMMARY FOR 188837 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 176290175 Instrument: GC17A Gas Chromatograph #17 (Channel A) TEH Begun: 20-JUL-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
001	201a001	X	PRIMER			20-JUL-2006	12:15 1.0								
002	201a002	X	IB			20-JUL-2006	12:43 1.0								
003	201a003	X	CM			20-JUL-2006	13:22 1.0						1		
004	201a004	X	CM			20-JUL-2006	13:49 1.0						2		
005	201a005	CCV	DSL_500			20-JUL-2006	14:17 1.0			3			3		
006	201a006	CCV	MO_500			20-JUL-2006	14:44 1.0	2		3			4		
007	201a007	X	IB			20-JUL-2006	18:09 1.0								
008	201a008	X	IB			20-JUL-2006	18:36 1.0								
009	201a009	ICAL	MO_50			20-JUL-2006	19:04 1.0						5		
010	201a010	ICAL	MO_250			20-JUL-2006	19:31 1.0						6		
011	201a011	ICAL	MO_500			20-JUL-2006	19:58 1.0						7		
012	201a012	ICAL	MO_1000			20-JUL-2006	20:25 1.0						8		
013	201a013	ICAL	MO_2500			20-JUL-2006	20:53 1.0						9		
014	201a014	ICAL	MO_5000			20-JUL-2006	21:20 1.0						10		
015	201a015	X	IB			20-JUL-2006	21:47 1.0								
016	201a016	X	IB			20-JUL-2006	22:14 1.0								89

Stds used: 1=03SS315 2=03SS316 3=S3623 4=S3741 5=S3326 6=S3327 7=S3328 8=S3329 9=S3330 10=S3325

SEQUENCE SUMMARY FOR 188837 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 176336052 Instrument: GC17A Gas Chromatograph #17 (Channel A) TEH Begun: 21-AUG-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used	>LR
001	233a001	X	PRIMER			21-AUG-2006 08:52	1.0						
002	233a002	X	IB			21-AUG-2006 09:19	1.0						
003	233a003	CCV	DSL 500			21-AUG-2006 09:47	1.0	1.0			3	1	
004	233a004	CCV	MO 500			21-AUG-2006 10:14	1.0	1.0			3	2	
005	233a005	LCS	QC352534 S			21-AUG-2006 13:10	1.0	0.1009			3		
006	233a006	BLANK	QC352533 S			21-AUG-2006 13:37	1.0	0.0995	9		3		
007	233a007	SAMPLE	188758-006 S			21-AUG-2006 14:04	2.0	0.1000	1	1	3		
008	233a008	SAMPLE	188758-003 S			21-AUG-2006 14:31	2.0	0.1008	1	1	3		
009	233a009	SAMPLE	188758-002 S			21-AUG-2006 14:59	2.0	0.1006	3		3		
010	233a010	SAMPLE	188758-001 S			21-AUG-2006 15:26	2.0	0.1007	3		3		
011	233a011	X	IB			21-AUG-2006 15:53	1.0						
012	233a012	SAMPLE	188758-005 S			21-AUG-2006 16:20	5.0	0.1003	1	1	3		11: BUNKC:=16255.4
013	233a013	SAMPLE	188758-004 S			21-AUG-2006 16:47	5.0	0.0996		1	3		7: BUNKC:=11510.5
014	233a014	X	IB			21-AUG-2006 17:14	1.0						
015	233a015	CCV	DSL 1000			21-AUG-2006 17:41	1.0	1.0			3	3	
016	233a016	CCV	MO 500			21-AUG-2006 18:09	1.0	1.0			3	2	
017	233a017	X	CCV			21-AUG-2006 18:36	1.0					3	
018	233a018	X	CCV			21-AUG-2006 19:03	1.0					2	
019	233a019	SAMPLE	188780-003			21-AUG-2006 21:07	20.0	0.1002			3		3: BUNKC:=6785.50
020	233a020	SAMPLE	188780-005			21-AUG-2006 21:34	20.0	0.1002			3		9: BUNKC:=15819.4
021	233a021	SAMPLE	188780-009			21-AUG-2006 22:01	20.0	0.1004			3		3: BUNKC:=6849.01
022	233a022	SAMPLE	188780-007			21-AUG-2006 22:29	20.0	0.1002			3		3: BUNKC:=9146.99
023	233a023	X	IB			21-AUG-2006 22:56	1.0						
024	233a024	SAMPLE	188775-022			21-AUG-2006 23:23	1.0	0.09988			3		
025	233a025	SAMPLE	188775-019			21-AUG-2006 23:50	1.0	0.1006			3		7: BUNKC:=10700.5
026	233a026	SAMPLE	188780-001			22-AUG-2006 00:18	20.0	0.1667			3		6: BUNKC:=11135.5
027	233a027	X	IB			22-AUG-2006 00:45	1.0						
028	233a028	SAMPLE	188775-026			22-AUG-2006 01:12	1.0	0.1007			3		
029	233a029	SAMPLE	188775-025			22-AUG-2006 01:40	2.0	0.1006	1		3		12: BUNKC:=14802.5
030	233a030	MSS	188775-027			22-AUG-2006 02:07	10.0	0.1002	9		3		
031	233a031	X	IB			22-AUG-2006 02:34	1.0						

Stds used: 1=S4053 2=S3933 3=S4054 4=S3717 5=S3934

SEQUENCE SUMMARY FOR 188837 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 176336052 Instrument: GC17A Gas Chromatograph #17 (channel A) TEH Begun: 21-AUG-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	num	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds	Used	>LR
032	233a032	CCV	DSL_250				22-AUG-2006 03:02	1.0	1.0			3	4		
033	233a033	CCV	MO_500				22-AUG-2006 03:29	1.0	1.0			3	2		
034	233a034	X	CCV				22-AUG-2006 03:56	1.0					4		
035	233a035	X	CCV				22-AUG-2006 04:24	1.0					2		
036	233a036	SAMPLE	188775-021			116562 Soil	22-AUG-2006 04:51	2.0	0.09998			3			
037	233a037	SAMPLE	188775-023			116562 Soil	22-AUG-2006 05:18	2.0	0.1006			3			2: BUNKC:=5582.94
038	233a038	SAMPLE	188775-020			116562 Soil	22-AUG-2006 05:45	2.0	0.1002		1	3			9: BUNKC:=16459.6
039	233a039	X	IB				22-AUG-2006 06:13	1.0							
040	233a040	SAMPLE	188779-002			116511 Water	22-AUG-2006 06:40	1.0	0.005			3			
041	233a041	CCV	DSL_500				22-AUG-2006 07:07	1.0	1.0			3	1		
042	233a042	CCV	MO_500				22-AUG-2006 07:34	1.0	1.0			3	2		
043	233a043	XBLANK	QC352311 S			116511 Water	22-AUG-2006 09:01	1.0							
044	233a044	BLANK	QC352311 S			116511 Water	22-AUG-2006 09:33	1.0	0.005		9	3			
045	233a045	BS	QC352312 S			116511 Water	22-AUG-2006 10:01	1.0	0.005			3			
046	233a046	BSD	QC352313 S			116511 Water	22-AUG-2006 10:28	1.0	0.005			3			88
047	233a047	SAMPLE	188787-001			116511 Water	22-AUG-2006 10:55	1.0	0.005			3			
048	233a048	SAMPLE	188787-002			116511 Water	22-AUG-2006 11:23	1.0	0.005			3			
049	233a049	BLANK	QC352545 S			116565 Soil	22-AUG-2006 11:50	1.0	0.1003		9	3			
050	233a050	SAMPLE	188779-001			116511 Water	22-AUG-2006 12:18	1.0	0.005			3			
051	233a051	SAMPLE	188846-005 S			116565 Soil	22-AUG-2006 12:45	2.0	0.1006			3			
052	233a052	X	IB				22-AUG-2006 13:12	1.0							
053	233a053	SAMPLE	188775-029			116511 Water	22-AUG-2006 13:40	1.0	0.005			3			
054	233a054	X	IB				22-AUG-2006 14:07	1.0							
055	233a055	CCV	DSL_1000				22-AUG-2006 14:34	1.0	1.0			3	3		
056	233a056	CCV	MO_500				22-AUG-2006 15:01	1.0	1.0			3	2		
057	233a057	BLANK	QC352561 S			116569 Water	22-AUG-2006 16:41	1.0	0.005		1	3			
058	233a058	LCS	QC352562 S			116569 Water	22-AUG-2006 17:08	1.0	0.005			3			
059	233a059	BLANK	QC352561			116569 Water	22-AUG-2006 17:35	1.0	0.005			3			
060	233a060	LCS	QC352562			116569 Water	22-AUG-2006 18:07	1.0	0.005			3			
061	233a061	MSS	188826-003 S			116569 Water	22-AUG-2006 18:34	1.0	0.005		9	3			
062	233a062	MS	QC352563 S			116569 Water	22-AUG-2006 19:01	1.0	0.005			3			

Stds used: 1=S4053 2=S3933 3=S4054 4=S3717 5=S3934

SEQUENCE SUMMARY FOR 188837 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 176336052 Instrument: GC17A Gas Chromatograph #17 (Channel A) TEH Begun: 21-AUG-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
063	233a063	MSD	QC352564 S	116569	Water	22-AUG-2006 19:29	1.0	0.005		3				
064	233a064	X	IB			22-AUG-2006 19:57	1.0							
065	233a065	SAMPLE	188837-020 S	116569	Water	22-AUG-2006 20:25	1.0	0.005		3				
066	233a066	SAMPLE	188837-021 S	116569	Water	22-AUG-2006 20:52	1.0	0.005		3				
067	233a067	SAMPLE	188815-001 S	116569	Water	22-AUG-2006 21:19	1.0	0.005		3				
068	233a068	X	IB			22-AUG-2006 21:47	1.0							
069	233a069	CCV	DSL_250			22-AUG-2006 22:14	1.0	1.0		3				
070	233a070	CCV	MO_500			22-AUG-2006 22:42	1.0	1.0		3				
071	233a071	X	CCV			22-AUG-2006 23:09	1.0							
072	233a072	X	CCV			22-AUG-2006 23:37	1.0							
073	233a073	SAMPLE	188815-002 S	116569	Water	23-AUG-2006 00:04	1.0	0.005		3				
074	233a074	SAMPLE	188815-003 S	116569	Water	23-AUG-2006 00:32	1.0	0.005		3				
075	233a075	SAMPLE	188815-004 S	116569	Water	23-AUG-2006 00:59	1.0	0.005		3				
076	233a076	SAMPLE	188815-005 S	116569	Water	23-AUG-2006 01:27	1.0	0.005		3				
077	233a077	SAMPLE	188815-006 S	116569	Water	23-AUG-2006 01:54	1.0	0.005		3				
078	233a078	X	IB			23-AUG-2006 02:21	1.0							
079	233a079	SAMPLE	188815-001	116569	Water	23-AUG-2006 02:48	1.0	0.005		3				
080	233a080	SAMPLE	188815-002	116569	Water	23-AUG-2006 03:15	1.0	0.005		3				
081	233a081	SAMPLE	188815-003	116569	Water	23-AUG-2006 03:43	1.0	0.005		3				
082	233a082	SAMPLE	188815-004	116569	Water	23-AUG-2006 04:10	1.0	0.005		3				
083	233a083	SAMPLE	188815-005	116569	Water	23-AUG-2006 04:37	1.0	0.005		3				
084	233a084	X	IB			23-AUG-2006 05:04	1.0							
085	233a085	CCV	DSL_500			23-AUG-2006 05:32	1.0	1.0		3				
086	233a086	CCV	MO_500			23-AUG-2006 05:59	1.0	1.0		3				

5: BUNKC:=10269.1

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Stds used: 1=S4053 2=S3933 3=S4054 4=S3717 5=S3934

SEQUENCE SUMMARY FOR 188837 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 176338855 Instrument: GC17A Gas Chromatograph #17 (Channel A) TEH Begun: 23-AUG-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	plenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
001	235a001	X	PRIMER				23-AUG-2006 07:35	1.0							
002	235a002	X	IB				23-AUG-2006 08:02	1.0							
003	235a003	CCV	DSL_500				23-AUG-2006 08:29	1.0	1.0			3	1		
004	235a004	CCV	MO_500				23-AUG-2006 08:57	1.0	1.0			3	2		
005	235a005	X	QC352816				23-AUG-2006 09:54	1.0							
006	235a006	CCV	KERO_250				23-AUG-2006 10:22	1.0	1.0			3	3		
007	235a007	BLANK	QC352816 S				23-AUG-2006 10:56	1.0	0.09936	16		3			
008	235a008	BLANK	QC352561 S				23-AUG-2006 11:23	1.0	0.005			3			
009	235a009	SAMPLE	188857-001				23-AUG-2006 11:51	1.0	0.1005			3			
010	235a010	SAMPLE	188857-004				23-AUG-2006 12:18	25.0	0.09982			3			
011	235a011	SAMPLE	188825-005 S				23-AUG-2006 12:51	1.0	0.005			3			
012	235a012	X	TC				23-AUG-2006 14:00	1.0							
013	235a013	X	TC				23-AUG-2006 14:27	1.0							
014	235a014	CCV	DSL_1000				23-AUG-2006 14:54	1.0	1.0			3	4		
015	235a015	CCV	MO_500				23-AUG-2006 15:21	1.0	1.0	2		3	5		
016	235a016	CCV	KERO_250				23-AUG-2006 16:06	1.0	1.0			3	3		
017	235a017	SAMPLE	188774-002 S				23-AUG-2006 19:12	1.0	0.005			3			
018	235a018	SAMPLE	188774-004 S				23-AUG-2006 19:39	1.0	0.005			3			
019	235a019	SAMPLE	188774-007 S				23-AUG-2006 20:06	1.0	0.005			3			
020	235a020	SAMPLE	188774-008 S				23-AUG-2006 20:34	1.0	0.005			3			
021	235a021	X	IB				23-AUG-2006 21:02	1.0							
022	235a022	SAMPLE	188774-009 S				23-AUG-2006 21:29	1.0	0.005			3			
023	235a023	SAMPLE	188774-010 S				23-AUG-2006 21:56	1.0	0.005			3			
024	235a024	SAMPLE	188774-012 S				23-AUG-2006 22:24	1.0	0.005			3			
025	235a025	X	IB				23-AUG-2006 22:51	1.0							
026	235a026	XCCV	DSL_250				23-AUG-2006 23:19	1.0	1.0			3	6		
027	235a027	CCV	MO_500				23-AUG-2006 23:46	1.0	1.0	2		3	5		
028	235a028	CCV	KERO_250				24-AUG-2006 00:13	1.0	1.0			3	3		
029	235a029	CCV	DSL_250				24-AUG-2006 00:40	1.0	1.0			3	6		
030	235a030	X	CCV				24-AUG-2006 01:08	1.0					5		
031	235a031	X	CCV				24-AUG-2006 01:35	1.0					3		

Stds used: 1=S4053 2=S3933 3=S3880 4=S4054 5=S3934 6=S3717

SEQUENCE SUMMARY FOR 188837 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 176338855 Instrument: GC17A Gas Chromatograph #17 (Channel A) TEH Begun: 23-AUG-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Plenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds Used	>LR
032	235a032	SAMPLE	188886-001	116686	Soil	24-AUG-2006	02:02	1.0	0.09913			3	1:BUNKC:=5036.33	
033	235a033	SAMPLE	188886-005	116686	Soil	24-AUG-2006	02:29	1.0	0.1002			3		
034	235a034	SAMPLE	188886-002	116686	Soil	24-AUG-2006	02:57	1.0	0.09909	2	1	3	18:BUNKC:=77465.6	
035	235a035	SAMPLE	188885-001	116686	Soil	24-AUG-2006	03:24	1.0	0.0995	3	1	3	22:BUNKC:=100742	
036	235a036	X	IB			24-AUG-2006	03:52	1.0						
037	235a037	SAMPLE	188910-001	116686	Soil	24-AUG-2006	04:19	1.0	0.1005			3		
038	235a038	SAMPLE	188910-002	116686	Soil	24-AUG-2006	04:46	1.0	0.1009			3		
039	235a039	X	IB			24-AUG-2006	05:14	1.0						
040	235a040	CCV	DSL_500			24-AUG-2006	05:41	1.0	1.0			3	1	
041	235a041	CCV	MO_500			24-AUG-2006	06:08	1.0	1.0	2		3	5	
042	235a042	CCV	KERO_250			24-AUG-2006	06:36	1.0	1.0			3	3	
043	235a043	X	TC			24-AUG-2006	10:04	1.0						
044	235a044	X	TC			24-AUG-2006	10:32	1.0						
045	235a045	SAMPLE	188886-002	116686	Soil	24-AUG-2006	10:59	10.0	0.09909			3	3:BUNKC:=7369.86	
046	235a046	SAMPLE	188885-001	116686	Soil	24-AUG-2006	11:27	20.0	0.0995			3	5	
047	235a047	X	IB			24-AUG-2006	11:54	1.0						
048	235a048	SAMPLE	188770-001	116686	Soil	24-AUG-2006	12:21	20.0	0.09988			3		
049	235a049	XCCV	DSL_1000			24-AUG-2006	12:59	1.0	1.0			3	4	
050	235a050	CCV	MO_500			24-AUG-2006	13:26	1.0	1.0	2		3	5	
051	235a051	CCV	DSL_1000			24-AUG-2006	13:53	1.0	1.0			3	4	
052	235a052	CCV	KERO_250			24-AUG-2006	14:21	1.0	1.0			3	3	
053	235a053	X	TC			24-AUG-2006	15:22	1.0						
054	235a054	X	TC			24-AUG-2006	15:49	1.0						
055	235a055	BLANK	QC353210	S	116727	Soil	24-AUG-2006	16:16	1.0	0.1000	10	1	3	
056	235a056	LCS	QC353211	S	116727	Soil	24-AUG-2006	16:47	1.0	0.1009		2	3	
057	235a057	MSS	188870-006	S	116727	Soil	24-AUG-2006	17:14	1.0	0.1003	10		3	7:BUNKC:=11475.6
058	235a058	MS	QC353212	S	116727	Soil	24-AUG-2006	17:41	1.0	0.1004			3	7:BUNKC:=11517.6
059	235a059	MSD	QC353213	S	116727	Soil	24-AUG-2006	18:09	1.0	0.1004			3	10:BUNKC:=14634.1
060	235a060	X	IB			24-AUG-2006	18:37	1.0						
061	235a061	SAMPLE	188902-001	116727	Soil	24-AUG-2006	19:04	1.0	0.09921			3		
062	235a062	SAMPLE	188902-002	116727	Soil	24-AUG-2006	19:32	1.0	0.09964	1		3	12:BUNKC:=13477.1	

Stds used: 1=S4053 2=S3933 3=S3880 4=S4054 5=S3934 6=S3717

SEQUENCE SUMMARY FOR 188837 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 17633885 Instrument: GC17A Gas Chromatograph #17 (Channel A) TEH Begun: 23-AUG-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	UL	Stds	Used	>LR
063	235a063	SAMPLE	188902-003	116727	Soil	24-AUG-2006 20:00	1.0	0.09976		3				
064	235a064	SAMPLE	188902-005	116727	Soil	24-AUG-2006 20:27	1.0	0.1009		3				
065	235a065	SAMPLE	188895-001	116727	Soil	24-AUG-2006 20:55	5.0	0.1002		3				
066	235a066	X	IB			24-AUG-2006 21:22	1.0							
067	235a067	CCV	MO_500			24-AUG-2006 21:49	1.0	1.0		3				
068	235a068	CCV	DSL_250			24-AUG-2006 22:16	1.0	1.0		3				
069	235a069	CCV	KERO_250			24-AUG-2006 22:44	1.0	1.0		3				
070	235a070	X	CCV			24-AUG-2006 23:11	1.0							
071	235a071	X	CCV			24-AUG-2006 23:38	1.0							
072	235a072	X	CCV			25-AUG-2006 00:05	1.0							
073	235a073	SAMPLE	188769-001	S	Miscel	25-AUG-2006 00:32	1.0	0.1001		3				
074	235a074	SAMPLE	188837-001	S	Water	25-AUG-2006 01:00	1.0	0.005		3				
075	235a075	SAMPLE	188837-008	S	Water	25-AUG-2006 01:27	1.0	0.005		3				
076	235a076	SAMPLE	188837-010	S	Water	25-AUG-2006 01:54	1.0	0.005		3				
077	235a077	X	IB			25-AUG-2006 02:22	1.0							
078	235a078	SAMPLE	188802-004	S	Water	25-AUG-2006 02:49	1.0	0.005		3				
079	235a079	SAMPLE	188802-005	S	Water	25-AUG-2006 03:16	1.0	0.005		3				
080	235a080	SAMPLE	188837-012	S	Water	25-AUG-2006 03:44	1.0	0.005		3				
081	235a081	SAMPLE	188802-020	S	Water	25-AUG-2006 04:11	1.0	0.005		3				
082	235a082	SAMPLE	188837-005	S	Water	25-AUG-2006 04:38	1.0	0.005		3				
083	235a083	CCV	MO_500			25-AUG-2006 05:05	1.0	1.0		3				
084	235a084	CCV	DSL_250			25-AUG-2006 05:33	1.0	1.0		3				

Stds used: 1=S4053 2=S3933 3=S3880 4=S4054 5=S3934 6=S3717

SEQUENCE SUMMARY FOR 188837 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 116340404 Instrument: GC11A Gas Chromatograph #11 (Channel A) TEH Begun: 24-AUG-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds Used	>LR
001	236a001	X	PRIMER			24-AUG-2006 09:24	1.0						
002	236a002	X	IB			24-AUG-2006 09:52	1.0						
003	236a003	CCV	DSL_500			24-AUG-2006 10:20	1.0	1.0				1	
004	236a004	CCV	MO_500			24-AUG-2006 10:48	1.0	1.0	1			2	
005	236a005	X	TANK1-RECHEC			24-AUG-2006 12:12	1.0						
006	236a006	X	TANK3-CHECK			24-AUG-2006 12:40	1.0						
007	236a007	X	TANK2-RECHEC			24-AUG-2006 13:08	1.0						
008	236a008	SAMPLE	188899-008		116686 Soil	24-AUG-2006 15:17	1.0	0.09915			3		2: BUNKC:=9023.96
009	236a009	SAMPLE	188884-001		116686 Soil	24-AUG-2006 15:44	1.0	0.09913	1	1	3		20: BUNKC:=109757
010	236a010	SAMPLE	188899-007		116686 Soil	24-AUG-2006 16:12	20.0	0.09921			3		
011	236a011	X	IB			24-AUG-2006 16:40	1.0						
012	236a012	SAMPLE	188875-005		116686 Soil	24-AUG-2006 17:08	1.0	0.1000			3		2: BUNKC:=5826.57
013	236a013	SAMPLE	188884-002		116686 Soil	24-AUG-2006 17:36	40.0	0.2014			3		
014	236a014	X	IB			24-AUG-2006 18:03	1.0						
015	236a015	CCV	DSL_1000			24-AUG-2006 19:15	1.0	1.0			3	3	
016	236a016	CCV	MO_500			24-AUG-2006 19:43	1.0	1.0			3	2	
017	236a017	CCV	KERO_250			24-AUG-2006 20:11	1.0	1.0			3	4	
018	236a018	X	CCV			24-AUG-2006 20:39	1.0					3	
019	236a019	X	CCV			24-AUG-2006 21:07	1.0					2	
020	236a020	X	CCV			24-AUG-2006 21:35	1.0					4	
021	236a021	BLANK	QC353116	S	116703 Water	24-AUG-2006 22:03	1.0	0.005			3		
022	236a022	LCS	QC353117	S	116703 Water	24-AUG-2006 22:31	1.0	0.005			3		
023	236a023	MSS	188802-001	S	116703 Water	24-AUG-2006 22:59	1.0	0.005	15		3		14: BUNKC:=20778.5
024	236a024	MS	QC353118	S	116703 Water	24-AUG-2006 23:27	1.0	0.005		1	3		13: BUNKC:=16570.5
025	236a025	MSD	QC353119	S	116703 Water	24-AUG-2006 23:55	1.0	0.005			3		14: BUNKC:=33193.9
026	236a026	X	IB			25-AUG-2006 00:22	1.0						
027	236a027	MSS	188837-009	S	116703 Water	25-AUG-2006 00:50	1.0	0.005	7		3		
028	236a028	MS	QC353120	S	116703 Water	25-AUG-2006 01:18	1.0	0.005			3		
029	236a029	MSD	QC353121	S	116703 Water	25-AUG-2006 01:46	1.0	0.005			3		
030	236a030	SAMPLE	188869-001	S	116703 Water	25-AUG-2006 02:14	1.0	0.005			3		
031	236a031	SAMPLE	188802-002	S	116703 Water	25-AUG-2006 02:41	1.0	0.005			3		

Stds used: 1=S4053 2=S3934 3=S4054 4=S3880 5=S3717

SEQUENCE SUMMARY FOR 188837 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 116340404 Instrument: GC11A Gas Chromatograph #11 (Channel A) TEH Begun: 24-AUG-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	UL	Stds	Used	>LR
032	236a032	X	IB			25-AUG-2006 03:09	1.0							
033	236a033	CCV	DSL_250			25-AUG-2006 03:37	1.0	1.0		3		5		
034	236a034	CCV	MO_500			25-AUG-2006 04:05	1.0	1.0		3		2		
035	236a035	X	CCV			25-AUG-2006 04:33	1.0					5		
036	236a036	X	CCV			25-AUG-2006 05:01	1.0					2		

Stds used: 1=S4053 2=S3934 3=S4054 4=S3880 5=S3717



Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 188837 TEHM Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	D S L :	M O 2	H X C S
188837-001	GC17A	08/25/06 01:00	1.0	+	+	+
188837-005	GC17A	08/25/06 04:38	1.0	+	+	+
188837-008	GC17A	08/25/06 01:27	1.0	+	+	+
188837-009	GC11A	08/25/06 00:50	1.0	+	+	+
188837-010	GC17A	08/25/06 01:54	1.0	+	+	+
188837-012	GC17A	08/25/06 03:44	1.0	+	+	+
188837-020	GC17A	08/22/06 20:25	1.0	+	+	+
188837-021	GC17A	08/22/06 20:52	1.0	+	+	+
QC352561	GC17A	08/22/06 16:41	1.0			
QC352561	GC17A	08/22/06 17:35	1.0			
QC352561	GC17A	08/23/06 11:23	1.0	+	+	+
QC352562	GC17A	08/22/06 17:08	1.0	+		+
QC352562	GC17A	08/22/06 18:07	1.0			
QC352563	GC17A	08/22/06 19:01	1.0	+		+
QC352564	GC17A	08/22/06 19:29	1.0	+		+
QC353116	GC11A	08/24/06 22:03	1.0	+	+	+
QC353117	GC11A	08/24/06 22:31	1.0	+		+
QC353118	GC11A	08/24/06 23:27	1.0			
QC353118	GC17A	08/25/06 16:15	5.0			
QC353119	GC11A	08/24/06 23:55	1.0			
QC353119	GC17A	08/25/06 16:42	5.0			
QC353120	GC11A	08/25/06 01:18	1.0	+		+
QC353121	GC11A	08/25/06 01:46	1.0	+		+

Curtis & Tompkins Laboratories

Sample Preparation Summary

24-AUG-2006 19:15

Batch Number : 116703 ✓
Date Extracted : 23-AUG-2006
Extracted by : Kevin Riley
Prep Method : 3520C ✓

Analysis : N/A
Bgroup : TEH
Units : mL
Clean-up :

Spike #1 ID : S4026C ✓
Spike #2 ID : S4117A ✓
Spike #3 ID :
SDP Version : TEH50LL rv10

Sample	Type	Client	Matrix	Init	Units	Final	Prep	Clean	pH	Sp 1	Sp 2	Sp 3	Analyses	Clean	Comments
188802-001		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	mss ✓
188802-002		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	
188802-004		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	
188802-005		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	
188802-006		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	
188802-008		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	
188802-009		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	
188802-013		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	
188802-014		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	
188802-015		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	
188802-020		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	
188837-001		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	
188837-005		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	
188837-008		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	
188837-009		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	
188837-010		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	
188837-012		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	
188869-001		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7.5	0			TEHM	3630C	
QC353116	BLANK		Water	500	mL	2.5	0.005000	1	7.5	0			TEH	3630C	
QC353117	LCS		Water	500	mL	2.5	0.005000	1	7.5	0			TEH	3630C	
QC353118	MS	of 188802-001 ✓	Water	500	mL	2.5	0.005000	1	7.5	0			TEH	3630C	
QC353119	MSD	of 188802-001 ✓	Water	500	mL	2.5	0.005000	1	7.5	0			TEH	3630C	
QC353120	MS	of 188837-009 ✓	Water	500	mL	2.5	0.005000	1	7.5	0			TEH	3630C	
QC353121	MSD	of 188837-009 ✓	Water	500	mL	2.5	0.005000	1	7.5	0			TEH	3630C	

mss ✓

Prep Chemist:

K. Hey

Reviewed By:

Pamela Chung Date: *8/24/06*Relinquished By: *Michael Chu*

Received By:

CF Date: *8/28/06*

LIMS Batch No: 116703

Extraction Method:

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LIMS Analysis: TEH/M☐ mod. EPA 3510 sep. funnel

Cleanup Method (if needed):

Extracted by: KR☒ mod. EPA 3520 cont. L/L☒ EPA 3630 Silica GelDate Extracted: 8/23/06☐ _____☐ Other _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
188802-001AK	500	7	2.5	X *MSS	
-002G					
-004D					
-005I					
-006J					
-008I					
-009J					
-010I	MCC 8/24/06				
-013J			2.5		
-014					
-015		5			
-020		7			
188837-001D					
-005H					
-008J					
-009S					MSS
-010G					
-012R		6			
188869-001		5			
MB QC353116		N/A			
LCS 17					
MS 18		7			*188802-001AL
MSD 19					
MS 20					188837-009T
MSD 21					

0.5 mL of TEH_SURR was added to all samples

0.5 mL of TEH_SP was added to all spikes

pH of all samples adjusted to pH ≤ 2 with H₂SO₄☒ Samples were continually extracted about 450 mL of CH₂Cl₂

Extraction Start Time:

Extraction End Time:

☐ Samples were extracted 3 times with 60 mL of CH₂Cl₂Extracts filtered through baked, CH₂Cl₂-rinsed granular Na₂SO₄

Concentrated to volumes as noted above

Mfg & Lot# / LIMS # / Time Date/ Initials

S4026 C 8/23/06 KR

S4117 A

FS054 S22

EM46130

K15

0900

N/A

EM 461116 20

✓

Krey 23 Aug 06
 Extraction Chemist Date

Continued from Page 57
 Continued on Page 58

Pamela Moringlat 8/24/06
 Reviewed by Date

Prep Chemist: MCC
 Cleanup Date: 8/24/06

Benchbook # **BK 2356**

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Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
188802-001	116703	6.0	1.0	mss ☺
-002				
-004				
-005				
-006				
-008				
-009				
-013				
-014				
-015				
-020				
188837-001				
-005				
-008				
-009				mss
-010				
-012				
188869-001				*
MB Qc353116				
LCS 17				
MS 18				☺
MSD 19				☺
MS 20				
MSD 21				
mcc 8/24/06				

* ☒ Extracts were cleaned up using C&T assembled 60 g columns
☒ Extracts were cleaned up using 10 g cartridges
 Extracts were eluted with 40 mL CH₂Cl₂
 Concentrated to volumes as noted above

Mfg & Lot # / Time / Program	Initials / Date
SP43219426	mcc 8/24/06
SP7135	
EM 45139	

Michael Chu 8/24/06
 Extraction Chemist / Date

Continued from page
 Continued 98 page

Pamela Manghet 8/24/06
 Reviewed by / Date

Curtis & Tompkins Laboratories

Sample Preparation Summary

21-AUG-2006 17:20

Batch Number : 116569
Date Extracted: 20-AUG-2006
Extracted by : Kevin Riley
Prep Method : 3520C

Analysis : N/A
Bgroup : TEH
Units : mL
Clean-up :

Spike #1 ID : S4026B
Spike #2 ID : S4117B
Spike #3 ID :
SOP Version : TEH50LL rv10

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
188815-001		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEHM	3630C	
188815-002		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEHM	3630C	
188815-003		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEHM	3630C	
188815-004		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEHM	3630C	
188815-005		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEHM	3630C	
188815-006		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEHM	3630C	
188824-002		MWH	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEH	3630C	
188824-003		MWH	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEH	3630C	
188824-013		MWH	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEH	3630C	
188825-001		Geologica	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEHM	3630C	
188825-002		Geologica	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEHM	3630C	
188825-003		Geologica	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEHM	3630C	
188825-004		Geologica	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEHM	3630C	
188825-005		Geologica	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEHM	3630C	
188826-001		Erler & Kalinowski, Inc.	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEH	3630C	
188826-002		Erler & Kalinowski, Inc.	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEH	3630C	
188826-003		Erler & Kalinowski, Inc.	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEH	3630C	
188826-004		Erler & Kalinowski, Inc.	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEH	3630C	
188837-020		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEHM	3630C	
188837-021		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEHM	3630C	
QC352561	BLANK														
QC352562	LCS														
QC352563	MS														
QC352564	MSD														

of 188826-003
of 188826-003

Prep Chemist:

JON for KR

Reviewed By:

Jesse Lee

Date:

8/22/06

Relinquished By:

Michael Chan

Received By:

CR

Date:

8/22/06

LIMS Batch No: 116569
 LIMS Analysis: TEH/M
 Extracted by: KR
 Date Extracted: 20 Aug 06

Extraction Method:

☐ mod. EPA 3510 sep. funnel☒ mod. EPA 3520 cont. L/L☐

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Cleanup Method (if needed):

☒ EPA 3630 Silica Gel☐ Other _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
BUNIK QCS2561	500	NA	2.5	X	
BS	562	↓		X	
MS	563 G	7		X	
MSD	564 G			X	
5 188815-001:A				X	
2					
3					
4					
5					
10 ↓ 6 ↓				↓	
188824-002:F				X	
3:L					
13:F				X	
188825-001:G				X	
15 2					
3					
4					
5 ↓				↓	
188826-001:D				X	
20 2 ↓					
3:A					MISS
4:D				↓	
188837-020:D				X	
188837-021:D				X	

JAN 8/22/06

0.5 mL of TEH SURR was added to all samples

0.5 mL of TEH SP was added to all spikes

pH of all samples adjusted to pH ≤ 2 with H₂SO₄Samples were continually extracted about 450 mL of CH₂Cl₂

Extraction Start Time:

Extraction End Time:

☐ Samples were extracted 3 times with 60 mL of CH₂Cl₂Extracts filtered through baked, CH₂Cl₂-rinsed granular Na₂SO₄

Concentrated to volumes as noted above

Mfg & Lot# / LIMS # / Time Date/ Initials

SA026 B 8/22/06 KA

SA117 B

PS059522

EM46130

1350

0915

N/A

EM4611620

✓

✓

Prep Chemist: MCCCleanup Date: 8/21/06Benchbook # **BK 2356**

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Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
1-001	116569	1.0	1.0	
002				
003				
004				
5 005				
006				
1-002				
003				
013				
10 001				
002				
003				
004				
005				
15 6-001				
002				
003				MSS
004				
7-000				
20 001				
QC352561				
02				
03				
04				
25				
30				

☐ Extracts were cleaned up using C&T assembled g columns

☒ Extracts were cleaned up using 1.0 g cartridges
Extracts were eluted with 4.0 mL CH₂Cl₂

Concentrated to volumes as noted above

Mfg & Lot # / Time / Program

Initials / Date

N/A	MCC 8/21/06
SP7716	
EM4630	
✓	↓

Michael Chan 8/21/06Justin Mue 8/22/06

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 09/24/06

Analyte	Units	GC11A	GC13B B	GC15B	GC17A	GC14B B
JP-5 C10-C16	ug/L	17	16	7.9	5.4	
Jet Fuel A C10-C16	ug/L	14	30	24	33	
Diesel C12-C32	ug/L	22	14	25	23	
Diesel C12-C36	ug/L	13	17			
Diesel C12-C28	ug/L		31			
Diesel C12-C24	ug/L	20	13	20	33	
Diesel C12-C22	ug/L	19	17	20	25	
Diesel C10-C28	ug/L	18	11	22	37	
Diesel C10-C24	ug/L	21	15	18	33	
Diesel C10-C22	ug/L	21	18	19	27	
Diesel C10-C20	ug/L		16	13	19	
Motor Oil C22-C36	ug/L	120	110	120	140	89
Motor Oil C24-C36	ug/L	150	140	140	170	99
Motor Oil C22-C32	ug/L	140	130	21	160	99
Motor Oil C28-C40	ug/L	67	68	63	78	
Motor Oil C28-C36	ug/L	64	74	64	69	
Motor Oil C20-C36	ug/L	120	99	110	130	76
Hexacosane	ug/L	4.5	16	4.2	3.1	

VOLATILE ORGANIC COMPOUNDS

Purgeable Organics by GC/MS

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1065PZ1A	Batch#:	116620
Lab ID:	188837-008	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Analyzed:	08/22/06
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	0.06 J	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	0.7	0.5	

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-120
1,2-Dichloroethane-d4	98	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	102	86-115

J= Estimated value
ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit



Purgeable Organics by GC/MS

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	TB081706A	Batch#:	116620
Lab ID:	188837-011	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Analyzed:	08/22/06
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-120
1,2-Dichloroethane-d4	98	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	105	86-115

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

**Purgeable Organics by GC/MS**

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DW081706A	Batch#:	116620
Lab ID:	188837-012	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Analyzed:	08/22/06
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-120
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	105	86-115

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC352787	Batch#:	116620
Matrix:	Water	Analyzed:	08/22/06
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.04
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-120
1,2-Dichloroethane-d4	95	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	104	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC352786	Batch#:	116620
Matrix:	Water	Analyzed:	08/22/06
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	20.34	81	65-135
Benzene	25.00	22.51	90	65-135
Trichloroethene	25.00	21.67	87	65-135
Toluene	25.00	24.17	97	65-135
Chlorobenzene	25.00	22.13	89	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-120
1,2-Dichloroethane-d4	92	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	101	86-115

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	116620
MSS Lab ID:	188829-015	Sampled:	08/17/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Analyzed:	08/22/06
Diln Fac:	1.000		

Type: MS Lab ID: QC352803

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.2168	25.00	27.58	110	65-135
Benzene	<0.04131	25.00	26.77	107	65-135
Trichloroethene	26.55	25.00	47.97	86	65-135
Toluene	<0.08342	25.00	26.51	106	65-135
Chlorobenzene	<0.08963	25.00	24.48	98	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-120
1,2-Dichloroethane-d4	98	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	99	86-115

Type: MSD Lab ID: QC352804

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	26.85	107	65-135	3	35
Benzene	25.00	25.66	103	65-135	4	35
Trichloroethene	25.00	45.63	76	65-135	5	35
Toluene	25.00	26.12	104	65-135	1	35
Chlorobenzene	25.00	23.60	94	65-135	4	35

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-120
1,2-Dichloroethane-d4	96	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	102	86-115

CURTIS & TOMPKINS BFB TUNE FOR 188837 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 446307221011 File : eh111 Time : 01-AUG-2006 13:26

Standards: S3716

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	4518	26.77	
75	30.00% - 60.00% of mass 95	9721	57.59	
95		16880		
96	5.00% - 9.00% of mass 95	1489	8.82	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	14917	88.37	
175	5.00% - 9.00% of mass 174	1119	7.50	
176	> 95.00% and < 101.00% of mass 174	14555	97.57	
177	5.00% - 9.00% of mass 176	1192	8.19	

Analyst: AMK Date: 08/03/06 Reviewer: BO Date: 08/17/06

CURTIS & TOMPKINS BFB TUNE FOR 188837 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: BFB IDF : 1.0
Seqnum : 446337449002 File : ehm02 Time : 22-AUG-2006 08:41

Standards: S3716

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	7745	26.79	
75	30.00% - 60.00% of mass 95	14999	51.88	
95		28909		
96	5.00% - 9.00% of mass 95	2386	8.25	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	19942	68.98	
175	5.00% - 9.00% of mass 174	1624	8.14	
176	> 95.00% and < 101.00% of mass 174	20066	100.62	
177	5.00% - 9.00% of mass 176	1522	7.58	

Analyst: BO Date: 08/22/06 Reviewer: AMK Date: 08/22/06

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188837 MSVOA Water: EPA 8260B

Inst : MSVOA05
 Calnum : 446307221001
 Units : ug/L

Name : 826GOX5
 Date : 01-AUG-2006 15:03
 X Axis : R

Reviewer: AMK
 Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Std's														
L1	eh114	446307221014	0.25/0.5PPB	01-AUG-2006 15:03	S3851 (1000000X), S3980 (2000000X), S3053 (2000000X), S3894 (5000X)														
L2	eh115	446307221015	0.5/1PPB	01-AUG-2006 15:35	S3851 (5000000X), S3980 (10000000X), S3053 (10000000X), S3894 (5000X)														
L3	eh116	446307221016	2PPB	01-AUG-2006 16:07	S3851 (2500000X), S3980 (2500000X), S3053 (5000000X), S3894 (5000X)														
L4	eh117	446307221017	5PPB	01-AUG-2006 16:38	S3851 (1000000X), S3980 (1000000X), S3053 (2000000X), S3894 (5000X)														
L5	eh118	446307221018	10PPB	01-AUG-2006 17:10	S3851 (500000X), S3980 (500000X), S3053 (1000000X), S3894 (5000X)														
L6	eh119	446307221019	20PPB	01-AUG-2006 17:41	S3851 (250000X), S3980 (250000X), S3053 (500000X), S3894 (5000X)														
L7	eh120	446307221020	50PPB	01-AUG-2006 18:13	S3851 (100000X), S3980 (100000X), S3053 (200000X), S3894 (5000X)														
L8	eh121	446307221021	75PPB	01-AUG-2006 18:45	S3851 (6667X), S3980 (6667X), S3053 (13330X), S3894 (5000X)														
L9	eh122	446307221022	100PPB	01-AUG-2006 19:16	S3851 (5000X), S3980 (5000X), S3053 (10000X), S3894 (5000X)														
Analyte		L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ²	Max	Min	Fig
Chloromethane			1.2586m	1.0966m	1.0594m	1.0646m	0.9399m	0.9279	0.9180	0.9308	AVRG		0.97611		1.0245	12	15	0.10	0.99
Vinyl Chloride		0.7025	0.8085m	0.8180m	0.7830m	0.8011m	0.7485m	0.7475	0.7730	0.7858	AVRG		1.29165		0.7742	5	15	0.050	0.99
Bromomethane			0.4059m	0.4200m	0.3502m	0.4255m	0.3752	0.3862	0.4061	0.4025	AVRG		2.52238		0.3965	6	15	0.050	0.99
Chloroethane			0.3803	0.4159m	0.4087m	0.4204m	0.4040m	0.3853m	0.4036m	0.3910m	AVRG		2.49292		0.4011	4	15	0.050	0.99
Acetone						0.4869	0.4800	0.3753	0.3720	0.4477	AVRG		2.31281		0.4324	13	15	0.050	0.99
1,1-Dichloroethene			0.4292m	0.3499	0.3764	0.3382	0.3494	0.3973	0.3951	0.3999	AVRG		2.63551		0.3794	8	15	0.050	0.99
Methylene Chloride				0.6322	0.5792	0.5680	0.5453	0.5030	0.4909	0.4988	AVRG		1.83370		0.5453	10	15	0.050	0.99
Carbon Disulfide			1.6236	1.5188	1.6555	1.5664	1.5601	1.7193	1.6583	1.6816	AVRG		0.61617		1.6229	4	15	0.050	0.99
MTBE			2.1479	2.0808	2.3655	2.0937	2.0932	1.9395	2.0032	1.9513	AVRG		0.47976		2.0844	7	15	0.050	0.99
trans-1,2-Dichloroethene			0.4570m	0.4394m	0.5776	0.5340	0.5113	0.4934	0.5277	0.4684	AVRG		1.99559		0.5011	9	15	0.050	0.99
Vinyl Acetate			1.7425	2.0654	1.5899	1.4539	1.4700	2.2750	2.2435		QVAD	1.61689	0.49532	-0.00039	1.8343	0.993	15	0.050	0.99
1,1-Dichloroethane			1.3414m	1.2419	1.2956	1.2849	1.2261	1.2293	1.1895	1.1681	AVRG		0.80186		1.2471	5	15	0.10	0.99
2-Butanone				0.7485	0.6657	0.6156	0.6223	0.5511	0.5561	0.5735	AVRG		1.61555		0.6190	11	15	0.050	0.99
cis-1,2-Dichloroethene			0.6333m	0.6653	0.6370	0.6394	0.6045	0.5959	0.5735	0.5652	AVRG		1.62800		0.6142	6	15	0.050	0.99
Chloroform			1.3291	1.1745	1.2486	1.2619	1.1638	1.1489	1.1108	1.0956	AVRG		0.83916		1.1917	7	15	0.050	0.99
1,1,1-Trichloroethane			0.9232	0.8435	0.9135	0.8202	0.7838	0.8863	0.8837	0.8780	AVRG		1.15405		0.8665	5	15	0.050	0.99
Carbon Tetrachloride			0.3986	0.3702	0.4097	0.3483	0.3504	0.4296	0.4482	0.4413	AVRG		2.50295		0.3995	10	15	0.050	0.99
1,2-Dichloroethane			0.7179	0.7476	0.7548	0.7445	0.7322	0.6812	0.7003	0.6836	AVRG		1.38838		0.7203	4	15	0.050	0.99
Benzene			1.4310	1.3434	1.3879	1.3928	1.2781	1.2641	1.2489	1.2155	AVRG		0.75745		1.3202	6	15	0.050	0.99
Trichloroethene			0.4423	0.3566	0.3873	0.3758	0.3521	0.3509	0.3559	0.3608	AVRG		2.68307		0.3727	8	15	0.050	0.99
1,2-Dichloropropane			0.4236	0.4474m	0.4537m	0.4419m	0.4152	0.4068	0.4106m	0.4021	AVRG		2.35209		0.4252	5	15	0.050	0.99
Bromodichloromethane			0.6671	0.5505	0.5743	0.5908	0.5610	0.5441	0.5421	0.5441	AVRG		1.74899		0.5718	7	15	0.050	0.99
4-Methyl-2-Pentanone				0.7340	0.7605	0.7830	0.7388	0.7029	0.7127	0.7377	AVRG		1.35407		0.7385	4	15	0.050	0.99
cis-1,3-Dichloropropene			0.6863	0.6860	0.6939	0.7063	0.6506	0.6336	0.6400	0.6315	AVRG		1.50146		0.6660	5	15	0.050	0.99

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	AVG	r ²	Max	Min	Min
Toluene		0.8154	0.8449	0.8272	0.8493	0.7539	0.7908	0.7913	0.7713	AVRG		1.24144		0.8055	4	15	0.050	0.99
trans-1,3-Dichloropropene		0.7060	0.6804	0.6990	0.6979	0.6639	0.6446	0.6434	0.6312	AVRG		1.49080		0.6708	4	15	0.050	0.99
1,1,2-Trichloroethane		0.2713	0.2049	0.2067	0.2060	0.2014	0.1882	0.1919	0.1905	AVRG		4.81674		0.2076	13	15	0.050	0.99
2-Hexanone			0.6376	0.6406	0.6726	0.6108	0.5736	0.5931	0.5948	AVRG		1.61924		0.6176	6	15	0.050	0.99
Tetrachloroethene		0.3002	0.2901	0.3211	0.2967	0.2669	0.3237	0.3377	0.3307	AVRG		3.24274		0.3084	8	15	0.050	0.99
Dibromochloromethane		0.4537	0.4459	0.4707	0.4656	0.4409	0.4404	0.4474	0.4417	AVRG		2.21834		0.4508	3	15	0.050	0.99
Chlorobenzene		1.0876	1.0960	1.0857	1.1018	0.9897	1.0074	0.9863	0.9615	AVRG		0.96200		1.0395	6	15	0.30	0.99
Ethylbenzene		1.8406	1.8115	1.8123	1.8217	1.5543	1.7078	1.6898	1.6359	AVRG		0.57662		1.7342	6	15	0.050	0.99
m,p-Xylenes	0.7115	0.6745	0.6724	0.6703	0.6561	0.5721	0.6068	0.6024	0.5819	AVRG		1.56575		0.6387	8	15	0.050	0.99
o-Xylene		0.6841	0.6630	0.6798	0.6799	0.5889	0.6211	0.5947	0.5968	AVRG		1.56609		0.6385	7	15	0.050	0.99
Styrene		1.1552	1.1966	1.2089	1.2575	1.1039	1.1459	1.1072	1.1008	AVRG		0.86244		1.1595	5	15	0.050	0.99
Bromoform		0.4354	0.3823	0.3640	0.3732	0.3372	0.3554	0.3550	0.3550	AVRG		2.70497		0.3697	8	15	0.10	0.99
1,1,2,2-Tetrachloroethane		1.4877	1.3409	1.2768	1.2653	1.1858	1.2208	1.2364	1.1618	AVRG		0.78621		1.2719	8	15	0.30	0.99
Dibromofluoromethane		0.6627	0.6576	0.6485	0.6507	0.6566	0.6581	0.6394	0.6550	AVRG		1.53003		0.6536	1	15	0.050	0.99
1,2-Dichloroethane-d4	0.6101	0.6150	0.6102	0.5962	0.5902	0.6007	0.5802	0.5866	0.5810	AVRG		1.67591		0.5967	2	15	0.050	0.99
Toluene-d8	1.2097	1.2072	1.1960	1.1858	1.1714	1.2076	1.2006	1.1971	1.2291	AVRG		0.83300		1.2005	1	15	0.050	0.99
Bromofluorobenzene	1.4370	1.4195	1.3978	1.4035	1.4036	1.3857	1.3993	1.3845	1.3409	AVRG		0.71589		1.3969	2	15	0.050	0.99

Analyst: AMKDate: 08/03/06Reviewer: BODate: 08/17/06

m-manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188837 MSVOA Water
EPA 8260B

Inst : MSVOA05
Calnum : 446307221001

Name : 826GOX5
Cal Date: 01-AUG-2006

Type : WATER

ICV 446307221023 (eh123 01-AUG-2006) stds: S3979 (5000X), S3894 (5000X)

ICV 446307221024 (eh124 01-AUG-2006) stds: S4023 (10000X), S3978 (10000X),
S3894 (5000X)

Analyte	ICV Seqnum	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	446307221023	1.0245	0.8054	50.00	39.31	ug/L	-21	30	!v- m
Vinyl Chloride	446307221023	0.7742	0.6841	50.00	44.18	ug/L	-12	20	m
Bromomethane	446307221023	0.3965	0.3625	50.00	45.71	ug/L	-9	30	m
Chloroethane	446307221023	0.4011	0.3721	50.00	46.38	ug/L	-7	30	m
Acetone	446307221024	0.4324	0.3998	25.00	23.12	ug/L	-8	40	
1,1-Dichloroethene	446307221024	0.3794	0.4076	25.00	26.86	ug/L	7	20	
Methylene Chloride	446307221024	0.5453	0.5223	25.00	23.95	ug/L	-4	30	
Carbon Disulfide	446307221024	1.6229	1.5566	25.00	23.98	ug/L	-4	30	
MTBE	446307221024	2.0844	1.7968	25.00	21.55	ug/L	-14	30	
trans-1,2-Dichloroethene	446307221024	0.5011	0.5405	25.00	26.96	ug/L	8	30	
Vinyl Acetate	446307221024	1.8343	1.5309	25.00	20.00	ug/L	-20	40	
1,1-Dichloroethane	446307221024	1.2471	1.2207	25.00	24.47	ug/L	-2	30	
2-Butanone	446307221024	0.6190	0.5991	25.00	24.20	ug/L	-3	40	
cis-1,2-Dichloroethene	446307221024	0.6142	0.6313	25.00	25.69	ug/L	3	30	
Chloroform	446307221024	1.1917	1.1384	25.00	23.88	ug/L	-4	20	
1,1,1-Trichloroethane	446307221024	0.8665	0.8803	25.00	25.40	ug/L	2	30	
Carbon Tetrachloride	446307221024	0.3995	0.4275	25.00	26.75	ug/L	7	30	
1,2-Dichloroethane	446307221024	0.7203	0.6857	25.00	23.80	ug/L	-5	30	
Benzene	446307221024	1.3202	1.2914	25.00	24.45	ug/L	-2	30	
Trichloroethene	446307221024	0.3727	0.3568	25.00	23.93	ug/L	-4	30	
1,2-Dichloropropane	446307221024	0.4252	0.3843	25.00	22.60	ug/L	-10	20	
Bromodichloromethane	446307221024	0.5718	0.5737	25.00	25.09	ug/L	0	30	
4-Methyl-2-Pentanone	446307221024	0.7385	0.7660	25.00	25.93	ug/L	4	40	
cis-1,3-Dichloropropene	446307221024	0.6660	0.6360	25.00	23.87	ug/L	-5	30	
Toluene	446307221024	0.8055	0.8109	25.00	25.17	ug/L	1	20	
trans-1,3-Dichloropropene	446307221024	0.6708	0.6052	25.00	22.56	ug/L	-10	30	
1,1,2-Trichloroethane	446307221024	0.2076	0.1916	25.00	23.07	ug/L	-8	30	
2-Hexanone	446307221024	0.6176	0.6454	25.00	26.13	ug/L	5	40	
Tetrachloroethene	446307221024	0.3084	0.3387	25.00	27.46	ug/L	10	30	
Dibromochloromethane	446307221024	0.4508	0.4612	25.00	25.58	ug/L	2	30	
Chlorobenzene	446307221024	1.0395	0.9903	25.00	23.82	ug/L	-5	30	
Ethylbenzene	446307221024	1.7342	1.7953	25.00	25.88	ug/L	4	20	
m,p-Xylenes	446307221024	0.6387	0.6428	50.00	50.32	ug/L	1	30	
o-Xylene	446307221024	0.6385	0.6448	25.00	25.25	ug/L	1	30	
Styrene	446307221024	1.1595	1.1684	25.00	25.19	ug/L	1	30	
Bromoform	446307221024	0.3697	0.3535	25.00	23.91	ug/L	-4	30	
1,1,2,2-Tetrachloroethane	446307221024	1.2719	1.2205	25.00	23.99	ug/L	-4	30	

!=warning --low bias m=manual integration v=ICV

Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\080106.b\EH114.D
 Report Date: 02-Aug-2006 08:18

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\080106.b\EH114.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 01-AUG-2006 15:03 MS Autotune Date: 02-MAY-2006 14:30
 Operator : VOC Inst ID: MSVOA05.i
 Smp Info : ICAL,S3851,0.001/1000,S3980,0.0005/1000,
 Misc Info : S3053,0.0005/1000,0.25/0.5PPB
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA05.i\080106.b\826GOX5.m
 Meth Date : 02-Aug-2006 08:18 Administra Quant Type: ISTD
 Cal Date : 01-AUG-2006 19:16 Cal File: EH122.D
 Als bottle: 14 Calibration Sample, Level: 9
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.492	4.492	(0.446)	2981		0.50000	0.2663 (a)
2 Chloromethane	50	4.886	4.886	(0.485)	7259		0.50000	0.6532
3 Vinyl Chloride	62	5.054	5.054	(0.502)	3810		0.50000	0.4537 (a)
4 Bromomethane	94	5.655	5.655	(0.562)	2312		0.50000	0.5376
5 Chloroethane	64	5.803	5.803	(0.576)	1222		0.50000	0.2808 (a)
6 Trichlorofluoromethane	101	6.148	6.148	(0.611)	5224		0.50000	0.4705 (a)
7 Ethanol	45	6.433	6.433	(0.639)	1997		25.0000	16.2099
8 Freon 113	101	6.847	6.847	(0.680)	400		0.25000	2.3029
9 1,1-Dichloroethene	96	6.966	6.966	(0.692)	926		0.25000	0.2249 (a)
10 Acetone	43	7.084	7.084	(0.703)	8533		0.25000	0.0645 (a)
11 Isopropanol	45	7.173	7.173	(0.712)	1726		2.50000	2.3572
12 Carbon Disulfide	76	7.350	7.350	(0.730)	4710		0.25000	0.2675 (a)
13 Methylene Chloride	84	7.705	7.705	(0.765)	4810		0.25000	0.8131
14 tert-Butyl Alcohol (TBA)	59	7.715	7.715	(0.766)	2450		2.50000	2.2976
15 MTBE	73	7.951	7.951	(0.790)	7127		0.25000	0.3152 (a)
16 trans-1,2-Dichloroethene	96	8.020	8.020	(0.796)	1991		0.25000	0.3663 (a)

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
17 Isopropyl Ether (DIPE)	45	8.542	8.542	(0.848)	9197	0.25000	0.2776 (a)
18 Vinyl Acetate	43	8.611	8.611	(0.855)	8396	0.25000	2.0000
19 1,1-Dichloroethane	63	8.661	8.661	(0.860)	3757	0.25000	0.2777 (a)
20 Ethyl tert-Butyl Ether (ETBE)	59	9.045	9.045	(0.898)	8148	0.25000	0.2783 (a)
21 2,2-Dichloropropane	77	9.439	9.439	(0.937)	3297	0.25000	0.3777 (a)
22 2-Butanone	43	9.469	9.469	(0.940)	3954	0.25000	0.5889
23 cis-1,2-Dichloroethene	96	9.469	9.469	(0.940)	1978	0.25000	0.2968 (a)
24 Bromochloromethane	128	9.833	9.833	(0.977)	776	0.25000	0.2484 (a)
25 Tetrahydrofuran	42	9.853	9.853	(0.978)	40531	2.50000	11.7798
26 Chloroform	83	9.873	9.873	(0.980)	4152	0.25000	0.3212 (a)
* 27 Pentafluorobenzene	168	10.070	10.070	(1.000)	542334	50.0000	
28 Dibromofluoromethane	113	10.119	10.119	(1.005)	356026	50.0000	50.2209
29 1,1,1-Trichloroethane	97	10.149	10.149	(1.008)	2800	0.25000	0.2979 (a)
30 Carbon Tetrachloride	117	10.346	10.346	(0.924)	1733	0.25000	0.2507 (a)
31 1,1-Dichloropropene	75	10.356	10.356	(0.925)	1934	0.25000	0.2466 (a)
32 1,2-Dichloroethane-d4	65	10.671	10.671	(0.953)	527623	50.0000	51.1259
33 Benzene	78	10.681	10.681	(0.954)	6320	0.25000	0.2767 (a)
34 Methyl tert-Amyl Ether (TAME)	73	10.701	10.701	(0.956)	6217	0.25000	0.2922 (a)
35 1,2-Dichloroethane	62	10.789	10.789	(0.964)	3282	0.25000	0.2634 (a)
* 36 1,4-Difluorobenzene	114	11.193	11.193	(1.000)	864773	50.0000	
37 Trichloroethene	95	11.597	11.597	(1.036)	2185	0.25000	0.3389 (a)
38 Trifluorotoluene	146	11.962	11.962	(1.069)	1653	0.25000	0.2567 (a)
39 1,2-Dichloropropane	63	12.002	12.002	(1.072)	1743	0.25000	0.2370 (a)
40 Dibromomethane	93	12.199	12.199	(1.090)	1386	0.25000	0.2771 (a)
41 Bromodichloromethane	83	12.366	12.366	(1.105)	3423	0.25000	0.3461 (a)
42 2-Chloroethylvinylether	63	12.701	12.701	(1.135)	1069	0.50000	0.4231 (a)
43 Tetramethyl THF	43	12.928	12.928	(1.155)	6657	0.25000	0.2796 (a)
44 cis-1,3-Dichloropropene	75	12.987	12.987	(1.160)	3006	0.25000	0.2609 (a)
45 4-Methyl-2-Pentanone	43	13.135	13.135	(1.173)	7248	0.25000	0.5674
46 Toluene-d8	98	13.302	13.302	(1.188)	1046096	50.0000	50.3828
47 Toluene	92	13.411	13.411	(1.198)	3851	0.25000	0.2764 (a)
48 trans-1,3-Dichloropropene	75	13.746	13.746	(1.228)	3448	0.25000	0.2972 (a)
49 1,1,2-Trichloroethane	85	14.012	14.012	(1.252)	1268	0.25000	0.3531 (a)
50 Tetrachloroethene	166	14.120	14.120	(0.926)	1303	0.25000	0.2764 (a)
51 2-Hexanone	43	14.239	14.239	(0.933)	3728	0.25000	0.3949 (a)
52 1,3-Dichloropropane	76	14.249	14.249	(0.934)	2992	0.25000	0.2723 (a)
53 Dibromochloromethane	129	14.534	14.534	(0.953)	1677	0.25000	0.2434 (a)
54 1,2-Dibromoethane	107	14.731	14.731	(1.316)	1715	0.25000	0.2436 (a)
* 55 Chlorobenzene-d5	117	15.254	15.254	(1.000)	764131	50.0000	
56 Chlorobenzene	112	15.293	15.293	(1.003)	4676	0.25000	0.2943 (a)
57 Ethylbenzene	91	15.342	15.342	(1.006)	7576	0.25000	0.2858 (a)
58 1,1,1,2-Tetrachloroethane	131	15.382	15.382	(1.008)	1245	0.25000	0.2279 (a)
59 m,p-Xylenes	106	15.480	15.480	(1.015)	5437	0.50000	0.5570
60 o-Xylene	106	15.993	15.993	(1.048)	2433	0.25000	0.2493 (a)
61 Styrene	104	16.013	16.013	(1.050)	4959	0.25000	0.2798 (a)
62 Bromoform	173	16.318	16.318	(1.070)	1943	0.25000	0.3439 (a)
63 Isopropylbenzene	105	16.387	16.387	(0.912)	6346	0.25000	0.2794 (a)

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						(ug/L)	(ug/L)
=====	====	==	=====	=====	=====	=====	=====
64 Cyclohexanone_	55	16.653	16.653	(0.927)	3628	2.50000	2.4791
65 Bromofluorobenzene	95	16.653	16.653	(0.927)	531888	50.0000	51.4364
66 1,1,2,2-Tetrachloroethane	83	16.811	16.811	(0.935)	3313	0.25000	0.3518 (a)
67 Propylbenzene	91	16.860	16.860	(0.938)	8469	0.25000	0.2925 (a)
68 Bromobenzene	156	16.860	16.860	(0.938)	1872	0.25000	0.3046 (a)
69 1,2,3-Trichloropropane	75	16.880	16.880	(0.939)	3655	0.25000	0.3866 (a)
70 2-Chlorotoluene	91	17.038	17.038	(0.948)	6300	0.25000	0.2886 (a)
71 1,3,5-Trimethylbenzene	105	17.047	17.047	(0.948)	6665	0.25000	0.3171 (a)
72 4-Chlorotoluene	91	17.156	17.156	(0.954)	6986	0.25000	0.3236 (a)
73 tert-Butylbenzene	119	17.412	17.412	(0.969)	4382	0.25000	0.2873 (a)
74 1,2,4-Trimethylbenzene	105	17.481	17.481	(0.973)	6928	0.25000	0.3121 (a)
75 sec-Butylbenzene	105	17.658	17.658	(0.982)	6539	0.25000	0.2829 (a)
76 para-Isopropyl Toluene	119	17.806	17.806	(0.991)	5945	0.25000	0.3153 (a)
77 1,3-Dichlorobenzene	146	17.895	17.895	(0.996)	3620	0.25000	0.3209 (a)
* 78 1,4-Dichlorobenzene-d4	152	17.974	17.974	(1.000)	370137	50.0000	
79 1,4-Dichlorobenzene	146	18.003	18.003	(1.002)	3435	0.25000	0.2969 (a)
80 n-Butylbenzene	91	18.279	18.279	(1.017)	4545	0.25000	0.2566 (a)
81 1,2-Dichlorobenzene	146	18.467	18.467	(1.027)	3289	0.25000	0.2991 (a)
82 1,2-Dibromo-3-Chloropropane	75	19.442	19.442	(1.082)	713	0.25000	0.3040 (a)
83 1,2,4-Trichlorobenzene	180	20.536	20.536	(1.143)	1251	0.25000	0.1838 (a)
84 Hexachlorobutadiene	225	20.645	20.645	(1.149)	298	0.25000	0.1381 (a)
85 Naphthalene	128	20.970	20.970	(1.167)	1273	0.25000	1.3947
86 1,2,3-Trichlorobenzene	180	21.344	21.344	(1.188)	929	0.25000	0.4763 (a)

QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\GCHSERVER\JD\chem\MSV0005.i\080106.b\EH14.D

Date : 01-AUG-2006 15:03

Client ID: DYNA P&T

Sample Info: ICAL,S3861,0.001/1000,S3980,0.0005/1000,

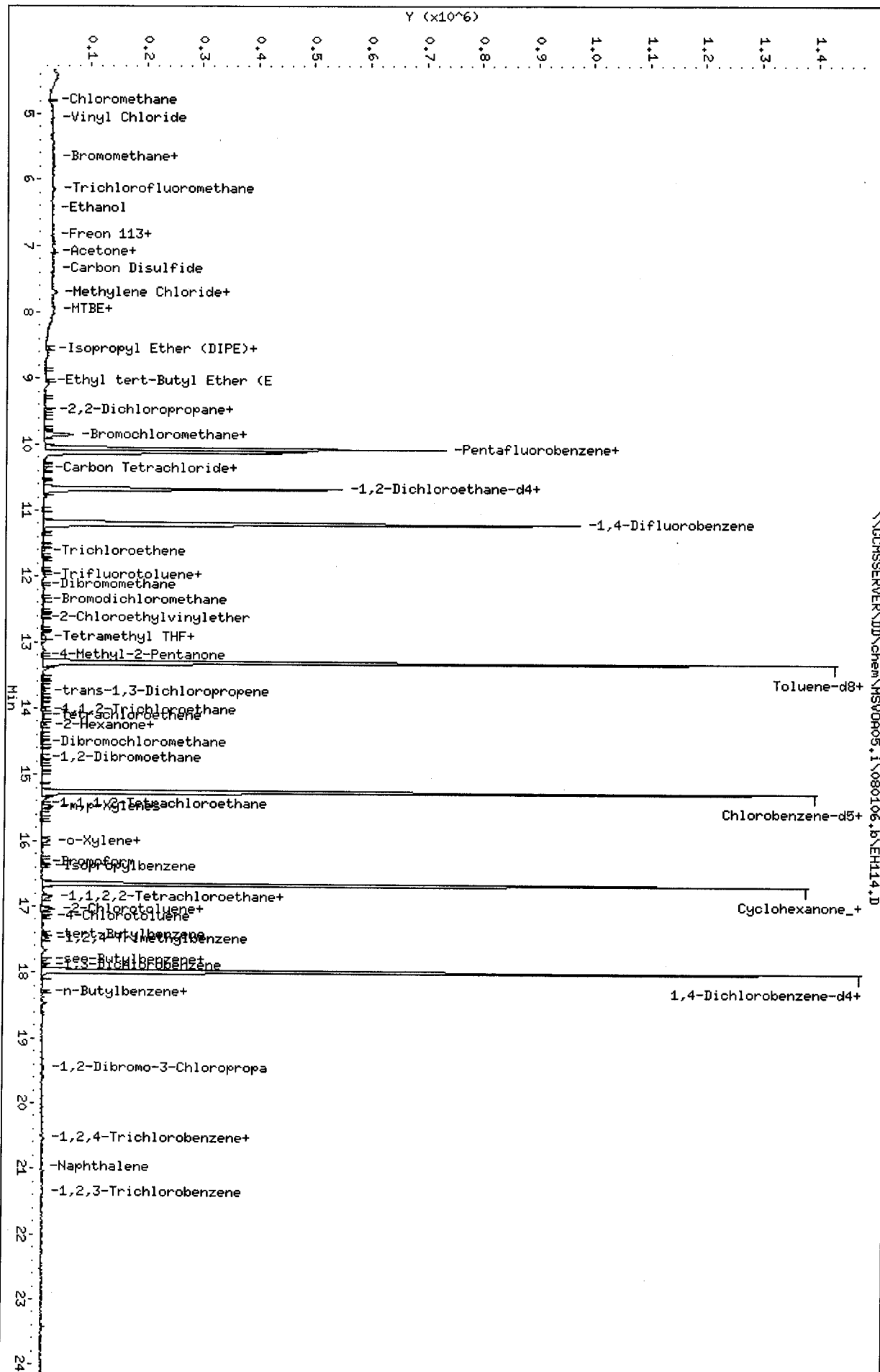
Purge Volume: 5.0

Column phase: RTX 624

Instrument: MSV0005.i

Operator: VOC

Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\080106.b\EH115.D
 Report Date: 02-Aug-2006 08:20

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\080106.b\EH115.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 01-AUG-2006 15:35 MS Autotune Date: 02-MAY-2006 14:30
 Operator : VOC Inst ID: MSVOA05.i
 Smp Info : ICAL,S3851,0.002/1000,S3980,0.001/1000,
 Misc Info : S3053,0.001/1000,0.5/1PPB
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA05.i\080106.b\826GOX5.m
 Meth Date : 02-Aug-2006 08:19 Administra Quant Type: ISTD
 Cal Date : 01-AUG-2006 19:16 Cal File: EH122.D
 Als bottle: 15 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.472	4.472	(0.444)	13370	1.00000	1.1689 (M)
2 Chloromethane	50	4.886	4.886	(0.485)	13952	1.00000	1.2285 (M)
3 Vinyl Chloride	62	5.053	5.053	(0.502)	8963	1.00000	1.0443 (M)
4 Bromomethane	94	5.664	5.664	(0.563)	4500	1.00000	1.0239 (M)
5 Chloroethane	64	5.822	5.822	(0.578)	4216	1.00000	0.9481
6 Trichlorofluoromethane	101	6.147	6.147	(0.610)	11458	1.00000	1.0097
7 Ethanol	45	6.433	6.433	(0.639)	5272	50.0000	41.8722
8 Freon 113	101	6.857	6.857	(0.681)	1713	0.50000	2.5707
9 1,1-Dichloroethene	96	6.955	6.955	(0.691)	2379	0.50000	0.5656 (M)
10 Acetone	43	7.083	7.083	(0.703)	7518	0.50000	(a)
11 Isopropanol	45	7.162	7.162	(0.711)	5152	5.00000	6.8847
12 Carbon Disulfide	76	7.359	7.359	(0.731)	8999	0.50000	0.5002
13 Methylene Chloride	84	7.694	7.694	(0.764)	5955	0.50000	0.9850
14 tert-Butyl Alcohol (TBA)	59	7.714	7.714	(0.766)	6046	5.00000	5.5479
15 MTBE	73	7.951	7.951	(0.790)	11905	0.50000	0.5152
16 trans-1,2-Dichloroethene	96	8.020	8.020	(0.796)	2533	0.50000	0.4559 (aM)

Compounds	QUANT SIG	AMOUNTS						
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
							(ug/L)	(ug/L)
=====	====	==	=====	=====	=====	=====	=====	
17 Isopropyl Ether (DIPE)	45	8.542	8.542	(0.848)	17964	0.50000	0.5305	
18 Vinyl Acetate	43	8.611	8.611	(0.855)	9658	0.50000	2.0481	
19 1,1-Dichloroethane	63	8.660	8.660	(0.860)	7435	0.50000	0.5378 (M)	
20 Ethyl tert-Butyl Ether (ETBE)	59	9.035	9.035	(0.897)	15978	0.50000	0.5339	
21 2,2-Dichloropropane	77	9.449	9.449	(0.938)	4886	0.50000	0.5477	
22 2-Butanone	43	9.468	9.468	(0.940)	5730	0.50000	0.8350	
23 cis-1,2-Dichloroethene	96	9.468	9.468	(0.940)	3510	0.50000	0.5154 (M)	
24 Bromochloromethane	128	9.833	9.833	(0.977)	1535	0.50000	0.4809 (a)	
25 Tetrahydrofuran	42	9.853	9.853	(0.978)	49838	5.00000	14.1729	
26 Chloroform	83	9.872	9.872	(0.980)	7367	0.50000	0.5576	
* 27 Pentafluorobenzene	168	10.069	10.069	(1.000)	554268	50.0000		
28 Dibromofluoromethane	113	10.119	10.119	(1.005)	367334	50.0000	50.7004	
29 1,1,1-Trichloroethane	97	10.148	10.148	(1.008)	5117	0.50000	0.5327	
30 Carbon Tetrachloride	117	10.345	10.345	(0.924)	3566	0.50000	0.4988 (a)	
31 1,1-Dichloropropene	75	10.365	10.365	(0.926)	3850	0.50000	0.4746 (a)	
32 1,2-Dichloroethane-d4	65	10.671	10.671	(0.953)	550223	50.0000	51.5340	
33 Benzene	78	10.690	10.690	(0.955)	12803	0.50000	0.5419	
34 Methyl tert-Amyl Ether (TAME)	73	10.700	10.700	(0.956)	11597	0.50000	0.5268	
35 1,2-Dichloroethane	62	10.779	10.779	(0.963)	6423	0.50000	0.4983 (a)	
* 36 1,4-Difluorobenzene	114	11.193	11.193	(1.000)	894673	50.0000		
37 Trichloroethene	95	11.597	11.597	(1.036)	3957	0.50000	0.5933	
38 Trifluorotoluene	146	11.962	11.962	(1.069)	2918	0.50000	0.4381 (a)	
39 1,2-Dichloropropane	63	12.011	12.011	(1.073)	3790	0.50000	0.4981 (a)	
40 Dibromomethane	93	12.208	12.208	(1.091)	2732	0.50000	0.5279	
41 Bromodichloromethane	83	12.356	12.356	(1.104)	5968	0.50000	0.5833	
42 2-Chloroethylvinylether	63	12.711	12.711	(1.136)	1670	1.00000	0.6389	
43 Tetramethyl THF	43	12.927	12.927	(1.155)	13310	0.50000	0.5405	
44 cis-1,3-Dichloropropene	75	12.987	12.987	(1.160)	6140	0.50000	0.5152	
45 4-Methyl-2-Pentanone	43	13.134	13.134	(1.173)	6691	0.50000	0.5063	
46 Toluene-d8	98	13.312	13.312	(1.189)	1080014	50.0000	50.2780	
47 Toluene	92	13.400	13.400	(1.197)	7295	0.50000	0.5061	
48 trans-1,3-Dichloropropene	75	13.745	13.745	(1.228)	6316	0.50000	0.5262	
49 1,1,2-Trichloroethane	85	14.002	14.002	(1.251)	2427	0.50000	0.6533	
50 Tetrachloroethene	166	14.120	14.120	(0.926)	2430	0.50000	0.4866 (a)	
51 2-Hexanone	43	14.248	14.248	(0.934)	8980	0.50000	0.8980	
52 1,3-Dichloropropane	76	14.248	14.248	(0.934)	6263	0.50000	0.5380	
53 Dibromochloromethane	129	14.534	14.534	(0.953)	3673	0.50000	0.5032	
54 1,2-Dibromoethane	107	14.731	14.731	(1.316)	4016	0.50000	0.5515	
* 55 Chlorobenzene-d5	117	15.253	15.253	(1.000)	809551	50.0000		
56 Chlorobenzene	112	15.293	15.293	(1.003)	8805	0.50000	0.5231	
57 Ethylbenzene	91	15.342	15.342	(1.006)	14901	0.50000	0.5306	
58 1,1,1,2-Tetrachloroethane	131	15.381	15.381	(1.008)	2758	0.50000	0.4765 (a)	
59 m,p-Xylenes	106	15.480	15.480	(1.015)	10921	1.00000	1.0561	
60 o-Xylene	106	15.983	15.983	(1.048)	5538	0.50000	0.5356	
61 Styrene	104	16.012	16.012	(1.050)	9352	0.50000	0.4981 (a)	
62 Bromoform	173	16.318	16.318	(1.070)	3525	0.50000	0.5889	
63 Isopropylbenzene	105	16.387	16.387	(0.912)	12262	0.50000	0.5156	

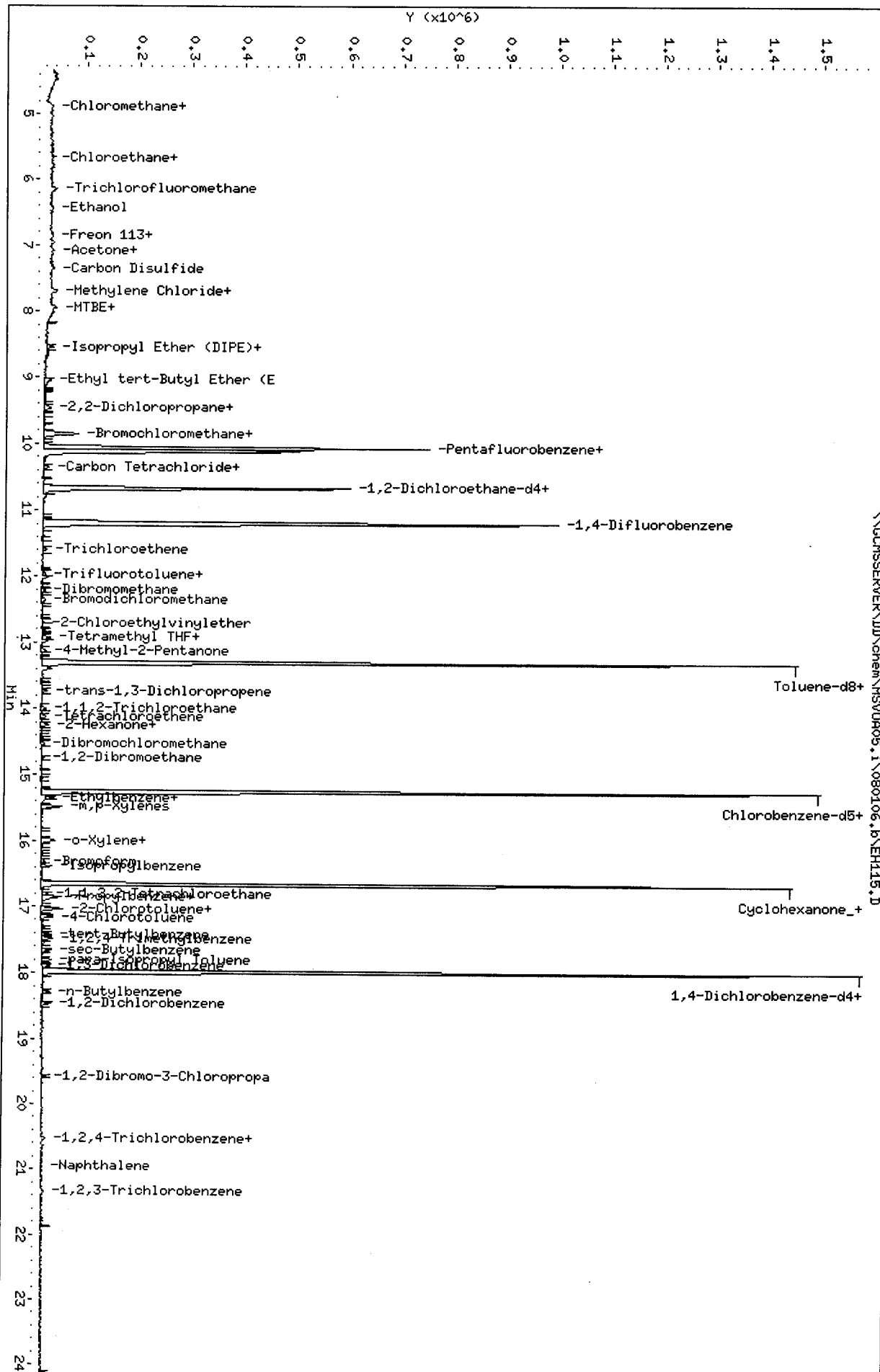
Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
64 Cyclohexanone_	55	16.643	16.643	(0.926)	10480	5.00000	6.8404
65 Bromofluorobenzene	95	16.653	16.653	(0.927)	550060	50.0000	50.8105
66 1,1,2,2-Tetrachloroethane	83	16.801	16.801	(0.935)	5765	0.50000	0.5848
67 Propylbenzene	91	16.860	16.860	(0.938)	17487	0.50000	0.5769
68 Bromobenzene	156	16.860	16.860	(0.938)	3560	0.50000	0.5533
69 1,2,3-Trichloropropane	75	16.889	16.889	(0.940)	5701	0.50000	0.5761
70 2-Chlorotoluene	91	17.037	17.037	(0.948)	13173	0.50000	0.5764
71 1,3,5-Trimethylbenzene	105	17.037	17.037	(0.948)	12399	0.50000	0.5634
72 4-Chlorotoluene	91	17.155	17.155	(0.954)	13407	0.50000	0.5933
73 tert-Butylbenzene	119	17.412	17.412	(0.969)	8760	0.50000	0.5486
74 1,2,4-Trimethylbenzene	105	17.481	17.481	(0.973)	12216	0.50000	0.5256
75 sec-Butylbenzene	105	17.658	17.658	(0.982)	12044	0.50000	0.4978 (a)
76 para-Isopropyl Toluene	119	17.806	17.806	(0.991)	9695	0.50000	0.4911 (a)
77 1,3-Dichlorobenzene	146	17.904	17.904	(0.996)	6276	0.50000	0.5315
* 78 1,4-Dichlorobenzene-d4	152	17.973	17.973	(1.000)	387498	50.0000	
79 1,4-Dichlorobenzene	146	18.003	18.003	(1.002)	6228	0.50000	0.5143
80 n-Butylbenzene	91	18.279	18.279	(1.017)	9298	0.50000	0.5014
81 1,2-Dichlorobenzene	146	18.466	18.466	(1.027)	6278	0.50000	0.5453
82 1,2-Dibromo-3-Chloropropane	75	19.452	19.452	(1.082)	1639	0.50000	0.6677
83 1,2,4-Trichlorobenzene	180	20.526	20.526	(1.142)	2583	0.50000	0.3625 (a)
84 Hexachlorobutadiene	225	20.644	20.644	(1.149)	906	0.50000	0.4012 (a)
85 Naphthalene	128	20.959	20.959	(1.166)	2985	0.50000	1.4879
86 1,2,3-Trichlorobenzene	180	21.334	21.334	(1.187)	2018	0.50000	0.6202

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.

Data File: \\GCHSERVER\DD\chem\MSV0A05.1\080106.b\EH115.D
 Date : 01-AUG-2006 15:35
 Client ID: DYNA P&T
 Sample Info: ICAL,S3851,0.002/1000,S3980,0.001/1000,
 Purge Volume: 5.0
 Column phase: RTX 624

Instrument: MSV0A05.1
 Operator: WOC
 Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\080106.b\EH116.D
 Report Date: 02-Aug-2006 08:21

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\080106.b\EH116.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 01-AUG-2006 16:07 MS Autotune Date: 02-MAY-2006 14:30
 Operator : VOC Inst ID: MSVOA05.i
 Smp Info : ICAL,S3851,0.002/500,S3980,0.002/500,
 Misc Info : S3053,0.001/500,2PPB
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA05.i\080106.b\826GOX5.m
 Meth Date : 02-Aug-2006 08:20 Administra Quant Type: ISTD
 Cal Date : 01-AUG-2006 19:16 Cal File: EH122.D
 Als bottle: 16 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.473	4.473	(0.444)	25895	2.00000	2.1439 (M)
2 Chloromethane	50	4.887	4.887	(0.485)	25674	2.00000	2.1407 (M)
3 Vinyl Chloride	62	5.045	5.045	(0.501)	19151	2.00000	2.1130 (M)
4 Bromomethane	94	5.665	5.665	(0.563)	9834	2.00000	2.1188 (M)
5 Chloroethane	64	5.813	5.813	(0.577)	9737	2.00000	2.0734 (M)
6 Trichlorofluoromethane	101	6.148	6.148	(0.611)	23567	2.00000	1.9667
7 Ethanol	45	6.434	6.434	(0.639)	27298	200.000	205.3043 (M)
8 Freon 113	101	6.858	6.858	(0.681)	6542	2.00000	3.4903
9 1,1-Dichloroethene	96	6.956	6.956	(0.691)	8192	2.00000	1.8442
10 Acetone	43	7.085	7.085	(0.703)	14318	2.00000	1.1094
11 Isopropanol	45	7.163	7.163	(0.711)	16956	20.0000	21.4562
12 Carbon Disulfide	76	7.351	7.351	(0.730)	35559	2.00000	1.8716
13 Methylene Chloride	84	7.696	7.696	(0.764)	14801	2.00000	2.3183
14 tert-Butyl Alcohol (TBA)	59	7.725	7.725	(0.767)	23291	20.0000	20.2381
15 MTBE	73	7.942	7.942	(0.789)	48719	2.00000	1.9965
16 trans-1,2-Dichloroethene	96	8.011	8.011	(0.795)	10287	2.00000	1.7535 (M)

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	----	==	=====	=====	=====	=====	=====
17 Isopropyl Ether (DIPE)	45	8.543	8.543	(0.848)	69178	2.00000	1.9347
18 Vinyl Acetate	43	8.612	8.612	(0.855)	48357	2.00000	3.6562
19 1,1-Dichloroethane	63	8.661	8.661	(0.860)	29078	2.00000	1.9917
20 Ethyl tert-Butyl Ether (ETBE)	59	9.036	9.036	(0.897)	65552	2.00000	2.0745
21 2,2-Dichloropropane	77	9.450	9.450	(0.938)	20009	2.00000	2.1242
22 2-Butanone	43	9.460	9.460	(0.939)	17526	2.00000	2.4186
23 cis-1,2-Dichloroethene	96	9.479	9.479	(0.941)	15578	2.00000	2.1663
24 Bromochloromethane	128	9.844	9.844	(0.977)	6791	2.00000	2.0146
25 Tetrahydrofuran	42	9.854	9.854	(0.978)	109303	20.0000	29.4338
26 Chloroform	83	9.874	9.874	(0.980)	27500	2.00000	1.9712
* 27 Pentafluorobenzene	168	10.071	10.071	(1.000)	585333	50.0000	
28 Dibromofluoromethane	113	10.120	10.120	(1.005)	384922	50.0000	50.3083
29 1,1,1-Trichloroethane	97	10.159	10.159	(1.009)	19748	2.00000	1.9467
30 Carbon Tetrachloride	117	10.357	10.357	(0.925)	14024	2.00000	1.8532
31 1,1-Dichloropropene	75	10.366	10.366	(0.926)	17048	2.00000	1.9854
32 1,2-Dichloroethane-d4	65	10.672	10.672	(0.953)	577839	50.0000	51.1292
33 Benzene	78	10.682	10.682	(0.954)	50890	2.00000	2.0351
34 Methyl tert-Amyl Ether (TAME)	73	10.692	10.692	(0.955)	49792	2.00000	2.1371
35 1,2-Dichloroethane	62	10.780	10.780	(0.963)	28319	2.00000	2.0758
* 36 1,4-Difluorobenzene	114	11.194	11.194	(1.000)	947016	50.0000	
37 Trichloroethene	95	11.598	11.598	(1.036)	13509	2.00000	1.9136
38 Trifluorotoluene	146	11.953	11.953	(1.068)	12856	2.00000	1.8235
39 1,2-Dichloropropane	63	12.012	12.012	(1.073)	16947	2.00000	2.1045 (M)
40 Dibromomethane	93	12.209	12.209	(1.091)	11170	2.00000	2.0393
41 Bromodichloromethane	83	12.357	12.357	(1.104)	20855	2.00000	1.9257
42 2-Chloroethylvinylether	63	12.702	12.702	(1.135)	5303	2.00000	1.9167
43 Tetramethyl THF	43	12.929	12.929	(1.155)	55237	2.00000	2.1192
44 cis-1,3-Dichloropropene	75	12.978	12.978	(1.159)	25988	2.00000	2.0601
45 4-Methyl-2-Pentanone	43	13.126	13.126	(1.173)	27805	2.00000	1.9878
46 Toluene-d8	98	13.303	13.303	(1.188)	1132603	50.0000	49.8119
47 Toluene	92	13.402	13.402	(1.197)	32007	2.00000	2.0978
48 trans-1,3-Dichloropropene	75	13.737	13.737	(1.227)	25773	2.00000	2.0286
49 1,1,2-Trichloroethane	85	14.003	14.003	(1.251)	7762	2.00000	1.9739
50 Tetrachloroethene	166	14.121	14.121	(0.926)	9574	2.00000	1.8813
51 2-Hexanone	43	14.239	14.239	(0.933)	21043	2.00000	2.0648
52 1,3-Dichloropropane	76	14.249	14.249	(0.934)	23710	2.00000	1.9986
53 Dibromochloromethane	129	14.535	14.535	(0.953)	14717	2.00000	1.9783
54 1,2-Dibromoethane	107	14.732	14.732	(1.316)	15812	2.00000	2.0515
* 55 Chlorobenzene-d5	117	15.255	15.255	(1.000)	825106	50.0000	
56 Chlorobenzene	112	15.294	15.294	(1.003)	36171	2.00000	2.1086
57 Ethylbenzene	91	15.343	15.343	(1.006)	59786	2.00000	2.0890
58 1,1,1,2-Tetrachloroethane	131	15.383	15.383	(1.008)	12172	2.00000	2.0636
59 m,p-Xylenes	106	15.481	15.481	(1.015)	44382	4.00000	4.2110
60 o-Xylene	106	15.994	15.994	(1.048)	21882	2.00000	2.0766
61 Styrene	104	16.013	16.013	(1.050)	39493	2.00000	2.0639
62 Bromoform	173	16.329	16.329	(1.070)	12616	2.00000	2.0679
63 Isopropylbenzene	105	16.388	16.388	(0.912)	48853	2.00000	1.9876

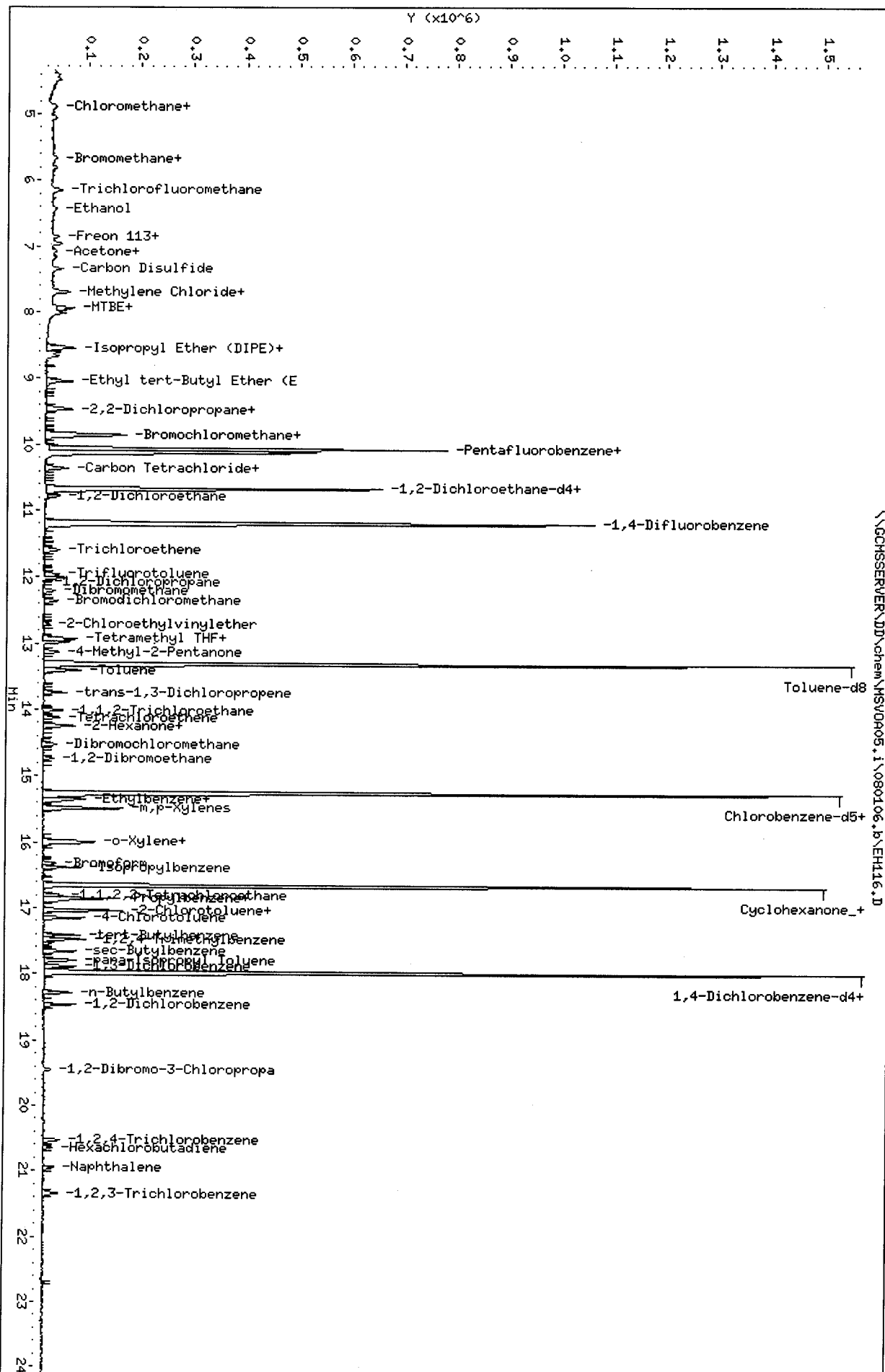
Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	----	==	=====	=====	=====	=====	=====
64 Cyclohexanone_	55	16.644	16.644	(0.926)	29389	20.0000	18.5579
65 Bromofluorobenzene	95	16.654	16.654	(0.927)	559891	50.0000	50.0344
66 1,1,2,2-Tetrachloroethane	83	16.802	16.802	(0.935)	21483	2.00000	2.1084
67 Propylbenzene	91	16.861	16.861	(0.938)	63709	2.00000	2.0336
68 Bromobenzene	156	16.861	16.861	(0.938)	13200	2.00000	1.9848
69 1,2,3-Trichloropropane	75	16.890	16.890	(0.940)	20365	2.00000	1.9910
70 2-Chlorotoluene	91	17.038	17.038	(0.948)	49652	2.00000	2.1020
71 1,3,5-Trimethylbenzene	105	17.038	17.038	(0.948)	47657	2.00000	2.0953
72 4-Chlorotoluene	91	17.157	17.157	(0.954)	47001	2.00000	2.0123
73 tert-Butylbenzene	119	17.413	17.413	(0.969)	32517	2.00000	1.9701
74 1,2,4-Trimethylbenzene	105	17.482	17.482	(0.973)	47163	2.00000	1.9634
75 sec-Butylbenzene	105	17.659	17.659	(0.982)	49858	2.00000	1.9936
76 para-Isopropyl Toluene	119	17.807	17.807	(0.991)	41370	2.00000	2.0276
77 1,3-Dichlorobenzene	146	17.906	17.906	(0.996)	24397	2.00000	1.9989
* 78 1,4-Dichlorobenzene-d4	152	17.975	17.975	(1.000)	400542	50.0000	
79 1,4-Dichlorobenzene	146	18.004	18.004	(1.002)	26124	2.00000	2.0871
80 n-Butylbenzene	91	18.280	18.280	(1.017)	35615	2.00000	1.8582
81 1,2-Dichlorobenzene	146	18.467	18.467	(1.027)	24642	2.00000	2.0709
82 1,2-Dibromo-3-Chloropropane	75	19.453	19.453	(1.082)	5057	2.00000	1.9931
83 1,2,4-Trichlorobenzene	180	20.537	20.537	(1.143)	12321	2.00000	1.6732
84 Hexachlorobutadiene	225	20.645	20.645	(1.149)	4179	2.00000	1.7904
85 Naphthalene	128	20.961	20.961	(1.166)	19554	2.00000	2.3846
86 1,2,3-Trichlorobenzene	180	21.345	21.345	(1.188)	10988	2.00000	1.8046

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCHSSERVER\DD\chem\HSV0A05.1\080106.b\EH116.D
 Date : 01-AUG-2006 16:07
 Client ID: DYNA P&T
 Sample Info: ICAL,S3851,0.002/500,S3980,0.002/500,
 Purge Volume: 5.0
 Column phase: RTX 624

Instrument: HSV0A05.1
 Operator: WOC
 Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\080106.b\EH117.D
 Report Date: 02-Aug-2006 08:22

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\080106.b\EH117.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 01-AUG-2006 16:38 MS Autotune Date: 02-MAY-2006 14:30
 Operator : VOC Inst ID: MSVOA05.i
 Smp Info : ICAL,S3851,0.005/500,S3980,0.005/500,
 Misc Info : S3053,0.0025/500,5PPB
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA05.i\080106.b\826GOX5.m
 Meth Date : 02-Aug-2006 08:21 Administra Quant Type: ISTD
 Cal Date : 01-AUG-2006 19:16 Cal File: EH122.D
 Als bottle: 17 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.478	4.478	(0.445)	60391	5.00000	4.8633 (M)
2 Chloromethane	50	4.892	4.892	(0.486)	63752	5.00000	5.1703 (M)
3 Vinyl Chloride	62	5.049	5.049	(0.502)	47117	5.00000	5.0565 (M)
4 Bromomethane	94	5.660	5.660	(0.562)	21072	5.00000	4.4161 (M)
5 Chloroethane	64	5.808	5.808	(0.577)	24593	5.00000	5.0938 (M)
6 Trichlorofluoromethane	101	6.153	6.153	(0.611)	62868	5.00000	5.1031 (M)
7 Ethanol	45	6.439	6.439	(0.640)	68235	500.000	499.1558 (M)
8 Freon 113	101	6.863	6.863	(0.682)	20818	5.00000	6.1487
9 1,1-Dichloroethene	96	6.961	6.961	(0.692)	22649	5.00000	4.9595
10 Acetone	43	7.080	7.080	(0.703)	34257	5.00000	5.0458
11 Isopropanol	45	7.168	7.168	(0.712)	40004	50.0000	49.2373
12 Carbon Disulfide	76	7.356	7.356	(0.731)	99626	5.00000	5.1003
13 Methylene Chloride	84	7.691	7.691	(0.764)	34857	5.00000	5.3106
14 tert-Butyl Alcohol (TBA)	59	7.720	7.720	(0.767)	59961	50.0000	50.6771
15 MTBE	73	7.947	7.947	(0.790)	142352	5.00000	5.6743
16 trans-1,2-Dichloroethene	96	8.016	8.016	(0.796)	34762	5.00000	5.7637

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
17 Isopropyl Ether (DIPE)	45	8.538	8.538	(0.848)	191017	5.00000	5.1961
18 Vinyl Acetate	43	8.607	8.607	(0.855)	95675	5.00000	5.5294
19 1,1-Dichloroethane	63	8.666	8.666	(0.861)	77969	5.00000	5.1945
20 Ethyl tert-Butyl Ether (ETBE)	59	9.041	9.041	(0.898)	167614	5.00000	5.1594
21 2,2-Dichloropropane	77	9.455	9.455	(0.939)	50640	5.00000	5.2290
22 2-Butanone	43	9.455	9.455	(0.939)	40059	5.00000	5.3771
23 cis-1,2-Dichloroethene	96	9.474	9.474	(0.941)	38333	5.00000	5.1850
24 Bromochloromethane	128	9.839	9.839	(0.977)	18013	5.00000	5.1977
25 Tetrahydrofuran	42	9.859	9.859	(0.979)	228945	50.0000	59.9664
26 Chloroform	83	9.878	9.878	(0.981)	75139	5.00000	5.2388
* 27 Pentafluorobenzene	168	10.066	10.066	(1.000)	601785	50.0000	
28 Dibromofluoromethane	113	10.125	10.125	(1.006)	390252	50.0000	49.6105
29 1,1,1-Trichloroethane	97	10.154	10.154	(1.009)	54973	5.00000	5.2711
30 Carbon Tetrachloride	117	10.352	10.352	(0.924)	39753	5.00000	5.1269
31 1,1-Dichloropropene	75	10.371	10.371	(0.926)	46060	5.00000	5.2351
32 1,2-Dichloroethane-d4	65	10.677	10.677	(0.953)	578573	50.0000	49.9626
33 Benzene	78	10.687	10.687	(0.954)	134674	5.00000	5.2562
34 Methyl tert-Amyl Ether (TAME)	73	10.696	10.696	(0.955)	121793	5.00000	5.1017
35 1,2-Dichloroethane	62	10.785	10.785	(0.963)	73240	5.00000	5.2395
* 36 1,4-Difluorobenzene	114	11.199	11.199	(1.000)	970359	50.0000	
37 Trichloroethene	95	11.593	11.593	(1.035)	37579	5.00000	5.1953
38 Trifluorotoluene	146	11.958	11.958	(1.068)	37004	5.00000	5.1224
39 1,2-Dichloropropane	63	12.007	12.007	(1.072)	44028	5.00000	5.3360 (M)
40 Dibromomethane	93	12.204	12.204	(1.090)	28786	5.00000	5.1291
41 Bromodichloromethane	83	12.352	12.352	(1.103)	55732	5.00000	5.0225
42 2-Chloroethylvinylether	63	12.707	12.707	(1.135)	11363	5.00000	4.0082
43 Tetramethyl THF	43	12.934	12.934	(1.155)	135369	5.00000	5.0687
44 cis-1,3-Dichloropropene	75	12.983	12.983	(1.159)	67331	5.00000	5.2091
45 4-Methyl-2-Pentanone	43	13.121	13.121	(1.172)	73791	5.00000	5.1485
46 Toluene-d8	98	13.308	13.308	(1.188)	1150697	50.0000	49.3903
47 Toluene	92	13.407	13.407	(1.197)	80266	5.00000	5.1344
48 trans-1,3-Dichloropropene	75	13.742	13.742	(1.227)	67824	5.00000	5.2100
49 1,1,2-Trichloroethane	85	14.008	14.008	(1.251)	20057	5.00000	4.9780
50 Tetrachloroethene	166	14.126	14.126	(0.926)	27143	5.00000	5.2062
51 2-Hexanone	43	14.234	14.234	(0.933)	54146	5.00000	5.1860
52 1,3-Dichloropropane	76	14.254	14.254	(0.934)	63035	5.00000	5.1866
53 Dibromochloromethane	129	14.530	14.530	(0.952)	39792	5.00000	5.2213
54 1,2-Dibromoethane	107	14.737	14.737	(1.316)	40210	5.00000	5.0916
* 55 Chlorobenzene-d5	117	15.259	15.259	(1.000)	845300	50.0000	
56 Chlorobenzene	112	15.299	15.299	(1.003)	91775	5.00000	5.2222
57 Ethylbenzene	91	15.338	15.338	(1.005)	153197	5.00000	5.2251
58 1,1,1,2-Tetrachloroethane	131	15.378	15.378	(1.008)	31950	5.00000	5.2873
59 m,p-Xylenes	106	15.486	15.486	(1.015)	113315	10.0000	10.4947
60 o-Xylene	106	15.989	15.989	(1.048)	57467	5.00000	5.3234
61 Styrene	104	16.008	16.008	(1.049)	102188	5.00000	5.2129
62 Bromoform	173	16.324	16.324	(1.070)	30770	5.00000	4.9232
63 Isopropylbenzene	105	16.383	16.383	(0.911)	134223	5.00000	5.3372

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
64 Cyclohexanone_	55	16.639	16.639	(0.925)	102785	50.0000	63.4339
65 Bromofluorobenzene	95	16.659	16.659	(0.927)	575183	50.0000	50.2363
66 1,1,2,2-Tetrachloroethane	83	16.807	16.807	(0.935)	52327	5.00000	5.0191
67 Propylbenzene	91	16.856	16.856	(0.938)	164741	5.00000	5.1395
68 Bromobenzene	156	16.866	16.866	(0.938)	34916	5.00000	5.1312
69 1,2,3-Trichloropropane	75	16.895	16.895	(0.940)	54596	5.00000	5.2168
70 2-Chlorotoluene	91	17.033	17.033	(0.947)	127097	5.00000	5.2589
71 1,3,5-Trimethylbenzene	105	17.043	17.043	(0.948)	122296	5.00000	5.2551
72 4-Chlorotoluene	91	17.161	17.161	(0.955)	123948	5.00000	5.1865
73 tert-Butylbenzene	119	17.418	17.418	(0.969)	86564	5.00000	5.1259
74 1,2,4-Trimethylbenzene	105	17.487	17.487	(0.973)	129328	5.00000	5.2619
75 sec-Butylbenzene	105	17.664	17.664	(0.982)	131933	5.00000	5.1560
76 para-Isopropyl Toluene	119	17.802	17.802	(0.990)	108954	5.00000	5.2191
77 1,3-Dichlorobenzene	146	17.901	17.901	(0.996)	65896	5.00000	5.2768
* 78 1,4-Dichlorobenzene-d4	152	17.979	17.979	(1.000)	409828	50.0000	
79 1,4-Dichlorobenzene	146	18.009	18.009	(1.002)	68132	5.00000	5.3200
80 n-Butylbenzene	91	18.285	18.285	(1.017)	100674	5.00000	5.1337
81 1,2-Dichlorobenzene	146	18.472	18.472	(1.027)	64125	5.00000	5.2669
82 1,2-Dibromo-3-Chloropropane	75	19.448	19.448	(1.082)	12434	5.00000	4.7895
83 1,2,4-Trichlorobenzene	180	20.542	20.542	(1.143)	36819	5.00000	4.8869
84 Hexachlorobutadiene	225	20.640	20.640	(1.148)	12316	5.00000	5.1571
85 Naphthalene	128	20.956	20.956	(1.166)	68938	5.00000	4.9751
86 1,2,3-Trichlorobenzene	180	21.340	21.340	(1.187)	34688	5.00000	4.8421

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCHSERVER\JD\chem\MSV0A05.i\080106.b\EH117.D

Date : 01-AUG-2006 16:38

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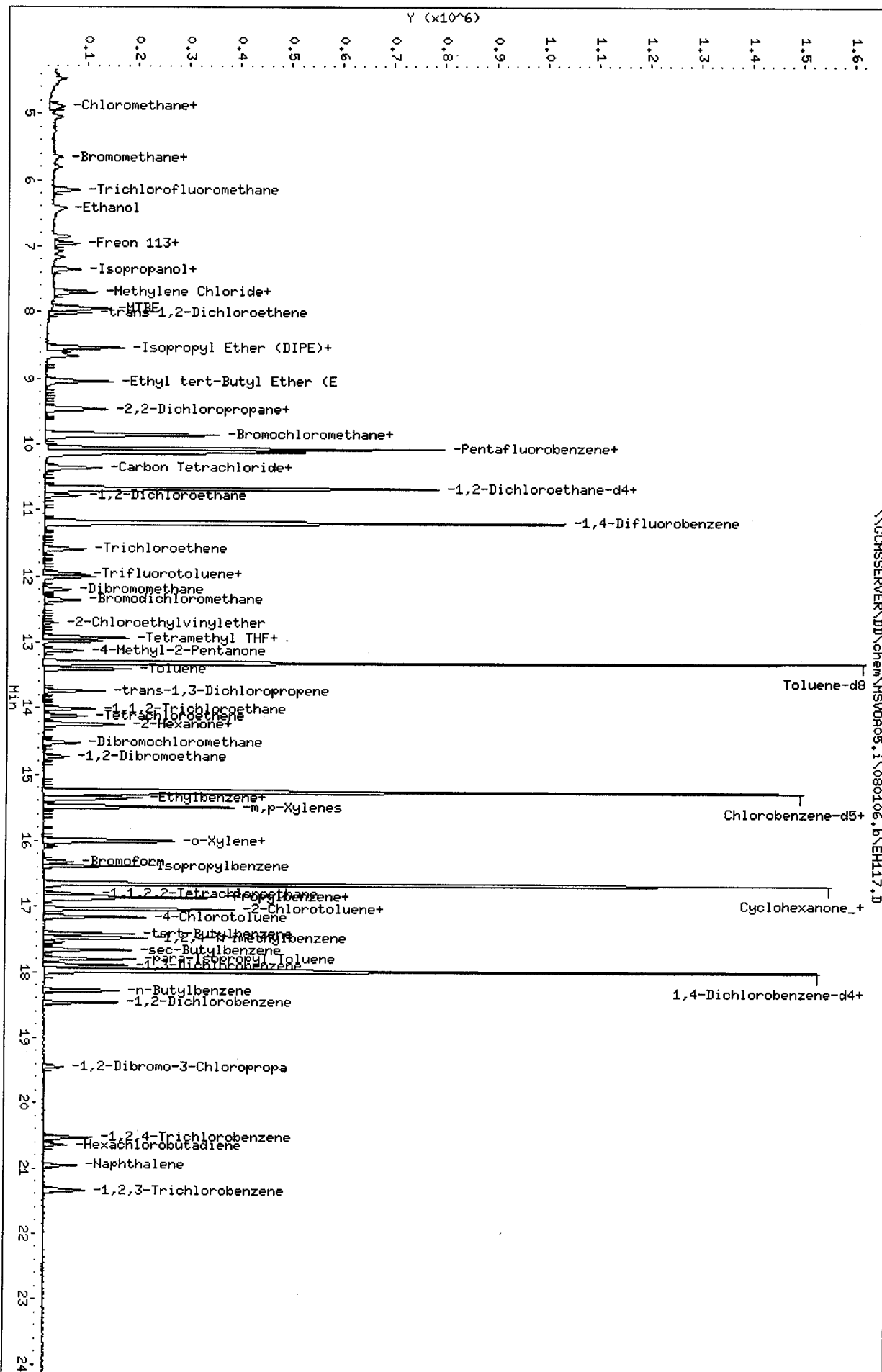
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Column phase: RTX 624

Instrument: MSV0A05.i

Operator: WOC

Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\080106.b\EH118.D
 Report Date: 02-Aug-2006 08:22

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Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\080106.b\EH118.D
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 Inj Date : 01-AUG-2006 17:10 MS Autotune Date: 02-MAY-2006 14:30
 Operator : VOC Inst ID: MSVOA05.i
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 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA05.i\080106.b\826GOX5.m
 Meth Date : 02-Aug-2006 08:22 Administra Quant Type: ISTD
 Cal Date : 01-AUG-2006 19:16 Cal File: EH122.D
 Als bottle: 18 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.474	4.474	(0.444)	119778	10.0000	9.5355 (M)
2 Chloromethane	50	4.888	4.888	(0.485)	129617	10.0000	10.3920 (M)
3 Vinyl Chloride	62	5.045	5.045	(0.501)	97526	10.0000	10.3467 (M)
4 Bromomethane	94	5.656	5.656	(0.562)	51807	10.0000	10.7334 (M)
5 Chloroethane	64	5.804	5.804	(0.576)	51178	10.0000	10.4792 (M)
6 Trichlorofluoromethane	101	6.149	6.149	(0.611)	124983	10.0000	10.0292 (M)
7 Ethanol	45	6.425	6.425	(0.638)	137524	1000.00	994.5311 (M)
8 Freon 113	101	6.859	6.859	(0.681)	30594	10.0000	7.9232
9 1,1-Dichloroethene	96	6.957	6.957	(0.691)	41174	10.0000	8.9130
10 Acetone	43	7.076	7.076	(0.703)	59275	10.0000	10.0597
11 Isopropanol	45	7.164	7.164	(0.711)	85668	100.000	104.2367
12 Carbon Disulfide	76	7.351	7.351	(0.730)	190700	10.0000	9.6514
13 Methylene Chloride	84	7.696	7.696	(0.764)	69148	10.0000	10.4146
14 tert-Butyl Alcohol (TBA)	59	7.716	7.716	(0.766)	119105	100.000	99.5140
15 MTBE	73	7.943	7.943	(0.789)	254902	10.0000	10.0446
16 trans-1,2-Dichloroethene	96	8.022	8.022	(0.796)	65014	10.0000	10.6565

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
17 Isopropyl Ether (DIPE)	45	8.534	8.534	(0.847)	392152	10.0000	10.5456
18 Vinyl Acetate	43	8.613	8.613	(0.855)	177003	10.0000	8.7349
19 1,1-Dichloroethane	63	8.662	8.662	(0.860)	156433	10.0000	10.3030
20 Ethyl tert-Butyl Ether (ETBE)	59	9.037	9.037	(0.897)	340193	10.0000	10.3521
21 2,2-Dichloropropane	77	9.451	9.451	(0.938)	95351	10.0000	9.7334
22 2-Butanone	43	9.460	9.460	(0.939)	74953	10.0000	9.9460
23 cis-1,2-Dichloroethene	96	9.480	9.480	(0.941)	77840	10.0000	10.4087
24 Bromochloromethane	128	9.835	9.835	(0.977)	37131	10.0000	10.5919
25 Tetrahydrofuran	42	9.855	9.855	(0.978)	423775	100.000	109.7294
26 Chloroform	83	9.874	9.874	(0.980)	153635	10.0000	10.5894
* 27 Pentafluorobenzene	168	10.071	10.071	(1.000)	608738	50.0000	
28 Dibromofluoromethane	113	10.121	10.121	(1.005)	396116	50.0000	49.7808
29 1,1,1-Trichloroethane	97	10.150	10.150	(1.008)	99863	10.0000	9.4660
30 Carbon Tetrachloride	117	10.347	10.347	(0.924)	68854	10.0000	8.7190
31 1,1-Dichloropropene	75	10.367	10.367	(0.926)	83773	10.0000	9.3488
32 1,2-Dichloroethane-d4	65	10.673	10.673	(0.953)	583282	50.0000	49.4555
33 Benzene	78	10.683	10.683	(0.954)	275291	10.0000	10.5495
34 Methyl tert-Amyl Ether (TAME)	73	10.692	10.692	(0.955)	251462	10.0000	10.3423
35 1,2-Dichloroethane	62	10.781	10.781	(0.963)	147159	10.0000	10.3367
* 36 1,4-Difluorobenzene	114	11.195	11.195	(1.000)	988288	50.0000	
37 Trichloroethene	95	11.589	11.589	(1.035)	74283	10.0000	10.0834
38 Trifluorotoluene	146	11.954	11.954	(1.068)	63642	10.0000	8.6501
39 1,2-Dichloropropane	63	12.013	12.013	(1.073)	87341	10.0000	10.3934 (M)
40 Dibromomethane	93	12.200	12.200	(1.090)	58145	10.0000	10.1724
41 Bromodichloromethane	83	12.358	12.358	(1.104)	116782	10.0000	10.3335
42 2-Chloroethylvinylether	63	12.703	12.703	(1.135)	29615	10.0000	10.2570
43 Tetramethyl THF	43	12.929	12.929	(1.155)	277399	10.0000	10.1984
44 cis-1,3-Dichloropropene	75	12.979	12.979	(1.159)	139598	10.0000	10.6042
45 4-Methyl-2-Pentanone	43	13.127	13.127	(1.173)	154772	10.0000	10.6027
46 Toluene-d8	98	13.304	13.304	(1.188)	1157709	50.0000	48.7898
47 Toluene	92	13.403	13.403	(1.197)	167876	10.0000	10.5439
48 trans-1,3-Dichloropropene	75	13.738	13.738	(1.227)	137948	10.0000	10.4044
49 1,1,2-Trichloroethane	85	14.004	14.004	(1.251)	40720	10.0000	9.9230
50 Tetrachloroethene	166	14.122	14.122	(0.926)	50631	10.0000	9.6209
51 2-Hexanone	43	14.230	14.230	(0.933)	114780	10.0000	10.8909
52 1,3-Dichloropropane	76	14.250	14.250	(0.934)	128454	10.0000	10.4708
53 Dibromochloromethane	129	14.526	14.526	(0.952)	79447	10.0000	10.3275
54 1,2-Dibromoethane	107	14.733	14.733	(1.316)	81420	10.0000	10.1229
* 55 Chlorobenzene-d5	117	15.255	15.255	(1.000)	853259	50.0000	
56 Chlorobenzene	112	15.295	15.295	(1.003)	188026	10.0000	10.5993
57 Ethylbenzene	91	15.344	15.344	(1.006)	310872	10.0000	10.5041
58 1,1,1,2-Tetrachloroethane	131	15.383	15.383	(1.008)	65306	10.0000	10.7064
59 m,p-Xylenes	106	15.482	15.482	(1.015)	223931	20.0000	20.5459
60 o-Xylene	106	15.985	15.985	(1.048)	116031	10.0000	10.6482
61 Styrene	104	16.014	16.014	(1.050)	214603	10.0000	10.8455
62 Bromoform	173	16.320	16.320	(1.070)	63695	10.0000	10.0961
63 Isopropylbenzene	105	16.389	16.389	(0.912)	256618	10.0000	10.1271

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	====	==	=====	=====	=====	=====	=====
64 Cyclohexanone_	55	16.645	16.645	(0.926)	201094	100.000	123.1679
65 Bromofluorobenzene	95	16.655	16.655	(0.927)	579616	50.0000	50.2410
66 1,1,2,2-Tetrachloroethane	83	16.803	16.803	(0.935)	104499	10.0000	9.9477
67 Propylbenzene	91	16.862	16.862	(0.938)	327626	10.0000	10.1439
68 Bromobenzene	156	16.862	16.862	(0.938)	73544	10.0000	10.7264
69 1,2,3-Trichloropropane	75	16.891	16.891	(0.940)	107047	10.0000	10.1513
70 2-Chlorotoluene	91	17.039	17.039	(0.948)	263039	10.0000	10.8015
71 1,3,5-Trimethylbenzene	105	17.039	17.039	(0.948)	244445	10.0000	10.4245
72 4-Chlorotoluene	91	17.157	17.157	(0.954)	257940	10.0000	10.7118
73 tert-Butylbenzene	119	17.414	17.414	(0.969)	170247	10.0000	10.0051
74 1,2,4-Trimethylbenzene	105	17.483	17.483	(0.973)	273359	10.0000	11.0381
75 sec-Butylbenzene	105	17.660	17.660	(0.982)	247674	10.0000	9.6062
76 para-Isopropyl Toluene	119	17.798	17.798	(0.990)	214414	10.0000	10.1933
77 1,3-Dichlorobenzene	146	17.897	17.897	(0.996)	135939	10.0000	10.8035
* 78 1,4-Dichlorobenzene-d4	152	17.975	17.975	(1.000)	412948	50.0000	
79 1,4-Dichlorobenzene	146	18.005	18.005	(1.002)	138551	10.0000	10.7368
80 n-Butylbenzene	91	18.281	18.281	(1.017)	196637	10.0000	9.9515
81 1,2-Dichlorobenzene	146	18.468	18.468	(1.027)	127973	10.0000	10.4317
82 1,2-Dibromo-3-Chloropropane	75	19.444	19.444	(1.082)	26245	10.0000	10.0332
83 1,2,4-Trichlorobenzene	180	20.538	20.538	(1.143)	84467	10.0000	11.1264
84 Hexachlorobutadiene	225	20.646	20.646	(1.149)	24114	10.0000	10.0211
85 Naphthalene	128	20.961	20.961	(1.166)	172355	10.0000	10.3156
86 1,2,3-Trichlorobenzene	180	21.346	21.346	(1.187)	80213	10.0000	10.6173

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCHSERVER\DD\chem\MSV0A05.1\080106.b\EH18.D

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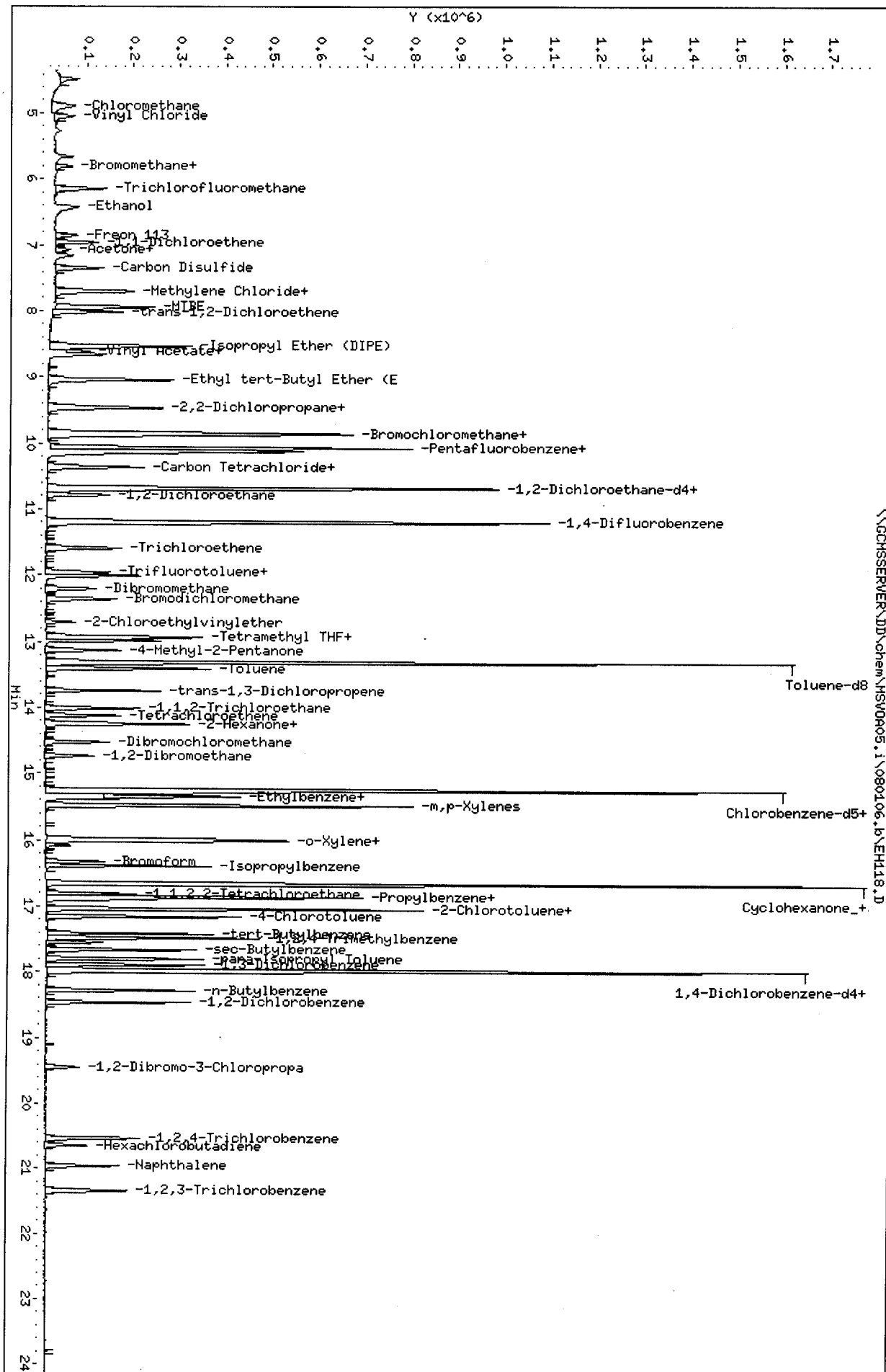
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Column phase: RTX 624

Instrument: MSV0A05.1

Operator: WOC

Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\080106.b\EH119.D
 Report Date: 02-Aug-2006 08:23

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\080106.b\EH119.D
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 Operator : VOC Inst ID: MSVOA05.i
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 Misc Info : S3053,0.002/100,20PPB
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA05.i\080106.b\826GOX5.m
 Meth Date : 02-Aug-2006 08:23 Administra Quant Type: ISTD
 Cal Date : 01-AUG-2006 19:16 Cal File: EH122.D
 Als bottle: 19 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.473	4.473	(0.444)	224492	20.0000	17.9528 (M)
2 Chloromethane	50	4.887	4.887	(0.485)	227830	20.0000	18.3489 (M)
3 Vinyl Chloride	62	5.054	5.054	(0.502)	181443	20.0000	19.3368 (M)
4 Bromomethane	94	5.655	5.655	(0.562)	90951	20.0000	18.9286
5 Chloroethane	64	5.813	5.813	(0.577)	97920	20.0000	20.1409 (M)
6 Trichlorofluoromethane	101	6.148	6.148	(0.611)	241566	20.0000	19.4720
7 Ethanol	45	6.424	6.424	(0.638)	288872	2000.00	2098.4890
8 Freon 113	101	6.858	6.858	(0.681)	74376	20.0000	16.0934
9 1,1-Dichloroethene	96	6.956	6.956	(0.691)	84705	20.0000	18.4193
10 Acetone	43	7.074	7.074	(0.703)	116339	20.0000	22.2612
11 Isopropanol	45	7.163	7.163	(0.711)	164743	200.000	201.3588
12 Carbon Disulfide	76	7.350	7.350	(0.730)	378156	20.0000	19.2252
13 Methylene Chloride	84	7.695	7.695	(0.764)	132190	20.0000	19.9998
14 tert-Butyl Alcohol (TBA)	59	7.715	7.715	(0.766)	242675	200.000	203.6764
15 MTBE	73	7.942	7.942	(0.789)	507379	20.0000	20.0842
16 trans-1,2-Dichloroethene	96	8.020	8.020	(0.796)	123939	20.0000	20.4070

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
17 Isopropyl Ether (DIPE)	45	8.533	8.533	(0.847)	782331	20.0000	21.1335
18 Vinyl Acetate	43	8.612	8.612	(0.855)	356323	20.0000	15.8391
19 1,1-Dichloroethane	63	8.661	8.661	(0.860)	297214	20.0000	19.6637
20 Ethyl tert-Butyl Ether (ETBE)	59	9.045	9.045	(0.898)	657806	20.0000	20.1078
21 2,2-Dichloropropane	77	9.449	9.449	(0.938)	178842	20.0000	18.3389
22 2-Butanone	43	9.459	9.459	(0.939)	150850	20.0000	20.1078
23 cis-1,2-Dichloroethene	96	9.479	9.479	(0.941)	146525	20.0000	19.6819
24 Bromochloromethane	128	9.844	9.844	(0.977)	72977	20.0000	20.9116
25 Tetrahydrofuran	42	9.854	9.854	(0.978)	775205	200.000	201.6349
26 Chloroform	83	9.873	9.873	(0.980)	282100	20.0000	19.5320
* 27 Pentafluorobenzene	168	10.070	10.070	(1.000)	605995	50.0000	
28 Dibromofluoromethane	113	10.120	10.120	(1.005)	397873	50.0000	50.2279
29 1,1,1-Trichloroethane	97	10.149	10.149	(1.008)	189993	20.0000	18.0910
30 Carbon Tetrachloride	117	10.346	10.346	(0.924)	138901	20.0000	17.5383
31 1,1-Dichloropropene	75	10.366	10.366	(0.926)	160295	20.0000	17.8368
32 1,2-Dichloroethane-d4	65	10.672	10.672	(0.953)	595401	50.0000	50.3373
33 Benzene	78	10.681	10.681	(0.954)	506730	20.0000	19.3625
34 Methyl tert-Amyl Ether (TAME)	73	10.691	10.691	(0.955)	489918	20.0000	20.0917
35 1,2-Dichloroethane	62	10.790	10.790	(0.964)	290289	20.0000	20.3315
* 36 1,4-Difluorobenzene	114	11.194	11.194	(1.000)	991149	50.0000	
37 Trichloroethene	95	11.598	11.598	(1.036)	139595	20.0000	18.8944
38 Trifluorotoluene	146	11.963	11.963	(1.069)	131835	20.0000	17.8672
39 1,2-Dichloropropane	63	12.012	12.012	(1.073)	164598	20.0000	19.5303
40 Dibromomethane	93	12.199	12.199	(1.090)	115253	20.0000	20.1053
41 Bromodichloromethane	83	12.357	12.357	(1.104)	222403	20.0000	19.6226
42 2-Chloroethylvinylether	63	12.702	12.702	(1.135)	61237	20.0000	21.1480
43 Tetramethyl THF	43	12.928	12.928	(1.155)	540910	20.0000	19.8289
44 cis-1,3-Dichloropropene	75	12.978	12.978	(1.159)	257930	20.0000	19.5364
45 4-Methyl-2-Pentanone	43	13.125	13.125	(1.173)	292899	20.0000	20.0073
46 Toluene-d8	98	13.303	13.303	(1.188)	1196869	50.0000	50.2945
47 Toluene	92	13.401	13.401	(1.197)	298877	20.0000	18.7176
48 trans-1,3-Dichloropropene	75	13.736	13.736	(1.227)	263196	20.0000	19.7938
49 1,1,2-Trichloroethane	85	14.003	14.003	(1.251)	79854	20.0000	19.4035
50 Tetrachloroethene	166	14.121	14.121	(0.926)	94147	20.0000	17.3099
51 2-Hexanone	43	14.239	14.239	(0.933)	215441	20.0000	19.7795
52 1,3-Dichloropropane	76	14.249	14.249	(0.934)	249241	20.0000	19.6580
53 Dibromochloromethane	129	14.535	14.535	(0.953)	155536	20.0000	19.5630
54 1,2-Dibromoethane	107	14.732	14.732	(1.316)	155282	20.0000	19.2505
* 55 Chlorobenzene-d5	117	15.254	15.254	(1.000)	881847	50.0000	
56 Chlorobenzene	112	15.294	15.294	(1.003)	349123	20.0000	19.0427
57 Ethylbenzene	91	15.343	15.343	(1.006)	548252	20.0000	17.9245
58 1,1,1,2-Tetrachloroethane	131	15.382	15.382	(1.008)	120804	20.0000	19.1629
59 m,p-Xylenes	106	15.481	15.481	(1.015)	403596	40.0000	35.8300
60 o-Xylene	106	15.983	15.983	(1.048)	207713	20.0000	18.4440
61 Styrene	104	16.013	16.013	(1.050)	389389	20.0000	19.0409
62 Bromoform	173	16.319	16.319	(1.070)	118958	20.0000	18.2445
63 Isopropylbenzene	105	16.388	16.388	(0.912)	446458	20.0000	17.0970

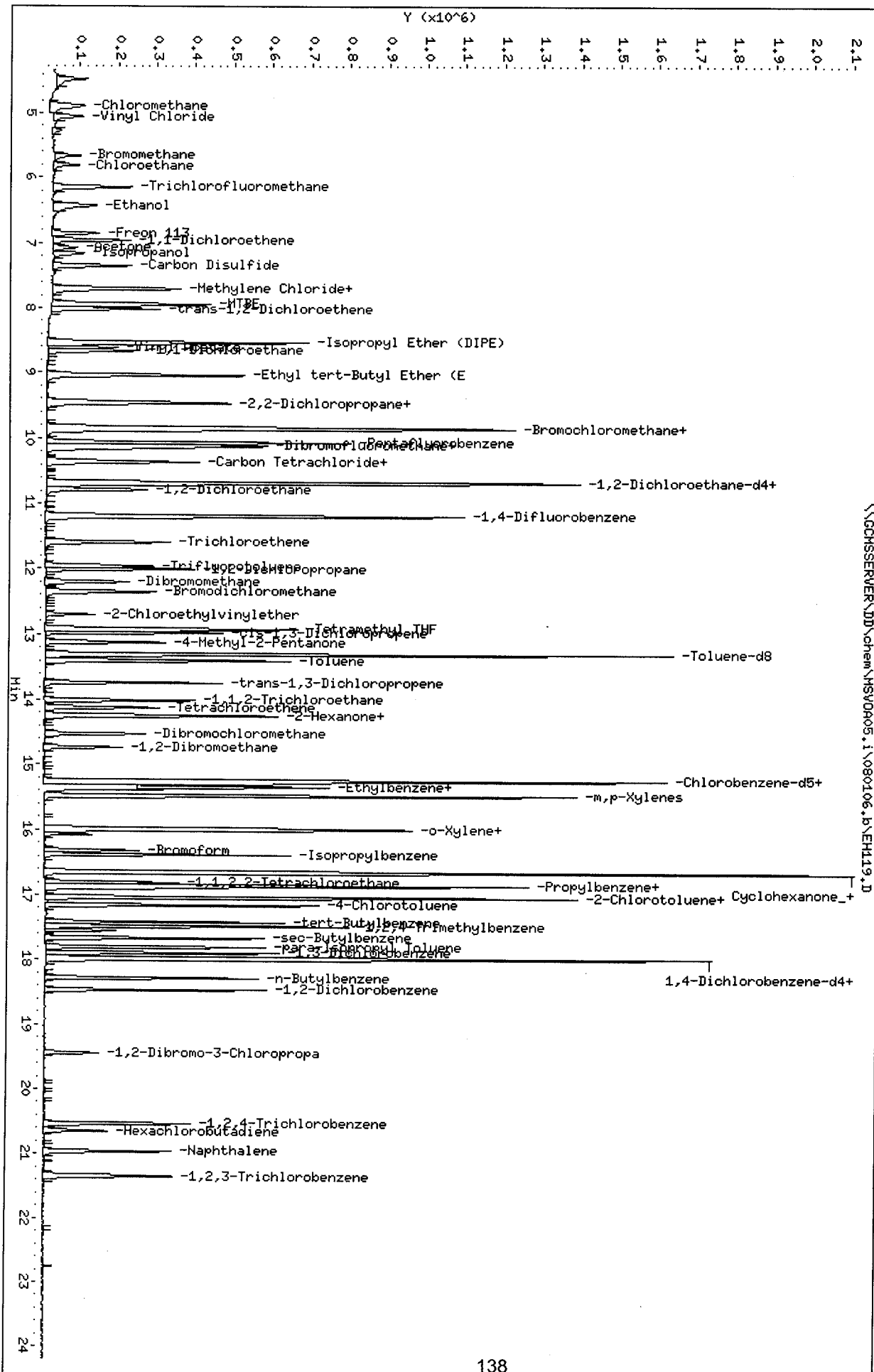
Compounds	QUANT SIG	AMOUNTS					
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)
=====	====	==	=====	=====	=====	=====	=====
64 Cyclohexanone_	55	16.644	16.644	(0.926)	417284	200.000	248.0109
65 Bromofluorobenzene	95	16.654	16.654	(0.927)	589691	50.0000	49.6001
66 1,1,2,2-Tetrachloroethane	83	16.801	16.801	(0.935)	201853	20.0000	18.6461
67 Propylbenzene	91	16.861	16.861	(0.938)	576952	20.0000	17.3343
68 Bromobenzene	156	16.861	16.861	(0.938)	135812	20.0000	19.2214
69 1,2,3-Trichloropropane	75	16.890	16.890	(0.940)	208882	20.0000	19.2216
70 2-Chlorotoluene	91	17.038	17.038	(0.948)	456066	20.0000	18.1733
71 1,3,5-Trimethylbenzene	105	17.038	17.038	(0.948)	422750	20.0000	17.4945
72 4-Chlorotoluene	91	17.156	17.156	(0.954)	447152	20.0000	18.0194
73 tert-Butylbenzene	119	17.412	17.412	(0.969)	294676	20.0000	16.8046
74 1,2,4-Trimethylbenzene	105	17.481	17.481	(0.973)	461564	20.0000	18.0856
75 sec-Butylbenzene	105	17.659	17.659	(0.982)	443708	20.0000	16.6997
76 para-Isopropyl Toluene	119	17.807	17.807	(0.991)	366363	20.0000	16.9011
77 1,3-Dichlorobenzene	146	17.895	17.895	(0.996)	241974	20.0000	18.6608
* 78 1,4-Dichlorobenzene-d4	152	17.974	17.974	(1.000)	425554	50.0000	
79 1,4-Dichlorobenzene	146	18.004	18.004	(1.002)	249247	20.0000	18.7429
80 n-Butylbenzene	91	18.280	18.280	(1.017)	342896	20.0000	16.8394
81 1,2-Dichlorobenzene	146	18.467	18.467	(1.027)	234240	20.0000	18.5284
82 1,2-Dibromo-3-Chloropropane	75	19.443	19.443	(1.082)	50167	20.0000	18.6102
83 1,2,4-Trichlorobenzene	180	20.537	20.537	(1.143)	156013	20.0000	19.9420
84 Hexachlorobutadiene	225	20.645	20.645	(1.149)	40869	20.0000	16.4809
85 Naphthalene	128	20.960	20.960	(1.166)	351447	20.0000	18.8797
86 1,2,3-Trichlorobenzene	180	21.345	21.345	(1.188)	151765	20.0000	19.0666

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCHSERVER\JD\chem\MSV0A05.1\080106.b\EH19.D
 Date : 01-AUG-2006 17:41
 Client ID: DYNA P&T
 Sample Info: ICAL,S3851,0.004/100,S3980,0.004/100,
 Purge Volume: 5.0
 Column phase: RTX 624

Instrument: MSV0A05.1
 Operator: VOC
 Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\080106.b\EH120.D
 Report Date: 02-Aug-2006 08:24

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Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\080106.b\EH120.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 01-AUG-2006 18:13 MS Autotune Date: 02-MAY-2006 14:30
 Operator : VOC Inst ID: MSVOA05.i
 Smp Info : ICAL,S3851,0.01/100,S3980,0.01/100,
 Misc Info : S3053,0.005/100,50PPB
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA05.i\080106.b\826GOX5.m
 Meth Date : 02-Aug-2006 08:24 Administra Quant Type: ISTD
 Cal Date : 01-AUG-2006 19:16 Cal File: EH122.D
 Als bottle: 20 Calibration Sample, Level: 6
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.478	4.478 (0.444)		605516	50.0000	47.4911 (M)
2 Chloromethane	50	4.882	4.882 (0.485)		573321	50.0000	45.2848
3 Vinyl Chloride	62	5.050	5.050 (0.501)		461848	50.0000	48.2724
4 Bromomethane	94	5.661	5.661 (0.562)		238649	50.0000	48.7108
5 Chloroethane	64	5.808	5.808 (0.576)		238094	50.0000	48.0299 (M)
6 Trichlorofluoromethane	101	6.153	6.153 (0.611)		616028	50.0000	48.7002
7 Ethanol	45	6.439	6.439 (0.639)		661004	5000.00	4709.3364
8 Freon 113	101	6.853	6.853 (0.680)		266677	50.0000	50.1725
9 1,1-Dichloroethene	96	6.961	6.961 (0.691)		245491	50.0000	52.3547
10 Acetone	43	7.070	7.070 (0.702)		231892	50.0000	47.7942
11 Isopropanol	45	7.168	7.168 (0.711)		397078	500.000	475.9857
12 Carbon Disulfide	76	7.356	7.356 (0.730)		1062322	50.0000	52.9677
13 Methylene Chloride	84	7.691	7.691 (0.763)		310818	50.0000	46.1199
14 tert-Butyl Alcohol (TBA)	59	7.720	7.720 (0.766)		571777	500.000	470.6487
15 MTBE	73	7.947	7.947 (0.789)		1198420	50.0000	46.5250
16 trans-1,2-Dichloroethene	96	8.016	8.016 (0.796)		304884	50.0000	49.2335

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
17 Isopropyl Ether (DIPE)	45	8.538	8.538	(0.847)	1836607	50.0000	48.6577
18 Vinyl Acetate	43	8.607	8.607	(0.854)	1405706	50.0000	52.8690
19 1,1-Dichloroethane	63	8.666	8.666	(0.860)	759554	50.0000	49.2845
20 Ethyl tert-Butyl Ether (ETBE)	59	9.041	9.041	(0.897)	1603587	50.0000	48.0745
21 2,2-Dichloropropane	77	9.455	9.455	(0.938)	495907	50.0000	49.8722
22 2-Butanone	43	9.455	9.455	(0.938)	340537	50.0000	44.5184
23 cis-1,2-Dichloroethene	96	9.474	9.474	(0.940)	368176	50.0000	48.5027
24 Bromochloromethane	128	9.839	9.839	(0.977)	177451	50.0000	49.8695
25 Tetrahydrofuran	42	9.849	9.849	(0.978)	1814367	500.000	462.8376
26 Chloroform	83	9.879	9.879	(0.980)	709923	50.0000	48.2070
* 27 Pentafluorobenzene	168	10.076	10.076	(1.000)	617895	50.0000	
28 Dibromofluoromethane	113	10.115	10.115	(1.004)	406636	50.0000	50.3455
29 1,1,1-Trichloroethane	97	10.154	10.154	(1.008)	547616	50.0000	51.1396
30 Carbon Tetrachloride	117	10.352	10.352	(0.924)	439534	50.0000	53.7619
31 1,1-Dichloropropene	75	10.371	10.371	(0.926)	486106	50.0000	52.3995
32 1,2-Dichloroethane-d4	65	10.677	10.677	(0.953)	593654	50.0000	48.6198
33 Benzene	78	10.687	10.687	(0.954)	1293408	50.0000	47.8763
34 Methyl tert-Amyl Ether (TAME)	73	10.697	10.697	(0.955)	1182210	50.0000	46.9664
35 1,2-Dichloroethane	62	10.785	10.785	(0.963)	696981	50.0000	47.2890
* 36 1,4-Difluorobenzene	114	11.199	11.199	(1.000)	1023151	50.0000	
37 Trichloroethene	95	11.593	11.593	(1.035)	359058	50.0000	47.0789
38 Trifluorotoluene	146	11.958	11.958	(1.068)	418287	50.0000	54.9161
39 1,2-Dichloropropane	63	12.007	12.007	(1.072)	416200	50.0000	47.8394
40 Dibromomethane	93	12.204	12.204	(1.090)	285613	50.0000	48.2654
41 Bromodichloromethane	83	12.362	12.362	(1.104)	556740	50.0000	47.5848
42 2-Chloroethylvinylether	63	12.707	12.707	(1.135)	162428	50.0000	54.3396
43 Tetramethyl THF	43	12.934	12.934	(1.155)	1348579	50.0000	47.8905
44 cis-1,3-Dichloropropene	75	12.983	12.983	(1.159)	648283	50.0000	47.5672
45 4-Methyl-2-Pentanone	43	13.121	13.121	(1.172)	719157	50.0000	47.5877
46 Toluene-d8	98	13.308	13.308	(1.188)	1228408	50.0000	50.0053
47 Toluene	92	13.407	13.407	(1.197)	809105	50.0000	49.0864
48 trans-1,3-Dichloropropene	75	13.742	13.742	(1.227)	659501	50.0000	48.0468
49 1,1,2-Trichloroethane	85	14.008	14.008	(1.251)	192551	50.0000	45.3240
50 Tetrachloroethene	166	14.126	14.126	(0.926)	285507	50.0000	52.4801
51 2-Hexanone	43	14.235	14.235	(0.933)	505925	50.0000	46.4370
52 1,3-Dichloropropane	76	14.254	14.254	(0.934)	609739	50.0000	48.0788
53 Dibromochloromethane	129	14.530	14.530	(0.952)	388471	50.0000	48.8488
54 1,2-Dibromoethane	107	14.737	14.737	(1.316)	387448	50.0000	46.5300
* 55 Chlorobenzene-d5	117	15.259	15.259	(1.000)	882071	50.0000	
56 Chlorobenzene	112	15.299	15.299	(1.003)	888602	50.0000	48.4560
57 Ethylbenzene	91	15.348	15.348	(1.006)	1506431	50.0000	49.2386
58 1,1,1,2-Tetrachloroethane	131	15.378	15.378	(1.008)	308126	50.0000	48.8651
59 m,p-Xylenes	106	15.486	15.486	(1.015)	1070516	100.000	95.0130
60 o-Xylene	106	15.989	15.989	(1.048)	547811	50.0000	48.6311
61 Styrene	104	16.008	16.008	(1.049)	1010758	50.0000	49.4129
62 Bromoform	173	16.324	16.324	(1.070)	313484	50.0000	48.0667
63 Isopropylbenzene	105	16.383	16.383	(0.911)	1336337	50.0000	50.5530

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
64 Cyclohexanone_	55	16.639	16.639	(0.925)	581339	500.000	341.3176
65 Bromofluorobenzene	95	16.659	16.659	(0.927)	602811	50.0000	50.0875
66 1,1,2,2-Tetrachloroethane	83	16.807	16.807	(0.935)	525890	50.0000	47.9885
67 Propylbenzene	91	16.856	16.856	(0.938)	1670168	50.0000	49.5699
68 Bromobenzene	156	16.866	16.866	(0.938)	346041	50.0000	48.3800
69 1,2,3-Trichloropropane	75	16.895	16.895	(0.940)	519724	50.0000	47.2447
70 2-Chlorotoluene	91	17.033	17.033	(0.947)	1204401	50.0000	47.4098
71 1,3,5-Trimethylbenzene	105	17.043	17.043	(0.948)	1184524	50.0000	48.4230
72 4-Chlorotoluene	91	17.162	17.162	(0.955)	1199966	50.0000	47.7690
73 tert-Butylbenzene	119	17.418	17.418	(0.969)	889762	50.0000	50.1241
74 1,2,4-Trimethylbenzene	105	17.487	17.487	(0.973)	1267689	50.0000	49.0687
75 sec-Butylbenzene	105	17.664	17.664	(0.982)	1417627	50.0000	52.7065
76 para-Isopropyl Toluene	119	17.802	17.802	(0.990)	1139083	50.0000	51.9099
77 1,3-Dichlorobenzene	146	17.901	17.901	(0.996)	638594	50.0000	48.6493
* 78 1,4-Dichlorobenzene-d4	152	17.980	17.980	(1.000)	430789	50.0000	
79 1,4-Dichlorobenzene	146	18.009	18.009	(1.002)	644323	50.0000	47.8633
80 n-Butylbenzene	91	18.285	18.285	(1.017)	1086517	50.0000	52.7100
81 1,2-Dichlorobenzene	146	18.472	18.472	(1.027)	608683	50.0000	47.5620
82 1,2-Dibromo-3-Chloropropane	75	19.448	19.448	(1.082)	121752	50.0000	44.6170
83 1,2,4-Trichlorobenzene	180	20.532	20.532	(1.142)	445733	50.0000	56.2825
84 Hexachlorobutadiene	225	20.650	20.650	(1.149)	140534	50.0000	55.9833
85 Naphthalene	128	20.966	20.966	(1.166)	1057561	50.0000	50.6703
86 1,2,3-Trichlorobenzene	180	21.340	21.340	(1.187)	423734	50.0000	50.4914

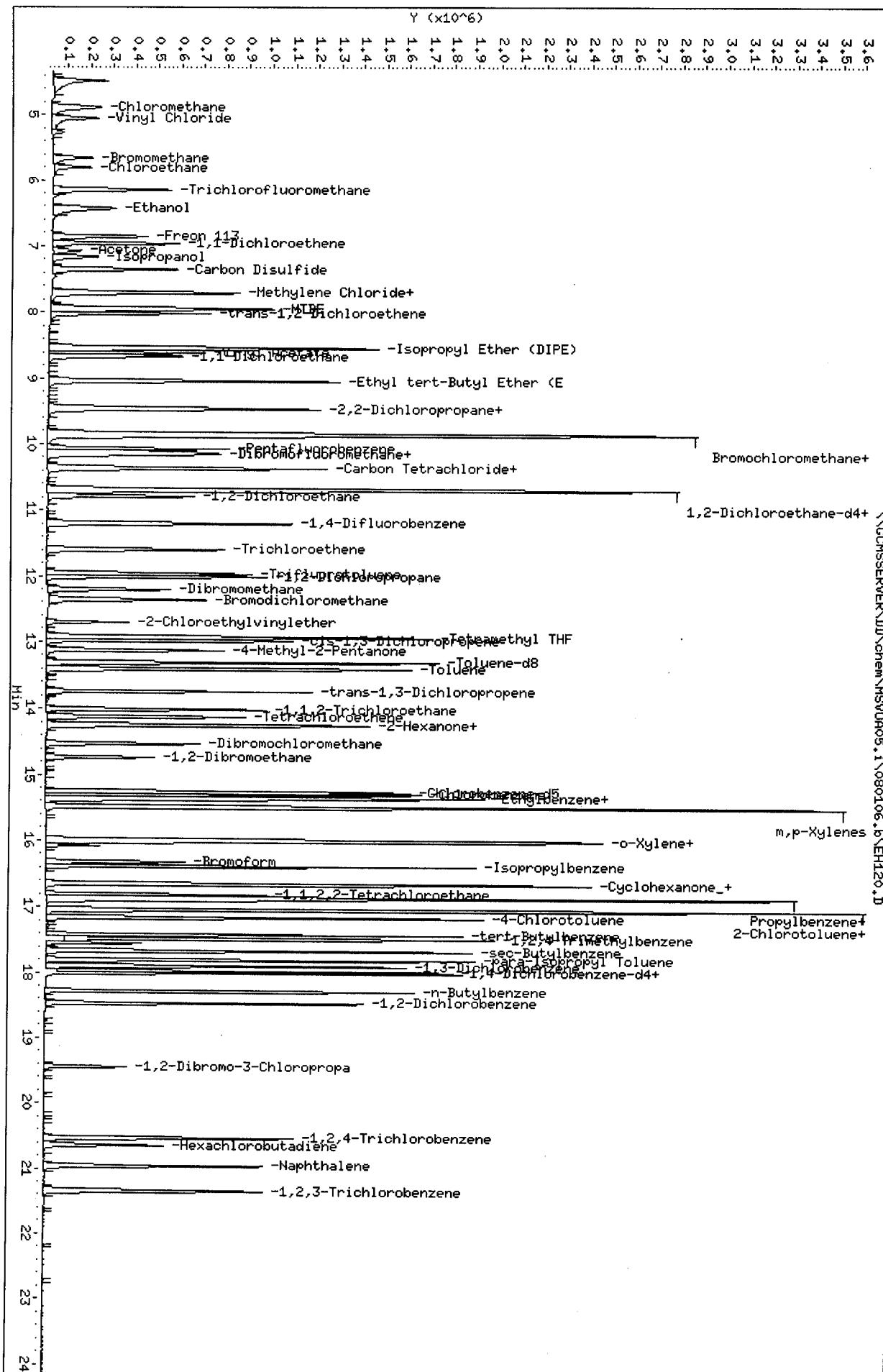
QC Flag Legend

M - Compound response manually integrated.

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 Date : 01-AUG-2006 18:13

Client ID: DYNA P&T
 Sample Info: ICAL,S3851,0.01/100,S3980,0.01/100,
 Purge Volume: 5.0
 Column phase: RTX 624

Instrument: MSV0A05.1
 Operator: VOC
 Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\080106.b\EH121.D
 Report Date: 02-Aug-2006 08:25

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\080106.b\EH121.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 01-AUG-2006 18:45 MS Autotune Date: 02-MAY-2006 14:30
 Operator : VOC Inst ID: MSVOA05.i
 Smp Info : ICAL,S3851,0.015/100,S3980,0.015/100,
 Misc Info : S3053,0.0075/100,75PPB
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA05.i\080106.b\826GOX5.m
 Meth Date : 02-Aug-2006 08:25 Administra Quant Type: ISTD
 Cal Date : 01-AUG-2006 19:16 Cal File: EH122.D
 Als bottle: 21 Calibration Sample, Level: 7
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.478	4.478	(0.445)	983657	75.0000	74.3250
2 Chloromethane	50	4.882	4.882	(0.485)	883207	75.0000	67.2082
3 Vinyl Chloride	62	5.049	5.049	(0.502)	743643	75.0000	74.8806
4 Bromomethane	94	5.650	5.650	(0.561)	390651	75.0000	76.8173
5 Chloroethane	64	5.798	5.798	(0.576)	388256	75.0000	75.4547 (M)
6 Trichlorofluoromethane	101	6.153	6.153	(0.611)	999297	75.0000	76.1080
7 Ethanol	45	6.429	6.429	(0.639)	1067283	7500.00	7325.5443
8 Freon 113	101	6.853	6.853	(0.681)	441903	75.0000	77.6613
9 1,1-Dichloroethene	96	6.961	6.961	(0.692)	380137	75.0000	78.1026
10 Acetone	43	7.070	7.070	(0.702)	357905	75.0000	75.7294
11 Isopropanol	45	7.168	7.168	(0.712)	626408	750.000	723.4026
12 Carbon Disulfide	76	7.346	7.346	(0.730)	1595419	75.0000	76.6364
13 Methylene Chloride	84	7.691	7.691	(0.764)	472271	75.0000	67.5116
14 tert-Butyl Alcohol (TBA)	59	7.720	7.720	(0.767)	896165	750.000	710.6616
15 MTBE	73	7.947	7.947	(0.790)	1927149	75.0000	72.0771
16 trans-1,2-Dichloroethene	96	8.016	8.016	(0.796)	507713	75.0000	78.9858

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
17 Isopropyl Ether (DIPE)	45	8.538	8.538	(0.848)	2733226	75.0000	69.7614
18 Vinyl Acetate	43	8.607	8.607	(0.855)	2158393	75.0000	73.8230
19 1,1-Dichloroethane	63	8.666	8.666	(0.861)	1144377	75.0000	71.5361
20 Ethyl tert-Butyl Ether (ETBE)	59	9.041	9.041	(0.898)	2450277	75.0000	70.7688
21 2,2-Dichloropropane	77	9.455	9.455	(0.939)	753260	75.0000	72.9808
22 2-Butanone	43	9.455	9.455	(0.939)	535031	75.0000	67.3843
23 cis-1,2-Dichloroethene	96	9.474	9.474	(0.941)	551728	75.0000	70.0229
24 Bromochloromethane	128	9.839	9.839	(0.977)	260935	75.0000	70.6469
25 Tetrahydrofuran	42	9.849	9.849	(0.978)	2723151	750.000	669.2370
26 Chloroform	83	9.878	9.878	(0.981)	1068664	75.0000	69.9109
* 27 Pentafluorobenzene	168	10.066	10.066	(1.000)	641372	50.0000	
28 Dibromofluoromethane	113	10.115	10.115	(1.005)	410100	50.0000	48.9158
29 1,1,1-Trichloroethane	97	10.154	10.154	(1.009)	850136	75.0000	76.4846
30 Carbon Tetrachloride	117	10.351	10.351	(0.924)	695672	75.0000	84.1362
31 1,1-Dichloropropene	75	10.371	10.371	(0.926)	767214	75.0000	81.7727
32 1,2-Dichloroethane-d4	65	10.677	10.677	(0.953)	606977	50.0000	49.1528
33 Benzene	78	10.686	10.686	(0.954)	1938459	75.0000	70.9476
34 Methyl tert-Amyl Ether (TAME)	73	10.696	10.696	(0.955)	1818614	75.0000	71.4379
35 1,2-Dichloroethane	62	10.785	10.785	(0.963)	1086990	75.0000	72.9224
* 36 1,4-Difluorobenzene	114	11.199	11.199	(1.000)	1034770	50.0000	
37 Trichloroethene	95	11.593	11.593	(1.035)	552339	75.0000	71.6084
38 Trifluorotoluene	146	11.958	11.958	(1.068)	676193	75.0000	87.7793
39 1,2-Dichloropropane	63	12.007	12.007	(1.072)	637325	75.0000	72.4337 (M)
40 Dibromomethane	93	12.204	12.204	(1.090)	428707	75.0000	71.6332
41 Bromodichloromethane	83	12.362	12.362	(1.104)	841469	75.0000	71.1132
42 2-Chloroethylvinylether	63	12.707	12.707	(1.135)	229809	75.0000	76.0183
43 Tetramethyl THF	43	12.933	12.933	(1.155)	2025886	75.0000	71.1352
44 cis-1,3-Dichloropropene	75	12.983	12.983	(1.159)	993304	75.0000	72.0645
45 4-Methyl-2-Pentanone	43	13.121	13.121	(1.172)	1106228	75.0000	72.3788
46 Toluene-d8	98	13.308	13.308	(1.188)	1238675	50.0000	49.8570
47 Toluene	92	13.407	13.407	(1.197)	1228244	75.0000	73.6779
48 trans-1,3-Dichloropropene	75	13.742	13.742	(1.227)	998714	75.0000	71.9426
49 1,1,2-Trichloroethane	85	14.008	14.008	(1.251)	297798	75.0000	69.3107
50 Tetrachloroethene	166	14.126	14.126	(0.926)	459498	75.0000	82.1369
51 2-Hexanone	43	14.234	14.234	(0.933)	807006	75.0000	72.0331
52 1,3-Dichloropropane	76	14.254	14.254	(0.934)	936126	75.0000	71.7829
53 Dibromochloromethane	129	14.530	14.530	(0.952)	608654	75.0000	74.4291
54 1,2-Dibromoethane	107	14.737	14.737	(1.316)	612441	75.0000	72.7244
* 55 Chlorobenzene-d5	117	15.259	15.259	(1.000)	907040	50.0000	
56 Chlorobenzene	112	15.299	15.299	(1.003)	1341891	75.0000	71.1598
57 Ethylbenzene	91	15.348	15.348	(1.006)	2299035	75.0000	73.0768
58 1,1,1,2-Tetrachloroethane	131	15.378	15.378	(1.008)	473909	75.0000	73.0874
59 m,p-Xylenes	106	15.486	15.486	(1.015)	1639237	150.000	141.4845
60 o-Xylene	106	15.989	15.989	(1.048)	809120	75.0000	69.8511
61 Styrene	104	16.018	16.018	(1.050)	1506401	75.0000	71.6162
62 Bromoform	173	16.324	16.324	(1.070)	482970	75.0000	72.0156
63 Isopropylbenzene	105	16.383	16.383	(0.911)	2123115	75.0000	78.3686

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						(ug/L)	(ug/L)
=====	====	==	=====	=====	=====	=====	=====
64 Cyclohexanone_	55	16.639	16.639	(0.925)	949430	750.000	543.9137
65 Bromofluorobenzene	95	16.659	16.659	(0.927)	611230	50.0000	49.5554
66 1,1,2,2-Tetrachloroethane	83	16.807	16.807	(0.935)	818776	75.0000	72.9030
67 Propylbenzene	91	16.866	16.866	(0.938)	2597963	75.0000	75.2366
68 Bromobenzene	156	16.866	16.866	(0.938)	526500	75.0000	71.8248
69 1,2,3-Trichloropropane	75	16.895	16.895	(0.940)	805454	75.0000	71.4429
70 2-Chlorotoluene	91	17.043	17.043	(0.948)	1838127	75.0000	70.6010
71 1,3,5-Trimethylbenzene	105	17.043	17.043	(0.948)	1851987	75.0000	73.8727
72 4-Chlorotoluene	91	17.161	17.161	(0.955)	1835301	75.0000	71.2890
73 tert-Butylbenzene	119	17.418	17.418	(0.969)	1454345	75.0000	79.9427
74 1,2,4-Trimethylbenzene	105	17.487	17.487	(0.973)	1970198	75.0000	74.4114
75 sec-Butylbenzene	105	17.664	17.664	(0.982)	2296279	75.0000	83.3037
76 para-Isopropyl Toluene	119	17.802	17.802	(0.990)	1808853	75.0000	80.4333
77 1,3-Dichlorobenzene	146	17.900	17.900	(0.996)	973605	75.0000	72.3724
* 78 1,4-Dichlorobenzene-d4	152	17.979	17.979	(1.000)	441496	50.0000	
79 1,4-Dichlorobenzene	146	18.009	18.009	(1.002)	997102	75.0000	72.2730
80 n-Butylbenzene	91	18.285	18.285	(1.017)	1759700	75.0000	83.2977
81 1,2-Dichlorobenzene	146	18.472	18.472	(1.027)	948226	75.0000	72.2967
82 1,2-Dibromo-3-Chloropropane	75	19.448	19.448	(1.082)	197144	75.0000	70.4930
83 1,2,4-Trichlorobenzene	180	20.532	20.532	(1.142)	687154	75.0000	84.6625
84 Hexachlorobutadiene	225	20.650	20.650	(1.149)	235830	75.0000	91.6672
85 Naphthalene	128	20.965	20.965	(1.166)	1696661	75.0000	74.7744
86 1,2,3-Trichlorobenzene	180	21.340	21.340	(1.187)	661188	75.0000	74.8311

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCHSSERVER\JD\chem\MSV0A05.i\080106.b\EH121.D
 Date : 01-AUG-2006 18:45

Client ID: DYNA P&T

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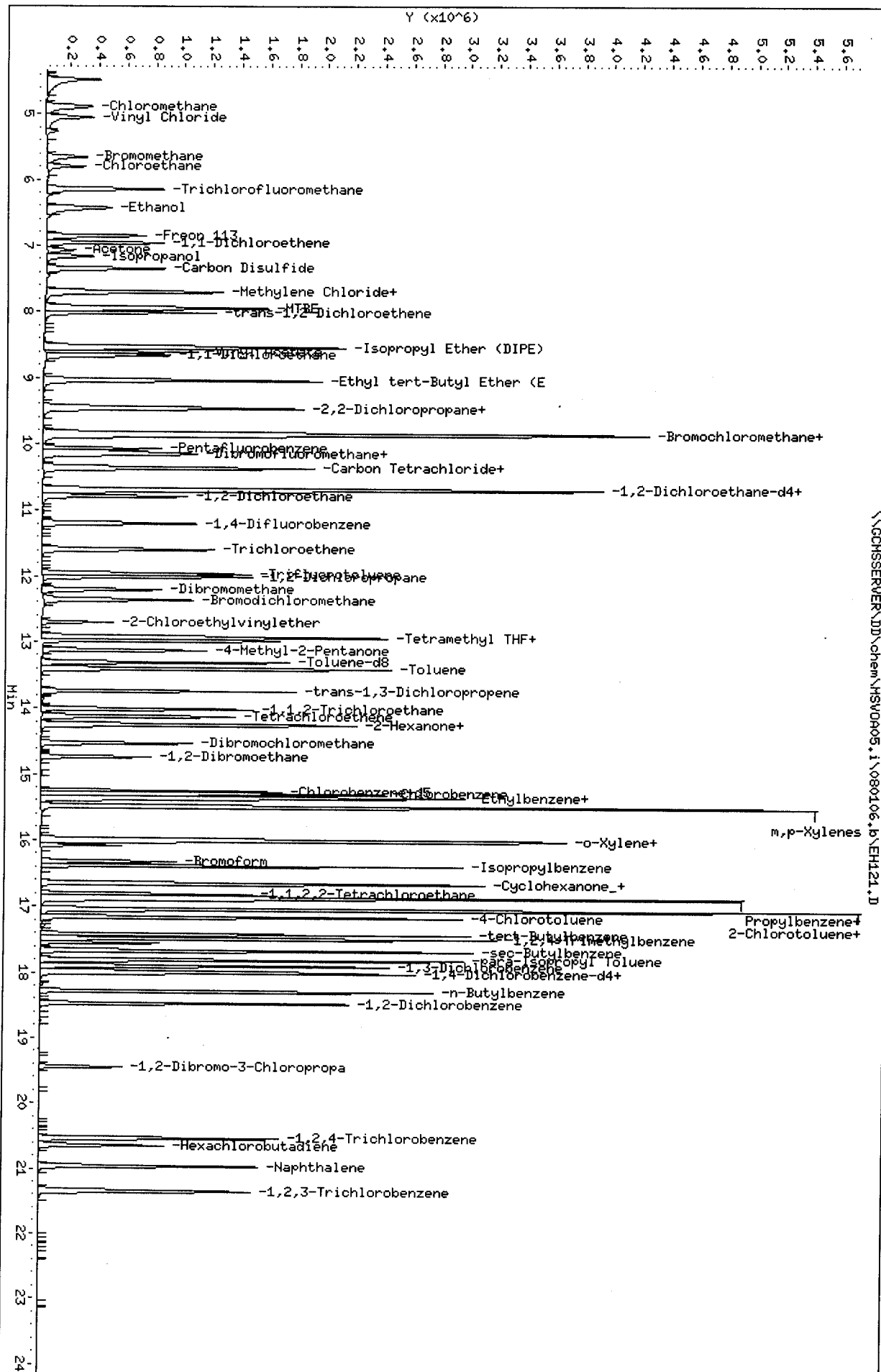
Purge Volume: 5.0

Column phase: RTX 624

Instrument: MSV0A05.i

Operator: WOC

Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA05.i\080106.b\EH122.D
 Report Date: 02-Aug-2006 08:26

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA05.i\080106.b\EH122.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 01-AUG-2006 19:16 MS Autotune Date: 02-MAY-2006 14:30
 Operator : VOC Inst ID: MSVOA05.i
 Smp Info : ICAL,S3851,0.02/100,S3980,0.02/100,
 Misc Info : S3053,0.01/100,100PPB
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA05.i\080106.b\826GOX5.m
 Meth Date : 02-Aug-2006 08:26 Administra Quant Type: ISTD
 Cal Date : 01-AUG-2006 19:16 Cal File: EH122.D
 Als bottle: 22 Calibration Sample, Level: 8
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.473	4.473	(0.444)	1319254	100.000	99.4343
2 Chloromethane	50	4.887	4.887	(0.485)	1196960	100.000	90.8565
3 Vinyl Chloride	62	5.045	5.045	(0.501)	1010561	100.000	101.5042(A)
4 Bromomethane	94	5.656	5.656	(0.562)	517546	100.000	101.5163
5 Chloroethane	64	5.804	5.804	(0.576)	502804	100.000	97.4729(M)
6 Trichlorofluoromethane	101	6.149	6.149	(0.611)	1343796	100.000	102.0906
7 Ethanol	45	6.434	6.434	(0.639)	1479245	10000.0	10127.8440
8 Freon 113	101	6.858	6.858	(0.681)	571559	100.000	98.4396
9 1,1-Dichloroethene	96	6.957	6.957	(0.691)	514286	100.000	105.4014
10 Acetone	43	7.075	7.075	(0.703)	575768	100.000	133.8301
11 Isopropanol	45	7.164	7.164	(0.711)	847917	1000.00	976.7709
12 Carbon Disulfide	76	7.351	7.351	(0.730)	2162419	100.000	103.6136
13 Methylene Chloride	84	7.696	7.696	(0.764)	641446	100.000	91.4668
14 tert-Butyl Alcohol (TBA)	59	7.716	7.716	(0.766)	1216886	1000.00	962.5900
15 MTBE	73	7.942	7.942	(0.789)	2509331	100.000	93.6174
16 trans-1,2-Dichloroethene	96	8.021	8.021	(0.796)	602284	100.000	93.4650

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
17 Isopropyl Ether (DIPE)	45	8.534	8.534	(0.847)	3604703	100.000	91.7753
18 Vinyl Acetate	43	8.603	8.603	(0.854)	2038162	100.000	70.2401
19 1,1-Dichloroethane	63	8.662	8.662	(0.860)	1502067	100.000	93.6617
20 Ethyl tert-Butyl Ether (ETBE)	59	9.036	9.036	(0.897)	3183449	100.000	91.7152
21 2,2-Dichloropropane	77	9.450	9.450	(0.938)	968174	100.000	93.5694
22 2-Butanone	43	9.460	9.460	(0.939)	737431	100.000	92.6441
23 cis-1,2-Dichloroethene	96	9.480	9.480	(0.941)	726832	100.000	92.0165
24 Bromochloromethane	128	9.835	9.835	(0.977)	350713	100.000	94.7174
25 Tetrahydrofuran	42	9.844	9.844	(0.977)	3578321	1000.00	877.2111
26 Chloroform	83	9.874	9.874	(0.980)	1408919	100.000	91.9403
* 27 Pentafluorobenzene	168	10.071	10.071	(1.000)	642974	50.0000	
28 Dibromofluoromethane	113	10.120	10.120	(1.005)	421164	50.0000	50.1104
29 1,1,1-Trichloroethane	97	10.150	10.150	(1.008)	1129008	100.000	101.3210
30 Carbon Tetrachloride	117	10.347	10.347	(0.924)	906897	100.000	110.4473
31 1,1-Dichloropropene	75	10.367	10.367	(0.926)	974624	100.000	104.6039
32 1,2-Dichloroethane-d4	65	10.672	10.672	(0.953)	597003	50.0000	48.6823
33 Benzene	78	10.682	10.682	(0.954)	2498016	100.000	92.0652
34 Methyl tert-Amyl Ether (TAME)	73	10.692	10.692	(0.955)	2342639	100.000	92.6643
35 1,2-Dichloroethane	62	10.790	10.790	(0.964)	1404906	100.000	94.9077
* 36 1,4-Difluorobenzene	114	11.195	11.195	(1.000)	1027602	50.0000	
37 Trichloroethene	95	11.599	11.599	(1.036)	741470	100.000	96.7989
38 Trifluorotoluene	146	11.963	11.963	(1.069)	887713	100.000	116.0414
39 1,2-Dichloropropane	63	12.013	12.013	(1.073)	826325	100.000	94.5692
40 Dibromomethane	93	12.200	12.200	(1.090)	567940	100.000	95.5598
41 Bromodichloromethane	83	12.357	12.357	(1.104)	1118151	100.000	95.1549
42 2-Chloroethylvinylether	63	12.702	12.702	(1.135)	317177	100.000	105.6506
43 Tetramethyl THF	43	12.929	12.929	(1.155)	2624470	100.000	92.7962
44 cis-1,3-Dichloropropene	75	12.978	12.978	(1.159)	1297930	100.000	94.8220
45 4-Methyl-2-Pentanone	43	13.126	13.126	(1.173)	1516185	100.000	99.8937
46 Toluene-d8	98	13.304	13.304	(1.188)	1262979	50.0000	51.1899
47 Toluene	92	13.402	13.402	(1.197)	1585194	100.000	95.7533
48 trans-1,3-Dichloropropene	75	13.737	13.737	(1.227)	1297180	100.000	94.0945
49 1,1,2-Trichloroethane	85	14.003	14.003	(1.251)	391546	100.000	91.7657
50 Tetrachloroethene	166	14.122	14.122	(0.926)	603230	100.000	107.2364
51 2-Hexanone	43	14.240	14.240	(0.933)	1084978	100.000	96.3121
52 1,3-Dichloropropane	76	14.250	14.250	(0.934)	1230693	100.000	93.8515
53 Dibromochloromethane	129	14.535	14.535	(0.953)	805670	100.000	97.9792
54 1,2-Dibromoethane	107	14.733	14.733	(1.316)	817634	100.000	97.7674
* 55 Chlorobenzene-d5	117	15.255	15.255	(1.000)	912057	50.0000	
56 Chlorobenzene	112	15.294	15.294	(1.003)	1753861	100.000	92.4947
57 Ethylbenzene	91	15.344	15.344	(1.006)	2984120	100.000	94.3310
58 1,1,1,2-Tetrachloroethane	131	15.383	15.383	(1.008)	637007	100.000	97.7004
59 m,p-Xylenes	106	15.482	15.482	(1.015)	2123023	200.000	182.2326
60 o-Xylene	106	15.994	15.994	(1.048)	1088625	100.000	93.4637
61 Styrene	104	16.014	16.014	(1.050)	2007978	100.000	94.9367
62 Bromoform	173	16.319	16.319	(1.070)	647490	100.000	96.0161
63 Isopropylbenzene	105	16.388	16.388	(0.912)	2731449	100.000	98.3799

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	====	==	=====	=====	=====	=====	=====
64 Cyclohexanone_	55	16.644	16.644	(0.926)	1652654	1000.00	923.8335
65 Bromofluorobenzene	95	16.654	16.654	(0.927)	606723	50.0000	47.9978
66 1,1,2,2-Tetrachloroethane	83	16.802	16.802	(0.935)	1051310	100.000	91.3390
67 Propylbenzene	91	16.861	16.861	(0.938)	3275621	100.000	92.5623
68 Bromobenzene	156	16.861	16.861	(0.938)	687892	100.000	91.5674
69 1,2,3-Trichloropropane	75	16.901	16.901	(0.940)	1080482	100.000	93.5148
70 2-Chlorotoluene	91	17.039	17.039	(0.948)	2310295	100.000	86.5860
71 1,3,5-Trimethylbenzene	105	17.049	17.049	(0.948)	2321846	100.000	90.3700
72 4-Chlorotoluene	91	17.157	17.157	(0.954)	2352849	100.000	89.1772
73 tert-Butylbenzene	119	17.413	17.413	(0.969)	1833399	100.000	98.3361
74 1,2,4-Trimethylbenzene	105	17.482	17.482	(0.973)	2531503	100.000	93.2938
75 sec-Butylbenzene	105	17.669	17.669	(0.983)	2869796	100.000	101.5864
76 para-Isopropyl Toluene	119	17.807	17.807	(0.991)	2270037	100.000	98.4941
77 1,3-Dichlorobenzene	146	17.896	17.896	(0.996)	1283187	100.000	93.0732
* 78 1,4-Dichlorobenzene-d4	152	17.975	17.975	(1.000)	452462	50.0000	
79 1,4-Dichlorobenzene	146	18.004	18.004	(1.002)	1317770	100.000	93.2011
80 n-Butylbenzene	91	18.280	18.280	(1.017)	2249913	100.000	103.9214
81 1,2-Dichlorobenzene	146	18.468	18.468	(1.027)	1257633	100.000	93.5632
82 1,2-Dibromo-3-Chloropropane	75	19.443	19.443	(1.082)	270556	100.000	94.3983
83 1,2,4-Trichlorobenzene	180	20.537	20.537	(1.143)	912129	100.000	109.6574
84 Hexachlorobutadiene	225	20.646	20.646	(1.149)	290763	100.000	110.2806
85 Naphthalene	128	20.961	20.961	(1.166)	2299725	100.000	93.9825
86 1,2,3-Trichlorobenzene	180	21.345	21.345	(1.188)	886385	100.000	95.5908

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.

Data File: \\GCHSERVER\DD\chem\MSV0A05.i\080106.b\EM122.D

Date : 01-AUG-2006 19:16

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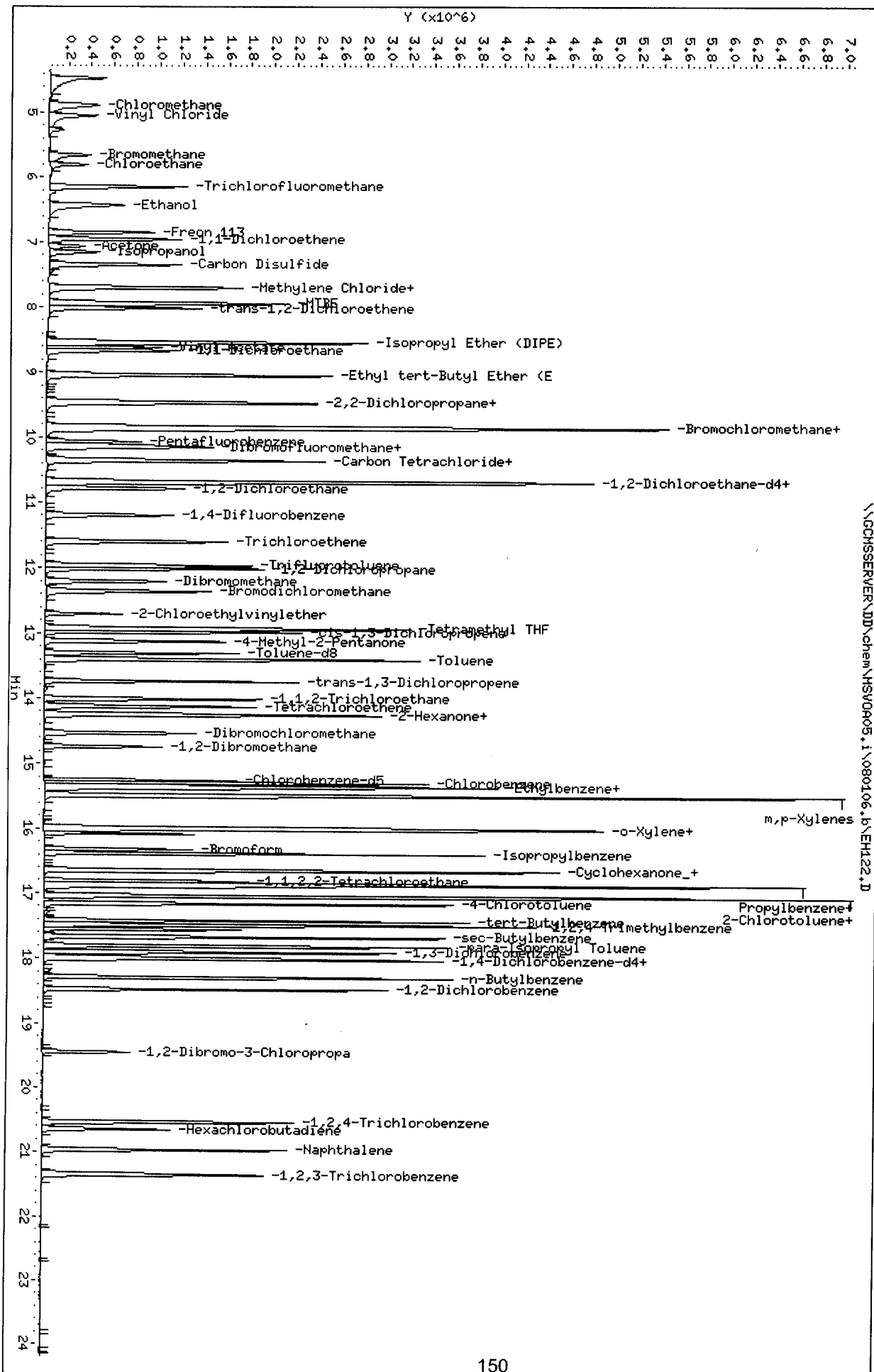
Purge Volume: 5.0

Column phase: RTX 624

Instrument: MSV0A05.i

Operator: VOC

Column diameter: 0.25



CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188837 MSVOA Water
EPA 8260B

Inst : MSVOA05 Run Name: 20PPB IDF : 1.0
 Seqnum : 446337449003 File : ehm03 Time : 22-AUG-2006 09:12
 Cal : 446307221001 Caldate : 01-AUG-2006 Caltype : WATER
 Standards: S3980 (25000X), S4084 (25000X), S3053 (50000X), S3894 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	1.0245	0.8839	20.00	17.26	ug/L	-14	30	0.1000	
Vinyl Chloride	0.7742	0.7174	20.00	18.53	ug/L	-7	20	0.0500	
Bromomethane	0.3965	0.3443	20.00	17.37	ug/L	-13	30	0.0500	
Chloroethane	0.4011	0.3808	20.00	18.99	ug/L	-5	30	0.0500	
Acetone	0.4324	0.3692	20.00	17.08	ug/L	-15	40	0.0500	
1,1-Dichloroethene	0.3794	0.3499	20.00	18.44	ug/L	-8	20	0.0500	
Methylene Chloride	0.5453	0.5160	20.00	18.93	ug/L	-5	30	0.0500	
Carbon Disulfide	1.6229	1.5091	20.00	18.60	ug/L	-7	30	0.0500	
MTBE	2.0844	1.9454	20.00	18.67	ug/L	-7	30	0.0500	
trans-1,2-Dichloroethene	0.5011	0.4992	20.00	19.92	ug/L	0	30	0.0500	
Vinyl Acetate	1.8343	2.3141	20.00	23.70	ug/L	18	40	0.0500	
1,1-Dichloroethane	1.2471	1.2369	20.00	19.84	ug/L	-1	30	0.1000	
2-Butanone	0.6190	0.5538	20.00	17.90	ug/L	-11	40	0.0500	
cis-1,2-Dichloroethene	0.6142	0.6148	20.00	20.02	ug/L	0	30	0.0500	
Chloroform	1.1917	1.1652	20.00	19.56	ug/L	-2	20	0.0500	
1,1,1-Trichloroethane	0.8665	0.8082	20.00	18.66	ug/L	-7	30	0.0500	
Carbon Tetrachloride	0.3995	0.3637	20.00	18.21	ug/L	-9	30	0.0500	
1,2-Dichloroethane	0.7203	0.7022	20.00	19.50	ug/L	-3	30	0.0500	
Benzene	1.3202	1.3332	20.00	20.20	ug/L	1	30	0.0500	
Trichloroethene	0.3727	0.3410	20.00	18.30	ug/L	-9	30	0.0500	
1,2-Dichloropropane	0.4252	0.4268	20.00	20.08	ug/L	0	20	0.0500	
Bromodichloromethane	0.5718	0.5508	20.00	19.27	ug/L	-4	30	0.0500	
4-Methyl-2-Pentanone	0.7385	0.7107	20.00	19.25	ug/L	-4	40	0.0500	
cis-1,3-Dichloropropene	0.6660	0.6538	20.00	19.63	ug/L	-2	30	0.0500	
Toluene	0.8055	0.8109	20.00	20.13	ug/L	1	20	0.0500	
trans-1,3-Dichloropropene	0.6708	0.6522	20.00	19.45	ug/L	-3	30	0.0500	
1,1,2-Trichloroethane	0.2076	0.1969	20.00	18.97	ug/L	-5	30	0.0500	
2-Hexanone	0.6176	0.5446	20.00	17.64	ug/L	-12	40	0.0500	
Tetrachloroethene	0.3084	0.2829	20.00	18.35	ug/L	-8	30	0.0500	
Dibromochloromethane	0.4508	0.4225	20.00	18.75	ug/L	-6	30	0.0500	
Chlorobenzene	1.0395	0.9960	20.00	19.16	ug/L	-4	30	0.3000	
Ethylbenzene	1.7342	1.6342	20.00	18.85	ug/L	-6	20	0.0500	
m,p-Xylenes	0.6387	0.6153	40.00	38.53	ug/L	-4	30	0.0500	
o-Xylene	0.6385	0.6266	20.00	19.63	ug/L	-2	30	0.0500	
Styrene	1.1595	1.1663	20.00	20.12	ug/L	1	30	0.0500	
Bromoform	0.3697	0.3283	20.00	17.76	ug/L	-11	30	0.1000	
1,1,2,2-Tetrachloroethane	1.2719	1.3323	20.00	20.95	ug/L	5	30	0.3000	
Dibromofluoromethane	0.6536	0.6665	50.00	50.99	ug/L	2	30	0.0500	
1,2-Dichloroethane-d4	0.5967	0.5838	50.00	48.92	ug/L	-2	30	0.0500	
Toluene-d8	1.2005	1.2414	50.00	51.70	ug/L	3	30	0.0500	
Bromofluorobenzene	1.3969	1.4253	50.00	51.02	ug/L	2	30	0.0500	

ISTD (ICAL eh120)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	617895	694653	12.42	10.08	10.06	-0.02
1,4-Difluorobenzene	1023151	1139046	11.33	11.20	11.18	-0.02
Chlorobenzene-d5	882071	1039387	17.83	15.26	15.25	-0.01
1,4-Dichlorobenzene-d4	430789	489307	13.58	17.98	17.97	-0.01

Analyst: BO

Date: 08/22/06

Reviewer: AMK

Date: 08/22/06

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 446337449

Date : 08/22/06
Sequence : MSVOA05 ehm

ICAL Filename: eh120
ICAL Analyzed: 08/01/06 18:13

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	617895	10.08	1023151	11.20	882071	15.26	430789	17.98
		LOWER LIMIT	308948	9.58	511576	10.70	441036	14.76	215395	17.48
		UPPER LIMIT	1235790	10.58	2046302	11.70	1764142	15.76	861578	18.48
003	CCV	20PPB	694653	10.06	1139046	11.18	1039387	15.25	489307	17.97
004	LCS	QC352786	728406	10.06	1224815	11.19	1105605	15.26	524524	17.98
006	BLANK	QC352787	740047	10.06	1238724	11.18	1135203	15.25	515052	17.97
007	SAMPLE	188868-002	729001	10.07	1229317	11.19	1114468	15.25	508078	17.97
008	SAMPLE	188829-014	740124	10.06	1230035	11.18	1089100	15.25	494969	17.97
009	SAMPLE	188829-011	735900	10.06	1198873	11.19	1113996	15.25	497476	17.98
010	SAMPLE	188829-012	738713	10.07	1208172	11.19	1093025	15.25	504067	17.97
011	MSS	188829-015	722568	10.06	1212421	11.18	1099129	15.25	497106	17.97
012	SAMPLE	188837-008	721076	10.07	1206563	11.19	1100911	15.25	516728	17.97
013	SAMPLE	188837-011	721977	10.06	1211790	11.18	1111076	15.25	496003	17.97
014	SAMPLE	188837-012	739703	10.06	1226498	11.18	1084579	15.25	504045	17.97
015	MS	QC352803	726804	10.07	1213597	11.19	1078958	15.25	525923	17.97
016	MSD	QC352804	745006	10.06	1232707	11.18	1115034	15.25	525376	17.97

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 446307221

Instrument : MSVOA05
Method : EPA 8260B

Begun : 08/01/06 08:21
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	eh101	X	IB			08/01/06 08:21	1.0	1	
002	eh102	TUN	BFB			08/01/06 08:48	1.0	2	
004	eh104	TUN	BFB			08/01/06 09:30	1.0	2	
005	eh105	TUN	BFB			08/01/06 09:56	1.0	2	
006	eh106	TUN	BFB			08/01/06 10:20	1.0	2	
007	eh107	TUN	BFB			08/01/06 10:52	1.0	2	
008	eh108	TUN	BFB			08/01/06 11:24	1.0	2	
009	eh109	X	LOW PT			08/01/06 12:02	1.0	1	
010	eh110	X	LOW PT			08/01/06 12:34	1.0	1	
011	eh111	TUN	BFB			08/01/06 13:26	1.0	2	
012	eh112	X	IB			08/01/06 13:58	1.0	1	
013	eh113	IB	CALIB IB			08/01/06 14:30	1.0	1	
014	eh114	ICAL	0.25/0.5PPB			08/01/06 15:03	1.0	3 4 5 1	
015	eh115	ICAL	0.5/1PPB			08/01/06 15:35	1.0	3 4 5 1	
016	eh116	ICAL	2PPB			08/01/06 16:07	1.0	3 4 5 1	
017	eh117	ICAL	5PPB			08/01/06 16:38	1.0	3 4 5 1	
018	eh118	ICAL	10PPB			08/01/06 17:10	1.0	3 4 5 1	
019	eh119	ICAL	20PPB			08/01/06 17:41	1.0	3 4 5 1	
020	eh120	ICAL	50PPB			08/01/06 18:13	1.0	3 4 5 1	
021	eh121	ICAL	75PPB			08/01/06 18:45	1.0	3 4 5 1	
022	eh122	ICAL	100PPB			08/01/06 19:16	1.0	3 4 5 1	
023	eh123	ICV	50PPB			08/01/06 19:48	1.0	6 1	
024	eh124	ICV	25PPB			08/01/06 20:20	1.0	7 8 1	
025	eh125	X	IB			08/01/06 20:51	1.0	1	
026	eh126	X	IB			08/01/06 21:23	1.0	1	
027	eh127	X	IB			08/01/06 21:55	1.0	1	

Analyst: BO Date: 08/21/06 Reviewer: AMK Date: 08/21/06

Standards used: 1=S3894 2=S3716 3=S3851 4=S3980 5=S3053 6=S3979 7=S4023 8=S3978

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 446337449

Instrument : MSVOA05
Method : EPA 8260B

Begun : 08/22/06 08:09
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	ehm01	X	IB			08/22/06 08:09	1.0	1	
002	ehm02	TUN	BFB			08/22/06 08:41	1.0	2	
003	ehm03	CCV	20PPB			08/22/06 09:12	1.0	3 4 5 1	
004	ehm04	LCS	QC352786	Water	116620	08/22/06 09:56	1.0	6 7 8 1	
005	ehm05	X	IB			08/22/06 10:28	1.0	1	
006	ehm06	BLANK	QC352787	Water	116620	08/22/06 11:00	1.0	1	
007	ehm07	SAMPLE	188868-002	Water	116620	08/22/06 11:32	20.0	1	pH > 2
008	ehm08	SAMPLE	188829-014	Water	116620	08/22/06 12:04	1.0	1	
009	ehm09	SAMPLE	188829-011	Water	116620	08/22/06 12:36	1.0	1	
010	ehm10	SAMPLE	188829-012	Water	116620	08/22/06 13:07	1.0	1	
011	ehm11	MSS	188829-015	Water	116620	08/22/06 13:39	1.0	1	
012	ehm12	SAMPLE	188837-008	Water	116620	08/22/06 14:11	1.0	1	
013	ehm13	SAMPLE	188837-011	Water	116620	08/22/06 14:43	1.0	1	
014	ehm14	SAMPLE	188837-012	Water	116620	08/22/06 15:15	1.0	1	
015	ehm15	MS	QC352803	Water	116620	08/22/06 15:46	1.0	1 6 7 8	
016	ehm16	MSD	QC352804	Water	116620	08/22/06 16:18	1.0	1 6 7 8	
017	ehm17	X	IB			08/22/06 16:49	1.0	1	
018	ehm18	X	IB			08/22/06 17:21	1.0	1	
019	ehm19	X	IB			08/22/06 17:53	1.0	1	

Analyst: BO

Date: 08/23/06

Reviewer: AMK

Date: 08/23/06

Standards used: 1=S3894 2=S3716 3=S3980 4=S4084 5=S3053 6=S4023 7=S3979 8=S3978

CURTIS & TOMPKINS, LTD.

PREPPED BY.

116620 (5)

WATER

PREPFORM.XLS

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 09/24/06

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
Ethanol	ug/L	55	22	23	50	11	22	36	10
1,1-Dichloroethene	ug/L	0.27	0.22	0.062	0.17	0.10	0.17	0.089	0.11
Benzene	ug/L	0.11	0.041	0.060	0.061	0.12	0.10	0.027	0.084
Trichloroethene	ug/L	0.21	0.076	0.18	0.17	0.11	0.13	0.087	0.086
Toluene	ug/L	0.083	0.083	0.12	0.092	0.062	0.085	0.053	0.14
Chlorobenzene	ug/L	0.10	0.090	0.11	0.16	0.16	0.098	0.050	0.075
Freon 12	ug/L	0.18	0.099	0.22	0.062	0.15	0.47	0.18	0.20
Chloromethane	ug/L	0.12	0.16	0.12	0.18	0.13	0.34	0.089	0.20
Vinyl Chloride	ug/L	0.19	0.23	0.10	0.066	0.10	0.097	0.16	0.039
Bromomethane	ug/L	0.29	0.30	0.31	0.13	0.31	0.34	0.20	0.23
Chloroethane	ug/L	0.33	0.33	0.15	0.16	0.13	0.45	0.12	0.18
Trichlorofluoromethane	ug/L	0.16	0.057	0.17	0.10	0.080	0.46	0.10	0.19
Acetone	ug/L	0.39	0.87	0.21	0.85	0.16	0.20	0.49	0.15
Freon 113	ug/L	0.062	0.12	0.13	0.25	0.071	0.19	0.091	0.16
Methylene Chloride	ug/L	0.15	0.21	0.11	0.12	0.16	0.29	0.22	0.086
MTBE	ug/L	0.069	0.074	0.065	0.045	0.040	0.15	0.052	0.068
Carbon Disulfide	ug/L	0.039	0.031	0.086	0.076	0.11	0.14	0.037	0.066
trans-1,2-Dichloroethene	ug/L	0.37	0.13	0.18	0.051	0.064	0.15	0.093	0.094
Vinyl Acetate	ug/L	0.076	0.36	0.084	0.99	0.40	0.13	0.10	0.13
1,1-Dichloroethane	ug/L	0.088	0.061	0.048	0.090	0.11	0.14	0.063	0.10
2-Butanone	ug/L	0.16	0.17	0.20	0.50	0.099	0.23	0.26	0.081
cis-1,2-Dichloroethene	ug/L	0.26	0.18	0.083	0.12	0.042	0.12	0.11	0.16
2,2-Dichloropropane	ug/L	0.093	0.17	0.077	0.12	0.066	0.15	0.083	0.14
Chloroform	ug/L	0.082	0.055	0.086	0.060	0.11	0.16	0.044	0.084
Bromochloromethane	ug/L	0.091	0.090	0.10	0.18	0.11	0.18	0.15	0.11
1,1,1-Trichloroethane	ug/L	0.084	0.066	0.14	0.11	0.061	0.12	0.041	0.096
1,1-Dichloropropene	ug/L	0.12	0.11	0.081	0.16	0.16	0.11	0.055	0.084
Carbon Tetrachloride	ug/L	0.089	0.11	0.098	0.17	0.15	0.14	0.056	0.14
1,2-Dichloroethane	ug/L	0.090	0.088	0.099	0.096	0.12	0.18	0.056	0.094
1,2-Dichloropropane	ug/L	0.093	0.060	0.079	0.071	0.14	0.16	0.12	0.086
Bromodichloromethane	ug/L	0.086	0.039	0.067	0.074	0.10	0.14	0.069	0.094
Dibromomethane	ug/L	0.16	0.061	0.092	0.16	0.11	0.18	0.13	0.089
4-Methyl-2-Pentanone	ug/L	0.044	0.076	0.057	0.20	0.13	0.14	0.25	0.067
cis-1,3-Dichloropropene	ug/L	0.068	0.065	0.056	0.20	0.16	0.094	0.044	0.080
trans-1,3-Dichloropropene	ug/L	0.074	0.074	0.044	0.073	0.14	0.13	0.060	0.059
1,1,2-Trichloroethane	ug/L	0.12	0.12	0.14	0.19	0.15	0.21	0.058	0.12
2-Hexanone	ug/L	0.043	0.31	0.047	0.34	0.11	0.13	0.14	0.097
1,3-Dichloropropane	ug/L	0.064	0.067	0.061	0.063	0.10	0.14	0.068	0.049
Tetrachloroethene	ug/L	0.13	0.14	0.12	0.22	0.14	0.092	0.093	0.089
Dibromochloromethane	ug/L	0.099	0.054	0.10	0.085	0.056	0.15	0.063	0.094
1,2-Dibromoethane	ug/L	0.16	0.061	0.10	0.073	0.11	0.13	0.070	0.088
2-Chloroethylvinylether	ug/L	0.093	0.18	0.24	0.17	0.14	0.19	0.23	0.14
1,1,1,2-Tetrachloroethane	ug/L	0.11	0.087	0.10	0.11	0.14	0.10	0.088	0.16
Ethylbenzene	ug/L	0.059	0.076	0.075	0.17	0.041	0.11	0.11	0.069
m,p-Xylenes	ug/L	0.24	0.22	0.14	0.27	0.17	0.19	0.20	0.14

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 09/24/06

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
o-Xylene	ug/L	0.10	0.058	0.092	0.11	0.16	0.087	0.13	0.078
Styrene	ug/L	0.12	0.092	0.098	0.085	0.16	0.11	0.061	0.055
Bromoform	ug/L	0.12	0.088	0.11	0.18	0.094	0.12	0.15	0.10
Isopropylbenzene	ug/L	0.12	0.059	0.090	0.18	0.059	0.11	0.10	0.089
1,1,2,2-Tetrachloroethane	ug/L	0.13	0.096	0.086	0.047	0.13	0.20	0.055	0.11
1,2,3-Trichloropropane	ug/L	0.31	0.28	0.074	0.11	0.17	0.19	0.16	0.072
Propylbenzene	ug/L	0.075	0.10	0.063	0.21	0.023	0.12	0.11	0.088
Bromobenzene	ug/L	0.12	0.12	0.10	0.19	0.12	0.17	0.085	0.088
1,3,5-Trimethylbenzene	ug/L	0.060	0.095	0.047	0.14	0.057	0.13	0.13	0.069
2-Chlorotoluene	ug/L	0.12	0.11	0.068	0.15	0.025	0.10	0.12	0.080
4-Chlorotoluene	ug/L	0.079	0.069	0.043	0.14	0.037	0.14	0.069	0.078
tert-Butylbenzene	ug/L	0.11	0.15	0.075	0.19	0.038	0.13	0.079	0.082
1,2,4-Trimethylbenzene	ug/L	0.091	0.088	0.066	0.12	0.069	0.082	0.10	0.099
sec-Butylbenzene	ug/L	0.11	0.12	0.062	0.17	0.088	0.088	0.076	0.097
para-Isopropyl Toluene	ug/L	0.058	0.12	0.12	0.14	0.056	0.071	0.045	0.075
1,3-Dichlorobenzene	ug/L	0.080	0.16	0.097	0.18	0.060	0.13	0.10	0.094
1,4-Dichlorobenzene	ug/L	0.068	0.14	0.095	0.18	0.038	0.10	0.17	0.072
n-Butylbenzene	ug/L	0.12	0.15	0.11	0.18	0.21	0.11	0.12	0.073
1,2-Dichlorobenzene	ug/L	0.072	0.14	0.080	0.14	0.16	0.16	0.061	0.081
1,2-Dibromo-3-Chloropropane	ug/L	0.39	0.25	0.21	0.22	0.13	0.17	0.098	0.18
1,2,4-Trichlorobenzene	ug/L	0.12	0.17	0.14	0.16	0.10	0.12	0.17	0.061
Hexachlorobutadiene	ug/L	0.19	0.19	0.29	0.21	0.11	0.065	0.25	0.17
Naphthalene	ug/L	0.12	0.13	0.060	0.10	0.091	0.11	0.16	0.052
1,2,3-Trichlorobenzene	ug/L	0.063	0.17	0.10	0.20	0.095	0.10	0.29	0.15
tert-Butyl Alcohol (TBA)	ug/L	1.3	1.6	0.83	2.5	1.3	1.1	1.3	1.3
Isopropyl Ether (DIPE)	ug/L	0.068	0.070	0.063	0.027	0.030	0.14	0.027	0.089
Ethyl tert-Butyl Ether (ETBE)	ug/L	0.089	0.045	0.024	0.20	0.033	0.13	0.034	0.079
Methyl tert-Amyl Ether (TAME)	ug/L	0.094	0.13	0.055	0.054	0.048	0.10	0.057	0.17
Isopropanol	ug/L	4.6	2.7	1.6	6.6	1.5	1.4	1.1	1.3
Hexane	ug/L				0.33		0.15		
Cyclohexanone	ug/L	3.8	2.4	0.21	1.6	1.6	1.3		1.0
Tetrahydrofuran	ug/L	0.64	1.2	1.1	0.79	1.4	2.1	3.5	0.70
Tetramethyl THF	ug/L	0.067	0.061	0.062	0.20	0.10	0.13	0.078	0.079
Gasoline C6-C10	ug/L		15		4.8	15	8.5		
Gasoline C7-C12	ug/L		18		2.4	13	7.7		
Dibromofluoromethane	ug/L	3.1	2.9	1.8	2.4	1.5	1.1	3.2	1.1
1,2-Dichloroethane-d4	ug/L	3.0	3.9		2.4	1.2	1.7	3.0	1.0
Toluene-d8	ug/L	1.7	3.8		1.1	1.0	1.5	1.1	0.96
Bromofluorobenzene	ug/L	2.5	2.6		1.2	1.2	2.5	1.5	0.62
Trifluorotoluene	ug/L	0.12	0.43	0.065	0.21	0.13		0.14	

PESTICIDES

Organochlorine Pesticides

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	1349MW03R	Batch#:	116753
Lab ID:	188837-002	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Prepared:	08/24/06
Diln Fac:	1.000	Analyzed:	08/29/06

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND	0.09
4,4'-DDT	ND #	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND #	0.5
Endrin ketone	ND	0.09
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	73	65-135
Decachlorobiphenyl	73	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements
ND= Not Detected
RL= Reporting Limit



Organochlorine Pesticides

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	1349MW101	Batch#:	116753
Lab ID:	188837-003	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Prepared:	08/24/06
Diln Fac:	1.000	Analyzed:	08/29/06

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND	0.09
4,4'-DDT	ND #	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND #	0.5
Endrin ketone	ND	0.09
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	73	65-135
Decachlorobiphenyl	75	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements

ND= Not Detected

RL= Reporting Limit

**Organochlorine Pesticides**

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	1349MW102	Batch#:	116753
Lab ID:	188837-004	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Prepared:	08/24/06
Diln Fac:	1.000	Analyzed:	08/30/06

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND	0.09
4,4'-DDT	ND	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.09
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	67	65-135
Decachlorobiphenyl	43 *	65-135

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

**Organochlorine Pesticides**

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	LF5GW101	Batch#:	116753
Lab ID:	188837-006	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Prepared:	08/24/06
Diln Fac:	1.000	Analyzed:	08/29/06

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND #	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND #	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	73	65-135
Decachlorobiphenyl	81	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements
ND= Not Detected
RL= Reporting Limit

**Organochlorine Pesticides**

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	LF5GW100	Batch#:	116753
Lab ID:	188837-007	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Prepared:	08/24/06
Diln Fac:	1.000	Analyzed:	08/29/06

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND	0.09
4,4'-DDT	ND #	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND #	0.5
Endrin ketone	ND	0.09
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	74	65-135
Decachlorobiphenyl	96	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements

ND= Not Detected

RL= Reporting Limit

Organochlorine Pesticides

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DW081706A	Batch#:	116753
Lab ID:	188837-012	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Prepared:	08/24/06
Diln Fac:	1.000	Analyzed:	08/29/06

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND #	0.05
Heptachlor	ND #	0.05
Aldrin	ND #	0.05
Heptachlor epoxide	ND #	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND #	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND #	0.1
alpha-Chlordane	ND #	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND #	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	133	65-135
Decachlorobiphenyl	83	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements
 ND= Not Detected
 RL= Reporting Limit

**Organochlorine Pesticides**

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	LF5GW102	Batch#:	116753
Lab ID:	188837-013	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Prepared:	08/24/06
Diln Fac:	1.000	Analyzed:	08/30/06

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND #	0.05
Heptachlor	ND #	0.05
Aldrin	ND #	0.05
Heptachlor epoxide	ND #	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND #	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND #	0.1
alpha-Chlordane	ND #	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND #	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	63 *	65-135
Decachlorobiphenyl	66	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit



Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	LF5GW103	Batch#:	116753
Lab ID:	188837-014	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Prepared:	08/24/06
Diln Fac:	1.000	Analyzed:	08/30/06

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND #	0.05
Heptachlor	ND #	0.05
Aldrin	ND #	0.05
Heptachlor epoxide	ND #	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND #	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND #	0.1
alpha-Chlordane	ND #	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND #	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	77	65-135
Decachlorobiphenyl	78	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements

ND= Not Detected

RL= Reporting Limit

**Organochlorine Pesticides**

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	LF5GW104	Batch#:	116753
Lab ID:	188837-015	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Prepared:	08/24/06
Diln Fac:	1.000	Analyzed:	08/30/06

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND #	0.05
Heptachlor	ND #	0.05
Aldrin	ND #	0.05
Heptachlor epoxide	ND #	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND #	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND #	0.1
alpha-Chlordane	ND #	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND #	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	70	65-135
Decachlorobiphenyl	71	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements

ND= Not Detected

RL= Reporting Limit

**Organochlorine Pesticides**

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DUP0817062A	Batch#:	116753
Lab ID:	188837-016	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Prepared:	08/24/06
Diln Fac:	1.000	Analyzed:	08/30/06

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND #	0.05
Heptachlor	ND #	0.05
Aldrin	ND #	0.05
Heptachlor epoxide	ND #	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND #	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND #	0.1
alpha-Chlordane	ND #	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND #	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	65	65-135
Decachlorobiphenyl	65	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC353319	Batch#:	116753
Matrix:	Water	Prepared:	08/24/06
Units:	ug/L	Analyzed:	08/26/06

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	59 *	65-135
Decachlorobiphenyl	85	65-135

*= Value outside of QC limits; see narrative
 ND= Not Detected
 RL= Reporting Limit



Batch QC Report

Organochlorine Pesticides

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC353320	Batch#:	116753
Matrix:	Water	Prepared:	08/24/06
Units:	ug/L	Analyzed:	08/26/06

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	0.2000	0.1958	98	65-135
Heptachlor	0.2000	0.1799	90	65-135
Aldrin	0.2000	0.1586	79	65-135
Dieldrin	0.4000	0.3920	98	65-135
Endrin	0.4000	0.3748	94	65-135
4,4'-DDT	0.4000	0.4200 #	105	65-135

Surrogate	%REC	Limits
TCMX	67	65-135
Decachlorobiphenyl	63 *	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements

*= Value outside of QC limits; see narrative

Batch QC Report

Organochlorine Pesticides			
Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	LF5GW104	Batch#:	116753
MSS Lab ID:	188837-015	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Prepared:	08/24/06
Diln Fac:	1.000	Analyzed:	09/01/06

Type: MS Lab ID: QC353321

Analyte	MSS Result	Spiked	Result	%REC	Limits
gamma-BHC	0.004065	0.1887	0.1873	97	65-135
Heptachlor	0.01700	0.1887	0.1452	68	65-135
Aldrin	<0.006387	0.1887	0.1496	79	65-135
Dieldrin	<0.007102	0.3774	0.2868 #	76	65-135
Endrin	<0.009148	0.3774	0.2962 #	78	65-135
4,4'-DDT	<0.01025	0.3774	0.3101	82	65-135

Surrogate	%REC	Limits
TCMX	76	65-135
Decachlorobiphenyl	79	65-135

Type: MSD Lab ID: QC353322

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.1923	0.1944	99	65-135	2	35
Heptachlor	0.1923	0.1581	73	65-135	7	35
Aldrin	0.1923	0.1601	83	65-135	5	35
Dieldrin	0.3846	0.3033 #	79	65-135	4	35
Endrin	0.3846	0.3139 #	82	65-135	4	35
4,4'-DDT	0.3846	0.3388	88	65-135	7	35

Surrogate	%REC	Limits
TCMX	73	65-135
Decachlorobiphenyl	78	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188837 PEST Water: EPA 8081A

Inst : GC16
 Calnum : 236341882001
 Units : pg/ul

Name : gc16pest_237
 Date : 25-AUG-2006 20:16
 X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	237_022	236341882022	PEST_1	25-AUG-2006 20:16	S2827
L2	237_023	236341882023	PEST_2	25-AUG-2006 20:33	S3833
L3	237_024	236341882024	PEST_3	25-AUG-2006 20:51	S4177
L4	237_025	236341882025	PEST_4	25-AUG-2006 21:09	S3699
L5	237_026	236341882026	PEST_5	25-AUG-2006 21:27	S3834
L6	237_027	236341882027	PEST_6	25-AUG-2006 21:44	S4042
L7	237_028	236341882028	PEST_7	25-AUG-2006 22:02	S4043

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	σ0	σ1	σ2	Avg	r ²	MRSD	MR ²	MRSD	Flg
alpha-BHC	A	11029	7994.8	9634.2	9223.5	10307	10836	11032	AVRG		9.99E-5		10008	11	0.995	20		
gamma-BHC	A	9267.5	7445.2	9048.6	8358.0	9284.6	9523.5	9425.2	AVRG		1.12E-4		8907.5	8	0.995	20		
beta-BHC	A	7317.0	5901.6	6183.8	5473.3	5677.2	5429.4	5029.5	AVRG		1.71E-4		5858.8	13	0.995	20		
delta-BHC	A	9440.5	6712.4	8468.6	7445.2	8077.8	8611.6	8525.4	AVRG		1.22E-4		8183.1	11	0.995	20		
Heptachlor	A	11593	8900.2	9970.9	8594.7	9243.1	8935.7	8354.9	AVRG		1.07E-4		9370.3	12	0.995	20		
Aldrin	A	10003	7892.4	8655.8	8057.1	8348.5	8466.5	8191.1	AVRG		1.17E-4		8516.3	8	0.995	20		
Heptachlor epoxide	A	11425	8839.4	9616.8	8661.0	8808.0	8516.9	7937.3	AVRG		1.10E-4		9114.8	12	0.995	20		
gamma-Chlordane	A	10099	8465.4	9153.3	8440.6	8442.6	8300.9	7777.9	AVRG		1.15E-4		8668.4	9	0.995	20		
alpha-Chlordane	A	9821.5	8139.4	8817.6	8103.7	8060.9	7884.4	7199.5	AVRG		1.21E-4		8289.6	10	0.995	20		
4,4'-DDE	A	8904.8	7736.5	8436.6	7867.7	7830.8	7755.8	7203.1	AVRG		1.26E-4		7962.2	7	0.995	20		
Endosulfan I	A	9983.5	8582.2	9319.1	8697.6	8844.5	8818.2	8466.4	AVRG		1.12E-4		8958.8	6	0.995	20		
Dieldrin	A	8260.3	7201.2	7991.0	7701.9	7796.3	7808.2	7313.3	AVRG		1.29E-4		7724.6	5	0.995	20		
Endrin	A	8209.3	6540.1	7003.1	6166.8	6395.6	6420.1	6090.8	AVRG		1.49E-4		6689.4	11	0.995	20		
4,4'-DDD	A	7476.8	5764.0	6193.1	5633.5	5663.6	5852.8	5630.7	AVRG		1.66E-4		6030.6	11	0.995	20		
Endosulfan II	A	8870.5	7131.2	7783.9	7178.1	7065.8	7011.9	6507.3	AVRG		1.36E-4		7364.1	10	0.995	20		
4,4'-DDT	A	4744.0	4298.9	4796.0	5156.1	5207.4	5504.5	5389.7	AVRG		1.99E-4		5013.8	8	0.995	20		
Methoxychlor	A	3492.6	2814.4	3112.7	2754.2	2728.0	2660.2	2455.7	AVRG		3.50E-4		2859.7	12	0.995	20		
Endosulfan sulfate	A	8462.8	6938.1	7673.3	7160.8	7056.4	6849.8	6335.3	AVRG		1.39E-4		7210.9	9	0.995	20		
Endrin ketone	A	7107.8	5636.0	6634.5	6136.6	6274.4	6409.8	5911.3	AVRG		1.58E-4		6330.0	8	0.995	20		
TCMX	A	12917	10608	11565	10242	10551	9852.6	9210.7	AVRG		9.34E-5		10707	11	0.995	20		
Decachlorobiphenyl	A	13865	11151	11958	9240.4	9291.8	8435.4		AVRG		9.38E-5		10657	19	0.995	20		
alpha-BHC	B	9183.5	6905.8	8408.5	7907.8	8987.2	9977.7	10580	AVRG		1.13E-4		8850.1	14	0.995	20		
gamma-BHC	B	8358.5	6629.2	7707.7	7249.3	7989.6	8538.4	8793.2	AVRG		1.27E-4		7895.1	10	0.995	20		
beta-BHC	B	7291.0	5327.4	5704.1	4800.4	4989.0	4812.9	4557.4	AVRG		1.87E-4		5354.6	17	0.995	20		
delta-BHC	B	8044.5	5794.4	6738.3	6135.0	6764.9	7507.4	7813.3	AVRG		1.43E-4		6971.1	12	0.995	20		
Heptachlor	B	8999.5	6816.0	7431.8	6340.7	6688.6	6576.5	6506.6	AVRG		1.42E-4		7051.4	13	0.995	20		

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	mnr ²	mxr ²	Fig
Aldrin	B	9876.0	8004.0	8674.5	8205.3	8493.4	8950.4	9057.5	AVRG		1.14E-4		8751.6	7	0.995	20	
Heptachlor epoxide	B	10251	8254.0	8674.7	7841.4	7867.5	7850.9	7626.9	AVRG		1.20E-4		8338.1	11	0.995	20	
gamma-Chlordane	B	11183	8781.4	9093.8	8307.8	8249.3	8338.6	8107.5	AVRG		1.13E-4		8865.9	12	0.995	20	
alpha-Chlordane	B	10295	8465.4	8845.6	8171.1	7978.0	7876.1	7661.1	AVRG		1.18E-4		8470.3	11	0.995	20	
4,4'-DDE	B	7502.0	6258.9	6932.6	6732.3	6696.2	7217.7	7130.8	AVRG		1.44E-4		6924.4	6	0.995	20	
Endosulfan I	B	9883.0	7711.4	8086.1	7392.7	7649.3	7917.9	7793.5	AVRG		1.24E-4		8062.0	10	0.995	20	
Dieldrin	B	8794.0	7051.6	7589.9	7308.8	7306.8	7675.1	7542.2	AVRG		1.31E-4		7609.8	7	0.995	20	
Endrin	B	6443.3	5342.5	5932.2	5333.5	5566.7	5732.3	5681.4	AVRG		1.75E-4		5718.8	7	0.995	20	
4,4'-DDD	B	5056.3	4094.9	4468.9	4186.4	4182.7	4453.7	4396.3	AVRG		2.27E-4		4405.6	7	0.995	20	
Endosulfan II	B	8323.3	6769.0	7139.0	6480.0	6522.6	6575.2	6229.3	AVRG		1.46E-4		6862.6	10	0.995	20	
4,4'-DDT	B	3627.8	2972.5	3247.4	2940.0	3041.1	3161.0	3157.2	AVRG		3.16E-4		3163.8	7	0.995	20	
Methoxychlor	B	2236.6	1643.7	1735.8	1507.3	1494.2	1483.0	1420.8	AVRG		6.08E-4		1645.9	17	0.995	20	
Endosulfan sulfate	B	8372.8	6053.9	6557.0	5845.2	5798.2	5813.6	5597.0	AVRG		1.59E-4		6291.1	15	0.995	20	
Endrin ketone	B	8327.8	5815.3	6494.7	5660.1	5807.0	5948.8	5676.8	AVRG		1.60E-4		6247.2	15	0.995	20	
TCMX	B	11362	9580.3	10698	9476.9	10115	9894.7	9639.1	AVRG		9.89E-5		10109	7	0.995	20	
Decachlorobiphenyl	B	12828	10127	10132	8387.1	8148.9	7488.2		AVRG		1.05E-4		9518.6	20	0.995	20	
Average EPA 8081A	A												(n=22)	10		20	
Average EPA 8081A	B												(n=22)	12		20	

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188837 PEST Water
EPA 8081A

Inst : GC16
Calnum : 236341882001

Name : gc16pest_237
Cal Date: 25-AUG-2006

ICV 236341882030 (237_030 25-AUG-2006) stds: S3877

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	10008	10004	25.00	24.99	pg/ul	0	15	
gamma-BHC	A	8907.5	9062.2	25.00	25.43	pg/ul	2	15	
beta-BHC	A	5858.8	5823.4	25.00	24.85	pg/ul	-1	15	
delta-BHC	A	8183.1	8274.6	25.00	25.28	pg/ul	1	15	
Heptachlor	A	9370.3	9226.2	25.00	24.62	pg/ul	-2	15	
Aldrin	A	8516.3	8172.2	25.00	23.99	pg/ul	-4	15	
Heptachlor epoxide	A	9114.8	8556.7	25.00	23.47	pg/ul	-6	15	
gamma-Chlordane	A	8668.4	8230.3	25.00	23.74	pg/ul	-5	15	
alpha-Chlordane	A	8289.6	8092.6	25.00	24.41	pg/ul	-2	15	
4,4'-DDE	A	7962.2	8112.0	25.00	25.47	pg/ul	2	15	
Endosulfan I	A	8958.8	8998.8	25.00	25.11	pg/ul	0	15	
Dieldrin	A	7724.6	8169.1	25.00	26.44	pg/ul	6	15	
Endrin	A	6689.4	7072.4	25.00	26.43	pg/ul	6	15	
4,4'-DDD	A	6030.6	6023.5	25.00	24.97	pg/ul	0	15	
Endosulfan II	A	7364.1	7182.4	25.00	24.38	pg/ul	-2	15	
4,4'-DDT	A	5013.8	4912.4	25.00	24.49	pg/ul	-2	15	
Methoxychlor	A	2859.7	3401.5	25.00	29.74	pg/ul	19	15	v+ ***
Endosulfan sulfate	A	7210.9	7135.6	25.00	24.74	pg/ul	-1	15	
Endrin ketone	A	6330.0	6480.4	25.00	25.59	pg/ul	2	15	
alpha-BHC	B	8850.1	8839.5	25.00	24.97	pg/ul	0	15	
gamma-BHC	B	7895.1	7980.0	25.00	25.27	pg/ul	1	15	
beta-BHC	B	5354.6	5085.5	25.00	23.74	pg/ul	-5	15	
delta-BHC	B	6971.1	7151.6	25.00	25.65	pg/ul	3	15	
Heptachlor	B	7051.4	6978.8	25.00	24.74	pg/ul	-1	15	
Aldrin	B	8751.6	8605.0	25.00	24.58	pg/ul	-2	15	
Heptachlor epoxide	B	8338.1	7976.4	25.00	23.92	pg/ul	-4	15	
gamma-Chlordane	B	8865.9	8269.0	25.00	23.32	pg/ul	-7	15	
alpha-Chlordane	B	8470.3	7924.9	25.00	23.39	pg/ul	-6	15	
4,4'-DDE	B	6924.4	7111.0	25.00	25.67	pg/ul	3	15	
Endosulfan I	B	8062.0	7865.3	25.00	24.39	pg/ul	-2	15	
Dieldrin	B	7609.8	7212.9	25.00	23.70	pg/ul	-5	15	
Endrin	B	5718.8	5577.2	25.00	24.38	pg/ul	-2	15	
4,4'-DDD	B	4405.6	4273.3	25.00	24.25	pg/ul	-3	15	
Endosulfan II	B	6862.6	6552.5	25.00	23.87	pg/ul	-5	15	
4,4'-DDT	B	3163.8	3169.9	25.00	25.05	pg/ul	0	15	
Methoxychlor	B	1645.9	2067.8	25.00	31.41	pg/ul	26	15	v+ ***
Endosulfan sulfate	B	6291.1	6004.3	25.00	23.86	pg/ul	-5	15	
Endrin ketone	B	6247.2	6054.2	25.00	24.23	pg/ul	-3	15	
Average EPA 8081A	A	n=20					3	15	
Average EPA 8081A	B	n=20					4	15	

+=high bias v=ICV

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188837 PEST Water: EPA 8081A

Inst : GC16
 Calnum : 236346178001
 Units : pg/ul

Name : GC16PEST241
 Date : 28-AUG-2006 19:53
 X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	240_028	236346178028	PEST_1	28-AUG-2006 19:53	S4176
L2	240_029	236346178029	PEST_2	28-AUG-2006 20:11	S3833
L3	240_030	236346178030	PEST_3	28-AUG-2006 20:29	S4177
L4	240_031	236346178031	PEST_4	28-AUG-2006 20:46	S4178
L5	240_032	236346178032	PEST_5	28-AUG-2006 21:04	S3834
L6	240_033	236346178033	PEST_6	28-AUG-2006 21:22	S4042
L7	240_034	236346178034	PEST_7	28-AUG-2006 21:40	S4043

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	MRSD	MNR ²	MRSD	Fig
alpha-BHC	A	8033.5	8937.0	9323.4	9173.0	10221	11510	11611	AVRG		1.02E-4		9831.3	14	0.995		20	
gamma-BHC	A	7871.0	8911.0	8871.8	8221.6	9263.4	10206	10120	AVRG		1.10E-4		9066.4	10	0.995		20	
beta-BHC	A	6406.0	6535.8	6023.4	5198.2	5600.8	5683.4	5344.5	AVRG		1.72E-4		5827.4	9	0.995		20	
delta-BHC	A	8224.5	7978.8	7800.8	7153.3	8137.4	9219.8	9297.8	AVRG		1.21E-4		8258.9	9	0.995		20	
Heptachlor	A	11185	10899	10062	8568.5	9485.7	9776.5	9165.0	AVRG		1.01E-4		9877.3	9	0.995		20	
Aldrin	A	8590.0	8812.2	8276.2	7487.6	7950.8	8649.7	8531.3	AVRG		1.20E-4		8328.3	6	0.995		20	
Heptachlor epoxide	A	9794.0	9671.8	9130.2	7824.5	8270.2	8663.0	8242.6	AVRG		1.14E-4		8799.5	9	0.995		20	
gamma-Chlordane	A	8755.0	9174.8	8790.7	7518.2	7881.9	8359.0	7975.1	AVRG		1.20E-4		8350.7	7	0.995		20	
alpha-Chlordane	A	8563.5	8717.8	8468.4	7212.1	7571.7	8050.3	7604.9	AVRG		1.25E-4		8027.0	7	0.995		20	
4,4'-DDE	A	7596.8	7859.4	7749.2	6746.8	7029.4	7647.1	7215.1	AVRG		1.35E-4		7406.2	6	0.995		20	
Endosulfan I	A	8957.0	9070.4	8839.4	7715.0	8084.2	8784.9	8464.4	AVRG		1.17E-4		8559.3	6	0.995		20	
Dieldrin	A	7671.5	7589.4	7632.1	6731.9	7112.1	7823.9	7467.4	AVRG		1.35E-4		7432.6	5	0.995		20	
Endrin	A	6644.8	6219.9	6230.7	5451.7	5808.4	6565.8	6245.2	AVRG		1.62E-4		6166.6	7	0.995		20	
4,4'-DDD	A	4973.8	4829.3	5141.5	4676.9	4885.6	5722.1	5538.8	AVRG		1.96E-4		5109.7	8	0.995		20	
Endosulfan II	A	7486.3	7106.1	7228.9	6329.0	6565.2	7067.3	6624.4	AVRG		1.45E-4		6915.3	6	0.995		20	
4,4'-DDT	A	5023.8	4892.0	5067.2	4546.2	4991.2	5829.5	5583.8	AVRG		1.95E-4		5133.4	8	0.995		20	
Methoxychlor	A	3373.5	3040.8	3030.7	2505.0	2607.9	2726.7	2430.1	AVRG		3.55E-4		2816.4	12	0.995		20	
Endosulfan sulfate	A	7776.5	7313.5	7228.4	6213.7	6453.7	6902.2	6462.3	AVRG		1.45E-4		6907.2	8	0.995		20	
Endrin ketone	A	6149.5	5838.0	6154.3	5359.3	5643.6	6288.7	5809.5	AVRG		1.70E-4		5891.8	6	0.995		20	
TCMX	A	11745	11435	11027	10117	10317	10214	9383.5	AVRG		9.43E-5		10606	8	0.995		20	
Decachlorobiphenyl	A	11850	11388	10823	8599.7	8753.5	8214.6	7038.2	AVRG		1.05E-4		9523.8	19	0.995		20	
alpha-BHC	B	7650.5	7737.6	7960.7	7591.8	8729.4	10157	10664	AVRG		1.15E-4		8670.2	15	0.995		20	
gamma-BHC	B	7136.5	7482.2	7377.7	6858.9	7798.2	8750.2	9109.3	AVRG		1.28E-4		7787.6	11	0.995		20	
beta-BHC	B	5824.0	5794.0	5378.4	4475.2	4943.5	5032.4	4815.2	AVRG		1.93E-4		5180.4	10	0.995		20	
delta-BHC	B	6793.0	6469.4	6308.0	5780.4	6756.1	7857.5	8337.7	AVRG		1.45E-4		6900.3	13	0.995		20	
Heptachlor	B	8303.5	7554.0	6990.0	5819.8	6666.2	6975.4	6869.5	AVRG		1.42E-4		7025.5	11	0.995		20	

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Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	MNR ²	MxRSD	Fig
Aldrin	B	8694.0	8144.8	7932.1	7182.2	7944.3	8886.8	9141.3	AVRG		1.21E-4		8275.1	8	0.995	20	
Hepachlor epoxide	B	8607.0	8389.0	7927.5	6945.7	7306.7	7854.1	7782.4	AVRG		1.28E-4		7830.3	7	0.995	20	
gamma-Chlordane	B	9292.5	8704.0	8487.3	7183.0	7466.6	8081.1	8024.0	AVRG		1.22E-4		8176.9	9	0.995	20	
alpha-Chlordane	B	9040.0	8397.8	8023.5	7014.6	7281.8	7594.7	7496.3	AVRG		1.28E-4		7835.5	9	0.995	20	
4,4'-DDE	B	6505.5	6029.2	6508.5	5733.1	6021.4	7071.3	7170.0	AVRG		1.55E-4		6434.1	8	0.995	20	
Endosulfan I	B	8630.0	7648.0	7816.0	6394.5	6681.6	7725.1	7803.1	AVRG		1.33E-4		7528.3	10	0.995	20	
Dieldrin	B	7317.8	6816.4	7034.3	6092.7	6444.1	7380.6	7474.6	AVRG		1.44E-4		6337.2	7	0.995	20	
Endrin	B	5881.3	5373.3	5375.4	4605.0	4982.0	5807.8	5756.6	AVRG		1.85E-4		5397.3	9	0.995	20	
4,4'-DDD	B	3973.8	3827.2	3844.4	3409.4	3556.8	4198.9	4302.4	AVRG		2.58E-4		3873.3	8	0.995	20	
Endosulfan II	B	7059.8	6471.7	6345.8	5468.3	5635.6	6282.1	6226.1	AVRG		1.61E-4		6212.8	9	0.995	20	
4,4'-DDT	B	3407.3	3105.7	3082.3	2641.9	2781.3	3211.9	3254.1	AVRG		3.26E-4		3069.2	9	0.995	20	
Methoxychlor	B	1905.7	1598.9	1546.5	1275.7	1324.7	1432.5	1359.2	AVRG		6.70E-4		1491.9	15	0.995	20	
Endosulfan sulfate	B	6622.5	5942.9	5810.9	4941.5	5043.5	5570.6	5546.4	AVRG		1.77E-4		5639.7	10	0.995	20	
Endrin ketone	B	5812.3	5274.6	5477.4	4630.2	4795.4	5445.6	5281.7	AVRG		1.91E-4		5245.3	8	0.995	20	
TCMX	B	10469	10342	10280	9232.3	9785.9	9943.7	9626.3	AVRG		1.00E-4		9954.2	4	0.995	20	
Decachlorobiphenyl	B	10966	10077	9380.6	7470.1	7584.1	7358.9	6468.2	AVRG		1.18E-4		8472.1	20	0.995	20	
Average EPA 8081A	A													(n=22)	9		20
Average EPA 8081A	B													(n=22)	10		20

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188837 PEST Water
EPA 8081A

Inst : GC16
Calnum : 236346178001

Name : GC16PEST241
Cal Date: 28-AUG-2006

ICV 236346178048 (240_048 29-AUG-2006) stds: S4238

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	9831.3	10782	25.00	27.42	pg/ul	10	15	
gamma-BHC	A	9066.4	9784.5	25.00	26.98	pg/ul	8	15	
beta-BHC	A	5827.4	6013.5	25.00	25.80	pg/ul	3	15	
delta-BHC	A	8258.9	9198.0	25.00	27.84	pg/ul	11	15	
Heptachlor	A	9877.3	9788.0	25.00	24.77	pg/ul	-1	15	
Aldrin	A	8328.3	8393.8	25.00	25.20	pg/ul	1	15	
Heptachlor epoxide	A	8799.5	8848.9	25.00	25.14	pg/ul	1	15	
gamma-Chlordane	A	8350.7	8422.0	25.00	25.21	pg/ul	1	15	
alpha-Chlordane	A	8027.0	8307.0	25.00	25.87	pg/ul	3	15	
4,4'-DDE	A	7406.2	8087.7	25.00	27.30	pg/ul	9	15	
Endosulfan I	A	8559.3	8992.5	25.00	26.27	pg/ul	5	15	
Dieldrin	A	7432.6	7769.4	25.00	26.13	pg/ul	5	15	
Endrin	A	6166.6	6742.4	25.00	27.33	pg/ul	9	15	
4,4'-DDD	A	5109.7	5653.5	25.00	27.66	pg/ul	11	15	
Endosulfan II	A	6915.3	7413.3	25.00	26.80	pg/ul	7	15	
4,4'-DDT	A	5133.4	5328.2	25.00	25.95	pg/ul	4	15	
Methoxychlor	A	2816.4	3390.6	25.00	30.10	pg/ul	20	15	v+ ***
Endosulfan sulfate	A	6907.2	7548.7	25.00	27.32	pg/ul	9	15	
Endrin ketone	A	5891.8	6841.6	25.00	29.03	pg/ul	16	15	v+ ***
alpha-BHC	B	8670.2	8300.1	25.00	23.93	pg/ul	-4	15	
gamma-BHC	B	7787.6	7375.0	25.00	23.68	pg/ul	-5	15	
beta-BHC	B	5180.4	4571.0	25.00	22.06	pg/ul	-12	15	
delta-BHC	B	6900.3	6692.1	25.00	24.25	pg/ul	-3	15	
Heptachlor	B	7025.5	6231.0	25.00	22.17	pg/ul	-11	15	
Aldrin	B	8275.1	8019.1	25.00	24.23	pg/ul	-3	15	
Heptachlor epoxide	B	7830.3	7227.8	25.00	23.08	pg/ul	-8	15	
gamma-Chlordane	B	8176.9	7681.4	25.00	23.49	pg/ul	-6	15	
alpha-Chlordane	B	7835.5	7593.9	25.00	24.23	pg/ul	-3	15	
4,4'-DDE	B	6434.1	6241.4	25.00	24.25	pg/ul	-3	15	
Endosulfan I	B	7528.3	7343.7	25.00	24.39	pg/ul	-2	15	
Dieldrin	B	6937.2	6570.8	25.00	23.68	pg/ul	-5	15	
Endrin	B	5397.3	5234.1	25.00	24.24	pg/ul	-3	15	
4,4'-DDD	B	3873.3	3569.5	25.00	23.04	pg/ul	-8	15	
Endosulfan II	B	6212.8	6179.8	25.00	24.87	pg/ul	-1	15	
4,4'-DDT	B	3069.2	2747.8	25.00	22.38	pg/ul	-10	15	
Methoxychlor	B	1491.9	1810.0	25.00	30.33	pg/ul	21	15	v+ ***
Endosulfan sulfate	B	5639.7	5691.5	25.00	25.23	pg/ul	1	15	
Endrin ketone	B	5245.3	5482.7	25.00	26.13	pg/ul	5	15	
Average EPA 8081A	A	n=20					7	15	
Average EPA 8081A	B	n=20					6	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188837 PEST Water: EPA 8081A

Inst : GC21
 Calnum : 246346494001
 Units : pg

Name : pest_240
 Date : 28-AUG-2006 20:31
 X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Strds
L1	240_014	246346494014	PEST_1	28-AUG-2006 20:31	S2827
L2	240_015	246346494015	PEST_2	28-AUG-2006 20:49	S3833
L3	240_016	246346494016	PEST_3	28-AUG-2006 21:06	S3698
L4	240_017	246346494017	PEST_4	28-AUG-2006 21:23	S3699
L5	240_018	246346494018	PEST_5	28-AUG-2006 21:40	S3834
L6	240_019	246346494019	PEST_6	28-AUG-2006 21:58	S4042
L7	240_020	246346494020	PEST_7	28-AUG-2006 22:15	S4043

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	MR ²	MRSD	Flg
alpha-BHC	A	18050	16010	15449	15017	14605	14507	12582	AVRG		6.59E-5		15174	11	0.995	20	
gamma-BHC	A	16247	14145	13506	13083	12729	12779	11186	AVRG		7.47E-5		13382	12	0.995	20	
beta-BHC	A	7731.0	6323.0	5921.0	5584.8	5370.2	5333.0	5267.2	AVRG		1.69E-4		5932.9	15	0.995	20	
delta-BHC	A	18982	15178	14393	13735	13239	13081	11052	AVRG		7.02E-5		14237	17	0.995	20	
Heptachlor	A	14068	12814	12062	11476	11127	11364	10038	AVRG		8.44E-5		11850	11	0.995	20	
Aldrin	A	14382	12984	12467	11900	11362	11568	10215	AVRG		8.25E-5		12125	11	0.995	20	
Heptachlor epoxide	A	13392	11848	11402	10717	10195	10356	9163.2	AVRG		9.08E-5		11010	12	0.995	20	
gamma-Chlordane	A	13421	12006	11625	11044	10492	10848	9704.1	AVRG		8.85E-5		11305	11	0.995	20	
alpha-Chlordane	A	13228	11564	11076	10560	9962.2	10453	9364.7	AVRG		9.19E-5		10887	12	0.995	20	
4,4'-DDE	A	12561	11126	10913	10641	9989.8	9397.9	7272.6	AVRG		9.74E-5		10271	16	0.995	20	
Endosulfan I	A	12487	10895	10329	9738.9	9268.5	9479.2	8818.6	AVRG		9.86E-5		10145	12	0.995	20	
Dieldrin	A	12263	11053	10814	10440	9860.3	9217.0	7114.7	AVRG		9.89E-5		10109	16	0.995	20	
Endrin	A	9433.3	8544.1	8222.7	7932.8	7485.8	7390.2	6157.8	AVRG		1.27E-4		7880.9	13	0.995	20	
4,4'-DDD	A	10562	9026.4	9083.2	8861.1	8285.5	7962.7	6349.2	AVRG		1.16E-4		8590.0	15	0.995	20	
Endosulfan II	A	10602	9087.3	8864.4	8679.0	8180.8	7894.8	6289.2	AVRG		1.17E-4		8514.0	15	0.995	20	
4,4'-DDT	A	8412.8	7690.5	7434.5	7544.1	7232.4	7399.9	6151.4	AVRG		1.35E-4		7409.4	9	0.995	20	
Methoxychlor	A	3671.9	3415.0	3311.5	3194.7	2950.2	2373.1		AVRG		3.17E-4		3152.7	14	0.995	20	
Endosulfan sulfate	A	9966.0	8153.3	7796.6	7551.4	7167.7	7066.4	5941.1	AVRG		1.30E-4		7663.2	16	0.995	20	
Endrin ketone	A	11131	9225.4	9137.6	9055.6	8552.9	8044.2	6250.3	AVRG		1.14E-4		8771.0	17	0.995	20	
TCMX	A	11676	10445	9998.2	9577.1	9390.1	9041.8	7639.8	AVRG		1.03E-4		9681.1	13	0.995	20	
Decachlorobiphenyl	A	8853.0	8030.0	7630.7	7340.3	6926.2	6796.9	6326.1	AVRG		1.35E-4		7414.7	11	0.995	20	
alpha-BHC	B	17678	16113	17002	17153	16527	15858	15060	AVRG		6.07E-5		16484	5	0.995	20	
gamma-BHC	B	17907	15577	14745	14907	14335	13775	13010	AVRG		6.71E-5		14893	11	0.995	20	
beta-BHC	B	9309.0	7322.4	6713.6	6701.8	6271.2	5988.7	6014.6	AVRG		1.45E-4		6903.0	17	0.995	20	
delta-BHC	B	19483	15617	14214	14315	13848	13041	11834	AVRG		6.84E-5		14622	17	0.995	20	
Heptachlor	B	17177	14778	13833	13946	13326	12955	12150	AVRG		7.13E-5		14024	12	0.995	20	

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188837 PEST Water
EPA 8081A

Inst : GC21
Calnum : 246346494001

Name : pest_240
Cal Date: 28-AUG-2006

ICV 246346494023 (240_023 28-AUG-2006) stds: S3877

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	15174	15237	25.00	25.10	pg	0	15	
gamma-BHC	A	13382	13399	25.00	25.03	pg	0	15	
beta-BHC	A	5932.9	5508.1	25.00	23.21	pg	-7	15	
delta-BHC	A	14237	14112	25.00	24.78	pg	-1	15	
Heptachlor	A	11850	11763	25.00	24.82	pg	-1	15	
Aldrin	A	12125	11752	25.00	24.23	pg	-3	15	
Heptachlor epoxide	A	11010	10366	25.00	23.54	pg	-6	15	
gamma-Chlordane	A	11305	10429	25.00	23.06	pg	-8	15	
alpha-Chlordane	A	10887	10216	25.00	23.46	pg	-6	15	
4,4'-DDE	A	10271	10454	25.00	25.44	pg	2	15	
Endosulfan I	A	10145	9540.7	25.00	23.51	pg	-6	15	
Dieldrin	A	10109	10071	25.00	24.91	pg	0	15	
Endrin	A	7880.9	8091.9	25.00	25.67	pg	3	15	
4,4'-DDD	A	8590.0	8650.7	25.00	25.18	pg	1	15	
Endosulfan II	A	8514.0	8618.8	25.00	25.31	pg	1	15	
4,4'-DDT	A	7409.4	7402.9	25.00	24.98	pg	0	15	
Methoxychlor	A	3152.7	3690.7	25.00	29.27	pg	17	15	v+ ***
Endosulfan sulfate	A	7663.2	7498.0	25.00	24.46	pg	-2	15	
Endrin ketone	A	8771.0	9055.0	25.00	25.81	pg	3	15	
alpha-BHC	B	16484	17053	25.00	25.86	pg	3	15	
gamma-BHC	B	14893	14779	25.00	24.81	pg	-1	15	
beta-BHC	B	6903.0	6568.6	25.00	23.79	pg	-5	15	
delta-BHC	B	14622	14733	25.00	25.19	pg	1	15	
Heptachlor	B	14024	14302	25.00	25.50	pg	2	15	
Aldrin	B	13362	13305	25.00	24.89	pg	0	15	
Heptachlor epoxide	B	11695	11521	25.00	24.63	pg	-1	15	
gamma-Chlordane	B	12199	11638	25.00	23.85	pg	-5	15	
alpha-Chlordane	B	11608	11206	25.00	24.14	pg	-3	15	
4,4'-DDE	B	10903	11623	25.00	26.65	pg	7	15	
Endosulfan I	B	10805	10540	25.00	24.39	pg	-2	15	
Dieldrin	B	10445	11096	25.00	26.56	pg	6	15	
Endrin	B	8613.3	9280.4	25.00	26.94	pg	8	15	
4,4'-DDD	B	8821.7	9044.5	25.00	25.63	pg	3	15	
Endosulfan II	B	9165.4	9455.6	25.00	25.79	pg	3	15	
4,4'-DDT	B	8316.5	8704.9	25.00	26.17	pg	5	15	
Methoxychlor	B	3402.9	4166.9	25.00	30.61	pg	22	15	v+ ***
Endosulfan sulfate	B	8140.2	8133.3	25.00	24.98	pg	0	15	
Endrin ketone	B	10207	10032	25.00	24.57	pg	-2	15	
Average EPA 8081A	A	n=20					3	15	
Average EPA 8081A	B	n=20					4	15	

+ = high bias v = ICV

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188837 PEST Water: EPA 8081A

Inst : GC23
 Calnum : 806350494001
 Units : pg

Name : GC23PEST244
 Date : 31-AUG-2006 21:13
 X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	stds
L1	243_020	806350494020	PEST_1	31-AUG-2006 21:13	S4176
L2	243_021	806350494021	PEST_2	31-AUG-2006 21:30	S3833
L3	243_022	806350494022	PEST_3	31-AUG-2006 21:47	S4177
L4	243_023	806350494023	PEST_4	31-AUG-2006 22:05	S4178
L5	243_024	806350494024	PEST_5	31-AUG-2006 22:22	S3834
L6	243_025	806350494025	PEST_6	31-AUG-2006 22:40	S4042
L7	243_026	806350494026	PEST_7	31-AUG-2006 22:57	S4043

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	MRSD	MRSD	Flg
alpha-BHC	A	18626	16577	17135	17889	16664	15341	18598	AVRG		5.79E-5		17261	7	0.995	20	
gamma-BHC	A	18467	15074	15231	15766	14656	13364	17167	AVRG		6.38E-5		15675	11	0.995	20	
beta-BHC	A	7567.0	6207.0	6127.0	5962.4	5490.8	4541.0	7071.2	AVRG		1.63E-4		6138.0	16	0.995	20	
delta-BHC	A	19833	15899	16081	16129	14767	13415	17121	AVRG		6.18E-5		16178	12	0.995	20	
Heptachlor	A	16312	13899	13929	13990	12914	11599	16157	AVRG		7.08E-5		14114	12	0.995	20	
Aldrin	A	14846	12776	12940	13152	12189	11276	15557	AVRG		7.55E-5		13248	11	0.995	20	
Heptachlor epoxide	A	14105	11835	11688	11712	10775	9742.0	13861	AVRG		8.36E-5		11959	13	0.995	20	
gamma-Chlordane	A	14602	11501	11500	11546	10632	9603.9	14023	AVRG		8.39E-5		11915	15	0.995	20	
alpha-Chlordane	A	12514	10324	10563	10830	9774.9	8896.1	13424	AVRG		9.17E-5		10904	14	0.995	20	
4,4'-DDE	A	13540	10737	10916	11981	11195	10407	10015	AVRG		8.88E-5		11256	11	0.995	20	
Endosulfan I	A	12942	10507	10316	10231	9582.6	8604.0	13090	AVRG		9.30E-5		10753	16	0.995	20	
Dieldrin	A	13064	10996	11363	12494	11735	10871	10172	AVRG		8.67E-5		11528	9	0.995	20	
Endrin	A	10938	9235.8	9357.3	10113	9429.5	8680.4	9474.7	AVRG		1.04E-4		9604.1	8	0.995	20	
4,4'-DDD	A	10243	8301.5	8322.9	9135.4	8510.8	8036.7	9187.8	AVRG		1.13E-4		8819.8	9	0.995	20	
Endosulfan II	A	10472	8750.4	8770.5	9711.9	9028.5	8522.4	9669.4	AVRG		1.08E-4		9275.0	8	0.995	20	
4,4'-DDT	A	9287.8	7914.9	7923.6	8923.6	8307.6	7881.2	8791.8	AVRG		1.19E-4		8432.9	7	0.995	20	
Methoxychlor	A	4413.1	3805.8	4018.4	4862.4	4391.6	3182.2		AVRG		2.43E-4		4112.3	14	0.995	20	
Endosulfan sulfate	A	10062	7955.8	7726.5	7879.8	7263.6	6613.8	8478.4	AVRG		1.25E-4		7997.2	14	0.995	20	
Endrin ketone	A	11093	8870.9	8670.5	9719.7	8809.0	8055.0	8646.2	AVRG		1.10E-4		9123.5	11	0.995	20	
TCMX	A	11538	10355	10792	11498	10645	9609.1	10765	AVRG		9.31E-5		10743	6	0.995	20	
Decachlorobiphenyl	A	7190.5	5995.2	5512.3	5788.8	5115.0	4288.6	6221.7	AVRG		1.75E-4		5730.3	16	0.995	20	
alpha-BHC	B	10185	10527	8682.9	9683.6	8372.8	7615.6	9420.2	AVRG		1.09E-4		9212.4	11	0.995	20	
gamma-BHC	B	8812.5	9246.4	7646.5	8477.6	7405.6	6604.5	8217.3	AVRG		1.24E-4		8058.6	11	0.995	20	
beta-BHC	B	3960.5	4088.6	3260.5	3498.3	3029.0	2561.8	2895.7	AVRG		3.01E-4		3327.8	17	0.995	20	
delta-BHC	B	9993.5	9957.2	7838.9	8735.0	7574.6	6568.2	8317.5	AVRG		1.19E-4		8426.4	15	0.995	20	
Heptachlor	B	8425.5	8907.8	7075.6	7871.0	6811.1	5889.2	7391.4	AVRG		1.34E-4		7481.7	14	0.995	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	%RSD	MnR ²	MxRSD	F1g
Aldrin	B	8144.0	8508.8	6940.3	7484.7	6596.9	5756.1	7116.6	AVRG		1.38E-4		7221.1	13	0.995	20		
Heptachlor epoxide	B	7174.5	7576.4	6210.0	6692.2	5959.2	5053.1	6170.4	AVRG		1.56E-4		6405.1	13	0.995	20		
gamma-Chlordane	B	7110.0	7729.8	6144.6	6617.9	5935.0	5008.3	6304.7	AVRG		1.56E-4		6407.2	14	0.995	20		
alpha-Chlordane	B	6624.0	7124.6	5821.6	6235.4	5633.8	4742.8	5966.2	AVRG		1.66E-4		6021.2	13	0.995	20		
4,4'-DDE	B	6477.0	6977.0	5635.3	6261.1	5762.6	4980.6	6393.6	AVRG		1.65E-4		6069.6	11	0.995	20		
Endosulfan I	B	6386.0	6865.2	5521.4	5889.7	5332.0	4413.6	5434.8	AVRG		1.76E-4		5691.8	14	0.995	20		
Dieldrin	B	6768.5	7177.8	5856.8	6462.1	5988.3	5176.5	6483.2	AVRG		1.59E-4		6273.3	10	0.995	20		
Endrin	B	5627.3	6229.7	4908.7	5402.3	5015.2	4120.4	5346.4	AVRG		1.91E-4		5235.7	13	0.995	20		
4,4'-DDD	B	5123.5	5644.1	4457.0	4876.6	4532.8	3697.2	5090.7	AVRG		2.09E-4		4774.6	13	0.995	20		
Endosulfan II	B	4876.3	5379.6	4469.3	4847.4	4563.2	3766.6	5027.9	AVRG		2.13E-4		4704.3	11	0.995	20		
4,4'-DDT	B	4735.3	5583.2	4370.6	4821.1	4572.6	3661.7	5133.8	AVRG		2.13E-4		4696.9	13	0.995	20		
Methoxychlor	B	2067.0	2494.7	1922.8	2240.6	2204.3	1690.7	1737.1	AVRG		4.88E-4		2051.0	14	0.995	20		
Endosulfan sulfate	B	4666.0	5141.6	3935.1	4231.0	3927.5	3096.5	4187.5	AVRG		2.40E-4		4169.3	15	0.995	20		
Endrin ketone	B	4684.8	5528.1	4103.4	4460.7	4263.6	3174.8	4502.4	AVRG		2.28E-4		4388.2	16	0.995	20		
TCMX	B	6481.5	6705.0	5557.8	6233.9	5421.3	4867.0	5930.4	AVRG		1.70E-4		5885.3	11	0.995	20		
Decachlorobiphenyl	B	3032.8	3889.3	2876.1	2984.3	2901.6	2051.8	2766.6	AVRG		3.41E-4		2928.9	18	0.995	20		
Average EPA 8081A	A												(n=22)	12		20		
Average EPA 8081A	B												(n=22)	14		20		

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188837 PEST Water
EPA 8081A

Inst : GC23
Calnum : 806350494001

Name : GC23PEST244
Cal Date: 31-AUG-2006

ICV 806350494029 (243_029 31-AUG-2006) stds: S3877

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	17261	18533	25.00	26.84	pg	7	15	
gamma-BHC	A	15675	16330	25.00	26.05	pg	4	15	
beta-BHC	A	6138.0	5930.2	25.00	24.15	pg	-3	15	
delta-BHC	A	16178	17241	25.00	26.64	pg	7	15	
Heptachlor	A	14114	14627	25.00	25.91	pg	4	15	
Aldrin	A	13248	13307	25.00	25.11	pg	0	15	
Heptachlor epoxide	A	11959	11585	25.00	24.22	pg	-3	15	
gamma-Chlordane	A	11915	11139	25.00	23.37	pg	-7	15	
alpha-Chlordane	A	10904	10372	25.00	23.78	pg	-5	15	
4,4'-DDE	A	11256	10763	25.00	23.90	pg	-4	15	
Endosulfan I	A	10753	10299	25.00	23.94	pg	-4	15	
Dieldrin	A	11528	10949	25.00	23.74	pg	-5	15	
Endrin	A	9604.1	9287.6	25.00	24.18	pg	-3	15	
4,4'-DDD	A	8819.8	8050.4	25.00	22.82	pg	-9	15	
Endosulfan II	A	9275.0	8626.2	25.00	23.25	pg	-7	15	
4,4'-DDT	A	8432.9	7893.8	25.00	23.40	pg	-6	15	
Methoxychlor	A	4112.3	3891.6	25.00	23.66	pg	-5	15	
Endosulfan sulfate	A	7997.2	7383.7	25.00	23.08	pg	-8	15	
Endrin ketone	A	9123.5	8674.0	25.00	23.77	pg	-5	15	
alpha-BHC	B	9212.4	10239	25.00	27.78	pg	11	15	
gamma-BHC	B	8058.6	8991.9	25.00	27.90	pg	12	15	
beta-BHC	B	3327.8	3628.2	25.00	27.26	pg	9	15	
delta-BHC	B	8426.4	9569.6	25.00	28.39	pg	14	15	
Heptachlor	B	7481.7	8545.2	25.00	28.55	pg	14	15	
Aldrin	B	7221.1	7867.2	25.00	27.24	pg	9	15	
Heptachlor epoxide	B	6405.1	6995.2	25.00	27.30	pg	9	15	
gamma-Chlordane	B	6407.2	6863.6	25.00	26.78	pg	7	15	
alpha-Chlordane	B	6021.2	6522.6	25.00	27.08	pg	8	15	
4,4'-DDE	B	6069.6	6661.2	25.00	27.44	pg	10	15	
Endosulfan I	B	5691.8	6316.3	25.00	27.74	pg	11	15	
Dieldrin	B	6273.3	6775.9	25.00	27.00	pg	8	15	
Endrin	B	5235.7	5912.6	25.00	28.23	pg	13	15	
4,4'-DDD	B	4774.6	5251.1	25.00	27.50	pg	10	15	
Endosulfan II	B	4704.3	4937.2	25.00	26.24	pg	5	15	
4,4'-DDT	B	4696.9	5271.8	25.00	28.06	pg	12	15	
Methoxychlor	B	2051.0	2442.9	25.00	29.78	pg	19	15	v+ ***
Endosulfan sulfate	B	4169.3	4656.9	25.00	27.92	pg	12	15	
Endrin ketone	B	4388.2	5179.2	25.00	29.51	pg	18	15	v+ ***
Average EPA 8081A	A	n=20					5	15	
Average EPA 8081A	B	n=20					11	15	

+ = high bias v = ICV

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188837 PEST Water
EPA 8081A

Inst : GC16 Run Name: PEM IDF : 1.0
Seqnum : 236343620002 File : 238_002 Time : 26-AUG-2006 15:18

Standards: S3952

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	491758	8	15	
4,4'-DDE	A	4579			
4,4'-DDD	A	37718			
Endrin	A	312816	8	15	
Endrin aldehyde	A	9902			
Endrin ketone	A	16616			
4,4'-DDT	B	239010	12	15	
4,4'-DDE	B	3677			
4,4'-DDD	B	29508			
Endrin	B	239451	10	15	
Endrin aldehyde	B	10398			
Endrin ketone	B	15757			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188837 PEST Water
EPA 8081A

Inst : GC16 Run Name: PEM IDF : 1.0
Seqnum : 236343620017 File : 238_017 Time : 26-AUG-2006 20:04

Standards: S3952

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	456957	10	15	
4,4'-DDE	A	4264			
4,4'-DDD	A	44364			
Endrin	A	306593	7	15	
Endrin aldehyde	A	6559			
Endrin ketone	A	18165			
4,4'-DDT	B	286652	14	15	
4,4'-DDE	B	3640			
4,4'-DDD	B	43456			
Endrin	B	278177	10	15	
Endrin aldehyde	B	10396			
Endrin ketone	B	19664			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188837 PEST Water
EPA 8081A

Inst : GC16 Run Name: PEM IDF : 1.0
Seqnum : 236348019001 File : 241_001 Time : 29-AUG-2006 16:19

Standards: S4175

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	526525	4	15	
4,4'-DDE	A	36			
4,4'-DDD	A	24299			
Endrin	A	310109	9	15	
Endrin aldehyde	A	14419			
Endrin ketone	A	15537			
4,4'-DDT	B	258207	7	15	
4,4'-DDE	B	2209			
4,4'-DDD	B	16437			
Endrin	B	251901	10	15	
Endrin aldehyde	B	14660			
Endrin ketone	B	14542			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188837 PEST Water
EPA 8081A

Inst : GC16 Run Name: PEM IDF : 1.0
Seqnum : 236348019015 File : 241_015 Time : 29-AUG-2006 22:16

Standards: S4175

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	347584	15	15	
4,4'-DDE	A	2695			
4,4'-DDD	A	58441			
Endrin	A	288631	5	15	
Endrin aldehyde	A	4106			
Endrin ketone	A	11122			
4,4'-DDT	B	212720	24	15	
4,4'-DDE	B	3956			
4,4'-DDD	B	61933			
Endrin	B	254047	8	15	
Endrin aldehyde	B	7836			
Endrin ketone	B	14093			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188837 PEST Water
EPA 8081A

Inst : GC16 Run Name: PEM IDF : 1.0
Seqnum : 236348019030 File : 241_030 Time : 30-AUG-2006 02:39

Standards: S4175

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	319634	15	15	
4,4'-DDE	A	2492			
4,4'-DDD	A	55721			
Endrin	A	261021	6	15	
Endrin aldehyde	A	6058			
Endrin ketone	A	9278			
4,4'-DDT	B	208106	23	15	
4,4'-DDE	B	3525			
4,4'-DDD	B	57782			
Endrin	B	241064	7	15	
Endrin aldehyde	B	6976			
Endrin ketone	B	11373			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188837 PEST Water
EPA 8081A

Inst : GC21 Run Name: PEM IDF : 1.0
 Seqnum : 246349166009 File : 242_009 Time : 30-AUG-2006 16:44

Standards: S4175

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	615923	17	15	
4,4'-DDE	A	4775			
4,4'-DDD	A	120262			
Endrin	A	388125	15	15	
Endrin aldehyde	A	16131			
Endrin ketone	A	51707			
4,4'-DDT	B	720373	10	15	
4,4'-DDE	B	14310			
4,4'-DDD	B	68778			
Endrin	B	444585	10	15	
Endrin aldehyde	B	11346			
Endrin ketone	B	36820			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188837 PEST Water
EPA 8081A

Inst : GC21 Run Name: PEM IDF : 1.0
 Seqnum : 246349166021 File : 242_021 Time : 30-AUG-2006 21:13

Standards: S4175

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	562798	21	15	
4,4'-DDE	A	3499			
4,4'-DDD	A	148991			
Endrin	A	411266	12	15	
Endrin aldehyde	A	9302			
Endrin ketone	A	46282			
4,4'-DDT	B	665969	14	15	
4,4'-DDE	B	4359			
4,4'-DDD	B	107733			
Endrin	B	460007	10	15	
Endrin aldehyde	B	10018			
Endrin ketone	B	39653			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188837 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 806351984002 File : 244_002 Time : 01-SEP-2006 10:42

Standards: S4175

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	989707	1	15	
4,4'-DDE	A	3073			
4,4'-DDD	A	8546			
Endrin	A	485753	3	15	
Endrin aldehyde	A	4639			
Endrin ketone	A	9136			
4,4'-DDT	B	400460	3	15	
4,4'-DDE	B	2097			
4,4'-DDD	B	8922			
Endrin	B	211781	5	15	
Endrin aldehyde	B	6826			
Endrin ketone	B	5109			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188837 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 806351984015 File : 244_015 Time : 01-SEP-2006 20:37

Standards: S4175

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	944244	4	15	
4,4'-DDE	A	3797			
4,4'-DDD	A	36998			
Endrin	A	503428	3	15	
Endrin aldehyde	A	2730			
Endrin ketone	A	11893			
4,4'-DDT	B	426121	4	15	
4,4'-DDE	B	2050			
4,4'-DDD	B	14840			
Endrin	B	244408	3	15	
Endrin aldehyde	B	1923			
Endrin ketone	B	6577			

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188837 PEST Water
EPA 8081A

Inst : GC16	Run Name: PEST_3	IDF : 1.0
Seqnum : 236343620004	File : 238_004	Time : 26-AUG-2006 16:02
Cal : 236341882001	Caldate : 25-AUG-2006	
Standards: S4177		

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	10008	9508.9	10.00	9.501	pg/ul	-5	15	
gamma-BHC	A	8907.5	8955.2	10.00	10.05	pg/ul	1	15	
beta-BHC	A	5858.8	6094.0	10.00	10.40	pg/ul	4	15	
delta-BHC	A	8183.1	7968.7	10.00	9.738	pg/ul	-3	15	
Heptachlor	A	9370.3	9891.5	10.00	10.56	pg/ul	6	15	
Aldrin	A	8516.3	8539.9	10.00	10.03	pg/ul	0	15	
Heptachlor epoxide	A	9114.8	9690.2	10.00	10.63	pg/ul	6	15	
gamma-Chlordane	A	8668.4	9395.8	10.00	10.84	pg/ul	8	15	
alpha-Chlordane	A	8289.6	8956.2	10.00	10.80	pg/ul	8	15	
4,4'-DDE	A	7962.2	8676.0	20.00	21.79	pg/ul	9	15	
Endosulfan I	A	8958.8	9574.8	10.00	10.69	pg/ul	7	15	
Dieldrin	A	7724.6	8265.6	20.00	21.40	pg/ul	7	15	
Endrin	A	6689.4	6614.2	20.00	19.78	pg/ul	-1	15	
4,4'-DDD	A	6030.6	5884.3	20.00	19.51	pg/ul	-2	15	
Endosulfan II	A	7364.1	8067.6	20.00	21.91	pg/ul	10	15	
4,4'-DDT	A	5013.8	5257.6	20.00	20.97	pg/ul	5	15	
Methoxychlor	A	2859.7	3085.0	100.0	107.9	pg/ul	8	15	
Endosulfan sulfate	A	7210.9	7938.7	20.00	22.02	pg/ul	10	15	
Endrin ketone	A	6330.0	7615.6	20.00	24.06	pg/ul	20	15	c+ ***
TCMX	A	10707	11025	20.00	20.60	pg/ul	3	15	
Decachlorobiphenyl	A	10657	11940	20.00	22.41	pg/ul	12	15	
alpha-BHC	B	8850.1	7290.6	10.00	8.238	pg/ul	-18	15	c- ***
gamma-BHC	B	7895.1	6837.6	10.00	8.661	pg/ul	-13	15	
beta-BHC	B	5354.6	4838.4	10.00	9.036	pg/ul	-10	15	
delta-BHC	B	6971.1	5854.2	10.00	8.398	pg/ul	-16	15	c- ***
Heptachlor	B	7051.4	6557.9	10.00	9.300	pg/ul	-7	15	
Aldrin	B	8751.6	8238.8	10.00	9.414	pg/ul	-6	15	
Heptachlor epoxide	B	8338.1	7947.8	10.00	9.532	pg/ul	-5	15	
gamma-Chlordane	B	8865.9	8523.0	10.00	9.613	pg/ul	-4	15	
alpha-Chlordane	B	8470.3	8393.2	10.00	9.909	pg/ul	-1	15	
4,4'-DDE	B	6924.4	6230.9	20.00	18.00	pg/ul	-10	15	
Endosulfan I	B	8062.0	7829.8	10.00	9.712	pg/ul	-3	15	
Dieldrin	B	7609.8	7024.9	20.00	18.46	pg/ul	-8	15	
Endrin	B	5718.8	5165.6	20.00	18.07	pg/ul	-10	15	
4,4'-DDD	B	4405.6	3864.7	20.00	17.54	pg/ul	-12	15	
Endosulfan II	B	6862.6	6661.8	20.00	19.41	pg/ul	-3	15	
4,4'-DDT	B	3163.8	2970.0	20.00	18.77	pg/ul	-6	15	
Methoxychlor	B	1645.9	1429.2	100.0	86.83	pg/ul	-13	15	
Endosulfan sulfate	B	6291.1	6222.4	20.00	19.78	pg/ul	-1	15	
Endrin ketone	B	6247.2	6136.2	20.00	19.64	pg/ul	-2	15	
TCMX	B	10109	10471	20.00	20.71	pg/ul	4	15	
Decachlorobiphenyl	B	9518.6	10420	20.00	21.89	pg/ul	9	15	
Average EPA 8081A	A	(n=22)					7	15	
Average EPA 8081A	B	(n=22)					7	15	

+=high bias -=low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188837 PEST Water
EPA 8081A

Inst : GC16	Run Name: PEST_4	IDF : 1.0
Seqnum : 236343620018	File : 238_018	Time : 26-AUG-2006 20:21
Cal : 236341882001	Caldate : 25-AUG-2006	
Standards: S3699		

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	10008	10888	20.00	21.76	pg/ul	9	15	
gamma-BHC	A	8907.5	10081	20.00	22.64	pg/ul	13	15	
beta-BHC	A	5858.8	6183.5	20.00	21.11	pg/ul	6	15	
delta-BHC	A	8183.1	9263.2	20.00	22.64	pg/ul	13	15	
Heptachlor	A	9370.3	10340	20.00	22.07	pg/ul	10	15	
Aldrin	A	8516.3	9027.1	20.00	21.20	pg/ul	6	15	
Heptachlor epoxide	A	9114.8	9764.0	20.00	21.42	pg/ul	7	15	
gamma-Chlordane	A	8668.4	9573.2	20.00	22.09	pg/ul	10	15	
alpha-Chlordane	A	8289.6	9222.0	20.00	22.25	pg/ul	11	15	
4,4'-DDE	A	7962.2	8758.5	40.00	44.00	pg/ul	10	15	
Endosulfan I	A	8958.8	9880.8	20.00	22.06	pg/ul	10	15	
Dieldrin	A	7724.6	8834.3	40.00	45.75	pg/ul	14	15	
Endrin	A	6689.4	7384.4	40.00	44.16	pg/ul	10	15	
4,4'-DDD	A	6030.6	6568.4	40.00	43.57	pg/ul	9	15	
Endosulfan II	A	7364.1	8597.7	40.00	46.70	pg/ul	17	15	c+ ***
4,4'-DDT	A	5013.8	6380.5	40.00	50.90	pg/ul	27	15	c+ ***
Methoxychlor	A	2859.7	3354.0	200.0	234.6	pg/ul	17	15	c+ ***
Endosulfan sulfate	A	7210.9	8106.7	40.00	44.97	pg/ul	12	15	
Endrin ketone	A	6330.0	8106.9	40.00	51.23	pg/ul	28	15	c+ ***
TCMX	A	10707	10827	40.00	40.45	pg/ul	1	15	
Decachlorobiphenyl	A	10657	11379	40.00	42.71	pg/ul	7	15	
alpha-BHC	B	8850.1	9515.8	20.00	21.50	pg/ul	8	15	
gamma-BHC	B	7895.1	8625.2	20.00	21.85	pg/ul	9	15	
beta-BHC	B	5354.6	5652.7	20.00	21.11	pg/ul	6	15	
delta-BHC	B	6971.1	7862.7	20.00	22.56	pg/ul	13	15	
Heptachlor	B	7051.4	7472.6	20.00	21.19	pg/ul	6	15	
Aldrin	B	8751.6	9098.4	20.00	20.79	pg/ul	4	15	
Heptachlor epoxide	B	8338.1	8887.2	20.00	21.32	pg/ul	7	15	
gamma-Chlordane	B	8865.9	9234.9	20.00	20.83	pg/ul	4	15	
alpha-Chlordane	B	8470.3	9012.3	20.00	21.28	pg/ul	6	15	
4,4'-DDE	B	6924.4	7965.8	40.00	46.02	pg/ul	15	15	
Endosulfan I	B	8062.0	8695.9	20.00	21.57	pg/ul	8	15	
Dieldrin	B	7609.8	8232.5	40.00	43.27	pg/ul	8	15	
Endrin	B	5718.8	6553.8	40.00	45.84	pg/ul	15	15	
4,4'-DDD	B	4405.6	5048.6	40.00	45.84	pg/ul	15	15	
Endosulfan II	B	6862.6	7689.6	40.00	44.82	pg/ul	12	15	
4,4'-DDT	B	3163.8	3920.2	40.00	49.56	pg/ul	24	15	c+ ***
Methoxychlor	B	1645.9	1888.2	200.0	229.4	pg/ul	15	15	
Endosulfan sulfate	B	6291.1	6992.6	40.00	44.46	pg/ul	11	15	
Endrin ketone	B	6247.2	7192.6	40.00	46.05	pg/ul	15	15	
TCMX	B	10109	10380	40.00	41.07	pg/ul	3	15	
Decachlorobiphenyl	B	9518.6	10155	40.00	42.67	pg/ul	7	15	
Average EPA 8081A	A	(n=22)					12	15	
Average EPA 8081A	B	(n=22)					10	15	

+ = high bias c = CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188837 PEST Water
EPA 8081A

Inst : GC16 Run Name: PEST_3 IDF : 1.0
 Seqnum : 236348019002 File : 241_002 Time : 29-AUG-2006 16:36
 Cal : 236346178001 Caldate : 28-AUG-2006
 Standards: S4177

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	9831.3	10134	10.00	10.31	pg/ul	3	15	
gamma-BHC	A	9066.4	9674.6	10.00	10.67	pg/ul	7	15	
beta-BHC	A	5827.4	6562.8	10.00	11.26	pg/ul	13	15	
delta-BHC	A	8258.9	8879.9	10.00	10.75	pg/ul	8	15	
Heptachlor	A	9877.3	10754	10.00	10.89	pg/ul	9	15	
Aldrin	A	8328.3	8847.3	10.00	10.62	pg/ul	6	15	
Heptachlor epoxide	A	8799.5	9612.3	10.00	10.92	pg/ul	9	15	
gamma-Chlordane	A	8350.7	8830.4	10.00	10.57	pg/ul	6	15	
alpha-Chlordane	A	8027.0	8562.6	10.00	10.67	pg/ul	7	15	
4,4'-DDE	A	7406.2	7858.2	20.00	21.22	pg/ul	6	15	
Endosulfan I	A	8559.3	9066.5	10.00	10.59	pg/ul	6	15	
Dieldrin	A	7432.6	7914.4	20.00	21.30	pg/ul	6	15	
Endrin	A	6166.6	6402.0	20.00	20.76	pg/ul	4	15	
4,4'-DDD	A	5109.7	5473.6	20.00	21.42	pg/ul	7	15	
Endosulfan II	A	6915.3	8303.4	20.00	24.01	pg/ul	20	15	c+ ***
4,4'-DDT	A	5133.4	5218.2	20.00	20.33	pg/ul	2	15	
Methoxychlor	A	2816.4	3013.1	100.0	107.0	pg/ul	7	15	
Endosulfan sulfate	A	6907.2	7657.3	20.00	22.17	pg/ul	11	15	
Endrin ketone	A	5891.8	6814.7	20.00	23.13	pg/ul	16	15	c+ ***
TCMX	A	10606	11792	20.00	22.24	pg/ul	11	15	
Decachlorobiphenyl	A	9523.8	11414	20.00	23.97	pg/ul	20	15	c+
alpha-BHC	B	8670.2	8037.2	10.00	9.270	pg/ul	-7	15	
gamma-BHC	B	7787.6	7459.3	10.00	9.578	pg/ul	-4	15	
beta-BHC	B	5180.4	5318.1	10.00	10.27	pg/ul	3	15	
delta-BHC	B	6900.3	6350.3	10.00	9.203	pg/ul	-8	15	
Heptachlor	B	7025.5	6995.2	10.00	9.957	pg/ul	0	15	
Aldrin	B	8275.1	8244.7	10.00	9.963	pg/ul	0	15	
Heptachlor epoxide	B	7830.3	7844.3	10.00	10.02	pg/ul	0	15	
gamma-Chlordane	B	8176.9	8281.9	10.00	10.13	pg/ul	1	15	
alpha-Chlordane	B	7835.5	8026.6	10.00	10.24	pg/ul	2	15	
4,4'-DDE	B	6434.1	5927.3	20.00	18.42	pg/ul	-8	15	
Endosulfan I	B	7528.3	7681.3	10.00	10.20	pg/ul	2	15	
Dieldrin	B	6937.2	6944.1	20.00	20.02	pg/ul	0	15	
Endrin	B	5397.3	5286.5	20.00	19.59	pg/ul	-2	15	
4,4'-DDD	B	3873.3	3669.6	20.00	18.95	pg/ul	-5	15	
Endosulfan II	B	6212.8	6770.5	20.00	21.80	pg/ul	9	15	
4,4'-DDT	B	3069.2	2939.0	20.00	19.15	pg/ul	-4	15	
Methoxychlor	B	1491.9	1418.3	100.0	95.07	pg/ul	-5	15	
Endosulfan sulfate	B	5639.7	5935.7	20.00	21.05	pg/ul	5	15	
Endrin ketone	B	5245.3	5576.6	20.00	21.26	pg/ul	6	15	
TCMX	B	9954.2	10830	20.00	21.76	pg/ul	9	15	
Decachlorobiphenyl	B	8472.1	9705.0	20.00	22.91	pg/ul	15	15	
Average EPA 8081A	A	(n=22)					9	15	
Average EPA 8081A	B	(n=22)					5	15	

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188837 PEST Water
EPA 8081A

Inst : GC16 Run Name: PEST_4 IDF : 1.0
 Seqnum : 236348019016 File : 241_016 Time : 29-AUG-2006 22:33
 Cal : 236346178001 Caldate : 28-AUG-2006
 Standards: S4178

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	9831.3	9929.5	20.00	20.20	pg/ul	1	15	
gamma-BHC	A	9066.4	8971.2	20.00	19.79	pg/ul	-1	15	
beta-BHC	A	5827.4	5626.8	20.00	19.31	pg/ul	-3	15	
delta-BHC	A	8258.9	7752.8	20.00	18.77	pg/ul	-6	15	
Heptachlor	A	9877.3	9047.8	20.00	18.32	pg/ul	-8	15	
Aldrin	A	8328.3	7899.0	20.00	18.97	pg/ul	-5	15	
Heptachlor epoxide	A	8799.5	8494.6	20.00	19.31	pg/ul	-3	15	
gamma-Chlordane	A	8350.7	8204.6	20.00	19.65	pg/ul	-2	15	
alpha-Chlordane	A	8027.0	7875.5	20.00	19.62	pg/ul	-2	15	
4,4'-DDE	A	7406.2	7413.0	40.00	40.04	pg/ul	0	15	
Endosulfan I	A	8559.3	8328.4	20.00	19.46	pg/ul	-3	15	
Dieldrin	A	7432.6	7466.4	40.00	40.18	pg/ul	0	15	
Endrin	A	6166.6	6134.9	40.00	39.79	pg/ul	-1	15	
4,4'-DDD	A	5109.7	5569.8	40.00	43.60	pg/ul	9	15	
Endosulfan II	A	6915.3	7012.9	40.00	40.56	pg/ul	1	15	
4,4'-DDT	A	5133.4	4202.2	40.00	32.74	pg/ul	-18	15	c- ***
Methoxychlor	A	2816.4	2284.1	200.0	162.2	pg/ul	-19	15	c- ***
Endosulfan sulfate	A	6907.2	6738.6	40.00	39.02	pg/ul	-2	15	
Endrin ketone	A	5891.8	6065.6	40.00	41.18	pg/ul	3	15	
TCMX	A	10606	10120	40.00	38.17	pg/ul	-5	15	
Decachlorobiphenyl	A	9523.8	9543.8	40.00	40.08	pg/ul	0	15	
alpha-BHC	B	8670.2	8503.8	20.00	19.62	pg/ul	-2	15	
gamma-BHC	B	7787.6	7570.4	20.00	19.44	pg/ul	-3	15	
beta-BHC	B	5180.4	5195.0	20.00	20.06	pg/ul	0	15	
delta-BHC	B	6900.3	6690.1	20.00	19.39	pg/ul	-3	15	
Heptachlor	B	7025.5	6389.3	20.00	18.19	pg/ul	-9	15	
Aldrin	B	8275.1	7713.9	20.00	18.64	pg/ul	-7	15	
Heptachlor epoxide	B	7830.3	7674.2	20.00	19.60	pg/ul	-2	15	
gamma-Chlordane	B	8176.9	7823.2	20.00	19.13	pg/ul	-4	15	
alpha-Chlordane	B	7835.5	7500.3	20.00	19.14	pg/ul	-4	15	
4,4'-DDE	B	6434.1	6725.8	40.00	41.81	pg/ul	5	15	
Endosulfan I	B	7528.3	7322.7	20.00	19.45	pg/ul	-3	15	
Dieldrin	B	6937.2	6829.3	40.00	39.38	pg/ul	-2	15	
Endrin	B	5397.3	5135.5	40.00	38.06	pg/ul	-5	15	
4,4'-DDD	B	3873.3	4324.0	40.00	44.65	pg/ul	12	15	
Endosulfan II	B	6212.8	6342.3	40.00	40.83	pg/ul	2	15	
4,4'-DDT	B	3069.2	2649.1	40.00	34.53	pg/ul	-14	15	
Methoxychlor	B	1491.9	1289.5	200.0	172.9	pg/ul	-14	15	
Endosulfan sulfate	B	5639.7	5574.6	40.00	39.54	pg/ul	-1	15	
Endrin ketone	B	5245.3	5184.7	40.00	39.54	pg/ul	-1	15	
TCMX	B	9954.2	9564.9	40.00	38.44	pg/ul	-4	15	
Decachlorobiphenyl	B	8472.1	8477.1	40.00	40.02	pg/ul	0	15	
Average EPA 8081A	A	(n=22)					4	15	
Average EPA 8081A	B	(n=22)					5	15	

--low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188837 PEST Water
EPA 8081A

Inst : GC16	Run Name: PEST_5	IDF : 1.0	
Seqnum : 236348019028	File : 241_028	Time : 30-AUG-2006 02:05	
Cal : 236346178001	Caldate : 28-AUG-2006		
Standards: S3834			

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	9831.3	9208.2	25.00	23.42	pg/ul	-6	15	
gamma-BHC	A	9066.4	8098.1	25.00	22.33	pg/ul	-11	15	
beta-BHC	A	5827.4	4966.0	25.00	21.30	pg/ul	-15	15	
delta-BHC	A	8258.9	6741.8	25.00	20.41	pg/ul	-18	15	c- ***
Heptachlor	A	9877.3	8023.0	25.00	20.31	pg/ul	-19	15	c- ***
Aldrin	A	8328.3	7026.8	25.00	21.09	pg/ul	-16	15	c- ***
Heptachlor epoxide	A	8799.5	7365.6	25.00	20.93	pg/ul	-16	15	c- ***
gamma-Chlordane	A	8350.7	7087.9	25.00	21.22	pg/ul	-15	15	
alpha-Chlordane	A	8027.0	6617.2	25.00	20.61	pg/ul	-18	15	c- ***
4,4'-DDE	A	7406.2	6341.3	50.00	42.81	pg/ul	-14	15	
Endosulfan I	A	8559.3	7368.6	25.00	21.52	pg/ul	-14	15	
Dieldrin	A	7432.6	6420.7	50.00	43.19	pg/ul	-14	15	
Endrin	A	6166.6	5443.3	50.00	44.14	pg/ul	-12	15	
4,4'-DDD	A	5109.7	4825.3	50.00	47.22	pg/ul	-6	15	
Endosulfan II	A	6915.3	6009.0	50.00	43.45	pg/ul	-13	15	
4,4'-DDT	A	5133.4	3533.8	50.00	34.42	pg/ul	-31	15	c- ***
Methoxychlor	A	2816.4	1978.4	250.0	175.6	pg/ul	-30	15	c- ***
Endosulfan sulfate	A	6907.2	5647.7	50.00	40.88	pg/ul	-18	15	c- ***
Endrin ketone	A	5891.8	5208.4	50.00	44.20	pg/ul	-12	15	
TCMX	A	10606	9557.4	50.00	45.06	pg/ul	-10	15	
Decachlorobiphenyl	A	9523.8	8093.8	50.00	42.49	pg/ul	-15	15	
alpha-BHC	B	8670.2	8230.1	25.00	23.73	pg/ul	-5	15	
gamma-BHC	B	7787.6	7237.5	25.00	23.23	pg/ul	-7	15	
beta-BHC	B	5180.4	4716.3	25.00	22.76	pg/ul	-9	15	
delta-BHC	B	6900.3	6087.4	25.00	22.05	pg/ul	-12	15	
Heptachlor	B	7025.5	5939.0	25.00	21.13	pg/ul	-15	15	
Aldrin	B	8275.1	7029.6	25.00	21.24	pg/ul	-15	15	
Heptachlor epoxide	B	7830.3	6884.2	25.00	21.98	pg/ul	-12	15	
gamma-Chlordane	B	8176.9	6977.2	25.00	21.33	pg/ul	-15	15	
alpha-Chlordane	B	7835.5	6695.8	25.00	21.36	pg/ul	-15	15	
4,4'-DDE	B	6434.1	5930.4	50.00	46.09	pg/ul	-8	15	
Endosulfan I	B	7528.3	6513.3	25.00	21.63	pg/ul	-13	15	
Dieldrin	B	6937.2	6111.1	50.00	44.05	pg/ul	-12	15	
Endrin	B	5397.3	4591.9	50.00	42.54	pg/ul	-15	15	
4,4'-DDD	B	3873.3	4116.3	50.00	53.14	pg/ul	6	15	
Endosulfan II	B	6212.8	5722.4	50.00	46.05	pg/ul	-8	15	
4,4'-DDT	B	3069.2	2383.5	50.00	38.83	pg/ul	-22	15	c- ***
Methoxychlor	B	1491.9	1186.6	250.0	198.8	pg/ul	-20	15	c- ***
Endosulfan sulfate	B	5639.7	4923.6	50.00	43.65	pg/ul	-13	15	
Endrin ketone	B	5245.3	4692.1	50.00	44.73	pg/ul	-11	15	
TCMX	B	9954.2	9122.5	50.00	45.82	pg/ul	-8	15	
Decachlorobiphenyl	B	8472.1	7224.0	50.00	42.63	pg/ul	-15	15	
Average EPA 8081A	A	(n=22)					15	15	
Average EPA 8081A	B	(n=22)					12	15	

--low bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188837 PEST Water
EPA 8081A

Inst : GC21 Run Name: PEST_3 IDF : 1.0
 Segnum : 246349166010 File : 242_010 Time : 30-AUG-2006 17:01
 Cal : 246346494001 Caldate : 28-AUG-2006
 Standards: S4177

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	15174	16010	10.00	10.55	pg	6	15	
gamma-BHC	A	13382	14168	10.00	10.59	pg	6	15	
beta-BHC	A	5932.9	6166.5	10.00	10.39	pg	4	15	
delta-BHC	A	14237	14394	10.00	10.11	pg	1	15	
Heptachlor	A	11850	11997	10.00	10.12	pg	1	15	
Aldrin	A	12125	12749	10.00	10.51	pg	5	15	
Heptachlor epoxide	A	11010	11658	10.00	10.59	pg	6	15	
gamma-Chlordane	A	11305	11869	10.00	10.50	pg	5	15	
alpha-Chlordane	A	10887	11199	10.00	10.29	pg	3	15	
4,4'-DDE	A	10271	11131	20.00	21.67	pg	8	15	
Endosulfan I	A	10145	10703	10.00	10.55	pg	5	15	
Dieldrin	A	10109	11121	20.00	22.00	pg	10	15	
Endrin	A	7880.9	8404.6	20.00	21.33	pg	7	15	
4,4'-DDD	A	8590.0	10348	20.00	24.09	pg	20	15	c+ ***
Endosulfan II	A	8514.0	9169.6	20.00	21.54	pg	8	15	
4,4'-DDT	A	7409.4	6602.7	20.00	17.82	pg	-11	15	
Methoxychlor	A	3152.7	3069.9	100.0	97.37	pg	-3	15	
Endosulfan sulfate	A	7663.2	8119.0	20.00	21.19	pg	6	15	
Endrin ketone	A	8771.0	9735.7	20.00	22.20	pg	11	15	
TCMX	A	9681.1	10384	20.00	21.45	pg	7	15	
Decachlorobiphenyl	A	7414.7	7811.2	20.00	21.07	pg	5	15	
alpha-BHC	B	16484	16765	10.00	10.17	pg	2	15	
gamma-BHC	B	14893	14539	10.00	9.762	pg	-2	15	
beta-BHC	B	6903.0	6571.3	10.00	9.519	pg	-5	15	
delta-BHC	B	14622	14026	10.00	9.593	pg	-4	15	
Heptachlor	B	14024	13812	10.00	9.849	pg	-2	15	
Aldrin	B	13362	13192	10.00	9.873	pg	-1	15	
Heptachlor epoxide	B	11695	11812	10.00	10.10	pg	1	15	
gamma-Chlordane	B	12199	11998	10.00	9.835	pg	-2	15	
alpha-Chlordane	B	11608	11287	10.00	9.724	pg	-3	15	
4,4'-DDE	B	10903	11283	20.00	20.70	pg	3	15	
Endosulfan I	B	10805	10778	10.00	9.975	pg	0	15	
Dieldrin	B	10445	11068	20.00	21.19	pg	6	15	
Endrin	B	8613.3	9128.0	20.00	21.20	pg	6	15	
4,4'-DDD	B	8821.7	9741.1	20.00	22.08	pg	10	15	
Endosulfan II	B	9165.4	9508.8	20.00	20.75	pg	4	15	
4,4'-DDT	B	8316.5	7992.0	20.00	19.22	pg	-4	15	
Methoxychlor	B	3402.9	3570.3	100.0	104.9	pg	5	15	
Endosulfan sulfate	B	8140.2	8228.9	20.00	20.22	pg	1	15	
Endrin ketone	B	10207	9933.6	20.00	19.46	pg	-3	15	
TCMX	B	9432.1	9141.2	20.00	19.38	pg	-3	15	
Decachlorobiphenyl	B	6575.0	6966.1	20.00	21.19	pg	6	15	
Average EPA 8081A	A	(n=22)					6	15	
Average EPA 8081A	B	(n=22)					4	15	

+ = high bias c = CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188837 PEST Water
EPA 8081A

Inst : GC21
Seqnum : 246349166023
Cal : 246346494001
Standards: S3834

Run Name: PEST_5
File : 242_023
Caldate : 28-AUG-2006

IDF : 1.0
Time : 30-AUG-2006 21:48

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	15174	15635	25.00	25.76	pg	3	15	
gamma-BHC	A	13382	13630	25.00	25.46	pg	2	15	
beta-BHC	A	5932.9	5691.7	25.00	23.98	pg	-4	15	
delta-BHC	A	14237	13996	25.00	24.58	pg	-2	15	
Heptachlor	A	11850	11691	25.00	24.67	pg	-1	15	
Aldrin	A	12125	12121	25.00	24.99	pg	0	15	
Heptachlor epoxide	A	11010	10896	25.00	24.74	pg	-1	15	
gamma-Chlordane	A	11305	11101	25.00	24.55	pg	-2	15	
alpha-Chlordane	A	10887	10584	25.00	24.30	pg	-3	15	
4,4'-DDE	A	10271	10555	50.00	51.38	pg	3	15	
Endosulfan I	A	10145	9856.0	25.00	24.29	pg	-3	15	
Dieldrin	A	10109	10580	50.00	52.33	pg	5	15	
Endrin	A	7880.9	8131.9	50.00	51.59	pg	3	15	
4,4'-DDD	A	8590.0	9831.6	50.00	57.23	pg	14	15	
Endosulfan II	A	8514.0	8760.0	50.00	51.44	pg	3	15	
4,4'-DDT	A	7409.4	6175.4	50.00	41.67	pg	-17	15	c- ***
Methoxychlor	A	3152.7	2754.6	250.0	218.4	pg	-13	15	
Endosulfan sulfate	A	7663.2	7744.1	50.00	50.53	pg	1	15	
Endrin ketone	A	8771.0	9179.1	50.00	52.33	pg	5	15	
TCMX	A	9681.1	10003	50.00	51.66	pg	3	15	
Decachlorobiphenyl	A	7414.7	7182.5	50.00	48.43	pg	-3	15	
alpha-BHC	B	16484	16163	25.00	24.51	pg	-2	15	
gamma-BHC	B	14893	14074	25.00	23.62	pg	-6	15	
beta-BHC	B	6903.0	6263.4	25.00	22.68	pg	-9	15	
delta-BHC	B	14622	13479	25.00	23.05	pg	-8	15	
Heptachlor	B	14024	13348	25.00	23.80	pg	-5	15	
Aldrin	B	13362	12615	25.00	23.60	pg	-6	15	
Heptachlor epoxide	B	11695	11156	25.00	23.85	pg	-5	15	
gamma-Chlordane	B	12199	11400	25.00	23.36	pg	-7	15	
alpha-Chlordane	B	11608	10721	25.00	23.09	pg	-8	15	
4,4'-DDE	B	10903	10755	50.00	49.32	pg	-1	15	
Endosulfan I	B	10805	10247	25.00	23.71	pg	-5	15	
Dieldrin	B	10445	10600	50.00	50.74	pg	1	15	
Endrin	B	8613.3	8844.3	50.00	51.34	pg	3	15	
4,4'-DDD	B	8821.7	9397.5	50.00	53.26	pg	7	15	
Endosulfan II	B	9165.4	9057.8	50.00	49.41	pg	-1	15	
4,4'-DDT	B	8316.5	7696.2	50.00	46.27	pg	-7	15	
Methoxychlor	B	3402.9	3050.8	250.0	224.1	pg	-10	15	
Endosulfan sulfate	B	8140.2	7808.5	50.00	47.96	pg	-4	15	
Endrin ketone	B	10207	9313.2	50.00	45.62	pg	-9	15	
TCMX	B	9432.1	8519.2	50.00	45.16	pg	-10	15	
Decachlorobiphenyl	B	6575.0	6703.4	50.00	50.98	pg	2	15	
Average EPA 8081A	A	(n=22)					4	15	
Average EPA 8081A	B	(n=22)					6	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188837 PEST Water
EPA 8081A

Inst : GC23
Seqnum : 806351984003
Cal : 806350494001
Standards: S4177

Run Name: PEST-3
File : 244_003
Caldate : 31-AUG-2006

IDF : 1.0
Time : 01-SEP-2006 10:59

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	17261	16988	10.00	9.841	pg	-2	15	
gamma-BHC	A	15675	15116	10.00	9.644	pg	-4	15	
beta-BHC	A	6138.0	6187.2	10.00	10.08	pg	1	15	
delta-BHC	A	16178	15465	10.00	9.559	pg	-4	15	
Heptachlor	A	14114	13355	10.00	9.462	pg	-5	15	
Aldrin	A	13248	12651	10.00	9.549	pg	-5	15	
Heptachlor epoxide	A	11959	11555	10.00	9.662	pg	-3	15	
gamma-Chlordane	A	11915	11661	10.00	9.787	pg	-2	15	
alpha-Chlordane	A	10904	10886	10.00	9.984	pg	0	15	
4,4'-DDE	A	11256	10732	20.00	19.07	pg	-5	15	
Endosulfan I	A	10753	10025	10.00	9.323	pg	-7	15	
Dieldrin	A	11528	11017	20.00	19.11	pg	-4	15	
Endrin	A	9604.1	9313.9	20.00	19.40	pg	-3	15	
4,4'-DDD	A	8819.8	8490.1	20.00	19.25	pg	-4	15	
Endosulfan II	A	9275.0	9122.6	20.00	19.67	pg	-2	15	
4,4'-DDT	A	8432.9	8285.5	20.00	19.65	pg	-2	15	
Methoxychlor	A	4112.3	4166.8	100.0	101.3	pg	1	15	
Endosulfan sulfate	A	7997.2	7758.2	20.00	19.40	pg	-3	15	
Endrin ketone	A	9123.5	8722.0	20.00	19.12	pg	-4	15	
TCMX	A	10743	10663	20.00	19.85	pg	-1	15	
Decachlorobiphenyl	A	5730.3	5875.7	20.00	20.51	pg	3	15	
alpha-BHC	B	9212.4	9790.1	10.00	10.63	pg	6	15	
gamma-BHC	B	8058.6	8668.2	10.00	10.76	pg	8	15	
beta-BHC	B	3327.8	3712.1	10.00	11.15	pg	12	15	
delta-BHC	B	8426.4	9010.9	10.00	10.69	pg	7	15	
Heptachlor	B	7481.7	8024.1	10.00	10.73	pg	7	15	
Aldrin	B	7221.1	7700.9	10.00	10.66	pg	7	15	
Heptachlor epoxide	B	6405.1	6899.5	10.00	10.77	pg	8	15	
gamma-Chlordane	B	6407.2	6847.8	10.00	10.69	pg	7	15	
alpha-Chlordane	B	6021.2	6514.0	10.00	10.82	pg	8	15	
4,4'-DDE	B	6069.6	6287.4	20.00	20.72	pg	4	15	
Endosulfan I	B	5691.8	6151.2	10.00	10.81	pg	8	15	
Dieldrin	B	6273.3	6475.8	20.00	20.65	pg	3	15	
Endrin	B	5235.7	5287.2	20.00	20.20	pg	1	15	
4,4'-DDD	B	4774.6	5022.7	20.00	21.04	pg	5	15	
Endosulfan II	B	4704.3	5347.1	20.00	22.73	pg	14	15	
4,4'-DDT	B	4696.9	4776.5	20.00	20.34	pg	2	15	
Methoxychlor	B	2051.0	2032.8	100.0	99.11	pg	-1	15	
Endosulfan sulfate	B	4169.3	4401.9	20.00	21.12	pg	6	15	
Endrin ketone	B	4388.2	4758.6	20.00	21.69	pg	8	15	
TCMX	B	5885.3	6341.3	20.00	21.55	pg	8	15	
Decachlorobiphenyl	B	2928.9	3279.6	20.00	22.39	pg	12	15	
Average EPA 8081A	A	(n=22)					3	15	
Average EPA 8081A	B	(n=22)					7	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188837 PEST Water
EPA 8081A

Inst : GC23	Run Name: PEST_4	IDF : 1.0
Seqnum : 806351984016	File : 244_016	Time : 01-SEP-2006 20:54
Cal : 806350494001	Caldate : 31-AUG-2006	
Standards: S4178		

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	17261	19308	20.00	22.37	pg	12	15	
gamma-BHC	A	15675	17248	20.00	22.01	pg	10	15	
beta-BHC	A	6138.0	6454.7	20.00	21.03	pg	5	15	
delta-BHC	A	16178	17427	20.00	21.54	pg	8	15	
Heptachlor	A	14114	14860	20.00	21.06	pg	5	15	
Aldrin	A	13248	14330	20.00	21.63	pg	8	15	
Heptachlor epoxide	A	11959	12727	20.00	21.28	pg	6	15	
gamma-Chlordane	A	11915	12683	20.00	21.29	pg	6	15	
alpha-Chlordane	A	10904	11870	20.00	21.77	pg	9	15	
4,4'-DDE	A	11256	13346	40.00	47.43	pg	19	15	c+ ***
Endosulfan I	A	10753	11451	20.00	21.30	pg	6	15	
Dieldrin	A	11528	13912	40.00	48.27	pg	21	15	c+ ***
Endrin	A	9604.1	11322	40.00	47.16	pg	18	15	c+ ***
4,4'-DDD	A	8819.8	10544	40.00	47.82	pg	20	15	c+ ***
Endosulfan II	A	9275.0	10970	40.00	47.31	pg	18	15	c+ ***
4,4'-DDT	A	8432.9	9288.0	40.00	44.06	pg	10	15	
Methoxychlor	A	4112.3	5000.0	200.0	243.2	pg	22	15	c+ ***
Endosulfan sulfate	A	7997.2	8510.2	40.00	42.57	pg	6	15	
Endrin ketone	A	9123.5	10566	40.00	46.32	pg	16	15	c+ ***
TCMX	A	10743	12320	40.00	45.87	pg	15	15	
Decachlorobiphenyl	A	5730.3	6055.6	40.00	42.27	pg	6	15	
alpha-BHC	B	9212.4	8056.4	20.00	17.49	pg	-13	15	
gamma-BHC	B	8058.6	7042.6	20.00	17.48	pg	-13	15	
beta-BHC	B	3327.8	2915.8	20.00	17.52	pg	-12	15	
delta-BHC	B	8426.4	7040.1	20.00	16.71	pg	-16	15	c- ***
Heptachlor	B	7481.7	6382.2	20.00	17.06	pg	-15	15	
Aldrin	B	7221.1	6176.3	20.00	17.11	pg	-14	15	
Heptachlor epoxide	B	6405.1	5461.0	20.00	17.05	pg	-15	15	
gamma-Chlordane	B	6407.2	5399.7	20.00	16.86	pg	-16	15	c- ***
alpha-Chlordane	B	6021.2	5139.6	20.00	17.07	pg	-15	15	
4,4'-DDE	B	6069.6	5106.4	40.00	33.65	pg	-16	15	c- ***
Endosulfan I	B	5691.8	4861.0	20.00	17.08	pg	-15	15	
Dieldrin	B	6273.3	5264.6	40.00	33.57	pg	-16	15	c- ***
Endrin	B	5235.7	4364.7	40.00	33.35	pg	-17	15	c- ***
4,4'-DDD	B	4774.6	4068.8	40.00	34.09	pg	-15	15	
Endosulfan II	B	4704.3	4249.0	40.00	36.13	pg	-10	15	
4,4'-DDT	B	4696.9	3663.3	40.00	31.20	pg	-22	15	c- ***
Methoxychlor	B	2051.0	1730.4	200.0	168.7	pg	-16	15	c- ***
Endosulfan sulfate	B	4169.3	3397.5	40.00	32.59	pg	-19	15	c- ***
Endrin ketone	B	4388.2	3712.5	40.00	33.84	pg	-15	15	
TCMX	B	5885.3	5194.5	40.00	35.31	pg	-12	15	
Decachlorobiphenyl	B	2928.9	2611.4	40.00	35.66	pg	-11	15	
Average EPA 8081A	A	(n=22)					12	15	
Average EPA 8081A	B	(n=22)					15	15	

+=high bias -=low bias c=CCV

SEQUENCE SUMMARY FOR 188837 PEST Water
Curtis & Tompkins Laboratories

Sequence: 236341882 Instrument: GC16
Analytical Method: EPA 8081A

Gas Chromatograph #16 ECD
SOP Version: 8081_rv7

Begun: 25-AUG-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Std's	Used	>LR
001	237_001	X	PRIMER			25-AUG-2006 10:02	1.0								
002	237_002	X	PRIMER			25-AUG-2006 10:19	1.0								
003	237_003	X	PRIMER			25-AUG-2006 10:37	1.0								
004	237_004	X	HEX			25-AUG-2006 10:54	1.0								
005	237_005	PEM	PEM			25-AUG-2006 11:12	1.0			1			1		
006	237_006	X	PEST_4			25-AUG-2006 11:30	1.0			17			2	ac	
007	237_007	CCV	PEST_4			25-AUG-2006 12:13	1.0			21			2	ac	
008	237_008	X	HEX			25-AUG-2006 16:05	1.0								
009	237_009	X	PRIMER			25-AUG-2006 16:23	1.0								
010	237_010	X	PRIMER			25-AUG-2006 16:41	1.0								
011	237_011	X	PRIMER			25-AUG-2006 16:59	1.0								
012	237_012	X	PRIMER			25-AUG-2006 17:16	1.0								
013	237_013	X	PRIMER			25-AUG-2006 17:34	1.0								
014	237_014	X	PRIMER			25-AUG-2006 17:52	1.0								
015	237_015	X	PRIMER			25-AUG-2006 18:10	1.0								
016	237_016	X	PRIMER			25-AUG-2006 18:28	1.0								
017	237_017	X	PRIMER			25-AUG-2006 18:46	1.0								
018	237_018	X	PRIMER			25-AUG-2006 19:04	1.0								
019	237_019	X	HEX			25-AUG-2006 19:22	1.0								
020	237_020	PEM	PEM			25-AUG-2006 19:40	1.0			1			1		
021	237_021	X	HEX			25-AUG-2006 20:16	1.0								
022	237_022	ICAL	PEST_1			25-AUG-2006 20:33	1.0						3		
023	237_023	ICAL	PEST_2			25-AUG-2006 20:51	1.0						4		
024	237_024	ICAL	PEST_3			25-AUG-2006 21:09	1.0						5		
025	237_025	ICAL	PEST_4			25-AUG-2006 21:27	1.0						2		
026	237_026	ICAL	PEST_5			25-AUG-2006 21:44	1.0						6		
027	237_027	ICAL	PEST_6			25-AUG-2006 22:02	1.0						7		
028	237_028	ICAL	PEST_7			25-AUG-2006 22:19	1.0						8		
029	237_029	X	HEX			25-AUG-2006 22:36	1.0								
030	237_030	ICV	ICV							2			1		
													9		

Std's used: 1=S3952 2=S3699 3=S2827 4=S3833 5=S4177 6=S3834 7=S4042 8=S4043 9=S3877
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 188837 PEST Water
Curtis & Tompkins Laboratories

Sequence: 236341882 Instrument: GC16
Analytical Method: EPA 8081A

Gas Chromatograph #16 ECD
SOP Version: 8081_rv7

Begun: 25-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>IR
031	237_031	ICV	ICV			25-AUG-2006	22:53	1.0					9		
032	237_032	X	HEX			25-AUG-2006	23:10	1.0							
033	237_033	PEM	PEM			25-AUG-2006	23:27	1.0					1		
034	237_034	CCV	PEST_4			25-AUG-2006	23:45	1.0					2		
035	237_035	X	HEX			26-AUG-2006	00:02	1.0							
036	237_036	X	ASE CHECK PR			26-AUG-2006	00:19	1.0							
037	237_037	X	ASE MB CHECK			26-AUG-2006	00:36	1.0							
038	237_038	X	ASE LCS CHEC			26-AUG-2006	00:54	1.0							
039	237_039	X	ASE EARTH CH			26-AUG-2006	01:11	1.0							

Stds used: 1=S3952 2=S3699 3=S2827 4=S3833 5=S4177 6=S3834 7=S4042 8=S4043 9=S3877
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 188837 PEST Water
Curtis & Tompkins Laboratories

Sequence: 236343620 Instrument: GC16
Analytical Method: EPA 8081A

Gas Chromatograph #16 ECD
SOP Version: 8081_rv7

Begun: 26-AUG-2006

#	Filename	Type	Sample	lenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
001	238_001	X	HEX				26-AUG-2006	15:00	1.0					
002	238_002	PEM	PEM				26-AUG-2006	15:18	1.0	1.0			1	
003	238_003	X	PEST_3				26-AUG-2006	15:35	1.0	1.0	16		2	ac
004	238_004	CCV	PEST_3				26-AUG-2006	16:02	1.0	1.0	3		2	
005	238_005	X	HEX				26-AUG-2006	16:33	1.0					
006	238_006	BLANK	QC353319				26-AUG-2006	16:51	1.0	0.01	2	2	1	
007	238_007	LCS	QC353320				26-AUG-2006	17:09	1.0	0.01	7	3	1	
008	238_008	PREPBLK	QC353323				26-AUG-2006	17:26	1.0	0.009615	2	2	1	
009	238_009	BLANK	QC353072				26-AUG-2006	17:44	1.0	0.6693	2		1	
010	238_010	LCS	QC353124				26-AUG-2006	18:01	1.0	0.6647	7		1	
011	238_011	SAMPLE	188870-001				26-AUG-2006	18:18	1.0	0.009901			1	
012	238_012	SAMPLE	188870-002				26-AUG-2006	18:35	1.0	0.009901			1	
013	238_013	SAMPLE	188870-003				26-AUG-2006	18:53	1.0	0.009615			1	
014	238_014	SAMPLE	188870-004				26-AUG-2006	19:10	1.0	0.01			1	
015	238_015	SAMPLE	188870-005				26-AUG-2006	19:28	1.0	0.009615			1	
016	238_016	X	HEX				26-AUG-2006	19:46	1.0					
017	238_017	PEM	PEM				26-AUG-2006	20:04	1.0	1.0			1	
018	238_018	CCV	PEST_4				26-AUG-2006	20:21	1.0	1.0	5		1	
019	238_019	X	PEST_4				26-AUG-2006	20:39	1.0					
020	238_020	X	PEM				26-AUG-2006	20:57	1.0					
021	238_021	X	HEX				26-AUG-2006	21:15	1.0					
022	238_022	SAMPLE	188870-006				26-AUG-2006	21:33	1.0	0.009709			1	
023	238_023	SAMPLE	188870-001				26-AUG-2006	21:51	5.0	0.6673	7	2	1	
024	238_024	SAMPLE	188870-002				26-AUG-2006	22:08	10.0	0.6734	15		1	
025	238_025	MSS	188870-003				26-AUG-2006	22:26	10.0	0.6718	14		1	
026	238_026	SAMPLE	188870-004				26-AUG-2006	22:43	5.0	0.657	8		1	
027	238_027	SAMPLE	188870-005				26-AUG-2006	23:00	5.0	0.6716	7		1	
028	238_028	SAMPLE	188870-006				26-AUG-2006	23:17	5.0	0.6579	8		1	
029	238_029	X	HEX				26-AUG-2006	23:34	1.0					
030	238_030	SAMPLE	188793-011				26-AUG-2006	23:51	20.0	0.657	2		1	

Stds used: 1=S3952 2=S4177 3=S3699 4=S3834
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 188837 PEST Water
Curtis & Tompkins Laboratories

Sequence: 236343620 Instrument: GC16 Gas Chromatograph #16 ECD
Analytical Method: EPA 8081A SOP Version: 8081_rv7

Begun: 26-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Std	Used	>LR
031	238_031	X	HEX			27-AUG-2006 00:09	1.0					1		
032	238_032	X	PEM			27-AUG-2006 00:26	1.0	1.0			1	4		
033	238_033	CCV	PEST_5			27-AUG-2006 00:43	1.0	1.0			1	4		
034	238_034	X	PEST_5			27-AUG-2006 01:00	1.0					1		
035	238_035	PEM	PEM			27-AUG-2006 01:18	1.0	1.0			1	1		
036	238_036	X	HEX			27-AUG-2006 01:35	1.0							

Std's used: 1=S3952 2=S4177 3=S3699 4=S3834
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 188837 PEST Water
Curtis & Tompkins Laboratories

Sequence: 236346178 Instrument: GC16
Analytical Method: EPA 8081A

Gas Chromatograph #16 ECD
SOP Version: 8081_rv7

Begun: 28-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
001	240_001	X	HEX			28-AUG-2006 09:38	1.0								
002	240_002	X	PEM			28-AUG-2006 09:55	1.0			1			1		
003	240_003	X	PEST_3			28-AUG-2006 10:13	1.0			40			2	ac	
004	240_004	X	PEST_3			28-AUG-2006 10:39	1.0			24			2	ac	
005	240_005	X	HEX			28-AUG-2006 11:04	1.0			1					
006	240_006	X	PRIMER			28-AUG-2006 11:22	1.0								
007	240_007	X	PRIMER			28-AUG-2006 11:39	1.0								
008	240_008	X	PRIMER			28-AUG-2006 11:57	1.0								
009	240_009	X	PRIMER			28-AUG-2006 12:15	1.0								
010	240_010	X	HEX			28-AUG-2006 12:33	1.0								
011	240_011	PEM	PEM			28-AUG-2006 12:50	1.0			1			1		
012	240_012	CCV	PEST_3			28-AUG-2006 13:08	1.0			28			2	ac	
013	240_013	X	HEX			28-AUG-2006 15:26	1.0								
014	240_014	X	PRIMER			28-AUG-2006 15:44	1.0								
015	240_015	X	PRIMER			28-AUG-2006 16:02	1.0								
016	240_016	X	PRIMER			28-AUG-2006 16:20	1.0								
017	240_017	X	PRIMER			28-AUG-2006 16:37	1.0								
022	240_022	X	PRIMER			28-AUG-2006 18:05	1.0								
023	240_023	X	PRIMER			28-AUG-2006 18:23	1.0								
024	240_024	X	HEX			28-AUG-2006 18:41	1.0								
025	240_025	X	HEX			28-AUG-2006 18:59	1.0								
026	240_026	PEM	PEM			28-AUG-2006 19:17	1.0			1			1		
027	240_027	X	HEX			28-AUG-2006 19:35	1.0								
028	240_028	ICAL	PEST_1			28-AUG-2006 19:53	1.0						3		
029	240_029	ICAL	PEST_2			28-AUG-2006 20:11	1.0						4		
030	240_030	ICAL	PEST_3			28-AUG-2006 20:29	1.0						2		
031	240_031	ICAL	PEST_4			28-AUG-2006 20:46	1.0						5		
032	240_032	ICAL	PEST_5			28-AUG-2006 21:04	1.0						6		
033	240_033	ICAL	PEST_6			28-AUG-2006 21:22	1.0						7		
034	240_034	ICAL	PEST_7			28-AUG-2006 21:40	1.0						8		

Stds used: 1=S3952 2=S4177 3=S4176 4=S3833 5=S4178 6=S3834 7=S4042 8=S4043 9=S3877 10=S4238
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 188837 PEST Water
Curtis & Tompkins Laboratories

Sequence: 236346178 Instrument: GC16
Analytical Method: EPA 8081A

Gas Chromatograph #16 ECD
SOP Version: 8081_rv7

Begun: 28-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds	Used	>LR
035	240_035	X	HEX			28-AUG-2006 21:57	1.0								
036	240_036	X	ICV			28-AUG-2006 22:15	1.0	29		1			9		
037	240_037	X	ICV			28-AUG-2006 22:32	1.0	29		1			9		
038	240_038	X	HEX			28-AUG-2006 22:49	1.0								
039	240_039	PEM	PEM			28-AUG-2006 23:06	1.0			1			1		
040	240_040	CCV	PEST_3			28-AUG-2006 23:23	1.0						2		
041	240_041	X	HEX			28-AUG-2006 23:41	1.0								
042	240_042	X	PRIMER			29-AUG-2006 10:39	1.0								
043	240_043	X	PRIMER			29-AUG-2006 10:56	1.0								
044	240_044	X	PRIMER			29-AUG-2006 11:14	1.0								
045	240_045	X	PRIMER			29-AUG-2006 11:31	1.0								
046	240_046	X	HEX			29-AUG-2006 11:49	1.0								
047	240_047	X	ICV			29-AUG-2006 15:05	1.0			1			10		
048	240_048	ICV	ICV			29-AUG-2006 15:22	1.0	4		1			10		

Stds used: 1=S3952 2=S4177 3=S4176 4=S3833 5=S4178 6=S3834 7=S4042 8=S4043 9=S3877 10=S4238
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 188837 PEST Water
Curtis & Tompkins Laboratories

Sequence: 246346494 Instrument: GC21
Analytical Method: EPA 8081A

Gas Chromatograph #21 ECD
SOP Version: 8081_rv7

Begun: 28-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
001	240_001	X	HEX			28-AUG-2006	14:54	1.0							
002	240_002	CCV	PEST_4			28-AUG-2006	15:12	1.0					1		
003	240_003	PEM	PEM			28-AUG-2006	15:29	1.0		1			2		
004	240_004	X	PRIMER			28-AUG-2006	17:39	1.0							
005	240_005	X	PRIMER			28-AUG-2006	17:56	1.0							
006	240_006	X	PRIMER			28-AUG-2006	18:13	1.0							
007	240_007	X	PRIMER			28-AUG-2006	18:31	1.0							
008	240_008	X	PRIMER			28-AUG-2006	18:48	1.0							
009	240_009	X	PRIMER			28-AUG-2006	19:05	1.0							
010	240_010	X	PRIMER			28-AUG-2006	19:22	1.0							
011	240_011	X	HEX			28-AUG-2006	19:40	1.0							
012	240_012	X	HEX			28-AUG-2006	19:57	1.0							
013	240_013	X	HEX			28-AUG-2006	20:14	1.0							
014	240_014	ICAL	PEST_1			28-AUG-2006	20:31	1.0					3		
015	240_015	ICAL	PEST_2			28-AUG-2006	20:49	1.0					4		
016	240_016	ICAL	PEST_3			28-AUG-2006	21:06	1.0					5		
017	240_017	ICAL	PEST_4			28-AUG-2006	21:23	1.0					1		
018	240_018	ICAL	PEST_5			28-AUG-2006	21:40	1.0					6		
019	240_019	ICAL	PEST_6			28-AUG-2006	21:58	1.0					7		
020	240_020	ICAL	PEST_7			28-AUG-2006	22:15	1.0					8		
021	240_021	X	HEX			28-AUG-2006	22:32	1.0							
022	240_022	X,ICV	ICV			28-AUG-2006	22:49	1.0					9		
023	240_023	ICV	ICV			28-AUG-2006	23:07	1.0		2			1		
024	240_024	X	HEX			28-AUG-2006	23:24	1.0							

Stds used: 1=S3699 2=S3952 3=S2827 4=S3833 5=S3698 6=S3834 7=S4042 8=S4043 9=S3877

SEQUENCE SUMMARY FOR 188837 PEST Water
Curtis & Tompkins Laboratories

Sequence: 236348019 Instrument: GC16
Analytical Method: EPA 8081A

Gas Chromatograph #16 ECD
SOP Version: 8081_rv7

Begun: 29-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds	Used	>LR
001	241_001	PEM	PEM			29-AUG-2006 16:19	1.0	1.0			1	1		
002	241_002	CCV	PEST_3			29-AUG-2006 16:36	1.0	1.0	3		1	2		
003	241_003	X	HEX			29-AUG-2006 18:45	1.0							
004	241_004	BLANK	QC353706			29-AUG-2006 19:02	1.0	0.01	2		1			
005	241_005	BS	QC353707			29-AUG-2006 19:20	1.0	0.01	5		1			
006	241_006	BSD	QC353708			29-AUG-2006 19:37	1.0	0.01	5		1			
007	241_007	SAMPLE	188947-003			29-AUG-2006 19:55	1.0	0.009615	2		1			
008	241_008	SAMPLE	188947-004			29-AUG-2006 20:13	1.0	0.009524	2		1			
009	241_009	SAMPLE	188837-002			29-AUG-2006 20:30	1.0	0.009434	2		1			
010	241_010	SAMPLE	188837-003			29-AUG-2006 20:48	1.0	0.009434	2		1			
011	241_011	SAMPLE	188837-004			29-AUG-2006 21:06	1.0	0.009434	2	4	1			
012	241_012	SAMPLE	188837-006			29-AUG-2006 21:23	1.0	0.009524	2		1			
013	241_013	SAMPLE	188837-007			29-AUG-2006 21:41	1.0	0.009434	2		1			
014	241_014	X	HEX			29-AUG-2006 21:59	1.0							
015	241_015	PEM	PEM			29-AUG-2006 22:16	1.0	1.0			1	1		
016	241_016	CCV	PEST_4			29-AUG-2006 22:33	1.0	1.0	2		1	3		
017	241_017	X	PEST_4			29-AUG-2006 22:51	1.0					3		
018	241_018	X	PEM			29-AUG-2006 23:08	1.0	1.0			1	1		
019	241_019	X	HEX			29-AUG-2006 23:26	1.0							
020	241_020	SAMPLE	188837-012			29-AUG-2006 23:44	1.0	0.009615	10	1	1			
021	241_021	SAMPLE	188837-013			30-AUG-2006 00:02	1.0	0.009615	10	3	1			
022	241_022	SAMPLE	188837-014			30-AUG-2006 00:20	1.0	0.009524	10		1			
023	241_023	MSS	188837-015			30-AUG-2006 00:38	1.0	0.009615	10	1	1			
024	241_024	SAMPLE	188837-016			30-AUG-2006 00:56	1.0	0.009615	10	1	1			
025	241_025	SAMPLE	188869-001			30-AUG-2006 01:13	1.0	0.009524	10	3	1			
026	241_026	X	HEX			30-AUG-2006 01:30	1.0							
027	241_027	X	PEM			30-AUG-2006 01:47	1.0	1.0			1	1		
028	241_028	CCV	PEST_5			30-AUG-2006 02:05	1.0	1.0	10		1	4		
029	241_029	X	PEST_5			30-AUG-2006 02:22	1.0					4		
030	241_030	PEM	PEM			30-AUG-2006 02:39	1.0	1.0			1	1		
031	241_031	X	HEX			30-AUG-2006 02:56	1.0							

Stds used: 1=S4175 2=S4177 3=S4178 4=S3834

SEQUENCE SUMMARY FOR 188837 PEST Water
Curtis & Tompkins Laboratories

Sequence: 246349166 Instrument: GC21
Analytical Method: EPA 8081A

Gas Chromatograph #21 ECD
SOP Version: 8081_rv7

Begun: 30-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used	>LR
001	242_001	X	HEX			30-AUG-2006 11:26	1.0						
002	242_002	PEM	PEM			30-AUG-2006 11:42	1.0	1.0			1	1	
003	242_003	CCV	PEST_4			30-AUG-2006 11:59	1.0	1.0			1	2	
004	242_004	X	HEX			30-AUG-2006 15:12	1.0						
005	242_005	LCS	QC353501		116797 Soil	30-AUG-2006 15:29	1.0	0.6711	1		1		
006	242_006	SAMPLE	188841-001		116797 Soil	30-AUG-2006 15:52	20.0	0.6723	5		1		
007	242_007	SAMPLE	188841-002		116797 Soil	30-AUG-2006 16:09	40.0	0.6623	6		1		1:DDT44=221.388
008	242_008	X	HEX			30-AUG-2006 16:27	1.0						
009	242_009	PEM	PEM			30-AUG-2006 16:44	1.0	1.0			1	1	
010	242_010	CCV	PEST_3			30-AUG-2006 17:01	1.0	1.0			1	3	
011	242_011	X	PEM			30-AUG-2006 18:21	1.0					1	
012	242_012	X	HEX			30-AUG-2006 18:38	1.0						
013	242_013	SAMPLE	188837-004		116753 Water	30-AUG-2006 18:55	1.0	0.009434	1	3	1		
014	242_014	SAMPLE	188839-002		116693 Soil	30-AUG-2006 19:12	2.0	0.6651	4		1		2:CL10BZ=250.582
015	242_015	SAMPLE	188839-003		116693 Soil	30-AUG-2006 19:30	2.0	0.6766	2		1		N
016	242_016	SAMPLE	188839-004		116693 Soil	30-AUG-2006 19:47	1.0	0.6773	2		1		N
017	242_017	SAMPLE	188839-005		116693 Soil	30-AUG-2006 20:04	1.0	0.6709	2		1		
018	242_018	SAMPLE	188839-006		116693 Soil	30-AUG-2006 20:21	2.0	0.6775	2		1		
019	242_019	SAMPLE	188839-010		116693 Soil	30-AUG-2006 20:39	1.0	0.664	2	1	1		
020	242_020	X	HEX			30-AUG-2006 20:56	1.0						
021	242_021	PEM	PEM			30-AUG-2006 21:13	1.0	1.0			1	1	
022	242_022	X	PEST_5			30-AUG-2006 21:30	1.0					4	
023	242_023	CCV	PEST_5			30-AUG-2006 21:48	1.0	1.0			1	4	
024	242_024	X	PEM			30-AUG-2006 22:05	1.0					1	
025	242_025	X	HEX			30-AUG-2006 22:22	1.0					1	

Stds used: 1=S4175 2=S4178 3=S4177 4=S3834

SEQUENCE SUMMARY FOR 188837 PEST Water
Curtis & Tompkins Laboratories

Sequence: 806350494 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Begun: 31-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	stds	Used	>LR
001	243_001	X	PRIMER			31-AUG-2006 09:34	1.0								
002	243_002	X	PRIMER			31-AUG-2006 09:51	1.0								
003	243_003	X	PRIMER			31-AUG-2006 10:09	1.0								
004	243_004	X	PRIMER			31-AUG-2006 10:26	1.0								
005	243_005	X	HEX			31-AUG-2006 10:44	1.0								
006	243_006	X	PEM			31-AUG-2006 11:01	1.0								
007	243_007	X	PEST_3			31-AUG-2006 11:19	1.0								
008	243_008	X	PRIMER			31-AUG-2006 17:42	1.0		40	1					
009	243_009	X	PRIMER			31-AUG-2006 18:00	1.0								
010	243_010	X	PRIMER			31-AUG-2006 18:19	1.0								
011	243_011	X	PRIMER			31-AUG-2006 18:37	1.0								
012	243_012	X	PRIMER			31-AUG-2006 18:54	1.0								
013	243_013	X	PRIMER			31-AUG-2006 19:11	1.0								
014	243_014	X	PRIMER			31-AUG-2006 19:29	1.0								
015	243_015	X	PRIMER			31-AUG-2006 19:46	1.0								
016	243_016	X	HEX			31-AUG-2006 20:03	1.0								
017	243_017	X	HEX			31-AUG-2006 20:21	1.0								
018	243_018	PEM	PEM			31-AUG-2006 20:38	1.0			1					
019	243_019	X	HEX			31-AUG-2006 20:55	1.0								
020	243_020	ICAL	PEST_1			31-AUG-2006 21:13	1.0								
021	243_021	ICAL	PEST_2			31-AUG-2006 21:30	1.0								
022	243_022	ICAL	PEST_3			31-AUG-2006 21:47	1.0								
023	243_023	ICAL	PEST_4			31-AUG-2006 22:05	1.0								
024	243_024	ICAL	PEST_5			31-AUG-2006 22:22	1.0								
025	243_025	ICAL	PEST_6			31-AUG-2006 22:40	1.0								
026	243_026	ICAL	PEST_7			31-AUG-2006 22:57	1.0								
027	243_027	X	HEX			31-AUG-2006 23:14	1.0								
028	243_028	X	ICV			31-AUG-2006 23:32	1.0								
029	243_029	ICV	ICV			31-AUG-2006 23:49	1.0		2	1					
030	243_030	X	HEX			01-SEP-2006 00:06	1.0								

Std's used: 1=S4175 2=S4177 3=S4176 4=S3833 5=S4178 6=S3834 7=S4042 8=S4043 9=S3877
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 188837 PEST Water
Curtis & Tompkins Laboratories

Sequence: 806351984 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Begun: 01-SEP-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
001	244_001	X	HEX			01-SEP-2006 10:24	1.0							
002	244_002	PEM	PEM			01-SEP-2006 10:42	1.0	1.0			1	1		
003	244_003	CCV	PEST-3			01-SEP-2006 10:59	1.0	1.0			1	2		
004	244_004	X	HEX			01-SEP-2006 17:25	1.0							
005	244_005	BLANK	QC354315			01-SEP-2006 17:43	1.0	0.01	9		1			
006	244_006	BS	QC354316			01-SEP-2006 18:00	1.0	0.01	16	1	1			
007	244_007	BSD	QC354317			01-SEP-2006 18:18	1.0	0.01	16	9	1			
008	244_008	MS	QC353321			01-SEP-2006 18:35	1.0	0.009434	15	1	1			
009	244_009	MSD	QC353322			01-SEP-2006 18:52	1.0	0.009615	15	5	1			
010	244_010	SAMPLE	189065-014			01-SEP-2006 19:10	1.0	0.009434	1	2	1			1:BHCGAM-150.544
011	244_011	SAMPLE	189065-015			01-SEP-2006 19:27	1.0							
012	244_012	SAMPLE	189029-001			01-SEP-2006 19:44	20.0	0.009615	9		1			
013	244_013	SAMPLE	189047-008			01-SEP-2006 20:02	40.0	0.6734	8		1			
014	244_014	X	HEX			01-SEP-2006 20:19	1.0							
015	244_015	PEM	PEM			01-SEP-2006 20:37	1.0	1.0			1	1		
016	244_016	CCV	PEST_4			01-SEP-2006 20:54	1.0	1.0	16		1	3		214
017	244_017	X	PEST_4			01-SEP-2006 21:12	1.0					3		
018	244_018	X	PEM			01-SEP-2006 21:29	1.0					1		
019	244_019	X	HEX			01-SEP-2006 21:46	1.0							
020	244_020	BLANK	QC354307			01-SEP-2006 22:04	1.0	0.6711	9		1			
021	244_021	LCS	QC354308			01-SEP-2006 22:21	1.0	0.6577	16		1			
022	244_022	SAMPLE	189058-001			01-SEP-2006 22:39	1.0	0.6647	9		1			
023	244_023	SAMPLE	189058-002			01-SEP-2006 22:56	1.0	0.675	9		1			
024	244_024	SAMPLE	189065-001			01-SEP-2006 23:13	10.0	0.6592	1		1			
025	244_025	SAMPLE	189065-002			01-SEP-2006 23:31	5.0	0.6568	1		1			
026	244_026	SAMPLE	189065-003			01-SEP-2006 23:48	1.0	0.6754	1		1			
027	244_027	SAMPLE	189065-004			02-SEP-2006 00:05	10.0	0.6577	1		1			
028	244_028	SAMPLE	189065-005			02-SEP-2006 00:23	5.0	0.675	1		1			
029	244_029	SAMPLE	189065-006			02-SEP-2006 00:40	1.0	0.6623	1		1			
030	244_030	X	HEX			02-SEP-2006 00:58	1.0							

Stds used: 1=S4175 2=S4177 3=S4178 4=S3834

Flags used: >=closing ac=average CCV drift out

SEQUENCE SUMMARY FOR 188837 PEST Water
Curtis & Tompkins Laboratories

Sequence: 806351984 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Begun: 01-SEP-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds Used	>LR
031	244_031	PEM	PEM			02-SEP-2006 01:15	1.0	1.0			1	1	
032	244_032	CCV	PEST_5			02-SEP-2006 01:32	1.0	1.0			1	4	
033	244_033	X	PEST_5			02-SEP-2006 01:50	1.0					4	
034	244_034	X	PEM			02-SEP-2006 02:07	1.0					1	
035	244_035	X	HEX			02-SEP-2006 02:24	1.0						
036	244_036	SAMPLE	189065-007	116992	Soil	02-SEP-2006 02:42	10.0	0.6603	1		1	>ac	
037	244_037	SAMPLE	189065-008	116992	Soil	02-SEP-2006 02:59	5.0	0.6575	1		1	>ac	
038	244_038	SAMPLE	189065-009	116992	Soil	02-SEP-2006 03:16	5.0	0.668	1		1	>ac	
039	244_039	SAMPLE	189065-010	116992	Soil	02-SEP-2006 03:34	10.0	0.6585	1		1	>ac	
040	244_040	SAMPLE	189065-011	116992	Soil	02-SEP-2006 03:51	1.0	0.6579	1		1	>ac	
041	244_041	SAMPLE	189065-012	116992	Soil	02-SEP-2006 04:09	1.0	0.6642	1		1	>ac	
042	244_042	MSS	189065-013	116992	Soil	02-SEP-2006 04:26	1.0	0.6658	13		1	>ac	
043	244_043	MS	QC354309	116992	Soil	02-SEP-2006 04:43	1.0	0.6609	13		1	>ac	
044	244_044	MSD	QC354310	116992	Soil	02-SEP-2006 05:01	1.0	0.6707	13		1	>ac	
045	244_045	X	HEX			02-SEP-2006 05:18	1.0						
046	244_046	PEM	PEM			02-SEP-2006 05:36	1.0	1.0			1	1	
047	244_047	CCV	PEST_3			02-SEP-2006 05:53	1.0	1.0	13		1	2 ac	
048	244_048	X	PEST_3			02-SEP-2006 06:11	1.0	1.0	19		1	2 ac	
049	244_049	X	PEM			02-SEP-2006 06:28	1.0					1	
050	244_050	X	HEX			02-SEP-2006 06:45	1.0						

Stds used: 1=S4175 2=S4177 3=S4178 4=S3834
Flags used: >=closing ac=average CCV drift out

REPORTING SUMMARY FOR 188837 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
188837-002	alpha-BHC	GC16	A	08/29/06 20:30
188837-002	beta-BHC	GC16	A	08/29/06 20:30
188837-002	gamma-BHC	GC16	A	08/29/06 20:30
188837-002	delta-BHC	GC16	A	08/29/06 20:30
188837-002	Heptachlor	GC16	A	08/29/06 20:30
188837-002	Aldrin	GC16	A	08/29/06 20:30
188837-002	Heptachlor epoxide	GC16	A	08/29/06 20:30
188837-002	Endosulfan I	GC16	A	08/29/06 20:30
188837-002	Dieldrin	GC16	A	08/29/06 20:30
188837-002	4,4'-DDE	GC16	A	08/29/06 20:30
188837-002	Endrin	GC16	A	08/29/06 20:30
188837-002	Endosulfan II	GC16	A	08/29/06 20:30
188837-002	Endosulfan sulfate	GC16	A	08/29/06 20:30
188837-002	4,4'-DDD	GC16	A	08/29/06 20:30
188837-002	4,4'-DDT	GC16	A	08/29/06 20:30
188837-002	alpha-Chlordane	GC16	A	08/29/06 20:30
188837-002	gamma-Chlordane	GC16	A	08/29/06 20:30
188837-002	Methoxychlor	GC16	A	08/29/06 20:30
188837-002	Endrin ketone	GC16	A	08/29/06 20:30
188837-002	Toxaphene	GC16	A	08/29/06 20:30
188837-002	TCMX	GC16	A	08/29/06 20:30
188837-002	Decachlorobiphenyl	GC16	A	08/29/06 20:30
188837-003	alpha-BHC	GC16	A	08/29/06 20:48
188837-003	beta-BHC	GC16	A	08/29/06 20:48
188837-003	gamma-BHC	GC16	A	08/29/06 20:48
188837-003	delta-BHC	GC16	A	08/29/06 20:48
188837-003	Heptachlor	GC16	A	08/29/06 20:48
188837-003	Aldrin	GC16	A	08/29/06 20:48
188837-003	Heptachlor epoxide	GC16	A	08/29/06 20:48
188837-003	Endosulfan I	GC16	A	08/29/06 20:48
188837-003	Dieldrin	GC16	A	08/29/06 20:48
188837-003	4,4'-DDE	GC16	A	08/29/06 20:48
188837-003	Endrin	GC16	A	08/29/06 20:48
188837-003	Endosulfan II	GC16	A	08/29/06 20:48
188837-003	Endosulfan sulfate	GC16	A	08/29/06 20:48
188837-003	4,4'-DDD	GC16	A	08/29/06 20:48
188837-003	4,4'-DDT	GC16	A	08/29/06 20:48
188837-003	alpha-Chlordane	GC16	A	08/29/06 20:48
188837-003	gamma-Chlordane	GC16	A	08/29/06 20:48
188837-003	Methoxychlor	GC16	A	08/29/06 20:48
188837-003	Endrin ketone	GC16	A	08/29/06 20:48
188837-003	Toxaphene	GC16	A	08/29/06 20:48
188837-003	TCMX	GC16	A	08/29/06 20:48
188837-003	Decachlorobiphenyl	GC16	A	08/29/06 20:48
188837-004	alpha-BHC	GC21	A	08/30/06 18:55
188837-004	beta-BHC	GC21	A	08/30/06 18:55
188837-004	gamma-BHC	GC21	A	08/30/06 18:55
188837-004	delta-BHC	GC21	A	08/30/06 18:55
188837-004	Heptachlor	GC21	A	08/30/06 18:55
188837-004	Aldrin	GC21	A	08/30/06 18:55
188837-004	Heptachlor epoxide	GC21	A	08/30/06 18:55
188837-004	Endosulfan I	GC21	A	08/30/06 18:55

REPORTING SUMMARY FOR 188837 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
188837-004	Dieldrin	GC21	A	08/30/06 18:55
188837-004	4,4'-DDE	GC21	B	08/30/06 18:55
188837-004	Endrin	GC21	A	08/30/06 18:55
188837-004	Endosulfan II	GC21	A	08/30/06 18:55
188837-004	Endosulfan sulfate	GC21	A	08/30/06 18:55
188837-004	4,4'-DDD	GC21	B	08/30/06 18:55
188837-004	4,4'-DDT	GC21	B	08/30/06 18:55
188837-004	alpha-Chlordane	GC21	A	08/30/06 18:55
188837-004	gamma-Chlordane	GC21	A	08/30/06 18:55
188837-004	Methoxychlor	GC21	A	08/30/06 18:55
188837-004	Endrin ketone	GC21	A	08/30/06 18:55
188837-004	Toxaphene	GC21	A	08/30/06 18:55
188837-004	TCMX	GC21	A	08/30/06 18:55
188837-004	Decachlorobiphenyl	GC21	A	08/30/06 18:55
188837-006	alpha-BHC	GC16	A	08/29/06 21:23
188837-006	beta-BHC	GC16	A	08/29/06 21:23
188837-006	gamma-BHC	GC16	A	08/29/06 21:23
188837-006	delta-BHC	GC16	A	08/29/06 21:23
188837-006	Heptachlor	GC16	A	08/29/06 21:23
188837-006	Aldrin	GC16	A	08/29/06 21:23
188837-006	Heptachlor epoxide	GC16	A	08/29/06 21:23
188837-006	Endosulfan I	GC16	A	08/29/06 21:23
188837-006	Dieldrin	GC16	A	08/29/06 21:23
188837-006	4,4'-DDE	GC16	A	08/29/06 21:23
188837-006	Endrin	GC16	A	08/29/06 21:23
188837-006	Endosulfan II	GC16	A	08/29/06 21:23
188837-006	Endosulfan sulfate	GC16	A	08/29/06 21:23
188837-006	4,4'-DDD	GC16	A	08/29/06 21:23
188837-006	4,4'-DDT	GC16	A	08/29/06 21:23
188837-006	alpha-Chlordane	GC16	A	08/29/06 21:23
188837-006	gamma-Chlordane	GC16	A	08/29/06 21:23
188837-006	Methoxychlor	GC16	A	08/29/06 21:23
188837-006	Endrin ketone	GC16	A	08/29/06 21:23
188837-006	Toxaphene	GC16	A	08/29/06 21:23
188837-006	TCMX	GC16	A	08/29/06 21:23
188837-006	Decachlorobiphenyl	GC16	A	08/29/06 21:23
188837-007	alpha-BHC	GC16	A	08/29/06 21:41
188837-007	beta-BHC	GC16	A	08/29/06 21:41
188837-007	gamma-BHC	GC16	A	08/29/06 21:41
188837-007	delta-BHC	GC16	A	08/29/06 21:41
188837-007	Heptachlor	GC16	A	08/29/06 21:41
188837-007	Aldrin	GC16	A	08/29/06 21:41
188837-007	Heptachlor epoxide	GC16	A	08/29/06 21:41
188837-007	Endosulfan I	GC16	A	08/29/06 21:41
188837-007	Dieldrin	GC16	A	08/29/06 21:41
188837-007	4,4'-DDE	GC16	A	08/29/06 21:41
188837-007	Endrin	GC16	A	08/29/06 21:41
188837-007	Endosulfan II	GC16	A	08/29/06 21:41
188837-007	Endosulfan sulfate	GC16	A	08/29/06 21:41
188837-007	4,4'-DDD	GC16	A	08/29/06 21:41
188837-007	4,4'-DDT	GC16	A	08/29/06 21:41
188837-007	alpha-Chlordane	GC16	A	08/29/06 21:41

REPORTING SUMMARY FOR 188837 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
188837-007	gamma-Chlordane	GC16	A	08/29/06 21:41
188837-007	Methoxychlor	GC16	A	08/29/06 21:41
188837-007	Endrin ketone	GC16	A	08/29/06 21:41
188837-007	Toxaphene	GC16	A	08/29/06 21:41
188837-007	TCMX	GC16	A	08/29/06 21:41
188837-007	Decachlorobiphenyl	GC16	A	08/29/06 21:41
188837-012	alpha-BHC	GC16	A	08/29/06 23:44
188837-012	beta-BHC	GC16	A	08/29/06 23:44
188837-012	gamma-BHC	GC16	A	08/29/06 23:44
188837-012	delta-BHC	GC16	A	08/29/06 23:44
188837-012	Heptachlor	GC16	A	08/29/06 23:44
188837-012	Aldrin	GC16	A	08/29/06 23:44
188837-012	Heptachlor epoxide	GC16	A	08/29/06 23:44
188837-012	Endosulfan I	GC16	A	08/29/06 23:44
188837-012	Dieldrin	GC16	A	08/29/06 23:44
188837-012	4,4'-DDE	GC16	A	08/29/06 23:44
188837-012	Endrin	GC16	A	08/29/06 23:44
188837-012	Endosulfan II	GC16	A	08/29/06 23:44
188837-012	Endosulfan sulfate	GC16	A	08/29/06 23:44
188837-012	4,4'-DDD	GC16	A	08/29/06 23:44
188837-012	4,4'-DDT	GC16	A	08/29/06 23:44
188837-012	alpha-Chlordane	GC16	A	08/29/06 23:44
188837-012	gamma-Chlordane	GC16	A	08/29/06 23:44
188837-012	Methoxychlor	GC16	A	08/29/06 23:44
188837-012	Endrin ketone	GC16	A	08/29/06 23:44
188837-012	Toxaphene	GC16	A	08/29/06 23:44
188837-012	TCMX	GC16	A	08/29/06 23:44
188837-012	Decachlorobiphenyl	GC16	A	08/29/06 23:44
188837-013	alpha-BHC	GC16	A	08/30/06 00:02
188837-013	beta-BHC	GC16	A	08/30/06 00:02
188837-013	gamma-BHC	GC16	A	08/30/06 00:02
188837-013	delta-BHC	GC16	A	08/30/06 00:02
188837-013	Heptachlor	GC16	A	08/30/06 00:02
188837-013	Aldrin	GC16	A	08/30/06 00:02
188837-013	Heptachlor epoxide	GC16	A	08/30/06 00:02
188837-013	Endosulfan I	GC16	A	08/30/06 00:02
188837-013	Dieldrin	GC16	A	08/30/06 00:02
188837-013	4,4'-DDE	GC16	A	08/30/06 00:02
188837-013	Endrin	GC16	A	08/30/06 00:02
188837-013	Endosulfan II	GC16	A	08/30/06 00:02
188837-013	Endosulfan sulfate	GC16	A	08/30/06 00:02
188837-013	4,4'-DDD	GC16	A	08/30/06 00:02
188837-013	4,4'-DDT	GC16	A	08/30/06 00:02
188837-013	alpha-Chlordane	GC16	A	08/30/06 00:02
188837-013	gamma-Chlordane	GC16	A	08/30/06 00:02
188837-013	Methoxychlor	GC16	A	08/30/06 00:02
188837-013	Endrin ketone	GC16	A	08/30/06 00:02
188837-013	Toxaphene	GC16	A	08/30/06 00:02
188837-013	TCMX	GC16	A	08/30/06 00:02
188837-013	Decachlorobiphenyl	GC16	A	08/30/06 00:02
188837-014	alpha-BHC	GC16	A	08/30/06 00:20

REPORTING SUMMARY FOR 188837 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
188837-014	beta-BHC	GC16	A	08/30/06 00:20
188837-014	gamma-BHC	GC16	A	08/30/06 00:20
188837-014	delta-BHC	GC16	A	08/30/06 00:20
188837-014	Heptachlor	GC16	A	08/30/06 00:20
188837-014	Aldrin	GC16	A	08/30/06 00:20
188837-014	Heptachlor epoxide	GC16	A	08/30/06 00:20
188837-014	Endosulfan I	GC16	A	08/30/06 00:20
188837-014	Dieldrin	GC16	A	08/30/06 00:20
188837-014	4,4'-DDE	GC16	A	08/30/06 00:20
188837-014	Endrin	GC16	A	08/30/06 00:20
188837-014	Endosulfan II	GC16	A	08/30/06 00:20
188837-014	Endosulfan sulfate	GC16	A	08/30/06 00:20
188837-014	4,4'-DDD	GC16	A	08/30/06 00:20
188837-014	4,4'-DDT	GC16	A	08/30/06 00:20
188837-014	alpha-Chlordane	GC16	A	08/30/06 00:20
188837-014	gamma-Chlordane	GC16	A	08/30/06 00:20
188837-014	Methoxychlor	GC16	A	08/30/06 00:20
188837-014	Endrin ketone	GC16	A	08/30/06 00:20
188837-014	Toxaphene	GC16	A	08/30/06 00:20
188837-014	TCMX	GC16	A	08/30/06 00:20
188837-014	Decachlorobiphenyl	GC16	A	08/30/06 00:20
188837-015	alpha-BHC	GC16	A	08/30/06 00:38
188837-015	beta-BHC	GC16	A	08/30/06 00:38
188837-015	gamma-BHC	GC16	A	08/30/06 00:38
188837-015	delta-BHC	GC16	A	08/30/06 00:38
188837-015	Heptachlor	GC16	A	08/30/06 00:38
188837-015	Aldrin	GC16	A	08/30/06 00:38
188837-015	Heptachlor epoxide	GC16	A	08/30/06 00:38
188837-015	Endosulfan I	GC16	A	08/30/06 00:38
188837-015	Dieldrin	GC16	A	08/30/06 00:38
188837-015	4,4'-DDE	GC16	A	08/30/06 00:38
188837-015	Endrin	GC16	A	08/30/06 00:38
188837-015	Endosulfan II	GC16	A	08/30/06 00:38
188837-015	Endosulfan sulfate	GC16	A	08/30/06 00:38
188837-015	4,4'-DDD	GC16	A	08/30/06 00:38
188837-015	4,4'-DDT	GC16	A	08/30/06 00:38
188837-015	alpha-Chlordane	GC16	A	08/30/06 00:38
188837-015	gamma-Chlordane	GC16	A	08/30/06 00:38
188837-015	Methoxychlor	GC16	A	08/30/06 00:38
188837-015	Endrin ketone	GC16	A	08/30/06 00:38
188837-015	Toxaphene	GC16	A	08/30/06 00:38
188837-015	TCMX	GC16	A	08/30/06 00:38
188837-015	Decachlorobiphenyl	GC16	A	08/30/06 00:38
188837-016	alpha-BHC	GC16	A	08/30/06 00:56
188837-016	beta-BHC	GC16	A	08/30/06 00:56
188837-016	gamma-BHC	GC16	A	08/30/06 00:56
188837-016	delta-BHC	GC16	A	08/30/06 00:56
188837-016	Heptachlor	GC16	A	08/30/06 00:56
188837-016	Aldrin	GC16	A	08/30/06 00:56
188837-016	Heptachlor epoxide	GC16	A	08/30/06 00:56
188837-016	Endosulfan I	GC16	A	08/30/06 00:56
188837-016	Dieldrin	GC16	A	08/30/06 00:56

REPORTING SUMMARY FOR 188837 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
188837-016	4,4'-DDE	GC16	A	08/30/06 00:56
188837-016	Endrin	GC16	A	08/30/06 00:56
188837-016	Endosulfan II	GC16	A	08/30/06 00:56
188837-016	Endosulfan sulfate	GC16	A	08/30/06 00:56
188837-016	4,4'-DDD	GC16	A	08/30/06 00:56
188837-016	4,4'-DDT	GC16	A	08/30/06 00:56
188837-016	alpha-Chlordane	GC16	A	08/30/06 00:56
188837-016	gamma-Chlordane	GC16	A	08/30/06 00:56
188837-016	Methoxychlor	GC16	A	08/30/06 00:56
188837-016	Endrin ketone	GC16	A	08/30/06 00:56
188837-016	Toxaphene	GC16	A	08/30/06 00:56
188837-016	TCMX	GC16	A	08/30/06 00:56
188837-016	Decachlorobiphenyl	GC16	A	08/30/06 00:56
QC353319	alpha-BHC	GC16	A	08/26/06 16:51
QC353319	beta-BHC	GC16	A	08/26/06 16:51
QC353319	gamma-BHC	GC16	A	08/26/06 16:51
QC353319	delta-BHC	GC16	A	08/26/06 16:51
QC353319	Heptachlor	GC16	A	08/26/06 16:51
QC353319	Aldrin	GC16	A	08/26/06 16:51
QC353319	Heptachlor epoxide	GC16	A	08/26/06 16:51
QC353319	Endosulfan I	GC16	A	08/26/06 16:51
QC353319	Dieldrin	GC16	A	08/26/06 16:51
QC353319	4,4'-DDE	GC16	A	08/26/06 16:51
QC353319	Endrin	GC16	A	08/26/06 16:51
QC353319	Endosulfan II	GC16	A	08/26/06 16:51
QC353319	Endosulfan sulfate	GC16	A	08/26/06 16:51
QC353319	4,4'-DDD	GC16	A	08/26/06 16:51
QC353319	4,4'-DDT	GC16	A	08/26/06 16:51
QC353319	alpha-Chlordane	GC16	A	08/26/06 16:51
QC353319	gamma-Chlordane	GC16	A	08/26/06 16:51
QC353319	Methoxychlor	GC16	A	08/26/06 16:51
QC353319	Endrin ketone	GC16	A	08/26/06 16:51
QC353319	Toxaphene	GC16	A	08/26/06 16:51
QC353319	TCMX	GC16	A	08/26/06 16:51
QC353319	Decachlorobiphenyl	GC16	A	08/26/06 16:51
QC353320	gamma-BHC	GC16	A	08/26/06 17:09
QC353320	Heptachlor	GC16	A	08/26/06 17:09
QC353320	Aldrin	GC16	A	08/26/06 17:09
QC353320	Dieldrin	GC16	A	08/26/06 17:09
QC353320	Endrin	GC16	A	08/26/06 17:09
QC353320	4,4'-DDT	GC16	A	08/26/06 17:09
QC353320	TCMX	GC16	A	08/26/06 17:09
QC353320	Decachlorobiphenyl	GC16	A	08/26/06 17:09
QC353321	gamma-BHC	GC23	A	09/01/06 18:35
QC353321	Heptachlor	GC23	A	09/01/06 18:35
QC353321	Aldrin	GC23	A	09/01/06 18:35
QC353321	Dieldrin	GC23	A	09/01/06 18:35
QC353321	Endrin	GC23	A	09/01/06 18:35
QC353321	4,4'-DDT	GC23	A	09/01/06 18:35
QC353321	TCMX	GC23	A	09/01/06 18:35
QC353321	Decachlorobiphenyl	GC23	A	09/01/06 18:35

REPORTING SUMMARY FOR 188837 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC353322	gamma-BHC	GC23	A	09/01/06 18:52
QC353322	Heptachlor	GC23	A	09/01/06 18:52
QC353322	Aldrin	GC23	A	09/01/06 18:52
QC353322	Dieldrin	GC23	A	09/01/06 18:52
QC353322	Endrin	GC23	A	09/01/06 18:52
QC353322	4,4'-DDT	GC23	A	09/01/06 18:52
QC353322	TCMX	GC23	A	09/01/06 18:52
QC353322	Decachlorobiphenyl	GC23	A	09/01/06 18:52

Curtis & Tompkins Laboratories

Sample Preparation Summary

29-AUG-2006 16:09

Batch Number : 116753
Date Extracted : 24-AUG-2006
Extracted by : Robert F Wellbrock
Prep Method : 3520C

Analysis : 8081
Bg group : N/A
Units : mL
Clean-up :

Spike #1 ID : S4187B
Spike #2 ID : S4098A
Spike #3 ID :
SOP Version : 8081w rv14

Sample	Type	Client	Matrix	Init	Units	Final	Prep	Clean	pH	Sp 1	Sp 2	Sp 3	Analyses	Clean	Comments
188837-002		Treadwell & Rollo	Water	1060	mL	10	0.009434	1	7	.025	0		8081		
188837-003		Treadwell & Rollo	Water	1060	mL	10	0.009434	1	6	.025	0		8081		
188837-004		Treadwell & Rollo	Water	1060	mL	10	0.009434	1	6	.025	0		8081		
188837-006		Treadwell & Rollo	Water	1050	mL	10	0.009524	1	6	.025	0		8081		
188837-007		Treadwell & Rollo	Water	1060	mL	10	0.009434	1	6	.025	0		8081		
188837-012		Treadwell & Rollo	Water	1040	mL	10	0.009615	1	5	.025	0		8081		
188837-013		Treadwell & Rollo	Water	1040	mL	10	0.009615	1	7	.025	0		8081		
188837-014		Treadwell & Rollo	Water	1050	mL	10	0.009524	1	7	.025	0		8081		
188837-015		Treadwell & Rollo	Water	1040	mL	10	0.009615	1	6	.025	0		8081		
188837-016		Treadwell & Rollo	Water	1040	mL	10	0.009615	1	6	.025	0		8081		
188869-001		Treadwell & Rollo	Water	1050	mL	10	0.009524	1	5	.025	0		8081		
188870-001		Tetra Tech EC, Inc.	TCLP Leach	1010	mL	10	0.009901	1	7	.025	0		8081		
188870-002		Tetra Tech EC, Inc.	TCLP Leach	1010	mL	10	0.009901	1	7	.025	0		8081		
188870-003		Tetra Tech EC, Inc.	TCLP Leach	1040	mL	10	0.009615	1	7	.025	0		8081		
188870-004		Tetra Tech EC, Inc.	TCLP Leach	1000	mL	10	0.010000	1	7	.025	0		8081		
188870-005		Tetra Tech EC, Inc.	TCLP Leach	1040	mL	10	0.009615	1	7	.025	0		8081		
188870-006		Tetra Tech EC, Inc.	TCLP Leach	1030	mL	10	0.009709	1	7	.025	0		8081		
OC353319	BLANK		Water	1000	mL	10	0.010000	1		.025	0		8081		
OC353320	LCS		Water	1000	mL	10	0.010000	1		.025	.025		8081		
OC353321	MS	of 188837-015	Water	1060	mL	10	0.009434	1	6	.025	.025		8081		
OC353322	MSD	of 188837-015	Water	1040	mL	10	0.009615	1	6	.025	.025		8081		
OC353323	PREPBLK		TCLP Leach	1040	mL	10	0.009615	1	7	.025	0		8081		

MSS

Prep Chemist:

JOM for RFW

Reviewed By:

Date: 8/29/06

Relinquished By:

JOM for FW

Received By:

Date: 8/29/06

LIMS Batch No: 116753
 LIMS Analysis: 8081
 Extracted by: RFW
 Date Extracted: 8/24/06

Extraction Method:
☐ EPA 3510c sep. funnel
☒ EPA 3520c cont. L/L
☐ _____

Cleanup Method (if needed):
☐ EPA 3640a GPC
☐ EPA 3620b Florisil
☐ _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
188837-002 A	1060	7	10		
-003 B	↓	6			
-004	↓				
-006	1050				
-007	1060	↓			
-012 N	1040	5			
-013 A	1040	7			
-014 B	1050	7			
-015 A	1040	6			MSS
-016 A	↓	↓			
188869-001 N	1050	5			
188870-001	1010	7			TCLP Leachate
-002	1010				
-003	1040				
-004	1000				
-005	1040				
-006	1030				
MB QC353319	1000	N/A			
LCS	20	↓			
MS	21	6			188837-015 F
MSD	22	↓			188837-015 B
PREPBLK	23	N/A			TCLP Leachate
JRM 8/24/06					

0.025 mL of surrogate solution was added to all samples
 0.025 mL of matrix spike solution was added to all spikes

☒ Samples continuously extracted with about 450 mL of CH_2Cl_2

Extraction Start Time:

Extraction End Time:

☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2

Extracts filtered through baked, CH_2Cl_2 rinsed powdered Na_2SO_4

Exchanged 2x with Hexane

Concentrated: ☒ to volumes as noted above ☐ to clean-up volume

Clean-up (if necessary): ☐ GPC (see GPC run log) ☐ Florisil

Mfg & Lot# / LIMS # / Time Date/ Initials

54187 B	RFW 8/24/06
54098 A	
EM46069	
1330	↓
0748	JRM 8/25/06
NA	AW 8/23/06
EM46069	
EM46069	
NA	↓

8/24/06

Extraction Chemist Date

8/29/06



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories
MDL Summary for EPA 8081A Water
As of 09/24/06

Analyte	Units	GC21 A	GC21 B	GC16 A	GC16 B	GC23 A	GC23 B
gamma-BHC	ug/L	0.0065	0.0039	0.0032	0.0025	0.0029	0.0039
Heptachlor	ug/L	0.0083	0.0056	0.0057	0.0061	0.0029	0.0055
Aldrin	ug/L	0.0094	0.0070	0.0066	0.0066	0.0062	0.0077
Dieldrin	ug/L	0.011	0.0051	0.0074	0.0070	0.0041	0.0097
Endrin	ug/L	0.012	0.011	0.0095	0.0083	0.0054	0.011
4,4'-DDT	ug/L	0.012	0.0071	0.011	0.0099	0.0088	0.0087
alpha-BHC	ug/L	0.0063	0.0040	0.0029	0.0027	0.0032	0.0049
beta-BHC	ug/L	0.0061	0.011	0.0033	0.0052	0.0029	0.0055
delta-BHC	ug/L	0.0065	0.0023	0.0040	0.0026	0.0018	0.0041
Heptachlor epoxide	ug/L	0.0066	0.0097	0.0033	0.0032	0.0028	0.0044
gamma-Chlordane	ug/L	0.0064	0.011	0.0041	0.0037	0.0020	0.0042
alpha-Chlordane	ug/L	0.010	0.0052	0.0045	0.0036	0.0023	0.0052
Endosulfan I	ug/L	0.0062	0.0033	0.0043	0.0032	0.0026	0.0048
4,4'-DDE	ug/L	0.011	0.0057	0.010	0.0082	0.0045	0.0097
Endosulfan II	ug/L	0.013	0.0077	0.0088	0.0073	0.0066	0.0097
Endosulfan sulfate	ug/L	0.0096	0.0054	0.015	0.0087	0.0054	0.0093
4,4'-DDD	ug/L	0.011	0.0096	0.0088	0.0090	0.0033	0.010
Endrin aldehyde	ug/L	0.010	0.0092	0.0084	0.0086	0.0052	0.0088
Chlordane (Technical)	ug/L	0.26	0.21	0.19	0.19	0.17	0.21
Methoxychlor	ug/L	0.050	0.018	0.057	0.080	0.043	0.051
Endrin ketone	ug/L	0.0083	0.023	0.027	0.0095	0.0051	0.015
Toxaphene	ug/L	0.49	0.26	0.39	0.34	0.54	0.29

PCBs



Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Field ID:	DW081706A	Batch#:	116568
Matrix:	Water	Sampled:	08/17/06
Units:	ug/L	Received:	08/18/06
Diln Fac:	1.000	Prepared:	08/20/06

Type:	SAMPLE	Analyzed:	08/23/06
Lab ID:	188837-012	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.48
Aroclor-1221	ND	0.96
Aroclor-1232	ND	0.48
Aroclor-1242	ND	0.48
Aroclor-1248	ND	0.48
Aroclor-1254	ND	0.48
Aroclor-1260	ND	0.48

Surrogate	%REC	Limits
TCMX	96	65-135
Decachlorobiphenyl	98	65-135

Type:	BLANK	Analyzed:	08/22/06
Lab ID:	QC352557	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	83	65-135
Decachlorobiphenyl	96	65-135

ND= Not Detected
RL= Reporting Limit



Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC352558	Batch#:	116568
Matrix:	Water	Prepared:	08/20/06
Units:	ug/L	Analyzed:	08/22/06

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	5.000	5.168	103	77-131
Aroclor-1260	5.000	5.199	104	65-135

Surrogate	%REC	Limits
TCMX	92	65-135
Decachlorobiphenyl	76	65-135

Batch QC Report

Polychlorinated Biphenyls (PCBs)			
Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Field ID:	1349MW100	Batch#:	116568
MSS Lab ID:	188802-001	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Prepared:	08/20/06
Diln Fac:	1.000	Analyzed:	08/22/06

Type: MS
Lab ID: QC352559

Cleanup Method: EPA 3665A

Analyte	MSS Result	Spiked	Result	%REC	Limits
Aroclor-1016	<0.06449	4.717	3.866	82	68-143
Aroclor-1260	<0.1205	4.717	5.003	106	65-135

Surrogate	%REC	Limits
TCMX	59 *	65-135
Decachlorobiphenyl	73	65-135

Type: MSD
Lab ID: QC352560

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	4.717	3.988	85	68-143	3	38
Aroclor-1260	4.717	5.219	111	65-135	4	39

Surrogate	%REC	Limits
TCMX	55 *	65-135
Decachlorobiphenyl	70	65-135

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188837 PCBS Water: EPA 8082

Inst : GC25
 Calnum : 826336380001
 Units : pg

Name : ar16/60 233
 Date : 21-AUG-2006 16:57
 X Axis : R

Reviewer: MCH

Level	File	Segment	Sample ID	Analyzed	Stds
L1	233_007	826336380007	PCB10_2	21-AUG-2006 16:57	S3538
L2	233_008	826336380008	PCB25_5	21-AUG-2006 17:24	S3537
L3	233_009	826336380009	PCB100_20	21-AUG-2006 17:50	S3535
L4	233_010	826336380010	PCB250_50	21-AUG-2006 18:16	S4052
L5	233_011	826336380011	PCB500_100	21-AUG-2006 18:43	S3524
L6	233_012	826336380012	PCB750_150	21-AUG-2006 19:09	S3511
L7	233_013	826336380013	PCB1000_200	21-AUG-2006 19:35	S3856

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	MRSD	MRSD	Fig
Aroclor-1016 Peak # 1	A	249.30	284.52	250.24	220.10	221.79	224.91	229.48	AVRG	0.00417			240.05	10	.99	20	
Aroclor-1016 Peak # 2	A	408.60	480.68	448.71	389.86	411.12	416.56	449.12	AVRG	0.00233			429.24	7	.99	20	
Aroclor-1016 Peak # 3	A	192.50	233.84	238.88	217.40	213.67	225.18	235.86	AVRG	0.00449			222.48	7	.99	20	
Aroclor-1016 Peak # 4	A	93.500	165.48	155.99	140.10	144.14	145.49	148.29	AVRG	0.00705			141.86	16	.99	20	
Aroclor-1016 Peak # 5	A	174.10	210.36	183.86	170.59	169.24	174.35	180.68	AVRG	0.00554			180.45	8	.99	20	
Aroclor-1260 Peak # 1	A	955.40	1149.3	978.81	849.47	900.86	991.89	1102.6	AVRG	0.00101			989.77	11	.99	20	
Aroclor-1260 Peak # 2	A	572.20	653.96	617.15	638.06	541.70	597.07	643.29	AVRG	0.00164			609.06	7	.99	20	
Aroclor-1260 Peak # 3	A	456.50	529.12	495.03	491.31	425.42	491.03	552.18	AVRG	0.00203			491.51	9	.99	20	
Aroclor-1260 Peak # 4	A	1078.0	1381.0	1178.5	1167.6	1079.2	1218.4	1383.3	AVRG	8.25E-4			1212.3	10	.99	20	
Aroclor-1260 Peak # 5	A	455.30	534.60	469.52	438.94	440.36	483.73	576.73	AVRG	0.00205			487.03	11	.99	20	
TCMX	A	9269.0	10271	8540.6	8074.4	7985.8	8067.8	8274.5	AVRG	1.16E-4			8640.5	10	.99	20	
Decachlorobiphenyl	A	7847.0	9925.4	7866.4	6575.7	7168.9	7803.6	9122.9	AVRG	1.24E-4			8044.3	14	.99	20	
Aroclor-1016 Peak # 1	B	270.60	248.72	262.25	247.94	240.70	230.62	211.00	AVRG	0.00409			244.55	8	.99	20	
Aroclor-1016 Peak # 2	B	330.30	344.52	313.88	283.66	293.37	273.63	242.99	AVRG	0.00336			297.48	12	.99	20	
Aroclor-1016 Peak # 3	B	1077.9	1122.9	956.84	883.92	927.23	879.80	800.78	AVRG	0.00105			949.91	12	.99	20	
Aroclor-1016 Peak # 4	B	489.40	474.36	396.96	377.09	399.11	365.05	316.79	AVRG	0.00248			402.68	15	.99	20	
Aroclor-1016 Peak # 5	B	274.10	284.64	256.51	236.52	250.45	230.15	204.61	AVRG	0.00403			248.14	11	.99	20	
Aroclor-1260 Peak # 1	B	881.90	955.16	837.25	1020.3	788.40	984.41	915.68	AVRG	0.00110			911.88	9	.99	20	
Aroclor-1260 Peak # 2	B	1092.0	1181.4	992.36	887.40	955.35	911.99	857.28	AVRG	0.00102			982.54	12	.99	20	
Aroclor-1260 Peak # 3	B	637.10	702.72	592.06	659.28	566.05	536.78	500.01	AVRG	0.00167			599.14	12	.99	20	
Aroclor-1260 Peak # 4	B	522.00	599.84	505.93	539.97	482.33	458.39	423.14	AVRG	0.00198			504.52	11	.99	20	
Aroclor-1260 Peak # 5	B	678.30	680.60	593.59	626.20	607.03	576.83	541.86	AVRG	0.00163			614.92	8	.99	20	
TCMX	B	15143	14994	12841	12167	11360	10475	9053.8	AVRG	8.14E-5			12290	18	.99	20	
Decachlorobiphenyl	B	10939	11502	8847.6	9028.4	8879.9	8141.9	7579.4	AVRG	1.08E-4			9274.1	15	.99	20	

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188837 PCBS Water
EPA 8082

Inst : GC25
Calnum : 826336380001

Name : ar16/60_233
Cal Date: 21-AUG-2006

ICV 826336380015 (233_015 21-AUG-2006) stds: S3643

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1016	A	240.05		250.0	250.5	pg	0	15	
Aroclor-1260	A	989.77		250.0	260.6	pg	4	15	
Aroclor-1016	B	244.55		250.0	238.5	pg	-5	15	
Aroclor-1260	B	911.88		250.0	246.3	pg	-1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188837 PCBS Water
EPA 8082

Inst : GC25 Run Name: PCB500_100 IDF : 1.0
 Seqnum : 826337691003 File : 234_003 Time : 22-AUG-2006 13:04
 Cal : 826336380001 Caldate : 21-AUG-2006
 Standards: S3524

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1016	A			500.0	484.9	pg	-3	15	
Aroclor-1260	A			500.0	473.8	pg	-5	15	
TCMX	A	8640.5	7856.2	100.0	90.92	pg	-9	15	
Decachlorobiphenyl	A	8044.3	7532.4	100.0	93.64	pg	-6	15	
Aroclor-1016	B			500.0	507.1	pg	1	15	
Aroclor-1260	B			500.0	494.4	pg	-1	15	
TCMX	B	12290	11864	100.0	96.53	pg	-3	15	
Decachlorobiphenyl	B	9274.1	9334.9	100.0	100.7	pg	1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188837 PCBS Water
EPA 8082

Inst : GC25 Run Name: PCB250_50 IDF : 1.0
 Seqnum : 826337691019 File : 234_019 Time : 22-AUG-2006 22:16
 Cal : 826336380001 Caldate : 21-AUG-2006
 Standards: S4052

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1016	A			250.0	233.9	pg	-6	15	
Aroclor-1260	A			250.0	238.6	pg	-5	15	
TCMX	A	8640.5	8326.6	50.00	48.18	pg	-4	15	
Decachlorobiphenyl	A	8044.3	6880.6	50.00	42.77	pg	-14	15	
Aroclor-1016	B			250.0	239.3	pg	-4	15	
Aroclor-1260	B			250.0	254.1	pg	2	15	
TCMX	B	12290	12171	50.00	49.52	pg	-1	15	
Decachlorobiphenyl	B	9274.1	8999.8	50.00	48.52	pg	-3	15	

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CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188837 PCBS Water
EPA 8082

Inst : GC25 Run Name: PCB500_100 IDF : 1.0
 Seqnum : 826337691034 File : 234_034 Time : 23-AUG-2006 04:49
 Cal : 826336380001 Caldate : 21-AUG-2006
 Standards: S3524

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1016	A			500.0	483.3	pg	-3	15	
Aroclor-1260	A			500.0	452.8	pg	-9	15	
TCMX	A	8640.5	8380.5	100.0	96.99	pg	-3	15	
Decachlorobiphenyl	A	8044.3	7105.0	100.0	88.32	pg	-12	15	
Aroclor-1016	B			500.0	478.9	pg	-4	15	
Aroclor-1260	B			500.0	464.6	pg	-7	15	
TCMX	B	12290	11500	100.0	93.57	pg	-6	15	
Decachlorobiphenyl	B	9274.1	8822.3	100.0	95.13	pg	-5	15	

SEQUENCE SUMMARY FOR 188837 PCBs Water
Curtis & Tompkins Laboratories

Sequence: 826336380 Instrument: GC25
Analytical Method: EPA 8082

Gas Chromatograph #25 ECD
SOP Version: 8082_rv.6

Begun: 21-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	stds	Used	>LR
001	233_001	X	PRIMER			21-AUG-2006	14:20	1.0							
002	233_002	X	PRIMER			21-AUG-2006	14:47	1.0							
003	233_003	X	PRIMER			21-AUG-2006	15:13	1.0							
004	233_004	X	HEX			21-AUG-2006	15:39	1.0							
005	233_005	X	HEX			21-AUG-2006	16:05	1.0							
006	233_006	X	HEX			21-AUG-2006	16:31	1.0							
007	233_007	ICAL	PCB10_2			21-AUG-2006	16:57	1.0					1		
008	233_008	ICAL	PCB25_5			21-AUG-2006	17:24	1.0					2		
009	233_009	ICAL	PCB100_20			21-AUG-2006	17:50	1.0					3		
010	233_010	ICAL	PCB250_50			21-AUG-2006	18:16	1.0					4		
011	233_011	ICAL	PCB500_100			21-AUG-2006	18:43	1.0					5		
012	233_012	ICAL	PCB750_150			21-AUG-2006	19:09	1.0					6		
013	233_013	ICAL	PCB1000_200			21-AUG-2006	19:35	1.0					7		
014	233_014	X	HEX			21-AUG-2006	20:01	1.0							
015	233_015	ICV	ULTRA_1660			21-AUG-2006	20:28	1.0		1			8		
016	233_016	ICV	ULTRA_1660			21-AUG-2006	20:54	1.0					8		
017	233_017	X	HEX			21-AUG-2006	21:21	1.0							

Stds used: 1=S3538 2=S3537 3=S3535 4=S4052 5=S3524 6=S3511 7=S3856 8=S3643

SEQUENCE SUMMARY FOR 188837 PCBs Water
Curtis & Tompkins Laboratories

Sequence: 826337691 Instrument: GC25
Analytical Method: EPA 8082

Gas Chromatograph #25 ECD
SOP Version: 8082_rv.6

Begun: 22-AUG-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used	>LR
001	234_001	X	HEX			22-AUG-2006 12:11	1.0					1	
002	234_002	X	PCB500_100			22-AUG-2006 12:37	1.0					1	
003	234_003	CCV	PCB500_100			22-AUG-2006 13:04	1.0	1.0				1	
004	234_004	X	CCV			22-AUG-2006 13:52	1.0					2	
005	234_005	X	CCV			22-AUG-2006 14:18	1.0					3	
006	234_006	X	HEX			22-AUG-2006 15:37	1.0						
007	234_007	SAMPLE	188878-007		Wipe	22-AUG-2006 16:04	1.0	50.0			1		
008	234_008	SAMPLE	188878-008		Wipe	22-AUG-2006 16:30	1.0	50.0			1		
009	234_009	BLANK	QC352895		Wipe	22-AUG-2006 17:03	1.0	50.0			1		
010	234_010	BS	QC352896		Wipe	22-AUG-2006 17:29	1.0	50.0			1		
011	234_011	BSD	QC352897		Wipe	22-AUG-2006 17:56	1.0	50.0			1		
012	234_012	X	188802-001		Water	22-AUG-2006 19:12	1.0	0.02358		4	1		
013	234_013	BLANK	QC352557		Water	22-AUG-2006 19:38	1.0	0.025			1		
014	234_014	LCS	QC352558		Water	22-AUG-2006 20:04	1.0	0.025			1		
015	234_015	MS	QC352559		Water	22-AUG-2006 20:31	1.0	0.02358		2	1		
016	234_016	MSD	QC352560		Water	22-AUG-2006 20:57	1.0	0.02358		2	1		
017	234_017	X	HEX			22-AUG-2006 21:23	1.0						
018	234_018	X	PCB250_50			22-AUG-2006 21:49	1.0					4	
019	234_019	CCV	PCB250_50			22-AUG-2006 22:16	1.0				1		
020	234_020	X	CCV			22-AUG-2006 22:42	1.0	1.0				2	
021	234_021	X	CCV			22-AUG-2006 23:08	1.0					2	
022	234_022	ICAL	AR1248			22-AUG-2006 23:34	1.0					3	
023	234_023	X	HEX			23-AUG-2006 00:01	1.0	1.0					
024	234_024	MDLCHC	187656-009		Water	23-AUG-2006 00:27	1.0	0.025			1		
025	234_025	SAMPLE	188801-003		Water	23-AUG-2006 00:53	1.0	0.025			1		
026	234_026	SAMPLE	188808-031		Water	23-AUG-2006 01:19	1.0	0.02475			2		
027	234_027	SAMPLE	188802-008		Water	23-AUG-2006 01:46	1.0	0.02358			2		
028	234_028	SAMPLE	188802-010		Water	23-AUG-2006 02:12	1.0	0.02381			1		
029	234_029	SAMPLE	188802-017		Water	23-AUG-2006 02:38	1.0	0.02358			1		
030	234_030	SAMPLE	188802-018		Water	23-AUG-2006 03:04	1.0	0.02358			1		

Stds used: 1=S3524 2=S4085 3=S3783 4=S4052
Flags used: sh=out of sample hold

SEQUENCE SUMMARY FOR 188837 PCBs Water
Curtis & Tompkins Laboratories

Sequence: 826337691 Instrument: GC25
Analytical Method: EPA 8082

Gas Chromatograph #25 ECD
SOP Version: 8082_rv.6

Begun: 22-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used	>LR
031	234_031	SAMPLE	188837-012	116568	Water	23-AUG-2006 03:30	1.0	0.02404			1		
032	234_032	SAMPLE	188437-009	116513	Soil	23-AUG-2006 03:56	10.0	0.6664	28		1	sh	12:PCB125=1387.12
033	234_033	X	HEX			23-AUG-2006 04:23	1.0						
034	234_034	CCV	PCB500_100			23-AUG-2006 04:49	1.0	1.0			1		
035	234_035	X	PCB500_100			23-AUG-2006 05:15	1.0	1.0	3		1		
036	234_036	X	CCV			23-AUG-2006 08:06	1.0						
037	234_037	X	CCV			23-AUG-2006 08:32	1.0						
038	234_038	CCV	AR1248			23-AUG-2006 08:58	1.0	1.0			1		
039	234_039	X	HEX			23-AUG-2006 09:25	1.0						

Stds used: 1=S3524 2=S4085 3=S3783 4=S4052
Flags used: sh=out of sample hold

REPORTING SUMMARY FOR 188837 PCBS Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
188837-012	Aroclor-1016	GC25	A	08/23/06 03:30
188837-012	Aroclor-1221	GC25	A	08/23/06 03:30
188837-012	Aroclor-1232	GC25	A	08/23/06 03:30
188837-012	Aroclor-1242	GC25	A	08/23/06 03:30
188837-012	Aroclor-1248	GC25	A	08/23/06 03:30
188837-012	Aroclor-1254	GC25	A	08/23/06 03:30
188837-012	Aroclor-1260	GC25	A	08/23/06 03:30
188837-012	TCMX	GC25	A	08/23/06 03:30
188837-012	Decachlorobiphenyl	GC25	A	08/23/06 03:30
QC352557	Aroclor-1016	GC25	A	08/22/06 19:38
QC352557	Aroclor-1221	GC25	A	08/22/06 19:38
QC352557	Aroclor-1232	GC25	A	08/22/06 19:38
QC352557	Aroclor-1242	GC25	A	08/22/06 19:38
QC352557	Aroclor-1248	GC25	A	08/22/06 19:38
QC352557	Aroclor-1254	GC25	A	08/22/06 19:38
QC352557	Aroclor-1260	GC25	A	08/22/06 19:38
QC352557	TCMX	GC25	A	08/22/06 19:38
QC352557	Decachlorobiphenyl	GC25	A	08/22/06 19:38
QC352558	Aroclor-1016	GC25	A	08/22/06 20:04
QC352558	Aroclor-1260	GC25	A	08/22/06 20:04
QC352558	TCMX	GC25	A	08/22/06 20:04
QC352558	Decachlorobiphenyl	GC25	A	08/22/06 20:04
QC352559	Aroclor-1016	GC25	A	08/22/06 20:31
QC352559	Aroclor-1260	GC25	A	08/22/06 20:31
QC352559	TCMX	GC25	A	08/22/06 20:31
QC352559	Decachlorobiphenyl	GC25	A	08/22/06 20:31
QC352560	Aroclor-1016	GC25	A	08/22/06 20:57
QC352560	Aroclor-1260	GC25	A	08/22/06 20:57
QC352560	TCMX	GC25	A	08/22/06 20:57
QC352560	Decachlorobiphenyl	GC25	A	08/22/06 20:57

Curtis & Tompkins Laboratories Sample Preparation Summary

22-AUG-2006 16:48

Batch Number : 116568
 Date Extracted : 20-AUG-2006
 Extracted by : Kevin Riley
 Prep Method : 3520C

Analysis : PCB
 Bgroup : N/A
 Units : mL
 Clean-up :

Spike #1 ID : S4064A
 Spike #2 ID : S4092A
 Spike #3 ID :
 SGP Version : PCB w rv7

Sample	Type	Client	Matrix	Init	Units	Final	Prep	Clean	pH	Sp	1	Sp	2	Sp	3	Analyses	Clean	Comments
				W/V		Vol	D.F.	D.F.		Vol	Vol	Vol	Vol	Vol		Method		
188801-003		LFR Levine Fricke	Water	1000	mL	25	0.025000	1	7	.05	0					3665A		
188802-001		Treadwell & Rollo	Water	1060	mL	25	0.023585	1	7	.05	0					3665A	ms	
188802-008		Treadwell & Rollo	Water	1060	mL	25	0.023585	1	7	.05	0					3665A		
188802-010		Treadwell & Rollo	Water	1050	mL	25	0.023810	1	7	.05	0					3665A		
188802-017		Treadwell & Rollo	Water	1060	mL	25	0.023585	1	7	.05	0					3665A		
188802-018		Treadwell & Rollo	Water	1060	mL	25	0.023585	1	7	.05	0					3665A		
188808-031		Innovative Technical Solutions	Water	1010	mL	25	0.024752	1	7	.05	0					3665A		
188837-012		Treadwell & Rollo	Water	1040	mL	25	0.024038	1	7	.05	0					3665A		
QC352557	BLANK		Water	1000	mL	25	0.025000	1			.05	0				3665A		
QC352558	LCS		Water	1000	mL	25	0.025000	1			.05	.05				3665A		
QC352559	MS	of 188802-001	Water	1060	mL	25	0.023585	1	7	.05	.05	.05				3665A		
QC352560	MSD	of 188802-001	Water	1060	mL	25	0.023585	1	7	.05	.05	.05				3665A		

Prep Chemist:

JON for KP

Reviewed By:

[Signature]

Date:

8/22/06

Relinquished By:

JON for RFM

Received By:

[Signature]

Date:

8/22/06

LIMS Batch No: 116568
 LIMS Analysis: KB
 Extracted by: KR
 Date Extracted: 20 Aug 06

Extraction Method:
☐ EPA 3510c Sep. Funnel
☒ EPA 3520c Continuous L/L
☐ Other _____

BK 2374
 Page 3

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Comments
BLANK QC352557	1000	NA	25.0	
LCS / 558	↓	↓	↓	
MS / 559 AH	1060	7	↓	
MSD / 560 AJ	1060	↓	↓	
188801-003:K	1000	↓	↓	
188802-001:AI	1060	↓	↓	MSS
↓ 8:F	1060	↓	↓	
↓ 10:F	1050	↓	↓	
↓ 17:C	1060	↓	↓	
↓ 18:C	1060	↓	↓	
188808-031:K	1010	↓	↓	
188837-012:Q	1040	↓	↓	

0.05 mL of surrogate solution was added to all samples

0.05 mL of spike solution Ar 16/60 was added to all spikes

☒ Samples were continuously extracted with about 450 mL CH₂Cl₂

Extraction Start Time: 1330

Extraction End Time: 1055

☐ Samples were extracted 3 times with 60 mL of CH₂Cl₂

Extracts filtered through baked, CH₂Cl₂-rinsed granular Na₂SO₄

Concentrated to volumes noted above after 2x exchange w/ Hexane lot#

EPA 3665A Clean-up: Vortexed w/ 10mL H₂SO₄ lot #

Centrifuged for 1min; 10mL transferred to labelled vial

Mfg & Lot# / LIMS # / Time	Date/ Initials
S4092 A/R S4064 A	8/20/06 KR
S41042 A	↓
EM46130	↓
1330	↓
1055	08/21/06
NA	RFW 8/22/06
EM4611620	↓
B42E31	↓
ES054522	↓



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories
MDL Summary for EPA 8082 Water
As of 09/24/06

Analyte	Units	GC06 A	GC06 B	GC16 A	GC16 B	GC22 A	GC22 B	GC25 A	GC25 B
Aroclor-1016	ug/L	0.12	0.091	0.044	0.049	0.068	0.18	0.15	0.22
Aroclor-1221	ug/L	0.29	0.43	0.29	0.43	0.20	0.48	0.23	0.49
Aroclor-1232	ug/L	0.11	0.088			0.075	0.21	0.16	0.087
Aroclor-1242	ug/L	0.15	0.16			0.24	0.22	0.14	0.15
Aroclor-1248	ug/L	0.15	0.14	0.073	0.051	0.080	0.19	0.11	0.16
Aroclor-1254	ug/L	0.086	0.11			0.11	0.14	0.12	0.13
Aroclor-1260	ug/L	0.12	0.095	0.036	0.061	0.13	0.15	0.17	0.13

POLYAROMATIC HYDROCARBONS



Polynuclear Aromatics by HPLC

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DW081706A	Batch#:	116658
Lab ID:	188837-012	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Prepared:	08/22/06
Diln Fac:	1.000	Analyzed:	08/25/06

Analyte	Result	RL	MDL
Naphthalene	ND	0.95	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.95	
Fluorene	ND	0.95	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	ND	0.38	0.01
Pyrene	ND	0.19	
Benzo (a) anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo (b) fluoranthene	ND	0.19	
Benzo (k) fluoranthene	ND	0.10	
Benzo (a) pyrene	ND	0.10	
Dibenz (a, h) anthracene	ND	0.19	
Benzo (g, h, i) perylene	ND	0.19	
Indeno (1, 2, 3-cd) pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	89	65-135
1-Methylnaphthalene (F)	90	65-135

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC352946	Batch#:	116658
Matrix:	Water	Prepared:	08/22/06
Units:	ug/L	Analyzed:	08/24/06

Analyte	Result	RL	MDL
Naphthalene	ND	1.0	
Acenaphthylene	ND	2.0	
Acenaphthene	ND	1.0	
Fluorene	ND	1.0	
Phenanthrene	ND	0.50	
Anthracene	ND	0.50	0.02
Fluoranthene	ND	0.40	0.01
Pyrene	ND	0.20	
Benzo (a) anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo (b) fluoranthene	ND	0.20	
Benzo (k) fluoranthene	ND	0.10	
Benzo (a) pyrene	ND	0.10	
Dibenz (a, h) anthracene	ND	0.20	
Benzo (g, h, i) perylene	ND	0.20	
Indeno (1, 2, 3-cd) pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	88	65-135
1-Methylnaphthalene (F)	89	65-135

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC352947	Batch#:	116658
Matrix:	Water	Prepared:	08/22/06
Units:	ug/L	Analyzed:	08/24/06

Analyte	Spiked	Result	%REC	Limits
Naphthalene	10.00	8.668	87	50-135
Fluorene	2.000	1.786	89	65-135
Pyrene	1.000	0.9056	91	65-135
Benzo (a) pyrene	1.000	0.8693	87	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	88	65-135
1-Methylnaphthalene (F)	90	65-135

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	1349MW100	Batch#:	116658
MSS Lab ID:	188802-001	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Prepared:	08/22/06
Diln Fac:	1.000	Analyzed:	08/24/06

Type: MS Lab ID: QC352948

Analyte	MSS Result	Spiked	Result	%REC	Limits
Naphthalene	<0.09154	9.434	0	0 *	50-135
Fluorene	12.92	1.887	21.22 >LR	440 NM	65-135
Pyrene	1.527	0.9434	1.698	18 *	65-135
Benzo(a)pyrene	<0.02358	0.9434	0.2358	25 *	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	174 *	65-135
1-Methylnaphthalene (F)	126	65-135

Type: MSD Lab ID: QC352949

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Naphthalene	9.434	0	0 *	50-135	NC	35
Fluorene	1.887	16.56	193 NM	65-135	NC	35
Pyrene	0.9434	2.935	149 *	65-135	53 *	35
Benzo(a)pyrene	0.9434	0.2432	26 *	65-135	3	35

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	204 *	65-135
1-Methylnaphthalene (F)	141 *	65-135

*= Value outside of QC limits; see narrative

NC= Not Calculated

NM= Not Meaningful: Sample concentration > 4X spike concentration

>LR= Response exceeds instrument's linear range

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188837 HPLC Water: EPA 8310

Inst : HPLC04
 Calnum : 296199754001
 Units : ug/L

Date : 18-MAY-2006 19:52
 X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	13800006	296199754006	18-MAY-2006	19:52	S3065
L2	13800007	296199754007	18-MAY-2006	20:24	S3064
L3	13800008	296199754008	18-MAY-2006	20:56	S3063
L4	13800009	296199754009	18-MAY-2006	21:27	S3062
L5	13800010	296199754010	18-MAY-2006	21:59	S3061
L6	13800011	296199754011	18-MAY-2006	22:31	S3060
L7	13800012	296199754012	18-MAY-2006	23:02	S3059

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	MR ²	MRSD	Flg
Naphthalene	1	0.0127	0.0132	0.0131	0.0132	0.0131	0.0130	0.0129	LINR	-52.228	77.4002		0.0130	1.000	0.99	20	
Acenaphthylene	1	0.0092	0.0093	0.0094	0.0095	0.0094	0.0092	0.0091	LINR	-269.75	109.800		0.0093	1.000	0.99	20	
Acenaphthene	1	0.0052	0.0052	0.0052	0.0054	0.0053	0.0052	0.0051	LINR	-189.44	195.810		0.0052	1.000	0.99	20	
Fluorene	1	0.0627	0.0624	0.0622	0.0635	0.0628	0.0627	0.0625	LINR	-5.8158	16.0057		0.0627	1.000	0.99	20	
Phenanthrene	1	0.1770	0.1795	0.1810	0.1828	0.1804	0.1795	0.1796	LINR	-2.6724	5.57221		0.1800	1.000	0.99	20	
Anthracene	1	0.4152	0.4253	0.4257	0.4310	0.4281	0.4249	0.4232	LINR	-4.5965	2.36313		0.4248	1.000	0.99	20	
Fluoranthene	1	0.0412	0.0411	0.0410	0.0412	0.0406	0.0406	0.0407	LINR	-3.4660	24.6116		0.0409	1.000	0.99	20	
Pyrene	1	0.0368	0.0344	0.0333	0.0343	0.0336	0.0336	0.0338	LINR	-0.0362	29.6394		0.0342	1.000	0.99	20	
Benzo(a)anthracene	1	0.0900	0.0968	0.0940	0.0956	0.0948	0.0945	0.0948	LINR	0.57638	10.5497		0.0943	1.000	0.99	20	
Chrysene	1	0.1270	0.1360	0.1344	0.1356	0.1346	0.1336	0.1335	LINR	-3.4437	7.45542		0.1335	1.000	0.99	20	
Benzo(b)fluoranthene	1	0.1037	0.1043	0.1063	0.1075	0.1067	0.1065	0.1063	LINR	-2.9110	9.40726		0.1059	1.000	0.99	20	
Benzo(k)fluoranthene	1	0.0788	0.0790	0.0823	0.0837	0.0837	0.0836	0.0835	LINR	1.73999	11.9711		0.0821	1.000	0.99	20	
Benzo(a)pyrene	1	0.0878	0.0823	0.0860	0.0884	0.0876	0.0881	0.0886	LINR	6.09778	11.2895		0.0870	1.000	0.99	20	
Dibenz(a,h)anthracene	1	0.0186	0.0202	0.0213	0.0218	0.0220	0.0221	0.0223	LINR	23.8574	44.7933		0.0212	1.000	0.99	20	
Benzo(g,h,i)perylene	1	0.0317	0.0340	0.0353	0.0359	0.0358	0.0363	0.0368	LINR	28.4784	27.1931		0.0351	1.000	0.99	20	
Indeno(1,2,3-cd)pyrene	1	0.0880	0.0965	0.0978	0.1005	0.0999	0.1003	0.1005	LINR	4.90163	9.94487		0.0976	1.000	0.99	20	
1-Methylnaphthalene (UV)	1	0.0086	0.0086	0.0086	0.0087	0.0085	0.0084	0.0084	LINR	-341.04	119.464		0.0085	1.000	0.99	20	
Acenaphthylene	2	0.0277	0.0280	0.0280	0.0283	0.0280	0.0278	0.0278	LINR	-84.965	36.0430		0.0279	1.000	0.99	20	
1-Methylnaphthalene (UV)	2	0.0030	0.0031	0.0031	0.0031	0.0031	0.0030	0.0030	LINR	-288.17	330.724		0.0031	1.000	0.99	20	
Naphthalene	3	0.0110	0.0111	0.0111	0.0112	0.0110	0.0110	0.0109	LINR	-50.394	91.4049		0.0110	1.000	0.99	20	
Acenaphthene	3	0.0234	0.0236	0.0235	0.0239	0.0233	0.0231	0.0226	LINR	-178.43	44.2064		0.0233	1.000	0.99	20	
Fluorene	3	0.1279	0.1273	0.1274	0.1284	0.1265	0.1243	0.1225	LINR	-32.341	8.16717		0.1263	1.000	0.99	20	
Phenanthrene	3	0.1354	0.1366	0.1364	0.1377	0.1361	0.1356	0.1354	LINR	-3.3588	7.38874		0.1362	1.000	0.99	20	
Anthracene	3	0.4199	0.4224	0.4266	0.4322	0.4290	0.4269	0.4268	LINR	-1.7330	2.34358		0.4263	1.000	0.99	20	
Fluoranthene	3	0.0382	0.0384	0.0386	0.0392	0.0388	0.0387	0.0387	LINR	-1.5194	25.8283		0.0387	1.000	0.99	20	
Pyrene	3	0.1308	0.1311	0.1332	0.1355	0.1333	0.1340	0.1343	LINR	1.83815	7.44901		0.1332	1.000	0.99	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	%RSD	Mtr ²	MxRSD	Fig
Benzo (a) anthracene	3	0.1489	0.1515	0.1523	0.1536	0.1520	0.1512	0.1508	LINR	-3.9150	6.63150		0.1515	1.000	0.99	20		
Chrysene	3	0.1787	0.1811	0.1815	0.1828	0.1806	0.1793	0.1780	LINR	-7.8225	5.62009		0.1803	1.000	0.99	20		
Benzo (b) fluoranthene	3	0.0628	0.0642	0.0647	0.0654	0.0646	0.0644	0.0641	LINR	-9.1941	15.6059		0.0643	1.000	0.99	20		
Benzo (k) fluoranthene	3	0.3857	0.3920	0.3949	0.3978	0.3926	0.3879	0.3820	LINR	-13.766	2.61710		0.3904	1.000	0.99	20		
Benzo (a) pyrene	3	0.2089	0.2127	0.2141	0.2165	0.2143	0.2129	0.2128	LINR	-3.0160	4.70028		0.2132	1.000	0.99	20		
Dibenz (a, h) anthracene	3	0.0303	0.0301	0.0308	0.0318	0.0315	0.0316	0.0317	LINR	9.18553	31.5065		0.0311	1.000	0.99	20		
Benzo (g, h, i) perylene	3	0.0608	0.0590	0.0602	0.0618	0.0617	0.0624	0.0631	LINR	24.3223	15.8303		0.0613	1.000	0.99	20		
Indeno (1,2,3-cd) pyrene	3	0.0962	0.0968	0.0965	0.0983	0.0975	0.0975	0.0971	LINR	-1.8455	10.2902		0.0971	1.000	0.99	20		
1-Methylnaphthalene (F)	3	0.0122	0.0123	0.0123	0.0124	0.0122	0.0120	0.0118	LINR	-661.87	84.7083		0.0122	1.000	0.99	20		

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Calibration Table

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NEW ICAL FOLLOWING REPLACEMENT OF UV LAMP. *gm*
HPLC04 METHOD 8310

22 MAY 2006

Calib. Data Modified : 5/22/2006 4:16:03 PM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 1.000 %
Abs. Reference Window : 0.200 min
Rel. Non-ref. Window : 1.000 %
Abs. Non-ref. Window : 0.250 min
Do not use Multiplier & Dilution Factor with ISTDs
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
Origin : Ignored
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :

Printout of recalibrations within a sequence:

Calibration Table after Recalibration

Normal Report after Recalibration

If the sequence is done with bracketing:

Results of first cycle (ending previous bracket)

Signal 1: DAD1 A, Sig=254,4 Ref=480,80

Signal 2: DAD1 B, Sig=305,4 Ref=480,80

Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime	Lvl	Amount	Area	Amt/Area	Ref Grp Name
[min]	Sig	[ug/l]			
4.752	1	1 500.00000	6.35383	78.69275	Naphthalene
		2 1000.00000	13.15704	76.00496	
		3 2500.00000	32.77972	76.26668	
		4 5000.00000	66.00784	75.74857	
		5 1.00000e4	130.71696	76.50116	
		6 2.50000e4	323.77454	77.21423	
		7 5.00000e4	646.40033	77.35145	
4.790	3	1 500.00000	5.48376	91.17835	Naphthalene
		2 1000.00000	11.08296	90.22864	
		3 2500.00000	27.68407	90.30465	
		4 5000.00000	55.85367	89.51963	
		5 1.00000e4	110.44406	90.54357	
		6 2.50000e4	274.47531	91.08287	
		7 5.00000e4	547.22638	91.36986	
6.004	1	1 1000.00000	9.18307	108.89603	Acenaphthylene
		2 2000.00000	18.68859	107.01715	
		3 5000.00000	46.93712	106.52549	
		4 1.00000e4	94.78723	105.49944	
		5 2.00000e4	187.08742	106.90190	
		6 5.00000e4	462.20984	108.17598	
		7 1.00000e5	910.50854	109.82873	
6.005	2	1 1000.00000	27.65381	36.16138	Acenaphthylene
		2 2000.00000	56.04304	35.68686	
		3 5000.00000	140.16672	35.67181	

RetTime [min]	Lvl Sig	Amount [ug/l]	Area	Amt/Area	Ref Grp Name
----- --- --- ----- ----- -----					
		4 1.00000e4	282.77841	35.36338	
		5 2.00000e4	559.61334	35.73896	
		6 5.00000e4	1390.57104	35.95645	
		7 1.00000e5	2775.66528	36.02740	
6.773	1	1 2000.00000	17.19066	116.34227	1-Methylnaphthalene (UV)
		2 4000.00000	34.41462	116.22969	
		3 1.00000e4	85.94093	116.35899	
		4 2.00000e4	173.09207	115.54544	
		5 4.00000e4	340.84924	117.35394	
		6 1.00000e5	839.48529	119.12061	
		7 2.00000e5	1676.38977	119.30400	
6.774	2	1 2000.00000	6.06443	329.79188	1-Methylnaphthalene (UV)
		2 4000.00000	12.31411	324.83055	
		3 1.00000e4	30.67977	325.94769	
		4 2.00000e4	61.92251	322.98433	
		5 4.00000e4	122.83121	325.65012	
		6 1.00000e5	304.35931	328.55903	
		7 2.00000e5	604.82648	330.67335	
6.811	3	1 2000.00000	24.40978	81.93437	1-Methylnaphthalene (F)
		2 4000.00000	49.21495	81.27612	
		3 1.00000e4	122.94567	81.33674	
		4 2.00000e4	247.30377	80.87220	
		5 4.00000e4	488.69351	81.85089	
		6 1.00000e5	1199.20923	83.38828	
		7 2.00000e5	2361.67969	84.68549	
7.233	1	1 500.00000	5.96680	83.79698	2-Methylnaphthalene
		2 1000.00000	11.99022	83.40130	
		3 2500.00000	29.85911	83.72654	
		4 5000.00000	60.88431	82.12296	
		5 1.00000e4	120.14920	83.22985	
		6 2.50000e4	297.53644	84.02332	
7.269	3	1 500.00000	7.74911	64.52351	2-Methylnaphthalene
		2 1000.00000	15.52372	64.41757	
		3 2500.00000	38.81281	64.41172	
		4 5000.00000	78.28068	63.87272	
		5 1.00000e4	154.78474	64.60585	
		6 2.50000e4	382.29327	65.39482	
7.613	1	1 500.00000	2.59693	192.53514	Acenaphthene
		2 1000.00000	5.17957	193.06637	
		3 2500.00000	13.08239	191.09658	
		4 5000.00000	26.89059	185.93866	
		5 1.00000e4	53.03941	188.53907	
		6 2.50000e4	131.16444	190.60043	
		7 5.00000e4	254.87729	196.17283	
7.651	3	1 500.00000	11.70526	42.71583	Acenaphthene
		2 1000.00000	23.56936	42.42797	
		3 2500.00000	58.84945	42.48128	
		4 5000.00000	119.32713	41.90162	
		5 1.00000e4	233.17419	42.88639	
		6 2.50000e4	577.51837	43.28867	
		7 5.00000e4	1130.49866	44.22827	
8.138	1	1 100.00000	6.27447	15.93759	Fluorene
		2 200.00000	12.48572	16.01830	
		3 500.00000	31.10701	16.07355	
		4 1000.00000	63.54686	15.73642	
		5 2000.00000	125.67238	15.91440	
		6 5000.00000	313.25665	15.96135	
		7 1.00000e4	624.78467	16.00551	
8.176	3	1 100.00000	12.79477	7.81570	Fluorene
		2 200.00000	25.46982	7.85243	
		3 500.00000	63.67719	7.85210	
		4 1000.00000	128.43744	7.78589	
		5 2000.00000	252.91112	7.90792	

RetTime	Lvl	Amount	Area	Amt/Area	Ref Grp Name
[min]	Sig	[ug/l]			
----- --- ----- ----- ----- -----					
9.260	1	6 5000.00000	621.43634	8.04588	Phenanthrene
		7 1.00000e4	1224.89038	8.16400	
		1 50.00000	8.85156	5.64872	
		2 100.00000	17.94612	5.57224	
		3 250.00000	45.25932	5.52372	
		4 500.00000	91.37579	5.47191	
		5 1000.00000	180.36794	5.54422	
9.297	3	6 2500.00000	448.64795	5.57230	Phenanthrene
		7 5000.00000	897.85052	5.56886	
		1 50.00000	6.77231	7.38301	
		2 100.00000	13.66179	7.31969	
		3 250.00000	34.08815	7.33393	
		4 500.00000	68.83022	7.26425	
		5 1000.00000	136.09827	7.34763	
10.285	1	6 2500.00000	338.96707	7.37535	Anthracene
		7 5000.00000	676.96960	7.38586	
		1 50.00000	20.75930	2.40856	
		2 100.00000	42.52945	2.35131	
		3 250.00000	106.41690	2.34925	
		4 500.00000	215.48436	2.32035	
		5 1000.00000	428.09290	2.33594	
10.323	3	6 2500.00000	1062.12512	2.35377	Anthracene
		7 5000.00000	2115.98950	2.36296	
		1 50.00000	20.99740	2.38125	
		2 100.00000	42.23863	2.36750	
		3 250.00000	106.64105	2.34431	
		4 500.00000	216.08749	2.31388	
		5 1000.00000	428.97952	2.33111	
11.435	1	6 2500.00000	1067.30798	2.34234	Fluoranthene
		7 5000.00000	2133.87500	2.34316	
		1 100.00000	4.12269	24.25600	
		2 200.00000	8.21146	24.35620	
		3 500.00000	20.48045	24.41353	
		4 1000.00000	41.23911	24.24883	
		5 2000.00000	81.15630	24.64380	
11.472	3	6 5000.00000	203.07642	24.62127	Fluoranthene
		7 1.00000e4	406.56757	24.59616	
		1 100.00000	3.82083	26.17234	
		2 200.00000	7.68846	26.01302	
		3 500.00000	19.30645	25.89808	
		4 1000.00000	39.23374	25.48827	
		5 2000.00000	77.62599	25.76457	
12.208	1	6 5000.00000	193.25951	25.87195	Pyrene
		7 1.00000e4	387.35989	25.81579	
		1 50.00000	1.83995	27.17468	
		2 100.00000	3.43952	29.07386	
		3 250.00000	8.33079	30.00916	
		4 500.00000	17.14116	29.16955	
		5 1000.00000	33.56740	29.79081	
12.245	3	6 2500.00000	83.91055	29.79363	Pyrene
		7 5000.00000	168.92415	29.59908	
		1 50.00000	6.53807	7.64751	
		2 100.00000	13.11404	7.62541	
		3 250.00000	33.29245	7.50921	
		4 500.00000	67.75372	7.37967	
		5 1000.00000	133.33412	7.49996	
15.039	1	6 2500.00000	334.87701	7.46543	Benzo(a)anthracene
		7 5000.00000	671.27612	7.44850	
		1 50.00000	4.49803	11.11598	
		2 100.00000	9.67921	10.33142	
		3 250.00000	23.48936	10.64311	
		4 500.00000	47.78680	10.46314	250
		5 1000.00000	94.79131	10.54949	

RetTime [min]	Lvl Sig	Amount [ug/l]	Area	Amt/Area	Ref Grp Name
15.077	3	6 2500.00000	236.18423	10.58496	
		7 5000.00000	474.20624	10.54394	
		1 50.00000	7.44724	6.71390	Benzo(a)anthracene
		2 100.00000	15.15430	6.59879	
		3 250.00000	38.07673	6.56569	
		4 500.00000	76.80959	6.50960	
		5 1000.00000	151.99316	6.57924	
		6 2500.00000	377.89438	6.61561	
		7 5000.00000	754.23340	6.62925	
15.539	1	1 50.00000	6.35061	7.87325	Chrysene
		2 100.00000	13.59609	7.35506	
		3 250.00000	33.59677	7.44119	
		4 500.00000	67.79062	7.37565	
		5 1000.00000	134.58353	7.43033	
		6 2500.00000	334.09467	7.48291	
		7 5000.00000	667.30255	7.49285	
15.577	3	1 50.00000	8.93709	5.59467	Chrysene
		2 100.00000	18.11283	5.52095	
		3 250.00000	45.37164	5.51005	
		4 500.00000	91.38473	5.47137	
		5 1000.00000	180.56219	5.53826	
		6 2500.00000	448.13257	5.57871	
		7 5000.00000	889.81403	5.61915	
17.772	1	1 100.00000	10.36747	9.64555	Benzo(b)fluoranthene
		2 200.00000	20.85804	9.58863	
		3 500.00000	53.17228	9.40340	
		4 1000.00000	107.52938	9.29978	
		5 2000.00000	213.44913	9.36991	
		6 5000.00000	532.37317	9.39191	
		7 1.00000e4	1062.87402	9.40845	
17.810	3	1 100.00000	6.27574	15.93439	Benzo(b)fluoranthene
		2 200.00000	12.83850	15.57814	
		3 500.00000	32.34958	15.45615	
		4 1000.00000	65.39377	15.29198	
		5 2000.00000	129.20119	15.47973	
		6 5000.00000	322.01157	15.52739	
		7 1.00000e4	640.72485	15.60732	
18.726	1	1 50.00000	3.94109	12.68686	Benzo(k)fluoranthene
		2 100.00000	7.89588	12.66483	
		3 250.00000	20.57043	12.15337	
		4 500.00000	41.83699	11.95115	
		5 1000.00000	83.72203	11.94429	
		6 2500.00000	208.88004	11.96859	
		7 5000.00000	417.35922	11.98009	
18.764	3	1 50.00000	19.28471	2.59273	Benzo(k)fluoranthene
		2 100.00000	39.20409	2.55075	
		3 250.00000	98.73430	2.53205	
		4 500.00000	198.87831	2.51410	
		5 1000.00000	392.59399	2.54716	
		6 2500.00000	969.84100	2.57774	
		7 5000.00000	1910.04431	2.61774	
19.676	1	1 50.00000	4.38903	11.39205	Benzo(a)pyrene
		2 100.00000	8.22974	12.15105	
		3 250.00000	21.51167	11.62160	
		4 500.00000	44.20454	11.31105	
		5 1000.00000	87.60189	11.41528	
		6 2500.00000	220.13969	11.35643	
		7 5000.00000	442.77490	11.29242	
19.714	3	1 50.00000	10.44253	4.78811	Benzo(a)pyrene
		2 100.00000	21.26584	4.70238	
		3 250.00000	53.53555	4.66979	
		4 500.00000	108.22565	4.61998	
		5 1000.00000	214.33957	4.516549	

RetTime [min]	Lvl Sig	Amount [ug/l]	Area	Amt/Area	Ref Grp Name
21.294	1	6 2500.00000	532.33307	4.69631	Dibenz(a,h)anthracene
		7 5000.00000	1064.23083	4.69823	
		1 100.00000	1.86005	53.76185	
		2 200.00000	4.03761	49.53425	
		3 500.00000	10.67297	46.84733	
		4 1000.00000	21.81421	45.84168	
		5 2000.00000	44.01789	45.43607	
21.332	3	6 5000.00000	110.60422	45.20623	Dibenz(a,h)anthracene
		7 1.00000e4	222.97006	44.84907	
		1 100.00000	3.03149	32.98710	
		2 200.00000	6.02086	33.21784	
		3 500.00000	15.37518	32.51994	
		4 1000.00000	31.83378	31.41317	
		5 2000.00000	63.06483	31.71339	
22.074	1	6 5000.00000	158.06801	31.63195	Benzo(g,h,i)perylene
		7 1.00000e4	317.26797	31.51910	
		1 100.00000	3.17288	31.51711	
		2 200.00000	6.79410	29.43731	
		3 500.00000	17.66954	28.29729	
		4 1000.00000	35.90152	27.85397	
		5 2000.00000	71.56614	27.94618	
22.111	3	6 5000.00000	181.34886	27.57117	Benzo(g,h,i)perylene
		7 1.00000e4	367.56784	27.20586	
		1 100.00000	6.08162	16.44298	
		2 200.00000	11.79889	16.95075	
		3 500.00000	30.11854	16.60107	
		4 1000.00000	61.84187	16.17027	
		5 2000.00000	123.34122	16.21518	
22.588	1	6 5000.00000	312.19437	16.01566	Indeno(1,2,3-cd)pyrene
		7 1.00000e4	631.46387	15.83622	
		1 50.00000	4.39845	11.36763	
		2 100.00000	9.64680	10.36613	
		3 250.00000	24.43922	10.22946	
		4 500.00000	50.25140	9.94997	
		5 1000.00000	99.94793	10.00521	
22.626	3	6 2500.00000	250.73134	9.97083	Indeno(1,2,3-cd)pyrene
		7 5000.00000	502.34595	9.95330	
		1 50.00000	4.81022	10.39454	
		2 100.00000	9.68046	10.33008	
		3 250.00000	24.11350	10.36764	
		4 500.00000	49.15816	10.17125	
		5 1000.00000	97.53080	10.25317	
		6 2500.00000	243.71762	10.25777	
		7 5000.00000	485.73682	10.29364	

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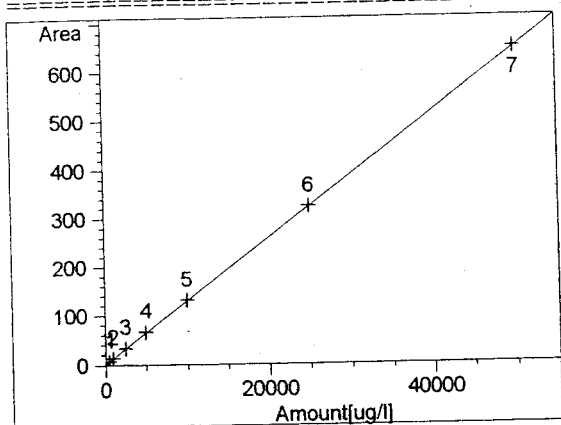
Peak Sum Table

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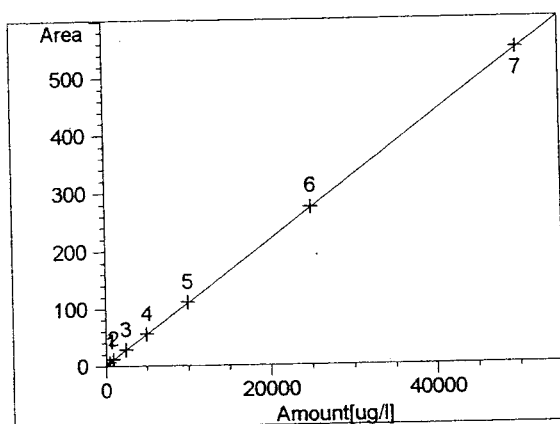
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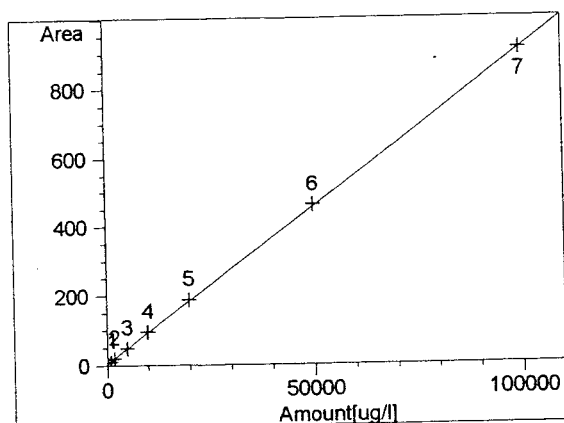
Calibration Curves



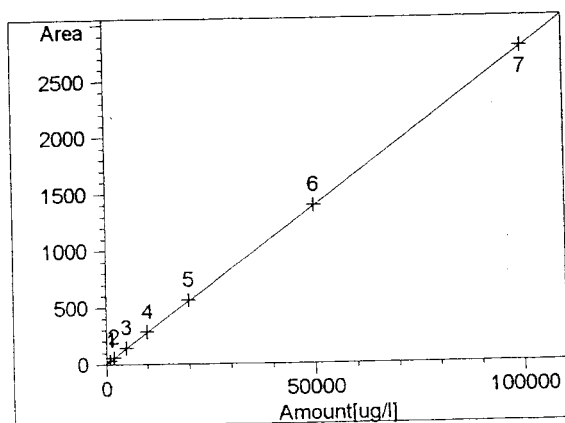
Naphthalene at exp. RT: 4.752
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 0.65900
Formula: $y = mx + b$
m: $1.29199e-2$
b: $6.74777e-1$
x: Amount[ug/l]
y: Area



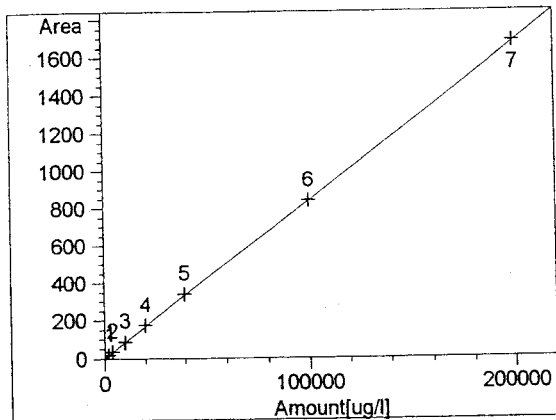
Naphthalene at exp. RT: 4.790
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.52793
Formula: $y = mx + b$
m: $1.09403e-2$
b: $5.51329e-1$
x: Amount[ug/l]
y: Area



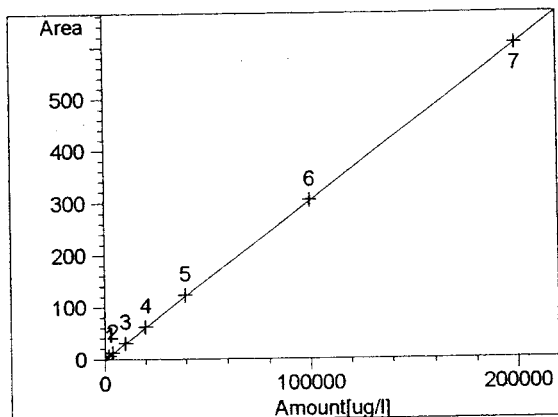
Acenaphthylene at exp. RT: 6.004
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99997
Residual Std. Dev.: 2.99661
Formula: $y = mx + b$
m: $9.10747e-3$
b: 2.45677
x: Amount[ug/l]
y: Area



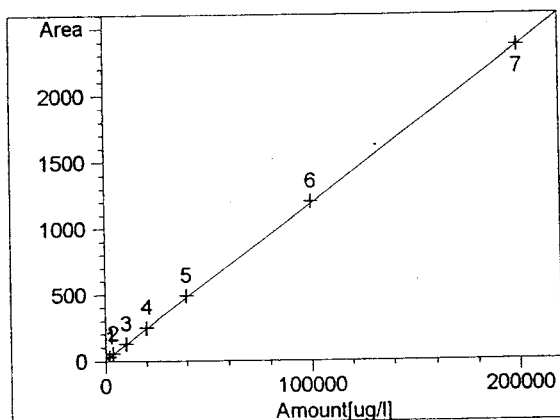
Acenaphthylene at exp. RT: 6.005
DAD1 B, Sig=305,4 Ref=480,80
Correlation: 1.00000
Residual Std. Dev.: 2.31582
Formula: $y = mx + b$
m: $2.77446e-2$
b: 2.35731
x: Amount[ug/l]
y: Area



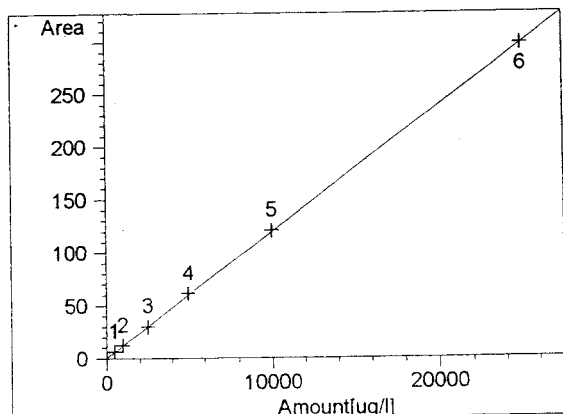
1-Methylnaphthalene (UV) at exp. RT: 6.773
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 2.38438
Formula: $y = mx + b$
m: $8.37069e-3$
b: 2.85473
x: Amount[ug/l]
y: Area



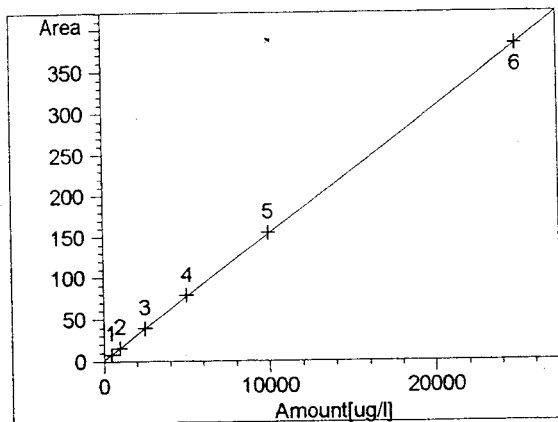
1-Methylnaphthalene (UV) at exp. RT: 6.774
DAD1 B, Sig=305,4 Ref=480,80
Correlation: 0.99999
Residual Std. Dev.: 0.95514
Formula: $y = mx + b$
m: $3.02367e-3$
b: $8.71326e-1$
x: Amount[ug/l]
y: Area



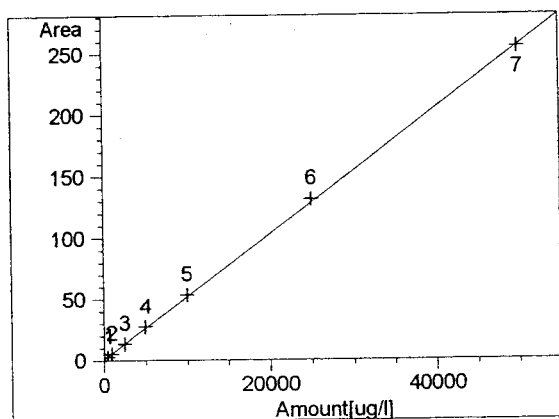
1-Methylnaphthalene (F) at exp. RT: 6.811
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99996
Residual Std. Dev.: 8.34271
Formula: $y = mx + b$
m: $1.18052e-2$
b: 7.81357
x: Amount[ug/l]
y: Area



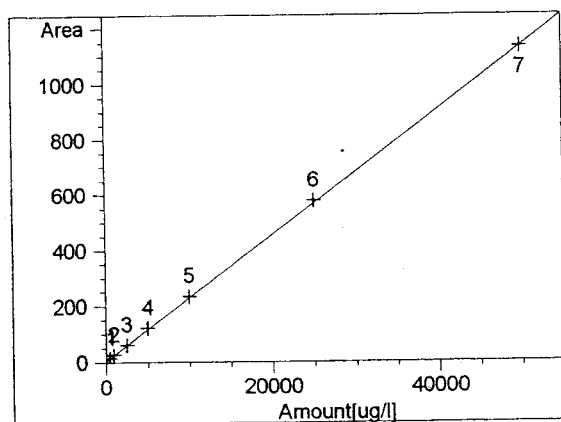
2-Methylnaphthalene at exp. RT: 7.233
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99998
Residual Std. Dev.: 0.70066
Formula: $y = mx + b$
m: $1.18983e-2$
b: $4.76749e-1$
x: Amount[ug/l]
y: Area



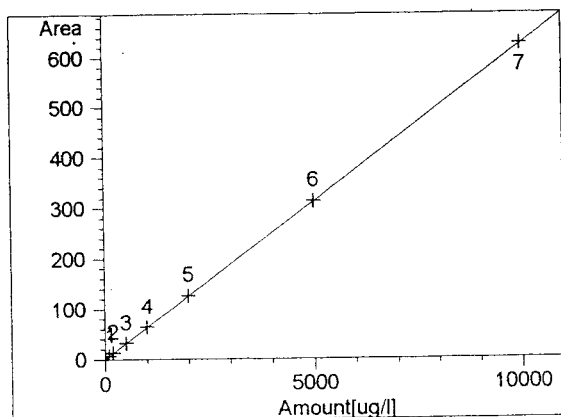
2-Methylnaphthalene at exp. RT: 7.269
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99998
 Residual Std. Dev.: 0.95275
 Formula: $y = mx + b$
 m: $1.52819e-2$
 b: $8.39982e-1$
 x: Amount[ug/l]
 y: Area



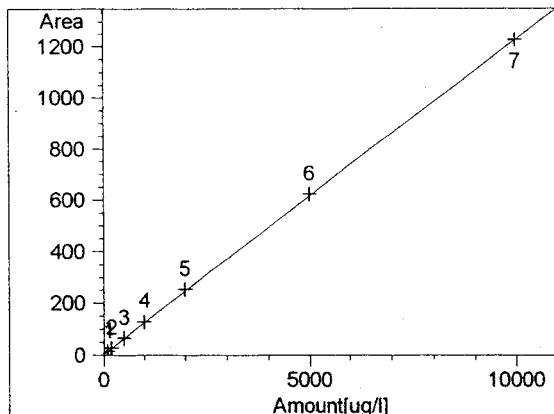
Acenaphthene at exp. RT: 7.613
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 0.99989
 Residual Std. Dev.: 1.52771
 Formula: $y = mx + b$
 m: $5.10700e-3$
 b: $9.67465e-1$
 x: Amount[ug/l]
 y: Area



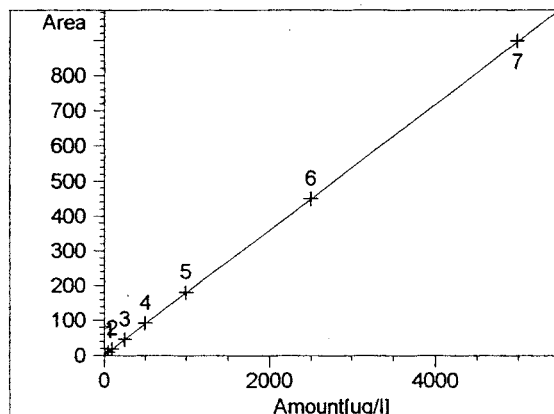
Acenaphthene at exp. RT: 7.651
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99994
 Residual Std. Dev.: 4.97058
 Formula: $y = mx + b$
 m: $2.26212e-2$
 b: 4.03630
 x: Amount[ug/l]
 y: Area



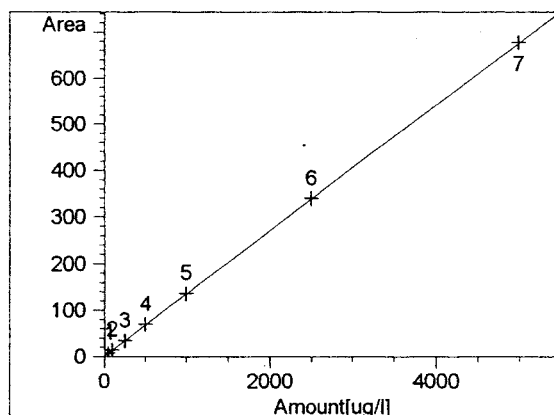
Fluorene at exp. RT: 8.138
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.54815
 Formula: $y = mx + b$
 m: $6.24779e-2$
 b: $3.63360e-1$
 x: Amount[ug/l]
 y: Area



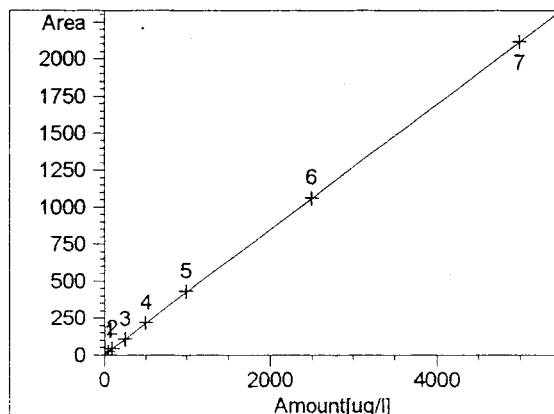
Fluorene at exp. RT: 8.176
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99997
 Residual Std. Dev.: 4.08298
 Formula: $y = mx + b$
 m: $1.22441e-1$
 b: 3.95988
 x: Amount[ug/l]
 y: Area



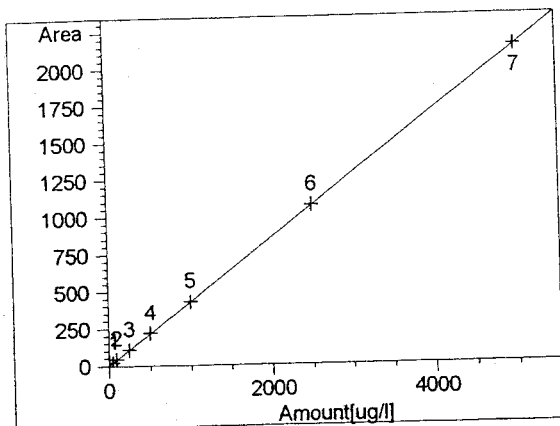
Phenanthrene at exp. RT: 9.260
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.68975
 Formula: $y = mx + b$
 m: $1.79462e-1$
 b: $4.79584e-1$
 x: Amount[ug/l]
 y: Area



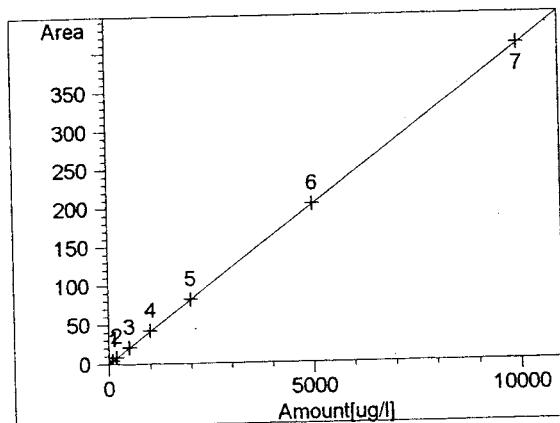
Phenanthrene at exp. RT: 9.297
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 0.44720
 Formula: $y = mx + b$
 m: $1.35341e-1$
 b: $4.54582e-1$
 x: Amount[ug/l]
 y: Area



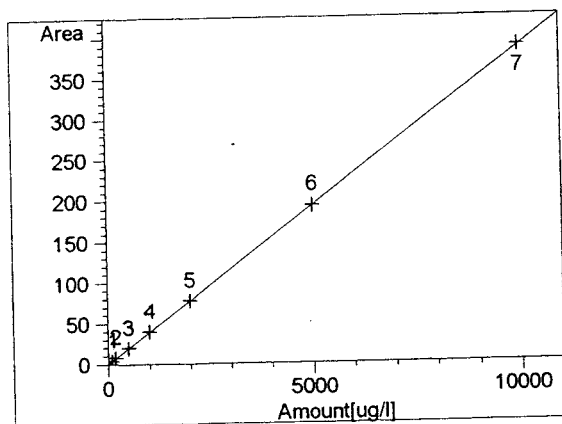
Anthracene at exp. RT: 10.285
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 2.50095
 Formula: $y = mx + b$
 m: $4.23168e-1$
 b: 1.94511
 x: Amount[ug/l]
 y: Area



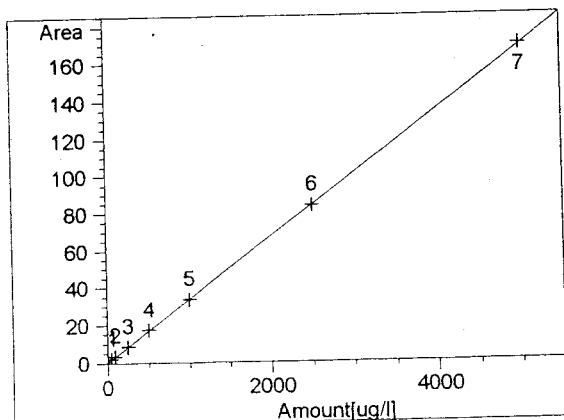
Anthracene at exp. RT: 10.323
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 1.38985
 Formula: $y = mx + b$
 m: $4.26697e-1$
 b: $7.39476e-1$
 x: Amount[ug/l]
 y: Area



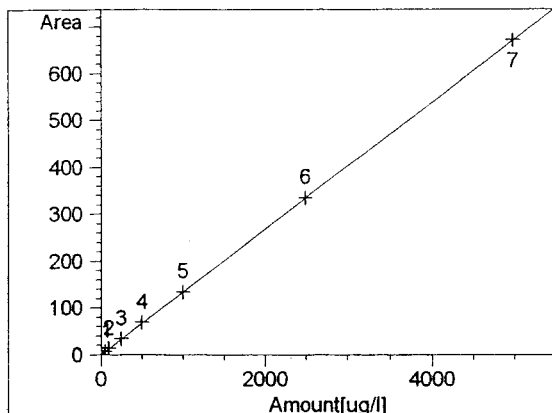
Fluoranthene at exp. RT: 11.435
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.26501
 Formula: $y = mx + b$
 m: $4.06313e-2$
 b: $1.40829e-1$
 x: Amount[ug/l]
 y: Area



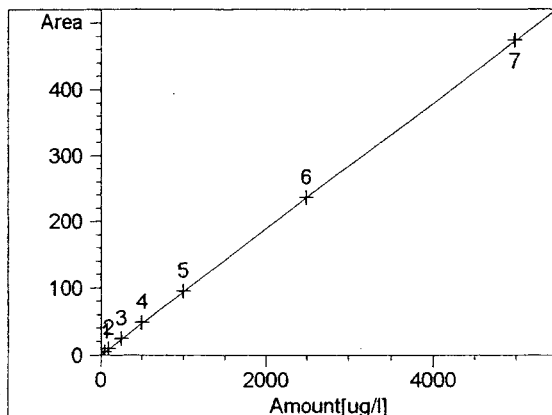
Fluoranthene at exp. RT: 11.472
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 0.29311
 Formula: $y = mx + b$
 m: $3.87172e-2$
 b: $5.88250e-2$
 x: Amount[ug/l]
 y: Area



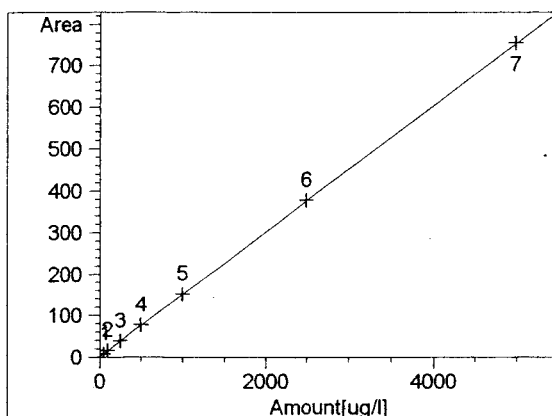
Pyrene at exp. RT: 12.208
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 0.99999
 Residual Std. Dev.: 0.27756
 Formula: $y = mx + b$
 m: $3.37388e-2$
 b: $1.22142e-3$
 x: Amount[ug/l]
 y: Area



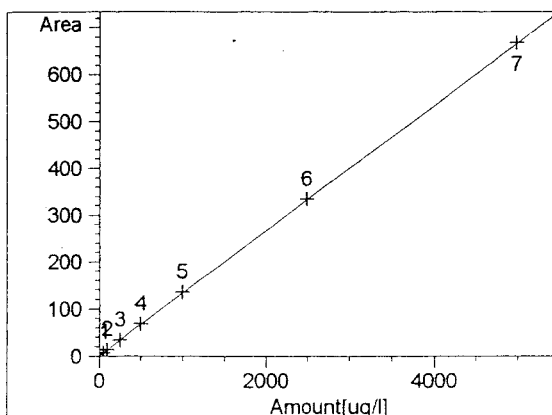
Pyrene at exp. RT: 12.245
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 0.55665
 Formula: $y = mx + b$
 m: 1.34246e-1
 b: -2.46762e-1
 x: Amount[ug/l]
 y: Area



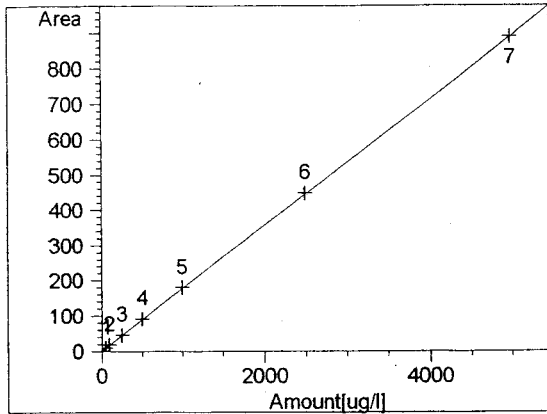
Benzo(a)anthracene at exp. RT: 15.039
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.43917
 Formula: $y = mx + b$
 m: 9.47891e-2
 b: -5.46320e-2
 x: Amount[ug/l]
 y: Area



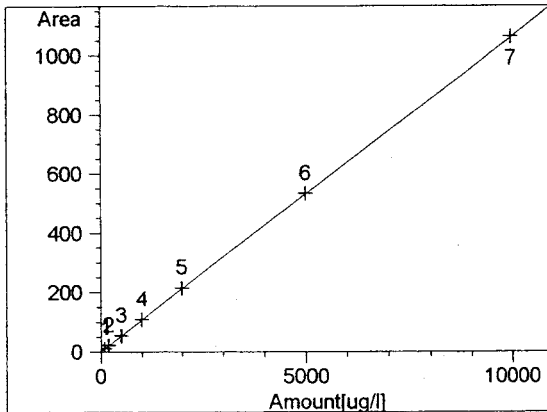
Benzo(a)anthracene at exp. RT: 15.077
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 0.63754
 Formula: $y = mx + b$
 m: 1.50795e-1
 b: 5.90358e-1
 x: Amount[ug/l]
 y: Area



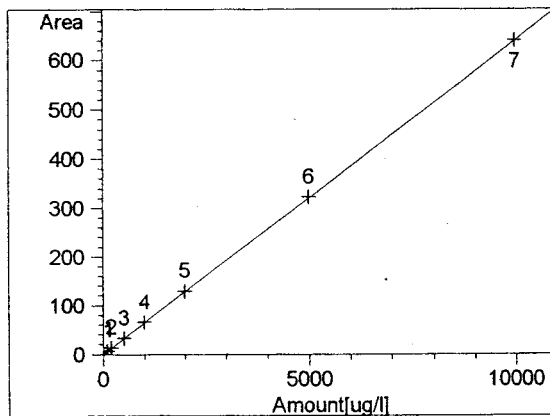
Chrysene at exp. RT: 15.539
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.57474
 Formula: $y = mx + b$
 m: 1.33415e-1
 b: 4.59439e-1
 x: Amount[ug/l]
 y: Area



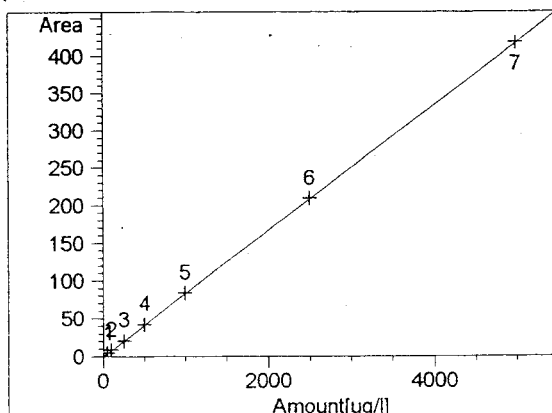
Chrysene at exp. RT: 15.577
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99999
 Residual Std. Dev.: 1.48324
 Formula: $y = mx + b$
 m: $1.77933e-1$
 b: 1.39188
 x: Amount[ug/l]
 y: Area



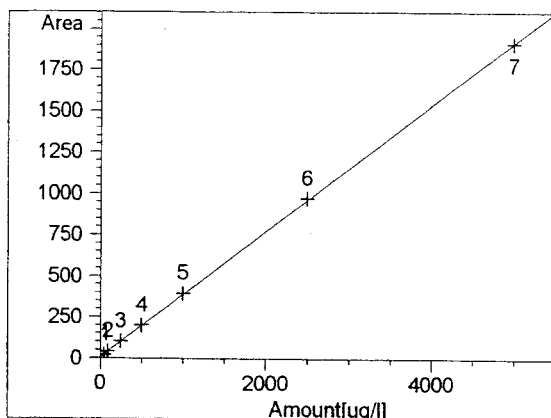
Benzo(b)fluoranthene at exp. RT: 17.772
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.71561
 Formula: $y = mx + b$
 m: $1.06301e-1$
 b: $3.09438e-1$
 x: Amount[ug/l]
 y: Area



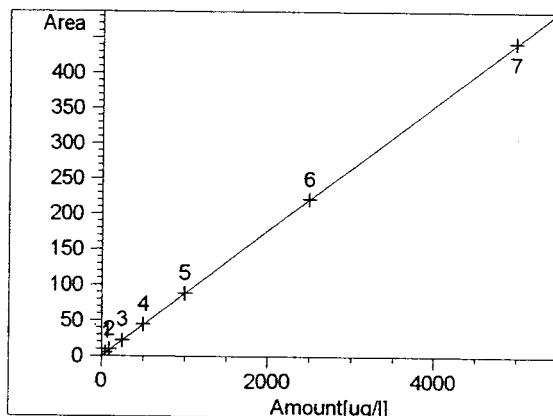
Benzo(b)fluoranthene at exp. RT: 17.810
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 0.79187
 Formula: $y = mx + b$
 m: $6.40783e-2$
 b: $5.89141e-1$
 x: Amount[ug/l]
 y: Area



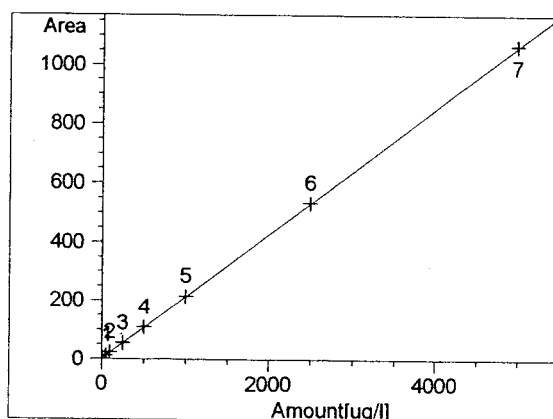
Benzo(k)fluoranthene at exp. RT: 18.726
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.26640
 Formula: $y = mx + b$
 m: $8.35344e-2$
 b: $-1.45349e-1$
 x: Amount[ug/l]
 y: Area



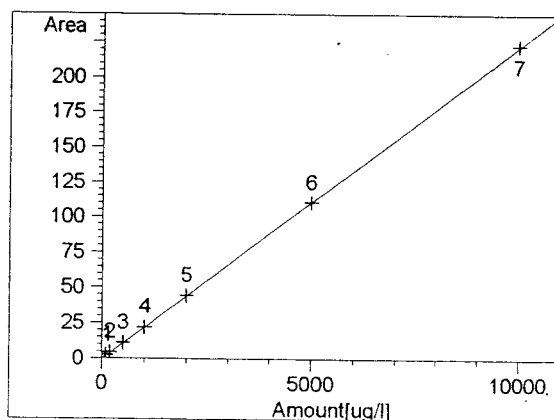
Benzo(k)fluoranthene at exp. RT: 18.764
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99997
 Residual Std. Dev.: 6.35516
 Formula: $y = mx + b$
 m: $3.82102e-1$
 b: 5.25986
 x: Amount[ug/l]
 y: Area



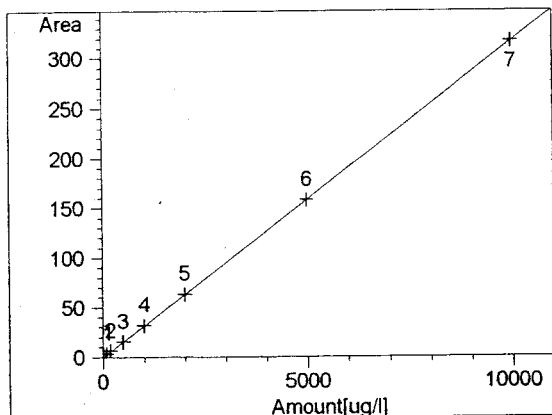
Benzo(a)pyrene at exp. RT: 19.676
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.53487
 Formula: $y = mx + b$
 m: $8.85779e-2$
 b: $-5.40129e-1$
 x: Amount[ug/l]
 y: Area



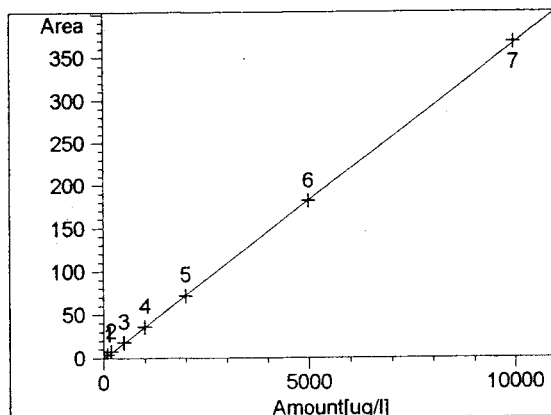
Benzo(a)pyrene at exp. RT: 19.714
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 0.85195
 Formula: $y = mx + b$
 m: $2.12753e-1$
 b: $6.41655e-1$
 x: Amount[ug/l]
 y: Area



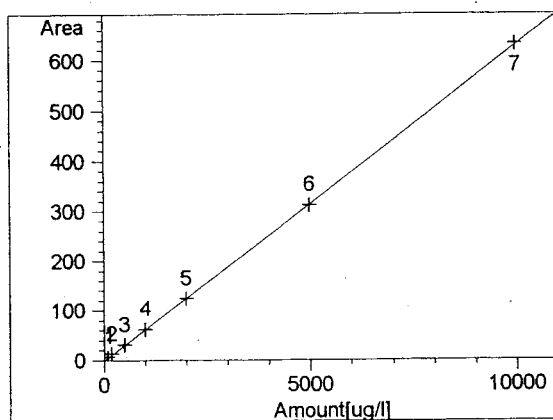
Dibenz(a,h)anthracene at exp. RT: 21.294
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.26499
 Formula: $y = mx + b$
 m: $2.23247e-2$
 b: $-5.32610e-1$
 x: Amount[ug/l]
 y: Area



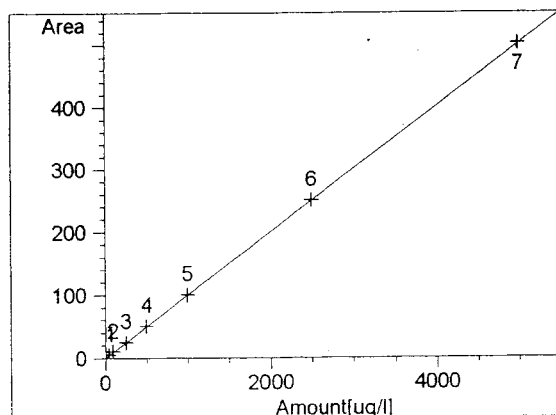
Dibenz(a,h)anthracene at exp. RT: 21.332
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 0.27198
 Formula: $y = mx + b$
 m: $3.17395e-2$
 b: $-2.91544e-1$
 x: Amount[ug/l]
 y: Area



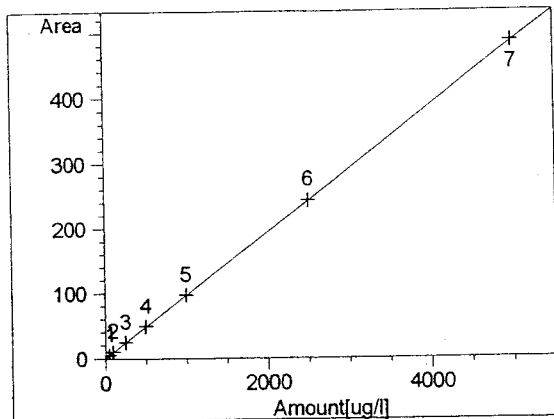
Benzo(g,h,i)perylene at exp. RT: 22.074
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 0.99998
 Residual Std. Dev.: 0.94681
 Formula: $y = mx + b$
 m: $3.67740e-2$
 b: -1.04727
 x: Amount[ug/l]
 y: Area



Benzo(g,h,i)perylene at exp. RT: 22.111
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99998
 Residual Std. Dev.: 1.45280
 Formula: $y = mx + b$
 m: $6.31700e-2$
 b: -1.53644
 x: Amount[ug/l]
 y: Area



Indeno(1,2,3-cd)pyrene at exp. RT: 22.588
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.25692
 Formula: $y = mx + b$
 m: $1.00554e-1$
 b: $-4.92879e-1$
 x: Amount[ug/l]
 y: Area



Indeno(1,2,3-cd)pyrene at exp. RT: 22.626
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 0.41791
 Formula: $y = mx + b$
 m: 9.71800e-2
 b: 1.79343e-1
 x: Amount[ug/l]
 y: Area

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CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188837 HPLC Water
EPA 8310

Inst : HPLC04
Calnum : 296199754001

Cal Date: 18-MAY-2006

ICV 296199754015 (13800015 19-MAY-2006) stds: S3051

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Naphthalene	1	0.0130	0.0134	5000	5126	ug/L	3	15	
Acenaphthylene	1	0.0093	0.0100	10000	10680	ug/L	7	15	
Acenaphthene	1	0.0052	0.0057	5000	5392	ug/L	8	15	
Fluorene	1	0.0627	0.0646	1000	1028	ug/L	3	15	
Phenanthrene	1	0.1800	0.1815	500.0	503.1	ug/L	1	15	
Anthracene	1	0.4248	0.4384	500.0	513.4	ug/L	3	15	
Fluoranthene	1	0.0409	0.0422	1000	1034	ug/L	3	15	
Pyrene	1	0.0342	0.0343	500.0	508.5	ug/L	2	15	
Benzo(a)anthracene	1	0.0943	0.0969	500.0	511.5	ug/L	2	15	
Chrysene	1	0.1335	0.1357	500.0	505.0	ug/L	1	15	
Benzo(b)fluoranthene	1	0.1059	0.1090	1000	1023	ug/L	2	15	
Benzo(k)fluoranthene	1	0.0821	0.0850	500.0	510.7	ug/L	2	15	
Benzo(a)pyrene	1	0.0870	0.0890	500.0	508.4	ug/L	2	15	
Dibenz(a,h)anthracene	1	0.0212	0.0222	1000	1017	ug/L	2	15	
Benzo(g,h,i)perylene	1	0.0351	0.0359	1000	1004	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	1	0.0976	0.1026	500.0	515.2	ug/L	3	15	
Acenaphthylene	2	0.0279	0.0285	10000	10180	ug/L	2	15	
Naphthalene	3	0.0110	0.0113	5000	5130	ug/L	3	15	
Acenaphthene	3	0.0233	0.0248	5000	5302	ug/L	6	15	
Fluorene	3	0.1263	0.1289	1000	1020	ug/L	2	15	
Phenanthrene	3	0.1362	0.1386	500.0	508.6	ug/L	2	15	
Anthracene	3	0.4263	0.4399	500.0	513.7	ug/L	3	15	
Fluoranthene	3	0.0387	0.0407	1000	1050	ug/L	5	15	
Pyrene	3	0.1332	0.1384	500.0	517.2	ug/L	3	15	
Benzo(a)anthracene	3	0.1515	0.1558	500.0	512.8	ug/L	3	15	
Chrysene	3	0.1803	0.1841	500.0	509.6	ug/L	2	15	
Benzo(b)fluoranthene	3	0.0643	0.0664	1000	1027	ug/L	3	15	
Benzo(k)fluoranthene	3	0.3904	0.4029	500.0	513.5	ug/L	3	15	
Benzo(a)pyrene	3	0.2132	0.2200	500.0	513.9	ug/L	3	15	
Dibenz(a,h)anthracene	3	0.0311	0.0322	1000	1025	ug/L	3	15	
Benzo(g,h,i)perylene	3	0.0613	0.0619	1000	1004	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	3	0.0971	0.1010	500.0	517.9	ug/L	4	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188837 HPLC Water
EPA 8310

Inst : HPLC04	Run Name: L	IDF : 1.0
Seqnum : 296340469002	File : 23600002	Time : 24-AUG-2006 11:01
Cal : 296199754001	Caldate : 18-MAY-2006	
Standards: S3190		

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0128	2500	2430	ug/L	-3	15	
Acenaphthylene	1	0.0093	0.0090	5000	4696	ug/L	-6	15	
Acenaphthene	1	0.0052	0.0052	2500	2341	ug/L	-6	15	
Fluorene	1	0.0627	0.0610	500.0	482.1	ug/L	-4	15	
Phenanthrene	1	0.1800	0.1744	250.0	240.3	ug/L	-4	15	
Anthracene	1	0.4248	0.4115	250.0	238.5	ug/L	-5	15	
Fluoranthene	1	0.0409	0.0400	500.0	488.2	ug/L	-2	15	
Pyrene	1	0.0342	0.0331	250.0	245.3	ug/L	-2	15	
Benzo(a)anthracene	1	0.0943	0.0910	250.0	240.6	ug/L	-4	15	
Chrysene	1	0.1335	0.1310	250.0	242.0	ug/L	-3	15	
Benzo(b)fluoranthene	1	0.1059	0.1023	500.0	478.4	ug/L	-4	15	
Benzo(k)fluoranthene	1	0.0821	0.0805	250.0	242.7	ug/L	-3	15	
Benzo(a)pyrene	1	0.0870	0.0848	250.0	245.5	ug/L	-2	15	
Dibenz(a,h)anthracene	1	0.0212	0.0209	500.0	492.5	ug/L	-2	15	
Benzo(g,h,i)perylene	1	0.0351	0.0348	500.0	502.0	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	1	0.0976	0.0984	250.0	249.6	ug/L	0	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0084	50000	49810	ug/L	0	15	
Acenaphthylene	2	0.0279	0.0272	5000	4808	ug/L	-4	15	
1-Methylnaphthalene (UV)	2	0.0031	0.0030	50000	49580	ug/L	-1	15	
Naphthalene	3	0.0110	0.0110	2500	2473	ug/L	-1	15	
Acenaphthene	3	0.0233	0.0233	2500	2395	ug/L	-4	15	
Fluorene	3	0.1263	0.1230	500.0	469.8	ug/L	-6	15	
Phenanthrene	3	0.1362	0.1346	250.0	245.3	ug/L	-2	15	
Anthracene	3	0.4263	0.4204	250.0	244.6	ug/L	-2	15	
Fluoranthene	3	0.0387	0.0380	500.0	488.9	ug/L	-2	15	
Pyrene	3	0.1332	0.1327	250.0	248.9	ug/L	0	15	
Benzo(a)anthracene	3	0.1515	0.1499	250.0	244.7	ug/L	-2	15	
Chrysene	3	0.1803	0.1798	250.0	244.9	ug/L	-2	15	
Benzo(b)fluoranthene	3	0.0643	0.0638	500.0	488.5	ug/L	-2	15	
Benzo(k)fluoranthene	3	0.3904	0.3876	250.0	239.8	ug/L	-4	15	
Benzo(a)pyrene	3	0.2132	0.2128	250.0	247.0	ug/L	-1	15	
Dibenz(a,h)anthracene	3	0.0311	0.0297	500.0	477.0	ug/L	-5	15	
Benzo(g,h,i)perylene	3	0.0613	0.0599	500.0	498.3	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	3	0.0971	0.0944	250.0	241.1	ug/L	-4	15	
1-Methylnaphthalene (F)	3	0.0122	0.0123	50000	51320	ug/L	3	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188837 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: M IDF : 1.0
 Seqnum : 296340469020 File : 23600020 Time : 24-AUG-2006 20:30
 Cal : 296199754001 Caldate : 18-MAY-2006
 Standards: S3192

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0134	5000	5146	ug/L	3	15	
Acenaphthylene	1	0.0093	0.0095	10000	10210	ug/L	2	15	
Acenaphthene	1	0.0052	0.0054	5000	5128	ug/L	3	15	
Fluorene	1	0.0627	0.0643	1000	1024	ug/L	2	15	
Phenanthrene	1	0.1800	0.1848	500.0	512.1	ug/L	2	15	
Anthracene	1	0.4248	0.4359	500.0	510.4	ug/L	2	15	
Fluoranthene	1	0.0409	0.0422	1000	1036	ug/L	4	15	
Pyrene	1	0.0342	0.0357	500.0	529.6	ug/L	6	15	
Benzo(a)anthracene	1	0.0943	0.0966	500.0	510.2	ug/L	2	15	
Chrysene	1	0.1335	0.1381	500.0	514.1	ug/L	3	15	
Benzo(b)fluoranthene	1	0.1059	0.1094	1000	1026	ug/L	3	15	
Benzo(k)fluoranthene	1	0.0821	0.0852	500.0	511.9	ug/L	2	15	
Benzo(a)pyrene	1	0.0870	0.0892	500.0	509.6	ug/L	2	15	
Dibenz(a,h)anthracene	1	0.0212	0.0220	1000	1007	ug/L	1	15	
Benzo(g,h,i)perylene	1	0.0351	0.0361	1000	1010	ug/L	1	15	
Indeno(1,2,3-cd)pyrene	1	0.0976	0.1005	500.0	504.5	ug/L	1	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0086	50000	50900	ug/L	2	15	
Acenaphthylene	2	0.0279	0.0287	10000	10250	ug/L	3	15	
1-Methylnaphthalene (UV)	2	0.0031	0.0031	50000	50760	ug/L	2	15	
Naphthalene	3	0.0110	0.0112	5000	5086	ug/L	2	15	
Acenaphthene	3	0.0233	0.0239	5000	5111	ug/L	2	15	
Fluorene	3	0.1263	0.1284	1000	1016	ug/L	2	15	
Phenanthrene	3	0.1362	0.1370	500.0	502.6	ug/L	1	15	
Anthracene	3	0.4263	0.4422	500.0	516.5	ug/L	3	15	
Fluoranthene	3	0.0387	0.0393	1000	1013	ug/L	1	15	
Pyrene	3	0.1332	0.1310	500.0	489.7	ug/L	-2	15	
Benzo(a)anthracene	3	0.1515	0.1544	500.0	508.0	ug/L	2	15	
Chrysene	3	0.1803	0.1832	500.0	507.0	ug/L	1	15	
Benzo(b)fluoranthene	3	0.0643	0.0664	1000	1027	ug/L	3	15	
Benzo(k)fluoranthene	3	0.3904	0.4043	500.0	515.3	ug/L	3	15	
Benzo(a)pyrene	3	0.2132	0.2187	500.0	510.9	ug/L	2	15	
Dibenz(a,h)anthracene	3	0.0311	0.0327	1000	1040	ug/L	4	15	
Benzo(g,h,i)perylene	3	0.0613	0.0624	1000	1012	ug/L	1	15	
Indeno(1,2,3-cd)pyrene	3	0.0971	0.1014	500.0	519.8	ug/L	4	15	
1-Methylnaphthalene (F)	3	0.0122	0.0122	50000	50990	ug/L	2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188837 HPLC Water
EPA 8310

Inst : HPLC04 Run Name: H IDF : 1.0
 Seqnum : 296340469031 File : 23600031 Time : 25-AUG-2006 02:18
 Cal : 296199754001 Caldate : 18-MAY-2006
 Standards: S2954

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0132	10000	10140	ug/L	1	15	
Acenaphthylene	1	0.0093	0.0094	20000	20280	ug/L	1	15	
Acenaphthene	1	0.0052	0.0052	10000	10070	ug/L	1	15	
Fluorene	1	0.0627	0.0631	2000	2014	ug/L	1	15	
Phenanthrene	1	0.1800	0.1816	1000	1009	ug/L	1	15	
Anthracene	1	0.4248	0.4299	1000	1011	ug/L	1	15	
Fluoranthene	1	0.0409	0.0411	2000	2022	ug/L	1	15	
Pyrene	1	0.0342	0.0352	1000	1042	ug/L	4	15	
Benzo(a)anthracene	1	0.0943	0.0956	1000	1009	ug/L	1	15	
Chrysene	1	0.1335	0.1360	1000	1016	ug/L	2	15	
Benzo(b)fluoranthene	1	0.1059	0.1080	2000	2030	ug/L	1	15	
Benzo(k)fluoranthene	1	0.0821	0.0842	1000	1010	ug/L	1	15	
Benzo(a)pyrene	1	0.0870	0.0884	1000	1004	ug/L	0	15	
Dibenz(a,h)anthracene	1	0.0212	0.0220	2000	1993	ug/L	0	15	
Benzo(g,h,i)perylene	1	0.0351	0.0358	2000	1978	ug/L	-1	15	
Indeno(1,2,3-cd)pyrene	1	0.0976	0.1001	1000	1000	ug/L	0	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0085	50000	50580	ug/L	1	15	
Acenaphthylene	2	0.0279	0.0282	20000	20280	ug/L	1	15	
1-Methylnaphthalene (UV)	2	0.0031	0.0031	50000	50260	ug/L	1	15	
Naphthalene	3	0.0110	0.0111	10000	10130	ug/L	1	15	
Acenaphthene	3	0.0233	0.0236	10000	10260	ug/L	3	15	
Fluorene	3	0.1263	0.1256	2000	2019	ug/L	1	15	
Phenanthrene	3	0.1362	0.1381	1000	1017	ug/L	2	15	
Anthracene	3	0.4263	0.4349	1000	1018	ug/L	2	15	
Fluoranthene	3	0.0387	0.0393	2000	2029	ug/L	1	15	
Pyrene	3	0.1332	0.1367	1000	1020	ug/L	2	15	
Benzo(a)anthracene	3	0.1515	0.1540	1000	1017	ug/L	2	15	
Chrysene	3	0.1803	0.1827	1000	1019	ug/L	2	15	
Benzo(b)fluoranthene	3	0.0643	0.0656	2000	2038	ug/L	2	15	
Benzo(k)fluoranthene	3	0.3904	0.3968	1000	1025	ug/L	2	15	
Benzo(a)pyrene	3	0.2132	0.2168	1000	1016	ug/L	2	15	
Dibenz(a,h)anthracene	3	0.0311	0.0321	2000	2030	ug/L	1	15	
Benzo(g,h,i)perylene	3	0.0613	0.0626	2000	2006	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	3	0.0971	0.0994	1000	1021	ug/L	2	15	
1-Methylnaphthalene (F)	3	0.0122	0.0123	50000	51430	ug/L	3	15	

SEQUENCE SUMMARY FOR 188837 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 296199754 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 18-MAY-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
001	13800001	X	PRIMER - 138			18-MAY-2006 17:14	1.0								
002	13800002	X	PRIMER			18-MAY-2006 17:46	1.0								
003	13800003	X	IB - 138			18-MAY-2006 18:17	1.0								
004	13800004	X	IB			18-MAY-2006 18:49	1.0								
005	13800005	X	IB			18-MAY-2006 19:21	1.0								
006	13800006	ICAL				18-MAY-2006 19:52	1.0								
007	13800007	ICAL				18-MAY-2006 20:24	1.0								
008	13800008	ICAL				18-MAY-2006 20:56	1.0								
009	13800009	ICAL				18-MAY-2006 21:27	1.0								
010	13800010	ICAL				18-MAY-2006 21:59	1.0								
011	13800011	ICAL				18-MAY-2006 22:31	1.0								
012	13800012	ICAL				18-MAY-2006 23:02	1.0								
013	13800013	X	IB			18-MAY-2006 23:34	1.0								
014	13800014	X	IB			19-MAY-2006 00:05	1.0								
015	13800015	ICV	ICV			19-MAY-2006 00:37	1.0			10					
016	13800016	X	ICV			19-MAY-2006 01:09	1.0								
017	13800017	X	IB			19-MAY-2006 01:40	1.0								

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Stds used: 1=S3065 2=S3064 3=S3063 4=S3062 5=S3061 6=S3060 7=S3059 8=S3051

SEQUENCE SUMMARY FOR 188837 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 296340469 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 24-AUG-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
001	23600001	X	IB - 236			24-AUG-2006 10:29	1.0							
002	23600002	CCV	L			24-AUG-2006 11:01	1.0	1.0			10	1		
003	23600003	X	CCV			24-AUG-2006 11:33	1.0					1		
004	23600004	X	IB			24-AUG-2006 12:04	1.0							
005	23600005	BLANK	QC352946			24-AUG-2006 12:36	1.0	0.002			10			
006	23600006	LCS	QC352947			24-AUG-2006 13:07	1.0	0.002			10			
007	23600007	X	IB			24-AUG-2006 13:39	1.0							
008	23600008	SAMPLE	188774-001			24-AUG-2006 14:11	1.0	0.001887			10			
009	23600009	SAMPLE	188774-007			24-AUG-2006 14:42	1.0	0.001887			10			
010	23600010	SAMPLE	188774-002			24-AUG-2006 15:14	1.0	0.001887			10			
011	23600011	SAMPLE	188774-008			24-AUG-2006 15:45	1.0	0.001887			10			
012	23600012	SAMPLE	188774-009			24-AUG-2006 16:17	1.0	0.001887			10			
013	23600013	MSS	188802-001			24-AUG-2006 16:49	1.0	0.001887	6	1	10			4:PYR=30823.2
014	23600014	MS	QC352948			24-AUG-2006 17:20	1.0	0.001887	1	24	10			5:PYR=26940.5
015	23600015	MSD	QC352949			24-AUG-2006 17:52	1.0	0.001887	3	23	10			5:PYR=48189.2
016	23600016	X	IB			24-AUG-2006 18:24	1.0							N
017	23600017	X	IB			24-AUG-2006 18:55	1.0							
018	23600018	X	IB			24-AUG-2006 19:27	1.0							
019	23600019	X	IB			24-AUG-2006 19:58	1.0							
020	23600020	CCV	M			24-AUG-2006 20:30	1.0							
021	23600021	X	CCV			24-AUG-2006 21:01	1.0	1.0			10	2		
022	23600022	X	IB			24-AUG-2006 21:33	1.0							
023	23600023	SAMPLE	188802-004			24-AUG-2006 22:05	1.0	0.001887			10			
024	23600024	SAMPLE	188802-005			24-AUG-2006 22:36	1.0	0.001887			10			
025	23600025	SAMPLE	188802-006			24-AUG-2006 23:08	1.0	0.001887			10			
026	23600026	SAMPLE	188802-008			24-AUG-2006 23:40	1.0	0.001887			10			
027	23600027	SAMPLE	188802-010			25-AUG-2006 00:11	1.0	0.001887			10			
028	23600028	SAMPLE	188837-012			25-AUG-2006 00:43	1.0	0.001905			10			
029	23600029	SAMPLE	188869-001			25-AUG-2006 01:14	1.0	0.001905			10			
030	23600030	X	IB			25-AUG-2006 01:46	1.0							
031	23600031	CCV	H			25-AUG-2006 02:18	1.0	1.0			10	3		

Stds used: 1=S3190 2=S3192 3=S2954

SEQUENCE SUMMARY FOR 188837 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 296340469 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 24-AUG-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Std	Used	>LR
032	23600032	X	CCV			25-AUG-2006	02:49	1.0				3		
033	23600033	X	IB			25-AUG-2006	03:21	1.0						

Std's used: 1=S3190 2=S3192 3=S2954

REPORTING SUMMARY FOR 188837 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
188837-012	Naphthalene	HPLC04	1	08/25/06 00:43
188837-012	Acenaphthylene	HPLC04	1	08/25/06 00:43
188837-012	Acenaphthene	HPLC04	1	08/25/06 00:43
188837-012	Fluorene	HPLC04	1	08/25/06 00:43
188837-012	Phenanthrene	HPLC04	3	08/25/06 00:43
188837-012	Anthracene	HPLC04	3	08/25/06 00:43
188837-012	Fluoranthene	HPLC04	3	08/25/06 00:43
188837-012	Pyrene	HPLC04	3	08/25/06 00:43
188837-012	Benzo(a)anthracene	HPLC04	3	08/25/06 00:43
188837-012	Chrysene	HPLC04	3	08/25/06 00:43
188837-012	Benzo(b)fluoranthene	HPLC04	3	08/25/06 00:43
188837-012	Benzo(k)fluoranthene	HPLC04	3	08/25/06 00:43
188837-012	Benzo(a)pyrene	HPLC04	3	08/25/06 00:43
188837-012	Dibenz(a,h)anthracene	HPLC04	3	08/25/06 00:43
188837-012	Benzo(g,h,i)perylene	HPLC04	3	08/25/06 00:43
188837-012	Indeno(1,2,3-cd)pyrene	HPLC04	3	08/25/06 00:43
188837-012	1-Methylnaphthalene (UV)	HPLC04	1	08/25/06 00:43
188837-012	1-Methylnaphthalene (F)	HPLC04	3	08/25/06 00:43
QC352946	Naphthalene	HPLC04	1	08/24/06 12:36
QC352946	Acenaphthylene	HPLC04	1	08/24/06 12:36
QC352946	Acenaphthene	HPLC04	1	08/24/06 12:36
QC352946	Fluorene	HPLC04	1	08/24/06 12:36
QC352946	Phenanthrene	HPLC04	3	08/24/06 12:36
QC352946	Anthracene	HPLC04	3	08/24/06 12:36
QC352946	Fluoranthene	HPLC04	3	08/24/06 12:36
QC352946	Pyrene	HPLC04	3	08/24/06 12:36
QC352946	Benzo(a)anthracene	HPLC04	3	08/24/06 12:36
QC352946	Chrysene	HPLC04	3	08/24/06 12:36
QC352946	Benzo(b)fluoranthene	HPLC04	3	08/24/06 12:36
QC352946	Benzo(k)fluoranthene	HPLC04	3	08/24/06 12:36
QC352946	Benzo(a)pyrene	HPLC04	3	08/24/06 12:36
QC352946	Dibenz(a,h)anthracene	HPLC04	3	08/24/06 12:36
QC352946	Benzo(g,h,i)perylene	HPLC04	3	08/24/06 12:36
QC352946	Indeno(1,2,3-cd)pyrene	HPLC04	3	08/24/06 12:36
QC352946	1-Methylnaphthalene (UV)	HPLC04	1	08/24/06 12:36
QC352946	1-Methylnaphthalene (F)	HPLC04	3	08/24/06 12:36
QC352947	Naphthalene	HPLC04	1	08/24/06 13:07
QC352947	Fluorene	HPLC04	1	08/24/06 13:07
QC352947	Pyrene	HPLC04	3	08/24/06 13:07
QC352947	Benzo(a)pyrene	HPLC04	3	08/24/06 13:07
QC352947	1-Methylnaphthalene (UV)	HPLC04	1	08/24/06 13:07
QC352947	1-Methylnaphthalene (F)	HPLC04	3	08/24/06 13:07
QC352948	Naphthalene	HPLC04	1	08/24/06 17:20
QC352948	Fluorene	HPLC04	1	08/24/06 17:20
QC352948	Pyrene	HPLC04	3	08/24/06 17:20
QC352948	Benzo(a)pyrene	HPLC04	3	08/24/06 17:20
QC352948	1-Methylnaphthalene (UV)	HPLC04	1	08/24/06 17:20
QC352948	1-Methylnaphthalene (F)	HPLC04	3	08/24/06 17:20
QC352949	Naphthalene	HPLC04	1	08/24/06 17:52
QC352949	Fluorene	HPLC04	1	08/24/06 17:52

REPORTING SUMMARY FOR 188837 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC352949	Pyrene	HPLC04	3	08/24/06 17:52
QC352949	Benzo(a)pyrene	HPLC04	3	08/24/06 17:52
QC352949	1-Methylnaphthalene (UV)	HPLC04	1	08/24/06 17:52
QC352949	1-Methylnaphthalene (F)	HPLC04	3	08/24/06 17:52

Curtis & Tompkins Laboratories Sample Preparation Summary

23-AUG-2006 17:56

Batch Number : 116658
 Date Extracted : 22-AUG-2006
 Extracted by : Jessie O'Brien Mee
 Prep Method : 3520C

Analysis : 8310
 Bgroup : N/A
 Units : mL
 Clean-up :

Spike #1 ID : S4149D
 Spike #2 ID : S3553B
 Spike #3 ID : S310W
 SDF Version : rv6

Sample	Type	Client	Matrix	Init	Units	Final	Prep	Clean	pH	Sp	1	Sp	2	Sp	3	Analyses	Clean	Comments
				W/V		Vol	D.F.	D.F.		Vol		Vol		Vol			Method	
188774-001		Treadwell & Rollo	Water	1060	ml	2	0.001887	1	7	.1	0				8310			
188774-002		Treadwell & Rollo	Water	1060	ml	2	0.001887	1	7	.1	0				8310			
188774-007		Treadwell & Rollo	Water	1060	ml	2	0.001887	1	7	.1	0				8310			
188774-008		Treadwell & Rollo	Water	1060	ml	2	0.001887	1	7	.1	0				8310			
188774-009		Treadwell & Rollo	Water	1060	ml	2	0.001887	1	7	.1	0				8310			
188802-001		Treadwell & Rollo	Water	1060	ml	2	0.001887	1	7	.1	0				8310			
188802-004		Treadwell & Rollo	Water	1060	ml	2	0.001887	1	7	.1	0				8310			
188802-005		Treadwell & Rollo	Water	1060	ml	2	0.001887	1	7	.1	0				8310			
188802-006		Treadwell & Rollo	Water	1060	ml	2	0.001887	1	7	.1	0				8310			
188802-008		Treadwell & Rollo	Water	1060	ml	2	0.001887	1	7	.1	0				8310			
188802-010		Treadwell & Rollo	Water	1050	ml	2	0.001905	1	5	-.1	0				8310			
188837-012		Treadwell & Rollo	Water	1050	ml	2	0.001905	1	6	-.1	0				8310			
188869-001		Treadwell & Rollo	Water	1000	ml	2	0.002000	1		.1	0				8310			
QC352946	BLANK		Water	1000	ml	2	0.002000	1		.1	1				8310			
QC352947	LCS		Water	1060	ml	2	0.001887	1	7	.1	1				8310			
QC352948	MS		Water	1060	ml	2	0.001887	1	7	.1	1				8310			
QC352949	MSD		Water	1060	ml	2	0.001887	1	7	.1	1				8310			
of 188802-001, of 188802-001, MSD																		

MSS

Prep Chemist: [Signature] Reviewed By: [Signature] Date: 8/24/06
 Relinquished By: [Signature] Received By: [Signature] Date: 24 AUG 2006

[illegible]

Mfg & Lot# / LIMS # / Time		Date / Initials
<u>0.1</u> mL of surrogate solution was added to all samples	S449D/G*	10/18/22
<u>1.0</u> mL of matrix spiking solution was added to all spikes	S3553B	
☒ Samples continuously extracted with about 450 mL of CH ₂ Cl ₂	EM46121	
Extraction Start Time:	1420 ^{10/18/22} 1620	
Extraction End Time:	1025	JLM 8/23/06
☐ Samples were extracted 3 times with 60 mL of CH ₂ Cl ₂	n/a	PdM 8/23/06
Extracts filtered through baked, CH ₂ Cl ₂ -rinsed ^{off-analyte} powdered Na ₂ SO ₄	EM46111620	
Exchanged 2x with Acetonitrile	EM46059	
Concentrated: ☐ to volumes as noted above ☐ to clean-up volume	✓	
Clean-up (if necessary): ☐ GPC (see GPC run log) ☐ Silica Gel	n/a	
Extracts filtered with 0.45 um PTFE syringe filter	whatman K774	✓

Reviewed by [Signature] Date 8/24/06

Curtis & Tompkins Laboratories
MDL Summary for EPA 8310 Water 3520C
As of 09/24/06

Analyte	Units	HPLC02 1	HPLC02 2	HPLC02 3	HPLC04 1	HPLC04 2	HPLC04 3
Naphthalene	ug/L	0.16		0.069	0.097		0.10
Acenaphthylene	ug/L	0.37	0.29		0.24	0.16	
2-Methylnaphthalene	ug/L				0.072		0.10
Acenaphthene	ug/L	0.36		0.098	0.33		0.085
Fluorene	ug/L	0.051		0.054	0.028		0.017
Phenanthrene	ug/L	0.030		0.0086	0.0082		0.0078
Anthracene	ug/L	0.021		0.0077	0.024		0.023
Fluoranthene	ug/L	0.13		0.011	0.042		0.013
Pyrene	ug/L	0.066		0.0048	0.036		0.010
Benzo (a) anthracene	ug/L	0.044		0.0046	0.022		0.013
Chrysene	ug/L	0.036		0.0059	0.021		0.0096
Benzo (b) fluoranthene	ug/L	0.032		0.0081	0.015		0.013
Benzo (k) fluoranthene	ug/L	0.037		0.0044	0.013		0.0080
Benzo (a) pyrene	ug/L	0.055		0.0045	0.017		0.025
Dibenz (a,h) anthracene	ug/L	0.12		0.026	0.037		0.025
Benzo (g,h,i) perylene	ug/L	0.066		0.014	0.047		0.017
Indeno (1,2,3-cd) pyrene	ug/L	0.065		0.011	0.013		0.0096
1-Methylnaphthalene (UV)	ug/L	1.2	1.9		9.0	9.1	
1-Methylnaphthalene (F)	ug/L			0.72			9.8

METALS

Metals			
Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	610SP01	Batch#:	116738
Lab ID:	188837-005	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Prepared:	08/24/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	29,000	250	5.000	08/25/06
Arsenic	6.4	5.0	1.000	08/25/06
Cadmium	ND	1.0	1.000	08/24/06
Calcium	270,000	1,300	25.00	08/25/06
Chromium	110	10	1.000	08/25/06
Copper	35	1.0	1.000	08/24/06
Iron	57,000	250	5.000	08/25/06
Lead	55	3.0	1.000	08/24/06
Magnesium	460,000	1,300	25.00	08/25/06
Manganese	4,800	10	25.00	08/25/06
Nickel	170	20	1.000	08/24/06
Potassium	88,000	500	5.000	08/25/06
Sodium	3,800,000	13,000	250.0	08/25/06
Zinc	110	20	1.000	08/24/06

ND= Not Detected

RL= Reporting Limit

**Dissolved Metals**

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	610SP01	Batch#:	116738
Lab ID:	188837-005	Sampled:	08/17/06
Matrix:	Filtrate	Received:	08/18/06
Units:	ug/L	Prepared:	08/24/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	08/24/06
Arsenic	7.7	5.0	1.000	08/25/06
Cadmium	ND	1.0	1.000	08/24/06
Calcium	230,000	1,300	25.00	08/25/06
Chromium	ND	10	1.000	08/25/06
Copper	1.4	1.0	1.000	08/24/06
Iron	4,200	100	1.000	08/24/06
Lead	ND	3.0	1.000	08/24/06
Magnesium	400,000	1,300	25.00	08/25/06
Manganese	3,900	10	25.00	08/25/06
Nickel	ND	20	1.000	08/24/06
Potassium	90,000	1,300	25.00	08/25/06
Sodium	3,400,000	13,000	250.0	08/25/06
Zinc	ND	20	1.000	08/24/06

ND= Not Detected
RL= Reporting Limit

Dissolved Metals

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ1A	Batch#:	116738
Lab ID:	188837-008	Sampled:	08/17/06
Matrix:	Filtrate	Received:	08/18/06
Units:	ug/L	Prepared:	08/24/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	08/24/06
Antimony	ND	1.0	1.000	08/24/06
Arsenic	24	5.0	1.000	08/24/06
Cadmium	ND	1.0	1.000	08/24/06
Calcium	21,000	1,000	20.00	08/25/06
Chromium	ND	10	1.000	08/25/06
Copper	ND	1.0	1.000	08/24/06
Iron	16,000	100	1.000	08/24/06
Lead	ND	3.0	1.000	08/24/06
Magnesium	50,000	1,000	20.00	08/25/06
Manganese	64	10	1.000	08/24/06
Nickel	ND	20	1.000	08/24/06
Potassium	1,600	500	1.000	08/24/06
Sodium	220,000	1,000	20.00	08/25/06
Vanadium	ND	10	1.000	08/24/06
Zinc	ND	20	1.000	08/24/06

**Dissolved Metals**

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ2A	Batch#:	116738
Lab ID:	188837-009	Sampled:	08/17/06
Matrix:	Filtrate	Received:	08/18/06
Units:	ug/L	Prepared:	08/24/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	08/24/06
Antimony	ND	1.0	1.000	08/24/06
Arsenic	16	5.0	1.000	08/24/06
Cadmium	ND	1.0	1.000	08/24/06
Calcium	23,000	500	10.00	08/24/06
Chromium	ND	10	1.000	08/25/06
Copper	ND	1.0	1.000	08/24/06
Iron	13,000	100	1.000	08/24/06
Lead	ND	3.0	1.000	08/24/06
Magnesium	46,000	500	10.00	08/25/06
Manganese	880	10	10.00	08/25/06
Nickel	ND	20	1.000	08/24/06
Potassium	740	500	1.000	08/24/06
Sodium	65,000	500	10.00	08/25/06
Vanadium	ND	10	1.000	08/24/06
Zinc	ND	20	1.000	08/24/06

ND= Not Detected
RL= Reporting Limit

Dissolved Metals

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ4A	Batch#:	116738
Lab ID:	188837-010	Sampled:	08/17/06
Matrix:	Filtrate	Received:	08/18/06
Units:	ug/L	Prepared:	08/24/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	08/24/06
Antimony	ND	1.0	1.000	08/24/06
Arsenic	12	5.0	1.000	08/24/06
Cadmium	ND	1.0	1.000	08/24/06
Calcium	45,000	500	10.00	08/25/06
Chromium	ND	10	1.000	08/25/06
Copper	ND	1.0	1.000	08/24/06
Iron	23,000	500	10.00	08/25/06
Lead	ND	3.0	1.000	08/24/06
Magnesium	64,000	500	10.00	08/25/06
Manganese	1,700	10	10.00	08/25/06
Nickel	ND	20	1.000	08/24/06
Potassium	6,800	500	1.000	08/24/06
Sodium	120,000	500	10.00	08/25/06
Vanadium	ND	10	1.000	08/25/06
Zinc	ND	20	1.000	08/24/06

ND= Not Detected
 RL= Reporting Limit

**Target Analyte List Metals**

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DW081706A	Batch#:	116738
Lab ID:	188837-012	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Prepared:	08/24/06
Diln Fac:	1.000		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	08/24/06
Antimony	ND	1.0	08/24/06
Arsenic	ND	5.0	08/24/06
Barium	ND	10	08/24/06
Beryllium	ND	2.0	08/24/06
Cadmium	ND	1.0	08/24/06
Calcium	ND	500	08/24/06
Chromium	ND	10	08/25/06
Cobalt	ND	10	08/24/06
Copper	ND	1.0	08/24/06
Iron	ND	100	08/24/06
Lead	ND	3.0	08/24/06
Magnesium	ND	500	08/24/06
Manganese	ND	10	08/25/06
Nickel	ND	20	08/24/06
Potassium	ND	500	08/24/06
Selenium	ND	5.0	08/24/06
Silver	ND	1.0	08/24/06
Sodium	800	500	08/25/06
Thallium	ND	1.0	08/24/06
Vanadium	ND	10	08/25/06
Zinc	ND	20	08/24/06

ND= Not Detected

RL= Reporting Limit



Batch QC Report

Target Analyte List Metals

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC353251	Batch#:	116738
Matrix:	Filtrate	Prepared:	08/24/06
Units:	ug/L		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	08/24/06
Antimony	ND	1.0	08/24/06
Arsenic	ND	5.0	08/24/06
Barium	ND	10	08/24/06
Beryllium	ND	2.0	08/24/06
Cadmium	ND	1.0	08/24/06
Calcium	ND	500	08/24/06
Chromium	ND	10	08/25/06
Cobalt	ND	10	08/24/06
Copper	ND	1.0	08/24/06
Iron	ND	100	08/24/06
Lead	ND	3.0	08/24/06
Magnesium	ND	500	08/24/06
Manganese	ND	10	08/24/06
Nickel	ND	20	08/24/06
Potassium	ND	500	08/24/06
Selenium	ND	5.0	08/24/06
Silver	ND	1.0	08/24/06
Sodium	ND	500	08/25/06
Thallium	ND	1.0	08/24/06
Vanadium	ND	10	08/24/06
Zinc	ND	20	08/24/06

ND= Not Detected

RL= Reporting Limit

**Mercury by Cold Vapor AA**

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	116599
Field ID:	DW081706A	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Prepared:	08/21/06
Diln Fac:	1.000	Analyzed:	08/21/06

Type	Lab ID	Result	RL
SAMPLE	188837-012	ND	0.20
BLANK	QC352691	ND	0.20



Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals			
Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Filtrate	Batch#:	116738
Units:	ug/L	Prepared:	08/24/06
Diln Fac:	1.000		

Type: BS

Lab ID:

QC353252

Analyte	Spiked	Result	%REC	Limits	Analyzed
Aluminum	10,100	10,530	104	80-120	08/25/06
Antimony	100.0	99.09	99	80-120	08/24/06
Arsenic	100.0	92.99	93	80-120	08/24/06
Barium	100.0	103.1	103	80-120	08/24/06
Beryllium	100.0	101.9	102	80-120	08/25/06
Cadmium	100.0	96.17	96	80-120	08/24/06
Calcium	10,000	10,480	105	80-120	08/24/06
Chromium	100.0	97.18	97	80-120	08/25/06
Cobalt	100.0	88.39	88	80-120	08/24/06
Copper	100.0	93.20	93	80-120	08/24/06
Iron	10,000	9,602	96	80-120	08/24/06
Lead	100.0	96.72	97	80-120	08/24/06
Magnesium	10,000	10,370	104	80-120	08/25/06
Manganese	100.0	89.47	89	80-120	08/24/06
Nickel	100.0	94.34	94	80-120	08/24/06
Potassium	10,000	10,160	102	80-120	08/24/06
Selenium	100.0	88.33	88	80-120	08/24/06
Silver	100.0	103.0	103	80-120	08/24/06
Sodium	10,000	10,240	102	80-120	08/25/06
Thallium	50.00	47.93	96	80-120	08/24/06
Vanadium	100.0	95.39	95	80-120	08/24/06
Zinc	100.0	91.20	91	80-120	08/24/06

Type: BSD

Lab ID:

QC353253

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
Aluminum	10,100	10,110	100	80-120	4	20	08/25/06
Antimony	100.0	98.52	99	80-120	1	20	08/24/06
Arsenic	100.0	98.18	98	80-120	5	20	08/24/06
Barium	100.0	100.8	101	80-120	2	20	08/24/06
Beryllium	100.0	98.31	98	80-120	4	20	08/25/06
Cadmium	100.0	102.6	103	80-120	6	20	08/24/06
Calcium	10,000	10,390	104	80-120	1	20	08/24/06
Chromium	100.0	99.90	100	80-120	3	20	08/25/06
Cobalt	100.0	96.15	96	80-120	8	20	08/24/06
Copper	100.0	102.0	102	80-120	9	20	08/24/06
Iron	10,000	10,410	104	80-120	8	20	08/24/06
Lead	100.0	96.63	97	80-120	0	20	08/24/06
Magnesium	10,000	9,970	100	80-120	4	20	08/25/06
Manganese	100.0	97.04	97	80-120	8	20	08/24/06
Nickel	100.0	102.2	102	80-120	8	20	08/24/06
Potassium	10,000	10,180	102	80-120	0	20	08/24/06
Selenium	100.0	92.53	93	80-120	5	20	08/24/06
Silver	100.0	109.7	110	80-120	6	20	08/24/06
Sodium	10,000	9,855	99	80-120	4	20	08/25/06
Thallium	50.00	49.35	99	80-120	3	20	08/24/06
Vanadium	100.0	95.94	96	80-120	1	20	08/24/06
Zinc	100.0	97.45	97	80-120	7	20	08/24/06

RPD= Relative Percent Difference

Page 1 of 1

Batch QC Report

Mercury by Cold Vapor AA

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	116599
Field ID:	1349MW100	Sampled:	08/16/06
MSS Lab ID:	188802-001	Received:	08/17/06
Units:	ug/L	Prepared:	08/21/06
Diln Fac:	1.000	Analyzed:	08/21/06

Type	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC352692	Water		5.000	4.190	84	80-120		
BSD	QC352693	Water		5.000	4.240	85	80-120	1	20
MS	QC352695	Filtrate	<0.05753	5.000	3.590	72 *	75-125		
MSD	QC352696	Filtrate		5.000	3.520	70 *	75-125	2	20

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference



Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals			
Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ2A	Batch#:	116738
MSS Lab ID:	188837-009	Sampled:	08/17/06
Matrix:	Filtrate	Received:	08/18/06
Units:	ug/L	Prepared:	08/24/06

Type: MS Lab ID: QC353254

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln	Fac	Analyzed
Aluminum	<9.556	10,100	10,120	100	75-125	1.000		08/25/06
Antimony	0.09282	100.0	103.0	103	75-125	1.000		08/24/06
Arsenic	16.46	100.0	112.1	96	75-125	1.000		08/24/06
Barium	77.15	100.0	189.1	112	75-125	1.000		08/24/06
Beryllium	<0.1228	100.0	100.2	100	75-125	1.000		08/25/06
Cadmium	<0.1659	100.0	94.70	95	75-125	1.000		08/24/06
Calcium	22,790	10,000	33,610	108	75-125	10.00		08/24/06
Chromium	1.546	100.0	97.74	96	75-125	1.000		08/25/06
Cobalt	1.833	100.0	94.41	93	75-125	1.000		08/24/06
Copper	0.3120	100.0	96.96	97	75-125	1.000		08/24/06
Iron	13,480	10,000	21,990	85	75-125	10.00		08/24/06
Lead	<0.08794	100.0	98.41	98	75-125	1.000		08/24/06
Magnesium	45,770	10,000	57,400	116	NM 75-125	10.00		08/25/06
Manganese	877.8	100.0	1,010	132	NM 75-125	10.00		08/25/06
Nickel	2.248	100.0	99.76	98	75-125	1.000		08/24/06
Potassium	741.5	10,000	10,900	102	75-125	1.000		08/24/06
Selenium	0.5030	100.0	87.39	87	75-125	1.000		08/24/06
Silver	<0.06797	100.0	101.6	102	75-125	1.000		08/24/06
Sodium	64,930	10,000	77,170	122	NM 75-125	10.00		08/25/06
Thallium	0.3916	50.00	49.31	98	75-125	1.000		08/24/06
Vanadium	0.9928	100.0	105.3	104	75-125	1.000		08/24/06
Zinc	2.017	100.0	95.28	93	75-125	1.000		08/24/06

Type: MSD Lab ID: QC353255

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Analyzed
Aluminum	10,100	10,350	102	75-125	2	20	1.000		08/25/06
Antimony	100.0	99.22	99	75-125	4	20	1.000		08/24/06
Arsenic	100.0	109.6	93	75-125	2	20	1.000		08/24/06
Barium	100.0	183.9	107	75-125	3	20	1.000		08/24/06
Beryllium	100.0	102.0	102	75-125	2	20	1.000		08/25/06
Cadmium	100.0	92.17	92	75-125	3	20	1.000		08/24/06
Calcium	10,000	33,350	106	75-125	1	20	10.00		08/24/06
Chromium	100.0	93.86	92	75-125	4	20	1.000		08/25/06
Cobalt	100.0	92.84	91	75-125	2	20	1.000		08/24/06
Copper	100.0	95.86	96	75-125	1	20	1.000		08/24/06
Iron	10,000	22,050	86	75-125	0	20	10.00		08/24/06
Lead	100.0	96.49	96	75-125	2	20	1.000		08/24/06
Magnesium	10,000	57,080	113	NM 75-125	1	20	10.00		08/25/06
Manganese	100.0	999.6	122	NM 75-125	1	20	10.00		08/25/06
Nickel	100.0	99.54	97	75-125	0	20	1.000		08/24/06
Potassium	10,000	10,630	99	75-125	3	20	1.000		08/24/06
Selenium	100.0	84.82	84	75-125	3	20	1.000		08/24/06
Silver	100.0	99.25	99	75-125	2	20	1.000		08/24/06
Sodium	10,000	77,050	121	NM 75-125	0	20	10.00		08/25/06
Thallium	50.00	48.73	97	75-125	1	20	1.000		08/24/06
Vanadium	100.0	96.82	96	75-125	8	20	1.000		08/24/06
Zinc	100.0	90.18	88	75-125	5	20	1.000		08/24/06

NM= Not Meaningful: Sample concentration > 4X spike concentration

RPD= Relative Percent Difference

Batch QC Report

Target Analyte List Metals

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ2A	Units:	ug/L
Type:	Serial Dilution	Batch#:	116738
MSS Lab ID:	188837-009	Sampled:	08/17/06
Lab ID:	QC353256	Received:	08/18/06
Matrix:	Filtrate		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln	Fac	Analyzed
Aluminum	ND	100.0	ND	250.0	NC	10	5.000		08/25/06
Antimony	ND	1.000	ND	1.250	NC	10	5.000		08/25/06
Arsenic	16.46	5.000	22.59	5.000	NC	10	5.000		08/25/06
Barium	79.67	10.00	78.92	10.00	1	10	5.000		08/25/06
Beryllium	ND	2.000	ND	2.000	NC	10	5.000		08/25/06
Cadmium	ND	1.000	ND	1.250	NC	10	5.000		08/25/06
Calcium	22,790	500.0	26,960	2,500	18 *	10	50.00		08/24/06
Chromium	ND	10.00	4.239 J	10.00	NC	10	5.000		08/25/06
Cobalt	ND	10.00	1.974 J	10.00	NC	10	5.000		08/25/06
Copper	ND	1.000	ND	2.500	NC	10	5.000		08/25/06
Iron	13,480	100.0	13,320	250.0	1	10	5.000		08/25/06
Lead	ND	3.000	ND	3.000	NC	10	5.000		08/25/06
Magnesium	45,770	500.0	42,260	2,500	8	10	50.00		08/25/06
Manganese	877.8	10.00	881.7	12.50	0	10	50.00		08/25/06
Nickel	ND	20.00	2.557 J	20.00	NC	10	5.000		08/25/06
Potassium	741.5	500.0	754.9	500.0	2	10	5.000		08/25/06
Selenium	ND	5.000	ND	5.000	NC	10	5.000		08/25/06
Silver	ND	1.000	ND	1.250	NC	10	5.000		08/25/06
Sodium	64,930	500.0	66,800	2,500	3	10	50.00		08/25/06
Thallium	ND	1.000	ND	1.250	NC	10	5.000		08/25/06
Vanadium	ND	10.00	4.420 J	10.00	NC	10	5.000		08/25/06
Zinc	ND	20.00	1.660 J	20.00	NC	10	5.000		08/25/06

*= Value outside of QC limits; see narrative

J= Estimated value

NC= Not Calculated

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Mercury by Cold Vapor AA			
Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	1349MW100	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	116599
MSS Lab ID:	188802-001	Sampled:	08/16/06
Lab ID:	QC352694	Received:	08/17/06
Matrix:	Filtrate	Analyzed:	08/21/06

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
 ND= Not Detected
 RL= Reporting Limit

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
 Inst : MET05
 Seqnum: 56340782044
 File : h2415044
 IDF : 1.0
 Lab ID: 188837-009
 Matrix: Filtrate
 Batch : 116738
 Time : 24-AUG-2006 19:47
 Cal : 56340782001
 Units : ug/L

Type : PDS
 Inst : MET05
 Seqnum: 56340782048
 File : h2415048
 IDF : 1.0
 Lab ID: QC353257
 Matrix: Filtrate
 Batch : 116738
 Time : 24-AUG-2006 20:09
 Cal : 56340782001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S3780 (100X)

Analyte	MSS	Spiked	PDS	%Rec	Limits	Flags
Aluminum	ND	10000	9370	94	75-125	>c+ b*
Antimony	0.09282	100.0	95.39	95	75-125	u
Arsenic	16.46	100.0	105.4	89	75-125	u
Barium	77.15	100.0	175.3	98	75-125	u
Beryllium	ND	100.0	95.54	96	75-125	>c+ b*
Cadmium	ND	100.0	90.88	91	75-125	u
Cobalt	1.833	100.0	90.13	88	75-125	u
Copper	0.3120	100.0	92.34	92	75-125	u
Iron	13480	10000	22720 >LR	92	75-125	>LR b*
Lead	ND	100.0	91.99	92	75-125	u
Molybdenum	0.9674	100.0	95.14	94	75-125	
Nickel	2.248	100.0	94.76	93	75-125	u
Potassium	741.5	10000	10160	94	75-125	u
Selenium	0.5030	100.0	84.07	84	75-125	u
Silver	ND	100.0	89.13	89	75-125	u
Thallium	0.3916	50.00	48.14	95	75-125	u
Vanadium	0.9928	100.0	90.81	90	75-125	u
Zinc	2.017	100.0	89.02	87	75-125	u

ISTD (ICALBLK h2415005)	ICALBLK Abund	PDS Abund	%Drift
Lithium	336846	272836	-19.00
Scandium	366577	310112	-15.40
Germanium	82555	69075	-16.33
Indium	571579	434239	-24.03
Bismuth	478991	359221	-25.00

MISSING READINGS: CA CR MG MN NA

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : PDS
 Inst : MET05
 Seqnum: 56341908027
 File : h2510027
 IDF : 1.0
 Lab ID: QC353257
 Matrix: Filtrate
 Batch : 116738
 Time : 25-AUG-2006 12:54
 Cal : 56341908001
 MSS : 188837-009
 Units : ug/L

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S3780 (100X), S3310

Analyte	MSS Seqnum	Result	Spiked	PDS	%Rec	Limits	Flags
Aluminum	56340782044	ND	10000	9878	99	75-125	u
Antimony	56340782044	0.09282	100.0	95.48	95	75-125	
Arsenic	56340782044	16.46	100.0	106.6	90	75-125	
Barium	56341908023	79.67	100.0	177.5	98	75-125	
Beryllium	56341908023	ND	100.0	97.29	97	75-125	u
Cadmium	56340782044	ND	100.0	90.42	90	75-125	
Chromium	56341908023	1.546	100.0	89.96	88	75-125	u
Cobalt	56341908023	1.912	100.0	88.97	87	75-125	
Copper	56340782044	0.3120	100.0	92.27	92	75-125	
Iron	56340782044	13480	10000	21980 >LR	85	75-125	>LR b*
Lead	56340782044	ND	100.0	97.59	98	75-125	
Molybdenum	56341908023	0.9667	100.0	97.47	97	75-125	
Nickel	56340782044	2.248	100.0	94.02	92	75-125	
Potassium	56340782044	741.5	10000	10390	96	75-125	
Selenium	56341908023	0.5799	100.0	85.35	85	75-125	
Silver	56341908023	ND	100.0	89.45	89	75-125	
Thallium	56341908023	0.1639	50.00	48.45	97	75-125	
Vanadium	56340782044	0.9928	100.0	89.10	88	75-125	
Zinc	56340782044	2.017	100.0	86.90	85	75-125	

ISTD (ICALBLK h2510003)	ICALBLK Abund	PDS Abund	%Drift
Lithium	323251	285974	-11.53
Scandium	341957	300450	-12.14
Germanium	80606	71332	-11.51
Indium	530308	432939	-18.36
Bismuth	437483	370956	-15.21

MISSING READINGS: CA MG MN NA

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
 Inst : MET05
 Seqnum: 56340782061
 File : h2415061
 IDF : 10.0
 Lab ID: 188837-009
 Matrix: Filtrate
 Batch : 116738
 Time : 24-AUG-2006 21:22
 Cal : 56340782001
 Units : ug/L

Type : PDS
 Inst : MET05
 Seqnum: 56340782065
 File : h2415065
 IDF : 10.0
 Lab ID: QC353257
 Matrix: Filtrate
 Batch : 116738
 Time : 24-AUG-2006 21:44
 Cal : 56340782001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S3780 (1000X)

Analyte	MSS	Spiked	PDS	%Rec	Limits	Flags
Aluminum	23.01	1000	1244	122	75-125	<c+ >c+ b*
Antimony	ND	10.00	9.363	94	75-125	
Arsenic	2.324	10.00	11.97	96	75-125	
Barium	7.323	10.00	16.97	96	75-125	
Beryllium	ND	10.00	11.53	115	75-125	<c+ >c+ b*
Cadmium	ND	10.00	9.901	99	75-125	
Calcium	2279	1000	3230	95	75-125	u
Cobalt	0.2312	10.00	9.149	89	75-125	
Copper	ND	10.00	9.939	99	75-125	
Iron	1246	1000	2136	89	75-125	u
Lead	ND	10.00	9.437	94	75-125	
Molybdenum	ND	10.00	9.390	94	75-125	
Nickel	0.8447	10.00	10.03	92	75-125	
Potassium	115.7	1000	1180	106	75-125	
Selenium	ND	10.00	9.999	100	75-125	
Silver	ND	10.00	9.319	93	75-125	
Thallium	0.04910	5.000	4.949	98	75-125	
Zinc	0.5741	10.00	9.831	93	75-125	

ISTD (ICALBLK h2415005)	ICALBLK Abund	PDS Abund	%Drift
Lithium	336846	320289	-4.92
Scandium	366577	340426	-7.13
Germanium	82555	84044	1.80
Indium	571579	547467	-4.22
Bismuth	478991	454737	-5.06

MISSING READINGS: CR MG MN NA V

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : PDS
 Inst : MET05
 Seqnum: 56341908038
 File : h2510038
 IDF : 10.0
 Lab ID: QC353257
 Matrix: Filtrate
 Batch : 116738
 Time : 25-AUG-2006 13:56
 Cal : 56341908001
 MSS : 188837-009
 Units : ug/L

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S3780 (1000X), S3310

Analyte	MSS Seqnum	Result	Spiked	PDS	%Rec	Limits	Flags
Aluminum	56341908034	ND	1000	1015	102	75-125	u
Antimony	56341908034	ND	10.00	9.290	93	75-125	
Arsenic	56341908034	2.218	10.00	11.92	97	75-125	
Barium	56341908034	7.737	10.00	17.11	94	75-125	
Beryllium	56341908034	ND	10.00	9.769	98	75-125	u
Cadmium	56341908034	ND	10.00	9.790	98	75-125	
Calcium	56340782061	2279	1000	3121	84	75-125	
Chromium	56341908034	0.6401	10.00	9.748	91	75-125	u
Cobalt	56341908034	0.1717	10.00	9.282	91	75-125	
Copper	56341908034	ND	10.00	9.990	100	75-125	
Iron	56341908034	1284	1000	2162	88	75-125	
Lead	56341908034	ND	10.00	9.360	94	75-125	
Magnesium	56341908034	4577	1000	5559	98	75-125	: u
Manganese	56341908034	87.78	10.00	94.62	68	75-125	: u
Molybdenum	56341908034	ND	10.00	9.769	98	75-125	
Nickel	56341908034	0.7013	10.00	10.07	94	75-125	
Potassium	56341908034	59.00	1000	1064	101	75-125	
Selenium	56341908034	ND	10.00	10.05	101	75-125	
Silver	56341908034	ND	10.00	9.403	94	75-125	
Sodium	56341908034	6493	1000	7419	93	75-125	: u
Thallium	56341908034	ND	5.000	4.648	93	75-125	
Vanadium	56341908034	ND	10.00	9.174	92	75-125	
Zinc	56341908034	0.4528	10.00	9.716	93	75-125	

ISTD (ICALBLK h2510003)	ICALBLK Abund	PDS Abund	%Drift
Lithium	323251	317206	-1.87
Scandium	341957	327509	-4.23
Germanium	80606	79300	-1.62
Indium	530308	509275	-3.97
Bismuth	437483	442337	1.11

: =recovery not meaningful u=use

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 7470A

Type : MSS
Inst : MET04
Seqnum : 46336367014
File : 116599
IDF : 1.0
Lab ID : 188802-001
Matrix : Filtrate
Batch : 116599
Time : 21-AUG-2006 14:41
Cal : 46336367002
Caltype: WATER
Units : ug/L

Type : PDS
Inst : MET04
Seqnum : 46336367041
File : 116599
IDF : 1.0
Lab ID : QC352697
Matrix : Filtrate
Batch : 116599
Time : 21-AUG-2006 17:47
Cal : 46336367002
Caltype: WATER

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S4162 (20X)

Analyte	MSS	Spiked	PDS	%Rec	Limits	Flags
Mercury	ND	5.000	4.560	91	75-125	u

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET05
 Calnum : 56340782001
 Units : ug/L

Date : 24-AUG-2006 16:09
 X Axis : R

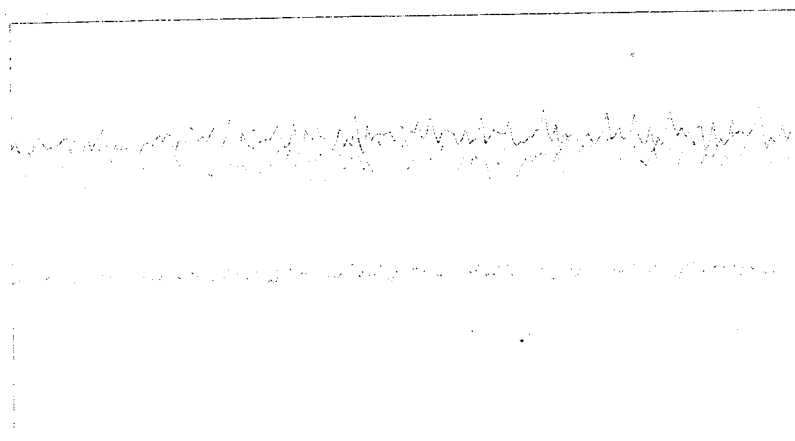
Reviewer: ---

Level	File	Segment	Sample ID	Analyzed	Std
L1	h2415006	56340782006	CS1	24-AUG-2006 16:14	S4004
L2	h2415007	56340782007	CS2	24-AUG-2006 16:20	S4005
L3	h2415008	56340782008	CS3	24-AUG-2006 16:26	S4006
L4	h2415009	56340782009	CS4	24-AUG-2006 16:31	S4007
L5	h2415010	56340782010	CS5	24-AUG-2006 16:37	S4001
L6	h2415011	56340782011	CS6	24-AUG-2006 16:43	S4002

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ²	*RSD	Mmr ²	Fig
Aluminum		0.6786	0.6324	0.6275	0.6239	0.6407	BLNK	-5.4809	1.56966		0.6406	1.000	0.995		
Antimony	0.3369	0.3273	0.3130	0.3019	0.3101	0.3176	BLNK	-0.0477	3.16472		0.3178	1.000	0.995		
Arsenic		0.8745	0.7153	0.5595	0.5517	0.5486	BLNK	-0.1165	1.82192		0.6499	1.000	0.995		
Barium	0.2068	0.1763	0.1400	0.1215	0.1264	0.1285	BLNK	-0.0585	7.81229		0.1499	1.000	0.995		
Beryllium	0.1941	0.1923	0.1774	0.1708	0.1732	0.1761	BLNK	-0.0301	5.69865		0.1806	1.000	0.995		
Cadmium	0.6623	0.6110	0.6077	0.5570	0.5335	0.5195	BLNK	-0.0664	1.91507		0.5818	1.000	0.995		
Calcium		0.0389	0.0303	0.0231	0.0232	0.0229	BLNK	-31.949	43.6110		0.0277	1.000	0.995		
Chromium		9.7505	6.6843	4.2922	4.0465	4.2110	BLNK	-0.6442	0.24028		5.7969	1.000	0.995		
Cobalt	5.2046	4.7560	4.7394	4.6149	4.6133	4.9128	BLNK	-0.0225	0.20611		4.8068	0.999	0.995		
Copper		1.8229	1.5823	1.1826	1.1320	1.1218	BLNK	-0.2165	0.89093		1.3683	1.000	0.995		
Iron		0.1608	0.1321	0.1078	0.1121	0.1100	BLNK	-24.393	9.07068		0.1246	1.000	0.995		
Lead	1.5576	1.3911	1.3109	1.2127	1.2422	1.3051	BLNK	-0.0377	0.77396		1.3366	0.999	0.995		
Magnesium		0.0864	0.0802	0.0769	0.0811	0.0824	BLNK	-4.5733	12.1820		0.0814	1.000	0.995		
Manganese	7.7525	6.8843	5.8042	5.2856	5.5718	5.5097	BLNK	-0.0871	0.18120		6.1347	1.000	0.995		
Molybdenum		1.4708	1.2344	1.0983	1.0947	1.0937	BLNK	-0.1989	0.91532		1.1983	1.000	0.995		
Nickel	2.0452	1.2913	1.2123	1.0382	0.9983	0.9851	BLNK	-0.1343	1.01313		1.2617	1.000	0.995		
Potassium		2.0010	1.4090	0.7772	0.7192	0.7218	BLNK	-87.792	1.39368		1.1257	1.000	0.995		
Selenium		0.0895	0.0613	0.0462	0.0423	0.0407	BLNK	-0.5758	24.4449		0.0560	1.000	0.995		
Silver	2.5931	2.8483	2.7247	2.5965	2.6192	2.5611	BLNK	-0.0228	0.38875		2.6572	1.000	0.995		
Sodium		2.5747	1.7397	0.9295	0.8652	0.8743	BLNK	-136.66	1.15570		1.3967	1.000	0.995		
Thallium		0.9506	0.9117	0.8033	0.8682	0.9039	BLNK	-0.0281	1.11578		0.8875	1.000	0.995		
Vanadium		5.9254	5.2396	4.4634	4.5089	4.8836	BLNK	-0.1756	0.20821		5.0042	0.998	0.995		
Zinc		3.7612	2.5154	0.7509	0.6010	0.5830	BLNK	-2.3793	1.72885		1.6423	1.000	0.995		

Tune Report

Tune File : Autotune.u



m/z:	7	89	205
Range:	20,000	50,000	50,000
Count:	14,391	33,765	20,120
Mean:	14397.2	33122.7	20127.7
RSD%:	3.03	3.19	2.76
n:	200		

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec

Oxide: 156/140 0.35%
Doubly Charged: 70/140 1.09%

Background:

m/z:	7	89	205
Cps:	61.2	25.1	20.7

m/z:	7	89	205
Height:	14,497	33,045	20,553
Axis:	7.00	89.00	205.00
W-50%:	0.60	0.55	0.60
W-10%:	0.7500	0.7500	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Tuning Parameters

===Plasma Condition===

RF Power: 1300 W
RF Matching: 1.7 V
Smpl Depth: 8 mm
Torch-H: -0.1 mm
Torch-V: 0.4 mm
Carrier Gas: 1.05 L/min
Makeup Gas: 0 L/min
Optional Gas: --- %
PeriPump1: 0.1 rps
PeriPump2: --- rps
S/C Temp: 2 degC

===Ion Lenses===

Extract 1: -150 V
Extract 2: -70 V
Einzel 1,3: -100 V
Einzel 2: 7 V
Omega Bias: -55 V
Omega (+): 5 V
Omega (-): -5 V
QP Focus: 5 V
Plate Bias: -5 V

===Q-Pole Parameters===

AMU Gain: 130
AMU Offset: 126
Axis Gain: 0.9993
Axis Offset: -0.1
QP Bias: 1.6 V

===Detector Parameters===

Discriminator: 8.8 mV
Analog HV: 1860 V
Pulse HV: 1590 V

P/A Factor Tuning Report

Acquired: Aug 24 2006 09:20 am

Mass[amu]	Element	P/A Factor
6	Li	0.071639
9	Be	0.080651
23	Na	Sensitivity too high
25	Mg	Sensitivity too high
26	Mg	Sensitivity too high
27	Al	0.096325
39	K	Sensitivity too high
43	Ca	0.095971
44	Ca	Sensitivity too high
45	Sc	Sensitivity too low
51	V	0.100797
52	Cr	0.101920
53	Cr	Sensitivity too low
54	Fe	Sensitivity too high
55	Mn	0.104041
57	Fe	Sensitivity too high
59	Co	0.106422
60	Ni	0.103663
63	Cu	0.106948
65	Cu	0.104915
66	Zn	0.104555
72	Ge	Sensitivity too low
75	As	0.103001
77	(As)	Sensitivity too low
82	Se	Sensitivity too low
83	(As)	Sensitivity too low
88	(Ca)	Sensitivity too low
89	Y	0.101087
95	Mo	0.102155
98	Mo	0.103616
99	(Mo)	Sensitivity too low
106	(Cd)	Sensitivity too low
108	(Cd)	Sensitivity too low
109	Ag	0.109169
111	Cd	Sensitivity too low
114	Cd	0.108070
115	In	0.106323
118	(In)	Sensitivity too high
121	Sb	0.109243
135	Ba	Sensitivity too low
137	Ba	0.106705
159	Tb	0.109176
166	Er	Sensitivity too low

Temp.p\$\$

205	Tl	0.117216
206	(Pb)	0.114399
207	(Pb)	0.113484
208	Pb	0.116170
209	Bi	0.111481

===Detector Parameters===

Discriminator: 8.8 mV

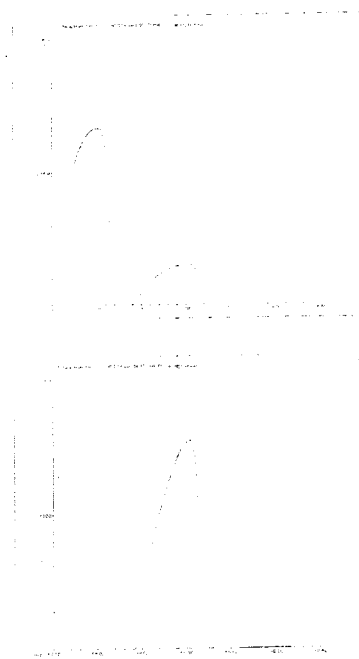
Analog HV: 1860 V

Pulse HV: 1590 V

6020 QC Tune Report

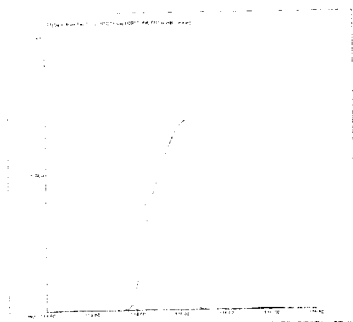
Data File: C:\ICPCHEM\1\DATA\06H2415a.B\001TUNE.D
Date Acquired: Aug 24 2006 03:42 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s4021
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)	Element	Actual	Required	Flag
	7 Li	1.42	5.00	
	59 Co	0.90	5.00	
	115 In	0.45	5.00	
	205 Tl	1.33	5.00	



7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.55
Required: 0.90
Flag:

59 Co
Mass Calib.
Actual: 59.05
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



115 In

Mass Calib.

Actual: 115.05

Required: 114.90 - 115.10

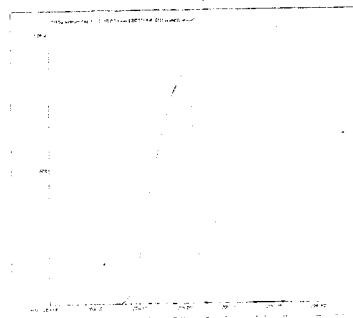
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



205 Tl

Mass Calib.

Actual: 205.00

Required: 204.90 - 205.10

Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06H2415a.B\005CAL
 Date Acquired: Aug 24 2006 04:09 pm
 Operator:
 Sample Name: std-blank
 Misc Info:
 Vial Number: 1101
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\602001
 Last Cal Update: Aug 24 2006 03:59 pm
 Sample Type: CalBlk
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	336845.50 P	1096.00	0.33
9 Be	35.56 P	1.93	5.41
23 Na	866887.19 A	3325.00	0.38
26 Mg	2752.22 P	18.36	0.67
27 Al	25597.78 P	209.20	0.82
39 K	461832.19 P	3325.00	0.72
44 Ca	5370.95 P	80.58	1.50
45 Sc	366576.69 P	2807.00	0.77
51 V	1393.33 P	774.90	55.62
52 Cr	4426.67 P	87.18	1.97
55 Mn	793.33 P	29.63	3.73
57 Fe	4440.00 P	80.90	1.82
59 Co	180.00 P	29.63	16.46
60 Ni	218.89 P	34.21	15.63
65 Cu	401.10 P	68.83	17.16
66 Zn	2272.22 P	65.77	2.89
72 Ge	82555.33 P	178.40	0.22
75 As	105.32 P	179.10	170.05
82 Se	38.89 P	13.47	34.64
95 Mo	358.89 P	54.19	15.10
109 Ag	96.67 P	10.00	10.35
111 Cd	57.26 P	22.57	39.42
115 In	571578.69 P	2659.00	0.47
121 Sb	172.22 P	15.75	9.15
137 Ba	85.56 P	13.88	16.22
205 Tl	241.11 P	16.78	6.96
208 Pb	466.67 P	27.28	5.85
209 Bi	478991.09 P	5055.00	1.06

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2415a.B\006CALI.D\006CALI.D#
 Date Acquired: Aug 24 2006 04:14 pm
 Operator:
 Sample Name: cs1,s4004
 Misc Info:
 Vial Number: 1102
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 24 2006 04:10 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	338942.19 P	531.70	0.16
9 Be	328.89 P	11.71	3.56
23 Na	709985.00 M	54370.00	7.66
26 Mg	17223.33 P	171.00	0.99
27 Al	141285.59 P	799.00	0.57
39 K	592775.50 P	3681.00	0.62
44 Ca	9914.47 P	285.30	2.88
45 Sc	368162.19 P	4472.00	1.21
51 V	3315.84 P	495.80	14.95
52 Cr	6217.78 P	125.40	2.02
55 Mn	3222.22 P	24.11	0.75
57 Fe	8796.67 P	37.86	0.43
59 Co	2163.33 P	123.40	5.70
60 Ni	850.00 P	20.82	2.45
65 Cu	1042.15 P	78.48	7.53
66 Zn	2878.89 P	32.72	1.14
72 Ge	83128.89 P	436.50	0.53
75 As	532.20 P	107.50	20.20
82 Se	69.78 P	13.17	18.87
95 Mo	836.67 P	26.03	3.11
109 Ag	1077.78 P	1.93	0.18
111 Cd	275.16 P	52.47	19.07
115 In	575906.88 P	1651.00	0.29
121 Sb	970.00 P	29.63	3.05
137 Ba	595.56 P	48.34	8.12
205 Tl	1278.89 P	58.53	4.58
208 Pb	3783.33 P	250.50	6.62
209 Bi	485894.41 P	3386.00	0.70

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	338942.19	0.16	336845.53	100.6	80 - 120	

45	Sc	368162.19	1.21	366576.66	100.4	80 -	120
72	Ge	83128.89	0.53	82555.34	100.7	80 -	120
115	In	575906.88	0.29	571578.75	100.8	80 -	120
209	Bi	485894.41	0.70	478991.06	101.4	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2415a.B\005CALB.D\005CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2415a.B\007CALI.D\007CALI.D#
 Date Acquired: Aug 24 2006 04:20 pm
 Operator:
 Sample Name: cs2,s4005
 Misc Info:
 Vial Number: 1103
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 24 2006 04:16 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	338741.09 P	2431.00	0.72
9 Be	651.11 P	106.10	16.30
23 Na	953871.50 A	14780.00	1.55
26 Mg	31994.44 P	532.10	1.66
27 Al	251388.91 P	1064.00	0.42
39 K	741376.69 M	22430.00	3.03
44 Ca	14413.69 P	252.60	1.75
45 Sc	370466.69 P	2198.00	0.59
51 V	4889.98 P	279.20	5.71
52 Cr	8044.44 P	283.90	3.53
55 Mn	5680.00 P	34.80	0.61
57 Fe	13263.33 P	121.00	0.91
59 Co	3924.44 P	88.78	2.26
60 Ni	1065.56 P	65.52	6.15
65 Cu	1504.31 P	84.74	5.63
66 Zn	3103.33 P	26.03	0.84
72 Ge	82509.56 P	477.30	0.58
75 As	720.72 P	215.70	29.93
82 Se	73.78 P	35.54	48.17
95 Mo	1213.33 P	90.25	7.44
109 Ag	2350.00 P	57.83	2.46
111 Cd	504.24 P	48.27	9.57
115 In	574722.19 P	2910.00	0.51
121 Sb	1881.11 P	66.69	3.55
137 Ba	1013.33 P	26.67	2.63
205 Tl	2304.44 P	78.48	3.41
208 Pb	6744.44 P	92.52	1.37
209 Bi	484827.69 P	487.00	0.10

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	338741.09	0.72	336845.53	100.6	80 - 120	

45	Sc	370466.66	0.59	366576.66	101.1	80 -	120
72	Ge	82509.56	0.58	82555.34	99.9	80 -	120
115	In	574722.19	0.51	571578.75	100.5	80 -	120
209	Bi	484827.75	0.10	478991.06	101.2	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2415a.B\005CALB.D\005CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2415a.B\008CALI.D\008CALI.D#
 Date Acquired: Aug 24 2006 04:26 pm
 Operator:
 Sample Name: cs3,s4006
 Misc Info:
 Vial Number: 1104
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 24 2006 04:22 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	341086.69 P	2185.00	0.64
9 Be	1210.00 P	20.28	1.68
23 Na	1291676.00 A	34670.00	2.68
26 Mg	59556.66 P	303.70	0.51
27 Al	469483.31 P	1628.00	0.35
39 K	1046133.00 A	15830.00	1.51
44 Ca	22498.45 P	500.90	2.23
45 Sc	371214.41 P	1017.00	0.27
51 V	8650.15 P	558.60	6.46
52 Cr	11034.44 P	300.30	2.72
55 Mn	9581.11 P	22.69	0.24
57 Fe	21814.44 P	578.30	2.65
59 Co	7823.33 P	105.00	1.34
60 Ni	2001.11 P	86.69	4.33
65 Cu	2611.96 P	13.88	0.53
66 Zn	4152.22 P	52.32	1.26
72 Ge	82536.89 P	239.60	0.29
75 As	1180.79 P	30.91	2.62
82 Se	101.11 P	12.01	11.88
95 Mo	2037.78 P	80.71	3.96
109 Ag	4497.78 P	28.35	0.63
111 Cd	1003.10 P	47.39	4.72
115 In	577395.13 P	956.90	0.17
121 Sb	3614.44 P	90.70	2.51
137 Ba	1616.67 P	31.80	1.97
205 Tl	4440.00 P	135.00	3.04
208 Pb	12770.00 P	216.70	1.70
209 Bi	487092.19 P	2975.00	0.61

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	341086.66	0.64	336845.53	101.3	80 - 120	

C:\ICPCHEM\1\DATA\06H2415a.B\008CALI.D\008CALI.D#

45	Sc	371214.44	0.27	366576.66	101.3	80 -	120
72	Ge	82536.89	0.29	82555.34	100.0	80 -	120
115	In	577395.06	0.17	571578.75	101.0	80 -	120
209	Bi	487092.22	0.61	478991.06	101.7	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2415a.B\005CALB.D\005CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2415a.B\009CALI.D\009CALI.D#
 Date Acquired: Aug 24 2006 04:31 pm
 Operator:
 Sample Name: CS4, S4007
 Misc Info:
 Vial Number: 1105
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 24 2006 04:27 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	345950.00 P	1100.00	0.32
9 Be	11818.89 P	97.54	0.83
23 Na	6975215.00 A	5865.00	0.08
26 Mg	576925.50 P	569.10	0.10
27 Al	4709040.00 A	22100.00	0.47
39 K	5832077.00 A	15380.00	0.26
44 Ca	173525.59 P	509.70	0.29
45 Sc	375203.31 P	1032.00	0.28
51 V	74616.33 P	1383.00	1.85
52 Cr	71755.55 P	676.90	0.94
55 Mn	88363.33 P	845.00	0.96
57 Fe	180158.91 P	965.90	0.54
59 Co	77150.00 P	728.00	0.94
60 Ni	17355.55 P	94.30	0.54
65 Cu	19769.71 P	417.50	2.11
66 Zn	12553.33 P	292.60	2.33
72 Ge	83587.78 P	66.75	0.08
75 As	9352.64 P	171.50	1.83
82 Se	773.11 P	19.58	2.53
95 Mo	18360.00 P	200.40	1.09
109 Ag	43407.77 P	276.90	0.64
111 Cd	9311.21 P	118.30	1.27
115 In	580668.63 P	1762.00	0.30
121 Sb	35061.11 P	207.70	0.59
137 Ba	14112.22 P	152.50	1.08
205 Tl	39436.67 P	729.20	1.85
208 Pb	119067.80 P	975.70	0.82
209 Bi	490925.59 P	1062.00	0.22

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	345950.00	0.32	336845.53	102.7	80 - 120	

45	Sc	375203.31	0.28	366576.66	102.4	80 -	120
72	Ge	83587.77	0.08	82555.34	101.3	80 -	120
115	In	580668.56	0.30	571578.75	101.6	80 -	120
209	Bi	490925.56	0.22	478991.06	102.5	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2415a.B\005CALB.D\005CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2415a.B\010CALI.D\010CALI.D#
 Date Acquired: Aug 24 2006 04:37 pm
 Operator:
 Sample Name: cs5,s4001
 Misc Info:
 Vial Number: 1106
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 24 2006 04:33 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	345050.00 P	2666.00	0.77
9 Be	119528.90 P	527.90	0.44
23 Na	64889780.00 A	1099000.00	1.69
26 Mg	6084264.00 A	47120.00	0.77
27 Al	46795140.00 A	265000.00	0.57
39 K	53946800.00 A	196000.00	0.36
44 Ca	1738749.00 A	21420.00	1.23
45 Sc	375058.91 P	4061.00	1.08
51 V	758144.81 P	4424.00	0.58
52 Cr	680396.63 P	3487.00	0.51
55 Mn	936857.00 A	6628.00	0.71
57 Fe	1885164.00 A	13580.00	0.72
59 Co	775695.50 P	2102.00	0.27
60 Ni	167860.00 P	1264.00	0.75
65 Cu	190346.50 P	553.40	0.29
66 Zn	101058.90 P	1484.00	1.47
72 Ge	84072.44 P	152.30	0.18
75 As	92759.92 P	787.60	0.85
82 Se	7111.11 P	74.88	1.05
95 Mo	184063.30 P	1540.00	0.84
109 Ag	440411.09 P	1781.00	0.40
111 Cd	89710.60 P	804.30	0.90
115 In	560482.31 P	4895.00	0.87
121 Sb	347601.09 P	2539.00	0.73
137 Ba	141632.20 P	1248.00	0.88
205 Tl	410840.00 P	4793.00	1.17
208 Pb	1175641.00 P	10380.00	0.88
209 Bi	473221.09 P	2700.00	0.57

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	345050.00	0.77	336845.53	102.4	80 - 120	

45	Sc	375058.88	1.08	366576.66	102.3	80 -	120
72	Ge	84072.45	0.18	82555.34	101.8	80 -	120
115	In	560482.25	0.87	571578.75	98.1	80 -	120
209	Bi	473221.06	0.57	478991.06	98.8	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2415a.B\005CALB.D\005CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2415a.B\011CALI.D\011CALI.D#
 Date Acquired: Aug 24 2006 04:43 pm
 Operator:
 Sample Name: cs6,s4002
 Misc Info:
 Vial Number: 1107
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 24 2006 04:38 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	336894.41 P	535.60	0.16
9 Be	237306.70 P	736.40	0.31
23 Na	128810100.00 A	385400.00	0.30
26 Mg	12135810.00 A	14820.00	0.12
27 Al	94387272.00 A	342000.00	0.36
39 K	106344300.00 A	89610.00	0.08
44 Ca	3377323.00 A	28160.00	0.83
45 Sc	368320.00 P	1431.00	0.39
51 V	1631169.00 A	19320.00	1.18
52 Cr	1406495.00 A	12360.00	0.88
55 Mn	1840231.00 A	5400.00	0.29
57 Fe	3673730.00 A	17340.00	0.47
59 Co	1640857.00 A	5731.00	0.35
60 Ni	329028.91 P	552.20	0.17
65 Cu	374659.91 P	736.70	0.20
66 Zn	194717.80 P	1464.00	0.75
72 Ge	83500.22 P	403.60	0.48
75 As	183244.00 P	631.90	0.34
82 Se	13604.44 P	71.02	0.52
95 Mo	365278.91 P	1658.00	0.45
109 Ag	855377.69 P	1993.00	0.23
111 Cd	173514.70 P	664.30	0.38
115 In	537968.69 P	1568.00	0.29
121 Sb	683452.19 P	2224.00	0.33
137 Ba	276493.31 P	1262.00	0.46
205 Tl	820244.38 P	5831.00	0.71
208 Pb	2368597.00 A	7570.00	0.32
209 Bi	453742.19 P	3617.00	0.80

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	336894.44	0.16	336845.53	100.0	80 - 120	

45 Sc	368320.00	0.39	366576.66	100.5	80 -	120
72 Ge	83500.23	0.48	82555.34	101.1	80 -	120
115 In	537968.75	0.29	571578.75	94.1	80 -	120
209 Bi	453742.22	0.80	478991.06	94.7	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2415a.B\005CALB.D\005CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

Calibration Summary

Calibration : C:\ICPCHEM\1\DATA\06G1718A.B\60200111.C
 Last Calib: Aug 24, 2006 16:44
 Cal Type : External Calibration Method
 Cal Title :

Standard Data Files

Level	DataPath	DataFile	Date Acquired
1	...hem\1\data\06h2415a.b\005calb.d\	005calb.d#	Aug 24 2006 04:09 pm
2	...hem\1\data\06h2415a.b\006cali.d\	006cali.d#	Aug 24 2006 04:14 pm
3	...hem\1\data\06h2415a.b\007cali.d\	007cali.d#	Aug 24 2006 04:20 pm
4	...hem\1\data\06h2415a.b\008cali.d\	008cali.d#	Aug 24 2006 04:26 pm
5	...hem\1\data\06h2415a.b\009cali.d\	009cali.d#	Aug 24 2006 04:31 pm
6	...hem\1\data\06h2415a.b\010cali.d\	010cali.d#	Aug 24 2006 04:37 pm
7	...hem\1\data\06h2415a.b\011cali.d\	011cali.d#	Aug 24 2006 04:43 pm
8	---		
9	---		
10	---		
11	---		
12	---		
13	---		
14	---		
15	---		
16	---		
17	---		
18	---		
19	---		
20	---		

Level	BkgPath	BkgFile	Interference Correction
1	---	---	ON
2	---	---	ON
3	---	---	ON
4	---	---	ON
5	---	---	ON
6	---	---	ON
7	---	---	ON
8	---		
9	---		
10	---		
11	---		
12	---		
13	---		
14	---		
15	---		
16	---		
17	---		
18	---		
19	---		
20	---		

Name	m/z	IS	Equation	r	Units
Li	6	---	Excluded	---	ppb
Be	9	6	$Y = 1.755E-1 \cdot X + 5.278E-3$ (blank)	---	ppb
Na	23	45	$Y = 8.653E-1 \cdot X + 1.182E+2$ (blank)	---	ppb
Mg	25	45	Excluded	---	ppb
Mg	26	45	$Y = 8.209E-2 \cdot X + 3.754E-1$ (blank)	---	ppb
Al	27	45	$Y = 6.371E-1 \cdot X + 3.492E+0$ (blank)	---	ppb
K	39	45	$Y = 7.175E-1 \cdot X + 6.299E+1$ (blank)	---	ppb
Ca	43	45	Excluded	---	ppb
Ca	44	45	$Y = 2.293E-2 \cdot X + 7.326E-1$ (blank)	---	ppb
Sc	45	---	Excluded	---	ppb
V	51	72	$Y = 4.803E+0 \cdot X + 8.432E-1$ (blank)	---	ppb
Cr	52	72	$Y = 4.162E+0 \cdot X + 2.681E+0$ (blank)	---	ppb
Cr	53	72	Excluded	---	ppb
Fe	54	72	Excluded	---	ppb
Mn	55	72	$Y = 5.519E+0 \cdot X + 4.805E-1$ (blank)	---	ppb
Fe	57	72	$Y = 1.102E-1 \cdot X + 2.689E+0$ (blank)	---	ppb
Co	59	72	$Y = 4.852E+0 \cdot X + 1.090E-1$ (blank)	---	ppb
Ni	60	72	$Y = 9.870E-1 \cdot X + 1.326E-1$ (blank)	---	ppb
Cu	63	72	Excluded	---	ppb
Cu	65	72	$Y = 1.122E+0 \cdot X + 2.430E-1$ (blank)	---	ppb
Zn	66	72	$Y = 5.784E-1 \cdot X + 1.376E+0$ (blank)	---	ppb
Ge	72	---	Excluded	---	ppb
As	75	72	$Y = 5.489E-1 \cdot X + 6.394E-2$ (blank)	---	ppb
(As)	77	72	Excluded	---	ppb
Se	82	72	$Y = 4.091E-2 \cdot X + 2.355E-2$ (blank)	---	ppb
(As)	83	72	Excluded	---	ppb
(Ca)	88	72	Excluded	---	ppb
Y	89	72	Excluded	---	ppb
Mo	95	72	$Y = 1.093E+0 \cdot X + 2.173E-1$ (blank)	---	ppb
Mo	98	72	Excluded	---	ppb
(Mo)	99	72	Excluded	---	ppb
(Cd)	106	72	Excluded	---	ppb
(Cd)	108	72	Excluded	---	ppb
Ag	109	72	$Y = 2.572E+0 \cdot X + 5.855E-2$ (blank)	---	ppb
Cd	111	72	$Y = 5.222E-1 \cdot X + 3.470E-2$ (blank)	---	ppb
Cd	114	72	Excluded	---	ppb
In	115	---	Excluded	---	ppb
(In)	118	---	Excluded	---	ppb
Sb	121	115	$Y = 3.160E-1 \cdot X + 1.506E-2$ (blank)	---	ppb
Ba	135	115	Excluded	---	ppb
Ba	137	115	$Y = 1.280E-1 \cdot X + 7.487E-3$ (blank)	---	ppb
Tb	159	---	Excluded	---	ppb
Er	166	115	Excluded	---	ppb
Tl	205	209	$Y = 8.962E-1 \cdot X + 2.517E-2$ (blank)	---	ppb
(Pb)	206	209	Excluded	---	ppb
(Pb)	207	209	Excluded	---	ppb
Pb	208	209	$Y = 1.292E+0 \cdot X + 4.873E-2$ (blank)	---	ppb
Bi	209	---	Excluded	---	ppb

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET05
 Seqnum : 56340782013
 Cal : 56340782001
 Standards: S4008

File : h2415013
 Caldate: 24-AUG-2006
 IDF : 1.0
 Time : 24-AUG-2006 16:54

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	0.6406	0.6335	10000	9938	ug/L	-1	10	
Antimony	0.3178	0.3101	100.0	98.10	ug/L	-2	10	
Arsenic	0.6499	0.5492	100.0	99.94	ug/L	0	10	
Barium	0.1499	0.1258	100.0	98.20	ug/L	-2	10	
Beryllium	0.1806	0.1724	100.0	98.19	ug/L	-2	10	
Cadmium	0.5818	0.5257	100.0	100.6	ug/L	1	10	
Calcium	0.0277	0.0233	10000	10120	ug/L	1	10	
Chromium	5.7969	4.0375	100.0	96.37	ug/L	-4	10	
Cobalt	4.8068	4.6053	100.0	94.90	ug/L	-5	10	
Copper	1.3683	1.1320	100.0	100.6	ug/L	1	10	
Iron	0.1246	0.1120	10000	10130	ug/L	1	10	
Lead	1.3366	1.2368	100.0	95.69	ug/L	-4	10	
Magnesium	0.0814	0.0818	10000	9963	ug/L	0	10	
Manganese	6.1347	5.6330	100.0	102.0	ug/L	2	10	
Molybdenum	1.1983	1.0902	100.0	99.59	ug/L	0	10	
Nickel	1.2617	0.9967	100.0	100.8	ug/L	1	10	
Potassium	1.1257	0.7215	10000	9968	ug/L	0	10	
Selenium	0.0560	0.0418	100.0	101.6	ug/L	2	10	
Silver	2.6572	2.5813	100.0	100.3	ug/L	0	10	
Sodium	1.3967	0.8663	10000	9875	ug/L	-1	10	
Thallium	0.8875	0.8787	50.00	48.99	ug/L	-2	10	
Vanadium	5.0042	4.6758	100.0	97.18	ug/L	-3	10	
Zinc	1.6423	0.5986	100.0	101.1	ug/L	1	10	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	347242	3.09
Scandium	366577	375933	2.55
Germanium	82555	84405	2.24
Indium	571579	555836	-2.75
Bismuth	478991	467299	-2.44

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56340782030
 Cal : 56340782001
 Standards: S4009

File : h2415030
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 18:28

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6406	0.6830	10000	10710	ug/L	7	10	
Antimony	0.3178	0.3058	100.0	96.73	ug/L	-3	10	
Arsenic	0.6499	0.5483	100.0	99.79	ug/L	0	10	
Barium	0.1499	0.1246	100.0	97.29	ug/L	-3	10	
Beryllium	0.1806	0.1866	100.0	106.3	ug/L	6	10	
Cadmium	0.5818	0.5186	100.0	99.25	ug/L	-1	10	
Calcium	0.0277	0.0232	10000	10100	ug/L	1	10	
Chromium	5.7969	3.8872	100.0	92.76	ug/L	-7	10	
Cobalt	4.8068	4.5236	100.0	93.22	ug/L	-7	10	
Copper	1.3683	1.1290	100.0	100.4	ug/L	0	10	
Iron	0.1246	0.1100	10000	9953	ug/L	0	10	
Lead	1.3366	1.2276	100.0	94.97	ug/L	-5	10	
Magnesium	0.0814	0.0879	10000	10700	ug/L	7	10	
Manganese	6.1347	5.0851	100.0	92.06	ug/L	-8	10	
Molybdenum	1.1983	1.0861	100.0	99.21	ug/L	-1	10	
Nickel	1.2617	0.9829	100.0	99.45	ug/L	-1	10	
Potassium	1.1257	0.7396	10000	10220	ug/L	2	10	
Selenium	0.0560	0.0410	100.0	99.71	ug/L	0	10	
Silver	2.6572	2.5188	100.0	97.90	ug/L	-2	10	
Sodium	1.3967	0.9388	10000	10710	ug/L	7	10	
Thallium	0.8875	0.8673	50.00	48.36	ug/L	-3	10	
Vanadium	5.0042	4.3215	100.0	89.80	ug/L	-10	10	
Zinc	1.6423	0.5910	100.0	99.80	ug/L	0	10	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	298533	-11.37
Scandium	366577	336070	-8.32
Germanium	82555	78733	-4.63
Indium	571579	515579	-9.80
Bismuth	478991	441916	-7.74

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56340782036
 Cal : 56340782001
 Standards: S4009

File : h2415036
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 19:02

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6406	0.6242	10000	9792	ug/L	-2	10	
Antimony	0.3178	0.3056	100.0	96.65	ug/L	-3	10	
Arsenic	0.6499	0.5437	100.0	98.94	ug/L	-1	10	
Barium	0.1499	0.1244	100.0	97.10	ug/L	-3	10	
Beryllium	0.1806	0.1742	100.0	99.21	ug/L	-1	10	
Cadmium	0.5818	0.5227	100.0	100.0	ug/L	0	10	
Calcium	0.0277	0.0231	10000	10030	ug/L	0	10	
Chromium	5.7969	3.9720	100.0	94.80	ug/L	-5	10	
Cobalt	4.8068	4.5548	100.0	93.86	ug/L	-6	10	
Copper	1.3683	1.1178	100.0	99.37	ug/L	-1	10	
Iron	0.1246	0.1114	10000	10080	ug/L	1	10	
Lead	1.3366	1.2261	100.0	94.86	ug/L	-5	10	
Magnesium	0.0814	0.0806	10000	9812	ug/L	-2	10	
Manganese	6.1347	5.2800	100.0	95.59	ug/L	-4	10	
Molybdenum	1.1983	1.0806	100.0	98.71	ug/L	-1	10	
Nickel	1.2617	0.9771	100.0	98.85	ug/L	-1	10	
Potassium	1.1257	0.7119	10000	9834	ug/L	-2	10	
Selenium	0.0560	0.0410	100.0	99.56	ug/L	0	10	
Silver	2.6572	2.5658	100.0	99.72	ug/L	0	10	
Sodium	1.3967	0.8616	10000	9821	ug/L	-2	10	
Thallium	0.8875	0.8620	50.00	48.06	ug/L	-4	10	
Vanadium	5.0042	4.4329	100.0	92.12	ug/L	-8	10	
Zinc	1.6423	0.5926	100.0	100.1	ug/L	0	10	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	309546	-8.10
Scandium	366577	348538	-4.92
Germanium	82555	78038	-5.47
Indium	571579	520020	-9.02
Bismuth	478991	437778	-8.60

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56340782053
 Cal : 56340782001
 Standards: S4009

File : h2415053
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 20:37

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6406	0.7560	10000	11860	ug/L	19	10	c+ ***
Antimony	0.3178	0.2983	100.0	94.37	ug/L	-6	10	
Arsenic	0.6499	0.5471	100.0	99.56	ug/L	0	10	
Barium	0.1499	0.1187	100.0	92.65	ug/L	-7	10	
Beryllium	0.1806	0.2007	100.0	114.4	ug/L	14	10	c+ ***
Cadmium	0.5818	0.4961	100.0	94.94	ug/L	-5	10	
Calcium	0.0277	0.0230	10000	9990	ug/L	0	10	
Chromium	5.7969	3.6585	100.0	87.26	ug/L	-13	10	c- ***
Cobalt	4.8068	4.3782	100.0	90.22	ug/L	-10	10	
Copper	1.3683	1.0950	100.0	97.34	ug/L	-3	10	
Iron	0.1246	0.1049	10000	9489	ug/L	-5	10	
Lead	1.3366	1.2164	100.0	94.11	ug/L	-6	10	
Magnesium	0.0814	0.0971	10000	11820	ug/L	18	10	c+ ***
Manganese	6.1347	5.1249	100.0	92.78	ug/L	-7	10	
Molybdenum	1.1983	1.0289	100.0	93.98	ug/L	-6	10	
Nickel	1.2617	0.9539	100.0	96.50	ug/L	-4	10	
Potassium	1.1257	0.7653	10000	10580	ug/L	6	10	
Selenium	0.0560	0.0400	100.0	97.17	ug/L	-3	10	
Silver	2.6572	2.4114	100.0	93.72	ug/L	-6	10	
Sodium	1.3967	1.0685	10000	12210	ug/L	22	10	c+ ***
Thallium	0.8875	0.8720	50.00	48.62	ug/L	-3	10	
Vanadium	5.0042	4.4281	100.0	92.02	ug/L	-8	10	
Zinc	1.6423	0.5731	100.0	96.70	ug/L	-3	10	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	357041	6.00
Scandium	366577	392718	7.13
Germanium	82555	96949	17.44
Indium	571579	610742	6.85
Bismuth	478991	489814	2.26

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56340782068
 Cal : 56340782001
 Standards: S4009

File : h2415068
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 22:01

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6406	0.7506	10000	11780	ug/L	18	10	c+ ***
Antimony	0.3178	0.3044	100.0	96.30	ug/L	-4	10	
Arsenic	0.6499	0.5462	100.0	99.40	ug/L	-1	10	
Barium	0.1499	0.1225	100.0	95.61	ug/L	-4	10	
Beryllium	0.1806	0.1988	100.0	113.2	ug/L	13	10	c+ ***
Cadmium	0.5818	0.5045	100.0	96.55	ug/L	-3	10	
Calcium	0.0277	0.0229	10000	9946	ug/L	-1	10	
Chromium	5.7969	3.6615	100.0	87.33	ug/L	-13	10	c- ***
Cobalt	4.8068	4.3685	100.0	90.02	ug/L	-10	10	
Copper	1.3683	1.0968	100.0	97.50	ug/L	-3	10	
Iron	0.1246	0.1053	10000	9530	ug/L	-5	10	
Lead	1.3366	1.2109	100.0	93.68	ug/L	-6	10	
Magnesium	0.0814	0.0965	10000	11750	ug/L	18	10	c+ ***
Manganese	6.1347	4.9110	100.0	88.90	ug/L	-11	10	c- ***
Molybdenum	1.1983	1.0233	100.0	93.47	ug/L	-7	10	
Nickel	1.2617	0.9527	100.0	96.38	ug/L	-4	10	
Potassium	1.1257	0.7704	10000	10650	ug/L	7	10	
Selenium	0.0560	0.0398	100.0	96.61	ug/L	-3	10	
Silver	2.6572	2.4397	100.0	94.82	ug/L	-5	10	
Sodium	1.3967	1.0406	10000	11890	ug/L	19	10	c+ ***
Thallium	0.8875	0.8716	50.00	48.60	ug/L	-3	10	
Vanadium	5.0042	4.1773	100.0	86.80	ug/L	-13	10	c- ***
Zinc	1.6423	0.5703	100.0	96.21	ug/L	-4	10	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	316576	-6.02
Scandium	366577	338731	-7.60
Germanium	82555	82845	0.35
Indium	571579	528366	-7.56
Bismuth	478991	449277	-6.20

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56340782077
 Cal : 56340782001
 Standards: S4009

File : h2415077
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 22:51

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6406	0.6927	10000	10870	ug/L	9	10	
Antimony	0.3178	0.2996	100.0	94.76	ug/L	-5	10	
Arsenic	0.6499	0.5418	100.0	98.60	ug/L	-1	10	
Barium	0.1499	0.1217	100.0	95.00	ug/L	-5	10	
Beryllium	0.1806	0.1913	100.0	109.0	ug/L	9	10	
Cadmium	0.5818	0.5000	100.0	95.68	ug/L	-4	10	
Calcium	0.0277	0.0226	10000	9818	ug/L	-2	10	
Chromium	5.7969	3.7684	100.0	89.90	ug/L	-10	10	
Cobalt	4.8068	4.4184	100.0	91.05	ug/L	-9	10	
Copper	1.3683	1.0939	100.0	97.24	ug/L	-3	10	
Iron	0.1246	0.1075	10000	9729	ug/L	-3	10	
Lead	1.3366	1.1966	100.0	92.57	ug/L	-7	10	
Magnesium	0.0814	0.0894	10000	10880	ug/L	9	10	
Manganese	6.1347	4.9116	100.0	88.91	ug/L	-11	10	c- ***
Molybdenum	1.1983	1.0384	100.0	94.85	ug/L	-5	10	
Nickel	1.2617	0.9634	100.0	97.47	ug/L	-3	10	
Potassium	1.1257	0.7417	10000	10250	ug/L	3	10	
Selenium	0.0560	0.0397	100.0	96.58	ug/L	-3	10	
Silver	2.6572	2.4325	100.0	94.54	ug/L	-5	10	
Sodium	1.3967	0.9540	10000	10890	ug/L	9	10	
Thallium	0.8875	0.8580	50.00	47.84	ug/L	-4	10	
Vanadium	5.0042	4.1723	100.0	86.70	ug/L	-13	10	c- ***
Zinc	1.6423	0.5741	100.0	96.87	ug/L	-3	10	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	299719	-11.02
Scandium	366577	337550	-7.92
Germanium	82555	79502	-3.70
Indium	571579	516408	-9.65
Bismuth	478991	433537	-9.49

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56340782097
 Cal : 56340782001
 Standards: S4009

File : h2415097
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 00:45

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6406	0.6886	10000	10800	ug/L	8	10	
Antimony	0.3178	0.2992	100.0	94.65	ug/L	-5	10	
Arsenic	0.6499	0.5372	100.0	97.75	ug/L	-2	10	
Barium	0.1499	0.1222	100.0	95.37	ug/L	-5	10	
Beryllium	0.1806	0.1826	100.0	104.0	ug/L	4	10	
Cadmium	0.5818	0.5042	100.0	96.48	ug/L	-4	10	
Calcium	0.0277	0.0226	10000	9827	ug/L	-2	10	
Chromium	5.7969	3.7893	100.0	90.41	ug/L	-10	10	
Cobalt	4.8068	4.4240	100.0	91.16	ug/L	-9	10	
Copper	1.3683	1.0958	100.0	97.41	ug/L	-3	10	
Iron	0.1246	0.1082	10000	9791	ug/L	-2	10	
Lead	1.3366	1.1923	100.0	92.24	ug/L	-8	10	
Magnesium	0.0814	0.0894	10000	10880	ug/L	9	10	
Manganese	6.1347	4.9933	100.0	90.39	ug/L	-10	10	
Molybdenum	1.1983	1.0243	100.0	93.55	ug/L	-6	10	
Nickel	1.2617	0.9655	100.0	97.68	ug/L	-2	10	
Potassium	1.1257	0.7380	10000	10200	ug/L	2	10	
Selenium	0.0560	0.0397	100.0	96.48	ug/L	-4	10	
Silver	2.6572	2.4412	100.0	94.88	ug/L	-5	10	
Sodium	1.3967	0.9495	10000	10840	ug/L	8	10	
Thallium	0.8875	0.8573	50.00	47.80	ug/L	-4	10	
Vanadium	5.0042	4.2177	100.0	87.64	ug/L	-12	10	c- ***
Zinc	1.6423	0.5736	100.0	96.79	ug/L	-3	10	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	296080	-12.10
Scandium	366577	320631	-12.53
Germanium	82555	74168	-10.16
Indium	571579	487109	-14.78
Bismuth	478991	422734	-11.74

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56340782112
 Cal : 56340782001
 Standards: S4009

File : h2415112
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 02:09

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6406	0.7006	10000	10990	ug/L	10	10	
Antimony	0.3178	0.3008	100.0	95.16	ug/L	-5	10	
Arsenic	0.6499	0.5360	100.0	97.54	ug/L	-2	10	
Barium	0.1499	0.1223	100.0	95.48	ug/L	-5	10	
Beryllium	0.1806	0.1890	100.0	107.7	ug/L	8	10	
Cadmium	0.5818	0.4969	100.0	95.10	ug/L	-5	10	
Calcium	0.0277	0.0226	10000	9834	ug/L	-2	10	
Chromium	5.7969	3.7773	100.0	90.12	ug/L	-10	10	
Cobalt	4.8068	4.4012	100.0	90.69	ug/L	-9	10	
Copper	1.3683	1.0825	100.0	96.23	ug/L	-4	10	
Iron	0.1246	0.1080	10000	9769	ug/L	-2	10	
Lead	1.3366	1.2059	100.0	93.30	ug/L	-7	10	
Magnesium	0.0814	0.0910	10000	11080	ug/L	11	10	c+ ***
Manganese	6.1347	4.9736	100.0	90.04	ug/L	-10	10	
Molybdenum	1.1983	1.0097	100.0	92.22	ug/L	-8	10	
Nickel	1.2617	0.9544	100.0	96.56	ug/L	-3	10	
Potassium	1.1257	0.7489	10000	10350	ug/L	4	10	
Selenium	0.0560	0.0393	100.0	95.52	ug/L	-4	10	
Silver	2.6572	2.4267	100.0	94.31	ug/L	-6	10	
Sodium	1.3967	0.9874	10000	11270	ug/L	13	10	c+ ***
Thallium	0.8875	0.8686	50.00	48.43	ug/L	-3	10	
Vanadium	5.0042	4.1962	100.0	87.20	ug/L	-13	10	c- ***
Zinc	1.6423	0.5665	100.0	95.56	ug/L	-4	10	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	315022	-6.48
Scandium	366577	342352	-6.61
Germanium	82555	79807	-3.33
Indium	571579	516312	-9.67
Bismuth	478991	442422	-7.63

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56340782126
 Cal : 56340782001
 Standards: S4009

File : h2415126
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 03:28

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6406	0.7013	10000	11000	ug/L	10	10	
Antimony	0.3178	0.3080	100.0	97.43	ug/L	-3	10	
Arsenic	0.6499	0.5386	100.0	98.02	ug/L	-2	10	
Barium	0.1499	0.1262	100.0	98.56	ug/L	-1	10	
Beryllium	0.1806	0.1829	100.0	104.2	ug/L	4	10	
Cadmium	0.5818	0.5136	100.0	98.29	ug/L	-2	10	
Calcium	0.0277	0.0234	10000	10160	ug/L	2	10	
Chromium	5.7969	3.9040	100.0	93.16	ug/L	-7	10	
Cobalt	4.8068	4.4643	100.0	91.99	ug/L	-8	10	
Copper	1.3683	1.0960	100.0	97.43	ug/L	-3	10	
Iron	0.1246	0.1114	10000	10080	ug/L	1	10	
Lead	1.3366	1.2169	100.0	94.14	ug/L	-6	10	
Magnesium	0.0814	0.0918	10000	11180	ug/L	12	10	c+ ***
Manganese	6.1347	5.1308	100.0	92.88	ug/L	-7	10	
Molybdenum	1.1983	1.0252	100.0	93.64	ug/L	-6	10	
Nickel	1.2617	0.9668	100.0	97.81	ug/L	-2	10	
Potassium	1.1257	0.7519	10000	10390	ug/L	4	10	
Selenium	0.0560	0.0397	100.0	96.42	ug/L	-4	10	
Silver	2.6572	2.4671	100.0	95.88	ug/L	-4	10	
Sodium	1.3967	0.9973	10000	11390	ug/L	14	10	c+ ***
Thallium	0.8875	0.8713	50.00	48.58	ug/L	-3	10	
Vanadium	5.0042	4.3205	100.0	89.78	ug/L	-10	10	
Zinc	1.6423	0.5751	100.0	97.05	ug/L	-3	10	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	287181	-14.74
Scandium	366577	301214	-17.83
Germanium	82555	68372	-17.18
Indium	571579	449540	-21.35
Bismuth	478991	400857	-16.31

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56340782016
 Cal : 56340782001

File : h2415016
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 17:10

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	50.00	2.123	ug/L	
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.3352]	0.5000	0.09029	ug/L	!ib
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	[0.01573]	0.2500	0.009674	ug/L	!ib
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	[0.1354]	0.5000	0.03860	ug/L	!ib
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	[0.01657]	0.2500	0.005283	ug/L	!ib
Magnesium	ND	50.00	3.054	ug/L	
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	ND	0.2500	0.01266	ug/L	
Sodium	[18.95]	50.00	9.919	ug/L	!ib
Thallium	[0.1479]	0.2500	0.02100	ug/L	!ib
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	366672	8.85
Scandium	366577	390434	6.51
Germanium	82555	87125	5.54
Indium	571579	594888	4.08
Bismuth	478991	489444	2.18

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56340782033
 Cal : 56340782001

File : h2415033
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 18:45

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[7.299]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.2835]	0.5000	0.09029	ug/L	!ib
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	ND	0.2500	0.009674	ug/L	
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	[19.99]	50.00	7.739	ug/L	!ib
Chromium	[0.08906]	0.5000	0.03860	ug/L	!ib
Cobalt	[0.009526]	0.2500	0.008548	ug/L	!ib
Copper	ND	0.5000	0.04426	ug/L	
Iron	[18.20]	50.00	6.980	ug/L	!ib
Lead	[0.01591]	0.2500	0.005283	ug/L	!ib
Magnesium	[7.369]	50.00	3.054	ug/L	!ib
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	0.7295	0.5000	0.4994	ug/L	ib ***
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	[7.264]	50.00	6.379	ug/L	!ib
Selenium	ND	0.5000	0.1891	ug/L	
Silver	ND	0.2500	0.01266	ug/L	
Sodium	61.96	50.00	9.919	ug/L	ib ***
Thallium	[0.07468]	0.2500	0.02100	ug/L	!ib
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	307454	-8.73
Scandium	366577	342692	-6.52
Germanium	82555	77666	-5.92
Indium	571579	534508	-6.49
Bismuth	478991	448957	-6.27

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56340782039
 Cal : 56340782001

File : h2415039
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 19:19

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[5.602]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.3531]	0.5000	0.09029	ug/L	!ib
Barium	[0.02415]	0.2500	0.02391	ug/L	!ib
Beryllium	[0.01814]	0.2500	0.009674	ug/L	!ib
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	[14.06]	50.00	7.739	ug/L	!ib
Chromium	[0.1008]	0.5000	0.03860	ug/L	!ib
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	[15.28]	50.00	6.980	ug/L	!ib
Lead	[0.01784]	0.2500	0.005283	ug/L	!ib
Magnesium	[5.874]	50.00	3.054	ug/L	!ib
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	[0.2339]	0.5000	0.1891	ug/L	!ib
Silver	[0.01677]	0.2500	0.01266	ug/L	!ib
Sodium	71.50	50.00	9.919	ug/L	ib ***
Thallium	[0.09232]	0.2500	0.02100	ug/L	!ib
Vanadium	[0.1630]	0.5000	0.08283	ug/L	!ib
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	328348	-2.52
Scandium	366577	361759	-1.31
Germanium	82555	80850	-2.07
Indium	571579	556692	-2.60
Bismuth	478991	457317	-4.52

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56340782056
 Cal : 56340782001

File : h2415056
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 20:54

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[19.04]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.3473]	0.5000	0.09029	ug/L	!ib
Barium	[0.06090]	0.2500	0.02391	ug/L	!ib
Beryllium	[0.04520]	0.2500	0.009674	ug/L	!ib
Cadmium	[0.1129]	0.2500	0.04566	ug/L	!ib
Calcium	[47.56]	50.00	7.739	ug/L	!ib
Chromium	ND	0.5000	0.03860	ug/L	
Cobalt	[0.04187]	0.2500	0.008548	ug/L	!ib
Copper	[0.06811]	0.5000	0.04426	ug/L	!ib
Iron	[31.91]	50.00	6.980	ug/L	!ib
Lead	[0.04008]	0.2500	0.005283	ug/L	!ib
Magnesium	[36.77]	50.00	3.054	ug/L	!ib
Manganese	[0.2314]	0.2500	0.01838	ug/L	!ib
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	[0.04364]	0.2500	0.03982	ug/L	!ib
Potassium	[12.77]	50.00	6.379	ug/L	!ib
Selenium	[0.2083]	0.5000	0.1891	ug/L	!ib
Silver	[0.03768]	0.2500	0.01266	ug/L	!ib
Sodium	332.5	50.00	9.919	ug/L	ib ***
Thallium	[0.1272]	0.2500	0.02100	ug/L	!ib
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	344809	2.36
Scandium	366577	374512	2.16
Germanium	82555	90766	9.95
Indium	571579	603490	5.58
Bismuth	478991	496312	3.62

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56340782070
 Cal : 56340782001

File : h2415070
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 22:12

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[9.409]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.2812]	0.5000	0.09029	ug/L	!ib
Barium	[0.04398]	0.2500	0.02391	ug/L	!ib
Beryllium	[0.03870]	0.2500	0.009674	ug/L	!ib
Cadmium	[0.07099]	0.2500	0.04566	ug/L	!ib
Calcium	[18.73]	50.00	7.739	ug/L	!ib
Chromium	ND	0.5000	0.03860	ug/L	
Cobalt	[0.02462]	0.2500	0.008548	ug/L	!ib
Copper	[0.04590]	0.5000	0.04426	ug/L	!ib
Iron	[12.62]	50.00	6.980	ug/L	!ib
Lead	[0.04060]	0.2500	0.005283	ug/L	!ib
Magnesium	[19.05]	50.00	3.054	ug/L	!ib
Manganese	[0.1562]	0.2500	0.01838	ug/L	!ib
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	[0.02628]	0.2500	0.01266	ug/L	!ib
Sodium	185.4	50.00	9.919	ug/L	!ib ***
Thallium	[0.1278]	0.2500	0.02100	ug/L	!ib
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	326810	-2.98
Scandium	366577	348477	-4.94
Germanium	82555	84121	1.90
Indium	571579	563317	-1.45
Bismuth	478991	467719	-2.35

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56340782080
 Cal : 56340782001

File : h2415080
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 23:08

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[5.733]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.2895]	0.5000	0.09029	ug/L	!ib
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	[0.01458]	0.2500	0.009674	ug/L	!ib
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	[12.01]	50.00	7.739	ug/L	!ib
Chromium	[0.05599]	0.5000	0.03860	ug/L	!ib
Cobalt	[0.01014]	0.2500	0.008548	ug/L	!ib
Copper	ND	0.5000	0.04426	ug/L	
Iron	[12.87]	50.00	6.980	ug/L	!ib
Lead	[0.01247]	0.2500	0.005283	ug/L	!ib
Magnesium	[7.028]	50.00	3.054	ug/L	!ib
Manganese	[0.03368]	0.2500	0.01838	ug/L	!ib
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	ND	0.2500	0.01266	ug/L	
Sodium	50.51	50.00	9.919	ug/L	ib ***
Thallium	[0.05956]	0.2500	0.02100	ug/L	!ib
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	312018	-7.37
Scandium	366577	345521	-5.74
Germanium	82555	81117	-1.74
Indium	571579	543857	-4.85
Bismuth	478991	445530	-6.99

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56340782099
 Cal : 56340782001

File : h2415099
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 00:56

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	50.00	2.123	ug/L	
Antimony	[0.03406]	0.2500	0.03394	ug/L	!ib
Arsenic	[0.1516]	0.5000	0.09029	ug/L	!ib
Barium	[0.03157]	0.2500	0.02391	ug/L	!ib
Beryllium	[0.02895]	0.2500	0.009674	ug/L	!ib
Cadmium	[0.07339]	0.2500	0.04566	ug/L	!ib
Calcium	ND	50.00	7.739	ug/L	
Chromium	ND	0.5000	0.03860	ug/L	
Cobalt	[0.01257]	0.2500	0.008548	ug/L	!ib
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	[0.02252]	0.2500	0.005283	ug/L	!ib
Magnesium	[3.590]	50.00	3.054	ug/L	!ib
Manganese	[0.2156]	0.2500	0.01838	ug/L	!ib
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	[0.01576]	0.2500	0.01266	ug/L	!ib
Sodium	ND	50.00	9.919	ug/L	
Thallium	[0.1302]	0.2500	0.02100	ug/L	!ib
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	295061	-12.40
Scandium	366577	320166	-12.66
Germanium	82555	72872	-11.73
Indium	571579	501067	-12.34
Bismuth	478991	423976	-11.49

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56340782114
 Cal : 56340782001

File : h2415114
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 02:20

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[3.005]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	0.5798	0.5000	0.09029	ug/L	ib ***
Barium	[0.03264]	0.2500	0.02391	ug/L	!ib
Beryllium	[0.03369]	0.2500	0.009674	ug/L	!ib
Cadmium	[0.08275]	0.2500	0.04566	ug/L	!ib
Calcium	ND	50.00	7.739	ug/L	
Chromium	[0.2053]	0.5000	0.03860	ug/L	!ib
Cobalt	[0.02724]	0.2500	0.008548	ug/L	!ib
Copper	[0.04855]	0.5000	0.04426	ug/L	!ib
Iron	ND	50.00	6.980	ug/L	
Lead	[0.04510]	0.2500	0.005283	ug/L	!ib
Magnesium	[11.82]	50.00	3.054	ug/L	!ib
Manganese	0.2711	0.2500	0.01838	ug/L	ib ***
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	[0.02263]	0.2500	0.01266	ug/L	!ib
Sodium	[46.47]	50.00	9.919	ug/L	!ib
Thallium	[0.09725]	0.2500	0.02100	ug/L	!ib
Vanadium	[0.09390]	0.5000	0.08283	ug/L	!ib
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	317920	-5.62
Scandium	366577	343380	-6.33
Germanium	82555	79910	-3.20
Indium	571579	538009	-5.87
Bismuth	478991	449660	-6.12

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56340782128
 Cal : 56340782001

File : h2415128
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 03:39

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[2.656]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	0.5480	0.5000	0.09029	ug/L	ib ***
Barium	[0.05811]	0.2500	0.02391	ug/L	!ib
Beryllium	[0.04799]	0.2500	0.009674	ug/L	!ib
Cadmium	[0.07511]	0.2500	0.04566	ug/L	!ib
Calcium	ND	50.00	7.739	ug/L	
Chromium	[0.09652]	0.5000	0.03860	ug/L	!ib
Cobalt	[0.03166]	0.2500	0.008548	ug/L	!ib
Copper	[0.05604]	0.5000	0.04426	ug/L	!ib
Iron	ND	50.00	6.980	ug/L	
Lead	[0.04480]	0.2500	0.005283	ug/L	!ib
Magnesium	[13.73]	50.00	3.054	ug/L	!ib
Manganese	[0.1409]	0.2500	0.01838	ug/L	!ib
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	[0.2807]	0.5000	0.1891	ug/L	!ib
Silver	[0.04128]	0.2500	0.01266	ug/L	!ib
Sodium	[14.71]	50.00	9.919	ug/L	!ib
Thallium	[0.08668]	0.2500	0.02100	ug/L	!ib
Vanadium	[0.1466]	0.5000	0.08283	ug/L	!ib
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	291944	-13.33
Scandium	366577	307571	-16.10
Germanium	82555	70469	-14.64
Indium	571579	476316	-16.67
Bismuth	478991	413726	-13.63

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56340782017
 Cal : 56340782001
 Standards: S4011, S3310

File : h2415017
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 17:16

Analyte	Quant	RL	Units	Flags
Antimony	2.129	0.2500	ug/L	
Arsenic	[0.4137]	0.5000	ug/L	
Barium	1.012	0.2500	ug/L	
Beryllium	[0.04513]	0.2500	ug/L	
Cadmium	[0.1426]	0.2500	ug/L	
Chromium	1.095	0.5000	ug/L	
Cobalt	2.481	0.2500	ug/L	
Copper	1.516	0.5000	ug/L	
Lead	1.195	0.2500	ug/L	
Manganese	0.9071	0.2500	ug/L	
Nickel	1.275	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1378]	0.2500	ug/L	
Thallium	[0.1510]	0.2500	ug/L	
Vanadium	[0.1056]	0.5000	ug/L	
Zinc	2.235	0.5000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	102000	ug/L	102
Calcium	300000	295500	ug/L	99
Iron	250000	230400	ug/L	92
Magnesium	100000	100700	ug/L	101
Molybdenum	2000	1906	ug/L	95
Potassium	100000	97660	ug/L	98
Sodium	250000	243100	ug/L	97

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	311213	-7.61
Scandium	366577	359864	-1.83
Germanium	82555	84081	1.85
Indium	571579	489173	-14.42
Bismuth	478991	386249	-19.36

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56340782018
 Cal : 56340782001
 Standards: S4012, S3310

File : h2415018
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 17:21

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	108400	ug/L	8		
Arsenic	100.0	100.3	ug/L	0	20	
Cadmium	100.0	85.95	ug/L	-14	20	
Calcium	300000	296400	ug/L	-1		
Chromium	200.0	198.4	ug/L	-1	20	
Cobalt	200.0	197.9	ug/L	-1	20	
Copper	200.0	187.9	ug/L	-6	20	
Iron	250000	227100	ug/L	-9		
Magnesium	100000	106900	ug/L	7		
Manganese	200.0	196.1	ug/L	-2	20	
Molybdenum	2000	1905	ug/L	-5		
Nickel	200.0	190.9	ug/L	-5	20	
Potassium	100000	100500	ug/L	1		
Selenium	100.0	88.06	ug/L	-12	20	
Silver	50.00	44.30	ug/L	-11	20	
Sodium	250000	259300	ug/L	4		
Vanadium	200.0	203.6	ug/L	2	20	
Zinc	100.0	100.5	ug/L	1	20	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Scandium	366577	341021	-6.97
Germanium	82555	83180	0.76

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Segnum : 56340782027
 Cal : 56340782001
 Standards: S4011, S3310

File : h2415027
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 18:12

Analyte	Quant	RL	Units	Flags
Antimony	2.099	0.2500	ug/L	
Arsenic	0.5818	0.5000	ug/L	
Barium	0.9801	0.2500	ug/L	
Beryllium	[0.05229]	0.2500	ug/L	
Cadmium	[0.1352]	0.2500	ug/L	
Chromium	1.115	0.5000	ug/L	
Cobalt	2.466	0.2500	ug/L	
Copper	1.517	0.5000	ug/L	
Lead	1.180	0.2500	ug/L	
Manganese	0.9134	0.2500	ug/L	
Nickel	1.359	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1298]	0.2500	ug/L	
Thallium	[0.05144]	0.2500	ug/L	
Vanadium	[0.1241]	0.5000	ug/L	
Zinc	2.265	0.5000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	107600	ug/L	108
Calcium	300000	296800	ug/L	99
Iron	250000	228300	ug/L	91
Magnesium	100000	105900	ug/L	106
Molybdenum	2000	1918	ug/L	96
Potassium	100000	100100	ug/L	100
Sodium	250000	259100	ug/L	104

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	292002	-13.31
Scandium	366577	336201	-8.29
Germanium	82555	81129	-1.73
Indium	571579	470977	-17.60
Bismuth	478991	378844	-20.91

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56340782028
 Cal : 56340782001
 Standards: S4012, S3310

File : h2415028
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 18:17

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	111200	ug/L	11		
Arsenic	100.0	99.76	ug/L	0	20	
Cadmium	100.0	85.65	ug/L	-14	20	
Calcium	300000	294500	ug/L	-2		
Chromium	200.0	194.0	ug/L	-3	20	
Cobalt	200.0	195.5	ug/L	-2	20	
Copper	200.0	187.4	ug/L	-6	20	
Iron	250000	221600	ug/L	-11		
Magnesium	100000	109500	ug/L	10		
Manganese	200.0	193.2	ug/L	-3	20	
Molybdenum	2000	1886	ug/L	-6		
Nickel	200.0	189.4	ug/L	-5	20	
Potassium	100000	101600	ug/L	2		
Selenium	100.0	88.19	ug/L	-12	20	
Silver	50.00	44.44	ug/L	-11	20	
Sodium	250000	266800	ug/L	7		
Vanadium	200.0	200.7	ug/L	0	20	
Zinc	100.0	99.34	ug/L	-1	20	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Scandium	366577	324293	-11.53
Germanium	82555	80828	-2.09

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56340782073
 Cal : 56340782001
 Standards: S4011, S3310

File : h2415073
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 22:29

Analyte	Quant	RL	Units	Flags
Antimony	2.021	0.2500	ug/L	
Arsenic	[0.4836]	0.5000	ug/L	
Barium	0.9191	0.2500	ug/L	
Beryllium	[0.04094]	0.2500	ug/L	
Cadmium	[0.1971]	0.2500	ug/L	
Chromium	1.033	0.5000	ug/L	
Cobalt	2.388	0.2500	ug/L	
Copper	1.519	0.5000	ug/L	
Lead	1.196	0.2500	ug/L	
Manganese	0.9953	0.2500	ug/L	
Nickel	1.388	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1327]	0.2500	ug/L	
Thallium	[0.08988]	0.2500	ug/L	
Vanadium	[0.06302]	0.5000	ug/L	
Zinc	2.125	0.5000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	115300	ug/L	115
Calcium	300000	286800	ug/L	96
Iron	250000	212700	ug/L	85
Magnesium	100000	113800	ug/L	114
Molybdenum	2000	1833	ug/L	92
Potassium	100000	102400	ug/L	102
Sodium	250000	274200	ug/L	110

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	298629	-11.35
Scandium	366577	343660	-6.25
Germanium	82555	87885	6.46
Indium	571579	499909	-12.54
Bismuth	478991	382931	-20.05

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56340782074
 Cal : 56340782001
 Standards: S4012, S3310

File : h2415074
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 22:35

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	116000	ug/L	16		
Arsenic	100.0	97.56	ug/L	-2	20	
Cadmium	100.0	82.88	ug/L	-17	20	
Calcium	300000	283800	ug/L	-5		
Chromium	200.0	180.0	ug/L	-10	20	
Cobalt	200.0	185.4	ug/L	-7	20	
Copper	200.0	178.0	ug/L	-11	20	
Iron	250000	208100	ug/L	-17		
Magnesium	100000	114300	ug/L	14		
Manganese	200.0	178.1	ug/L	-11	20	
Molybdenum	2000	1812	ug/L	-9		
Nickel	200.0	179.6	ug/L	-10	20	
Potassium	100000	102100	ug/L	2		
Selenium	100.0	84.78	ug/L	-15	20	
Silver	50.00	41.99	ug/L	-16	20	
Sodium	250000	274600	ug/L	10		
Vanadium	200.0	186.4	ug/L	-7	20	
Zinc	100.0	94.77	ug/L	-5	20	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Scandium	366577	335399	-8.51
Germanium	82555	86927	5.30

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56340782130
 Cal : 56340782001
 Standards: S4011, S3310

File : h2415130
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 03:50

Analyte	Quant	RL	Units	Flags
Antimony	2.086	0.2500	ug/L	
Arsenic	0.7242	0.5000	ug/L	
Barium	0.9328	0.2500	ug/L	
Beryllium	[0.007509]	0.2500	ug/L	
Cadmium	[0.1063]	0.2500	ug/L	
Chromium	1.096	0.5000	ug/L	
Cobalt	2.416	0.2500	ug/L	
Copper	1.454	0.5000	ug/L	
Lead	1.133	0.2500	ug/L	
Manganese	0.9927	0.2500	ug/L	
Nickel	1.277	0.2500	ug/L	
Selenium	0.5260	0.5000	ug/L	
Silver	[0.1129]	0.2500	ug/L	
Thallium	[0.06881]	0.2500	ug/L	
Vanadium	[0.1327]	0.5000	ug/L	
Zinc	2.193	0.5000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	108900	ug/L	109
Calcium	300000	292900	ug/L	98
Iron	250000	224100	ug/L	90
Magnesium	100000	107300	ug/L	107
Molybdenum	2000	1888	ug/L	94
Potassium	100000	100800	ug/L	101
Sodium	250000	265100	ug/L	106

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	252539	-25.03
Scandium	366577	286572	-21.82
Germanium	82555	68345	-17.21
Indium	571579	408101	-28.60
Bismuth	478991	337712	-29.50

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56340782131
 Cal : 56340782001
 Standards: S4012, S3310

File : h2415131
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 03:55

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	112500	ug/L	13		
Arsenic	100.0	97.61	ug/L	-2	20	
Cadmium	100.0	84.40	ug/L	-16	20	
Calcium	300000	289000	ug/L	-4		
Chromium	200.0	189.0	ug/L	-6	20	
Cobalt	200.0	191.8	ug/L	-4	20	
Copper	200.0	178.9	ug/L	-11	20	
Iron	250000	217200	ug/L	-13		
Magnesium	100000	110500	ug/L	11		
Manganese	200.0	189.3	ug/L	-5	20	
Molybdenum	2000	1843	ug/L	-8		
Nickel	200.0	182.4	ug/L	-9	20	
Potassium	100000	102200	ug/L	2		
Selenium	100.0	85.02	ug/L	-15	20	
Silver	50.00	42.66	ug/L	-15	20	
Sodium	250000	271600	ug/L	9		
Vanadium	200.0	196.1	ug/L	-2	20	
Zinc	100.0	95.96	ug/L	-4	20	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Scandium	366577	290120	-20.86
Germanium	82555	71952	-12.84

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56340782 Instrument: MET05
Analytical Method: EPA 6020 Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 24-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
001	h2415001	TUN				24-AUG-2006	15:42	1.0				1		
002	h2415002	X	RINSE			24-AUG-2006	15:48	1.0				2		
003	h2415003	X	STD-BLANK			24-AUG-2006	15:58	1.0				2		
004	h2415004	X	RINSE			24-AUG-2006	16:03	1.0				2		
005	h2415005	ICALBLK	STD-BLANK			24-AUG-2006	16:09	1.0				2		
006	h2415006	ICAL	CS1			24-AUG-2006	16:14	1.0				3		
007	h2415007	ICAL	CS2			24-AUG-2006	16:20	1.0				4		
008	h2415008	ICAL	CS3			24-AUG-2006	16:26	1.0				5		
009	h2415009	ICAL	CS4			24-AUG-2006	16:31	1.0				6		
010	h2415010	ICAL	CS5			24-AUG-2006	16:37	1.0				7		
011	h2415011	ICAL	CS6			24-AUG-2006	16:43	1.0				8		
012	h2415012	X	RINSE			24-AUG-2006	16:48	1.0				2		
013	h2415013	ICV				24-AUG-2006	16:54	1.0				9		
014	h2415014	X	RINSE			24-AUG-2006	17:05	1.0				2		
015	h2415015	X				24-AUG-2006	17:10	1.0				2		
016	h2415016	ICB				24-AUG-2006	17:16	1.0				10	2	7:CA=295500
017	h2415017	ICSA				24-AUG-2006	17:21	1.0				11	2	8:CA=296400
018	h2415018	ICSAB				24-AUG-2006	17:27	1.0				2		
019	h2415019	X	RINSE			24-AUG-2006	17:33	1.0				2		
020	h2415020	X	RINSE			24-AUG-2006	17:38	50.0				2		1:NA=81740.0
021	h2415021	SAMPLE				24-AUG-2006	17:44	50.0				2		1:NA=80420.0
022	h2415022	SAMPLE				24-AUG-2006	17:49	1.0				2		
023	h2415023	SAMPLE				24-AUG-2006	17:55	5.0				2		1:NA=94960.0
024	h2415024	SAMPLE				24-AUG-2006	18:01	50.0				2		1:NA=54300.0
025	h2415025	SAMPLE				24-AUG-2006	18:06	50.0				2		
026	h2415026	SAMPLE				24-AUG-2006	18:12	1.0				10	2	7:CA=296800
027	h2415027	ICSA				24-AUG-2006	18:17	1.0				11	2	8:CA=294500
028	h2415028	ICSAB				24-AUG-2006	18:23	1.0				2		
029	h2415029	X	RINSE			24-AUG-2006	18:28	1.0				12		
030	h2415030	CCV				24-AUG-2006	18:34	1.0				2		
031	h2415031	X	RINSE			24-AUG-2006	18:34	1.0				2		

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S4009 13=S3780

Analyst: *[Signature]* Date: *8/25/06*

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56340782
Analytical Method: EPA 6020

Instrument: MET05

Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 24-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
032	h2415032	X				24-AUG-2006	18:40	1.0				12		
033	h2415033	CCB				24-AUG-2006	18:45	1.0	1.0	2	1	12		
034	h2415034	X	RINSE			24-AUG-2006	18:51	1.0				12		
035	h2415035	X	RINSE			24-AUG-2006	18:56	1.0				12		
036	h2415036	CCV				24-AUG-2006	19:02	1.0	1.0		1	12		
037	h2415037	X	RINSE			24-AUG-2006	19:08	1.0				12		
038	h2415038	X				24-AUG-2006	19:13	1.0				12		
039	h2415039	CCB				24-AUG-2006	19:19	1.0	1.0	1	1	12		
040	h2415040	BLANK	QC353251			24-AUG-2006	19:25	1.0	1.0	2	1	12		
041	h2415041	BS	QC353252			24-AUG-2006	19:30	1.0	1.0	5	1	12		
042	h2415042	BSD	QC353253			24-AUG-2006	19:36	1.0	1.0	5	1	12		
043	h2415043	X	RINSE			24-AUG-2006	19:41	1.0				12		
044	h2415044	MSS	188837-009			24-AUG-2006	19:47	1.0	1.0	5	1	12	4:NA=60310.0	
045	h2415045	X	NO SAMPLE			24-AUG-2006	19:52	5.0	1.0	3	1	12		
046	h2415046	MS	QC353254			24-AUG-2006	19:58	1.0	1.0	4	1	12	5:NA=73740.0	
047	h2415047	MSD	QC353255			24-AUG-2006	20:04	1.0	1.0	4	1	12	5:NA=72530.0	
048	h2415048	PDS	QC353257			24-AUG-2006	20:09	1.0	1.0	3	1	13	5:NA=68690.0	
049	h2415049	X	RINSE			24-AUG-2006	20:15	1.0				12		
050	h2415050	SAMPLE	188837-005			24-AUG-2006	20:20	1.0	1.0	6	1	12	4:MG=367400	
051	h2415051	SAMPLE	188837-008			24-AUG-2006	20:26	1.0	1.0	4	1	12	3:NA=235700	
052	h2415052	X	RINSE			24-AUG-2006	20:31	1.0		5	1	12		
053	h2415053	CCV				24-AUG-2006	20:37	1.0	1.0			12		
054	h2415054	X	RINSE			24-AUG-2006	20:43	1.0				12		
055	h2415055	X				24-AUG-2006	20:48	1.0				12		
056	h2415056	CCB				24-AUG-2006	20:54	1.0	1.0	1	1	12	6:NA=126700	
057	h2415057	SAMPLE	188837-010			24-AUG-2006	20:59	1.0	1.0	7	1	12	7:MG=391800	
058	h2415058	SAMPLE	188837-005			24-AUG-2006	21:05	1.0	1.0	8	1	12		
059	h2415059	SAMPLE	188837-012			24-AUG-2006	21:11	1.0	1.0	4	1	12		
060	h2415060	SAMPLE	188869-001			24-AUG-2006	21:16	1.0	1.0	4	1	12		
061	h2415061	MSS	188837-009			24-AUG-2006	21:22	10.0	1.0	5	1	12		
062	h2415062	SER	QC353256			24-AUG-2006	21:27	50.0	1.0	2	1	12		

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S4009 13=S3780

Analyst: *Valley* Date: *8/25/06*

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56340782 Instrument: MET05
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 24-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
063	h2415063	MS	QC353254	116738	Filter	24-AUG-2006 21:33	10.0	1.0	3	1	1	2		
064	h2415064	MSD	QC353255	116738	Filter	24-AUG-2006 21:39	10.0	1.0	3	1	1	2		
065	h2415065	PDS	QC353257	116738	Filter	24-AUG-2006 21:44	10.0	1.0	2	1	1	13		
066	h2415066	SAMPLE	188837-012	116738	Water	24-AUG-2006 21:50	10.0	1.0	4	1	1	2		
067	h2415067	X	RINSE			24-AUG-2006 21:56	1.0					2		
068	h2415068	CCV				24-AUG-2006 22:01	1.0		7	1	1	12		
069	h2415069	X	RINSE			24-AUG-2006 22:07	1.0					2		
070	h2415070	CCB				24-AUG-2006 22:12	1.0		1	1	1	2		
071	h2415071	X				24-AUG-2006 22:18	1.0					2		
072	h2415072	SAMPLE	188869-001	116738	Water	24-AUG-2006 22:24	10.0	1.0	5	1	1	2		
073	h2415073	ICSA				24-AUG-2006 22:29	1.0	1.0			1	10 2	7:CA=286800	
074	h2415074	ICSAB				24-AUG-2006 22:35	1.0	1.0			1	11 2	7:CA=283800	
075	h2415075	X	RINSE			24-AUG-2006 22:40	1.0					2		
076	h2415076	X	RINSE			24-AUG-2006 22:46	1.0					2		
077	h2415077	CCV				24-AUG-2006 22:51	1.0		2	1	1	12		34
078	h2415078	X	RINSE			24-AUG-2006 22:57	1.0	1.0				2		
079	h2415079	X				24-AUG-2006 23:03	1.0					2		
080	h2415080	CCB				24-AUG-2006 23:08	1.0	1.0	1		1	2		
081	h2415081	TUN				24-AUG-2006 23:14	1.0	1.0				1		
082	h2415082	TUN				24-AUG-2006 23:21	1.0	1.0				1		
083	h2415083	X	RINSE			24-AUG-2006 23:27	1.0					2		
084	h2415084	BLANK	QC353240	116736	Filter	24-AUG-2006 23:33	1.0	1.0	3	1	1	2		
085	h2415085	BS	QC353241	116736	Filter	24-AUG-2006 23:38	1.0	1.0	3	1	1	2		
086	h2415086	BSD	QC353242	116736	Filter	24-AUG-2006 23:44	1.0	1.0	3	1	1	2		
087	h2415087	X	RINSE			24-AUG-2006 23:49	1.0					2		
088	h2415088	MSS	188802-001	116736	Filter	24-AUG-2006 23:55	1.0	1.0	7	1	1	2	6:NA=435000	
089	h2415089	SER	QC353245	116736	Filter	25-AUG-2006 00:01	5.0	1.0			1	2	4:NA=94040.0	
090	h2415090	MS	QC353243	116736	Filter	25-AUG-2006 00:06	1.0	1.0			1	2	6:NA=466300	
091	h2415091	MSD	QC353244	116736	Filter	25-AUG-2006 00:12	1.0	1.0			1	2	6:NA=457400	
092	h2415092	PDS	QC353246	116736	Filter	25-AUG-2006 00:17	1.0	1.0		3	1	13	6:NA=475100	
093	h2415093	X	RINSE			25-AUG-2006 00:23	1.0					2		

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S4009 13=S3780

Analyst: *Healy* Date: *8/25/06*

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56340782
Analytical Method: EPA 6020

Instrument: MET05

Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 24-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
094	h2415094	MSS	188802-001	116736	Filt	25-AUG-2006 00:28	10.0	1.0	4	1	1	2	3:NA=52090.0	
095	h2415095	SER	QC353245	116736	Filt	25-AUG-2006 00:34	50.0	1.0				2	1:MN=274.800	
096	h2415096	X	RINSE			25-AUG-2006 00:40	1.0					2		
097	h2415097	CCV	RINSE			25-AUG-2006 00:45	1.0	1.0	1	1	1	2		
098	h2415098	X	RINSE			25-AUG-2006 00:51	1.0					2		
099	h2415099	CCB	RINSE			25-AUG-2006 00:56	1.0	1.0			1	2		
100	h2415100	X				25-AUG-2006 01:02	1.0					2		
101	h2415101	MS	QC353243	116736	Filt	25-AUG-2006 01:08	10.0	1.0	1	1	1	2	3:NA=44790.0	
102	h2415102	MSD	QC353244	116736	Filt	25-AUG-2006 01:13	10.0	1.0	1	1	1	2	3:NA=45160.0	
103	h2415103	PDS	QC353246	116736	Filt	25-AUG-2006 01:19	10.0	1.0	1	1	1	13	3:NA=47390.0	
104	h2415104	SAMPLE	188802-002	116736	Filt	25-AUG-2006 01:24	1.0	1.0	6	1	1	2	6:NA=98760.0	
105	h2415105	SAMPLE	188802-003	116736	Filt	25-AUG-2006 01:30	1.0	1.0	4	1	1	2	3:NA=94050.0	
106	h2415106	SAMPLE	188802-004	116736	Filt	25-AUG-2006 01:35	1.0	1.0	4	1	1	2	3:NA=102900	
107	h2415107	SAMPLE	188802-005	116736	Filt	25-AUG-2006 01:41	1.0	1.0	3	1	1	2	2:NA=324900	
108	h2415108	SAMPLE	188802-006	116736	Filt	25-AUG-2006 01:47	1.0	1.0	3	1	1	2	2:NA=333000	
109	h2415109	SAMPLE	188802-008	116736	Filt	25-AUG-2006 01:52	1.0	1.0	4	1	1	2	3:NA=75910.0	
110	h2415110	SAMPLE	188802-009	116736	Filt	25-AUG-2006 01:58	1.0	1.0	4	1	1	2	3:NA=261700	
111	h2415111	X	RINSE			25-AUG-2006 02:03	1.0					2		
112	h2415112	CCV	RINSE			25-AUG-2006 02:09	1.0	1.0	3	1	1	12		
113	h2415113	X	RINSE			25-AUG-2006 02:14	1.0					2		
114	h2415114	CCB	RINSE			25-AUG-2006 02:20	1.0	1.0	2	1	1	2		
115	h2415115	X				25-AUG-2006 02:26	1.0					2		
116	h2415116	SAMPLE	188802-010	116736	Filt	25-AUG-2006 02:31	1.0	1.0	4	1	1	2	3:NA=78140.0	
117	h2415117	SAMPLE	188802-012	116736	Filt	25-AUG-2006 02:37	1.0	1.0	5	1	1	2	4:NA=199000	
118	h2415118	SAMPLE	188802-013	116736	Filt	25-AUG-2006 02:43	1.0	1.0	5	1	1	2	4:MG=101200	
119	h2415119	SAMPLE	188802-014	116736	Filt	25-AUG-2006 02:49	1.0	1.0	4	1	1	2	3:NA=63310.0	
120	h2415120	SAMPLE	188802-015	116736	Filt	25-AUG-2006 02:54	1.0	1.0	2	1	1	2	3:MG=435400	
121	h2415121	SAMPLE	188802-017	116736	Filt	25-AUG-2006 03:00	1.0	1.0	3	1	1	2	4:MG=249000	
122	h2415122	SAMPLE	188802-018	116736	Filt	25-AUG-2006 03:05	1.0	1.0	3	1	1	2	3:NA=62740.0	
123	h2415123	SAMPLE	188802-020	116736	Filt	25-AUG-2006 03:11	1.0	1.0	4	1	1	2	3:NA=323500	
124	h2415124	SAMPLE	188867-002	116736	Water	25-AUG-2006 03:16	1.0	1.0	3	1	1	2		

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S4009 13=S3780

Analyst: *[Signature]* Date: *8/25/06*

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 56340782 Instrument: MET05 Agilent ICP-MS
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 24-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
125	h2415125	X	RINSE			25-AUG-2006 03:22	1.0					2		
126	h2415126	CCV				25-AUG-2006 03:28	1.0	1.0	2	1		12		
127	h2415127	X	RINSE			25-AUG-2006 03:33	1.0					2		
128	h2415128	CCB				25-AUG-2006 03:39	1.0	1.0	1	1		2		
129	h2415129	X				25-AUG-2006 03:44	1.0					2		
130	h2415130	ICSA				25-AUG-2006 03:50	1.0	1.0		1		10 2		7:CA=292900
131	h2415131	ICSAB				25-AUG-2006 03:55	1.0	1.0		1		11 2		7:CA=289000

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S4009 13=S3780

Analyst: McAuliffe Date: 8/25/06
Page 5 of 5

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET05
 Calnum : 56341908001
 Units : ug/L

Date : 25-AUG-2006 10:40
 X Axis : R

Reviewer: ---

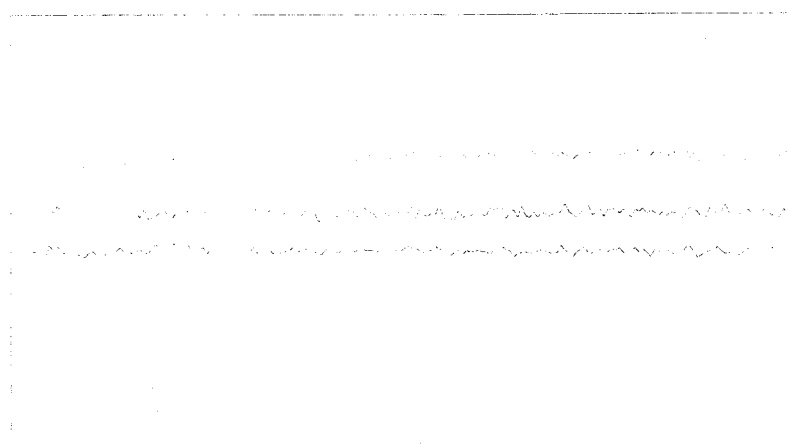
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L2	h2510005	56341908005	CS2	25-AUG-2006 10:51	S4005
L3	h2510006	56341908006	CS3	25-AUG-2006 10:57	S4006
L4	h2510007	56341908007	CS4	25-AUG-2006 11:03	S4007
L5	h2510008	56341908008	CS5	25-AUG-2006 11:08	S4001
L6	h2510009	56341908009	CS6	25-AUG-2006 11:14	S4002

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	AVG	r ²	%RSD	Mnr ²	Fig
Aluminum	0.6841	0.6341	0.6278	0.6167	0.6310	BLNK	-4.6391	1.59239			0.6387	1.000	0.995		
Antimony	0.3162	0.2938	0.2440	0.2402	0.2479	0.2523	BLNK	-0.0813	3.97991		0.2657	1.000	0.995		
Arsenic	0.7013	0.6232	0.4585	0.4487	0.4509	BLNK	-0.3562	2.22490			0.5365	1.000	0.995		
Barium	0.1841	0.1497	0.1141	0.0982	0.1020	0.1031	BLNK	-0.0815	9.72584		0.1252	1.000	0.995		
Beryllium	0.1769	0.1849	0.1645	0.1609	0.1612	0.1653	BLNK	-0.0459	6.08235		0.1690	1.000	0.995		
Cadmium	0.8217	0.5960	0.4699	0.4189	0.4057	0.3991	BLNK	-0.1990	2.50028		0.5186	1.000	0.995		
Calcium	0.0327	0.0249	0.0185	0.0185	0.0189	0.0186	BLNK	-32.336	53.6811		0.0227	1.000	0.995		
Chromium	7.6991	5.2022	3.2559	3.0245	3.1236	BLNK	-0.7204	0.32359			4.4611	1.000	0.995		
Cobalt	4.1096	4.0174	3.8102	3.6254	3.5637	3.7742	BLNK	-0.0462	0.26804		3.8167	0.999	0.995		
Copper	1.5733	1.2439	0.9343	0.8915	0.8744	BLNK	-0.2359	1.14068			1.1035	1.000	0.995		
Iron	0.1309	0.1040	0.0831	0.0861	0.0838	BLNK	-28.529	11.8936			0.0976	1.000	0.995		
Lead	1.3485	1.2163	1.1017	0.9836	1.0026	1.0237	BLNK	-0.0722	0.98143		1.1127	1.000	0.995		
Magnesium	0.0914	0.0823	0.0760	0.0799	0.0807	BLNK	-8.3406	12.4207			0.0821	1.000	0.995		
Manganese	7.5920	5.9652	4.9035	4.0136	3.9481	4.1398	BLNK	-0.1809	0.24410		5.0937	0.999	0.995		
Molybdenum	0.9561	0.8992	0.8187	0.8334	0.8390	BLNK	-0.1112	1.19430			0.8693	1.000	0.995		
Nickel	1.7645	1.0306	0.9862	0.7966	0.7818	0.7641	BLNK	-0.1546	1.30391		1.0206	1.000	0.995		
Potassium	1.8248	1.2955	0.6951	0.6357	0.6388	BLNK	-96.445	1.57607			1.0180	1.000	0.995		
Selenium	0.1006	0.0644	0.0379	0.0326	0.0322	BLNK	-0.8774	31.1651			0.0535	1.000	0.995		
Silver	2.2062	2.0888	2.0748	1.9497	1.9724	1.9284	BLNK	-0.0402	0.51633		2.0367	1.000	0.995		
Sodium	1.7096	1.3794	0.8729	0.8346	0.8468	BLNK	-45.784	1.18756			1.1287	1.000	0.995		
Thallium	1.0275	0.8281	0.6794	0.7208	0.7384	BLNK	-0.1385	1.36328			0.7988	1.000	0.995		
Vanadium	4.4426	3.9089	3.4192	3.3647	3.6067	BLNK	-0.1911	0.28139			3.7484	0.999	0.995		
Zinc	3.4605	2.1121	0.6016	0.4635	0.4452	BLNK	-3.0425	2.26825			1.4166	1.000	0.995		

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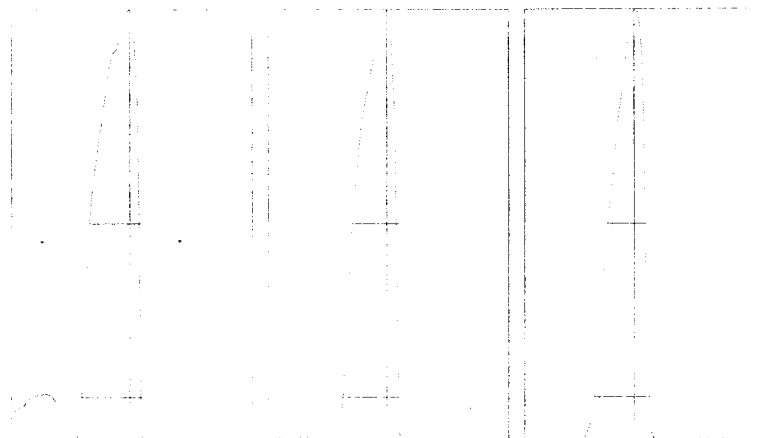
Tune Report

Tune File : ATUNE.U



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Range:	20,000	50,000	20,000
Count:	10,686	22,653	13,556
Mean:	10813.5	22682.2	13373.3
RSD%:	1.51	1.53	1.43
n:	200		

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec



Oxide:	156/140	0.40%
Doubly Charged:	70/140	1.24%

Background:

m/z:	7	89	205
Cps:	21.0	8.6	8.0

m/z:	7	89	205
Height:	10,908	22,575	15,738
Axis:	7.00	89.00	204.90
W-50%:	0.65	0.60	0.50
W-10%:	0.7500	0.700	0.700

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Tuning Parameters

===Plasma Condition===

RF Power: 1300 W
RF Matching: 1.7 V
Smpl Depth: 8 mm
Torch-H: -0.1 mm
Torch-V: 0.4 mm
Carrier Gas: 1.1 L/min
Makeup Gas: 0 L/min
Optional Gas: --- %
PeriPump1: 0.1 rps
PeriPump2: --- rps
S/C Temp: 2 degC

===Ion Lenses===

Extract 1: -150 V
Extract 2: -70 V
Einzel 1,3: -100 V
Einzel 2: 7 V
Omega Bias: -55 V
Omega (+): 5 V
Omega (-): -5 V
QP Focus: 5 V
Plate Bias: -5 V

===Q-Pole Parameters===

AMU Gain: 130
AMU Offset: 126
Axis Gain: 0.9993
Axis Offset: -0.1
QP Bias: 1.6 V

===Detector Parameters===

Discriminator: 8.8 mV
Analog HV: 1860 V
Pulse HV: 1590 V

P/A Factor Tuning Report

Acquired: Aug 25 2006 09:57 am

Mass[amu]	Element	P/A Factor
6	Li	0.072534
9	Be	0.080069
23	Na	Sensitivity too high
25	Mg	Sensitivity too high
26	Mg	Sensitivity too high
27	Al	0.094120
39	K	Sensitivity too high
43	Ca	0.094340
44	Ca	Sensitivity too high
45	Sc	Sensitivity too low
51	V	0.099200
52	Cr	0.100360
53	Cr	Sensitivity too low
54	Fe	Sensitivity too high
55	Mn	0.101921
57	Fe	Sensitivity too high
59	Co	0.103661
60	Ni	0.100858
63	Cu	0.103981
65	Cu	0.101713
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
77	(As)	Sensitivity too low
82	Se	Sensitivity too low
83	(As)	Sensitivity too low
88	(Ca)	Sensitivity too low
89	Y	0.100017
95	Mo	0.100297
98	Mo	0.100281
99	(Mo)	Sensitivity too low
106	(Cd)	Sensitivity too low
108	(Cd)	Sensitivity too low
109	Ag	0.104933
111	Cd	Sensitivity too low
114	Cd	0.103605
115	In	0.105161
118	(In)	Sensitivity too high
121	Sb	0.104050
135	Ba	Sensitivity too low
137	Ba	0.104848
159	Tb	0.107952
166	Er	Sensitivity too low

Temp.p\$\$
205 Tl 0.110323
206 (Pb) 0.111701
207 (Pb) 0.110845
208 Pb 0.108988
209 Bi Sensitivity too low

===Detector Parameters===

Discriminator: 8.8 mV

Analog HV: 1860 V

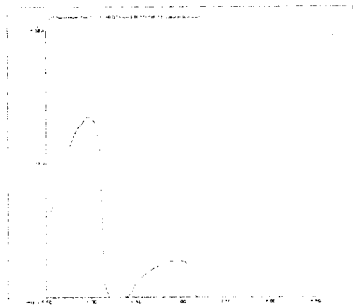
Pulse HV: 1590 V

6020 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\06H2510a.B\001TUNE.D
Date Acquired: Aug 25 2006 10:28 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s4021
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	0.26	5.00	
59 Co	1.44	5.00	
115 In	0.88	5.00	
205 Tl	1.30	5.00	



7 Li

Mass Calib.

Actual: 6.95

Required: 6.90 - 7.10

Flag:

Peak Width

Actual: 0.55

Required: 0.90

Flag:

59 Co

Mass Calib.

Actual: 59.00

Required: 58.90 - 59.10

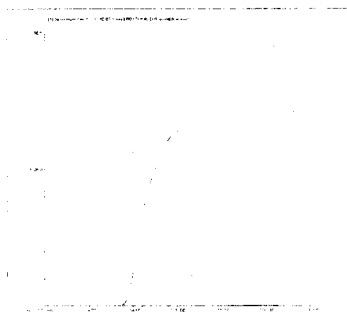
Flag:

Peak Width

Actual: 0.55

Required: 0.90

Flag:



115 In

Mass Calib.

Actual: 115.00

Required: 114.90 - 115.10

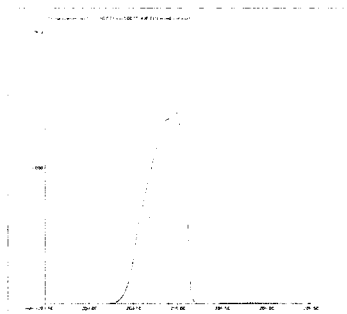
Flag:

Peak Width

Actual: 0.55

Required: 0.90

Flag:



205 Tl

Mass Calib.

Actual: 205.00

Required: 204.90 - 205.10

Flag:

Peak Width

Actual: 0.55

Required: 0.90

Flag:

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06H2510a.B\003CAL
 Date Acquired: Aug 25 2006 10:40 am
 Operator:
 Sample Name: std-blank
 Misc Info:
 Vial Number: 1101
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\602001
 Last Cal Update: Aug 24 2006 04:44 pm
 Sample Type: CalBlk
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	323251.09 P	1860.00	0.58
9 Be	48.89 P	25.24	51.63
23 Na	263663.31 P	4035.00	1.53
26 Mg	4592.22 P	276.70	6.03
27 Al	19923.33 P	880.00	4.42
39 K	418508.91 P	5147.00	1.23
44 Ca	4119.52 P	82.13	1.99
45 Sc	341956.69 P	1165.00	0.34
51 V	1094.67 P	347.40	31.74
52 Cr	3588.89 P	181.00	5.04
55 Mn	1194.44 P	38.63	3.23
57 Fe	3866.67 P	60.64	1.57
59 Co	277.78 P	10.72	3.86
60 Ni	191.11 P	24.57	12.86
65 Cu	333.31 P	29.63	8.89
66 Zn	2162.22 P	71.21	3.29
72 Ge	80605.78 P	393.40	0.49
75 As	257.89 P	60.45	23.44
82 Se	45.33 P	16.04	35.38
95 Mo	150.00 P	23.33	15.55
109 Ag	125.56 P	3.85	3.07
111 Cd	128.21 P	34.20	26.68
115 In	530308.38 P	2777.00	0.52
121 Sb	216.67 P	43.33	20.00
137 Ba	88.89 P	5.09	5.73
205 Tl	888.89 P	44.01	4.95
208 Pb	643.33 P	44.10	6.85
209 Bi	437483.31 P	161.50	0.04

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2510a.B\004CALI.D\004CALI.D#
 Date Acquired: Aug 25 2006 10:46 am
 Operator:
 Sample Name: cs1,s4004
 Misc Info:
 Vial Number: 1102
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 25 2006 10:42 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	327737.81 P	1389.00	0.42
9 Be	290.00 P	37.86	13.06
23 Na	444228.91 P	4374.00	0.98
26 Mg	17433.33 P	437.80	2.51
27 Al	129914.40 P	1023.00	0.79
39 K	522311.09 P	3456.00	0.66
44 Ca	8146.98 P	103.60	1.27
45 Sc	345367.81 P	2893.00	0.84
51 V	3023.46 P	150.70	4.98
52 Cr	4916.67 P	38.44	0.78
55 Mn	3097.78 P	68.50	2.21
57 Fe	7313.33 P	127.20	1.74
59 Co	1676.67 P	35.12	2.09
60 Ni	720.00 P	32.83	4.56
65 Cu	888.81 P	10.72	1.21
66 Zn	2501.11 P	118.60	4.74
72 Ge	81604.22 P	342.70	0.42
75 As	451.56 P	75.42	16.70
82 Se	53.33 P	9.26	17.37
95 Mo	484.44 P	36.57	7.55
109 Ag	900.00 P	53.64	5.96
111 Cd	335.42 P	53.19	15.86
115 In	533605.19 P	3223.00	0.60
121 Sb	843.33 P	37.12	4.40
137 Ba	491.11 P	41.41	8.43
205 Tl	1543.33 P	81.92	5.31
208 Pb	3024.44 P	85.79	2.84
209 Bi	448524.41 P	3781.00	0.84

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	327737.78	0.42	323251.09	101.4	80 - 120	

45	Sc	345367.78	0.84	341956.66	101.0	80 -	120
72	Ge	81604.23	0.42	80605.77	101.2	80 -	120
115	In	533605.25	0.60	530308.44	100.6	80 -	120
209	Bi	448524.41	0.84	437483.31	102.5	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2510a.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2510a.B\005CALI.D\005CALI.D#
 Date Acquired: Aug 25 2006 10:51 am
 Operator:
 Sample Name: cs2,s4005
 Misc Info:
 Vial Number: 1103
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 25 2006 10:47 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	325665.50 P	1237.00	0.38
9 Be	602.22 P	5.09	0.85
23 Na	582522.19 P	4295.00	0.74
26 Mg	31135.56 P	100.20	0.32
27 Al	233094.41 P	1257.00	0.54
39 K	621784.38 P	3668.00	0.59
44 Ca	11152.61 P	212.80	1.91
45 Sc	340738.91 P	491.80	0.14
51 V	3572.71 P	462.20	12.94
52 Cr	6192.22 P	155.40	2.51
55 Mn	4797.78 P	15.40	0.32
57 Fe	10528.89 P	95.30	0.91
59 Co	3231.11 P	43.50	1.35
60 Ni	828.89 P	15.75	1.90
65 Cu	1265.42 P	44.76	3.54
66 Zn	2783.33 P	56.96	2.05
72 Ge	80429.78 P	134.50	0.17
75 As	564.14 P	56.76	10.06
82 Se	80.89 P	8.04	9.94
95 Mo	768.89 P	54.19	7.05
109 Ag	1680.00 P	14.53	0.86
111 Cd	479.34 P	50.37	10.51
115 In	529120.88 P	121.20	0.02
121 Sb	1554.44 P	59.29	3.81
137 Ba	792.22 P	62.92	7.94
205 Tl	2273.33 P	6.67	0.29
208 Pb	5382.22 P	137.90	2.56
209 Bi	442511.09 P	838.50	0.19

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	325665.53	0.38	323251.09	100.7	80 - 120	

45	Sc	340738.88	0.14	341956.66	99.6	80 -	120
72	Ge	80429.77	0.17	80605.77	99.8	80 -	120
115	In	529120.94	0.02	530308.44	99.8	80 -	120
209	Bi	442511.06	0.19	437483.31	101.1	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2510a.B\003CALB.D\003CALB.D#

---	:Element Failures	---	:Max. Number of Failures Allowed
0	:ISTD Failures	0	:Max. Number of ISTD Failures Allowed

Data Results:

Analytes:	Pass
ISTD:	Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2510a.B\006CALI.D\006CALI.D#
 Date Acquired: Aug 25 2006 10:57 am
 Operator:
 Sample Name: cs3,s4006
 Misc Info:
 Vial Number: 1104
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 25 2006 10:53 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	324680.00 P	1742.00	0.54
9 Be	1067.78 P	60.77	5.69
23 Na	939175.69 A	6872.00	0.73
26 Mg	56034.44 P	316.60	0.57
27 Al	431695.50 P	3183.00	0.74
39 K	882026.69 A	4980.00	0.56
44 Ca	16968.46 P	347.20	2.05
45 Sc	340418.91 P	1618.00	0.48
51 V	6284.03 P	370.70	5.90
52 Cr	8363.33 P	202.60	2.42
55 Mn	7883.33 P	265.10	3.36
57 Fe	16712.22 P	300.60	1.80
59 Co	6125.56 P	125.10	2.04
60 Ni	1585.56 P	10.18	0.64
65 Cu	1999.75 P	37.56	1.88
66 Zn	3395.55 P	63.63	1.87
72 Ge	80383.11 P	130.00	0.16
75 As	1001.97 P	93.38	9.32
82 Se	103.56 P	11.28	10.89
95 Mo	1445.56 P	78.62	5.44
109 Ag	3335.55 P	24.57	0.74
111 Cd	755.55 P	104.90	13.88
115 In	530072.88 P	1616.00	0.30
121 Sb	2586.67 P	117.90	4.56
137 Ba	1210.00 P	31.80	2.63
205 Tl	3691.11 P	92.52	2.51
208 Pb	9821.11 P	105.10	1.07
209 Bi	445743.31 P	596.70	0.13

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	324680.00	0.54	323251.09	100.4	80 - 120	

45	Sc	340418.88	0.48	341956.66	99.6	80 -	120
72	Ge	80383.11	0.16	80605.77	99.7	80 -	120
115	In	530072.94	0.30	530308.44	100.0	80 -	120
209	Bi	445743.31	0.13	437483.31	101.9	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2510a.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2510a.B\007CALI.D\007CALI.D#
 Date Acquired: Aug 25 2006 11:03 am
 Operator:
 Sample Name: cs4,s4007
 Misc Info:
 Vial Number: 1105
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 25 2006 10:59 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	323711.09 P	3205.00	0.99
9 Be	10418.89 P	79.54	0.76
23 Na	5894217.00 A	71290.00	1.21
26 Mg	513137.69 P	1602.00	0.31
27 Al	4239315.00 A	52540.00	1.24
39 K	4693735.00 A	43600.00	0.93
44 Ca	125160.10 P	281.30	0.22
45 Sc	337633.31 P	1915.00	0.57
51 V	54159.45 P	929.60	1.72
52 Cr	51575.55 P	422.70	0.82
55 Mn	63577.78 P	803.40	1.26
57 Fe	131646.70 P	1560.00	1.19
59 Co	57427.78 P	336.80	0.59
60 Ni	12618.89 P	114.40	0.91
65 Cu	14798.85 P	259.30	1.75
66 Zn	9528.89 P	187.70	1.97
72 Ge	79202.22 P	330.60	0.42
75 As	7261.47 P	273.90	3.77
82 Se	600.00 P	18.05	3.01
95 Mo	12968.89 P	255.10	1.97
109 Ag	30884.44 P	221.30	0.72
111 Cd	6635.03 P	112.70	1.70
115 In	522689.91 P	5334.00	1.02
121 Sb	25114.44 P	362.30	1.44
137 Ba	10260.00 P	95.39	0.93
205 Tl	30061.11 P	334.20	1.11
208 Pb	87050.00 P	801.80	0.92
209 Bi	442484.41 P	1381.00	0.31

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	323711.09	0.99	323251.09	100.1	80 - 120	

45	Sc	337633.31	0.57	341956.66	98.7	80 -	120
72	Ge	79202.23	0.42	80605.77	98.3	80 -	120
115	In	522689.94	1.02	530308.44	98.6	80 -	120
209	Bi	442484.41	0.31	437483.31	101.1	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2510a.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2510a.B\008CALI.D\008CALI.D#
 Date Acquired: Aug 25 2006 11:08 am
 Operator:
 Sample Name: cs5,s4001
 Misc Info:
 Vial Number: 1106
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 25 2006 11:04 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	320703.31 P	2971.00	0.93
9 Be	103377.80 P	1165.00	1.13
23 Na	56339460.00 A	428800.00	0.76
26 Mg	5391598.00 A	30990.00	0.57
27 Al	41629980.00 A	133900.00	0.32
39 K	42914200.00 A	157900.00	0.37
44 Ca	1272504.00 A	7679.00	0.60
45 Sc	337531.09 P	1999.00	0.59
51 V	536769.50 P	3863.00	0.72
52 Cr	482506.59 P	5544.00	1.15
55 Mn	629844.38 P	7978.00	1.27
57 Fe	1372861.00 A	9474.00	0.69
59 Co	568515.63 P	3995.00	0.70
60 Ni	124716.70 P	1138.00	0.91
65 Cu	142227.30 P	1903.00	1.34
66 Zn	73946.66 P	891.10	1.21
72 Ge	79766.22 P	629.70	0.79
75 As	71582.34 P	736.80	1.03
82 Se	5194.44 P	114.00	2.19
95 Mo	132967.80 P	2282.00	1.72
109 Ag	314660.00 P	3517.00	1.12
111 Cd	64729.07 P	864.70	1.34
115 In	507977.09 P	5650.00	1.11
121 Sb	251897.80 P	2886.00	1.15
137 Ba	103583.30 P	994.30	0.96
205 Tl	313468.91 P	4569.00	1.46
208 Pb	871993.31 P	7097.00	0.81
209 Bi	434858.91 P	4145.00	0.95

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	320703.31	0.93	323251.09	99.2	80 - 120	

45	Sc	337531.09	0.59	341956.66	98.7	80 -	120
72	Ge	79766.23	0.79	80605.77	99.0	80 -	120
115	In	507977.06	1.11	530308.44	95.8	80 -	120
209	Bi	434858.88	0.95	437483.31	99.4	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2510a.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2510a.B\009CALI.D\009CALI.D#
 Date Acquired: Aug 25 2006 11:14 am
 Operator:
 Sample Name: cs6,s4002
 Misc Info:
 Vial Number: 1107
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 25 2006 11:10 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	316653.31 P	1680.00	0.53
9 Be	209353.30 P	1287.00	0.61
23 Na	114750900.00 A	576200.00	0.50
26 Mg	10940220.00 A	80900.00	0.74
27 Al	85509040.00 A	368800.00	0.43
39 K	86558008.00 A	263000.00	0.30
44 Ca	2523201.00 A	23300.00	0.92
45 Sc	338775.50 P	2325.00	0.69
51 V	1182423.00 A	7345.00	0.62
52 Cr	1024078.00 A	6688.00	0.65
55 Mn	1357270.00 A	10990.00	0.81
57 Fe	2746466.00 A	4254.00	0.15
59 Co	1237331.00 A	15130.00	1.22
60 Ni	250498.91 P	1449.00	0.58
65 Cu	286682.41 P	2399.00	0.84
66 Zn	145957.80 P	1288.00	0.88
72 Ge	81963.11 P	365.00	0.45
75 As	147818.80 P	1190.00	0.81
82 Se	10548.00 P	142.00	1.35
95 Mo	275085.50 P	2223.00	0.81
109 Ag	632227.69 P	4394.00	0.70
111 Cd	130840.10 P	751.10	0.57
115 In	508229.59 P	830.20	0.16
121 Sb	512860.00 P	1006.00	0.20
137 Ba	209614.41 P	691.70	0.33
205 Tl	629866.63 P	3314.00	0.53
208 Pb	1746300.00 A	5820.00	0.33
209 Bi	426503.31 P	2584.00	0.61

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	316653.31	0.53	323251.09	98.0	80 - 120	

45	Sc	338775.53	0.69	341956.66	99.1	80 -	120
72	Ge	81963.11	0.45	80605.77	101.7	80 -	120
115	In	508229.56	0.16	530308.44	95.8	80 -	120
209	Bi	426503.31	0.61	437483.31	97.5	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2510a.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

Calibration Summary

Calibration : C:\ICPCHEM\1\DATA\06G1718A.B\60200111.C

Last Calib: Aug 25, 2006 11:15

Cal Type : External Calibration Method

Cal Title :

Standard Data Files

Level	DataPath	DataFile	Date Acquired
1	...hem\1\data\06h2510a.b\003calb.d\	003calb.d#	Aug 25 2006 10:40 am
2	...hem\1\data\06h2510a.b\004cali.d\	004cali.d#	Aug 25 2006 10:46 am
3	...hem\1\data\06h2510a.b\005cali.d\	005cali.d#	Aug 25 2006 10:51 am
4	...hem\1\data\06h2510a.b\006cali.d\	006cali.d#	Aug 25 2006 10:57 am
5	...hem\1\data\06h2510a.b\007cali.d\	007cali.d#	Aug 25 2006 11:03 am
6	...hem\1\data\06h2510a.b\008cali.d\	008cali.d#	Aug 25 2006 11:08 am
7	...hem\1\data\06h2510a.b\009cali.d\	009cali.d#	Aug 25 2006 11:14 am
8	---		
9	---		
10	---		
11	---		
12	---		
13	---		
14	---		
15	---		
16	---		
17	---		
18	---		
19	---		
20	---		

Level	BkgPath	BkgFile	Interference Correction
1	---	---	ON
2	---	---	ON
3	---	---	ON
4	---	---	ON
5	---	---	ON
6	---	---	ON
7	---	---	ON
8	---	---	ON
9	---	---	
10	---	---	
11	---	---	
12	---	---	
13	---	---	
14	---	---	
15	---	---	
16	---	---	
17	---	---	
18	---	---	
19	---	---	
20	---	---	

Name	m/z	IS	Equation	r	Units
Li	6	---	Excluded	---	ppb
Be	9	6	$Y = 1.644E-1 \cdot X + 7.554E-3$ (blank)	---	ppb
Na	23	45	$Y = 8.421E-1 \cdot X + 3.855E+1$ (blank)	---	ppb
Mg	25	45	Excluded	---	ppb
Mg	26	45	$Y = 8.051E-2 \cdot X + 6.715E-1$ (blank)	---	ppb
Al	27	45	$Y = 6.280E-1 \cdot X + 2.913E+0$ (blank)	---	ppb
K	39	45	$Y = 6.345E-1 \cdot X + 6.119E+1$ (blank)	---	ppb
Ca	43	45	Excluded	---	ppb
Ca	44	45	$Y = 1.863E-2 \cdot X + 6.024E-1$ (blank)	---	ppb
Sc	45	---	Excluded	---	ppb
V	51	72	$Y = 3.554E+0 \cdot X + 6.793E-1$ (blank)	---	ppb
Cr	52	72	$Y = 3.090E+0 \cdot X + 2.226E+0$ (blank)	---	ppb
Cr	53	72	Excluded	---	ppb
Fe	54	72	Excluded	---	ppb
Mn	55	72	$Y = 4.097E+0 \cdot X + 7.410E-1$ (blank)	---	ppb
Fe	57	72	$Y = 8.408E-2 \cdot X + 2.399E+0$ (blank)	---	ppb
Co	59	72	$Y = 3.731E+0 \cdot X + 1.723E-1$ (blank)	---	ppb
Ni	60	72	$Y = 7.669E-1 \cdot X + 1.186E-1$ (blank)	---	ppb
Cu	63	72	Excluded	---	ppb
Cu	65	72	$Y = 8.767E-1 \cdot X + 2.068E-1$ (blank)	---	ppb
Zn	66	72	$Y = 4.409E-1 \cdot X + 1.341E+0$ (blank)	---	ppb
Ge	72	---	Excluded	---	ppb
As	75	72	$Y = 4.495E-1 \cdot X + 1.601E-1$ (blank)	---	ppb
(As)	77	72	Excluded	---	ppb
Se	82	72	$Y = 3.209E-2 \cdot X + 2.815E-2$ (blank)	---	ppb
(As)	83	72	Excluded	---	ppb
(Ca)	88	72	Excluded	---	ppb
Y	89	72	Excluded	---	ppb
Mo	95	72	$Y = 8.373E-1 \cdot X + 9.308E-2$ (blank)	---	ppb
Mo	98	72	Excluded	---	ppb
(Mo)	99	72	Excluded	---	ppb
(Cd)	106	72	Excluded	---	ppb
(Cd)	108	72	Excluded	---	ppb
Ag	109	72	$Y = 1.937E+0 \cdot X + 7.788E-2$ (blank)	---	ppb
Cd	111	72	$Y = 4.000E-1 \cdot X + 7.960E-2$ (blank)	---	ppb
Cd	114	72	Excluded	---	ppb
In	115	---	Excluded	---	ppb
(In)	118	---	Excluded	---	ppb
Sb	121	115	$Y = 2.513E-1 \cdot X + 2.043E-2$ (blank)	---	ppb
Ba	135	115	Excluded	---	ppb
Ba	137	115	$Y = 1.028E-1 \cdot X + 8.380E-3$ (blank)	---	ppb
Tb	159	---	Excluded	---	ppb
Er	166	115	Excluded	---	ppb
Tl	205	209	$Y = 7.335E-1 \cdot X + 1.016E-1$ (blank)	---	ppb
(Pb)	206	209	Excluded	---	ppb
(Pb)	207	209	Excluded	---	ppb
Pb	208	209	$Y = 1.019E+0 \cdot X + 7.353E-2$ (blank)	---	ppb
Bi	209	---	Excluded	---	ppb

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET05
 Seqnum : 56341908011
 Cal : 56341908001
 Standards: S4008

File : h2510011
 Caldate: 25-AUG-2006
 IDF : 1.0
 Time : 25-AUG-2006 11:25

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	0.6387	0.6221	10000	9901	ug/L	-1	10	
Antimony	0.2657	0.2448	100.0	97.36	ug/L	-3	10	
Arsenic	0.5365	0.4495	100.0	99.65	ug/L	0	10	
Barium	0.1252	0.0999	100.0	97.03	ug/L	-3	10	
Beryllium	0.1690	0.1629	100.0	99.05	ug/L	-1	10	
Cadmium	0.5186	0.4024	100.0	100.4	ug/L	0	10	
Calcium	0.0227	0.0187	10000	9999	ug/L	0	10	
Chromium	4.4611	2.9686	100.0	95.34	ug/L	-5	10	
Cobalt	3.8167	3.5490	100.0	95.08	ug/L	-5	10	
Copper	1.1035	0.8921	100.0	101.5	ug/L	2	10	
Iron	0.0976	0.0854	10000	10130	ug/L	1	10	
Lead	1.1127	0.9970	100.0	97.78	ug/L	-2	10	
Magnesium	0.0821	0.0805	10000	9989	ug/L	0	10	
Manganese	5.0937	3.9151	100.0	95.38	ug/L	-5	10	
Molybdenum	0.8693	0.8302	100.0	99.04	ug/L	-1	10	
Nickel	1.0206	0.7724	100.0	100.6	ug/L	1	10	
Potassium	1.0180	0.6366	10000	9937	ug/L	-1	10	
Selenium	0.0535	0.0326	100.0	100.7	ug/L	1	10	
Silver	2.0367	1.9488	100.0	100.6	ug/L	1	10	
Sodium	1.1287	0.8423	10000	9957	ug/L	0	10	
Thallium	0.7988	0.7242	50.00	49.22	ug/L	-2	10	
Vanadium	3.7484	3.3024	100.0	92.74	ug/L	-7	10	
Zinc	1.4166	0.4575	100.0	100.7	ug/L	1	10	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	322159	-0.34
Scandium	341957	341860	-0.03
Germanium	80606	81880	1.58
Indium	530308	518535	-2.22
Bismuth	437483	435888	-0.36

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56341908029
 Cal : 56341908001
 Standards: S4009

File : h2510029
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 13:05

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6387	0.6348	10000	10100	ug/L	1	10	
Antimony	0.2657	0.2425	100.0	96.42	ug/L	-4	10	
Arsenic	0.5365	0.4436	100.0	98.33	ug/L	-2	10	
Barium	0.1252	0.1006	100.0	97.76	ug/L	-2	10	
Beryllium	0.1690	0.1613	100.0	98.05	ug/L	-2	10	
Cadmium	0.5186	0.3961	100.0	98.84	ug/L	-1	10	
Calcium	0.0227	0.0186	10000	9967	ug/L	0	10	
Chromium	4.4611	2.8931	100.0	92.90	ug/L	-7	10	
Cobalt	3.8167	3.4522	100.0	92.49	ug/L	-8	10	
Copper	1.1035	0.8697	100.0	98.97	ug/L	-1	10	
Iron	0.0976	0.0831	10000	9851	ug/L	-1	10	
Lead	1.1127	0.9933	100.0	97.41	ug/L	-3	10	
Magnesium	0.0821	0.0819	10000	10160	ug/L	2	10	
Manganese	5.0937	3.7669	100.0	91.77	ug/L	-8	10	
Molybdenum	0.8693	0.8256	100.0	98.49	ug/L	-2	10	
Nickel	1.0206	0.7561	100.0	98.44	ug/L	-2	10	
Potassium	1.0180	0.6446	10000	10060	ug/L	1	10	
Selenium	0.0535	0.0325	100.0	100.4	ug/L	0	10	
Silver	2.0367	1.9183	100.0	99.01	ug/L	-1	10	
Sodium	1.1287	0.8439	10000	9976	ug/L	0	10	
Thallium	0.7988	0.7145	50.00	48.56	ug/L	-3	10	
Vanadium	3.7484	3.2255	100.0	90.57	ug/L	-9	10	
Zinc	1.4166	0.4473	100.0	98.42	ug/L	-2	10	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	312323	-3.38
Scandium	341957	328006	-4.08
Germanium	80606	79508	-1.36
Indium	530308	503523	-5.05
Bismuth	437483	436229	-0.29

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56341908046 File : h2510046
 Cal : 56341908001 Caldate: 25-AUG-2006
 Standards: S4009, S3310

IDF : 1.0
 Time : 25-AUG-2006 15:06

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6387	0.6727	10000	10710	ug/L	7	10	
Antimony	0.2657	0.2519	100.0	100.2	ug/L	0	10	
Arsenic	0.5365	0.4670	100.0	103.5	ug/L	4	10	
Barium	0.1252	0.1055	100.0	102.6	ug/L	3	10	
Beryllium	0.1690	0.1676	100.0	101.9	ug/L	2	10	
Cadmium	0.5186	0.4121	100.0	102.8	ug/L	3	10	
Calcium	0.0227	0.0195	10000	10430	ug/L	4	10	
Chromium	4.4611	2.9959	100.0	96.22	ug/L	-4	10	
Cobalt	3.8167	3.6211	100.0	97.01	ug/L	-3	10	
Copper	1.1035	0.9133	100.0	103.9	ug/L	4	10	
Iron	0.0976	0.0865	10000	10260	ug/L	3	10	
Lead	1.1127	1.0314	100.0	101.2	ug/L	1	10	
Magnesium	0.0821	0.0864	10000	10730	ug/L	7	10	
Manganese	5.0937	3.9438	100.0	96.09	ug/L	-4	10	
Molybdenum	0.8693	0.8633	100.0	103.0	ug/L	3	10	
Nickel	1.0206	0.7990	100.0	104.0	ug/L	4	10	
Potassium	1.0180	0.6735	10000	10520	ug/L	5	10	
Selenium	0.0535	0.0346	100.0	107.1	ug/L	7	10	
Silver	2.0367	2.0061	100.0	103.5	ug/L	4	10	
Sodium	1.1287	0.8958	10000	10590	ug/L	6	10	
Thallium	0.7988	0.7417	50.00	50.42	ug/L	1	10	
Vanadium	3.7484	3.3584	100.0	94.31	ug/L	-6	10	
Zinc	1.4166	0.4715	100.0	103.9	ug/L	4	10	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	322233	-0.31
Scandium	341957	330318	-3.40
Germanium	80606	79506	-1.36
Indium	530308	504921	-4.79
Bismuth	437483	446747	2.12

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Segnum : 56341908052
 Cal : 56341908001
 Standards: S4009, S3310

File : h2510052
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 15:39

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6387	0.6753	10000	10750	ug/L	7	10	
Antimony	0.2657	0.2507	100.0	99.69	ug/L	0	10	
Arsenic	0.5365	0.4627	100.0	102.6	ug/L	3	10	
Barium	0.1252	0.1053	100.0	102.3	ug/L	2	10	
Beryllium	0.1690	0.1687	100.0	102.5	ug/L	3	10	
Cadmium	0.5186	0.4114	100.0	102.7	ug/L	3	10	
Calcium	0.0227	0.0195	10000	10430	ug/L	4	10	
Chromium	4.4611	2.9994	100.0	96.34	ug/L	-4	10	
Cobalt	3.8167	3.5956	100.0	96.33	ug/L	-4	10	
Copper	1.1035	0.9063	100.0	103.1	ug/L	3	10	
Iron	0.0976	0.0857	10000	10160	ug/L	2	10	
Lead	1.1127	1.0348	100.0	101.5	ug/L	2	10	
Magnesium	0.0821	0.0869	10000	10780	ug/L	8	10	
Manganese	5.0937	3.9084	100.0	95.22	ug/L	-5	10	
Molybdenum	0.8693	0.8620	100.0	102.8	ug/L	3	10	
Nickel	1.0206	0.7900	100.0	102.8	ug/L	3	10	
Potassium	1.0180	0.6777	10000	10580	ug/L	6	10	
Selenium	0.0535	0.0337	100.0	104.2	ug/L	4	10	
Silver	2.0367	1.9911	100.0	102.8	ug/L	3	10	
Sodium	1.1287	0.8948	10000	10580	ug/L	6	10	
Thallium	0.7988	0.7419	50.00	50.43	ug/L	1	10	
Vanadium	3.7484	3.3596	100.0	94.34	ug/L	-6	10	
Zinc	1.4166	0.4664	100.0	102.8	ug/L	3	10	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	318859	-1.36
Scandium	341957	326357	-4.56
Germanium	80606	79166	-1.79
Indium	530308	502214	-5.30
Bismuth	437483	443934	1.47

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56341908073
 Cal : 56341908001
 Standards: S4009, S3310

File : h2510073
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 17:48

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6387	0.6606	10000	10520	ug/L	5	10	
Antimony	0.2657	0.2479	100.0	98.56	ug/L	-1	10	
Arsenic	0.5365	0.4566	100.0	101.2	ug/L	1	10	
Barium	0.1252	0.1041	100.0	101.1	ug/L	1	10	
Beryllium	0.1690	0.1607	100.0	97.70	ug/L	-2	10	
Cadmium	0.5186	0.4053	100.0	101.1	ug/L	1	10	
Calcium	0.0227	0.0191	10000	10210	ug/L	2	10	
Chromium	4.4611	2.9442	100.0	94.55	ug/L	-5	10	
Cobalt	3.8167	3.5356	100.0	94.72	ug/L	-5	10	
Copper	1.1035	0.8924	100.0	101.6	ug/L	2	10	
Iron	0.0976	0.0848	10000	10060	ug/L	1	10	
Lead	1.1127	1.0151	100.0	99.55	ug/L	0	10	
Magnesium	0.0821	0.0851	10000	10570	ug/L	6	10	
Manganese	5.0937	3.8567	100.0	93.96	ug/L	-6	10	
Molybdenum	0.8693	0.8468	100.0	101.0	ug/L	1	10	
Nickel	1.0206	0.7763	100.0	101.1	ug/L	1	10	
Potassium	1.0180	0.6716	10000	10490	ug/L	5	10	
Selenium	0.0535	0.0340	100.0	105.1	ug/L	5	10	
Silver	2.0367	1.9536	100.0	100.8	ug/L	1	10	
Sodium	1.1287	0.8768	10000	10370	ug/L	4	10	
Thallium	0.7988	0.7239	50.00	49.20	ug/L	-2	10	
Vanadium	3.7484	3.3240	100.0	93.34	ug/L	-7	10	
Zinc	1.4166	0.4579	100.0	100.8	ug/L	1	10	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	302769	-6.34
Scandium	341957	304897	-10.84
Germanium	80606	72090	-10.56
Indium	530308	461548	-12.97
Bismuth	437483	419799	-4.04

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56341908013
 Cal : 56341908001

File : h2510013
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 11:36

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[5.199]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.2935]	0.5000	0.09029	ug/L	!ib
Barium	[0.1082]	0.2500	0.02391	ug/L	!ib
Beryllium	[0.01016]	0.2500	0.009674	ug/L	!ib
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	[7.782]	50.00	7.739	ug/L	!ib
Chromium	[0.1688]	0.5000	0.03860	ug/L	!ib
Cobalt	[0.01040]	0.2500	0.008548	ug/L	!ib
Copper	[0.1766]	0.5000	0.04426	ug/L	!ib
Iron	ND	50.00	6.980	ug/L	
Lead	[0.02944]	0.2500	0.005283	ug/L	!ib
Magnesium	ND	50.00	3.054	ug/L	
Manganese	[0.04879]	0.2500	0.01838	ug/L	!ib
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	[0.01992]	0.2500	0.01266	ug/L	!ib
Sodium	ND	50.00	9.919	ug/L	
Thallium	[0.04866]	0.2500	0.02100	ug/L	!ib
Vanadium	[0.09718]	0.5000	0.08283	ug/L	!ib
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	330743	2.32
Scandium	341957	345158	0.94
Germanium	80606	81572	1.20
Indium	530308	538528	1.55
Bismuth	437483	450909	3.07

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56341908032
 Cal : 56341908001

File : h2510032
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 13:22

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	50.00	2.123	ug/L	
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.2988]	0.5000	0.09029	ug/L	!ib
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	ND	0.2500	0.009674	ug/L	
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	[0.2721]	0.5000	0.03860	ug/L	!ib
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	ND	50.00	3.054	ug/L	
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	[0.2258]	0.5000	0.1891	ug/L	!ib
Silver	ND	0.2500	0.01266	ug/L	
Sodium	ND	50.00	9.919	ug/L	
Thallium	ND	0.2500	0.02100	ug/L	
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	310667	-3.89
Scandium	341957	321206	-6.07
Germanium	80606	76632	-4.93
Indium	530308	503028	-5.14
Bismuth	437483	439702	0.51

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56341908049
 Cal : 56341908001

File : h2510049
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 15:23

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	50.00	2.123	ug/L	
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.2357]	0.5000	0.09029	ug/L	!ib
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	ND	0.2500	0.009674	ug/L	
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	[0.2140]	0.5000	0.03860	ug/L	!ib
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	ND	50.00	3.054	ug/L	
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	[0.3328]	0.5000	0.1891	ug/L	!ib
Silver	ND	0.2500	0.01266	ug/L	
Sodium	ND	50.00	9.919	ug/L	
Thallium	ND	0.2500	0.02100	ug/L	
Vanadium	[0.1496]	0.5000	0.08283	ug/L	!ib
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	338508	4.72
Scandium	341957	341442	-0.15
Germanium	80606	80983	0.47
Indium	530308	535560	0.99
Bismuth	437483	473139	8.15

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05. IDF : 1.0
 Seqnum : 56341908054 File : h2510054 Time : 25-AUG-2006 15:51
 Cal : 56341908001 Caldate: 25-AUG-2006

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	50.00	2.123	ug/L	
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.4083]	0.5000	0.09029	ug/L	!ib
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	[0.02156]	0.2500	0.009674	ug/L	!ib
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	[0.2300]	0.5000	0.03860	ug/L	!ib
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	ND	50.00	3.054	ug/L	
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	ND	0.2500	0.01266	ug/L	
Sodium	ND	50.00	9.919	ug/L	
Thallium	ND	0.2500	0.02100	ug/L	
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	331087	2.42
Scandium	341957	332599	-2.74
Germanium	80606	79531	-1.33
Indium	530308	522128	-1.54
Bismuth	437483	464050	6.07

! = warning ib = instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Segnum : 56341908075
 Cal : 56341908001

File : h2510075
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 17:59

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[4.388]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.3001]	0.5000	0.09029	ug/L	!ib
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	ND	0.2500	0.009674	ug/L	
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	[0.05610]	0.5000	0.03860	ug/L	!ib
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	ND	50.00	3.054	ug/L	
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	[0.2271]	0.5000	0.1891	ug/L	!ib
Silver	ND	0.2500	0.01266	ug/L	
Sodium	[28.09]	50.00	9.919	ug/L	!ib
Thallium	ND	0.2500	0.02100	ug/L	
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	308846	-4.46
Scandium	341957	311108	-9.02
Germanium	80606	73695	-8.57
Indium	530308	485421	-8.46
Bismuth	437483	440889	0.78

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56341908015 File : h2510015
 Cal : 56341908001 Caldate: 25-AUG-2006
 Standards: S4011, S3310

IDF : 1.0
 Time : 25-AUG-2006 11:47

Analyte	Quant	RL	Units	Flags
Antimony	2.096	0.2500	ug/L	
Arsenic	[0.2745]	0.5000	ug/L	
Barium	0.8940	0.2500	ug/L	
Beryllium	[0.01137]	0.2500	ug/L	
Cadmium	[0]	0.2500	ug/L	
Chromium	1.128	0.5000	ug/L	
Cobalt	2.459	0.2500	ug/L	
Copper	1.572	0.5000	ug/L	
Lead	1.180	0.2500	ug/L	
Manganese	0.8620	0.2500	ug/L	
Nickel	1.587	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1231]	0.2500	ug/L	
Thallium	[0.02564]	0.2500	ug/L	
Vanadium	[0.09319]	0.5000	ug/L	
Zinc	1.811	0.5000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	98970	ug/L	99
Calcium	300000	286100	ug/L	95
Iron	250000	218600	ug/L	87
Magnesium	100000	97390	ug/L	97
Molybdenum	2000	1963	ug/L	98
Potassium	100000	97100	ug/L	97
Sodium	250000	237600	ug/L	95

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	288781	-10.66
Scandium	341957	324404	-5.13
Germanium	80606	83583	3.69
Indium	530308	482377	-9.04
Bismuth	437483	377109	-13.80

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56341908016 File : h2510016
 Cal : 56341908001 Caldate: 25-AUG-2006
 Standards: S4012, S3310

IDF : 1.0
 Time : 25-AUG-2006 11:53

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	99440	ug/L	-1		
Arsenic	100.0	98.06	ug/L	-2	20	
Cadmium	100.0	88.16	ug/L	-12	20	
Calcium	300000	286500	ug/L	-5		
Chromium	200.0	192.6	ug/L	-4	20	
Cobalt	200.0	190.0	ug/L	-5	20	
Copper	200.0	181.4	ug/L	-9	20	
Iron	250000	215800	ug/L	-14		
Magnesium	100000	98710	ug/L	-1		
Manganese	200.0	190.5	ug/L	-5	20	
Molybdenum	2000	1955	ug/L	-2		
Nickel	200.0	183.1	ug/L	-8	20	
Potassium	100000	97270	ug/L	-3		
Selenium	100.0	88.84	ug/L	-11	20	
Silver	50.00	45.55	ug/L	-9	20	
Sodium	250000	237500	ug/L	-5		
Vanadium	200.0	198.8	ug/L	-1	20	
Zinc	100.0	98.62	ug/L	-1	20	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Scandium	341957	318101	-6.98
Germanium	80606	82303	2.11

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56341908069 File : h2510069
 Cal : 56341908001 Caldate: 25-AUG-2006
 Standards: S4011, S3310

IDF : 1.0
 Time : 25-AUG-2006 17:18

Analyte	Quant	RL	Units	Flags
Antimony	1.931	0.2500	ug/L	
Arsenic	[0.1344]	0.5000	ug/L	
Barium	0.9864	0.2500	ug/L	
Beryllium	[0.009709]	0.2500	ug/L	
Cadmium	[0.08450]	0.2500	ug/L	
Chromium	0.9977	0.5000	ug/L	
Cobalt	2.418	0.2500	ug/L	
Copper	1.548	0.5000	ug/L	
Lead	1.133	0.2500	ug/L	
Manganese	0.9306	0.2500	ug/L	
Nickel	1.423	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.09473]	0.2500	ug/L	
Thallium	[0]	0.2500	ug/L	
Vanadium	[0]	0.5000	ug/L	
Zinc	1.797	0.5000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	101400	ug/L	101
Calcium	300000	284600	ug/L	95
Iron	250000	211400	ug/L	85
Magnesium	100000	99350	ug/L	99
Molybdenum	2000	1954	ug/L	98
Potassium	100000	97920	ug/L	98
Sodium	250000	241400	ug/L	97

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	267803	-17.15
Scandium	341957	283813	-17.00
Germanium	80606	72556	-9.99
Indium	530308	428075	-19.28
Bismuth	437483	371229	-15.14

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56341908070
 Cal : 56341908001
 Standards: S4012, S3310

File : h2510070
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 17:24

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	100900	ug/L	1		
Arsenic	100.0	95.82	ug/L	-4	20	
Cadmium	100.0	86.27	ug/L	-14	20	
Calcium	300000	280400	ug/L	-7		
Chromium	200.0	181.9	ug/L	-9	20	
Cobalt	200.0	183.8	ug/L	-8	20	
Copper	200.0	175.9	ug/L	-12	20	
Iron	250000	205900	ug/L	-18		
Magnesium	100000	98510	ug/L	-1		
Manganese	200.0	180.5	ug/L	-10	20	
Molybdenum	2000	1943	ug/L	-3		
Nickel	200.0	175.5	ug/L	-12	20	
Potassium	100000	97040	ug/L	-3		
Selenium	100.0	87.80	ug/L	-12	20	
Silver	50.00	44.96	ug/L	-10	20	
Sodium	250000	237500	ug/L	-5		
Vanadium	200.0	192.8	ug/L	-4	20	
Zinc	100.0	94.07	ug/L	-6	20	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Scandium	341957	293606	-14.14
Germanium	80606	75737	-6.04

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56341908 Instrument: MET05 Agilent ICP-MS
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 25-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
001	h2510001	TUN				25-AUG-2006 10:28	1.0	1.0				1		
002	h2510002	X	RINSE			25-AUG-2006 10:35	1.0					2		
003	h2510003	ICALBLK	STD-BLANK			25-AUG-2006 10:40	1.0	1.0				2		
004	h2510004	ICAL	CS1			25-AUG-2006 10:46	1.0	1.0				3		
005	h2510005	ICAL	CS2			25-AUG-2006 10:51	1.0	1.0				4		
006	h2510006	ICAL	CS3			25-AUG-2006 10:57	1.0	1.0				5		
007	h2510007	ICAL	CS4			25-AUG-2006 11:03	1.0	1.0				6		
008	h2510008	ICAL	CS5			25-AUG-2006 11:08	1.0	1.0				7		
009	h2510009	ICAL	CS6			25-AUG-2006 11:14	1.0	1.0				8		
010	h2510010	X	RINSE			25-AUG-2006 11:19	1.0					2		
011	h2510011	ICV				25-AUG-2006 11:25	1.0	1.0				9		
012	h2510012	X	RINSE			25-AUG-2006 11:30	1.0					2		
013	h2510013	ICB				25-AUG-2006 11:36	1.0	1.0				2		
014	h2510014	X				25-AUG-2006 11:42	1.0	1.0				2		
015	h2510015	ICSA				25-AUG-2006 11:47	1.0	1.0				10	2	7:CA=286100
016	h2510016	ICSAB				25-AUG-2006 11:53	1.0	1.0				11	2	7:CA=286500
017	h2510017	X	RINSE			25-AUG-2006 11:58	1.0					2		
018	h2510018	X	RINSE			25-AUG-2006 12:04	1.0					2		
019	h2510019	BLANK	QC353251			116738 Filtra	25-AUG-2006 12:10	1.0	1.0			1		
020	h2510020	BS	QC353252			116738 Filtra	25-AUG-2006 12:15	1.0	1.0			2		
021	h2510021	BSD	QC353253			116738 Filtra	25-AUG-2006 12:21	1.0	1.0			2		
022	h2510022	X	RINSE			25-AUG-2006 12:26	1.0					2		
023	h2510023	MSS	188837-009			116738 Filtra	25-AUG-2006 12:32	1.0	1.0	4		1		4:NA=61250.0
024	h2510024	SER	QC353256			116738 Filtra	25-AUG-2006 12:37	5.0	1.0			2		
025	h2510025	MS	QC353254			116738 Filtra	25-AUG-2006 12:43	1.0	1.0	2		1		5:NA=72310.0
026	h2510026	MSD	QC353255			116738 Filtra	25-AUG-2006 12:49	1.0	1.0	2		1		5:NA=73570.0
027	h2510027	PDS	QC353257			116738 Filtra	25-AUG-2006 12:54	1.0	1.0	1		1		5:NA=70530.0
028	h2510028	X	RINSE			25-AUG-2006 13:00	1.0					2		
029	h2510029	CCV				25-AUG-2006 13:05	1.0	1.0				13		
030	h2510030	X	RINSE			25-AUG-2006 13:11	1.0					2		
031	h2510031	X				25-AUG-2006 13:16	1.0	1.0				2		

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S3780 13=S4009

Analyst: *McAvoy* Date: *8/25/06*

Sequence: 56341908 Instrument: MET05
Analytical Method: EPA 6020

Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 25-AUG-2006

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
032	h2510032	CCB	RINSE			25-AUG-2006	13:22 1.0	1.0			1	2		
033	h2510033	X				25-AUG-2006	13:28 1.0					2		
034	h2510034	MSS	188837-009			25-AUG-2006	13:33 10.0	1.0			1	2		
035	h2510035	SER	QC353256			25-AUG-2006	13:39 50.0	1.0			1	2		
036	h2510036	MS	QC353254			25-AUG-2006	13:45 10.0	1.0			1	2		
037	h2510037	MSD	QC353255			25-AUG-2006	13:50 10.0	1.0			1	2		
038	h2510038	PDS	QC353257			25-AUG-2006	13:56 10.0	1.0			1	12 2		
039	h2510039	X	RINSE			25-AUG-2006	14:26 1.0					2		
040	h2510040	SAMPLE	188837-012			25-AUG-2006	14:32 1.0	1.0			1	2		
041	h2510041	SAMPLE	188869-001			25-AUG-2006	14:38 1.0	1.0			1	2		
042	h2510042	SAMPLE	188837-008			25-AUG-2006	14:43 1.0	1.0			1	2		
043	h2510043	SAMPLE	188837-008			25-AUG-2006	14:49 20.0	1.0			1	2		
044	h2510044	SAMPLE	188837-010			25-AUG-2006	14:55 1.0	1.0			1	2		
045	h2510045	X	RINSE			25-AUG-2006	15:00 1.0					2		
046	h2510046	CCV				25-AUG-2006	15:06 1.0	1.0			1	13 2		
047	h2510047	X	RINSE			25-AUG-2006	15:11 1.0					2		
048	h2510048	X				25-AUG-2006	15:17 1.0	1.0			1	2		
049	h2510049	CCB				25-AUG-2006	15:23 1.0	1.0			1	2		
050	h2510050	SAMPLE	188837-010			25-AUG-2006	15:28 10.0	1.0			1	2		
051	h2510051	X	RINSE			25-AUG-2006	15:34 1.0					2		
052	h2510052	CCV				25-AUG-2006	15:39 1.0	1.0			1	13 2		
053	h2510053	X	RINSE			25-AUG-2006	15:45 1.0					2		
054	h2510054	CCB				25-AUG-2006	15:51 1.0	1.0			1	2		
055	h2510055	X				25-AUG-2006	15:57 1.0	1.0			1	2		
056	h2510056	SAMPLE	188837-005			25-AUG-2006	16:05 1.0	1.0			1	2		
057	h2510057	SAMPLE	188837-005			25-AUG-2006	16:11 1.0	1.0			1	2		
058	h2510058	X	RINSE			25-AUG-2006	16:16 1.0					2		
059	h2510059	X	RINSE			25-AUG-2006	16:22 1.0					2		
060	h2510060	X	RINSE			25-AUG-2006	16:28 1.0					2		
061	h2510061	SAMPLE	188837-005			25-AUG-2006	16:33 25.0	1.0			1	2		
062	h2510062	SAMPLE	188837-005			25-AUG-2006	16:39 5.0	1.0			1	2		

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S3780 13=S4009

Analyst: *W. Carls* Date: *8/25/06*

Sequence: 56341908 Instrument: MET05
Analytical Method: EPA 6020

Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 25-AUG-2006

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

#	Filename	Type	Sample	lenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
063	h2510063	SAMPLE	188837-005		116738	Water	25-AUG-2006	16:44	25.0	1.0	1	1	2		1:NA=144960
064	h2510064	X	RINSE				25-AUG-2006	16:50	1.0				2		
065	h2510065	X	RINSE				25-AUG-2006	16:56	1.0				2		
066	h2510066	SAMPLE	188837-005		116738	Filtira	25-AUG-2006	17:01	250.0	1.0	1	1	2		
067	h2510067	SAMPLE	188837-005		116738	Water	25-AUG-2006	17:07	250.0	1.0		1	2		
068	h2510068	X	RINSE				25-AUG-2006	17:12	1.0				2		
069	h2510069	ICSA					25-AUG-2006	17:18	1.0	1.0		1	10	2	7:CA=284600
070	h2510070	ICSAB					25-AUG-2006	17:24	1.0	1.0		1	11	2	7:CA=280400
071	h2510071	X	RINSE				25-AUG-2006	17:29	1.0				2		
072	h2510072	X	RINSE				25-AUG-2006	17:35	1.0				2		
073	h2510073	CCV					25-AUG-2006	17:48	1.0	1.0		1	13	2	
074	h2510074	X	RINSE				25-AUG-2006	17:54	1.0				2		
075	h2510075	CCB					25-AUG-2006	17:59	1.0	1.0		1	2		

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S3780 13=S4009

Analyst: *Ala* Date: *8/25/06*

REPORTING SUMMARY FOR 188837 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	A	S	A	B	B	C	C	C	C	F	P	M	M	H	N	K	S	A	N	T	V	Z
				L	B	S	A	E	D	A	R	O	U	E	B	G	N	G	I	E	G	A	L	N	
188837-005	MET05	08/24/06 21:05	1.0						+				+	+				+							+
188837-005	MET05	08/25/06 16:11	1.0			+					+														
188837-005	MET05	08/25/06 16:39	5.0	+									+						+						
188837-005	MET05	08/25/06 16:44	25.0						+						+	+									
188837-005	MET05	08/25/06 17:07	250.0																			+			
188837-012	MET04	08/21/06 15:35	1.0															+							
188837-012	MET05	08/24/06 21:11	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
188837-012	MET05	08/25/06 14:32	1.0								+					+						+		+	
QC352691	MET04	08/21/06 14:33	1.0															+							
QC352692	MET04	08/21/06 14:37	1.0															+							
QC352693	MET04	08/21/06 14:39	1.0															+							
QC352694	MET04	08/21/06 14:44	5.0															+							
QC352695	MET04	08/21/06 14:46	1.0															+							
QC352696	MET04	08/21/06 14:49	1.0															+							
QC352697	MET04	08/21/06 17:47	1.0															+							
QC353251	MET05	08/24/06 19:25	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+
QC353251	MET05	08/25/06 12:10	1.0								+											+			
QC353252	MET05	08/24/06 19:30	1.0		+	+	+		+	+		+	+	+	+	+		+	+	+	+	+	+	+	+
QC353252	MET05	08/25/06 12:15	1.0	+				+			+					+						+			
QC353253	MET05	08/24/06 19:36	1.0		+	+	+		+	+		+	+	+	+	+		+	+	+	+	+	+	+	+
QC353253	MET05	08/25/06 12:21	1.0	+				+			+					+						+			
QC353254	MET05	08/24/06 19:58	1.0		+	+	+		+			+	+	+	+			+	+	+	+	+	+	+	+
QC353254	MET05	08/24/06 21:33	10.0						+				+												
QC353254	MET05	08/25/06 12:43	1.0	+				+			+														
QC353254	MET05	08/25/06 13:45	10.0												+	+						+			
QC353255	MET05	08/24/06 20:04	1.0		+	+	+		+			+	+	+	+			+	+	+	+	+	+	+	+
QC353255	MET05	08/24/06 21:39	10.0						+				+												
QC353255	MET05	08/25/06 12:49	1.0	+				+			+														
QC353255	MET05	08/25/06 13:50	10.0												+	+						+			
QC353256	MET05	08/24/06 21:27	50.0						+																
QC353256	MET05	08/25/06 12:37	5.0	+	+	+	+	+	+		+	+	+	+	+			+	+	+	+	+	+	+	+
QC353256	MET05	08/25/06 13:39	50.0												+	+						+			
QC353257	MET05	08/24/06 20:09	1.0		+	+	+		+			+	+	+	+			+	+	+	+	+	+	+	+

REPORTING SUMMARY FOR 188837 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	A	S	A	B	B	C	C	C	C	C	F	P	M	M	H	N	K	S	A	N	T	V	Z
				L	B	S	A	E	D	A	R	O	U	E	B	G	N	G	I		E	G	A	L		N
QC353257	MET05	08/24/06 21:44	10.0							+				+												
QC353257	MET05	08/25/06 12:54	1.0	+				+			+															
QC353257	MET05	08/25/06 13:56	10.0	+				+			+					+	+						+			

REPORTING SUMMARY FOR 188837 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	A L	S B	A S	C D	C A	C R	C U	F E	P B	M G	M N	N I	K	N A	V	Z N
188837-005	MET05	08/24/06 20:20	1.0	+			+		+	+	+				+				+
188837-005	MET05	08/25/06 16:05	1.0			+			+										
188837-005	MET05	08/25/06 16:33	25.0					+					+	+		+			
188837-005	MET05	08/25/06 17:01	250.0														+		
188837-008	MET05	08/24/06 20:26	1.0	+	+	+	+			+	+	+		+	+	+		+	+
188837-008	MET05	08/25/06 14:43	1.0						+										
188837-008	MET05	08/25/06 14:49	20.0					+					+				+		
188837-009	MET05	08/24/06 19:47	1.0	+	+	+	+			+	+	+			+	+		+	+
188837-009	MET05	08/24/06 21:22	10.0					+											
188837-009	MET05	08/25/06 12:32	1.0						+										
188837-009	MET05	08/25/06 13:33	10.0										+	+			+		
188837-010	MET05	08/24/06 20:59	1.0	+	+	+	+			+		+			+	+			+
188837-010	MET05	08/25/06 14:55	1.0						+									+	
188837-010	MET05	08/25/06 15:28	10.0					+		+		+	+				+		
QC353251	MET05	08/24/06 19:25	1.0	+	+	+	+	+		+	+	+	+	+	+	+		+	+
QC353251	MET05	08/25/06 12:10	1.0						+								+		
QC353252	MET05	08/24/06 19:30	1.0		+	+	+	+		+	+	+		+	+	+		+	+
QC353252	MET05	08/25/06 12:15	1.0	+					+				+				+		
QC353253	MET05	08/24/06 19:36	1.0		+	+	+	+		+	+	+		+	+	+		+	+
QC353253	MET05	08/25/06 12:21	1.0	+					+				+				+		
QC353254	MET05	08/24/06 19:58	1.0		+	+	+			+	+				+	+		+	+
QC353254	MET05	08/24/06 21:33	10.0					+		+									
QC353254	MET05	08/25/06 12:43	1.0	+					+										
QC353254	MET05	08/25/06 13:45	10.0										+	+			+		
QC353255	MET05	08/24/06 20:04	1.0		+	+	+			+	+				+	+		+	+
QC353255	MET05	08/24/06 21:39	10.0					+		+									
QC353255	MET05	08/25/06 12:49	1.0	+					+										
QC353255	MET05	08/25/06 13:50	10.0										+	+			+		
QC353256	MET05	08/24/06 21:27	50.0					+											
QC353256	MET05	08/25/06 12:37	5.0	+	+	+	+		+	+	+	+			+	+		+	+
QC353256	MET05	08/25/06 13:39	50.0										+	+			+		
QC353257	MET05	08/24/06 20:09	1.0		+	+	+			+	+				+	+		+	+
QC353257	MET05	08/24/06 21:44	10.0					+		+									
QC353257	MET05	08/25/06 12:54	1.0	+					+										
QC353257	MET05	08/25/06 13:56	10.0	+					+				+	+			+		

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 24-AUG-2006
Sequence: 56340782
Instrument ID: MET05

(h2415)

ICALBLK Filename: h2415005
Date Analyzed: 24-AUG-2006
Time Analyzed: 16:09

	ICALBLK STD	LOWER LIMIT	UPPER LIMIT
IS1 (LI READING	336846	101054	404215
IS2 (SC READING	366577	109973	439892
IS3 (GE READING	82555	24767	99066
IS4 (IN READING	571579	171474	685895
IS5 (BI READING	478991	143697	574789
IS6 (TB READING	780388	234116	936465

TYPE	SAMPLE	#	IS1 (LI READING	IS2 (SC READING	IS3 (GE READING	IS4 (IN READING	IS5 (BI READING	IS6 (TB READING
ICB	188762-004	016	366672	390434	87125	594888	489444	809744
ICSA	188762-005	017	311213	359864	84081	489173	386249	705154
SAMPLE	188762-006	021	323059	364650	86603	549319	427476	743098
SAMPLE	188762-007	022	333396	370457	88908	553540	424810	740479
SAMPLE	188762-008	023	298940	319178	77879	484298	407778	647966
SAMPLE	188762-009	024	312796	334983	80335	517963	435736	716289
SAMPLE	188762-008	025	326650	355444	84524	545223	443460	742224
SAMPLE	188762-009	026	333586	352718	84744	555471	469266	749554
ICSA		027	292002	336201	81129	470977	378844	682266
CCV		030	298533	336070	78733	515579	441916	723859
CCB		033	307454	342692	77666	534508	448957	726551
CCV		036	309546	348538	78038	520020	437778	736201
CCB		039	328348	361759	80850	556692	457317	753057
BLANK	QC353251	040	256551	272534	63508	416273	367251	577616
BS	QC353252	041	264539	283907	67286	417464	373417	608739
BSD	QC353253	042	273640	298140	65636	443681	387170	636669
MSS	188837-009	044	273061	308181	69235	437937	364797	617413
MS	QC353254	046	270844	307119	69318	421512	358474	606366
MSD	QC353255	047	271246	307914	69254	425967	356961	609856
PDS	QC353257	048	272836	310112	69075	434239	359221	615100
SAMPLE	188837-005	050	318856	340540	76177	405294	283327	551913
SAMPLE	188837-008	051	343187	378344	93632	546649	412678	728292
CCV		053	357041	392718	96949	610742	489814	821287
CCB		056	344809	374512	90766	603490	496312	794703
SAMPLE	188837-010	057	286642	319621	75526	464872	386962	648491
SAMPLE	188837-005	058	310910	405298	80144	420992	300529	594362
SAMPLE	188837-012	059	358033	364160	95519	564957	428157	705079
SAMPLE	188869-001	060	314994	326618	84273	515298	413198	662722

INTERNAL STANDARD SUMMARY Curtis & Tompkins Laboratories

Sequence Date: 24-AUG-2006
Sequence: 56340782
Instrument ID: MET05

(h2415)

ICALBLK Filename: h2415005
Date Analyzed: 24-AUG-2006
Time Analyzed: 16:09

TYPE	SAMPLE	#							
MSS	188837-009	061	335019	356371	88882	574049	464263	756463	
SER	QC353256	062	337232	357104	89646	581396	472816	753004	
MS	QC353254	063	318638	337688	83598	542143	449407	724718	
MSD	QC353255	064	319046	338513	83511	542852	453816	729190	
PDS	QC353257	065	320289	340426	84044	547467	454737	732170	
SAMPLE	188837-012	066	325538	341376	84130	554360	460753	725623	
CCV		068	316576	338731	82845	528366	449277	728773	
CCB		070	326810	348477	84121	563317	467719	743312	
SAMPLE	188869-001	072	321720	341528	82717	549900	457167	723811	
ICSA		073	298629	343660	87885	499909	382931	695604	
CCV		077	299719	337550	79502	516408	433537	708986	
CCB		080	312018	345521	81117	543857	445530	717929	
BLANK	QC353240	084	269103	289864	67759	446314	389323	608686	
BS	QC353241	085	266899	291683	66889	437089	383062	618443	
BSD	QC353242	086	272556	298839	67995	443303	388360	628080	
MSS	188802-001	088	271153	296701	68416	415311	337939	587429	
SER	QC353245	089	304607	336817	78538	503786	406223	694599	
MS	QC353243	090	261666	280624	66427	394558	328604	566093	
MSD	QC353244	091	254286	275327	65446	387853	324744	557574	
PDS	QC353246	092	254659	270144	64648	391969	325492	549458	
MSS	188802-001	094	292223	308861	74779	482315	404827	659992	
SER	QC353245	095	280307	299464	67953	459750	389080	630422	
CCV		097	296080	320631	74168	487109	422734	682537	
CCB		099	295061	320166	72872	501067	423976	677192	
MS	QC353243	101	285356	309829	69643	460290	384786	643143	
MSD	QC353244	102	282427	304880	68535	450780	384573	630583	
PDS	QC353246	103	297802	320727	73791	483556	405397	669998	
SAMPLE	188802-002	104	253519	274850	63267	395891	342407	567227	
SAMPLE	188802-003	105	271079	288350	67441	417017	359796	587769	
SAMPLE	188802-004	106	264573	273658	63362	389359	344178	555913	
SAMPLE	188802-005	107	272047	284937	65056	398717	328054	554222	
SAMPLE	188802-006	108	285691	298453	70374	420568	350016	589800	
SAMPLE	188802-008	109	273592	286246	66163	403498	359559	582658	
SAMPLE	188802-009	110	260847	278352	66142	392789	342061	555807	

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 24-AUG-2006
Sequence: 56340782
Instrument ID: MET05

(h2415)

ICALBLK Filename: h2415005
Date Analyzed: 24-AUG-2006
Time Analyzed: 16:09

TYPE	SAMPLE	#								
CCV		112	315022	342352	79807	516312	442422	723504		
CCB		114	317920	343380	79910	538009	449660	721689		
SAMPLE	188802-010	116	257906	270210	63458	388972	343502	551041		
SAMPLE	188802-012	117	275878	285980	66577	411101	354740	580448		
SAMPLE	188802-013	118	263701	273976	64551	378718	343137	549327		
SAMPLE	188802-014	119	258499	268321	61903	384533	345378	551172		
SAMPLE	188802-015	120	284449	274760	65694	413010	372787	575460		
SAMPLE	188802-017	121	279012	280540	67466	388831	340848	561117		
SAMPLE	188802-018	122	274491	283068	68423	389415	340216	559584		
SAMPLE	188802-020	123	282090	289403	67338	403677	356352	581094		
SAMPLE	188867-002	124	264024	268674	61080	377244	322764	539146		
CCV		126	287181	301214	68372	449540	400857	643120		
CCB		128	291944	307571	70469	476316	413726	649859		
ICSA		130	252539	286572	68345	408101	337712	586723		

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 25-AUG-2006
Sequence: 56341908 (h2510)
Instrument ID: MET05
ICALBLK Filename: h2510003
Date Analyzed: 25-AUG-2006
Time Analyzed: 10:40

	IS1 (LI READING	IS2 (SC READING	IS3 (GE READING	IS4 (IN READING	IS5 (BI READING	IS6 (TB READING
ICALBLK STD	323251	341957	80606	530308	437483	697614
LOWER LIMIT	96975	102587	24182	159093	131245	209284
UPPER LIMIT	387901	410348	96727	636370	524980	837137

TYPE	SAMPLE	#							
ICB		013	330743	345158	81572	538528	450909	712002	
ICSA		015	288781	324404	83583	482377	377109	661668	
BLANK	QC353251	019	262537	272984	64769	421685	375546	575790	
BS	QC353252	020	258138	259306	63033	374774	351711	542189	
BSD	QC353253	021	273628	286020	65815	421404	375392	598800	
MSS	188837-009	023	273494	295252	69855	424869	368389	595893	
SER	QC353256	024	314717	331702	79289	508064	428348	687562	
MS	QC353254	025	263160	282449	66803	400343	354060	574291	
MSD	QC353255	026	274972	292829	69820	414997	364946	595568	
PDS	QC353257	027	285974	300450	71332	432939	370956	609287	
CCV		029	312323	328006	79508	503523	436229	695663	
CCB		032	310667	321206	76632	503028	439702	679858	
MSS	188837-009	034	317298	328928	79449	509833	443784	698441	
SER	QC353256	035	324677	337694	82190	533056	463663	717108	
MS	QC353254	036	313819	327800	79092	506764	439429	695512	
MSD	QC353255	037	315869	327507	78835	505281	439362	694903	
PDS	QC353257	038	317206	327509	79300	509275	442337	693890	
SAMPLE	188837-012	040	292543	277822	68458	422013	382611	577321	
SAMPLE	188869-001	041	293269	279909	68593	426988	387017	589511	
SAMPLE	188837-008	042	288809	300540	72604	439014	367664	613414	
SAMPLE	188837-008	043	351937	352198	86046	549362	467950	736664	
SAMPLE	188837-010	044	281388	288466	67746	413913	365902	594276	
CCV		046	322233	330318	79506	504921	446747	707828	
CCB		049	338508	341442	80983	535560	473139	749532	
SAMPLE	188837-010	050	316716	322586	77331	500449	444572	694716	
CCV		052	318859	326357	79166	502214	443934	703836	
CCB		054	331087	332599	79531	522128	464050	709387	
SAMPLE	188837-005	056	274720	279636	69514	397636	299504	527064	

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 25-AUG-2006
Sequence: 56341908
Instrument ID: MET05

(h2510)
ICALBLK Filename: h2510003
Date Analyzed: 25-AUG-2006
Time Analyzed: 10:40

TYPE	SAMPLE	#							
SAMPLE	188837-005	057	250922	300392	62812	359908	280138	491943	
SAMPLE	188837-005	061	341739	336043	83482	520054	417131	682949	
SAMPLE	188837-005	062	288228	305293	72522	442367	360888	607617	
SAMPLE	188837-005	063	324526	325781	81622	502640	414569	675256	
SAMPLE	188837-005	066	355811	339840	85585	547637	463314	714018	
SAMPLE	188837-005	067	347633	332696	83297	535571	462454	704552	
ICSA		069	267803	283813	72556	428075	371229	616159	
CCV		073	302769	304897	72090	461548	419799	658217	
CCB		075	308846	311108	73695	485421	440889	666724	

Curtis & Tompkins Laboratories

Sample Preparation Summary

24-AUG-2006 10:29

Batch Number : 116738
Date Extracted : 24-AUG-2006
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgr Group : ICAP
Units : mL
Clean-up :

Spike #1 ID : S3379
Spike #2 ID : S4130
Spike #3 ID :
SDP Version :

Sample	Type	Client	Matrix	Init	Units	Final	Prep	Clean	pH	Sp 1	Sp 2	Sp 3	Analyses	Clean	Comments
188837-005		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
188837-005		Treadwell & Rollo	Water	50	mL	50	1.000000	1					14MET		
188837-008		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					15MET		
188837-009		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					15MET		
188837-010		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					15MET		
188837-012		Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
188869-001		Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
QC353251	BLANK		Filtrate	50	mL	50	1.000000	1					ICAP		
QC353252	BS		Filtrate	50	mL	50	1.000000	1					ICAP		
QC353253	BSD		Filtrate	50	mL	50	1.000000	1					ICAP		
QC353254	MS	of 188837-009	Filtrate	50	mL	50	1.000000	1					ICAP		
QC353255	MSD	of 188837-009	Filtrate	50	mL	50	1.000000	1					ICAP		
QC353256	SER	of 188837-009	Filtrate	50	mL	50	1.000000	1					ICAP		
QC353257	PDS	of 188837-009	Filtrate	50	mL	50	1.000000	1					ICAP		

Prep Chemist:



Reviewed By:



Date:

8/25/06

Relinquished By:



Received By:



Date:

8/25/06

LIMS Batch #: _____
Date Digested: 8/24/03
Digested by: Jul B

BK BK 2382

☒ EPA 200.8 for ICP-MS

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Continued From:
Continued On:

Sample # and letter	Volume	Final	Filtered?	Comments
	Sample (mL)	Volume (mL)	(y/n)	
B1K	50	50		
B3				
B5D				
M5-09M				
M2-09				
166837-09				
-08H				
-10K				
-05K				
-05F				
-12L				
337-				
✓ 869-01L	✓	✓		TOTALS ↓

1.0/1.5 mL of spike solution was added to all spikes

concentrated HCl

concentrated HNO_3

☐ filtered thru' Whatman # 541

Reagent ID or LIMS #	Initials / Date
95	WLB 8/24
33379	
34130	
C1075 BAKED	
C14035 ✓	

Prep Chemist Signature / Date

Reviewer Signature / Date K. Carlson 8/24/06



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories
MDL Summary for EPA 6020 Water 200.8
As of 09/24/06

Analyte	Units	MET06 A	MET06 E	MET06 H	MET05
Aluminum	ug/L	0.40			9.6
Antimony	ug/L	0.0093			0.062
Arsenic	ug/L		0.034		0.34
Barium	ug/L	0.023			0.13
Beryllium	ug/L	0.017			0.12
Cadmium	ug/L	0.0058			0.17
Calcium	ug/L	5.6			15
Chromium	ug/L		0.038		0.18
Cobalt	ug/L		0.0072		0.069
Copper	ug/L		0.028		0.24
Iron	ug/L			1.9	16
Lead	ug/L	0.013			0.088
Magnesium	ug/L	0.73			11
Manganese	ug/L		0.011		0.050
Molybdenum	ug/L	0.0063			0.24
Nickel	ug/L		0.029		0.21
Potassium	ug/L	5.3			8.7
Selenium	ug/L			0.027	0.35
Silver	ug/L	0.0079			0.068
Sodium	ug/L		2.7		14
Thallium	ug/L	0.030			0.030
Vanadium	ug/L		0.026		0.24
Zinc	ug/L		0.062		0.23



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories
MDL Summary for EPA 7470A Water
As of 09/24/06

Analyte	Units	MET04	MET14
Mercury	ug/L	0.058	0.021

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 7470A

nst : MET04
 alnum : 46336367002
 nits : ug/L

Date : 21-AUG-2006 14:07
 X Axis : R

Reviewer: ---
 Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	stds
L1	116599	46336367002	STD02REP1	21-AUG-2006 14:09	S4162 (500X)
L2	116599	46336367003	STD03REP1	21-AUG-2006 14:11	S4162 (200X)
L3	116599	46336367004	STD04REP1	21-AUG-2006 14:13	S4162 (50X)
L4	116599	46336367005	STD05REP1	21-AUG-2006 14:15	S4162 (20X)
L5	116599	46336367006	STD06REP1	21-AUG-2006 14:17	S4162 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ²	MRSD	MNR ²	Fig
Mercury	4160.0	2772.0	2563.0	2431.2	2552.1	LINR	-0.0511	3.98E-4		2895.7	0.999		.99	

strument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression
 Page 1 of 1

46336367002

File Utility Help

RN > RN > ?

Protocol hgppb

Dataset/Proto 082106 /hgppb

Protocol | Line info | Cal Curve | Report | Ctrl Chart | Viewer

Reset

Calib Coeffs

New Cal

Update Coeffs

Spike Coeffs

A

B 3.97828e-4

C -5.11487e-2

Rho .999577

Type Linear

☒ Calibrated☒ Accepted

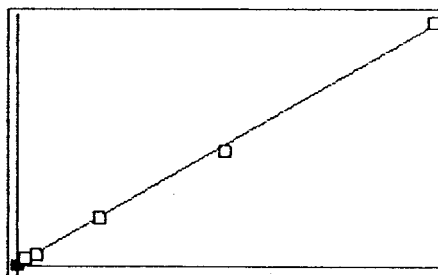
Accept

 μ Abs.

25521

Accepted

New



21-Aug-06 14:18

Conc. 10.1

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3
01	.00000	.045	.045	233	0	242		
02	.20000	.280	.080	832	0%	832		
03	.50000	.500	.000	1386	0%	1386		
04	2.00000	1.99	-.012	5126	0%	5126		
05	5.00000	4.78	-.215	12157	0%	12156		
06	10.000	10.1	.102	25522	0%	25521		

Ready

NUM

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 1 Rep: 1				Seq: 1		14:07:04	21 Aug 06	HG
Hg	.000	ppb	242					
		Bkgd 1	18163654					=
*** Standard: 2 Rep: 1				Seq: 2		14:09:13	21 Aug 06	HG
Hg	.200	ppb	832					=
		Bkgd 1	18165975					=
*** Standard: 3 Rep: 1				Seq: 3		14:11:21	21 Aug 06	HG
Hg	.500	ppb	1386					=
		Bkgd 1	18152305					=
*** Standard: 4 Rep: 1				Seq: 4		14:13:29	21 Aug 06	HG
Hg	2.00	ppb	5126					=
		Bkgd 1	18151982					=
*** Standard: 5 Rep: 1				Seq: 5		14:15:34	21 Aug 06	HG
Hg	5.00	ppb	12156					=
		Bkgd 1	18153405					=
*** Standard: 6 Rep: 1				Seq: 6		14:17:41	21 Aug 06	HG
Hg	10.0	ppb	25521					=
		Bkgd 1	18150793					=
*** Check Standard: 2			Ck2S4164	Seq: 7		14:20:58	21 Aug 06	HG
Line Flag			Intensities					
Hg			10278					=
		Bkgd 1	18151021					=
*** Check Standard: 1			Ck1ICB	Seq: 8		14:25:14	21 Aug 06	HG
Line Flag			Intensities					
Hg			178					=
		Bkgd 1	18154824					=
*** Check Standard: 2			Ck2S4164	Seq: 9		14:27:27	21 Aug 06	HG
Line Flag			Intensities					
Hg			12486					=
		Bkgd 1	18146858					=

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 46336367 Instrument: MET04
Analytical Method: EPA 7470A
Analyte: Mercury

Begun: 21-AUG-2006

#	Filename Type	Sample Num	Subj Samp	Batch	Matrix Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	Rec	RPD	Flags
001	116599	ICALBLK STD01REP1			21-AUG-2006 14:07 1.0	1.0	1.0									
002	116599	ICAL STD02REP1			21-AUG-2006 14:09 1.0	1.0	1.0									
003	116599	ICAL STD03REP1			21-AUG-2006 14:11 1.0	1.0	1.0									
004	116599	ICAL STD04REP1			21-AUG-2006 14:13 1.0	1.0	1.0									
005	116599	ICAL STD05REP1			21-AUG-2006 14:15 1.0	1.0	1.0									
006	116599	ICAL STD06REP1			21-AUG-2006 14:17 1.0	1.0	1.0									
007	116599	X			21-AUG-2006 14:20 1.0											
008	116599	X			21-AUG-2006 14:25 1.0											
009	116599	ICV			21-AUG-2006 14:27 1.0	1.0	2	5.000		46336367001	4.920		ug/L	98		
010	116599	ICV			21-AUG-2006 14:30 1.0	1.0				46336367001	[0.03500]	0.20	ug/L			
011	116599	BLANK			21-AUG-2006 14:33 1.0	1.0				46336367001	ND	0.20	ug/L			
012	116599	BS			21-AUG-2006 14:37 1.0	1.0				46336367001	4.190	0.20	ug/L	84		
013	116599	BSD			21-AUG-2006 14:39 1.0	1.0				46336367001	4.240	0.20	ug/L	85		
014	116599	MSS			21-AUG-2006 14:41 1.0	1.0				46336367001	ND	0.20	ug/L			
015	116599	SER			21-AUG-2006 14:44 5.0	1.0				46336367001	ND	1.0	ug/L			
016	116599	MS			21-AUG-2006 14:46 1.0	1.0				46336367001	3.590	0.20	ug/L	72*		
017	116599	MSD			21-AUG-2006 14:49 1.0	1.0				46336367001	3.520	0.20	ug/L	70*	2	
018	116599	SAMPLE			21-AUG-2006 14:51 1.0	1.0				46336367001	ND	0.20	ug/L			
019	116599	SAMPLE			21-AUG-2006 14:54 1.0	1.0				46336367001	ND	0.20	ug/L			
020	116599	SAMPLE			21-AUG-2006 14:56 1.0	1.0				46336367001	ND	0.20	ug/L			
021	116599	CCV			21-AUG-2006 14:58 1.0	1.0	3	2.500		46336367001	2.880		ug/L	115		
022	116599	CCV			21-AUG-2006 15:00 1.0	1.0				46336367001	[0.02200]	0.20	ug/L			
023	116599	SAMPLE			21-AUG-2006 15:02 1.0	1.0				46336367001	ND	0.20	ug/L			
024	116599	SAMPLE			21-AUG-2006 15:04 1.0	1.0				46336367001	0.89	0.20	ug/L			
025	116599	SAMPLE			21-AUG-2006 15:06 1.0	1.0				46336367001	0.23	0.20	ug/L			
026	116599	SAMPLE			21-AUG-2006 15:08 1.0	1.0				46336367001	ND	0.20	ug/L			
027	116599	SAMPLE			21-AUG-2006 15:12 1.0	1.0				46336367001	ND	0.20	ug/L			
028	116599	SAMPLE			21-AUG-2006 15:15 1.0	1.0				46336367001	ND	0.20	ug/L			
029	116599	SAMPLE			21-AUG-2006 15:17 1.0	1.0				46336367001	ND	0.20	ug/L			
030	116599	SAMPLE			21-AUG-2006 15:20 1.0	1.0				46336367001	ND	0.20	ug/L			
031	116599	SAMPLE			21-AUG-2006 15:22 1.0	1.0				46336367001	ND	0.20	ug/L			
032	116599	SAMPLE			21-AUG-2006 15:24 1.0	1.0				46336367001	ND	0.20	ug/L			
033	116599	CCV			21-AUG-2006 15:26 1.0	1.0	4	5.000		46336367001	4.950		ug/L	99		
034	116599	CCV			21-AUG-2006 15:28 1.0	1.0				46336367001	ND	0.20	ug/L			
035	116599	SAMPLE			21-AUG-2006 15:31 1.0	1.0				46336367001	ND	0.20	ug/L			
036	116599	SAMPLE			21-AUG-2006 15:33 1.0	1.0				46336367001	ND	0.20	ug/L			
037	116599	SAMPLE			21-AUG-2006 15:35 1.0	1.0				46336367001	ND	0.20	ug/L			
038	116599	SAMPLE			21-AUG-2006 15:38 1.0	1.0				46336367001	2.4	0.20	ug/L			
039	116599	CCV			21-AUG-2006 15:40 1.0	1.0	5	7.500		46336367001	7.490		ug/L	100		
040	116599	CCV			21-AUG-2006 15:42 1.0	1.0				46336367001	ND	0.20	ug/L			
041	116599	PDS			21-AUG-2006 17:47 1.0	1.0	1	5.000		46336367001	4.560	0.20	ug/L	91		
042	116599	CCV			21-AUG-2006 17:50 1.0	1.0	3	2.500		46336367001	2.700		ug/L	108		
043	116599	CCV			21-AUG-2006 17:52 1.0	1.0				46336367001	[0.009000]	0.20	ug/L			

Stds used: 1=S4162 2=S4164 3=S4165 4=S4166 5=S4167
Flags used: u=use

Analyst: Jack Brown Date: 8/1/06

Curtis & Tompkins Laboratories

Sample Preparation Summary

21-AUG-2006 14:03

Batch Number : 116599
Date Extracted: 21-AUG-2006
Extracted by : Zachary Abbott
Prep Method : METHOD

Analysis : N/A
Bgroup : HG
Units : mL
Clean-up :

Spike #1 ID : S4162
Spike #2 ID :
Spike #3 ID :
SOP Version :

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
188734-001		Polymatrix	Water	50	mL	50	1.000000	1					HG		
188736-014		U.S. Army Corps of Engineers	Water	50	mL	50	1.000000	1					T26/HG		
188736-015		U.S. Army Corps of Engineers	Water	50	mL	50	1.000000	1					T26/HG		
188736-016		U.S. Army Corps of Engineers	Water	50	mL	50	1.000000	1					T26/HG		
188774-001		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
188774-002		Treadwell & Rollo	Water	50	mL	50	1.000000	1					HG		
188774-002		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
188774-010		Treadwell & Rollo	Water	50	mL	50	1.000000	1					HG		
188802-001		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
188802-003		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
188802-004		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
188802-008		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
188802-010		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
188809-001		Kensington Laboratories	Water	50	mL	50	1.000000	1					HG		
188818-001		Arcadis G&M	Water	50	mL	50	1.000000	1					HG		
188837-012		Treadwell & Rollo	Water	50	mL	50	1.000000	1					HG		
188840-001		Conocophillips Company	Water	50	mL	50	1.000000	1					T26/HG		
QC352691	BLANK		Water	50	mL	50	1.000000	1					HG		
QC352692	BS		Water	50	mL	50	1.000000	1					HG		
QC352693	BSD		Water	50	mL	50	1.000000	1					HG		
QC352694	SER	of 188802-001	Filtrate	50	mL	50	1.000000	1					HG		
QC352695	MS	of 188802-001	Filtrate	50	mL	50	1.000000	1					HG		
QC352696	MSD	of 188802-001	Filtrate	50	mL	50	1.000000	1					HG		
QC352697	PDS	of 188802-001	Filtrate	50	mL	50	1.000000	1					HG		

Prep Chemist: Zach AbbottZach Abbott

8/21/06

Reviewed By: AKZach AbbottDate: 8/21/06Received By: Zach AbbottDate: 8/21/06

Water Digestion for Mercury

Curtis & Tompkins, L

W

LIMS Batch #: 116599
 Date Digested: 8/21/06
 Digested by: AA

Digestion Method
☒ EPA 7470A/ EPA 245.1
☐

BK 2335
 Page 60

LIMS
 Date C
 Dig

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
188734-001				water
188734-001 B	50	50		water
188736-014 A				
↓ -015 ↓				
↓ -016 ↓				
188774-001				
↓ -002 ↓				
188774-001 B				Filtrate (F.F.)
-002 B				
-010 H				
188802-001 mss S				Filtrate (F.F.)
-003 A				
-004 A				
-008 D				
-010 D				
188809-001 A				water
188818-001 J				
188837-012 K				
188837-012				Filtrate
188840-001 A				water → reacted violently w/ H ₂ SO ₄
Blank BS				
BSD				
ms 188802-001 S				Filtrate (F.F.)
msD ↓				

2.5 mL of spike solution was added to all spikes

Reagent ID/ LIMS# / Time Initials / Date

ICAL Source WS#

ICV / CCV WS#

Digestion of Samples & Standards: Time ON / Temperature ON

Time OFF/ Temperature OFF

concentrated H₂SO₄

concentrated HNO₃

5% KMnO₄

5% K₂S₂O₈

NaCl.hydroxylamine hydrochloride

Stannous Chloride

☒ filtered thru' 0.45 um syringe filter

S4162	7/8/21/06
S4162	
S4164/65/66/67	
12:30 95°C	
2:30 95°C	
B41041	
C22019	
K081406	
K2072706	
K4081506	
Smk082106	
millipore R6AN47832	

AA 8/21/06

GENERAL CHEMISTRY

**Alkalinity**

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	08/17/06
Units:	mg/L	Received:	08/18/06
Diln Fac:	1.000	Analyzed:	08/30/06
Batch#:	116959		

Field ID: 610SP01
Type: SAMPLE

Lab ID: 188837-005

Analyte	Result	RL
Alkalinity, Bicarbonate	410	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	410	6.7

Field ID: 1065PZ1A
Type: SAMPLE

Lab ID: 188837-008

Analyte	Result	RL
Alkalinity, Bicarbonate	560	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	560	6.7

Field ID: 1065PZ2A
Type: SAMPLE

Lab ID: 188837-009

Analyte	Result	RL
Alkalinity, Bicarbonate	300	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	300	6.7

ND= Not Detected

RL= Reporting Limit

Alkalinity			
Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	08/17/06
Units:	mg/L	Received:	08/18/06
Diln Fac:	1.000	Analyzed:	08/30/06
Batch#:	116959		

Field ID: 1065PZ4A Lab ID: 188837-010
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	440	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	440	6.7

Field ID: DW081706A Lab ID: 188837-012
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO ₃	ND	1.0

Type: BLANK Lab ID: QC354179

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	4.0
Alkalinity, Carbonate	ND	4.0
Alkalinity, Hydroxide	ND	4.0
Alkalinity, Total as CaCO ₃	ND	4.0

Batch QC Report

Alkalinity			
Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO ₃	Units:	mg/L
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC354180	Batch#:	116959
Matrix:	Water	Analyzed:	08/30/06

Spiked	Result	%REC	Limits
200.0	182.7	91	90-110

Batch QC Report

Alkalinity			
Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO ₃	Diln Fac:	1.000
Field ID:	1065PZ2A	Batch#:	116959
MSS Lab ID:	188837-009	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	mg/L	Analyzed:	08/30/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC354181	299.7	200.0	618.7	96	69-112		
MSD	QC354182		200.0	609.0	93	69-112	2	25

Analysis: Alkalinity Analysis Date: 08/30/06 H₂SO₄ Normality = 0.029
 Method: EPA 310.1 / SMWW 2320B Batch No: 116959 conc.(mg/L) Na₂CO₃ for QC = 200
 SOP#: Alkalinity_rv 7.doc Analyst: SJ

QC DATA	Initial	Sample	Vol. Acid	Vol. Acid	Alkalinity	Low Alk	Low Alk	RL	% Rec.	% RPD
	pH	Volume (mL)	to pH 8.3 (mL)	to pH 4.5 (mL)	as CaCO ₃ (mg/L)	Vol (mL)	as CaCO ₃ (mg/L)	(mg/L)		
MB	8.3	100	0.0	0.0	ND			1.0		
LCS	10.4	25	1.5	3.2	182.70			4.0	91	
188837-009	7	15	0.0	3.1	299.67		n/a	6.7		
MS	9.1	15	0.7	6.4	618.67			6.7	96	
MSD	9	15	0.8	6.3	609.00			6.7	93	2

SAMPLE	Initial	Sample	Vol. Acid	Vol. Acid	Alkalinity	Low Alkalinity	Low Alkalinity	Reporting Limit
	pH	Volume (mL)	to pH 8.3 (mL)	to pH 4.5 (mL)	as CaCO ₃ (mg/L)	Volume (4.5-4.2) (mL)	as CaCO ₃ (mg/L)	(mg/L)
188923-001	7.30	25	0.0	4.5	261.00		n/a	4.0
188923-002	7.10	25	0.0	7.2	414.70		n/a	4.0
188923-003	7.10	25	0.0	9.2	533.60		n/a	4.0
188923-004	7.30	25	0.0	8.5	493.00		n/a	4.0
188923-005	7.10	25	0.0	8.6	498.80		n/a	4.0
188923-006	7.10	25	0.0	7.8	452.40		n/a	4.0
188923-007	7.70	25	0.0	4.2	243.60		n/a	4.0
188837-005	6.90	15	0.0	4.3	410.83		n/a	6.7
188837-008	7.10	15	0.0	5.8	560.67		n/a	6.7
188837-009	7.00	15	0.0	3.1	299.67		n/a	6.7
188837-010	6.90	15	0.0	4.5	435.00		n/a	6.7
188837-012	5.60	100	0.0	0.0	rpt low alk	0.05	ND	1.0

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Reviewed by/ Date: *DPB 8/30/06*

QC Limits		RPD		Recovery	
LCS/BS/BS	20			90 - 110	
MS/MSD	25			80 - 120	

Analysis: Alkalinity
Method: EPA 310.1

Analysis Date: 08/30/06
Batch No: 116959

H₂SO₄ Normality = 0.029
Analyst: SJ

SAMPLE	(P)	(T-P)	Total Alkalinity as CaCO ₃ (mg/L)	Bicarbonate Alkalinity as CaCO ₃ (mg/L)			Carbonate Alkalinity		Hydroxide Alkalinity	
				Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity	Alkalinity	Alkalinity	Alkalinity	Alkalinity
188923-001	0.0	261.0	261	261.000	0.000	0.000				
188923-002	0.0	414.70	414.700	414.700	0.000	0.000				
188923-003	0.0	533.60	533.600	533.600	0.000	0.000				
188923-004	0.0	493.00	493.000	493.000	0.000	0.000				
188923-005	0.0	498.80	498.800	498.800	0.000	0.000				
188923-006	0.0	452.40	452.400	452.400	0.000	0.000				
188923-007	0.0	243.60	243.600	243.600	0.000	0.000				
188837-005	0.0	410.83	410.833	410.833	0.000	0.000				
188837-008	0.0	560.67	560.667	560.667	0.000	0.000				
188837-009	0.0	299.67	299.667	299.667	0.000	0.000				
188837-010	0.0	435.00	435.000	435.000	0.000	0.000				
188837-012	0.0	#VALUE!	ND	not applicable	not applicable	not applicable				

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

P: Phenolphthalein Alkalinity (using volume to pH 8.3)
T-P: Total Alkalinity minus Phenolphthalein Alkalinity

Carbonate Alkalinity = 2x the smaller of P or (T-P)
Bicarbonate Alkalinity = (T-2P) when P < (T-P)
Hydroxide Alkalinity = (2P-T) when (T-P) < P

Analysis:
Method:

Alkalinity
EPA 310.1

Analysis Date: 08/30/06
Batch No: 116959

H₂SO₄ Normality = 0.029
Analyst: SJ

SAMPLE	Total Alkalinity as CaCO ₃ (mg/L)	Bicarbonate		Carbonate		Hydroxide	
		Alkalinity as HCO ₃ ⁻ (mg/L)		Alkalinity as CO ₃ ²⁻ (mg/L)		Alkalinity as OH ⁻ (mg/L)	
188923-001	261.000	318.223		0.000		0.000	
188923-002	414.700	505.622		0.000		0.000	
188923-003	533.600	650.590		0.000		0.000	
188923-004	493.000	601.089		0.000		0.000	
188923-005	498.800	608.160		0.000		0.000	
188923-006	452.400	551.587		0.000		0.000	
188923-007	243.600	297.009		0.000		0.000	
188837-005	410.833	500.907		0.000		0.000	
188837-008	560.667	683.591		0.000		0.000	
188837-009	299.667	365.368		0.000		0.000	
188837-010	435.000	530.372		0.000		0.000	
188837-012	ND	not applicable		not applicable		not applicable	

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

LIMS Batch #: 116959

Matrix: water

Date: 8/30/06

Time: 15:00

Benchbook#: BK2384

Page: 6

CAL-ph 4.0: SS#: S749

CAL-ph 7.0: SS#: 8177

CAL-ph 10.0: SS#: S3822

Slope: 99.8

(slope limits: 92 - 102)

NaCO₃ Vol (mgL) Spiked: 5

NaCO₃ Conc (mg/L): 1000

NaCO3 WS#: 53723

H₂SO₄ Normality: 0.0251H₂SO₄ Reagent ID: 121910 b

Sample # / Letter	Initial pH	Sample Vol.	H ₂ SO ₄ Vol (mL)		Low Alk	Comments
	(S.U.)	Titrated (mL)	to pH 8.3	to pH 4.5 *	Total Vol (mL)	
1 MB	8.3	100	—	<0.05		
LCS	10.4	25	1.5	5.15		
188723-1 I	7.3	↓	—	4.5		
-2	7.1	↓	—	7.15		
-3	7.1	↓	—	7.2		
-4	7.3	↓	—	8.5		
-5	7.1	↓	—	8.6		
-6	7.1	↓	—	7.8		
-7 ↓	7.2	↓	—	4.2		
10 188837 -5 G	6.9	65	—	4.25		
-8 I	7.1	↓	—	5.8		
-9 P	7.0	↓	—	3.1		
MS-9 ↓	9.1	↓	0.7	6.4		
MSP-9 ↓	9.0	↓	0.75	6.3		
-10 F	6.9	↓	—	4.5		
-12 M	4.5	25	—	—		
-12 ↓	5.6	100	—	<0.05	0.05	to pH = 4.6

* If Acid Vol to 4.5 is $< 2.0\text{mL}$, redo using 100mL sample volume. If still $< 2.0\text{mL}$, go on to Low Alkalinity


Analyst / Date

8/22/06

410

DMB 8/30/06
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 116959
 Date Started: 30-AUG-2006
 Batched by : Stephanie Jim

Analysis : ALKALINITY
 Bgroup : N/A
 Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
188837-005		Treadwell & Rollo	Water	ALKALINITY	30-AUG-2006
188837-008		Treadwell & Rollo	Water	ALKALINITY	30-AUG-2006
188837-009		Treadwell & Rollo	Water	ALKALINITY	30-AUG-2006
188837-010		Treadwell & Rollo	Water	ALKALINITY	30-AUG-2006
188837-012		Treadwell & Rollo	Water	ALKALINITY	30-AUG-2006
188923-001		Treadwell & Rollo	Water	ALKALINITY	29-AUG-2006
188923-002		Treadwell & Rollo	Water	ALKALINITY	29-AUG-2006
188923-003		Treadwell & Rollo	Water	ALKALINITY	29-AUG-2006
188923-004		Treadwell & Rollo	Water	ALKALINITY	29-AUG-2006
188923-005		Treadwell & Rollo	Water	ALKALINITY	29-AUG-2006
188923-006		Treadwell & Rollo	Water	ALKALINITY	29-AUG-2006
188923-007		Treadwell & Rollo	Water	ALKALINITY	29-AUG-2006
QC354179	BLANK		Water	ALKALINITY	
QC354180	LCS		Water	ALKALINITY	
QC354181	MS	of 188837-009	Water	ALKALINITY	
QC354182	MSD	of 188837-009	Water	ALKALINITY	

Chloride

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Batch#:	116593
Matrix:	Water	Received:	08/18/06
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln Fac	Sampled	Analyzed
610SP01	SAMPLE	188837-005	6,000	100	500.0	08/17/06 09:00	08/18/06 16:57
1065PZ1A	SAMPLE	188837-008	72	5.0	25.00	08/17/06 12:30	08/18/06 21:05
1065PZ2A	SAMPLE	188837-009	50	2.0	10.00	08/17/06 11:30	08/18/06 19:55
1065PZ4A	SAMPLE	188837-010	67	5.0	25.00	08/17/06 09:20	08/18/06 21:22
DW081706A	SAMPLE	188837-012	ND	0.20	1.000	08/17/06 15:00	08/18/06 17:19
	BLANK	QC352648	ND	0.20	1.000		08/18/06 13:19

Fluoride

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Units:	mg/L
Matrix:	Water	Received:	08/18/06

Field ID	Type	Lab ID	Result	RL	Diln	Fac	Batch#	Sampled		Analyzed	
610SP01	SAMPLE	188837-005	ND	1.0	10.00		116593	08/17/06	09:00	08/18/06	21:40
1065PZ1A	SAMPLE	188837-008	0.22	0.10	1.000		116593	08/17/06	12:30	08/18/06	17:36
1065PZ2A	SAMPLE	188837-009	0.29	0.10	1.000		116593	08/17/06	11:30	08/18/06	16:38
1065PZ4A	SAMPLE	188837-010	ND	0.10	1.000		116633	08/17/06	09:20	08/21/06	17:29
DW081706A	SAMPLE	188837-012	ND	0.10	1.000		116593	08/17/06	15:00	08/18/06	17:19
	BLANK	QC352648	ND	0.10	1.000		116593			08/18/06	13:19
	BLANK	QC352844	ND	0.10	1.000		116633			08/21/06	15:45

**Nitrate Nitrogen**

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Batch#:	116593
Matrix:	Water	Received:	08/18/06
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln Fac	Sampled	Analyzed
610SP01	SAMPLE	188837-005	ND	0.50	10.00	08/17/06 09:00	08/18/06 21:40
1065PZ1A	SAMPLE	188837-008	ND	0.05	1.000	08/17/06 12:30	08/18/06 17:36
1065PZ2A	SAMPLE	188837-009	ND	0.05	1.000	08/17/06 11:30	08/18/06 16:38
1065PZ4A	SAMPLE	188837-010	ND	0.05	1.000	08/17/06 09:20	08/18/06 17:54
DW081706A	SAMPLE	188837-012	ND	0.05	1.000	08/17/06 15:00	08/18/06 17:19
	BLANK	QC352648	ND	0.05	1.000		08/18/06 13:19

ND= Not Detected
RL= Reporting Limit

**Nitrite Nitrogen**

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Batch#:	116593
Matrix:	Water	Received:	08/18/06
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln Fac	Sampled	Analyzed
610SP01	SAMPLE	188837-005	ND	1.0	20.00	08/17/06 09:00	08/18/06 18:11
1065PZ1A	SAMPLE	188837-008	ND	0.05	1.000	08/17/06 12:30	08/18/06 17:36
1065PZ2A	SAMPLE	188837-009	ND	0.05	1.000	08/17/06 11:30	08/18/06 16:38
1065PZ4A	SAMPLE	188837-010	ND	0.05	1.000	08/17/06 09:20	08/18/06 17:54
DW081706A	SAMPLE	188837-012	ND	0.05	1.000	08/17/06 15:00	08/18/06 17:19
	BLANK	QC352648	ND	0.05	1.000		08/18/06 13:19

ND= Not Detected

RL= Reporting Limit

Sulfate

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Batch#:	116593
Matrix:	Water	Received:	08/18/06
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln Fac	Sampled	Analyzed
610SP01	SAMPLE	188837-005	830	10	20.00	08/17/06 09:00	08/18/06 18:11
1065PZ1A	SAMPLE	188837-008	ND	0.50	1.000	08/17/06 12:30	08/18/06 17:36
1065PZ2A	SAMPLE	188837-009	1.4	0.50	1.000	08/17/06 11:30	08/18/06 16:38
1065PZ4A	SAMPLE	188837-010	ND	0.50	1.000	08/17/06 09:20	08/18/06 17:54
DW081706A	SAMPLE	188837-012	ND	0.50	1.000	08/17/06 15:00	08/18/06 17:19
	BLANK	QC352648	ND	0.50	1.000		08/18/06 13:19



Batch QC Report

Chloride			
Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Units:	mg/L
Field ID:	1065PZ2A	Batch#:	116593
MSS Lab ID:	188837-009	Sampled:	08/17/06 11:30
Matrix:	Water	Received:	08/18/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Analyzed
BS	QC352649		4.000	3.946	99	80-120			1.000		08/18/06 15:52
BSD	QC352650		4.000	3.932	98	80-120	0	20	1.000		08/18/06 16:09
MS	QC352651	49.70	20.00	69.08	97	80-120			10.00		08/18/06 20:13
MSD	QC352652		20.00	69.70	100	80-120	1	25	10.00		08/18/06 20:30

Batch QC Report

Fluoride

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Units:	mg/L
Matrix:	Water		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	MRBC	Limits	RPD	Lim Diln	Pac	Batch#	Sampled	Received	Analyzed
	BS		QC352649		2.000	2.109	105	80-120	2	1.000		116593			08/18/06 15:52
	BSD		QC352650		2.000	2.061	103	80-120	2	1.000		116593			08/18/06 16:09
1065PZ2A	MS	188837-009	QC352651	0.2891	10.00	9.905	96	77-120		10.00		116593	08/17/06 11:30	08/18/06	08/18/06 20:13
1065PZ2A	MSD	188837-009	QC352652		10.00	10.05	98	77-120	1	20	10.00	116593	08/17/06 11:30	08/18/06	08/18/06 20:30
	BS		QC352845		2.000	2.221	111	80-120		1.000		116633			08/21/06 16:02
	BSD		QC352846		2.000	2.168	108	80-120	2	20	1.000	116633			08/21/06 16:20
ZZZZZZZZZZ	MS	188786-003	QC352847	6.591	200.0	187.9	91	77-120		200.0		116633	08/16/06 11:40	08/16/06	08/21/06 18:33
ZZZZZZZZZZ	MSD	188786-003	QC352848		200.0	191.2	92	77-120	2	20	200.0	116633	08/16/06 11:40	08/16/06	08/21/06 18:51





Batch QC Report

Nitrate Nitrogen

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Units:	mg/L
Field ID:	1065PZ2A	Batch#:	116593
MSS Lab ID:	188837-009	Sampled:	08/17/06 11:30
Matrix:	Water	Received:	08/18/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Analyzed
BS	QC352649		1.000	0.9933	99	80-120			1.000		08/18/06 15:52
BSD	QC352650		1.000	0.9797	98	80-120	1	20	1.000		08/18/06 16:09
MS	QC352651	<0.008826	5.000	4.894	98	80-120			10.00		08/18/06 20:13
MSD	QC352652		5.000	4.777	96	80-120	2	25	10.00		08/18/06 20:30

RPD= Relative Percent Difference



Batch QC Report

Nitrite Nitrogen

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Units:	mg/L
Field ID:	1065PZ2A	Batch#:	116593
MSS Lab ID:	188837-009	Sampled:	08/17/06 11:30
Matrix:	Water	Received:	08/18/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Analyzed
BS	QC352649		1.000	0.9654	97	80-120			1.000		08/18/06 15:52
BSD	QC352650		1.000	0.9750	98	80-120	1	20	1.000		08/18/06 16:09
MS	QC352651	<0.01206	5.000	4.682	94	80-120			10.00		08/18/06 20:13
MSD	QC352652		5.000	4.743	95	80-120	1	25	10.00		08/18/06 20:30

Batch QC Report

Sulfate			
Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Units:	mg/L
Field ID:	1065PZ2A	Batch#:	116593
MSS Lab ID:	188837-009	Sampled:	08/17/06 11:30
Matrix:	Water	Received:	08/18/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Analyzed
BS	QC352649		10.00	9.940	99	80-120			1.000		08/18/06 15:52
BSD	QC352650		10.00	9.620	96	80-120	3	20	1.000		08/18/06 16:09
MS	QC352651	1.445	50.00	49.05	95	80-120			10.00		08/18/06 20:13
MSD	QC352652		50.00	49.35	96	80-120	1	25	10.00		08/18/06 20:30

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 300.0

Inst : IC03
 Calnum : 626330641001
 Units : mg/L

Date : 17-AUG-2006 14:58
 X Axis : A

Inj Vol: 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	229_2.000	626330641002	L1	17-AUG-2006 14:58	S3313 (500X)
L2	229_3.000	626330641003	L2	17-AUG-2006 15:16	S3313 (100X)
L3	229_4.000	626330641004	L3	17-AUG-2006 15:33	S3313 (25X)
L4	229_5.000	626330641005	L4	17-AUG-2006 15:50	S3313 (10X)
L5	229_6.000	626330641006	L5	17-AUG-2006 16:08	S3313 (5X)

ms 8/21/06

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ²	MSD	MSR ²	Fig
Fluoride	0.1524	0.1580	0.1788	0.1831	0.1920	QORG	0.17406	0.001793	0.1728	1.000	0.990			
Chloride	0.1827	0.1444	0.1586	0.1660	0.1787	QORG	0.15313	0.001281	0.1661	1.000	0.990			
Nitrogen, Nitrite	0.3486	0.2909	0.3137	0.3174	0.3272	QORG	0.30795	0.003850	0.3196	1.000	0.990			
Bromide	0.1131	0.0689	0.0670	0.0668	0.0689	QORG	0.06544	1.715E-4	0.0769	1.000	0.990			
Nitrogen, Nitrate	0.4134	0.3338	0.3738	0.3865	0.4029	QORG	0.36802	0.007000	0.3821	1.000	0.990			
Orthophosphate (as P)	0.1692	0.1175	0.1142	0.1219	0.1274	QORG	0.11489	6.294E-4	0.1300	1.000	0.990			
Sulfate	0.1046	0.1063	0.1094	0.1177	0.1241	QORG	0.10952	2.929E-4	0.1124	1.000	0.990			

ms 8/21/06

422

Sequence: 229
Operator: ic_analyst

Page 1 of 6
Printed: 8/21/2006 12:38:27 PM

Title: Anions
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006
Timebase: IC3_DX120
#Samples: 105

Created: 8/1/2003 11:03:14 AM by ic_analyst
Last Update: 8/21/2006 12:38:13 PM by ic_analyst

No.	*Batch	Name	Comment	Dil.	Factor	Program	Status	Inj. Date/Time	Method
1	CAL-229	IB			1.0000	IC03-7AN	Finished	8/17/2006 2:41:10 PM	IC03-7AN_CAL
2	CAL-229	ICAL, L1,S3313,500			1.0000	IC03-7AN	Finished	8/17/2006 2:58:35 PM	IC03-7AN_CAL
3	CAL-229	ICAL, L2,S3313,100			1.0000	IC03-7AN	Finished	8/17/2006 3:16:00 PM	IC03-7AN_CAL
4	CAL-229	ICAL, L3,S3313,25			1.0000	IC03-7AN	Finished	8/17/2006 3:33:24 PM	IC03-7AN_CAL
5	CAL-229	ICAL, L4,S3313,10			1.0000	IC03-7AN	Finished	8/17/2006 3:50:49 PM	IC03-7AN_CAL
6	CAL-229	ICAL, L5,S3313,5			1.0000	IC03-7AN	Finished	8/17/2006 4:08:14 PM	IC03-7AN_CAL
7	CAL-229	ICV,S3859,5			1.0000	IC03-7AN	Finished	8/17/2006 4:25:39 PM	IC03-7AN_CAL
8	CAL-229	ICB			1.0000	IC03-7AN	Finished	8/17/2006 4:43:04 PM	IC03-7AN_CAL
9	116514	CCV,L,S3313,100			1.0000	IC03-7AN	Finished	8/17/2006 5:00:29 PM	IC03-7AN_CAL
10	116514	CCB/MB,QC352330			1.0000	IC03-7AN	Finished	8/17/2006 5:17:54 PM	IC03-7AN_CAL
11	116514	MSS,188802-001	V		100.0000	IC03-7AN	Finished	8/17/2006 5:35:18 PM	IC03-7AN_CAL
12	116514	188802-017	B		100.0000	IC03-7AN	Finished	8/17/2006 5:52:42 PM	IC03-7AN_CAL
13	116514	188802-018	B		50.0000	IC03-7AN	Finished	8/17/2006 6:10:07 PM	IC03-7AN_CAL
14	116514	MS,QC352333,S3313,50	V		200.0000	IC03-7AN	Finished	8/17/2006 6:27:31 PM	IC03-7AN_CAL
15	116514	MSD,QC352334,S3313,50	V		200.0000	IC03-7AN	Finished	8/17/2006 6:44:56 PM	IC03-7AN_CAL
16	116514	MSS,188802-001	V		2.0000	IC03-7AN	Finished	8/17/2006 7:02:22 PM	IC03-7AN_CAL
17	116514	BLK			1.0000	IC03-7AN	Finished	8/17/2006 7:19:48 PM	IC03-7AN_CAL
18	116514	MSS,188802-001	V		1.0000	IC03-7AN	Finished	8/17/2006 7:37:13 PM	IC03-7AN_CAL
19	116514	BLK			1.0000	IC03-7AN	Finished	8/17/2006 7:54:38 PM	IC03-7AN_CAL
20	116514	BLK			1.0000	IC03-7AN	Finished	8/17/2006 8:12:02 PM	IC03-7AN_CAL
21	116514	BS,QC352331,S3313,25			1.0000	IC03-7AN	Finished	8/17/2006 8:29:27 PM	IC03-7AN_CAL
22	116514	BSD,QC352332,S3313,25			1.0000	IC03-7AN	Finished	8/17/2006 8:46:52 PM	IC03-7AN_CAL
23	116514	CCV,M,S3313,25			1.0000	IC03-7AN	Finished	8/17/2006 9:04:16 PM	IC03-7AN_CAL
24	116514	CCB			1.0000	IC03-7AN	Finished	8/17/2006 9:21:41 PM	IC03-7AN_CAL
25	116514	X,CCV,M,S3313,25			1.0000	IC03-7AN	Finished	8/17/2006 9:39:06 PM	IC03-7AN_CAL
26	116514	X,CCB			1.0000	IC03-7AN	Finished	8/17/2006 9:56:30 PM	IC03-7AN_CAL
27	116514	188802-002	F		1.0000	IC03-7AN	Finished	8/17/2006 10:13:55 PM	IC03-7AN_CAL
28	116514	BLK			1.0000	IC03-7AN	Finished	8/17/2006 10:31:19 PM	IC03-7AN_CAL
29	116514	188802-003	B		1.0000	IC03-7AN	Finished	8/17/2006 10:48:44 PM	IC03-7AN_CAL
30	116514	188802-004	B		1.0000	IC03-7AN	Finished	8/17/2006 11:06:09 PM	IC03-7AN_CAL
31	116514	188802-005	H		1.0000	IC03-7AN	Finished	8/17/2006 11:23:33 PM	IC03-7AN_CAL
32	116514	188802-006	H		1.0000	IC03-7AN	Finished	8/17/2006 11:40:58 PM	IC03-7AN_CAL
33	116514	188802-008	E		1.0000	IC03-7AN	Finished	8/17/2006 11:58:22 PM	IC03-7AN_CAL
34	116514	188802-010	E		1.0000	IC03-7AN	Finished	8/18/2006 12:15:47 AM	IC03-7AN_CAL
35	116514	188802-012	I		1.0000	IC03-7AN	Finished	8/18/2006 12:33:11 AM	IC03-7AN_CAL
36	116514	188802-013	I		1.0000	IC03-7AN	Finished	8/18/2006 12:50:36 AM	IC03-7AN_CAL
37	116514	188802-009	I		1.0000	IC03-7AN	Finished	8/18/2006 1:08:01 AM	IC03-7AN_CAL
38	116514	CCV,H,S3313,10			1.0000	IC03-7AN	Finished	8/18/2006 1:25:25 AM	IC03-7AN_CAL
39	116514	CCB			1.0000	IC03-7AN	Finished	8/18/2006 1:42:50 AM	IC03-7AN_CAL
40	116514	X,CCV,H,S3313,10			1.0000	IC03-7AN	Finished	8/18/2006 2:00:14 AM	IC03-7AN_CAL
41	116514	X,CCB			1.0000	IC03-7AN	Finished	8/18/2006 2:17:38 AM	IC03-7AN_CAL
42	116514	188802-015	I		1.0000	IC03-7AN	Finished	8/18/2006 2:35:03 AM	IC03-7AN_CAL
43	116514	188802-014	I		1.0000	IC03-7AN	Finished	8/18/2006 2:52:27 AM	IC03-7AN_CAL
44	116514	188802-020	I		1.0000	IC03-7AN	Finished	8/18/2006 3:09:52 AM	IC03-7AN_CAL
45	116514	188802-017	B		1.0000	IC03-7AN	Finished	8/18/2006 3:27:16 AM	IC03-7AN_CAL
46	116514	BLK			1.0000	IC03-7AN	Finished	8/18/2006 3:44:40 AM	IC03-7AN_CAL
47	116514	188802-018	B		1.0000	IC03-7AN	Finished	8/18/2006 4:02:05 AM	IC03-7AN_CAL
48	116514	BLK			1.0000	IC03-7AN	Finished	8/18/2006 4:19:29 AM	IC03-7AN_CAL
49	116514	188802-002	F		25.0000	IC03-7AN	Finished	8/18/2006 4:36:54 AM	IC03-7AN_CAL

Sequence: 229
Operator: ic_analyst

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Title: Anions
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006
Timebase: IC3_DX120
#Samples: 105

Created: 8/1/2003 11:03:14 AM by ic_analyst
Last Update: 8/21/2006 12:38:13 PM by ic_analyst

No.	*Batch	Name	Comment	Type	Inj. Vol.	*operator	*PDF
1	CAL-229	IB		Unknown	25.0 MRS		1
2	CAL-229	ICAL, L1,S3313,500		Standard	25.0 MRS		1
3	CAL-229	ICAL, L2,S3313,100		Standard	25.0 MRS		1
4	CAL-229	ICAL, L3,S3313,25		Standard	25.0 MRS		1
5	CAL-229	ICAL, L4,S3313,10		Standard	25.0 MRS		1
6	CAL-229	ICAL, L5,S3313,5		Standard	25.0 MRS		1
7	CAL-229	ICV,S3859,5		Unknown	25.0 MRS		1
8	CAL-229	ICB		Unknown	25.0 MRS		1
9	116514	CCV,L,S3313,100		Unknown	25.0 MRS		1
10	116514	CCB/MB,QC352330		Unknown	25.0 MRS		1
11	116514	MSS,188802-001	V	Unknown	25.0 MRS		1
12	116514	188802-017	B	Unknown	25.0 MRS		1
13	116514	188802-018	B	Unknown	25.0 MRS		1
14	116514	MS,QC352333,S3313,50	V	Unknown	25.0 MRS		1
15	116514	MSD,QC352334,S3313,50	V	Unknown	25.0 MRS		1
16	116514	MSS,188802-001	V	Unknown	25.0 MRS		1
17	116514	BLK		Unknown	25.0 MRS		1
18	116514	MSS,188802-001	V	Unknown	25.0 MRS		1
19	116514	BLK		Unknown	25.0 MRS		1
20	116514	BLK		Unknown	25.0 MRS		1
21	116514	BS,QC352331,S3313,25		Unknown	25.0 MRS		1
22	116514	BSD,QC352332,S3313,25		Unknown	25.0 MRS		1
23	116514	CCV,M,S3313,25		Unknown	25.0 MRS		1
24	116514	CCB		Unknown	25.0 MRS		1
25	116514	X,CCV,M,S3313,25		Unknown	25.0 MRS		1
26	116514	X,CCB		Unknown	25.0 MRS		1
27	116514	188802-002	F	Unknown	25.0 MRS		1
28	116514	BLK		Unknown	25.0 MRS		1
29	116514	188802-003	B	Unknown	25.0 MRS		1
30	116514	188802-004	B	Unknown	25.0 MRS		1
31	116514	188802-005	H	Unknown	25.0 MRS		1
32	116514	188802-006	H	Unknown	25.0 MRS		1
33	116514	188802-008	E	Unknown	25.0 MRS		1
34	116514	188802-010	E	Unknown	25.0 MRS		1
35	116514	188802-012	I	Unknown	25.0 MRS		1
36	116514	188802-013	I	Unknown	25.0 MRS		1
37	116514	188802-009	I	Unknown	25.0 MRS		1
38	116514	CCV,H,S3313,10		Unknown	25.0 MRS		1
39	116514	CCB		Unknown	25.0 MRS		1
40	116514	X,CCV,H,S3313,10		Unknown	25.0 MRS		1
41	116514	X,CCB		Unknown	25.0 MRS		1
42	116514	188802-015	I	Unknown	25.0 MRS		1
43	116514	188802-014	I	Unknown	25.0 MRS		1
44	116514	188802-020	I	Unknown	25.0 MRS		1
45	116514	188802-017	B	Unknown	25.0 MRS		1
46	116514	BLK		Unknown	25.0 MRS		1
47	116514	188802-018	B	Unknown	25.0 MRS		1
48	116514	BLK		Unknown	25.0 MRS		1
49	116514	188802-002	F	Unknown	25.0 MRS		1

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Operator: ic_analyst

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Title: Anions
Datasource: DGLD4X01_local
Location: IC3_DX120IC03-ANIONS-2006
Timebase: IC3_DX120
#Samples: 105

Created: 8/1/2003 11:03:14 AM by ic_analyst
Last Update: 8/21/2006 12:38:13 PM by ic_analyst

No.	*Batch	Name	Comment	Dil. Factor	Program	Status	Inj. Date/Time	Method
50	116514	188802-003	B	25.0000	IC03-7AN	Finished	8/18/2006 4:54:18 AM	IC03-7AN_CAL
51	116514	188802-004	B	25.0000	IC03-7AN	Finished	8/18/2006 5:11:43 AM	IC03-7AN_CAL
52	116514	188802-005	H	25.0000	IC03-7AN	Finished	8/18/2006 5:29:08 AM	IC03-7AN_CAL
53	116514	188802-006	H	25.0000	IC03-7AN	Finished	8/18/2006 5:46:33 AM	IC03-7AN_CAL
54	116514	CCV,M,S3313,25		1.0000	IC03-7AN	Finished	8/18/2006 6:03:57 AM	IC03-7AN_CAL
55	116514	CCB		1.0000	IC03-7AN	Finished	8/18/2006 6:21:22 AM	IC03-7AN_CAL
56	116514	X,CCV,M,S3313,25		1.0000	IC03-7AN	Finished	8/18/2006 6:38:46 AM	IC03-7AN_CAL
57	116514	X,CCB		1.0000	IC03-7AN	Finished	8/18/2006 6:56:11 AM	IC03-7AN_CAL
58	116514	188802-008	E	10.0000	IC03-7AN	Finished	8/18/2006 7:13:36 AM	IC03-7AN_CAL
59	116514	188802-009	I	25.0000	IC03-7AN	Finished	8/18/2006 7:31:00 AM	IC03-7AN_CAL
60	116514	188802-010	E	10.0000	IC03-7AN	Finished	8/18/2006 7:48:25 AM	IC03-7AN_CAL
61	116514	188802-012	I	25.0000	IC03-7AN	Finished	8/18/2006 8:05:49 AM	IC03-7AN_CAL
62	116514	188802-013	I	25.0000	IC03-7AN	Finished	8/18/2006 8:23:14 AM	IC03-7AN_CAL
63	116514	188802-014	I	25.0000	IC03-7AN	Finished	8/18/2006 8:40:38 AM	IC03-7AN_CAL
64	116514	188802-020	I	10.0000	IC03-7AN	Finished	8/18/2006 8:58:03 AM	IC03-7AN_CAL
65	116514	188792-001	B	10.0000	IC03-7AN	Finished	8/18/2006 9:15:27 AM	IC03-7AN_CAL
66	116514	188792-001	B	1.0000	IC03-7AN	Finished	8/18/2006 9:32:52 AM	IC03-7AN_CAL
67	116514	BLK		1.0000	IC03-7AN	Finished	8/18/2006 9:50:16 AM	IC03-7AN_CAL
68	116514	188805-001	H	1.0000	IC03-7AN	Finished	8/18/2006 10:07:41 AM	IC03-7AN_CAL
69	116514	CCV,H,S3313,10		1.0000	IC03-7AN	Finished	8/18/2006 10:25:05 AM	IC03-7AN_CAL
70	116514	CCB		1.0000	IC03-7AN	Finished	8/18/2006 10:42:30 AM	IC03-7AN_CAL
71	116514	X,CCV,H,S3313,10		1.0000	IC03-7AN	Finished	8/18/2006 10:59:55 AM	IC03-7AN_CAL
72	116514	X,CCB		1.0000	IC03-7AN	Finished	8/18/2006 11:17:20 AM	IC03-7AN_CAL
73	116514	188756-009	G	1.0000	IC03-7AN	Finished	8/18/2006 11:34:44 AM	IC03-7AN_CAL
74	116514	188805-001	H	25.0000	IC03-7AN	Finished	8/18/2006 11:52:09 AM	IC03-7AN_CAL
75	116514	188756-014	F	100.0000	IC03-7AN	Finished	8/18/2006 12:09:34 PM	IC03-7AN_CAL
76	116514	CCV,L,S3313,100		1.0000	IC03-7AN	Finished	8/18/2006 12:26:59 PM	IC03-7AN_CAL
77	116514	CCB		1.0000	IC03-7AN	Finished	8/18/2006 12:44:23 PM	IC03-7AN_CAL
78	116593	CCV,L,S3313,100		1.0000	IC03-7AN	Finished	8/18/2006 1:01:48 PM	IC03-7AN_CAL
79	116593	CCB/MB,QC352648		1.0000	IC03-7AN	Finished	8/18/2006 1:19:12 PM	IC03-7AN_CAL
80	116593	BS,QC352649,S3313,25		1.0000	IC03-7AN	Finished	8/18/2006 3:52:14 PM	IC03-7AN_CAL
81	116593	BSD,QC352650,S3313,25		1.0000	IC03-7AN	Finished	8/18/2006 4:09:39 PM	IC03-7AN_CAL
82	116593	MSS,188837-009	P	1.0000	IC03-7AN	Finished	8/18/2006 4:38:09 PM	IC03-7AN_CAL
83	116593	188837-005	G	500.0000	IC03-7AN	Finished	8/18/2006 4:57:30 PM	IC03-7AN_CAL
84	116593	188837-012	M	1.0000	IC03-7AN	Finished	8/18/2006 5:19:11 PM	IC03-7AN_CAL
85	116593	188837-008	I	1.0000	IC03-7AN	Finished	8/18/2006 5:36:35 PM	IC03-7AN_CAL
86	116593	188837-010	F	1.0000	IC03-7AN	Finished	8/18/2006 5:54:00 PM	IC03-7AN_CAL
87	116593	188837-005	G	20.0000	IC03-7AN	Finished	8/18/2006 6:11:25 PM	IC03-7AN_CAL
88	116593	BLK		1.0000	IC03-7AN	Finished	8/18/2006 6:28:49 PM	IC03-7AN_CAL
89	116593	CCV,H,S3313,10		1.0000	IC03-7AN	Finished	8/18/2006 6:46:14 PM	IC03-7AN_CAL
90	116593	CCB		1.0000	IC03-7AN	Finished	8/18/2006 7:03:39 PM	IC03-7AN_CAL
91	116593	X,CCV,H,S3313,10		1.0000	IC03-7AN	Finished	8/18/2006 7:21:03 PM	IC03-7AN_CAL
92	116593	X,CCB		1.0000	IC03-7AN	Finished	8/18/2006 7:38:28 PM	IC03-7AN_CAL
93	116593	MSS,188837-009	P	10.0000	IC03-7AN	Finished	8/18/2006 7:55:52 PM	IC03-7AN_CAL
94	116593	MS,QC352651,S3313,50		10.0000	IC03-7AN	Finished	8/18/2006 8:13:17 PM	IC03-7AN_CAL
95	116593	MSD,QC352652,S3313,50		10.0000	IC03-7AN	Finished	8/18/2006 8:30:41 PM	IC03-7AN_CAL
96	116593	BLK		1.0000	IC03-7AN	Finished	8/18/2006 8:48:06 PM	IC03-7AN_CAL
97	116593	188837-008	I	25.0000	IC03-7AN	Finished	8/18/2006 9:05:31 PM	IC03-7AN_CAL
98	116593	188837-010	F	25.0000	IC03-7AN	Finished	8/18/2006 9:22:55 PM	IC03-7AN_CAL

Sequence: 229
Operator: ic_analyst

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Title: Anions
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006
Timebase: IC3_DX120
#Samples: 105

Created: 8/1/2003 11:03:14 AM by ic_analyst
Last Update: 8/21/2006 12:38:13 PM by ic_analyst

No.	*Batch	Name	Comment	Type	Inj. Vol.	*operator	*PDF
50	116514	188802-003	B	Unknown	25.0 MRS	1	
51	116514	188802-004	B	Unknown	25.0 MRS	1	
52	116514	188802-005	H	Unknown	25.0 MRS	1	
53	116514	188802-006	H	Unknown	25.0 MRS	1	
54	116514	CCV,M,S3313,25		Unknown	25.0 MRS	1	
55	116514	CCB		Unknown	25.0 MRS	1	
56	116514	X,CCV,M,S3313,25		Unknown	25.0 MRS	1	
57	116514	X,CCB		Unknown	25.0 MRS	1	
58	116514	188802-008	E	Unknown	25.0 MRS	1	
59	116514	188802-009	I	Unknown	25.0 MRS	1	
60	116514	188802-010	E	Unknown	25.0 MRS	1	
61	116514	188802-012	I	Unknown	25.0 MRS	1	
62	116514	188802-013	I	Unknown	25.0 MRS	1	
63	116514	188802-014	I	Unknown	25.0 MRS	1	
64	116514	188802-020	I	Unknown	25.0 MRS	1	
65	116514	188792-001	B	Unknown	25.0 MRS	1	
66	116514	188792-001	B	Unknown	25.0 MRS	1	
67	116514	BLK		Unknown	25.0 MRS	1	
68	116514	188805-001	H	Unknown	25.0 MRS	1	
69	116514	CCV,H,S3313,10		Unknown	25.0 MRS	1	
70	116514	CCB		Unknown	25.0 MRS	1	
71	116514	X,CCV,H,S3313,10		Unknown	25.0 MRS	1	
72	116514	X,CCB		Unknown	25.0 MRS	1	
73	116514	188756-009	G	Unknown	25.0 MRS	1	
74	116514	188805-001	H	Unknown	25.0 MRS	1	
75	116514	188756-014	F	Unknown	25.0 MRS	1	
76	116514	CCV,L,S3313,100		Unknown	25.0 MRS	1	
77	116514	CCB		Unknown	25.0 MRS	1	
78	116593	CCV,L,S3313,100		Unknown	25.0 MRS	1	
79	116593	CCB/MB,QC352648		Unknown	25.0 MRS	1	
80	116593	BS,QC352649,S3313,25		Unknown	25.0 MRS	1	
81	116593	BSD,QC352650,S3313,25		Unknown	25.0 MRS	1	
82	116593	MSS,188837-009	P	Unknown	25.0 MRS	1	
83	116593	188837-005	G	Unknown	25.0 MRS	1	
84	116593	188837-012	M	Unknown	25.0 MRS	1	
85	116593	188837-008	I	Unknown	25.0 MRS	1	
86	116593	188837-010	F	Unknown	25.0 MRS	1	
87	116593	188837-005	G	Unknown	25.0 MRS	1	
88	116593	BLK		Unknown	25.0 MRS	1	
89	116593	CCV,H,S3313,10		Unknown	25.0 MRS	1	
90	116593	CCB		Unknown	25.0 MRS	1	
91	116593	X,CCV,H,S3313,10		Unknown	25.0 MRS	1	
92	116593	X,CCB		Unknown	25.0 MRS	1	
93	116593	MSS,188837-009	P	Unknown	25.0 MRS	1	
94	116593	MS,QC352651,S3313,50		Unknown	25.0 MRS	1	
95	116593	MSD,QC352652,S3313,50		Unknown	25.0 MRS	1	
96	116593	BLK		Unknown	25.0 MRS	1	
97	116593	188837-008	I	Unknown	25.0 MRS	1	
98	116593	188837-010	F	Unknown	25.0 MRS	1	

Sequence: 229
Operator: ic_analyst

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Printed: 8/21/2006 12:38:29 PM

Title: Anions
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006
Timebase: IC3_DX120
#Samples: 105

Created: 8/1/2003 11:03:14 AM by ic_analyst
Last Update: 8/21/2006 12:38:13 PM by ic_analyst

No.	*Batch	Name	Comment	Dil. Factor	Program	Status	Inj. Date/Time	Method
99	116593	188837-005	G	10.0000	IC03-7AN	Finished	8/18/2006 9:40:20 PM	IC03-7AN_CAL
100	116593	BLK		1.0000	IC03-7AN	Finished	8/18/2006 9:57:44 PM	IC03-7AN_CAL
101	116593	CCV,M,S3313,25		1.0000	IC03-7AN	Finished	8/18/2006 10:15:08 PM	IC03-7AN_CAL
102	116593	CCB		1.0000	IC03-7AN	Finished	8/18/2006 10:32:33 PM	IC03-7AN_CAL
103	116593	X,CCV,M,S3313,25		1.0000	IC03-7AN	Finished	8/18/2006 10:49:57 PM	IC03-7AN_CAL
104	116593	X,CCB		1.0000	IC03-7AN	Finished	8/18/2006 11:07:22 PM	IC03-7AN_CAL
105	116593	SHUTDOWN		1.0000	IC03-7AN_OFF	Finished	8/18/2006 11:24:46 PM	IC03-7AN_CAL

Sequence: 229
Operator: ic_analyst

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Printed: 8/21/2006 12:38:29 PM

Title: Anions
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006
Timebase: IC3_DX120
#Samples: 105

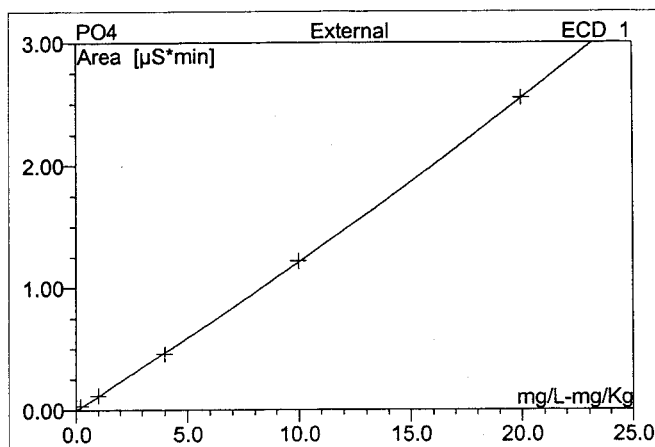
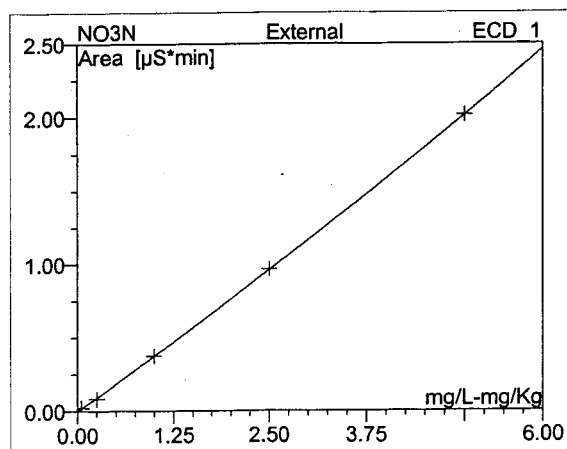
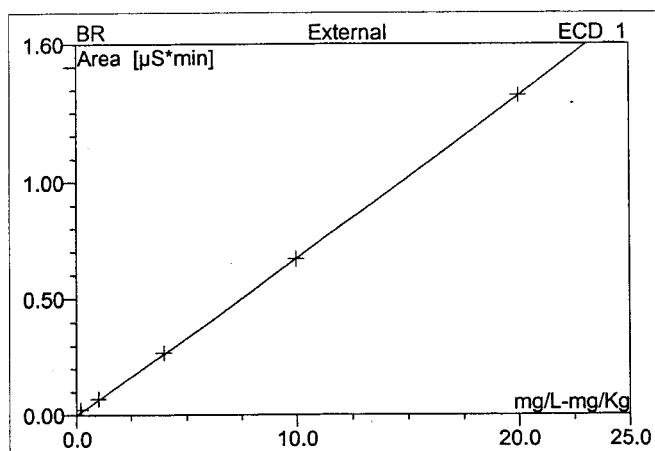
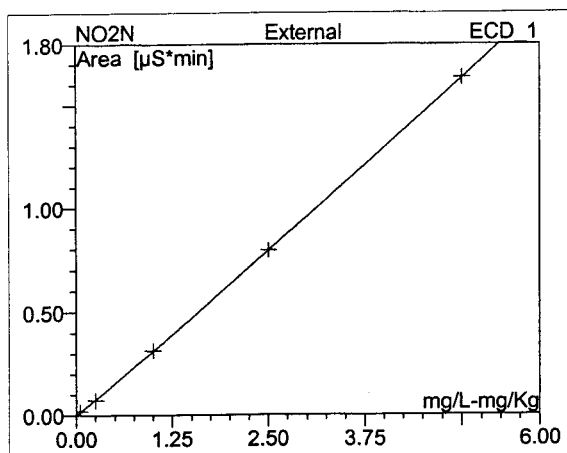
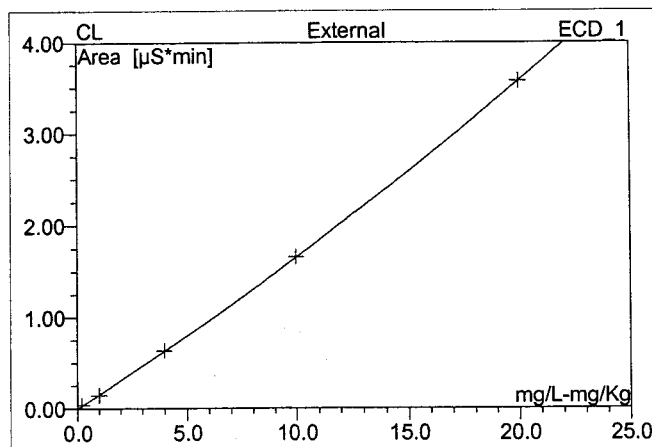
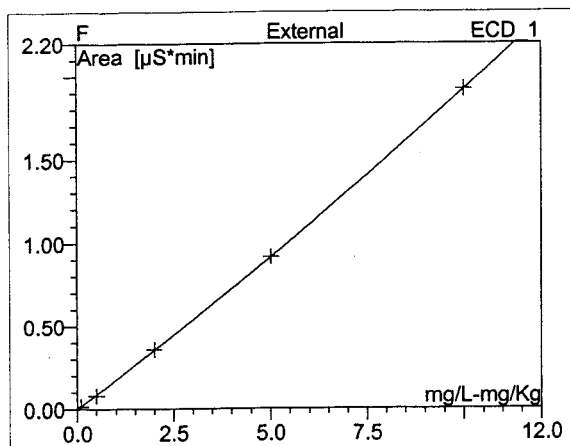
Created: 8/1/2003 11:03:14 AM by ic_analyst
Last Update: 8/21/2006 12:38:13 PM by ic_analyst

No.	*Batch	Name	Comment	Type	Inj. Vol.	*operator	*PDF
99	116593	188837-005	G	Unknown	25.0 MRS		1
100	116593	BLK		Unknown	25.0 MRS		1
101	116593	CCV,M,S3313,25		Unknown	25.0 MRS		1
102	116593	CCB		Unknown	25.0 MRS		1
103	116593	X,CCV,M,S3313,25		Unknown	25.0 MRS		1
104	116593	X,CCB		Unknown	25.0 MRS		1
105	116593	SHUTDOWN		Unknown	25.0 MRS		1

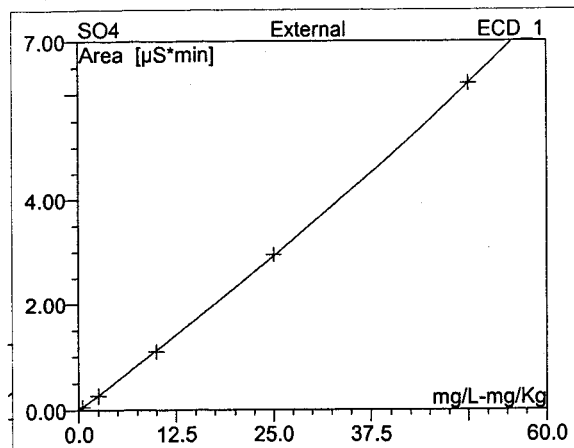
IC03 Calibration Batch Report

Sequence: 229
Program: IC03-7AN
Inj. Date/Time: 08/17/06 15:33

Inj. Vol.: 25.0
Operator: PC_NEWIC
Run Time: 15.00



Sequence:	229	Inj. Vol.:	25.0
Program:	IC03-7AN	Operator:	n.a.
Ini. Date/Time:	08/17/06 15:33	Run Time:	15.00



No.	Ret. Time min	Peak Name	Cal. Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr. Coeff. %
1	3.027	F	Quad	5	0.000000	0.174064	0.001793	99.974549
2	4.493	CL	Quad	5	0.000000	0.153127	0.001281	99.929476
3	5.340	NO2N	Quad	5	0.000000	0.307949	0.003850	99.987722
4	6.840	BR	Quad	5	0.000000	0.065436	0.000172	99.982031
5	7.707	NO3N	Quad	5	0.000000	0.368022	0.007000	99.976240
6	10.030	PO4	Quad	5	0.000000	0.114893	0.000629	99.959045
7	12.133	SO4	Quad	5	0.000000	0.109518	0.000293	99.956509
AVERAGE:					0.000000	0.184716	0.002145	99.966510

No.	Name	Area $\mu\text{S}^*\text{min}$ F ECD 1	Area $\mu\text{S}^*\text{min}$ CL ECD 1	Area $\mu\text{S}^*\text{min}$ NO2N ECD 1	Area $\mu\text{S}^*\text{min}$ BR ECD 1	Area $\mu\text{S}^*\text{min}$ NO3N ECD 1	Area $\mu\text{S}^*\text{min}$ PO4 ECD 1	Area $\mu\text{S}^*\text{min}$ SO4 ECD 1
2	ICAL, L1, S33	0.015239	0.036533	0.017431	0.022616	0.020669	0.033834	0.052315
3	ICAL, L2, S33	0.078978	0.144383	0.072736	0.068926	0.083440	0.117493	0.265659
4	ICAL, L3, S33	0.357537	0.634268	0.313730	0.268063	0.373803	0.456752	1.093531
5	ICAL, L4, S33	0.915410	1.660256	0.793472	0.668224	0.966207	1.219308	2.942806
6	ICAL, L5, S33	1.919788	3.574769	1.636043	1.378013	2.014579	2.548246	6.203955

No.	Name	Height μS F ECD 1	Height μS CL ECD 1	Height μS NO2N ECD 1	Height μS BR ECD 1	Height μS NO3N ECD 1	Height μS PO4 ECD 1	Height μS SO4 ECD 1
2	ICAL, L1, S33	0.096620	0.269740	0.082910	0.084952	0.079450	0.080210	0.138150
3	ICAL, L2, S33	0.449148	1.044038	0.405398	0.314620	0.347972	0.308854	0.732106
4	ICAL, L3, S33	2.052724	4.513930	1.694122	1.257826	1.516334	1.287236	3.087534
5	ICAL, L4, S33	5.881974	12.205264	4.398822	3.222644	4.001614	3.510658	8.321488
6	ICAL, L5, S33	13.415718	26.664738	9.124548	6.763160	8.540492	7.779288	18.193556

No.	Name	Amount mg/L-mg/Kg F ECD 1	Amount mg/L-mg/Kg CL ECD 1	Amount mg/L-mg/Kg NO2N ECD 1	Amount mg/L-mg/Kg BR ECD 1	Amount mg/L-mg/Kg NO3N ECD 1	Amount mg/L-mg/Kg PO4 ECD 1	Amount mg/L-mg/Kg SO4 ECD 1
2	ICAL, L1, S33	0.087471	0.238103	0.056564	0.345304	0.056104	0.294007	0.477076
3	ICAL, L2, S33	0.451631	0.935572	0.235501	1.050430	0.225757	1.016971	2.410169
4	ICAL, L3, S33	2.012349	4.007714	1.006117	4.053465	0.996809	3.892471	9.731655
5	ICAL, L4, S33	5.001403	10.004847	2.498586	9.952166	2.505958	10.058386	25.175461
6	ICAL, L5, S33	9.999355	19.998813	5.000143	20.009285	4.998791	19.990349	49.969842

8/21/06

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 1 of 6
Printed: 8/21/2006 12:43:37 PM

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006\229.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON
Last Update: 8/7/2006 3:54:14 PM by ic_analyst

Blank Run Subtraction: No Blank Run Subtraction

Detection Table:

No.	Ret. Time	Param. Name	Param. Value	Channel
	[min]			
1	0.000	Inhibit Integration	On	ECD_1
2	2.250	Sensitivity	0.001 "[Signal]"	ECD_1
3	2.250	Minimum Area	0.001 "[Signal]*min"	ECD_1
4	2.250	Peak Slice	0.50 s	ECD_1
5	2.500	Inhibit Integration	Off	ECD_1

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 2 of 6
Printed: 8/21/2006 12:43:37 PM

Title: IC03-7AN_CAL

Datasource: DGLD4X01_local

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON

Location: IC3_DX120\IC03-ANIONS-2006\229.SEQ

Last Update: 8/7/2006 3:54:14 PM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off

Dead time:

Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Window	Standard	Int.Type	Cal.Type	Peak Type	Group	Amount	
									ICAL, L1,S3313,500	ICAL, L2,S3313,100
1	F	3.000 min	5.000 RG	External	Area	Quad	Auto		0.100000	0.500000
2	CL	4.440 min	5.000 RG	External	Area	Quad	Auto		0.200000	1.000000
3	NO2N	5.267 min	5.000 RG	External	Area	Quad	Auto		0.050000	0.250000
4	BR	6.713 min	5.000 RG	External	Area	Quad	Auto		0.200000	1.000000
5	NO3N	7.560 min	10.000 RG	External	Area	Quad	Auto		0.050000	0.250000
6	PO4	9.993 min	10.000 RG	External	Area	Quad	Auto		0.200000	1.000000
7	SO4	12.113 min	10.000 RG	External	Area	Quad	Auto		0.500000	2.500000

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 3 of 6
Printed: 8/21/2006 12:43:37 PM

Title: IC03-7AN_CAL

Datasource: DGLD4X01_local

Location: IC3_DX120\IC03-ANIONS-2006\229.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON

Last Update: 8/7/2006 3:54:14 PM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off

Dead time:

Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Amount	Amount	Amount	Comment
			ICAL, L3,S3313,25	ICAL, L4,S3313,10	ICAL, L5,S3313,5	
1	F	3.000 min	2.000000	5.000000	10.000000	
2	CL	4.440 min	4.000000	10.000000	20.000000	
3	NO2N	5.267 min	1.000000	2.500000	5.000000	
4	BR	6.713 min	4.000000	10.000000	20.000000	
5	NO3N	7.560 min	1.000000	2.500000	5.000000	
6	PO4	9.993 min	4.000000	10.000000	20.000000	
7	SO4	12.113 min	10.000000	25.000000	50.000000	

Method File: IC03-7AN_CAL

Printed: 8/21/2006 12:43:37 PM

Operator: ic_analyst

Title: IC03-7AN_CAL

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON

Datasource: DGLD4X01_local

Last Update: 8/7/2006 3:54:14 PM by ic_analyst

Location: IC3_DX120\IC03-ANIONS-2006\229.SEQ

Amount Table:

Dimension of Amounts: mg/L-mg/Kg

Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Resp.Fact.	Amount	Amount	Amount	Amount
				ICAL, L1,S3313,500	ICAL, L2,S3313,100	ICAL, L3,S3313,25	ICAL, L4,S3313,10
1	F	3.000 min	1.000000	0.100000	0.500000	2.000000	5.000000
2	CL	4.440 min	1.000000	0.200000	1.000000	4.000000	10.000000
3	NO2N	5.267 min	1.000000	0.050000	0.250000	1.000000	2.500000
4	BR	6.713 min	1.000000	0.200000	1.000000	4.000000	10.000000
5	NO3N	7.560 min	1.000000	0.050000	0.250000	1.000000	2.500000
6	PO4	9.993 min	1.000000	0.200000	1.000000	4.000000	10.000000
7	SO4	12.113 min	1.000000	0.500000	2.500000	10.000000	25.000000

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 5 of 6
Printed: 8/21/2006 12:43:37 PM

Title: IC03-7AN_CAL

Datasource: DGLD4X01_local

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON

Location: IC3_DX120\IC03-ANIONS-2006\229.SEQ

Last Update: 8/7/2006 3:54:14 PM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg

Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Amount	Comment
			ICAL, L5,S3313,5	
1	F	3.000 min	10.000000	
2	CL	4.440 min	20.000000	
3	NO2N	5.267 min	5.000000	
4	BR	6.713 min	20.000000	
5	NO3N	7.560 min	5.000000	
6	PO4	9.993 min	20.000000	
7	SO4	12.113 min	50.000000	

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 6 of 6
Printed: 8/21/2006 12:43:38 PM

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006\229.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPKN
Last Update: 8/7/2006 3:54:14 PM by ic_analyst

Calibration:

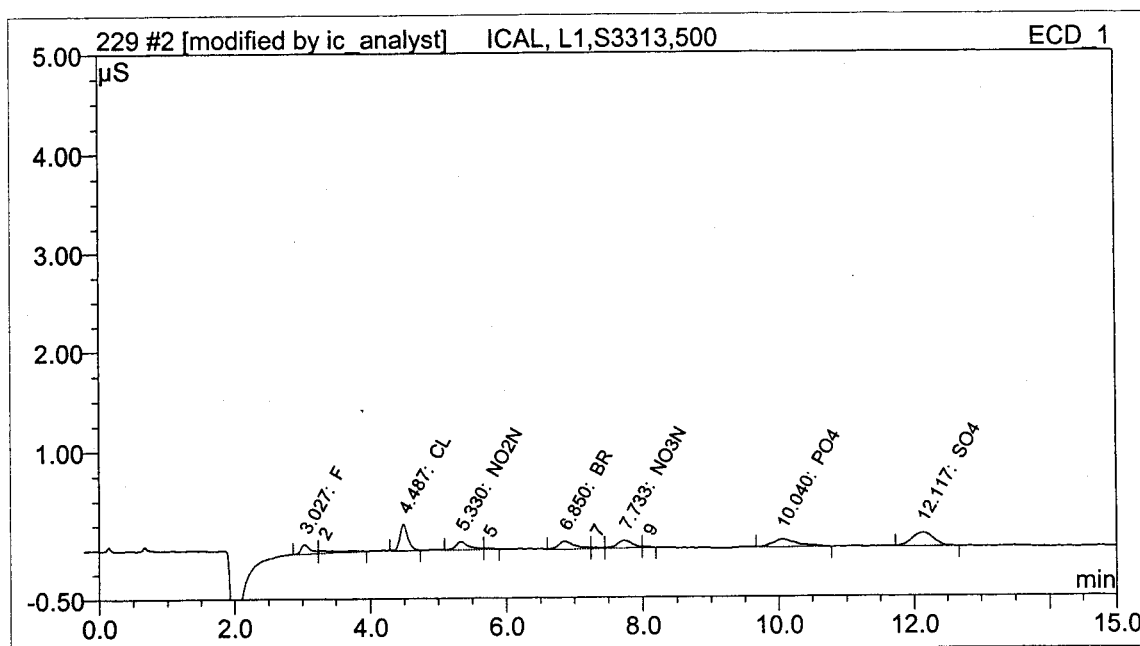
Calibration Mode: Total
Auto Recalibrate: On

No.	Enabled	Name	Smp.No.	Pos.	Inj. Vol.	Weight	ISTD Amount	Dil. Factor	Inj. Date/Time	Calib. Comment
1	☒	 ICAL, L1,S3313,500	2	179	25.0	1.0000	1.0000	1.0000	8/17/2006 2:58:35 PM	Ok
2	☒	 ICAL, L2,S3313,100	3	179	25.0	1.0000	1.0000	1.0000	8/17/2006 3:16:00 PM	Ok
3	☒	 ICAL, L3,S3313,25	4	180	25.0	1.0000	1.0000	1.0000	8/17/2006 3:33:24 PM	Ok
4	☒	 ICAL, L4,S3313,10	5	181	25.0	1.0000	1.0000	1.0000	8/17/2006 3:50:49 PM	Ok
5	☒	 ICAL, L5,S3313,5	6	183	25.0	1.0000	1.0000	1.0000	8/17/2006 4:08:14 PM	Ok

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L1,S3313,500	Sample No.:	2
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 2:58 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S}\cdot\text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.027	0.015239	0.0875	0.0875	
3	CL	4.487	0.036533	0.2381	0.2381	
4	NO2N	5.330	0.017431	0.0566	0.0566	
6	BR	6.850	0.022616	0.3453	0.3453	
8	NO3N	7.733	0.020669	0.0561	0.0561	
10	PO4	10.040	0.033834	0.2940	0.2940	
11	SO4	12.117	0.052315	0.4771	0.4771	



ANALYZED BY:

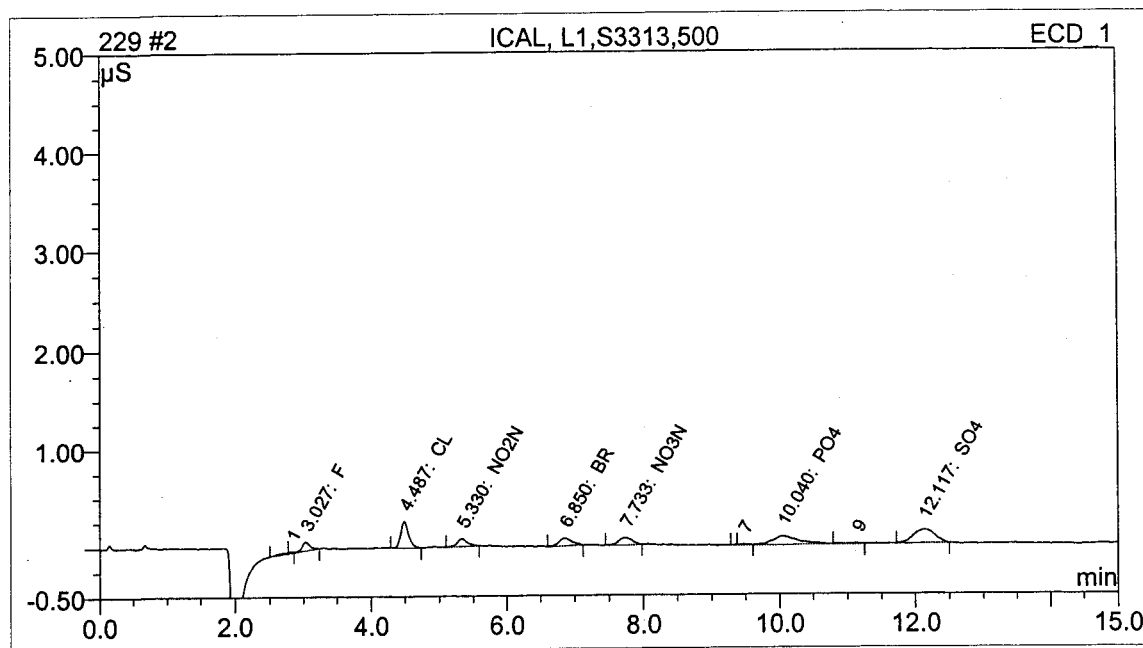
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L1,S3313,500	Sample No.:	2
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 2:58 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S}\cdot\text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
2	F	3.027	0.015901	0.0913	0.0913	
3	CL	4.487	0.036533	0.2381	0.2381	
4	NO2N	5.330	0.013472	0.0437	0.0437	
5	BR	6.850	0.017308	0.2644	0.2644	
6	NO3N	7.733	0.016920	0.0459	0.0459	
8	PO4	10.040	0.041841	0.3633	0.3633	
10	SO4	12.117	0.048316	0.4407	0.4407	



ANALYZED BY:

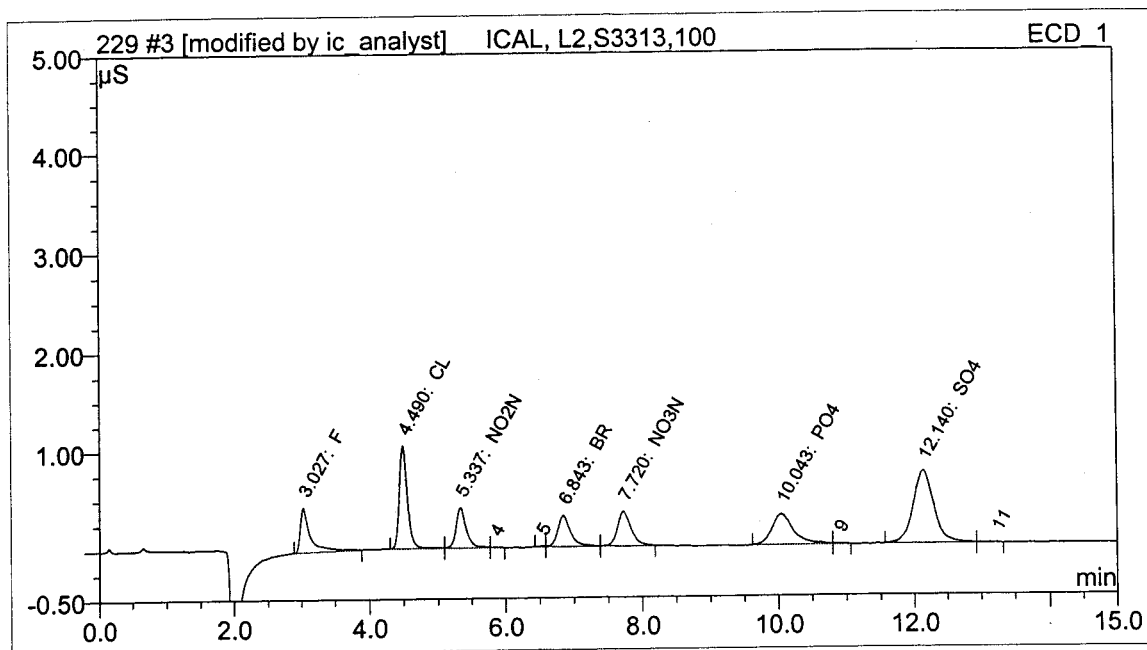
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L2,S3313,100	Sample No.:	3
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 3:16 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.027	0.078978	0.4516	0.4516	
2	CL	4.490	0.144383	0.9356	0.9356	
3	NO2N	5.337	0.072736	0.2355	0.2355	
6	BR	6.843	0.068926	1.0504	1.0504	
7	NO3N	7.720	0.083440	0.2258	0.2258	
8	PO4	10.043	0.117493	1.0170	1.0170	
10	SO4	12.140	0.265659	2.4102	2.4102	



ANALYZED BY:

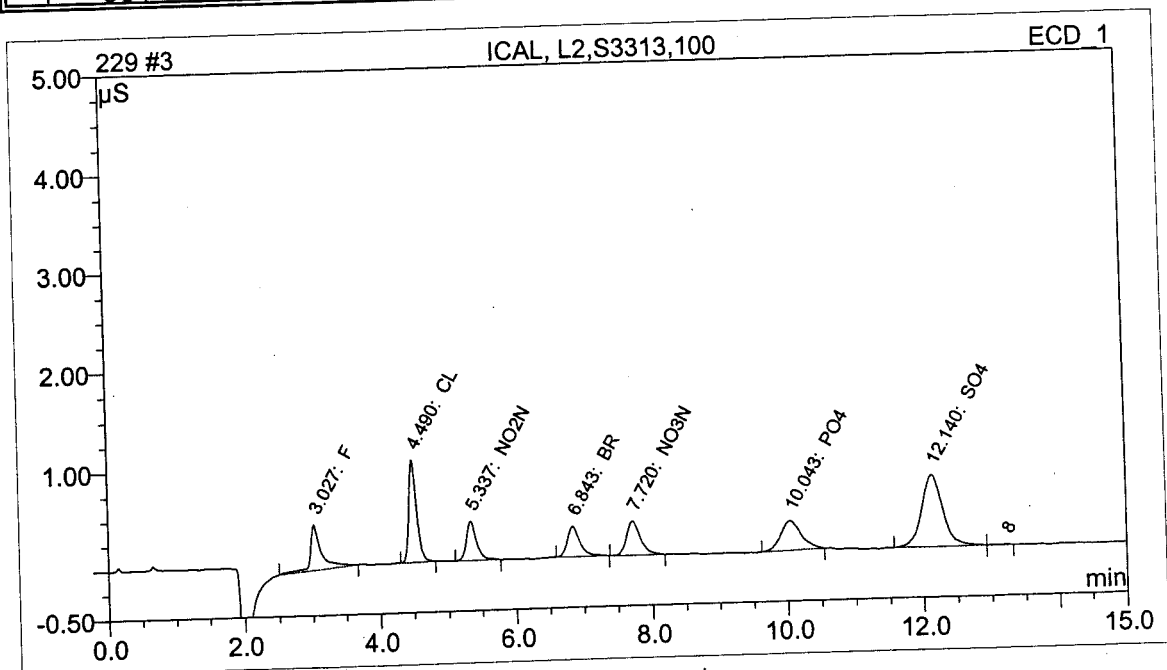
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L2,S3313,100	Sample No.:	3
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 3:16 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.027	0.089671	0.5108	0.5108	
2	CL	4.490	0.139671	0.9060	0.9060	
3	NO2N	5.337	0.070747	0.2292	0.2292	
4	BR	6.843	0.066449	1.0138	1.0138	
5	NO3N	7.720	0.082634	0.2236	0.2236	
6	PO4	10.043	0.105061	0.9125	0.9125	
7	SO4	12.140	0.265659	2.4102	2.4102	



ANALYZED BY:

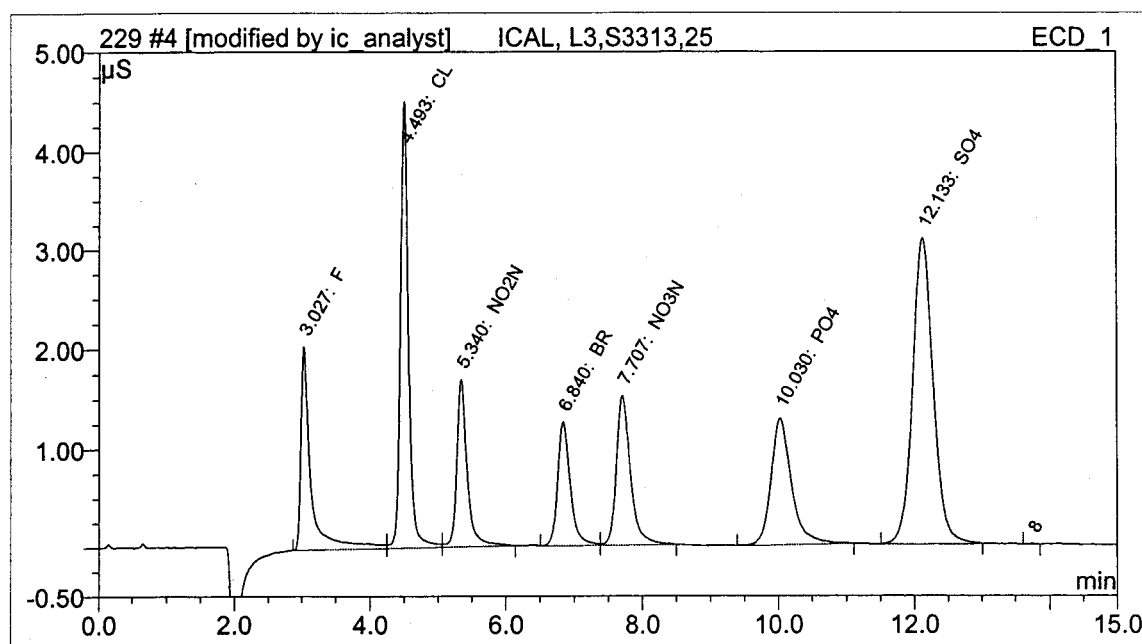
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L3,S3313,25	Sample No.:	4
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 3:33 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.027	0.357537	2.0123	2.0123	
2	CL	4.493	0.634268	4.0077	4.0077	
3	NO2N	5.340	0.313730	1.0061	1.0061	
4	BR	6.840	0.268063	4.0535	4.0535	
5	NO3N	7.707	0.373803	0.9968	0.9968	
6	PO4	10.030	0.456752	3.8925	3.8925	
7	SO4	12.133	1.093531	9.7317	9.7317	



ANALYZED BY:

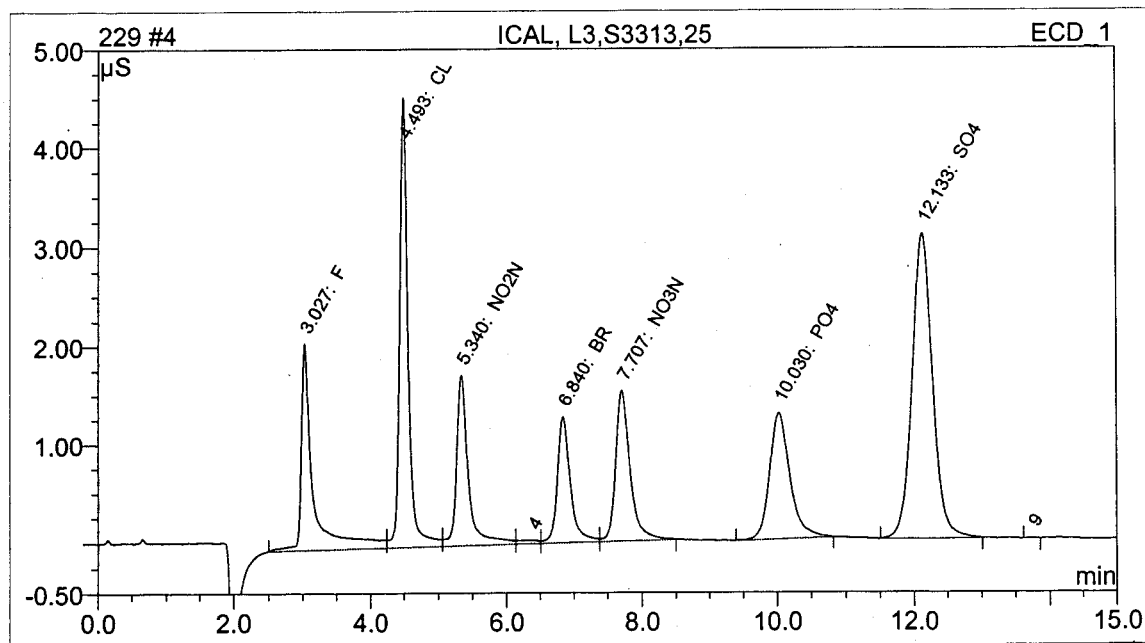
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L3,S3313,25	Sample No.:	4
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 3:33 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.027	0.422952	2.2586	2.2586	
2	CL	4.493	0.664519	4.1377	4.1377	
3	NO2N	5.340	0.350406	1.0865	1.0865	
5	BR	6.840	0.284369	4.2239	4.2239	
6	NO3N	7.707	0.381420	1.0109	1.0109	
7	PO4	10.030	0.444092	3.8163	3.8163	
8	SO4	12.133	1.093531	9.7317	9.7317	



ANALYZED BY:

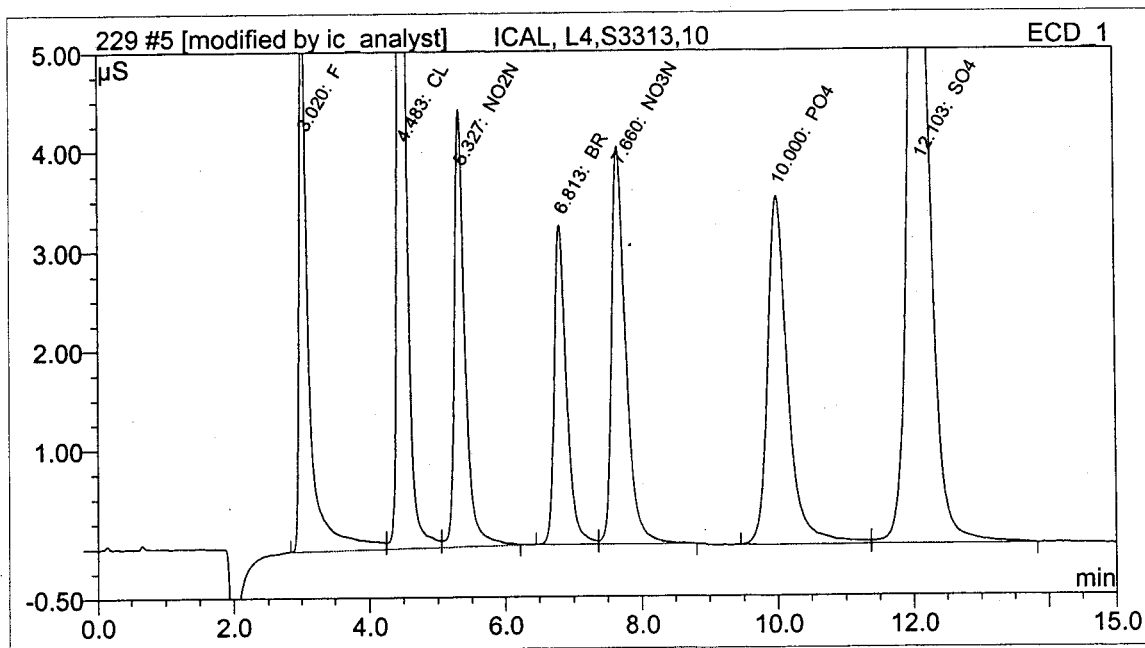
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L4,S3313,10	Sample No.:	5
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 3:50 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.020	0.915410	5.0014	5.0014	
2	CL	4.483	1.660256	10.0048	10.0048	
3	NO2N	5.327	0.793472	2.4986	2.4986	
4	BR	6.813	0.668224	9.9522	9.9522	
5	NO3N	7.660	0.966207	2.5060	2.5060	
6	PO4	10.000	1.219308	10.0584	10.0584	
7	SO4	12.103	2.942806	25.1755	25.1755	



ANALYZED BY:

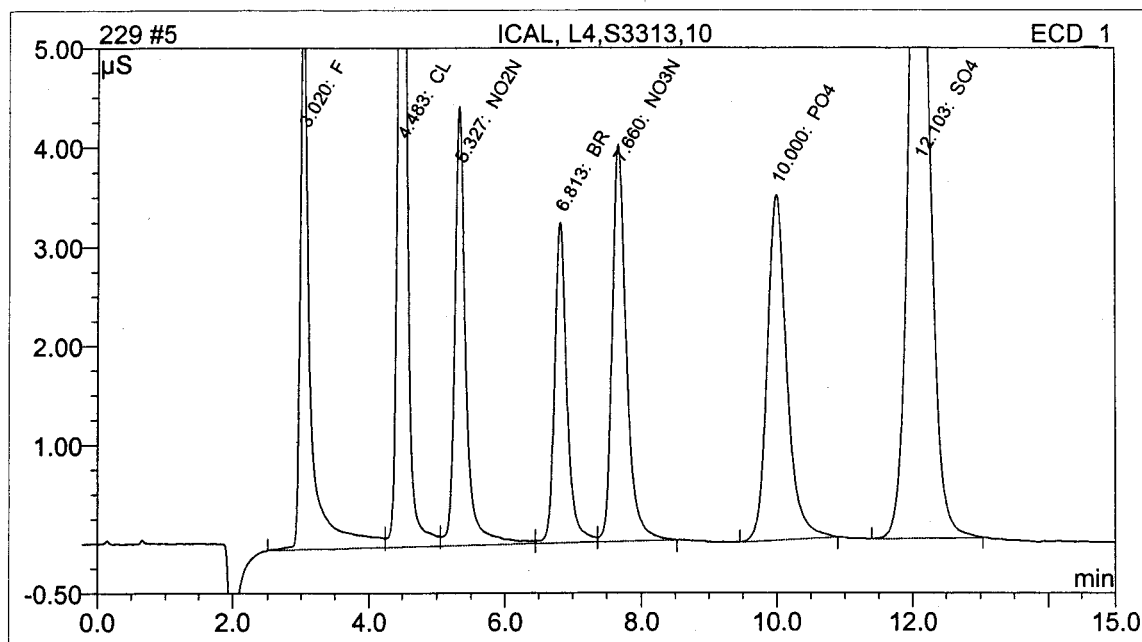
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L4,S3313,10	Sample No.:	5
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 3:50 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.020	0.957720	5.0686	5.0686	
2	CL	4.483	1.682386	10.0427	10.0427	
3	NO2N	5.327	0.832114	2.5346	2.5346	
4	BR	6.813	0.682580	10.0159	10.0159	
5	NO3N	7.660	0.962991	2.5035	2.5035	
6	PO4	10.000	1.163423	9.9243	9.9243	
7	SO4	12.103	2.864991	24.9840	24.9840	



ANALYZED BY:

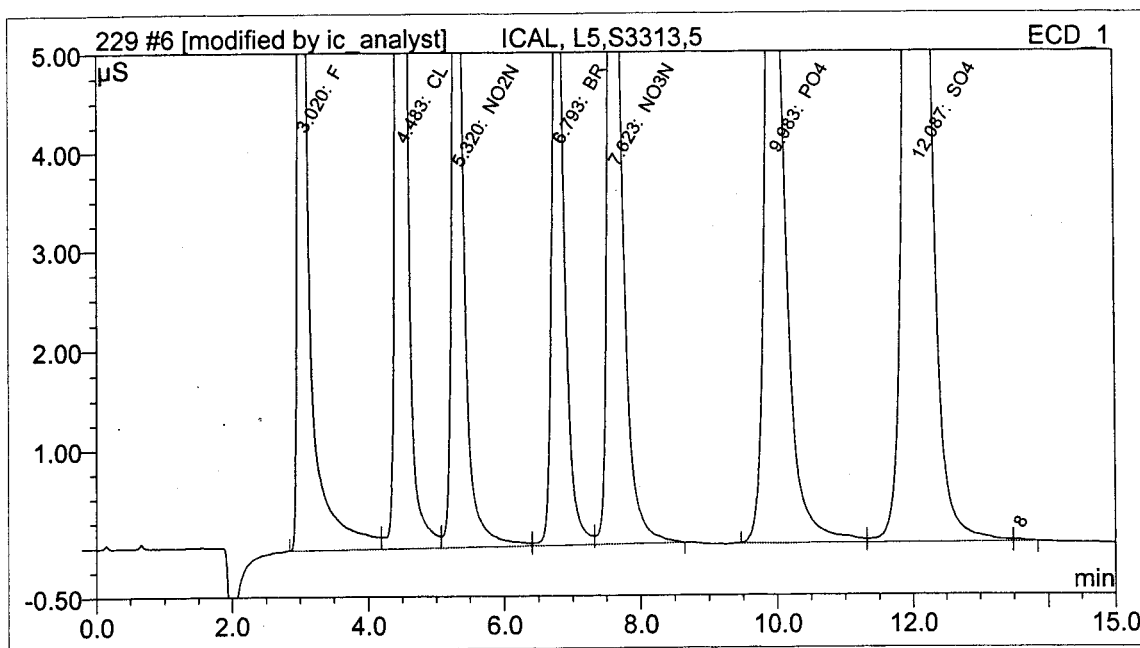
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L5,S3313,5	Sample No.:	6
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 4:08 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S}\cdot\text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.020	1.919788	9.9994	9.9994	
2	CL	4.483	3.574769	19.9988	19.9988	
3	NO2N	5.320	1.636043	5.0001	5.0001	
4	BR	6.793	1.378013	20.0093	20.0093	
5	NO3N	7.623	2.014579	4.9988	4.9988	
6	PO4	9.983	2.548246	19.9903	19.9903	
7	SO4	12.087	6.203955	49.9698	49.9698	



ANALYZED BY:

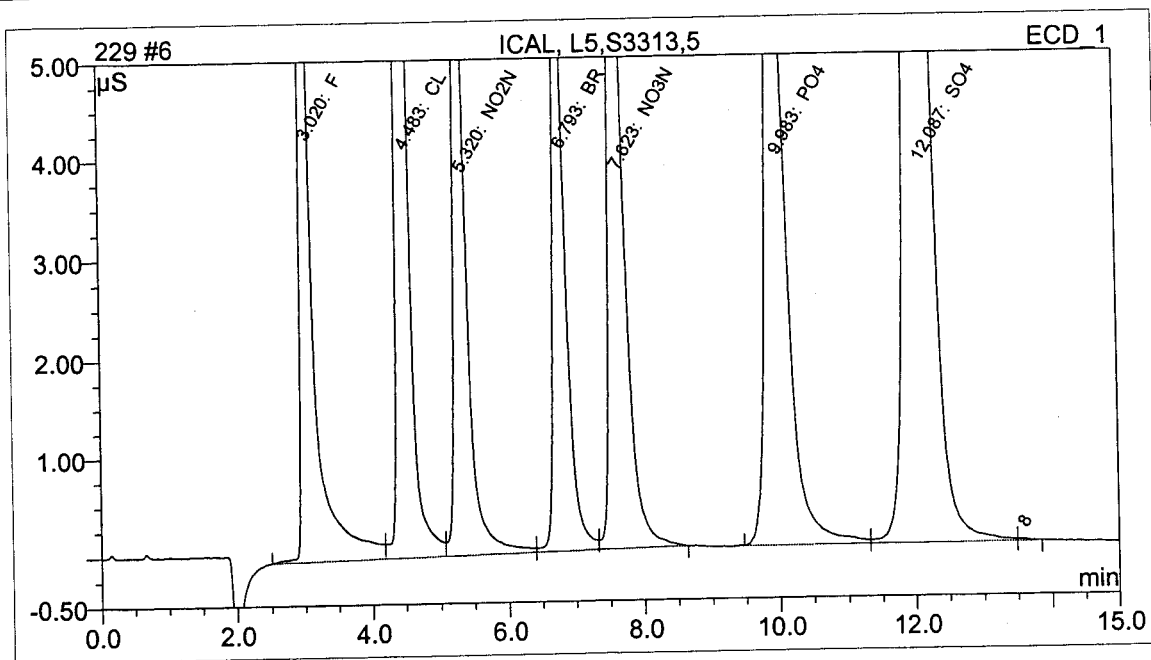
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L5,S3313,5	Sample No.:	6
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 4:08 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.020	1.967398	10.0018	10.0018	
2	CL	4.483	3.595853	20.0000	20.0000	
3	NO2N	5.320	1.658979	5.0009	5.0009	
4	BR	6.793	1.387672	20.0106	20.0106	
5	NO3N	7.623	2.019742	4.9989	4.9989	
6	PO4	9.983	2.548246	19.9903	19.9903	
7	SO4	12.087	6.203955	49.9698	49.9698	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 300.0

Inst : IC03
Seqnum : 626330641007
Cal : 626330641001
Standards: S3859 (5X)

File : 229_7.000
Caldate: 17-AUG-2006

IDF : 1.0
Time : 17-AUG-2006 16:25

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.1728	0.1635	1.000	0.9303	mg/L	-7	10	
Chloride	0.1661	0.1470	2.000	1.890	mg/L	-6	10	
Nitrogen, Nitrite	0.3196	0.3027	0.5000	0.4885	mg/L	-2	10	
Bromide	0.0769	0.0684	2.000	2.079	mg/L	4	10	
Nitrogen, Nitrate	0.3821	0.3435	0.5000	0.4626	mg/L	-7	10	
Orthophosphate (as P)	0.1300	0.1149	2.000	1.979	mg/L	-1	10	
Sulfate	0.1124	0.1058	5.000	4.771	mg/L	-5	10	

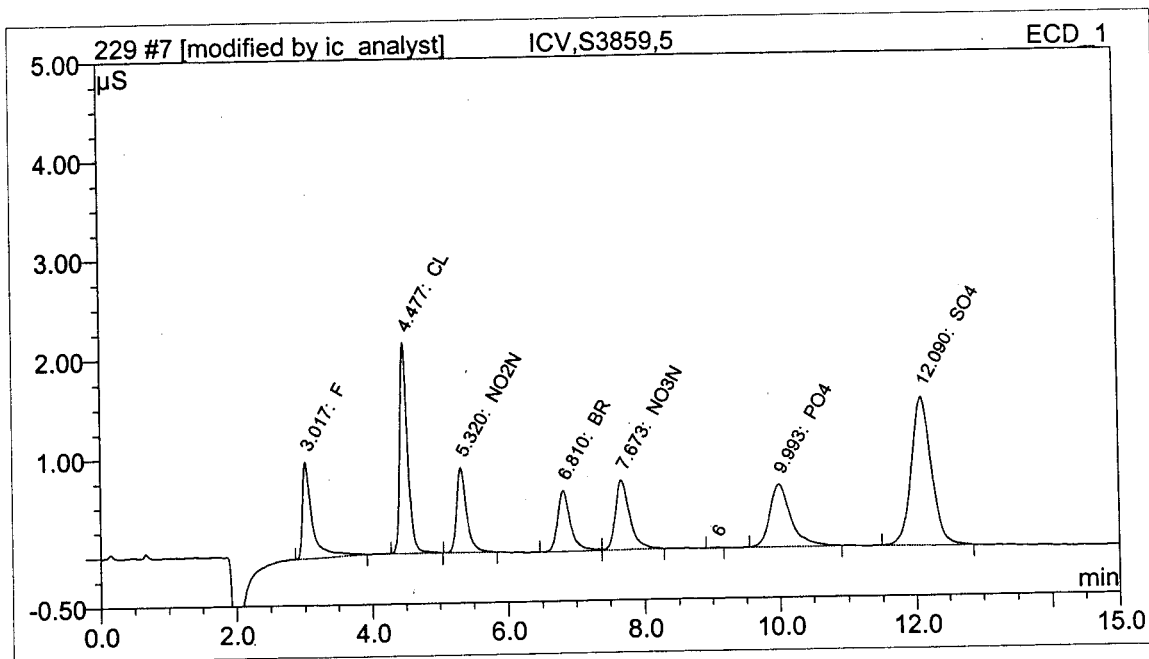
Mes 8/21/06

Mes 8/21/06

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICV,S3859,5	Sample No.:	7
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 4:25 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.017	0.163489	0.9303	0.9303	
2	CL	4.477	0.293909	1.8895	1.8895	
3	NO2N	5.320	0.151338	0.4885	0.4885	
4	BR	6.810	0.136799	2.0792	2.0792	
5	NO3N	7.673	0.171761	0.4626	0.4626	
7	PO4	9.993	0.229886	1.9794	1.9794	
8	SO4	12.090	0.529192	4.7711	4.7711	



ANALYZED BY:

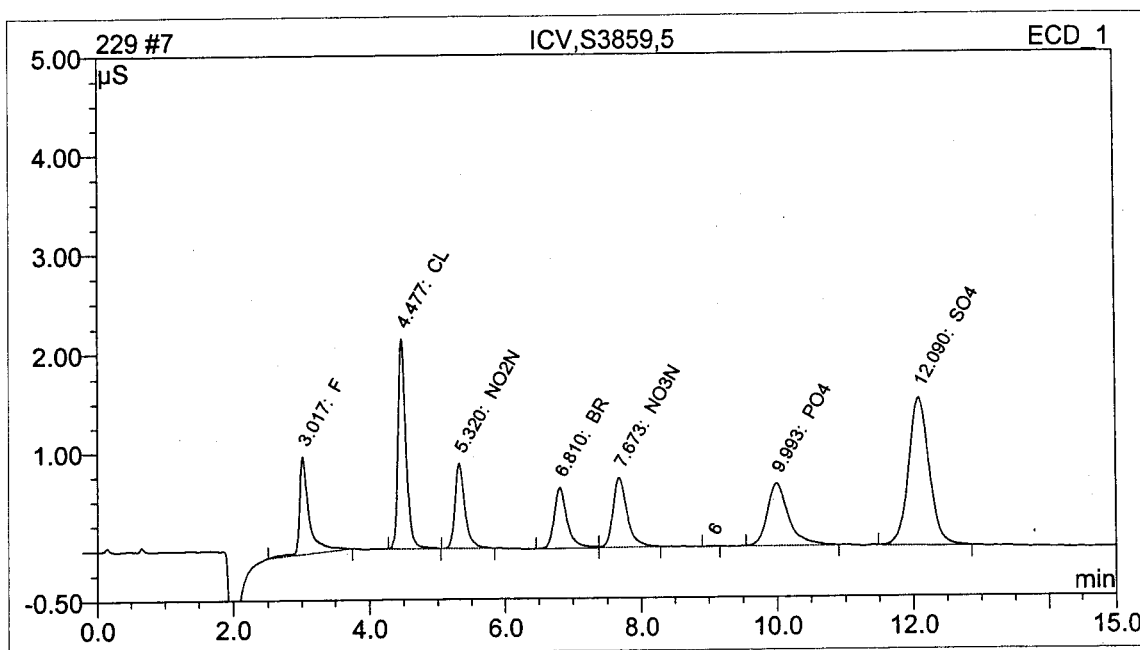
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICV,S3859,5	Sample No.:	7
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 4:25 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.017	0.168917	0.9609	0.9609	
2	CL	4.477	0.293909	1.8895	1.8895	
3	NO2N	5.320	0.151338	0.4885	0.4885	
4	BR	6.810	0.136799	2.0792	2.0792	
5	NO3N	7.673	0.171761	0.4626	0.4626	
7	PO4	9.993	0.229886	1.9794	1.9794	
8	SO4	12.090	0.529192	4.7711	4.7711	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC03
Seqnum : 626330641008
Cal : 626330641001

File : 229_8.000
Caldate: 17-AUG-2006

IDF : 1.0
Time : 17-AUG-2006 16:43

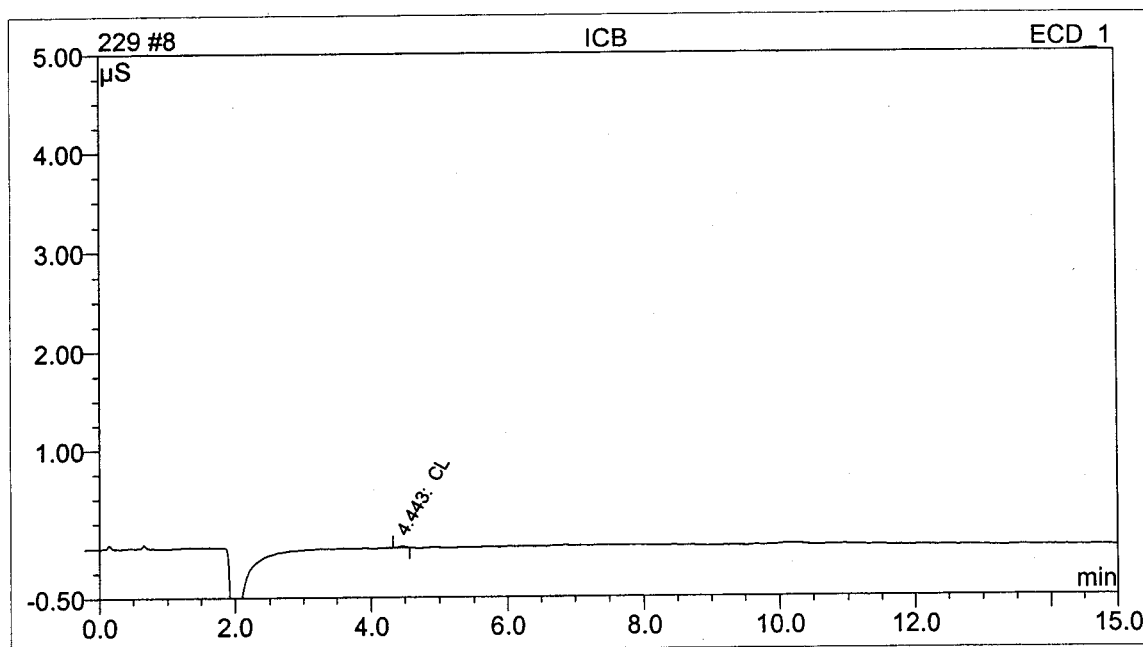
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Bromide	ND	0.2000	0.02767	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Orthophosphate (as P)	ND	0.2000	0.03686	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

MCS 8/21/06

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICB	Sample No.:	8
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 4:43 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
1	CL	4.443	0.001550	0.0101	0.0101	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
n.a.	PO4	n.a.	n.a.	n.a.	n.a.	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC03
 Seqnum : 626330641001
 Cal : 626316153001

File : 229_1.000
 Caldate: 07-AUG-2006

IDF : 1.0
 Time : 17-AUG-2006 14:41

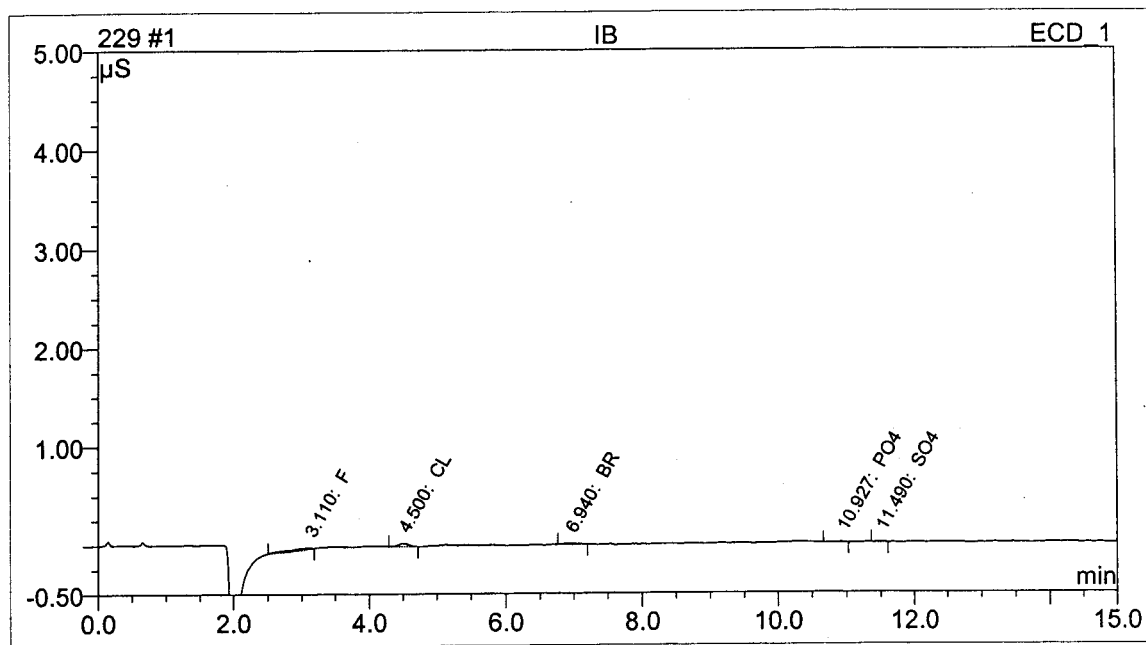
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	[0.04414]	0.1000	0.02324	mg/L	
Chloride	[0.04417]	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Bromide	[0.04290]	0.2000	0.02767	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Orthophosphate (as P)	ND	0.2000	0.03686	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

MCS 8/21/06

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	IB	Sample No.:	1
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 2:41 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.110	0.008364	0.0480	0.0480	
2	CL	4.500	0.006623	0.0432	0.0432	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
3	BR	6.940	0.002657	0.0406	0.0406	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
4	PO4	10.927	0.001547	0.0135	0.0135	
5	SO4	11.490	0.001193	0.0109	0.0109	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

CONTINUING CALIBRATION SUMMARY FOR 188837 IC Water
Curtis & Tompkins Laboratories

Analyte: Fluoride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D	Max	%D	Flags
						RF/CF	RF/CF							
IC03	P	626330641078	18-AUG-2006 13:01	626330641001	17-AUG-2006	0.1728	0.1665	0.5000	0.4759	mg/L	-5	10		
IC03	P	626330641089	18-AUG-2006 18:46	626330641001	17-AUG-2006	0.1728	0.1847	5.0000	5.0443	mg/L	1	10		
IC03	P	626330641101	18-AUG-2006 22:15	626330641001	17-AUG-2006	0.1728	0.1889	2.0000	2.1239	mg/L	6	10		
IC03	P	626336342016	21-AUG-2006 15:27	626330641001	17-AUG-2006	0.1728	0.1723	0.5000	0.4924	mg/L	-2	10		
IC03	P	626336342028	21-AUG-2006 19:08	626330641001	17-AUG-2006	0.1728	0.1950	2.0000	2.1908	mg/L	10	10		

CONTINUING CALIBRATION SUMMARY FOR 188837 IC Water
Curtis & Tompkins Laboratories

Analyte: Chloride

Avg												
Instid	Ch	Seqnum	Injected		Calnum	Caldate	RF/CF	RF/CF	SpkAmt	OntAmt	Units	%D Max %D Flags
IC03	P	626330641078	18-AUG-2006	13:01	626330641001	17-AUG-2006	0.1661	0.1440	1.0000	0.9333	mg/L	-7 10
IC03	P	626330641089	18-AUG-2006	18:46	626330641001	17-AUG-2006	0.1661	0.1638	10.000	9.8788	mg/L	-1 10
IC03	P	626330641101	18-AUG-2006	22:15	626330641001	17-AUG-2006	0.1661	0.1582	4.0000	3.9989	mg/L	0 10

CONTINUING CALIBRATION SUMMARY FOR 188837 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrite

Avg												
Instid	Ch	Seqnum	Injected	Calnum	Caldate	RF/CF	RF/CF	SpkAmt	OntAmt	Units	%D	Max %D Flags
IC03	P	626330641078	18-AUG-2006 13:01	626330641001	17-AUG-2006	0.3196	0.2864	0.2500	0.2318	mg/L	-7	10
IC03	P	626330641089	18-AUG-2006 18:46	626330641001	17-AUG-2006	0.3196	0.3074	2.5000	2.4222	mg/L	-3	10
IC03	P	626330641101	18-AUG-2006 22:15	626330641001	17-AUG-2006	0.3196	0.3012	1.0000	0.9665	mg/L	-3	10

CONTINUING CALIBRATION SUMMARY FOR 188837 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D	Max	%D	Flags
						RF/CF	RF/CF							
IC03	P	626330641078	18-AUG-2006 13:01	626330641001	17-AUG-2006	0.3821	0.3558	0.2500	0.2406	mg/L	-4	10		
IC03	P	626330641089	18-AUG-2006 18:46	626330641001	17-AUG-2006	0.3821	0.3801	2.5000	2.4663	mg/L	-1	10		
IC03	P	626330641101	18-AUG-2006 22:15	626330641001	17-AUG-2006	0.3821	0.3692	1.0000	0.9848	mg/L	-2	10		

CONTINUING CALIBRATION SUMMARY FOR 188837 IC Water
Curtis & Tompkins Laboratories

Analyte: Sulfate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D	Max	%D	Flags
						RF/CF	RF/CF							
IC03	P	626330641078	18-AUG-2006 13:01	626330641001	17-AUG-2006	0.1124	0.1049	2.5000	2.3784	mg/L	-5	10		
IC03	P	626330641089	18-AUG-2006 18:46	626330641001	17-AUG-2006	0.1124	0.1148	25.000	24.583	mg/L	-2	10		
IC03	P	626330641101	18-AUG-2006 22:15	626330641001	17-AUG-2006	0.1124	0.1106	10.000	9.8397	mg/L	-2	10		

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 188837 IC Water
EPA 300.0

Inst : IC03
Seqnum : 626330641090
Cal : 626330641001
File : 229_90.000
Caldate: 17-AUG-2006
IDF : 1.0
Time : 18-AUG-2006 19:03

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 188837 IC Water
EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 626330641102 File : 229_102.000 Time : 18-AUG-2006 22:32
Cal : 626330641001 Caldate: 17-AUG-2006

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 188837 IC Water
EPA 300.0

Inst : IC03
Seqnum : 626336342029
Cal : 626330641001

File : 233_29.000
Caldate: 17-AUG-2006

IDF : 1.0
Time : 21-AUG-2006 19:26

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

SEQUENCE SUMMARY FOR 188837 IC Water
Curtis & Tompkins Laboratories

Sequence: 626330641 Instrument: IC03 Ion Chromatograph
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

Begun: 17-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
001	229_1.00	IB				17-AUG-2006	14:41	1.0		25					
002	229_2.00	ICAL	L1			17-AUG-2006	14:58	1.0					1		
003	229_3.00	ICAL	L2			17-AUG-2006	15:16	1.0					1		
004	229_4.00	ICAL	L3			17-AUG-2006	15:33	1.0					1		
005	229_5.00	ICAL	L4			17-AUG-2006	15:50	1.0					1		
006	229_6.00	ICAL	L5			17-AUG-2006	16:08	1.0					1		
007	229_7.00	ICV				17-AUG-2006	16:25	1.0							
008	229_8.00	ICB				17-AUG-2006	16:43	1.0					2		
009	229_9.00	CCV	L			17-AUG-2006	17:00	1.0					1		
010	229_10.00	CCB/MB	QC352330			17-AUG-2006	17:17	1.0							
011	229_11.00	MSS	188802-001			17-AUG-2006	17:35	100.0							
012	229_12.00	SAMPLE	188802-017			17-AUG-2006	17:52	100.0							
013	229_13.00	SAMPLE	188802-018			17-AUG-2006	18:10	50.0							
014	229_14.00	MS	QC352333			17-AUG-2006	18:27	200.0					1		
015	229_15.00	MSD	QC352334			17-AUG-2006	18:44	200.0					1		
016	229_16.00	MSS	188802-001			17-AUG-2006	19:02	2.0							463
017	229_17.00	X	BLK			17-AUG-2006	19:19	1.0							
018	229_18.00	MSS	188802-001			17-AUG-2006	19:37	1.0							
019	229_19.00	X	BLK			17-AUG-2006	19:54	1.0							
020	229_20.00	X	BLK			17-AUG-2006	20:12	1.0							
021	229_21.00	BS	QC352331			17-AUG-2006	20:29	1.0					1		
022	229_22.00	BSD	QC352332			17-AUG-2006	20:46	1.0					1		
023	229_23.00	CCV	M			17-AUG-2006	21:04	1.0					1		
024	229_24.00	CCB				17-AUG-2006	21:21	1.0							
025	229_25.00	X	CCV			17-AUG-2006	21:39	1.0					1		
026	229_26.00	X	CCB			17-AUG-2006	21:56	1.0							
027	229_27.00	SAMPLE	188802-002			17-AUG-2006	22:13	1.0	1	25				1:Cl=62.6637	
028	229_28.00	X	BLK			17-AUG-2006	22:31	1.0							
029	229_29.00	SAMPLE	188802-003			17-AUG-2006	22:48	1.0	2	25				2:SO4=102.746	
030	229_30.00	SAMPLE	188802-004			17-AUG-2006	23:06	1.0	3	25				3:SO4=153.230	
031	229_31.00	SAMPLE	188802-005			17-AUG-2006	23:23	1.0	2	25				2:SO4=112.745	

Stds used: 1=S3313 2=S3859

SEQUENCE SUMMARY FOR 188837 IC Water
Curtis & Tompkins Laboratories

Sequence: 626330641 Instrument: IC03
Analytical Method: EPA 300.0

Ion Chromatograph
SOP Version: ANIONS_300_rv6

Begun: 17-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Std	Used	>LR
032	229_32.0	SAMPLE	188802-006	116514	Water	17-AUG-2006 23:40	1.0	2		25				2:CL=119.045	
033	229_33.0	SAMPLE	188802-008	116514	Water	17-AUG-2006 23:58	1.0	2		25				2:SO4=102.547	
034	229_34.0	SAMPLE	188802-010	116514	Water	18-AUG-2006 00:15	1.0	2		25				2:SO4=102.188	
035	229_35.0	SAMPLE	188802-012	116514	Water	18-AUG-2006 00:33	1.0	1		25				1:CL=85.6712	
036	229_36.0	SAMPLE	188802-013	116514	Water	18-AUG-2006 00:50	1.0	1		25				1:CL=123.553	
037	229_37.0	SAMPLE	188802-009	116514	Water	18-AUG-2006 01:08	1.0	1		25				1:CL=49.8349	
038	229_38.0	CCV	H	116514		18-AUG-2006 01:25	1.0			25			1		
039	229_39.0	CCB		116514		18-AUG-2006 01:42	1.0			25					
040	229_40.0	X	CCV	116514		18-AUG-2006 02:00	1.0						1		
041	229_41.0	X	CCB	116514		18-AUG-2006 02:17	1.0								
042	229_42.0	SAMPLE	188802-015	116514	Water	18-AUG-2006 02:35	1.0			25					
043	229_43.0	SAMPLE	188802-014	116514	Water	18-AUG-2006 02:52	1.0	3		25				3:SO4=73.1736	
044	229_44.0	SAMPLE	188802-020	116514	Water	18-AUG-2006 03:09	1.0	3		25				3:SO4=73.0052	
045	229_45.0	SAMPLE	188802-017	116514	Water	18-AUG-2006 03:27	1.0	1		25				1:SO4=306.955	
046	229_46.0	X	BLK	116514		18-AUG-2006 03:44	1.0								
047	229_47.0	SAMPLE	188802-018	116514	Water	18-AUG-2006 04:02	1.0	1		25				1:SO4=160.2834	
048	229_48.0	X	BLK	116514		18-AUG-2006 04:19	1.0								
049	229_49.0	SAMPLE	188802-002	116514	Water	18-AUG-2006 04:36	25.0			25					
050	229_50.0	SAMPLE	188802-003	116514	Water	18-AUG-2006 04:54	25.0			25					
051	229_51.0	SAMPLE	188802-004	116514	Water	18-AUG-2006 05:11	25.0			25					
052	229_52.0	SAMPLE	188802-005	116514	Water	18-AUG-2006 05:29	25.0			25					
053	229_53.0	SAMPLE	188802-006	116514	Water	18-AUG-2006 05:46	25.0			25					
054	229_54.0	CCV	M	116514		18-AUG-2006 06:03	1.0			25			1		
055	229_55.0	CCB		116514		18-AUG-2006 06:21	1.0			25					
056	229_56.0	X	CCV	116514		18-AUG-2006 06:38	1.0						1		
057	229_57.0	X	CCB	116514		18-AUG-2006 06:56	1.0								
058	229_58.0	SAMPLE	188802-008	116514	Water	18-AUG-2006 07:13	10.0			25					
059	229_59.0	SAMPLE	188802-009	116514	Water	18-AUG-2006 07:31	25.0			25					
060	229_60.0	SAMPLE	188802-010	116514	Water	18-AUG-2006 07:48	10.0			25					
061	229_61.0	SAMPLE	188802-012	116514	Water	18-AUG-2006 08:05	25.0			25					
062	229_62.0	SAMPLE	188802-013	116514	Water	18-AUG-2006 08:23	25.0			25					

Std's used: 1=S3313 2=S3859

SEQUENCE SUMMARY FOR 188837 IC Water
Curtis & Tompkins Laboratories

Sequence: 626330641 Instrument: IC03
Analytical Method: EPA 300.0

Ion Chromatograph
SOP Version: ANIONS_300_rv6

Begun: 17-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
063	229_63.0	SAMPLE	188802-014	116514	Water	18-AUG-2006	08:40 25.0			25					
064	229_64.0	SAMPLE	188802-020	116514	Water	18-AUG-2006	08:58 10.0			25					
065	229_65.0	SAMPLE	188792-001	116514	Water	18-AUG-2006	09:15 10.0			25					
066	229_66.0	SAMPLE	188792-001	116514	Water	18-AUG-2006	09:32 1.0	2		25					2:SO4=167.993
067	229_67.0	X	BLK	116514		18-AUG-2006	09:50 1.0								
068	229_68.0	SAMPLE	188805-001	116514	Water	18-AUG-2006	10:07 1.0	1		25					2:SO4=388.069
069	229_69.0	CCV	H	116514		18-AUG-2006	10:25 1.0			25					
070	229_70.0	CCB		116514		18-AUG-2006	10:42 1.0			25					
071	229_71.0	X	CCV	116514		18-AUG-2006	10:59 1.0						1		
072	229_72.0	X	CCB	116514		18-AUG-2006	11:17 1.0								
073	229_73.0	SAMPLE	188756-009	116514	Water	18-AUG-2006	11:34 1.0			25					
074	229_74.0	SAMPLE	188805-001	116514	Water	18-AUG-2006	11:52 25.0			25					
075	229_75.0	SAMPLE	188756-014	116514	Water	18-AUG-2006	12:09 100.0			25					
076	229_76.0	CCV	L	116514		18-AUG-2006	12:26 1.0			25			1		
077	229_77.0	CCB		116514		18-AUG-2006	12:44 1.0			25					
078	229_78.0	CCV	L	116593		18-AUG-2006	13:01 1.0	2		25			1		465
079	229_79.0	CCB/MB	QC352648	116593	Water	18-AUG-2006	13:19 1.0			25					
080	229_80.0	BS	QC352649	116593	Water	18-AUG-2006	15:52 1.0			25			1		
081	229_81.0	BSD	QC352650	116593	Water	18-AUG-2006	16:09 1.0			25			1		
082	229_82.0	MSS	188837-009	116593	Water	18-AUG-2006	16:38 1.0	3		25					1:CL=48.3396
083	229_83.0	SAMPLE	188837-005	116593	Water	18-AUG-2006	16:57 500.0			25					
084	229_84.0	SAMPLE	188837-012	116593	Water	18-AUG-2006	17:19 1.0			25					
085	229_85.0	SAMPLE	188837-008	116593	Water	18-AUG-2006	17:36 1.0	1		25					1:CL=67.0823
086	229_86.0	SAMPLE	188837-010	116593	Water	18-AUG-2006	17:54 1.0	1		25					1:CL=62.4456
087	229_87.0	SAMPLE	188837-005	116593	Water	18-AUG-2006	18:11 20.0	1		25					1:CL=188.939
088	229_88.0	X	BLK	116593		18-AUG-2006	18:28 1.0								
089	229_89.0	CCV	H	116593		18-AUG-2006	18:46 1.0			25			1		
090	229_90.0	CCB		116593		18-AUG-2006	19:03 1.0	1		25					
091	229_91.0	X	CCV	116593		18-AUG-2006	19:21 1.0						1		
092	229_92.0	X	CCB	116593		18-AUG-2006	19:38 1.0								
093	229_93.0	MSS	188837-009	116593	Water	18-AUG-2006	19:55 10.0	1		25					

Stds used: 1=S3313 2=S3859

SEQUENCE SUMMARY FOR 188837 IC Water
Curtis & Tompkins Laboratories

Sequence: 626330641 Instrument: IC03
Analytical Method: EPA 300.0

Ion Chromatograph
SOP Version: ANIONS_300_rv6

Begun: 17-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
094	229_94.0	MS	QC352651	116593	Water	18-AUG-2006 20:13	10.0		25				1		
095	229_95.0	MSD	QC352652	116593	Water	18-AUG-2006 20:30	10.0		25				1		
096	229_96.0	X	BLK	116593		18-AUG-2006 20:48	1.0								
097	229_97.0	SAMPLE	188837-008	116593	Water	18-AUG-2006 21:05	25.0		25						
098	229_98.0	SAMPLE	188837-010	116593	Water	18-AUG-2006 21:22	25.0		25						
099	229_99.0	SAMPLE	188837-005	116593	Water	18-AUG-2006 21:40	10.0	2	25						2:CL=291.110
100	229_100.	X	BLK	116593		18-AUG-2006 21:57	1.0								
101	229_101.	CCV	M	116593		18-AUG-2006 22:15	1.0		25				1		
102	229_102.	CCB		116593		18-AUG-2006 22:32	1.0		25						
103	229_103.	X	CCV	116593		18-AUG-2006 22:49	1.0						1		
104	229_104.	X	CCB	116593		18-AUG-2006 23:07	1.0								
105	229_105.	X	SHUTDOWN	116593		18-AUG-2006 23:24	1.0								

Stds used: 1=S3313 2=S3859

SEQUENCE SUMMARY FOR 188837 IC Water
Curtis & Tompkins Laboratories

Sequence: 626336342 Instrument: IC03
Analytical Method: EPA 300.0

Ion Chromatograph
SOP Version: ANIONS_300_rv6

Begun: 21-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
007	233_7.00	CCV	M	116600	Water	21-AUG-2006	12:49 1.0			25			1		
008	233_8.00	CCB/MB	QC352700	116600	Water	21-AUG-2006	13:07 1.0			25					
009	233_9.00	LCS	QC352701	116600	Water	21-AUG-2006	13:24 1.0			25			1		
010	233_10.0	MSS	188756-015	116600	Water	21-AUG-2006	13:42 100.0			25					
011	233_11.0	SAMPLE	188756-016	116600	Water	21-AUG-2006	13:59 100.0			25					
012	233_12.0	MS	QC352702	116600	Water	21-AUG-2006	14:16 100.0		2	25			1		
013	233_13.0	MSD	QC352703	116600	Water	21-AUG-2006	14:34 100.0		1	25			1		
014	233_14.0	CCV	H	116600		21-AUG-2006	14:51 1.0			25			1		
015	233_15.0	CCB		116600		21-AUG-2006	15:09 1.0			25					
016	233_16.0	CCV	L	116633	Water	21-AUG-2006	15:27 1.0		1	25			1		
017	233_17.0	CCB/MB	QC352844	116633	Water	21-AUG-2006	15:45 1.0			25					
018	233_18.0	BS	QC352845	116633	Water	21-AUG-2006	16:02 1.0			25			1		
019	233_19.0	BSD	QC352846	116633	Water	21-AUG-2006	16:20 1.0			25			1		
020	233_20.0	SAMPLE	188786-002	116633	Water	21-AUG-2006	16:37 100.0			25					
021	233_21.0	MSS	188786-003	116633	Water	21-AUG-2006	16:54 100.0			25					
022	233_22.0	SAMPLE	188786-004	116633	Water	21-AUG-2006	17:12 100.0			25					
023	233_23.0	SAMPLE	188837-010	116633	Water	21-AUG-2006	17:29 1.0		3	25					
024	233_24.0	X	BLK	116633		21-AUG-2006	17:47 1.0			25					
025	233_25.0	SAMPLE	188801-003	116633	Water	21-AUG-2006	18:16 100.0		1	25					
026	233_26.0	MS	QC352847	116633	Water	21-AUG-2006	18:33 200.0			25			1		
027	233_27.0	MSD	QC352848	116633	Water	21-AUG-2006	18:51 200.0			25			1		
028	233_28.0	CCV	M	116633		21-AUG-2006	19:08 1.0			25			1		
029	233_29.0	CCB		116633		21-AUG-2006	19:26 1.0			25					
030	233_30.0	SAMPLE	188801-003	116633	Water	21-AUG-2006	19:43 200.0			25					
031	233_31.0	SAMPLE	188824-003	116633	Water	21-AUG-2006	20:00 25.0			25					
032	233_32.0	SAMPLE	188824-004	116633	Water	21-AUG-2006	20:18 100.0			25					
033	233_33.0	SAMPLE	188824-005	116633	Water	21-AUG-2006	20:35 25.0			25					
034	233_34.0	SAMPLE	188824-006	116633	Water	21-AUG-2006	20:53 100.0			25					
035	233_35.0	SAMPLE	188824-007	116633	Water	21-AUG-2006	21:10 100.0			25					
036	233_36.0	SAMPLE	188824-008	116633	Water	21-AUG-2006	21:27 100.0			25					
037	233_37.0	SAMPLE	188824-009	116633	Water	21-AUG-2006	21:45 100.0			25					

Stds used: 1=S3313

SEQUENCE SUMMARY FOR 188837 IC Water
Curtis & Tompkins Laboratories

Sequence: 626336342 Instrument: IC03
Analytical Method: EPA 300.0

Ion Chromatograph
SOP Version: ANIONS_300_rv6

Begun: 21-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
038	233_38.0	SAMPLE	188824-010	116633	Water	21-AUG-2006 22:02	100.0		25						
039	233_39.0	SAMPLE	188824-011	116633	Water	21-AUG-2006 22:20	100.0		25						
040	233_40.0	CCV	H	116633		21-AUG-2006 22:37	1.0		25				1		
041	233_41.0	CCB		116633		21-AUG-2006 22:55	1.0	1	25						
042	233_42.0	X	CCV	116633		21-AUG-2006 23:12	1.0						1		
043	233_43.0	X	CCB	116633		21-AUG-2006 23:29	1.0								
044	233_44.0	SAMPLE	188824-012	116633	Water	21-AUG-2006 23:47	25.0		25						
045	233_45.0	CCV	L	116633		22-AUG-2006 00:04	1.0		25				1		
046	233_46.0	CCB		116633		22-AUG-2006 00:22	1.0		25						
047	233_47.0	X	CCV	116633		22-AUG-2006 00:39	1.0						1		
048	233_48.0	X	CCB	116633		22-AUG-2006 00:56	1.0								
049	233_49.0	X	SHUTDOWN	116633		22-AUG-2006 01:14	1.0								

Stds used: 1=S33313

REPORTING SUMMARY FOR 188837 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	AnalYZed	IDF	F	C L	N O 2 N	N O 3 N	S O 4
188837-005	IC03	08/18/06 16:57	500.0		+			
188837-005	IC03	08/18/06 18:11	20.0			+		+
188837-005	IC03	08/18/06 21:40	10.0	+			+	
188837-008	IC03	08/18/06 17:36	1.0	+		+	+	+
188837-008	IC03	08/18/06 21:05	25.0		+			
188837-009	IC03	08/18/06 16:38	1.0	+		+	+	+
188837-009	IC03	08/18/06 19:55	10.0		+			
188837-010	IC03	08/18/06 17:54	1.0			+	+	+
188837-010	IC03	08/18/06 21:22	25.0		+			
188837-010	IC03	08/21/06 17:29	1.0	+				
188837-012	IC03	08/18/06 17:19	1.0	+	+	+	+	+
QC352648	IC03	08/18/06 13:19	1.0	+	+	+	+	+
QC352649	IC03	08/18/06 15:52	1.0	+	+	+	+	+
QC352650	IC03	08/18/06 16:09	1.0	+	+	+	+	+
QC352651	IC03	08/18/06 20:13	10.0	+	+	+	+	+
QC352652	IC03	08/18/06 20:30	10.0	+	+	+	+	+
QC352844	IC03	08/21/06 15:45	1.0	+				
QC352845	IC03	08/21/06 16:02	1.0	+				
QC352846	IC03	08/21/06 16:20	1.0	+				
QC352847	IC03	08/21/06 18:33	200.0	+				
QC352848	IC03	08/21/06 18:51	200.0	+				

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 116593
 Date Started: 18-AUG-2006
 Batched by : Cheryl Pacheco

Analysis : N/A
 Bgroup : IC
 Department : GC Organics

Sample	Type	Client	Matrix	Analyses	Due Date
188837-005		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	30-AUG-2006
188837-008		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	30-AUG-2006
188837-009		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	30-AUG-2006
188837-010		Treadwell & Rollo	Water	CHLORIDE, NITRATE, NITRITE, SULFATE	30-AUG-2006
188837-012		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	30-AUG-2006
QC352648	BLANK		Water		
QC352649	BS		Water		
QC352650	BSD		Water		
QC352651	MS	of 188837-009	Water		
QC352652	MSD	of 188837-009	Water		

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO₄) EPA 314
☐ Cr6+ EPA 7199

Batch#: 116593
 Date Started: 8/18/06
 Prep Chemist: CP

BK 2373
 Page 6

	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	188837 -005 G	17.94	500x 20x 10x	S	
2	-008 I	1.20	25x 1x	↓	
3	-009 P	0.69	10x 1x	↓	MSS
4	-010 F	1.61	25x 1x	↓	RR@ 1x for F
5	↓ -012 M	0.02	1x	↓	
6	Blank QC352648	N/A	1x	N/A	
7	BS QC352649	↓	↓	↓	
8	BSD QC352650	↓	↓	↓	
9	MS QC352651 P	↓	10x	S	
10	MSD QC352652 P	↓	10x	S	
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

Eluent Reagent ID: 100X MS 8/10/06 Initials / Date: CP 8/21/06
 BS/BSD Spiked with 0.2 mL of : S3313
 MS/MSD Spiked with 0.1 mL of : S3313
 Filters Used: Ag: OnGuard II Ag N/A
 Na: OnGuard II Na
 P: OnGuard II P
 RP: OnGuard II RP
 S: 0.20um/0.45um Acrodac 12x #A10643613

CP 8/21/06
 Extraction Chemist / Date

Continued #701 page
 Continued on page

MSSM 8/21/06
 Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 116633
 Date Started: 21-AUG-2006
 Batched by : Micah Smith

Analysis : N/A
 Bgroup : IC
 Department : GC Organics

Sample	Type	Client	Matrix	Analyses	Due Date
188786-002		LFR Levine Fricke	Water	CHLORIDE, SULFATE	22-AUG-2006
188786-003		LFR Levine Fricke	Water	CHLORIDE, SULFATE	22-AUG-2006
188786-004		LFR Levine Fricke	Water	CHLORIDE, SULFATE	22-AUG-2006
188801-003		LFR Levine Fricke	Water	CHLORIDE, SULFATE	23-AUG-2006
188824-003		MWH	Water	CHLORIDE, SULFATE	23-AUG-2006
188824-004		MWH	Water	CHLORIDE, SULFATE	23-AUG-2006
188824-005		MWH	Water	CHLORIDE, SULFATE	23-AUG-2006
188824-006		MWH	Water	CHLORIDE, SULFATE	23-AUG-2006
188824-007		MWH	Water	CHLORIDE, SULFATE	23-AUG-2006
188824-008		MWH	Water	CHLORIDE, SULFATE	23-AUG-2006
188824-009		MWH	Water	CHLORIDE, SULFATE	23-AUG-2006
188824-010		MWH	Water	CHLORIDE, SULFATE	23-AUG-2006
188824-011		MWH	Water	CHLORIDE, SULFATE	23-AUG-2006
188824-012		MWH	Water	CHLORIDE, SULFATE	23-AUG-2006
188837-010		Treadwell & Rollo	Water	FLUORIDE	30-AUG-2006
QC352844	BLANK		Water		
QC352845	BS		Water		
QC352846	BSD		Water		
QC352847	MS	of 188786-003	Water		
QC352848	MSD	of 188786-003	Water		

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO₄) EPA 314
☐ Cr6+ EPA 7199

Batch#: 116633
 Date Started: 8/21/06
 Prep Chemist: MRS

BK 2373
 Page 8

	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	188786-002 F	5.73	100x	S	
2	↓ -003 G	6.15	↓	↓	MSS
3	↓ -004 F	7.76	↓	↓	
4	188801-003 F	8.54	100x 200x	S	
5	188824-003 K	1.89	25x	S	
6	↓ -004 G	6.64	100x	↓	
7	↓ -005	1.75	25x	↓	
8	↓ -006	4.47	100x	↓	
9	↓ -007	3.06	↓	↓	
10	↓ -008	4.33	↓	↓	
11	↓ -009	5.82	↓	↓	
12	↓ -010	5.00	↓	↓	
13	↓ -011	3.61	↓	↓	
14	↓ -012 ↓	1.37	25x	↓	
15	188837-010 F	1.61	1x	S	
16	Blank Qc352844	N/A	1x	N/A	
17	BS Qc352845	↓	↓	↓	
18	BSD Qc352846	↓	↓	↓	
19	MS Qc352847 G	↓	200x	S	
20	MSD Qc352848 G	↓	200x	S	
MRS 8/21/06					

	Eluent Reagent ID	Mfg & Lot # / Time / Program	Initials / Date
BS/BSD Spiked with	0.2 mL of :	100x MRS 8/10/06	MRS 8/21/06
MS/MSD Spiked with	0.1 mL of :	53313	
Filters Used:	Ag: OnGuard II Ag	53313	
	Na: OnGuard II Na	N/A	
	P: OnGuard II P	↓	
	RP: OnGuard II RP	↓	
	S: 0.20um/0.45um	Acrodisc lot # A10643613	↓

MRS 8/21/06
 Extraction Chemist / Date

Continued from page
 Continued 673 page

CR 8/22/06
 Reviewed by / Date



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories
MDL Summary for EPA 300.0 Water
As of 09/24/06

Analyte	Units	IC03	IC01
Fluoride	mg/L	0.023	0.0096
Chloride	mg/L	0.032	0.044
Nitrogen, Nitrite	mg/L	0.012	0.0067
Bromide	mg/L	0.028	0.075
Nitrogen, Nitrate	mg/L	0.0088	0.014
Orthophosphate (as P)	mg/L	0.037	0.045
Sulfate	mg/L	0.079	0.046

Sulfide

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Batch#:	116737
Matrix:	Water	Sampled:	08/17/06
Units:	mg/L	Received:	08/18/06
Diln Fac:	1.000	Analyzed:	08/24/06

Field ID	Type	Lab ID	Result	RL
610SP01	SAMPLE	188837-005	0.22	0.04
1065PZ1A	SAMPLE	188837-008	ND	0.04
1065PZ2A	SAMPLE	188837-009	ND	0.04
1065PZ4A	SAMPLE	188837-010	ND	0.04
DW081706A	SAMPLE	188837-012	ND	0.04
	BLANK	QC353247	ND	0.04



Batch QC Report

Sulfide

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Diln Fac:	1.000
Field ID:	1065PZ2A	Batch#:	116737
MSS Lab ID:	188837-009	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	mg/L	Analyzed:	08/24/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC353248	<0.04000	0.2898	0.1955	67 *	75-125		
MSD	QC353249		0.2898	0.1978	68 *	75-125	1	20
LCS	QC353250		0.4347	0.4166	96	75-125		

* = Value outside of QC limits; see narrative

RPD = Relative Percent Difference

Analysis: **SULFIDE**
 Method: **EPA 376.2**
 Instrument: **HP UV-VIS Spectrometer**
 Wavelength: **626 nm**
 SOP#: **sulfide_376_rv 4.doc**

Matrix: **Water**
 Batch: **116737**
 Prep Date: **8/24/2006**
 Analysis Date: **8/24/2006**
 Analyst: **DMC**

INITIAL CALIBRATION DATA

Calibration Date: **11/15/05**

Conc (mg/L)	Absorb	RF
0.0000	0.0001	
0.0233	0.0090	0.3863
0.0466	0.0156	0.3348
0.1862	0.0555	0.2981
0.3725	0.1650	0.4430
0.7450	0.3293	0.4420
1.3040	0.5687	0.4361
1.6760	0.7467	0.4455

Correlation Coefficient (r): **0.9994**
 Avg Rf: **0.3980**
 %RSD: **15.1**

Note: Average Rf used to calculate sample results.

CONTINUING CALIBRATION DATA

	Absorb Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.1658	0.4166	96%	90 - 110%
ICB	0.0000	0.0000		
CCV	0.1658	0.4166	96%	90 - 110%
CCB	0.0009	0.0023		
CCV	0.1647	0.4139	95%	90 - 110%
CCB	0.0012	0.0030		

Analysis: **SULFIDE**
 Method: **EPA 376.2**
 Instrument: **HP UV-VIS Spectrometer**
 Wavelength: **626 nm**
 Matrix: **Water**

Batch: **116737**
 Prep Date: **8/24/2006**
 Analysis Date: **8/24/2006**
 Analyst: **DMc**

SAMPLE & BATCH QC DATA

Sample ID	Sample Vol (mL)	D.F.	Sample Absorb	Color Bk Absorb	Report mg/L	Reporting Limit (mg/L)	Vol Spike Added (mL)	Sid Conc. (mg/L)	Spiked @ (mg/L)	% Rec	% RPD
MB	7.5000	1.0000	0.0000		ND	0.040					
LCS	7.5000	1.0000	0.1658		0.41663	0.040	1.0000	43.4720	0.4347	96	-
18837-9	7.5000	1.0000	0.0116		ND	0.040					
18837-9ms	7.5000	1.0000	0.0778		0.19550	0.040	0.0500	43.4720	0.2898	67	-
18837-9ms	7.5000	1.0000	0.0787		0.19776	0.040	0.0500	43.4720	0.2898	68	1
188801-1	7.5000	1.0000	0.0008		ND	0.040					
188801-2	7.5000	1.0000	0.0015		ND	0.040					
188801-3	7.5000	1.0000	-0.0009		ND	0.040					
188801-4	7.5000	1.0000	0.0247		0.06207	0.040					
188837-5	7.5000	1.0000	0.0886		0.22264	0.040					
188837-8	7.5000	1.0000	0.0126		ND	0.040					
188837-10	7.5000	1.0000	0.0107		ND	0.040					
188837-12	7.5000	1.0000	0.0027		ND	0.040					
188869-1	7.5000	1.0000	0.0003		ND	0.040					

QC Limits		RPD		Recovery	
LCS/BS/BS	20	20	90 - 110		
MS/MSD	20	42 - 121			

Reviewed by/ Date:

DMc 8/28/06

---> Standard Calibration Report <---

Date : 08-13-2006 ²⁴

Time : 10:51:40 ^{8.24.06}

Operator : PAP ^{DH}

File Name : C:\UV\DATA\SS1105.STD

Sample Name : sulfide

Analytical Wavelength : 626 nm

Solvent Name : CAL11-15-05

Reference Wavelength : None Selected

Conc Units : mg/L

Confirmation Wavelengths : None Selected

Integration Time : 1 seconds

Analytical Function Concentration = +2.266E+00 * Absorbance

STD #	Concentration	Absorbance	% Error
1	0.00000	0.0001	*****
2	0.37250	0.1650	-0.366 %
3	0.74500	0.3293	-0.135 %
4	1.30400	0.5687	+1.190 %
5	1.67600	0.7467	-0.933 %
6	0.02330	0.0090	+14.422 %
7	0.04660	0.0156	+31.758 %
8	0.18620	0.0555	+48.042 %

---> Standard Calibration Report <---

Date : 08-12-2006
 Time : 10:51:41
 Operator : POPDH

24
 8.24-06
 2047

File Name : C:\UV\DATA\SS1105.STD

Sample Name : sulfide

Solvent Name : CAL11-15-05

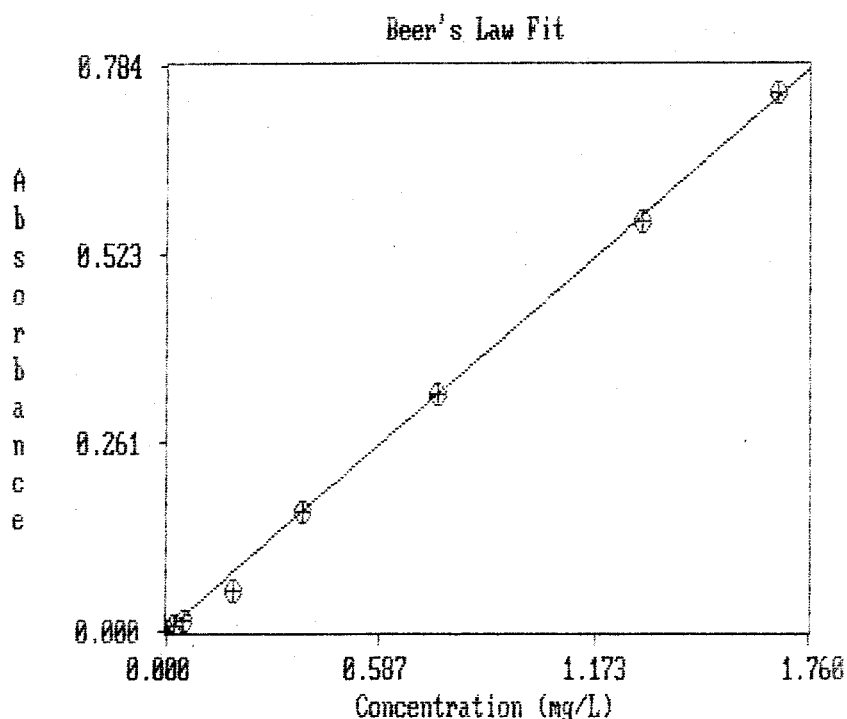
Conc Units : mg/L

Analytical Wavelength : 626 nm

Reference Wavelength : None Selected

Confirmation Wavelengths : None Selected

Integration Time : 1 seconds



---> Quantitation Results Report <---

Date : 08-13-2006 ²⁴
 Time : 10:51:23
 Operator : ~~DAD~~ ^{8.24.06} *Sum*

File Name : C:\UV\DATA\FE606.ORS

Sample Name : sulfide Analytical Wavelength : 626 nm
 Solvent Name : CAL11-15-05 Reference Wavelength : None Selected
 Conc Units : mg/L Confirmation Wavelengths : None Selected
 Dil. Factor : 1.00 Integration Time : 1 seconds

AMPLE #	Sample Name	Wavelength	Func. Res.	Concentration
1	ICB/MB	Analytical	-0.0000	0.00000
2	CCV/LCS ^{8.24.06}	Analytical	+0.1658	0.37577
3	188801-1	Analytical	+0.0008	0.00173
4	188801-2	Analytical	+0.0015	0.00349
5	188801-3	Analytical	-0.0009	0.00000
6	188801-4	Analytical	+0.0247	0.05601
7	188837-5	Analytical	+0.0886	0.20083
8	188837-8	Analytical	+0.0126	0.02849
9	188837-9	Analytical	+0.0116	0.02631
10	188837-9MS	Analytical	+0.0778	0.17622
11	CCV	Analytical	+0.1658	0.37567
12	CCB	Analytical	+0.0009	0.00201
13	188837-9MSD	Analytical	+0.0787	0.17839
14	188837-10	Analytical	+0.0107	0.02420
15	188837-12	Analytical	+0.0027	0.00602
16	188869-1	Analytical	+0.0003	6.223E-04
17	CCV	Analytical	+0.1647	0.37328
18	CCB	Analytical	+0.0012	0.00273

Diss Sulfide / Sulfide EPA 376.2
Sample Vol (ml) Final Vol (ml) ABS

B116737

*188801-1E	7.5	7.5	.0008
-2			.0015
-3			-.0009
-4			.0247
188837-5D			.0886
-8G			.0126
-9L			.0116
-9HS	+0.05ml (43.472mg/L from 0455292)		.0776
-9HSD	same as HS		.0787
-10D			.0107
-12J			.0027

188869-1+

ICB/HB

ICV/LCS

CCV

CCB

CCV

CCB

1ml $\frac{43.472}{\text{mg/L}} \rightarrow 100\text{ml}$, keep 7.5ml

.0000

.1658

.1658

.0009

.1647

.0012

TV = .4347mg/L

S-Std

2.4g 0455292 + 50ml DI H₂O

1.0 ml S:

5.0 ml I, 0.02363N = .11815

3.85 ml S, 0.02363N = .09098

$\frac{.02717 \times 16000}{1.0} = 434.72\text{mg/L}$

1:10 = 43.472 mg/L

1:05 $\rightarrow$ 7.5 = 2.898 mg/L

1:100 = .4347 mg/L

* = Filter thru WHATMAN .45 μ Filt L + L 00?

Continued on Page

Read and Understood By

Signed

Date

482

Signed

Date

Analysis: Sulfide
Method: EPA 376.2
Instrument: HP UV/Vis
Wavelength: 626 nm

Analysis Date: 4/14/2005
Analyst: DM

Instrument Calibrated to report sample results in concentration: mg/L

Concentration: 0.1098
Units: mg/L

1	0.100
2	0.104
3	0.105
4	0.096
5	0.096
6	0.095
7	0.092

Average: 0.098 ug/L
Std Deviation: 0.004691
Student T: 3.143

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev: 0.0147 mg/L
Reporting Limit: 0.04 mg/L
Status: PASS >1/3 RL

Total Dissolved Solids (TDS)

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Batch#:	116770
Matrix:	Water	Sampled:	08/17/06
Units:	mg/L	Received:	08/18/06
Diln Fac:	1.000	Analyzed:	08/24/06

Field ID	Type	Lab ID	Result	RL
610SP01	SAMPLE	188837-005	10,900	50
1065PZ1A	SAMPLE	188837-008	810	50
1065PZ2A	SAMPLE	188837-009	450	50
1065PZ4A	SAMPLE	188837-010	740	50
DW081706A	SAMPLE	188837-012	ND	50
	BLANK	QC353379	ND	10

Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	188837	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Diln Fac:	1.000
Matrix:	Water	Batch#:	116770
Units:	mg/L	Analyzed:	08/24/06

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim	Sampled	Received
1065PZ2A	BS		QC353380		100.0	118.0		118	79-121				
ZZZZZZZZZZ	SDUP	188837-009	QC353381	450.0		450.0	10.00			0	20	08/17/06	08/18/06
	SDUP	188908-001	QC353382	14,420		14,600	100.0			1	20	08/23/06	08/23/06
	BSD		QC354137		100.0	120.0		120	79-121	2	20		

485

RL= Reporting Limit

RPD= Relative Percent Difference

Page 1 of 1

66.2



Curtis & Tompkins, Ltd.

Analysis: **Total Dissolved Solids**
 Method: **EPA160.1 / SMWW/2540c**
 Matrix: **Water**
 SOP#: **tds_lv 9.doc**

Analysis Date: **24-Aug-06**
 Batch #: **116770**
 Analyst: **SJ**

BATCH QC DATA

Sample	Vol (mL) 50vol	DF	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	Report (mg/L)	Reporting Limit (mg/L)	Spike Std Conc (mg/L)	Spike Vol. Used (mL)	Spiking Level (mg/L)	Recovery, %	RPD, %
MB	50	1	51.7847	51.7851	0.0004	ND	10					
BS	50	1	49.2957	49.3016	0.0059	118.0	10	1,000	5	100	118	
BSD	50	1	50.3649	50.3709	0.0060	120.0	10	1,000	5	100	120	1.68
188837-009	10	5	27.3953	27.3998	0.0045	450.0	50					
SDUP	10	5	24.0973	24.1018	0.0045	450.0	50					0.00
188908-001	5	10	24.3367	24.4088	0.0721	14,420.0	100					
SDUP	5	10	27.1298	27.2028	0.0730	14,600.0	100					1.24

QC Limits		RPD	Recovery
LCS/BS/BSD	20	79	- 121
MS/MSD	20	69	- 131

SAMPLE DATA

Sample	Vol (mL) 50vol	DF	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	Report (mg/L)	Reporting Limit (mg/L)
188818-001	10	5	27.4076	27.4149	0.0073	730.0	50
188837-005	10	5	46.7365	46.8455	0.1090	10,900.0	50
188837-008	10	5	27.1582	27.1663	0.0081	810.0	50
188837-009	10	5	27.3953	27.3998	0.0045	450.0	50
188837-010	10	5	29.0289	29.0363	0.0074	740.0	50
188837-012	10	5	27.6338	27.6341	0.0003	ND	50
188842-001	10	5	25.4314	25.4412	0.0098	980.0	50
188869-001	10	5	27.4534	27.4539	0.0005	50.0	50
188872-009	10	5	29.1860	29.1907	0.0047	470.0	50
188872-010	10	5	26.2136	26.2186	0.0050	500.0	50
188887-001	10	5	26.0929	26.1026	0.0097	970.0	50
188908-001	5	10	24.3367	24.4088	0.0721	14,420.0	100
188917-001	10	5	24.9962	24.9974	0.0012	120.0	50
188917-002	10	5	24.4051	24.4062	0.0011	110.0	50
188917-003	10	5	27.4300	27.4311	0.0011	110.0	50
188921-001	10	5	25.4922	25.5243	0.0321	3,210.0	50

Note: Because the regulatory holding time is based on the prep date, the analysis date referenced above is the prep date.

Reviewed by/ Date:

DMB/3/3/06

TDS (Total Dissolved Solids)
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

LIMS Batch #: 116770

Prep Date: 8/24/06
Prep Time: 15:00

Benchbook#: **BK2254**

Page: 65

Filter Mfg/ Lot#: G1848457
Spike WS#: 33381

Spike WS Conc (mg/L): 1000
Spike Vol Added (mL): 5

	In	Out	In-2	Out-2	In-3	Out-3	In-4	Out-4
Date:	8/24/06	8/25/06	8/25/06	8/25/06	8/28/06	8/28/06	8/28/06	8/28/06
Time:	16:30	12:10	16:45	17:00	14:00	16:00	17:00	18:30
Temp (C):	90°C	180°	180°C	180°C	180°C	180°C	180°C	180°C

In-5	Out-5	In-6	Out-6	In-7	Out-7
8/24/06 16:30 180°C	8/24/06 11:30 180°C	8/24/06 13:00 180°C	8/24/06 14:00 180°C	8/24/06 14:45 17:00	8/24/06 17:00

Sample # / Letter	EC Value (µS/cm)	Sample Vol. Filtered (mL)	Dish ID	Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*	4th
MB		50	FFF	51.7847	51.7859	51.7850	51.7851	
BS			KMA	49.2957	49.3013	49.3016		
BSD			24	50.3649	50.3713	50.3718	50.3709	50.36
188315-1 K	1110	10	MAS	27.4076	27.4146	27.4149		
188337-5 CT	13,980		GNR	46.7365	46.8528	46.8503	46.8484	46.8460
-8 I	1161		RIP	27.1582	27.1660	27.1663		
-9 P	1075	6A	NYC	27.3952	27.3994	27.3998		
-10 F	1122		LHF	29.0289	29.0358	29.0363		
-12 M	2360		OAK	27.6338	27.6340	27.6341		
SDUP 188312-1 A	1322		BOM	25.4314	25.4411	25.4412		
188369-1 M	2.75		PMP	27.4534	27.4536	27.4539		
188872-9 B	462		GER	29.1860	29.1903	29.1907		
-10 L	782		OPP	26.2136	26.2183	26.2186		
188887-1 L	1346		TOE	26.0929	26.1028	26.1026		
188908-1 B	17590	5	GAS	24.3367	24.4101	24.4152	24.4129	24.409
188917-1 C	1365	10	UK	24.1962	24.9972	24.9974		
-2	1072		ITA	24.4051	24.4060	24.4062		
-3	1042		YES	27.4300	27.4308	27.4311		
188921-1 I	3430		RON	25.4922	25.5262	25.5252	25.5245	25.524
SDUP 18837-9 P	664		VRU	24.0973	24.1017	24.1018		
SDUP 188908-1 B	17,590	5	ELF	27.1298	27.2021	27.2067	27.2053	27.2028

* Constant weight must be within 0.0005 from previous reading.

5th 46.8455
6th 24.4038
7th 27.2008
27.2033
27.2028

Analyst / Date

8/24/06

487

DMS 8/29/06

Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 116770
 Date Started: 24-AUG-2006
 Batched by : Stephanie Jim

Analysis : TDS
 Bgroup : N/A
 Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
188818-001		Arcadis G&M	Water	TDS	29-AUG-2006
188837-005		Treadwell & Rollo	Water	TDS	30-AUG-2006
188837-008		Treadwell & Rollo	Water	TDS	30-AUG-2006
188837-009		Treadwell & Rollo	Water	TDS	30-AUG-2006
188837-010		Treadwell & Rollo	Water	TDS	30-AUG-2006
188837-012		Treadwell & Rollo	Water	TDS	30-AUG-2006
188842-001		Stellar Environmen	Water	TDS	24-AUG-2006
188869-001		Treadwell & Rollo	Water	TDS	31-AUG-2006
188872-009		ERS Corp.	Water	TDS	01-SEP-2006
188872-010		ERS Corp.	Water	TDS	01-SEP-2006
188887-001		Arcadis G&M	Water	TDS	01-SEP-2006
188908-001		Acme Fill Corp.	Water	TDS	05-SEP-2006
188917-001		URS Corporation	Water	TDS	29-AUG-2006
188917-002		URS Corporation	Water	TDS	29-AUG-2006
188917-003		URS Corporation	Water	TDS	29-AUG-2006
188921-001		ERS Corp.	Water	TDS	05-SEP-2006
QC353379	BLANK		Water	TDS	
QC353380	LCS		Water	TDS	
QC353381	SDUP	of 188837-009	Water	TDS	
QC353382	SDUP	of 188908-001	Water	TDS	

NDMA



NARRATIVE REPORT
Method 1625M Semivolatiles

Curtis & Tompkins
2323 Fifth Street
Berkeley, CA 94710

08/30/06

Attn: Steve Stanley

PA Reference: 2711

Samples: DW081706B, NKGW01, NKGW02, NKGW05

Semivolatiles analysis:

The samples were extracted and analyzed by Method 1625C, modified for the lowest possible detection limits. A 10 gram aliquot was spiked with 0.1 ug of N-Nitrosodimethylamine-d6 and extracted by sonication. The sample extract was concentrated to a final volume of 1.0 mL and spiked with 0.1 ug of 2,2'-Difluorobiphenyl as an internal recovery standard. The extracts were analyzed by GC/MS with the mass spectrometer operating in the "Specific Ion Mode" for greater sensitivity and lower detection limits. The instrument was calibrated with five initial calibration standards ranging from 0.02 ug/mL to 1.00 ug/mL.

On-going Precision and Recovery

A laboratory blank (P&R) was spiked with 0.02 ug of NNDMA and 0.1 ug of its labeled analog, and extracted and analyzed like a sample for each extraction batch. Recoveries for NNDMA and its Label are within the method specified recovery limits for the P&R's associated with the samples.

Laboratory Blank

A laboratory blank was extracted and analyzed like the sample with each extraction batch. Laboratory blank 11714 contains NNDMA at a concentration of 0.0006 ug/L. The other laboratory blank associated with the samples has no NNDMA detected.

Samples

Sample DW081706A has NNDMA detected at a concentration of 0.0121 ug/L.

Please contact Steve Parsons at (760) 496-2200 if there are any questions concerning this data package.

Chris Burbach
GC/MS Supervisor

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510) 486-0900
(510) 486-0532

LEVEL III

Project Number: 188837
Site: Presidio

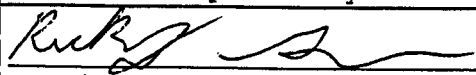
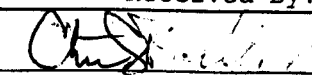
Subcontract Laboratory:
Pacific Analytical, Inc.
6056 Corte del Cedro
Carlsbad, CA 92009
(760) 496-2200
ATTN: Steve Parson

Results due: Report Level: III

Please send report to: Steve Stanley

*** Please report using Sample ID rather than C&T Lab #.

Sample ID	Sampled	Matrix	Analysis	C&T Lab #	Comments
DW081706A	08/17 15:00	Water	NDMA	188837-012	
NKGW01	08/17 12:54	Water	NDMA	188837-017	
GW02	08/17 11:33	Water	NDMA	188837-018	-
GW05	08/17 12:12	Water	NDMA	188837-019	

Notes:	Relinquished By:	Received By:
		
	Date/Time: 8/21/06 11:00	Date/Time: 8/22/06 0800

Signature on this form constitutes a firm Purchase Order for the services requested above.

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DW081706A

Lab Name: PACIFIC ANALYTICAL, INC.

Matrix: WATER

Sample wt/vol: 1000.000 ml

Concentrated Extract Volume: 100 ul

Injection Volume: 1 ul

Lab Sample ID: 2711-001

Lab File ID: 11H2919

Date Sampled: 08/17/06

Date Extracted: 08/22/06

Date Analyzed: 08/29/06

Time Analyzed: 2207

Compound	Sample Conc ug/L	PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0121	0.0020	45 %

U = Undetected J = Estimated Concentration B = Found in Blank

D = Dilution Results E = Result Exceeds Calibration Curve

na = Compound has no corresponding labeled reference

PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

NKGW01

Lab Name: PACIFIC ANALYTICAL, INC.

Matrix: WATER

Sample wt/vol: 1000.000 ml

Concentrated Extract Volume: 100 ul

Injection Volume: 1 ul

Lab Sample ID: 2711-002

Lab File ID: 11H2920

Date Sampled: 08/17/06

Date Extracted: 08/22/06

Date Analyzed: 08/29/06

Time Analyzed: 2249

Compound	Sample Conc ug/L	PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	U	0.0020	43 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

NKGW02

Lab Name: PACIFIC ANALYTICAL, INC.

Matrix: WATER

Sample wt/vol: 1000.000 ml

Concentrated Extract Volume: 100 ul

Injection Volume: 1 ul

Lab Sample ID: 2711-003

Lab File ID: 11H2921

Date Sampled: 08/17/06

Date Extracted: 08/22/06

Date Analyzed: 08/29/06

Time Analyzed: 2330

Compound	Sample Conc ug/L	PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	U	0.0020	35 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

NKGW05

Lab Name: PACIFIC ANALYTICAL, INC.

Matrix: WATER

Sample wt/vol: 1000.000 ml

Concentrated Extract Volume: 100 ul

Injection Volume: 1 ul

Lab Sample ID: 2711-004

Lab File ID: 11H2922

Date Sampled: 08/17/06

Date Extracted: 08/22/06

Date Analyzed: 08/30/06

Time Analyzed: 0012

Compound	Sample Conc ug/L	PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	U	0.0020	37 %

U = Undetected J = Estimated Concentration B = Found in Blank

D = Dilution Results E = Result Exceeds Calibration Curve

na = Compound has no corresponding labeled reference

PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B11713

Lab Name: PACIFIC ANALYTICAL, INC.

Matrix: WATER

Sample wt/vol: 1000.000 ml

Concentrated Extract Volume: 100 ul

Injection Volume: 1 ul

Lab Sample ID: 11713

Lab File ID: 11H2913

Date Sampled:

Date Extracted: 08/22/06

Date Analyzed: 08/29/06

Time Analyzed: 1757

Compound	Sample Conc ug/L	PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	U	0.0020	46 %

U = Undetected J = Estimated Concentration B = Found in Blank

D = Dilution Results E = Result Exceeds Calibration Curve

na = Compound has no corresponding labeled reference

PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B11714

Lab Name: PACIFIC ANALYTICAL, INC.

Matrix: WATER

Sample wt/vol: 1000.000 ml

Concentrated Extract Volume: 100 ul

Injection Volume: 1 ul

Lab Sample ID: 11714

Lab File ID: 11H2914

Date Sampled:

Date Extracted: 08/22/06

Date Analyzed: 08/29/06

Time Analyzed: 1839

Compound	Sample Conc ug/L		PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0006	J	0.0020	62 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

P&R Q01

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: 1000.000 ml
Concentrated Extract Volume: 100 ul
Injection Volume: 1 ul

Lab Sample ID: P&R Q01
Lab File ID: 11H2911
Date Sampled:
Date Extracted: 08/22/06
Date Analyzed: 08/29/06
Time Analyzed: 1634

Compound	Sample Conc ug/L	Spike Amt. ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0019 J	0.0020	48 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

P&R Q01DUP

Lab Name: PACIFIC ANALYTICAL, INC.

Matrix: WATER

Sample wt/vol: 1000.000 ml

Concentrated Extract Volume: 100 ul

Injection Volume: 1 ul

Lab Sample ID: P&R Q01DUP

Lab File ID: 11H2912

Date Sampled:

Date Extracted: 08/22/07

Date Analyzed: 08/29/06

Time Analyzed: 1716

Compound	Sample Conc ug/L	Spike Amt. ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0023	0.0020	58 %

U = Undetected J = Estimated Concentration B = Found in Blank

D = Dilution Results E = Result Exceeds Calibration Curve

na = Compound has no corresponding labeled reference

PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

0.10 PPM 2N SRC

Lab Name: PACIFIC ANALYTICAL, INC.

Matrix: WATER

Sample wt/vol: NA

Concentrated Extract Volume: NA

Injection Volume: 1 ul

Lab Sample ID: NSTD0.10

Lab File ID: 11H2923

Date Sampled:

Date Extracted:

Date Analyzed: 08/30/06

Time Analyzed: 0054

Compound	Daily Conc ug/mL	Daily Spike ug/mL	Recovery
N-Nitrosodimethylamine	0.1015	0.1000	103 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

METHOD 1625 ISOTOPE DILUTION
LABELED COMPOUNDS

Lab Name: PACIFIC ANALYTICAL

Instr. ID: VG11

Cal. Date: 08/29/06

LAB FILE IDs: Conc1 = 11H2905
 Conc2 = 11H2906
 Conc3 = 11H2907
 Conc4 = 11H2908
 Conc5 = 11H2909

COMPOUND	RF	RF	RF	RF	RF	RF	% RSD
	Conc1	Conc2	Conc3	Conc4	Conc5	MEAN	
N-Nitrosodimethylamine-d6	0.195	0.183	0.184	0.185	0.194	0.188	3.1
=====							

METHOD 1625 ISOTOPE DILUTION
COMPOUNDS HAVING A LABELED REFERENCE

Lab Name: PACIFIC ANALYTICAL

Instr. ID: VG11

Cal. Date: 08/29/06

LAB FILE IDs: Conc1 = 11H2905
 Conc2 = 11H2906
 Conc3 = 11H2907
 Conc4 = 11H2908
 Conc5 = 11H2909

COMPOUND	RX	RR Conc1	RR Conc2	RR Conc3	RR Conc4	RR Conc5
----------	----	-------------	-------------	-------------	-------------	-------------

N-Nitrosodimethylami	999999	0.191	0.430	0.773	4.168	7.816
----------------------	--------	-------	-------	-------	-------	-------

=====

CONCENTRATIONS OF CALIBRATION STANDARDS

Compound	Ical Type	Resp Ref	Calibration Standards				
			Conc1 ug/L	Conc2 ug/L	Conc3 ug/L	Conc4 ug/L	Conc5 ug/L
1 2,2'-Difluorobiphenyl	I	1	0.10	0.10	0.10	0.10	0.10
2 N-Nitrosodimethylamine	L	1	0.10	0.10	0.10	0.10	0.10
3 N-Nitrosodimethylamine	U	2	0.02	0.05	0.10	0.50	1.00

=====

I = internal standard; L = labeled compound; U = unlabeled native
 O = compound referenced to internal standard

GC/MS SEMI-VOLATILES
RUN LOGInstrument: 1611Page: 857Cal File: 11H29Date: 8/24/06

Notes:

SIM SEC Curtis 170mpkms WDMA
 5.0 100 SFI SFZ Q1 QH QIC QIK OCH
 10 100 50 5.0 3.0 0.5 750

Inj port = 200°C
 purge = 0.75 min

10°C H₂ 25 min 5°C/min to 280°C hold 1 min

SIR

Taped	Sample ID	File Name	OK	Description	OP
		11H2901		Warm-up	03
		02			
		03			
		04			
	INST00.02	05		0.02 µl/ml WDMA STD	
	INST00.05	06		0.05	
	INST00.10	07		0.10	
	INST00.50	08		0.50	
	INST1.00	09		1.00	
	INST5.00	10		5.00	
	PRRQ 01	11		OPR	
	PRRQ 01dup	12			
	11713	13		Lab Blank	
	11714	14			
	11715	15			
	2706-001	16			
	2706-002	17			
	2710-001	18			
	2711-001	19			
	2711-002	20			
	2711-003	21			
	2711-004	22			
	INST00.10	23		0.10 µl/ml WDMA 2nd Src	
		24			
		25	504		

90/22/8

Client: CSF

Extraction Method: ML/625

Wunder

MI' NEOUS

NEOUS

Job # 27062702711

Extraction Solvent:

QCM

Lot #: 46150 Initials: _____

Initials: de

Matrix:

As

1. Surrogate Spike

2. Matrix Spike

8. Internal Stdrd.

	Label:	Date Made:			Concentration:	Volume added:	Date Spiked:	Initials:	Comments:
1. Surrogate Spike	NDMA, 14-Dioxin-labils	8/17/06	0.02mg/L	500µL	5/22/06				
2. Matrix Spike	NDMA, 14-Dioxin-native	6/6/06	0.02-0.10mg/L	100µL					
3. Internal Standard	NDMA-15	08/29/06	1mg/mL	10µL	08/29/06	VADP			
Sample #:	Sample Size: Extracted:	% Moisture Solids:	Extraction pH	Standards (check) 1 2 3	Initial Extract Volume: A	Aliquot Removed for Prep: B	Volume After Prep: C	Calculated Final Volume: A/B x C =	Comments: (Cleanup Methods used and Information concerning unusual sample and extract behavior)
B11713	1000µg	<1%	6-7	X	100µL	100µL	IDEAL	100µL	
B11714	/	/	/		/	/	/	/	
B11715	/	/	/		/	/	/	/	
P-RG01	/	/	/		/	/	/	/	
+ dup	/	/	/		/	/	/	/	
2706-01	/	/	/		/	/	/	/	
+ 02	/	/	/		/	/	/	/	
2710-01	/	/	/		/	/	/	/	
2711-01	/	/	/		/	/	/	/	
+ 02	/	/	/		/	/	/	/	
+ 03	/	/	/		/	/	/	/	
+ 04	/	/	/		/	/	/	/	mAY HAVE X2 SPIKED IS WH

on 1530

QA Review:

2711 Curtis & Tompkins, 4 X NDMA (TAT: 30)

Lab ID	NDMA
2711-001	P
2711-002	P
2711-003	P
2711-004	P

Lab ID	Cust ID	Sampled	Rec'd	Login ID
2711-001	DW081706A	08/17/06	08/22/06	01850
2711-002	NKGW01	08/17/06	08/22/06	01850
2711-003	NKGW02	08/17/06	08/22/06	01850
2711-004	NKGW05	08/17/06	08/22/06	01850

Lab ID	Description	Comment
2711-001	2 X AL	OK
2711-002	2 X AL	OK
2711-003	2 X AL	OK
2711-004	2 X AL	OK

Login	Loggin by	Shipper	Shipper Code	CofC
01850	Chris J. Burbach	California Overnight	C10129000030306	OK

SAMPLE LOG-IN SHEET -- Initial

JOB # 2711	LOG-IN DATE 8/22/06	Received By (print name): Chris Burbach	Received By (signature): <i>Chris Burbach</i>
---------------	------------------------	--	--

CLIENT Curtiss Tapkins	# of Coolers: 1	TEMP: 3°C		ANALYSIS	# of Containers	CONTAINER TYPE	Matrix Code (see table below)	CONDITION
		LAB ID #	SAMPLE #					
Received From Cal Overnigh		2711-001	DW080706A	NMA	2	AL	WW	OK
Custody seals Present Intact		2711-002	NK6W01					
Custody Seal #'s		2711-003	NK6W02					
Airbill Present		2711-004	NK6W05					
Airbill # C80129000030306								
Date Rec'd 8/22/06								
Time Rec'd 0800								
Chain of Custody or Traffic Reports								
Sample Label Present								
Sample ID #'s Not Listed								
Sample Condition Intact								
Does information on Custody records, reports and sample tags agree?								

* COMMENTS

Matrix Codes: DW = Drinking Water WW = Wastewater S = Soil SL = Sludge O = Other
 Container Types: AL = Amber Liter VOA = 40 mL vial SJ = Solid jar BT = Brass Tube OTC = Other Type Container



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Number 188869

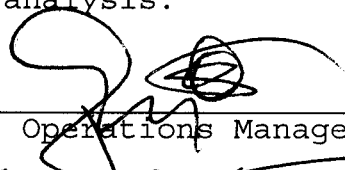
Treadwell & Rollo
555 Montgomery Street
San Francisco, CA 94111

Project#: 2893.04.51
Location: Presidio

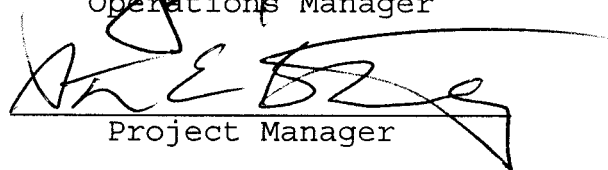
Sample ID
DW082106B

Lab ID
188869-001

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis.

Signature: 
Operations Manager

Date: 9/25/06

Signature: 
Project Manager

Date: 9/24/06

CASE NARRATIVE

Laboratory number: 188869
Client: Treadwell & Rollo
Project: 2893.04.51
Location: Presidio
Request Date: 08/21/06
Samples Received: 08/21/06

This hardcopy data package contains sample and QC results for one water sample, requested for the above referenced project on 08/21/06. The sample was received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):
No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):
Responses exceeding the instrument's linear range were observed for diesel C12-C24 in the MS/MSD of 1349MW100 (lab # 188802-001). Low surrogate recovery was observed for hexacosane in the MS of 1349MW100 (lab # 188802-001). No other analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):
No analytical problems were encountered.

Pesticides (EPA 8081A):
High responses were observed for endrin ketone and methoxychlor in the ICV analyzed 08/25/06 22:36 and the ICV analyzed 08/29/06 15:22; average ICV drift met method requirements, and these analytes were not detected at or above the RL in the associated samples. Low responses were observed for many analytes in the CCV analyzed 08/29/06 22:33 and the CCV analyzed 08/30/06 02:05. High responses were observed for many analytes in the CCV analyzed 08/26/06 16:02, the CCV analyzed 08/26/06 20:21, and the CCV analyzed 09/01/06 20:54; average CCV drift met method requirements. Low surrogate recoveries were observed for TCMX in DW082106B (lab # 188869-001) and the method blank for batch 116753; the corresponding decachlorobiphenyl surrogate recoveries were within limits. Low surrogate recovery was observed for decachlorobiphenyl in the LCS for batch 116753; the corresponding TCMX surrogate recovery was within limits. No other analytical problems were encountered.

Polychlorinated Biphenyls (PCBs) (EPA 8082):
No analytical problems were encountered.

Polynuclear Aromatics by HPLC (EPA 8310):
Low recoveries were observed for benzo(a)pyrene, naphthalene, and pyrene in the MS/MSD of 1349MW100 (lab # 188802-001); the LCS was within limits. High recovery was observed for pyrene in the MSD of 1349MW100 (lab # 188802-001); the LCS was within limits, and this analyte was not detected at or above the RL in the associated sample. High RPD was also observed for pyrene in the

CASE NARRATIVE

Laboratory number: 188869
Client: Treadwell & Rollo
Project: 2893.04.51
Location: Presidio
Request Date: 08/21/06
Samples Received: 08/21/06

Polynuclear Aromatics by HPLC (EPA 8310):

MS/MSD of 1349MW100 (lab # 188802-001); this analyte was not detected at or above the RL in the associated sample. Response exceeding the instrument's linear range was observed for fluorene in the MS of 1349MW100 (lab # 188802-001). High surrogate recoveries were observed for 1-methylnaphthalene (UV) in the MS/MSD of 1349MW100 (lab # 188802-001). High surrogate recovery was observed for 1-methylnaphthalene (F) in the MSD of 1349MW100 (lab # 188802-001). No other analytical problems were encountered.

Metals (EPA 6020 and EPA 7470A):

High responses were observed for aluminum, beryllium, and magnesium in the CCV analyzed 08/24/06 20:37 and the CCV analyzed 08/24/06 22:01; these analytes were not detected at or above the RL in the associated samples. High % difference was observed for calcium in the serial dilution of 1065PZ2A (lab # 188837-009); this analyte was not detected at or above the RL in the associated sample. No other analytical problems were encountered.

Ion Chromatography (EPA 300.0):

No analytical problems were encountered.

Alkalinity (EPA 310.1):

No analytical problems were encountered.

Sulfide (EPA 376.2):

Low recoveries were observed for sulfide in the MS/MSD of 1065PZ2A (lab # 188837-009); the LCS was within limits, and the associated RPD was within limits. No other analytical problems were encountered.

Total Dissolved Solids (TDS) (EPA 160.1):

No analytical problems were encountered.

NDMA (EPA 1625):

Pacific Analytical, Inc. in Carlsbad, CA performed the analysis. Please see the Pacific Analytical, Inc. case narrative.

Chain of Custody

Page: / of /

[illegible]

Intact cold R_i

CURTIS & TOMPKINS, LTD. BERKELEY

Reason for change: x Client Request By: J.Graber 8/23/06 10:36 Initials: SES
Login Review Data Review

[illegible]

Steven Stanley

From: "Joshua Graber" <jdgraber@treadwellrollo.com>
To: "Steven Stanley" <steve@ctberk.com>
Sent: Monday, August 21, 2006 12:38 PM
Subject: DW Samples

Hey Steve,

Please cancel the dissolved metals analyses associated with both DW samples. I don't think they filtered either.

Thanks.

Joshua D. Graber
Senior Project Manager / Scientist
Treadwell & Rollo, Inc.
Environmental & Geotechnical Consultants
555 Montgomery, Suite 1300
San Francisco, CA 94111
office (415) 955-9040
fax (415) 955-9041
mobile (415) 254-8774
<http://www.treadwellrollo.com/>

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SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 1 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd



Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 188869 Date Received: 8-21-06 Number of Coolers: 1
Client: Treadwell + Rollo Project: Presidio

A. Preliminary Examination Phase

Date Opened: 8-21-06 By (print): Troy Windsor (sign) Troy Windsor

1. Did cooler come with a shipping slip (airbill, etc.)?..... YES ☒ NO

If YES, enter carrier name and airbill number: _____

2. Were custody seals on outside of cooler?..... YES ☒ NO

How many and where? _____ Seal date: _____ Seal name: _____

3. Were custody seals unbroken and intact at the date and time of arrival?..... YES ☒ NO

4. Were custody papers dry and intact when received?..... YES ☒ NO

5. Were custody papers filled out properly (ink, signed, etc.)?..... YES ☒ NO

6. Did you sign the custody papers in the appropriate place?..... YES ☒ NO

7. Was project identifiable from custody papers?..... YES ☒ NO

If YES, enter project name at the top of this form.

8. If required, was sufficient ice used? Samples should be 2-6 degrees C. YES ☒ NO

Type of ice: Wet Temperature: Cold - no temp blank

B. Login Phase

Date Logged In: 8-21-06 By (print): Troy Windsor (sign) Troy Windsor

1. Describe type of packing in cooler: In ziploc type bags

2. Did all bottles arrive unbroken?..... YES ☒ NO

3. Were labels in good condition and complete (ID, date, time, signature, etc.)?..... YES ☒ NO

4. Did bottle labels agree with custody papers?..... YES ☒ NO

5. Were appropriate containers used for the tests indicated?..... YES ☒ NO

6. Were correct preservatives added to samples?..... YES ☒ NO

7. Was sufficient amount of sample sent for tests indicated?..... YES ☒ NO

8. Were bubbles absent in VOA samples? If NO, list sample Ids below..... YES ☒ NO

9. Was the client contacted concerning this sample delivery?..... YES ☒ NO

If YES, give details below.

Who was called? _____ By whom? _____ Date: _____

Additional Comments:

TOTAL VOLATILE HYDROCARBONS/

BTXE

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	DW082106B	Batch#:	116587
Lab ID:	188869-001	Sampled:	08/21/06
Matrix:	Water	Received:	08/21/06
Units:	ug/L	Analyzed:	08/21/06
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
Stoddard Solvent C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	93	65-135	EPA 8015B
Bromofluorobenzene (FID)	96	65-135	EPA 8015B
Trifluorotoluene (PID)	96	65-135	EPA 8021B
Bromofluorobenzene (PID)	104	65-135	EPA 8021B

ND= Not Detected

RL= Reporting Limit



Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Type:	BLANK	Units:	ug/L
Lab ID:	QC352636	Diln Fac:	1.000
Matrix:	Water	Batch#:	116587

Analyte	Result	RL	Analyzed	Analysis
Gasoline C7-C12	ND	50	08/21/06	EPA 8015B
Stoddard Solvent C7-C12	ND	50	08/22/06	EPA 8015B
MTBE	ND	2.0	08/21/06	EPA 8021B
Benzene	ND	0.50	08/21/06	EPA 8021B
Toluene	ND	0.50	08/21/06	EPA 8021B
Ethylbenzene	ND	0.50	08/21/06	EPA 8021B
Xylene (total)	ND	1.0		EPA 8021B

Surrogate	%REC	Limits	Analyzed	Analysis
Trifluorotoluene (FID)	86	65-135	08/21/06	EPA 8015B
Bromofluorobenzene (FID)	92	65-135	08/21/06	EPA 8015B
Trifluorotoluene (PID)	91	65-135	08/21/06	EPA 8021B
Bromofluorobenzene (PID)	94	65-135	08/21/06	EPA 8021B



Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC352637	Batch#:	116587
Matrix:	Water	Analyzed:	08/21/06
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	21.96	110	65-135
Benzene	20.00	20.23	101	65-135
Toluene	20.00	20.11	101	65-135
Ethylbenzene	20.00	20.90	105	65-135

Surrogate	%REC	Limits
Trifluorotoluene (PID)	92	65-135
Bromofluorobenzene (PID)	92	65-135



Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC352638	Batch#:	116587
Matrix:	Water	Analyzed:	08/21/06
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	2,005	100	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	107	65-135
Bromofluorobenzene (FID)	106	65-135



Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	610SP01	Batch#:	116587
MSS Lab ID:	188837-005	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Analyzed:	08/21/06
Diln Fac:	1.000		

Type: MS Lab ID: QC352674

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	40.35	2,000	1,811	89	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	108	65-135
Bromofluorobenzene (FID)	112	65-135

Type: MSD Lab ID: QC352675

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,775	87	65-135	2	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	108	65-135
Bromofluorobenzene (FID)	112	65-135

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188869 GCVOA Water: EPA 8015B

Inst : GC05
 Calnum : 315421005001
 Units : ng

Name : stoddard 1pt
 Date : 19-OCT-2005 09:49
 X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	292_003	315421005003	stodd	19-OCT-2005 09:49	S736 (1000X), S1421 (5000X)

Analyte	Ch	LI	Type	a0	a1	a2	Avg	r ² %RSD	Mmr ²	MKRSD	Fig
Stoddard Solvent C7-C12	G	1843.8	AVRG		5.42E-4		1843.8	0	0.995	20	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188869 GCVOA Water: EPA 8015B

Inst : GC05
Calnum : 316199245001
Units : ng

Name : GAS
Date : 18-MAY-2006 16:47
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Std
L1	138_006	316199245006	lvh 1	18-MAY-2006 16:47	S3460 (1000X), S3248 (5000X)
L2	138_007	316199245007	lvh 2	18-MAY-2006 17:19	S3459 (1000X), S3248 (5000X)
L3	138_008	316199245008	lvh 3	18-MAY-2006 17:51	S3458 (1000X), S3248 (5000X)
L4	138_009	316199245009	lvh 4	18-MAY-2006 18:23	S3457 (2000X), S3248 (5000X)
L5	138_010	316199245010	lvh 5	18-MAY-2006 18:55	S3457 (1000X), S3248 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ²	MnR ²	MxRSD	Flg
Gasoline C7-C12	G	1168.4	1143.2	1104.8	1017.7	1031.8	AVRG		9.15E-4		1093.2	6	0.995	20	

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor
Page 1 of 1

316199245001

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188869 GCVOA Water: EPA 8015B / EPA 8021B

Inst : GC05
Calnum : 316256980001
Units : ng

Name : TFT/BFB
Date : 27-JUN-2006 11:32
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	stds
L1	178_002	316256980002	TFT/BFB 1 27-JUN-2006	11:32	S3289 (5000X)
L2	178_003	316256980003	TFT/BFB 2 27-JUN-2006	12:15	S3290 (5000X)
L3	178_004	316256980004	TFT/BFB 3 27-JUN-2006	12:48	S3291 (5000X)
L4	178_005	316256980005	TFT/BFB 4 27-JUN-2006	13:20	S3292 (5000X)
L5	178_006	316256980006	TFT/BFB 5 27-JUN-2006	14:00	S3293 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ² %RSD	Mmr ²	MxRSD	Flg
Trifluorotoluene (FID)	G	1196.5	1050.6	1047.7	1080.5	1028.7	AVRG		9.25E-4		1080.8	6	0.995	20	
Bromofluorobenzene (FID)	G	715.53	622.35	643.36	685.08	654.33	AVRG		0.00151		664.13	6	0.995	20	
Trifluorotoluene (PID)	H	428.47	388.60	416.82	454.90	440.54	AVRG		0.00235		425.87	6	0.995	20	
Bromofluorobenzene (PID)	H	826.27	773.56	859.00	931.80	902.86	AVRG		0.00116		858.70	7	0.995	20	
Trifluorotoluene (PID)	I	389.06	351.31	377.77	409.07	403.16	AVRG		0.00259		386.07	6	0.995	20	
Bromofluorobenzene (PID)	I	808.06	758.25	827.88	934.38	905.97	AVRG		0.00118		846.91	9	0.995	20	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188869 GCV0A Water: EPA 8021B

Inst : GC05
 Calnum : 316256980002
 Units : ng

Name : MBTXE
 Date : 27-JUN-2006 16:28
 X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Std
L1	178_009	316256980009	BTXE 1	27-JUN-2006 16:28	S3735 (1000X), S3248 (5000X)
L2	178_010	316256980010	MTBE 1	27-JUN-2006 17:00	S3734 (1250X), S3248 (5000X)
L3	178_011	316256980011	BTXE 2	27-JUN-2006 17:32	S3734 (500X), S3248 (5000X)
L4	178_012	316256980012	BTXE 3	27-JUN-2006 18:04	S3734 (125X), S3248 (5000X)
L5	178_013	316256980013	BTXE 4	27-JUN-2006 18:36	S3733 (1000X), S3248 (5000X)
L6	178_014	316256980014	BTXE 5	27-JUN-2006 19:08	S3733 (500X), S3248 (5000X)
L7	178_015	316256980015	BTXE 6	27-JUN-2006 19:40	S3733 (250X), S3248 (5000X)
L8	178_016	316256980016	MBTXE 7	27-JUN-2006 20:12	S3732 (500X), S3248 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Type	a0	a1	a2	Avg	r ²	MNR ²	MxRSD	Flg
MTBE	H		560.00	564.60	549.20	648.24	656.83	625.10	603.21	AVRG		0.00166		601.03	7	0.995	20	
Benzene	H	1644.0		1532.6	1540.3	1729.3	1759.0	1690.0		AVRG		6.06E-4		1649.2	6	0.995	20	
Toluene	H	1536.0		1553.2	1518.4	1663.8	1681.2	1582.5		AVRG		6.29E-4		1589.2	4	0.995	20	
Ethylbenzene	H	1184.0		1286.0	1308.1	1478.3	1511.0	1414.6		AVRG		7.33E-4		1363.7	9	0.995	20	
m,p-Xylenes	H	1520.0		1563.6	1546.9	1744.1	1743.2	1615.3		AVRG		6.16E-4		1622.2	6	0.995	20	
o-Xylene	H	1273.9		1321.2	1302.8	1445.8	1453.5	1354.3		AVRG		7.36E-4		1358.6	6	0.995	20	
MTBE	I		476.45	453.49	444.88	596.37	647.83	659.37	672.40	AVRG		0.00177		564.40	18	0.995	20	
Benzene	I	1389.0		1312.1	1383.2	1770.1	1882.0	1898.0		AVRG		6.29E-4		1589.1	18	0.995	20	
Toluene	I	1888.0		1184.7	1232.1	1680.9	1802.3	1780.7		AVRG		6.27E-4		1594.8	19	0.995	20	
Ethylbenzene	I	1519.8		1024.4	1142.4	1514.8	1639.4	1619.3		AVRG		7.09E-4		1410.0	18	0.995	20	
m,p-Xylenes	I	1360.1		1208.5	1338.5	1759.4	1907.0	1886.4		AVRG		6.34E-4		1576.7	20	0.995	20	
o-Xylene	I	1497.0		1024.6	1082.5	1478.8	1596.4	1590.2		AVRG		7.26E-4		1378.2	19	0.995	20	

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188869 GCVOA Water
EPA 8015B

Inst : GC05
Calnum : 316199245001

Name : GAS
Cal Date: 18-MAY-2006

ICV 316199245014 (138_014 18-MAY-2006) stds: S3323 (1000X), S3248 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Gasoline C7-C12	G	1093.2	1144.6	10000	10470	ng	5	

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188869 GCVOA Water
EPA 8021B

Inst : GC05
Calnum : 316256980002

Name : MBTXE
Cal Date: 27-JUN-2006

ICV 316256980019 (178_019 27-JUN-2006) stds: S3079 (1000X), S3248 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
MTBE	H	601.03	551.90	100.0	91.83	ng	-8	15	
Benzene	H	1649.2	1657.6	100.0	100.5	ng	1	15	
Toluene	H	1589.2	1640.1	100.0	103.2	ng	3	15	
Ethylbenzene	H	1363.7	1396.6	100.0	102.4	ng	2	15	
m,p-Xylenes	H	1622.2	1736.9	200.0	214.1	ng	7	15	
o-Xylene	H	1358.6	1419.3	100.0	104.5	ng	4	15	
MTBE	I	564.40	507.26	100.0	89.88	ng	-10	15	
Benzene	I	1589.1	1656.4	100.0	104.2	ng	4	15	
Toluene	I	1594.8	1536.9	100.0	96.37	ng	-4	15	
Ethylbenzene	I	1410.0	1327.0	100.0	94.11	ng	-6	15	
m,p-Xylenes	I	1576.7	1644.5	200.0	208.6	ng	4	15	
o-Xylene	I	1378.2	1243.6	100.0	90.23	ng	-10	15	

CURTIS & TOMPKINS SPIKE USER REPORT FOR 188869 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name: QC352637 IDF : 1.0
 Seqnum : 316336234001.3 File : 233_001 Time : 21-AUG-2006 11:54
 Standards: S4123 (1000X), S3969 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
MTBE	H	316256980002	27-JUN-2006	659.80	100.0	110	ng	10	15	u
MTBE	I	316256980002	27-JUN-2006	537.66	100.0	95	ng	-5	15	
Benzene	H	316256980002	27-JUN-2006	1668.3	100.0	100	ng	1	15	u
Benzene	I	316256980002	27-JUN-2006	1449.8	100.0	91	ng	-9	15	
Toluene	H	316256980002	27-JUN-2006	1597.6	100.0	100	ng	1	15	u
Toluene	I	316256980002	27-JUN-2006	1334.8	100.0	84	ng	-16	15	c- ***★
Ethylbenzene	H	316256980002	27-JUN-2006	1425.3	100.0	100	ng	5	15	u
Ethylbenzene	I	316256980002	27-JUN-2006	1191.8	100.0	85	ng	-15	15	
m,p-Xylenes	H	316256980002	27-JUN-2006	1864.4	100.0	110	ng	15	15	u
m,p-Xylenes	I	316256980002	27-JUN-2006	1618.5	100.0	100	ng	3	15	
o-Xylene	H	316256980002	27-JUN-2006	1406.5	100.0	100	ng	4	15	u
o-Xylene	I	316256980002	27-JUN-2006	1191.2	100.0	86	ng	-14	15	
Trifluorotoluene (FID)	G	316256980001	27-JUN-2006	916.57	450.0	380	ng	-15	15	
Bromofluorobenzene (FID)	G	316256980001	27-JUN-2006	589.52	450.0	400	ng	-11	15	
Trifluorotoluene (PID)	H	316256980001	27-JUN-2006	390.09	450.0	410	ng	-8	15	u
Trifluorotoluene (PID)	I	316256980001	27-JUN-2006	309.71	450.0	360	ng	-20	15	c facs
Bromofluorobenzene (PID)	H	316256980001	27-JUN-2006	792.83	450.0	420	ng	-8	15	u
Bromofluorobenzene (PID)	I	316256980001	27-JUN-2006	718.41	450.0	380	ng	-15	15	

★Toluene FID conf. samples
 ND for analyte w/in this
 ccv bracket. norm g/2206

CURTIS & TOMPKINS SPIKE USER REPORT FOR 188869 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name: QC352638 IDF : 1.0
 Seqnum : 316336234002.3 File : 233_002 Time : 21-AUG-2006 12:26
 Standards: S3982 (1000X), S3969 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	G	316199245001	18-MAY-2006	1095.8	10000	10000	ng	0	15	u
Trifluorotoluene (FID)	G	316256980001	27-JUN-2006	1158.7	450.0	480	ng	7	15	u
Bromofluorobenzene (FID)	G	316256980001	27-JUN-2006	703.57	450.0	480	ng	6	15	u
Trifluorotoluene (PID)	H	316256980001	27-JUN-2006	439.45	450.0	460	ng	3	15	
Trifluorotoluene (PID)	I	316256980001	27-JUN-2006	395.37	450.0	460	ng	2	15	
Bromofluorobenzene (PID)	H	316256980001	27-JUN-2006	848.16	450.0	440	ng	-1	15	
Bromofluorobenzene (PID)	I	316256980001	27-JUN-2006	830.12	450.0	440	ng	-2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188869 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name: TVH IDF : 1.0
 Seqnum : 316336234008 File : 233_008 Time : 21-AUG-2006 19:31
 Standards: S3982 (666.7X), S3969 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	G	316199245001	18-MAY-2006	1064.5	15000	14610	ng	-3	15	
Trifluorotoluene (FID)	G	316256980001	27-JUN-2006	1142.6	450.0	475.7	ng	6	15	
Bromofluorobenzene (FID)	G	316256980001	27-JUN-2006	739.77	450.0	501.3	ng	11	15	
Trifluorotoluene (PID)	H	316256980001	27-JUN-2006	514.53	450.0	543.7	ng	21	15	c N/A
Bromofluorobenzene (PID)	H	316256980001	27-JUN-2006	855.79	450.0	448.5	ng	0	15	
Trifluorotoluene (PID)	I	316256980001	27-JUN-2006	419.69	450.0	489.2	ng	9	15	
Bromofluorobenzene (PID)	I	316256980001	27-JUN-2006	840.12	450.0	446.4	ng	-1	15	✓

MSM 8/22/06

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188869 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name: STODD IDF : 1.0
Seqnum : 316336234009 File : 233_009 Time : 21-AUG-2006 20:03
Standards: S3641 (1000X), S3969 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Stoddard Solvent C7-C12	G	315421005001	19-OCT-2005	1711.7	10000	9284	ng	-7	15	
Trifluorotoluene (FID)	G	316256980001	27-JUN-2006	950.08	450.0	395.6	ng	-12	15	
Bromofluorobenzene (FID)	G	316256980001	27-JUN-2006	1030.0	450.0	697.9	ng	55	15	c+ *
Trifluorotoluene (PID)	H	316256980001	27-JUN-2006	395.69	450.0	418.1	ng	-7	15	
Bromofluorobenzene (PID)	H	316256980001	27-JUN-2006	1002.0	450.0	525.1	ng	17	15	c+ N/A
Trifluorotoluene (PID)	I	316256980001	27-JUN-2006	325.27	450.0	379.1	ng	-16	15	c-
Bromofluorobenzene (PID)	I	316256980001	27-JUN-2006	1185.7	450.0	630.0	ng	40	15	c+ ↓

*BFB(FID) F↑ due to
coelution w/ standard
MFM 8/22/06

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188869 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name: MBTXE IDF : 1.0
Seqnum : 316336234010 File : 233_010 Time : 21-AUG-2006 21:04
Standards: S4123 (666.7X), S3969 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	G	316256980001	27-JUN-2006	1009.2	450.0	420.2	ng	-7	15	
Bromofluorobenzene (FID)	G	316256980001	27-JUN-2006	646.85	450.0	438.3	ng	-3	15	
MTBE	H	316256980002	27-JUN-2006	592.00	150.0	147.7	ng	-2	15	
Benzene	H	316256980002	27-JUN-2006	1578.9	150.0	143.6	ng	-4	15	
Toluene	H	316256980002	27-JUN-2006	1529.8	150.0	144.4	ng	-4	15	
Ethylbenzene	H	316256980002	27-JUN-2006	1374.1	150.0	151.1	ng	1	15	
m,p-Xylenes	H	316256980002	27-JUN-2006	1811.5	150.0	167.5	ng	12	15	
o-Xylene	H	316256980002	27-JUN-2006	1375.3	150.0	151.8	ng	1	15	
Trifluorotoluene (PID)	H	316256980001	27-JUN-2006	408.90	450.0	432.1	ng	-4	15	
Bromofluorobenzene (PID)	H	316256980001	27-JUN-2006	889.22	450.0	466.0	ng	4	15	
MTBE	I	316256980002	27-JUN-2006	516.72	150.0	137.3	ng	-8	15	
Benzene	I	316256980002	27-JUN-2006	1447.3	150.0	136.6	ng	-9	15	
Toluene	I	316256980002	27-JUN-2006	1321.6	150.0	124.3	ng	-17	15	c- ***
Ethylbenzene	I	316256980002	27-JUN-2006	1191.2	150.0	126.7	ng	-16	15	c- ***
m,p-Xylenes	I	316256980002	27-JUN-2006	1586.4	150.0	150.9	ng	1	15	
o-Xylene	I	316256980002	27-JUN-2006	1170.0	150.0	127.3	ng	-15	15	
Trifluorotoluene (PID)	I	316256980001	27-JUN-2006	328.11	450.0	382.4	ng	-15	15	
Bromofluorobenzene (PID)	I	316256980001	27-JUN-2006	818.25	450.0	434.8	ng	-3	15	

★ Toluene/Ethylbenzene F↓
conf. samples w/in ccv bracket
ND for both analytes.
Mon 8/22/06

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188869 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name: MBTXE IDF : 1.0
 Seqnum : 316336234015 File : 233_015 Time : 21-AUG-2006 23:43
 Standards: S4123 (2000X), S3969 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	G	316256980001	27-JUN-2006	1020.3	450.0	424.8	ng	-6	15	
Bromofluorobenzene (FID)	G	316256980001	27-JUN-2006	655.64	450.0	444.2	ng	-1	15	
MTBE	H	316256980002	27-JUN-2006	679.20	50.00	56.50	ng	13	15	
Benzene	H	316256980002	27-JUN-2006	1588.8	50.00	48.17	ng	-4	15	
Toluene	H	316256980002	27-JUN-2006	1592.4	50.00	50.10	ng	0	15	
Ethylbenzene	H	316256980002	27-JUN-2006	1294.6	50.00	47.47	ng	-5	15	
m,p-Xylenes	H	316256980002	27-JUN-2006	1764.3	50.00	54.38	ng	9	15	
o-Xylene	H	316256980002	27-JUN-2006	1401.8	50.00	51.59	ng	3	15	
Trifluorotoluene (PID)	H	316256980001	27-JUN-2006	424.53	450.0	448.6	ng	0	15	
Bromofluorobenzene (PID)	H	316256980001	27-JUN-2006	896.89	450.0	470.0	ng	4	15	
MTBE	I	316256980002	27-JUN-2006	488.57	50.00	43.28	ng	-13	15	
Benzene	I	316256980002	27-JUN-2006	1348.2	50.00	42.42	ng	-15	15	
Toluene	I	316256980002	27-JUN-2006	1221.4	50.00	38.29	ng	-23	15	c- ***
Ethylbenzene	I	316256980002	27-JUN-2006	1073.6	50.00	38.07	ng	-24	15	c- ***
m,p-Xylenes	I	316256980002	27-JUN-2006	1416.6	50.00	44.93	ng	-10	15	
o-Xylene	I	316256980002	27-JUN-2006	1054.4	50.00	38.25	ng	-23	15	c- ***
Trifluorotoluene (PID)	I	316256980001	27-JUN-2006	329.31	450.0	383.8	ng	-15	15	
Bromofluorobenzene (PID)	I	316256980001	27-JUN-2006	816.33	450.0	433.8	ng	-4	15	

★ Toluene, Ethylbenzene, ★ o-xylene
 F↓ conf., samples w/in ccv
 bracket ND for these analytes.
 MSN 8/22/06

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188869 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name: TVH IDF : 1.0
 Segnum : 316336234017 File : 233_017 Time : 22-AUG-2006 00:48
 Standards: S3982 (2000X), S3969 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	G	316199245001	18-MAY-2006	1111.7	5000	5085	ng	2	15	
Trifluorotoluene (FID)	G	316256980001	27-JUN-2006	1160.9	450.0	483.3	ng	7	15	
Bromofluorobenzene (FID)	G	316256980001	27-JUN-2006	714.46	450.0	484.1	ng	8	15	
Trifluorotoluene (PID)	H	316256980001	27-JUN-2006	458.04	450.0	484.0	ng	8	15	
Bromofluorobenzene (PID)	H	316256980001	27-JUN-2006	930.92	450.0	487.8	ng	8	15	
Trifluorotoluene (PID)	I	316256980001	27-JUN-2006	407.13	450.0	474.5	ng	5	15	
Bromofluorobenzene (PID)	I	316256980001	27-JUN-2006	862.68	450.0	458.4	ng	2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188869 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name: STODD IDF : 1.0
Seqnum : 316336234019 File : 233_019 Time : 22-AUG-2006 01:52
Standards: S3641 (1000X), S3969 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Stoddard Solvent C7-C12	G	315421005001	19-OCT-2005	1745.1	10000	9465	ng	-5	15	
Trifluorotoluene (FID)	G	316256980001	27-JUN-2006	915.67	450.0	381.2	ng	-15	15	
Bromofluorobenzene (FID)	G	316256980001	27-JUN-2006	1000.3	450.0	677.8	ng	51	15	c+ *
Trifluorotoluene (PID)	H	316256980001	27-JUN-2006	399.12	450.0	421.7	ng	-6	15	
Bromofluorobenzene (PID)	H	316256980001	27-JUN-2006	992.96	450.0	520.4	ng	16	15	c+ N/A
Trifluorotoluene (PID)	I	316256980001	27-JUN-2006	319.00	450.0	371.8	ng	-17	15	c-
Bromofluorobenzene (PID)	I	316256980001	27-JUN-2006	1166.1	450.0	619.6	ng	38	15	c+ ↓

* BFB (FID) FA due to
coelution w/ standard.
mm 8/22/06

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188869 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC05 Run Name: STODD IDF : 1.0
Seqnum : 316336234023 File : 233_023 Time : 22-AUG-2006 11:35
Standards: S3641 (1000X), S3969 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Stoddard Solvent C7-C12	G	315421005001	19-OCT-2005	1791.6	10000	9717	ng	-3	15	
Trifluorotoluene (FID)	G	316256980001	27-JUN-2006	882.08	450.0	367.3	ng	-18	15	c- PASS
Bromofluorobenzene (FID)	G	316256980001	27-JUN-2006	977.11	450.0	662.1	ng	47	15	c+ *
Trifluorotoluene (PID)	H	316256980001	27-JUN-2006	371.47	450.0	392.5	ng	-13	15	
Bromofluorobenzene (PID)	H	316256980001	27-JUN-2006	978.00	450.0	512.5	ng	14	15	
Trifluorotoluene (PID)	I	316256980001	27-JUN-2006	294.02	450.0	342.7	ng	-24	15	c- N/A
Bromofluorobenzene (PID)	I	316256980001	27-JUN-2006	1335.7	450.0	709.7	ng	58	15	c+ ↓

* BFBC(FID) F↑ due
to coelution w/ standard.
MFM 8/22/06

PROJECT GC05 Sequence Logbook

Notebook No. BK 2341

Continued From Page 1

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SEQUENCE SUMMARY

Curtis & Tompkins Laboratories

Sequence: 316336234 Instrument: GC05 Gas Chromatograph #5 TVH/BTXE Begun: 21-AUG-2006
 Analytical Method: EPA 8015B SOP Version: TVH_BTXE_rv11
 Analytical Method: EPA 8021B SOP Version: TVH_BTXE_rv13

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Std's	Used	>LR
001	233_001	CCV/LCS	QC352637	116587	Water	21-AUG-2006	11:54 1.0	1	5000				1	2 PASS / Used	Toluene F ↓ Conf.
002	233_002	CCV/LCS	QC352638	116587	Water	21-AUG-2006	12:26 1.0		5000				3	2 PASS / Used	
003	233_003	BLANK	QC352636	116587	Water	21-AUG-2006	12:58 1.0	5	5000				2	< 1/2 RL TVH & MBTXE ONLY	
004	233_004	MSS	188837-005	116587	Water	21-AUG-2006	13:34 1.0	5	5000				1,3,2		
005	233_005	MS	QC352674	116587	Water	21-AUG-2006	14:06 1.0		5000				1	3 2 PASS / Used	
006	233_006	MSD	QC352675	116587	Water	21-AUG-2006	14:38 1.0		5000				1	3 2 ↓	
007	233_007	X	MBTXE	116587		21-AUG-2006	18:59 1.0	3	5000				1	2 Not Used	
008	233_008	CCV	TVH	116587		21-AUG-2006	19:31 1.0		5000				3	2 PASS / Used	
009	233_009	CCV	STODD	116587		21-AUG-2006	20:03 1.0		5000				1	4 2	
010	233_010	CCV	MBTXE	116587		21-AUG-2006	21:04 1.0	2	5000				1	2 ↓ Toluene/Ethylbenzene F ↓ Conf.	
011	233_011	X	MBTXE	116587		21-AUG-2006	21:36 1.0	2	5000				1	2 Not Used	
012	233_012	SAMPLE	188867-001	116587	Water	21-AUG-2006	22:08 1.0	3	5000				1,3,2		
013	233_013	SAMPLE	188867-002	116587	Water	21-AUG-2006	22:40 1.0	3	5000				1	2	
014	233_014	SAMPLE	188869-001	116587	Water	21-AUG-2006	23:11 1.0	3	5000				1	2 PASS / Used	Toluene/Ethylbenzene/Benzene Fu Conf.
015	233_015	CCV	MBTXE	116587		22-AUG-2006	00:15 1.0	4	5000				1	2 Not Used	
016	233_016	X	MBTXE	116587		22-AUG-2006	00:48 1.0		5000				3	2 PASS / Used	
017	233_017	CCV	TVH	116587		22-AUG-2006	01:20 1.0		5000				1	2	
018	233_018	CCV	TVH	116587		22-AUG-2006	01:52 1.0		5000				4	2	
019	233_019	CCV	STODD	116587		22-AUG-2006	02:24 1.0	1	5000				4	2 Not Used	
020	233_020	X	STODD												
021	233_021	X	IB										1	2	
022	233_022	BLANK	QC352636	116587	Water	22-AUG-2006	10:32 1.0	6	5000				2	< 1/2 RL STANDARD ONLY	
023	233_023	CCV	STODD	116587		22-AUG-2006	11:04 1.0		5000				4	2 PASS / Used	
						22-AUG-2006	11:35 1.0								

Std's used: 1=S4123 2=S3969 3=S3982 4=S3641

Analyst: *newt* Date: 08/22/2006

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MJM 8/22/06

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Read and Understood By

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Date

SEQUENCE SUMMARY

Curtis & Tompkins Laboratories

Sequence: 316256980 Instrument: GC05

Gas Chromatograph #5 TVH/BTXE

Analytical Method: EPA 8015B

SOP Version: TVH_BTXE_rv11

Analytical Method: EPA 8021B

SOP Version: TVH_BTXE_rv13

Begun: 27-JUN-2006

#	Filename Type	Samplenum	Batch	Matrix Analyzed	IDF	IOC SPK uL	VL pH Stds Used	>LR
001	178_001 X	IB		27-JUN-2006	11:00 1.0		1	
002	178_002 ICAL	TFT/BFB 1		27-JUN-2006	11:32 1.0		2	PASS/USE
003	178_003 ICAL	TFT/BFB 2		27-JUN-2006	12:15 1.0		3	
004	178_004 ICAL	TFT/BFB 3		27-JUN-2006	12:48 1.0		4	
005	178_005 ICAL	TFT/BFB 4		27-JUN-2006	13:20 1.0		5	
006	178_006 ICAL	TFT/BFB 5		27-JUN-2006	14:00 1.0		6	
007	178_007 X	IB		27-JUN-2006	15:24 1.0		1	
008	178_008 X	IB		27-JUN-2006	15:56 1.0		1	
009	178_009 ICAL	BTXE 1		27-JUN-2006	16:28 1.0		7	PASS/USE
010	178_010 ICAL	MTBE 1		27-JUN-2006	17:00 1.0		8	
011	178_011 ICAL	BTXE 2		27-JUN-2006	17:32 1.0		8	
012	178_012 ICAL	BTXE 3		27-JUN-2006	18:04 1.0		8	
013	178_013 ICAL	BTXE 4		27-JUN-2006	18:36 1.0		9	
014	178_014 ICAL	BTXE 5		27-JUN-2006	19:08 1.0		9	
015	178_015 ICAL	BTXE 6		27-JUN-2006	19:40 1.0		9	
016	178_016 ICAL	MTBE 7		27-JUN-2006	20:12 1.0		10	
017	178_017 X	IB		27-JUN-2006	20:44 1.0		1	
018	178_018 X	MTBE		27-JUN-2006	21:16 1.0		11	MTBE/USE
019	178_019 ICV	MTBE		27-JUN-2006	21:48 1.0	5000	11	PASS/USE

Stds used: 1-S3248 2-S3289 3-S3290 4-S3291 5-S3292 6-S3293 7-S3735 8-S3734 9-S3733 10-S3732 11-S3079

Analyst:

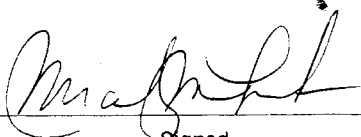
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06/28/06

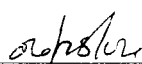
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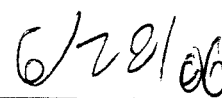


Date

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Date



SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 316199245 Instrument: GC05 Gas Chromatograph #5 TVH/BTXE
 Analytical Method: EPA 8015B SOP Version: TVH_BTXE_rv11
 Analytical Method: EPA 8021B SOP Version: TVH_BTXE_rv13
 Begun: 18-MAY-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Std's	Used	>LR
001	138_001	X	ib			18-MAY-2006	08:45	1.0					1		
002	138_002	X	QC340572	113573	Water	18-MAY-2006	09:17	1.0					2	1	Not used
003	138_003	X	QC340573	113573	Water	18-MAY-2006	09:49	1.0					3	1	
004	138_004	X	QC340571	113573	Water	18-MAY-2006	10:21	1.0					1		
005	138_005	X	ib			18-MAY-2006	16:15	1.0					1		
006	138_006	ICAL	tvh 1			18-MAY-2006	16:47	1.0					4	1	PASS USE
007	138_007	ICAL	tvh 2			18-MAY-2006	17:19	1.0					5	1	
008	138_008	ICAL	tvh 3			18-MAY-2006	17:51	1.0					6	1	
009	138_009	ICAL	tvh 4			18-MAY-2006	18:23	1.0					7	1	
010	138_010	ICAL	tvh 5			18-MAY-2006	18:55	1.0					7	1	
011	138_011	X	ib			18-MAY-2006	19:27	1.0					1		
012	138_012	X	carbamark			18-MAY-2006	19:58	1.0					8	9	1 USE
013	138_013	X	ib			18-MAY-2006	20:30	1.0					1		
014	138_014	ICV	tvh			18-MAY-2006	21:02	1.0					3	1	PASS USE
										5000					

Std's used: 1=S3248 2=S3406 3=S3323 4=S3460 5=S3459 6=S3458 7=S3457 8=S1645 9=S1646

Analyst: Micaela M. L. F. Date: 05/22/06

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05/22/06
Date

Micaela M. L. F.
Signed

5/22/06
Date

GC05 Sequence by Brook

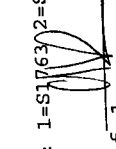
SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Begun: 19-OCT-2005

Gas Chromatograph #5 TVH/BTXE
SOP Version: TVH_BTXE_rv11
SOP Version: TVH_BTXE_rv11Sequence: 315421005 Instrument: GC05
Analytical Method: EPA 8015B
Analytical Method: EPA 8021B

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Std	Used	>LR
001	292_001	CCV/LCS	QC313524	106875	Water	19-OCT-2005	08:45	1.0		5000			1	2	PASS
002	292_002	CCV/LCS	QC313525	106875	Water	19-OCT-2005	09:17	1.0	1	5000			3	2	
003	292_003	CCV	stodd	106875		19-OCT-2005	09:49	1.0		5000			4	2	
004	292_004	BLANK	QC313523	106875	Water	19-OCT-2005	10:20	1.0	5	5000			2	1	1/20/05
005	292_005	SAMPLE	182533-001	106875	Water	19-OCT-2005	10:52	1.0		5000			1	0	2
006	292_006	SAMPLE	182533-002	106875	Water	19-OCT-2005	11:24	1.0		5000			1	2	
007	292_007	SAMPLE	182533-003	106875	Water	19-OCT-2005	11:56	1.0		5000			1	2	
008	292_008	SAMPLE	182533-004	106875	Water	19-OCT-2005	12:28	1.0		5000			1	2	
009	292_009	SAMPLE	182533-005	106875	Water	19-OCT-2005	12:59	1.0		5000			1	2	
010	292_010	SAMPLE	182578-001	106875	Water	19-OCT-2005	13:32	1.0		5000			1	2	
011	292_011	SAMPLE	182578-002	106875	Water	19-OCT-2005	14:04	1.0		5000			1	2	PASS
012	292_012	CCV	mbtixe	106875		19-OCT-2005	14:35	1.0		5000			1	2	
013	292_013	CCV	stodd	106875		19-OCT-2005	15:08	1.0		5000			3	2	
014	292_014	CCV	tvh	106875		19-OCT-2005	15:39	1.0		5000			1	2	
015	292_015	SAMPLE	182586-001	106875	Water	19-OCT-2005	16:12	1.0		5000			1	2	
016	292_016	MSS	182586-002	106875	Water	19-OCT-2005	16:44	1.0	2	5000			1	2	
017	292_017	SAMPLE	182588-002	106875	Water	19-OCT-2005	17:16	1.0		5000			1	2	
018	292_018	SAMPLE	182590-012	106875	Water	19-OCT-2005	17:47	1.0		5000			1	2	
019	292_019	SAMPLE	182590-013	106875	Water	19-OCT-2005	18:19	1.0		5000			1	2	
020	292_020	MS	QC313667	106875	Water	19-OCT-2005	19:13	1.0		5000			1	2	PASS
021	292_021	MSD	QC313668	106875	Water	19-OCT-2005	19:45	1.0	1	5000			3	2	
022	292_022	CCV	tvh	106875		19-OCT-2005	20:16	1.0		5000			3	2	
023	292_023	CCV	tvh	106875		19-OCT-2005	20:48	1.0		5000			3	2	

stds used: 1=S1763/2=S1421 3=S1762 4=S736

Analyst: 

Date: 10/20/05

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Date

REPORTING SUMMARY FOR 188869 GCVOA Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
188869-001	Gasoline C7-C12	GC05	G	08/21/06 23:11
188869-001	Stoddard Solvent C7-C12	GC05	G	08/21/06 23:11
188869-001	MTBE	GC05	H	08/21/06 23:11
188869-001	Benzene	GC05	H	08/21/06 23:11
188869-001	Toluene	GC05	H	08/21/06 23:11
188869-001	Ethylbenzene	GC05	H	08/21/06 23:11
188869-001	Trifluorotoluene (FID)	GC05	G	08/21/06 23:11
188869-001	Bromofluorobenzene (FID)	GC05	G	08/21/06 23:11
188869-001	Trifluorotoluene (PID)	GC05	H	08/21/06 23:11
188869-001	Bromofluorobenzene (PID)	GC05	H	08/21/06 23:11
188869-001	Xylene (total)	GC05	H	08/21/06 23:11
QC352636	Gasoline C7-C12	GC05	G	08/21/06 12:58
QC352636	Stoddard Solvent C7-C12	GC05	G	08/22/06 11:04
QC352636	MTBE	GC05	H	08/21/06 12:58
QC352636	Benzene	GC05	H	08/21/06 12:58
QC352636	Toluene	GC05	H	08/21/06 12:58
QC352636	Ethylbenzene	GC05	H	08/21/06 12:58
QC352636	Trifluorotoluene (FID)	GC05	G	08/21/06 12:58
QC352636	Bromofluorobenzene (FID)	GC05	G	08/21/06 12:58
QC352636	Trifluorotoluene (PID)	GC05	H	08/21/06 12:58
QC352636	Bromofluorobenzene (PID)	GC05	H	08/21/06 12:58
QC352636	Xylene (total)	GC05	H	08/21/06 12:58
QC352637	MTBE	GC05	H	08/21/06 11:54
QC352637	Benzene	GC05	H	08/21/06 11:54
QC352637	Toluene	GC05	H	08/21/06 11:54
QC352637	Ethylbenzene	GC05	H	08/21/06 11:54
QC352637	Trifluorotoluene (PID)	GC05	H	08/21/06 11:54
QC352637	Bromofluorobenzene (PID)	GC05	H	08/21/06 11:54
QC352638	Gasoline C7-C12	GC05	G	08/21/06 12:26
QC352638	Trifluorotoluene (FID)	GC05	G	08/21/06 12:26
QC352638	Bromofluorobenzene (FID)	GC05	G	08/21/06 12:26
QC352674	Gasoline C7-C12	GC05	G	08/21/06 14:06
QC352674	Trifluorotoluene (FID)	GC05	G	08/21/06 14:06
QC352674	Bromofluorobenzene (FID)	GC05	G	08/21/06 14:06
QC352675	Gasoline C7-C12	GC05	G	08/21/06 14:38
QC352675	Trifluorotoluene (FID)	GC05	G	08/21/06 14:38
QC352675	Bromofluorobenzene (FID)	GC05	G	08/21/06 14:38

GC05

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 116587
Date Started: 21-AUG-2006
Batched by : Micaela M. Perpetuo

Analysis : N/A
Bgroup : TVH
Department : GC Organics

Sample	Type	Client	Matrix	Analyses	Due Date
188837-005		Treadwell & Rollo	Water	MBTXE, TVH	30-AUG-2006
188867-001		Iris Environmental	Water	MBTXE, TVH	25-AUG-2006
188867-002		Iris Environmental	Water	MBTXE, TVH	25-AUG-2006
188869-001		Treadwell & Rollo	Water	MBTXE, TVH	31-AUG-2006
QC352636	BLANK		Water		
QC352637	LCS		Water		
QC352638	LCS		Water		
QC352674	MS	of 188837-005	Water		
QC352675	MSD	of 188837-005	Water		

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Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 09/24/06

Analyte	Units	GC19 A	GC19 X	GC04 A	GC04 J	GC05 G	GC07 A
Gasoline C6-C10	ug/L	21	21	6.7	6.2	14	10
Gasoline C6-C12	ug/L	21	21	5.5	6.8	11	14
Gasoline C7-C12	ug/L	27	27	4.8	7.2	7.4	15
JP-4 C7-C12	ug/L		4.6	12	12	9.9	19
Gasoline C6-C8	ug/L						7.0
Gasoline C8-C10	ug/L						12
Trifluorotoluene (FID)	ug/L			3.9			9.8
Bromofluorobenzene (FID)	ug/L			5.2			7.5

Curtis & Tompkins Laboratories
MDL Summary for EPA 8021B Water
As of 09/24/06

Analyte	Units	GC19 B	GC19 C	GC19 Y	GC19 Z	GC04 B	GC04 C	GC04 K	GC04 L	GC05 H	GC05 I	GC07 B	GC07 C
MTBE	ug/L	0.84	0.85	0.49	0.18	0.48	0.26	0.45	0.83	0.30	0.62	0.35	0.23
Benzene	ug/L	0.24	0.21	0.073	0.033	0.15	0.032	0.094	0.16	0.034	0.057	0.23	0.035
Toluene	ug/L	0.15	0.14	0.13	0.025	0.11	0.098	0.14	0.11	0.048	0.15	0.069	0.024
Ethylbenzene	ug/L	0.12	0.11	0.14	0.024	0.087	0.061	0.038	0.12	0.036	0.17	0.084	0.056
m,p-Xylenes	ug/L	0.11	0.10	0.13	0.039	0.15	0.11	0.10	0.21	0.030	0.17	0.090	0.027
o-Xylene	ug/L	0.19	0.20	0.15	0.015	0.19	0.10	0.12	0.10	0.083	0.19	0.13	0.040

**TOTAL EXTRACTABLE
HYDROCARBONS**

**Total Extractable Hydrocarbons**

Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DW082106B	Batch#:	116703
Matrix:	Water	Sampled:	08/21/06
Units:	ug/L	Received:	08/21/06
Diln Fac:	1.000	Prepared:	08/23/06

Type:	SAMPLE	Analyzed:	08/25/06
Lab ID:	188869-001	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	83	65-135

Type:	BLANK	Analyzed:	08/24/06
Lab ID:	QC353116	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	109	65-135

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC353117	Batch#:	116703
Matrix:	Water	Prepared:	08/23/06
Units:	ug/L	Analyzed:	08/24/06

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,277	91	65-135

Surrogate	%REC	Limits
Hexacosane	106	65-135

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1349MW100	Batch#:	116703
MSS Lab ID:	188802-001	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Prepared:	08/23/06
Diln Fac:	1.000	Analyzed:	08/24/06

Type: MS
Lab ID: QC353118

Cleanup Method: EPA 3630C

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C12-C24	46,960 >LR	2,500	37,460 >LR	-380 NM	65-135

Surrogate	%REC	Limits
Hexacosane	64 *	65-135

Type: MSD
Lab ID: QC353119

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	75,050 >LR	1123 NM	65-135	NC	35

Surrogate	%REC	Limits
Hexacosane	119	65-135

*= Value outside of QC limits; see narrative

NC= Not Calculated

NM= Not Meaningful: Sample concentration > 4X spike concentration

>LR= Response exceeds instrument's linear range

RPD= Relative Percent Difference

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1065PZ2A	Batch#:	116703
MSS Lab ID:	188837-009	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Prepared:	08/23/06
Diln Fac:	1.000	Analyzed:	08/25/06

Type: MS
Lab ID: QC353120

Cleanup Method: EPA 3630C

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C12-C24	21.70	2,500	2,147	85	65-135

Surrogate	%REC	Limits
Hexacosane	105	65-135

Type: MSD
Lab ID: QC353121

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,437	97	65-135	13	35

Surrogate	%REC	Limits
Hexacosane	112	65-135

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188869 GCSV Water: EPA 8015B

Inst : GC11A
Calnum : 116235201001
Units : mg/L

Name : gcl1ads1cal6/13/06
Date : 13-JUN-2006 07:02
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Std
L1	163a018	116235201018	DSL_10	13-JUN-2006 07:02	S3433
L2	163a019	116235201019	DSL_100	13-JUN-2006 07:30	S3434
L3	163a020	116235201020	DSL_250	13-JUN-2006 07:58	S3435
L4	163a021	116235201021	DSL_500	13-JUN-2006 08:26	S3436
L5	163a022	116235201022	DSL_1000	13-JUN-2006 08:54	S3437
L6	163a023	116235201023	DSL_2500	13-JUN-2006 09:23	S3438
L7	163a024	116235201024	DSL_5000	13-JUN-2006 09:51	S3432

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	%RSD	Mth ²	MthRSD	Flg
Diesel C12-C24	70351	61641	59864	60002	59376	59503	59800	AVRG		1.63E-5		61505	6	0.995	20		

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor
Page 1 of 1

116235201001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188869 GCSV Water
EPA 8015B

Inst : GC11A
Calnum : 116235201001

Name : gc11adslcal6/13/06
Cal Date: 13-JUN-2006

ICV 116235201026 (163a026 13-JUN-2006) stds: S3623

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	61505	58612	500.0	476.5	mg/L	-5	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188869 GCSV Water: EPA 8015B

Inst : GC11A
 Calnum : 116235201003
 Units : mg/L

Name : MO
 Date : 13-JUN-2006 11:42
 X Axis : R

Reviewer: MCH

Level	File	Segnum	Sample ID	Analyzed	Std
L1	163a028	116235201028	MO_50	13-JUN-2006 11:42	S3326
L2	163a029	116235201029	MO_250	13-JUN-2006 12:10	S3327
L3	163a030	116235201030	MO_500	13-JUN-2006 12:38	S3328
L4	163a031	116235201031	MO_1000	13-JUN-2006 13:06	S3329
L5	163a032	116235201032	MO_2500	13-JUN-2006 13:33	S3330
L6	163a033	116235201033	MO_5000	13-JUN-2006 14:01	S3325

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ²	MGR ²	MxRSD	Flg
Motor Oil C24-C36	37512	40742	39568	39106	40379	40112	AVRG		2.53E-5		39570	3	0.995	20	

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor
 Page 1 of 1

116235201003

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188869 GCSV Water: EPA 8015B

Inst : GC11A
Calnum : 116235201002
Units : mg/L

Name : Hex
Date : 13-JUN-2006 14:57
X Axis : R

Reviewer: MCH

Level	File	Segnum	Sample ID	Analyzed	Std
L1	163a035	116235201035	HEX_5	13-JUN-2006 14:57	S3671
L2	163a036	116235201036	HEX_10	13-JUN-2006 15:25	S3672
L3	163a037	116235201037	HEX_25	13-JUN-2006 15:52	S3673
L4	163a038	116235201038	HEX_50	13-JUN-2006 16:20	S3674
L5	163a039	116235201039	HEX_75	13-JUN-2006 16:48	S3675

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ²	%RSD	MUR ²	MoRSD	Fig
Hexacosane	68290	70892	67660	67747	68862	AVRG		1.46E-5		68690	2	0.995	20		

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor
Page 1 of 1

116235201002

CONTINUING CALIBRATION SUMMARY FOR 188869 GCSV Water
Curtis & Tompkins Laboratories

Analyte: Diesel C12-C24

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D	Flags
						RF/CF	RF/CF						
GC11A	A	116340404015	24-AUG-2006 19:15	116235201001	13-JUN-2006	61505	59775	1000.0	971.88	mg/L	-3	15	
GC11A	A	116340404033	25-AUG-2006 03:37	116235201001	13-JUN-2006	61505	63205	250.00	256.91	mg/L	3	15	

CONTINUING CALIBRATION SUMMARY FOR 188869 GCSV Water
Curtis & Tompkins Laboratories

Analyte: Motor Oil C24-C36

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D	Flags
						RF/CF	RF/CF						
GC11A	A	116340404016	24-AUG-2006 19:43	116235201003	13-JUN-2006	39570	38721	500.00	489.28	mg/L	-2	15	
GC11A	A	116340404034	25-AUG-2006 04:05	116235201003	13-JUN-2006	39570	39186	500.00	495.15	mg/L	-1	15	

CONTINUING CALIBRATION SUMMARY FOR 188869 GCSV Water
Curtis & Tompkins Laboratories

Analyte: Hexacosane

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D	Flags
						RF/CF	RF/CF						
GC11A	A	116340404015	24-AUG-2006 19:15	116235201002	13-JUN-2006	68690	72377	50.000	52.684	mg/L	5	15	
GC11A	A	116340404033	25-AUG-2006 03:37	116235201002	13-JUN-2006	68690	74987	50.000	54.584	mg/L	9	15	

SEQUENCE SUMMARY FOR 188869 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 116235201 Instrument: GC11A Gas Chromatograph #11 (Channel A) TEH Begun: 12-JUN-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
001	163a001	X	PRIMER			12-JUN-2006	08:01	1.0						
002	163a002	X	IB			12-JUN-2006	08:29	1.0						
003	163a003	CCV	DSL_500			12-JUN-2006	08:57	1.0			3	1		
004	163a004	CCV	MO_500			12-JUN-2006	09:25	1.0			6	2		
005	163a005	LCS	QC343463 S	114293	Soil	12-JUN-2006	11:42	1.0			3			
006	163a006	XCCV	DSL_500			12-JUN-2006	12:10	1.0				1		
007	163a007	SAMPLE	187264-002	114250	Water	12-JUN-2006	12:39	3.0			3			1.JP8:10=3093.46
008	163a008	SAMPLE	187264-001	114250	Water	12-JUN-2006	13:07	10.0			3			2.JP8:10=3730.48
009	163a009	CCV	DSL_1000			12-JUN-2006	13:34	1.0			3	3		
010	163a010	X	IB			12-JUN-2006	15:11	1.0						
011	163a011	X	C10			12-JUN-2006	15:39	1.0				4		
012	163a012	X	C12-C60			12-JUN-2006	16:07	1.0				5		
013	163a013	CCV	MO_500			12-JUN-2006	17:12	1.0			3	2		
014	163a014	CCV	DSL_500			12-JUN-2006	17:40	1.0			3	1		
015	163a015	X	C10			13-JUN-2006	05:39	1.0				4		
016	163a016	X	C12-C60			13-JUN-2006	06:07	1.0				5		50
017	163a017	X	IB			13-JUN-2006	06:35	1.0						
018	163a018	ICAL	DSL_10			13-JUN-2006	07:02	1.0				6		
019	163a019	ICAL	DSL_100			13-JUN-2006	07:30	1.0				7		
020	163a020	ICAL	DSL_250			13-JUN-2006	07:58	1.0				8		
021	163a021	ICAL	DSL_500			13-JUN-2006	08:26	1.0				9		
022	163a022	ICAL	DSL_1000			13-JUN-2006	08:54	1.0				10		
023	163a023	ICAL	DSL_2500			13-JUN-2006	09:23	1.0				11		
024	163a024	ICAL	DSL_5000			13-JUN-2006	09:51	1.0				12		
025	163a025	X	IB			13-JUN-2006	10:19	1.0						
026	163a026	ICV	DSL_500			13-JUN-2006	10:47	1.0			3	13		
027	163a027	X	IB			13-JUN-2006	11:14	1.0						
028	163a028	ICAL	MO_50			13-JUN-2006	11:42	1.0				14		
029	163a029	ICAL	MO_250			13-JUN-2006	12:10	1.0				15		
030	163a030	ICAL	MO_500			13-JUN-2006	12:38	1.0				16		

Stds used: 1=S3367 2=S3369 3=S3368 4=03SS315 5=03SS316 6=S3433 7=S3434 8=S3435 9=S3436 10=S3437 11=S3438 12=S3432 13=S3623 14=S3326 15=S3327 16=S3328 17=S3329 18=S3330
19=S3325 20=S3671 21=S3672 22=S3673 23=S3674 24=S3675

SEQUENCE SUMMARY FOR 188869 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 116235201 Instrument: GC11A Gas Chromatograph #11 (Channel A) TEH Begun: 12-JUN-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used	>LR
031	163a031	ICAL	MO_1000			13-JUN-2006	13:06 1.0	1.0				17	
032	163a032	ICAL	MO_2500			13-JUN-2006	13:33 1.0	1.0				18	
033	163a033	ICAL	MO_5000			13-JUN-2006	14:01 1.0	1.0				19	
034	163a034	X	IB			13-JUN-2006	14:29 1.0						
035	163a035	ICAL	HEX_5			13-JUN-2006	14:57 1.0	1.0				20	
036	163a036	ICAL	HEX_10			13-JUN-2006	15:25 1.0	1.0				21	
037	163a037	ICAL	HEX_25			13-JUN-2006	15:52 1.0	1.0				22	
038	163a038	ICAL	HEX_50			13-JUN-2006	16:20 1.0	1.0				23	
039	163a039	ICAL	HEX_75			13-JUN-2006	16:48 1.0	1.0				24	
040	163a040	X	IB			13-JUN-2006	17:15 1.0						

Stds used: 1=S3367 2=S3639 3=S3368 4=03SS315 5=03SS316 6=S3433 7=S3434 8=S3435 9=S3436 10=S3437 11=S3438 12=S3432 13=S3623 14=S3326 15=S3327 16=S3328 17=S3329 18=S3330
19=S3325 20=S3671 21=S3672 22=S3673 23=S3674 24=S3675

SEQUENCE SUMMARY FOR 188869 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 116340404 Instrument: GC11A Gas Chromatograph #11 (Channel A) TEH Begun: 24-AUG-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	lenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used	>LR
001	236a001	X	PRIMER				24-AUG-2006 09:24	1.0						
002	236a002	X	IB				24-AUG-2006 09:52	1.0						
003	236a003	CCV	DSL_500				24-AUG-2006 10:20	1.0	1.0				1	
004	236a004	CCV	MO_500				24-AUG-2006 10:48	1.0	1.0	1			2	
005	236a005	X	TANK1-RECHEC				24-AUG-2006 12:12	1.0						
006	236a006	X	TANK3-CHECK				24-AUG-2006 12:40	1.0						
007	236a007	X	TANK2-RECHEC				24-AUG-2006 13:08	1.0						
008	236a008	SAMPLE	188899-008			116686	Soil	24-AUG-2006 15:17	1.0	0.09915		3		2: BUNKC:=9023.96
009	236a009	SAMPLE	188884-001			116686	Soil	24-AUG-2006 15:44	1.0	0.09913	1	1		20: BUNKC:=109757
010	236a010	SAMPLE	188899-007			116686	Soil	24-AUG-2006 16:12	20.0	0.09921		3		
011	236a011	X	IB				24-AUG-2006 16:40	1.0						
012	236a012	SAMPLE	188875-005			116686	Soil	24-AUG-2006 17:08	1.0	0.1000		3		2: BUNKC:=5826.57
013	236a013	SAMPLE	188884-002			116686	Soil	24-AUG-2006 17:36	40.0	0.2014		3		
014	236a014	X	IB				24-AUG-2006 18:03	1.0						
015	236a015	CCV	DSL_1000				24-AUG-2006 19:15	1.0	1.0			3		52
016	236a016	CCV	MO_500				24-AUG-2006 19:43	1.0	1.0			3		
017	236a017	CCV	KERO_250				24-AUG-2006 20:11	1.0	1.0			3		
018	236a018	X	CCV				24-AUG-2006 20:39	1.0					3	
019	236a019	X	CCV				24-AUG-2006 21:07	1.0					2	
020	236a020	X	CCV				24-AUG-2006 21:35	1.0					4	
021	236a021	BLANK	QC353116	S		116703	Water	24-AUG-2006 22:03	1.0	0.005		3		
022	236a022	LCS	QC353117	S		116703	Water	24-AUG-2006 22:31	1.0	0.005		3		
023	236a023	MSS	188802-001	S		116703	Water	24-AUG-2006 22:59	1.0	0.005	15			14: BUNKC:=20778.5
024	236a024	MS	QC353118	S		116703	Water	24-AUG-2006 23:27	1.0	0.005	1	3		13: BUNKC:=16570.5
025	236a025	MSD	QC353119	S		116703	Water	24-AUG-2006 23:55	1.0	0.005		3		14: BUNKC:=33193.9
026	236a026	X	IB				25-AUG-2006 00:22	1.0						
027	236a027	MSS	188837-009	S		116703	Water	25-AUG-2006 00:50	1.0	0.005	7	3		
028	236a028	MS	QC353120	S		116703	Water	25-AUG-2006 01:18	1.0	0.005		3		
029	236a029	MSD	QC353121	S		116703	Water	25-AUG-2006 01:46	1.0	0.005		3		
030	236a030	SAMPLE	188869-001	S		116703	Water	25-AUG-2006 02:14	1.0	0.005		3		
031	236a031	SAMPLE	188802-002	S		116703	Water	25-AUG-2006 02:41	1.0	0.005		3		

Stds used: 1=S4053 2=S3934 3=S4054 4=S3880 5=S3717

SEQUENCE SUMMARY FOR 188869 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 116340404 Instrument: GC11A Gas Chromatograph #11 (Channel A) TEH Begun: 24-AUG-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds Used	>LR
032	236a032	X	IB			25-AUG-2006 03:09	1.0					5	
033	236a033	CCV	DSL_250			25-AUG-2006 03:37	1.0	1.0		3		2	
034	236a034	CCV	MO_500			25-AUG-2006 04:05	1.0	1.0		3		5	
035	236a035	X	CCV			25-AUG-2006 04:33	1.0					2	
036	236a036	X	CCV			25-AUG-2006 05:01	1.0					2	

Stds used: 1=S4053 2=S3934 3=S4054 4=S3880 5=S3717

REPORTING SUMMARY FOR 188869 TEHM Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	D S L :	M O 2	H X C S
188869-001	GC11A	08/25/06 02:14	1.0	+	+	+
QC353116	GC11A	08/24/06 22:03	1.0	+	+	+
QC353117	GC11A	08/24/06 22:31	1.0	+		+
QC353118	GC11A	08/24/06 23:27	1.0	+		+
QC353118	GC17A	08/25/06 16:15	5.0			
QC353119	GC11A	08/24/06 23:55	1.0	+		+
QC353119	GC17A	08/25/06 16:42	5.0			
QC353120	GC11A	08/25/06 01:18	1.0	+		+
QC353121	GC11A	08/25/06 01:46	1.0	+		+

Curtis & Tompkins Laboratories

Sample Preparation Summary

24-AUG-2006 19:15

Batch Number : 116703 ✓
Date Extracted : 23-AUG-2006
Extracted by : Kevin Riley
Prep Method : 3520C ✓

Analysis : N/A
Bgroup : TEH
Units : mL
Clean-up :

Spike #1 ID : S4026C ✓
Spike #2 ID : S4117A ✓
Spike #3 ID :
SDP Version : TEH50LL rv10

Sample	Type	Client	Matrix	Init	Units	Final	Prep	Clean	pH	Sp. 1	Sp. 2	Sp. 3	Analyses	Clean	Comments
				W/V		Vol	D.F.	D.F.		Vol	Vol	Vol		Method	
188802-001		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0		TEHM	3630C	mss ✓
188802-002		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0		TEHM	3630C	
188802-004		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0		TEHM	3630C	
188802-005		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0		TEHM	3630C	
188802-006		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0		TEHM	3630C	
188802-008		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0		TEHM	3630C	
188802-009		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0		TEH	3630C	
188802-013		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0		TEHM	3630C	
188802-014		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0		TEHM	3630C	
188802-015		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	5	.5	0		TEHM	3630C	
188802-020		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0		TEHM	3630C	
188837-001		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0		TEHM	3630C	
188837-005		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0		TEHM	3630C	
188837-008		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0		TEHM	3630C	
188837-009		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0		TEHM	3630C	
188837-010		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0		TEHM	3630C	
188837-012		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	6	.5	0		TEHM	3630C	
188869-001		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	5	.5	0		TEHM	3630C	
QC353116	BLANK		Water	500	mL	2.5	0.005000	1		.5	0		TEH	3630C	
QC353117	LCS		Water	500	mL	2.5	0.005000	1		.5			TEH	3630C	
QC353118	MS	of 188802-001 ✓	Water	500	mL	2.5	0.005000	1	7	.5	.5		TEH	3630C	
QC353119	MSD	of 188802-001 ✓	Water	500	mL	2.5	0.005000	1	7	.5	.5		TEH	3630C	
QC353120	MS	of 188837-009 ✓	Water	500	mL	2.5	0.005000	1	7	.5	.5		TEH	3630C	
QC353121	MSD	of 188837-009 ✓	Water	500	mL	2.5	0.005000	1	7	.5	.5		TEH	3630C	

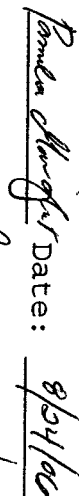
55

mss ✓

Prep Chemist:



Reviewed By:



Date: 8/24/06

Relinquished By:



Received By:

Date: 8/28/06

LIMS Batch No: 116703

Extraction Method:

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LIMS Analysis: TEH/M☐ mod. EPA 3510 sep. funnel

Cleanup Method (if needed):

Extracted by: KR☒ mod. EPA 3520 cont. L/L☒ EPA 3630 Silica GelDate Extracted: 8/23/06☐ _____☐ Other _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
188802-001AK	500	7	2.5	X *MSS	
-002G					
-004D					
-005I					
-006J					
-008I					
-009J					
-010I	MCC 8/24/06				
-013J			2.5		
-014		✓			
-015		5			
-020		7			
188837-001D					
-005H					
-008J					
-009S					MSS
-010G		✓			
-012R		6			
188869-001		5			
MB QC353116		N/A			
LCS 17		✓			
MS 18		7			*188802-001AL
MSD 19					↓
MS 20					188837-009T
MSD 21					↓

0.5 mL of TEH_SURR was added to all samples

0.5 mL of TEH_SP was added to all spikes

pH of all samples adjusted to pH ≤ 2 with H₂SO₄☒ Samples were continually extracted about 450 mL of CH₂Cl₂

Extraction Start Time:

Extraction End Time:

☐ Samples were extracted 3 times with 60 mL of CH₂Cl₂Extracts filtered through baked, CH₂Cl₂-rinsed granular Na₂SO₄

Concentrated to volumes as noted above

Mfg & Lot# / LIMS # / Time Date/ Initials

S4026 C 8/23/06 KR

S4117 A

FS054522

EM46130

K115

0900

N/A

EM 461116 CO

✓

Krey 23 Aug 06
 Extraction Chemist Date

Continued from Page
 Continued on Page

Parade Massiglat 8/24/06
 Reviewed by Date

Prep Chemist: MCCBenchbook # BK 2356Cleanup Date: 8/24/06Page 88

Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
188802-001	116703	60	10	mss ☺
-002				
-004				
-005				
-006				
-008				
-009				
-013				
-014				
-015				
-020				
188837-001				
-005				
-008				
-009				mss
-010				
-012				
188869-001				*
MB Qc353116				
LCS 17				
MS 18				☺
MSD 19				☺
MS 20				
MSD 21				
MCC 8/24/06				

* ☒ Extracts were cleaned up using C&T assembled 60 g columns
☒ Extracts were cleaned up using 60 g cartridges
 Extracts were eluted with 40 mL CH₂Cl₂
 Concentrated to volumes as noted above

Mfg & Lot # / Time / Program	Initials / Date
SP43219426	MCC 8/24/06
SP7335	
EM 45139	

Michael Ch... 8/24/06
 Extraction Chemist / Date

Continued from page
 Continued 57 page

Pamela M... 8/24/06
 Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 09/24/06

Analyte	Units	GC11A	GC13B B	GC15B	GC17A	GC14B B
JP-5 C10-C16	ug/L	17	16	7.9	5.4	
Jet Fuel A C10-C16	ug/L	14	30	24	33	
Diesel C12-C32	ug/L	22	14	25	23	
Diesel C12-C36	ug/L	13	17			
Diesel C12-C28	ug/L		31			
Diesel C12-C24	ug/L	20	13	20	33	
Diesel C12-C22	ug/L	19	17	20	25	
Diesel C10-C28	ug/L	18	11	22	37	
Diesel C10-C24	ug/L	21	15	18	33	
Diesel C10-C22	ug/L	21	18	19	27	
Diesel C10-C20	ug/L		16	13	19	
Motor Oil C22-C36	ug/L	120	110	120	140	89
Motor Oil C24-C36	ug/L	150	140	140	170	99
Motor Oil C22-C32	ug/L	140	130	21	160	99
Motor Oil C28-C40	ug/L	67	68	63	78	
Motor Oil C28-C36	ug/L	64	74	64	69	
Motor Oil C20-C36	ug/L	120	99	110	130	76
Hexacosane	ug/L	4.5	16	4.2	3.1	

VOLATILE ORGANIC COMPOUNDS

Purgeable Organics by GC/MS

Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DW082106B	Batch#:	116618
Lab ID:	188869-001	Sampled:	08/21/06
Matrix:	Water	Received:	08/21/06
Units:	ug/L	Analyzed:	08/22/06
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	16	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-120
1,2-Dichloroethane-d4	112	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	108	86-115

ND= Not Detected
 RL= Reporting Limit
 MDL= Method Detection Limit
 Page 1 of 1

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC352783	Batch#:	116618
Matrix:	Water	Analyzed:	08/22/06
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-120
1,2-Dichloroethane-d4	102	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	104	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit
Page 1 of 1

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	116618
Units:	ug/L	Analyzed:	08/22/06
Diln Fac:	1.000		

Type: BS Lab ID: QC352779

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	26.30	105	65-135
Benzene	25.00	24.96	100	65-135
Trichloroethene	25.00	23.90	96	65-135
Toluene	25.00	25.85	103	65-135
Chlorobenzene	25.00	24.93	100	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-120
1,2-Dichloroethane-d4	103	76-114
Toluene-d8	104	88-110
Bromofluorobenzene	102	86-115

Type: BSD Lab ID: QC352780

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	23.29	93	65-135	12	35
Benzene	25.00	23.30	93	65-135	7	35
Trichloroethene	25.00	22.59	90	65-135	6	35
Toluene	25.00	24.39	98	65-135	6	35
Chlorobenzene	25.00	23.61	94	65-135	5	35

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-120
1,2-Dichloroethane-d4	103	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	102	86-115

RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 188869 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name: BFB IDF : 1.0
Seqnum : 476318840007.1 File : hh907 Time : 09-AUG-2006 13:01

Standards: S3716

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	19703	22.60	
75	30.00% - 60.00% of mass 95	41618	47.73	
95		87189		
96	5.00% - 9.00% of mass 95	5406	6.20	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	70248	80.57	
175	5.00% - 9.00% of mass 174	3675	5.23	
176	> 95.00% and < 101.00% of mass 174	67370	95.90	
177	5.00% - 9.00% of mass 176	4512	6.70	

Analyst: ACM Date: 08/17/06 Reviewer: SJD Date: 08/17/06

CURTIS & TOMPKINS BFB TUNE FOR 188869 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name: BFB IDF : 1.0
Seqnum : 476337393002 File : hhm02 Time : 22-AUG-2006 07:50

Standards: S3716

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	15438	23.62	
75	30.00% - 60.00% of mass 95	32065	49.05	
95		65368		
96	5.00% - 9.00% of mass 95	4549	6.96	
173	< 2.00% of mass 174	168	0.31	
174	> 50.00% and < 100.00% of mass 95	53794	82.29	
175	5.00% - 9.00% of mass 174	4043	7.52	
176	> 95.00% and < 101.00% of mass 174	51594	95.91	
177	5.00% - 9.00% of mass 176	3452	6.69	

Analyst: LW Date: 08/22/06 Reviewer: AMK Date: 08/23/06

CURTIS & TOMPKINS BFB TUNE FOR 188869 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name: BFB IDF : 1.0
Seqnum : 476337393009 File : hhm09 Time : 22-AUG-2006 12:04

Standards: S3716

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	15628	21.42	
75	30.00% - 60.00% of mass 95	34056	46.67	
95		72976		
96	5.00% - 9.00% of mass 95	4963	6.80	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	71944	98.59	
175	5.00% - 9.00% of mass 174	5760	8.01	
176	> 95.00% and < 101.00% of mass 174	70064	97.39	
177	5.00% - 9.00% of mass 176	3834	5.47	

Analyst: LW Date: 08/22/06 Reviewer: AMK Date: 08/23/06

Inst	:	MSVOA08
Calnum	:	476318840001
Units	:	ug/L

Reviewer: AMK
Type : WATER

Reviewer: AMK
Type : WATER

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Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ²	Max	Min	r ²	Max	Min	Fig
Toluene		0.5211	0.4707	0.4787	0.4831	0.4550	0.4564	0.4367	0.4159	AVRG		2.15199		0.4647	7	15	0.050	0.99			
trans-1,3-Dichloropropene		0.3228	0.2955	0.3157	0.3171	0.3177	0.3188	0.3034	0.2937	AVRG		3.21996		0.3106	4	15	0.050	0.99			
1,1,2-Trichloroethane		0.1114	0.1026	0.1079	0.1096	0.1074	0.1080	0.1032	0.1011	AVRG		9.39932		0.1064	3	15	0.050	0.99			
2-Hexanone			0.2602	0.2663	0.2541	0.2427	0.2463	0.2351	0.2299	AVRG		4.03566		0.2478	5	15	0.050	0.99			
Tetrachloroethene		0.1855	0.1707	0.1698	0.1897	0.1731	0.2043	0.1864	0.2067	AVRG		5.38263		0.1858	8	15	0.050	0.99			
Dibromochloromethane		0.1969	0.2117	0.2124	0.2065	0.2069	0.2241	0.2113	0.2149	AVRG		4.74858		0.2106	4	15	0.050	0.99			
Chlorobenzene		0.6432	0.6224	0.6379	0.6146	0.5882	0.5956	0.5399	0.5329	AVRG		1.67547		0.5968	7	15	0.30	0.99			
Ethylbenzene		0.9940	1.0056	1.0215	1.0052	0.9313	0.9749	0.8806	0.8772	AVRG		1.04027		0.9613	6	15	0.050	0.99			
m,p-Xylenes	0.4325	0.3838	0.3741	0.3822	0.3724	0.3495	0.3568	0.3203	0.3117	AVRG		2.74110		0.3648	10	15	0.050	0.99			
o-Xylene		0.3707	0.3725	0.3788	0.3733	0.3584	0.3737	0.3346	0.3274	AVRG		2.76881		0.3612	5	15	0.050	0.99			
Styrene		0.6085	0.6415	0.6687	0.6838	0.6461	0.6543	0.5937	0.5680	AVRG		1.57963		0.6331	6	15	0.050	0.99			
Bromoform		0.1781	0.1575	0.1494	0.1565	0.1563	0.1681	0.1600	0.1598	AVRG		6.22281		0.1607	5	15	0.10	0.99			
1,1,2,2-Tetrachloroethane		0.5322	0.5145	0.5129	0.5287	0.5295	0.5429	0.5183	0.4922	AVRG		1.91788		0.5214	3	15	0.30	0.99			
Dibromofluoromethane	0.5728	0.5763	0.5809	0.5734	0.5919	0.5841	0.6051	0.6042	0.6141	AVRG		1.69720		0.5892	3	15	0.050	0.99			
1,2-Dichloroethane-d4	0.4493	0.4509	0.4475	0.4606	0.4467	0.4455	0.4373	0.4348	0.4271	AVRG		2.25022		0.4444	2	15	0.050	0.99			
Toluene-d8	1.1560	1.1490	1.1593	1.1837	1.1865	1.1672	1.1656	1.1649	1.1270	AVRG		0.86048		1.1621	2	15	0.050	0.99			
Bromofluorobenzene	1.1023	1.1427	1.1104	1.1141	1.1012	1.1154	1.1413	1.0811	1.0757	AVRG		0.90142		1.1094	2	15	0.050	0.99			

Analyst: AMKDate: 08/11/06Reviewer: BODate: 08/17/06

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; LINR=linear regression

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CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188869 MSVOA Water
EPA 8260B

Inst : MSVOA08
Calnum : 476318840001

Name : 826GOX8
Cal Date: 09-AUG-2006

Type : WATER

ICV 476318840020 (hh920 09-AUG-2006) stds: S3979 (10000X), S3894 (5000X)
ICV 476318840021 (hh921 09-AUG-2006) stds: S3978 (10000X), S4023 (10000X),
S3894 (5000X)

Analyte	ICV Seqnum	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	476318840020	0.7672	0.6637	25.00	21.63	ug/L	-13	30	
Vinyl Chloride	476318840020	0.5758	0.5117	25.00	22.22	ug/L	-11	20	
Bromomethane	476318840020	0.2552	0.2622	25.00	25.69	ug/L	3	30	
Chloroethane	476318840020	0.3252	0.3070	25.00	23.60	ug/L	-6	30	
Acetone	476318840021	0.1836	0.1739	25.00	29.25	ug/L	17	40	
1,1-Dichloroethene	476318840021	0.2409	0.2481	25.00	25.75	ug/L	3	20	
Methylene Chloride	476318840021	0.4222	0.4396	25.00	26.03	ug/L	4	30	
Carbon Disulfide	476318840021	1.3352	1.1347	25.00	21.25	ug/L	-15	30	
MTBE	476318840021	0.9901	0.9372	25.00	23.66	ug/L	-5	30	
trans-1,2-Dichloroethene	476318840021	0.3077	0.3223	25.00	26.19	ug/L	5	30	
Vinyl Acetate	476318840021	1.0660	0.6485	25.00	15.21	ug/L	-39	40	!v-
1,1-Dichloroethane	476318840021	0.6780	0.6744	25.00	24.87	ug/L	-1	30	
2-Butanone	476318840021	0.2448	0.2432	25.00	24.84	ug/L	-1	40	
cis-1,2-Dichloroethene	476318840021	0.3437	0.3598	25.00	26.17	ug/L	5	30	
Chloroform	476318840021	0.5616	0.5744	25.00	25.57	ug/L	2	20	
1,1,1-Trichloroethane	476318840021	0.3602	0.3884	25.00	26.95	ug/L	8	30	
Carbon Tetrachloride	476318840021	0.1726	0.1954	25.00	28.29	ug/L	13	30	
1,2-Dichloroethane	476318840021	0.2990	0.2895	25.00	24.20	ug/L	-3	30	
Benzene	476318840021	0.7738	0.7842	25.00	25.34	ug/L	1	30	
Trichloroethene	476318840021	0.2074	0.2127	25.00	25.65	ug/L	3	30	
1,2-Dichloropropane	476318840021	0.2511	0.2335	25.00	23.24	ug/L	-7	20	
Bromodichloromethane	476318840021	0.2574	0.2810	25.00	27.29	ug/L	9	30	
4-Methyl-2-Pentanone	476318840021	0.3085	0.3203	25.00	25.96	ug/L	4	40	
cis-1,3-Dichloropropene	476318840021	0.3386	0.3367	25.00	24.86	ug/L	-1	30	
Toluene	476318840021	0.4647	0.4800	25.00	25.83	ug/L	3	20	
trans-1,3-Dichloropropene	476318840021	0.3106	0.2871	25.00	23.11	ug/L	-8	30	
1,1,2-Trichloroethane	476318840021	0.1064	0.1064	25.00	25.00	ug/L	0	30	
2-Hexanone	476318840021	0.2478	0.2539	25.00	25.62	ug/L	2	40	
Tetrachloroethene	476318840021	0.1858	0.2103	25.00	28.30	ug/L	13	30	
Dibromochloromethane	476318840021	0.2106	0.2257	25.00	26.80	ug/L	7	30	
Chlorobenzene	476318840021	0.5968	0.6080	25.00	25.47	ug/L	2	30	
Ethylbenzene	476318840021	0.9613	1.0438	25.00	27.15	ug/L	9	20	
m,p-Xylenes	476318840021	0.3648	0.3790	50.00	51.95	ug/L	4	30	
o-Xylene	476318840021	0.3612	0.3767	25.00	26.07	ug/L	4	30	
Styrene	476318840021	0.6331	0.6818	25.00	26.92	ug/L	8	30	
Bromoform	476318840021	0.1607	0.1607	25.00	25.00	ug/L	0	30	
1,1,2,2-Tetrachloroethane	476318840021	0.5214	0.4942	25.00	23.69	ug/L	-5	30	

!=warning --low bias v=ICV

Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\HH911.D
 Report Date: 10-Aug-2006 08:33

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\HH911.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 09-AUG-2006 16:31 MS Autotune Date: 27-JUL-2006 10:42
 Operator : LW Inst ID: MSVOA08.i
 Smp Info : ICAL,S3942,0.001/1000,S3980,0.0005/1000,
 Misc Info : S3053,0.0005/1000,0.25/0.5PPB
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\826GOX8.m
 Meth Date : 10-Aug-2006 08:32 Administra Quant Type: ISTD
 Cal Date : 09-AUG-2006 16:31 Cal File: HH911.D
 Als bottle: 11 Calibration Sample, Level: 9
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG			AMOUNTS			
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.795	4.795	(0.461)	2908	0.50000	0.1644 (a)
2 Chloromethane	50	5.306	5.306	(0.510)	6465	0.50000	0.2239 (a)
3 Vinyl Chloride	62	5.385	5.385	(0.517)	10762	0.50000	0.4967 (aM)
4 Bromomethane	94	6.015	6.015	(0.578)	2518	0.50000	0.2622 (a)
5 Chloroethane	64	6.152	6.152	(0.591)	3917	0.50000	0.3200 (a)
6 Trichlorofluoromethane	101	6.487	6.487	(0.623)	8282	0.50000	0.4611 (a)
7 Ethanol	45	6.762	6.762	(0.650)	7614	25.0000	33.0755
8 Freon 113	101	7.195	7.195	(0.691)	2157	0.25000	0.8971
9 1,1-Dichloroethene	96	7.303	7.303	(0.701)	3866	0.25000	0.4265 (a)
10 Acetone	43	7.401	7.401	(0.711)	24117	0.25000	(a)
11 Isopropanol	45	7.500	7.500	(0.720)	7128	2.50000	6.6140
12 Carbon Disulfide	76	7.706	7.706	(0.740)	15098	0.25000	0.3005 (a)
13 tert-Butyl Alcohol (TBA)	59	8.051	8.051	(0.773)	4528	2.50000	3.2231
14 Methylene Chloride	84	8.060	8.060	(0.774)	3976	0.25000	0.2502 (a)
15 MTBE	73	8.297	8.297	(0.797)	10010	0.25000	0.2686 (a)
16 trans-1,2-Dichloroethene	96	8.365	8.365	(0.803)	4289	0.25000	0.3704 (a)

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
17 Isopropyl Ether (DIPE)	45	8.877	8.877	(0.853)	15414	0.25000	0.2745 (a)
18 Vinyl Acetate	43	8.946	8.946	(0.859)	9682	0.25000	0.2413 (a)
19 1,1-Dichloroethane	63	9.005	9.005	(0.865)	6801	0.25000	0.2665 (a)
20 Ethyl tert-Butyl Ether (ETBE)	59	9.388	9.388	(0.902)	10650	0.25000	0.2432 (a)
21 2-Butanone	43	9.801	9.801	(0.941)	5143	0.25000	0.5582
22 2,2-Dichloropropane	77	9.801	9.801	(0.941)	4353	0.25000	0.3096 (a)
23 cis-1,2-Dichloroethene	96	9.821	9.821	(0.943)	3903	0.25000	0.3017 (a)
24 Tetrahydrofuran	42	10.195	10.195	(0.979)	66715	2.50000	3.5701
25 Bromochloromethane	128	10.185	10.185	(0.978)	1393	0.25000	0.2155 (a)
26 Chloroform	83	10.214	10.214	(0.981)	5413	0.25000	0.2561 (a)
* 27 Pentafluorobenzene	168	10.411	10.411	(1.000)	1881358	50.0000	
28 Dibromofluoromethane	113	10.460	10.460	(1.005)	1077703	50.0000	48.6106
29 1,1,1-Trichloroethane	97	10.510	10.510	(1.009)	3895	0.25000	0.2873 (a)
30 Carbon Tetrachloride	117	10.706	10.706	(0.928)	3575	0.25000	0.3519 (a)
31 1,1-Dichloropropene	75	10.726	10.726	(0.929)	4743	0.25000	0.3422 (a)
32 1,2-Dichloroethane-d4	65	11.011	11.011	(0.954)	1321712	50.0000	50.5490
33 Benzene	78	11.041	11.041	(0.957)	14762	0.25000	0.3242 (a)
34 Methyl tert-Amyl Ether (TAME)	73	11.041	11.041	(0.957)	9403	0.25000	0.2814 (a)
35 1,2-Dichloroethane	62	11.129	11.129	(0.964)	4379	0.25000	0.2488 (a)
* 36 1,4-Difluorobenzene	114	11.542	11.542	(1.000)	2941837	50.0000	
37 Trichloroethene	95	11.936	11.936	(1.034)	3876	0.25000	0.3176 (a)
38 Trifluorotoluene	146	12.290	12.290	(1.065)	4377	0.25000	0.3213 (a)
39 1,2-Dichloropropane	63	12.329	12.329	(1.068)	4245	0.25000	0.2873 (a)
40 Dibromomethane	93	12.536	12.536	(1.086)	1798	0.25000	0.2165 (a)
41 Bromodichloromethane	83	12.673	12.673	(1.098)	3777	0.25000	0.2493 (a)
42 2-Chloroethylvinylether	63	13.008	13.008	(1.127)	2177	0.50000	0.4688 (a)
43 Tetramethyl THF	43	13.244	13.244	(1.147)	10806	0.25000	0.2956 (a)
44 cis-1,3-Dichloropropene	75	13.283	13.283	(1.151)	5353	0.25000	0.2687 (a)
45 4-Methyl-2-Pentanone	43	13.431	13.431	(1.164)	5104	0.25000	0.2812 (a)
46 Toluene-d8	98	13.618	13.618	(1.180)	3400836	50.0000	49.7368
47 Toluene	92	13.716	13.716	(1.188)	8023	0.25000	0.2934 (a)
48 trans-1,3-Dichloropropene	75	14.031	14.031	(1.216)	4430	0.25000	0.2424 (a)
49 1,1,2-Trichloroethane	85	14.296	14.296	(1.239)	1687	0.25000	0.2695 (a)
50 Tetrachloroethene	166	14.424	14.424	(0.928)	3177	0.25000	0.3302 (a)
51 2-Hexanone	43	14.523	14.523	(0.934)	4034	0.25000	0.3144 (a)
52 1,3-Dichloropropane	76	14.542	14.542	(0.935)	5517	0.25000	0.2754 (a)
53 Dibromochloromethane	129	14.818	14.818	(0.953)	2435	0.25000	0.2233 (a)
54 1,2-Dibromoethane	107	15.024	15.024	(1.302)	2637	0.25000	0.2272 (a)
* 55 Chlorobenzene-d5	117	15.545	15.545	(1.000)	2588748	50.0000	
56 Chlorobenzene	112	15.575	15.575	(1.002)	8745	0.25000	0.2829 (a)
57 Ethylbenzene	91	15.634	15.634	(1.006)	14601	0.25000	0.2933 (a)
58 1,1,1,2-Tetrachloroethane	131	15.663	15.663	(1.008)	2562	0.25000	0.2607 (a)
59 m,p-Xylenes	106	15.762	15.762	(1.014)	11197	0.50000	0.5927
60 o-Xylene	106	16.263	16.263	(1.046)	5446	0.25000	0.2912 (a)
61 Styrene	104	16.283	16.283	(1.047)	8063	0.25000	0.2459 (a)
62 Bromoform	173	16.598	16.598	(1.068)	2960	0.25000	0.3557 (a)
63 Isopropylbenzene	105	16.657	16.657	(0.912)	13445	0.25000	0.3134 (a)

Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\HH911.D
 Report Date: 10-Aug-2006 08:33

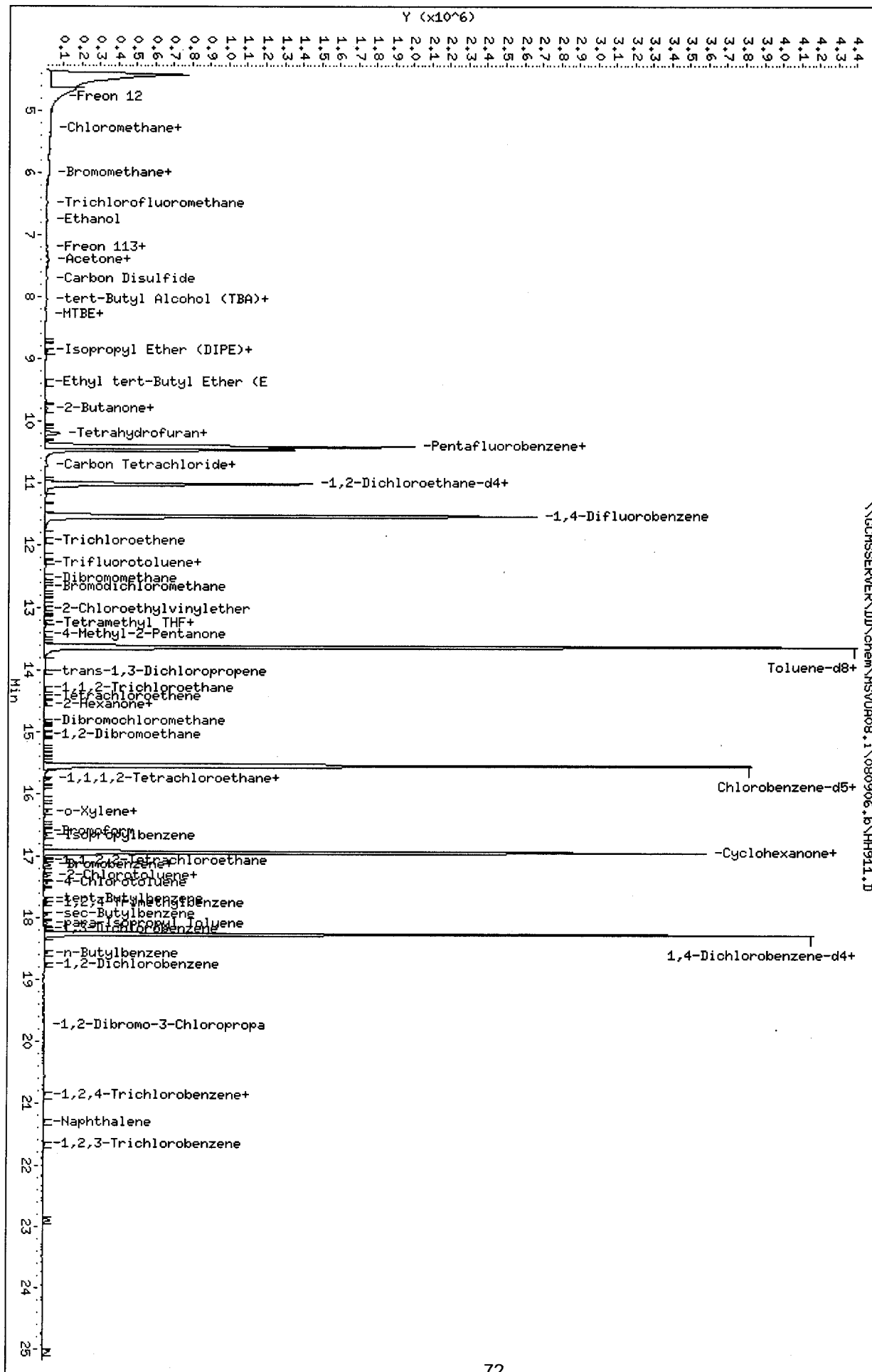
Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
64 Cyclohexanone	55	16.913	16.913	(0.926)	9421	2.50000	3.9135
65 Bromofluorobenzene	95	16.922	16.922	(0.927)	1488150	50.0000	49.6803
66 1,1,2,2-Tetrachloroethane	83	17.060	17.060	(0.934)	3243	0.25000	0.2303 (a)
67 Bromobenzene	156	17.139	17.139	(0.939)	3395	0.25000	0.2686 (a)
68 Propylbenzene	91	17.129	17.129	(0.938)	18349	0.25000	0.3190 (a)
69 1,2,3-Trichloropropane	110	17.159	17.159	(0.940)	1137	0.25000	0.2741 (a)
70 2-Chlorotoluene	91	17.306	17.306	(0.948)	12748	0.25000	0.3149 (a)
71 1,3,5-Trimethylbenzene	105	17.316	17.316	(0.948)	11862	0.25000	0.3132 (a)
72 4-Chlorotoluene	91	17.434	17.434	(0.955)	11225	0.25000	0.2834 (a)
73 tert-Butylbenzene	119	17.690	17.690	(0.969)	9904	0.25000	0.3207 (a)
74 1,2,4-Trimethylbenzene	105	17.758	17.758	(0.973)	11629	0.25000	0.2896 (a)
75 sec-Butylbenzene	105	17.936	17.936	(0.982)	15388	0.25000	0.3268 (a)
76 para-Isopropyl Toluene	119	18.083	18.083	(0.990)	12505	0.25000	0.3292 (a)
77 1,3-Dichlorobenzene	146	18.181	18.181	(0.996)	7273	0.25000	0.2965 (a)
* 78 1,4-Dichlorobenzene-d4	152	18.260	18.260	(1.000)	1350082	50.0000	
79 1,4-Dichlorobenzene	146	18.280	18.280	(1.001)	7382	0.25000	0.2880 (a)
80 n-Butylbenzene	91	18.565	18.565	(1.017)	13665	0.25000	0.3683 (a)
81 1,2-Dichlorobenzene	146	18.752	18.752	(1.027)	6475	0.25000	0.2720 (a)
82 1,2-Dibromo-3-Chloropropane	75	19.726	19.726	(1.080)	847	0.25000	0.2968 (a)
83 1,2,4-Trichlorobenzene	180	20.857	20.857	(1.142)	4604	0.25000	0.3223 (a)
84 Hexachlorobutadiene	225	20.965	20.965	(1.148)	1809	0.25000	0.4163 (a)
85 Naphthalene	128	21.290	21.290	(1.166)	11123	0.25000	0.3003 (a)
86 1,2,3-Trichlorobenzene	180	21.673	21.673	(1.187)	4156	0.25000	0.3067 (a)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.

Data File: \\GCHSSERVER\JD\chem\HSV0A08.i\080906.b\HH911.D
 Date : 09-AUG-2006 16:31
 Client ID: DYNA P&T
 Sample Info: ICPL,S3942,0.001/1000,S3980,0.0005/1000,
 Purge Volume: 5.0
 Column phase: RTX 624

Instrument: HSV0A08.i
 Operator: LM
 Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\HH912.D
 Report Date: 10-Aug-2006 08:34

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\HH912.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 09-AUG-2006 17:09 MS Autotune Date: 27-JUL-2006 10:42
 Operator : LW Inst ID: MSVOA08.i
 Smp Info : ICAL,S3942,0.002/1000,S3980,0.001/1000,
 Misc Info : S3053,0.001/1000,0.5/1PPB
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\826GOX8.m
 Meth Date : 10-Aug-2006 08:34 Administra Quant Type: ISTD
 Cal Date : 09-AUG-2006 16:31 Cal File: HH911.D
 Als bottle: 12 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.795	4.795	(0.461)	17498	1.00000	1.0088 (M)
2 Chloromethane	50	5.287	5.287	(0.508)	32742	1.00000	1.1561 (M)
3 Vinyl Chloride	62	5.385	5.385	(0.517)	22131	1.00000	1.0411 (M)
4 Bromomethane	94	6.025	6.025	(0.579)	8267	1.00000	0.8776 (M)
5 Chloroethane	64	6.143	6.143	(0.590)	12811	1.00000	1.0671 (M)
6 Trichlorofluoromethane	101	6.487	6.487	(0.623)	17573	1.00000	0.9972
7 Ethanol	45	6.753	6.753	(0.649)	13792	50.0000	61.0708
8 Freon 113	101	7.205	7.205	(0.692)	3033	0.50000	1.0174
9 1,1-Dichloroethene	96	7.303	7.303	(0.701)	5138	0.50000	0.5778
10 Acetone	43	7.402	7.402	(0.711)	27480	0.50000	(a)
11 Isopropanol	45	7.500	7.500	(0.720)	11115	5.00000	10.5127
12 Carbon Disulfide	76	7.707	7.707	(0.740)	28187	0.50000	0.5718 (M)
13 tert-Butyl Alcohol (TBA)	59	8.051	8.051	(0.773)	7422	5.00000	5.3852
14 Methylene Chloride	84	8.051	8.051	(0.773)	9031	0.50000	0.5795
15 MTBE	73	8.287	8.287	(0.796)	18782	0.50000	0.5138
16 trans-1,2-Dichloroethene	96	8.366	8.366	(0.803)	5497	0.50000	0.4839 (a)

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
17 Isopropyl Ether (DIPE)	45	8.887	8.887	(0.854)	29688	0.50000	0.5389
18 Vinyl Acetate	43	8.946	8.946	(0.859)	21326	0.50000	0.5419
19 1,1-Dichloroethane	63	9.005	9.005	(0.865)	13138	0.50000	0.5249
20 Ethyl tert-Butyl Ether (ETBE)	59	9.389	9.389	(0.902)	21582	0.50000	0.5025
21 2-Butanone	43	9.792	9.792	(0.940)	9272	0.50000	1.0259
22 2,2-Dichloropropane	77	9.802	9.802	(0.941)	8077	0.50000	0.5856
23 cis-1,2-Dichloroethene	96	9.811	9.811	(0.942)	7380	0.50000	0.5816 (M)
24 Tetrahydrofuran	42	10.195	10.195	(0.979)	83271	5.00000	6.7767
25 Bromochloromethane	128	10.185	10.185	(0.978)	3012	0.50000	0.4749 (a)
26 Chloroform	83	10.215	10.215	(0.981)	10770	0.50000	0.5195
* 27 Pentafluorobenzene	168	10.411	10.411	(1.000)	1845694	50.0000	
28 Dibromofluoromethane	113	10.461	10.461	(1.005)	1063715	50.0000	48.9067
29 1,1,1-Trichloroethane	97	10.500	10.500	(1.009)	6369	0.50000	0.4789 (a)
30 Carbon Tetrachloride	117	10.707	10.707	(0.928)	5025	0.50000	0.5032
31 1,1-Dichloropropene	75	10.716	10.716	(0.929)	7112	0.50000	0.5221
32 1,2-Dichloroethane-d4	65	11.011	11.011	(0.955)	1303894	50.0000	50.7335
33 Benzene	78	11.041	11.041	(0.957)	25353	0.50000	0.5665
34 Methyl tert-Amyl Ether (TAME)	73	11.041	11.041	(0.957)	17224	0.50000	0.5245
35 1,2-Dichloroethane	62	11.129	11.129	(0.965)	8793	0.50000	0.5084
* 36 1,4-Difluorobenzene	114	11.533	11.533	(1.000)	2891624	50.0000	
37 Trichloroethene	95	11.936	11.936	(1.035)	6589	0.50000	0.5494
38 Trifluorotoluene	146	12.290	12.290	(1.066)	7006	0.50000	0.5232
39 1,2-Dichloropropane	63	12.339	12.339	(1.070)	8406	0.50000	0.5788 (M)
40 Dibromomethane	93	12.526	12.526	(1.086)	4105	0.50000	0.5029
41 Bromodichloromethane	83	12.674	12.674	(1.099)	7266	0.50000	0.4880 (a)
42 2-Chloroethylvinylether	63	13.008	13.008	(1.128)	4403	1.00000	0.9647
43 Tetramethyl THF	43	13.244	13.244	(1.148)	19702	0.50000	0.5484
44 cis-1,3-Dichloropropene	75	13.283	13.283	(1.152)	9287	0.50000	0.4743 (a)
45 4-Methyl-2-Pentanone	43	13.431	13.431	(1.165)	10452	0.50000	0.5859
46 Toluene-d8	98	13.618	13.618	(1.181)	3322457	50.0000	49.4343
47 Toluene	92	13.706	13.706	(1.188)	15068	0.50000	0.5606
48 trans-1,3-Dichloropropene	75	14.031	14.031	(1.217)	9334	0.50000	0.5196
49 1,1,2-Trichloroethane	85	14.297	14.297	(1.240)	3222	0.50000	0.5236
50 Tetrachloroethene	166	14.424	14.424	(0.928)	4744	0.50000	0.4992 (a)
51 2-Hexanone	43	14.523	14.523	(0.934)	7152	0.50000	0.5643
52 1,3-Dichloropropane	76	14.542	14.542	(0.935)	10374	0.50000	0.5242
53 Dibromochloromethane	129	14.818	14.818	(0.953)	5034	0.50000	0.4674 (a)
54 1,2-Dibromoethane	107	15.024	15.024	(1.303)	5868	0.50000	0.5144
* 55 Chlorobenzene-d5	117	15.546	15.546	(1.000)	2557123	50.0000	
56 Chlorobenzene	112	15.575	15.575	(1.002)	16448	0.50000	0.5388
57 Ethylbenzene	91	15.624	15.624	(1.005)	25419	0.50000	0.5170
58 1,1,1,2-Tetrachloroethane	131	15.664	15.664	(1.008)	4849	0.50000	0.4995 (a)
59 m,p-Xylenes	106	15.762	15.762	(1.014)	19630	1.00000	1.0521
60 o-Xylene	106	16.264	16.264	(1.046)	9478	0.50000	0.5131
61 Styrene	104	16.293	16.293	(1.048)	15559	0.50000	0.4805 (a)
62 Bromoform	173	16.598	16.598	(1.068)	4553	0.50000	0.5539
63 Isopropylbenzene	105	16.657	16.657	(0.912)	21554	0.50000	0.5177

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
64 Cyclohexanone	55	16.913	16.913	(0.926)	17173	5.00000	10.5924
65 Bromofluorobenzene	95	16.923	16.923	(0.927)	1497057	50.0000	51.5026
66 1,1,2,2-Tetrachloroethane	83	17.060	17.060	(0.934)	6973	0.50000	0.5103
67 Bromobenzene	156	17.129	17.129	(0.938)	6292	0.50000	0.5131
68 Propylbenzene	91	17.129	17.129	(0.938)	29630	0.50000	0.5309
69 1,2,3-Trichloropropane	110	17.149	17.149	(0.939)	1926	0.50000	0.4784 (a)
70 2-Chlorotoluene	91	17.306	17.306	(0.948)	21278	0.50000	0.5417
71 1,3,5-Trimethylbenzene	105	17.306	17.306	(0.948)	19608	0.50000	0.5336
72 4-Chlorotoluene	91	17.434	17.434	(0.955)	20532	0.50000	0.5342
73 tert-Butylbenzene	119	17.690	17.690	(0.969)	14597	0.50000	0.4871 (a)
74 1,2,4-Trimethylbenzene	105	17.759	17.759	(0.973)	20220	0.50000	0.5190
75 sec-Butylbenzene	105	17.936	17.936	(0.982)	22801	0.50000	0.4990 (a)
76 para-Isopropyl Toluene	119	18.083	18.083	(0.990)	18979	0.50000	0.5149
77 1,3-Dichlorobenzene	146	18.182	18.182	(0.996)	11960	0.50000	0.5025
* 78 1,4-Dichlorobenzene-d4	152	18.260	18.260	(1.000)	1310108	50.0000	
79 1,4-Dichlorobenzene	146	18.280	18.280	(1.001)	13265	0.50000	0.5334
80 n-Butylbenzene	91	18.565	18.565	(1.017)	18746	0.50000	0.5207
81 1,2-Dichlorobenzene	146	18.752	18.752	(1.027)	12018	0.50000	0.5203
82 1,2-Dibromo-3-Chloropropane	75	19.746	19.746	(1.081)	1400	0.50000	0.5057 (M)
83 1,2,4-Trichlorobenzene	180	20.857	20.857	(1.142)	7729	0.50000	0.5576
84 Hexachlorobutadiene	225	20.965	20.965	(1.148)	2197	0.50000	0.5211
85 Naphthalene	128	21.290	21.290	(1.166)	18149	0.50000	0.5049
86 1,2,3-Trichlorobenzene	180	21.673	21.673	(1.187)	6573	0.50000	0.4999 (a)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.

Data File: \\GCHSSERVER\JD\chem\MSV0008.i\080906.b\HH912.D

Date : 09-AUG-2006 17:09

Client ID: DYNA P&T

Sample Info: ICAL,S3942,0.002/1000,S3980,0.001/1000,

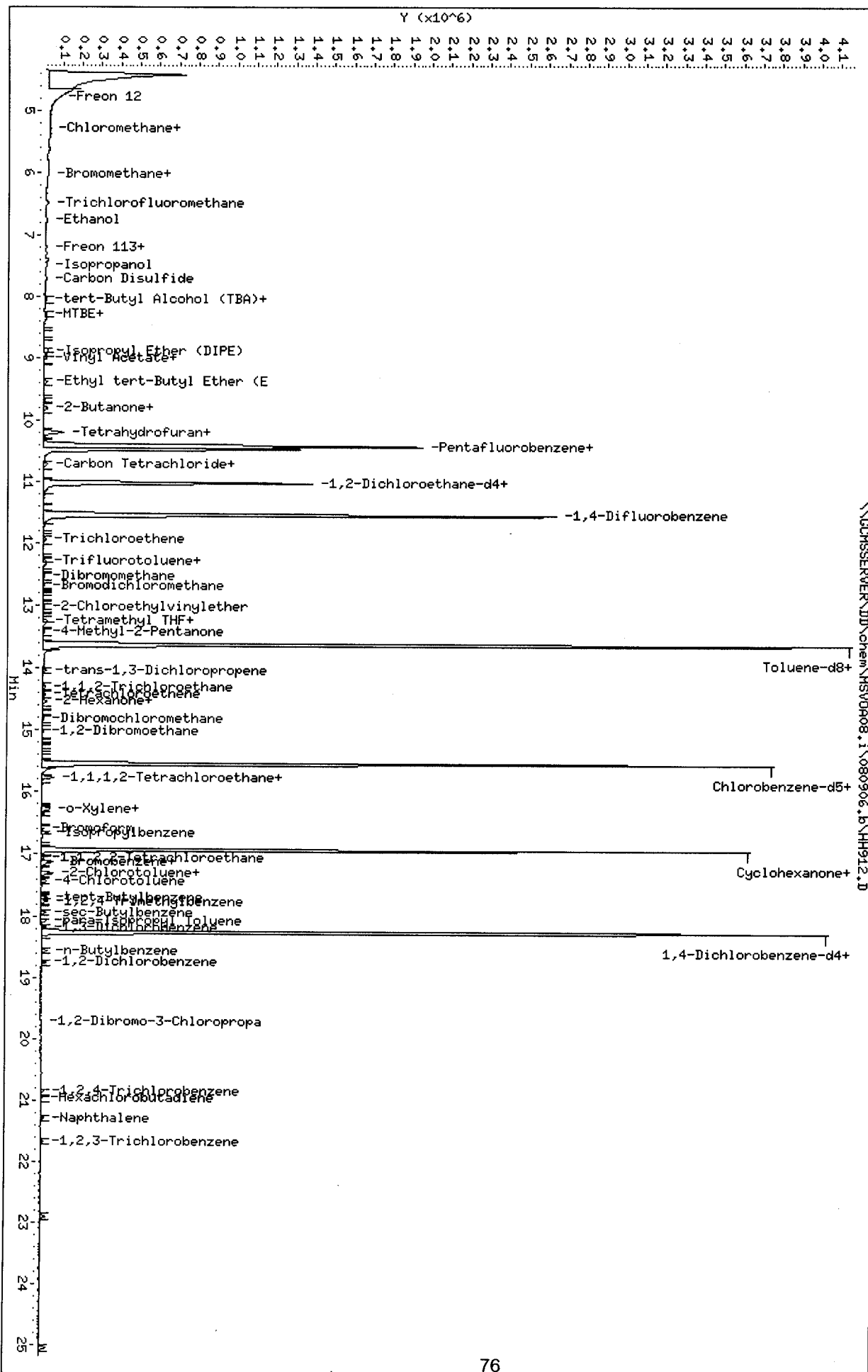
Purge Volume: 5.0

Column phase: RTX 624

Instrument: MSV0008.i

Operator: LM

Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\HH913.D
 Report Date: 10-Aug-2006 08:35

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\HH913.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 09-AUG-2006 17:48 MS Autotune Date: 27-JUL-2006 10:42
 Operator : LW Inst ID: MSVOA08.i
 Smp Info : ICAL,S3942,0.002/500,S3980,0.002/500,
 Misc Info : S3053,0.001/500,2PPB
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\826GOX8.m
 Meth Date : 10-Aug-2006 08:35 Administra Quant Type: ISTD
 Cal Date : 09-AUG-2006 16:31 Cal File: HH911.D
 Als bottle: 13 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.807	4.807	(0.462)	36984	2.00000	2.1400 (M)
2 Chloromethane	50	5.309	5.309	(0.510)	63378	2.00000	2.2461 (M)
3 Vinyl Chloride	62	5.388	5.388	(0.517)	43307	2.00000	2.0449 (M)
4 Bromomethane	94	6.027	6.027	(0.579)	15566	2.00000	1.6584 (M)
5 Chloroethane	64	6.155	6.155	(0.591)	26176	2.00000	2.1883 (M)
6 Trichlorofluoromethane	101	6.489	6.489	(0.623)	35293	2.00000	2.0102
7 Ethanol	45	6.755	6.755	(0.649)	46724	200.000	207.6505
8 Freon 113	101	7.207	7.207	(0.692)	11862	2.00000	2.1788
9 1,1-Dichloroethene	96	7.306	7.306	(0.702)	15092	2.00000	1.7035
10 Acetone	43	7.404	7.404	(0.711)	33240	2.00000	0.9564
11 Isopropanol	45	7.493	7.493	(0.719)	27346	20.0000	25.9590
12 Carbon Disulfide	76	7.709	7.709	(0.740)	95001	2.00000	1.9345 (M)
13 tert-Butyl Alcohol (TBA)	59	8.043	8.043	(0.772)	29086	20.0000	21.1813
14 Methylene Chloride	84	8.043	8.043	(0.772)	33548	2.00000	2.1605
15 MTBE	73	8.289	8.289	(0.796)	74966	2.00000	2.0585
16 trans-1,2-Dichloroethene	96	8.368	8.368	(0.804)	22890	2.00000	2.0224

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
17 Isopropyl Ether (DIPE)	45	8.879	8.879	(0.853)	113166	2.00000	2.0620
18 Vinyl Acetate	43	8.948	8.948	(0.859)	84599	2.00000	2.1577
19 1,1-Dichloroethane	63	9.007	9.007	(0.865)	50316	2.00000	2.0178
20 Ethyl tert-Butyl Ether (ETBE)	59	9.391	9.391	(0.902)	88096	2.00000	2.0587
21 2-Butanone	43	9.794	9.794	(0.940)	21600	2.00000	2.3986
22 2,2-Dichloropropane	77	9.794	9.794	(0.940)	27323	2.00000	1.9884
23 cis-1,2-Dichloroethene	96	9.824	9.824	(0.943)	25280	2.00000	1.9997
24 Tetrahydrofuran	42	10.197	10.197	(0.979)	165250	20.0000	21.7627
25 Bromochloromethane	128	10.187	10.187	(0.978)	12786	2.00000	2.0237
26 Chloroform	83	10.217	10.217	(0.981)	43016	2.00000	2.0825
* 27 Pentafluorobenzene	168	10.414	10.414	(1.000)	1838964	50.0000	
28 Dibromofluoromethane	113	10.463	10.463	(1.005)	1068170	50.0000	49.2913
29 1,1,1-Trichloroethane	97	10.512	10.512	(1.009)	24682	2.00000	1.8629
30 Carbon Tetrachloride	117	10.709	10.709	(0.928)	19148	2.00000	1.8705
31 1,1-Dichloropropene	75	10.719	10.719	(0.929)	25425	2.00000	1.8207
32 1,2-Dichloroethane-d4	65	11.014	11.014	(0.955)	1326558	50.0000	50.3444
33 Benzene	78	11.033	11.033	(0.957)	92387	2.00000	2.0135
34 Methyl tert-Amyl Ether (TAME)	73	11.043	11.043	(0.957)	68707	2.00000	2.0407
35 1,2-Dichloroethane	62	11.132	11.132	(0.965)	37237	2.00000	2.1000
* 36 1,4-Difluorobenzene	114	11.535	11.535	(1.000)	2964622	50.0000	
37 Trichloroethene	95	11.938	11.938	(1.035)	24028	2.00000	1.9542
38 Trifluorotoluene	146	12.292	12.292	(1.066)	23115	2.00000	1.6838
39 1,2-Dichloropropane	63	12.342	12.342	(1.070)	29477	2.00000	1.9796
40 Dibromomethane	93	12.528	12.528	(1.086)	16701	2.00000	1.9958
41 Bromodichloromethane	83	12.676	12.676	(1.099)	30018	2.00000	1.9666
42 2-Chloroethylvinylether	63	13.010	13.010	(1.128)	8811	2.00000	1.8830
43 Tetramethyl THF	43	13.246	13.246	(1.148)	77130	2.00000	2.0940
44 cis-1,3-Dichloropropene	75	13.286	13.286	(1.152)	41133	2.00000	2.0490
45 4-Methyl-2-Pentanone	43	13.423	13.423	(1.164)	38373	2.00000	2.0980
46 Toluene-d8	98	13.620	13.620	(1.181)	3436816	50.0000	49.8767
47 Toluene	92	13.709	13.709	(1.188)	55822	2.00000	2.0260
48 trans-1,3-Dichloropropene	75	14.033	14.033	(1.217)	35036	2.00000	1.9026
49 1,1,2-Trichloroethane	85	14.299	14.299	(1.240)	12172	2.00000	1.9295
50 Tetrachloroethene	166	14.427	14.427	(0.928)	17545	2.00000	1.8377
51 2-Hexanone	43	14.515	14.515	(0.934)	26747	2.00000	2.1005
52 1,3-Dichloropropane	76	14.545	14.545	(0.936)	39653	2.00000	1.9944
53 Dibromochloromethane	129	14.820	14.820	(0.954)	21758	2.00000	2.0105
54 1,2-Dibromoethane	107	15.027	15.027	(1.303)	23312	2.00000	1.9934
* 55 Chlorobenzene-d5	117	15.538	15.538	(1.000)	2569398	50.0000	
56 Chlorobenzene	112	15.577	15.577	(1.003)	63968	2.00000	2.0856
57 Ethylbenzene	91	15.627	15.627	(1.006)	103350	2.00000	2.0921
58 1,1,1,2-Tetrachloroethane	131	15.666	15.666	(1.008)	19286	2.00000	1.9775
59 m,p-Xylenes	106	15.764	15.764	(1.015)	76892	4.00000	4.1015
60 o-Xylene	106	16.266	16.266	(1.047)	38287	2.00000	2.0629
61 Styrene	104	16.286	16.286	(1.048)	65931	2.00000	2.0266
62 Bromoform	173	16.591	16.591	(1.068)	16192	2.00000	1.9607
63 Isopropylbenzene	105	16.659	16.659	(0.913)	82100	2.00000	1.9536

Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\HH913.D
 Report Date: 10-Aug-2006 08:35

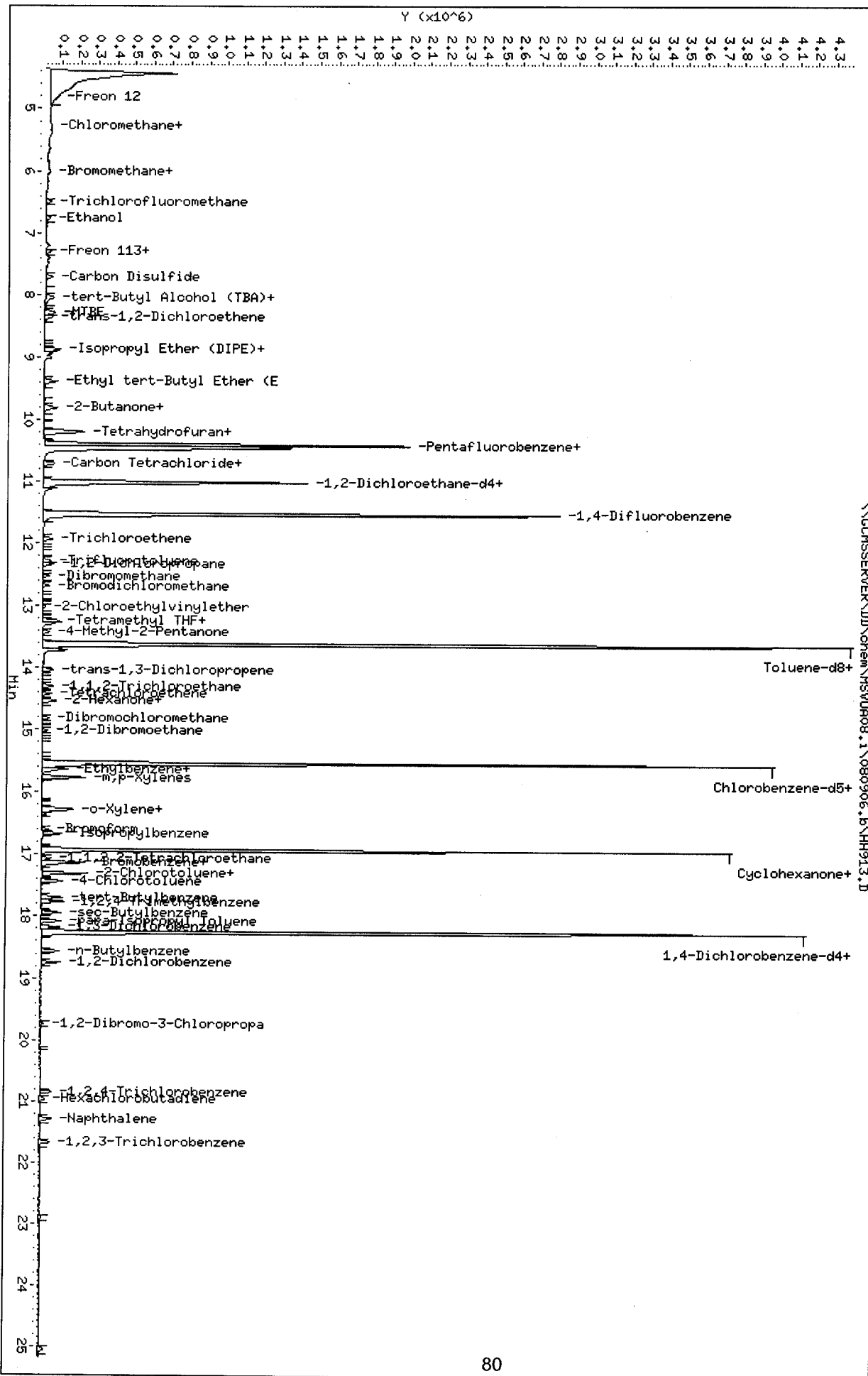
Compounds	QUANT SIG			REL RT	RESPONSE	AMOUNTS	
	MASS	RT	EXP RT			CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
64 Cyclohexanone	55	16.915	16.915	(0.927)	31259	20.0000	22.1141
65 Bromofluorobenzene	95	16.925	16.925	(0.927)	1468549	50.0000	50.0489
66 1,1,2,2-Tetrachloroethane	83	17.063	17.063	(0.935)	27217	2.00000	1.9735
67 Bromobenzene	156	17.132	17.132	(0.939)	26710	2.00000	2.1578
68 Propylbenzene	91	17.132	17.132	(0.939)	116781	2.00000	2.0730
69 1,2,3-Trichloropropane	110	17.161	17.161	(0.940)	8362	2.00000	2.0580
70 2-Chlorotoluene	91	17.309	17.309	(0.948)	85236	2.00000	2.1499
71 1,3,5-Trimethylbenzene	105	17.309	17.309	(0.948)	76244	2.00000	2.0555
72 4-Chlorotoluene	91	17.427	17.427	(0.955)	81738	2.00000	2.1070
73 tert-Butylbenzene	119	17.692	17.692	(0.969)	59546	2.00000	1.9687
74 1,2,4-Trimethylbenzene	105	17.761	17.761	(0.973)	80280	2.00000	2.0415
75 sec-Butylbenzene	105	17.938	17.938	(0.983)	87798	2.00000	1.9036
76 para-Isopropyl Toluene	119	18.076	18.076	(0.990)	72301	2.00000	1.9433
77 1,3-Dichlorobenzene	146	18.184	18.184	(0.996)	50212	2.00000	2.0902
* 78 1,4-Dichlorobenzene-d4	152	18.253	18.253	(1.000)	1322489	50.0000	
79 1,4-Dichlorobenzene	146	18.282	18.282	(1.002)	54390	2.00000	2.1669
80 n-Butylbenzene	91	18.558	18.558	(1.017)	70971	2.00000	1.9528
81 1,2-Dichlorobenzene	146	18.754	18.754	(1.027)	48201	2.00000	2.0675
82 1,2-Dibromo-3-Chloropropane	75	19.738	19.738	(1.081)	5700	2.00000	2.0396
83 1,2,4-Trichlorobenzene	180	20.849	20.849	(1.142)	28791	2.00000	2.0576
84 Hexachlorobutadiene	225	20.967	20.967	(1.149)	7896	2.00000	1.8553
85 Naphthalene	128	21.292	21.292	(1.167)	70974	2.00000	1.9561
86 1,2,3-Trichlorobenzene	180	21.676	21.676	(1.188)	26910	2.00000	2.0274

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCHSSERVER\JD\chem\MSV0908.i\080906.b\HH913.D
 Date : 09-AUG-2006 17:48
 Client ID: DYNA P&T
 Sample Info: ICAL,S3942,0.002/500,S3980,0.002/500,
 Purge Volume: 5.0
 Column phase: RTX 624

Instrument: MSV0908.i
 Operator: LM
 Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\HH914.D
 Report Date: 10-Aug-2006 08:36

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\HH914.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 09-AUG-2006 18:26 MS Autotune Date: 27-JUL-2006 10:42
 Operator : LW Inst ID: MSVOA08.i
 Smp Info : ICAL,S3942,0.005/500,S3980,0.005/500,
 Misc Info : S3053,0.0025/500,5PPB
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\826GOX8.m
 Meth Date : 10-Aug-2006 08:36 Administra Quant Type: ISTD
 Cal Date : 09-AUG-2006 16:31 Cal File: HH911.D
 Als bottle: 14 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT	SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85		4.805	4.805	(0.462)	93192	5.00000	5.3085
2 Chloromethane	50		5.306	5.306	(0.510)	151816	5.00000	5.2966 (M)
3 Vinyl Chloride	62		5.385	5.385	(0.517)	113733	5.00000	5.2867
4 Bromomethane	94		6.005	6.005	(0.577)	43820	5.00000	4.5961 (M)
5 Chloroethane	64		6.152	6.152	(0.591)	63750	5.00000	5.2467 (M)
6 Trichlorofluoromethane	101		6.487	6.487	(0.623)	88727	5.00000	4.9751
7 Ethanol	45		6.762	6.762	(0.650)	112200	500.000	490.8802
8 Freon 113	101		7.195	7.195	(0.691)	23614	5.00000	3.6668
9 1,1-Dichloroethene	96		7.303	7.303	(0.701)	35750	5.00000	3.9724
10 Acetone	43		7.411	7.411	(0.712)	54916	5.00000	5.6079
11 Isopropanol	45		7.490	7.490	(0.719)	55863	50.0000	52.2046
12 Carbon Disulfide	76		7.716	7.716	(0.741)	227572	5.00000	4.5620
13 tert-Butyl Alcohol (TBA)	59		8.051	8.051	(0.773)	70146	50.0000	50.2878
14 Methylene Chloride	84		8.051	8.051	(0.773)	83164	5.00000	5.2726
15 MTBE	73		8.287	8.287	(0.796)	184519	5.00000	4.9880
16 trans-1,2-Dichloroethene	96		8.365	8.365	(0.803)	54020	5.00000	4.6986

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
17 Isopropyl Ether (DIPE)	45	8.877	8.877	(0.853)	282640	5.00000	5.0699
18 Vinyl Acetate	43	8.946	8.946	(0.859)	196597	5.00000	4.9362
19 1,1-Dichloroethane	63	9.005	9.005	(0.865)	125753	5.00000	4.9646
20 Ethyl tert-Butyl Ether (ETBE)	59	9.388	9.388	(0.902)	219068	5.00000	5.0398
21 2-Butanone	43	9.792	9.792	(0.940)	51690	5.00000	5.6508
22 2,2-Dichloropropane	77	9.801	9.801	(0.941)	66307	5.00000	4.7505
23 cis-1,2-Dichloroethene	96	9.821	9.821	(0.943)	62953	5.00000	4.9022
24 Tetrahydrofuran	42	10.195	10.195	(0.979)	320464	50.0000	49.6593
25 Bromochloromethane	128	10.185	10.185	(0.978)	32449	5.00000	5.0559
26 Chloroform	83	10.215	10.215	(0.981)	104363	5.00000	4.9740
* 27 Pentafluorobenzene	168	10.411	10.411	(1.000)	1868029	50.0000	
28 Dibromofluoromethane	113	10.460	10.460	(1.005)	1071142	50.0000	48.6594
29 1,1,1-Trichloroethane	97	10.500	10.500	(1.009)	58275	5.00000	4.3301
30 Carbon Tetrachloride	117	10.706	10.706	(0.928)	41542	5.00000	4.1494
31 1,1-Dichloropropene	75	10.726	10.726	(0.930)	60654	5.00000	4.4412
32 1,2-Dichloroethane-d4	65	11.011	11.011	(0.955)	1335410	50.0000	51.8198
33 Benzene	78	11.041	11.041	(0.957)	232224	5.00000	5.1749
34 Methyl tert-Amyl Ether (TAME)	73	11.041	11.041	(0.957)	169915	5.00000	5.1602
35 1,2-Dichloroethane	62	11.129	11.129	(0.965)	88113	5.00000	5.0810
* 36 1,4-Difluorobenzene	114	11.533	11.533	(1.000)	2899436	50.0000	
37 Trichloroethene	95	11.936	11.936	(1.035)	60629	5.00000	5.0419
38 Trifluorotoluene	146	12.290	12.290	(1.066)	54535	5.00000	4.0619
39 1,2-Dichloropropane	63	12.339	12.339	(1.070)	73881	5.00000	5.0734 (M)
40 Dibromomethane	93	12.526	12.526	(1.086)	41830	5.00000	5.1112
41 Bromodichloromethane	83	12.673	12.673	(1.099)	76641	5.00000	5.1339
42 2-Chloroethylvinylether	63	13.008	13.008	(1.128)	23944	5.00000	5.2322
43 Tetramethyl THF	43	13.244	13.244	(1.148)	187844	5.00000	5.2145
44 cis-1,3-Dichloropropene	75	13.283	13.283	(1.152)	100921	5.00000	5.1403
45 4-Methyl-2-Pentanone	43	13.421	13.421	(1.164)	92989	5.00000	5.1986
46 Toluene-d8	98	13.618	13.618	(1.181)	3432169	50.0000	50.9291
47 Toluene	92	13.706	13.706	(1.188)	138806	5.00000	5.1511
48 trans-1,3-Dichloropropene	75	14.031	14.031	(1.217)	91521	5.00000	5.0819
49 1,1,2-Trichloroethane	85	14.296	14.296	(1.240)	31286	5.00000	5.0711
50 Tetrachloroethene	166	14.424	14.424	(0.928)	43227	5.00000	4.5700
51 2-Hexanone	43	14.523	14.523	(0.934)	67781	5.00000	5.3727
52 1,3-Dichloropropane	76	14.542	14.542	(0.935)	102966	5.00000	5.2273
53 Dibromochloromethane	129	14.818	14.818	(0.953)	54059	5.00000	5.0420
54 1,2-Dibromoethane	107	15.024	15.024	(1.303)	56074	5.00000	4.9027
* 55 Chlorobenzene-d5	117	15.545	15.545	(1.000)	2545633	50.0000	
56 Chlorobenzene	112	15.575	15.575	(1.002)	162387	5.00000	5.3439
57 Ethylbenzene	91	15.624	15.624	(1.005)	260047	5.00000	5.3133
58 1,1,1,2-Tetrachloroethane	131	15.664	15.664	(1.008)	50822	5.00000	5.2598
59 m,p-Xylenes	106	15.762	15.762	(1.014)	194582	10.0000	10.4761
60 o-Xylene	106	16.263	16.263	(1.046)	96435	5.00000	5.2444
61 Styrene	104	16.293	16.293	(1.048)	170229	5.00000	5.2815
62 Bromoform	173	16.598	16.598	(1.068)	38042	5.00000	4.6496
63 Isopropylbenzene	105	16.657	16.657	(0.913)	205192	5.00000	4.9175

Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\HH914.D
Report Date: 10-Aug-2006 08:36

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
64 Cyclohexanone	55	16.913	16.913	(0.927)	106254	50.0000	85.9171
65 Bromofluorobenzene	95	16.922	16.922	(0.927)	1462950	50.0000	50.2126
66 1,1,2,2-Tetrachloroethane	83	17.060	17.060	(0.935)	67350	5.00000	4.9182
67 Bromobenzene	156	17.129	17.129	(0.939)	66392	5.00000	5.4019
68 Propylbenzene	91	17.129	17.129	(0.939)	293818	5.00000	5.2527
69 1,2,3-Trichloropropane	110	17.159	17.159	(0.940)	20967	5.00000	5.1969
70 2-Chlorotoluene	91	17.306	17.306	(0.948)	215929	5.00000	5.4851
71 1,3,5-Trimethylbenzene	105	17.306	17.306	(0.948)	194095	5.00000	5.2699
72 4-Chlorotoluene	91	17.434	17.434	(0.955)	207185	5.00000	5.3788
73 tert-Butylbenzene	119	17.690	17.690	(0.969)	146794	5.00000	4.8878
74 1,2,4-Trimethylbenzene	105	17.759	17.759	(0.973)	214085	5.00000	5.4829
75 sec-Butylbenzene	105	17.936	17.936	(0.983)	217424	5.00000	4.7477
76 para-Isopropyl Toluene	119	18.083	18.083	(0.991)	184698	5.00000	4.9996
77 1,3-Dichlorobenzene	146	18.181	18.181	(0.996)	127602	5.00000	5.3496
* 78 1,4-Dichlorobenzene-d4	152	18.250	18.250	(1.000)	1313150	50.0000	
79 1,4-Dichlorobenzene	146	18.290	18.290	(1.002)	133033	5.00000	5.3378
80 n-Butylbenzene	91	18.565	18.565	(1.017)	178439	5.00000	4.9450
81 1,2-Dichlorobenzene	146	18.752	18.752	(1.027)	123176	5.00000	5.3212
82 1,2-Dibromo-3-Chloropropane	75	19.735	19.735	(1.081)	14365	5.00000	5.1768
83 1,2,4-Trichlorobenzene	180	20.857	20.857	(1.143)	73168	5.00000	5.2663
84 Hexachlorobutadiene	225	20.965	20.965	(1.149)	18700	5.00000	4.4253
85 Naphthalene	128	21.290	21.290	(1.167)	187693	5.00000	5.2098
86 1,2,3-Trichlorobenzene	180	21.673	21.673	(1.188)	69419	5.00000	5.2673

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCHSSERVER\JD\chem\MSV0908.i\080906.b\HH914.D

Date : 09-AUG-2006 18:26

Client ID: DYNA P&T

Sample Info: ICAL,S3942,0.005/500,S3980,0.005/500,

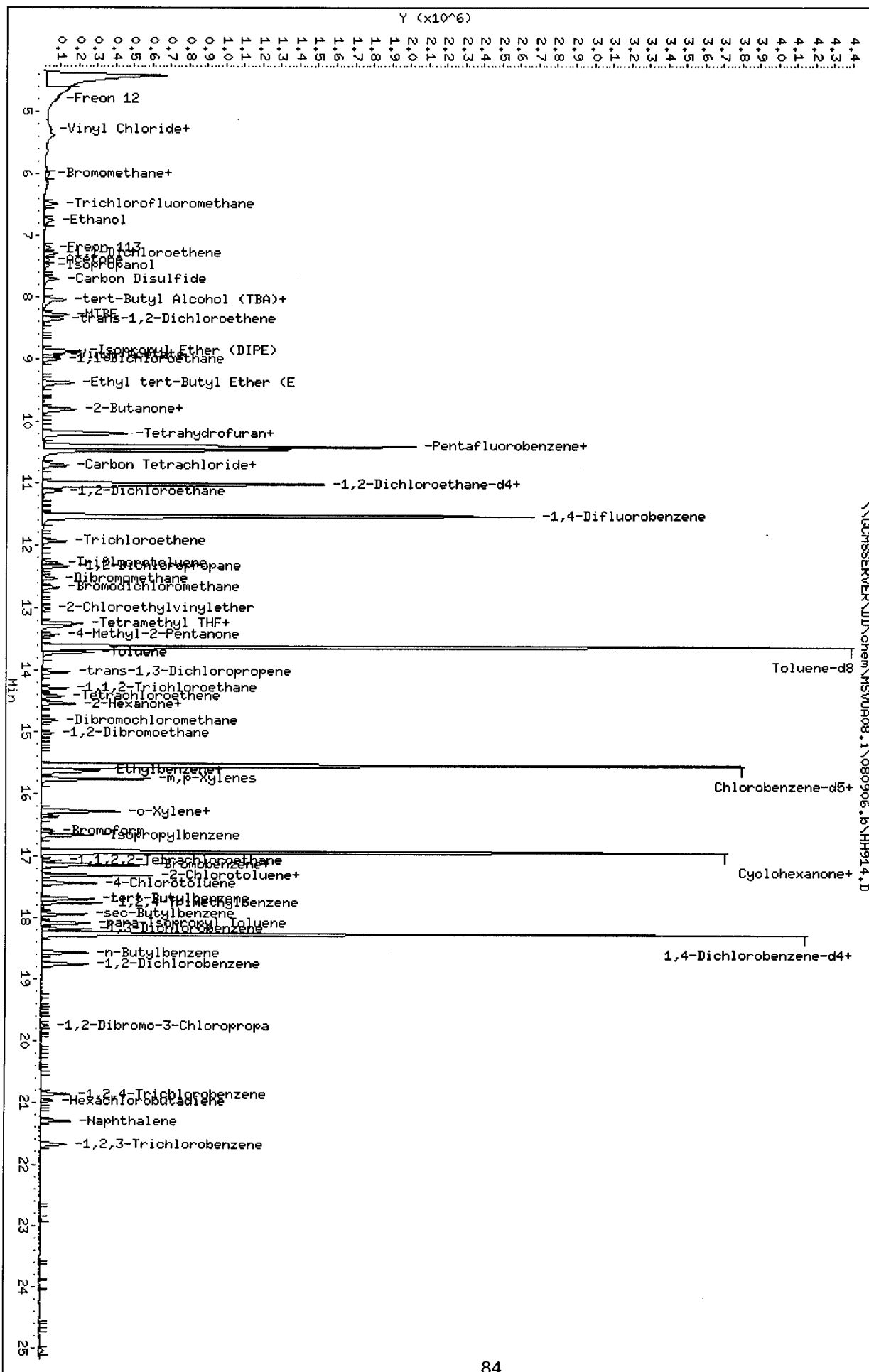
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Column phase: RTX 624

Instrument: MSV0908.i

Operator: LM

Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\HH915.D
 Report Date: 10-Aug-2006 08:37

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\HH915.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 09-AUG-2006 19:04 MS Autotune Date: 27-JUL-2006 10:42
 Operator : LW Inst ID: MSVOA08.i
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 Misc Info : S3053,0.001/100,10PPB
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\826GOX8.m
 Meth Date : 10-Aug-2006 08:37 Administra Quant Type: ISTD
 Cal Date : 09-AUG-2006 16:31 Cal File: HH911.D
 Als bottle: 15 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.800	4.800	(0.461)	183114	10.0000	10.5071
2 Chloromethane	50	5.302	5.302	(0.509)	303153	10.0000	10.6541 (M)
3 Vinyl Chloride	62	5.390	5.390	(0.518)	227586	10.0000	10.6566
4 Bromomethane	94	6.010	6.010	(0.578)	96683	10.0000	10.2151
5 Chloroethane	64	6.158	6.158	(0.592)	126280	10.0000	10.4691
6 Trichlorofluoromethane	101	6.492	6.492	(0.624)	184160	10.0000	10.4019
7 Ethanol	45	6.758	6.758	(0.649)	237186	1000.00	1045.3032
8 Freon 113	101	7.200	7.200	(0.692)	74544	10.0000	10.1870
9 1,1-Dichloroethene	96	7.299	7.299	(0.701)	90929	10.0000	10.1779
10 Acetone	43	7.407	7.407	(0.712)	72352	10.0000	9.5592
11 Isopropanol	45	7.485	7.485	(0.719)	105992	100.000	99.7765
12 Carbon Disulfide	76	7.712	7.712	(0.741)	518449	10.0000	10.4692
13 tert-Butyl Alcohol (TBA)	59	8.046	8.046	(0.773)	145451	100.000	105.0382
14 Methylene Chloride	84	8.046	8.046	(0.773)	165794	10.0000	10.5885
15 MTBE	73	8.282	8.282	(0.796)	384378	10.0000	10.4669
16 trans-1,2-Dichloroethene	96	8.361	8.361	(0.803)	119965	10.0000	10.5110

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
17 Isopropyl Ether (DIPE)	45	8.882	8.882	(0.854)	588973	10.0000	10.6422
18 Vinyl Acetate	43	8.941	8.941	(0.859)	424672	10.0000	10.7410
19 1,1-Dichloroethane	63	9.000	9.000	(0.865)	265452	10.0000	10.5565
20 Ethyl tert-Butyl Ether (ETBE)	59	9.384	9.384	(0.902)	450654	10.0000	10.4437
21 2-Butanone	43	9.797	9.797	(0.941)	95789	10.0000	10.5486
22 2,2-Dichloropropane	77	9.797	9.797	(0.941)	138426	10.0000	9.9901
23 cis-1,2-Dichloroethene	96	9.817	9.817	(0.943)	127528	10.0000	10.0035
24 Tetrahydrofuran	42	10.190	10.190	(0.979)	600080	100.000	103.4216
25 Bromochloromethane	128	10.180	10.180	(0.978)	68602	10.0000	10.7673
26 Chloroform	83	10.220	10.220	(0.982)	219410	10.0000	10.5338
* 27 Pentafluorobenzene	168	10.407	10.407	(1.000)	1854441	50.0000	
28 Dibromofluoromethane	113	10.456	10.456	(1.005)	1097587	50.0000	50.2260
29 1,1,1-Trichloroethane	97	10.505	10.505	(1.009)	138137	10.0000	10.3394
30 Carbon Tetrachloride	117	10.702	10.702	(0.928)	101103	10.0000	9.8458
31 1,1-Dichloropropene	75	10.721	10.721	(0.929)	141995	10.0000	10.1369
32 1,2-Dichloroethane-d4	65	11.016	11.016	(0.955)	1328556	50.0000	50.2628
33 Benzene	78	11.036	11.036	(0.957)	468346	10.0000	10.1754
34 Methyl tert-Amyl Ether (TAME)	73	11.036	11.036	(0.957)	346184	10.0000	10.2502
35 1,2-Dichloroethane	62	11.125	11.125	(0.964)	179135	10.0000	10.0712
* 36 1,4-Difluorobenzene	114	11.538	11.538	(1.000)	2973912	50.0000	
37 Trichloroethene	95	11.941	11.941	(1.035)	122491	10.0000	9.9312
38 Trifluorotoluene	146	12.285	12.285	(1.065)	133882	10.0000	9.7223
39 1,2-Dichloropropane	63	12.334	12.334	(1.069)	151650	10.0000	10.1530 (M)
40 Dibromomethane	93	12.531	12.531	(1.086)	84839	10.0000	10.1068
41 Bromodichloromethane	83	12.679	12.679	(1.099)	157916	10.0000	10.3134
42 2-Chloroethylvinylether	63	13.013	13.013	(1.128)	51807	10.0000	11.0374
43 Tetramethyl THF	43	13.239	13.239	(1.147)	385429	10.0000	10.4316
44 cis-1,3-Dichloropropene	75	13.289	13.289	(1.152)	206901	10.0000	10.2743
45 4-Methyl-2-Pentanone	43	13.426	13.426	(1.164)	188793	10.0000	10.2902
46 Toluene-d8	98	13.613	13.613	(1.180)	3528487	50.0000	51.0472
47 Toluene	92	13.711	13.711	(1.188)	287316	10.0000	10.3954
48 trans-1,3-Dichloropropene	75	14.036	14.036	(1.217)	188590	10.0000	10.2096
49 1,1,2-Trichloroethane	85	14.302	14.302	(1.240)	65163	10.0000	10.2976
50 Tetrachloroethene	166	14.420	14.420	(0.928)	98708	10.0000	10.2094
51 2-Hexanone	43	14.518	14.518	(0.934)	132214	10.0000	10.2529
52 1,3-Dichloropropane	76	14.538	14.538	(0.935)	202719	10.0000	10.0683
53 Dibromochloromethane	129	14.813	14.813	(0.953)	107475	10.0000	9.8067
54 1,2-Dibromoethane	107	15.020	15.020	(1.302)	119305	10.0000	10.1701
* 55 Chlorobenzene-d5	117	15.541	15.541	(1.000)	2602047	50.0000	
56 Chlorobenzene	112	15.580	15.580	(1.003)	319856	10.0000	10.2978
57 Ethylbenzene	91	15.629	15.629	(1.006)	523116	10.0000	10.4567
58 1,1,1,2-Tetrachloroethane	131	15.659	15.659	(1.008)	96273	10.0000	9.7477
59 m,p-Xylenes	106	15.767	15.767	(1.015)	387602	20.0000	20.4157
60 o-Xylene	106	16.269	16.269	(1.047)	194250	10.0000	10.3349
61 Styrene	104	16.288	16.288	(1.048)	355842	10.0000	10.8010
62 Bromoform	173	16.593	16.593	(1.068)	81436	10.0000	9.7377
63 Isopropylbenzene	105	16.662	16.662	(0.913)	445983	10.0000	10.3192

Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\HH915.D
 Report Date: 10-Aug-2006 08:37

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						(ug/L)	(ug/L)
=====	====	==	=====	=====	=====	=====	=====
64 Cyclohexanone	55	16.908	16.908	(0.926)	118895	100.000	93.2783
65 Bromofluorobenzene	95	16.928	16.928	(0.927)	1497717	50.0000	49.6315
66 1,1,2,2-Tetrachloroethane	83	17.065	17.065	(0.935)	143807	10.0000	10.1391
67 Bromobenzene	156	17.134	17.134	(0.939)	129736	10.0000	10.1915
68 Propylbenzene	91	17.124	17.124	(0.938)	606182	10.0000	10.4629
69 1,2,3-Trichloropropane	110	17.154	17.154	(0.940)	42743	10.0000	10.2287
70 2-Chlorotoluene	91	17.311	17.311	(0.948)	428286	10.0000	10.5040
71 1,3,5-Trimethylbenzene	105	17.311	17.311	(0.948)	400349	10.0000	10.4948
72 4-Chlorotoluene	91	17.429	17.429	(0.955)	411845	10.0000	10.3230
73 tert-Butylbenzene	119	17.695	17.695	(0.969)	325927	10.0000	10.4779
74 1,2,4-Trimethylbenzene	105	17.754	17.754	(0.973)	414825	10.0000	10.2574
75 sec-Butylbenzene	105	17.941	17.941	(0.983)	500765	10.0000	10.5575
76 para-Isopropyl Toluene	119	18.079	18.079	(0.990)	395020	10.0000	10.3238
77 1,3-Dichlorobenzene	146	18.177	18.177	(0.996)	254401	10.0000	10.2975
* 78 1,4-Dichlorobenzene-d4	152	18.256	18.256	(1.000)	1360098	50.0000	
79 1,4-Dichlorobenzene	146	18.285	18.285	(1.002)	261093	10.0000	10.1145
80 n-Butylbenzene	91	18.560	18.560	(1.017)	381791	10.0000	10.2151
81 1,2-Dichlorobenzene	146	18.757	18.757	(1.027)	245474	10.0000	10.2385
82 1,2-Dibromo-3-Chloropropane	75	19.741	19.741	(1.081)	28983	10.0000	10.0843
83 1,2,4-Trichlorobenzene	180	20.852	20.852	(1.142)	146207	10.0000	10.1602
84 Hexachlorobutadiene	225	20.960	20.960	(1.148)	43741	10.0000	9.9939
85 Naphthalene	128	21.285	21.285	(1.166)	387630	10.0000	10.3882
86 1,2,3-Trichlorobenzene	180	21.678	21.678	(1.187)	139834	10.0000	10.2440

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCHSSERVER\JD\chem\MSV0908.i\080906.b\HH915.D

Date : 09-AUG-2006 19:04

Client ID: DYNA P&T

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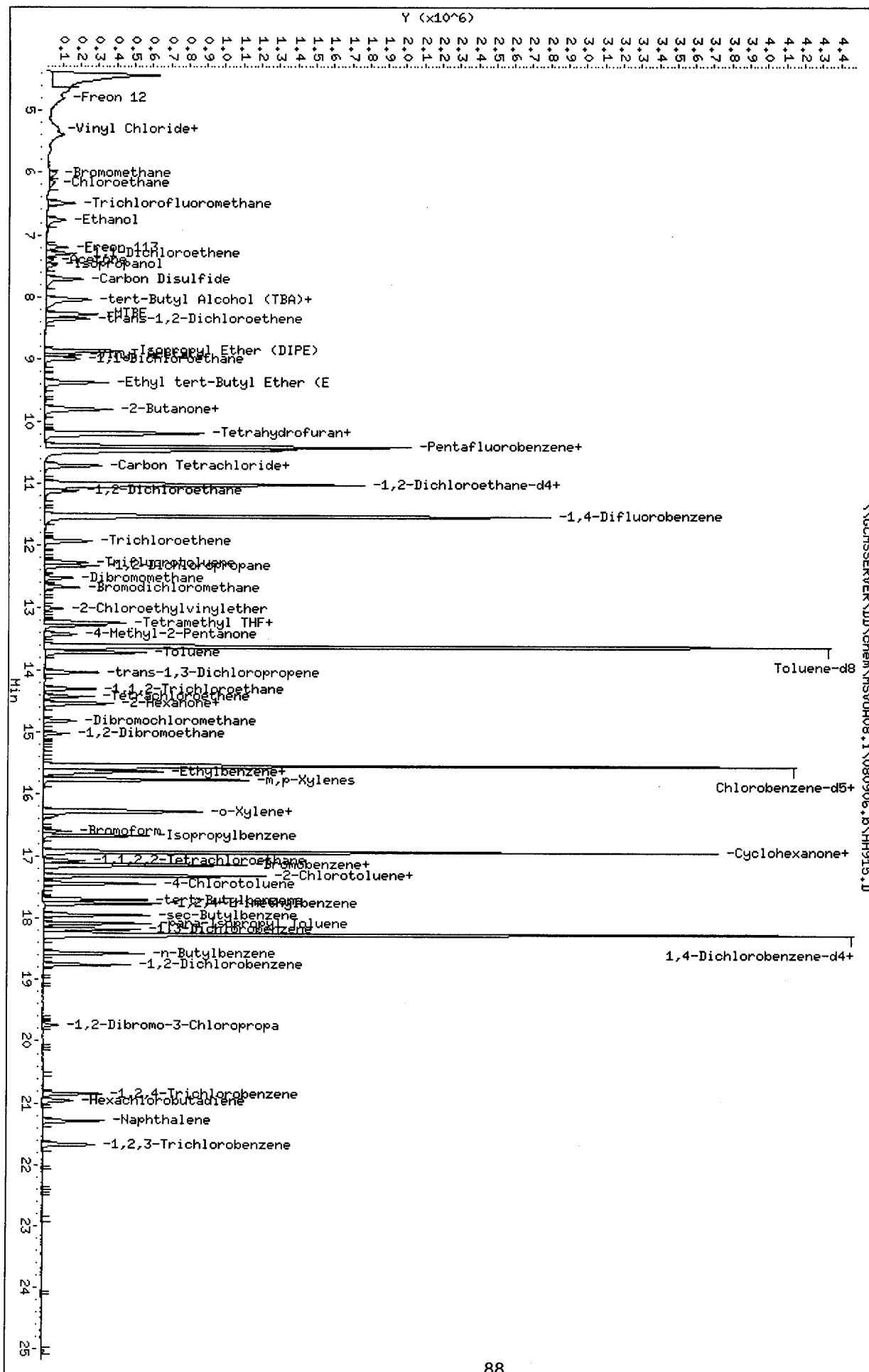
Purge Volume: 5.0

Column phase: RTX 624

Instrument: MSV0908.i

Operator: LM

Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\HH916.D
 Report Date: 10-Aug-2006 08:38

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\HH916.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 09-AUG-2006 19:42 MS Autotune Date: 27-JUL-2006 10:42
 Operator : LW Inst ID: MSVOA08.i
 Smp Info : ICAL,S3942,0.004/100,S3980,0.004/100,
 Misc Info : S3053,0.002/100,20PPB
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\826GOX8.m
 Meth Date : 10-Aug-2006 08:38 Administra Quant Type: ISTD
 Cal Date : 09-AUG-2006 16:31 Cal File: HH911.D
 Als bottle: 16 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.798	4.798	(0.461)	236887	20.0000	13.1884
2 Chloromethane	50	5.279	5.279	(0.507)	524335	20.0000	17.8794 (M)
3 Vinyl Chloride	62	5.388	5.388	(0.518)	355635	20.0000	16.1572
4 Bromomethane	94	6.007	6.007	(0.577)	192770	20.0000	19.7616 (M)
5 Chloroethane	64	6.155	6.155	(0.592)	216391	20.0000	17.4062
6 Trichlorofluoromethane	101	6.489	6.489	(0.624)	257436	20.0000	14.1083
7 Ethanol	45	6.755	6.755	(0.649)	480496	2000.00	2054.6157
8 Freon 113	101	7.197	7.197	(0.692)	147297	20.0000	18.6466
9 1,1-Dichloroethene	96	7.306	7.306	(0.702)	172858	20.0000	18.7730
10 Acetone	43	7.404	7.404	(0.712)	120944	20.0000	19.5272
11 Isopropanol	45	7.483	7.483	(0.719)	203557	200.000	185.9212
12 Carbon Disulfide	76	7.709	7.709	(0.741)	974693	20.0000	19.0969
13 tert-Butyl Alcohol (TBA)	59	8.043	8.043	(0.773)	280879	200.000	196.8056
14 Methylene Chloride	84	8.043	8.043	(0.773)	321840	20.0000	19.9431
15 MTBE	73	8.279	8.279	(0.796)	765981	20.0000	20.2379
16 trans-1,2-Dichloroethene	96	8.358	8.358	(0.803)	225321	20.0000	19.1549

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
17 Isopropyl Ether (DIPE)	45	8.879	8.879	(0.853)	1125971	20.0000	19.7402
18 Vinyl Acetate	43	8.948	8.948	(0.860)	818344	20.0000	20.0824
19 1,1-Dichloroethane	63	9.007	9.007	(0.866)	508084	20.0000	19.6047
20 Ethyl tert-Butyl Ether (ETBE)	59	9.381	9.381	(0.902)	887590	20.0000	19.9578
21 2-Butanone	43	9.794	9.794	(0.941)	177054	20.0000	18.9179
22 2,2-Dichloropropane	77	9.804	9.804	(0.942)	269711	20.0000	18.8859
23 cis-1,2-Dichloroethene	96	9.814	9.814	(0.943)	250515	20.0000	19.0664
24 Tetrahydrofuran	42	10.188	10.188	(0.979)	1064984	200.000	190.7043
25 Bromochloromethane	128	10.178	10.178	(0.978)	130948	20.0000	19.9415
26 Chloroform	83	10.217	10.217	(0.982)	419435	20.0000	19.5381
* 27 Pentafluorobenzene	168	10.404	10.404	(1.000)	1911285	50.0000	
28 Dibromofluoromethane	113	10.453	10.453	(1.005)	1116438	50.0000	49.5692
29 1,1,1-Trichloroethane	97	10.502	10.502	(1.009)	269656	20.0000	19.5832
30 Carbon Tetrachloride	117	10.699	10.699	(0.928)	198816	20.0000	19.2590
31 1,1-Dichloropropene	75	10.719	10.719	(0.929)	270402	20.0000	19.2015
32 1,2-Dichloroethane-d4	65	11.014	11.014	(0.955)	1331986	50.0000	50.1256
33 Benzene	78	11.033	11.033	(0.957)	916465	20.0000	19.8059
34 Methyl tert-Amyl Ether (TAME)	73	11.033	11.033	(0.957)	694757	20.0000	20.4622
35 1,2-Dichloroethane	62	11.122	11.122	(0.964)	358332	20.0000	20.0392
* 36 1,4-Difluorobenzene	114	11.535	11.535	(1.000)	2989748	50.0000	
37 Trichloroethene	95	11.938	11.938	(1.035)	240526	20.0000	19.3979
38 Trifluorotoluene	146	12.283	12.283	(1.065)	253172	20.0000	18.2876
39 1,2-Dichloropropane	63	12.342	12.342	(1.070)	295222	20.0000	19.6606
40 Dibromomethane	93	12.528	12.528	(1.086)	166245	20.0000	19.6998
41 Bromodichloromethane	83	12.676	12.676	(1.099)	311788	20.0000	20.2549
42 2-Chloroethylvinylether	63	13.010	13.010	(1.128)	76584	20.0000	16.2297
43 Tetramethyl THF	43	13.237	13.237	(1.148)	755857	20.0000	20.3489
44 cis-1,3-Dichloropropene	75	13.286	13.286	(1.152)	402273	20.0000	19.8704
45 4-Methyl-2-Pentanone	43	13.423	13.423	(1.164)	376796	20.0000	20.4287
46 Toluene-d8	98	13.620	13.620	(1.181)	3489634	50.0000	50.2177
47 Toluene	92	13.709	13.709	(1.188)	544098	20.0000	19.5818
48 trans-1,3-Dichloropropene	75	14.033	14.033	(1.217)	379929	20.0000	20.4592
49 1,1,2-Trichloroethane	85	14.299	14.299	(1.240)	128382	20.0000	20.1806
50 Tetrachloroethene	166	14.427	14.427	(0.928)	185610	20.0000	18.6356
51 2-Hexanone	43	14.515	14.515	(0.934)	260279	20.0000	19.5930
52 1,3-Dichloropropane	76	14.545	14.545	(0.936)	408415	20.0000	19.6906
53 Dibromochloromethane	129	14.820	14.820	(0.954)	221825	20.0000	19.6482
54 1,2-Dibromoethane	107	15.017	15.017	(1.302)	237983	20.0000	20.1793
* 55 Chlorobenzene-d5	117	15.538	15.538	(1.000)	2680536	50.0000	
56 Chlorobenzene	112	15.577	15.577	(1.003)	630729	20.0000	19.7118
57 Ethylbenzene	91	15.627	15.627	(1.006)	998577	20.0000	19.3764
58 1,1,1,2-Tetrachloroethane	131	15.656	15.656	(1.008)	199237	20.0000	19.5823
59 m,p-Xylenes	106	15.764	15.764	(1.015)	749496	40.0000	38.3215
60 o-Xylene	106	16.266	16.266	(1.047)	384256	20.0000	19.8454
61 Styrene	104	16.286	16.286	(1.048)	692765	20.0000	20.4121
62 Bromoform	173	16.591	16.591	(1.068)	167548	20.0000	19.4479
63 Isopropylbenzene	105	16.659	16.659	(0.913)	841125	20.0000	19.3665

Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\HH916.D
 Report Date: 10-Aug-2006 08:38

Compounds	QUANT SIG			REL RT	RESPONSE	AMOUNTS	
	MASS	RT	EXP RT			CAL-AMT (ug/L)	ON-COL (ug/L)
=====	----	==	=====	=====	=====	=====	=====
64 Cyclohexanone	55	16.905	16.905	(0.926)	193968	200.000	155.9423
65 Bromofluorobenzene	95	16.925	16.925	(0.927)	1524524	50.0000	50.2715
66 1,1,2,2-Tetrachloroethane	83	17.063	17.063	(0.935)	289506	20.0000	20.3113
67 Bromobenzene	156	17.132	17.132	(0.939)	256082	20.0000	20.0178
68 Propylbenzene	91	17.132	17.132	(0.939)	1133409	20.0000	19.4668
69 1,2,3-Trichloropropane	110	17.161	17.161	(0.940)	87262	20.0000	20.7799
70 2-Chlorotoluene	91	17.309	17.309	(0.948)	817416	20.0000	19.9493
71 1,3,5-Trimethylbenzene	105	17.309	17.309	(0.948)	753245	20.0000	19.6486
72 4-Chlorotoluene	91	17.427	17.427	(0.955)	783737	20.0000	19.5480
73 tert-Butylbenzene	119	17.692	17.692	(0.969)	596948	20.0000	19.0963
74 1,2,4-Trimethylbenzene	105	17.761	17.761	(0.973)	788437	20.0000	19.3999
75 sec-Butylbenzene	105	17.938	17.938	(0.983)	910255	20.0000	19.0963
76 para-Isopropyl Toluene	119	18.076	18.076	(0.990)	738820	20.0000	19.2142
77 1,3-Dichlorobenzene	146	18.174	18.174	(0.996)	494322	20.0000	19.9106
* 78 1,4-Dichlorobenzene-d4	152	18.253	18.253	(1.000)	1366816	50.0000	
79 1,4-Dichlorobenzene	146	18.282	18.282	(1.002)	505922	20.0000	19.5027
80 n-Butylbenzene	91	18.558	18.558	(1.017)	703713	20.0000	18.7359
81 1,2-Dichlorobenzene	146	18.754	18.754	(1.027)	481739	20.0000	19.9941
82 1,2-Dibromo-3-Chloropropane	75	19.738	19.738	(1.081)	58035	20.0000	20.0935
83 1,2,4-Trichlorobenzene	180	20.849	20.849	(1.142)	277970	20.0000	19.2218
84 Hexachlorobutadiene	225	20.967	20.967	(1.149)	78379	20.0000	17.8200
85 Naphthalene	128	21.292	21.292	(1.167)	746877	20.0000	19.9173
86 1,2,3-Trichlorobenzene	180	21.676	21.676	(1.188)	271670	20.0000	19.8044

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCHSSERVER\JD\chem\MSV0008.i\080906.b\HH916.D

Date : 09-AUG-2006 19:42

Client ID: DYNA P&T

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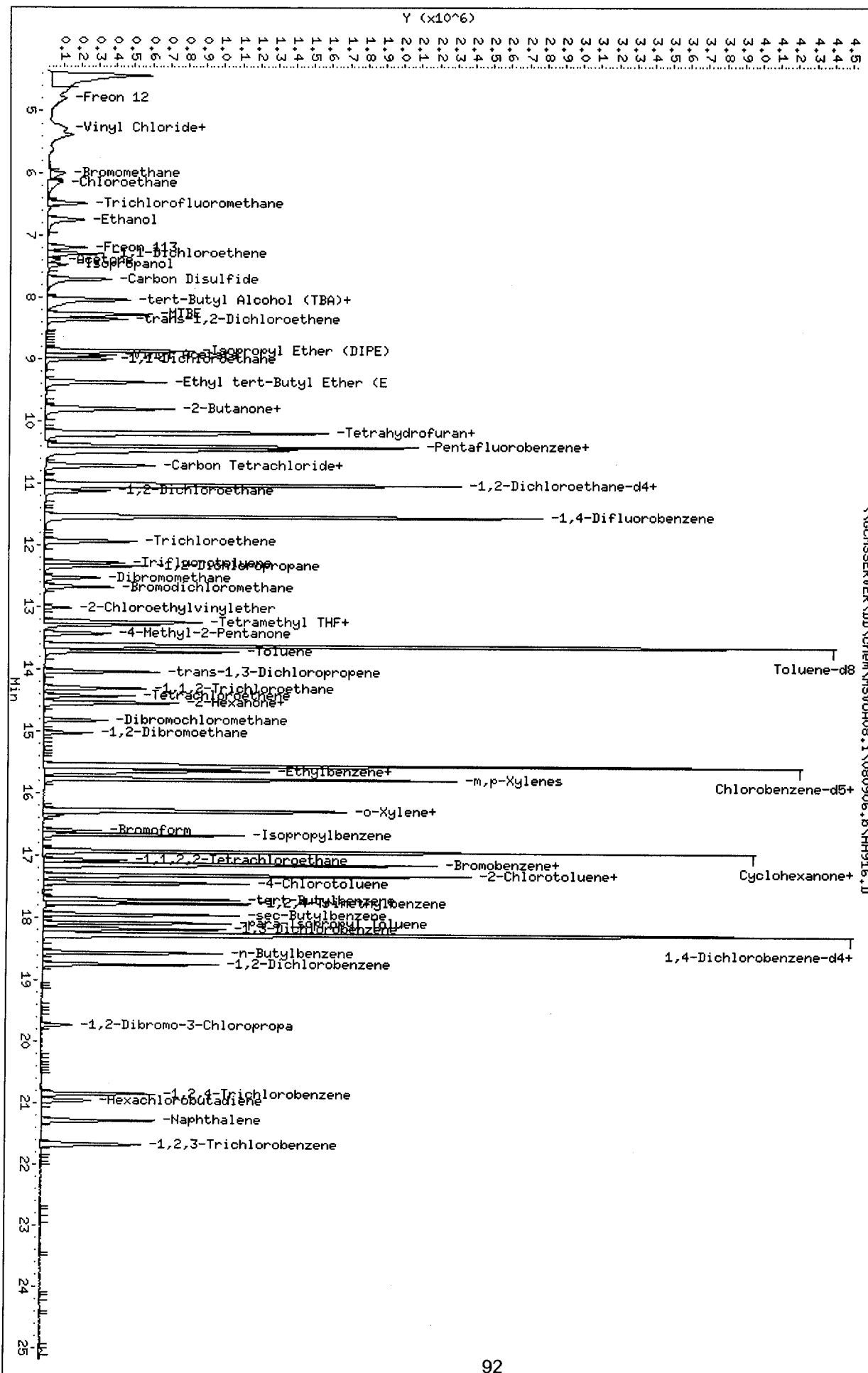
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Column phase: RTX 624

Instrument: MSV0008.i

Operator: LM

Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\HH917.D
 Report Date: 10-Aug-2006 08:39

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\HH917.D
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 Inj Date : 09-AUG-2006 20:19 MS Autotune Date: 27-JUL-2006 10:42
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 Meth Date : 10-Aug-2006 08:39 Administra Quant Type: ISTD
 Cal Date : 09-AUG-2006 16:31 Cal File: HH911.D
 Als bottle: 17 Calibration Sample, Level: 6
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.805	4.805	(0.462)	969180	50.0000	54.6319
2 Chloromethane	50	5.297	5.297	(0.509)	1405087	50.0000	48.5107
3 Vinyl Chloride	62	5.395	5.395	(0.518)	1148238	50.0000	52.8183
4 Bromomethane	94	6.005	6.005	(0.577)	545077	50.0000	56.5759
5 Chloroethane	64	6.152	6.152	(0.591)	611233	50.0000	49.7809
6 Trichlorofluoromethane	101	6.497	6.497	(0.624)	1008284	50.0000	55.9474
7 Ethanol	45	6.752	6.752	(0.649)	1148971	5000.00	4974.3928
8 Freon 113	101	7.195	7.195	(0.691)	475331	50.0000	54.6269
9 1,1-Dichloroethene	96	7.303	7.303	(0.701)	479272	50.0000	52.7008
10 Acetone	43	7.401	7.401	(0.711)	261899	50.0000	50.5283
11 Isopropanol	45	7.480	7.480	(0.718)	507946	500.000	469.7326
12 Carbon Disulfide	76	7.716	7.716	(0.741)	2588501	50.0000	51.3494
13 tert-Butyl Alcohol (TBA)	59	8.031	8.031	(0.771)	688946	50.0000	488.7576
14 Methylene Chloride	84	8.051	8.051	(0.773)	782993	50.0000	49.1248
15 MTBE	73	8.277	8.277	(0.795)	1849316	50.0000	49.4708
16 trans-1,2-Dichloroethene	96	8.365	8.365	(0.803)	602259	50.0000	51.8385

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
17 Isopropyl Ether (DIPE)	45	8.877	8.877	(0.853)	2790445	50.0000	49.5324
18 Vinyl Acetate	43	8.946	8.946	(0.859)	2076409	50.0000	51.5922
19 1,1-Dichloroethane	63	9.005	9.005	(0.865)	1301940	50.0000	50.8635
20 Ethyl tert-Butyl Ether (ETBE)	59	9.378	9.378	(0.901)	2239436	50.0000	50.9834
21 2-Butanone	43	9.782	9.782	(0.940)	417735	50.0000	45.1918
22 2,2-Dichloropropane	77	9.801	9.801	(0.941)	703243	50.0000	49.8580
23 cis-1,2-Dichloroethene	96	9.821	9.821	(0.943)	640428	50.0000	49.3510
24 Tetrahydrofuran	42	10.185	10.185	(0.978)	2469796	500.000	509.7113
25 Bromochloromethane	128	10.185	10.185	(0.978)	334688	50.0000	51.6048
26 Chloroform	83	10.214	10.214	(0.981)	1066425	50.0000	50.2967
* 27 Pentafluorobenzene	168	10.411	10.411	(1.000)	1887710	50.0000	
28 Dibromofluoromethane	113	10.460	10.460	(1.005)	1142261	50.0000	51.3491
29 1,1,1-Trichloroethane	97	10.500	10.500	(1.009)	738561	50.0000	54.3064
30 Carbon Tetrachloride	117	10.706	10.706	(0.928)	568200	50.0000	54.5050
31 1,1-Dichloropropene	75	10.716	10.716	(0.929)	762994	50.0000	53.6537
32 1,2-Dichloroethane-d4	65	11.011	11.011	(0.955)	1320122	50.0000	49.1957
33 Benzene	78	11.031	11.031	(0.957)	2286981	50.0000	48.9434
34 Methyl tert-Amyl Ether (TAME)	73	11.031	11.031	(0.957)	1699711	50.0000	49.5733
35 1,2-Dichloroethane	62	11.129	11.129	(0.965)	907021	50.0000	50.2302
* 36 1,4-Difluorobenzene	114	11.532	11.532	(1.000)	3019130	50.0000	
37 Trichloroethene	95	11.936	11.936	(1.035)	627837	50.0000	50.1410
38 Trifluorotoluene	146	12.290	12.290	(1.066)	730882	50.0000	52.2808
39 1,2-Dichloropropane	63	12.339	12.339	(1.070)	748019	50.0000	49.3304
40 Dibromomethane	93	12.526	12.526	(1.086)	435833	50.0000	51.1432
41 Bromodichloromethane	83	12.673	12.673	(1.099)	796136	50.0000	51.2166
42 2-Chloroethylvinylether	63	13.008	13.008	(1.128)	262393	50.0000	55.0652
43 Tetramethyl THF	43	13.234	13.234	(1.148)	1831626	50.0000	48.8305
44 cis-1,3-Dichloropropene	75	13.283	13.283	(1.152)	1039924	50.0000	50.8675
45 4-Methyl-2-Pentanone	43	13.421	13.421	(1.164)	941485	50.0000	50.5476
46 Toluene-d8	98	13.618	13.618	(1.181)	3519146	50.0000	50.1495
47 Toluene	92	13.706	13.706	(1.188)	1377853	50.0000	49.1056
48 trans-1,3-Dichloropropene	75	14.031	14.031	(1.217)	962356	50.0000	51.3186
49 1,1,2-Trichloroethane	85	14.296	14.296	(1.240)	325991	50.0000	50.7446
50 Tetrachloroethene	166	14.424	14.424	(0.928)	524996	50.0000	54.9791
51 2-Hexanone	43	14.513	14.513	(0.934)	632888	50.0000	49.6923
52 1,3-Dichloropropane	76	14.542	14.542	(0.935)	1002622	50.0000	50.4191
53 Dibromochloromethane	129	14.818	14.818	(0.953)	575967	50.0000	53.2120
54 1,2-Dibromoethane	107	15.024	15.024	(1.303)	610369	50.0000	51.2514
* 55 Chlorobenzene-d5	117	15.545	15.545	(1.000)	2569935	50.0000	
56 Chlorobenzene	112	15.575	15.575	(1.002)	1530712	50.0000	49.8974
57 Ethylbenzene	91	15.624	15.624	(1.005)	2505426	50.0000	50.7076
58 1,1,1,2-Tetrachloroethane	131	15.663	15.663	(1.008)	512412	50.0000	52.5308
59 m,p-Xylenes	106	15.762	15.762	(1.014)	1833895	100.000	97.8019
60 o-Xylene	106	16.263	16.263	(1.046)	960418	50.0000	51.7369
61 Styrene	104	16.283	16.283	(1.047)	1681438	50.0000	51.6754
62 Bromoform	173	16.588	16.588	(1.067)	431885	50.0000	52.2880
63 Isopropylbenzene	105	16.657	16.657	(0.913)	2233864	50.0000	52.2084

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	=====	====	==	=====	=====	=====	=====
64 Cyclohexanone	55	16.903	16.903	(0.926)	586849	500.000	523.4395
65 Bromofluorobenzene	95	16.922	16.922	(0.927)	1536801	50.0000	51.4398
66 1,1,2,2-Tetrachloroethane	83	17.060	17.060	(0.935)	731049	50.0000	52.0620
67 Bromobenzene	156	17.129	17.129	(0.939)	624620	50.0000	49.5619
68 Propylbenzene	91	17.129	17.129	(0.939)	2916654	50.0000	50.8496
69 1,2,3-Trichloropropane	110	17.158	17.158	(0.940)	208053	50.0000	50.2905
70 2-Chlorotoluene	91	17.306	17.306	(0.948)	1960449	50.0000	48.5661
71 1,3,5-Trimethylbenzene	105	17.306	17.306	(0.948)	1899874	50.0000	50.3053
72 4-Chlorotoluene	91	17.434	17.434	(0.955)	1969731	50.0000	49.8693
73 tert-Butylbenzene	119	17.690	17.690	(0.969)	1633557	50.0000	53.0447
74 1,2,4-Trimethylbenzene	105	17.758	17.758	(0.973)	1975070	50.0000	49.3299
75 sec-Butylbenzene	105	17.935	17.935	(0.983)	2545652	50.0000	54.2101
76 para-Isopropyl Toluene	119	18.083	18.083	(0.991)	2002546	50.0000	52.8639
77 1,3-Dichlorobenzene	146	18.181	18.181	(0.996)	1232578	50.0000	50.3946
* 78 1,4-Dichlorobenzene-d4	152	18.250	18.250	(1.000)	1346531	50.0000	
79 1,4-Dichlorobenzene	146	18.280	18.280	(1.002)	1260449	50.0000	49.3210
80 n-Butylbenzene	91	18.565	18.565	(1.017)	1974879	50.0000	53.3721
81 1,2-Dichlorobenzene	146	18.752	18.752	(1.027)	1180154	50.0000	49.7191
82 1,2-Dibromo-3-Chloropropane	75	19.735	19.735	(1.081)	142733	50.0000	50.1631
83 1,2,4-Trichlorobenzene	180	20.857	20.857	(1.143)	700099	50.0000	49.1416
84 Hexachlorobutadiene	225	20.965	20.965	(1.149)	238552	50.0000	55.0537
85 Naphthalene	128	21.289	21.289	(1.167)	1898041	50.0000	51.3786
86 1,2,3-Trichlorobenzene	180	21.673	21.673	(1.188)	689701	50.0000	51.0358

Date : 09-AUG-2006 20:19

Client ID: DYNA P&T

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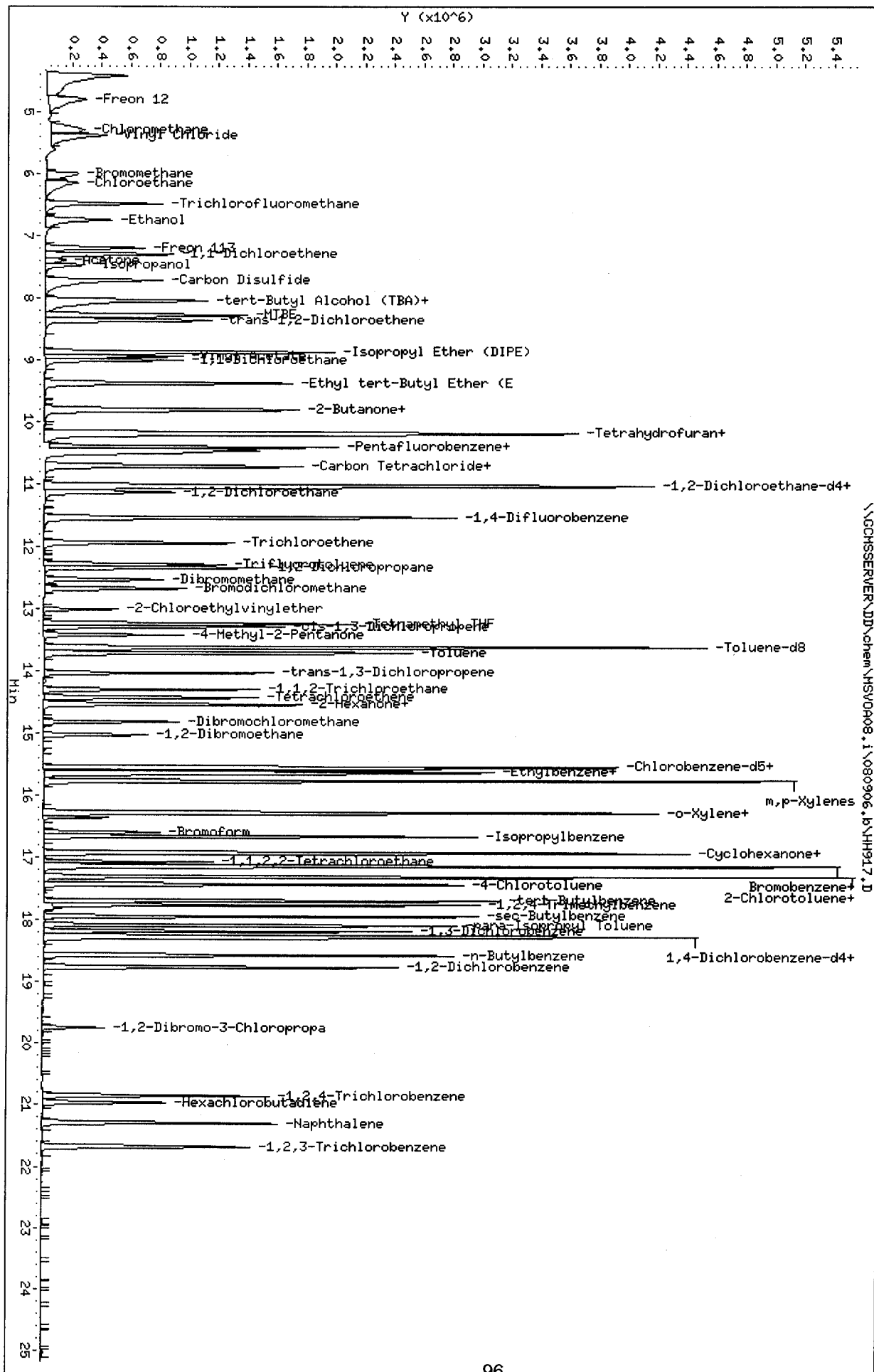
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Column phase: RTX 624

Instrument: MSV0408.i

Operator: LM

Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\HH918.D
 Report Date: 10-Aug-2006 08:40

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\HH918.D
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 Operator : LW Inst ID: MSVOA08.i
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 Meth Date : 10-Aug-2006 08:40 Administra Quant Type: ISTD
 Cal Date : 09-AUG-2006 16:31 Cal File: HH911.D
 Als bottle: 18 Calibration Sample, Level: 7
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.794	4.794	(0.461)	1478258	75.0000	78.6201
2 Chloromethane	50	5.296	5.296	(0.509)	2062149	75.0000	67.1732
3 Vinyl Chloride	62	5.394	5.394	(0.518)	1758120	75.0000	76.3032
4 Bromomethane	94	6.004	6.004	(0.577)	858160	75.0000	84.0396
5 Chloroethane	64	6.152	6.152	(0.591)	919939	75.0000	70.6898
6 Trichlorofluoromethane	101	6.496	6.496	(0.624)	1530899	75.0000	80.1467
7 Ethanol	45	6.752	6.752	(0.649)	1799178	7500.00	7349.3127
8 Freon 113	101	7.194	7.194	(0.691)	688094	75.0000	70.8606
9 1,1-Dichloroethene	96	7.302	7.302	(0.701)	767456	75.0000	79.6214
10 Acetone	43	7.401	7.401	(0.711)	395676	75.0000	74.7771
11 Isopropanol	45	7.479	7.479	(0.718)	774667	750.000	675.9115
12 Carbon Disulfide	76	7.715	7.715	(0.741)	3931214	75.0000	73.5792
13 tert-Butyl Alcohol (TBA)	59	8.030	8.030	(0.771)	1069740	750.000	716.0250
14 Methylene Chloride	84	8.050	8.050	(0.773)	1182592	75.0000	70.0035
15 MTBE	73	8.276	8.276	(0.795)	2825623	75.0000	71.3172
16 trans-1,2-Dichloroethene	96	8.365	8.365	(0.803)	930901	75.0000	75.5987

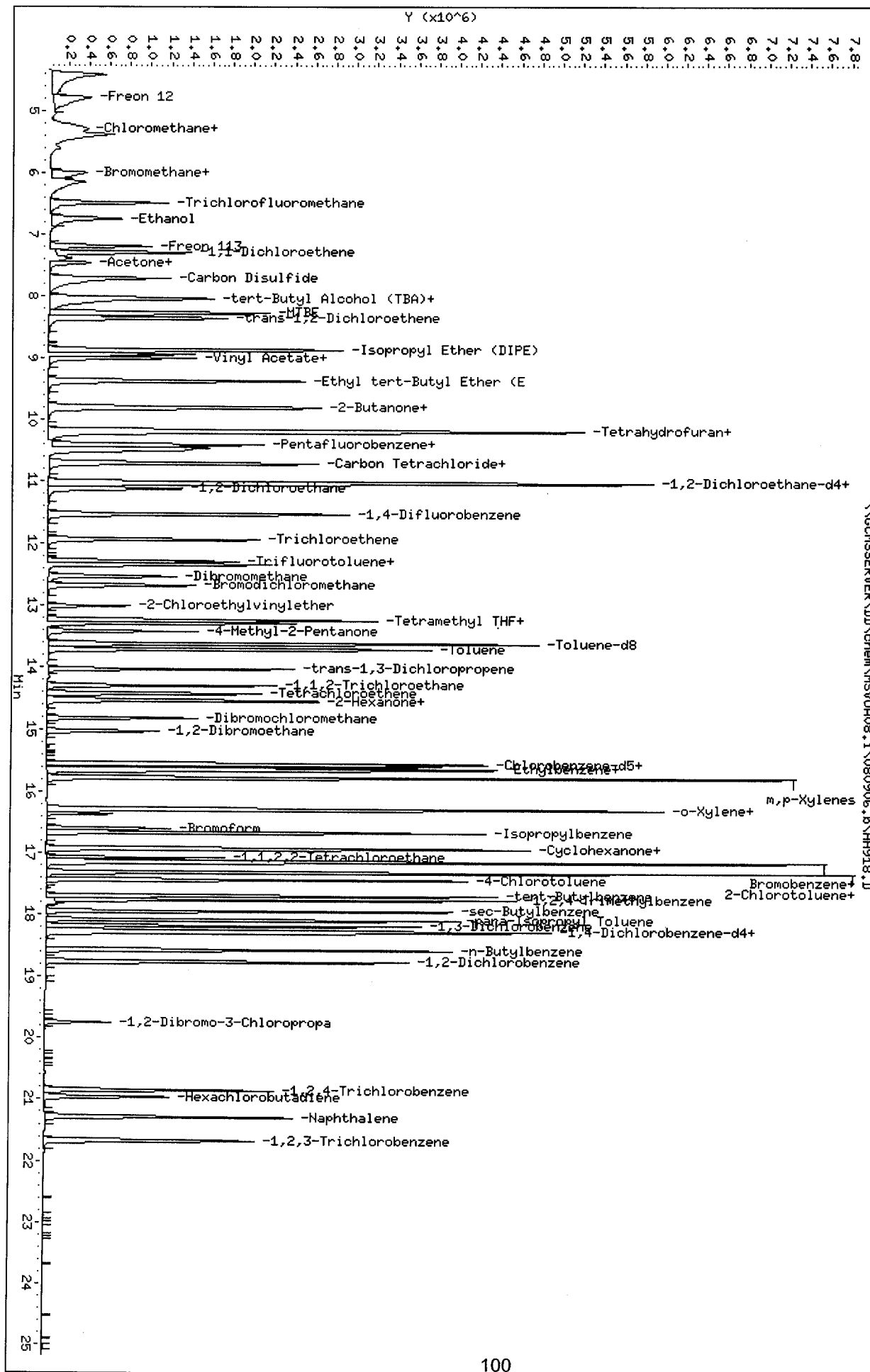
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
17 Isopropyl Ether (DIPE)	45	8.866	8.866	(0.852)	4139501	75.0000	69.3274
18 Vinyl Acetate	43	8.945	8.945	(0.859)	3081550	75.0000	72.2407
19 1,1-Dichloroethane	63	9.004	9.004	(0.865)	1946258	75.0000	71.7393
20 Ethyl tert-Butyl Ether (ETBE)	59	9.378	9.378	(0.901)	3361261	75.0000	72.1995
21 2-Butanone	43	9.781	9.781	(0.940)	653427	75.0000	66.6956
22 2,2-Dichloropropane	77	9.801	9.801	(0.941)	1078387	75.0000	72.1350
23 cis-1,2-Dichloroethene	96	9.820	9.820	(0.943)	992623	75.0000	72.1692
24 Tetrahydrofuran	42	10.184	10.184	(0.978)	3574709	750.000	743.3566
25 Bromochloromethane	128	10.184	10.184	(0.978)	501275	75.0000	72.9235
26 Chloroform	83	10.214	10.214	(0.981)	1586650	75.0000	70.6045
* 27 Pentafluorobenzene	168	10.410	10.410	(1.000)	2000754	50.0000	
28 Dibromofluoromethane	113	10.460	10.460	(1.005)	1208814	50.0000	51.2706
29 1,1,1-Trichloroethane	97	10.499	10.499	(1.009)	1125404	75.0000	78.0755
30 Carbon Tetrachloride	117	10.706	10.706	(0.928)	855245	75.0000	77.6949
31 1,1-Dichloropropene	75	10.715	10.715	(0.929)	1147848	75.0000	76.4415
32 1,2-Dichloroethane-d4	65	11.010	11.010	(0.955)	1386058	50.0000	48.9171
33 Benzene	78	11.030	11.030	(0.957)	3457926	75.0000	70.0832
34 Methyl tert-Amyl Ether (TAME)	73	11.030	11.030	(0.957)	2579726	75.0000	71.2545
35 1,2-Dichloroethane	62	11.128	11.128	(0.965)	1370184	75.0000	71.8609
* 36 1,4-Difluorobenzene	114	11.532	11.532	(1.000)	3187979	50.0000	
37 Trichloroethene	95	11.935	11.935	(1.035)	934842	75.0000	70.7051
38 Trifluorotoluene	146	12.289	12.289	(1.066)	1086607	75.0000	73.6095
39 1,2-Dichloropropane	63	12.338	12.338	(1.070)	1106601	75.0000	69.1130
40 Dibromomethane	93	12.525	12.525	(1.086)	662105	75.0000	73.5802
41 Bromodichloromethane	83	12.673	12.673	(1.099)	1205587	75.0000	73.4495
42 2-Chloroethylvinylether	63	13.007	13.007	(1.128)	425306	75.0000	84.5265
43 Tetramethyl THF	43	13.233	13.233	(1.148)	2730525	75.0000	68.9393
44 cis-1,3-Dichloropropene	75	13.282	13.282	(1.152)	1601526	75.0000	74.1890
45 4-Methyl-2-Pentanone	43	13.420	13.420	(1.164)	1410748	75.0000	71.7304
46 Toluene-d8	98	13.617	13.617	(1.181)	3713755	50.0000	50.1197
47 Toluene	92	13.715	13.715	(1.189)	2088055	75.0000	70.4752
48 trans-1,3-Dichloropropene	75	14.030	14.030	(1.217)	1450695	75.0000	73.2624
49 1,1,2-Trichloroethane	85	14.296	14.296	(1.240)	493564	75.0000	72.7602
50 Tetrachloroethene	166	14.423	14.423	(0.928)	773556	75.0000	75.2553
51 2-Hexanone	43	14.512	14.512	(0.934)	975393	75.0000	71.1451
52 1,3-Dichloropropane	76	14.541	14.541	(0.935)	1537725	75.0000	71.8357
53 Dibromochloromethane	129	14.817	14.817	(0.953)	876939	75.0000	75.2636
54 1,2-Dibromoethane	107	15.023	15.023	(1.303)	931762	75.0000	74.0943
* 55 Chlorobenzene-d5	117	15.545	15.545	(1.000)	2766423	50.0000	
56 Chlorobenzene	112	15.574	15.574	(1.002)	2240353	75.0000	67.8430
57 Ethylbenzene	91	15.623	15.623	(1.005)	3654008	75.0000	68.7013
58 1,1,1,2-Tetrachloroethane	131	15.663	15.663	(1.008)	767913	75.0000	73.1325
59 m,p-Xylenes	106	15.771	15.771	(1.015)	2658520	150.000	131.7093
60 o-Xylene	106	16.263	16.263	(1.046)	1388363	75.0000	69.4779
61 Styrene	104	16.292	16.292	(1.048)	2463618	75.0000	70.3364
62 Bromoform	173	16.597	16.597	(1.068)	663783	75.0000	74.6559
63 Isopropylbenzene	105	16.656	16.656	(0.912)	3255731	75.0000	71.2085

Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\HH918.D
 Report Date: 10-Aug-2006 08:40

Compounds	QUANT SIG			REL RT	RESPONSE	AMOUNTS	
	MASS	RT	EXP RT			CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
64 Cyclohexanone	55	16.902	16.902	(0.926)	852122	750.000	739.3083
65 Bromofluorobenzene	95	16.922	16.922	(0.927)	1555588	50.0000	48.7276
66 1,1,2,2-Tetrachloroethane	83	17.059	17.059	(0.934)	1118660	75.0000	74.5541
67 Bromobenzene	156	17.138	17.138	(0.939)	924680	75.0000	68.6630
68 Propylbenzene	91	17.128	17.128	(0.938)	4125563	75.0000	67.3109
69 1,2,3-Trichloropropane	110	17.158	17.158	(0.940)	319688	75.0000	72.3165
70 2-Chlorotoluene	91	17.305	17.305	(0.948)	2837626	75.0000	65.7858
71 1,3,5-Trimethylbenzene	105	17.315	17.315	(0.948)	2735500	75.0000	67.7836
72 4-Chlorotoluene	91	17.433	17.433	(0.955)	2839650	75.0000	67.2807
73 tert-Butylbenzene	119	17.689	17.689	(0.969)	2357882	75.0000	71.6522
74 1,2,4-Trimethylbenzene	105	17.758	17.758	(0.973)	2955478	75.0000	69.0804
75 sec-Butylbenzene	105	17.945	17.945	(0.983)	3580144	75.0000	71.3479
76 para-Isopropyl Toluene	119	18.082	18.082	(0.990)	2813024	75.0000	69.4944
77 1,3-Dichlorobenzene	146	18.181	18.181	(0.996)	1791618	75.0000	68.5510
* 78 1,4-Dichlorobenzene-d4	152	18.259	18.259	(1.000)	1438856	50.0000	
79 1,4-Dichlorobenzene	146	18.289	18.289	(1.002)	1838447	75.0000	67.3219
80 n-Butylbenzene	91	18.564	18.564	(1.017)	2757918	75.0000	69.7517
81 1,2-Dichlorobenzene	146	18.751	18.751	(1.027)	1739017	75.0000	68.5626
82 1,2-Dibromo-3-Chloropropane	75	19.735	19.735	(1.081)	221728	75.0000	72.9255
83 1,2,4-Trichlorobenzene	180	20.856	20.856	(1.142)	1027078	75.0000	67.4672
84 Hexachlorobutadiene	225	20.964	20.964	(1.148)	334295	75.0000	72.1992
85 Naphthalene	128	21.289	21.289	(1.166)	2859897	75.0000	72.4480
86 1,2,3-Trichlorobenzene	180	21.672	21.672	(1.187)	1001470	75.0000	69.3507

Data File: \\GCHSSERVER\DD\chem\MSV0A08.i\080906.b\HH918.D
 Date : 09-AUG-2006 20:57
 Client ID: DYNA P&T
 Sample Info: ICAL,S3942,0.015/100,S3980,0.015/100,
 Purge Volume: 5.0
 Column phase: RTX 624

Instrument: MSV0A08.i
 Operator: LM
 Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\HH919.D
 Report Date: 10-Aug-2006 08:41

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\HH919.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 09-AUG-2006 21:34 MS Autotune Date: 27-JUL-2006 10:42
 Operator : LW Inst ID: MSVOA08.i
 Smp Info : ICAL,S3942,0.02/100,S3980,0.02/100,
 Misc Info : S3053,0.01/100,100PPB
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\826GOX8.m
 Meth Date : 10-Aug-2006 08:41 Administra Quant Type: ISTD
 Cal Date : 09-AUG-2006 21:34 Cal File: HH919.D
 Als bottle: 19 Calibration Sample, Level: 8
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.797	4.797	(0.461)	2000546	100.000	100.8438
2 Chloromethane	50	5.289	5.289	(0.508)	2708424	100.000	83.6199
3 Vinyl Chloride	62	5.388	5.388	(0.518)	2281004	100.000	93.8291
4 Bromomethane	94	6.007	6.007	(0.577)	1198326	100.000	111.2264
5 Chloroethane	64	6.155	6.155	(0.592)	1282365	100.000	93.3957
6 Trichlorofluoromethane	101	6.499	6.499	(0.625)	2155136	100.000	106.9377
7 Ethanol	45	6.745	6.745	(0.648)	2408798	10000.0	9325.8873
8 Freon 113	101	7.197	7.197	(0.692)	1166715	100.000	100.6683
9 1,1-Dichloroethene	96	7.306	7.306	(0.702)	1145097	100.000	112.5994
10 Acetone	43	7.394	7.394	(0.711)	643946	100.000	118.8539
11 Isopropanol	45	7.473	7.473	(0.718)	1076093	1000.00	889.9011
12 Carbon Disulfide	76	7.719	7.719	(0.742)	5449504	100.000	96.6725
13 tert-Butyl Alcohol (TBA)	59	8.024	8.024	(0.771)	1405253	1000.00	891.5006
14 Methylene Chloride	84	8.053	8.053	(0.774)	1592169	100.000	89.3287
15 MTBE	73	8.279	8.279	(0.796)	3956416	100.000	94.6453
16 trans-1,2-Dichloroethene	96	8.358	8.358	(0.803)	1335044	100.000	102.7599

Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\HH919.D
Report Date: 10-Aug-2006 08:41

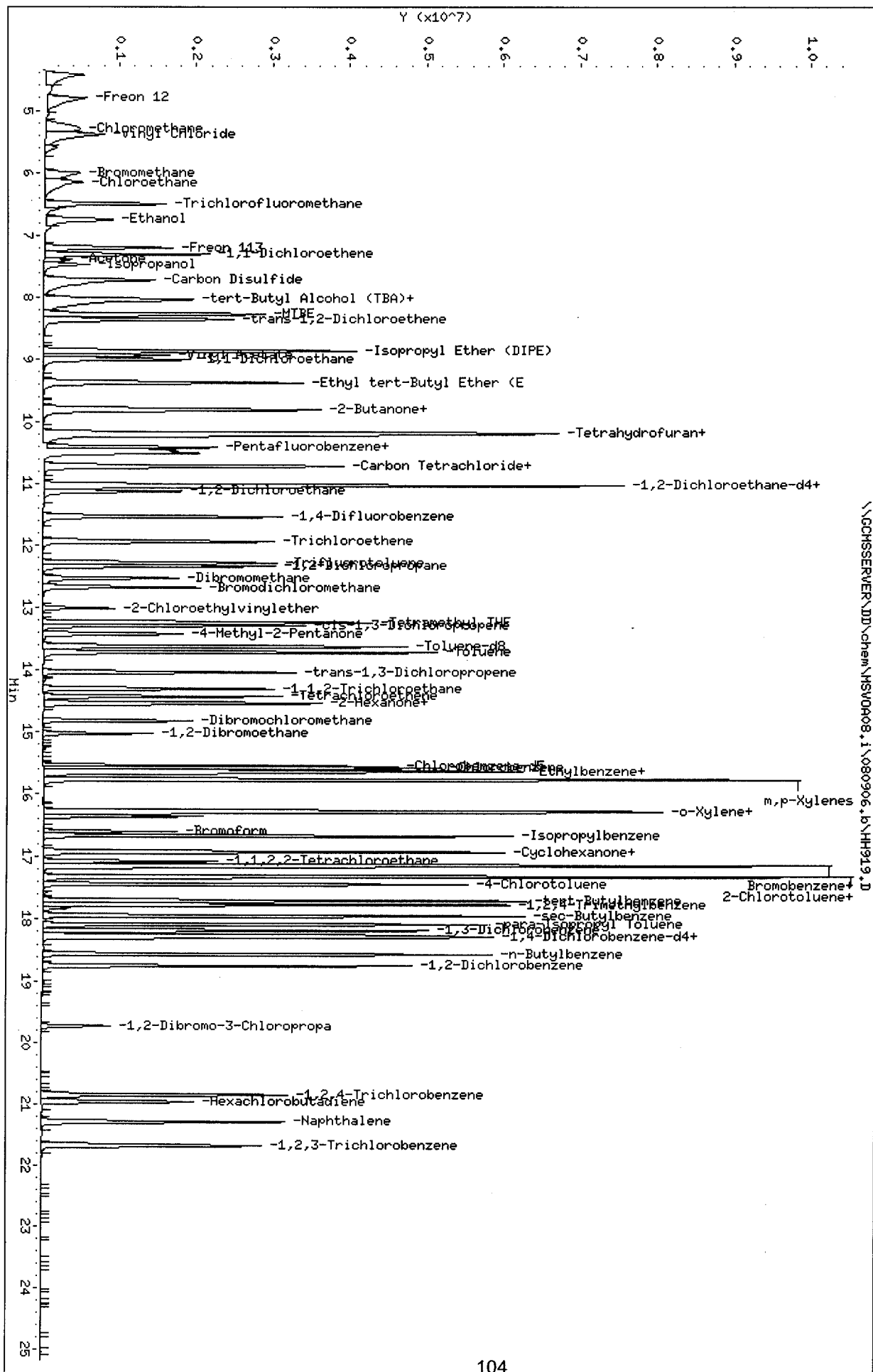
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
17 Isopropyl Ether (DIPE)	45	8.869	8.869	(0.853)	5737782	100.000	91.0790
18 Vinyl Acetate	43	8.938	8.938	(0.859)	3495593	100.000	77.6696
19 1,1-Dichloroethane	63	9.007	9.007	(0.866)	2686534	100.000	93.8569
20 Ethyl tert-Butyl Ether (ETBE)	59	9.371	9.371	(0.901)	4582771	100.000	93.2990
21 2-Butanone	43	9.784	9.784	(0.940)	906117	100.000	87.6600
22 2,2-Dichloropropane	77	9.794	9.794	(0.941)	1548959	100.000	98.2039
23 cis-1,2-Dichloroethene	96	9.823	9.823	(0.944)	1383611	100.000	95.3452
24 Tetrahydrofuran	42	10.178	10.178	(0.978)	4783725	1000.00	1001.3839
25 Bromochloromethane	128	10.187	10.187	(0.979)	688094	100.000	94.8760
26 Chloroform	83	10.217	10.217	(0.982)	2245912	100.000	94.7242
* 27 Pentafluorobenzene	168	10.404	10.404	(1.000)	2110943	50.0000	
28 Dibromofluoromethane	113	10.463	10.463	(1.006)	1296433	50.0000	52.1167
29 1,1,1-Trichloroethane	97	10.502	10.502	(1.009)	1679428	100.000	110.4295
30 Carbon Tetrachloride	117	10.699	10.699	(0.928)	1356942	100.000	115.4691
31 1,1-Dichloropropene	75	10.719	10.719	(0.929)	1748896	100.000	109.0967
32 1,2-Dichloroethane-d4	65	11.014	11.014	(0.955)	1453536	50.0000	48.0516
33 Benzene	78	11.033	11.033	(0.957)	4762215	100.000	90.4087
34 Methyl tert-Amyl Ether (TAME)	73	11.033	11.033	(0.957)	3513019	100.000	90.8912
35 1,2-Dichloroethane	62	11.122	11.122	(0.964)	1923733	100.000	94.5064
* 36 1,4-Difluorobenzene	114	11.535	11.535	(1.000)	3403400	50.0000	
37 Trichloroethene	95	11.938	11.938	(1.035)	1421498	100.000	100.7074
38 Trifluorotoluene	146	12.282	12.282	(1.065)	1733861	100.000	110.0217
39 1,2-Dichloropropane	63	12.341	12.341	(1.070)	1592071	100.000	93.1394
40 Dibromomethane	93	12.528	12.528	(1.086)	935989	100.000	97.4333
41 Bromodichloromethane	83	12.676	12.676	(1.099)	1692820	100.000	96.6059
42 2-Chloroethylvinylether	63	13.010	13.010	(1.128)	485442	100.000	90.3715
43 Tetramethyl THF	43	13.236	13.236	(1.148)	3622961	100.000	85.6815
44 cis-1,3-Dichloropropene	75	13.286	13.286	(1.152)	2238520	100.000	97.1335
45 4-Methyl-2-Pentanone	43	13.413	13.413	(1.163)	1875821	100.000	89.3404
46 Toluene-d8	98	13.620	13.620	(1.181)	3835663	50.0000	48.4885
47 Toluene	92	13.709	13.709	(1.188)	2830773	100.000	89.4956
48 trans-1,3-Dichloropropene	75	14.033	14.033	(1.217)	1999268	100.000	94.5755
49 1,1,2-Trichloroethane	85	14.299	14.299	(1.240)	687857	100.000	94.9842
50 Tetrachloroethene	166	14.427	14.427	(0.928)	1195752	100.000	111.2804
51 2-Hexanone	43	14.515	14.515	(0.934)	1329703	100.000	92.7795
52 1,3-Dichloropropane	76	14.545	14.545	(0.936)	2128418	100.000	95.1153
53 Dibromochloromethane	129	14.820	14.820	(0.954)	1243157	100.000	102.0641
54 1,2-Dibromoethane	107	15.027	15.027	(1.303)	1281944	100.000	95.4885
* 55 Chlorobenzene-d5	117	15.538	15.538	(1.000)	2891924	50.0000	
56 Chlorobenzene	112	15.577	15.577	(1.003)	3081958	100.000	89.2785
57 Ethylbenzene	91	15.627	15.627	(1.006)	5073509	100.000	91.2506
58 1,1,1,2-Tetrachloroethane	131	15.656	15.656	(1.008)	1076204	100.000	98.0448
59 m,p-Xylenes	106	15.764	15.764	(1.015)	3605549	200.000	170.8755
60 o-Xylene	106	16.266	16.266	(1.047)	1893617	100.000	90.6500
61 Styrene	104	16.286	16.286	(1.048)	3284989	100.000	89.7165
62 Bromoform	173	16.590	16.590	(1.068)	924205	100.000	99.4347
63 Isopropylbenzene	105	16.659	16.659	(0.913)	4732323	100.000	101.0286

Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\080906.b\HH919.D
 Report Date: 10-Aug-2006 08:41

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
64 Cyclohexanone	55	16.905	16.905	(0.926)	2018754	1000.00	2021.3932
65 Bromofluorobenzene	95	16.925	16.925	(0.927)	1585761	50.0000	48.4847
66 1,1,2,2-Tetrachloroethane	83	17.063	17.063	(0.935)	1451182	100.000	94.4023
67 Bromobenzene	156	17.131	17.131	(0.939)	1224609	100.000	88.7597
68 Propylbenzene	91	17.131	17.131	(0.939)	5757915	100.000	91.6968
69 1,2,3-Trichloropropane	110	17.161	17.161	(0.940)	426950	100.000	94.2704
70 2-Chlorotoluene	91	17.308	17.308	(0.948)	3747873	100.000	84.8103
71 1,3,5-Trimethylbenzene	105	17.308	17.308	(0.948)	3759164	100.000	90.9215
72 4-Chlorotoluene	91	17.426	17.426	(0.955)	3882899	100.000	89.7984
73 tert-Butylbenzene	119	17.692	17.692	(0.969)	3522579	100.000	104.4852
74 1,2,4-Trimethylbenzene	105	17.761	17.761	(0.973)	4124951	100.000	94.1093
75 sec-Butylbenzene	105	17.938	17.938	(0.983)	5420629	100.000	105.4428
76 para-Isopropyl Toluene	119	18.085	18.085	(0.991)	4236374	100.000	102.1545
77 1,3-Dichlorobenzene	146	18.184	18.184	(0.996)	2497019	100.000	93.2561
* 78 1,4-Dichlorobenzene-d4	152	18.253	18.253	(1.000)	1474112	50.0000	
79 1,4-Dichlorobenzene	146	18.282	18.282	(1.002)	2549668	100.000	91.1331
80 n-Butylbenzene	91	18.558	18.558	(1.017)	4202100	100.000	103.7353
81 1,2-Dichlorobenzene	146	18.754	18.754	(1.027)	2414221	100.000	92.9068
82 1,2-Dibromo-3-Chloropropane	75	19.738	19.738	(1.081)	294260	100.000	94.4663
83 1,2,4-Trichlorobenzene	180	20.849	20.849	(1.142)	1471018	100.000	94.3179
84 Hexachlorobutadiene	225	20.967	20.967	(1.149)	564895	100.000	119.0850
85 Naphthalene	128	21.292	21.292	(1.167)	3809015	100.000	94.1836
86 1,2,3-Trichlorobenzene	180	21.675	21.675	(1.188)	1439445	100.000	97.2960

Data File: \\GCHSSERVER\JD\chem\MSV0A08.i\080906.b\HH919.D
 Date : 09-AUG-2006 21:34
 Client ID: DYNA P&T
 Sample Info: ICAL,S3942,0.02/100,S3980,0.02/100,
 Purge Volume: 5.0
 Column phase: RTX 624

Instrument: MSV0A08.i
 Operator: LM
 Column diameter: 0.25



CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188869 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name: 25 PPB IDF : 1.0
 Seqnum : 476337393003 File : hhm03 Time : 22-AUG-2006 08:19
 Cal : 476318840001 Caldate : 09-AUG-2006 Caltype : WATER
 Standards: S4084 (20000X), S3980 (20000X), S3053 (40000X), S3894 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.7672	0.7672	25.00	25.00	ug/L	0	30	0.1000	
Vinyl Chloride	0.5758	0.6221	25.00	27.01	ug/L	8	20	0.0500	
Bromomethane	0.2552	0.2601	25.00	25.48	ug/L	2	30	0.0500	
Chloroethane	0.3252	0.3451	25.00	26.53	ug/L	6	30	0.0500	
Acetone	0.1836	0.1566	25.00	25.70	ug/L	3	40	0.0500	
1,1-Dichloroethene	0.2409	0.2742	25.00	28.46	ug/L	14	20	0.0500	
Methylene Chloride	0.4222	0.4313	25.00	25.54	ug/L	2	30	0.0500	
Carbon Disulfide	1.3352	1.3909	25.00	26.04	ug/L	4	30	0.0500	
MTBE	0.9901	1.0088	25.00	25.47	ug/L	2	30	0.0500	
trans-1,2-Dichloroethene	0.3077	0.3240	25.00	26.33	ug/L	5	30	0.0500	
Vinyl Acetate	1.0660	0.9882	25.00	23.17	ug/L	-7	40	0.0500	
1,1-Dichloroethane	0.6780	0.7231	25.00	26.66	ug/L	7	30	0.1000	
2-Butanone	0.2448	0.2295	25.00	23.43	ug/L	-6	40	0.0500	
cis-1,2-Dichloroethene	0.3437	0.3425	25.00	24.91	ug/L	0	30	0.0500	
Chloroform	0.5616	0.6114	25.00	27.21	ug/L	9	20	0.0500	
1,1,1-Trichloroethane	0.3602	0.4307	25.00	29.89	ug/L	20	30	0.0500	
Carbon Tetrachloride	0.1726	0.2121	25.00	30.71	ug/L	23	30	0.0500	!c+
1,2-Dichloroethane	0.2990	0.3152	25.00	26.35	ug/L	5	30	0.0500	
Benzene	0.7738	0.7753	25.00	25.05	ug/L	0	30	0.0500	
Trichloroethene	0.2074	0.1954	25.00	23.55	ug/L	-6	30	0.0500	
1,2-Dichloropropane	0.2511	0.2488	25.00	24.77	ug/L	-1	20	0.0500	
Bromodichloromethane	0.2574	0.2604	25.00	25.29	ug/L	1	30	0.0500	
4-Methyl-2-Pentanone	0.3085	0.2978	25.00	24.13	ug/L	-3	40	0.0500	
cis-1,3-Dichloropropene	0.3386	0.3419	25.00	25.25	ug/L	1	30	0.0500	
Toluene	0.4647	0.4579	25.00	24.64	ug/L	-1	20	0.0500	
trans-1,3-Dichloropropene	0.3106	0.3144	25.00	25.31	ug/L	1	30	0.0500	
1,1,2-Trichloroethane	0.1064	0.1065	25.00	25.03	ug/L	0	30	0.0500	
2-Hexanone	0.2478	0.2382	25.00	24.03	ug/L	-4	40	0.0500	
Tetrachloroethene	0.1858	0.1988	25.00	26.75	ug/L	7	30	0.0500	
Dibromochloromethane	0.2106	0.2010	25.00	23.86	ug/L	-5	30	0.0500	
Chlorobenzene	0.5968	0.5655	25.00	23.69	ug/L	-5	30	0.3000	
Ethylbenzene	0.9613	0.9968	25.00	25.92	ug/L	4	20	0.0500	
m,p-Xylenes	0.3648	0.3663	50.00	50.21	ug/L	0	30	0.0500	
o-Xylene	0.3612	0.3551	25.00	24.58	ug/L	-2	30	0.0500	
Styrene	0.6331	0.6148	25.00	24.28	ug/L	-3	30	0.0500	
Bromoform	0.1607	0.1412	25.00	21.96	ug/L	-12	30	0.1000	
1,1,2,2-Tetrachloroethane	0.5214	0.5739	25.00	27.52	ug/L	10	30	0.3000	
Dibromofluoromethane	0.5892	0.6343	50.00	53.83	ug/L	8	30	0.0500	
1,2-Dichloroethane-d4	0.4444	0.4868	50.00	54.78	ug/L	10	30	0.0500	
Toluene-d8	1.1621	1.1675	50.00	50.23	ug/L	0	30	0.0500	
Bromofluorobenzene	1.1094	1.1127	50.00	50.15	ug/L	0	30	0.0500	

ISTD (ICAL hh917)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1887710	1983544	5.08	10.41	10.41	0.00
1,4-Difluorobenzene	3019130	3296472	9.19	11.53	11.53	0.00
Chlorobenzene-d5	2569935	2916033	13.47	15.55	15.53	-0.02
1,4-Dichlorobenzene-d4	1346531	1536248	14.09	18.25	18.25	0.00

Analyst: LW

Date: 08/22/06

Reviewer: AMK

Date: 08/23/06

!=warning +=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188869 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name: 25 PPB IDF : 1.0
 Seqnum : 476337393010 File : hhm10 Time : 22-AUG-2006 12:34
 Cal : 476318840001 Caldate : 09-AUG-2006 Caltype : WATER
 Standards: S4084 (20000X), S3980 (20000X), S3053 (40000X), S3894 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.7672	0.7065	25.00	23.02	ug/L	-8	30	0.1000	
Vinyl Chloride	0.5758	0.5805	25.00	25.20	ug/L	1	20	0.0500	
Bromomethane	0.2552	0.2423	25.00	23.74	ug/L	-5	30	0.0500	
Chloroethane	0.3252	0.3175	25.00	24.41	ug/L	-2	30	0.0500	
Acetone	0.1836	0.1352	25.00	21.29	ug/L	-15	40	0.0500	
1,1-Dichloroethene	0.2409	0.2565	25.00	26.62	ug/L	6	20	0.0500	
Methylene Chloride	0.4222	0.4056	25.00	24.02	ug/L	-4	30	0.0500	
Carbon Disulfide	1.3352	1.2110	25.00	22.68	ug/L	-9	30	0.0500	
MTBE	0.9901	0.9860	25.00	24.90	ug/L	0	30	0.0500	
trans-1,2-Dichloroethene	0.3077	0.3104	25.00	25.22	ug/L	1	30	0.0500	
Vinyl Acetate	1.0660	0.9229	25.00	21.64	ug/L	-13	40	0.0500	
1,1-Dichloroethane	0.6780	0.6658	25.00	24.55	ug/L	-2	30	0.1000	
2-Butanone	0.2448	0.2122	25.00	21.66	ug/L	-13	40	0.0500	
cis-1,2-Dichloroethene	0.3437	0.3275	25.00	23.82	ug/L	-5	30	0.0500	
Chloroform	0.5616	0.5462	25.00	24.31	ug/L	-3	20	0.0500	
1,1,1-Trichloroethane	0.3602	0.3897	25.00	27.04	ug/L	8	30	0.0500	
Carbon Tetrachloride	0.1726	0.1993	25.00	28.86	ug/L	15	30	0.0500	
1,2-Dichloroethane	0.2990	0.2903	25.00	24.27	ug/L	-3	30	0.0500	
Benzene	0.7738	0.7586	25.00	24.51	ug/L	-2	30	0.0500	
Trichloroethene	0.2074	0.1958	25.00	23.60	ug/L	-6	30	0.0500	
1,2-Dichloropropane	0.2511	0.2439	25.00	24.28	ug/L	-3	20	0.0500	
Bromodichloromethane	0.2574	0.2516	25.00	24.44	ug/L	-2	30	0.0500	
4-Methyl-2-Pentanone	0.3085	0.2922	25.00	23.68	ug/L	-5	40	0.0500	
cis-1,3-Dichloropropene	0.3386	0.3364	25.00	24.84	ug/L	-1	30	0.0500	
Toluene	0.4647	0.4419	25.00	23.77	ug/L	-5	20	0.0500	
trans-1,3-Dichloropropene	0.3106	0.3017	25.00	24.29	ug/L	-3	30	0.0500	
1,1,2-Trichloroethane	0.1064	0.1040	25.00	24.43	ug/L	-2	30	0.0500	
2-Hexanone	0.2478	0.2338	25.00	23.59	ug/L	-6	40	0.0500	
Tetrachloroethene	0.1858	0.1978	25.00	26.62	ug/L	6	30	0.0500	
Dibromochloromethane	0.2106	0.2083	25.00	24.73	ug/L	-1	30	0.0500	
Chlorobenzene	0.5968	0.5769	25.00	24.16	ug/L	-3	30	0.3000	
Ethylbenzene	0.9613	0.9489	25.00	24.68	ug/L	-1	20	0.0500	
m,p-Xylenes	0.3648	0.3512	50.00	48.14	ug/L	-4	30	0.0500	
o-Xylene	0.3612	0.3500	25.00	24.22	ug/L	-3	30	0.0500	
Styrene	0.6331	0.6063	25.00	23.94	ug/L	-4	30	0.0500	
Bromoform	0.1607	0.1526	25.00	23.74	ug/L	-5	30	0.1000	
1,1,2,2-Tetrachloroethane	0.5214	0.5793	25.00	27.78	ug/L	11	30	0.3000	
Dibromofluoromethane	0.5892	0.5986	50.00	50.80	ug/L	2	30	0.0500	
1,2-Dichloroethane-d4	0.4444	0.4387	50.00	49.36	ug/L	-1	30	0.0500	
Toluene-d8	1.1621	1.1545	50.00	49.67	ug/L	-1	30	0.0500	
Bromofluorobenzene	1.1094	1.0933	50.00	49.28	ug/L	-1	30	0.0500	

ISTD (ICAL hh917)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1887710	2613833	38.47	10.41	10.41	0.00
1,4-Difluorobenzene	3019130	4128235	36.74	11.53	11.53	0.00
Chlorobenzene-d5	2569935	3542303	37.84	15.55	15.54	-0.01
1,4-Dichlorobenzene-d4	1346531	1834528	36.24	18.25	18.26	0.01

Analyst: LW

Date: 08/22/06

Reviewer: AMK

Date: 08/23/06

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 476337393

Date : 08/22/06
Sequence : MSVOA08 hhm

ICAL Filename: hh917
ICAL Analyzed: 08/09/06 20:19

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1887710	10.41	3019130	11.53	2569935	15.55	1346531	18.25
		LOWER LIMIT	943855	9.91	1509565	11.03	1284968	15.05	673266	17.75
		UPPER LIMIT	3775420	10.91	6038260	12.03	5139870	16.05	2693062	18.75
003	CCV	25 PPB	1983544	10.41	3296472	11.53	2916033	15.53	1536248	18.25
005	BS	QC352779	2208947	10.40	3597089	11.53	3163494	15.54	1664879	18.25
006	BSD	QC352780	2392552	10.41	3802517	11.53	3341207	15.54	1752741	18.26
007	BS	QC352781	2428538	10.40	3829448	11.53	3427904	15.54	1772024	18.25
008	BSD	QC352782	2509972	10.41	3943350	11.53	3468893	15.54	1752101	18.26
010	CCV	25 PPB	2613833	10.41	4128235	11.53	3542303	15.54	1834528	18.26
013	BLANK	QC352783	2450120	10.41	3858465	11.53	3364395	15.54	1697196	18.26
014	SAMPLE	188847-004	2341058	10.40	3749701	11.53	3269434	15.54	1623389	18.25
015	SAMPLE	188796-006	2385770	10.41	3776686	11.53	3261912	15.54	1642750	18.25
016	SAMPLE	188796-008	2220877	10.41	3616820	11.53	3138942	15.54	1566196	18.26
017	SAMPLE	188848-002	2258205	10.41	3711859	11.53	3186502	15.54	1639762	18.26
018	SAMPLE	188848-004	2410906	10.40	3894787	11.53	3365993	15.54	1681627	18.25
019	SAMPLE	188847-003	2315846	10.41	3701296	11.53	3261518	15.54	1603939	18.25
020	SAMPLE	188796-001	2286679	10.40	3752701	11.53	3262137	15.54	1618326	18.25
021	SAMPLE	188796-005	2226033	10.40	3575069	11.53	3107397	15.54	1527059	18.25
022	SAMPLE	188796-012	2227939	10.40	3646285	11.53	3154252	15.53	1543083	18.25
023	SAMPLE	188796-013	2179262	10.40	3597303	11.53	3162841	15.54	1565196	18.25
024	SAMPLE	188847-013	2195721	10.41	3517828	11.53	3105092	15.54	1545624	18.26
025	SAMPLE	188847-024	2200276	10.40	3565498	11.53	3109487	15.54	1560474	18.25
026	SAMPLE	188863-001	2164067	10.41	3607086	11.53	3103733	15.54	1564172	18.26
027	SAMPLE	188863-002	2172361	10.40	3430829	11.53	3129678	15.54	1526095	18.25
028	SAMPLE	188869-001	2180970	10.40	3479798	11.54	3041115	15.54	1504929	18.25

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 476318840

Instrument : MSVOA08
Method : EPA 8260B

Begun : 08/09/06 10:00
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	hh901	X	BFB			08/09/06 10:00	1.0	1	
002	hh902	X	25PPB			08/09/06 10:28	1.0	2 3 4 5	
003	hh903	X	BFB			08/09/06 11:09	1.0	1	
004	hh904	X	25PPB			08/09/06 11:42	1.0	2 3 4 5	
005	hh905	X	BFB			08/09/06 12:14	1.0	1	
006	hh906	X	BFB			08/09/06 12:30	1.0	1	
007	hh907	TUN	BFB			08/09/06 13:01	1.0	1	
008	hh908	X	25PPB			08/09/06 13:39	1.0	2 3 4 5	
009	hh909	X	IB			08/09/06 15:15	1.0	5	
010	hh910	X	CALIB IB			08/09/06 15:53	1.0	5	
011	hh911	ICAL	0.25/0.5PPB			08/09/06 16:31	1.0	2 3 4 5	
012	hh912	ICAL	0.5/1PPB			08/09/06 17:09	1.0	2 3 4 5	
013	hh913	ICAL	2PPB			08/09/06 17:48	1.0	2 3 4 5	
014	hh914	ICAL	5PPB			08/09/06 18:26	1.0	2 3 4 5	
015	hh915	ICAL	10PPB			08/09/06 19:04	1.0	2 3 4 5	
016	hh916	ICAL	20PPB			08/09/06 19:42	1.0	2 3 4 5	
017	hh917	ICAL	50PPB			08/09/06 20:19	1.0	2 3 4 5	
018	hh918	ICAL	75PPB			08/09/06 20:57	1.0	2 3 4 5	
019	hh919	ICAL	100PPB			08/09/06 21:34	1.0	2 3 4 5	
020	hh920	ICV	25PPB			08/09/06 22:12	1.0	6 5	
021	hh921	ICV	25PPB			08/09/06 22:49	1.0	7 8 5	
022	hh922	X	IB			08/09/06 23:27	1.0	5	
023	hh923	X	IB			08/10/06 00:05	1.0	5	
024	hh924	X	IB			08/10/06 00:42	1.0	5	

Analyst: BO Date: 08/17/06 Reviewer: SJD Date: 08/17/06

Standards used: 1=S3716 2=S3942 3=S3980 4=S3053 5=S3894 6=S3979 7=S3978 8=S4023

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 476337393

Instrument : MSVOA08
Method : EPA 8260B

Begun : 08/22/06 07:13
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	hhm01	X	IB			08/22/06 07:13	1.0	1	
002	hhm02	TUN	BFB			08/22/06 07:50	1.0	2	
003	hhm03	CCV	25 PPB			08/22/06 08:19	1.0	3 4 5 1	
004	hhm04	CCV	TVH			08/22/06 08:57	1.0	6 1	
005	hhm05	BS	QC352779	Water	116618	08/22/06 09:44	1.0	7 8 9 1	
006	hhm06	BSD	QC352780	Water	116618	08/22/06 10:21	1.0	7 8 9 1	
007	hhm07	BS	QC352781	Water	116618	08/22/06 10:59	1.0	10 1	
008	hhm08	BSD	QC352782	Water	116618	08/22/06 11:36	1.0	10 1	
009	hhm09	TUN	BFB			08/22/06 12:04	1.0	2	
010	hhm10	CCV	25 PPB			08/22/06 12:34	1.0	3 4 5 1	
011	hhm11	CCV	TVH			08/22/06 13:11	1.0	6 1	
012	hhm12	X	IB			08/22/06 13:55	1.0	1	
013	hhm13	BLANK	QC352783	Water	116618	08/22/06 14:32	1.0	1	
014	hhm14	SAMPLE	188847-004	Water	116618	08/22/06 15:10	1.0	1	
015	hhm15	SAMPLE	188796-006	Water	116618	08/22/06 15:47	1.0	1	
016	hhm16	SAMPLE	188796-008	Water	116618	08/22/06 16:25	1.0	1	
017	hhm17	SAMPLE	188848-002	Water	116618	08/22/06 17:02	1.0	1	
018	hhm18	SAMPLE	188848-004	Water	116618	08/22/06 17:40	1.0	1	
019	hhm19	SAMPLE	188847-003	Water	116618	08/22/06 18:17	3.333	1	
020	hhm20	SAMPLE	188796-001	Water	116618	08/22/06 18:55	2.0	1	
021	hhm21	SAMPLE	188796-005	Water	116618	08/22/06 19:32	4.0	1	
022	hhm22	SAMPLE	188796-012	Water	116618	08/22/06 20:10	4.0	1	
023	hhm23	SAMPLE	188796-013	Water	116618	08/22/06 20:47	25.0	1	
024	hhm24	SAMPLE	188847-013	Water	116618	08/22/06 21:25	6.25	1	
025	hhm25	SAMPLE	188847-024	Water	116618	08/22/06 22:02	1.0	1	
026	hhm26	SAMPLE	188863-001	Water	116618	08/22/06 22:40	1.0	1	
027	hhm27	SAMPLE	188863-002	Water	116618	08/22/06 23:17	1.0	1	
028	hhm28	SAMPLE	188869-001	Water	116618	08/22/06 23:55	1.0	1	
029	hhm29	X	IB			08/23/06 00:32	1.0	1	
030	hhm30	X	IB			08/23/06 01:10	1.0	1	
031	hhm31	X	IB			08/23/06 01:47	1.0	1	

Analyst: LW Date: 08/23/06 Reviewer: AMK Date: 08/23/06

Standards used: 1=S3894 2=S3716 3=S4084 4=S3980 5=S3053 6=S4120 7=S3978 8=S3979 9=S4023 10=S3056



REPORTING SUMMARY FOR 188869 8260 Water
Curtis & Tompkins Laboratories

[illegible]

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 8-22

PREPPED BY.

116618

WATER

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	188847-2		C	—			8	1x 454	
2	188848-4		I	<2				1x	TVH
3	-2		I	+				1x	
4	188796-1		I	<2				2x	
5	-5		I	+				4x	
6	-6		I	<2				1x	
7	-8		I	+				1x	
8	-12		I	<2				4x	
9	-13		I	+				25x	
10	188847-13		B	<2				6.25x	
11	-24		I	+				1x	
12	188863-1		C	+				ALIAS 188702-2	1x
13	-2		B	+				1x	-7
14	188837-8		I	+				1x	
15	-11		A	+			Y	1x	
16	-12		C	+			Y	1x	
17	188847-3		I	<2			Y	3.3x	
18	-4		I	+				1x VCD	
19	188869-1		C	+				1x	
20									
21									
22									
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PREPFORM.XLS

7/21/98

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 09/24/06

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
Ethanol	ug/L	55	22	23	50	11	22	36	10
1,1-Dichloroethene	ug/L	0.27	0.22	0.062	0.17	0.10	0.17	0.089	0.11
Benzene	ug/L	0.11	0.041	0.060	0.061	0.12	0.10	0.027	0.084
Trichloroethene	ug/L	0.21	0.076	0.18	0.17	0.11	0.13	0.087	0.086
Toluene	ug/L	0.083	0.083	0.12	0.092	0.062	0.085	0.053	0.14
Chlorobenzene	ug/L	0.10	0.090	0.11	0.16	0.16	0.098	0.050	0.075
Freon 12	ug/L	0.18	0.099	0.22	0.062	0.15	0.47	0.18	0.20
Chloromethane	ug/L	0.12	0.16	0.12	0.18	0.13	0.34	0.089	0.20
Vinyl Chloride	ug/L	0.19	0.23	0.10	0.066	0.10	0.097	0.16	0.039
Bromomethane	ug/L	0.29	0.30	0.31	0.13	0.31	0.34	0.20	0.23
Chloroethane	ug/L	0.33	0.33	0.15	0.16	0.13	0.45	0.12	0.18
Trichlorofluoromethane	ug/L	0.16	0.057	0.17	0.10	0.080	0.46	0.10	0.19
Acetone	ug/L	0.39	0.87	0.21	0.85	0.16	0.20	0.49	0.15
Freon 113	ug/L	0.062	0.12	0.13	0.25	0.071	0.19	0.091	0.16
Methylene Chloride	ug/L	0.15	0.21	0.11	0.12	0.16	0.29	0.22	0.086
MTBE	ug/L	0.069	0.074	0.065	0.045	0.040	0.15	0.052	0.068
Carbon Disulfide	ug/L	0.039	0.031	0.086	0.076	0.11	0.14	0.037	0.066
trans-1,2-Dichloroethene	ug/L	0.37	0.13	0.18	0.051	0.064	0.15	0.093	0.094
Vinyl Acetate	ug/L	0.076	0.36	0.084	0.99	0.40	0.13	0.10	0.13
1,1-Dichloroethane	ug/L	0.088	0.061	0.048	0.090	0.11	0.14	0.063	0.10
2-Butanone	ug/L	0.16	0.17	0.20	0.50	0.099	0.23	0.26	0.081
cis-1,2-Dichloroethene	ug/L	0.26	0.18	0.083	0.12	0.042	0.12	0.11	0.16
2,2-Dichloropropane	ug/L	0.093	0.17	0.077	0.12	0.066	0.15	0.083	0.14
Chloroform	ug/L	0.082	0.055	0.086	0.060	0.11	0.16	0.044	0.084
Bromochloromethane	ug/L	0.091	0.090	0.10	0.18	0.11	0.18	0.15	0.11
1,1,1-Trichloroethane	ug/L	0.084	0.066	0.14	0.11	0.061	0.12	0.041	0.096
1,1-Dichloropropene	ug/L	0.12	0.11	0.081	0.16	0.16	0.11	0.055	0.084
Carbon Tetrachloride	ug/L	0.089	0.11	0.098	0.17	0.15	0.14	0.056	0.14
1,2-Dichloroethane	ug/L	0.090	0.088	0.099	0.096	0.12	0.18	0.056	0.094
1,2-Dichloropropane	ug/L	0.093	0.060	0.079	0.071	0.14	0.16	0.12	0.086
Bromodichloromethane	ug/L	0.086	0.039	0.067	0.074	0.10	0.14	0.069	0.094
Dibromomethane	ug/L	0.16	0.061	0.092	0.16	0.11	0.18	0.13	0.089
4-Methyl-2-Pentanone	ug/L	0.044	0.076	0.057	0.20	0.13	0.14	0.25	0.067
cis-1,3-Dichloropropene	ug/L	0.068	0.065	0.056	0.20	0.16	0.094	0.044	0.080
trans-1,3-Dichloropropene	ug/L	0.074	0.074	0.044	0.073	0.14	0.13	0.060	0.059
1,1,2-Trichloroethane	ug/L	0.12	0.12	0.14	0.19	0.15	0.21	0.058	0.12
2-Hexanone	ug/L	0.043	0.31	0.047	0.34	0.11	0.13	0.14	0.097
1,3-Dichloropropane	ug/L	0.064	0.067	0.061	0.063	0.10	0.14	0.068	0.049
Tetrachloroethene	ug/L	0.13	0.14	0.12	0.22	0.14	0.092	0.093	0.089
Dibromochloromethane	ug/L	0.099	0.054	0.10	0.085	0.056	0.15	0.063	0.094
1,2-Dibromoethane	ug/L	0.16	0.061	0.10	0.073	0.11	0.13	0.070	0.088
2-Chloroethylvinylether	ug/L	0.093	0.18	0.24	0.17	0.14	0.19	0.23	0.14
1,1,1,2-Tetrachloroethane	ug/L	0.11	0.087	0.10	0.11	0.14	0.10	0.088	0.16
Ethylbenzene	ug/L	0.059	0.076	0.075	0.17	0.041	0.11	0.11	0.069
m,p-Xylenes	ug/L	0.24	0.22	0.14	0.27	0.17	0.19	0.20	0.14

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 09/24/06

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
o-Xylene	ug/L	0.10	0.058	0.092	0.11	0.16	0.087	0.13	0.078
Styrene	ug/L	0.12	0.092	0.098	0.085	0.16	0.11	0.061	0.055
Bromoform	ug/L	0.12	0.088	0.11	0.18	0.094	0.12	0.15	0.10
Isopropylbenzene	ug/L	0.12	0.059	0.090	0.18	0.059	0.11	0.10	0.089
1,1,2,2-Tetrachloroethane	ug/L	0.13	0.096	0.086	0.047	0.13	0.20	0.055	0.11
1,2,3-Trichloropropane	ug/L	0.31	0.28	0.074	0.11	0.17	0.19	0.16	0.072
Propylbenzene	ug/L	0.075	0.10	0.063	0.21	0.023	0.12	0.11	0.088
Bromobenzene	ug/L	0.12	0.12	0.10	0.19	0.12	0.17	0.085	0.088
1,3,5-Trimethylbenzene	ug/L	0.060	0.095	0.047	0.14	0.057	0.13	0.13	0.069
2-Chlorotoluene	ug/L	0.12	0.11	0.068	0.15	0.025	0.10	0.12	0.080
4-Chlorotoluene	ug/L	0.079	0.069	0.043	0.14	0.037	0.14	0.069	0.078
tert-Butylbenzene	ug/L	0.11	0.15	0.075	0.19	0.038	0.13	0.079	0.082
1,2,4-Trimethylbenzene	ug/L	0.091	0.088	0.066	0.12	0.069	0.082	0.10	0.099
sec-Butylbenzene	ug/L	0.11	0.12	0.062	0.17	0.088	0.088	0.076	0.097
para-Isopropyl Toluene	ug/L	0.058	0.12	0.12	0.14	0.056	0.071	0.045	0.075
1,3-Dichlorobenzene	ug/L	0.080	0.16	0.097	0.18	0.060	0.13	0.10	0.094
1,4-Dichlorobenzene	ug/L	0.068	0.14	0.095	0.18	0.038	0.10	0.17	0.072
n-Butylbenzene	ug/L	0.12	0.15	0.11	0.18	0.21	0.11	0.12	0.073
1,2-Dichlorobenzene	ug/L	0.072	0.14	0.080	0.14	0.16	0.16	0.061	0.081
1,2-Dibromo-3-Chloropropane	ug/L	0.39	0.25	0.21	0.22	0.13	0.17	0.098	0.18
1,2,4-Trichlorobenzene	ug/L	0.12	0.17	0.14	0.16	0.10	0.12	0.17	0.061
Hexachlorobutadiene	ug/L	0.19	0.19	0.29	0.21	0.11	0.065	0.25	0.17
Naphthalene	ug/L	0.12	0.13	0.060	0.10	0.091	0.11	0.16	0.052
1,2,3-Trichlorobenzene	ug/L	0.063	0.17	0.10	0.20	0.095	0.10	0.29	0.15
tert-Butyl Alcohol (TBA)	ug/L	1.3	1.6	0.83	2.5	1.3	1.1	1.3	1.3
Isopropyl Ether (DIPE)	ug/L	0.068	0.070	0.063	0.027	0.030	0.14	0.027	0.089
Ethyl tert-Butyl Ether (ETBE)	ug/L	0.089	0.045	0.024	0.20	0.033	0.13	0.034	0.079
Methyl tert-Amyl Ether (TAME)	ug/L	0.094	0.13	0.055	0.054	0.048	0.10	0.057	0.17
Isopropanol	ug/L	4.6	2.7	1.6	6.6	1.5	1.4	1.1	1.3
Hexane	ug/L				0.33		0.15		
Cyclohexanone	ug/L	3.8	2.4	0.21	1.6	1.6	1.3		1.0
Tetrahydrofuran	ug/L	0.64	1.2	1.1	0.79	1.4	2.1	3.5	0.70
Tetramethyl THF	ug/L	0.067	0.061	0.062	0.20	0.10	0.13	0.078	0.079
Gasoline C6-C10	ug/L		15		4.8	15	8.5		
Gasoline C7-C12	ug/L		18		2.4	13	7.7		
Dibromofluoromethane	ug/L	3.1	2.9	1.8	2.4	1.5	1.1	3.2	1.1
1,2-Dichloroethane-d4	ug/L	3.0	3.9		2.4	1.2	1.7	3.0	1.0
Toluene-d8	ug/L	1.7	3.8		1.1	1.0	1.5	1.1	0.96
Bromofluorobenzene	ug/L	2.5	2.6		1.2	1.2	2.5	1.5	0.62
Trifluorotoluene	ug/L	0.12	0.43	0.065	0.21	0.13		0.14	

PESTICIDES



Organochlorine Pesticides

Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DW082106B	Batch#:	116753
Lab ID:	188869-001	Sampled:	08/21/06
Matrix:	Water	Received:	08/21/06
Units:	ug/L	Prepared:	08/24/06
Diln Fac:	1.000	Analyzed:	08/30/06

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND #	0.05
Heptachlor	ND #	0.05
Aldrin	ND #	0.05
Heptachlor epoxide	ND #	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND #	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND #	0.1
alpha-Chlordane	ND #	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND #	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	62 *	65-135
Decachlorobiphenyl	67	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Organochlorine Pesticides

Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC353319	Batch#:	116753
Matrix:	Water	Prepared:	08/24/06
Units:	ug/L	Analyzed:	08/26/06

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	59 *	65-135
Decachlorobiphenyl	85	65-135

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC353320	Batch#:	116753
Matrix:	Water	Prepared:	08/24/06
Units:	ug/L	Analyzed:	08/26/06

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	0.2000	0.1958	98	65-135
Heptachlor	0.2000	0.1799	90	65-135
Aldrin	0.2000	0.1586	79	65-135
Dieldrin	0.4000	0.3920	98	65-135
Endrin	0.4000	0.3748	94	65-135
4,4'-DDT	0.4000	0.4200 #	105	65-135

Surrogate	%REC	Limits
TCMX	67	65-135
Decachlorobiphenyl	63 *	65-135

= CCV drift outside limits; average CCV drift within limits per method requirements

* = Value outside of QC limits; see narrative

Batch QC Report

Organochlorine Pesticides

Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	LF5GW104	Batch#:	116753
MSS Lab ID:	188837-015	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	ug/L	Prepared:	08/24/06
Diln Fac:	1.000	Analyzed:	09/01/06

Type: MS Lab ID: QC353321

Analyte	MSS Result	Spiked	Result	%REC	Limits
gamma-BHC	0.004065	0.1887	0.1873	97	65-135
Heptachlor	0.01700	0.1887	0.1452	68	65-135
Aldrin	<0.006387	0.1887	0.1496	79	65-135
Dieldrin	<0.007102	0.3774	0.2868 #	76	65-135
Endrin	<0.009148	0.3774	0.2962 #	78	65-135
4,4'-DDT	<0.01025	0.3774	0.3101	82	65-135

Surrogate	%REC	Limits
TCMX	76	65-135
Decachlorobiphenyl	79	65-135

Type: MSD Lab ID: QC353322

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.1923	0.1944	99	65-135	2	35
Heptachlor	0.1923	0.1581	73	65-135	7	35
Aldrin	0.1923	0.1601	83	65-135	5	35
Dieldrin	0.3846	0.3033 #	79	65-135	4	35
Endrin	0.3846	0.3139 #	82	65-135	4	35
4,4'-DDT	0.3846	0.3388	88	65-135	7	35

Surrogate	%REC	Limits
TCMX	73	65-135
Decachlorobiphenyl	78	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements
RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188869 PEST Water: EPA 8081A

Inst : GC16
 Calnum : 236341882001
 Units : pg/ul

Name : gc16pest 237
 Date : 25-AUG-2006 20:16
 X Axis : R

Reviewer: MCH

Level	File	Segment	Sample ID	Analyzed	Std
L1	237_022	236341882022	PEST_1	25-AUG-2006 20:16	S2827
L2	237_023	236341882023	PEST_2	25-AUG-2006 20:33	S3833
L3	237_024	236341882024	PEST_3	25-AUG-2006 20:51	S4177
L4	237_025	236341882025	PEST_4	25-AUG-2006 21:09	S3699
L5	237_026	236341882026	PEST_5	25-AUG-2006 21:27	S3834
L6	237_027	236341882027	PEST_6	25-AUG-2006 21:44	S4042
L7	237_028	236341882028	PEST_7	25-AUG-2006 22:02	S4043

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	%RSD	MNR ²	MxRSD	Flg
alpha-BHC	A	11029	7994.8	9634.2	9223.5	10307	10836	11032	AVRG		9.99E-5		10008	11	0.995	20		
gamma-BHC	A	9267.5	7445.2	9048.6	8358.0	9284.6	9523.5	9425.2	AVRG		1.12E-4		8907.5	8	0.995	20		
beta-BHC	A	7317.0	5901.6	6183.8	5473.3	5677.2	5429.4	5029.5	AVRG		1.71E-4		5858.8	13	0.995	20		
delta-BHC	A	9440.5	6712.4	8468.6	7445.2	8077.8	8611.6	8525.4	AVRG		1.22E-4		8183.1	11	0.995	20		
Heptachlor	A	11593	8900.2	9970.9	8594.7	9243.1	8935.7	8354.9	AVRG		1.07E-4		9370.3	12	0.995	20		
Aldrin	A	10003	7892.4	8655.8	8057.1	8348.5	8466.5	8191.1	AVRG		1.17E-4		8516.3	8	0.995	20		
Heptachlor epoxide	A	11425	8839.4	9616.8	8661.0	8808.0	8516.9	7937.3	AVRG		1.10E-4		9114.8	12	0.995	20		
gamma-Chlordane	A	10099	8465.4	9153.3	8440.6	8442.6	8300.9	7777.9	AVRG		1.15E-4		8668.4	9	0.995	20		
alpha-Chlordane	A	9821.5	8139.4	8817.6	8103.7	8060.9	7884.4	7199.5	AVRG		1.21E-4		8289.6	10	0.995	20		
4,4'-DDE	A	8904.8	7736.5	8436.6	7867.7	7830.8	7755.8	7203.1	AVRG		1.26E-4		7962.2	7	0.995	20		
Endosulfan I	A	9983.5	8582.2	9319.1	8697.6	8844.5	8818.2	8466.4	AVRG		1.12E-4		8958.8	6	0.995	20		
Dieldrin	A	8260.3	7201.2	7991.0	7701.9	7796.3	7808.2	7313.3	AVRG		1.29E-4		7724.6	5	0.995	20		
Endrin	A	8209.3	6540.1	7003.1	6166.8	6395.6	6420.1	6090.8	AVRG		1.49E-4		6689.4	11	0.995	20		
4,4'-DDD	A	7476.8	5764.0	6193.1	5633.5	5663.6	5852.8	5630.7	AVRG		1.66E-4		6030.6	11	0.995	20		
Endosulfan II	A	8870.5	7131.2	7783.9	7178.1	7065.8	7011.9	6507.3	AVRG		1.36E-4		7364.1	10	0.995	20		
4,4'-DDT	A	4744.0	4298.9	4796.0	5156.1	5207.4	5504.5	5389.7	AVRG		1.99E-4		5013.8	8	0.995	20		
Methoxychlor	A	3492.6	2814.4	3112.7	2754.2	2728.0	2660.2	2455.7	AVRG		3.50E-4		2859.7	12	0.995	20		
Endosulfan sulfate	A	8462.8	6938.1	7673.3	7160.8	7056.4	6849.8	6335.3	AVRG		1.39E-4		7210.9	9	0.995	20		
Endrin ketone	A	7107.8	5636.0	6834.5	6136.6	6274.4	6409.8	5911.3	AVRG		1.58E-4		6330.0	8	0.995	20		
TCMX	A	12917	10608	11565	10242	10951	9852.6	9210.7	AVRG		9.34E-5		10707	11	0.995	20		
Decachlorobiphenyl	A	13865	11151	11958	9240.4	9291.8	8435.4		AVRG		9.38E-5		10657	19	0.995	20		
alpha-BHC	B	9183.5	6905.8	8408.5	7907.8	8987.2	9977.7	10580	AVRG		1.13E-4		8850.1	14	0.995	20		
gamma-BHC	B	8358.5	6629.2	7707.7	7249.3	7989.6	8538.4	8793.2	AVRG		1.27E-4		7895.1	10	0.995	20		
beta-BHC	B	7291.0	5327.4	5704.1	4800.4	4989.0	4812.9	4557.4	AVRG		1.87E-4		5354.6	17	0.995	20		
delta-BHC	B	8044.5	5794.4	6738.3	6135.0	6764.9	7507.4	7813.3	AVRG		1.43E-4		6971.1	12	0.995	20		
Heptachlor	B	8999.5	6816.0	7431.8	6340.7	6688.6	6576.5	6506.6	AVRG		1.42E-4		7051.4	13	0.995	20		

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Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	MnR ²	MxRSD	Fig
Aldrin	B	9876.0	8004.0	8674.5	8205.3	8493.4	8950.4	9057.5	AVRG		1.14E-4		8751.6	7	0.995	20	
Heptachlor epoxide	B	10251	8254.0	8674.7	7841.4	7867.5	7850.9	7626.9	AVRG		1.20E-4		8338.1	11	0.995	20	
gamma-Chlordane	B	11183	8781.4	9093.8	8307.8	8249.3	8338.6	8107.5	AVRG		1.13E-4		8865.9	12	0.995	20	
alpha-Chlordane	B	10295	8465.4	8845.6	8171.1	7978.0	7876.1	7661.1	AVRG		1.18E-4		8470.3	11	0.995	20	
4,4'-DDE	B	7502.0	6258.9	6932.6	6732.3	6696.2	7217.7	7130.8	AVRG		1.44E-4		6924.4	6	0.995	20	
Endosulfan I	B	9883.0	7711.4	8086.1	7392.7	7649.3	7917.9	7793.5	AVRG		1.24E-4		8062.0	10	0.995	20	
Diieldrin	B	8794.0	7051.6	7589.9	7308.8	7306.8	7675.1	7542.2	AVRG		1.31E-4		7609.8	7	0.995	20	
Endrin	B	6443.3	5342.5	5932.2	5333.5	5566.7	5732.3	5681.4	AVRG		1.75E-4		5718.8	7	0.995	20	
4,4'-DDD	B	5056.3	4094.9	4468.9	4186.4	4182.7	4453.7	4396.3	AVRG		2.27E-4		4405.6	7	0.995	20	
Endosulfan II	B	8323.3	6769.0	7139.0	6480.0	6522.6	6575.2	6229.3	AVRG		1.46E-4		6862.6	10	0.995	20	
4,4'-DDT	B	3627.8	2972.5	3247.4	2940.0	3041.1	3161.0	3157.2	AVRG		3.16E-4		3163.8	7	0.995	20	
Methoxychlor	B	2236.6	1643.7	1735.8	1507.3	1494.2	1483.0	1420.8	AVRG		6.08E-4		1645.9	17	0.995	20	
Endosulfan sulfate	B	8372.8	6053.9	6557.0	5845.2	5798.2	5813.6	5597.0	AVRG		1.59E-4		6291.1	15	0.995	20	
Endrin ketone	B	8327.8	5815.3	6494.7	5660.1	5807.0	5948.8	5676.8	AVRG		1.60E-4		6247.2	15	0.995	20	
TCMX	B	11362	9580.3	10698	9476.9	10115	9894.7	9639.1	AVRG		9.89E-5		10109	7	0.995	20	
Decachlorobiphenyl	B	12828	10127	10132	8387.1	8148.9	7488.2		AVRG		1.05E-4		9518.6	20	0.995	20	
Average EPA 8081A	A												(n=22)	10		20	
Average EPA 8081A	B												(n=22)	12		20	

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188869 PEST Water
EPA 8081A

Inst : GC16
Calnum : 236341882001

Name : gc16pest_237
Cal Date: 25-AUG-2006

ICV 236341882030 (237_030 25-AUG-2006) stds: S3877

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	10008	10004	25.00	24.99	pg/ul	0	15	
gamma-BHC	A	8907.5	9062.2	25.00	25.43	pg/ul	2	15	
beta-BHC	A	5858.8	5823.4	25.00	24.85	pg/ul	-1	15	
delta-BHC	A	8183.1	8274.6	25.00	25.28	pg/ul	1	15	
Heptachlor	A	9370.3	9226.2	25.00	24.62	pg/ul	-2	15	
Aldrin	A	8516.3	8172.2	25.00	23.99	pg/ul	-4	15	
Heptachlor epoxide	A	9114.8	8556.7	25.00	23.47	pg/ul	-6	15	
gamma-Chlordane	A	8668.4	8230.3	25.00	23.74	pg/ul	-5	15	
alpha-Chlordane	A	8289.6	8092.6	25.00	24.41	pg/ul	-2	15	
4,4'-DDE	A	7962.2	8112.0	25.00	25.47	pg/ul	2	15	
Endosulfan I	A	8958.8	8998.8	25.00	25.11	pg/ul	0	15	
Dieldrin	A	7724.6	8169.1	25.00	26.44	pg/ul	6	15	
Endrin	A	6689.4	7072.4	25.00	26.43	pg/ul	6	15	
4,4'-DDD	A	6030.6	6023.5	25.00	24.97	pg/ul	0	15	
Endosulfan II	A	7364.1	7182.4	25.00	24.38	pg/ul	-2	15	
4,4'-DDT	A	5013.8	4912.4	25.00	24.49	pg/ul	-2	15	
Methoxychlor	A	2859.7	3401.5	25.00	29.74	pg/ul	19	15	v+ ***
Endosulfan sulfate	A	7210.9	7135.6	25.00	24.74	pg/ul	-1	15	
Endrin ketone	A	6330.0	6480.4	25.00	25.59	pg/ul	2	15	
alpha-BHC	B	8850.1	8839.5	25.00	24.97	pg/ul	0	15	
gamma-BHC	B	7895.1	7980.0	25.00	25.27	pg/ul	1	15	
beta-BHC	B	5354.6	5085.5	25.00	23.74	pg/ul	-5	15	
delta-BHC	B	6971.1	7151.6	25.00	25.65	pg/ul	3	15	
Heptachlor	B	7051.4	6978.8	25.00	24.74	pg/ul	-1	15	
Aldrin	B	8751.6	8605.0	25.00	24.58	pg/ul	-2	15	
Heptachlor epoxide	B	8338.1	7976.4	25.00	23.92	pg/ul	-4	15	
gamma-Chlordane	B	8865.9	8269.0	25.00	23.32	pg/ul	-7	15	
alpha-Chlordane	B	8470.3	7924.9	25.00	23.39	pg/ul	-6	15	
4,4'-DDE	B	6924.4	7111.0	25.00	25.67	pg/ul	3	15	
Endosulfan I	B	8062.0	7865.3	25.00	24.39	pg/ul	-2	15	
Dieldrin	B	7609.8	7212.9	25.00	23.70	pg/ul	-5	15	
Endrin	B	5718.8	5577.2	25.00	24.38	pg/ul	-2	15	
4,4'-DDD	B	4405.6	4273.3	25.00	24.25	pg/ul	-3	15	
Endosulfan II	B	6862.6	6552.5	25.00	23.87	pg/ul	-5	15	
4,4'-DDT	B	3163.8	3169.9	25.00	25.05	pg/ul	0	15	
Methoxychlor	B	1645.9	2067.8	25.00	31.41	pg/ul	26	15	v+ ***
Endosulfan sulfate	B	6291.1	6004.3	25.00	23.86	pg/ul	-5	15	
Endrin ketone	B	6247.2	6054.2	25.00	24.23	pg/ul	-3	15	
Average EPA 8081A	A	n=20					3	15	
Average EPA 8081A	B	n=20					4	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188869 PEST Water: EPA 8081A

Inst : GC16
 Calnum : 236346178001
 Units : pg/ul

Name : GC16PEST241
 Date : 28-AUG-2006 19:53
 X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	stds
L1	240_028	236346178028	PEST_1	28-AUG-2006 19:53	S4176
L2	240_029	236346178029	PEST_2	28-AUG-2006 20:11	S3833
L3	240_030	236346178030	PEST_3	28-AUG-2006 20:29	S4177
L4	240_031	236346178031	PEST_4	28-AUG-2006 20:46	S4178
L5	240_032	236346178032	PEST_5	28-AUG-2006 21:04	S3834
L6	240_033	236346178033	PEST_6	28-AUG-2006 21:22	S4042
L7	240_034	236346178034	PEST_7	28-AUG-2006 21:40	S4043

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	ao	a1	a2	Avg	r ²	%RSD	MNR ²	MxRSD	Flg
alpha-BHC	A	8033.5	8937.0	9323.4	9173.0	10231	11510	11611	AVRG		1.02E-4		9831.3	14	0.995	20		
gamma-BHC	A	7871.0	8911.0	8871.8	8221.6	9263.4	10206	10120	AVRG		1.10E-4		9066.4	10	0.995	20		
beta-BHC	A	6406.0	6535.8	6023.4	5198.2	5600.8	5683.4	5344.5	AVRG		1.72E-4		5827.4	9	0.995	20		
delta-BHC	A	8224.5	7978.8	7800.8	7153.3	8137.4	9219.8	9297.8	AVRG		1.21E-4		8258.9	9	0.995	20		
Heptachlor	A	11185	10899	10062	8568.5	9485.7	9776.5	9165.0	AVRG		1.01E-4		9877.3	9	0.995	20		
Aldrin	A	8590.0	8812.2	8276.2	7487.6	7950.8	8649.7	8531.3	AVRG		1.20E-4		8328.3	6	0.995	20		
Heptachlor epoxide	A	9794.0	9671.8	9130.2	7824.5	8270.2	8663.0	8242.6	AVRG		1.14E-4		8799.5	9	0.995	20		
gamma-Chlordane	A	8755.0	9174.8	8790.7	7518.2	7861.9	8359.0	7975.1	AVRG		1.20E-4		8350.7	7	0.995	20		
alpha-Chlordane	A	8563.5	8717.8	8468.4	7212.1	7571.7	8050.3	7604.9	AVRG		1.25E-4		8027.0	7	0.995	20		
4,4'-DDE	A	7596.8	7859.4	7749.2	6746.8	7029.4	7647.1	7215.1	AVRG		1.35E-4		7406.2	6	0.995	20		
Endosulfan I	A	8957.0	9070.4	8839.4	7715.0	8084.2	8784.9	8464.4	AVRG		1.17E-4		8559.3	6	0.995	20		
Dieldrin	A	7671.5	7589.4	7632.1	6731.9	7112.1	7823.9	7467.4	AVRG		1.35E-4		7432.6	5	0.995	20		
Endrin	A	6644.8	6219.9	6230.7	5451.7	5808.4	6565.8	6245.2	AVRG		1.62E-4		6166.6	7	0.995	20		
4,4'-DDD	A	4973.8	4829.3	5141.5	4676.9	4885.6	5722.1	5538.8	AVRG		1.96E-4		5109.7	8	0.995	20		
Endosulfan II	A	7486.3	7106.1	7228.9	6329.0	6565.2	7067.3	6624.4	AVRG		1.45E-4		6915.3	6	0.995	20		
4,4'-DDT	A	5023.8	4892.0	5067.2	4546.2	4991.2	5829.5	5583.8	AVRG		1.95E-4		5133.4	8	0.995	20		
Methoxychlor	A	3373.5	3040.8	3030.7	2505.0	2607.9	2726.7	2430.1	AVRG		3.55E-4		2816.4	12	0.995	20		
Endosulfan sulfate	A	7776.5	7313.5	7228.4	6213.7	6453.7	6902.2	6462.3	AVRG		1.45E-4		6907.2	8	0.995	20		
Endrin ketone	A	6149.5	5838.0	6154.3	5359.3	5643.6	6288.7	5809.5	AVRG		1.70E-4		5891.8	6	0.995	20		
TCMX	A	11745	11435	11027	10117	10317	10214	9383.5	AVRG		9.43E-5		10606	8	0.995	20		
Decachlorobiphenyl	A	11850	11388	10823	8599.7	8753.5	8214.6	7038.2	AVRG		1.05E-4		9523.8	19	0.995	20		
alpha-BHC	B	7650.5	7737.6	7960.7	7591.8	8729.4	10157	10864	AVRG		1.15E-4		8670.2	15	0.995	20		
gamma-BHC	B	7136.5	7482.2	7377.7	6858.9	7798.2	8750.2	9109.3	AVRG		1.28E-4		7787.6	11	0.995	20		
beta-BHC	B	5824.0	5794.0	5378.4	4475.2	4943.5	5032.4	4815.2	AVRG		1.93E-4		5180.4	10	0.995	20		
delta-BHC	B	6793.0	6469.4	6308.0	5780.4	6756.1	7857.5	8337.7	AVRG		1.45E-4		6900.3	13	0.995	20		
Heptachlor	B	8303.5	7554.0	6990.0	5819.8	6666.2	6975.4	6869.5	AVRG		1.42E-4		7025.5	11	0.995	20		

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	MNR ²	MRSD	Fig
Aldrin	B	8694.0	8144.8	7932.1	7182.2	7944.3	8886.8	9141.3	AVRG		1.21E-4		8275.1	8	0.995	20	
Heptachlor epoxide	B	8607.0	8389.0	7927.5	6945.7	7306.7	7854.1	7782.4	AVRG		1.28E-4		7830.3	7	0.995	20	
gamma-Chlordane	B	9292.5	8704.0	8487.3	7183.0	7466.6	8081.1	8024.0	AVRG		1.22E-4		8176.9	9	0.995	20	
alpha-Chlordane	B	9040.0	8397.8	8023.5	7014.6	7281.8	7594.7	7496.3	AVRG		1.28E-4		7835.5	9	0.995	20	
4,4'-DDE	B	6505.5	6029.2	6508.5	5733.1	6021.4	7071.3	7170.0	AVRG		1.55E-4		6434.1	8	0.995	20	
Endosulfan I	B	8630.0	7648.0	7816.0	6394.5	6681.6	7725.1	7803.1	AVRG		1.33E-4		7528.3	10	0.995	20	
Dieldrin	B	7317.8	6816.4	7034.3	6092.7	6444.1	7380.6	7474.6	AVRG		1.44E-4		6937.2	7	0.995	20	
Endrin	B	5881.3	5373.3	5375.4	4605.0	4982.0	5807.8	5756.6	AVRG		1.85E-4		5397.3	9	0.995	20	
4,4'-DDD	B	3973.8	3827.2	3844.4	3409.4	3556.8	4198.9	4302.4	AVRG		2.58E-4		3873.3	8	0.995	20	
Endosulfan II	B	7059.8	6471.7	6345.8	5468.3	5635.6	6282.1	6226.1	AVRG		1.61E-4		6212.8	9	0.995	20	
4,4'-DDT	B	3407.3	3105.7	3082.3	2641.9	2781.3	3211.9	3254.1	AVRG		3.26E-4		3069.2	9	0.995	20	
Methoxychlor	B	1905.7	1598.9	1546.5	1275.7	1324.7	1432.5	1359.2	AVRG		6.70E-4		1491.9	15	0.995	20	
Endosulfan sulfate	B	6622.5	5942.9	5810.9	4941.5	5043.5	5570.6	5546.4	AVRG		1.77E-4		5639.7	10	0.995	20	
Endrin ketone	B	5812.3	5274.6	5477.4	4630.2	4795.4	5445.6	5281.7	AVRG		1.91E-4		5245.3	8	0.995	20	
TCMX	B	10469	10342	10280	9232.3	9785.9	9943.7	9626.3	AVRG		1.00E-4		9954.2	4	0.995	20	
Decachlorobiphenyl	B	10966	10077	9380.6	7470.1	7584.1	7358.9	6468.2	AVRG		1.18E-4		8472.1	20	0.995	20	
Average EPA 8081A	A												(n=22)	9		20	
Average EPA 8081A	B												(n=22)	10		20	

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188869 PEST Water
EPA 8081A

Inst : GC16
Calnum : 236346178001

Name : GC16PEST241
Cal Date: 28-AUG-2006

ICV 236346178048 (240_048 29-AUG-2006) stds: S4238

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	9831.3	10782	25.00	27.42	pg/ul	10	15	
gamma-BHC	A	9066.4	9784.5	25.00	26.98	pg/ul	8	15	
beta-BHC	A	5827.4	6013.5	25.00	25.80	pg/ul	3	15	
delta-BHC	A	8258.9	9198.0	25.00	27.84	pg/ul	11	15	
Heptachlor	A	9877.3	9788.0	25.00	24.77	pg/ul	-1	15	
Aldrin	A	8328.3	8393.8	25.00	25.20	pg/ul	1	15	
Heptachlor epoxide	A	8799.5	8848.9	25.00	25.14	pg/ul	1	15	
gamma-Chlordane	A	8350.7	8422.0	25.00	25.21	pg/ul	1	15	
alpha-Chlordane	A	8027.0	8307.0	25.00	25.87	pg/ul	3	15	
4,4'-DDE	A	7406.2	8087.7	25.00	27.30	pg/ul	9	15	
Endosulfan I	A	8559.3	8992.5	25.00	26.27	pg/ul	5	15	
Dieldrin	A	7432.6	7769.4	25.00	26.13	pg/ul	5	15	
Endrin	A	6166.6	6742.4	25.00	27.33	pg/ul	9	15	
4,4'-DDD	A	5109.7	5653.5	25.00	27.66	pg/ul	11	15	
Endosulfan II	A	6915.3	7413.3	25.00	26.80	pg/ul	7	15	
4,4'-DDT	A	5133.4	5328.2	25.00	25.95	pg/ul	4	15	
Methoxychlor	A	2816.4	3390.6	25.00	30.10	pg/ul	20	15	v+ ***
Endosulfan sulfate	A	6907.2	7548.7	25.00	27.32	pg/ul	9	15	
Endrin ketone	A	5891.8	6841.6	25.00	29.03	pg/ul	16	15	v+ ***
alpha-BHC	B	8670.2	8300.1	25.00	23.93	pg/ul	-4	15	
gamma-BHC	B	7787.6	7375.0	25.00	23.68	pg/ul	-5	15	
beta-BHC	B	5180.4	4571.0	25.00	22.06	pg/ul	-12	15	
delta-BHC	B	6900.3	6692.1	25.00	24.25	pg/ul	-3	15	
Heptachlor	B	7025.5	6231.0	25.00	22.17	pg/ul	-11	15	
Aldrin	B	8275.1	8019.1	25.00	24.23	pg/ul	-3	15	
Heptachlor epoxide	B	7830.3	7227.8	25.00	23.08	pg/ul	-8	15	
gamma-Chlordane	B	8176.9	7681.4	25.00	23.49	pg/ul	-6	15	
alpha-Chlordane	B	7835.5	7593.9	25.00	24.23	pg/ul	-3	15	
4,4'-DDE	B	6434.1	6241.4	25.00	24.25	pg/ul	-3	15	
Endosulfan I	B	7528.3	7343.7	25.00	24.39	pg/ul	-2	15	
Dieldrin	B	6937.2	6570.8	25.00	23.68	pg/ul	-5	15	
Endrin	B	5397.3	5234.1	25.00	24.24	pg/ul	-3	15	
4,4'-DDD	B	3873.3	3569.5	25.00	23.04	pg/ul	-8	15	
Endosulfan II	B	6212.8	6179.8	25.00	24.87	pg/ul	-1	15	
4,4'-DDT	B	3069.2	2747.8	25.00	22.38	pg/ul	-10	15	
Methoxychlor	B	1491.9	1810.0	25.00	30.33	pg/ul	21	15	v+ ***
Endosulfan sulfate	B	5639.7	5691.5	25.00	25.23	pg/ul	1	15	
Endrin ketone	B	5245.3	5482.7	25.00	26.13	pg/ul	5	15	
Average EPA 8081A	A	n=20					7	15	
Average EPA 8081A	B	n=20					6	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188869 PEST Water: EPA 8081A

Inst : GC23
 Calnum : 806350494001
 Units : pg

Name : GC23PEST244
 Date : 31-AUG-2006 21:13
 X Axis : R

Reviewer: CW

Level	File	Segnum	Sample ID	Analyzed	Std's
L1	243_020	806350494020	PEST_1	31-AUG-2006 21:13	S4176
L2	243_021	806350494021	PEST_2	31-AUG-2006 21:30	S3833
L3	243_022	806350494022	PEST_3	31-AUG-2006 21:47	S4177
L4	243_023	806350494023	PEST_4	31-AUG-2006 22:05	S4178
L5	243_024	806350494024	PEST_5	31-AUG-2006 22:22	S3834
L6	243_025	806350494025	PEST_6	31-AUG-2006 22:40	S4042
L7	243_026	806350494026	PEST_7	31-AUG-2006 22:57	S4043

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	%RSD	MWR ²	MxRSD	F1g
alpha-BHC	A	18626	16577	17135	17889	16664	15341	18598	AVRG		5.79E-5		17261	7	0.995	20		
gamma-BHC	A	18467	15074	15231	15766	14656	13364	17167	AVRG		6.38E-5		15675	11	0.995	20		
beta-BHC	A	7567.0	6207.0	6127.0	5962.4	5490.8	4541.0	7071.2	AVRG		1.63E-4		6138.0	16	0.995	20		
delta-BHC	A	19833	15899	16081	16129	14767	13415	17121	AVRG		6.18E-5		16178	12	0.995	20		
Heptachlor	A	16312	13899	13929	13990	12914	11599	16157	AVRG		7.08E-5		14114	12	0.995	20		
Aldrin	A	14846	12776	12940	13152	12189	11276	15557	AVRG		7.55E-5		13248	11	0.995	20		
Heptachlor epoxide	A	14105	11835	11688	11712	10775	9742.0	13861	AVRG		8.36E-5		11959	13	0.995	20		
gamma-Chlordane	A	14602	11501	11500	11546	10632	9603.9	14023	AVRG		8.39E-5		11915	15	0.995	20		
alpha-Chlordane	A	12514	10324	10563	10830	9774.9	8896.1	13424	AVRG		9.17E-5		10904	14	0.995	20		
4,4'-DDE	A	13540	10737	10916	11981	11195	10407	10015	AVRG		8.88E-5		11256	11	0.995	20		
Endosulfan I	A	12942	10507	10316	10231	9582.6	8604.0	13090	AVRG		9.30E-5		10753	16	0.995	20		
Dieldrin	A	13064	10996	11363	12494	11735	10871	10172	AVRG		8.67E-5		11528	9	0.995	20		
Endrin	A	10938	9235.8	9357.3	10113	9429.5	8680.4	9474.7	AVRG		1.04E-4		9604.1	8	0.995	20		
4,4'-DDD	A	10243	8301.5	8322.9	9135.4	8510.8	8036.7	9187.8	AVRG		1.13E-4		8819.8	9	0.995	20		
Endosulfan II	A	10472	8750.4	8770.5	9711.9	9028.5	8522.4	9669.4	AVRG		1.08E-4		9275.0	8	0.995	20		
4,4'-DDT	A	9287.8	7914.9	7923.6	8923.6	8307.6	7881.2	8791.8	AVRG		1.19E-4		8432.9	7	0.995	20		
Methoxychlor	A	4413.1	3805.8	4018.4	4862.4	4391.6	3182.2		AVRG		2.43E-4		4112.3	14	0.995	20		
Endosulfan sulfate	A	10062	7955.8	7726.5	7879.8	7263.6	6613.8	8478.4	AVRG		1.25E-4		7997.2	14	0.995	20		
Endrin ketone	A	11093	8870.9	8670.5	9719.7	8809.0	8055.0	8646.2	AVRG		1.10E-4		9123.5	11	0.995	20		
TCMX	A	11538	10355	10792	11498	10645	9609.1	10765	AVRG		9.31E-5		10743	6	0.995	20		
Decachlorobiphenyl	A	7190.5	5995.2	5512.3	5788.8	5115.0	4288.6	6221.7	AVRG		1.75E-4		5730.3	16	0.995	20		
alpha-BHC	B	10185	10527	8682.9	9683.6	8372.8	7615.6	9420.2	AVRG		1.09E-4		9212.4	11	0.995	20		
gamma-BHC	B	8812.5	9246.4	7646.5	8477.6	7405.6	6604.5	8217.3	AVRG		1.24E-4		8058.6	11	0.995	20		
beta-BHC	B	3960.5	4088.6	3260.5	3498.3	3029.0	2561.8	2895.7	AVRG		3.01E-4		3337.8	17	0.995	20		
delta-BHC	B	9993.5	9957.2	7838.9	8735.0	7574.6	6568.2	8317.5	AVRG		1.19E-4		8426.4	15	0.995	20		
Heptachlor	B	8425.5	8907.8	7075.6	7871.0	6811.1	5889.2	7391.4	AVRG		1.34E-4		7481.7	14	0.995	20		

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ² %RSD	Mmr ²	MxrSD	Flg
Aldrin	B	8144.0	8508.8	6940.3	7484.7	6596.9	5756.1	7116.6	AVRG		1.38E-4		7221.1	13	0.995	20	
Heptachlor epoxide	B	7174.5	7576.4	6210.0	6692.2	5959.2	5053.1	6170.4	AVRG		1.56E-4		6405.1	13	0.995	20	
gamma-Chlordane	B	7110.0	7729.8	6144.6	6617.9	5935.0	5008.3	6304.7	AVRG		1.56E-4		6407.2	14	0.995	20	
alpha-Chlordane	B	6624.0	7124.6	5821.6	6235.4	5633.8	4742.8	5966.2	AVRG		1.66E-4		6021.2	13	0.995	20	
4,4'-DDE	B	6477.0	6977.0	5635.3	6261.1	5762.6	4980.6	6393.6	AVRG		1.65E-4		6069.6	11	0.995	20	
Endosulfan I	B	6386.0	6865.2	5521.4	5889.7	5332.0	4413.6	5434.8	AVRG		1.76E-4		5691.8	14	0.995	20	
Dieldrin	B	6768.5	7177.8	5856.8	6462.1	5988.3	5176.5	6483.2	AVRG		1.59E-4		6273.3	10	0.995	20	
Endrin	B	5627.3	6229.7	4908.7	5402.3	5015.2	4120.4	5346.4	AVRG		1.91E-4		5235.7	13	0.995	20	
4,4'-DDD	B	5123.5	5644.1	4457.0	4876.6	4532.8	3697.2	5090.7	AVRG		2.09E-4		4774.6	13	0.995	20	
Endosulfan II	B	4876.3	5379.6	4469.3	4847.4	4563.2	3766.6	5027.9	AVRG		2.13E-4		4704.3	11	0.995	20	
4,4'-DDT	B	4735.3	5583.2	4370.6	4821.1	4572.6	3661.7	5133.8	AVRG		2.13E-4		4696.9	13	0.995	20	
Methoxychlor	B	2067.0	2494.7	1922.8	2240.6	2204.3	1690.7	1737.1	AVRG		4.88E-4		2051.0	14	0.995	20	
Endosulfan sulfate	B	4666.0	5141.6	3935.1	4231.0	3927.5	3096.5	4187.5	AVRG		2.40E-4		4169.3	15	0.995	20	
Endrin ketone	B	4684.8	5528.1	4103.4	4460.7	4263.6	3174.8	4502.4	AVRG		2.28E-4		4388.2	16	0.995	20	
TCMX	B	6481.5	6705.0	5557.8	6233.9	5421.3	4867.0	5930.4	AVRG		1.70E-4		5885.3	11	0.995	20	
Decachlorobiphenyl	B	3032.8	3889.3	2876.1	2984.3	2901.6	2051.8	2766.6	AVRG		3.41E-4		2928.9	18	0.995	20	
Average EPA 8081A	A												(n=22)	12		20	
Average EPA 8081A	B												(n=22)	14		20	

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188869 PEST Water
EPA 8081A

Inst : GC23
Calnum : 806350494001

Name : GC23PEST244
Cal Date: 31-AUG-2006

ICV 806350494029 (243_029 31-AUG-2006) stds: S3877

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	17261	18533	25.00	26.84	pg	7	15	
gamma-BHC	A	15675	16330	25.00	26.05	pg	4	15	
beta-BHC	A	6138.0	5930.2	25.00	24.15	pg	-3	15	
delta-BHC	A	16178	17241	25.00	26.64	pg	7	15	
Heptachlor	A	14114	14627	25.00	25.91	pg	4	15	
Aldrin	A	13248	13307	25.00	25.11	pg	0	15	
Heptachlor epoxide	A	11959	11585	25.00	24.22	pg	-3	15	
gamma-Chlordane	A	11915	11139	25.00	23.37	pg	-7	15	
alpha-Chlordane	A	10904	10372	25.00	23.78	pg	-5	15	
4,4'-DDE	A	11256	10763	25.00	23.90	pg	-4	15	
Endosulfan I	A	10753	10299	25.00	23.94	pg	-4	15	
Dieldrin	A	11528	10949	25.00	23.74	pg	-5	15	
Endrin	A	9604.1	9287.6	25.00	24.18	pg	-3	15	
4,4'-DDD	A	8819.8	8050.4	25.00	22.82	pg	-9	15	
Endosulfan II	A	9275.0	8626.2	25.00	23.25	pg	-7	15	
4,4'-DDT	A	8432.9	7893.8	25.00	23.40	pg	-6	15	
Methoxychlor	A	4112.3	3891.6	25.00	23.66	pg	-5	15	
Endosulfan sulfate	A	7997.2	7383.7	25.00	23.08	pg	-8	15	
Endrin ketone	A	9123.5	8674.0	25.00	23.77	pg	-5	15	
alpha-BHC	B	9212.4	10239	25.00	27.78	pg	11	15	
gamma-BHC	B	8058.6	8991.9	25.00	27.90	pg	12	15	
beta-BHC	B	3327.8	3628.2	25.00	27.26	pg	9	15	
delta-BHC	B	8426.4	9569.6	25.00	28.39	pg	14	15	
Heptachlor	B	7481.7	8545.2	25.00	28.55	pg	14	15	
Aldrin	B	7221.1	7867.2	25.00	27.24	pg	9	15	
Heptachlor epoxide	B	6405.1	6995.2	25.00	27.30	pg	9	15	
gamma-Chlordane	B	6407.2	6863.6	25.00	26.78	pg	7	15	
alpha-Chlordane	B	6021.2	6522.6	25.00	27.08	pg	8	15	
4,4'-DDE	B	6069.6	6661.2	25.00	27.44	pg	10	15	
Endosulfan I	B	5691.8	6316.3	25.00	27.74	pg	11	15	
Dieldrin	B	6273.3	6775.9	25.00	27.00	pg	8	15	
Endrin	B	5235.7	5912.6	25.00	28.23	pg	13	15	
4,4'-DDD	B	4774.6	5251.1	25.00	27.50	pg	10	15	
Endosulfan II	B	4704.3	4937.2	25.00	26.24	pg	5	15	
4,4'-DDT	B	4696.9	5271.8	25.00	28.06	pg	12	15	
Methoxychlor	B	2051.0	2442.9	25.00	29.78	pg	19	15	v+ ***
Endosulfan sulfate	B	4169.3	4656.9	25.00	27.92	pg	12	15	
Endrin ketone	B	4388.2	5179.2	25.00	29.51	pg	18	15	v+ ***
Average EPA 8081A	A	n=20					5	15	
Average EPA 8081A	B	n=20					11	15	

+ = high bias v = ICV

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188869 PEST Water
EPA 8081A

Inst : GC16 Run Name: PEM IDF : 1.0
Seqnum : 236343620002 File : 238_002 Time : 26-AUG-2006 15:18

Standards: S3952

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	491758	8	15	
4,4'-DDE	A	4579			
4,4'-DDD	A	37718			
Endrin	A	312816	8	15	
Endrin aldehyde	A	9902			
Endrin ketone	A	16616			
4,4'-DDT	B	239010	12	15	
4,4'-DDE	B	3677			
4,4'-DDD	B	29508			
Endrin	B	239451	10	15	
Endrin aldehyde	B	10398			
Endrin ketone	B	15757			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188869 PEST Water
EPA 8081A

Inst : GC16 Run Name: PEM IDF : 1.0
Seqnum : 236343620017 File : 238_017 Time : 26-AUG-2006 20:04

Standards: S3952

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	456957	10	15	
4,4'-DDE	A	4264			
4,4'-DDD	A	44364			
Endrin	A	306593	7	15	
Endrin aldehyde	A	6559			
Endrin ketone	A	18165			
4,4'-DDT	B	286652	14	15	
4,4'-DDE	B	3640			
4,4'-DDD	B	43456			
Endrin	B	278177	10	15	
Endrin aldehyde	B	10396			
Endrin ketone	B	19664			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188869 PEST Water
EPA 8081A

Inst : GC16 Run Name: PEM IDF : 1.0
Seqnum : 236348019015 File : 241_015 Time : 29-AUG-2006 22:16

Standards: S4175

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	347584	15	15	
4,4'-DDE	A	2695			
4,4'-DDD	A	58441			
Endrin	A	288631	5	15	
Endrin aldehyde	A	4106			
Endrin ketone	A	11122			
4,4'-DDT	B	212720	24	15	
4,4'-DDE	B	3956			
4,4'-DDD	B	61933			
Endrin	B	254047	8	15	
Endrin aldehyde	B	7836			
Endrin ketone	B	14093			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188869 PEST Water
EPA 8081A

Inst : GC16 Run Name: PEM IDF : 1.0
Seqnum : 236348019030 File : 241_030 Time : 30-AUG-2006 02:39

Standards: S4175

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	319634	15	15	
4,4'-DDE	A	2492			
4,4'-DDD	A	55721			
Endrin	A	261021	6	15	
Endrin aldehyde	A	6058			
Endrin ketone	A	9278			
4,4'-DDT	B	208106	23	15	
4,4'-DDE	B	3525			
4,4'-DDD	B	57782			
Endrin	B	241064	7	15	
Endrin aldehyde	B	6976			
Endrin ketone	B	11373			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188869 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
 Segnum : 806351984002 File : 244_002 Time : 01-SEP-2006 10:42

Standards: S4175

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	989707	1	15	
4,4'-DDE	A	3073			
4,4'-DDD	A	8546			
Endrin	A	485753	3	15	
Endrin aldehyde	A	4639			
Endrin ketone	A	9136			
4,4'-DDT	B	400460	3	15	
4,4'-DDE	B	2097			
4,4'-DDD	B	8922			
Endrin	B	211781	5	15	
Endrin aldehyde	B	6826			
Endrin ketone	B	5109			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 188869 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 806351984015 File : 244_015 Time : 01-SEP-2006 20:37

Standards: S4175

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	944244	4	15	
4,4'-DDE	A	3797			
4,4'-DDD	A	36998			
Endrin	A	503428	3	15	
Endrin aldehyde	A	2730			
Endrin ketone	A	11893			
4,4'-DDT	B	426121	4	15	
4,4'-DDE	B	2050			
4,4'-DDD	B	14840			
Endrin	B	244408	3	15	
Endrin aldehyde	B	1923			
Endrin ketone	B	6577			

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188869 PEST Water
EPA 8081A

Inst : GC16	Run Name: PEST_3	IDF : 1.0
Seqnum : 236343620004	File : 238_004	Time : 26-AUG-2006 16:02
Cal : 236341882001	Caldate : 25-AUG-2006	
Standards: S4177		

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	10008	9508.9	10.00	9.501	pg/ul	-5	15	
gamma-BHC	A	8907.5	8955.2	10.00	10.05	pg/ul	1	15	
beta-BHC	A	5858.8	6094.0	10.00	10.40	pg/ul	4	15	
delta-BHC	A	8183.1	7968.7	10.00	9.738	pg/ul	-3	15	
Heptachlor	A	9370.3	9891.5	10.00	10.56	pg/ul	6	15	
Aldrin	A	8516.3	8539.9	10.00	10.03	pg/ul	0	15	
Heptachlor epoxide	A	9114.8	9690.2	10.00	10.63	pg/ul	6	15	
gamma-Chlordane	A	8668.4	9395.8	10.00	10.84	pg/ul	8	15	
alpha-Chlordane	A	8289.6	8956.2	10.00	10.80	pg/ul	8	15	
4,4'-DDE	A	7962.2	8676.0	20.00	21.79	pg/ul	9	15	
Endosulfan I	A	8958.8	9574.8	10.00	10.69	pg/ul	7	15	
Dieldrin	A	7724.6	8265.6	20.00	21.40	pg/ul	7	15	
Endrin	A	6689.4	6614.2	20.00	19.78	pg/ul	-1	15	
4,4'-DDD	A	6030.6	5884.3	20.00	19.51	pg/ul	-2	15	
Endosulfan II	A	7364.1	8067.6	20.00	21.91	pg/ul	10	15	
4,4'-DDT	A	5013.8	5257.6	20.00	20.97	pg/ul	5	15	
Methoxychlor	A	2859.7	3085.0	100.0	107.9	pg/ul	8	15	
Endosulfan sulfate	A	7210.9	7938.7	20.00	22.02	pg/ul	10	15	
Endrin ketone	A	6330.0	7615.6	20.00	24.06	pg/ul	20	15	C+ ***
TCMX	A	10707	11025	20.00	20.60	pg/ul	3	15	
Decachlorobiphenyl	A	10657	11940	20.00	22.41	pg/ul	12	15	
alpha-BHC	B	8850.1	7290.6	10.00	8.238	pg/ul	-18	15	C- ***
gamma-BHC	B	7895.1	6837.6	10.00	8.661	pg/ul	-13	15	
beta-BHC	B	5354.6	4838.4	10.00	9.036	pg/ul	-10	15	
delta-BHC	B	6971.1	5854.2	10.00	8.398	pg/ul	-16	15	C- ***
Heptachlor	B	7051.4	6557.9	10.00	9.300	pg/ul	-7	15	
Aldrin	B	8751.6	8238.8	10.00	9.414	pg/ul	-6	15	
Heptachlor epoxide	B	8338.1	7947.8	10.00	9.532	pg/ul	-5	15	
gamma-Chlordane	B	8865.9	8523.0	10.00	9.613	pg/ul	-4	15	
alpha-Chlordane	B	8470.3	8393.2	10.00	9.909	pg/ul	-1	15	
4,4'-DDE	B	6924.4	6230.9	20.00	18.00	pg/ul	-10	15	
Endosulfan I	B	8062.0	7829.8	10.00	9.712	pg/ul	-3	15	
Dieldrin	B	7609.8	7024.9	20.00	18.46	pg/ul	-8	15	
Endrin	B	5718.8	5165.6	20.00	18.07	pg/ul	-10	15	
4,4'-DDD	B	4405.6	3864.7	20.00	17.54	pg/ul	-12	15	
Endosulfan II	B	6862.6	6661.8	20.00	19.41	pg/ul	-3	15	
4,4'-DDT	B	3163.8	2970.0	20.00	18.77	pg/ul	-6	15	
Methoxychlor	B	1645.9	1429.2	100.0	86.83	pg/ul	-13	15	
Endosulfan sulfate	B	6291.1	6222.4	20.00	19.78	pg/ul	-1	15	
Endrin ketone	B	6247.2	6136.2	20.00	19.64	pg/ul	-2	15	
TCMX	B	10109	10471	20.00	20.71	pg/ul	4	15	
Decachlorobiphenyl	B	9518.6	10420	20.00	21.89	pg/ul	9	15	
Average EPA 8081A	A	(n=22)					7	15	
Average EPA 8081A	B	(n=22)					7	15	

+=high bias -=low bias C=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188869 PEST Water
EPA 8081A

Inst : GC16 Run Name: PEST 4 IDF : 1.0
 Seqnum : 236343620018 File : 238_018 Time : 26-AUG-2006 20:21
 Cal : 236341882001 Caldate : 25-AUG-2006
 Standards: S3699

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	10008	10888	20.00	21.76	pg/ul	9	15	
gamma-BHC	A	8907.5	10081	20.00	22.64	pg/ul	13	15	
beta-BHC	A	5858.8	6183.5	20.00	21.11	pg/ul	6	15	
delta-BHC	A	8183.1	9263.2	20.00	22.64	pg/ul	13	15	
Heptachlor	A	9370.3	10340	20.00	22.07	pg/ul	10	15	
Aldrin	A	8516.3	9027.1	20.00	21.20	pg/ul	6	15	
Heptachlor epoxide	A	9114.8	9764.0	20.00	21.42	pg/ul	7	15	
gamma-Chlordane	A	8668.4	9573.2	20.00	22.09	pg/ul	10	15	
alpha-Chlordane	A	8289.6	9222.0	20.00	22.25	pg/ul	11	15	
4,4'-DDE	A	7962.2	8758.5	40.00	44.00	pg/ul	10	15	
Endosulfan I	A	8958.8	9880.8	20.00	22.06	pg/ul	10	15	
Dieldrin	A	7724.6	8834.3	40.00	45.75	pg/ul	14	15	
Endrin	A	6689.4	7384.4	40.00	44.16	pg/ul	10	15	
4,4'-DDD	A	6030.6	6568.4	40.00	43.57	pg/ul	9	15	
Endosulfan II	A	7364.1	8597.7	40.00	46.70	pg/ul	17	15	c+ ***
4,4'-DDT	A	5013.8	6380.5	40.00	50.90	pg/ul	27	15	c+ ***
Methoxychlor	A	2859.7	3354.0	200.0	234.6	pg/ul	17	15	c+ ***
Endosulfan sulfate	A	7210.9	8106.7	40.00	44.97	pg/ul	12	15	
Endrin ketone	A	6330.0	8106.9	40.00	51.23	pg/ul	28	15	c+ ***
TCMX	A	10707	10827	40.00	40.45	pg/ul	1	15	
Decachlorobiphenyl	A	10657	11379	40.00	42.71	pg/ul	7	15	
alpha-BHC	B	8850.1	9515.8	20.00	21.50	pg/ul	8	15	
gamma-BHC	B	7895.1	8625.2	20.00	21.85	pg/ul	9	15	
beta-BHC	B	5354.6	5652.7	20.00	21.11	pg/ul	6	15	
delta-BHC	B	6971.1	7862.7	20.00	22.56	pg/ul	13	15	
Heptachlor	B	7051.4	7472.6	20.00	21.19	pg/ul	6	15	
Aldrin	B	8751.6	9098.4	20.00	20.79	pg/ul	4	15	
Heptachlor epoxide	B	8338.1	8887.2	20.00	21.32	pg/ul	7	15	
gamma-Chlordane	B	8865.9	9234.9	20.00	20.83	pg/ul	4	15	
alpha-Chlordane	B	8470.3	9012.3	20.00	21.28	pg/ul	6	15	
4,4'-DDE	B	6924.4	7965.8	40.00	46.02	pg/ul	15	15	
Endosulfan I	B	8062.0	8695.9	20.00	21.57	pg/ul	8	15	
Dieldrin	B	7609.8	8232.5	40.00	43.27	pg/ul	8	15	
Endrin	B	5718.8	6553.8	40.00	45.84	pg/ul	15	15	
4,4'-DDD	B	4405.6	5048.6	40.00	45.84	pg/ul	15	15	
Endosulfan II	B	6862.6	7689.6	40.00	44.82	pg/ul	12	15	
4,4'-DDT	B	3163.8	3920.2	40.00	49.56	pg/ul	24	15	c+ ***
Methoxychlor	B	1645.9	1888.2	200.0	229.4	pg/ul	15	15	
Endosulfan sulfate	B	6291.1	6992.6	40.00	44.46	pg/ul	11	15	
Endrin ketone	B	6247.2	7192.6	40.00	46.05	pg/ul	15	15	
TCMX	B	10109	10380	40.00	41.07	pg/ul	3	15	
Decachlorobiphenyl	B	9518.6	10155	40.00	42.67	pg/ul	7	15	
Average EPA 8081A	A	(n=22)					12	15	
Average EPA 8081A	B	(n=22)					10	15	

+=high bias c=CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188869 PEST Water
EPA 8081A

Inst : GC16 Run Name: PEST_4 IDF : 1.0
Seqnum : 236348019016 File : 241_016 Time : 29-AUG-2006 22:33
Cal : 236346178001 Caldate : 28-AUG-2006
Standards: S4178

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	9831.3	9929.5	20.00	20.20	pg/ul	1	15	
gamma-BHC	A	9066.4	8971.2	20.00	19.79	pg/ul	-1	15	
beta-BHC	A	5827.4	5626.8	20.00	19.31	pg/ul	-3	15	
delta-BHC	A	8258.9	7752.8	20.00	18.77	pg/ul	-6	15	
Heptachlor	A	9877.3	9047.8	20.00	18.32	pg/ul	-8	15	
Aldrin	A	8328.3	7899.0	20.00	18.97	pg/ul	-5	15	
Heptachlor epoxide	A	8799.5	8494.6	20.00	19.31	pg/ul	-3	15	
gamma-Chlordane	A	8350.7	8204.6	20.00	19.65	pg/ul	-2	15	
alpha-Chlordane	A	8027.0	7875.5	20.00	19.62	pg/ul	-2	15	
4,4'-DDE	A	7406.2	7413.0	40.00	40.04	pg/ul	0	15	
Endosulfan I	A	8559.3	8328.4	20.00	19.46	pg/ul	-3	15	
Dieldrin	A	7432.6	7466.4	40.00	40.18	pg/ul	0	15	
Endrin	A	6166.6	6134.9	40.00	39.79	pg/ul	-1	15	
4,4'-DDD	A	5109.7	5569.8	40.00	43.60	pg/ul	9	15	
Endosulfan II	A	6915.3	7012.9	40.00	40.56	pg/ul	1	15	
4,4'-DDT	A	5133.4	4202.2	40.00	32.74	pg/ul	-18	15	c- ***
Methoxychlor	A	2816.4	2284.1	200.0	162.2	pg/ul	-19	15	c- ***
Endosulfan sulfate	A	6907.2	6738.6	40.00	39.02	pg/ul	-2	15	
Endrin ketone	A	5891.8	6065.6	40.00	41.18	pg/ul	3	15	
TCMX	A	10606	10120	40.00	38.17	pg/ul	-5	15	
Decachlorobiphenyl	A	9523.8	9543.8	40.00	40.08	pg/ul	0	15	
alpha-BHC	B	8670.2	8503.8	20.00	19.62	pg/ul	-2	15	
gamma-BHC	B	7787.6	7570.4	20.00	19.44	pg/ul	-3	15	
beta-BHC	B	5180.4	5195.0	20.00	20.06	pg/ul	0	15	
delta-BHC	B	6900.3	6690.1	20.00	19.39	pg/ul	-3	15	
Heptachlor	B	7025.5	6389.3	20.00	18.19	pg/ul	-9	15	
Aldrin	B	8275.1	7713.9	20.00	18.64	pg/ul	-7	15	
Heptachlor epoxide	B	7830.3	7674.2	20.00	19.60	pg/ul	-2	15	
gamma-Chlordane	B	8176.9	7823.2	20.00	19.13	pg/ul	-4	15	
alpha-Chlordane	B	7835.5	7500.3	20.00	19.14	pg/ul	-4	15	
4,4'-DDE	B	6434.1	6725.8	40.00	41.81	pg/ul	5	15	
Endosulfan I	B	7528.3	7322.7	20.00	19.45	pg/ul	-3	15	
Dieldrin	B	6937.2	6829.3	40.00	39.38	pg/ul	-2	15	
Endrin	B	5397.3	5135.5	40.00	38.06	pg/ul	-5	15	
4,4'-DDD	B	3873.3	4324.0	40.00	44.65	pg/ul	12	15	
Endosulfan II	B	6212.8	6342.3	40.00	40.83	pg/ul	2	15	
4,4'-DDT	B	3069.2	2649.1	40.00	34.53	pg/ul	-14	15	
Methoxychlor	B	1491.9	1289.5	200.0	172.9	pg/ul	-14	15	
Endosulfan sulfate	B	5639.7	5574.6	40.00	39.54	pg/ul	-1	15	
Endrin ketone	B	5245.3	5184.7	40.00	39.54	pg/ul	-1	15	
TCMX	B	9954.2	9564.9	40.00	38.44	pg/ul	-4	15	
Decachlorobiphenyl	B	8472.1	8477.1	40.00	40.02	pg/ul	0	15	
Average EPA 8081A	A	(n=22)					4	15	
Average EPA 8081A	B	(n=22)					5	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188869 PEST Water
EPA 8081A

Inst : GC16
Seqnum : 236348019028
Cal : 236346178001
Standards: S3834

Run Name: PEST_5
File : 241_028
Caldate : 28-AUG-2006

IDF : 1.0
Time : 30-AUG-2006 02:05

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	9831.3	9208.2	25.00	23.42	pg/ul	-6	15	
gamma-BHC	A	9066.4	8098.1	25.00	22.33	pg/ul	-11	15	
beta-BHC	A	5827.4	4966.0	25.00	21.30	pg/ul	-15	15	
delta-BHC	A	8258.9	6741.8	25.00	20.41	pg/ul	-18	15	c- ***
Heptachlor	A	9877.3	8023.0	25.00	20.31	pg/ul	-19	15	c- ***
Aldrin	A	8328.3	7026.8	25.00	21.09	pg/ul	-16	15	c- ***
Heptachlor epoxide	A	8799.5	7365.6	25.00	20.93	pg/ul	-16	15	c- ***
gamma-Chlordane	A	8350.7	7087.9	25.00	21.22	pg/ul	-15	15	
alpha-Chlordane	A	8027.0	6617.2	25.00	20.61	pg/ul	-18	15	c- ***
4,4'-DDE	A	7406.2	6341.3	50.00	42.81	pg/ul	-14	15	
Endosulfan I	A	8559.3	7368.6	25.00	21.52	pg/ul	-14	15	
Dieldrin	A	7432.6	6420.7	50.00	43.19	pg/ul	-14	15	
Endrin	A	6166.6	5443.3	50.00	44.14	pg/ul	-12	15	
4,4'-DDD	A	5109.7	4825.3	50.00	47.22	pg/ul	-6	15	
Endosulfan II	A	6915.3	6009.0	50.00	43.45	pg/ul	-13	15	
4,4'-DDT	A	5133.4	3533.8	50.00	34.42	pg/ul	-31	15	c- ***
Methoxychlor	A	2816.4	1978.4	250.0	175.6	pg/ul	-30	15	c- ***
Endosulfan sulfate	A	6907.2	5647.7	50.00	40.88	pg/ul	-18	15	c- ***
Endrin ketone	A	5891.8	5208.4	50.00	44.20	pg/ul	-12	15	
TCMX	A	10606	9557.4	50.00	45.06	pg/ul	-10	15	
Decachlorobiphenyl	A	9523.8	8093.8	50.00	42.49	pg/ul	-15	15	
alpha-BHC	B	8670.2	8230.1	25.00	23.73	pg/ul	-5	15	
gamma-BHC	B	7787.6	7237.5	25.00	23.23	pg/ul	-7	15	
beta-BHC	B	5180.4	4716.3	25.00	22.76	pg/ul	-9	15	
delta-BHC	B	6900.3	6087.4	25.00	22.05	pg/ul	-12	15	
Heptachlor	B	7025.5	5939.0	25.00	21.13	pg/ul	-15	15	
Aldrin	B	8275.1	7029.6	25.00	21.24	pg/ul	-15	15	
Heptachlor epoxide	B	7830.3	6884.2	25.00	21.98	pg/ul	-12	15	
gamma-Chlordane	B	8176.9	6977.2	25.00	21.33	pg/ul	-15	15	
alpha-Chlordane	B	7835.5	6695.8	25.00	21.36	pg/ul	-15	15	
4,4'-DDE	B	6434.1	5930.4	50.00	46.09	pg/ul	-8	15	
Endosulfan I	B	7528.3	6513.3	25.00	21.63	pg/ul	-13	15	
Dieldrin	B	6937.2	6111.1	50.00	44.05	pg/ul	-12	15	
Endrin	B	5397.3	4591.9	50.00	42.54	pg/ul	-15	15	
4,4'-DDD	B	3873.3	4116.3	50.00	53.14	pg/ul	6	15	
Endosulfan II	B	6212.8	5722.4	50.00	46.05	pg/ul	-8	15	
4,4'-DDT	B	3069.2	2383.5	50.00	38.83	pg/ul	-22	15	c- ***
Methoxychlor	B	1491.9	1186.6	250.0	198.8	pg/ul	-20	15	c- ***
Endosulfan sulfate	B	5639.7	4923.6	50.00	43.65	pg/ul	-13	15	
Endrin ketone	B	5245.3	4692.1	50.00	44.73	pg/ul	-11	15	
TCMX	B	9954.2	9122.5	50.00	45.82	pg/ul	-8	15	
Decachlorobiphenyl	B	8472.1	7224.0	50.00	42.63	pg/ul	-15	15	
Average EPA 8081A	A	(n=22)					15	15	
Average EPA 8081A	B	(n=22)					12	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188869 PEST Water
EPA 8081A

Inst — : GC23
Seqnum : 806351984003
Cal : 806350494001
Standards: S4177

Run Name: PEST-3
File : 244_003
Caldate : 31-AUG-2006

IDF : 1.0
Time : 01-SEP-2006 10:59

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	17261	16988	10.00	9.841	pg	-2	15	
gamma-BHC	A	15675	15116	10.00	9.644	pg	-4	15	
beta-BHC	A	6138.0	6187.2	10.00	10.08	pg	1	15	
delta-BHC	A	16178	15465	10.00	9.559	pg	-4	15	
Heptachlor	A	14114	13355	10.00	9.462	pg	-5	15	
Aldrin	A	13248	12651	10.00	9.549	pg	-5	15	
Heptachlor epoxide	A	11959	11555	10.00	9.662	pg	-3	15	
gamma-Chlordane	A	11915	11661	10.00	9.787	pg	-2	15	
alpha-Chlordane	A	10904	10886	10.00	9.984	pg	0	15	
4,4'-DDE	A	11256	10732	20.00	19.07	pg	-5	15	
Endosulfan I	A	10753	10025	10.00	9.323	pg	-7	15	
Dieldrin	A	11528	11017	20.00	19.11	pg	-4	15	
Endrin	A	9604.1	9313.9	20.00	19.40	pg	-3	15	
4,4'-DDD	A	8819.8	8490.1	20.00	19.25	pg	-4	15	
Endosulfan II	A	9275.0	9122.6	20.00	19.67	pg	-2	15	
4,4'-DDT	A	8432.9	8285.5	20.00	19.65	pg	-2	15	
Methoxychlor	A	4112.3	4166.8	100.0	101.3	pg	1	15	
Endosulfan sulfate	A	7997.2	7758.2	20.00	19.40	pg	-3	15	
Endrin ketone	A	9123.5	8722.0	20.00	19.12	pg	-4	15	
TCMX	A	10743	10663	20.00	19.85	pg	-1	15	
Decachlorobiphenyl	A	5730.3	5875.7	20.00	20.51	pg	3	15	
alpha-BHC	B	9212.4	9790.1	10.00	10.63	pg	6	15	
gamma-BHC	B	8058.6	8668.2	10.00	10.76	pg	8	15	
beta-BHC	B	3327.8	3712.1	10.00	11.15	pg	12	15	
delta-BHC	B	8426.4	9010.9	10.00	10.69	pg	7	15	
Heptachlor	B	7481.7	8024.1	10.00	10.73	pg	7	15	
Aldrin	B	7221.1	7700.9	10.00	10.66	pg	7	15	
Heptachlor epoxide	B	6405.1	6899.5	10.00	10.77	pg	8	15	
gamma-Chlordane	B	6407.2	6847.8	10.00	10.69	pg	7	15	
alpha-Chlordane	B	6021.2	6514.0	10.00	10.82	pg	8	15	
4,4'-DDE	B	6069.6	6287.4	20.00	20.72	pg	4	15	
Endosulfan I	B	5691.8	6151.2	10.00	10.81	pg	8	15	
Dieldrin	B	6273.3	6475.8	20.00	20.65	pg	3	15	
Endrin	B	5235.7	5287.2	20.00	20.20	pg	1	15	
4,4'-DDD	B	4774.6	5022.7	20.00	21.04	pg	5	15	
Endosulfan II	B	4704.3	5347.1	20.00	22.73	pg	14	15	
4,4'-DDT	B	4696.9	4776.5	20.00	20.34	pg	2	15	
Methoxychlor	B	2051.0	2032.8	100.0	99.11	pg	-1	15	
Endosulfan sulfate	B	4169.3	4401.9	20.00	21.12	pg	6	15	
Endrin ketone	B	4388.2	4758.6	20.00	21.69	pg	8	15	
TCMX	B	5885.3	6341.3	20.00	21.55	pg	8	15	
Decachlorobiphenyl	B	2928.9	3279.6	20.00	22.39	pg	12	15	
Average EPA 8081A	A	(n=22)					3	15	
Average EPA 8081A	B	(n=22)					7	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188869 PEST Water
EPA 8081A

Inst : GC23
Seqnum : 806351984016
Cal : 806350494001
Standards: S4178

Run Name: PEST_4
File : 244_016
Caldate : 31-AUG-2006

IDF : 1.0
Time : 01-SEP-2006 20:54

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	17261	19308	20.00	22.37	pg	12	15	
gamma-BHC	A	15675	17248	20.00	22.01	pg	10	15	
beta-BHC	A	6138.0	6454.7	20.00	21.03	pg	5	15	
delta-BHC	A	16178	17427	20.00	21.54	pg	8	15	
Heptachlor	A	14114	14860	20.00	21.06	pg	5	15	
Aldrin	A	13248	14330	20.00	21.63	pg	8	15	
Heptachlor epoxide	A	11959	12727	20.00	21.28	pg	6	15	
gamma-Chlordane	A	11915	12683	20.00	21.29	pg	6	15	
alpha-Chlordane	A	10904	11870	20.00	21.77	pg	9	15	
4,4'-DDE	A	11256	13346	40.00	47.43	pg	19	15	c+ ***
Endosulfan I	A	10753	11451	20.00	21.30	pg	6	15	
Dieldrin	A	11528	13912	40.00	48.27	pg	21	15	c+ ***
Endrin	A	9604.1	11322	40.00	47.16	pg	18	15	c+ ***
4,4'-DDD	A	8819.8	10544	40.00	47.82	pg	20	15	c+ ***
Endosulfan II	A	9275.0	10970	40.00	47.31	pg	18	15	c+ ***
4,4'-DDT	A	8432.9	9288.0	40.00	44.06	pg	10	15	
Methoxychlor	A	4112.3	5000.0	200.0	243.2	pg	22	15	c+ ***
Endosulfan sulfate	A	7997.2	8510.2	40.00	42.57	pg	6	15	
Endrin ketone	A	9123.5	10566	40.00	46.32	pg	16	15	c+ ***
TCMX	A	10743	12320	40.00	45.87	pg	15	15	
Decachlorobiphenyl	A	5730.3	6055.6	40.00	42.27	pg	6	15	
alpha-BHC	B	9212.4	8056.4	20.00	17.49	pg	-13	15	
gamma-BHC	B	8058.6	7042.6	20.00	17.48	pg	-13	15	
beta-BHC	B	3327.8	2915.8	20.00	17.52	pg	-12	15	
delta-BHC	B	8426.4	7040.1	20.00	16.71	pg	-16	15	c- ***
Heptachlor	B	7481.7	6382.2	20.00	17.06	pg	-15	15	
Aldrin	B	7221.1	6176.3	20.00	17.11	pg	-14	15	
Heptachlor epoxide	B	6405.1	5461.0	20.00	17.05	pg	-15	15	
gamma-Chlordane	B	6407.2	5399.7	20.00	16.86	pg	-16	15	c- ***
alpha-Chlordane	B	6021.2	5139.6	20.00	17.07	pg	-15	15	
4,4'-DDE	B	6069.6	5106.4	40.00	33.65	pg	-16	15	c- ***
Endosulfan I	B	5691.8	4861.0	20.00	17.08	pg	-15	15	
Dieldrin	B	6273.3	5264.6	40.00	33.57	pg	-16	15	c- ***
Endrin	B	5235.7	4364.7	40.00	33.35	pg	-17	15	c- ***
4,4'-DDD	B	4774.6	4068.8	40.00	34.09	pg	-15	15	
Endosulfan II	B	4704.3	4249.0	40.00	36.13	pg	-10	15	
4,4'-DDT	B	4696.9	3663.3	40.00	31.20	pg	-22	15	c- ***
Methoxychlor	B	2051.0	1730.4	200.0	168.7	pg	-16	15	c- ***
Endosulfan sulfate	B	4169.3	3397.5	40.00	32.59	pg	-19	15	c- ***
Endrin ketone	B	4388.2	3712.5	40.00	33.84	pg	-15	15	
TCMX	B	5885.3	5194.5	40.00	35.31	pg	-12	15	
Decachlorobiphenyl	B	2928.9	2611.4	40.00	35.66	pg	-11	15	
Average EPA 8081A	A	(n=22)					12	15	
Average EPA 8081A	B	(n=22)					15	15	

+=high bias -=low bias c=CCV

Curtis & Tompkins Laboratories

Gas Chromatograph #16 ECD
SOP Version: 8081_rv7

Begun: 25-AUG-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stdts	Used	>LR
001	237_001	X	PRIMER			25-AUG-2006 10:02	1.0								
002	237_002	X	PRIMER			25-AUG-2006 10:19	1.0								
003	237_003	X	PRIMER			25-AUG-2006 10:37	1.0								
004	237_004	X	HEX			25-AUG-2006 10:54	1.0								
005	237_005	PEM	PEM			25-AUG-2006 11:12	1.0			1					
006	237_006	X	PEST_4			25-AUG-2006 11:30	1.0			17					
007	237_007	CCV	PEST_4			25-AUG-2006 12:13	1.0			21					
008	237_008	X	HEX			25-AUG-2006 16:05	1.0			1			2	ac	
009	237_009	X	PRIMER			25-AUG-2006 16:23	1.0								
010	237_010	X	PRIMER			25-AUG-2006 16:41	1.0								
011	237_011	X	PRIMER			25-AUG-2006 16:59	1.0								
012	237_012	X	PRIMER			25-AUG-2006 17:16	1.0								
013	237_013	X	PRIMER			25-AUG-2006 17:34	1.0								
014	237_014	X	PRIMER			25-AUG-2006 17:52	1.0								
015	237_015	X	PRIMER			25-AUG-2006 18:10	1.0								
016	237_016	X	PRIMER			25-AUG-2006 18:28	1.0								
017	237_017	X	PRIMER			25-AUG-2006 18:46	1.0								
018	237_018	X	PRIMER			25-AUG-2006 19:04	1.0								
019	237_019	X	HEX			25-AUG-2006 19:22	1.0								
020	237_020	PEM	PEM			25-AUG-2006 19:40	1.0			1					
021	237_021	X	HEX			25-AUG-2006 19:58	1.0						1		
022	237_022	ICAL	PEST_1			25-AUG-2006 20:16	1.0						3		
023	237_023	ICAL	PEST_2			25-AUG-2006 20:33	1.0						4		
024	237_024	ICAL	PEST_3			25-AUG-2006 20:51	1.0						5		
025	237_025	ICAL	PEST_4			25-AUG-2006 21:09	1.0						2		
026	237_026	ICAL	PEST_5			25-AUG-2006 21:27	1.0						6		
027	237_027	ICAL	PEST_6			25-AUG-2006 21:44	1.0						7		
028	237_028	ICAL	PEST_7			25-AUG-2006 22:02	1.0						8		
029	237_029	X	HEX			25-AUG-2006 22:19	1.0								
030	237_030	ICV	ICV			25-AUG-2006 22:36	1.0			2			9		

StdS used: 1=S3952 2=S3699 3=S2827 4=S3833 5=S4177 6=S3834 7=S4042 8=S4043 9=S3877
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 188869 PEST Water
Curtis & Tompkins Laboratories

Sequence: 236341882 Instrument: GC16
Analytical Method: EPA 8081A

Gas Chromatograph #16 ECD
SOP Version: 8081_rv7

Begun: 25-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	stds	Used	>LR
031	237_031	ICV	ICV			25-AUG-2006 22:53	1.0						9		
032	237_032	X	HEX			25-AUG-2006 23:10	1.0								
033	237_033	PEM	PEM			25-AUG-2006 23:27	1.0						1		
034	237_034	CCV	PEST_4			25-AUG-2006 23:45	1.0						2		
035	237_035	X	HEX			26-AUG-2006 00:02	1.0								
036	237_036	X	ASE CHECK PR			26-AUG-2006 00:19	1.0								
037	237_037	X	ASE MB CHECK			26-AUG-2006 00:36	1.0								
038	237_038	X	ASE LCS CHEC			26-AUG-2006 00:54	1.0								
039	237_039	X	ASE EARTH CH			26-AUG-2006 01:11	1.0								

StdS used: 1=S3952 2=S3699 3=S2827 4=S3833 5=S4177 6=S3834 7=S4042 8=S4043 9=S3877
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 188869 PEST Water
Curtis & Tompkins Laboratories

Sequence: 236343620 Instrument: GC16 Gas Chromatograph #16 ECD
Analytical Method: EPA 8081A SOP Version: 8081_rv7

Begun: 26-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds	Used	>LR
001	238_001	X	HEX			26-AUG-2006 15:00	1.0							
002	238_002	PEM	PEM			26-AUG-2006 15:18	1.0	1.0				1		
003	238_003	X	PEST_3			26-AUG-2006 15:35	1.0	1.0	16			2	ac	
004	238_004	CCV	PEST_3			26-AUG-2006 16:02	1.0	1.0	3			2		
005	238_005	X	HEX			26-AUG-2006 16:33	1.0							
006	238_006	BLANK	QC353319			26-AUG-2006 16:51	1.0	0.01	2	2	1			
007	238_007	LCS	QC353320			26-AUG-2006 17:09	1.0	0.01	7	3	1			
008	238_008	PREPBLK	QC353323			26-AUG-2006 17:26	1.0	0.009615	2	2	1			
009	238_009	BLANK	QC353072			26-AUG-2006 17:44	1.0	0.6693	2		1			
010	238_010	LCS	QC353124			26-AUG-2006 18:01	1.0	0.6647	7		1			
011	238_011	SAMPLE	188870-001			26-AUG-2006 18:18	1.0	0.009901			1			
012	238_012	SAMPLE	188870-002			26-AUG-2006 18:35	1.0	0.009901			1			
013	238_013	SAMPLE	188870-003			26-AUG-2006 18:53	1.0	0.009615			1			
014	238_014	SAMPLE	188870-004			26-AUG-2006 19:10	1.0	0.01			1			1:BHCGAM=143.179
015	238_015	SAMPLE	188870-005			26-AUG-2006 19:28	1.0	0.009615			1			
016	238_016	X	HEX			26-AUG-2006 19:46	1.0							144
017	238_017	PEM	PEM			26-AUG-2006 20:04	1.0	1.0			1			
018	238_018	CCV	PEST_4			26-AUG-2006 20:21	1.0	1.0	5		1			
019	238_019	X	PEST_4			26-AUG-2006 20:39	1.0							
020	238_020	X	PEM			26-AUG-2006 20:57	1.0							
021	238_021	X	HEX			26-AUG-2006 21:15	1.0							
022	238_022	SAMPLE	188870-006			26-AUG-2006 21:33	1.0	0.009709			1			
023	238_023	SAMPLE	188870-001			26-AUG-2006 21:51	5.0	0.6673	7	2	1			9:DDT44=1265.02
024	238_024	SAMPLE	188870-002			26-AUG-2006 22:08	10.0	0.6734	15		1			15:MTXYCL=4756.64
025	238_025	MSS	188870-003			26-AUG-2006 22:26	10.0	0.6718	14		1			13:DDT44=1741.02
026	238_026	SAMPLE	188870-004			26-AUG-2006 22:43	5.0	0.657	8		1			7:MTXYCL=2312.11
027	238_027	SAMPLE	188870-005			26-AUG-2006 23:00	5.0	0.6716	7		1			7:DDT44=691.574
028	238_028	SAMPLE	188870-006			26-AUG-2006 23:17	5.0	0.6579	8		1			7:DDT44=1056.25
029	238_029	X	HEX			26-AUG-2006 23:34	1.0							
030	238_030	SAMPLE	188793-011			26-AUG-2006 23:51	20.0	0.657	2		1			

Stds used: 1=S3952 2=S4177 3=S3699 4=S3834
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 188869 PEST Water
Curtis & Tompkins Laboratories

Sequence: 236343620 Instrument: GC16 Gas Chromatograph #16 ECD
Analytical Method: EPA 8081A SOP Version: 8081_rv7

Begun: 26-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Std	Used	>LR
031	238_031	X	HEX			27-AUG-2006 00:09	1.0					1		
032	238_032	X	PEM			27-AUG-2006 00:26	1.0	1.0			1	1		
033	238_033	CCV	PEST_5			27-AUG-2006 00:43	1.0	1.0			1	4		
034	238_034	X	PEST_5			27-AUG-2006 01:00	1.0					4		
035	238_035	PEM	PEM			27-AUG-2006 01:18	1.0	1.0			1	1		
036	238_036	X	HEX			27-AUG-2006 01:35	1.0					1		

Std's used: 1=S3952 2=S4177 3=S3699 4=S3834
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 188869 PEST Water
Curtis & Tompkins Laboratories

Sequence: 236346178 Instrument: GC16
Analytical Method: EPA 8081A

Gas Chromatograph #16 ECD
SOP Version: 8081_rv7

Begun: 28-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds	Used	>LR
001	240_001	X	HEX			28-AUG-2006 09:38	1.0								
002	240_002	X	PEM			28-AUG-2006 09:55	1.0			1			1		
003	240_003	X	PEST_3			28-AUG-2006 10:13	1.0			40			2	ac	
004	240_004	X	PEST_3			28-AUG-2006 10:39	1.0			24			2	ac	
005	240_005	X	HEX			28-AUG-2006 11:04	1.0			1					
006	240_006	X	PRIMER			28-AUG-2006 11:22	1.0								
007	240_007	X	PRIMER			28-AUG-2006 11:39	1.0								
008	240_008	X	PRIMER			28-AUG-2006 11:57	1.0								
009	240_009	X	PRIMER			28-AUG-2006 12:15	1.0								
010	240_010	X	HEX			28-AUG-2006 12:33	1.0								
011	240_011	PEM	PEM			28-AUG-2006 12:50	1.0			1			1		
012	240_012	CCV	PEST_3			28-AUG-2006 13:08	1.0			28			2	ac	
013	240_013	X	HEX			28-AUG-2006 15:26	1.0								
014	240_014	X	PRIMER			28-AUG-2006 15:44	1.0								
015	240_015	X	PRIMER			28-AUG-2006 16:02	1.0								
016	240_016	X	PRIMER			28-AUG-2006 16:20	1.0								
017	240_017	X	PRIMER			28-AUG-2006 16:37	1.0								
022	240_022	X	PRIMER			28-AUG-2006 18:05	1.0								
023	240_023	X	PRIMER			28-AUG-2006 18:23	1.0								
024	240_024	X	HEX			28-AUG-2006 18:41	1.0								
025	240_025	X	HEX			28-AUG-2006 18:59	1.0								
026	240_026	PEM	PEM			28-AUG-2006 19:17	1.0								
027	240_027	X	HEX			28-AUG-2006 19:35	1.0			1			1		
028	240_028	ICAL	PEST_1			28-AUG-2006 19:53	1.0						3		
029	240_029	ICAL	PEST_2			28-AUG-2006 20:11	1.0						4		
030	240_030	ICAL	PEST_3			28-AUG-2006 20:29	1.0						2		
031	240_031	ICAL	PEST_4			28-AUG-2006 20:46	1.0						5		
032	240_032	ICAL	PEST_5			28-AUG-2006 21:04	1.0						6		
033	240_033	ICAL	PEST_6			28-AUG-2006 21:22	1.0						7		
034	240_034	ICAL	PEST_7			28-AUG-2006 21:40	1.0						8		

Stds used: 1=S3952 2=S4177 3=S4176 4=S3833 5=S4178 6=S3834 7=S4042 8=S4043 9=S3877 10=S4238
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 188869 PEST Water
Curtis & Tompkins Laboratories

Sequence: 236346178 Instrument: GC16
Analytical Method: EPA 8081A

Gas Chromatograph #16 ECD
SOP Version: 8081_rv7

Begun: 28-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	stds	Used	>LR
035	240_035	X	HEX			28-AUG-2006	21:57	1.0							
036	240_036	X	ICV			28-AUG-2006	22:15	1.0	29	1			9		
037	240_037	X	ICV			28-AUG-2006	22:32	1.0	29	1			9		
038	240_038	X	HEX			28-AUG-2006	22:49	1.0							
039	240_039	PEM	PEM			28-AUG-2006	23:06	1.0		1			1		
040	240_040	CCV	PEST_3			28-AUG-2006	23:23	1.0					2		
041	240_041	X	HEX			28-AUG-2006	23:41	1.0							
042	240_042	X	PRIMER			29-AUG-2006	10:39	1.0							
043	240_043	X	PRIMER			29-AUG-2006	10:56	1.0							
044	240_044	X	PRIMER			29-AUG-2006	11:14	1.0							
045	240_045	X	PRIMER			29-AUG-2006	11:31	1.0							
046	240_046	X	HEX			29-AUG-2006	11:49	1.0							
047	240_047	X	ICV			29-AUG-2006	15:05	1.0		1			10		
048	240_048	ICV	ICV			29-AUG-2006	15:22	1.0	4	1			10		

Std's used: 1=S3952 2=S4177 3=S4176 4=S3833 5=S4178 6=S3834 7=S4042 8=S4043 9=S3877 10=S4238
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 188869 PEST Water
Curtis & Tompkins Laboratories

Sequence: 236348019 Instrument: GC16
Analytical Method: EPA 8081A

Gas Chromatograph #16 ECD
SOP Version: 8081_rv7

Begun: 29-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds Used	>LR
001	241_001	PEM	PEM			29-AUG-2006 16:19	1.0	1.0			1	1	
002	241_002	CCV	PEST_3			29-AUG-2006 16:36	1.0	1.0	3		1	2	
003	241_003	X	HEX			29-AUG-2006 18:45	1.0						
004	241_004	BLANK	QC353706			29-AUG-2006 19:02	1.0	0.01	2		1		
005	241_005	BS	QC353707			29-AUG-2006 19:20	1.0	0.01	5		1		
006	241_006	BSD	QC353708			29-AUG-2006 19:37	1.0	0.01	5		1		
007	241_007	SAMPLE	188947-003			29-AUG-2006 19:55	1.0	0.009615	2		1		
008	241_008	SAMPLE	188947-004			29-AUG-2006 20:13	1.0	0.009524	2		1		
009	241_009	SAMPLE	188837-002			29-AUG-2006 20:30	1.0	0.009434	2		1		
010	241_010	SAMPLE	188837-003			29-AUG-2006 20:48	1.0	0.009434	2		1		
011	241_011	SAMPLE	188837-004			29-AUG-2006 21:06	1.0	0.009434	2	4	1		
012	241_012	SAMPLE	188837-006			29-AUG-2006 21:23	1.0	0.009524	2		1		
013	241_013	SAMPLE	188837-007			29-AUG-2006 21:41	1.0	0.009434	2		1		
014	241_014	X	HEX			29-AUG-2006 21:59	1.0						
015	241_015	PEM	PEM			29-AUG-2006 22:16	1.0	1.0			1	1	
016	241_016	CCV	PEST_4			29-AUG-2006 22:33	1.0	1.0	2		1	3	
017	241_017	X	PEST_4			29-AUG-2006 22:51	1.0					3	
018	241_018	X	PEM			29-AUG-2006 23:08	1.0	1.0			1	1	
019	241_019	X	HEX			29-AUG-2006 23:26	1.0						
020	241_020	SAMPLE	188837-012			29-AUG-2006 23:44	1.0	0.009615	10	1	1		
021	241_021	SAMPLE	188837-013			30-AUG-2006 00:02	1.0	0.009615	10	3	1		
022	241_022	SAMPLE	188837-014			30-AUG-2006 00:20	1.0	0.009524	10		1		
023	241_023	MSS	188837-015			30-AUG-2006 00:38	1.0	0.009615	10	1	1		
024	241_024	SAMPLE	188837-016			30-AUG-2006 00:56	1.0	0.009615	10	1	1		
025	241_025	SAMPLE	188869-001			30-AUG-2006 01:13	1.0	0.009524	10	3	1		
026	241_026	X	HEX			30-AUG-2006 01:30	1.0						
027	241_027	X	PEM			30-AUG-2006 01:47	1.0	1.0			1	1	
028	241_028	CCV	PEST_5			30-AUG-2006 02:05	1.0	1.0	10		1	4	
029	241_029	X	PEST_5			30-AUG-2006 02:22	1.0					4	
030	241_030	PEM	PEM			30-AUG-2006 02:39	1.0	1.0			1	1	
031	241_031	X	HEX			30-AUG-2006 02:56	1.0						

Stds used: 1=S4175 2=S4177 3=S4178 4=S3834

SEQUENCE SUMMARY FOR 188869 PEST Water
Curtis & Tompkins Laboratories

Sequence: 806350494 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Begun: 31-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds	Used	>LR
001	243_001	X	PRIMER			31-AUG-2006 09:34	1.0								
002	243_002	X	PRIMER			31-AUG-2006 09:51	1.0								
003	243_003	X	PRIMER			31-AUG-2006 10:09	1.0								
004	243_004	X	PRIMER			31-AUG-2006 10:26	1.0								
005	243_005	X	HEX			31-AUG-2006 10:44	1.0								
006	243_006	X	PEM			31-AUG-2006 11:01	1.0								
007	243_007	X	PEST_3			31-AUG-2006 11:19	1.0								
008	243_008	X	PRIMER			31-AUG-2006 17:42	1.0		40	1					
009	243_009	X	PRIMER			31-AUG-2006 18:00	1.0								
010	243_010	X	PRIMER			31-AUG-2006 18:19	1.0								
011	243_011	X	PRIMER			31-AUG-2006 18:37	1.0								
012	243_012	X	PRIMER			31-AUG-2006 18:54	1.0								
013	243_013	X	PRIMER			31-AUG-2006 19:11	1.0								
014	243_014	X	PRIMER			31-AUG-2006 19:29	1.0								
015	243_015	X	PRIMER			31-AUG-2006 19:46	1.0								
016	243_016	X	HEX			31-AUG-2006 20:03	1.0								
017	243_017	X	HEX			31-AUG-2006 20:21	1.0								
018	243_018	PEM	PEM			31-AUG-2006 20:38	1.0			1					
019	243_019	X	HEX			31-AUG-2006 20:55	1.0								
020	243_020	ICAL	PEST_1			31-AUG-2006 21:13	1.0								
021	243_021	ICAL	PEST_2			31-AUG-2006 21:30	1.0								
022	243_022	ICAL	PEST_3			31-AUG-2006 21:47	1.0								
023	243_023	ICAL	PEST_4			31-AUG-2006 22:05	1.0								
024	243_024	ICAL	PEST_5			31-AUG-2006 22:22	1.0								
025	243_025	ICAL	PEST_6			31-AUG-2006 22:40	1.0								
026	243_026	ICAL	PEST_7			31-AUG-2006 22:57	1.0								
027	243_027	X	HEX			31-AUG-2006 23:14	1.0								
028	243_028	X	ICV			31-AUG-2006 23:32	1.0								
029	243_029	ICV	ICV			31-AUG-2006 23:49	1.0		2	1					
030	243_030	X	HEX			01-SEP-2006 00:06	1.0								

Std's used: 1=S4175 2=S4177 3=S4176 4=S3833 5=S4178 6=S3834 7=S4042 8=S4043 9=S3877
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 188869 PEST Water
Curtis & Tompkins Laboratories

Sequence: 806351984 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Begun: 01-SEP-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used	>LR
001	244_001	X	HEX			01-SEP-2006 10:24	1.0						
002	244_002	PEM	PEM			01-SEP-2006 10:42	1.0	1.0			1	1	
003	244_003	CCV	PEST-3			01-SEP-2006 10:59	1.0	1.0			1	2	
004	244_004	X	HEX			01-SEP-2006 17:25	1.0						
005	244_005	BLANK	QC354315		Water	01-SEP-2006 17:43	1.0	0.01	9		1		
006	244_006	BS	QC354316		Water	01-SEP-2006 18:00	1.0	0.01	16	1	1		
007	244_007	BSD	QC354317		Water	01-SEP-2006 18:18	1.0	0.01	16	9	1		
008	244_008	MS	QC353321		Water	01-SEP-2006 18:35	1.0	0.009434	15	1	1		
009	244_009	MSD	QC353322		Water	01-SEP-2006 18:52	1.0	0.009615	15	5	1		
010	244_010	SAMPLE	189065-014		Water	01-SEP-2006 19:10	1.0	0.009434	1	2	1		1:BHCAM=150.544
011	244_011	SAMPLE	189065-015		Water	01-SEP-2006 19:27	1.0						
012	244_012	SAMPLE	189029-001		Water	01-SEP-2006 19:44	20.0	0.009615	9		1		
013	244_013	SAMPLE	189047-008		Soil	01-SEP-2006 20:02	40.0	0.6734	8		1		
014	244_014	X	HEX			01-SEP-2006 20:19	1.0						
015	244_015	PEM	PEM			01-SEP-2006 20:37	1.0	1.0			1	1	
016	244_016	CCV	PEST_4			01-SEP-2006 20:54	1.0	1.0	16		1	3	150
017	244_017	X	PEST_4			01-SEP-2006 21:12	1.0						
018	244_018	X	PEM			01-SEP-2006 21:29	1.0						
019	244_019	X	HEX			01-SEP-2006 21:46	1.0						
020	244_020	BLANK	QC354307		Soil	01-SEP-2006 22:04	1.0	0.6711	9		1		
021	244_021	LCS	QC354308		Soil	01-SEP-2006 22:21	1.0	0.6577	16		1		
022	244_022	SAMPLE	189058-001		Soil	01-SEP-2006 22:39	1.0	0.6647	9		1		
023	244_023	SAMPLE	189058-002		Soil	01-SEP-2006 22:56	1.0	0.675	9		1		
024	244_024	SAMPLE	189065-001		Soil	01-SEP-2006 23:13	10.0	0.6592	1		1		
025	244_025	SAMPLE	189065-002		Soil	01-SEP-2006 23:31	5.0	0.6568	1		1		
026	244_026	SAMPLE	189065-003		Soil	01-SEP-2006 23:48	1.0	0.6754	1		1		
027	244_027	SAMPLE	189065-004		Soil	02-SEP-2006 00:05	10.0	0.6577	1		1		
028	244_028	SAMPLE	189065-005		Soil	02-SEP-2006 00:23	5.0	0.675	1		1		
029	244_029	SAMPLE	189065-006		Soil	02-SEP-2006 00:40	1.0	0.6623	1		1		
030	244_030	X	HEX			02-SEP-2006 00:58	1.0						

Stds used: 1=S4175 2=S4177 3=S4178 4=S3834

Flags used: >=closing ac=average CCV drift out

SEQUENCE SUMMARY FOR 188869 PEST Water
Curtis & Tompkins Laboratories

Sequence: 806351984 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Begun: 01-SEP-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Std	Used	>LR
031	244_031	PEM	PEM			02-SEP-2006 01:15	1.0	1.0			1	1		
032	244_032	CCV	PEST_5			02-SEP-2006 01:32	1.0	1.0			1	4		
033	244_033	X	PEST_5			02-SEP-2006 01:50	1.0					4		
034	244_034	X	PEM			02-SEP-2006 02:07	1.0					1		
035	244_035	X	HEX			02-SEP-2006 02:24	1.0							
036	244_036	SAMPLE	189065-007	116992	Soil	02-SEP-2006 02:42	10.0	0.6603	1		1	>ac		
037	244_037	SAMPLE	189065-008	116992	Soil	02-SEP-2006 02:59	5.0	0.6575	1		1	>ac		
038	244_038	SAMPLE	189065-009	116992	Soil	02-SEP-2006 03:16	5.0	0.668	1		1	>ac		
039	244_039	SAMPLE	189065-010	116992	Soil	02-SEP-2006 03:34	10.0	0.6585	1		1	>ac		
040	244_040	SAMPLE	189065-011	116992	Soil	02-SEP-2006 04:09	1.0	0.6579	1		1	>ac		
041	244_041	SAMPLE	189065-012	116992	Soil	02-SEP-2006 04:26	1.0	0.6642	1		1	>ac		
042	244_042	MSS	189065-013	116992	Soil	02-SEP-2006 04:43	1.0	0.6609	13		1	>ac		
043	244_043	MS	QC354309	116992	Soil	02-SEP-2006 05:01	1.0	0.6707	13		1	>ac		
044	244_044	MSD	QC354310	116992	Soil	02-SEP-2006 05:18	1.0							
045	244_045	X	HEX			02-SEP-2006 05:36	1.0				1	1		
046	244_046	PEM	PEM			02-SEP-2006 05:53	1.0				1	2	ac	
047	244_047	CCV	PEST_3			02-SEP-2006 06:11	1.0				1	2	ac	
048	244_048	X	PEST_3			02-SEP-2006 06:28	1.0				1	1		
049	244_049	X	PEM			02-SEP-2006 06:45	1.0							
050	244_050	X	HEX											

Std used: 1=S4175 2=S4177 3=S4178 4=S3834
Flags used: >=closing ac=average CCV drift out

REPORTING SUMMARY FOR 188869 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
188869-001	alpha-BHC	GC16	A	08/30/06 01:13
188869-001	beta-BHC	GC16	A	08/30/06 01:13
188869-001	gamma-BHC	GC16	A	08/30/06 01:13
188869-001	delta-BHC	GC16	A	08/30/06 01:13
188869-001	Heptachlor	GC16	A	08/30/06 01:13
188869-001	Aldrin	GC16	A	08/30/06 01:13
188869-001	Heptachlor epoxide	GC16	A	08/30/06 01:13
188869-001	Endosulfan I	GC16	A	08/30/06 01:13
188869-001	Dieldrin	GC16	A	08/30/06 01:13
188869-001	4,4'-DDE	GC16	A	08/30/06 01:13
188869-001	Endrin	GC16	A	08/30/06 01:13
188869-001	Endosulfan II	GC16	A	08/30/06 01:13
188869-001	Endosulfan sulfate	GC16	A	08/30/06 01:13
188869-001	4,4'-DDD	GC16	A	08/30/06 01:13
188869-001	4,4'-DDT	GC16	A	08/30/06 01:13
188869-001	alpha-Chlordane	GC16	A	08/30/06 01:13
188869-001	gamma-Chlordane	GC16	A	08/30/06 01:13
188869-001	Methoxychlor	GC16	A	08/30/06 01:13
188869-001	Endrin ketone	GC16	A	08/30/06 01:13
188869-001	Toxaphene	GC16	A	08/30/06 01:13
188869-001	TCMX	GC16	A	08/30/06 01:13
188869-001	Decachlorobiphenyl	GC16	A	08/30/06 01:13
QC353319	alpha-BHC	GC16	A	08/26/06 16:51
QC353319	beta-BHC	GC16	A	08/26/06 16:51
QC353319	gamma-BHC	GC16	A	08/26/06 16:51
QC353319	delta-BHC	GC16	A	08/26/06 16:51
QC353319	Heptachlor	GC16	A	08/26/06 16:51
QC353319	Aldrin	GC16	A	08/26/06 16:51
QC353319	Heptachlor epoxide	GC16	A	08/26/06 16:51
QC353319	Endosulfan I	GC16	A	08/26/06 16:51
QC353319	Dieldrin	GC16	A	08/26/06 16:51
QC353319	4,4'-DDE	GC16	A	08/26/06 16:51
QC353319	Endrin	GC16	A	08/26/06 16:51
QC353319	Endosulfan II	GC16	A	08/26/06 16:51
QC353319	Endosulfan sulfate	GC16	A	08/26/06 16:51
QC353319	4,4'-DDD	GC16	A	08/26/06 16:51
QC353319	4,4'-DDT	GC16	A	08/26/06 16:51
QC353319	alpha-Chlordane	GC16	A	08/26/06 16:51
QC353319	gamma-Chlordane	GC16	A	08/26/06 16:51
QC353319	Methoxychlor	GC16	A	08/26/06 16:51
QC353319	Endrin ketone	GC16	A	08/26/06 16:51
QC353319	Toxaphene	GC16	A	08/26/06 16:51
QC353319	TCMX	GC16	A	08/26/06 16:51
QC353319	Decachlorobiphenyl	GC16	A	08/26/06 16:51
QC353320	gamma-BHC	GC16	A	08/26/06 17:09
QC353320	Heptachlor	GC16	A	08/26/06 17:09
QC353320	Aldrin	GC16	A	08/26/06 17:09
QC353320	Dieldrin	GC16	A	08/26/06 17:09
QC353320	Endrin	GC16	A	08/26/06 17:09
QC353320	4,4'-DDT	GC16	A	08/26/06 17:09
QC353320	TCMX	GC16	A	08/26/06 17:09
QC353320	Decachlorobiphenyl	GC16	A	08/26/06 17:09

REPORTING SUMMARY FOR 188869 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC353321	gamma-BHC	GC23	A	09/01/06 18:35
QC353321	Heptachlor	GC23	A	09/01/06 18:35
QC353321	Aldrin	GC23	A	09/01/06 18:35
QC353321	Dieldrin	GC23	A	09/01/06 18:35
QC353321	Endrin	GC23	A	09/01/06 18:35
QC353321	4,4'-DDT	GC23	A	09/01/06 18:35
QC353321	TCMX	GC23	A	09/01/06 18:35
QC353321	Decachlorobiphenyl	GC23	A	09/01/06 18:35
QC353322	gamma-BHC	GC23	A	09/01/06 18:52
QC353322	Heptachlor	GC23	A	09/01/06 18:52
QC353322	Aldrin	GC23	A	09/01/06 18:52
QC353322	Dieldrin	GC23	A	09/01/06 18:52
QC353322	Endrin	GC23	A	09/01/06 18:52
QC353322	4,4'-DDT	GC23	A	09/01/06 18:52
QC353322	TCMX	GC23	A	09/01/06 18:52
QC353322	Decachlorobiphenyl	GC23	A	09/01/06 18:52

Curtis & Tompkins Laboratories

Sample Preparation Summary

29-AUG-2006 16:09

Batch Number : 116753
Date Extracted : 24-AUG-2006
Extracted by : Robert F Wellbrock
Prep Method : 3520C

Analysis : 8081
Bgroup : N/A
Units : mL
Clean-up : 1

Spike #1 ID : S4187B
Spike #2 ID : S4098A
Spike #3 ID :
SDP Version : 8081w rv14

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
188837-002		Treadwell & Rollo	Water	1060	mL	10	0.009434 1	7	.025 0				8081		
188837-003		Treadwell & Rollo	Water	1060	mL	10	0.009434 1	6	.025 0				8081		
188837-004		Treadwell & Rollo	Water	1060	mL	10	0.009434 1	6	.025 0				8081		
188837-006		Treadwell & Rollo	Water	1050	mL	10	0.009524 1	6	.025 0				8081		
188837-007		Treadwell & Rollo	Water	1060	mL	10	0.009434 1	6	.025 0				8081		
188837-012		Treadwell & Rollo	Water	1040	mL	10	0.009615 1	5	.025 0				8081		
188837-013		Treadwell & Rollo	Water	1040	mL	10	0.009615 1	7	.025 0				8081		
188837-014		Treadwell & Rollo	Water	1050	mL	10	0.009524 1	7	.025 0				8081		
188837-015		Treadwell & Rollo	Water	1040	mL	10	0.009615 1	6	.025 0				8081		
188837-016		Treadwell & Rollo	Water	1040	mL	10	0.009615 1	6	.025 0				8081		
188869-001		Treadwell & Rollo	Water	1040	mL	10	0.009615 1	6	.025 0				8081		
188870-001		Tetra Tech EC, Inc.	Water	1050	mL	10	0.009524 1	5	.025 0				8081		
188870-002		Tetra Tech EC, Inc.	TCLP Leach 1010	mL	10	10	0.009901 1	7	.025 0				8081		
188870-003		Tetra Tech EC, Inc.	TCLP Leach 1010	mL	10	10	0.009901 1	7	.025 0				8081		
188870-004		Tetra Tech EC, Inc.	TCLP Leach 1040	mL	10	10	0.009615 1	7	.025 0				8081		
188870-005		Tetra Tech EC, Inc.	TCLP Leach 1000	mL	10	10	0.010000 1	7	.025 0				8081		
188870-006		Tetra Tech EC, Inc.	TCLP Leach 1040	mL	10	10	0.009615 1	7	.025 0				8081		
QC353319	BLANK	Tetra Tech EC, Inc.	TCLP Leach 1030	mL	10	10	0.009709 1	7	.025 0				8081		
QC353320	LCS		Water	1000	mL	10	0.010000 1		.025 0				8081		
QC353321	MS		Water	1060	mL	10	0.010000 1		.025 .025				8081		
QC353322	MSD		Water	1060	mL	10	0.009434 1	6	.025 .025				8081		
QC353323	PREPBLK		Water	1040	mL	10	0.009615 1	6	.025 .025				8081		
			TCLP Leach 1040	mL	10	10	0.009615 1	7	.025 0				8081		

mss

Prep Chemist: JOM for RFW
Relinquished By: JOM for FW

Reviewed By: JOM for RFW
Received By: JOM for RFW
Date: 8/29/06

LIMS Batch No: 116753LIMS Analysis: 8081Extracted by: RFWDate Extracted: 8/24/06

Extraction Method:

☐ EPA 3510c sep. funnel☒ EPA 3520c cont. L/L☐

Cleanup Method (if needed):

☐ EPA 3640a GPC☐ EPA 3620b Florisil☐

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
188837-002 A	1060	7	10		
-003 B	↓	6			
-004	↓				
-006	1050				
-007 ↓	1060	↓			
-012 N	1040	5			
-013 A	1040	7			
-014 B	1050	7			
-015 A	1040	6			MSS
↓ -016 A	↓	↓			
188869-001 N	1050	5			
188870-001	1010	7			TCLP leachate
-002	1010				
-003	1040				
-004	1000				
-005	1040				
↓ -006	1030				
MB QC353319	1000	NA			
LCS	20	↓			
MS	21	1060	6		188837-015 F
MSD	22	1040			188837-015 B
PREPBLK ↓ 23	1040	NA	↓ ↓		TCLP leachate
JOM 8/24/06					

0.025 mL of surrogate solution was added to all samples

0.025 mL of matrix spike solution was added to all spikes

☒ Samples continuously extracted with about 450 mL of CH_2Cl_2

Extraction Start Time:

Extraction End Time:

☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2 Extracts filtered through baked, CH_2Cl_2 rinsed powdered Na_2SO_4

Exchanged 2x with Hexane

Concentrated: ☒ to volumes as noted above ☐ to clean-up volumeClean-up (if necessary): ☐ GPC (see GPC run log) ☐ Florisil

Mfg & Lot# / LIMS # / Time Date/ Initials

34187 B	RFW 8/24/06
54098 A	
EM46069	
1330	✓
0748	JLM 8/25/06
NA	AW 8/23/06
EM46069	
EM46069	
NA	✓

TCLP EXTRACTION LOG

Curtis & Tompkins, Ltd.

LIMS Batch #: 116724
 Extraction Method: 131
 Rotator #'s: 26

Date/ Time ON: 8/23/06 3:10pm
 Temp (F) ON: 23°C
 Date/ Time OFF: 8/24/06 P. Wynn
 Temp (F) OFF: 23°C

Page: 4
 Benchbook#: BK 2380

Sample # / Letter	Vessel #	Sample Mass (g)	Free Liq (y/n)*	Sieved? (y/n)*	Sample pH	pH after +1N HCl	Fluid #	Extract Vol (mL)	Final pH	*Comments
Blank	1	-	-	-	-	-	1	200mL	6	
1888D-1 #	2	100g	N	N	T	T	1		7	
-2	3								7	
-3	4								7	
-4	5								7	
-5	6								7	
-6	7								7	

* TCLP Fluid #1 used for organics extraction

3.5 mL of 1 N HCl was added to all samples

Used Sodium Hydroxide (NaOH)

Used Acetic acid (HOAc)

Temperature Limits: 21 - 25 C

Fluid #1 pH Limits: 4.88 - 4.98 su

Fluid #2 pH Limits: 2.83 - 3.03 su

Extract filtered through 0.7um x 142mm TCLP filter paper

Mfg & Lot # / LIMS #

Date/ Initials

NO	8/23/06 CUB
VWR-6067	
Baker B45828	
4.96	
ENV Exp TCLP 605031	8/24/06 CUB

Ch 8/23/06

Extraction Chemist Date

[Signature] 8/24/06

Reviewed by Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8081A Water
As of 09/24/06

Analyte	Units	GC21 A	GC21 B	GC16 A	GC16 B	GC23 A	GC23 B
gamma-BHC	ug/L	0.0065	0.0039	0.0032	0.0025	0.0029	0.0039
Heptachlor	ug/L	0.0083	0.0056	0.0057	0.0061	0.0029	0.0055
Aldrin	ug/L	0.0094	0.0070	0.0066	0.0066	0.0062	0.0077
Dieldrin	ug/L	0.011	0.0051	0.0074	0.0070	0.0041	0.0097
Endrin	ug/L	0.012	0.011	0.0095	0.0083	0.0054	0.011
4,4'-DDT	ug/L	0.012	0.0071	0.011	0.0099	0.0088	0.0087
alpha-BHC	ug/L	0.0063	0.0040	0.0029	0.0027	0.0032	0.0049
beta-BHC	ug/L	0.0061	0.011	0.0033	0.0052	0.0029	0.0055
delta-BHC	ug/L	0.0065	0.0023	0.0040	0.0026	0.0018	0.0041
Heptachlor epoxide	ug/L	0.0066	0.0097	0.0033	0.0032	0.0028	0.0044
gamma-Chlordane	ug/L	0.0064	0.011	0.0041	0.0037	0.0020	0.0042
alpha-Chlordane	ug/L	0.010	0.0052	0.0045	0.0036	0.0023	0.0052
Endosulfan I	ug/L	0.0062	0.0033	0.0043	0.0032	0.0026	0.0048
4,4'-DDE	ug/L	0.011	0.0057	0.010	0.0082	0.0045	0.0097
Endosulfan II	ug/L	0.013	0.0077	0.0088	0.0073	0.0066	0.0097
Endosulfan sulfate	ug/L	0.0096	0.0054	0.015	0.0087	0.0054	0.0093
4,4'-DDD	ug/L	0.011	0.0096	0.0088	0.0090	0.0033	0.010
Endrin aldehyde	ug/L	0.010	0.0092	0.0084	0.0086	0.0052	0.0088
Chlordane (Technical)	ug/L	0.26	0.21	0.19	0.19	0.17	0.21
Methoxychlor	ug/L	0.050	0.018	0.057	0.080	0.043	0.051
Endrin ketone	ug/L	0.0083	0.023	0.027	0.0095	0.0051	0.015
Toxaphene	ug/L	0.49	0.26	0.39	0.34	0.54	0.29

PCBs

Polychlorinated Biphenyls (PCBs)

Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Field ID:	DW082106B	Batch#:	116817
Matrix:	Water	Sampled:	08/21/06
Units:	ug/L	Received:	08/21/06
Diln Fac:	1.000	Prepared:	08/25/06

Type:	SAMPLE	Analyzed:	08/28/06
Lab ID:	188869-001	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.49
Aroclor-1221	ND	0.97
Aroclor-1232	ND	0.49
Aroclor-1242	ND	0.49
Aroclor-1248	ND	0.49
Aroclor-1254	ND	0.49
Aroclor-1260	ND	0.49

Surrogate	%REC	Limits
TCMX	106	65-135
Decachlorobiphenyl	78	65-135

Type:	BLANK	Analyzed:	08/29/06
Lab ID:	QC353595	Cleanup Method:	EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	98	65-135
Decachlorobiphenyl	73	65-135

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Polychlorinated Biphenyls (PCBs)			
Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Batch#:	116817
Units:	ug/L	Prepared:	08/25/06
Diln Fac:	1.000	Analyzed:	08/28/06

Type: BS
Lab ID: QC353596

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1016	5.000	6.187	124	77-131
Aroclor-1260	5.000	6.726	135	65-135

Surrogate	%REC	Limits
TCMX	101	65-135
Decachlorobiphenyl	107	65-135

Type: BSD
Lab ID: QC353597

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1016	5.000	5.833	117	77-131	6	28
Aroclor-1260	5.000	6.176	124	65-135	9	35

Surrogate	%REC	Limits
TCMX	95	65-135
Decachlorobiphenyl	101	65-135

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188869 PCBS Water: EPA 8082

Inst : GC06
 Calnum : 206339326001
 Units : pg

Name : ar16/60_235
 Date : 23-AUG-2006 21:59
 X Axis : R

Reviewer: MCH

Level	File	Segment	Sample ID	Analyzed	Stds
L1	235_010	206339326010	PCB10_2	23-AUG-2006 21:59	S3538
L2	235_011	206339326011	PCB25_5	23-AUG-2006 22:26	S3537
L3	235_012	206339326012	PCB100_20	23-AUG-2006 22:54	S3535
L4	235_013	206339326013	PCB250_50	23-AUG-2006 23:21	S4052
L5	235_014	206339326014	PCB500_100	23-AUG-2006 23:49	S3524
L6	235_015	206339326015	PCB750_150	24-AUG-2006 00:17	S3511
L7	235_021	206339326021	PCB1000_200	24-AUG-2006 10:51	S3856

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ² #RSD	MNR ²	MRSD	Fig
Aroclor-1016 Peak # 1	A	391.50	304.64	336.59	287.52	310.90	304.85	461.42	AVRG		0.00292		342.49	18	.99	20	
Aroclor-1016 Peak # 2	A	811.30	650.80	674.53	532.61	581.34	557.45	502.37	AVRG		0.00162		615.77	17	.99	20	
Aroclor-1016 Peak # 3	A	635.80	517.24	591.17	505.48	655.63	664.34	608.37	AVRG		0.00168		596.86	11	.99	20	
Aroclor-1016 Peak # 4	A	464.10	378.16	428.59	353.92	407.53	403.78	381.09	AVRG		0.00248		402.45	9	.99	20	
Aroclor-1016 Peak # 5	A	404.70	317.12	348.87	291.28	335.76	329.38	309.03	AVRG		0.00300		333.73	11	.99	20	
Aroclor-1260 Peak # 1	A	1312.6	1001.8	1066.2	856.41	936.75	866.10	867.70	AVRG		0.00101		986.79	17	.99	20	
Aroclor-1260 Peak # 2	A	610.70	459.32	553.40	519.74	477.23	441.58	452.83	AVRG		0.00199		502.11	12	.99	20	
Aroclor-1260 Peak # 3	A	699.50	504.64	533.42	508.08	509.68	470.95	512.13	AVRG		0.00187		534.06	14	.99	20	
Aroclor-1260 Peak # 4	A	1367.1	1016.5	1121.7	1074.9	1083.2	989.67	1060.0	AVRG		9.08E-4		1101.8	11	.99	20	
Aroclor-1260 Peak # 5	A	686.40	506.36	571.38	517.89	588.00	545.21	604.24	AVRG		0.00174		574.21	11	.99	20	
TCMX	A	11622	9439.6	11925	11525	13558	13718	12693	AVRG		8.29E-5		12069	12	.99	20	
Decachlorobiphenyl	A		13902	14089	11436	11771	10070	11213	AVRG		8.28E-5		12080	13	.99	20	
Aroclor-1016 Peak # 1	B	235.70	186.44	208.04	178.08	198.60	194.30	180.43	AVRG		0.00507		197.37	10	.99	20	
Aroclor-1016 Peak # 2	B	294.70	235.92	262.21	216.26	252.22	248.30	233.11	AVRG		0.00402		248.96	10	.99	20	
Aroclor-1016 Peak # 3	B	719.10	562.40	646.30	555.04	695.55	703.66	680.36	AVRG		0.00153		651.77	10	.99	20	
Aroclor-1016 Peak # 4	B	351.70	275.48	310.10	257.36	305.25	302.81	293.39	AVRG		0.00334		299.44	10	.99	20	
Aroclor-1016 Peak # 5	B	242.70	191.68	215.70	180.34	213.54	211.02	205.14	AVRG		0.00479		208.59	9	.99	20	
Aroclor-1260 Peak # 1	B	679.50	520.44	565.42	473.96	515.31	476.35	479.87	AVRG		0.00189		530.12	14	.99	20	
Aroclor-1260 Peak # 2	B	448.80	333.28	366.83	360.13	340.26	314.40	318.29	AVRG		0.00282		354.57	13	.99	20	
Aroclor-1260 Peak # 3	B	394.50	294.92	326.86	319.36	315.22	304.53	309.27	AVRG		0.00309		323.52	10	.99	20	
Aroclor-1260 Peak # 4	B	953.00	710.08	802.97	788.42	809.72	746.62	802.53	AVRG		0.00125		801.90	9	.99	20	
Aroclor-1260 Peak # 5	B	455.70	338.88	380.79	348.48	411.84	385.85	430.84	AVRG		0.00254		393.20	11	.99	20	
TCMX	B	7136.0	5864.6	7589.4	7653.8	9462.4	9736.1	9121.1	AVRG		1.24E-4		8080.5	17	.99	20	
Decachlorobiphenyl	B		9845.6	10503	8716.5	9020.9	7722.6	8571.8	AVRG		1.10E-4		9063.4	11	.99	20	

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188869 PCBS Water
EPA 8082

Inst : GC06
Calnum : 206339326001

Name : ar16/60_235
Cal Date: 23-AUG-2006

ICV 206339326023 (235_023 24-AUG-2006) stds: S3643

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1016	A	342.49		250.0	217.2	pg	-13	15	
Aroclor-1260	A	986.79		250.0	229.5	pg	-8	15	
Aroclor-1016	B	197.37		250.0	222.8	pg	-11	15	
Aroclor-1260	B	530.12		250.0	236.2	pg	-6	15	

CONTINUING CALIBRATION SUMMARY FOR 188869 PCBS Water
Curtis & Tompkins Laboratories

Analyte: Aroclor-1016

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	OntAmt	Units	%D Max	%D	Flags
						RF/CF	RF/CF						
GC06	A	206346249007	28-AUG-2006 16:09	206339326001	23-AUG-2006			250.00	236.89	pg	-5	15	
GC06	B	206346249007	28-AUG-2006 16:09	206339326001	23-AUG-2006			250.00	249.95	pg	0	15	
GC06	A	206346249022	29-AUG-2006 00:15	206339326001	23-AUG-2006			500.00	558.19	pg	12	15	
GC06	B	206346249022	29-AUG-2006 00:15	206339326001	23-AUG-2006			500.00	596.78	pg	19	15	c+ ***
GC06	A	206346249038	29-AUG-2006 07:36	206339326001	23-AUG-2006			250.00	229.67	pg	-8	15	
GC06	B	206346249038	29-AUG-2006 07:36	206339326001	23-AUG-2006			250.00	243.75	pg	-2	15	
GC06	A	206346249045	29-AUG-2006 12:03	206339326001	23-AUG-2006			100.00	112.60	pg	13	15	
GC06	B	206346249045	29-AUG-2006 12:03	206339326001	23-AUG-2006			100.00	116.23	pg	16	15	c+ ***

reported
from
A

CW 8/31/06

+ = high bias c = CCV

CONTINUING CALIBRATION SUMMARY FOR 188869 PCBS Water
Curtis & Tompkins Laboratories

Analyte: Aroclor-1260

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	OntAmt	Units	%D	Max	%D	Flags
						RF/CF	RF/CF							
GC06	A	206346249007	28-AUG-2006 16:09	206339326001	23-AUG-2006			250.00	245.48	pg	-2	15		
GC06	B	206346249007	28-AUG-2006 16:09	206339326001	23-AUG-2006			250.00	255.24	pg	2	15		
GC06	A	206346249022	29-AUG-2006 00:15	206339326001	23-AUG-2006			500.00	515.86	pg	3	15		
GC06	B	206346249022	29-AUG-2006 00:15	206339326001	23-AUG-2006			500.00	555.67	pg	11	15		
GC06	A	206346249038	29-AUG-2006 07:36	206339326001	23-AUG-2006			250.00	224.35	pg	-10	15		
GC06	B	206346249038	29-AUG-2006 07:36	206339326001	23-AUG-2006			250.00	226.99	pg	-9	15		
GC06	A	206346249045	29-AUG-2006 12:03	206339326001	23-AUG-2006			100.00	107.20	pg	7	15		
GC06	B	206346249045	29-AUG-2006 12:03	206339326001	23-AUG-2006			100.00	109.03	pg	9	15		

CONTINUING CALIBRATION SUMMARY FOR 188869 PCBS Water
Curtis & Tompkins Laboratories

Analyte: TCMX

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D	Flags
						RF/CF	RF/CF						
GC06	A	206346249007	28-AUG-2006 16:09	206339326001	23-AUG-2006	12069	12658	50.000	52.442	pg	5	15	
GC06	B	206346249007	28-AUG-2006 16:09	206339326001	23-AUG-2006	8080.5	8949.9	50.000	55.380	pg	11	15	
GC06	A	206346249022	29-AUG-2006 00:15	206339326001	23-AUG-2006	12069	15158	100.00	125.59	pg	26	15	c+
GC06	B	206346249022	29-AUG-2006 00:15	206339326001	23-AUG-2006	8080.5	11075	100.00	137.06	pg	37	15	c+
GC06	A	206346249038	29-AUG-2006 07:36	206339326001	23-AUG-2006	12069	11847	50.000	49.083	pg	-2	15	
GC06	B	206346249038	29-AUG-2006 07:36	206339326001	23-AUG-2006	8080.5	8243.9	50.000	51.011	pg	2	15	
GC06	A	206346249045	29-AUG-2006 12:03	206339326001	23-AUG-2006	12069	12857	20.000	21.306	pg	7	15	
GC06	B	206346249045	29-AUG-2006 12:03	206339326001	23-AUG-2006	8080.5	8535.5	20.000	21.126	pg	6	15	

+ = high bias c = CCV

CONTINUING CALIBRATION SUMMARY FOR 188869 PCBS Water
Curtis & Tompkins Laboratories

Analyte: Decachlorobiphenyl

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D	Flags
						RF/CF	RF/CF						
GC06	A	206346249007	28-AUG-2006 16:09	206339326001	23-AUG-2006	12080	11998	50.000	49.659	pg	-1	15	
GC06	B	206346249007	28-AUG-2006 16:09	206339326001	23-AUG-2006	9063.4	9370.9	50.000	51.697	pg	3	15	
GC06	A	206346249022	29-AUG-2006 00:15	206339326001	23-AUG-2006	12080	12650	100.00	104.72	pg	5	15	
GC06	B	206346249022	29-AUG-2006 00:15	206339326001	23-AUG-2006	9063.4	10077	100.00	111.19	pg	11	15	
GC06	A	206346249038	29-AUG-2006 07:36	206339326001	23-AUG-2006	12080	10346	50.000	42.823	pg	-14	15	
GC06	B	206346249038	29-AUG-2006 07:36	206339326001	23-AUG-2006	9063.4	8165.7	50.000	45.048	pg	-10	15	
GC06	A	206346249045	29-AUG-2006 12:03	206339326001	23-AUG-2006	12080	14897	20.000	24.664	pg	23	15	c+
GC06	B	206346249045	29-AUG-2006 12:03	206339326001	23-AUG-2006	9063.4	11473	20.000	25.318	pg	27	15	c+

+ = high bias c = CCV

SEQUENCE SUMMARY FOR 188869 PCBs Water
Curtis & Tompkins Laboratories

Sequence: 206339326 Instrument: GC06
Analytical Method: EPA 8082

Gas Chromatograph #6 ECD
SOP Version: 8082_rv.6

Begun: 23-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds Used	>LR
001	235_001	X	PRIMER			23-AUG-2006	15:26	1.0					
002	235_002	X	PRIMER			23-AUG-2006	15:53	1.0					
003	235_003	X	PRIMER			23-AUG-2006	18:46	1.0					
004	235_004	X	PRIMER			23-AUG-2006	19:14	1.0					
005	235_005	X	PRIMER			23-AUG-2006	19:41	1.0					
006	235_006	X	PRIMER			23-AUG-2006	20:09	1.0					
007	235_007	X	HEX			23-AUG-2006	20:36	1.0					
008	235_008	X	HEX			23-AUG-2006	21:04	1.0					
009	235_009	X	HEX			23-AUG-2006	21:31	1.0					
010	235_010	ICAL	PCB10_2			23-AUG-2006	21:59	1.0				1	
011	235_011	ICAL	PCB25_5			23-AUG-2006	22:26	1.0				2	
012	235_012	ICAL	PCB100_20			23-AUG-2006	22:54	1.0				3	
013	235_013	ICAL	PCB250_50			23-AUG-2006	23:21	1.0				4	
014	235_014	ICAL	PCB500_100			23-AUG-2006	23:49	1.0				5	
015	235_015	ICAL	PCB750_150			24-AUG-2006	00:17	1.0				6	
016	235_016	ICAL	PCB1000_200			24-AUG-2006	00:44	1.0				7	
017	235_017	X	HEX			24-AUG-2006	01:12	1.0					
018	235_018	ICV	ULTRA_1660			24-AUG-2006	01:39	1.0				8	
019	235_019	ICV	ULTRA_1660			24-AUG-2006	02:07	1.0				8	
020	235_020	X	HEX			24-AUG-2006	02:34	1.0					
021	235_021	ICAL	PCB1000_200			24-AUG-2006	10:51	1.0				7	
022	235_022	X	HEX			24-AUG-2006	11:19	1.0					
023	235_023	ICV	ULTRA_1660			24-AUG-2006	11:46	1.0				8	
024	235_024	ICV	ULTRA_1660			24-AUG-2006	12:14	1.0				8	
026	235_026	BLANK	QC353351		116764	24-AUG-2006	14:22	1.0					
027	235_027	BLANK	QC353352		116764	24-AUG-2006	14:49	1.0					
028	235_028	LCS	QC353353		116764	24-AUG-2006	15:17	1.0					
029	235_029	SAMPLE	188870-001		116694	24-AUG-2006	15:45	10.0					
030	235_030	X	HEX			24-AUG-2006	17:55	1.0					
031	235_031	X	CCV			24-AUG-2006	18:26	1.0				9	
032	235_032	X	HEX			24-AUG-2006	18:54	1.0					

Stds used: 1=S3538 2=S3537 3=S3535 4=S4052 5=S3524 6=S3511 7=S3856 8=S3643 9=S4085

SEQUENCE SUMMARY FOR 188869 PCBs Water
Curtis & Tompkins Laboratories

Sequence: 206346249 Instrument: GC06
Analytical Method: EPA 8082

Gas Chromatograph #6 ECD
SOP Version: 8082_rv.6

Begun: 28-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
001	240_001	X	PCB500_100			28-AUG-2006 10:49	1.0	1.0			1	1		
002	240_002	X	PCB500_100			28-AUG-2006 11:17	1.0	1.0	1		1	1		
003	240_003	X	HEX			28-AUG-2006 12:05	1.0							
004	240_004	MSS	188770-001		Soil	28-AUG-2006 12:33	1.0	0.6633	3		1			
005	240_005	X	HEX			28-AUG-2006 15:14	1.0							
006	240_006	X	PCB250_50			28-AUG-2006 15:41	1.0	1.0	3		1	2		
007	240_007	CCV	PCB250_50			28-AUG-2006 16:09	1.0	1.0			1	2		
008	240_008	CCV	AR2154			28-AUG-2006 17:50	1.0	1.0	1		1	3		
009	240_009	CCV	AR1248			28-AUG-2006 18:17	1.0					4		
010	240_010	X	HEX			28-AUG-2006 18:45	1.0							
011	240_011	X	QC353595		Water	28-AUG-2006 19:12	1.0	0.025			1			
012	240_012	SAMPLE	188802-021		Water	28-AUG-2006 19:40	1.0	0.02	18	4	1	sh		
013	240_013	SAMPLE	188869-001		Water	28-AUG-2006 20:08	1.0	0.02427			1			
014	240_014	SAMPLE	188878-005		Soil	28-AUG-2006 20:35	1.0	0.6743	19		1			21:PCB125=3688.19
015	240_015	SAMPLE	188878-006		Soil	28-AUG-2006 21:03	1.0	0.6711	4		1			8
016	240_016	SAMPLE	188935-001		Soil	28-AUG-2006 21:30	1.0	0.6732			1			8
017	240_017	SAMPLE	188935-002		Soil	28-AUG-2006 21:58	1.0	0.664			1			
018	240_018	SAMPLE	188947-005		Soil	28-AUG-2006 22:25	1.0	0.6651			1			
019	240_019	BS	QC353596		Water	28-AUG-2006 22:53	1.0	0.025	1	2	1			
020	240_020	BSD	QC353597		Water	28-AUG-2006 23:20	1.0	0.025	1		1			
021	240_021	X	HEX			28-AUG-2006 23:48	1.0							
022	240_022	CCV	PCB500_100			29-AUG-2006 00:15	1.0	1.0	1		1	1		
023	240_023	X	PCB500_100			29-AUG-2006 00:43	1.0	1.0	2		1	1		
024	240_024	ICAL	AR2154			29-AUG-2006 01:10	1.0	1.0			1	3		
025	240_025	CCV	AR1248			29-AUG-2006 01:38	1.0					4		
026	240_026	X	HEX			29-AUG-2006 02:05	1.0							
027	240_027	BLANK	QC353680		Soil	29-AUG-2006 02:33	1.0	0.675			1			
028	240_028	SAMPLE	188947-006		Soil	29-AUG-2006 03:00	1.0	0.6757			1			
029	240_029	SAMPLE	188437-009		Soil	29-AUG-2006 03:28	20.0	0.6664	18		1	sh		
030	240_030	MSS	188935-008		Soil	29-AUG-2006 03:56	1.0	0.6727			1			

Stds used: 1=S3524 2=S4052 3=S4085 4=S4185 5=S3535
Flags used: sh=out of sample hold

SEQUENCE SUMMARY FOR 188869 PCBs Water
Curtis & Tompkins Laboratories

Sequence: 206346249 Instrument: GC06
Analytical Method: EPA 8082

Gas Chromatograph #6 ECD
SOP Version: 8082_rv.6

Begun: 28-AUG-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used	>LR
031	240_031	MSS	188935-019	116835	Soil	29-AUG-2006 04:23	1.0	0.6579	1	1	1		
032	240_032	LCS	QC353686	116835	Soil	29-AUG-2006 04:51	1.0	0.6696	1	1	1		
033	240_033	MS	QC353687	116835	Soil	29-AUG-2006 05:18	1.0	0.6709	1	1	1		
034	240_034	MSD	QC353688	116835	Soil	29-AUG-2006 05:46	1.0	0.6725	1	1	1		
035	240_035	MS	QC353689	116835	Soil	29-AUG-2006 06:13	1.0	0.675	1	1	1		
036	240_036	MSD	QC353690	116835	Soil	29-AUG-2006 06:41	1.0	0.6725	1	1	1		
037	240_037	X	HEX			29-AUG-2006 07:08	1.0						
038	240_038	CCV	PCB250_50			29-AUG-2006 07:36	1.0	1.0			1	2	
039	240_039	X	PCB250_50			29-AUG-2006 08:03	1.0	1.0	3		1	2	
040	240_040	CCV	AR2154			29-AUG-2006 08:31	1.0	1.0			1	3	
041	240_041	CCV	AR1248			29-AUG-2006 08:58	1.0					4	
042	240_042	X	HEX			29-AUG-2006 09:26	1.0						
043	240_043	BLANK	QC353595	116817	Water	29-AUG-2006 11:08	1.0	0.025			1		
044	240_044	X	HEX			29-AUG-2006 11:36	1.0						
045	240_045	CCV	PCB100_20			29-AUG-2006 12:03	1.0	1.0	1	1	1	5	169

Stds used: 1=S3524 2=S4052 3=S4085 4=S4185 5=S3535
Flags used: sh=out of sample hold

REPORTING SUMMARY FOR 188869 PCBS Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
188869-001	Aroclor-1016	GC06	A	08/28/06 20:08
188869-001	Aroclor-1221	GC06	A	08/28/06 20:08
188869-001	Aroclor-1232	GC06	A	08/28/06 20:08
188869-001	Aroclor-1242	GC06	A	08/28/06 20:08
188869-001	Aroclor-1248	GC06	A	08/28/06 20:08
188869-001	Aroclor-1254	GC06	A	08/28/06 20:08
188869-001	Aroclor-1260	GC06	A	08/28/06 20:08
188869-001	TCMX	GC06	A	08/28/06 20:08
188869-001	Decachlorobiphenyl	GC06	A	08/28/06 20:08
QC353595	Aroclor-1016	GC06	A	08/29/06 11:08
QC353595	Aroclor-1221	GC06	A	08/29/06 11:08
QC353595	Aroclor-1232	GC06	A	08/29/06 11:08
QC353595	Aroclor-1242	GC06	A	08/29/06 11:08
QC353595	Aroclor-1248	GC06	A	08/29/06 11:08
QC353595	Aroclor-1254	GC06	A	08/29/06 11:08
QC353595	Aroclor-1260	GC06	A	08/29/06 11:08
QC353595	TCMX	GC06	A	08/29/06 11:08
QC353595	Decachlorobiphenyl	GC06	A	08/29/06 11:08
QC353596	Aroclor-1016	GC06	A	08/28/06 22:53
QC353596	Aroclor-1260	GC06	A	08/28/06 22:53
QC353596	TCMX	GC06	A	08/28/06 22:53
QC353596	Decachlorobiphenyl	GC06	A	08/28/06 22:53
QC353597	Aroclor-1016	GC06	A	08/28/06 23:20
QC353597	Aroclor-1260	GC06	A	08/28/06 23:20
QC353597	TCMX	GC06	A	08/28/06 23:20
QC353597	Decachlorobiphenyl	GC06	A	08/28/06 23:20

26-AUG-2006 14:34

Spike #1	ID	:	S4187A
Spike #2	ID	:	S4092A
Spike #3	ID	:	
SDP Version		:	PCB w rv7

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BK 2374
Page 5

Centrifuged for 1min; 10mL transferred to labelled vial

Mfg & Lot# / LIMS # / Time	Date/ Initials
S4187A	8/25/06
S4092A	
EM46121	
1740	
1140	8/26/06 Kp
NA	
EM46111630	
EM46137	
FS054522	
1K	

Reviewed by RL Date 26 AUG 96

Curtis & Tompkins Laboratories
MDL Summary for EPA 8082 Water
As of 09/24/06

Analyte	Units	GC06 A	GC06 B	GC16 A	GC16 B	GC22 A	GC22 B	GC25 A	GC25 B
Aroclor-1016	ug/L	0.12	0.091	0.044	0.049	0.068	0.18	0.15	0.22
Aroclor-1221	ug/L	0.29	0.43	0.29	0.43	0.20	0.48	0.23	0.49
Aroclor-1232	ug/L	0.11	0.088			0.075	0.21	0.16	0.087
Aroclor-1242	ug/L	0.15	0.16			0.24	0.22	0.14	0.15
Aroclor-1248	ug/L	0.15	0.14	0.073	0.051	0.080	0.19	0.11	0.16
Aroclor-1254	ug/L	0.086	0.11			0.11	0.14	0.12	0.13
Aroclor-1260	ug/L	0.12	0.095	0.036	0.061	0.13	0.15	0.17	0.13

POLYAROMATIC HYDROCARBONS

Polynuclear Aromatics by HPLC

Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DW082106B	Batch#:	116658
Lab ID:	188869-001	Sampled:	08/21/06
Matrix:	Water	Received:	08/21/06
Units:	ug/L	Prepared:	08/22/06
Diln Fac:	1.000	Analyzed:	08/25/06

Analyte	Result	RL	MDL
Naphthalene	ND	0.95	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.95	
Fluorene	ND	0.95	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	ND	0.38	0.01
Pyrene	ND	0.19	
Benzo (a) anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo (b) fluoranthene	ND	0.19	
Benzo (k) fluoranthene	ND	0.10	
Benzo (a) pyrene	ND	0.10	
Dibenz (a, h) anthracene	ND	0.19	
Benzo (g, h, i) perylene	ND	0.19	
Indeno (1, 2, 3-cd) pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	90	65-135
1-Methylnaphthalene (F)	91	65-135

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC352946	Batch#:	116658
Matrix:	Water	Prepared:	08/22/06
Units:	ug/L	Analyzed:	08/24/06

Analyte	Result	RL	MDL
Naphthalene	ND	1.0	
Acenaphthylene	ND	2.0	
Acenaphthene	ND	1.0	
Fluorene	ND	1.0	
Phenanthrene	ND	0.50	
Anthracene	ND	0.50	0.02
Fluoranthene	ND	0.40	0.01
Pyrene	ND	0.20	
Benzo (a) anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo (b) fluoranthene	ND	0.20	
Benzo (k) fluoranthene	ND	0.10	
Benzo (a) pyrene	ND	0.10	
Dibenz (a, h) anthracene	ND	0.20	
Benzo (g, h, i) perylene	ND	0.20	
Indeno (1, 2, 3-cd) pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	88	65-135
1-Methylnaphthalene (F)	89	65-135

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC352947	Batch#:	116658
Matrix:	Water	Prepared:	08/22/06
Units:	ug/L	Analyzed:	08/24/06

Analyte	Spiked	Result	%REC	Limits
Naphthalene	10.00	8.668	87	50-135
Fluorene	2.000	1.786	89	65-135
Pyrene	1.000	0.9056	91	65-135
Benzo (a) pyrene	1.000	0.8693	87	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	88	65-135
1-Methylnaphthalene (F)	90	65-135

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	1349MW100	Batch#:	116658
MSS Lab ID:	188802-001	Sampled:	08/16/06
Matrix:	Water	Received:	08/17/06
Units:	ug/L	Prepared:	08/22/06
Diln Fac:	1.000	Analyzed:	08/24/06

Type: MS Lab ID: QC352948

Analyte	MSS Result	Spiked	Result	%REC	Limits
Naphthalene	<0.09154	9.434	0	0 *	50-135
Fluorene	12.92	1.887	21.22 >LR	440 NM	65-135
Pyrene	1.527	0.9434	1.698	18 *	65-135
Benzo(a)pyrene	<0.02358	0.9434	0.2358	25 *	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	174 *	65-135
1-Methylnaphthalene (F)	126	65-135

Type: MSD Lab ID: QC352949

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Naphthalene	9.434	0	0 *	50-135	NC	35
Fluorene	1.887	16.56	193 NM	65-135	NC	35
Pyrene	0.9434	2.935	149 *	65-135	53 *	35
Benzo(a)pyrene	0.9434	0.2432	26 *	65-135	3	35

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	204 *	65-135
1-Methylnaphthalene (F)	141 *	65-135

*= Value outside of QC limits; see narrative

NC= Not Calculated

NM= Not Meaningful: Sample concentration > 4X spike concentration

>LR= Response exceeds instrument's linear range

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188869 HPLC Water: EPA 8310

Inst : HPLC04
 Calnum : 296199754001
 Units : ug/L

Date : 18-MAY-2006 19:52
 X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	13800006	296199754006	18-MAY-2006	19:52	S3065
L2	13800007	296199754007	18-MAY-2006	20:24	S3064
L3	13800008	296199754008	18-MAY-2006	20:56	S3063
L4	13800009	296199754009	18-MAY-2006	21:27	S3062
L5	13800010	296199754010	18-MAY-2006	21:59	S3061
L6	13800011	296199754011	18-MAY-2006	22:31	S3060
L7	13800012	296199754012	18-MAY-2006	23:02	S3059

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	avg	r ²	MR ²	MRSD	Fig
Naphthalene	1	0.0127	0.0132	0.0131	0.0132	0.0131	0.0130	0.0129	LINR	-52.228	77.4002		0.0130	1.000	0.99	20	
Acenaphthylene	1	0.0092	0.0093	0.0094	0.0095	0.0094	0.0092	0.0091	LINR	-269.75	109.800		0.0093	1.000	0.99	20	
Acenaphthene	1	0.0052	0.0052	0.0052	0.0054	0.0053	0.0052	0.0051	LINR	-189.44	195.810		0.0052	1.000	0.99	20	
Fluorene	1	0.0627	0.0624	0.0622	0.0635	0.0628	0.0627	0.0625	LINR	-5.8158	16.0057		0.0627	1.000	0.99	20	
Phenanthrene	1	0.1770	0.1795	0.1810	0.1828	0.1804	0.1795	0.1796	LINR	-2.6724	5.57221		0.1800	1.000	0.99	20	
Anthracene	1	0.4152	0.4253	0.4257	0.4310	0.4281	0.4249	0.4232	LINR	-4.5965	2.36313		0.4248	1.000	0.99	20	
Fluoranthene	1	0.0412	0.0411	0.0410	0.0412	0.0406	0.0406	0.0407	LINR	-3.4660	24.6116		0.0409	1.000	0.99	20	
Pyrene	1	0.0368	0.0344	0.0333	0.0343	0.0336	0.0336	0.0338	LINR	-0.0362	29.6394		0.0342	1.000	0.99	20	
Benzo(a)anthracene	1	0.0900	0.0968	0.0940	0.0956	0.0948	0.0945	0.0948	LINR	0.57638	10.5497		0.0943	1.000	0.99	20	
Chrysene	1	0.1270	0.1360	0.1344	0.1356	0.1346	0.1336	0.1335	LINR	-3.4437	7.49542		0.1335	1.000	0.99	20	
Benzo(b)fluoranthene	1	0.1037	0.1043	0.1063	0.1075	0.1067	0.1065	0.1063	LINR	-2.9110	9.40726		0.1059	1.000	0.99	20	
Benzo(k)fluoranthene	1	0.0788	0.0790	0.0823	0.0837	0.0837	0.0836	0.0835	LINR	1.73999	11.9711		0.0821	1.000	0.99	20	
Benzo(a)pyrene	1	0.0878	0.0823	0.0860	0.0884	0.0876	0.0881	0.0886	LINR	6.09778	11.2895		0.0870	1.000	0.99	20	
Dibenz(a,h)anthracene	1	0.0186	0.0202	0.0213	0.0218	0.0220	0.0221	0.0223	LINR	23.8574	44.7933		0.0212	1.000	0.99	20	
Benzo(g,h,i)perylene	1	0.0317	0.0340	0.0353	0.0359	0.0358	0.0363	0.0368	LINR	28.4784	27.1931		0.0351	1.000	0.99	20	
Indeno(1,2,3-cd)pyrene	1	0.0880	0.0965	0.0978	0.1005	0.0999	0.1003	0.1005	LINR	4.90163	9.94487		0.0976	1.000	0.99	20	
1-Methylnaphthalene (UV)	1	0.0086	0.0086	0.0086	0.0087	0.0085	0.0084	0.0084	LINR	-341.04	119.464		0.0085	1.000	0.99	20	
Acenaphthylene	2	0.0277	0.0280	0.0280	0.0283	0.0280	0.0278	0.0278	LINR	-84.965	36.0430		0.0279	1.000	0.99	20	
1-Methylnaphthalene (UV)	2	0.0030	0.0031	0.0031	0.0031	0.0031	0.0030	0.0030	LINR	-288.17	330.724		0.0031	1.000	0.99	20	
Naphthalene	3	0.0110	0.0111	0.0111	0.0112	0.0110	0.0110	0.0109	LINR	-50.394	91.4049		0.0110	1.000	0.99	20	
Acenaphthene	3	0.0234	0.0236	0.0235	0.0239	0.0233	0.0231	0.0226	LINR	-178.43	44.2064		0.0233	1.000	0.99	20	
Fluorene	3	0.1279	0.1273	0.1274	0.1284	0.1265	0.1243	0.1225	LINR	-32.341	8.16717		0.1263	1.000	0.99	20	
Phenanthrene	3	0.1354	0.1366	0.1364	0.1377	0.1361	0.1356	0.1354	LINR	-3.3588	7.38874		0.1362	1.000	0.99	20	
Anthracene	3	0.4199	0.4224	0.4266	0.4322	0.4290	0.4269	0.4268	LINR	-1.7330	2.34358		0.4263	1.000	0.99	20	
Fluoranthene	3	0.0382	0.0384	0.0386	0.0392	0.0388	0.0387	0.0387	LINR	-1.5194	25.8283		0.0387	1.000	0.99	20	
Pyrene	3	0.1308	0.1311	0.1332	0.1355	0.1333	0.1340	0.1343	LINR	1.83815	7.44901		0.1332	1.000	0.99	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	%RSD	WtR ²	WtRSD	Fig
Benzo(a)anthracene	3	0.1489	0.1515	0.1523	0.1536	0.1520	0.1512	0.1508	LINR	-3.9150	6.63150		0.1515	1.000	0.99	20		
Chrysene	3	0.1787	0.1811	0.1815	0.1828	0.1806	0.1793	0.1780	LINR	-7.8225	5.62009		0.1803	1.000	0.99	20		
Benzo(b)fluoranthene	3	0.0628	0.0642	0.0647	0.0654	0.0646	0.0644	0.0641	LINR	-9.1941	15.6059		0.0643	1.000	0.99	20		
Benzo(k)fluoranthene	3	0.3857	0.3920	0.3949	0.3978	0.3926	0.3879	0.3820	LINR	-13.766	2.61710		0.3904	1.000	0.99	20		
Benzo(a)pyrene	3	0.2089	0.2127	0.2141	0.2165	0.2143	0.2129	0.2128	LINR	-3.0160	4.70028		0.2132	1.000	0.99	20		
Dibenz(a,h)anthracene	3	0.0303	0.0301	0.0308	0.0318	0.0315	0.0316	0.0317	LINR	9.18553	31.5065		0.0311	1.000	0.99	20		
Benzo(g,h,i)perylene	3	0.0608	0.0590	0.0602	0.0618	0.0617	0.0624	0.0631	LINR	24.3223	15.8303		0.0613	1.000	0.99	20		
Indeno(1,2,3-cd)pyrene	3	0.0962	0.0968	0.0965	0.0983	0.0975	0.0975	0.0971	LINR	-1.8455	10.2902		0.0971	1.000	0.99	20		
1-Methylnaphthalene (F)	3	0.0122	0.0123	0.0123	0.0124	0.0122	0.0120	0.0118	LINR	-661.87	84.7083		0.0122	1.000	0.99	20		

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Calibration Table

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NEW ICAL FOLLOWING REPLACEMENT OF UV LAMP. *gm*
 HPLC04 METHOD 8310

22 MAY 2006

Calib. Data Modified : 5/22/2006 4:16:03 PM

Calculate : External Standard
 Based on : Peak Area

Rel. Reference Window : 1.000 %
 Abs. Reference Window : 0.200 min
 Rel. Non-ref. Window : 1.000 %
 Abs. Non-ref. Window : 0.250 min
 Do not use Multiplier & Dilution Factor with ISTDs
 Uncalibrated Peaks : not reported
 Partial Calibration : Yes, identified peaks are recalibrated
 Correct All Ret. Times: No, only for identified peaks

man 5/23/06

Curve Type : Linear
 Origin : Ignored
 Weight : Equal

Recalibration Settings:
 Average Response : Average all calibrations
 Average Retention Time: Floating Average New 75%

Calibration Report Options :

Printout of recalibrations within a sequence:

Calibration Table after Recalibration

Normal Report after Recalibration

If the sequence is done with bracketing:

Results of first cycle (ending previous bracket)

Signal 1: DAD1 A, Sig=254,4 Ref=480,80
 Signal 2: DAD1 B, Sig=305,4 Ref=480,80
 Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime	Lvl	Amount	Area	Amt/Area	Ref Grp Name
[min]	Sig	[ug/l]			
4.752	1	1 500.00000	6.35383	78.69275	Naphthalene
	2	1000.00000	13.15704	76.00496	
	3	2500.00000	32.77972	76.26668	
	4	5000.00000	66.00784	75.74857	
	5	1.00000e4	130.71696	76.50116	
	6	2.50000e4	323.77454	77.21423	
	7	5.00000e4	646.40033	77.35145	
4.790	3	1 500.00000	5.48376	91.17835	Naphthalene
	2	1000.00000	11.08296	90.22864	
	3	2500.00000	27.68407	90.30465	
	4	5000.00000	55.85367	89.51963	
	5	1.00000e4	110.44406	90.54357	
	6	2.50000e4	274.47531	91.08287	
	7	5.00000e4	547.22638	91.36986	
6.004	1	1 1000.00000	9.18307	108.89603	Acenaphthylene
	2	2000.00000	18.68859	107.01715	
	3	5000.00000	46.93712	106.52549	
	4	1.00000e4	94.78723	105.49944	
	5	2.00000e4	187.08742	106.90190	
	6	5.00000e4	462.20984	108.17598	
	7	1.00000e5	910.50854	109.82873	
6.005	2	1 1000.00000	27.65381	36.16138	Acenaphthylene
	2	2000.00000	56.04304	35.68686	
	3	5000.00000	140.16672	33.817181	

RetTime [min]	Lvl Sig	Amount [ug/l]	Area	Amt/Area	Ref Grp Name
		4 1.00000e4	282.77841	35.36338	
		5 2.00000e4	559.61334	35.73896	
		6 5.00000e4	1390.57104	35.95645	
		7 1.00000e5	2775.66528	36.02740	
6.773	1	1 2000.00000	17.19066	116.34227	1-Methylnaphthalene (UV)
		2 4000.00000	34.41462	116.22969	
		3 1.00000e4	85.94093	116.35899	
		4 2.00000e4	173.09207	115.54544	
		5 4.00000e4	340.84924	117.35394	
		6 1.00000e5	839.48529	119.12061	
		7 2.00000e5	1676.38977	119.30400	
6.774	2	1 2000.00000	6.06443	329.79188	1-Methylnaphthalene (UV)
		2 4000.00000	12.31411	324.83055	
		3 1.00000e4	30.67977	325.94769	
		4 2.00000e4	61.92251	322.98433	
		5 4.00000e4	122.83121	325.65012	
		6 1.00000e5	304.35931	328.55903	
		7 2.00000e5	604.82648	330.67335	
6.811	3	1 2000.00000	24.40978	81.93437	1-Methylnaphthalene (F)
		2 4000.00000	49.21495	81.27612	
		3 1.00000e4	122.94567	81.33674	
		4 2.00000e4	247.30377	80.87220	
		5 4.00000e4	488.69351	81.85089	
		6 1.00000e5	1199.20923	83.38828	
		7 2.00000e5	2361.67969	84.68549	
7.233	1	1 500.00000	5.96680	83.79698	2-Methylnaphthalene
		2 1000.00000	11.99022	83.40130	
		3 2500.00000	29.85911	83.72654	
		4 5000.00000	60.88431	82.12296	
		5 1.00000e4	120.14920	83.22985	
		6 2.50000e4	297.53644	84.02332	
7.269	3	1 500.00000	7.74911	64.52351	2-Methylnaphthalene
		2 1000.00000	15.52372	64.41757	
		3 2500.00000	38.81281	64.41172	
		4 5000.00000	78.28068	63.87272	
		5 1.00000e4	154.78474	64.60585	
		6 2.50000e4	382.29327	65.39482	
7.613	1	1 500.00000	2.59693	192.53514	Acenaphthene
		2 1000.00000	5.17957	193.06637	
		3 2500.00000	13.08239	191.09658	
		4 5000.00000	26.89059	185.93866	
		5 1.00000e4	53.03941	188.53907	
		6 2.50000e4	131.16444	190.60043	
		7 5.00000e4	254.87729	196.17283	
7.651	3	1 500.00000	11.70526	42.71583	Acenaphthene
		2 1000.00000	23.56936	42.42797	
		3 2500.00000	58.84945	42.48128	
		4 5000.00000	119.32713	41.90162	
		5 1.00000e4	233.17419	42.88639	
		6 2.50000e4	577.51837	43.28867	
		7 5.00000e4	1130.49866	44.22827	
8.138	1	1 100.00000	6.27447	15.93759	Fluorene
		2 200.00000	12.48572	16.01830	
		3 500.00000	31.10701	16.07355	
		4 1000.00000	63.54686	15.73642	
		5 2000.00000	125.67238	15.91440	
		6 5000.00000	313.25665	15.96135	
		7 1.00000e4	624.78467	16.00551	
8.176	3	1 100.00000	12.79477	7.81570	Fluorene
		2 200.00000	25.46982	7.85243	
		3 500.00000	63.67719	7.85210	
		4 1000.00000	128.43744	7.78589	
		5 2000.00000	252.91112	7.90792	

RetTime [min]	Lvl Sig	Amount [ug/l]	Area	Amt/Area	Ref Grp Name
9.260	1	6 5000.00000	621.43634	8.04588	
		7 1.00000e4	1224.89038	8.16400	
	1	1 50.00000	8.85156	5.64872	Phenanthrene
	2	2 100.00000	17.94612	5.57224	
	3	3 250.00000	45.25932	5.52372	
	4	4 500.00000	91.37579	5.47191	
	5	5 1000.00000	180.36794	5.54422	
	6	6 2500.00000	448.64795	5.57230	
	7	7 5000.00000	897.85052	5.56886	
9.297	3	1 50.00000	6.77231	7.38301	Phenanthrene
	2	2 100.00000	13.66179	7.31969	
	3	3 250.00000	34.08815	7.33393	
	4	4 500.00000	68.83022	7.26425	
	5	5 1000.00000	136.09827	7.34763	
	6	6 2500.00000	338.96707	7.37535	
	7	7 5000.00000	676.96960	7.38586	
10.285	1	1 50.00000	20.75930	2.40856	Anthracene
	2	2 100.00000	42.52945	2.35131	
	3	3 250.00000	106.41690	2.34925	
	4	4 500.00000	215.48436	2.32035	
	5	5 1000.00000	428.09290	2.33594	
	6	6 2500.00000	1062.12512	2.35377	
	7	7 5000.00000	2115.98950	2.36296	
10.323	3	1 50.00000	20.99740	2.38125	Anthracene
	2	2 100.00000	42.23863	2.36750	
	3	3 250.00000	106.64105	2.34431	
	4	4 500.00000	216.08749	2.31388	
	5	5 1000.00000	428.97952	2.33111	
	6	6 2500.00000	1067.30798	2.34234	
	7	7 5000.00000	2133.87500	2.34316	
11.435	1	1 100.00000	4.12269	24.25600	Fluoranthene
	2	2 200.00000	8.21146	24.35620	
	3	3 500.00000	20.48045	24.41353	
	4	4 1000.00000	41.23911	24.24883	
	5	5 2000.00000	81.15630	24.64380	
	6	6 5000.00000	203.07642	24.62127	
	7	7 1.00000e4	406.56757	24.59616	
11.472	3	1 100.00000	3.82083	26.17234	Fluoranthene
	2	2 200.00000	7.68846	26.01302	
	3	3 500.00000	19.30645	25.89808	
	4	4 1000.00000	39.23374	25.48827	
	5	5 2000.00000	77.62599	25.76457	
	6	6 5000.00000	193.25951	25.87195	
	7	7 1.00000e4	387.35989	25.81579	
12.208	1	1 50.00000	1.83995	27.17468	Pyrene
	2	2 100.00000	3.43952	29.07386	
	3	3 250.00000	8.33079	30.00916	
	4	4 500.00000	17.14116	29.16955	
	5	5 1000.00000	33.56740	29.79081	
	6	6 2500.00000	83.91055	29.79363	
	7	7 5000.00000	168.92415	29.59908	
12.245	3	1 50.00000	6.53807	7.64751	Pyrene
	2	2 100.00000	13.11404	7.62541	
	3	3 250.00000	33.29245	7.50921	
	4	4 500.00000	67.75372	7.37967	
	5	5 1000.00000	133.33412	7.49996	
	6	6 2500.00000	334.87701	7.46543	
	7	7 5000.00000	671.27612	7.44850	
15.039	1	1 50.00000	4.49803	11.11598	Benzo(a)anthracene
	2	2 100.00000	9.67921	10.33142	
	3	3 250.00000	23.48936	10.64311	
	4	4 500.00000	47.78680	10.46314	
	5	5 1000.00000	94.79131	10.54949	

RetTime [min]	Lvl Sig	Amount [ug/l]	Area	Amt/Area	Ref Grp Name
15.077	3	6 2500.00000	236.18423	10.58496	
		7 5000.00000	474.20624	10.54394	
	1	1 50.00000	7.44724	6.71390	Benzo(a)anthracene
	2	2 100.00000	15.15430	6.59879	
	3	3 250.00000	38.07673	6.56569	
	4	4 500.00000	76.80959	6.50960	
	5	5 1000.00000	151.99316	6.57924	
	6	6 2500.00000	377.89438	6.61561	
	7	7 5000.00000	754.23340	6.62925	
15.539	1	1 50.00000	6.35061	7.87325	Chrysene
	2	2 100.00000	13.59609	7.35506	
	3	3 250.00000	33.59677	7.44119	
	4	4 500.00000	67.79062	7.37565	
	5	5 1000.00000	134.58353	7.43033	
	6	6 2500.00000	334.09467	7.48291	
	7	7 5000.00000	667.30255	7.49285	
15.577	3	1 50.00000	8.93709	5.59467	Chrysene
	2	2 100.00000	18.11283	5.52095	
	3	3 250.00000	45.37164	5.51005	
	4	4 500.00000	91.38473	5.47137	
	5	5 1000.00000	180.56219	5.53826	
	6	6 2500.00000	448.13257	5.57871	
	7	7 5000.00000	889.81403	5.61915	
17.772	1	1 100.00000	10.36747	9.64555	Benzo(b)fluoranthene
	2	2 200.00000	20.85804	9.58863	
	3	3 500.00000	53.17228	9.40340	
	4	4 1000.00000	107.52938	9.29978	
	5	5 2000.00000	213.44913	9.36991	
	6	6 5000.00000	532.37317	9.39191	
	7	7 1.00000e4	1062.87402	9.40845	
17.810	3	1 100.00000	6.27574	15.93439	Benzo(b)fluoranthene
	2	2 200.00000	12.83850	15.57814	
	3	3 500.00000	32.34958	15.45615	
	4	4 1000.00000	65.39377	15.29198	
	5	5 2000.00000	129.20119	15.47973	
	6	6 5000.00000	322.01157	15.52739	
	7	7 1.00000e4	640.72485	15.60732	
18.726	1	1 50.00000	3.94109	12.68686	Benzo(k)fluoranthene
	2	2 100.00000	7.89588	12.66483	
	3	3 250.00000	20.57043	12.15337	
	4	4 500.00000	41.83699	11.95115	
	5	5 1000.00000	83.72203	11.94429	
	6	6 2500.00000	208.88004	11.96859	
	7	7 5000.00000	417.35922	11.98009	
18.764	3	1 50.00000	19.28471	2.59273	Benzo(k)fluoranthene
	2	2 100.00000	39.20409	2.55075	
	3	3 250.00000	98.73430	2.53205	
	4	4 500.00000	198.87831	2.51410	
	5	5 1000.00000	392.59399	2.54716	
	6	6 2500.00000	969.84100	2.57774	
	7	7 5000.00000	1910.04431	2.61774	
19.676	1	1 50.00000	4.38903	11.39205	Benzo(a)pyrene
	2	2 100.00000	8.22974	12.15105	
	3	3 250.00000	21.51167	11.62160	
	4	4 500.00000	44.20454	11.31105	
	5	5 1000.00000	87.60189	11.41528	
	6	6 2500.00000	220.13969	11.35643	
	7	7 5000.00000	442.77490	11.29242	
19.714	3	1 50.00000	10.44253	4.78811	Benzo(a)pyrene
	2	2 100.00000	21.26584	4.70238	
	3	3 250.00000	53.53555	4.66979	
	4	4 500.00000	108.22565	4.61998	
	5	5 1000.00000	214.33957	4.66549	

RetTime	Lvl	Amount	Area	Amt/Area	Ref Grp Name
[min]	Sig	[ug/l]			
----- ----- ----- ----- ----- -----					
		6 2500.00000	532.33307	4.69631	
		7 5000.00000	1064.23083	4.69823	
21.294	1	1 100.00000	1.86005	53.76185	Dibenz(a,h)anthracene
		2 200.00000	4.03761	49.53425	
		3 500.00000	10.67297	46.84733	
		4 1000.00000	21.81421	45.84168	
		5 2000.00000	44.01789	45.43607	
		6 5000.00000	110.60422	45.20623	
		7 1.00000e4	222.97006	44.84907	
21.332	3	1 100.00000	3.03149	32.98710	Dibenz(a,h)anthracene
		2 200.00000	6.02086	33.21784	
		3 500.00000	15.37518	32.51994	
		4 1000.00000	31.83378	31.41317	
		5 2000.00000	63.06483	31.71339	
		6 5000.00000	158.06801	31.63195	
		7 1.00000e4	317.26797	31.51910	
22.074	1	1 100.00000	3.17288	31.51711	Benzo(g,h,i)perylene
		2 200.00000	6.79410	29.43731	
		3 500.00000	17.66954	28.29729	
		4 1000.00000	35.90152	27.85397	
		5 2000.00000	71.56614	27.94618	
		6 5000.00000	181.34886	27.57117	
		7 1.00000e4	367.56784	27.20586	
22.111	3	1 100.00000	6.08162	16.44298	Benzo(g,h,i)perylene
		2 200.00000	11.79889	16.95075	
		3 500.00000	30.11854	16.60107	
		4 1000.00000	61.84187	16.17027	
		5 2000.00000	123.34122	16.21518	
		6 5000.00000	312.19437	16.01566	
		7 1.00000e4	631.46387	15.83622	
22.588	1	1 50.00000	4.39845	11.36763	Indeno(1,2,3-cd)pyrene
		2 100.00000	9.64680	10.36613	
		3 250.00000	24.43922	10.22946	
		4 500.00000	50.25140	9.94997	
		5 1000.00000	99.94793	10.00521	
		6 2500.00000	250.73134	9.97083	
		7 5000.00000	502.34595	9.95330	
22.626	3	1 50.00000	4.81022	10.39454	Indeno(1,2,3-cd)pyrene
		2 100.00000	9.68046	10.33008	
		3 250.00000	24.11350	10.36764	
		4 500.00000	49.15816	10.17125	
		5 1000.00000	97.53080	10.25317	
		6 2500.00000	243.71762	10.25777	
		7 5000.00000	485.73682	10.29364	

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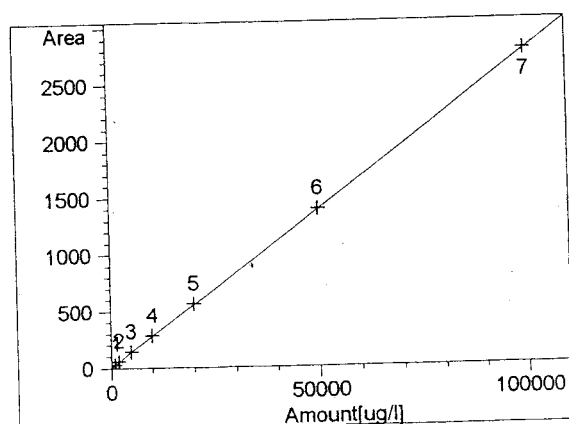
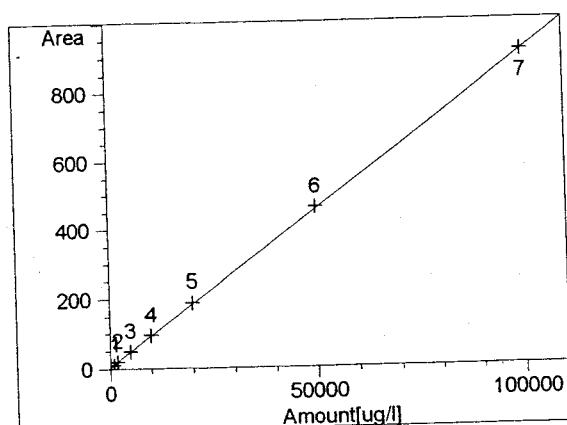
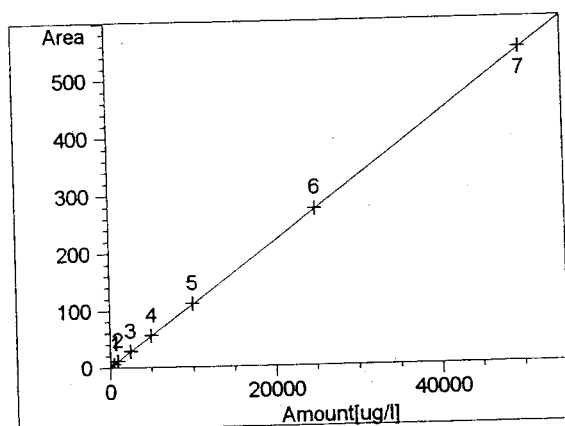
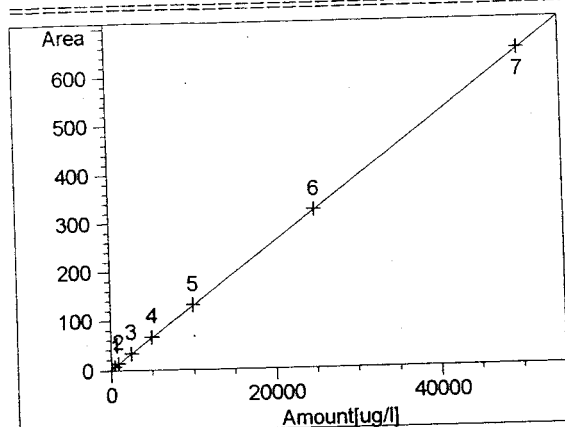
Peak Sum Table

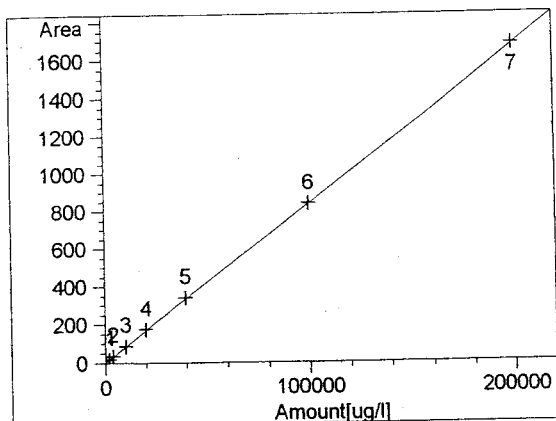
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No Entries in table

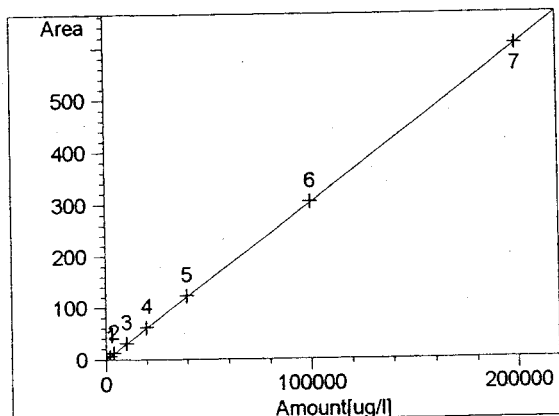
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Calibration Curves

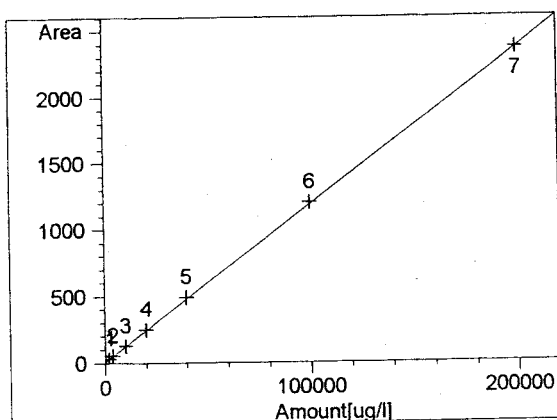




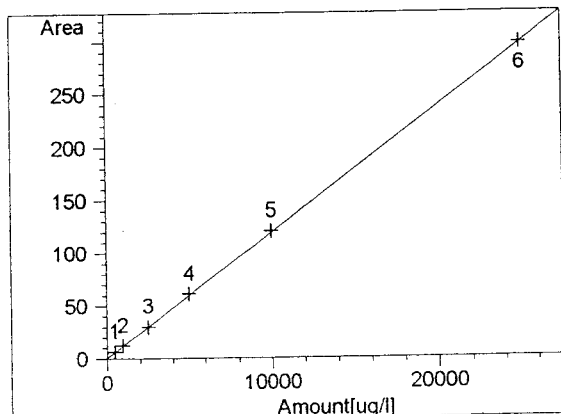
1-Methylnaphthalene (UV) at exp. RT: 6.773
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 0.99999
 Residual Std. Dev.: 2.38438
 Formula: $y = mx + b$
 m: $8.37069e-3$
 b: 2.85473
 x: Amount[ug/l]
 y: Area



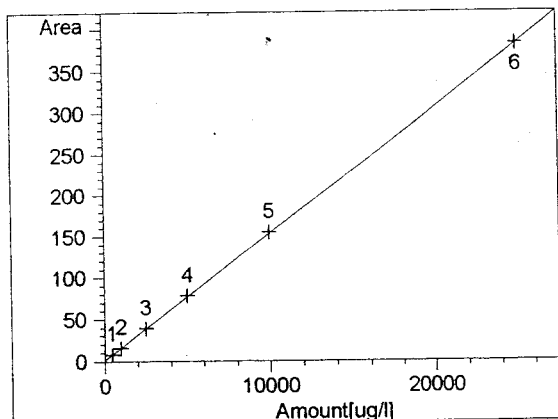
1-Methylnaphthalene (UV) at exp. RT: 6.774
 DAD1 B, Sig=305,4 Ref=480,80
 Correlation: 0.99999
 Residual Std. Dev.: 0.95514
 Formula: $y = mx + b$
 m: $3.02367e-3$
 b: $8.71326e-1$
 x: Amount[ug/l]
 y: Area



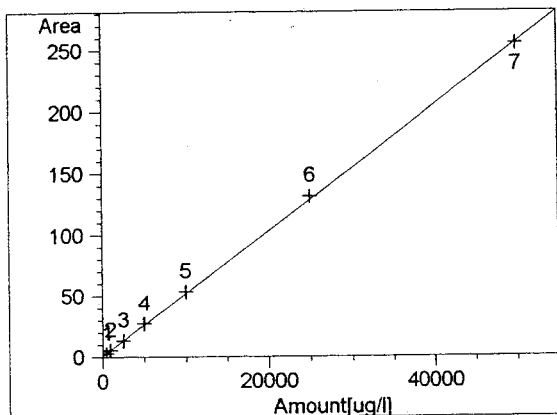
1-Methylnaphthalene (F) at exp. RT: 6.811
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99996
 Residual Std. Dev.: 8.34271
 Formula: $y = mx + b$
 m: $1.18052e-2$
 b: 7.81357
 x: Amount[ug/l]
 y: Area



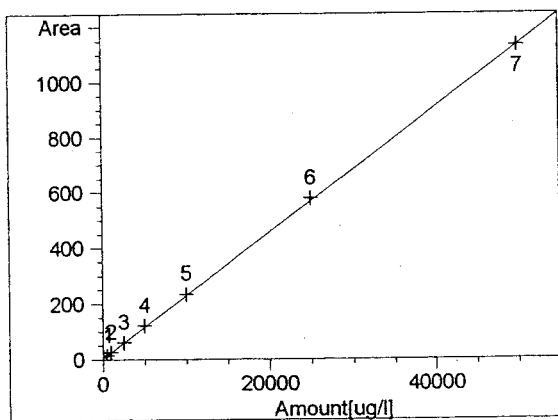
2-Methylnaphthalene at exp. RT: 7.233
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 0.99998
 Residual Std. Dev.: 0.70066
 Formula: $y = mx + b$
 m: $1.18983e-2$
 b: $4.76749e-1$
 x: Amount[ug/l]
 y: Area



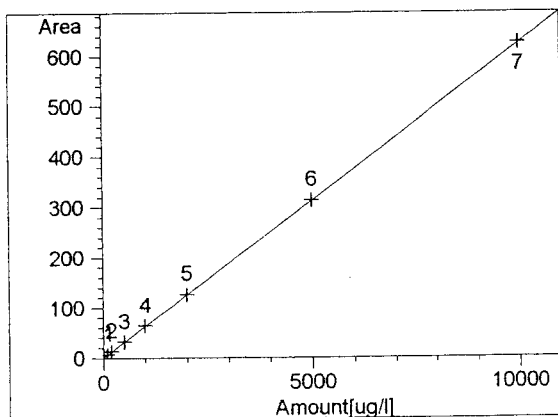
2-Methylnaphthalene at exp. RT: 7.269
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99998
 Residual Std. Dev.: 0.95275
 Formula: $y = mx + b$
 m: $1.52819e-2$
 b: $8.39982e-1$
 x: Amount[ug/l]
 y: Area



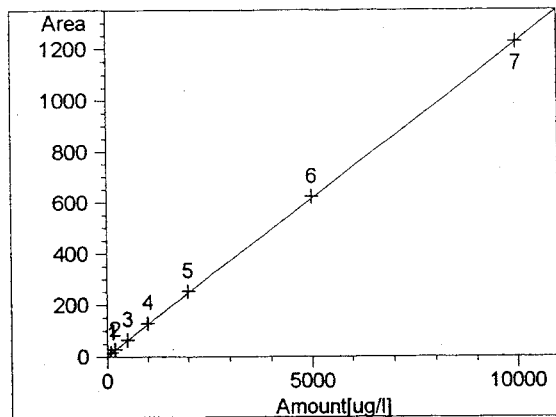
Acenaphthene at exp. RT: 7.613
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 0.99989
 Residual Std. Dev.: 1.52771
 Formula: $y = mx + b$
 m: $5.10700e-3$
 b: $9.67465e-1$
 x: Amount[ug/l]
 y: Area



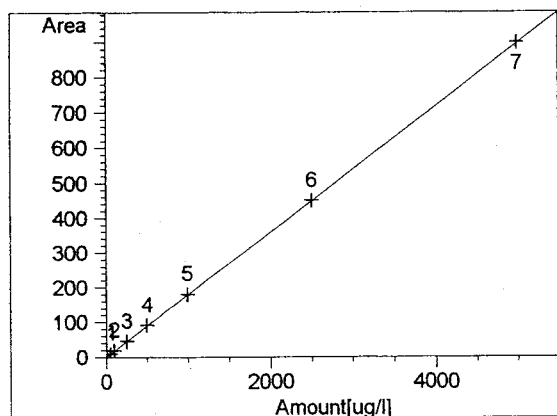
Acenaphthene at exp. RT: 7.651
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99994
 Residual Std. Dev.: 4.97058
 Formula: $y = mx + b$
 m: $2.26212e-2$
 b: 4.03630
 x: Amount[ug/l]
 y: Area



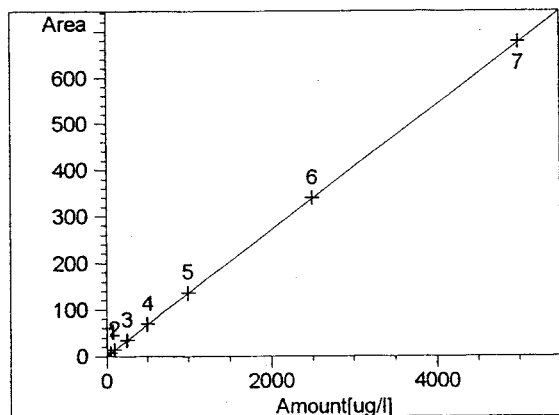
Fluorene at exp. RT: 8.138
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.54815
 Formula: $y = mx + b$
 m: $6.24779e-2$
 b: $3.63360e-1$
 x: Amount[ug/l]
 y: Area



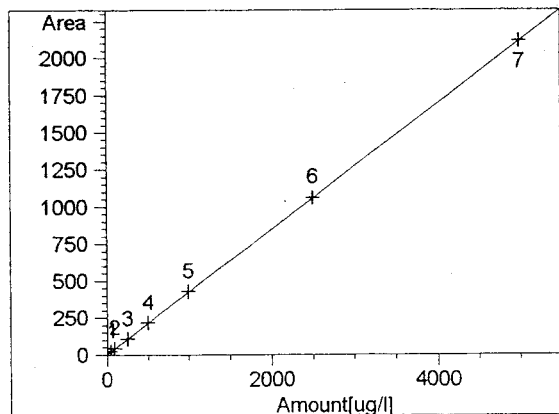
Fluorene at exp. RT: 8.176
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99997
 Residual Std. Dev.: 4.08298
 Formula: $y = mx + b$
 m: $1.22441e-1$
 b: 3.95988
 x: Amount[ug/l]
 y: Area



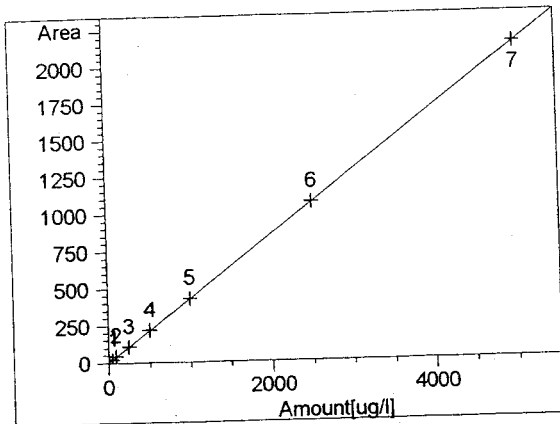
Phenanthrene at exp. RT: 9.260
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.68975
 Formula: $y = mx + b$
 m: $1.79462e-1$
 b: $4.79584e-1$
 x: Amount[ug/l]
 y: Area



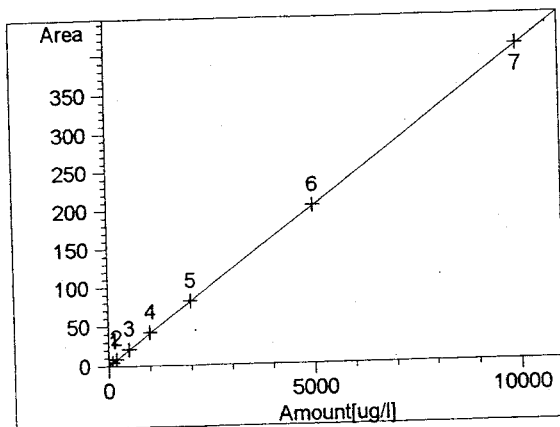
Phenanthrene at exp. RT: 9.297
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 0.44720
 Formula: $y = mx + b$
 m: $1.35341e-1$
 b: $4.54582e-1$
 x: Amount[ug/l]
 y: Area



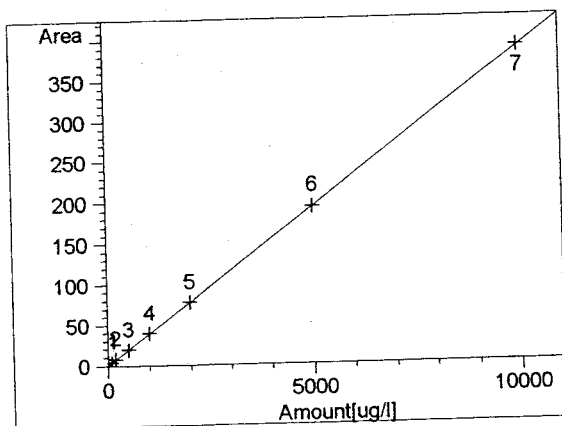
Anthracene at exp. RT: 10.285
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 2.50095
 Formula: $y = mx + b$
 m: $4.23168e-1$
 b: 1.94511
 x: Amount[ug/l]
 y: Area



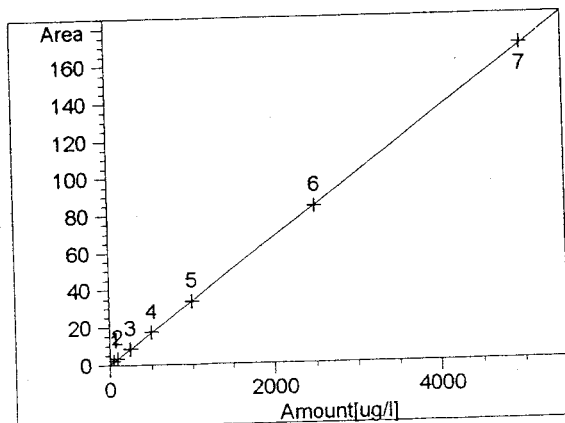
Anthracene at exp. RT: 10.323
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 1.38985
 Formula: $y = mx + b$
 m: 4.26697e-1
 b: 7.39476e-1
 x: Amount[ug/l]
 y: Area



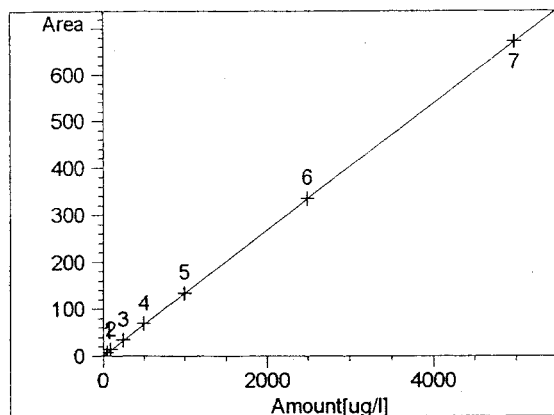
Fluoranthene at exp. RT: 11.435
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.26501
 Formula: $y = mx + b$
 m: 4.06313e-2
 b: 1.40829e-1
 x: Amount[ug/l]
 y: Area



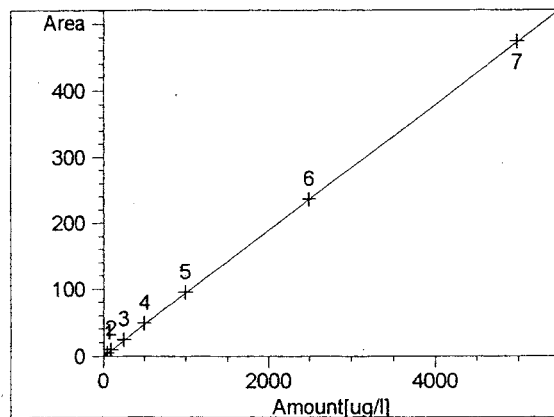
Fluoranthene at exp. RT: 11.472
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 0.29311
 Formula: $y = mx + b$
 m: 3.87172e-2
 b: 5.88250e-2
 x: Amount[ug/l]
 y: Area



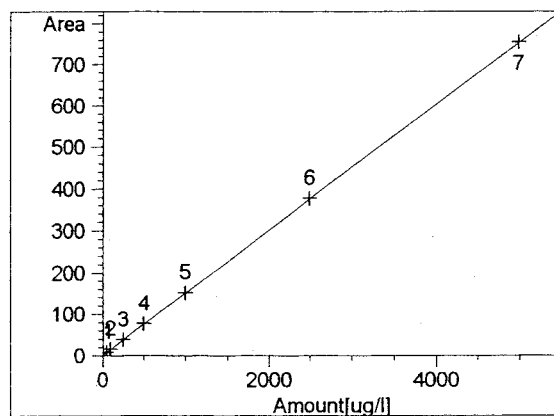
Pyrene at exp. RT: 12.208
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 0.99999
 Residual Std. Dev.: 0.27756
 Formula: $y = mx + b$
 m: 3.37388e-2
 b: 1.22142e-3
 x: Amount[ug/l]
 y: Area



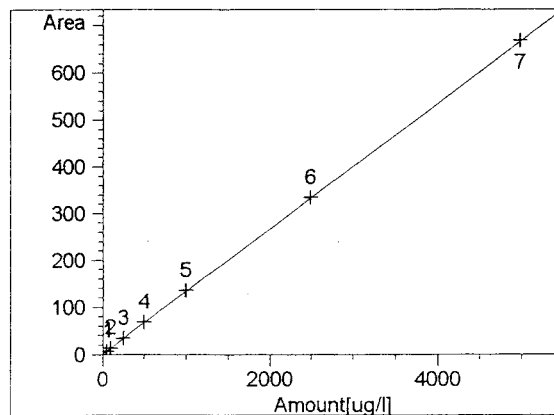
Pyrene at exp. RT: 12.245
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 0.55665
 Formula: $y = mx + b$
 m: $1.34246e-1$
 b: $-2.46762e-1$
 x: Amount[ug/l]
 y: Area



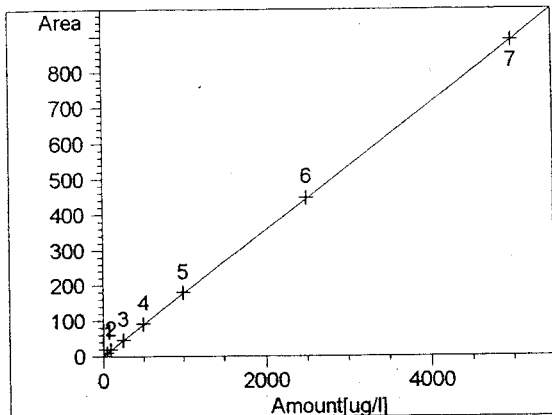
Benzo(a)anthracene at exp. RT: 15.039
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.43917
 Formula: $y = mx + b$
 m: $9.47891e-2$
 b: $-5.46320e-2$
 x: Amount[ug/l]
 y: Area



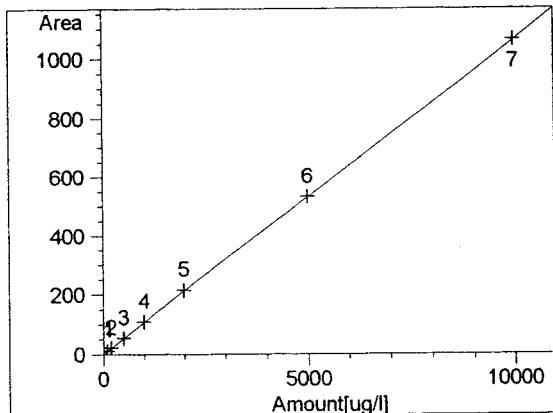
Benzo(a)anthracene at exp. RT: 15.077
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 0.63754
 Formula: $y = mx + b$
 m: $1.50795e-1$
 b: $5.90358e-1$
 x: Amount[ug/l]
 y: Area



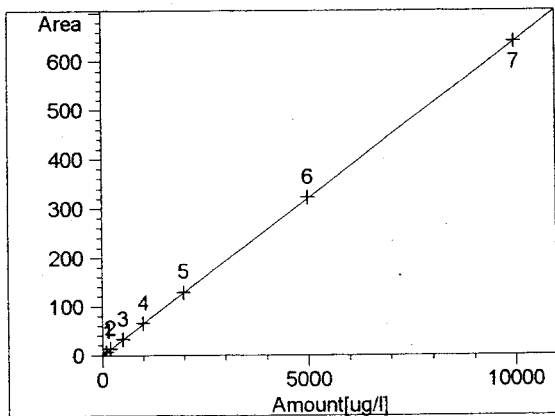
Chrysene at exp. RT: 15.539
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.57474
 Formula: $y = mx + b$
 m: $1.33415e-1$
 b: $4.59439e-1$
 x: Amount[ug/l]
 y: Area



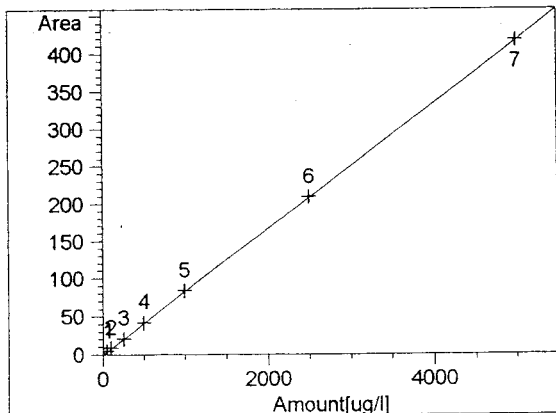
Chrysene at exp. RT: 15.577
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99999
 Residual Std. Dev.: 1.48324
 Formula: $y = mx + b$
 m: 1.77933e-1
 b: 1.39188
 x: Amount[ug/l]
 y: Area



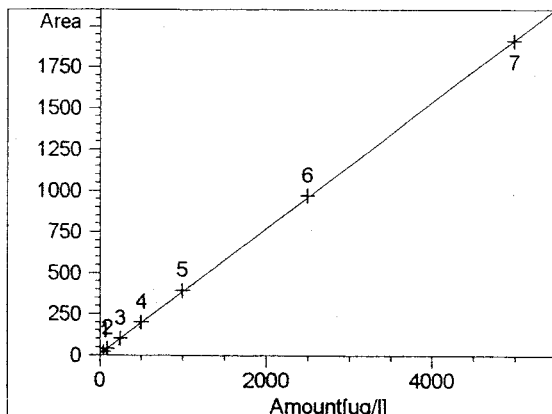
Benzo(b)fluoranthene at exp. RT: 17.772
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.71561
 Formula: $y = mx + b$
 m: 1.06301e-1
 b: 3.09438e-1
 x: Amount[ug/l]
 y: Area



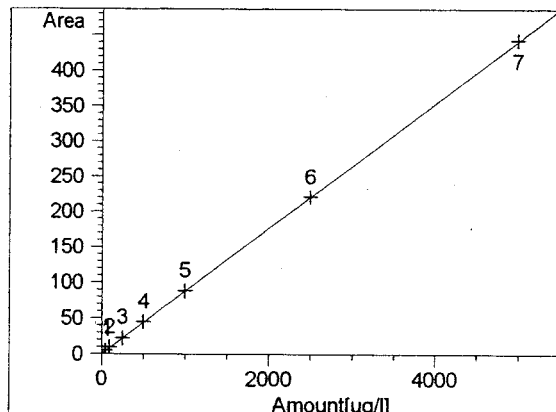
Benzo(b)fluoranthene at exp. RT: 17.810
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 0.79187
 Formula: $y = mx + b$
 m: 6.40783e-2
 b: 5.89141e-1
 x: Amount[ug/l]
 y: Area



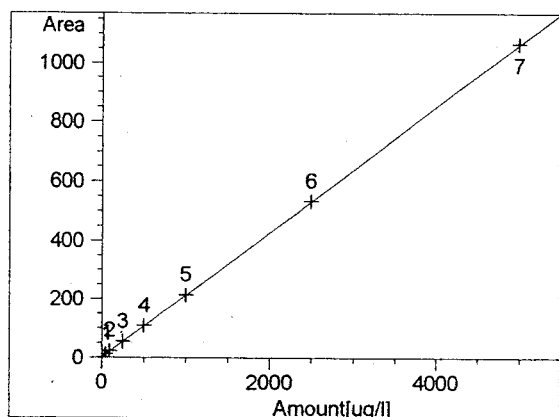
Benzo(k)fluoranthene at exp. RT: 18.726
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.26640
 Formula: $y = mx + b$
 m: 8.35344e-2
 b: -1.45349e-1
 x: Amount[ug/l]
 y: Area



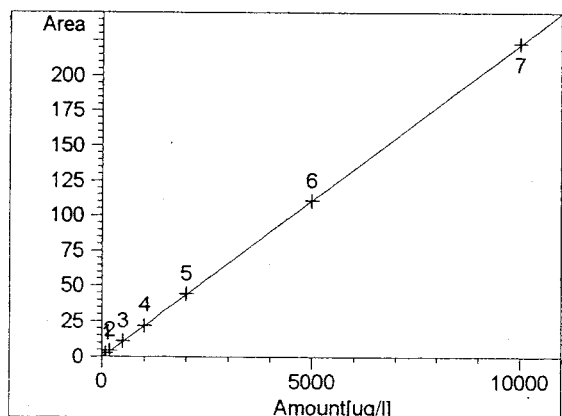
Benzo(k)fluoranthene at exp. RT: 18.764
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99997
 Residual Std. Dev.: 6.35516
 Formula: $y = mx + b$
 m: $3.82102e-1$
 b: 5.25986
 x: Amount[ug/l]
 y: Area



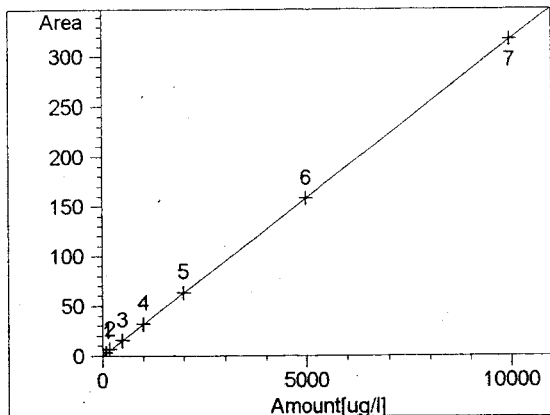
Benzo(a)pyrene at exp. RT: 19.676
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.53487
 Formula: $y = mx + b$
 m: $8.85779e-2$
 b: $-5.40129e-1$
 x: Amount[ug/l]
 y: Area



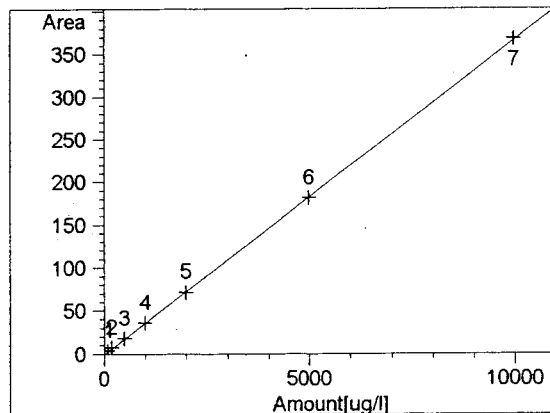
Benzo(a)pyrene at exp. RT: 19.714
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 0.85195
 Formula: $y = mx + b$
 m: $2.12753e-1$
 b: $6.41655e-1$
 x: Amount[ug/l]
 y: Area



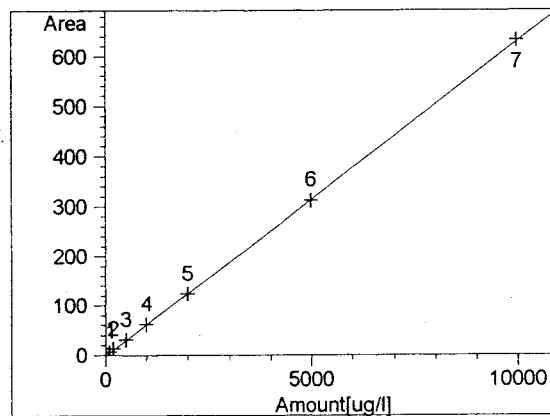
Dibenz(a,h)anthracene at exp. RT: 21.294
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.26499
 Formula: $y = mx + b$
 m: $2.23247e-2$
 b: $-5.32610e-1$
 x: Amount[ug/l]
 y: Area



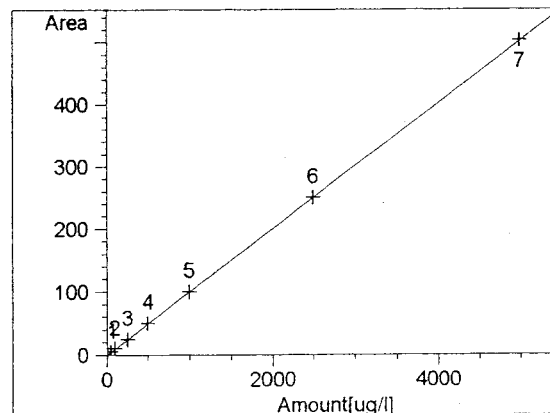
Dibenzo(a,h)anthracene at exp. RT: 21.332
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 1.00000
 Residual Std. Dev.: 0.27198
 Formula: $y = mx + b$
 m: $3.17395e-2$
 b: $-2.91544e-1$
 x: Amount[ug/l]
 y: Area



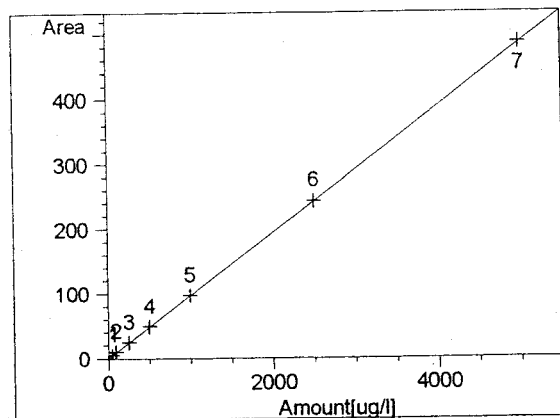
Benzo(g,h,i)perylene at exp. RT: 22.074
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 0.99998
 Residual Std. Dev.: 0.94681
 Formula: $y = mx + b$
 m: $3.67740e-2$
 b: -1.04727
 x: Amount[ug/l]
 y: Area



Benzo(g,h,i)perylene at exp. RT: 22.111
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99998
 Residual Std. Dev.: 1.45280
 Formula: $y = mx + b$
 m: $6.31700e-2$
 b: -1.53644
 x: Amount[ug/l]
 y: Area



Indeno(1,2,3-cd)pyrene at exp. RT: 22.588
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 1.00000
 Residual Std. Dev.: 0.25692
 Formula: $y = mx + b$
 m: $1.00554e-1$
 b: $-4.92879e-1$
 x: Amount[ug/l]
 y: Area



Indeno(1,2,3-cd)pyrene at exp. RT: 22.626
FLD1 A, Ex=273, Em=323, TT
Correlation: 1.00000
Residual Std. Dev.: 0.41791
Formula: $y = mx + b$
m: 9.71800e-2
b: 1.79343e-1
x: Amount[ug/l]
y: Area

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CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188869 HPLC Water
EPA 8310

Inst : HPLC04
Calnum : 296199754001

Cal Date: 18-MAY-2006

ICV 296199754015 (13800015 19-MAY-2006) stds: S3051

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Naphthalene	1	0.0130	0.0134	5000	5126	ug/L	3	15	
Acenaphthylene	1	0.0093	0.0100	10000	10680	ug/L	7	15	
Acenaphthene	1	0.0052	0.0057	5000	5392	ug/L	8	15	
Fluorene	1	0.0627	0.0646	1000	1028	ug/L	3	15	
Phenanthrene	1	0.1800	0.1815	500.0	503.1	ug/L	1	15	
Anthracene	1	0.4248	0.4384	500.0	513.4	ug/L	3	15	
Fluoranthene	1	0.0409	0.0422	1000	1034	ug/L	3	15	
Pyrene	1	0.0342	0.0343	500.0	508.5	ug/L	2	15	
Benzo(a)anthracene	1	0.0943	0.0969	500.0	511.5	ug/L	2	15	
Chrysene	1	0.1335	0.1357	500.0	505.0	ug/L	1	15	
Benzo(b)fluoranthene	1	0.1059	0.1090	1000	1023	ug/L	2	15	
Benzo(k)fluoranthene	1	0.0821	0.0850	500.0	510.7	ug/L	2	15	
Benzo(a)pyrene	1	0.0870	0.0890	500.0	508.4	ug/L	2	15	
Dibenz(a,h)anthracene	1	0.0212	0.0222	1000	1017	ug/L	2	15	
Benzo(g,h,i)perylene	1	0.0351	0.0359	1000	1004	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	1	0.0976	0.1026	500.0	515.2	ug/L	3	15	
Acenaphthylene	2	0.0279	0.0285	10000	10180	ug/L	2	15	
Naphthalene	3	0.0110	0.0113	5000	5130	ug/L	3	15	
Acenaphthene	3	0.0233	0.0248	5000	5302	ug/L	6	15	
Fluorene	3	0.1263	0.1289	1000	1020	ug/L	2	15	
Phenanthrene	3	0.1362	0.1386	500.0	508.6	ug/L	2	15	
Anthracene	3	0.4263	0.4399	500.0	513.7	ug/L	3	15	
Fluoranthene	3	0.0387	0.0407	1000	1050	ug/L	5	15	
Pyrene	3	0.1332	0.1384	500.0	517.2	ug/L	3	15	
Benzo(a)anthracene	3	0.1515	0.1558	500.0	512.8	ug/L	3	15	
Chrysene	3	0.1803	0.1841	500.0	509.6	ug/L	2	15	
Benzo(b)fluoranthene	3	0.0643	0.0664	1000	1027	ug/L	3	15	
Benzo(k)fluoranthene	3	0.3904	0.4029	500.0	513.5	ug/L	3	15	
Benzo(a)pyrene	3	0.2132	0.2200	500.0	513.9	ug/L	3	15	
Dibenz(a,h)anthracene	3	0.0311	0.0322	1000	1025	ug/L	3	15	
Benzo(g,h,i)perylene	3	0.0613	0.0619	1000	1004	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	3	0.0971	0.1010	500.0	517.9	ug/L	4	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188869 HPLC Water
EPA 8310

Inst : HPLC04
Seqnum : 296340469002
Cal : 296199754001
Standards: S3190

Run Name: L
File : 23600002
Caldate : 18-MAY-2006

IDF : 1.0
Time : 24-AUG-2006 11:01

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0128	2500	2430	ug/L	-3	15	
Acenaphthylene	1	0.0093	0.0090	5000	4696	ug/L	-6	15	
Acenaphthene	1	0.0052	0.0052	2500	2341	ug/L	-6	15	
Fluorene	1	0.0627	0.0610	500.0	482.1	ug/L	-4	15	
Phenanthrene	1	0.1800	0.1744	250.0	240.3	ug/L	-4	15	
Anthracene	1	0.4248	0.4115	250.0	238.5	ug/L	-5	15	
Fluoranthene	1	0.0409	0.0400	500.0	488.2	ug/L	-2	15	
Pyrene	1	0.0342	0.0331	250.0	245.3	ug/L	-2	15	
Benzo(a)anthracene	1	0.0943	0.0910	250.0	240.6	ug/L	-4	15	
Chrysene	1	0.1335	0.1310	250.0	242.0	ug/L	-3	15	
Benzo(b)fluoranthene	1	0.1059	0.1023	500.0	478.4	ug/L	-4	15	
Benzo(k)fluoranthene	1	0.0821	0.0805	250.0	242.7	ug/L	-3	15	
Benzo(a)pyrene	1	0.0870	0.0848	250.0	245.5	ug/L	-2	15	
Dibenz(a,h)anthracene	1	0.0212	0.0209	500.0	492.5	ug/L	-2	15	
Benzo(g,h,i)perylene	1	0.0351	0.0348	500.0	502.0	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	1	0.0976	0.0984	250.0	249.6	ug/L	0	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0084	50000	49810	ug/L	0	15	
Acenaphthylene	2	0.0279	0.0272	5000	4808	ug/L	-4	15	
1-Methylnaphthalene (UV)	2	0.0031	0.0030	50000	49580	ug/L	-1	15	
Naphthalene	3	0.0110	0.0110	2500	2473	ug/L	-1	15	
Acenaphthene	3	0.0233	0.0233	2500	2395	ug/L	-4	15	
Fluorene	3	0.1263	0.1230	500.0	469.8	ug/L	-6	15	
Phenanthrene	3	0.1362	0.1346	250.0	245.3	ug/L	-2	15	
Anthracene	3	0.4263	0.4204	250.0	244.6	ug/L	-2	15	
Fluoranthene	3	0.0387	0.0380	500.0	488.9	ug/L	-2	15	
Pyrene	3	0.1332	0.1327	250.0	248.9	ug/L	0	15	
Benzo(a)anthracene	3	0.1515	0.1499	250.0	244.7	ug/L	-2	15	
Chrysene	3	0.1803	0.1798	250.0	244.9	ug/L	-2	15	
Benzo(b)fluoranthene	3	0.0643	0.0638	500.0	488.5	ug/L	-2	15	
Benzo(k)fluoranthene	3	0.3904	0.3876	250.0	239.8	ug/L	-4	15	
Benzo(a)pyrene	3	0.2132	0.2128	250.0	247.0	ug/L	-1	15	
Dibenz(a,h)anthracene	3	0.0311	0.0297	500.0	477.0	ug/L	-5	15	
Benzo(g,h,i)perylene	3	0.0613	0.0599	500.0	498.3	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	3	0.0971	0.0944	250.0	241.1	ug/L	-4	15	
1-Methylnaphthalene (F)	3	0.0122	0.0123	50000	51320	ug/L	3	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188869 HPLC Water
EPA 8310

Inst : HPLC04
Seqnum : 296340469020
Cal : 296199754001
Standards: S3192

Run Name: M
File : 23600020
Caldate : 18-MAY-2006

IDF : 1.0
Time : 24-AUG-2006 20:30

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0134	5000	5146	ug/L	3	15	
Acenaphthylene	1	0.0093	0.0095	10000	10210	ug/L	2	15	
Acenaphthene	1	0.0052	0.0054	5000	5128	ug/L	3	15	
Fluorene	1	0.0627	0.0643	1000	1024	ug/L	2	15	
Phenanthrene	1	0.1800	0.1848	500.0	512.1	ug/L	2	15	
Anthracene	1	0.4248	0.4359	500.0	510.4	ug/L	2	15	
Fluoranthene	1	0.0409	0.0422	1000	1036	ug/L	4	15	
Pyrene	1	0.0342	0.0357	500.0	529.6	ug/L	6	15	
Benzo(a)anthracene	1	0.0943	0.0966	500.0	510.2	ug/L	2	15	
Chrysene	1	0.1335	0.1381	500.0	514.1	ug/L	3	15	
Benzo(b)fluoranthene	1	0.1059	0.1094	1000	1026	ug/L	3	15	
Benzo(k)fluoranthene	1	0.0821	0.0852	500.0	511.9	ug/L	2	15	
Benzo(a)pyrene	1	0.0870	0.0892	500.0	509.6	ug/L	2	15	
Dibenz(a,h)anthracene	1	0.0212	0.0220	1000	1007	ug/L	1	15	
Benzo(g,h,i)perylene	1	0.0351	0.0361	1000	1010	ug/L	1	15	
Indeno(1,2,3-cd)pyrene	1	0.0976	0.1005	500.0	504.5	ug/L	1	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0086	50000	50900	ug/L	2	15	
Acenaphthylene	2	0.0279	0.0287	10000	10250	ug/L	3	15	
1-Methylnaphthalene (UV)	2	0.0031	0.0031	50000	50760	ug/L	2	15	
Naphthalene	3	0.0110	0.0112	5000	5086	ug/L	2	15	
Acenaphthene	3	0.0233	0.0239	5000	5111	ug/L	2	15	
Fluorene	3	0.1263	0.1284	1000	1016	ug/L	2	15	
Phenanthrene	3	0.1362	0.1370	500.0	502.6	ug/L	1	15	
Anthracene	3	0.4263	0.4422	500.0	516.5	ug/L	3	15	
Fluoranthene	3	0.0387	0.0393	1000	1013	ug/L	1	15	
Pyrene	3	0.1332	0.1310	500.0	489.7	ug/L	-2	15	
Benzo(a)anthracene	3	0.1515	0.1544	500.0	508.0	ug/L	2	15	
Chrysene	3	0.1803	0.1832	500.0	507.0	ug/L	1	15	
Benzo(b)fluoranthene	3	0.0643	0.0664	1000	1027	ug/L	3	15	
Benzo(k)fluoranthene	3	0.3904	0.4043	500.0	515.3	ug/L	3	15	
Benzo(a)pyrene	3	0.2132	0.2187	500.0	510.9	ug/L	2	15	
Dibenz(a,h)anthracene	3	0.0311	0.0327	1000	1040	ug/L	4	15	
Benzo(g,h,i)perylene	3	0.0613	0.0624	1000	1012	ug/L	1	15	
Indeno(1,2,3-cd)pyrene	3	0.0971	0.1014	500.0	519.8	ug/L	4	15	
1-Methylnaphthalene (F)	3	0.0122	0.0122	50000	50990	ug/L	2	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188869 HPLC Water
EPA 8310

Inst : HPLC04	Run Name: H	IDF : 1.0
Seqnum : 296340469031	File : 23600031	Time : 25-AUG-2006 02:18
Cal : 296199754001	Caldate : 18-MAY-2006	
Standards: S2954		

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0130	0.0132	10000	10140	ug/L	1	15	
Acenaphthylene	1	0.0093	0.0094	20000	20280	ug/L	1	15	
Acenaphthene	1	0.0052	0.0052	10000	10070	ug/L	1	15	
Fluorene	1	0.0627	0.0631	2000	2014	ug/L	1	15	
Phenanthrene	1	0.1800	0.1816	1000	1009	ug/L	1	15	
Anthracene	1	0.4248	0.4299	1000	1011	ug/L	1	15	
Fluoranthene	1	0.0409	0.0411	2000	2022	ug/L	1	15	
Pyrene	1	0.0342	0.0352	1000	1042	ug/L	4	15	
Benzo(a)anthracene	1	0.0943	0.0956	1000	1009	ug/L	1	15	
Chrysene	1	0.1335	0.1360	1000	1016	ug/L	2	15	
Benzo(b)fluoranthene	1	0.1059	0.1080	2000	2030	ug/L	1	15	
Benzo(k)fluoranthene	1	0.0821	0.0842	1000	1010	ug/L	1	15	
Benzo(a)pyrene	1	0.0870	0.0884	1000	1004	ug/L	0	15	
Dibenz(a,h)anthracene	1	0.0212	0.0220	2000	1993	ug/L	0	15	
Benzo(g,h,i)perylene	1	0.0351	0.0358	2000	1978	ug/L	-1	15	
Indeno(1,2,3-cd)pyrene	1	0.0976	0.1001	1000	1000	ug/L	0	15	
1-Methylnaphthalene (UV)	1	0.0085	0.0085	50000	50580	ug/L	1	15	
Acenaphthylene	2	0.0279	0.0282	20000	20280	ug/L	1	15	
1-Methylnaphthalene (UV)	2	0.0031	0.0031	50000	50260	ug/L	1	15	
Naphthalene	3	0.0110	0.0111	10000	10130	ug/L	1	15	
Acenaphthene	3	0.0233	0.0236	10000	10260	ug/L	3	15	
Fluorene	3	0.1263	0.1256	2000	2019	ug/L	1	15	
Phenanthrene	3	0.1362	0.1381	1000	1017	ug/L	2	15	
Anthracene	3	0.4263	0.4349	1000	1018	ug/L	2	15	
Fluoranthene	3	0.0387	0.0393	2000	2029	ug/L	1	15	
Pyrene	3	0.1332	0.1367	1000	1020	ug/L	2	15	
Benzo(a)anthracene	3	0.1515	0.1540	1000	1017	ug/L	2	15	
Chrysene	3	0.1803	0.1827	1000	1019	ug/L	2	15	
Benzo(b)fluoranthene	3	0.0643	0.0656	2000	2038	ug/L	2	15	
Benzo(k)fluoranthene	3	0.3904	0.3968	1000	1025	ug/L	2	15	
Benzo(a)pyrene	3	0.2132	0.2168	1000	1016	ug/L	2	15	
Dibenz(a,h)anthracene	3	0.0311	0.0321	2000	2030	ug/L	1	15	
Benzo(g,h,i)perylene	3	0.0613	0.0626	2000	2006	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	3	0.0971	0.0994	1000	1021	ug/L	2	15	
1-Methylnaphthalene (F)	3	0.0122	0.0123	50000	51430	ug/L	3	15	

SEQUENCE SUMMARY FOR 188869 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 296199754 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 18-MAY-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
001	13800001	X	PRIMER	- 138		18-MAY-2006	17:14	1.0							
002	13800002	X	PRIMER			18-MAY-2006	17:46	1.0							
003	13800003	X	IB - 138			18-MAY-2006	18:17	1.0							
004	13800004	X	IB			18-MAY-2006	18:49	1.0							
005	13800005	X	IB			18-MAY-2006	19:21	1.0							
006	13800006	ICAL				18-MAY-2006	19:52	1.0							
007	13800007	ICAL				18-MAY-2006	20:24	1.0							
008	13800008	ICAL				18-MAY-2006	20:56	1.0							
009	13800009	ICAL				18-MAY-2006	21:27	1.0							
010	13800010	ICAL				18-MAY-2006	21:59	1.0							
011	13800011	ICAL				18-MAY-2006	22:31	1.0							
012	13800012	ICAL				18-MAY-2006	23:02	1.0							
013	13800013	X	IB			18-MAY-2006	23:34	1.0							
014	13800014	X	IB			19-MAY-2006	00:05	1.0							
015	13800015	ICV	ICV			19-MAY-2006	00:37	1.0							
016	13800016	X	ICV			19-MAY-2006	01:09	1.0							
017	13800017	X	IB			19-MAY-2006	01:40	1.0							

Stds used: 1=S3065 2=S3064 3=S3063 4=S3062 5=S3061 6=S3060 7=S3059 8=S3051

SEQUENCE SUMMARY FOR 188869 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 296340469 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 24-AUG-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Sample	num	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	ul	Stds	Used	>LR
001	23600001	X	IB	- 236			24-AUG-2006 10:29	1.0							
002	23600002	CCV	L				24-AUG-2006 11:01	1.0	1.0			10	1		
003	23600003	X	CCV				24-AUG-2006 11:33	1.0					1		
004	23600004	X	IB				24-AUG-2006 12:04	1.0							
005	23600005	BLANK	QC352946				24-AUG-2006 12:36	1.0	0.002			10			
006	23600006	LCS	QC352947				24-AUG-2006 13:07	1.0	0.002			10			
007	23600007	X	IB				24-AUG-2006 13:39	1.0							
008	23600008	SAMPLE	188774-001				24-AUG-2006 14:11	1.0	0.001887			10			
009	23600009	SAMPLE	188774-007				24-AUG-2006 14:42	1.0	0.001887			10			
010	23600010	SAMPLE	188774-002				24-AUG-2006 15:14	1.0	0.001887			10			
011	23600011	SAMPLE	188774-008				24-AUG-2006 15:45	1.0	0.001887			10			
012	23600012	SAMPLE	188774-009				24-AUG-2006 16:17	1.0	0.001887			10			
013	23600013	MSS	188802-001				24-AUG-2006 16:49	1.0	0.001887	6	1	10			4:PYR=30823.2
014	23600014	MS	QC352948				24-AUG-2006 17:20	1.0	0.001887	1	24	10			5:PYR=26940.5
015	23600015	MSD	QC352949				24-AUG-2006 17:52	1.0	0.001887	3	23	10			5:PYR=48151.2
016	23600016	X	IB				24-AUG-2006 18:24	1.0							N
017	23600017	X	IB				24-AUG-2006 18:55	1.0							
018	23600018	X	IB				24-AUG-2006 19:27	1.0							
019	23600019	X	IB				24-AUG-2006 19:58	1.0							
020	23600020	CCV	M				24-AUG-2006 20:30	1.0	1.0			10	2		
021	23600021	X	CCV				24-AUG-2006 21:01	1.0					2		
022	23600022	X	IB				24-AUG-2006 21:33	1.0							
023	23600023	SAMPLE	188802-004				24-AUG-2006 22:05	1.0	0.001887			10			
024	23600024	SAMPLE	188802-005				24-AUG-2006 22:36	1.0	0.001887			10			
025	23600025	SAMPLE	188802-006				24-AUG-2006 23:08	1.0	0.001887			10			
026	23600026	SAMPLE	188802-008				24-AUG-2006 23:40	1.0	0.001887			10			
027	23600027	SAMPLE	188802-010				25-AUG-2006 00:11	1.0	0.001887			10			
028	23600028	SAMPLE	188837-012				25-AUG-2006 00:43	1.0	0.001905			10			
029	23600029	SAMPLE	188869-001				25-AUG-2006 01:14	1.0	0.001905			10			
030	23600030	X	IB				25-AUG-2006 01:46	1.0							
031	23600031	CCV	H				25-AUG-2006 02:18	1.0	1.0			10	3		

Stds used: 1=S3190 2=S3192 3=S2954

SEQUENCE SUMMARY FOR 188869 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 296340469 Instrument: HPLC04 High Pressure Liquid Chromatograph #4 Begun: 24-AUG-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Sample	num	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Std	Used	>LR
032	23600032	X	CCV				25-AUG-2006	02:49	1.0				3		
033	23600033	X	IB				25-AUG-2006	03:21	1.0						

Std's used: 1=S3190 2=S3192 3=S2954

REPORTING SUMMARY FOR 188869 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
188869-001	Naphthalene	HPLC04	1	08/25/06 01:14
188869-001	Acenaphthylene	HPLC04	1	08/25/06 01:14
188869-001	Acenaphthene	HPLC04	1	08/25/06 01:14
188869-001	Fluorene	HPLC04	1	08/25/06 01:14
188869-001	Phenanthrene	HPLC04	3	08/25/06 01:14
188869-001	Anthracene	HPLC04	3	08/25/06 01:14
188869-001	Fluoranthene	HPLC04	3	08/25/06 01:14
188869-001	Pyrene	HPLC04	3	08/25/06 01:14
188869-001	Benzo(a)anthracene	HPLC04	3	08/25/06 01:14
188869-001	Chrysene	HPLC04	3	08/25/06 01:14
188869-001	Benzo(b)fluoranthene	HPLC04	3	08/25/06 01:14
188869-001	Benzo(k)fluoranthene	HPLC04	3	08/25/06 01:14
188869-001	Benzo(a)pyrene	HPLC04	3	08/25/06 01:14
188869-001	Dibenz(a,h)anthracene	HPLC04	3	08/25/06 01:14
188869-001	Benzo(g,h,i)perylene	HPLC04	3	08/25/06 01:14
188869-001	Indeno(1,2,3-cd)pyrene	HPLC04	3	08/25/06 01:14
188869-001	1-Methylnaphthalene (UV)	HPLC04	1	08/25/06 01:14
188869-001	1-Methylnaphthalene (F)	HPLC04	3	08/25/06 01:14
QC352946	Naphthalene	HPLC04	1	08/24/06 12:36
QC352946	Acenaphthylene	HPLC04	1	08/24/06 12:36
QC352946	Acenaphthene	HPLC04	1	08/24/06 12:36
QC352946	Fluorene	HPLC04	1	08/24/06 12:36
QC352946	Phenanthrene	HPLC04	3	08/24/06 12:36
QC352946	Anthracene	HPLC04	3	08/24/06 12:36
QC352946	Fluoranthene	HPLC04	3	08/24/06 12:36
QC352946	Pyrene	HPLC04	3	08/24/06 12:36
QC352946	Benzo(a)anthracene	HPLC04	3	08/24/06 12:36
QC352946	Chrysene	HPLC04	3	08/24/06 12:36
QC352946	Benzo(b)fluoranthene	HPLC04	3	08/24/06 12:36
QC352946	Benzo(k)fluoranthene	HPLC04	3	08/24/06 12:36
QC352946	Benzo(a)pyrene	HPLC04	3	08/24/06 12:36
QC352946	Dibenz(a,h)anthracene	HPLC04	3	08/24/06 12:36
QC352946	Benzo(g,h,i)perylene	HPLC04	3	08/24/06 12:36
QC352946	Indeno(1,2,3-cd)pyrene	HPLC04	3	08/24/06 12:36
QC352946	1-Methylnaphthalene (UV)	HPLC04	1	08/24/06 12:36
QC352946	1-Methylnaphthalene (F)	HPLC04	3	08/24/06 12:36
QC352947	Naphthalene	HPLC04	1	08/24/06 13:07
QC352947	Fluorene	HPLC04	1	08/24/06 13:07
QC352947	Pyrene	HPLC04	3	08/24/06 13:07
QC352947	Benzo(a)pyrene	HPLC04	3	08/24/06 13:07
QC352947	1-Methylnaphthalene (UV)	HPLC04	1	08/24/06 13:07
QC352947	1-Methylnaphthalene (F)	HPLC04	3	08/24/06 13:07
QC352948	Naphthalene	HPLC04	1	08/24/06 17:20
QC352948	Fluorene	HPLC04	1	08/24/06 17:20
QC352948	Pyrene	HPLC04	3	08/24/06 17:20
QC352948	Benzo(a)pyrene	HPLC04	3	08/24/06 17:20
QC352948	1-Methylnaphthalene (UV)	HPLC04	1	08/24/06 17:20
QC352948	1-Methylnaphthalene (F)	HPLC04	3	08/24/06 17:20
QC352949	Naphthalene	HPLC04	1	08/24/06 17:52
QC352949	Fluorene	HPLC04	1	08/24/06 17:52

REPORTING SUMMARY FOR 188869 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC352949	Pyrene	HPLC04	3	08/24/06 17:52
QC352949	Benzo(a)pyrene	HPLC04	3	08/24/06 17:52
QC352949	1-Methylnaphthalene (UV)	HPLC04	1	08/24/06 17:52
QC352949	1-Methylnaphthalene (F)	HPLC04	3	08/24/06 17:52

Curtis & Tompkins Laboratories Sample Preparation Summary

23-AUG-2006 17:56

Batch Number : 116658
 Date Extracted : 22-AUG-2006
 Extracted by : Jessie O'Brien
 Prep Method : 3520C

Analysis : 8310
 Bgroup : N/A
 Units : mL
 Clean-up :

Spike #1 ID : S4149D
 Spike #2 ID : S3553B
 Spike #3 ID :
 SDP Version : 8310w rv6

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean D.F.	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
188774-001		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0	0	8310		
188774-002		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0	0	8310		
188774-007		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0	0	8310		
188774-008		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0	0	8310		
188802-009		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0	0	8310		
188802-001		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0	0	8310		
188802-004		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0	0	8310		
188802-005		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0	0	8310		
188802-006		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0	0	8310		
188802-008		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0	0	8310		
188802-010		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0	0	8310		
188837-012		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	5	.1	0	0	8310		
188869-001		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	6	.1	0	0	8310		
QC352946	BLANK		Water	1000	mL	2	0.002000	1		.1	0	0	8310		
QC352947	LCS		Water	1000	mL	2	0.002000	1		.1	1	1	8310		
QC352948	MS		Water	1060	mL	2	0.001887	1	7	.1	1	1	8310		
QC352949	MSD	of 188802-001 of 188802-001	Water	1060	mL	2	0.001887	1	7	.1	1	1	8310		

MSS

Prep Chemist:

[Signature]

Reviewed By:

[Signature]

Date:

8/24/06

Relinquished By:

[Signature]

Received By:

[Signature]

Date:

24 AUG 2006

Curtis & Tompkins Laboratories
MDL Summary for EPA 8310 Water 3520C
As of 09/24/06

Analyte	Units	HPLC02 1	HPLC02 2	HPLC02 3	HPLC04 1	HPLC04 2	HPLC04 3
Naphthalene	ug/L	0.16		0.069	0.097		0.10
Acenaphthylene	ug/L	0.37	0.29		0.24	0.16	
2-Methylnaphthalene	ug/L				0.072		0.10
Acenaphthene	ug/L	0.36		0.098	0.33		0.085
Fluorene	ug/L	0.051		0.054	0.028		0.017
Phenanthrene	ug/L	0.030		0.0086	0.0082		0.0078
Anthracene	ug/L	0.021		0.0077	0.024		0.023
Fluoranthene	ug/L	0.13		0.011	0.042		0.013
Pyrene	ug/L	0.066		0.0048	0.036		0.010
Benzo(a)anthracene	ug/L	0.044		0.0046	0.022		0.013
Chrysene	ug/L	0.036		0.0059	0.021		0.0096
Benzo(b)fluoranthene	ug/L	0.032		0.0081	0.015		0.013
Benzo(k)fluoranthene	ug/L	0.037		0.0044	0.013		0.0080
Benzo(a)pyrene	ug/L	0.055		0.0045	0.017		0.025
Dibenz(a,h)anthracene	ug/L	0.12		0.026	0.037		0.025
Benzo(g,h,i)perylene	ug/L	0.066		0.014	0.047		0.017
Indeno(1,2,3-cd)pyrene	ug/L	0.065		0.011	0.013		0.0096
1-Methylnaphthalene (UV)	ug/L	1.2	1.9		9.0	9.1	
1-Methylnaphthalene (F)	ug/L			0.72			9.8

METALS

**Target Analyte List Metals**

Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DW082106B	Batch#:	116738
Lab ID:	188869-001	Sampled:	08/21/06
Matrix:	Water	Received:	08/21/06
Units:	ug/L	Prepared:	08/24/06
Diln Fac:	1.000		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	08/24/06
Antimony	ND	1.0	08/24/06
Arsenic	ND	5.0	08/24/06
Barium	ND	10	08/24/06
Beryllium	ND	2.0	08/24/06
Cadmium	ND	1.0	08/24/06
Calcium	ND	500	08/24/06
Chromium	ND	10	08/25/06
Cobalt	ND	10	08/24/06
Copper	ND	1.0	08/24/06
Iron	ND	100	08/24/06
Lead	ND	3.0	08/24/06
Magnesium	ND	500	08/24/06
Manganese	ND	10	08/25/06
Nickel	ND	20	08/24/06
Potassium	ND	500	08/24/06
Selenium	ND	5.0	08/24/06
Silver	ND	1.0	08/24/06
Sodium	ND	500	08/25/06
Thallium	ND	1.0	08/24/06
Vanadium	ND	10	08/25/06
Zinc	ND	20	08/24/06

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Target Analyte List Metals			
Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC353251	Batch#:	116738
Matrix:	Filtrate	Prepared:	08/24/06
Units:	ug/L		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	08/24/06
Antimony	ND	1.0	08/24/06
Arsenic	ND	5.0	08/24/06
Barium	ND	10	08/24/06
Beryllium	ND	2.0	08/24/06
Cadmium	ND	1.0	08/24/06
Calcium	ND	500	08/24/06
Chromium	ND	10	08/25/06
Cobalt	ND	10	08/24/06
Copper	ND	1.0	08/24/06
Iron	ND	100	08/24/06
Lead	ND	3.0	08/24/06
Magnesium	ND	500	08/24/06
Manganese	ND	10	08/24/06
Nickel	ND	20	08/24/06
Potassium	ND	500	08/24/06
Selenium	ND	5.0	08/24/06
Silver	ND	1.0	08/24/06
Sodium	ND	500	08/25/06
Thallium	ND	1.0	08/24/06
Vanadium	ND	10	08/24/06
Zinc	ND	20	08/24/06

ND= Not Detected

RL= Reporting Limit

Mercury by Cold Vapor AA

Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	116704
Field ID:	DW082106B	Sampled:	08/21/06
Matrix:	Water	Received:	08/21/06
Units:	ug/L	Prepared:	08/23/06
Diln Fac:	1.000	Analyzed:	08/23/06

Type	Lab ID	Result	RL
SAMPLE	188869-001	ND	0.20
BLANK	QC353127	ND	0.20

ND= Not Detected
 RL= Reporting Limit



Batch QC Report

Target Analyte List Metals			
Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Filtrate	Batch#:	116738
Units:	ug/L	Prepared:	08/24/06
Diln Fac:	1.000		

Type: BS

Lab ID: QC353252

Analyte	Spiked	Result	%REC	Limits	Analyzed
Aluminum	10,100	10,530	104	80-120	08/25/06
Antimony	100.0	99.09	99	80-120	08/24/06
Arsenic	100.0	92.99	93	80-120	08/24/06
Barium	100.0	103.1	103	80-120	08/24/06
Beryllium	100.0	101.9	102	80-120	08/25/06
Cadmium	100.0	96.17	96	80-120	08/24/06
Calcium	10,000	10,480	105	80-120	08/24/06
Chromium	100.0	97.18	97	80-120	08/25/06
Cobalt	100.0	88.39	88	80-120	08/24/06
Copper	100.0	93.20	93	80-120	08/24/06
Iron	10,000	9,602	96	80-120	08/24/06
Lead	100.0	96.72	97	80-120	08/24/06
Magnesium	10,000	10,370	104	80-120	08/25/06
Manganese	100.0	89.47	89	80-120	08/24/06
Nickel	100.0	94.34	94	80-120	08/24/06
Potassium	10,000	10,160	102	80-120	08/24/06
Selenium	100.0	88.33	88	80-120	08/24/06
Silver	100.0	103.0	103	80-120	08/24/06
Sodium	10,000	10,240	102	80-120	08/25/06
Thallium	50.00	47.93	96	80-120	08/24/06
Vanadium	100.0	95.39	95	80-120	08/24/06
Zinc	100.0	91.20	91	80-120	08/24/06

Type: BSD

Lab ID: QC353253

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
Aluminum	10,100	10,110	100	80-120	4	20	08/25/06
Antimony	100.0	98.52	99	80-120	1	20	08/24/06
Arsenic	100.0	98.18	98	80-120	5	20	08/24/06
Barium	100.0	100.8	101	80-120	2	20	08/24/06
Beryllium	100.0	98.31	98	80-120	4	20	08/25/06
Cadmium	100.0	102.6	103	80-120	6	20	08/24/06
Calcium	10,000	10,390	104	80-120	1	20	08/24/06
Chromium	100.0	99.90	100	80-120	3	20	08/25/06
Cobalt	100.0	96.15	96	80-120	8	20	08/24/06
Copper	100.0	102.0	102	80-120	9	20	08/24/06
Iron	10,000	10,410	104	80-120	8	20	08/24/06
Lead	100.0	96.63	97	80-120	0	20	08/24/06
Magnesium	10,000	9,970	100	80-120	4	20	08/25/06
Manganese	100.0	97.04	97	80-120	8	20	08/24/06
Nickel	100.0	102.2	102	80-120	8	20	08/24/06
Potassium	10,000	10,180	102	80-120	0	20	08/24/06
Selenium	100.0	92.53	93	80-120	5	20	08/24/06
Silver	100.0	109.7	110	80-120	6	20	08/24/06
Sodium	10,000	9,855	99	80-120	4	20	08/25/06
Thallium	50.00	49.35	99	80-120	3	20	08/24/06
Vanadium	100.0	95.94	96	80-120	1	20	08/24/06
Zinc	100.0	97.45	97	80-120	7	20	08/24/06

RPD= Relative Percent Difference

Page 1 of 1

Batch QC Report

Mercury by Cold Vapor AA			
Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	116704
Field ID:	DW082106B	Sampled:	08/21/06
MSS Lab ID:	188869-001	Received:	08/21/06
Matrix:	Water	Prepared:	08/23/06
Units:	ug/L	Analyzed:	08/23/06
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC353129		5.000	5.280	106	80-120		
BSD	QC353130		5.000	5.060	101	80-120	4	20
MS	QC353132	<0.02083	5.000	5.310	106	75-125		
MSD	QC353133		5.000	5.380	108	75-125	1	20

Batch QC Report

Target Analyte List Metals			
Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ2A	Batch#:	116738
MSS Lab ID:	188837-009	Sampled:	08/17/06
Matrix:	Filtrate	Received:	08/18/06
Units:	ug/L	Prepared:	08/24/06

Type: MS Lab ID: QC353254

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln	Fac	Analyzed
Aluminum	<9.556	10,100	10,120	100	75-125	1.000		08/25/06
Antimony	0.09282	100.0	103.0	103	75-125	1.000		08/24/06
Arsenic	16.46	100.0	112.1	96	75-125	1.000		08/24/06
Barium	77.15	100.0	189.1	112	75-125	1.000		08/24/06
Beryllium	<0.1228	100.0	100.2	100	75-125	1.000		08/25/06
Cadmium	<0.1659	100.0	94.70	95	75-125	1.000		08/24/06
Calcium	22,790	10,000	33,610	108	75-125	10.00		08/24/06
Chromium	1.546	100.0	97.74	96	75-125	1.000		08/25/06
Cobalt	1.833	100.0	94.41	93	75-125	1.000		08/24/06
Copper	0.3120	100.0	96.96	97	75-125	1.000		08/24/06
Iron	13,480	10,000	21,990	85	75-125	10.00		08/24/06
Lead	<0.08794	100.0	98.41	98	75-125	1.000		08/24/06
Magnesium	45,770	10,000	57,400	116 NM	75-125	10.00		08/25/06
Manganese	877.8	100.0	1,010	132 NM	75-125	10.00		08/25/06
Nickel	2.248	100.0	99.76	98	75-125	1.000		08/24/06
Potassium	741.5	10,000	10,900	102	75-125	1.000		08/24/06
Selenium	0.5030	100.0	87.39	87	75-125	1.000		08/24/06
Silver	<0.06797	100.0	101.6	102	75-125	1.000		08/24/06
Sodium	64,930	10,000	77,170	122 NM	75-125	10.00		08/25/06
Thallium	0.3916	50.00	49.31	98	75-125	1.000		08/24/06
Vanadium	0.9928	100.0	105.3	104	75-125	1.000		08/24/06
Zinc	2.017	100.0	95.28	93	75-125	1.000		08/24/06

Type: MSD Lab ID: QC353255

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Analyzed
Aluminum	10,100	10,350	102	75-125	2	20	1.000		08/25/06
Antimony	100.0	99.22	99	75-125	4	20	1.000		08/24/06
Arsenic	100.0	109.6	93	75-125	2	20	1.000		08/24/06
Barium	100.0	183.9	107	75-125	3	20	1.000		08/24/06
Beryllium	100.0	102.0	102	75-125	2	20	1.000		08/25/06
Cadmium	100.0	92.17	92	75-125	3	20	1.000		08/24/06
Calcium	10,000	33,350	106	75-125	1	20	10.00		08/24/06
Chromium	100.0	93.86	92	75-125	4	20	1.000		08/25/06
Cobalt	100.0	92.84	91	75-125	2	20	1.000		08/24/06
Copper	100.0	95.86	96	75-125	1	20	1.000		08/24/06
Iron	10,000	22,050	86	75-125	0	20	10.00		08/24/06
Lead	100.0	96.49	96	75-125	2	20	1.000		08/24/06
Magnesium	10,000	57,080	113 NM	75-125	1	20	10.00		08/25/06
Manganese	100.0	999.6	122 NM	75-125	1	20	10.00		08/25/06
Nickel	100.0	99.54	97	75-125	0	20	1.000		08/24/06
Potassium	10,000	10,630	99	75-125	3	20	1.000		08/24/06
Selenium	100.0	84.82	84	75-125	3	20	1.000		08/24/06
Silver	100.0	99.25	99	75-125	2	20	1.000		08/24/06
Sodium	10,000	77,050	121 NM	75-125	0	20	10.00		08/25/06
Thallium	50.00	48.73	97	75-125	1	20	1.000		08/24/06
Vanadium	100.0	96.82	96	75-125	8	20	1.000		08/24/06
Zinc	100.0	90.18	88	75-125	5	20	1.000		08/24/06

NM= Not Meaningful: Sample concentration > 4X spike concentration

RPD= Relative Percent Difference

Batch QC Report

Target Analyte List Metals

Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ2A	Units:	ug/L
Type:	Serial Dilution	Batch#:	116738
MSS Lab ID:	188837-009	Sampled:	08/17/06
Lab ID:	QC353256	Received:	08/18/06
Matrix:	Filtrate		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln	Fac	Analyzed
Aluminum	ND	100.0	ND	250.0	NC	10	5.000		08/25/06
Antimony	ND	1.000	ND	1.250	NC	10	5.000		08/25/06
Arsenic	16.46	5.000	22.59	5.000	NC	10	5.000		08/25/06
Barium	79.67	10.00	78.92	10.00	1	10	5.000		08/25/06
Beryllium	ND	2.000	ND	2.000	NC	10	5.000		08/25/06
Cadmium	ND	1.000	ND	1.250	NC	10	5.000		08/25/06
Calcium	22,790	500.0	26,960	2,500	18 *	10	50.00		08/24/06
Chromium	ND	10.00	4.239 J	10.00	NC	10	5.000		08/25/06
Cobalt	ND	10.00	1.974 J	10.00	NC	10	5.000		08/25/06
Copper	ND	1.000	ND	2.500	NC	10	5.000		08/25/06
Iron	13,480	100.0	13,320	250.0	1	10	5.000		08/25/06
Lead	ND	3.000	ND	3.000	NC	10	5.000		08/25/06
Magnesium	45,770	500.0	42,260	2,500	8	10	50.00		08/25/06
Manganese	877.8	10.00	881.7	12.50	0	10	50.00		08/25/06
Nickel	ND	20.00	2.557 J	20.00	NC	10	5.000		08/25/06
Potassium	741.5	500.0	754.9	500.0	2	10	5.000		08/25/06
Selenium	ND	5.000	ND	5.000	NC	10	5.000		08/25/06
Silver	ND	1.000	ND	1.250	NC	10	5.000		08/25/06
Sodium	64,930	500.0	66,800	2,500	3	10	50.00		08/25/06
Thallium	ND	1.000	ND	1.250	NC	10	5.000		08/25/06
Vanadium	ND	10.00	4.420 J	10.00	NC	10	5.000		08/25/06
Zinc	ND	20.00	1.660 J	20.00	NC	10	5.000		08/25/06

*= Value outside of QC limits; see narrative

J= Estimated value

NC= Not Calculated

ND= Not Detected

RL= Reporting Limit



Batch QC Report

Mercury by Cold Vapor AA

Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	DW082106B	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	116704
MSS Lab ID:	188869-001	Sampled:	08/21/06
Lab ID:	QC353131	Received:	08/21/06
Matrix:	Water	Analyzed:	08/23/06

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
 Inst : MET05
 Seqnum: 56340782044
 File : h2415044
 IDF : 1.0
 Lab ID: 188837-009
 Matrix: Filtrate
 Batch : 116738
 Time : 24-AUG-2006 19:47
 Cal : 56340782001
 Units : ug/L

Type : PDS
 Inst : MET05
 Seqnum: 56340782048
 File : h2415048
 IDF : 1.0
 Lab ID: QC353257
 Matrix: Filtrate
 Batch : 116738
 Time : 24-AUG-2006 20:09
 Cal : 56340782001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S3780 (100X)

Analyte	MSS	Spiked	PDS	%Rec	Limits	Flags
Aluminum	ND	10000	9370	94	75-125	>c+ b*
Antimony	0.09282	100.0	95.39	95	75-125	u
Arsenic	16.46	100.0	105.4	89	75-125	u
Barium	77.15	100.0	175.3	98	75-125	u
Beryllium	ND	100.0	95.54	96	75-125	>c+ b*
Cadmium	ND	100.0	90.88	91	75-125	u
Cobalt	1.833	100.0	90.13	88	75-125	u
Copper	0.3120	100.0	92.34	92	75-125	u
Iron	13480	10000	22720 >LR	92	75-125	>LR b*
Lead	ND	100.0	91.99	92	75-125	u
Molybdenum	0.9674	100.0	95.14	94	75-125	u
Nickel	2.248	100.0	94.76	93	75-125	u
Potassium	741.5	10000	10160	94	75-125	u
Selenium	0.5030	100.0	84.07	84	75-125	u
Silver	ND	100.0	89.13	89	75-125	u
Thallium	0.3916	50.00	48.14	95	75-125	u
Vanadium	0.9928	100.0	90.81	90	75-125	u
Zinc	2.017	100.0	89.02	87	75-125	u

ISTD (ICALBLK h2415005)	ICALBLK Abund	PDS Abund	%Drift
Lithium	336846	272836	-19.00
Scandium	366577	310112	-15.40
Germanium	82555	69075	-16.33
Indium	571579	434239	-24.03
Bismuth	478991	359221	-25.00

MISSING READINGS: CA CR MG MN NA

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : PDS
 Inst : MET05
 Seqnum: 56341908027
 File : h2510027
 IDF : 1.0
 Lab ID: QC353257
 Matrix: Filtrate
 Batch : 116738
 Time : 25-AUG-2006 12:54
 Cal : 56341908001
 MSS : 188837-009
 Units : ug/L

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S3780 (100X), S3310

Analyte	MSS Seqnum	Result	Spiked	PDS	%Rec	Limits	Flags
Aluminum	56340782044	ND	10000	9878	99	75-125	u
Antimony	56340782044	0.09282	100.0	95.48	95	75-125	
Arsenic	56340782044	16.46	100.0	106.6	90	75-125	
Barium	56341908023	79.67	100.0	177.5	98	75-125	
Beryllium	56341908023	ND	100.0	97.29	97	75-125	u
Cadmium	56340782044	ND	100.0	90.42	90	75-125	
Chromium	56341908023	1.546	100.0	89.96	88	75-125	u
Cobalt	56341908023	1.912	100.0	88.97	87	75-125	
Copper	56340782044	0.3120	100.0	92.27	92	75-125	
Iron	56340782044	13480	10000	21980 >LR	85	75-125	>LR b*
Lead	56340782044	ND	100.0	97.59	98	75-125	
Molybdenum	56341908023	0.9667	100.0	97.47	97	75-125	
Nickel	56340782044	2.248	100.0	94.02	92	75-125	
Potassium	56340782044	741.5	10000	10390	96	75-125	
Selenium	56341908023	0.5799	100.0	85.35	85	75-125	
Silver	56341908023	ND	100.0	89.45	89	75-125	
Thallium	56341908023	0.1639	50.00	48.45	97	75-125	
Vanadium	56340782044	0.9928	100.0	89.10	88	75-125	
Zinc	56340782044	2.017	100.0	86.90	85	75-125	

ISTD (ICALBLK h2510003)	ICALBLK Abund	PDS Abund	%Drift
Lithium	323251	285974	-11.53
Scandium	341957	300450	-12.14
Germanium	80606	71332	-11.51
Indium	530308	432939	-18.36
Bismuth	437483	370956	-15.21

MISSING READINGS: CA MG MN NA

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
 Inst : MET05
 Seqnum: 56340782061
 File : h2415061
 IDF : 10.0
 Lab ID: 188837-009
 Matrix: Filtrate
 Batch : 116738
 Time : 24-AUG-2006 21:22
 Cal : 56340782001
 Units : ug/L

Type : PDS
 Inst : MET05
 Seqnum: 56340782065
 File : h2415065
 IDF : 10.0
 Lab ID: QC353257
 Matrix: Filtrate
 Batch : 116738
 Time : 24-AUG-2006 21:44
 Cal : 56340782001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S3780 (1000X)

Analyte	MSS	Spiked	PDS	%Rec	Limits	Flags
Aluminum	23.01	1000	1244	122	75-125	<c+ >c+ b*
Antimony	ND	10.00	9.363	94	75-125	
Arsenic	2.324	10.00	11.97	96	75-125	
Barium	7.323	10.00	16.97	96	75-125	
Beryllium	ND	10.00	11.53	115	75-125	<c+ >c+ b*
Cadmium	ND	10.00	9.901	99	75-125	
Calcium	2279	1000	3230	95	75-125	u
Cobalt	0.2312	10.00	9.149	89	75-125	
Copper	ND	10.00	9.939	99	75-125	
Iron	1246	1000	2136	89	75-125	u
Lead	ND	10.00	9.437	94	75-125	
Molybdenum	ND	10.00	9.390	94	75-125	
Nickel	0.8447	10.00	10.03	92	75-125	
Potassium	115.7	1000	1180	106	75-125	
Selenium	ND	10.00	9.999	100	75-125	
Silver	ND	10.00	9.319	93	75-125	
Thallium	0.04910	5.000	4.949	98	75-125	
Zinc	0.5741	10.00	9.831	93	75-125	

ISTD (ICALBLK h2415005)	ICALBLK Abund	PDS Abund	%Drift
Lithium	336846	320289	-4.92
Scandium	366577	340426	-7.13
Germanium	82555	84044	1.80
Indium	571579	547467	-4.22
Bismuth	478991	454737	-5.06

MISSING READINGS: CR MG MN NA V

+ = high bias < = opening > = closing b = noncompliant c = CCV u = use

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : PDS
 Inst : MET05
 Seqnum: 56341908038
 File : h2510038
 IDF : 10.0
 Lab ID: QC353257
 Matrix: Filtrate
 Batch : 116738
 Time : 25-AUG-2006 13:56
 Cal : 56341908001
 MSS : 188837-009
 Units : ug/L

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S3780 (1000X), S3310

Analyte	MSS Seqnum	Result	Spiked	PDS	%Rec	Limits	Flags
Aluminum	56341908034	ND	1000	1015	102	75-125	u
Antimony	56341908034	ND	10.00	9.290	93	75-125	
Arsenic	56341908034	2.218	10.00	11.92	97	75-125	
Barium	56341908034	7.737	10.00	17.11	94	75-125	
Beryllium	56341908034	ND	10.00	9.769	98	75-125	u
Cadmium	56341908034	ND	10.00	9.790	98	75-125	
Calcium	56340782061	2279	1000	3121	84	75-125	
Chromium	56341908034	0.6401	10.00	9.748	91	75-125	u
Cobalt	56341908034	0.1717	10.00	9.282	91	75-125	
Copper	56341908034	ND	10.00	9.990	100	75-125	
Iron	56341908034	1284	1000	2162	88	75-125	
Lead	56341908034	ND	10.00	9.360	94	75-125	
Magnesium	56341908034	4577	1000	5559	98	75-125	: u
Manganese	56341908034	87.78	10.00	94.62	68	75-125	: u
Molybdenum	56341908034	ND	10.00	9.769	98	75-125	
Nickel	56341908034	0.7013	10.00	10.07	94	75-125	
Potassium	56341908034	59.00	1000	1064	101	75-125	
Selenium	56341908034	ND	10.00	10.05	101	75-125	
Silver	56341908034	ND	10.00	9.403	94	75-125	
Sodium	56341908034	6493	1000	7419	93	75-125	: u
Thallium	56341908034	ND	5.000	4.648	93	75-125	
Vanadium	56341908034	ND	10.00	9.174	92	75-125	
Zinc	56341908034	0.4528	10.00	9.716	93	75-125	

ISTD (ICALBLK h2510003)	ICALBLK Abund	PDS Abund	%Drift
Lithium	323251	317206	-1.87
Scandium	341957	327509	-4.23
Germanium	80606	79300	-1.62
Indium	530308	509275	-3.97
Bismuth	437483	442337	1.11

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET05
 Calnum : 56340782001
 Units : ug/L

Date : 24-AUG-2006 16:09
 X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	h2415006	56340782006	CS1	24-AUG-2006 16:14	S4004
L2	h2415007	56340782007	CS2	24-AUG-2006 16:20	S4005
L3	h2415008	56340782008	CS3	24-AUG-2006 16:26	S4006
L4	h2415009	56340782009	CS4	24-AUG-2006 16:31	S4007
L5	h2415010	56340782010	CS5	24-AUG-2006 16:37	S4001
L6	h2415011	56340782011	CS6	24-AUG-2006 16:43	S4002

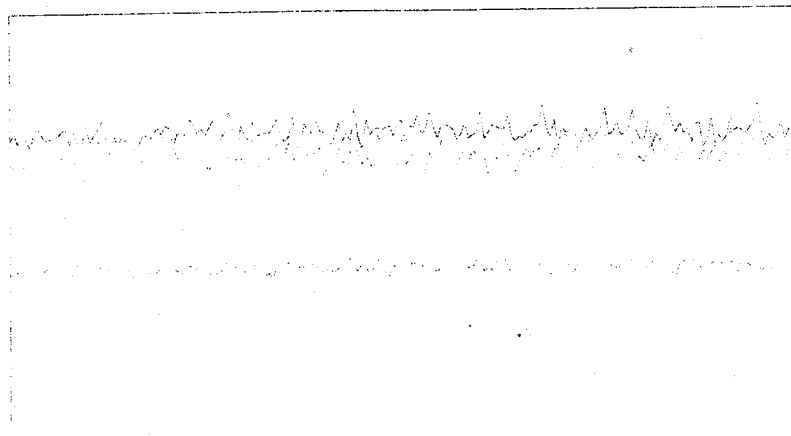
Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	AVG	r ²	MRSD	MR ²	Fig
Aluminum		0.6786	0.6324	0.6275	0.6239	0.6407	BLNK	-5.4809	1.56966		0.6406	1.000		0.995	
Antimony	0.3369	0.3273	0.3130	0.3019	0.3101	0.3176	BLNK	-0.0477	3.16472		0.3178	1.000		0.995	
Arsenic		0.8745	0.7153	0.5595	0.5517	0.5486	BLNK	-0.1165	1.82192		0.6499	1.000		0.995	
Barium	0.2068	0.1763	0.1400	0.1215	0.1264	0.1285	BLNK	-0.0585	7.81229		0.1499	1.000		0.995	
Beryllium	0.1941	0.1923	0.1774	0.1708	0.1732	0.1761	BLNK	-0.0301	5.69865		0.1806	1.000		0.995	
Cadmium	0.6623	0.6110	0.6077	0.5570	0.5335	0.5195	BLNK	-0.0664	1.91507		0.5818	1.000		0.995	
Calcium		0.0389	0.0303	0.0231	0.0232	0.0229	BLNK	-31.949	43.6110		0.0277	1.000		0.995	
Chromium		9.7505	6.6843	4.2922	4.0465	4.2110	BLNK	-0.6442	0.24028		5.7969	1.000		0.995	
Cobalt	5.2046	4.7560	4.7394	4.6149	4.6133	4.9128	BLNK	-0.0225	0.20611		4.8068	0.999		0.995	
Copper		1.8229	1.5823	1.1826	1.1320	1.1218	BLNK	-0.2165	0.89093		1.3683	1.000		0.995	
Iron		0.1608	0.1321	0.1078	0.1121	0.1100	BLNK	-24.393	9.07068		0.1246	1.000		0.995	
Lead	1.5576	1.3911	1.3109	1.2127	1.2422	1.3051	BLNK	-0.0377	0.77396		1.3366	0.999		0.995	
Magnesium		0.0864	0.0802	0.0769	0.0811	0.0824	BLNK	-4.5733	12.1820		0.0814	1.000		0.995	
Manganese	7.7525	6.8843	5.8042	5.2856	5.5718	5.5097	BLNK	-0.0871	0.18120		6.1347	1.000		0.995	
Molybdenum		1.4708	1.2344	1.0983	1.0947	1.0937	BLNK	-0.1989	0.91532		1.1983	1.000		0.995	
Nickel	2.0452	1.2913	1.2123	1.0382	0.9983	0.9851	BLNK	-0.1343	1.01313		1.2617	1.000		0.995	
Potassium		2.0010	1.4090	0.7772	0.7192	0.7218	BLNK	-87.792	1.39368		1.1257	1.000		0.995	
Selenium		0.0895	0.0613	0.0462	0.0423	0.0407	BLNK	-0.5758	24.4449		0.0560	1.000		0.995	
Silver	2.5931	2.8483	2.7247	2.5965	2.6192	2.5611	BLNK	-0.0228	0.38875		2.6572	1.000		0.995	
Sodium		2.5747	1.7397	0.9255	0.8652	0.8743	BLNK	-136.66	1.15570		1.3967	1.000		0.995	
Thallium		0.9506	0.9117	0.8033	0.8682	0.9039	BLNK	-0.0281	1.11578		0.8875	1.000		0.995	
Vanadium		5.9254	5.2396	4.4634	4.5089	4.8836	BLNK	-0.1756	0.20821		5.0042	0.998		0.995	
Zinc		3.7612	2.5154	0.7509	0.6010	0.5830	BLNK	-2.3793	1.72885		1.6423	1.000		0.995	

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Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+ [blank]

Tune Report

Tune File : Autotune.u



m/z:	7	89	205
Range:	20,000	50,000	50,000
Count:	14,391	33,765	20,120
Mean:	14397.2	33122.7	20127.7
RSD%:	3.03	3.19	2.76
n:	200		

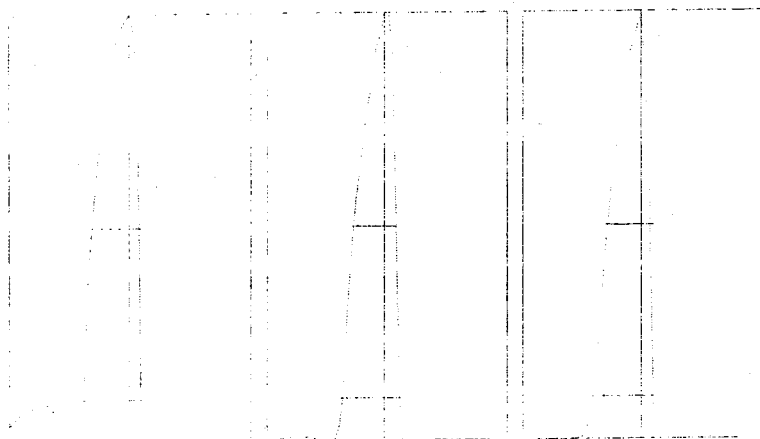
Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec

Oxide: 156/140 0.35%
Doubly Charged: 70/140 1.09%

m/z:	7	89	205
Cps:	61.2	25.1	20.7

m/z:	7	89	205
Height:	14,497	33,045	20,553
Axis:	7.00	89.00	205.00
W-50%:	0.60	0.55	0.60
W-10%:	0.7500	0.7500	0.7500

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec



Y axis : Linear

Tuning Parameters

===Plasma Condition===

RF Power: 1300 W
RF Matching: 1.7 V
Smpl Depth: 8 mm
Torch-H: -0.1 mm
Torch-V: 0.4 mm
Carrier Gas: 1.05 L/min
Makeup Gas: 0 L/min
Optional Gas: --- %
PeriPump1: 0.1 rps
PeriPump2: --- rps
S/C Temp: 2 degC

===Ion Lenses===

Extract 1: -150 V
Extract 2: -70 V
Einzel 1,3: -100 V
Einzel 2: 7 V
Omega Bias: -55 V
Omega (+): 5 V
Omega (-): -5 V
QP Focus: 5 V
Plate Bias: -5 V

===Q-Pole Parameters===

AMU Gain: 130
AMU Offset: 126
Axis Gain: 0.9993
Axis Offset: -0.1
QP Bias: 1.6 V

===Detector Parameters===

Discriminator: 8.8 mV
Analog HV: 1860 V
Pulse HV: 1590 V

Temp.p\$\$

P/A Factor Tuning Report

Acquired: Aug 24 2006 09:20 am

Mass[amu]	Element	P/A Factor
6	Li	0.071639
9	Be	0.080651
23	Na	Sensitivity too high
25	Mg	Sensitivity too high
26	Mg	Sensitivity too high
27	Al	0.096325
39	K	Sensitivity too high
43	Ca	0.095971
44	Ca	Sensitivity too high
45	Sc	Sensitivity too low
51	V	0.100797
52	Cr	0.101920
53	Cr	Sensitivity too low
54	Fe	Sensitivity too high
55	Mn	0.104041
57	Fe	Sensitivity too high
59	Co	0.106422
60	Ni	0.103663
63	Cu	0.106948
65	Cu	0.104915
66	Zn	0.104555
72	Ge	Sensitivity too low
75	As	0.103001
77	(As)	Sensitivity too low
82	Se	Sensitivity too low
83	(As)	Sensitivity too low
88	(Ca)	Sensitivity too low
89	Y	0.101087
95	Mo	0.102155
98	Mo	0.103616
99	(Mo)	Sensitivity too low
106	(Cd)	Sensitivity too low
108	(Cd)	Sensitivity too low
109	Ag	0.109169
111	Cd	Sensitivity too low
114	Cd	0.108070
115	In	0.106323
118	(In)	Sensitivity too high
121	Sb	0.109243
135	Ba	Sensitivity too low
137	Ba	0.106705
159	Tb	0.109176
166	Er	Sensitivity too low

Page 1

Temp.p\$\$

205	Tl	0.117216
206	(Pb)	0.114399
207	(Pb)	0.113484
208	Pb	0.116170
209	Bi	0.111481

===Detector Parameters===

Discriminator: 8.8 mV

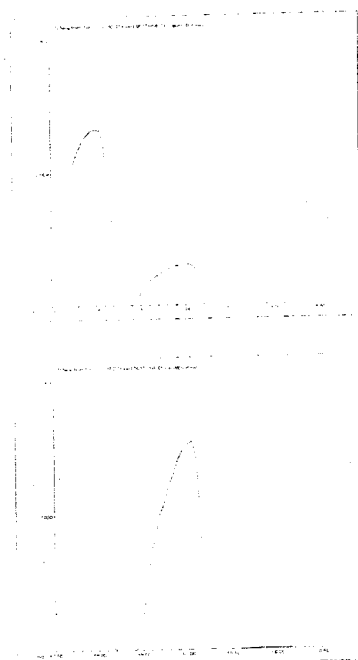
Analog HV: 1860 V

Pulse HV: 1590 V

6020 QC Tune Report

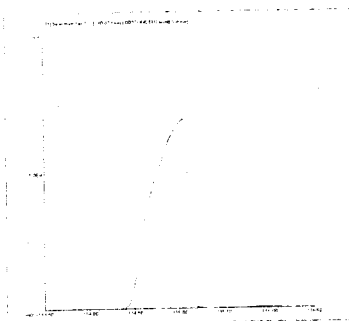
Data File: C:\ICPCHEM\1\DATA\06H2415a.B\001TUNE.D
Date Acquired: Aug 24 2006 03:42 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s4021
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)	Element	Actual	Required	Flag
	7 Li	1.42	5.00	
	59 Co	0.90	5.00	
	115 In	0.45	5.00	
	205 Tl	1.33	5.00	



7 Li
Mass Calib.
Actual: 7.00
Required: 6.90 - 7.10
Flag:
Peak Width
Actual: 0.55
Required: 0.90
Flag:

59 Co
Mass Calib.
Actual: 59.05
Required: 58.90 - 59.10
Flag:
Peak Width
Actual: 0.60
Required: 0.90
Flag:



115 In

Mass Calib.

Actual: 115.05

Required: 114.90 - 115.10

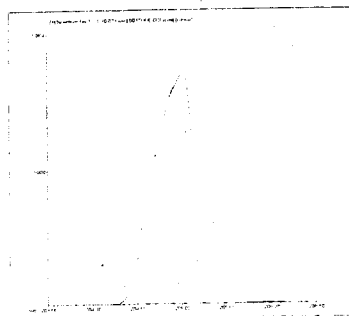
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



205 Tl

Mass Calib.

Actual: 205.00

Required: 204.90 - 205.10

Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:

Data File: C:\ICPCHEM\1\DATA\06H2415a.B\005CAL
Date Acquired: Aug 24 2006 04:09 pm
Operator:
Sample Name: std-blank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\602001
Last Cal Update: Aug 24 2006 03:59 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

Element	CPS Mean	SD	RSD(%)
6 Li	336845.50 P	1096.00	0.33
9 Be	35.56 P	1.93	5.41
23 Na	866887.19 A	3325.00	0.38
26 Mg	2752.22 P	18.36	0.67
27 Al	25597.78 P	209.20	0.82
39 K	461832.19 P	3325.00	0.72
44 Ca	5370.95 P	80.58	1.50
45 Sc	366576.69 P	2807.00	0.77
51 V	1393.33 P	774.90	55.62
52 Cr	4426.67 P	87.18	1.97
55 Mn	793.33 P	29.63	3.73
57 Fe	4440.00 P	80.90	1.82
59 Co	180.00 P	29.63	16.46
60 Ni	218.89 P	34.21	15.63
65 Cu	401.10 P	68.83	17.16
66 Zn	2272.22 P	65.77	2.89
72 Ge	82555.33 P	178.40	0.22
75 As	105.32 P	179.10	170.05
82 Se	38.89 P	13.47	34.64
95 Mo	358.89 P	54.19	15.10
109 Ag	96.67 P	10.00	10.35
111 Cd	57.26 P	22.57	39.42
115 In	571578.69 P	2659.00	0.47
121 Sb	172.22 P	15.75	9.15
137 Ba	85.56 P	13.88	16.22
205 Tl	241.11 P	16.78	6.96
208 Pb	466.67 P	27.28	5.85
209 Bi	478991.09 P	5055.00	1.06

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2415a.B\006CALI.D\006CALI.D#
 Date Acquired: Aug 24 2006 04:14 pm
 Operator:
 Sample Name: cs1,s4004
 Misc Info:
 Vial Number: 1102
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 24 2006 04:10 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	338942.19 P	531.70	0.16
9 Be	328.89 P	11.71	3.56
23 Na	709985.00 M	54370.00	7.66
26 Mg	17223.33 P	171.00	0.99
27 Al	141285.59 P	799.00	0.57
39 K	592775.50 P	3681.00	0.62
44 Ca	9914.47 P	285.30	2.88
45 Sc	368162.19 P	4472.00	1.21
51 V	3315.84 P	495.80	14.95
52 Cr	6217.78 P	125.40	2.02
55 Mn	3222.22 P	24.11	0.75
57 Fe	8796.67 P	37.86	0.43
59 Co	2163.33 P	123.40	5.70
60 Ni	850.00 P	20.82	2.45
65 Cu	1042.15 P	78.48	7.53
66 Zn	2878.89 P	32.72	1.14
72 Ge	83128.89 P	436.50	0.53
75 As	532.20 P	107.50	20.20
82 Se	69.78 P	13.17	18.87
95 Mo	836.67 P	26.03	3.11
109 Ag	1077.78 P	1.93	0.18
111 Cd	275.16 P	52.47	19.07
115 In	575906.88 P	1651.00	0.29
121 Sb	970.00 P	29.63	3.05
137 Ba	595.56 P	48.34	8.12
205 Tl	1278.89 P	58.53	4.58
208 Pb	3783.33 P	250.50	6.62
209 Bi	485894.41 P	3386.00	0.70

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	338942.19	0.16	336845.53	100.6	80 - 120	

C:\ICPCHEM\1\DATA\06H2415a.B\006CALI.D\006CALI.D#

45	Sc	368162.19	1.21	366576.66	100.4	80 -	120
72	Ge	83128.89	0.53	82555.34	100.7	80 -	120
115	In	575906.88	0.29	571578.75	100.8	80 -	120
209	Bi	485894.41	0.70	478991.06	101.4	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2415a.B\005CALB.D\005CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2415a.B\007CALI.D\007CALI.D#
 Date Acquired: Aug 24 2006 04:20 pm
 Operator:
 Sample Name: cs2,s4005
 Misc Info:
 Vial Number: 1103
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 24 2006 04:16 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	338741.09 P	2431.00	0.72
9 Be	651.11 P	106.10	16.30
23 Na	953871.50 A	14780.00	1.55
26 Mg	31994.44 P	532.10	1.66
27 Al	251388.91 P	1064.00	0.42
39 K	741376.69 M	22430.00	3.03
44 Ca	14413.69 P	252.60	1.75
45 Sc	370466.69 P	2198.00	0.59
51 V	4889.98 P	279.20	5.71
52 Cr	8044.44 P	283.90	3.53
55 Mn	5680.00 P	34.80	0.61
57 Fe	13263.33 P	121.00	0.91
59 Co	3924.44 P	88.78	2.26
60 Ni	1065.56 P	65.52	6.15
65 Cu	1504.31 P	84.74	5.63
66 Zn	3103.33 P	26.03	0.84
72 Ge	82509.56 P	477.30	0.58
75 As	720.72 P	215.70	29.93
82 Se	73.78 P	35.54	48.17
95 Mo	1213.33 P	90.25	7.44
109 Ag	2350.00 P	57.83	2.46
111 Cd	504.24 P	48.27	9.57
115 In	574722.19 P	2910.00	0.51
121 Sb	1881.11 P	66.69	3.55
137 Ba	1013.33 P	26.67	2.63
205 Tl	2304.44 P	78.48	3.41
208 Pb	6744.44 P	92.52	1.37
209 Bi	484827.69 P	487.00	0.10

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	338741.09	0.72	336845.53	100.6	80 - 120	

C:\ICPCHEM\1\DATA\06H2415a.B\007CALI.D\007CALI.D#

45	Sc	370466.66	0.59	366576.66	101.1	80 -	120
72	Ge	82509.56	0.58	82555.34	99.9	80 -	120
115	In	574722.19	0.51	571578.75	100.5	80 -	120
209	Bi	484827.75	0.10	478991.06	101.2	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2415a.B\005CALB.D\005CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2415a.B\008CALI.D\008CALI.D#
 Date Acquired: Aug 24 2006 04:26 pm
 Operator:
 Sample Name: cs3,s4006
 Misc Info:
 Vial Number: 1104
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 24 2006 04:22 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	341086.69 P	2185.00	0.64
9 Be	1210.00 P	20.28	1.68
23 Na	1291676.00 A	34670.00	2.68
26 Mg	59556.66 P	303.70	0.51
27 Al	469483.31 P	1628.00	0.35
39 K	1046133.00 A	15830.00	1.51
44 Ca	22498.45 P	500.90	2.23
45 Sc	371214.41 P	1017.00	0.27
51 V	8650.15 P	558.60	6.46
52 Cr	11034.44 P	300.30	2.72
55 Mn	9581.11 P	22.69	0.24
57 Fe	21814.44 P	578.30	2.65
59 Co	7823.33 P	105.00	1.34
60 Ni	2001.11 P	86.69	4.33
65 Cu	2611.96 P	13.88	0.53
66 Zn	4152.22 P	52.32	1.26
72 Ge	82536.89 P	239.60	0.29
75 As	1180.79 P	30.91	2.62
82 Se	101.11 P	12.01	11.88
95 Mo	2037.78 P	80.71	3.96
109 Ag	4497.78 P	28.35	0.63
111 Cd	1003.10 P	47.39	4.72
115 In	577395.13 P	956.90	0.17
121 Sb	3614.44 P	90.70	2.51
137 Ba	1616.67 P	31.80	1.97
205 Tl	4440.00 P	135.00	3.04
208 Pb	12770.00 P	216.70	1.70
209 Bi	487092.19 P	2975.00	0.61

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	341086.66	0.64	336845.53	101.3	80 - 120	

C:\ICPCHEM\1\DATA\06H2415a.B\008CALI.D\008CALI.D#

45 Sc	371214.44	0.27	366576.66	101.3	80 -	120
72 Ge	82536.89	0.29	82555.34	100.0	80 -	120
115 In	577395.06	0.17	571578.75	101.0	80 -	120
209 Bi	487092.22	0.61	478991.06	101.7	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2415a.B\005CALB.D\005CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:
Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2415a.B\009CALI.D\009CALI.D#
 Date Acquired: Aug 24 2006 04:31 pm
 Operator:
 Sample Name: cs4,s4007
 Misc Info:
 Vial Number: 1105
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 24 2006 04:27 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	345950.00 P	1100.00	0.32
9 Be	11818.89 P	97.54	0.83
23 Na	6975215.00 A	5865.00	0.08
26 Mg	576925.50 P	569.10	0.10
27 Al	4709040.00 A	22100.00	0.47
39 K	5832077.00 A	15380.00	0.26
44 Ca	173525.59 P	509.70	0.29
45 Sc	375203.31 P	1032.00	0.28
51 V	74616.33 P	1383.00	1.85
52 Cr	71755.55 P	676.90	0.94
55 Mn	88363.33 P	845.00	0.96
57 Fe	180158.91 P	965.90	0.54
59 Co	77150.00 P	728.00	0.94
60 Ni	17355.55 P	94.30	0.54
65 Cu	19769.71 P	417.50	2.11
66 Zn	12553.33 P	292.60	2.33
72 Ge	83587.78 P	66.75	0.08
75 As	9352.64 P	171.50	1.83
82 Se	773.11 P	19.58	2.53
95 Mo	18360.00 P	200.40	1.09
109 Ag	43407.77 P	276.90	0.64
111 Cd	9311.21 P	118.30	1.27
115 In	580668.63 P	1762.00	0.30
121 Sb	35061.11 P	207.70	0.59
137 Ba	14112.22 P	152.50	1.08
205 Tl	39436.67 P	729.20	1.85
208 Pb	119067.80 P	975.70	0.82
209 Bi	490925.59 P	1062.00	0.22

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	345950.00	0.32	336845.53	102.7	80 - 120	

45	Sc	375203.31	0.28	366576.66	102.4	80 -	120
72	Ge	83587.77	0.08	82555.34	101.3	80 -	120
115	In	580668.56	0.30	571578.75	101.6	80 -	120
209	Bi	490925.56	0.22	478991.06	102.5	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2415a.B\005CALB.D\005CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2415a.B\010CALI.D\010CALI.D#
 Date Acquired: Aug 24 2006 04:37 pm
 Operator:
 Sample Name: cs5,s4001
 Misc Info:
 Vial Number: 1106
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 24 2006 04:33 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	345050.00 P	2666.00	0.77
9 Be	119528.90 P	527.90	0.44
23 Na	64889780.00 A	1099000.00	1.69
26 Mg	6084264.00 A	47120.00	0.77
27 Al	46795140.00 A	265000.00	0.57
39 K	53946800.00 A	196000.00	0.36
44 Ca	1738749.00 A	21420.00	1.23
45 Sc	375058.91 P	4061.00	1.08
51 V	758144.81 P	4424.00	0.58
52 Cr	680396.63 P	3487.00	0.51
55 Mn	936857.00 A	6628.00	0.71
57 Fe	1885164.00 A	13580.00	0.72
59 Co	775695.50 P	2102.00	0.27
60 Ni	167860.00 P	1264.00	0.75
65 Cu	190346.50 P	553.40	0.29
66 Zn	101058.90 P	1484.00	1.47
72 Ge	84072.44 P	152.30	0.18
75 As	92759.92 P	787.60	0.85
82 Se	7111.11 P	74.88	1.05
95 Mo	184063.30 P	1540.00	0.84
109 Ag	440411.09 P	1781.00	0.40
111 Cd	89710.60 P	804.30	0.90
115 In	560482.31 P	4895.00	0.87
121 Sb	347601.09 P	2539.00	0.73
137 Ba	141632.20 P	1248.00	0.88
205 Tl	410840.00 P	4793.00	1.17
208 Pb	1175641.00 P	10380.00	0.88
209 Bi	473221.09 P	2700.00	0.57

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	345050.00	0.77	336845.53	102.4	80 - 120	

45	Sc	375058.88	1.08	366576.66	102.3	80 -	120
72	Ge	84072.45	0.18	82555.34	101.8	80 -	120
115	In	560482.25	0.87	571578.75	98.1	80 -	120
209	Bi	473221.06	0.57	478991.06	98.8	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2415a.B\005CALB.D\005CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2415a.B\011CALI.D\011CALI.D#
 Date Acquired: Aug 24 2006 04:43 pm
 Operator:
 Sample Name: cs6,s4002
 Misc Info:
 Vial Number: 1107
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 24 2006 04:38 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	336894.41 P	535.60	0.16
9 Be	237306.70 P	736.40	0.31
23 Na	128810100.00 A	385400.00	0.30
26 Mg	12135810.00 A	14820.00	0.12
27 Al	94387272.00 A	342000.00	0.36
39 K	106344300.00 A	89610.00	0.08
44 Ca	3377323.00 A	28160.00	0.83
45 Sc	368320.00 P	1431.00	0.39
51 V	1631169.00 A	19320.00	1.18
52 Cr	1406495.00 A	12360.00	0.88
55 Mn	1840231.00 A	5400.00	0.29
57 Fe	3673730.00 A	17340.00	0.47
59 Co	1640857.00 A	5731.00	0.35
60 Ni	329028.91 P	552.20	0.17
65 Cu	374659.91 P	736.70	0.20
66 Zn	194717.80 P	1464.00	0.75
72 Ge	83500.22 P	403.60	0.48
75 As	183244.00 P	631.90	0.34
82 Se	13604.44 P	71.02	0.52
95 Mo	365278.91 P	1658.00	0.45
109 Ag	855377.69 P	1993.00	0.23
111 Cd	173514.70 P	664.30	0.38
115 In	537968.69 P	1568.00	0.29
121 Sb	683452.19 P	2224.00	0.33
137 Ba	276493.31 P	1262.00	0.46
205 Tl	820244.38 P	5831.00	0.71
208 Pb	2368597.00 A	7570.00	0.32
209 Bi	453742.19 P	3617.00	0.80

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	336894.44	0.16	336845.53	100.0	80 - 120	

C:\ICPCHEM\1\DATA\06H2415a.B\011CALI.D\011CALI.D#

45	Sc	368320.00	0.39	366576.66	100.5	80 -	120
72	Ge	83500.23	0.48	82555.34	101.1	80 -	120
115	In	537968.75	0.29	571578.75	94.1	80 -	120
209	Bi	453742.22	0.80	478991.06	94.7	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2415a.B\005CALB.D\005CALB.D#

---	:Element Failures	---	:Max. Number of Failures Allowed
0	:ISTD Failures	0	:Max. Number of ISTD Failures Allowed

Data Results:

Analytes:	Pass
ISTD:	Pass

Calibration Summary

Calibration : C:\ICPCHEM\1\DATA\06G1718A.B\60200111.C
 Last Calib: Aug 24, 2006 16:44
 Cal Type : External Calibration Method
 Cal Title :

Standard Data Files

Level	DataPath	DataFile	Date Acquired
1	...hem\1\data\06h2415a.b\005calb.d\	005calb.d#	Aug 24 2006 04:09 pm
2	...hem\1\data\06h2415a.b\006cali.d\	006cali.d#	Aug 24 2006 04:14 pm
3	...hem\1\data\06h2415a.b\007cali.d\	007cali.d#	Aug 24 2006 04:20 pm
4	...hem\1\data\06h2415a.b\008cali.d\	008cali.d#	Aug 24 2006 04:26 pm
5	...hem\1\data\06h2415a.b\009cali.d\	009cali.d#	Aug 24 2006 04:31 pm
6	...hem\1\data\06h2415a.b\010cali.d\	010cali.d#	Aug 24 2006 04:37 pm
7	...hem\1\data\06h2415a.b\011cali.d\	011cali.d#	Aug 24 2006 04:43 pm
8	---		
9	---		
10	---		
11	---		
12	---		
13	---		
14	---		
15	---		
16	---		
17	---		
18	---		
19	---		
20	---		

Level	BkgPath	BkgFile	Interference Correction
1	---	---	ON
2	---	---	ON
3	---	---	ON
4	---	---	ON
5	---	---	ON
6	---	---	ON
7	---	---	ON
8	---		
9	---		
10	---		
11	---		
12	---		
13	---		
14	---		
15	---		
16	---		
17	---		
18	---		
19	---		
20	---		

Name	m/z	IS	Equation	r	Units
Li	6	---	Excluded	---	ppb
Be	9	6	$Y = 1.755E-1 \cdot X + 5.278E-3$ (blank)	---	ppb
Na	23	45	$Y = 8.653E-1 \cdot X + 1.182E+2$ (blank)	---	ppb
Mg	25	45	Excluded	---	ppb
Mg	26	45	$Y = 8.209E-2 \cdot X + 3.754E-1$ (blank)	---	ppb
Al	27	45	$Y = 6.371E-1 \cdot X + 3.492E+0$ (blank)	---	ppb
K	39	45	$Y = 7.175E-1 \cdot X + 6.299E+1$ (blank)	---	ppb
Ca	43	45	Excluded	---	ppb
Ca	44	45	$Y = 2.293E-2 \cdot X + 7.326E-1$ (blank)	---	ppb
Sc	45	---	Excluded	---	ppb
V	51	72	$Y = 4.803E+0 \cdot X + 8.432E-1$ (blank)	---	ppb
Cr	52	72	$Y = 4.162E+0 \cdot X + 2.681E+0$ (blank)	---	ppb
Cr	53	72	Excluded	---	ppb
Fe	54	72	Excluded	---	ppb
Mn	55	72	$Y = 5.519E+0 \cdot X + 4.805E-1$ (blank)	---	ppb
Fe	57	72	$Y = 1.102E-1 \cdot X + 2.689E+0$ (blank)	---	ppb
Co	59	72	$Y = 4.852E+0 \cdot X + 1.090E-1$ (blank)	---	ppb
Ni	60	72	$Y = 9.870E-1 \cdot X + 1.326E-1$ (blank)	---	ppb
Cu	63	72	Excluded	---	ppb
Cu	65	72	$Y = 1.122E+0 \cdot X + 2.430E-1$ (blank)	---	ppb
Zn	66	72	$Y = 5.784E-1 \cdot X + 1.376E+0$ (blank)	---	ppb
Ge	72	---	Excluded	---	ppb
As	75	72	$Y = 5.489E-1 \cdot X + 6.394E-2$ (blank)	---	ppb
(As)	77	72	Excluded	---	ppb
Se	82	72	$Y = 4.091E-2 \cdot X + 2.355E-2$ (blank)	---	ppb
(As)	83	72	Excluded	---	ppb
(Ca)	88	72	Excluded	---	ppb
Y	89	72	Excluded	---	ppb
Mo	95	72	$Y = 1.093E+0 \cdot X + 2.173E-1$ (blank)	---	ppb
Mo	98	72	Excluded	---	ppb
(Mo)	99	72	Excluded	---	ppb
(Cd)	106	72	Excluded	---	ppb
(Cd)	108	72	Excluded	---	ppb
Ag	109	72	$Y = 2.572E+0 \cdot X + 5.855E-2$ (blank)	---	ppb
Cd	111	72	$Y = 5.222E-1 \cdot X + 3.470E-2$ (blank)	---	ppb
Cd	114	72	Excluded	---	ppb
In	115	---	Excluded	---	ppb
(In)	118	---	Excluded	---	ppb
Sb	121	115	$Y = 3.160E-1 \cdot X + 1.506E-2$ (blank)	---	ppb
Ba	135	115	Excluded	---	ppb
Ba	137	115	$Y = 1.280E-1 \cdot X + 7.487E-3$ (blank)	---	ppb
Tb	159	---	Excluded	---	ppb
Er	166	115	Excluded	---	ppb
Tl	205	209	$Y = 8.962E-1 \cdot X + 2.517E-2$ (blank)	---	ppb
(Pb)	206	209	Excluded	---	ppb
(Pb)	207	209	Excluded	---	ppb
Pb	208	209	$Y = 1.292E+0 \cdot X + 4.873E-2$ (blank)	---	ppb
Bi	209	---	Excluded	---	ppb

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET05
 Seqnum : 56340782013
 Cal : 56340782001
 Standards: S4008

File : h2415013
 Caldate: 24-AUG-2006
 IDF : 1.0
 Time : 24-AUG-2006 16:54

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	0.6406	0.6335	10000	9938	ug/L	-1	10	
Antimony	0.3178	0.3101	100.0	98.10	ug/L	-2	10	
Arsenic	0.6499	0.5492	100.0	99.94	ug/L	0	10	
Barium	0.1499	0.1258	100.0	98.20	ug/L	-2	10	
Beryllium	0.1806	0.1724	100.0	98.19	ug/L	-2	10	
Cadmium	0.5818	0.5257	100.0	100.6	ug/L	1	10	
Calcium	0.0277	0.0233	10000	10120	ug/L	1	10	
Chromium	5.7969	4.0375	100.0	96.37	ug/L	-4	10	
Cobalt	4.8068	4.6053	100.0	94.90	ug/L	-5	10	
Copper	1.3683	1.1320	100.0	100.6	ug/L	1	10	
Iron	0.1246	0.1120	10000	10130	ug/L	1	10	
Lead	1.3366	1.2368	100.0	95.69	ug/L	-4	10	
Magnesium	0.0814	0.0818	10000	9963	ug/L	0	10	
Manganese	6.1347	5.6330	100.0	102.0	ug/L	2	10	
Molybdenum	1.1983	1.0902	100.0	99.59	ug/L	0	10	
Nickel	1.2617	0.9967	100.0	100.8	ug/L	1	10	
Potassium	1.1257	0.7215	10000	9968	ug/L	0	10	
Selenium	0.0560	0.0418	100.0	101.6	ug/L	2	10	
Silver	2.6572	2.5813	100.0	100.3	ug/L	0	10	
Sodium	1.3967	0.8663	10000	9875	ug/L	-1	10	
Thallium	0.8875	0.8787	50.00	48.99	ug/L	-2	10	
Vanadium	5.0042	4.6758	100.0	97.18	ug/L	-3	10	
Zinc	1.6423	0.5986	100.0	101.1	ug/L	1	10	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	347242	3.09
Scandium	366577	375933	2.55
Germanium	82555	84405	2.24
Indium	571579	555836	-2.75
Bismuth	478991	467299	-2.44

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56340782030
 Cal : 56340782001
 Standards: S4009

File : h2415030
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 18:28

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6406	0.6830	10000	10710	ug/L	7	10	
Antimony	0.3178	0.3058	100.0	96.73	ug/L	-3	10	
Arsenic	0.6499	0.5483	100.0	99.79	ug/L	0	10	
Barium	0.1499	0.1246	100.0	97.29	ug/L	-3	10	
Beryllium	0.1806	0.1866	100.0	106.3	ug/L	6	10	
Cadmium	0.5818	0.5186	100.0	99.25	ug/L	-1	10	
Calcium	0.0277	0.0232	10000	10100	ug/L	1	10	
Chromium	5.7969	3.8872	100.0	92.76	ug/L	-7	10	
Cobalt	4.8068	4.5236	100.0	93.22	ug/L	-7	10	
Copper	1.3683	1.1290	100.0	100.4	ug/L	0	10	
Iron	0.1246	0.1100	10000	9953	ug/L	0	10	
Lead	1.3366	1.2276	100.0	94.97	ug/L	-5	10	
Magnesium	0.0814	0.0879	10000	10700	ug/L	7	10	
Manganese	6.1347	5.0851	100.0	92.06	ug/L	-8	10	
Molybdenum	1.1983	1.0861	100.0	99.21	ug/L	-1	10	
Nickel	1.2617	0.9829	100.0	99.45	ug/L	-1	10	
Potassium	1.1257	0.7396	10000	10220	ug/L	2	10	
Selenium	0.0560	0.0410	100.0	99.71	ug/L	0	10	
Silver	2.6572	2.5188	100.0	97.90	ug/L	-2	10	
Sodium	1.3967	0.9388	10000	10710	ug/L	7	10	
Thallium	0.8875	0.8673	50.00	48.36	ug/L	-3	10	
Vanadium	5.0042	4.3215	100.0	89.80	ug/L	-10	10	
Zinc	1.6423	0.5910	100.0	99.80	ug/L	0	10	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	298533	-11.37
Scandium	366577	336070	-8.32
Germanium	82555	78733	-4.63
Indium	571579	515579	-9.80
Bismuth	478991	441916	-7.74

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56340782036
 Cal : 56340782001
 Standards: S4009

File : h2415036
 Caldate: 24-AUG-2006
 IDF : 1.0
 Time : 24-AUG-2006 19:02

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6406	0.6242	10000	9792	ug/L	-2	10	
Antimony	0.3178	0.3056	100.0	96.65	ug/L	-3	10	
Arsenic	0.6499	0.5437	100.0	98.94	ug/L	-1	10	
Barium	0.1499	0.1244	100.0	97.10	ug/L	-3	10	
Beryllium	0.1806	0.1742	100.0	99.21	ug/L	-1	10	
Cadmium	0.5818	0.5227	100.0	100.0	ug/L	0	10	
Calcium	0.0277	0.0231	10000	10030	ug/L	0	10	
Chromium	5.7969	3.9720	100.0	94.80	ug/L	-5	10	
Cobalt	4.8068	4.5548	100.0	93.86	ug/L	-6	10	
Copper	1.3683	1.1178	100.0	99.37	ug/L	-1	10	
Iron	0.1246	0.1114	10000	10080	ug/L	1	10	
Lead	1.3366	1.2261	100.0	94.86	ug/L	-5	10	
Magnesium	0.0814	0.0806	10000	9812	ug/L	-2	10	
Manganese	6.1347	5.2800	100.0	95.59	ug/L	-4	10	
Molybdenum	1.1983	1.0806	100.0	98.71	ug/L	-1	10	
Nickel	1.2617	0.9771	100.0	98.85	ug/L	-1	10	
Potassium	1.1257	0.7119	10000	9834	ug/L	-2	10	
Selenium	0.0560	0.0410	100.0	99.56	ug/L	0	10	
Silver	2.6572	2.5658	100.0	99.72	ug/L	0	10	
Sodium	1.3967	0.8616	10000	9821	ug/L	-2	10	
Thallium	0.8875	0.8620	50.00	48.06	ug/L	-4	10	
Vanadium	5.0042	4.4329	100.0	92.12	ug/L	-8	10	
Zinc	1.6423	0.5926	100.0	100.1	ug/L	0	10	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	309546	-8.10
Scandium	366577	348538	-4.92
Germanium	82555	78038	-5.47
Indium	571579	520020	-9.02
Bismuth	478991	437778	-8.60

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56340782053
 Cal : 56340782001
 Standards: S4009

File : h2415053
 Caldate: 24-AUG-2006
 IDF : 1.0
 Time : 24-AUG-2006 20:37

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6406	0.7560	10000	11860	ug/L	19	10	c+ ***
Antimony	0.3178	0.2983	100.0	94.37	ug/L	-6	10	
Arsenic	0.6499	0.5471	100.0	99.56	ug/L	0	10	
Barium	0.1499	0.1187	100.0	92.65	ug/L	-7	10	
Beryllium	0.1806	0.2007	100.0	114.4	ug/L	14	10	c+ ***
Cadmium	0.5818	0.4961	100.0	94.94	ug/L	-5	10	
Calcium	0.0277	0.0230	10000	9990	ug/L	0	10	
Chromium	5.7969	3.6585	100.0	87.26	ug/L	-13	10	c- ***
Cobalt	4.8068	4.3782	100.0	90.22	ug/L	-10	10	
Copper	1.3683	1.0950	100.0	97.34	ug/L	-3	10	
Iron	0.1246	0.1049	10000	9489	ug/L	-5	10	
Lead	1.3366	1.2164	100.0	94.11	ug/L	-6	10	
Magnesium	0.0814	0.0971	10000	11820	ug/L	18	10	c+ ***
Manganese	6.1347	5.1249	100.0	92.78	ug/L	-7	10	
Molybdenum	1.1983	1.0289	100.0	93.98	ug/L	-6	10	
Nickel	1.2617	0.9539	100.0	96.50	ug/L	-4	10	
Potassium	1.1257	0.7653	10000	10580	ug/L	6	10	
Selenium	0.0560	0.0400	100.0	97.17	ug/L	-3	10	
Silver	2.6572	2.4114	100.0	93.72	ug/L	-6	10	
Sodium	1.3967	1.0685	10000	12210	ug/L	22	10	c+ ***
Thallium	0.8875	0.8720	50.00	48.62	ug/L	-3	10	
Vanadium	5.0042	4.4281	100.0	92.02	ug/L	-8	10	
Zinc	1.6423	0.5731	100.0	96.70	ug/L	-3	10	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	357041	6.00
Scandium	366577	392718	7.13
Germanium	82555	96949	17.44
Indium	571579	610742	6.85
Bismuth	478991	489814	2.26

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56340782068
 Cal : 56340782001
 Standards: S4009

File : h2415068
 Caldate: 24-AUG-2006
 IDF : 1.0
 Time : 24-AUG-2006 22:01

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6406	0.7506	10000	11780	ug/L	18	10	c+ ***
Antimony	0.3178	0.3044	100.0	96.30	ug/L	-4	10	
Arsenic	0.6499	0.5462	100.0	99.40	ug/L	-1	10	
Barium	0.1499	0.1225	100.0	95.61	ug/L	-4	10	
Beryllium	0.1806	0.1988	100.0	113.2	ug/L	13	10	c+ ***
Cadmium	0.5818	0.5045	100.0	96.55	ug/L	-3	10	
Calcium	0.0277	0.0229	10000	9946	ug/L	-1	10	
Chromium	5.7969	3.6615	100.0	87.33	ug/L	-13	10	c- ***
Cobalt	4.8068	4.3685	100.0	90.02	ug/L	-10	10	
Copper	1.3683	1.0968	100.0	97.50	ug/L	-3	10	
Iron	0.1246	0.1053	10000	9530	ug/L	-5	10	
Lead	1.3366	1.2109	100.0	93.68	ug/L	-6	10	
Magnesium	0.0814	0.0965	10000	11750	ug/L	18	10	c+ ***
Manganese	6.1347	4.9110	100.0	88.90	ug/L	-11	10	c- ***
Molybdenum	1.1983	1.0233	100.0	93.47	ug/L	-7	10	
Nickel	1.2617	0.9527	100.0	96.38	ug/L	-4	10	
Potassium	1.1257	0.7704	10000	10650	ug/L	7	10	
Selenium	0.0560	0.0398	100.0	96.61	ug/L	-3	10	
Silver	2.6572	2.4397	100.0	94.82	ug/L	-5	10	
Sodium	1.3967	1.0406	10000	11890	ug/L	19	10	c+ ***
Thallium	0.8875	0.8716	50.00	48.60	ug/L	-3	10	
Vanadium	5.0042	4.1773	100.0	86.80	ug/L	-13	10	c- ***
Zinc	1.6423	0.5703	100.0	96.21	ug/L	-4	10	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	316576	-6.02
Scandium	366577	338731	-7.60
Germanium	82555	82845	0.35
Indium	571579	528366	-7.56
Bismuth	478991	449277	-6.20

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56340782077
 Cal : 56340782001
 Standards: S4009

File : h2415077
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 22:51

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6406	0.6927	10000	10870	ug/L	9	10	
Antimony	0.3178	0.2996	100.0	94.76	ug/L	-5	10	
Arsenic	0.6499	0.5418	100.0	98.60	ug/L	-1	10	
Barium	0.1499	0.1217	100.0	95.00	ug/L	-5	10	
Beryllium	0.1806	0.1913	100.0	109.0	ug/L	9	10	
Cadmium	0.5818	0.5000	100.0	95.68	ug/L	-4	10	
Calcium	0.0277	0.0226	10000	9818	ug/L	-2	10	
Chromium	5.7969	3.7684	100.0	89.90	ug/L	-10	10	
Cobalt	4.8068	4.4184	100.0	91.05	ug/L	-9	10	
Copper	1.3683	1.0939	100.0	97.24	ug/L	-3	10	
Iron	0.1246	0.1075	10000	9729	ug/L	-3	10	
Lead	1.3366	1.1966	100.0	92.57	ug/L	-7	10	
Magnesium	0.0814	0.0894	10000	10880	ug/L	9	10	
Manganese	6.1347	4.9116	100.0	88.91	ug/L	-11	10	c- ***
Molybdenum	1.1983	1.0384	100.0	94.85	ug/L	-5	10	
Nickel	1.2617	0.9634	100.0	97.47	ug/L	-3	10	
Potassium	1.1257	0.7417	10000	10250	ug/L	3	10	
Selenium	0.0560	0.0397	100.0	96.58	ug/L	-3	10	
Silver	2.6572	2.4325	100.0	94.54	ug/L	-5	10	
Sodium	1.3967	0.9540	10000	10890	ug/L	9	10	
Thallium	0.8875	0.8580	50.00	47.84	ug/L	-4	10	
Vanadium	5.0042	4.1723	100.0	86.70	ug/L	-13	10	c- ***
Zinc	1.6423	0.5741	100.0	96.87	ug/L	-3	10	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	299719	-11.02
Scandium	366577	337550	-7.92
Germanium	82555	79502	-3.70
Indium	571579	516408	-9.65
Bismuth	478991	433537	-9.49

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Segnum : 56340782097
 Cal : 56340782001
 Standards: S4009

File : h2415097
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 00:45

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6406	0.6886	10000	10800	ug/L	8	10	
Antimony	0.3178	0.2992	100.0	94.65	ug/L	-5	10	
Arsenic	0.6499	0.5372	100.0	97.75	ug/L	-2	10	
Barium	0.1499	0.1222	100.0	95.37	ug/L	-5	10	
Beryllium	0.1806	0.1826	100.0	104.0	ug/L	4	10	
Cadmium	0.5818	0.5042	100.0	96.48	ug/L	-4	10	
Calcium	0.0277	0.0226	10000	9827	ug/L	-2	10	
Chromium	5.7969	3.7893	100.0	90.41	ug/L	-10	10	
Cobalt	4.8068	4.4240	100.0	91.16	ug/L	-9	10	
Copper	1.3683	1.0958	100.0	97.41	ug/L	-3	10	
Iron	0.1246	0.1082	10000	9791	ug/L	-2	10	
Lead	1.3366	1.1923	100.0	92.24	ug/L	-8	10	
Magnesium	0.0814	0.0894	10000	10880	ug/L	9	10	
Manganese	6.1347	4.9933	100.0	90.39	ug/L	-10	10	
Molybdenum	1.1983	1.0243	100.0	93.55	ug/L	-6	10	
Nickel	1.2617	0.9655	100.0	97.68	ug/L	-2	10	
Potassium	1.1257	0.7380	10000	10200	ug/L	2	10	
Selenium	0.0560	0.0397	100.0	96.48	ug/L	-4	10	
Silver	2.6572	2.4412	100.0	94.88	ug/L	-5	10	
Sodium	1.3967	0.9495	10000	10840	ug/L	8	10	
Thallium	0.8875	0.8573	50.00	47.80	ug/L	-4	10	
Vanadium	5.0042	4.2177	100.0	87.64	ug/L	-12	10	c- ***
Zinc	1.6423	0.5736	100.0	96.79	ug/L	-3	10	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	296080	-12.10
Scandium	366577	320631	-12.53
Germanium	82555	74168	-10.16
Indium	571579	487109	-14.78
Bismuth	478991	422734	-11.74

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56340782112
 Cal : 56340782001
 Standards: S4009

File : h2415112
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 02:09

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6406	0.7006	10000	10990	ug/L	10	10	
Antimony	0.3178	0.3008	100.0	95.16	ug/L	-5	10	
Arsenic	0.6499	0.5360	100.0	97.54	ug/L	-2	10	
Barium	0.1499	0.1223	100.0	95.48	ug/L	-5	10	
Beryllium	0.1806	0.1890	100.0	107.7	ug/L	8	10	
Cadmium	0.5818	0.4969	100.0	95.10	ug/L	-5	10	
Calcium	0.0277	0.0226	10000	9834	ug/L	-2	10	
Chromium	5.7969	3.7773	100.0	90.12	ug/L	-10	10	
Cobalt	4.8068	4.4012	100.0	90.69	ug/L	-9	10	
Copper	1.3683	1.0825	100.0	96.23	ug/L	-4	10	
Iron	0.1246	0.1080	10000	9769	ug/L	-2	10	
Lead	1.3366	1.2059	100.0	93.30	ug/L	-7	10	
Magnesium	0.0814	0.0910	10000	11080	ug/L	11	10	c+ ***
Manganese	6.1347	4.9736	100.0	90.04	ug/L	-10	10	
Molybdenum	1.1983	1.0097	100.0	92.22	ug/L	-8	10	
Nickel	1.2617	0.9544	100.0	96.56	ug/L	-3	10	
Potassium	1.1257	0.7489	10000	10350	ug/L	4	10	
Selenium	0.0560	0.0393	100.0	95.52	ug/L	-4	10	
Silver	2.6572	2.4267	100.0	94.31	ug/L	-6	10	
Sodium	1.3967	0.9874	10000	11270	ug/L	13	10	c+ ***
Thallium	0.8875	0.8686	50.00	48.43	ug/L	-3	10	
Vanadium	5.0042	4.1962	100.0	87.20	ug/L	-13	10	c- ***
Zinc	1.6423	0.5665	100.0	95.56	ug/L	-4	10	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	315022	-6.48
Scandium	366577	342352	-6.61
Germanium	82555	79807	-3.33
Indium	571579	516312	-9.67
Bismuth	478991	442422	-7.63

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56340782126
 Cal : 56340782001
 Standards: S4009

File : h2415126
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 03:28

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6406	0.7013	10000	11000	ug/L	10	10	
Antimony	0.3178	0.3080	100.0	97.43	ug/L	-3	10	
Arsenic	0.6499	0.5386	100.0	98.02	ug/L	-2	10	
Barium	0.1499	0.1262	100.0	98.56	ug/L	-1	10	
Beryllium	0.1806	0.1829	100.0	104.2	ug/L	4	10	
Cadmium	0.5818	0.5136	100.0	98.29	ug/L	-2	10	
Calcium	0.0277	0.0234	10000	10160	ug/L	2	10	
Chromium	5.7969	3.9040	100.0	93.16	ug/L	-7	10	
Cobalt	4.8068	4.4643	100.0	91.99	ug/L	-8	10	
Copper	1.3683	1.0960	100.0	97.43	ug/L	-3	10	
Iron	0.1246	0.1114	10000	10080	ug/L	1	10	
Lead	1.3366	1.2169	100.0	94.14	ug/L	-6	10	
Magnesium	0.0814	0.0918	10000	11180	ug/L	12	10	c+ ***
Manganese	6.1347	5.1308	100.0	92.88	ug/L	-7	10	
Molybdenum	1.1983	1.0252	100.0	93.64	ug/L	-6	10	
Nickel	1.2617	0.9668	100.0	97.81	ug/L	-2	10	
Potassium	1.1257	0.7519	10000	10390	ug/L	4	10	
Selenium	0.0560	0.0397	100.0	96.42	ug/L	-4	10	
Silver	2.6572	2.4671	100.0	95.88	ug/L	-4	10	
Sodium	1.3967	0.9973	10000	11390	ug/L	14	10	c+ ***
Thallium	0.8875	0.8713	50.00	48.58	ug/L	-3	10	
Vanadium	5.0042	4.3205	100.0	89.78	ug/L	-10	10	
Zinc	1.6423	0.5751	100.0	97.05	ug/L	-3	10	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	287181	-14.74
Scandium	366577	301214	-17.83
Germanium	82555	68372	-17.18
Indium	571579	449540	-21.35
Bismuth	478991	400857	-16.31

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56340782016
 Cal : 56340782001

File : h2415016
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 17:10

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	50.00	2.123	ug/L	
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.3352]	0.5000	0.09029	ug/L	!ib
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	[0.01573]	0.2500	0.009674	ug/L	!ib
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	[0.1354]	0.5000	0.03860	ug/L	!ib
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	[0.01657]	0.2500	0.005283	ug/L	!ib
Magnesium	ND	50.00	3.054	ug/L	
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	ND	0.2500	0.01266	ug/L	
Sodium	[18.95]	50.00	9.919	ug/L	!ib
Thallium	[0.1479]	0.2500	0.02100	ug/L	!ib
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	366672	8.85
Scandium	366577	390434	6.51
Germanium	82555	87125	5.54
Indium	571579	594888	4.08
Bismuth	478991	489444	2.18

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56340782033
 Cal : 56340782001

File : h2415033
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 18:45

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[7.299]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.2835]	0.5000	0.09029	ug/L	!ib
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	ND	0.2500	0.009674	ug/L	
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	[19.99]	50.00	7.739	ug/L	!ib
Chromium	[0.08906]	0.5000	0.03860	ug/L	!ib
Cobalt	[0.009526]	0.2500	0.008548	ug/L	!ib
Copper	ND	0.5000	0.04426	ug/L	
Iron	[18.20]	50.00	6.980	ug/L	!ib
Lead	[0.01591]	0.2500	0.005283	ug/L	!ib
Magnesium	[7.369]	50.00	3.054	ug/L	!ib
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	0.7295	0.5000	0.4994	ug/L	ib ***
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	[7.264]	50.00	6.379	ug/L	!ib
Selenium	ND	0.5000	0.1891	ug/L	
Silver	ND	0.2500	0.01266	ug/L	
Sodium	61.96	50.00	9.919	ug/L	ib ***
Thallium	[0.07468]	0.2500	0.02100	ug/L	!ib
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	307454	-8.73
Scandium	366577	342692	-6.52
Germanium	82555	77666	-5.92
Indium	571579	534508	-6.49
Bismuth	478991	448957	-6.27

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56340782039
 Cal : 56340782001

File : h2415039
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 19:19

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[5.602]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.3531]	0.5000	0.09029	ug/L	!ib
Barium	[0.02415]	0.2500	0.02391	ug/L	!ib
Beryllium	[0.01814]	0.2500	0.009674	ug/L	!ib
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	[14.06]	50.00	7.739	ug/L	!ib
Chromium	[0.1008]	0.5000	0.03860	ug/L	!ib
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	[15.28]	50.00	6.980	ug/L	!ib
Lead	[0.01784]	0.2500	0.005283	ug/L	!ib
Magnesium	[5.874]	50.00	3.054	ug/L	!ib
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	[0.2339]	0.5000	0.1891	ug/L	!ib
Silver	[0.01677]	0.2500	0.01266	ug/L	!ib
Sodium	71.50	50.00	9.919	ug/L	ib ***
Thallium	[0.09232]	0.2500	0.02100	ug/L	!ib
Vanadium	[0.1630]	0.5000	0.08283	ug/L	!ib
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	328348	-2.52
Scandium	366577	361759	-1.31
Germanium	82555	80850	-2.07
Indium	571579	556692	-2.60
Bismuth	478991	457317	-4.52

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56340782056
 Cal : 56340782001

File : h2415056
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 20:54

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[19.04]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.3473]	0.5000	0.09029	ug/L	!ib
Barium	[0.06090]	0.2500	0.02391	ug/L	!ib
Beryllium	[0.04520]	0.2500	0.009674	ug/L	!ib
Cadmium	[0.1129]	0.2500	0.04566	ug/L	!ib
Calcium	[47.56]	50.00	7.739	ug/L	!ib
Chromium	ND	0.5000	0.03860	ug/L	
Cobalt	[0.04187]	0.2500	0.008548	ug/L	!ib
Copper	[0.06811]	0.5000	0.04426	ug/L	!ib
Iron	[31.91]	50.00	6.980	ug/L	!ib
Lead	[0.04008]	0.2500	0.005283	ug/L	!ib
Magnesium	[36.77]	50.00	3.054	ug/L	!ib
Manganese	[0.2314]	0.2500	0.01838	ug/L	!ib
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	[0.04364]	0.2500	0.03982	ug/L	!ib
Potassium	[12.77]	50.00	6.379	ug/L	!ib
Selenium	[0.2083]	0.5000	0.1891	ug/L	!ib
Silver	[0.03768]	0.2500	0.01266	ug/L	!ib
Sodium	332.5	50.00	9.919	ug/L	ib ***
Thallium	[0.1272]	0.2500	0.02100	ug/L	!ib
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	344809	2.36
Scandium	366577	374512	2.16
Germanium	82555	90766	9.95
Indium	571579	603490	5.58
Bismuth	478991	496312	3.62

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56340782070
 Cal : 56340782001

File : h2415070
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 22:12

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[9.409]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.2812]	0.5000	0.09029	ug/L	!ib
Barium	[0.04398]	0.2500	0.02391	ug/L	!ib
Beryllium	[0.03870]	0.2500	0.009674	ug/L	!ib
Cadmium	[0.07099]	0.2500	0.04566	ug/L	!ib
Calcium	[18.73]	50.00	7.739	ug/L	!ib
Chromium	ND	0.5000	0.03860	ug/L	
Cobalt	[0.02462]	0.2500	0.008548	ug/L	!ib
Copper	[0.04590]	0.5000	0.04426	ug/L	!ib
Iron	[12.62]	50.00	6.980	ug/L	!ib
Lead	[0.04060]	0.2500	0.005283	ug/L	!ib
Magnesium	[19.05]	50.00	3.054	ug/L	!ib
Manganese	[0.1562]	0.2500	0.01838	ug/L	!ib
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	[0.02628]	0.2500	0.01266	ug/L	!ib
Sodium	185.4	50.00	9.919	ug/L	!ib ***
Thallium	[0.1278]	0.2500	0.02100	ug/L	!ib
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	326810	-2.98
Scandium	366577	348477	-4.94
Germanium	82555	84121	1.90
Indium	571579	563317	-1.45
Bismuth	478991	467719	-2.35

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56340782080
 Cal : 56340782001

File : h2415080
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 23:08

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[5.733]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.2895]	0.5000	0.09029	ug/L	!ib
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	[0.01458]	0.2500	0.009674	ug/L	!ib
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	[12.01]	50.00	7.739	ug/L	!ib
Chromium	[0.05599]	0.5000	0.03860	ug/L	!ib
Cobalt	[0.01014]	0.2500	0.008548	ug/L	!ib
Copper	ND	0.5000	0.04426	ug/L	
Iron	[12.87]	50.00	6.980	ug/L	!ib
Lead	[0.01247]	0.2500	0.005283	ug/L	!ib
Magnesium	[7.028]	50.00	3.054	ug/L	!ib
Manganese	[0.03368]	0.2500	0.01838	ug/L	!ib
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	ND	0.2500	0.01266	ug/L	
Sodium	50.51	50.00	9.919	ug/L	ib ***
Thallium	[0.05956]	0.2500	0.02100	ug/L	!ib
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	312018	-7.37
Scandium	366577	345521	-5.74
Germanium	82555	81117	-1.74
Indium	571579	543857	-4.85
Bismuth	478991	445530	-6.99

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56340782099
 Cal : 56340782001

File : h2415099
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 00:56

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	50.00	2.123	ug/L	
Antimony	[0.03406]	0.2500	0.03394	ug/L	!ib
Arsenic	[0.1516]	0.5000	0.09029	ug/L	!ib
Barium	[0.03157]	0.2500	0.02391	ug/L	!ib
Beryllium	[0.02895]	0.2500	0.009674	ug/L	!ib
Cadmium	[0.07339]	0.2500	0.04566	ug/L	!ib
Calcium	ND	50.00	7.739	ug/L	
Chromium	ND	0.5000	0.03860	ug/L	
Cobalt	[0.01257]	0.2500	0.008548	ug/L	!ib
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	[0.02252]	0.2500	0.005283	ug/L	!ib
Magnesium	[3.590]	50.00	3.054	ug/L	!ib
Manganese	[0.2156]	0.2500	0.01838	ug/L	!ib
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	[0.01576]	0.2500	0.01266	ug/L	!ib
Sodium	ND	50.00	9.919	ug/L	
Thallium	[0.1302]	0.2500	0.02100	ug/L	!ib
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	295061	-12.40
Scandium	366577	320166	-12.66
Germanium	82555	72872	-11.73
Indium	571579	501067	-12.34
Bismuth	478991	423976	-11.49

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56340782114
 Cal : 56340782001

File : h2415114
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 02:20

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[3.005]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	0.5798	0.5000	0.09029	ug/L	ib ***
Barium	[0.03264]	0.2500	0.02391	ug/L	!ib
Beryllium	[0.03369]	0.2500	0.009674	ug/L	!ib
Cadmium	[0.08275]	0.2500	0.04566	ug/L	!ib
Calcium	ND	50.00	7.739	ug/L	
Chromium	[0.2053]	0.5000	0.03860	ug/L	!ib
Cobalt	[0.02724]	0.2500	0.008548	ug/L	!ib
Copper	[0.04855]	0.5000	0.04426	ug/L	!ib
Iron	ND	50.00	6.980	ug/L	
Lead	[0.04510]	0.2500	0.005283	ug/L	!ib
Magnesium	[11.82]	50.00	3.054	ug/L	!ib
Manganese	0.2711	0.2500	0.01838	ug/L	ib ***
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	[0.02263]	0.2500	0.01266	ug/L	!ib
Sodium	[46.47]	50.00	9.919	ug/L	!ib
Thallium	[0.09725]	0.2500	0.02100	ug/L	!ib
Vanadium	[0.09390]	0.5000	0.08283	ug/L	!ib
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	317920	-5.62
Scandium	366577	343380	-6.33
Germanium	82555	79910	-3.20
Indium	571579	538009	-5.87
Bismuth	478991	449660	-6.12

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56340782128
 Cal : 56340782001

File : h2415128
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 03:39

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[2.656]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	0.5480	0.5000	0.09029	ug/L	ib ***
Barium	[0.05811]	0.2500	0.02391	ug/L	!ib
Beryllium	[0.04799]	0.2500	0.009674	ug/L	!ib
Cadmium	[0.07511]	0.2500	0.04566	ug/L	!ib
Calcium	ND	50.00	7.739	ug/L	
Chromium	[0.09652]	0.5000	0.03860	ug/L	!ib
Cobalt	[0.03166]	0.2500	0.008548	ug/L	!ib
Copper	[0.05604]	0.5000	0.04426	ug/L	!ib
Iron	ND	50.00	6.980	ug/L	
Lead	[0.04480]	0.2500	0.005283	ug/L	!ib
Magnesium	[13.73]	50.00	3.054	ug/L	!ib
Manganese	[0.1409]	0.2500	0.01838	ug/L	!ib
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	[0.2807]	0.5000	0.1891	ug/L	!ib
Silver	[0.04128]	0.2500	0.01266	ug/L	!ib
Sodium	[14.71]	50.00	9.919	ug/L	!ib
Thallium	[0.08668]	0.2500	0.02100	ug/L	!ib
Vanadium	[0.1466]	0.5000	0.08283	ug/L	!ib
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	291944	-13.33
Scandium	366577	307571	-16.10
Germanium	82555	70469	-14.64
Indium	571579	476316	-16.67
Bismuth	478991	413726	-13.63

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05

IDF : 1.0

Seqnum : 56340782017

File : h2415017

Time : 24-AUG-2006 17:16

Cal : 56340782001

Caldate: 24-AUG-2006

Standards: S4011, S3310

Analyte	Quant	RL	Units	Flags
Antimony	2.129	0.2500	ug/L	
Arsenic	[0.4137]	0.5000	ug/L	
Barium	1.012	0.2500	ug/L	
Beryllium	[0.04513]	0.2500	ug/L	
Cadmium	[0.1426]	0.2500	ug/L	
Chromium	1.095	0.5000	ug/L	
Cobalt	2.481	0.2500	ug/L	
Copper	1.516	0.5000	ug/L	
Lead	1.195	0.2500	ug/L	
Manganese	0.9071	0.2500	ug/L	
Nickel	1.275	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1378]	0.2500	ug/L	
Thallium	[0.1510]	0.2500	ug/L	
Vanadium	[0.1056]	0.5000	ug/L	
Zinc	2.235	0.5000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	102000	ug/L	102
Calcium	300000	295500	ug/L	99
Iron	250000	230400	ug/L	92
Magnesium	100000	100700	ug/L	101
Molybdenum	2000	1906	ug/L	95
Potassium	100000	97660	ug/L	98
Sodium	250000	243100	ug/L	97

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	311213	-7.61
Scandium	366577	359864	-1.83
Germanium	82555	84081	1.85
Indium	571579	489173	-14.42
Bismuth	478991	386249	-19.36

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Segnum : 56340782018 File : h2415018
 Cal : 56340782001 Caldate: 24-AUG-2006
 Standards: S4012, S3310

IDF : 1.0
 Time : 24-AUG-2006 17:21

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	108400	ug/L	8		
Arsenic	100.0	100.3	ug/L	0	20	
Cadmium	100.0	85.95	ug/L	-14	20	
Calcium	300000	296400	ug/L	-1		
Chromium	200.0	198.4	ug/L	-1	20	
Cobalt	200.0	197.9	ug/L	-1	20	
Copper	200.0	187.9	ug/L	-6	20	
Iron	250000	227100	ug/L	-9		
Magnesium	100000	106900	ug/L	7		
Manganese	200.0	196.1	ug/L	-2	20	
Molybdenum	2000	1905	ug/L	-5		
Nickel	200.0	190.9	ug/L	-5	20	
Potassium	100000	100500	ug/L	1		
Selenium	100.0	88.06	ug/L	-12	20	
Silver	50.00	44.30	ug/L	-11	20	
Sodium	250000	259300	ug/L	4		
Vanadium	200.0	203.6	ug/L	2	20	
Zinc	100.0	100.5	ug/L	1	20	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Scandium	366577	341021	-6.97
Germanium	82555	83180	0.76

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05		IDF : 1.0
Seqnum : 56340782027	File : h2415027	Time : 24-AUG-2006 18:12
Cal : 56340782001	Caldate: 24-AUG-2006	
Standards: S4011, S3310		

Analyte	Quant	RL	Units	Flags
Antimony	2.099	0.2500	ug/L	
Arsenic	0.5818	0.5000	ug/L	
Barium	0.9801	0.2500	ug/L	
Beryllium	[0.05229]	0.2500	ug/L	
Cadmium	[0.1352]	0.2500	ug/L	
Chromium	1.115	0.5000	ug/L	
Cobalt	2.466	0.2500	ug/L	
Copper	1.517	0.5000	ug/L	
Lead	1.180	0.2500	ug/L	
Manganese	0.9134	0.2500	ug/L	
Nickel	1.359	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1298]	0.2500	ug/L	
Thallium	[0.05144]	0.2500	ug/L	
Vanadium	[0.1241]	0.5000	ug/L	
Zinc	2.265	0.5000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	107600	ug/L	108
Calcium	300000	296800	ug/L	99
Iron	250000	228300	ug/L	91
Magnesium	100000	105900	ug/L	106
Molybdenum	2000	1918	ug/L	96
Potassium	100000	100100	ug/L	100
Sodium	250000	259100	ug/L	104

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	292002	-13.31
Scandium	366577	336201	-8.29
Germanium	82555	81129	-1.73
Indium	571579	470977	-17.60
Bismuth	478991	378844	-20.91

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56340782028
 Cal : 56340782001
 Standards: S4012, S3310

File : h2415028
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 18:17

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	111200	ug/L	11		
Arsenic	100.0	99.76	ug/L	0	20	
Cadmium	100.0	85.65	ug/L	-14	20	
Calcium	300000	294500	ug/L	-2		
Chromium	200.0	194.0	ug/L	-3	20	
Cobalt	200.0	195.5	ug/L	-2	20	
Copper	200.0	187.4	ug/L	-6	20	
Iron	250000	221600	ug/L	-11		
Magnesium	100000	109500	ug/L	10		
Manganese	200.0	193.2	ug/L	-3	20	
Molybdenum	2000	1886	ug/L	-6		
Nickel	200.0	189.4	ug/L	-5	20	
Potassium	100000	101600	ug/L	2		
Selenium	100.0	88.19	ug/L	-12	20	
Silver	50.00	44.44	ug/L	-11	20	
Sodium	250000	266800	ug/L	7		
Vanadium	200.0	200.7	ug/L	0	20	
Zinc	100.0	99.34	ug/L	-1	20	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Scandium	366577	324293	-11.53
Germanium	82555	80828	-2.09

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56340782073
 Cal : 56340782001
 Standards: S4011, S3310

File : h2415073
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 22:29

Analyte	Quant	RL	Units	Flags
Antimony	2.021	0.2500	ug/L	
Arsenic	[0.4836]	0.5000	ug/L	
Barium	0.9191	0.2500	ug/L	
Beryllium	[0.04094]	0.2500	ug/L	
Cadmium	[0.1971]	0.2500	ug/L	
Chromium	1.033	0.5000	ug/L	
Cobalt	2.388	0.2500	ug/L	
Copper	1.519	0.5000	ug/L	
Lead	1.196	0.2500	ug/L	
Manganese	0.9953	0.2500	ug/L	
Nickel	1.388	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1327]	0.2500	ug/L	
Thallium	[0.08988]	0.2500	ug/L	
Vanadium	[0.06302]	0.5000	ug/L	
Zinc	2.125	0.5000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	115300	ug/L	115
Calcium	300000	286800	ug/L	96
Iron	250000	212700	ug/L	85
Magnesium	100000	113800	ug/L	114
Molybdenum	2000	1833	ug/L	92
Potassium	100000	102400	ug/L	102
Sodium	250000	274200	ug/L	110

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	298629	-11.35
Scandium	366577	343660	-6.25
Germanium	82555	87885	6.46
Indium	571579	499909	-12.54
Bismuth	478991	382931	-20.05

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56340782074
 Cal : 56340782001
 Standards: S4012, S3310

File : h2415074
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 24-AUG-2006 22:35

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	116000	ug/L	16		
Arsenic	100.0	97.56	ug/L	-2	20	
Cadmium	100.0	82.88	ug/L	-17	20	
Calcium	300000	283800	ug/L	-5		
Chromium	200.0	180.0	ug/L	-10	20	
Cobalt	200.0	185.4	ug/L	-7	20	
Copper	200.0	178.0	ug/L	-11	20	
Iron	250000	208100	ug/L	-17		
Magnesium	100000	114300	ug/L	14		
Manganese	200.0	178.1	ug/L	-11	20	
Molybdenum	2000	1812	ug/L	-9		
Nickel	200.0	179.6	ug/L	-10	20	
Potassium	100000	102100	ug/L	2		
Selenium	100.0	84.78	ug/L	-15	20	
Silver	50.00	41.99	ug/L	-16	20	
Sodium	250000	274600	ug/L	10		
Vanadium	200.0	186.4	ug/L	-7	20	
Zinc	100.0	94.77	ug/L	-5	20	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Scandium	366577	335399	-8.51
Germanium	82555	86927	5.30

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56340782130
 Cal : 56340782001
 Standards: S4011, S3310

File : h2415130
 Caldate: 24-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 03:50

Analyte	Quant	RL	Units	Flags
Antimony	2.086	0.2500	ug/L	
Arsenic	0.7242	0.5000	ug/L	
Barium	0.9328	0.2500	ug/L	
Beryllium	[0.007509]	0.2500	ug/L	
Cadmium	[0.1063]	0.2500	ug/L	
Chromium	1.096	0.5000	ug/L	
Cobalt	2.416	0.2500	ug/L	
Copper	1.454	0.5000	ug/L	
Lead	1.133	0.2500	ug/L	
Manganese	0.9927	0.2500	ug/L	
Nickel	1.277	0.2500	ug/L	
Selenium	0.5260	0.5000	ug/L	
Silver	[0.1129]	0.2500	ug/L	
Thallium	[0.06881]	0.2500	ug/L	
Vanadium	[0.1327]	0.5000	ug/L	
Zinc	2.193	0.5000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	108900	ug/L	109
Calcium	300000	292900	ug/L	98
Iron	250000	224100	ug/L	90
Magnesium	100000	107300	ug/L	107
Molybdenum	2000	1888	ug/L	94
Potassium	100000	100800	ug/L	101
Sodium	250000	265100	ug/L	106

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Lithium	336846	252539	-25.03
Scandium	366577	286572	-21.82
Germanium	82555	68345	-17.21
Indium	571579	408101	-28.60
Bismuth	478991	337712	-29.50

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Segnum : 56340782131 File : h2415131
 Cal : 56340782001 Caldate: 24-AUG-2006
 Standards: S4012, S3310

IDF : 1.0
 Time : 25-AUG-2006 03:55

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	112500	ug/L	13		
Arsenic	100.0	97.61	ug/L	-2	20	
Cadmium	100.0	84.40	ug/L	-16	20	
Calcium	300000	289000	ug/L	-4		
Chromium	200.0	189.0	ug/L	-6	20	
Cobalt	200.0	191.8	ug/L	-4	20	
Copper	200.0	178.9	ug/L	-11	20	
Iron	250000	217200	ug/L	-13		
Magnesium	100000	110500	ug/L	11		
Manganese	200.0	189.3	ug/L	-5	20	
Molybdenum	2000	1843	ug/L	-8		
Nickel	200.0	182.4	ug/L	-9	20	
Potassium	100000	102200	ug/L	2		
Selenium	100.0	85.02	ug/L	-15	20	
Silver	50.00	42.66	ug/L	-15	20	
Sodium	250000	271600	ug/L	9		
Vanadium	200.0	196.1	ug/L	-2	20	
Zinc	100.0	95.96	ug/L	-4	20	

ISTD (ICALBLK h2415005)	ICALBLK Abund	Abund	%Drift
Scandium	366577	290120	-20.86
Germanium	82555	71952	-12.84

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56340782 Instrument: MET05
Analytical Method: EPA 6020 Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 24-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
001	h2415001	TUN				24-AUG-2006 15:42	1.0	1.0				1		
002	h2415002	X	RINSE			24-AUG-2006 15:48	1.0					2		
003	h2415003	X	STD-BLANK			24-AUG-2006 15:58	1.0					2		
004	h2415004	X	RINSE			24-AUG-2006 16:03	1.0					2		
005	h2415005	ICALBLK	STD-BLANK			24-AUG-2006 16:09	1.0	1.0				2		
006	h2415006	ICAL	CS1			24-AUG-2006 16:14	1.0	1.0				3		
007	h2415007	ICAL	CS2			24-AUG-2006 16:20	1.0	1.0				4		
008	h2415008	ICAL	CS3			24-AUG-2006 16:26	1.0	1.0				5		
009	h2415009	ICAL	CS4			24-AUG-2006 16:31	1.0	1.0				6		
010	h2415010	ICAL	CS5			24-AUG-2006 16:37	1.0	1.0				7		
011	h2415011	ICAL	CS6			24-AUG-2006 16:43	1.0	1.0				8		
012	h2415012	X	RINSE			24-AUG-2006 16:48	1.0					2		
013	h2415013	ICV				24-AUG-2006 16:54	1.0	1.0				9		
014	h2415014	X	RINSE			24-AUG-2006 16:59	1.0					2		
015	h2415015	X				24-AUG-2006 17:05	1.0					2		
016	h2415016	ICB				24-AUG-2006 17:10	1.0	1.0				2		
017	h2415017	ICSA				24-AUG-2006 17:16	1.0	1.0				10 2	7:CA=295500	
018	h2415018	ICSAB				24-AUG-2006 17:21	1.0	1.0				11 2	8:CA=296400	
019	h2415019	X	RINSE			24-AUG-2006 17:27	1.0					2		
020	h2415020	X	RINSE			24-AUG-2006 17:33	1.0					2		
021	h2415021	SAMPLE	188762-004			24-AUG-2006 17:38	50.0	1.0				2	1:NA=81740.0	
022	h2415022	SAMPLE	188762-005			24-AUG-2006 17:44	50.0	1.0				2	1:NA=80420.0	
023	h2415023	SAMPLE	188762-006			24-AUG-2006 17:49	1.0	1.0				2		
024	h2415024	SAMPLE	188762-007			24-AUG-2006 17:55	5.0	1.0				2	1:NA=94960.0	
025	h2415025	SAMPLE	188762-008			24-AUG-2006 18:01	50.0	1.0				2	1:NA=54300.0	
026	h2415026	SAMPLE	188762-009			24-AUG-2006 18:06	50.0	1.0				2		
027	h2415027	ICSA				24-AUG-2006 18:12	1.0	1.0				10 2	7:CA=296800	
028	h2415028	ICSAB				24-AUG-2006 18:17	1.0	1.0				11 2	8:CA=294500	
029	h2415029	X	RINSE			24-AUG-2006 18:23	1.0					2		
030	h2415030	CCV				24-AUG-2006 18:28	1.0	1.0				12		
031	h2415031	X	RINSE			24-AUG-2006 18:34	1.0					2		

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S4009 13=S3780

Analyst: *[Signature]* Date: *8/25/06*

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56340782 Instrument: MET05
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 24-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>IR
032	h2415032	X		24-AUG-2006	18:40	1.0						2		
033	h2415033	CCB		24-AUG-2006	18:45	1.0		1.0	2		1	2		
034	h2415034	X	RINSE	24-AUG-2006	18:51	1.0						2		
035	h2415035	X	RINSE	24-AUG-2006	18:56	1.0						2		
036	h2415036	CCV		24-AUG-2006	19:02	1.0		1.0			1	12		
037	h2415037	X	RINSE	24-AUG-2006	19:08	1.0						2		
038	h2415038	X		24-AUG-2006	19:13	1.0						2		
039	h2415039	CCB		24-AUG-2006	19:19	1.0		1.0	1		1	2		
040	h2415040	BLANK	QC353251	24-AUG-2006	19:25	1.0		1.0	2		1	2		
041	h2415041	BS	QC353252	24-AUG-2006	19:30	1.0		1.0	5		1	2		
042	h2415042	BSD	QC353253	24-AUG-2006	19:36	1.0		1.0	5		1	2		
043	h2415043	X	RINSE	24-AUG-2006	19:41	1.0						2		
044	h2415044	MSS	188837-009	24-AUG-2006	19:47	1.0		1.0	5		1	2	4:NA=60310.0	
045	h2415045	X	NO SAMPLE	24-AUG-2006	19:52	5.0		1.0		3	1	2		
046	h2415046	MS	QC353254	24-AUG-2006	19:58	1.0		1.0	4		1	2	5:NA=737400	
047	h2415047	MSD	QC353255	24-AUG-2006	20:04	1.0		1.0	4		1	2	5:NA=725300	
048	h2415048	PDS	QC353257	24-AUG-2006	20:09	1.0		1.0	3		1	13	5:NA=68690.0	
049	h2415049	X	RINSE	24-AUG-2006	20:15	1.0						2		
050	h2415050	SAMPLE	188837-005	24-AUG-2006	20:20	1.0		1.0	6		1	2	4:MG=367400	
051	h2415051	SAMPLE	188837-008	24-AUG-2006	20:26	1.0		1.0	4		1	2	3:NA=235700	
052	h2415052	X	RINSE	24-AUG-2006	20:31	1.0						2		
053	h2415053	CCV		24-AUG-2006	20:37	1.0		1.0	5		1	12		
054	h2415054	X	RINSE	24-AUG-2006	20:43	1.0						2		
055	h2415055	X		24-AUG-2006	20:48	1.0						2		
056	h2415056	CCB		24-AUG-2006	20:54	1.0		1.0	1		1	2		
057	h2415057	SAMPLE	188837-010	24-AUG-2006	20:59	1.0		1.0	7		1	2	6:NA=126700	
058	h2415058	SAMPLE	188837-005	24-AUG-2006	21:05	1.0		1.0	8		1	2	7:MG=391800	
059	h2415059	SAMPLE	188837-012	24-AUG-2006	21:11	1.0		1.0	4		1	2		
060	h2415060	SAMPLE	188869-001	24-AUG-2006	21:16	1.0		1.0	4		1	2		
061	h2415061	MSS	188837-009	24-AUG-2006	21:22	10.0		1.0	5		1	2		
062	h2415062	SER	QC353256	24-AUG-2006	21:27	50.0		1.0	2		1	2		

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S4009 13=S3780

Analyst: *Flavie* Date: *8/25/06*

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56340782 Instrument: MET05
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 24-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Std	Used	>LR
063	h2415063	MS	QC353254	116738	Filt	24-AUG-2006 21:33	10.0	1.0	3	1	1	2		
064	h2415064	MSD	QC353255	116738	Filt	24-AUG-2006 21:39	10.0	1.0	3	1	1	2		
065	h2415065	PDS	QC353257	116738	Filt	24-AUG-2006 21:44	10.0	1.0	2	1	1	13		
066	h2415066	SAMPLE	188837-012	116738	Water	24-AUG-2006 21:50	10.0	1.0	4	1	1	2		
067	h2415067	X	RINSE			24-AUG-2006 21:56	1.0					2		
068	h2415068	CCV				24-AUG-2006 22:01	1.0		7	1	1	12		
069	h2415069	X	RINSE			24-AUG-2006 22:07	1.0					2		
070	h2415070	CCB				24-AUG-2006 22:12	1.0		1	1	1	2		
071	h2415071	X				24-AUG-2006 22:18	1.0					2		
072	h2415072	SAMPLE	188869-001	116738	Water	24-AUG-2006 22:24	10.0	1.0	5	1	1	2		
073	h2415073	ICSA				24-AUG-2006 22:29	1.0					10 2		7:CA=286800
074	h2415074	ICSAB				24-AUG-2006 22:35	1.0					11 2		7:CA=283800
075	h2415075	X	RINSE			24-AUG-2006 22:40	1.0					2		
076	h2415076	X	RINSE			24-AUG-2006 22:46	1.0					2		
077	h2415077	CCV				24-AUG-2006 22:51	1.0					12		270
078	h2415078	X	RINSE			24-AUG-2006 22:57	1.0		2	1	1	2		
079	h2415079	X				24-AUG-2006 23:03	1.0					2		
080	h2415080	CCB				24-AUG-2006 23:08	1.0		1	1	1	2		
081	h2415081	TUN				24-AUG-2006 23:14	1.0					1		
082	h2415082	TUN				24-AUG-2006 23:21	1.0					1		
083	h2415083	X	RINSE			24-AUG-2006 23:27	1.0					2		
084	h2415084	BLANK	QC353240	116736	Filt	24-AUG-2006 23:33	1.0		3	1	1	2		
085	h2415085	BS	QC353241	116736	Filt	24-AUG-2006 23:38	1.0					2		
086	h2415086	BSD	QC353242	116736	Filt	24-AUG-2006 23:44	1.0		3	1	1	2		
087	h2415087	X	RINSE			24-AUG-2006 23:49	1.0					2		
088	h2415088	MSS	188802-001	116736	Filt	24-AUG-2006 23:55	1.0		7	1	1	2		6:NA=435000
089	h2415089	SER	QC353245	116736	Filt	25-AUG-2006 00:01	5.0					2		4:NA=94040.0
090	h2415090	MS	QC353243	116736	Filt	25-AUG-2006 00:06	1.0					2		6:NA=466300
091	h2415091	MSD	QC353244	116736	Filt	25-AUG-2006 00:12	1.0					2		6:NA=457400
092	h2415092	PDS	QC353246	116736	Filt	25-AUG-2006 00:17	1.0					13		6:NA=475100
093	h2415093	X	RINSE			25-AUG-2006 00:23	1.0					2		

Std's used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S4009 13=S3780

Analyst: Wendy Date: 8/25/06

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56340782 Instrument: MET05
Analytical Method: EPA 6020 Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 24-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
094	h2415094	MSS	188802-001	116736	Filter	25-AUG-2006 00:28	10.0	1.0	4	1	1	2	3:NA=52090.0	
095	h2415095	SER	QC353245	116736	Filter	25-AUG-2006 00:34	50.0	1.0		1	1	2	1:MN=274.800	
096	h2415096	X	RINSE			25-AUG-2006 00:40	1.0					2		
097	h2415097	CCV				25-AUG-2006 00:45	1.0		1	1	1	12		
098	h2415098	X	RINSE			25-AUG-2006 00:51	1.0					2		
099	h2415099	CCB				25-AUG-2006 00:56	1.0		1	1	1	2		
100	h2415100	X				25-AUG-2006 01:02	1.0					2		
101	h2415101	MS	QC353243	116736	Filter	25-AUG-2006 01:08	10.0	1.0	1	1	1	2	3:NA=44790.0	
102	h2415102	MSD	QC353244	116736	Filter	25-AUG-2006 01:13	10.0	1.0	1	1	1	2	3:NA=45160.0	
103	h2415103	PDS	QC353246	116736	Filter	25-AUG-2006 01:19	10.0	1.0	1	1	1	13	3:NA=47390.0	
104	h2415104	SAMPLE	188802-002	116736	Filter	25-AUG-2006 01:24	1.0	1.0	6	1	1	2	6:NA=98760.0	
105	h2415105	SAMPLE	188802-003	116736	Filter	25-AUG-2006 01:30	1.0	1.0	4	1	1	2	3:NA=94050.0	
106	h2415106	SAMPLE	188802-004	116736	Filter	25-AUG-2006 01:35	1.0	1.0	4	1	1	2	3:NA=102900	
107	h2415107	SAMPLE	188802-005	116736	Filter	25-AUG-2006 01:41	1.0	1.0	3	1	1	2	2:NA=324900	
108	h2415108	SAMPLE	188802-006	116736	Filter	25-AUG-2006 01:47	1.0	1.0	3	1	1	2	2:NA=333800	
109	h2415109	SAMPLE	188802-008	116736	Filter	25-AUG-2006 01:52	1.0	1.0	4	1	1	2	3:NA=75910.0	
110	h2415110	SAMPLE	188802-009	116736	Filter	25-AUG-2006 01:58	1.0	1.0	4	1	1	2	3:NA=261700	
111	h2415111	X	RINSE			25-AUG-2006 02:03	1.0					2		
112	h2415112	CCV				25-AUG-2006 02:09	1.0		3	1	1	12		
113	h2415113	X	RINSE			25-AUG-2006 02:14	1.0					2		
114	h2415114	CCB				25-AUG-2006 02:20	1.0		2	1	1	2		
115	h2415115	X				25-AUG-2006 02:26	1.0					2		
116	h2415116	SAMPLE	188802-010	116736	Filter	25-AUG-2006 02:31	1.0	1.0	4	1	1	2	3:NA=78140.0	
117	h2415117	SAMPLE	188802-012	116736	Filter	25-AUG-2006 02:37	1.0	1.0	5	1	1	2	4:NA=199000	
118	h2415118	SAMPLE	188802-013	116736	Filter	25-AUG-2006 02:43	1.0	1.0	5	1	1	2	4:MG=101200	
119	h2415119	SAMPLE	188802-014	116736	Filter	25-AUG-2006 02:49	1.0	1.0	4	1	1	2	3:NA=63310.0	
120	h2415120	SAMPLE	188802-015	116736	Filter	25-AUG-2006 02:54	1.0	1.0	2	1	1	2	3:MG=435400	
121	h2415121	SAMPLE	188802-017	116736	Filter	25-AUG-2006 03:00	1.0	1.0	3	1	1	2	4:MG=249000	
122	h2415122	SAMPLE	188802-018	116736	Filter	25-AUG-2006 03:05	1.0	1.0	3	1	1	2	3:NA=62740.0	
123	h2415123	SAMPLE	188802-020	116736	Filter	25-AUG-2006 03:11	1.0	1.0	4	1	1	2	3:NA=323500	
124	h2415124	SAMPLE	188867-002	116736	Water	25-AUG-2006 03:16	1.0	1.0	3	1	1	2		

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S4009 13=S3780

Analyst: *W. Carley* Date: *8/25/06*

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56340782 Instrument: MET05
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 24-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Std	Used	>LR
125	h2415125	X	RINSE			25-AUG-2006 03:22	1.0					2		
126	h2415126	CCV				25-AUG-2006 03:28	1.0	1.0	2	1		12		
127	h2415127	X	RINSE			25-AUG-2006 03:33	1.0					2		
128	h2415128	CCB				25-AUG-2006 03:39	1.0	1.0	1	1		2		
129	h2415129	X				25-AUG-2006 03:44	1.0					2		
130	h2415130	ICSA				25-AUG-2006 03:50	1.0	1.0		1		10	2	7:CA=292900
131	h2415131	ICSA				25-AUG-2006 03:55	1.0	1.0		1		11	2	7:CA=289000

Std used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S4009 13=S3780

Analyst: *Carlynn* Date: *8/25/06*

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET05
 Calnum : 56341908001
 Units : ug/L

Date : 25-AUG-2006 10:40
 X Axis : R

Reviewer: ---

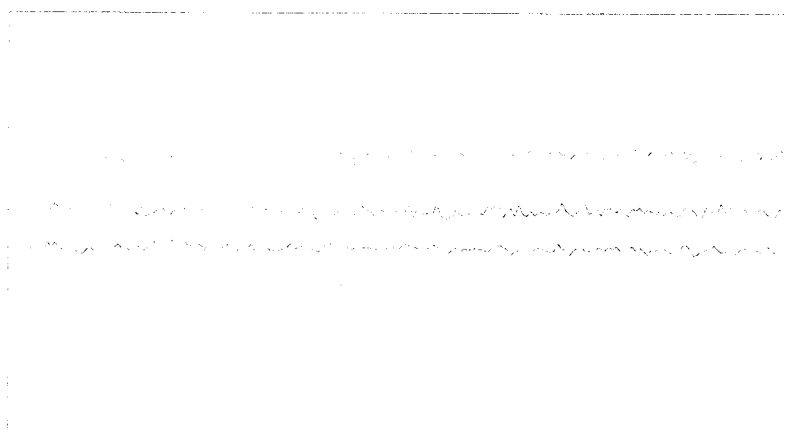
Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	h2510004	56341908004	CS1	25-AUG-2006 10:46	S4004
L2	h2510005	56341908005	CS2	25-AUG-2006 10:51	S4005
L3	h2510006	56341908006	CS3	25-AUG-2006 10:57	S4006
L4	h2510007	56341908007	CS4	25-AUG-2006 11:03	S4007
L5	h2510008	56341908008	CS5	25-AUG-2006 11:08	S4001
L6	h2510009	56341908009	CS6	25-AUG-2006 11:14	S4002

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ²	MRSD	MR ²	Fig
Aluminum	0.6841	0.6341	0.6278	0.6167	0.6310	BLNK	-4.6391	1.59239			0.6387	1.000	0.995		
Antimony	0.3162	0.2938	0.2440	0.2402	0.2479	0.2523	BLNK	-0.0813	3.97991		0.2657	1.000	0.995		
Arsenic	0.7013	0.6232	0.4585	0.4487	0.4509	BLNK	-0.3562	2.22490			0.5365	1.000	0.995		
Barium	0.1841	0.1497	0.1141	0.0982	0.1020	0.1031	BLNK	-0.0815	9.72584		0.1252	1.000	0.995		
Beryllium	0.1769	0.1849	0.1645	0.1609	0.1612	0.1653	BLNK	-0.0459	6.08235		0.1690	1.000	0.995		
Cadmium	0.8217	0.5960	0.4699	0.4189	0.4057	0.3991	BLNK	-0.1990	2.50028		0.5186	1.000	0.995		
Calcium	0.0327	0.0249	0.0185	0.0185	0.0189	0.0186	BLNK	-32.336	53.6811		0.0227	1.000	0.995		
Chromium	7.6991	5.2022	3.2559	3.0245	3.1236	BLNK	-0.7204	0.32359			4.4611	1.000	0.995		
Cobalt	4.1096	4.0174	3.8102	3.6254	3.5637	3.7742	BLNK	-0.0462	0.26804		3.8167	0.999	0.995		
Copper	1.5733	1.2439	0.9343	0.8915	0.8744	BLNK	-0.2359	1.14068			1.1035	1.000	0.995		
Iron	0.1309	0.1040	0.0831	0.0861	0.0838	BLNK	-28.529	11.8936			0.0976	1.000	0.995		
Lead	1.3485	1.2163	1.1017	0.9836	1.0026	1.0237	BLNK	-0.0722	0.98143		1.1127	1.000	0.995		
Magnesium	0.0914	0.0823	0.0760	0.0799	0.0807	BLNK	-8.3406	12.4207			0.0821	1.000	0.995		
Manganese	7.5920	5.9652	4.9035	4.0136	3.9481	4.1398	BLNK	-0.1809	0.24410		5.0937	0.999	0.995		
Molybdenum	0.9561	0.8992	0.8187	0.8334	0.8390	0.8390	BLNK	-0.1112	1.19430		0.8693	1.000	0.995		
Nickel	1.7645	1.0306	0.9862	0.7966	0.7818	0.7641	BLNK	-0.1546	1.30391		1.0206	1.000	0.995		
Potassium	1.8248	1.2955	0.6951	0.6357	0.6388	BLNK	-96.445	1.57607			1.0180	1.000	0.995		
Selenium	0.1006	0.0644	0.0379	0.0326	0.0322	BLNK	-0.8774	31.1651			0.0535	1.000	0.995		
Silver	2.2062	2.0888	2.0748	1.9497	1.9724	1.9284	BLNK	-0.0402	0.51633		2.0367	1.000	0.995		
Sodium	1.7096	1.3794	0.8729	0.8346	0.8468	BLNK	-45.784	1.18756			1.1287	1.000	0.995		
Thallium	1.0275	0.8281	0.6794	0.7208	0.7384	BLNK	-0.1385	1.36328			0.7988	1.000	0.995		
Vanadium	4.4426	3.9089	3.4192	3.3647	3.6067	BLNK	-0.1911	0.28139			3.7484	0.999	0.995		
Zinc	3.4605	2.1121	0.6016	0.4635	0.4452	BLNK	-3.0425	2.26825			1.4166	1.000	0.995		

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Tune Report

Tune File : ATUNE.U



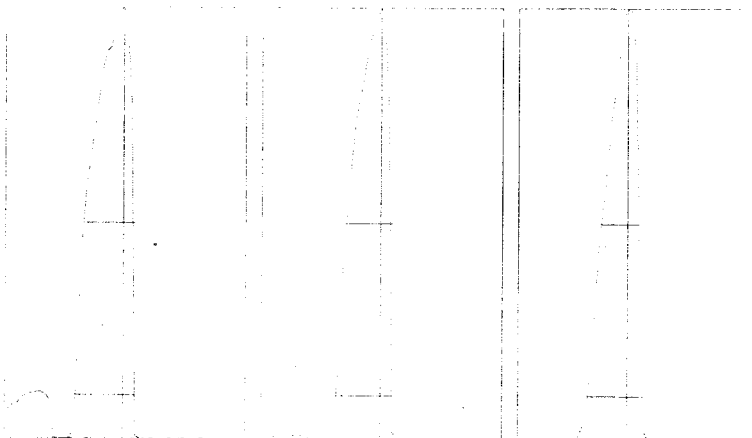
m/z:	7	89	205
Range:	20,000	50,000	20,000
Count:	10,686	22,653	13,556
Mean:	10813.5	22682.2	13373.3
RSD%:	1.51	1.53	1.43
n:	200		

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec

Oxide: 156/140 0.40%
Doubly Charged: 70/140 1.24%

Background:

m/z:	7	89	205
Cps:	21.0	8.6	8.0



m/z:	7	89	205
Height:	10,908	22,575	15,738
Axis:	7.00	89.00	204.90
W-50%:	0.65	0.60	0.50
W-10%:	0.7500	0.700	0.700

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Tuning Parameters

===Plasma Condition===

RF Power: 1300 W
RF Matching: 1.7 V
Smpl Depth: 8 mm
Torch-H: -0.1 mm
Torch-V: 0.4 mm
Carrier Gas: 1.1 L/min
Makeup Gas: 0 L/min
Optional Gas: --- %
PeriPump1: 0.1 rps
PeriPump2: --- rps
S/C Temp: 2 degC

===Ion Lenses===

Extract 1: -150 V
Extract 2: -70 V
Einzel 1,3: -100 V
Einzel 2: 7 V
Omega Bias: -55 V
Omega (+): 5 V
Omega (-): -5 V
QP Focus: 5 V
Plate Bias: -5 V

===Q-Pole Parameters===

AMU Gain: 130
AMU Offset: 126
Axis Gain: 0.9993
Axis Offset: -0.1
QP Bias: 1.6 V

===Detector Parameters===

Discriminator: 8.8 mV
Analog HV: 1860 V
Pulse HV: 1590 V

P/A Factor Tuning Report

Acquired: Aug 25 2006 09:57 am

Mass[amu]	Element	P/A Factor
6	Li	0.072534
9	Be	0.080069
23	Na	Sensitivity too high
25	Mg	Sensitivity too high
26	Mg	Sensitivity too high
27	Al	0.094120
39	K	Sensitivity too high
43	Ca	0.094340
44	Ca	Sensitivity too high
45	Sc	Sensitivity too low
51	V	0.099200
52	Cr	0.100360
53	Cr	Sensitivity too low
54	Fe	Sensitivity too high
55	Mn	0.101921
57	Fe	Sensitivity too high
59	Co	0.103661
60	Ni	0.100858
63	Cu	0.103981
65	Cu	0.101713
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
77	(As)	Sensitivity too low
82	Se	Sensitivity too low
83	(As)	Sensitivity too low
88	(Ca)	Sensitivity too low
89	Y	0.100017
95	Mo	0.100297
98	Mo	0.100281
99	(Mo)	Sensitivity too low
106	(Cd)	Sensitivity too low
108	(Cd)	Sensitivity too low
109	Ag	0.104933
111	Cd	Sensitivity too low
114	Cd	0.103605
115	In	0.105161
118	(In)	Sensitivity too high
121	Sb	0.104050
135	Ba	Sensitivity too low
137	Ba	0.104848
159	Tb	0.107952
166	Er	Sensitivity too low

Temp.p\$\$
205 Tl 0.110323
206 (Pb) 0.111701
207 (Pb) 0.110845
208 Pb 0.108988
209 Bi Sensitivity too low

===Detector Parameters===

Discriminator: 8.8 mV

Analog HV: 1860 V

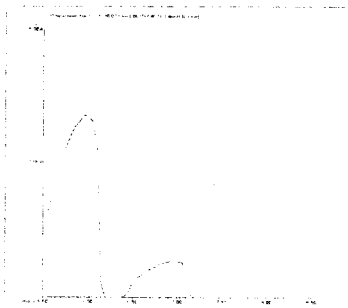
Pulse HV: 1590 V

6020 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\06H2510a.B\001TUNE.D
Date Acquired: Aug 25 2006 10:28 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s4021
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	0.26	5.00	
59 Co	1.44	5.00	
115 In	0.88	5.00	
205 Tl	1.30	5.00	



7 Li

Mass Calib.

Actual: 6.95
Required: 6.90 - 7.10
Flag:

Peak Width

Actual: 0.55
Required: 0.90
Flag:

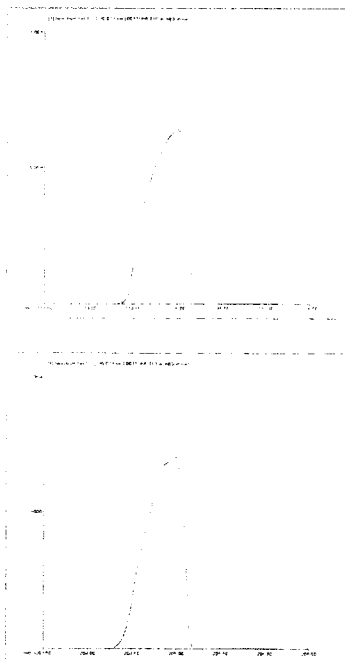
59 Co

Mass Calib.

Actual: 59.00
Required: 58.90 - 59.10
Flag:

Peak Width

Actual: 0.55
Required: 0.90
Flag:



115 In

Mass Calib.

Actual: 115.00

Required: 114.90 - 115.10

Flag:

Peak Width

Actual: 0.55

Required: 0.90

Flag:

205 T1

Mass Calib.

Actual: 205.00

Required: 204.90 - 205.10

Flag:

Peak Width

Actual: 0.55

Required: 0.90

Flag:

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06H2510a.B\003CAL
 Date Acquired: Aug 25 2006 10:40 am
 Operator:
 Sample Name: std-blank
 Misc Info:
 Vial Number: 1101
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\602001
 Last Cal Update: Aug 24 2006 04:44 pm
 Sample Type: CalBlk
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	323251.09 P	1860.00	0.58
9 Be	48.89 P	25.24	51.63
23 Na	263663.31 P	4035.00	1.53
26 Mg	4592.22 P	276.70	6.03
27 Al	19923.33 P	880.00	4.42
39 K	418508.91 P	5147.00	1.23
44 Ca	4119.52 P	82.13	1.99
45 Sc	341956.69 P	1165.00	0.34
51 V	1094.67 P	347.40	31.74
52 Cr	3588.89 P	181.00	5.04
55 Mn	1194.44 P	38.63	3.23
57 Fe	3866.67 P	60.64	1.57
59 Co	277.78 P	10.72	3.86
60 Ni	191.11 P	24.57	12.86
65 Cu	333.31 P	29.63	8.89
66 Zn	2162.22 P	71.21	3.29
72 Ge	80605.78 P	393.40	0.49
75 As	257.89 P	60.45	23.44
82 Se	45.33 P	16.04	35.38
95 Mo	150.00 P	23.33	15.55
109 Ag	125.56 P	3.85	3.07
111 Cd	128.21 P	34.20	26.68
115 In	530308.38 P	2777.00	0.52
121 Sb	216.67 P	43.33	20.00
137 Ba	88.89 P	5.09	5.73
205 Tl	888.89 P	44.01	4.95
208 Pb	643.33 P	44.10	6.85
209 Bi	437483.31 P	161.50	0.04

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2510a.B\004CALI.D\004CALI.D#
 Date Acquired: Aug 25 2006 10:46 am
 Operator:
 Sample Name: cs1,s4004
 Misc Info:
 Vial Number: 1102
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 25 2006 10:42 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	327737.81 P	1389.00	0.42
9 Be	290.00 P	37.86	13.06
23 Na	444228.91 P	4374.00	0.98
26 Mg	17433.33 P	437.80	2.51
27 Al	129914.40 P	1023.00	0.79
39 K	522311.09 P	3456.00	0.66
44 Ca	8146.98 P	103.60	1.27
45 Sc	345367.81 P	2893.00	0.84
51 V	3023.46 P	150.70	4.98
52 Cr	4916.67 P	38.44	0.78
55 Mn	3097.78 P	68.50	2.21
57 Fe	7313.33 P	127.20	1.74
59 Co	1676.67 P	35.12	2.09
60 Ni	720.00 P	32.83	4.56
65 Cu	888.81 P	10.72	1.21
66 Zn	2501.11 P	118.60	4.74
72 Ge	81604.22 P	342.70	0.42
75 As	451.56 P	75.42	16.70
82 Se	53.33 P	9.26	17.37
95 Mo	484.44 P	36.57	7.55
109 Ag	900.00 P	53.64	5.96
111 Cd	335.42 P	53.19	15.86
115 In	533605.19 P	3223.00	0.60
121 Sb	843.33 P	37.12	4.40
137 Ba	491.11 P	41.41	8.43
205 Tl	1543.33 P	81.92	5.31
208 Pb	3024.44 P	85.79	2.84
209 Bi	448524.41 P	3781.00	0.84

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	327737.78	0.42	323251.09	101.4	80 - 120	

45	Sc	345367.78	0.84	341956.66	101.0	80 -	120
72	Ge	81604.23	0.42	80605.77	101.2	80 -	120
115	In	533605.25	0.60	530308.44	100.6	80 -	120
209	Bi	448524.41	0.84	437483.31	102.5	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2510a.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2510a.B\005CALI.D\005CALI.D#
 Date Acquired: Aug 25 2006 10:51 am
 Operator:
 Sample Name: cs2,s4005
 Misc Info:
 Vial Number: 1103
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 25 2006 10:47 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	325665.50 P	1237.00	0.38
9 Be	602.22 P	5.09	0.85
23 Na	582522.19 P	4295.00	0.74
26 Mg	31135.56 P	100.20	0.32
27 Al	233094.41 P	1257.00	0.54
39 K	621784.38 P	3668.00	0.59
44 Ca	11152.61 P	212.80	1.91
45 Sc	340738.91 P	491.80	0.14
51 V	3572.71 P	462.20	12.94
52 Cr	6192.22 P	155.40	2.51
55 Mn	4797.78 P	15.40	0.32
57 Fe	10528.89 P	95.30	0.91
59 Co	3231.11 P	43.50	1.35
60 Ni	828.89 P	15.75	1.90
65 Cu	1265.42 P	44.76	3.54
66 Zn	2783.33 P	56.96	2.05
72 Ge	80429.78 P	134.50	0.17
75 As	564.14 P	56.76	10.06
82 Se	80.89 P	8.04	9.94
95 Mo	768.89 P	54.19	7.05
109 Ag	1680.00 P	14.53	0.86
111 Cd	479.34 P	50.37	10.51
115 In	529120.88 P	121.20	0.02
121 Sb	1554.44 P	59.29	3.81
137 Ba	792.22 P	62.92	7.94
205 Tl	2273.33 P	6.67	0.29
208 Pb	5382.22 P	137.90	2.56
209 Bi	442511.09 P	838.50	0.19

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	325665.53	0.38	323251.09	100.7	80 - 120	

45	Sc	340738.88	0.14	341956.66	99.6	80 -	120
72	Ge	80429.77	0.17	80605.77	99.8	80 -	120
115	In	529120.94	0.02	530308.44	99.8	80 -	120
209	Bi	442511.06	0.19	437483.31	101.1	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2510a.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2510a.B\006CALI.D\006CALI.D#
 Date Acquired: Aug 25 2006 10:57 am
 Operator:
 Sample Name: cs3,s4006
 Misc Info:
 Vial Number: 1104
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 25 2006 10:53 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	324680.00 P	1742.00	0.54
9 Be	1067.78 P	60.77	5.69
23 Na	939175.69 A	6872.00	0.73
26 Mg	56034.44 P	316.60	0.57
27 Al	431695.50 P	3183.00	0.74
39 K	882026.69 A	4980.00	0.56
44 Ca	16968.46 P	347.20	2.05
45 Sc	340418.91 P	1618.00	0.48
51 V	6284.03 P	370.70	5.90
52 Cr	8363.33 P	202.60	2.42
55 Mn	7883.33 P	265.10	3.36
57 Fe	16712.22 P	300.60	1.80
59 Co	6125.56 P	125.10	2.04
60 Ni	1585.56 P	10.18	0.64
65 Cu	1999.75 P	37.56	1.88
66 Zn	3395.55 P	63.63	1.87
72 Ge	80383.11 P	130.00	0.16
75 As	1001.97 P	93.38	9.32
82 Se	103.56 P	11.28	10.89
95 Mo	1445.56 P	78.62	5.44
109 Ag	3335.55 P	24.57	0.74
111 Cd	755.55 P	104.90	13.88
115 In	530072.88 P	1616.00	0.30
121 Sb	2586.67 P	117.90	4.56
137 Ba	1210.00 P	31.80	2.63
205 Tl	3691.11 P	92.52	2.51
208 Pb	9821.11 P	105.10	1.07
209 Bi	445743.31 P	596.70	0.13

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	324680.00	0.54	323251.09	100.4	80 - 120	

45	Sc	340418.88	0.48	341956.66	99.6	80 -	120
72	Ge	80383.11	0.16	80605.77	99.7	80 -	120
115	In	530072.94	0.30	530308.44	100.0	80 -	120
209	Bi	445743.31	0.13	437483.31	101.9	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2510a.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2510a.B\007CALI.D\007CALI.D#
 Date Acquired: Aug 25 2006 11:03 am
 Operator:
 Sample Name: cs4,s4007
 Misc Info:
 Vial Number: 1105
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 25 2006 10:59 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	323711.09 P	3205.00	0.99
9 Be	10418.89 P	79.54	0.76
23 Na	5894217.00 A	71290.00	1.21
26 Mg	513137.69 P	1602.00	0.31
27 Al	4239315.00 A	52540.00	1.24
39 K	4693735.00 A	43600.00	0.93
44 Ca	125160.10 P	281.30	0.22
45 Sc	337633.31 P	1915.00	0.57
51 V	54159.45 P	929.60	1.72
52 Cr	51575.55 P	422.70	0.82
55 Mn	63577.78 P	803.40	1.26
57 Fe	131646.70 P	1560.00	1.19
59 Co	57427.78 P	336.80	0.59
60 Ni	12618.89 P	114.40	0.91
65 Cu	14798.85 P	259.30	1.75
66 Zn	9528.89 P	187.70	1.97
72 Ge	79202.22 P	330.60	0.42
75 As	7261.47 P	273.90	3.77
82 Se	600.00 P	18.05	3.01
95 Mo	12968.89 P	255.10	1.97
109 Ag	30884.44 P	221.30	0.72
111 Cd	6635.03 P	112.70	1.70
115 In	522689.91 P	5334.00	1.02
121 Sb	25114.44 P	362.30	1.44
137 Ba	10260.00 P	95.39	0.93
205 Tl	30061.11 P	334.20	1.11
208 Pb	87050.00 P	801.80	0.92
209 Bi	442484.41 P	1381.00	0.31

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	323711.09	0.99	323251.09	100.1	80 - 120	

45	Sc	337633.31	0.57	341956.66	98.7	80 -	120
72	Ge	79202.23	0.42	80605.77	98.3	80 -	120
115	In	522689.94	1.02	530308.44	98.6	80 -	120
209	Bi	442484.41	0.31	437483.31	101.1	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2510a.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2510a.B\008CALI.D\008CALI.D#
 Date Acquired: Aug 25 2006 11:08 am
 Operator:
 Sample Name: cs5,s4001
 Misc Info:
 Vial Number: 1106
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 25 2006 11:04 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	320703.31 P	2971.00	0.93
9 Be	103377.80 P	1165.00	1.13
23 Na	56339460.00 A	428800.00	0.76
26 Mg	5391598.00 A	30990.00	0.57
27 Al	41629980.00 A	133900.00	0.32
39 K	42914200.00 A	157900.00	0.37
44 Ca	1272504.00 A	7679.00	0.60
45 Sc	337531.09 P	1999.00	0.59
51 V	536769.50 P	3863.00	0.72
52 Cr	482506.59 P	5544.00	1.15
55 Mn	629844.38 P	7978.00	1.27
57 Fe	1372861.00 A	9474.00	0.69
59 Co	568515.63 P	3995.00	0.70
60 Ni	124716.70 P	1138.00	0.91
65 Cu	142227.30 P	1903.00	1.34
66 Zn	73946.66 P	891.10	1.21
72 Ge	79766.22 P	629.70	0.79
75 As	71582.34 P	736.80	1.03
82 Se	5194.44 P	114.00	2.19
95 Mo	132967.80 P	2282.00	1.72
109 Ag	314660.00 P	3517.00	1.12
111 Cd	64729.07 P	864.70	1.34
115 In	507977.09 P	5650.00	1.11
121 Sb	251897.80 P	2886.00	1.15
137 Ba	103583.30 P	994.30	0.96
205 Tl	313468.91 P	4569.00	1.46
208 Pb	871993.31 P	7097.00	0.81
209 Bi	434858.91 P	4145.00	0.95

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	320703.31	0.93	323251.09	99.2	80 - 120	

45	Sc	337531.09	0.59	341956.66	98.7	80 -	120
72	Ge	79766.23	0.79	80605.77	99.0	80 -	120
115	In	507977.06	1.11	530308.44	95.8	80 -	120
209	Bi	434858.88	0.95	437483.31	99.4	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2510a.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06H2510a.B\009CALI.D\009CALI.D#
 Date Acquired: Aug 25 2006 11:14 am
 Operator:
 Sample Name: cs6,s4002
 Misc Info:
 Vial Number: 1107
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\DATA\06G1718a.B\60200111.C
 Last Cal Update: Aug 25 2006 11:10 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	316653.31 P	1680.00	0.53
9 Be	209353.30 P	1287.00	0.61
23 Na	114750900.00 A	576200.00	0.50
26 Mg	10940220.00 A	80900.00	0.74
27 Al	85509040.00 A	368800.00	0.43
39 K	86558008.00 A	263000.00	0.30
44 Ca	2523201.00 A	23300.00	0.92
45 Sc	338775.50 P	2325.00	0.69
51 V	1182423.00 A	7345.00	0.62
52 Cr	1024078.00 A	6688.00	0.65
55 Mn	1357270.00 A	10990.00	0.81
57 Fe	2746466.00 A	4254.00	0.15
59 Co	1237331.00 A	15130.00	1.22
60 Ni	250498.91 P	1449.00	0.58
65 Cu	286682.41 P	2399.00	0.84
66 Zn	145957.80 P	1288.00	0.88
72 Ge	81963.11 P	365.00	0.45
75 As	147818.80 P	1190.00	0.81
82 Se	10548.00 P	142.00	1.35
95 Mo	275085.50 P	2223.00	0.81
109 Ag	632227.69 P	4394.00	0.70
111 Cd	130840.10 P	751.10	0.57
115 In	508229.59 P	830.20	0.16
121 Sb	512860.00 P	1006.00	0.20
137 Ba	209614.41 P	691.70	0.33
205 Tl	629866.63 P	3314.00	0.53
208 Pb	1746300.00 A	5820.00	0.33
209 Bi	426503.31 P	2584.00	0.61

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	316653.31	0.53	323251.09	98.0	80 - 120	

45	Sc	338775.53	0.69	341956.66	99.1	80 -	120
72	Ge	81963.11	0.45	80605.77	101.7	80 -	120
115	In	508229.56	0.16	530308.44	95.8	80 -	120
209	Bi	426503.31	0.61	437483.31	97.5	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06H2510a.B\003CALB.D\003CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

Calibration Summary

Calibration : C:\ICPCHEM\1\DATA\06G1718A.B\60200111.C
 Last Calib: Aug 25, 2006 11:15
 Cal Type : External Calibration Method
 Cal Title :

Standard Data Files

Level	DataPath	DataFile	Date Acquired
1	...hem\1\data\06h2510a.b\003calb.d\	003calb.d#	Aug 25 2006 10:40 am
2	...hem\1\data\06h2510a.b\004cali.d\	004cali.d#	Aug 25 2006 10:46 am
3	...hem\1\data\06h2510a.b\005cali.d\	005cali.d#	Aug 25 2006 10:51 am
4	...hem\1\data\06h2510a.b\006cali.d\	006cali.d#	Aug 25 2006 10:57 am
5	...hem\1\data\06h2510a.b\007cali.d\	007cali.d#	Aug 25 2006 11:03 am
6	...hem\1\data\06h2510a.b\008cali.d\	008cali.d#	Aug 25 2006 11:08 am
7	...hem\1\data\06h2510a.b\009cali.d\	009cali.d#	Aug 25 2006 11:14 am
8	---		
9	---		
10	---		
11	---		
12	---		
13	---		
14	---		
15	---		
16	---		
17	---		
18	---		
19	---		
20	---		

Level	BkgPath	BkgFile	Interference Correction
1	---	---	ON
2	---	---	ON
3	---	---	ON
4	---	---	ON
5	---	---	ON
6	---	---	ON
7	---	---	ON
8	---		
9	---		
10	---		
11	---		
12	---		
13	---		
14	---		
15	---		
16	---		
17	---		
18	---		
19	---		
20	---		

Name	m/z	IS	Equation	r	Units
Li	6	---	Excluded	---	ppb
Be	9	6	$Y = 1.644E-1 \cdot X + 7.554E-3$ (blank)	---	ppb
Na	23	45	$Y = 8.421E-1 \cdot X + 3.855E+1$ (blank)	---	ppb
Mg	25	45	Excluded	---	ppb
Mg	26	45	$Y = 8.051E-2 \cdot X + 6.715E-1$ (blank)	---	ppb
Al	27	45	$Y = 6.280E-1 \cdot X + 2.913E+0$ (blank)	---	ppb
K	39	45	$Y = 6.345E-1 \cdot X + 6.119E+1$ (blank)	---	ppb
Ca	43	45	Excluded	---	ppb
Ca	44	45	$Y = 1.863E-2 \cdot X + 6.024E-1$ (blank)	---	ppb
Sc	45	---	Excluded	---	ppb
V	51	72	$Y = 3.554E+0 \cdot X + 6.793E-1$ (blank)	---	ppb
Cr	52	72	$Y = 3.090E+0 \cdot X + 2.226E+0$ (blank)	---	ppb
Cr	53	72	Excluded	---	ppb
Fe	54	72	Excluded	---	ppb
Mn	55	72	$Y = 4.097E+0 \cdot X + 7.410E-1$ (blank)	---	ppb
Fe	57	72	$Y = 8.408E-2 \cdot X + 2.399E+0$ (blank)	---	ppb
Co	59	72	$Y = 3.731E+0 \cdot X + 1.723E-1$ (blank)	---	ppb
Ni	60	72	$Y = 7.669E-1 \cdot X + 1.186E-1$ (blank)	---	ppb
Cu	63	72	Excluded	---	ppb
Cu	65	72	$Y = 8.767E-1 \cdot X + 2.068E-1$ (blank)	---	ppb
Zn	66	72	$Y = 4.409E-1 \cdot X + 1.341E+0$ (blank)	---	ppb
Ge	72	---	Excluded	---	ppb
As	75	72	$Y = 4.495E-1 \cdot X + 1.601E-1$ (blank)	---	ppb
(As)	77	72	Excluded	---	ppb
Se	82	72	$Y = 3.209E-2 \cdot X + 2.815E-2$ (blank)	---	ppb
(As)	83	72	Excluded	---	ppb
(Ca)	88	72	Excluded	---	ppb
Y	89	72	Excluded	---	ppb
Mo	95	72	$Y = 8.373E-1 \cdot X + 9.308E-2$ (blank)	---	ppb
Mo	98	72	Excluded	---	ppb
(Mo)	99	72	Excluded	---	ppb
(Cd)	106	72	Excluded	---	ppb
(Cd)	108	72	Excluded	---	ppb
Ag	109	72	$Y = 1.937E+0 \cdot X + 7.788E-2$ (blank)	---	ppb
Cd	111	72	$Y = 4.000E-1 \cdot X + 7.960E-2$ (blank)	---	ppb
Cd	114	72	Excluded	---	ppb
In	115	---	Excluded	---	ppb
(In)	118	---	Excluded	---	ppb
Sb	121	115	$Y = 2.513E-1 \cdot X + 2.043E-2$ (blank)	---	ppb
Ba	135	115	Excluded	---	ppb
Ba	137	115	$Y = 1.028E-1 \cdot X + 8.380E-3$ (blank)	---	ppb
Tb	159	---	Excluded	---	ppb
Er	166	115	Excluded	---	ppb
Tl	205	209	$Y = 7.335E-1 \cdot X + 1.016E-1$ (blank)	---	ppb
(Pb)	206	209	Excluded	---	ppb
(Pb)	207	209	Excluded	---	ppb
Pb	208	209	$Y = 1.019E+0 \cdot X + 7.353E-2$ (blank)	---	ppb
Bi	209	---	Excluded	---	ppb

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET05
 Segnum : 56341908011
 Cal : 56341908001
 Standards: S4008

File : h2510011
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 11:25

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	0.6387	0.6221	10000	9901	ug/L	-1	10	
Antimony	0.2657	0.2448	100.0	97.36	ug/L	-3	10	
Arsenic	0.5365	0.4495	100.0	99.65	ug/L	0	10	
Barium	0.1252	0.0999	100.0	97.03	ug/L	-3	10	
Beryllium	0.1690	0.1629	100.0	99.05	ug/L	-1	10	
Cadmium	0.5186	0.4024	100.0	100.4	ug/L	0	10	
Calcium	0.0227	0.0187	10000	9999	ug/L	0	10	
Chromium	4.4611	2.9686	100.0	95.34	ug/L	-5	10	
Cobalt	3.8167	3.5490	100.0	95.08	ug/L	-5	10	
Copper	1.1035	0.8921	100.0	101.5	ug/L	2	10	
Iron	0.0976	0.0854	10000	10130	ug/L	1	10	
Lead	1.1127	0.9970	100.0	97.78	ug/L	-2	10	
Magnesium	0.0821	0.0805	10000	9989	ug/L	0	10	
Manganese	5.0937	3.9151	100.0	95.38	ug/L	-5	10	
Molybdenum	0.8693	0.8302	100.0	99.04	ug/L	-1	10	
Nickel	1.0206	0.7724	100.0	100.6	ug/L	1	10	
Potassium	1.0180	0.6366	10000	9937	ug/L	-1	10	
Selenium	0.0535	0.0326	100.0	100.7	ug/L	1	10	
Silver	2.0367	1.9488	100.0	100.6	ug/L	1	10	
Sodium	1.1287	0.8423	10000	9957	ug/L	0	10	
Thallium	0.7988	0.7242	50.00	49.22	ug/L	-2	10	
Vanadium	3.7484	3.3024	100.0	92.74	ug/L	-7	10	
Zinc	1.4166	0.4575	100.0	100.7	ug/L	1	10	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	322159	-0.34
Scandium	341957	341860	-0.03
Germanium	80606	81880	1.58
Indium	530308	518535	-2.22
Bismuth	437483	435888	-0.36

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56341908029
 Cal : 56341908001
 Standards: S4009

File : h2510029
 Caldate: 25-AUG-2006
 IDF : 1.0
 Time : 25-AUG-2006 13:05

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6387	0.6348	10000	10100	ug/L	1	10	
Antimony	0.2657	0.2425	100.0	96.42	ug/L	-4	10	
Arsenic	0.5365	0.4436	100.0	98.33	ug/L	-2	10	
Barium	0.1252	0.1006	100.0	97.76	ug/L	-2	10	
Beryllium	0.1690	0.1613	100.0	98.05	ug/L	-2	10	
Cadmium	0.5186	0.3961	100.0	98.84	ug/L	-1	10	
Calcium	0.0227	0.0186	10000	9967	ug/L	0	10	
Chromium	4.4611	2.8931	100.0	92.90	ug/L	-7	10	
Cobalt	3.8167	3.4522	100.0	92.49	ug/L	-8	10	
Copper	1.1035	0.8697	100.0	98.97	ug/L	-1	10	
Iron	0.0976	0.0831	10000	9851	ug/L	-1	10	
Lead	1.1127	0.9933	100.0	97.41	ug/L	-3	10	
Magnesium	0.0821	0.0819	10000	10160	ug/L	2	10	
Manganese	5.0937	3.7669	100.0	91.77	ug/L	-8	10	
Molybdenum	0.8693	0.8256	100.0	98.49	ug/L	-2	10	
Nickel	1.0206	0.7561	100.0	98.44	ug/L	-2	10	
Potassium	1.0180	0.6446	10000	10060	ug/L	1	10	
Selenium	0.0535	0.0325	100.0	100.4	ug/L	0	10	
Silver	2.0367	1.9183	100.0	99.01	ug/L	-1	10	
Sodium	1.1287	0.8439	10000	9976	ug/L	0	10	
Thallium	0.7988	0.7145	50.00	48.56	ug/L	-3	10	
Vanadium	3.7484	3.2255	100.0	90.57	ug/L	-9	10	
Zinc	1.4166	0.4473	100.0	98.42	ug/L	-2	10	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	312323	-3.38
Scandium	341957	328006	-4.08
Germanium	80606	79508	-1.36
Indium	530308	503523	-5.05
Bismuth	437483	436229	-0.29

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56341908046 File : h2510046
 Cal : 56341908001 Caldate: 25-AUG-2006
 Standards: S4009, S3310

IDF : 1.0
 Time : 25-AUG-2006 15:06

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6387	0.6727	10000	10710	ug/L	7	10	
Antimony	0.2657	0.2519	100.0	100.2	ug/L	0	10	
Arsenic	0.5365	0.4670	100.0	103.5	ug/L	4	10	
Barium	0.1252	0.1055	100.0	102.6	ug/L	3	10	
Beryllium	0.1690	0.1676	100.0	101.9	ug/L	2	10	
Cadmium	0.5186	0.4121	100.0	102.8	ug/L	3	10	
Calcium	0.0227	0.0195	10000	10430	ug/L	4	10	
Chromium	4.4611	2.9959	100.0	96.22	ug/L	-4	10	
Cobalt	3.8167	3.6211	100.0	97.01	ug/L	-3	10	
Copper	1.1035	0.9133	100.0	103.9	ug/L	4	10	
Iron	0.0976	0.0865	10000	10260	ug/L	3	10	
Lead	1.1127	1.0314	100.0	101.2	ug/L	1	10	
Magnesium	0.0821	0.0864	10000	10730	ug/L	7	10	
Manganese	5.0937	3.9438	100.0	96.09	ug/L	-4	10	
Molybdenum	0.8693	0.8633	100.0	103.0	ug/L	3	10	
Nickel	1.0206	0.7990	100.0	104.0	ug/L	4	10	
Potassium	1.0180	0.6735	10000	10520	ug/L	5	10	
Selenium	0.0535	0.0346	100.0	107.1	ug/L	7	10	
Silver	2.0367	2.0061	100.0	103.5	ug/L	4	10	
Sodium	1.1287	0.8958	10000	10590	ug/L	6	10	
Thallium	0.7988	0.7417	50.00	50.42	ug/L	1	10	
Vanadium	3.7484	3.3584	100.0	94.31	ug/L	-6	10	
Zinc	1.4166	0.4715	100.0	103.9	ug/L	4	10	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	322233	-0.31
Scandium	341957	330318	-3.40
Germanium	80606	79506	-1.36
Indium	530308	504921	-4.79
Bismuth	437483	446747	2.12

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56341908052 File : h2510052
 Cal : 56341908001 Caldate: 25-AUG-2006
 Standards: S4009, S3310

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6387	0.6753	10000	10750	ug/L	7	10	
Antimony	0.2657	0.2507	100.0	99.69	ug/L	0	10	
Arsenic	0.5365	0.4627	100.0	102.6	ug/L	3	10	
Barium	0.1252	0.1053	100.0	102.3	ug/L	2	10	
Beryllium	0.1690	0.1687	100.0	102.5	ug/L	3	10	
Cadmium	0.5186	0.4114	100.0	102.7	ug/L	3	10	
Calcium	0.0227	0.0195	10000	10430	ug/L	4	10	
Chromium	4.4611	2.9994	100.0	96.34	ug/L	-4	10	
Cobalt	3.8167	3.5956	100.0	96.33	ug/L	-4	10	
Copper	1.1035	0.9063	100.0	103.1	ug/L	3	10	
Iron	0.0976	0.0857	10000	10160	ug/L	2	10	
Lead	1.1127	1.0348	100.0	101.5	ug/L	2	10	
Magnesium	0.0821	0.0869	10000	10780	ug/L	8	10	
Manganese	5.0937	3.9084	100.0	95.22	ug/L	-5	10	
Molybdenum	0.8693	0.8620	100.0	102.8	ug/L	3	10	
Nickel	1.0206	0.7900	100.0	102.8	ug/L	3	10	
Potassium	1.0180	0.6777	10000	10580	ug/L	6	10	
Selenium	0.0535	0.0337	100.0	104.2	ug/L	4	10	
Silver	2.0367	1.9911	100.0	102.8	ug/L	3	10	
Sodium	1.1287	0.8948	10000	10580	ug/L	6	10	
Thallium	0.7988	0.7419	50.00	50.43	ug/L	1	10	
Vanadium	3.7484	3.3596	100.0	94.34	ug/L	-6	10	
Zinc	1.4166	0.4664	100.0	102.8	ug/L	3	10	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	318859	-1.36
Scandium	341957	326357	-4.56
Germanium	80606	79166	-1.79
Indium	530308	502214	-5.30
Bismuth	437483	443934	1.47

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56341908073
 Cal : 56341908001
 Standards: S4009, S3310

File : h2510073
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 17:48

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.6387	0.6606	10000	10520	ug/L	5	10	
Antimony	0.2657	0.2479	100.0	98.56	ug/L	-1	10	
Arsenic	0.5365	0.4566	100.0	101.2	ug/L	1	10	
Barium	0.1252	0.1041	100.0	101.1	ug/L	1	10	
Beryllium	0.1690	0.1607	100.0	97.70	ug/L	-2	10	
Cadmium	0.5186	0.4053	100.0	101.1	ug/L	1	10	
Calcium	0.0227	0.0191	10000	10210	ug/L	2	10	
Chromium	4.4611	2.9442	100.0	94.55	ug/L	-5	10	
Cobalt	3.8167	3.5356	100.0	94.72	ug/L	-5	10	
Copper	1.1035	0.8924	100.0	101.6	ug/L	2	10	
Iron	0.0976	0.0848	10000	10060	ug/L	1	10	
Lead	1.1127	1.0151	100.0	99.55	ug/L	0	10	
Magnesium	0.0821	0.0851	10000	10570	ug/L	6	10	
Manganese	5.0937	3.8567	100.0	93.96	ug/L	-6	10	
Molybdenum	0.8693	0.8468	100.0	101.0	ug/L	1	10	
Nickel	1.0206	0.7763	100.0	101.1	ug/L	1	10	
Potassium	1.0180	0.6716	10000	10490	ug/L	5	10	
Selenium	0.0535	0.0340	100.0	105.1	ug/L	5	10	
Silver	2.0367	1.9536	100.0	100.8	ug/L	1	10	
Sodium	1.1287	0.8768	10000	10370	ug/L	4	10	
Thallium	0.7988	0.7239	50.00	49.20	ug/L	-2	10	
Vanadium	3.7484	3.3240	100.0	93.34	ug/L	-7	10	
Zinc	1.4166	0.4579	100.0	100.8	ug/L	1	10	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	302769	-6.34
Scandium	341957	304897	-10.84
Germanium	80606	72090	-10.56
Indium	530308	461548	-12.97
Bismuth	437483	419799	-4.04

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56341908013
 Cal : 56341908001

IDF : 1.0
 File : h2510013
 Time : 25-AUG-2006 11:36
 Caldate: 25-AUG-2006

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[5.199]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.2935]	0.5000	0.09029	ug/L	!ib
Barium	[0.1082]	0.2500	0.02391	ug/L	!ib
Beryllium	[0.01016]	0.2500	0.009674	ug/L	!ib
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	[7.782]	50.00	7.739	ug/L	!ib
Chromium	[0.1688]	0.5000	0.03860	ug/L	!ib
Cobalt	[0.01040]	0.2500	0.008548	ug/L	!ib
Copper	[0.1766]	0.5000	0.04426	ug/L	!ib
Iron	ND	50.00	6.980	ug/L	
Lead	[0.02944]	0.2500	0.005283	ug/L	!ib
Magnesium	ND	50.00	3.054	ug/L	
Manganese	[0.04879]	0.2500	0.01838	ug/L	!ib
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	[0.01992]	0.2500	0.01266	ug/L	!ib
Sodium	ND	50.00	9.919	ug/L	
Thallium	[0.04866]	0.2500	0.02100	ug/L	!ib
Vanadium	[0.09718]	0.5000	0.08283	ug/L	!ib
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	330743	2.32
Scandium	341957	345158	0.94
Germanium	80606	81572	1.20
Indium	530308	538528	1.55
Bismuth	437483	450909	3.07

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56341908032
 Cal : 56341908001

File : h2510032
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 13:22

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	50.00	2.123	ug/L	
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.2988]	0.5000	0.09029	ug/L	!ib
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	ND	0.2500	0.009674	ug/L	
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	[0.2721]	0.5000	0.03860	ug/L	!ib
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	ND	50.00	3.054	ug/L	
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	[0.2258]	0.5000	0.1891	ug/L	!ib
Silver	ND	0.2500	0.01266	ug/L	
Sodium	ND	50.00	9.919	ug/L	
Thallium	ND	0.2500	0.02100	ug/L	
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	310667	-3.89
Scandium	341957	321206	-6.07
Germanium	80606	76632	-4.93
Indium	530308	503028	-5.14
Bismuth	437483	439702	0.51

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56341908049
 Cal : 56341908001

File : h2510049
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 15:23

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	50.00	2.123	ug/L	
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.2357]	0.5000	0.09029	ug/L	!ib
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	ND	0.2500	0.009674	ug/L	
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	[0.2140]	0.5000	0.03860	ug/L	!ib
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	ND	50.00	3.054	ug/L	
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	[0.3328]	0.5000	0.1891	ug/L	!ib
Silver	ND	0.2500	0.01266	ug/L	
Sodium	ND	50.00	9.919	ug/L	
Thallium	ND	0.2500	0.02100	ug/L	
Vanadium	[0.1496]	0.5000	0.08283	ug/L	!ib
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	338508	4.72
Scandium	341957	341442	-0.15
Germanium	80606	80983	0.47
Indium	530308	535560	0.99
Bismuth	437483	473139	8.15

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Segnum : 56341908054
 Cal : 56341908001

File : h2510054
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 15:51

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	50.00	2.123	ug/L	
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.4083]	0.5000	0.09029	ug/L	!ib
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	[0.02156]	0.2500	0.009674	ug/L	!ib
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	[0.2300]	0.5000	0.03860	ug/L	!ib
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	ND	50.00	3.054	ug/L	
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	ND	0.5000	0.1891	ug/L	
Silver	ND	0.2500	0.01266	ug/L	
Sodium	ND	50.00	9.919	ug/L	
Thallium	ND	0.2500	0.02100	ug/L	
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	331087	2.42
Scandium	341957	332599	-2.74
Germanium	80606	79531	-1.33
Indium	530308	522128	-1.54
Bismuth	437483	464050	6.07

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05 IDF : 1.0
 Segnum : 56341908075 File : h2510075 Time : 25-AUG-2006 17:59
 Cal : 56341908001 Caldate: 25-AUG-2006

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[4.388]	50.00	2.123	ug/L	!ib
Antimony	ND	0.2500	0.03394	ug/L	
Arsenic	[0.3001]	0.5000	0.09029	ug/L	!ib
Barium	ND	0.2500	0.02391	ug/L	
Beryllium	ND	0.2500	0.009674	ug/L	
Cadmium	ND	0.2500	0.04566	ug/L	
Calcium	ND	50.00	7.739	ug/L	
Chromium	[0.05610]	0.5000	0.03860	ug/L	!ib
Cobalt	ND	0.2500	0.008548	ug/L	
Copper	ND	0.5000	0.04426	ug/L	
Iron	ND	50.00	6.980	ug/L	
Lead	ND	0.2500	0.005283	ug/L	
Magnesium	ND	50.00	3.054	ug/L	
Manganese	ND	0.2500	0.01838	ug/L	
Molybdenum	ND	0.5000	0.4994	ug/L	
Nickel	ND	0.2500	0.03982	ug/L	
Potassium	ND	50.00	6.379	ug/L	
Selenium	[0.2271]	0.5000	0.1891	ug/L	!ib
Silver	ND	0.2500	0.01266	ug/L	
Sodium	[28.09]	50.00	9.919	ug/L	!ib
Thallium	ND	0.2500	0.02100	ug/L	
Vanadium	ND	0.5000	0.08283	ug/L	
Zinc	ND	0.5000	0.09577	ug/L	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	308846	-4.46
Scandium	341957	311108	-9.02
Germanium	80606	73695	-8.57
Indium	530308	485421	-8.46
Bismuth	437483	440889	0.78

!=warning ib=instrument blank

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56341908015 File : h2510015
 Cal : 56341908001 Caldate: 25-AUG-2006
 Standards: S4011, S3310

IDF : 1.0
 Time : 25-AUG-2006 11:47

Analyte	Quant	RL	Units	Flags
Antimony	2.096	0.2500	ug/L	
Arsenic	[0.2745]	0.5000	ug/L	
Barium	0.8940	0.2500	ug/L	
Beryllium	[0.01137]	0.2500	ug/L	
Cadmium	[0]	0.2500	ug/L	
Chromium	1.128	0.5000	ug/L	
Cobalt	2.459	0.2500	ug/L	
Copper	1.572	0.5000	ug/L	
Lead	1.180	0.2500	ug/L	
Manganese	0.8620	0.2500	ug/L	
Nickel	1.587	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1231]	0.2500	ug/L	
Thallium	[0.02564]	0.2500	ug/L	
Vanadium	[0.09319]	0.5000	ug/L	
Zinc	1.811	0.5000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	98970	ug/L	99
Calcium	300000	286100	ug/L	95
Iron	250000	218600	ug/L	87
Magnesium	100000	97390	ug/L	97
Molybdenum	2000	1963	ug/L	98
Potassium	100000	97100	ug/L	97
Sodium	250000	237600	ug/L	95

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	288781	-10.66
Scandium	341957	324404	-5.13
Germanium	80606	83583	3.69
Indium	530308	482377	-9.04
Bismuth	437483	377109	-13.80

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56341908016
 Cal : 56341908001
 Standards: S4012, S3310

File : h2510016
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 11:53

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	99440	ug/L	-1		
Arsenic	100.0	98.06	ug/L	-2	20	
Cadmium	100.0	88.16	ug/L	-12	20	
Calcium	300000	286500	ug/L	-5		
Chromium	200.0	192.6	ug/L	-4	20	
Cobalt	200.0	190.0	ug/L	-5	20	
Copper	200.0	181.4	ug/L	-9	20	
Iron	250000	215800	ug/L	-14		
Magnesium	100000	98710	ug/L	-1		
Manganese	200.0	190.5	ug/L	-5	20	
Molybdenum	2000	1955	ug/L	-2		
Nickel	200.0	183.1	ug/L	-8	20	
Potassium	100000	97270	ug/L	-3		
Selenium	100.0	88.84	ug/L	-11	20	
Silver	50.00	45.55	ug/L	-9	20	
Sodium	250000	237500	ug/L	-5		
Vanadium	200.0	198.8	ug/L	-1	20	
Zinc	100.0	98.62	ug/L	-1	20	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Scandium	341957	318101	-6.98
Germanium	80606	82303	2.11

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56341908069 File : h2510069
 Cal : 56341908001 Caldate: 25-AUG-2006
 Standards: S4011, S3310

IDF : 1.0
 Time : 25-AUG-2006 17:18

Analyte	Quant	RL	Units	Flags
Antimony	1.931	0.2500	ug/L	
Arsenic	[0.1344]	0.5000	ug/L	
Barium	0.9864	0.2500	ug/L	
Beryllium	[0.009709]	0.2500	ug/L	
Cadmium	[0.08450]	0.2500	ug/L	
Chromium	0.9977	0.5000	ug/L	
Cobalt	2.418	0.2500	ug/L	
Copper	1.548	0.5000	ug/L	
Lead	1.133	0.2500	ug/L	
Manganese	0.9306	0.2500	ug/L	
Nickel	1.423	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.09473]	0.2500	ug/L	
Thallium	[0]	0.2500	ug/L	
Vanadium	[0]	0.5000	ug/L	
Zinc	1.797	0.5000	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	101400	ug/L	101
Calcium	300000	284600	ug/L	95
Iron	250000	211400	ug/L	85
Magnesium	100000	99350	ug/L	99
Molybdenum	2000	1954	ug/L	98
Potassium	100000	97920	ug/L	98
Sodium	250000	241400	ug/L	97

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Lithium	323251	267803	-17.15
Scandium	341957	283813	-17.00
Germanium	80606	72556	-9.99
Indium	530308	428075	-19.28
Bismuth	437483	371229	-15.14

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Segnum : 56341908070
 Cal : 56341908001
 Standards: S4012, S3310

File : h2510070
 Caldate: 25-AUG-2006

IDF : 1.0
 Time : 25-AUG-2006 17:24

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	100900	ug/L	1		
Arsenic	100.0	95.82	ug/L	-4	20	
Cadmium	100.0	86.27	ug/L	-14	20	
Calcium	300000	280400	ug/L	-7		
Chromium	200.0	181.9	ug/L	-9	20	
Cobalt	200.0	183.8	ug/L	-8	20	
Copper	200.0	175.9	ug/L	-12	20	
Iron	250000	205900	ug/L	-18		
Magnesium	100000	98510	ug/L	-1		
Manganese	200.0	180.5	ug/L	-10	20	
Molybdenum	2000	1943	ug/L	-3		
Nickel	200.0	175.5	ug/L	-12	20	
Potassium	100000	97040	ug/L	-3		
Selenium	100.0	87.80	ug/L	-12	20	
Silver	50.00	44.96	ug/L	-10	20	
Sodium	250000	237500	ug/L	-5		
Vanadium	200.0	192.8	ug/L	-4	20	
Zinc	100.0	94.07	ug/L	-6	20	

ISTD (ICALBLK h2510003)	ICALBLK Abund	Abund	%Drift
Scandium	341957	293606	-14.14
Germanium	80606	75737	-6.04

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56341908 Instrument: MET05
Analytical Method: EPA 6020

Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 25-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
001	h2510001	TUN	RINSE			25-AUG-2006 10:28	1.0	1.0				1		
002	h2510002	X	RINSE			25-AUG-2006 10:35	1.0	1.0				2		
003	h2510003	ICALBLK	STD-BLANK			25-AUG-2006 10:40	1.0	1.0				2		
004	h2510004	ICAL	CS1			25-AUG-2006 10:46	1.0	1.0				3		
005	h2510005	ICAL	CS2			25-AUG-2006 10:51	1.0	1.0				4		
006	h2510006	ICAL	CS3			25-AUG-2006 10:57	1.0	1.0				5		
007	h2510007	ICAL	CS4			25-AUG-2006 11:03	1.0	1.0				6		
008	h2510008	ICAL	CS5			25-AUG-2006 11:08	1.0	1.0				7		
009	h2510009	ICAL	CS6			25-AUG-2006 11:14	1.0	1.0				8		
010	h2510010	X	RINSE			25-AUG-2006 11:19	1.0	1.0				9		
011	h2510011	ICV				25-AUG-2006 11:25	1.0	1.0				10		
012	h2510012	X	RINSE			25-AUG-2006 11:30	1.0	1.0				11		
013	h2510013	ICB				25-AUG-2006 11:36	1.0	1.0				12		
014	h2510014	X				25-AUG-2006 11:42	1.0	1.0				13		
015	h2510015	ICSA				25-AUG-2006 11:47	1.0	1.0				14		
016	h2510016	ICSA				25-AUG-2006 11:53	1.0	1.0				15		
017	h2510017	X	RINSE			25-AUG-2006 11:58	1.0	1.0				16		
018	h2510018	X	RINSE			25-AUG-2006 12:04	1.0	1.0				17		
019	h2510019	BLANK				25-AUG-2006 12:10	1.0	1.0				18		
020	h2510020	BS	QC353252			25-AUG-2006 12:15	1.0	1.0				19		
021	h2510021	BSD	QC353253			25-AUG-2006 12:21	1.0	1.0				20		
022	h2510022	X	RINSE			25-AUG-2006 12:26	1.0	1.0				21		
023	h2510023	MSS	188837-009			25-AUG-2006 12:32	1.0	1.0				22		
024	h2510024	SER	QC353256			25-AUG-2006 12:37	5.0	1.0				23		
025	h2510025	MS	QC353254			25-AUG-2006 12:43	1.0	1.0				24		
026	h2510026	MSD	QC353255			25-AUG-2006 12:49	1.0	1.0				25		
027	h2510027	PDS	QC353257			25-AUG-2006 12:54	1.0	1.0				26		
028	h2510028	X	RINSE			25-AUG-2006 13:00	1.0	1.0				27		
029	h2510029	CCV				25-AUG-2006 13:05	1.0	1.0				28		
030	h2510030	X	RINSE			25-AUG-2006 13:11	1.0	1.0				29		
031	h2510031	X				25-AUG-2006 13:16	1.0	1.0				30		

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S3780 13=S4009

Analyst: *Heavly* Date: *8/25/06*

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56341908 Instrument: MET05
Analytical Method: EPA 6020

Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 25-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
032	h2510032	CCB	RINSE			25-AUG-2006 13:22	1.0	1.0			1	2		
033	h2510033	X				25-AUG-2006 13:28	1.0					2		
034	h2510034	MSS	188837-009		116738 Filtra	25-AUG-2006 13:33	10.0	1.0			1	2		
035	h2510035	SER	QC353256		116738 Filtra	25-AUG-2006 13:39	50.0	1.0			1	2		
036	h2510036	MS	QC353254		116738 Filtra	25-AUG-2006 13:45	10.0	1.0			1	2		
037	h2510037	MSD	QC353255		116738 Filtra	25-AUG-2006 13:50	10.0	1.0			1	2		
038	h2510038	PDS	QC353257		116738 Filtra	25-AUG-2006 13:56	10.0	1.0			1	2		
039	h2510039	X	RINSE			25-AUG-2006 14:26	1.0				1	2		
040	h2510040	SAMPLE	188837-012		116738 Water	25-AUG-2006 14:32	1.0	1.0			1	2		
041	h2510041	SAMPLE	188869-001		116738 Water	25-AUG-2006 14:38	1.0	1.0			1	2		
042	h2510042	SAMPLE	188837-008		116738 Filtra	25-AUG-2006 14:43	1.0	1.0			1	2		
043	h2510043	SAMPLE	188837-008		116738 Filtra	25-AUG-2006 14:49	20.0	1.0			1	2		
044	h2510044	SAMPLE	188837-010		116738 Filtra	25-AUG-2006 14:55	1.0	1.0			1	2		
045	h2510045	X	RINSE			25-AUG-2006 15:00	1.0				1	2		
046	h2510046	CCV				25-AUG-2006 15:06	1.0	1.0			1	2		
047	h2510047	X	RINSE			25-AUG-2006 15:11	1.0				1	2		
048	h2510048	X				25-AUG-2006 15:17	1.0	1.0			1	2		
049	h2510049	CCB				25-AUG-2006 15:23	1.0	1.0			1	2		
050	h2510050	SAMPLE	188837-010		116738 Filtra	25-AUG-2006 15:28	10.0	1.0			1	2		
051	h2510051	X	RINSE			25-AUG-2006 15:34	1.0				1	2		
052	h2510052	CCV				25-AUG-2006 15:39	1.0	1.0			1	2		
053	h2510053	X	RINSE			25-AUG-2006 15:45	1.0				1	2		
054	h2510054	CCB				25-AUG-2006 15:51	1.0	1.0			1	2		
055	h2510055	X				25-AUG-2006 15:57	1.0	1.0			1	2		
056	h2510056	SAMPLE	188837-005		116738 Filtra	25-AUG-2006 16:05	1.0	1.0			1	2		
057	h2510057	SAMPLE	188837-005		116738 Water	25-AUG-2006 16:11	1.0	1.0			1	2		
058	h2510058	X	RINSE			25-AUG-2006 16:16	1.0				1	2		
059	h2510059	X	RINSE			25-AUG-2006 16:22	1.0				1	2		
060	h2510060	X	RINSE			25-AUG-2006 16:28	1.0				1	2		
061	h2510061	SAMPLE	188837-005		116738 Filtra	25-AUG-2006 16:33	25.0	1.0			1	2		
062	h2510062	SAMPLE	188837-005		116738 Water	25-AUG-2006 16:39	5.0	1.0			1	2		

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S3780 13=S4009

Analyst:

Date:

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56341908 Instrument: MET05
Analytical Method: EPA 6020 Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 25-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Std	Used	>LR
063	h2510063	SAMPLE	188837-005	116738	Water	25-AUG-2006	16:44 25.0	1.0	1	1	1	2		1:NA=144960
064	h2510064	X	RINSE			25-AUG-2006	16:50 1.0					2		
065	h2510065	X	RINSE			25-AUG-2006	16:56 1.0					2		
066	h2510066	SAMPLE	188837-005	116738	Filtra	25-AUG-2006	17:01 250.0	1.0	1	1	1	2		
067	h2510067	SAMPLE	188837-005	116738	Water	25-AUG-2006	17:07 250.0	1.0				2		
068	h2510068	X	RINSE			25-AUG-2006	17:12 1.0					2		
069	h2510069	ICSA				25-AUG-2006	17:18 1.0	1.0			1	10 2		7:CA=284600
070	h2510070	ICSAB				25-AUG-2006	17:24 1.0	1.0			1	11 2		7:CA=280400
071	h2510071	X	RINSE			25-AUG-2006	17:29 1.0					2		
072	h2510072	X	RINSE			25-AUG-2006	17:35 1.0					2		
073	h2510073	CCV				25-AUG-2006	17:48 1.0	1.0			1	13 2		
074	h2510074	X	RINSE			25-AUG-2006	17:54 1.0					2		
075	h2510075	CCB				25-AUG-2006	17:59 1.0	1.0			1	2		

Stds used: 1=S4021 2=S3310 3=S4004 4=S4005 5=S4006 6=S4007 7=S4001 8=S4002 9=S4008 10=S4011 11=S4012 12=S3780 13=S4009

Analyst: *Alcalá* Date: *8/25/06*

REPORTING SUMMARY FOR 188869 METALS Water

Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	A	S	A	B	B	C	C	C	C	C	F	P	M	M	H	N	K	S	A	N	T	V	Z
				L	B	S	A	E	D	A	R	O	U	E	B	G	N	G	I	E	G	A	L	N		
188869-001	MET14	08/23/06 15:37	1.0															+								
188869-001	MET05	08/24/06 21:16	1.0	+	+	+	+	+	+	+		+	+	+	+	+		+	+	+	+		+		+	
188869-001	MET05	08/25/06 14:38	1.0								+						+						+		+	
QC353127	MET14	08/23/06 15:27	1.0															+								
QC353128	MET14	08/23/06 15:29	1.0															+								
QC353129	MET14	08/23/06 15:31	1.0															+								
QC353130	MET14	08/23/06 15:34	1.0															+								
QC353131	MET14	08/23/06 15:39	5.0															+								
QC353132	MET14	08/23/06 15:41	1.0															+								
QC353133	MET14	08/23/06 15:43	1.0															+								
QC353134	MET14	08/23/06 15:48	5.0															+								
QC353135	MET14	08/23/06 15:55	1.0															+								
QC353136	MET14	08/23/06 15:57	1.0															+								
QC353251	MET05	08/24/06 19:25	1.0	+	+	+	+	+	+	+		+	+	+	+	+	+	+	+	+	+		+	+	+	
QC353251	MET05	08/25/06 12:10	1.0								+												+			
QC353252	MET05	08/24/06 19:30	1.0		+	+	+		+	+		+	+	+	+	+	+	+	+	+	+		+	+	+	
QC353252	MET05	08/25/06 12:15	1.0	+				+			+					+							+			
QC353253	MET05	08/24/06 19:36	1.0		+	+	+		+	+		+	+	+	+	+	+	+	+	+	+		+	+	+	
QC353253	MET05	08/25/06 12:21	1.0	+				+			+					+							+			
QC353254	MET05	08/24/06 19:58	1.0		+	+	+		+			+	+		+				+	+	+	+		+	+	+
QC353254	MET05	08/24/06 21:33	10.0						+				+													
QC353254	MET05	08/25/06 12:43	1.0	+				+			+															
QC353254	MET05	08/25/06 13:45	10.0													+	+						+			
QC353255	MET05	08/24/06 20:04	1.0		+	+	+		+			+	+		+				+	+	+	+		+	+	+
QC353255	MET05	08/24/06 21:39	10.0						+				+													
QC353255	MET05	08/25/06 12:49	1.0	+				+			+															
QC353255	MET05	08/25/06 13:50	10.0													+	+						+			
QC353256	MET05	08/24/06 21:27	50.0						+																	
QC353256	MET05	08/25/06 12:37	5.0	+	+	+	+	+	+		+	+	+	+	+			+	+	+	+		+	+	+	
QC353256	MET05	08/25/06 13:39	50.0													+	+						+			
QC353257	MET05	08/24/06 20:09	1.0		+	+	+		+			+	+		+				+	+	+	+		+	+	+

REPORTING SUMMARY FOR 188869 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	A	S	A	B	B	C	C	C	C	C	F	P	M	M	H	N	K	S	A	N	T	V	Z
				L	B	S	A	E	D	A	R	O	U	E	B	G	N	G	I	E	G	A	L	N		
QC353257	MET05	08/24/06 21:44	10.0							+				+												
QC353257	MET05	08/25/06 12:54	1.0	+				+			+															
QC353257	MET05	08/25/06 13:56	10.0	+				+			+					+	+						+			

INTERNAL STANDARD SUMMARY
 tis & Tompkins Laboratories

Sequence Date: 24-AUG-2006
Sequence: 56340782
Instrument ID: MET05

(h2415)

ICALBLK Filename: h2415005
Date Analyzed: 24-AUG-2006
Time Analyzed: 16:09

	IS1 (LI)	IS2 (SC)	IS3 (GE)	IS4 (IN)	IS5 (BI)	IS6 (TB)
	READING	READING	READING	READING	READING	READING
ICALBLK STD	336846	366577	8255	571579	478991	780388
LOWER LIMIT	101054	109973	24767	171474	143697	234116
UPPER LIMIT	404215	439892	99066	685895	574789	936465

[illegible]

INTERNAL STANDARD SUMMARY

Sequence Date: 24-AUG-2006
Sequence: 56340782
Instrument ID: MET05

(h2415)

```
ICALBLK Filename: h2415005
Date Analyzed: 24-AUG-2006
Time Analyzed: 16:09
```

[illegible]

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 24-AUG-2006
Sequence: 56340782
Instrument ID: MET05

(h2415)

ICALBLK Filename: h2415005
Date Analyzed: 24-AUG-2006
Time Analyzed: 16:09

TYPE	SAMPLE	#									
CCV		112	315022	342352	79807	516312	442422	723504			
CCB		114	317920	343380	79910	538009	449660	721689			
SAMPLE	188802-010	116	257906	270210	63458	388972	343502	551041			
SAMPLE	188802-012	117	275878	285980	66577	411101	354740	580448			
SAMPLE	188802-013	118	263701	273976	64551	378718	343137	549327			
SAMPLE	188802-014	119	258499	268321	61903	384533	345378	551172			
SAMPLE	188802-015	120	284449	274760	65694	413010	372787	575460			
SAMPLE	188802-017	121	279012	280540	67466	388831	340848	561117			
SAMPLE	188802-018	122	274491	283068	68423	389415	340216	559584			
SAMPLE	188802-020	123	282090	289403	67338	403677	356352	581094			
SAMPLE	188867-002	124	264024	268674	61080	377244	322764	539146			
CCV		126	287181	301214	68372	449540	400857	643120			
CCB		128	291944	307571	70469	476316	413726	649859			
ICSA		130	252539	286572	68345	408101	337712	586723			
											315

INTERNAL STANDARD SUMMARY Curtis & Tompkins Laboratories

Sequence Date: 25-AUG-2006
Sequence: 56341908
Instrument ID: MET05

(h2510)
ICALBLK Filename: h2510003
Date Analyzed: 25-AUG-2006
Time Analyzed: 10:40

ICALBLK STD	IS1 (LI READING	IS2 (SC READING	IS3 (GE READING	IS4 (IN READING	IS5 (BI READING	IS6 (TB READING
LOWER LIMIT	323251	341957	80606	530308	437483	697614
UPPER LIMIT	96975	102587	24182	159093	131245	209284
	387901	410348	96727	636370	524980	837137

TYPE	SAMPLE	#	IS1 (LI READING	IS2 (SC READING	IS3 (GE READING	IS4 (IN READING	IS5 (BI READING	IS6 (TB READING
ICB		013	330743	345158	81572	538528	450909	712002
ICSA		015	288781	324404	83583	482377	377109	661668
BLANK	QC353251	019	262537	272984	64769	421685	375546	575790
BS	QC353252	020	258138	259306	63033	374774	351711	542189
BSD	QC353253	021	273628	286020	65815	421404	375392	598800
MSS	188837-009	023	273494	295252	69855	424869	368389	595893
SER	QC353256	024	314717	331702	79289	508064	428348	687562
MS	QC353254	025	263160	282449	66803	400343	354060	574291
MSD	QC353255	026	274972	292829	69820	414997	364946	595568
PDS	QC353257	027	285974	300450	71332	432939	370956	609287
CCV		029	312323	328006	79508	503523	436229	695663
CCB		032	310667	321206	76632	503028	439702	679858
MSS	188837-009	034	317298	328928	79449	509833	443784	698441
SER	QC353256	035	324677	337694	82190	533056	463663	717108
MS	QC353254	036	313819	327800	79092	506764	439429	695512
MSD	QC353255	037	315869	327507	78835	505281	439362	694903
PDS	QC353257	038	317206	327509	79300	509275	442337	693890
SAMPLE	188837-012	040	292543	277822	68458	422013	382611	577321
SAMPLE	188869-001	041	293269	279909	68593	426988	387017	589511
SAMPLE	188837-008	042	288809	300540	72604	439014	367664	613414
SAMPLE	188837-008	043	351937	352198	86046	549362	467950	736664
SAMPLE	188837-010	044	281388	288466	67746	413913	365902	594276
CCV		046	322233	330318	79506	504921	446747	707828
CCB		049	338508	341442	80983	535560	473139	749532
SAMPLE	188837-010	050	316716	322586	77331	500449	444572	694716
CCV		052	318859	326357	79166	502214	443934	703836
CCB		054	331087	332599	79531	522128	464050	709387
SAMPLE	188837-005	056	274720	279636	69514	397636	299504	527064

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 25-AUG-2006
 Sequence: 56341908 (h2510)
 Instrument ID: MET05
 ICALBLK Filename: h2510003
 Date Analyzed: 25-AUG-2006
 Time Analyzed: 10:40

TYPE	SAMPLE	#						
SAMPLE	188837-005	057	250922	300392	62812	359908	280138	491943
SAMPLE	188837-005	061	341739	336043	83482	520054	417131	682949
SAMPLE	188837-005	062	288228	305293	72522	442367	360888	607617
SAMPLE	188837-005	063	324526	325781	81622	502640	414569	675256
SAMPLE	188837-005	066	355811	339840	85585	547637	463314	714018
SAMPLE	188837-005	067	347633	332696	83297	535571	462454	704552
ICSA		069	267803	283813	72556	428075	371229	616159
CCV		073	302769	304897	72090	461548	419799	658217
CCB		075	308846	311108	73695	485421	440889	666724

Curtis & Tompkins Laboratories

Sample Preparation Summary

24-AUG-2006 10:29

Batch Number : 116738
Date Extracted : 24-AUG-2006
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S3379
Spike #2 ID : S4130
Spike #3 ID :
SDP Version :

Sample	Type	Client	Matrix	Init		Final		Clean	pH	Sp			Analyses	Clean	Comments
				W/V	Units	Vol	D.F.			Vol	Vol	Vol			
188837-005		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					14MET		
188837-005		Treadwell & Rollo	Water	50	mL	50	1.000000	1					14MET		
188837-008		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					15MET		
188837-009		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					15MET		
188837-010		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					15MET		
188837-012		Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
188869-001		Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
QC353251	BLANK		Filtrate	50	mL	50	1.000000	1					ICAP		
QC353252	BS		Filtrate	50	mL	50	1.000000	1					ICAP		
QC353253	BS		Filtrate	50	mL	50	1.000000	1					ICAP		
QC353254	MS	of 188837-009	Filtrate	50	mL	50	1.000000	1					ICAP		
QC353255	MSD	of 188837-009	Filtrate	50	mL	50	1.000000	1					ICAP		
QC353256	SER	of 188837-009	Filtrate	50	mL	50	1.000000	1					ICAP		
QC353257	PDS	of 188837-009	Filtrate	50	mL	50	1.000000	1					ICAP		

Prep Chemist:

Kevin Gaines

Reviewed By:

Kevin Gaines

Date: 8/25/06

Relinquished By:

Kevin Gaines

Received By:

Kevin Gaines

Date: 8/25/06

BK BK 2382
Page 8

Continued From:
Continued On:

20

K Carlson 8/24/06
Reviewer Signature / Date

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 7470A

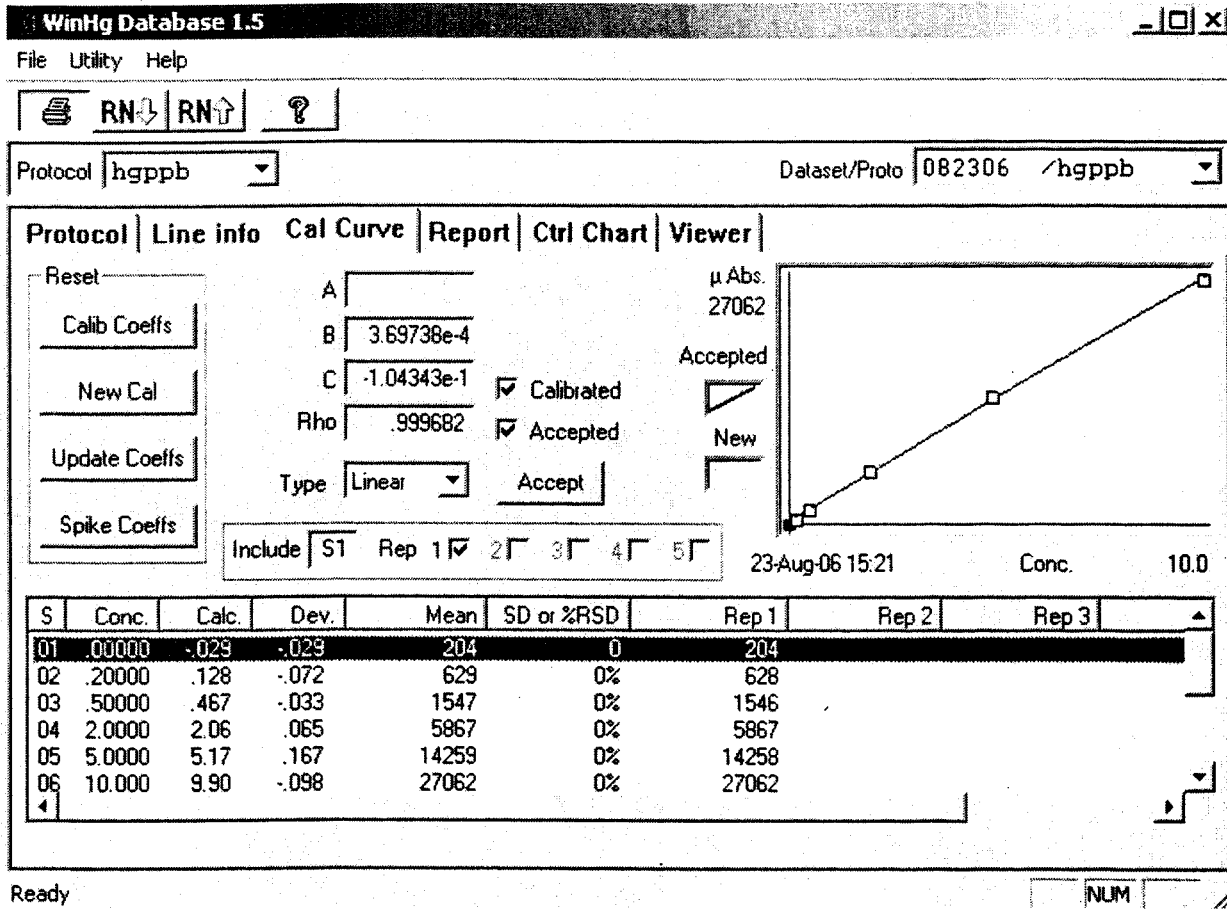
ist : MET14
lnum : 846339307001
its : ug/L

Date : 23-AUG-2006 15:07
X Axis : R

Reviewer: ---
Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	stds
1	116704	846339307002	STD02REP1	23-AUG-2006 15:09	S4179 (500X)
2	116704	846339307003	STD03REP1	23-AUG-2006 15:12	S4179 (200X)
3	116704	846339307004	STD04REP1	23-AUG-2006 15:14	S4179 (50X)
4	116704	846339307005	STD05REP1	23-AUG-2006 15:16	S4179 (20X)
5	116704	846339307006	STD06REP1	23-AUG-2006 15:18	S4179 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ²	%RSD	mnr ²	Fig
Accuracy	3140.0	3092.0	2933.5	2851.6	2706.2	LINR	-0.1043	3.70E-4		2944.7	0.999		.99	



Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1								
				Seq: 1		15:07:41	23 Aug 06	HG
Hg	.000	ppb	204					
		Bkgd 1	22377015					
*** Standard: 2 Rep: 1								
				Seq: 2		15:09:55	23 Aug 06	HG
Hg	.200	ppb	628					
		Bkgd 1	22366920					
*** Standard: 3 Rep: 1								
				Seq: 3		15:12:08	23 Aug 06	HG
Hg	.500	ppb	1546					
		Bkgd 1	22369712					
*** Standard: 4 Rep: 1								
				Seq: 4		15:14:27	23 Aug 06	HG
Hg	2.00	ppb	5867					
		Bkgd 1	22371531					
*** Standard: 5 Rep: 1								
				Seq: 5		15:16:31	23 Aug 06	HG
Hg	5.00	ppb	14258					
		Bkgd 1	22362266					
*** Standard: 6 Rep: 1								
				Seq: 6		15:18:46	23 Aug 06	HG
Hg	10.0	ppb	27062					
		Bkgd 1	22350977					
*** Check Standard: 2								
Line	Flag		Ck2S4181	Seq: 7		15:22:49	23 Aug 06	HG
			Intensities					
Hg			14273					
		Bkgd 1	22331221					
*** Check Standard: 1								
Line	Flag		Ck1ICB	Seq: 8		15:25:35	23 Aug 06	HG
			Intensities					
Hg			-11					
		Bkgd 1	22331684					
*** Sample ID: qc353127								
			116704,1	Seq: 9		15:27:39	23 Aug 06	HG
Hg	-.073	ppb	85					
		Bkgd 1	22341886					

Sequence: 846339307 Instrument: MET14
Analytical Method: EPA 7470A
Analyte: Mercury

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories
Hydraaa Hg Analyzer MET14
SOP Version: Hg_water_rv7

Begun: 23-AUG-2006

Filename	Type	Sample	Subl Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	%Rec	RPD	Flags
116704	ICBL	STD01REP1				23-AUG-2006 15:07	1.0	1.0						ug/L	103		
2116704	ICBL	STD02REP1				23-AUG-2006 15:09	1.0	1.0						ug/L			
3116704	ICBL	STD03REP1				23-AUG-2006 15:12	1.0	1.0						ug/L			
4116704	ICBL	STD04REP1				23-AUG-2006 15:14	1.0	1.0						ug/L			
5116704	ICBL	STD05REP1				23-AUG-2006 15:16	1.0	1.0						ug/L			
6116704	ICBL	STD06REP1				23-AUG-2006 15:18	1.0	1.0						ug/L			
7116704	ICV					23-AUG-2006 15:22	1.0	1.0	2	5.000	846339307001	5.170		ug/L			
8116704	ICB					23-AUG-2006 15:25	1.0	1.0						ug/L			
9116704	BLANK	OC353127				23-AUG-2006 15:27	1.0	1.0			846339307001	ND	0.20	ug/L			
1116704	BLANK	OC353128				23-AUG-2006 15:29	1.0	5.0			846339307001	ND	0.20	ug/L			
2116704	BS	OC353129				23-AUG-2006 15:31	1.0	1.0		5.000	846339307001	ND	1.0	ug/L			
3116704	BS	OC353130				23-AUG-2006 15:34	1.0	1.0		5.000	846339307001	5.280	0.20	ug/L	106		
4116704	MSS	188869-001				23-AUG-2006 15:37	1.0	1.0			846339307001	ND	0.20	ug/L	101	4	
5116704	SER	OC353131				23-AUG-2006 15:39	5.0	1.0			846339307001	ND	1.0	ug/L			
6116704	MS	OC353132				23-AUG-2006 15:41	1.0	1.0		5.000	846339307001	5.310	0.20	ug/L	106		
7116704	MSD	OC353133				23-AUG-2006 15:43	1.0	1.0		5.000	846339307001	5.380	0.20	ug/L	108	1	
8116704	MSS	188650-001				23-AUG-2006 15:46	1.0	5.0			846339307001	ND	2.0	ug/L			
9116704	SER	OC353134				23-AUG-2006 15:48	5.0	5.0			846339307001	ND	5.0	ug/L			
0116704	CCV					23-AUG-2006 15:50	1.0	1.0	3	2.500	846339307001	2.640		ug/L	106		
1116704	CCB					23-AUG-2006 15:52	1.0	1.0			846339307001	ND	0.20	ug/L			
2116704	MS	OC353135				23-AUG-2006 15:55	1.0	5.0		25.00	846339307001	26.90	1.0	ug/L	108		
3116704	MSD	OC353136				23-AUG-2006 15:57	1.0	5.0		25.00	846339307001	26.65	1.0	ug/L	107	1	
4116704	SAMPLE	188650-002				23-AUG-2006 15:59	1.0	5.0			846339307001	ND	2.0	ug/L			
5116704	SAMPLE	188650-003				23-AUG-2006 16:02	1.0	5.0			846339307001	ND	2.0	ug/L			
6116704	SAMPLE	188650-004				23-AUG-2006 16:04	1.0	5.0			846339307001	ND	2.0	ug/L			
7116704	SAMPLE	188650-005				23-AUG-2006 16:06	1.0	5.0			846339307001	ND	2.0	ug/L			
8116704	SAMPLE	188650-006				23-AUG-2006 16:08	1.0	5.0			846339307001	0.13 J	2.0	ug/L			
9116704	SAMPLE	188650-007				23-AUG-2006 16:11	1.0	5.0			846339307001	ND	2.0	ug/L			
0116704	SAMPLE	188650-008				23-AUG-2006 16:13	1.0	1.0			846339307001	ND	0.20	ug/L			
1116704	SAMPLE	188650-009				23-AUG-2006 16:16	1.0	1.0			846339307001	ND	0.20	ug/L			
2116704	SAMPLE	188650-010				23-AUG-2006 16:18	1.0	1.0	4	5.000	846339307001	5.350		ug/L	107		
3116704	CCB					23-AUG-2006 16:20	1.0	1.0			846339307001	ND	0.20	ug/L			
4116704	SAMPLE	188887-001				23-AUG-2006 16:22	1.0	1.0			846339307001	ND	0.20	ug/L			
5116704	SAMPLE	188887-002				23-AUG-2006 16:25	1.0	1.0			846339307001	ND	0.20	ug/L			
6116704	SAMPLE	188887-003				23-AUG-2006 16:28	1.0	1.0			846339307001	ND	0.20	ug/L			
7116704	SAMPLE	188887-004				23-AUG-2006 16:30	1.0	1.0			846339307001	2.0	0.20	ug/L			
8116704	SAMPLE	188887-005				23-AUG-2006 16:33	1.0	1.0			846339307001	2.4	0.20	ug/L			
9116704	SAMPLE	188887-006				23-AUG-2006 16:35	1.0	1.0			846339307001	3.30	0.20	ug/L			
0116704	SAMPLE	188887-007				23-AUG-2006 16:41	1.0	1.0			846339307001	3.30	0.20	ug/L			
1116704	SAMPLE	188887-008				23-AUG-2006 16:46	1.0	1.0			846339307001	1600	>LR	ug/L			
2116704	SAMPLE	188887-009				23-AUG-2006 16:49	100.0	1.0			846339307001	1700	100	ug/L			
3116704	SAMPLE	188887-010				23-AUG-2006 16:55	500.0	1.0			846339307001	1700	100	ug/L			

tds used: 1=S4179 2=S4181 3=S4182 4=S4183 5=S4184
lags used: >LR=overrange b=noncompliant calc=check quantitation u=use

Analyst: Val Hoot Date: 8/23/06
Page 1 of 2

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 846339307
Instrument: MET14
Analytical Method: EPA 7470A
Analyte: Mercury

HydraAA HG Analyzer MET14
SOP Version: HG_water_rv7

Begun: 23-AUG-2006

Filename	Type	Sample	Subj	Samp	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	Rec	RPD	Flags
4	116704	CCV					23-AUG-2006	16:58	1.0	1.0	5	7.500	846339307001	7.780		ug/L	104	
5	116704	CCB					23-AUG-2006	17:00	1.0	1.0			846339307001	ND		ug/L		

tds used: 1=S4179 2=S4181 3=S4182 4=S4183 5=S4184
lags used: >LR=Overrange b=noncompliant calc=check quantitation u=use

analyst: Jacob Abbott Date: 8/23/06

Curtis & Tompkins Laboratories

Sample Preparation Summary

23-AUG-2006 14:44

Batch Number : 116704
Date Extracted : 23-AUG-2006
Extracted by : Zachary Abbott
Prep Method : METHOD

Analysis : N/A
Bgroup : HG
Units : mL
Clean-up :

Spike #1 ID : S4179
Spike #2 ID :
Spike #3 ID :
SDP Version :

Sample	Type	Client	Matrix	Init	Units	Final	Prep	Clean	pH	Sp 1	Sp 2	Sp 3	Analyses	Clean	Comments
				W/V		Vol	D.F.	D.F.		Vol	Vol	Vol		Method	
188650-001		Tetra Tech EC, Inc.	TCLP Leach 10	mL	50	5.000000	1						HG		
188650-002		Tetra Tech EC, Inc.	TCLP Leach 10	mL	50	5.000000	1						HG		
188650-003		Tetra Tech EC, Inc.	TCLP Leach 10	mL	50	5.000000	1						HG		
188650-004		Tetra Tech EC, Inc.	TCLP Leach 10	mL	50	5.000000	1						HG		
188650-005		Tetra Tech EC, Inc.	TCLP Leach 10	mL	50	5.000000	1						HG		
188650-006		Tetra Tech EC, Inc.	TCLP Leach 10	mL	50	5.000000	1						HG		
188650-007		Tetra Tech EC, Inc.	TCLP Leach 10	mL	50	5.000000	1						HG		
188667-002		Iris Environmental	TCLP Leach 10	mL	50	5.000000	1						HG		
188669-001		Treadwell & Rollo	Water	50	mL	50	1.000000	1					T26/HG		
188676-001		Bay Ship & Yacht	Water	50	mL	50	1.000000	1					HG		
188867-001		Arcadis G&M	Water	50	mL	50	1.000000	1					HG		
188891-001		Iris Environmental	Water	50	mL	50	1.000000	1					T26/HG		
188891-002		Iris Environmental	Water	50	mL	50	1.000000	1					T26/HG		
188892-001		Reed International	Water	50	mL	50	1.000000	1					T26/HG		
188892-002		Reed International	Water	50	mL	50	1.000000	1					T26/HG		
188898-004		Strategic Engineering & Scienc	Water	50	mL	50	1.000000	1					T26/HG		
QC353127	BLANK		Water	50	mL	50	1.000000	1					HG		
QC353128	BLANK		TCLP Leach 10	mL	50	5.000000	1						HG		
QC353129	BS		Water	50	mL	50	1.000000	1					HG		
QC353130	BSD		Water	50	mL	50	1.000000	1					HG		
QC353131	SER	of 188869-001	Water	50	mL	50	1.000000	1					HG		
QC353132	MS	of 188869-001	Water	50	mL	50	1.000000	1					HG		
QC353133	MSD	of 188869-001	Water	50	mL	50	1.000000	1					HG		
QC353134	SER	of 188650-001	Water	50	mL	50	1.000000	1					HG		
QC353135	MS	of 188650-001	TCLP Leach 10	mL	50	5.000000	1						HG		
QC353136	MSD	of 188650-001	TCLP Leach 10	mL	50	5.000000	1						HG		
QC353137	PDS	of 188650-001	Water	50	mL	50	1.000000	1					HG		
QC353138	PDS	of 188650-001	TCLP Leach 10	mL	50	5.000000	1						HG		

Prep Chemist:

Full Abbott 8/17/06

Reviewed By:

JFA

Date:

8/23/06

Relinquished By:

Full Abbott 8/13/06

Received By:

JFA

Date:

8/23/06

Water Digestion for Mercury

Curtis & Tompkins, Ltd.

LIMS Batch #: 116704
 Date Digested: 8/23/06
 Digested by: ZHA

Digestion Method

BK 2335

☒ EPA 7470A/ EPA 245.1

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☐ _____

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
188650-001 MS	10	50	N	TCLP leachate
-002	↓	↓	↓	↓
-003	↓	↓	↓	↓
-004	↓	↓	↓	↓
-005	↓	↓	↓	↓
-006	↓	↓	↓	↓
-007	↓	↓	↓	↓
188867-002 F	50	↓	↓	water
188869-001				filtrate (F.F.)
188869-001 K	50	50	N	water
188876-001 B	↓	↓	↓	water
188887-001 S	↓	↓	↓	↓
188891-001 D	↓	↓	↓	↓
↓ -002	↓	↓	↓	↓
188892-001 A	↓	↓	↓	reacted violently w/ H ₂ SO ₄
↓ -002	↓	↓	↓	↓
188898-004 D	↓	↓	Y	↓
Blank	↓	↓	N	↓
Blank	10	↓	↓	TCLP leachate
BS	50	↓	↓	water
BSD	↓	↓	↓	↓
MS 188869-001 K	↓	↓	↓	water
MSD ↓	↓	↓	↓	↓
MS 188650-001	10	↓	↓	TCLP leachate
MSD ↓	↓	↓	↓	↓

Digestion of Samples & Standards:	Reagent ID/ LIMS# / Time	Initials / Date
2.5 mL of spike solution was added to all spikes	54179	ZHA 8/23/06
ICAL Source WS#	54179	
ICV / CCV WS#	54181/82/83/84	
Time ON / Temperature ON	11:00 / 95°C	
Time OFF / Temperature OFF	1:00 / 95°C	
concentrated H ₂ SO ₄	B41041	
concentrated HNO ₃	C22029	
5% KMnO ₄	K081406	
5% K ₂ S ₂ O ₈	IC072706	
NaCl.hydroxylamine hydrochloride	Hy081506	
Stannous Chloride	Sn081506	
☒ filtered thru' 0.45 um syringe filter	millipore PLAN43832	↓

Prep Chemist / Date

Continued from page 326

Continued on page

8/23/06

Reviewed by / Date



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories
MDL Summary for EPA 6020 Water 200.8
As of 09/24/06

Analyte	Units	MET06 A	MET06 E	MET06 H	MET05
Aluminum	ug/L	0.40			9.6
Antimony	ug/L	0.0093			0.062
Arsenic	ug/L		0.034		0.34
Barium	ug/L	0.023			0.13
Beryllium	ug/L	0.017			0.12
Cadmium	ug/L	0.0058			0.17
Calcium	ug/L	5.6			15
Chromium	ug/L		0.038		0.18
Cobalt	ug/L		0.0072		0.069
Copper	ug/L		0.028		0.24
Iron	ug/L			1.9	16
Lead	ug/L	0.013			0.088
Magnesium	ug/L	0.73			11
Manganese	ug/L		0.011		0.050
Molybdenum	ug/L	0.0063			0.24
Nickel	ug/L		0.029		0.21
Potassium	ug/L	5.3			8.7
Selenium	ug/L			0.027	0.35
Silver	ug/L	0.0079			0.068
Sodium	ug/L		2.7		14
Thallium	ug/L	0.030			0.030
Vanadium	ug/L		0.026		0.24
Zinc	ug/L		0.062		0.23



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories
MDL Summary for EPA 7470A Water
As of 09/24/06

Analyte	Units	MET04	MET14
Mercury	ug/L	0.058	0.021

GENERAL CHEMISTRY

Alkalinity			
Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Field ID:	DW082106B	Batch#:	116984
Matrix:	Water	Sampled:	08/21/06
Units:	mg/L	Received:	08/21/06
Diln Fac:	1.000	Analyzed:	08/31/06

Type: SAMPLE Lab ID: 188869-001

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO ₃	ND	1.0

Type: BLANK Lab ID: QC354277

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO ₃	ND	1.0

Batch QC Report

Alkalinity			
Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO ₃	Units:	mg/L
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC354278	Batch#:	116984
Matrix:	Water	Analyzed:	08/31/06

Spiked	Result	%REC	Limits
200.0	191.4	96	90-110

Batch QC Report

Alkalinity			
Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO ₃	Diln Fac:	1.000
Field ID:	DW082106B	Batch#:	116984
MSS Lab ID:	188869-001	Sampled:	08/21/06
Matrix:	Water	Received:	08/21/06
Units:	mg/L	Analyzed:	08/31/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC354279	<1.000	200.0	182.7	91	69-112		
MSD	QC354280		200.0	182.7	91	69-112	0	25

Analysis: Alkalinity
 Method: EPA 310.1 / SMWW 2320B
 SOP#: Alkalinity_rv 7.doc

Analysis Date: 08/31/06
 Batch No: 116984

H₂SO₄ Normality = 0.029
 conc.(mg/L) Na₂CO₃ for QC = 200
 Analyst: SJ

QC DATA	Initial	Sample	Vol. Acid	Vol. Acid	Alkalinity	Low Alk	Low Alk	RL	% Rec.	% RPD
	pH	Volume (mL)	to pH 8.3 (mL)	to pH 4.5 (mL)	as CaCO ₃ (mg/L)	Vol (mL)	as CaCO ₃ (mg/L)	(mg/L)		
MB	7.3 ✓	100 ✓	0.0 ✓	0.0 ✓	ND			1.0		
LCS	10.5 ✓	25 ✓	1.5 ✓	3.3 ✓	191.40			4.0	96	
188869-001	3.9 ✓	25 ✓	0.0 ✓	0.0 ✓	ND		n/a	4.0		
MS	10.6 ✓	25 ✓	1.4 ✓	3.2 ✓	182.70			4.0	91	
MSD	10.5 ✓	25 ✓	1.4 ✓	3.2 ✓	182.70			4.0	91	0
SAMPLE	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	Alkalinity as CaCO ₃ (mg/L)	Low Alkalinity Volume (4.5-4.2) (mL)	Low Alkalinity as CaCO ₃ (mg/L)	Reporting Limit (mg/L)		
188869-001	3.90 ✓	25	0.0 ✓	0.0 ✓	ND		n/a	4.0		

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Reviewed by/ Date:

[Signature] 8/31/06

QC Limits		RPD	Recovery
LCS/BS/BS	MS/MSD	20	90 - 110
		25	80 - 120

Analysis: Alkalinity
Method: EPA 310.1

Analysis Date: 08/31/06
Batch No: 116984

H₂SO₄ Normality = 0.029
Analyst: SJ

SAMPLE	(P)	(T-P)	Total Alkalinity as CaCO ₃ (mg/L)	Bicarbonate Alkalinity as CaCO ₃ (mg/L)	Carbonate Alkalinity	Hydroxide Alkalinity
188869-001	0.0	#VALUE!	ND	#VALUE!	#VALUE!	#VALUE!

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

P: Phenolphthalein Alkalinity (using volume to pH 8.3)
T-P: Total Alkalinity minus Phenolphthalein Alkalinity

Carbonate Alkalinity = 2x the smaller of P or (T-P)
Bicarbonate Alkalinity = (T-2P) when P < (T-P)
Hydroxide Alkalinity = (2P-T) when (T-P) < P

Analysis:
Method:

Alkalinity
EPA 310.1

Analysis Date: 08/31/06
Batch No: 116984

H₂SO₄ Normality = 0.029
Analyst: SJ

SAMPLE	Total Alkalinity as CaCO ₃ (mg/L)	Bicarbonate Alkalinity as HCO ₃ ⁻ (mg/L)	Carbonate Alkalinity as CO ₃ ²⁻ (mg/L)	Hydroxide Alkalinity as OH ⁻ (mg/L)
188869-001	ND	#VALUE!	#VALUE!	#VALUE!

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Alkalinity Benchbook

EPA 310.1 / SMWW 2320B

Curtis & Tompkins, Ltd.

LIMS Batch #: 116984
Matrix: water

Date: 8/31/06
Time: 10:15

Benchbook#: **BK2384**
Page: 7

CAL-ph 4.0: SS#: 8749
 CAL-ph 7.0: SS#: 8177
 CAL-ph 10.0: SS#: 53822
 Slope: 101.8
 (slope limits: 92 - 102)

NaCO ₃ Vol (mgL) Spiked:	5
NaCO ₃ Conc (mg/L):	1000
NaCO ₃ WS#:	S3723
H ₂ SO ₄ Normality:	0.029
H ₂ SO ₄ Reagent ID:	12/19/06

[illegible]

* If Acid Vol to 4.5 is $< 2.0\text{mL}$, redo using 100mL sample volume. If still $< 2.0\text{mL}$, go on to Low Alkalinity.

 8/31/06

DMB 813, 106

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 116984
 Date Started: 31-AUG-2006
 Batched by : Stephanie Jim

Analysis : ALKALINITY
 Bgroup : N/A
 Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
188869-001		Treadwell & Rollo	Water	ALKALINITY	31-AUG-2006
QC354277	BLANK		Water	ALKALINITY	
QC354278	LCS		Water	ALKALINITY	
QC354279	MS	of 188869-001	Water	ALKALINITY	
QC354280	MSD	of 188869-001	Water	ALKALINITY	

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Field ID:	DW082106B	Batch#:	116688
Matrix:	Water	Sampled:	08/21/06 10:00
Units:	mg/L	Received:	08/21/06
Diln Fac:	1.000		

Type: SAMPLE Analyzed: 08/22/06 14:55
Lab ID: 188869-001

Analyte	Result	RL
Fluoride	ND	0.10
Chloride	ND	0.20
Nitrogen, Nitrite	ND	0.05
Nitrogen, Nitrate	ND	0.05
Sulfate	ND	0.50

Type: BLANK Analyzed: 08/22/06 12:42
Lab ID: QC353053

Analyte	Result	RL
Fluoride	ND	0.10
Chloride	ND	0.20
Nitrogen, Nitrite	ND	0.05
Nitrogen, Nitrate	ND	0.05
Sulfate	ND	0.50

ND= Not Detected

RL= Reporting Limit



Batch QC Report

Curtis & Tompkins Laboratories Analytical Report			
Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Batch#:	116688

Type: BS Analyzed: 08/22/06 12:59
Lab ID: QC353054

Analyte	Spiked	Result	%REC	Limits
Fluoride	2.000	2.242	112	80-120
Chloride	4.000	4.029	101	80-120
Nitrogen, Nitrite	1.000	1.020	102	80-120
Nitrogen, Nitrate	1.000	0.9895	99	80-120
Sulfate	10.00	9.682	97	80-120

Type: BSD Analyzed: 08/22/06 13:17
Lab ID: QC353055

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Fluoride	2.000	2.256	113	80-120	1	20
Chloride	4.000	4.050	101	80-120	1	20
Nitrogen, Nitrite	1.000	0.9869	99	80-120	3	20
Nitrogen, Nitrate	1.000	1.020	102	80-120	3	20
Sulfate	10.00	9.883	99	80-120	2	20

RPD= Relative Percent Difference

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report			
Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Field ID:	DW082106B	Diln Fac:	1.020
MSS Lab ID:	188869-001	Batch#:	116688
Matrix:	Water	Sampled:	08/21/06 10:00
Units:	mg/L	Received:	08/21/06

Type: MS Analyzed: 08/22/06 15:12
 Lab ID: QC353056

Analyte	MSS Result	Spiked	Result	%REC	Limits
Fluoride	<0.02324	1.000	1.007	101	77-120
Chloride	<0.03217	2.000	1.876	94	80-120
Nitrogen, Nitrite	<0.01206	0.5000	0.4561	91	80-120
Nitrogen, Nitrate	<0.008826	0.5000	0.5008	100	80-120
Sulfate	<0.07889	5.000	4.634	93	80-120

Type: MSD Analyzed: 08/22/06 15:30
 Lab ID: QC353057

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Fluoride	1.000	1.012	101	77-120	0	20
Chloride	2.000	1.889	94	80-120	1	25
Nitrogen, Nitrite	0.5000	0.4727	95	80-120	4	25
Nitrogen, Nitrate	0.5000	0.4872	97	80-120	3	25
Sulfate	5.000	4.688	94	80-120	1	25

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 188869 IC Water: EPA 300.0

Inst : IC03
 Calnum : 626330641001
 Units : mg/L

Date : 17-AUG-2006 14:58
 X Axis : A

Reviewer: MCH
 Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	229_2.000	626330641002	L1	17-AUG-2006 14:58	S3313 (500X)
L2	229_3.000	626330641003	L2	17-AUG-2006 15:16	S3313 (100X)
L3	229_4.000	626330641004	L3	17-AUG-2006 15:33	S3313 (25X)
L4	229_5.000	626330641005	L4	17-AUG-2006 15:50	S3313 (10X)
L5	229_6.000	626330641006	L5	17-AUG-2006 16:08	S3313 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ²	MR ²	Fig
Fluoride	0.1524	0.1580	0.1788	0.1831	0.1920	QORG		0.17406	0.001793	0.1728	1.000	0.990	
Chloride	0.1827	0.1444	0.1586	0.1660	0.1787	QORG		0.15313	0.001281	0.1661	1.000	0.990	
Nitrogen, Nitrite	0.3486	0.2909	0.3137	0.3174	0.3272	QORG		0.30795	0.003850	0.3196	1.000	0.990	
Nitrogen, Nitrate	0.4134	0.3338	0.3738	0.3865	0.4029	QORG		0.36802	0.007000	0.3821	1.000	0.990	
Sulfate	0.1046	0.1063	0.1094	0.1177	0.1241	QORG		0.10952	2.929E-4	0.1124	1.000	0.990	

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 188869 IC Water
EPA 300.0

Inst : IC03
Calnum : 626330641001

Cal Date: 17-AUG-2006

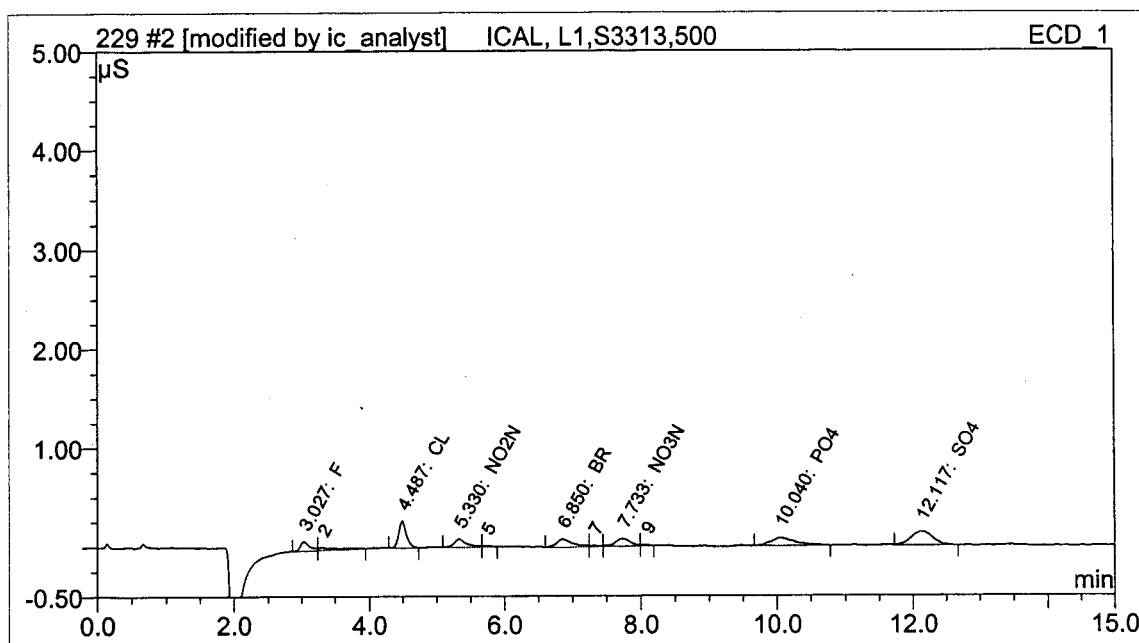
ICV 626330641007 (229_7.000 17-AUG-2006) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.1728	0.1635	1.000	0.9303	mg/L	-7	10	
Chloride	0.1661	0.1470	2.000	1.890	mg/L	-6	10	
Nitrogen, Nitrite	0.3196	0.3027	0.5000	0.4885	mg/L	-2	10	
Nitrogen, Nitrate	0.3821	0.3435	0.5000	0.4626	mg/L	-7	10	
Sulfate	0.1124	0.1058	5.000	4.771	mg/L	-5	10	

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L1,S3313,500	Sample No.:	2
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 2:58 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S}\cdot\text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.027	0.015239	0.0875	0.0875	
3	CL	4.487	0.036533	0.2381	0.2381	
4	NO2N	5.330	0.017431	0.0566	0.0566	
6	BR	6.850	0.022616	0.3453	0.3453	
8	NO3N	7.733	0.020669	0.0561	0.0561	
10	PO4	10.040	0.033834	0.2940	0.2940	
11	SO4	12.117	0.052315	0.4771	0.4771	



ANALYZED BY:

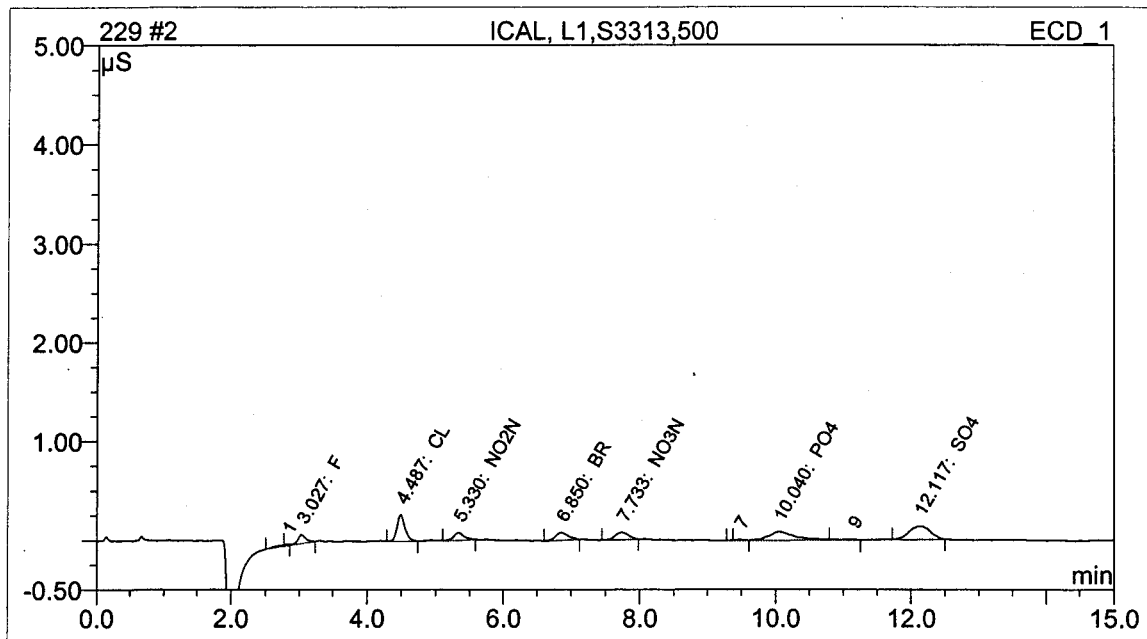
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L1,S3313,500	Sample No.:	2
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 2:58 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
2	F	3.027	0.015901	0.0913	0.0913	
3	CL	4.487	0.036533	0.2381	0.2381	
4	NO2N	5.330	0.013472	0.0437	0.0437	
5	BR	6.850	0.017308	0.2644	0.2644	
6	NO3N	7.733	0.016920	0.0459	0.0459	
8	PO4	10.040	0.041841	0.3633	0.3633	
10	SO4	12.117	0.048316	0.4407	0.4407	



ANALYZED BY:

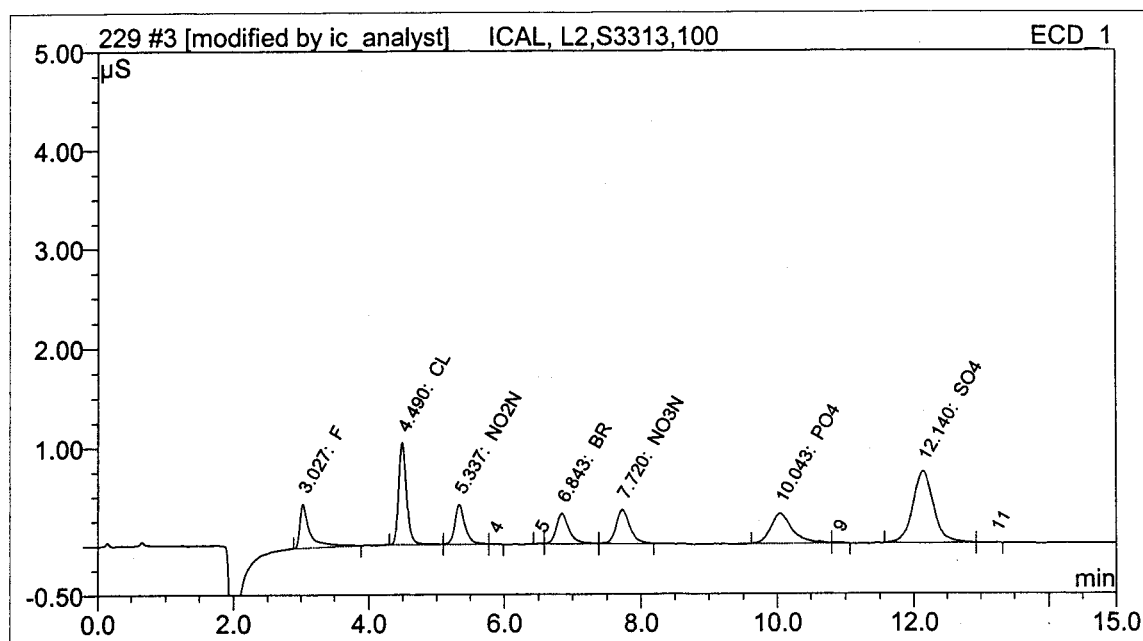
REVIEWED BY:

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ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L2,S3313,100	Sample No.:	3
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 3:16 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S}\cdot\text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.027	0.078978	0.4516	0.4516	
2	CL	4.490	0.144383	0.9356	0.9356	
3	NO2N	5.337	0.072736	0.2355	0.2355	
6	BR	6.843	0.068926	1.0504	1.0504	
7	NO3N	7.720	0.083440	0.2258	0.2258	
8	PO4	10.043	0.117493	1.0170	1.0170	
10	SO4	12.140	0.265659	2.4102	2.4102	



ANALYZED BY:

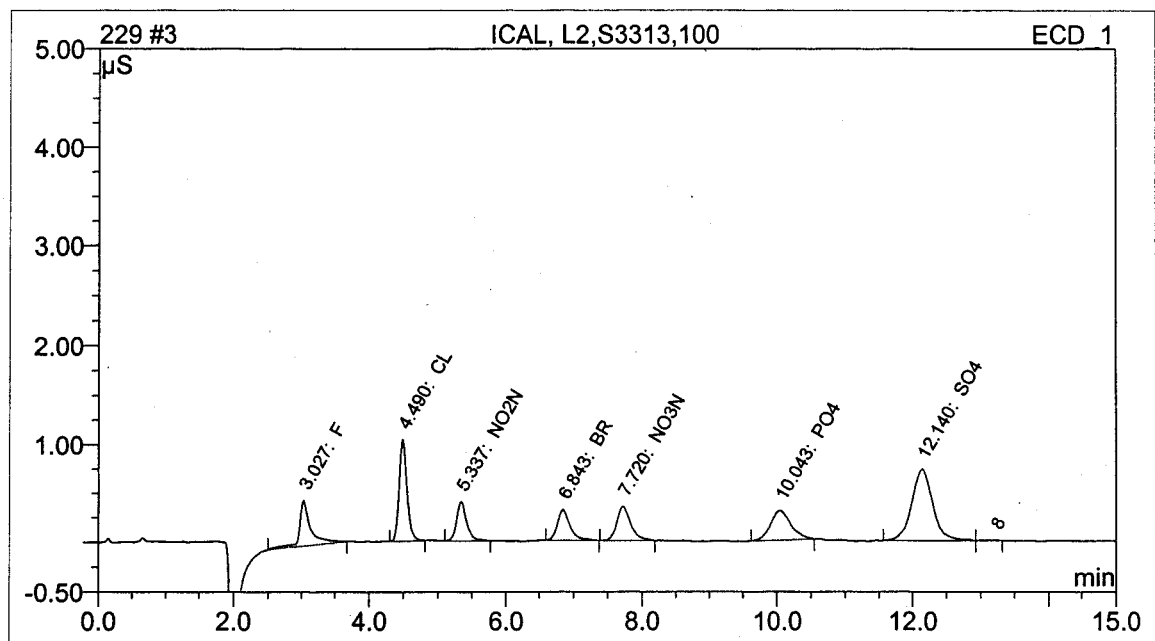
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L2,S3313,100	Sample No.:	3
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 3:16 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.027	0.089671	0.5108	0.5108	
2	CL	4.490	0.139671	0.9060	0.9060	
3	NO2N	5.337	0.070747	0.2292	0.2292	
4	BR	6.843	0.066449	1.0138	1.0138	
5	NO3N	7.720	0.082634	0.2236	0.2236	
6	PO4	10.043	0.105061	0.9125	0.9125	
7	SO4	12.140	0.265659	2.4102	2.4102	



ANALYZED BY:

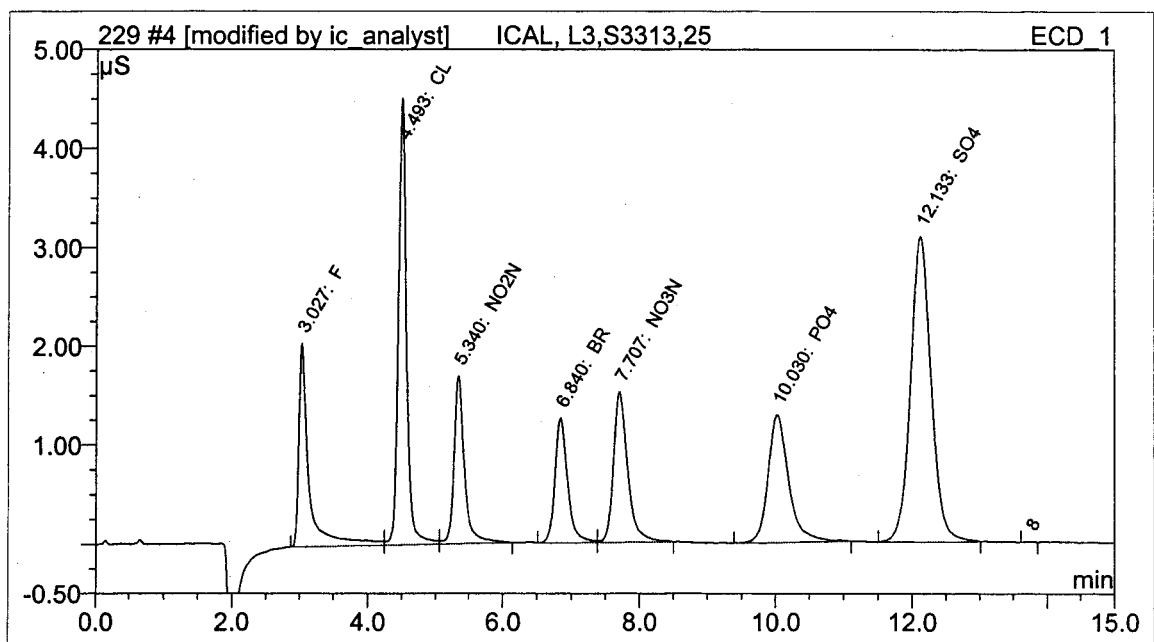
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L3,S3313,25	Sample No.:	4
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 3:33 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.027	0.357537	2.0123	2.0123	
2	CL	4.493	0.634268	4.0077	4.0077	
3	NO2N	5.340	0.313730	1.0061	1.0061	
4	BR	6.840	0.268063	4.0535	4.0535	
5	NO3N	7.707	0.373803	0.9968	0.9968	
6	PO4	10.030	0.456752	3.8925	3.8925	
7	SO4	12.133	1.093531	9.7317	9.7317	



ANALYZED BY:

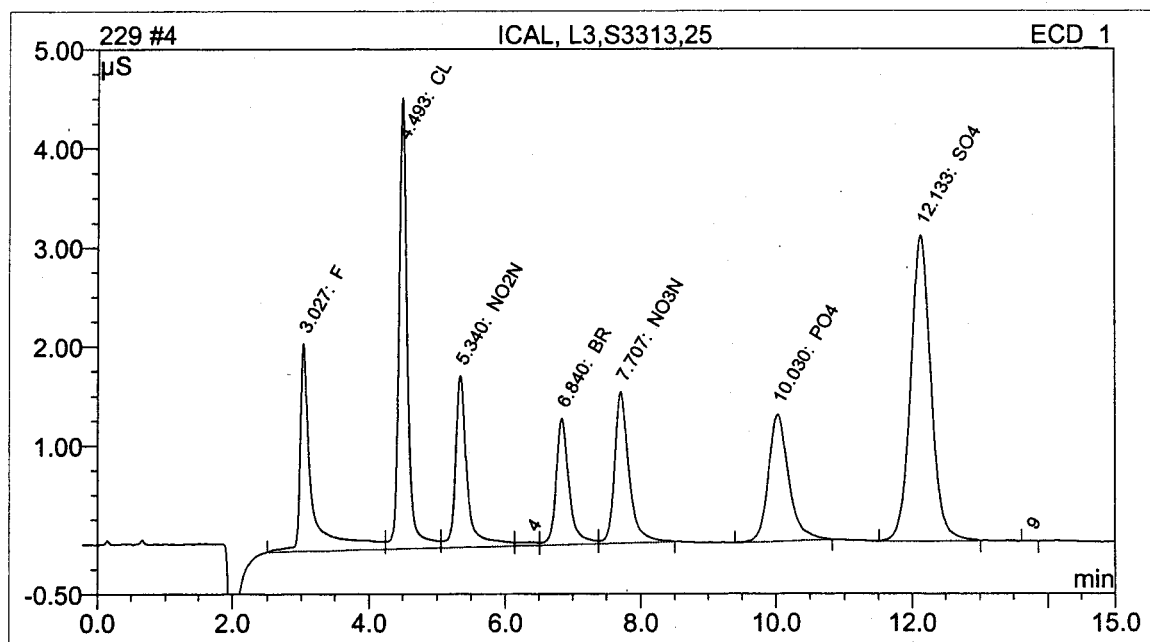
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L3,S3313,25	Sample No.:	4
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 3:33 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.027	0.422952	2.2586	2.2586	
2	CL	4.493	0.664519	4.1377	4.1377	
3	NO2N	5.340	0.350406	1.0865	1.0865	
5	BR	6.840	0.284369	4.2239	4.2239	
6	NO3N	7.707	0.381420	1.0109	1.0109	
7	PO4	10.030	0.444092	3.8163	3.8163	
8	SO4	12.133	1.093531	9.7317	9.7317	



ANALYZED BY:

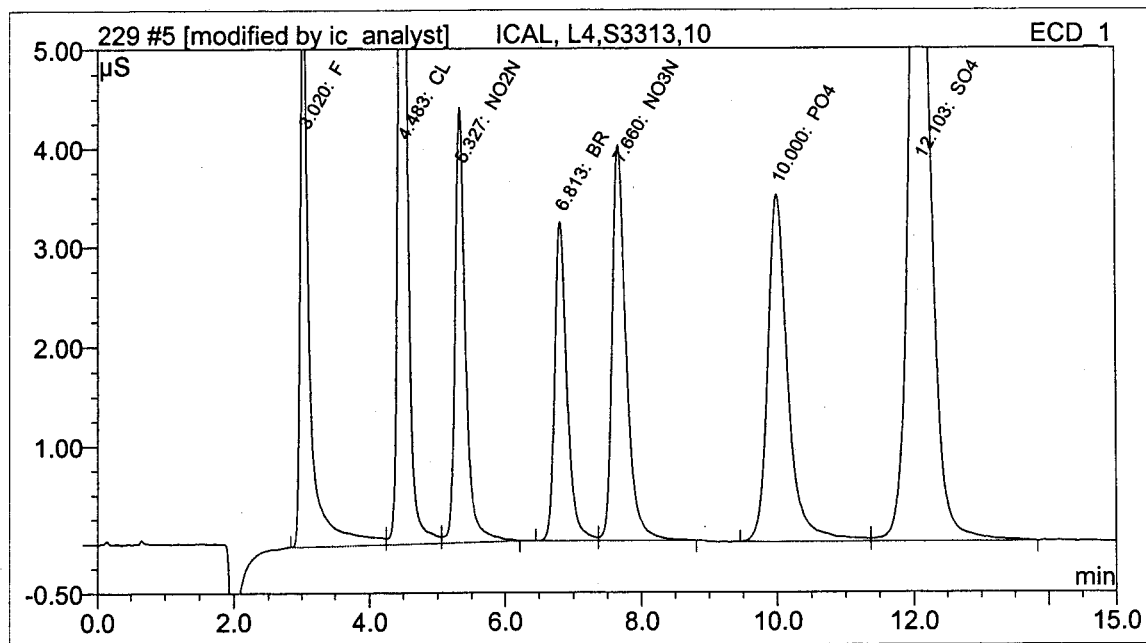
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L4,S3313,10	Sample No.:	5
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 3:50 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.020	0.915410	5.0014	5.0014	
2	CL	4.483	1.660256	10.0048	10.0048	
3	NO2N	5.327	0.793472	2.4986	2.4986	
4	BR	6.813	0.668224	9.9522	9.9522	
5	NO3N	7.660	0.966207	2.5060	2.5060	
6	PO4	10.000	1.219308	10.0584	10.0584	
7	SO4	12.103	2.942806	25.1755	25.1755	



ANALYZED BY:

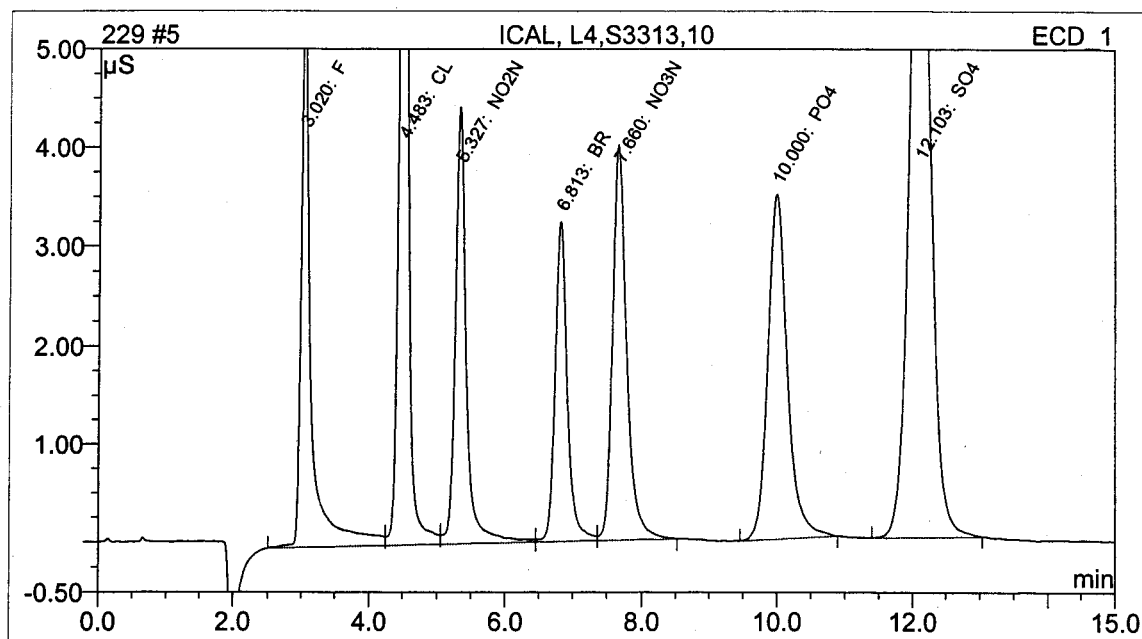
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L4,S3313,10	Sample No.:	5
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 3:50 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S}\cdot\text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.020	0.957720	5.0686	5.0686	
2	CL	4.483	1.682386	10.0427	10.0427	
3	NO2N	5.327	0.832114	2.5346	2.5346	
4	BR	6.813	0.682580	10.0159	10.0159	
5	NO3N	7.660	0.962991	2.5035	2.5035	
6	PO4	10.000	1.163423	9.9243	9.9243	
7	SO4	12.103	2.864991	24.9840	24.9840	



ANALYZED BY:

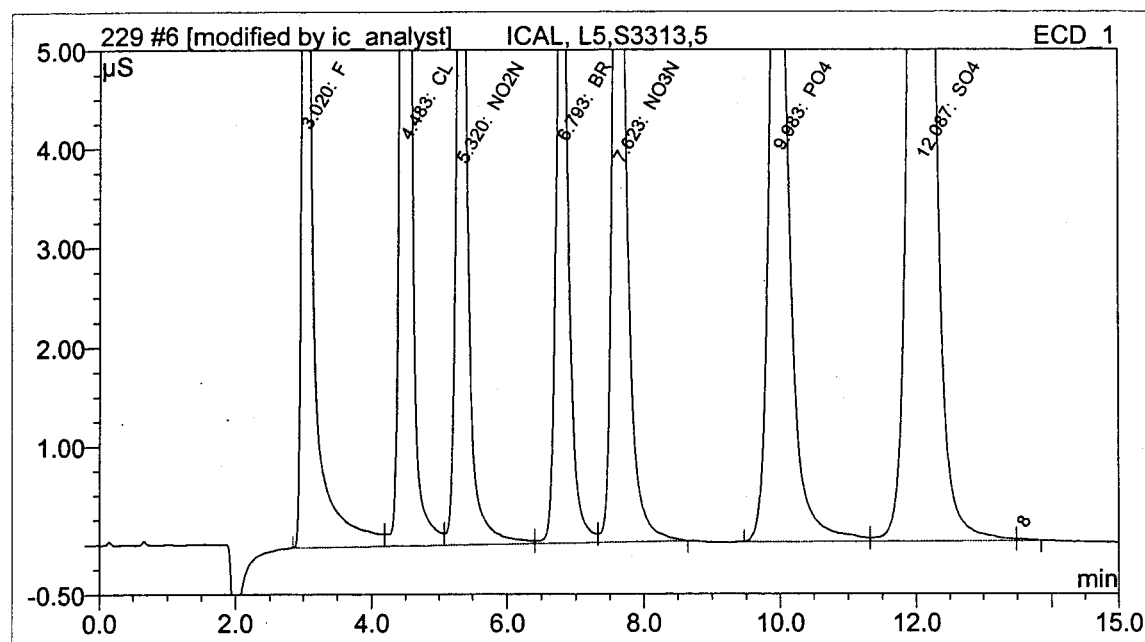
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L5,S3313,5	Sample No.:	6
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 4:08 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.020	1.919788	9.9994	9.9994	
2	CL	4.483	3.574769	19.9988	19.9988	
3	NO2N	5.320	1.636043	5.0001	5.0001	
4	BR	6.793	1.378013	20.0093	20.0093	
5	NO3N	7.623	2.014579	4.9988	4.9988	
6	PO4	9.983	2.548246	19.9903	19.9903	
7	SO4	12.087	6.203955	49.9698	49.9698	



ANALYZED BY:

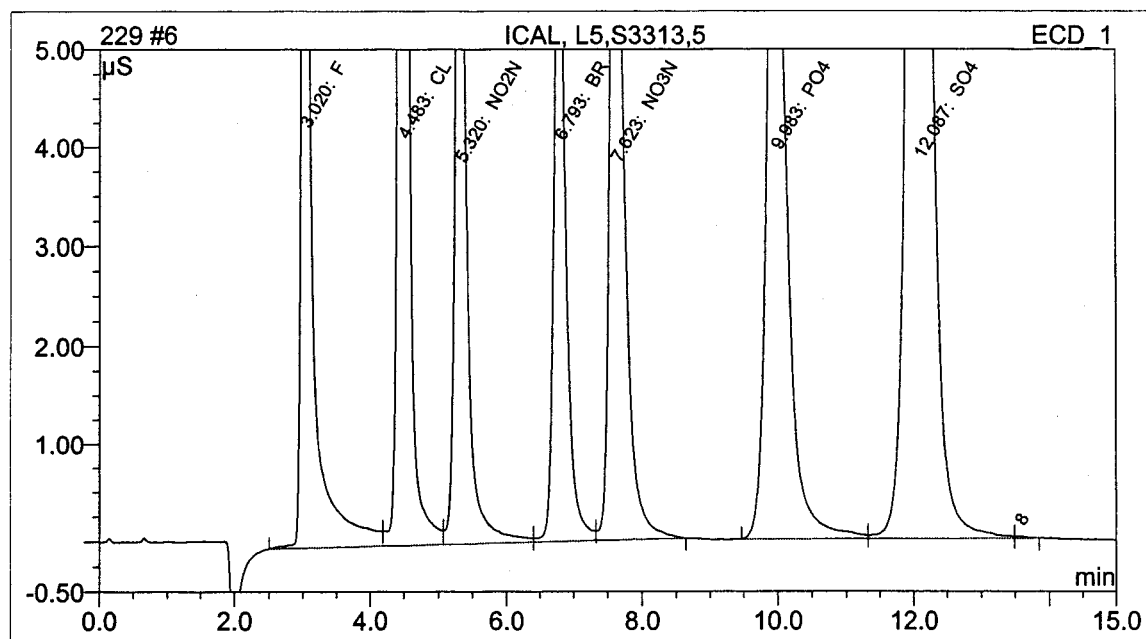
REVIEWED BY:

Curtis & Tompkins, Ltd.

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L5,S3313,5	Sample No.:	6
Sequence Name:	229	Batch #:	CAL-229
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	8/17/2006 4:08 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	3.020	1.967398	10.0018	10.0018	
2	CL	4.483	3.595853	20.0000	20.0000	
3	NO2N	5.320	1.658979	5.0009	5.0009	
4	BR	6.793	1.387672	20.0106	20.0106	
5	NO3N	7.623	2.019742	4.9989	4.9989	
6	PO4	9.983	2.548246	19.9903	19.9903	
7	SO4	12.087	6.203955	49.9698	49.9698	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188869 IC Water
EPA 300.0

Inst : IC03	Run Name: L	IDF : 1.0	
Seqnum : 626337757007	File : 234_7.000	Time : 22-AUG-2006 12:25	
Cal : 626330641001	Caldate : 17-AUG-2006		
Standards: S3313 (100X)			

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.1728	0.1746	0.5000	0.4989	mg/L	0	10	
Chloride	0.1661	0.1413	1.000	0.9160	mg/L	-8	10	
Nitrogen, Nitrite	0.3196	0.2875	0.2500	0.2327	mg/L	-7	10	
Nitrogen, Nitrate	0.3821	0.3531	0.2500	0.2388	mg/L	-4	10	
Sulfate	0.1124	0.1038	2.500	2.354	mg/L	-6	10	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 188869 IC Water
EPA 300.0

Inst : IC03 Run Name: H IDF : 1.0
 Seqnum : 626337757020 File : 234_20.000 Time : 22-AUG-2006 16:22
 Cal : 626330641001 Caldate : 17-AUG-2006
 Standards: S3313 (10X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.1728	0.2018	5.000	5.487	mg/L	10	10	
Chloride	0.1661	0.1669	10.00	10.05	mg/L	1	10	
Nitrogen, Nitrite	0.3196	0.3241	2.500	2.550	mg/L	2	10	
Nitrogen, Nitrate	0.3821	0.3913	2.500	2.536	mg/L	1	10	
Sulfate	0.1124	0.1160	25.00	24.83	mg/L	-1	10	

CURTIS & TOMPKINS BLANK USER REPORT FOR 188869 IC Water
EPA 300.0

Inst : IC03 Lab ID : QC353053
Seqnum : 626337757008.2 Matrix : Water
File : 234_8.000 Batch : 116688 Time : 22-AUG-2006 12:42
IDF : 1.0 PDF : 1.0 Units : mg/L
Cal : 626330641001 Caldate: 17-AUG-2006

Analyte	Result	RL	Flags
Fluoride	ND	0.10	u
Chloride	ND	0.20	u
Nitrogen, Nitrite	ND	0.05	u
Nitrogen, Nitrate	ND	0.05	u
Sulfate	ND	0.50	u

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 188869 IC Water
EPA 300.0

Inst : IC03		IDF : 1.0	
Seqnum : 626337757021	File : 234_21.000	Time : 22-AUG-2006 16:39	
Cal : 626330641001	Caldate: 17-AUG-2006		

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

SEQUENCE SUMMARY FOR 188869 IC Water
Curtis & Tompkins Laboratories

Sequence: 626330641 Instrument: IC03
Analytical Method: EPA 300.0

Ion Chromatograph
SOP Version: ANIONS_300_rv6

Begun: 17-AUG-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
001	229_1.00	IB				17-AUG-2006	14:41	1.0		25					
002	229_2.00	ICAL	L1			17-AUG-2006	14:58	1.0				1			
003	229_3.00	ICAL	L2			17-AUG-2006	15:16	1.0				1			
004	229_4.00	ICAL	L3			17-AUG-2006	15:33	1.0				1			
005	229_5.00	ICAL	L4			17-AUG-2006	15:50	1.0				1			
006	229_6.00	ICAL	L5			17-AUG-2006	16:08	1.0				1			
007	229_7.00	ICV				17-AUG-2006	16:25	1.0		25					
008	229_8.00	ICB				17-AUG-2006	16:43	1.0		25					
009	229_9.00	CCV	L			17-AUG-2006	17:00	1.0		25		1			
010	229_10.00	CCB/MB	QC352330			17-AUG-2006	17:17	1.0		25					
011	229_11.00	MSS	188802-001			17-AUG-2006	17:35	100.0		25					
012	229_12.00	SAMPLE	188802-017			17-AUG-2006	17:52	100.0		25					
013	229_13.00	SAMPLE	188802-018			17-AUG-2006	18:10	50.0		25					
014	229_14.00	MS	QC352333			17-AUG-2006	18:27	200.0		25		1			
015	229_15.00	MSD	QC352334			17-AUG-2006	18:44	200.0		25					
016	229_16.00	MSS	188802-001			17-AUG-2006	19:02	2.0		25		1			357
017	229_17.00	X	BLK			17-AUG-2006	19:19	1.0							
018	229_18.00	MSS	188802-001			17-AUG-2006	19:37	1.0		25					
019	229_19.00	X	BLK			17-AUG-2006	19:54	1.0							
020	229_20.00	X	BLK			17-AUG-2006	20:12	1.0							
021	229_21.00	BS	QC352331			17-AUG-2006	20:29	1.0		25		1			
022	229_22.00	BSD	QC352332			17-AUG-2006	20:46	1.0		25		1			
023	229_23.00	CCV	M			17-AUG-2006	21:04	1.0		25		1			
024	229_24.00	CCB				17-AUG-2006	21:21	1.0		25					
025	229_25.00	X	CCV			17-AUG-2006	21:39	1.0							
026	229_26.00	X	CCB			17-AUG-2006	21:56	1.0				1			
027	229_27.00	SAMPLE	188802-002			17-AUG-2006	22:13	1.0	1	25				1:CL=62.6637	
028	229_28.00	X	BLK			17-AUG-2006	22:31	1.0							
029	229_29.00	SAMPLE	188802-003			17-AUG-2006	22:48	1.0	2	25				2:SO4=102.746	
030	229_30.00	SAMPLE	188802-004			17-AUG-2006	23:06	1.0	3	25				3:SO4=153.230	
031	229_31.00	SAMPLE	188802-005			17-AUG-2006	23:23	1.0	2	25				2:SO4=112.745	

Stds used: 1=S3313 2=S3859

SEQUENCE SUMMARY FOR 188869 IC Water
Curtis & Tompkins Laboratories

Sequence: 626330641 Instrument: IC03
Analytical Method: EPA 300.0

Ion Chromatograph
SOP Version: ANIONS_300_rv6

Begun: 17-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
032	229_32.0	SAMPLE	188802-006	116514	Water	17-AUG-2006	23:40 1.0	2		25					2:CL=119.045
033	229_33.0	SAMPLE	188802-008	116514	Water	17-AUG-2006	23:58 1.0	2		25					2:SO4=102.547
034	229_34.0	SAMPLE	188802-010	116514	Water	18-AUG-2006	00:15 1.0	2		25					2:SO4=102.188
035	229_35.0	SAMPLE	188802-012	116514	Water	18-AUG-2006	00:33 1.0	1		25					1:CL=85.6712
036	229_36.0	SAMPLE	188802-013	116514	Water	18-AUG-2006	00:50 1.0	1		25					1:CL=123.553
037	229_37.0	SAMPLE	188802-009	116514	Water	18-AUG-2006	01:08 1.0	1		25					1:CL=49.8349
038	229_38.0	CCV	H	116514		18-AUG-2006	01:25 1.0			25					
039	229_39.0	CCB		116514		18-AUG-2006	01:42 1.0			25					
040	229_40.0	X	CCV	116514		18-AUG-2006	02:00 1.0								
041	229_41.0	X	CCB	116514		18-AUG-2006	02:17 1.0								1
042	229_42.0	SAMPLE	188802-015	116514	Water	18-AUG-2006	02:35 1.0			25					
043	229_43.0	SAMPLE	188802-014	116514	Water	18-AUG-2006	02:52 1.0	3		25					3:SO4=73.1736
044	229_44.0	SAMPLE	188802-020	116514	Water	18-AUG-2006	03:09 1.0	3		25					3:SO4=73.0052
045	229_45.0	SAMPLE	188802-017	116514	Water	18-AUG-2006	03:27 1.0	1		25					1:SO4=306.955
046	229_46.0	X	BLK	116514		18-AUG-2006	03:44 1.0								89
047	229_47.0	SAMPLE	188802-018	116514	Water	18-AUG-2006	04:02 1.0	1		25					1:SO4=160.2837
048	229_48.0	X	BLK	116514		18-AUG-2006	04:19 1.0								
049	229_49.0	SAMPLE	188802-002	116514	Water	18-AUG-2006	04:36 25.0			25					
050	229_50.0	SAMPLE	188802-003	116514	Water	18-AUG-2006	04:54 25.0			25					
051	229_51.0	SAMPLE	188802-004	116514	Water	18-AUG-2006	05:11 25.0			25					
052	229_52.0	SAMPLE	188802-005	116514	Water	18-AUG-2006	05:29 25.0			25					
053	229_53.0	SAMPLE	188802-006	116514	Water	18-AUG-2006	05:46 25.0			25					
054	229_54.0	CCV	M	116514		18-AUG-2006	06:03 1.0			25					1
055	229_55.0	CCB		116514		18-AUG-2006	06:21 1.0								
056	229_56.0	X	CCV	116514		18-AUG-2006	06:38 1.0			25					
057	229_57.0	X	CCB	116514		18-AUG-2006	06:56 1.0								1
058	229_58.0	SAMPLE	188802-008	116514	Water	18-AUG-2006	07:13 10.0			25					
059	229_59.0	SAMPLE	188802-009	116514	Water	18-AUG-2006	07:31 25.0			25					
060	229_60.0	SAMPLE	188802-010	116514	Water	18-AUG-2006	07:48 10.0			25					
061	229_61.0	SAMPLE	188802-012	116514	Water	18-AUG-2006	08:05 25.0			25					
062	229_62.0	SAMPLE	188802-013	116514	Water	18-AUG-2006	08:23 25.0			25					

Stds used: 1=S3313 2=S3859

SEQUENCE SUMMARY FOR 188869 IC Water
Curtis & Tompkins Laboratories

Sequence: 626330641 Instrument: IC03
Analytical Method: EPA 300.0

Ion Chromatograph
SOP Version: ANIONS_300_rv6

Begun: 17-AUG-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
063	229_63.0	SAMPLE	188802-014	116514	Water	18-AUG-2006	08:40 25.0			25					
064	229_64.0	SAMPLE	188802-020	116514	Water	18-AUG-2006	08:58 10.0			25					
065	229_65.0	SAMPLE	188792-001	116514	Water	18-AUG-2006	09:15 10.0			25					
066	229_66.0	SAMPLE	188792-001	116514	Water	18-AUG-2006	09:32 1.0	2		25					2:SO4=167.993
067	229_67.0	X	BLK	116514		18-AUG-2006	09:50 1.0								
068	229_68.0	SAMPLE	188805-001	116514	Water	18-AUG-2006	10:07 1.0	1		25					2:SO4=388.069
069	229_69.0	CCV	H	116514		18-AUG-2006	10:25 1.0			25					
070	229_70.0	CCB		116514		18-AUG-2006	10:42 1.0			25					
071	229_71.0	X	CCV	116514		18-AUG-2006	10:59 1.0								
072	229_72.0	X	CCB	116514		18-AUG-2006	11:17 1.0								
073	229_73.0	SAMPLE	188756-009	116514	Water	18-AUG-2006	11:34 1.0			25					
074	229_74.0	SAMPLE	188805-001	116514	Water	18-AUG-2006	11:52 25.0			25					
075	229_75.0	SAMPLE	188756-014	116514	Water	18-AUG-2006	12:09 100.0			25					
076	229_76.0	CCV	L	116514		18-AUG-2006	12:26 1.0			25					
077	229_77.0	CCB		116514		18-AUG-2006	12:44 1.0			25					
078	229_78.0	CCV	L	116593		18-AUG-2006	13:01 1.0	2		25					
079	229_79.0	CCB/MB	QC352648	116593	Water	18-AUG-2006	13:19 1.0	1		25					
080	229_80.0	BS	QC352649	116593	Water	18-AUG-2006	15:52 1.0	2		25					
081	229_81.0	BSD	QC352650	116593	Water	18-AUG-2006	16:09 1.0	2		25					
082	229_82.0	MSS	188837-009	116593	Water	18-AUG-2006	16:38 1.0	3		25					1:CL=48.3396
083	229_83.0	SAMPLE	188837-005	116593	Water	18-AUG-2006	16:57 500.0			25					
084	229_84.0	SAMPLE	188837-012	116593	Water	18-AUG-2006	17:19 1.0			25					
085	229_85.0	SAMPLE	188837-008	116593	Water	18-AUG-2006	17:36 1.0	1		25					1:CL=67.0823
086	229_86.0	SAMPLE	188837-010	116593	Water	18-AUG-2006	17:54 1.0	1		25					1:CL=62.4456
087	229_87.0	SAMPLE	188837-005	116593	Water	18-AUG-2006	18:11 20.0	1		25					1:CL=188.939
088	229_88.0	X	BLK	116593		18-AUG-2006	18:28 1.0								
089	229_89.0	CCV	H	116593		18-AUG-2006	18:46 1.0			25					
090	229_90.0	CCB		116593		18-AUG-2006	19:03 1.0	1		25					
091	229_91.0	X	CCV	116593		18-AUG-2006	19:21 1.0								
092	229_92.0	X	CCB	116593		18-AUG-2006	19:38 1.0								
093	229_93.0	MSS	188837-009	116593	Water	18-AUG-2006	19:55 10.0	1		25					

Stds used: 1=S3313 2=S3859

SEQUENCE SUMMARY FOR 188869 IC Water
Curtis & Tompkins Laboratories

Sequence: 626330641 Instrument: IC03
Analytical Method: EPA 300.0

Ion Chromatograph
SOP Version: ANIONS_300_rv6

Begun: 17-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Std	Used	>LR
094	229_94.0	MS	QC352651	116593	Water	18-AUG-2006	20:13 10.0	1	25				1		
095	229_95.0	MSD	QC352652	116593	Water	18-AUG-2006	20:30 10.0	1	25				1		
096	229_96.0	X	BLK	116593		18-AUG-2006	20:48 1.0								
097	229_97.0	SAMPLE	188837-008	116593	Water	18-AUG-2006	21:05 25.0		25						
098	229_98.0	SAMPLE	188837-010	116593	Water	18-AUG-2006	21:22 25.0		25						
099	229_99.0	SAMPLE	188837-005	116593	Water	18-AUG-2006	21:40 10.0	2	25						2:CL=291.110
100	229_100.	X	BLK	116593		18-AUG-2006	21:57 1.0								
101	229_101.	CCV	M	116593		18-AUG-2006	22:15 1.0		25				1		
102	229_102.	CCB		116593		18-AUG-2006	22:32 1.0		25						
103	229_103.	X	CCV	116593		18-AUG-2006	22:49 1.0						1		
104	229_104.	X	CCB	116593		18-AUG-2006	23:07 1.0								
105	229_105.	X	SHUTDOWN	116593		18-AUG-2006	23:24 1.0								

Std's used: 1=S3313 2=S3859

SEQUENCE SUMMARY FOR 188869 IC Water
Curtis & Tompkins Laboratories

Sequence: 626337757 Instrument: IC03
Analytical Method: EPA 300.0

Ion Chromatograph
SOP Version: ANIONS_300_rv6

Begun: 22-AUG-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Std	Used	>LR
007	234_7.00	CCV	L	116688	Water	22-AUG-2006 12:25	1.0	1		25			1		
008	234_8.00	CCB/MB	QC353053	116688	Water	22-AUG-2006 12:42	1.0			25					
009	234_9.00	BS	QC353054	116688	Water	22-AUG-2006 12:59	1.0			25			1		
010	234_10.0	BSD	QC353055	116688	Water	22-AUG-2006 13:17	1.0			25			1		
011	234_11.0	SAMPLE	188872-009	116688	Water	22-AUG-2006 13:45	1.0	1		25					1:CL=46.7701
012	234_12.0	X	BLK	116688		22-AUG-2006 14:02	1.0								
013	234_13.0	SAMPLE	188872-010	116688	Water	22-AUG-2006 14:20	1.0	2		25					2:SO4=125.306
014	234_14.0	X	BLK	116688		22-AUG-2006 14:37	1.0								
015	234_15.0	MSS	188869-001	116688	Water	22-AUG-2006 14:55	1.0	1		25					
016	234_16.0	MS	QC353056	116688	Water	22-AUG-2006 15:12	1.02			25			1		
017	234_17.0	MSD	QC353057	116688	Water	22-AUG-2006 15:30	1.02			25			1		
018	234_18.0	SAMPLE	188872-009	116688	Water	22-AUG-2006 15:47	5.0			25					
019	234_19.0	SAMPLE	188872-010	116688	Water	22-AUG-2006 16:04	10.0			25					
020	234_20.0	CCV	H	116688		22-AUG-2006 16:22	1.0			25			1		
021	234_21.0	CCB		116688		22-AUG-2006 16:39	1.0	1		25					
022	234_22.0	SAMPLE	188720-001	116688	Water	22-AUG-2006 17:00	10.0			25					361
023	234_23.0	SAMPLE	188720-004	116688	Water	22-AUG-2006 17:18	10.0			25					
024	234_24.0	SAMPLE	188720-002	116688	Water	22-AUG-2006 17:36	1.0			25					
025	234_25.0	SAMPLE	188720-003	116688	Water	22-AUG-2006 17:53	1.0			25					
026	234_26.0	SAMPLE	188720-005	116688	Water	22-AUG-2006 18:10	1.0			25					
027	234_27.0	SAMPLE	188720-006	116688	Water	22-AUG-2006 18:28	1.0			25					
028	234_28.0	SAMPLE	188720-007	116688	Water	22-AUG-2006 18:45	1.0			25					
029	234_29.0	SAMPLE	188720-004	116688	Water	22-AUG-2006 19:03	1.0			25					
030	234_30.0	SAMPLE	188720-001	116688	Water	22-AUG-2006 19:20	1.0			25					
031	234_31.0	CCV	M	116688		22-AUG-2006 19:37	1.0			25			1		
032	234_32.0	CCB		116688		22-AUG-2006 19:55	1.0			25					
033	234_33.0	X	CCV	116688		22-AUG-2006 20:12	1.0						1		
034	234_34.0	X	CCB	116688		22-AUG-2006 20:30	1.0								
035	234_35.0	X	SHUTDOWN	116688		22-AUG-2006 20:47	1.0								

Std's used: 1=S3313



Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 188869 IC Water
Curtis & Tompkins Laboratories

					F	C	N	N	S	
Lab ID	Inst ID	AnalYZed	IDF			L	O	O	O	
					2		3	4		
					N		N			
188869-001	IC03	08/22/06 14:55	1.0		+	+	+	+	+	
QC353053	IC03	08/22/06 12:42	1.0		+	+	+	+	+	
QC353054	IC03	08/22/06 12:59	1.0		+	+	+	+	+	
QC353055	IC03	08/22/06 13:17	1.0		+	+	+	+	+	
QC353056	IC03	08/22/06 15:12	1.02		+	+	+	+	+	
QC353057	IC03	08/22/06 15:30	1.02		+	+	+	+	+	

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 116688
 Date Started: 22-AUG-2006
 Batched by : Micah Smith

Analysis : N/A
 Bgroup : IC
 Department : GC Organics

Sample	Type	Client	Matrix	Analyses	Due Date
188720-001		Horizon Air Measur	Water	CHLORIDE, FLUORIDE, NITRATE	24-AUG-2006
188720-002		Horizon Air Measur	Water	CHLORIDE, FLUORIDE, NITRATE	24-AUG-2006
188720-003		Horizon Air Measur	Water	CHLORIDE, FLUORIDE, NITRATE	24-AUG-2006
188720-004		Horizon Air Measur	Water	CHLORIDE, FLUORIDE, NITRATE	24-AUG-2006
188720-005		Horizon Air Measur	Water	CHLORIDE, FLUORIDE, NITRATE	24-AUG-2006
188720-006		Horizon Air Measur	Water	CHLORIDE, FLUORIDE, NITRATE	24-AUG-2006
188720-007		Horizon Air Measur	Water	CHLORIDE, FLUORIDE, NITRATE	24-AUG-2006
188869-001		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	31-AUG-2006
188872-009		ERS Corp.	Water	CHLORIDE, NITRATE, SULFATE	01-SEP-2006
188872-010		ERS Corp.	Water	CHLORIDE, NITRATE, SULFATE	01-SEP-2006
QC353053	BLANK		Water		
QC353054	BS		Water		
QC353055	BSD		Water		
QC353056	MS	of 188869-001	Water		
QC353057	MSD	of 188869-001	Water		

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO₄) EPA 314
☐ Cr6+ EPA 7199

Batch#: 116688
 Date Started: 8/22/06
 Prep Chemist: MRS

BK 2373
 Page 11

Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1 188720-001 A	N/A	10x 1x	MRS 8/22/06 N/A	
2 -002		1x		
3 -003		1x		
4 -004		10x 1x		
5 -005		1x		
6 -006		1x		
7 -007		1x		
8 188869-001 M	0.01	1x	S	MRS
9 188872-009 B	0.47	1x 5x	S	
10 ↓ -010 B	0.81	1x 10x	S	
11 Blank QC353053	N/A	1x	N/A	
12 BS QC353054		↓	↓	
13 BSD QC353055		↓	↓	
14 MS QC353056 M		1.02x	S	
15 MSD QC353057 M		1.02x	S	
16				
17				
18				
19				
20				

Eluent Reagent ID	Mfg & Lot # / Time / Program	Initials / Date
BS/BSD Spiked with 0.2 mL of :	100x MRS 8/10/06	MRS 8/22/06
MS/MSD Spiked with 0.1 mL of :	S3313	
Filters Used: Ag: OnGuard II Ag	S3313	
Na: OnGuard II Na	N/A	
P: OnGuard II P	↓	
RP: OnGuard II RP		
S: 0.20um/0.45um	Acrodisc lot #410643613	↓

MRS 8/22/06
 Extraction Chemist / Date

Continued from page 364
 Continued on page

CP 8/23/06
 Reviewed by / Date



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories
MDL Summary for EPA 300.0 Water
As of 09/24/06

Analyte	Units	IC03	IC01
Fluoride	mg/L	0.023	0.0096
Chloride	mg/L	0.032	0.044
Nitrogen, Nitrite	mg/L	0.012	0.0067
Bromide	mg/L	0.028	0.075
Nitrogen, Nitrate	mg/L	0.0088	0.014
Orthophosphate (as P)	mg/L	0.037	0.045
Sulfate	mg/L	0.079	0.046



Curtis & Tompkins, Ltd.

Sulfide

Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Batch#:	116737
Field ID:	DW082106B	Sampled:	08/21/06
Matrix:	Water	Received:	08/21/06
Units:	mg/L	Analyzed:	08/24/06
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	188869-001	ND	0.04
BLANK	QC353247	ND	0.04

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Sulfide			
Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Diln Fac:	1.000
Field ID:	1065PZ2A	Batch#:	116737
MSS Lab ID:	188837-009	Sampled:	08/17/06
Matrix:	Water	Received:	08/18/06
Units:	mg/L	Analyzed:	08/24/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC353248	<0.04000	0.2898	0.1955	67 *	75-125		
MSD	QC353249		0.2898	0.1978	68 *	75-125	1	20
LCS	QC353250		0.4347	0.4166	96	75-125		

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Analysis: **SULFIDE**
 Method: **EPA 376.2**
 Instrument: **HP UV-VIS Spectrometer**
 Wavelength: **626 nm**
 SOP#: **sulfide_376_rv 4.doc**

Matrix: **Water**
 Batch: **116737**
 Prep Date: **8/24/2006**
 Analysis Date: **8/24/2006**
 Analyst: **DMc**

INITIAL CALIBRATION DATA

Calibration Date: **11/15/05**

Conc (mg/L)	Absorb	RF
0.0000	0.0001	
0.0233	0.0090	0.3863
0.0466	0.0156	0.3348
0.1862	0.0555	0.2981
0.3725	0.1650	0.4430
0.7450	0.3293	0.4420
1.3040	0.5687	0.4361
1.6760	0.7467	0.4455

Correlation Coefficient (r): **0.9994**
 Avg Rt: **0.3980**
 %RSD: **15.1**

Note: Average Rt used to calculate sample results.

CONTINUING CALIBRATION DATA

	Absorb Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.1658	0.4166	96%	90 - 110%
ICB	0.0000	0.0000		
CCV	0.1658	0.4166	96%	90 - 110%
CCB	0.0009	0.0023		
CCV	0.1647	0.4139	95%	90 - 110%
CCB	0.0012	0.0030		

Analysis: **SULFIDE**
 Method: **EPA 376.2**
 Instrument: HP UV-VIS Spectrometer
 Wavelength: 626 nm
 Matrix: Water

Batch: **116737**
 Prep Date: **8/24/2006**
 Analysis Date: **8/24/2006**
 Analyst: **DMc**

SAMPLE & BATCH QC DATA

Sample ID	Sample Vol (mL)	D.F.	Sample Absorb	Color Bk Absorb	Report mg/L	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	% Rec	% RPD
MB	7.5000	1.0000	0.0000		ND	0.040					
LCS	7.5000	1.0000	0.1658		0.41663	0.040	1.0000	43.4720	0.4347	96	
188837-9	7.5000	1.0000	0.0116		ND	0.040					
188837-9ms	7.5000	1.0000	0.0778		0.19550	0.040	0.0500	43.4720	0.2898	67	
188837-9ms	7.5000	1.0000	0.0787		0.19776	0.040	0.0500	43.4720	0.2898	68	1
188801-1	7.5000	1.0000	0.0008		ND	0.040					
188801-2	7.5000	1.0000	0.0015		ND	0.040					
188801-3	7.5000	1.0000	-0.0009		ND	0.040					
188801-4	7.5000	1.0000	0.0247		0.06207	0.040					
188837-5	7.5000	1.0000	0.0886		0.22264	0.040					
188837-8	7.5000	1.0000	0.0126		ND	0.040					
188837-10	7.5000	1.0000	0.0107		ND	0.040					
188837-12	7.5000	1.0000	0.0027		ND	0.040					
188869-1	7.5000	1.0000	0.0003		ND	0.040					

QC Limits		RPD		Recovery	
LCS/BS/BSD	20	20	90 - 110		
MS/MSD	20	42 - 121			

Reviewed by/ Date:

DMc 8/25/06

---> Quantitation Results Report <---

Date : 08-23-2006
Time : 10:51:23
Operator : *24* *8.24.06* *gum*

File Name : C:\UV\DATA\FE606.DRS

Sample Name : sulfide
Solvent Name : CAL11-15-05
Conc Units : mg/L
Dil. Factor : 1.00

Analytical Wavelength : 626 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

SAMPLE #	Sample Name	Wavelength	Func. Res.	Concentration
1	ICB/MB	Analytical	-0.0000	0.00000
2	CCV/ <i>LC9</i> <i>8-24-06</i>	Analytical	+0.1658	0.37577
3	188801-1	Analytical	+0.0008	0.00173
4	188801-2	Analytical	+0.0015	0.00349
5	188801-3	Analytical	-0.0009	0.00000
6	188801-4	Analytical	+0.0247	0.05601
7	188837-5	Analytical	+0.0886	0.20083
8	188837-8	Analytical	+0.0126	0.02849
9	188837-9	Analytical	+0.0116	0.02631
10	188837-9MS	Analytical	+0.0778	0.17622
11	CCV	Analytical	+0.1658	0.37567
12	CCB	Analytical	+0.0009	0.00201
13	188837-9MSD	Analytical	+0.0787	0.17839
14	<i>8-24-06</i> 188837-10	Analytical	+0.0107	0.02420
15	188837-12	Analytical	+0.0027	0.00602
16	188869-1	Analytical	+0.0003	0.00000
17	CCV	Analytical	+0.1647	0.37328
18	CCB	Analytical	+0.0012	0.00273

---> Standard Calibration Report <---

Date : 08-13-2006 ²⁴

Time : 10:51:40 ^{8.24}

Operator : PAP ^{OK}

File Name : C:\UV\DATA\SS1105.STD

Sample Name : sulfide

Solvent Name : CAL11-15-05

Conc Units : mg/L

Analytical Wavelength : 626 nm

Reference Wavelength : None Selected

Confirmation Wavelengths : None Selected

Integration Time : 1 seconds

Analytical Function

Concentration = +2.266E+00 * Absorbance

STD #	Concentration	Absorbance	% Error
1	0.00000	0.0001	*****
2	0.37250	0.1650	-0.366 %
3	0.74500	0.3293	-0.135 %
4	1.30400	0.5687	+1.190 %
5	1.67600	0.7467	-0.933 %
6	0.02230	0.0090	+14.422 %
7	0.04660	0.0156	+31.758 %
8	0.18620	0.0555	+48.042 %

---> Standard Calibration Report <---

Date : 08-12-2006

Time : 10:51:41

Operator : PAF DM

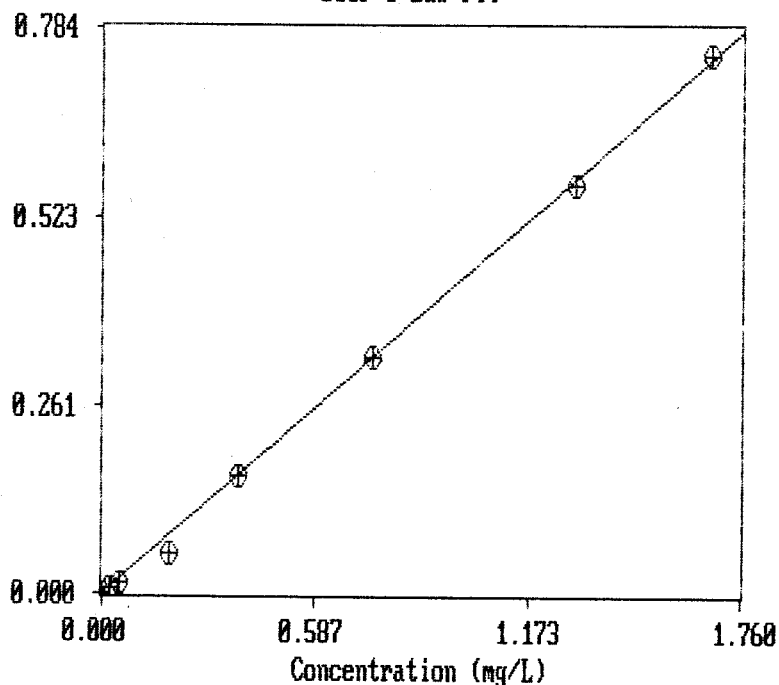
24
8.24.06
2006

File Name : C:\UV\DATA\SS1105.STD

Sample Name : sulfide
Solvent Name : CAL11-15-05
Conc Units : mg/L

Analytical Wavelength : 626 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

Beer's Law Fit



Diss sulfide / Sulfide EPA 376.2

B116737

Sample Vol (ml) Final Vol (ml) ABS

*188801-1E	7.5	7.5	.0008
-2			.0015
-3			-.0009
-4			.0247
188837-5D			.0386
-8G			.0126
-9L			.0116
-9HS	+0.05 ml (43.472 mg / L from 0455292)		.0776
-9HSD	same as HS		.0787
-10D			.0107
-12J			.0027
188869-1J			.0003
ICB/HB			.0000
ICV/LCS	1 ml 43.472 mg / L	100 ml, less 7.5 ml	.1258
CCV			.1658
CCB			.0009
CCV			.1647
CCB			.0012

TV = .4347 mg / L

S-Std

4g 0455292 → 50 ml DI H₂O

1.0 ml S:

5.0 ml I, 0.02363 N = .11815

3.85 ml S 0.02363 N = .09098

$$\frac{.02717 \times 16000}{1.0} = 434.72 \text{ mg / L}$$

$$1:10 = 43.472 \text{ mg / L}$$

$$1:05 \rightarrow 75 = 28.98 \text{ mg / L}$$

$$1:100 = 434.7 \text{ mg / L}$$

* = Filter thru WHATMAN #45, Filter L + L 007

Continued on Page

Read and Understood By

Signed

Date

8-24-06

373

Signed

Date

8/24/06

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 116737
 Date Started: 24-AUG-2006
 Batched by : Dennis McCanna

Analysis : DISS SULFIDE
 Bgroup : N/A
 Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
188801-001		LFR Levine Fricke	Water	DISS SULFIDE	23-AUG-2006
188801-002		LFR Levine Fricke	Water	DISS SULFIDE	23-AUG-2006
188801-003		LFR Levine Fricke	Water	DISS SULFIDE	23-AUG-2006
188801-004		LFR Levine Fricke	Water	DISS SULFIDE	23-AUG-2006
188837-005		Treadwell & Rollo	Water	SULFIDE	30-AUG-2006
188837-008		Treadwell & Rollo	Water	SULFIDE	30-AUG-2006
188837-009		Treadwell & Rollo	Water	SULFIDE	30-AUG-2006
188837-010		Treadwell & Rollo	Water	SULFIDE	30-AUG-2006
188837-012		Treadwell & Rollo	Water	SULFIDE	30-AUG-2006
188869-001		Treadwell & Rollo	Water	SULFIDE	31-AUG-2006
QC353247	BLANK		Water	SULFIDE	
QC353248	MS	of 188837-009	Water	SULFIDE	
QC353249	MSD	of 188837-009	Water	SULFIDE	
QC353250	LCS		Water	SULFIDE	

Analysis: Sulfide
Method: EPA 376.2
Instrument: HP UV/Vis
Wavelength: 626 nm

Analysis Date: 4/14/2005
Analyst: DM

Instrument Calibrated to report sample results in concentration: mg/L

Concentration: 0.1098
Units: mg/L

1	0.100
2	0.104
3	0.105
4	0.096
5	0.096
6	0.095
7	0.092

Average: 0.098 ug/L
Std Deviation: 0.004691
Student T: 3.143

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev: 0.0147 mg/L
Reporting Limit: 0.04 mg/L
Status: PASS >1/3 RL

**Total Dissolved Solids (TDS)**

Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Batch#:	116770
Field ID:	DW082106B	Sampled:	08/21/06
Matrix:	Water	Received:	08/21/06
Units:	mg/L	Analyzed:	08/24/06
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	188869-001	50	50
BLANK	QC353379	ND	10

ND= Not Detected
RL= Reporting Limit

Total Dissolved Solids (TDS)

Lab #:	188869	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Diln Fac:	1.000
Matrix:	Water	Batch#:	116770
Units:	mg/L	Analyzed:	08/24/06

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim	Sampled	Received
1065PZ2A	BS		QC353380		100.0	118.0		118	79-121				
ZZZZZZZZZZ	SDUP	188837-009	QC353381	450.0		450.0	10.00			0	20	08/17/06	08/18/06
	SDUP	188908-001	QC353382	14,420		14,600	100.0			1	20	08/23/06	08/23/06
	BSD		QC354137		100.0	120.0		120	79-121	2	20		

377

RL= Reporting Limit

RPD= Relative Percent Difference

Page 1 of 1

16.2



Curtis & Tompkins, Ltd.

Analysis: **Total Dissolved Solids**
 Method: **EPA160.1 / SMWW 2540c**
 Matrix: **Water**
 SOP#: **tds_rv 9.doc**

Analysis Date: **24-Aug-06**
 Batch #: **116770**
 Analyst: **SJ**

BATCH QC DATA

Sample	Sample Vol (mL) 50vol	DF	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	Report (mg/L)	Reporting Limit (mg/L)	Spike Std Conc (mg/L)	Spike Vol. Used (mL)	Spiking Level (mg/L)	Recovery, %	RPD, %
MB	50	1	51.7847	51.7851	0.0004	ND	10					
BS	50	1	49.2957	49.3016	0.0059	118.0	10	1,000	5	100	118	
BSD	50	1	50.3649	50.3709	0.0060	120.0	10	1,000	5	100	120	1.68
188837-009	10	5	27.3953	27.3998	0.0045	450.0	50					
SDUP	10	5	24.0973	24.1018	0.0045	450.0	50					0.00
188908-001	5	10	24.3367	24.4088	0.0721	14,420.0	100					
SDUP	5	10	27.1298	27.2028	0.0730	14,600.0	100					1.24

QC Limits		RPD	Recovery
LCS/BS/BS	20	79	- 121
MS/MSD	20	69	- 131

SAMPLE DATA

Sample	Sample Vol (mL) 50vol	DF	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	Report (mg/L)	Reporting Limit (mg/L)
188818-001	10	5	27.4076	27.4149	0.0073	730.0	50
188837-005	10	5	46.7365	46.8455	0.1090	10,900.0	50
188837-008	10	5	27.1582	27.1663	0.0081	810.0	50
188837-009	10	5	27.3953	27.3998	0.0045	450.0	50
188837-010	10	5	29.0289	29.0363	0.0074	740.0	50
188837-012	10	5	27.6338	27.6341	0.0003	ND	50
188842-001	10	5	25.4314	25.4412	0.0098	980.0	50
188869-001	10	5	27.4534	27.4539	0.0005	50.0	50
188872-009	10	5	29.1860	29.1907	0.0047	470.0	50
188872-010	10	5	26.2136	26.2186	0.0050	500.0	50
188887-001	10	5	26.0929	26.1026	0.0097	970.0	50
188908-001	5	10	24.3367	24.4088	0.0721	14,420.0	100
188917-001	10	5	24.9962	24.9974	0.0012	120.0	50
188917-002	10	5	24.4051	24.4062	0.0011	110.0	50
188917-003	10	5	27.4300	27.4311	0.0011	110.0	50
188921-001	10	5	25.4922	25.5243	0.0321	3,210.0	50

Note: Because the regulatory holding time is based on the prep date, the analysis date referenced above is the prep date.

Reviewed by/ Date:

[Signature] 8/30/06

TDS (Total Dissolved Solids)
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

LIMS Batch #: 116770

Prep Date: 8/24/06

Benchbook#: **BK2254**

Prep Time: 15:00

Page: 65

Filter Mfg/ Lot#: G1848457

Spike WS Conc (mg/L): 1000

Spike WS#: 33381

Spike Vol Added (mL): 5

	In	Out	In-2	Out-2	In-3	Out-3	In-4	Out-4
Date:	8/24/06	8/25/06	8/25/06	8/25/06	8/28/06	8/28/06	8/28/06	8/28/06
Time:	16:30	12:10	16:45	17:00	14:00	16:00	17:00	18:30
Temp (C):	90°C	180°	180°C	180°C	180°C	180°C	180°C	180°C
	In-5 8/24/06 16:30 180°C	Out-5 8/24/06 11:30 180°C	In-6 8/24/06 13:00 180°C	Out-6 8/24/06 14:45 180°C	In-7 8/24/06 14:45 180°C	Out-7 8/24/06 17:00 180°C		
Sample # / Letter	EC Value (µS/cm)	Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt (g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*	4th
MB		50	FFF	51.7847	51.7859	51.7850	51.7851	
BS			KMA	49.2957	49.3013	49.3016		
BSD			24	50.3649	50.3713	50.3718	50.3709	50.3716
188815-1 K	1110	10	MAS	27.4076	27.4146	27.4149		
188837-5 CT	13,980		GNR	46.7365	46.8528	46.8503	46.8484	46.8460
-8 I	1161		RIP	27.1582	27.1660	27.1663		
-9 P	1075		NYC	27.3952	27.3994	27.3998		
-10 F	1122		LHF	29.0289	29.0358	29.0363		
-12 M	2360		OAK	27.6338	27.6340	27.6341		
SDUP 188842-1 A	1322		BOM	25.4314	25.4411	25.4412		
188869-1 M	2.75		PMP	27.4534	27.4536	27.4534		
188872-9 B	462		GER	29.1860	29.1903	29.1907		
-10 J	782		OPP	26.2136	26.2183	26.2186		
188887-1 L	1346		TOE	26.0929	26.1028	26.1026		
188908-1 B	12590	5	GAS	24.3367	24.4101	24.4152	24.4129	24.409
188917-1 C	1365	10	UK	24.9962	24.9972	24.9974		
-2	1072		ETA	24.4051	24.4060	24.4062		
-3	1042		YES	27.4300	27.4308	27.4311		
188921-1 I	3430		RON	25.4922	25.5262	25.5252	25.5245	25.524
SDUP 188837-9 P	664		VRU	24.0973	24.1017	24.1018		
SDUP 188908-1 B	17,590	5	ELF	27.1298	27.2021	27.2067	27.2053	27.2028

* Constant weight must be within 0.0005 from previous reading.

5th 46.8455
 6th 24.4038
 7th 27.2008
 27.2033
 27.2028

DMB 8/29/06

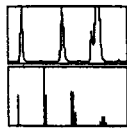
Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 116770
 Date Started: 24-AUG-2006
 Batched by : Stephanie Jim

Analysis : TDS
 Bgroup : N/A
 Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
188818-001		Arcadis G&M	Water	TDS	29-AUG-2006
188837-005		Treadwell & Rollo	Water	TDS	30-AUG-2006
188837-008		Treadwell & Rollo	Water	TDS	30-AUG-2006
188837-009		Treadwell & Rollo	Water	TDS	30-AUG-2006
188837-010		Treadwell & Rollo	Water	TDS	30-AUG-2006
188837-012		Treadwell & Rollo	Water	TDS	30-AUG-2006
188842-001		Stellar Environmen	Water	TDS	24-AUG-2006
188869-001		Treadwell & Rollo	Water	TDS	31-AUG-2006
188872-009		ERS Corp.	Water	TDS	01-SEP-2006
188872-010		ERS Corp.	Water	TDS	01-SEP-2006
188887-001		Arcadis G&M	Water	TDS	01-SEP-2006
188908-001		Acme Fill Corp.	Water	TDS	05-SEP-2006
188917-001		URS Corporation	Water	TDS	29-AUG-2006
188917-002		URS Corporation	Water	TDS	29-AUG-2006
188917-003		URS Corporation	Water	TDS	29-AUG-2006
188921-001		ERS Corp.	Water	TDS	05-SEP-2006
QC353379	BLANK		Water	TDS	
QC353380	LCS		Water	TDS	
QC353381	SDUP	of 188837-009	Water	TDS	
QC353382	SDUP	of 188908-001	Water	TDS	

NDMA



NARRATIVE REPORT
Method 1625M Semivolatiles

Curtis & Tompkins
2323 Fifth Street
Berkeley, CA 94710

08/30/06

Attn: Steve Stanley

PA Reference: 2710

Samples: DW082106B

Semivolatiles analysis:

The samples were extracted and analyzed by Method 1625C, modified for the lowest possible detection limits. A 10 gram aliquot was spiked with 0.1 ug of N-Nitrosodimethylamine-d6 and extracted by sonication. The sample extract was concentrated to a final volume of 1.0 mL and spiked with 0.1 ug of 2,2'-Difluorobiphenyl as an internal recovery standard. The extracts were analyzed by GC/MS with the mass spectrometer operating in the "Specific Ion Mode" for greater sensitivity and lower detection limits. The instrument was calibrated with five initial calibration standards ranging from 0.02 ug/mL to 1.00 ug/mL.

On-going Precision and Recovery

A laboratory blank (P&R) was spiked with 0.02 ug of NNDMA and 0.1 ug of its labeled analog, and extracted and analyzed like a sample for each extraction batch. Recoveries for NNDMA and its Label are within the method specified recovery limits for the P&R's associated with the samples.

Laboratory Blank

A laboratory blank was extracted and analyzed like the sample with each extraction batch. Laboratory blank 11714 contains NNDMA at a concentration of 0.0006 ug/L. The other laboratory blank associated with the samples has no NNDMA detected.

Samples

The sample has NNDMA detected at a concentration of 0.0417 ug/L.

Please contact Steve Parsons at (760) 496-2200 if there are any questions concerning this data package.

Chris Burbach
GC/MS Supervisor

Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878
2323 Fifth Street
Berkeley, CA 94710
(510) 486-0900
(510) 486-0532

LEVEL III

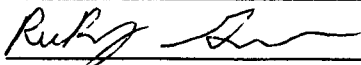
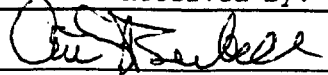
Project Number: 188869
Site: Presidio

Subcontract Laboratory:
Pacific Analytical, Inc.
6056 Corte del Cedro
Carlsbad, CA 92009
(760) 496-2200
ATTN: Steve Parson

Results due: Report Level: III

Please send report to: Steve Stanley
*** Please report using Sample ID rather than C&T Lab #.

Sample ID	Sampled	Matrix	Analysis	C&T Lab #	Comments
DW082106B	08/21 10:00	Water	NDMA	188869-001	

Notes:	Relinquished By:	Received By:
		
	Date/Time: 8/21/06 17:30	Date/Time: 8/22/06 0800

Signature on this form constitutes a firm Purchase Order for the services requested above.

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DW082106B

Lab Name: PACIFIC ANALYTICAL, INC.

Matrix: WATER

Sample wt/vol: 1000.000 ml

Concentrated Extract Volume: 100 ul

Injection Volume: 1 ul

Lab Sample ID: 2710-001

Lab File ID: 11H2918

Date Sampled: 08/21/06

Date Extracted: 08/22/06

Date Analyzed: 08/29/06

Time Analyzed: 2126

Compound	Sample Conc ug/L	PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0417	0.0020	52 %

U = Undetected J = Estimated Concentration B = Found in Blank

D = Dilution Results E = Result Exceeds Calibration Curve

na = Compound has no corresponding labeled reference

PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B11713

Lab Name: PACIFIC ANALYTICAL, INC.

Matrix: WATER

Sample wt/vol: 1000.000 ml

Concentrated Extract Volume: 100 ul

Injection Volume: 1 ul

Lab Sample ID: 11713

Lab File ID: 11H2913

Date Sampled:

Date Extracted: 08/22/06

Date Analyzed: 08/29/06

Time Analyzed: 1757

Compound	Sample Conc ug/L	PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	U	0.0020	46 %

U = Undetected J = Estimated Concentration B = Found in Blank

D = Dilution Results E = Result Exceeds Calibration Curve

na = Compound has no corresponding labeled reference

PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

B11714

Lab Name: PACIFIC ANALYTICAL, INC.

Matrix: WATER

Sample wt/vol: 1000.000 ml

Concentrated Extract Volume: 100 ul

Injection Volume: 1 ul

Lab Sample ID: 11714

Lab File ID: 11H2914

Date Sampled:

Date Extracted: 08/22/06

Date Analyzed: 08/29/06

Time Analyzed: 1839

Compound	Sample Conc ug/L	PQL ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0006 J	0.0020	62 %

U = Undetected J = Estimated Concentration B = Found in Blank

D = Dilution Results E = Result Exceeds Calibration Curve

na = Compound has no corresponding labeled reference

PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

0.10 PPM 2N SRC

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: NA
Concentrated Extract Volume: NA
Injection Volume: 1 ul

Lab Sample ID: NSTD0.10
Lab File ID: 11H2923
Date Sampled:
Date Extracted:
Date Analyzed: 08/30/06
Time Analyzed: 0054

Compound	Daily Conc ug/mL	Daily Spike ug/mL	Recovery
N-Nitrosodimethylamine	0.1015	0.1000	103 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

P&R Q01

Lab Name: PACIFIC ANALYTICAL, INC.

Matrix: WATER

Sample wt/vol: 1000.000 ml

Concentrated Extract Volume: 100 ul

Injection Volume: 1 ul

Lab Sample ID:

P&R Q01

Lab File ID:

11H2911

Date Sampled:

Date Extracted:

08/22/06

Date Analyzed:

08/29/06

Time Analyzed:

1634

Compound	Sample Conc ug/L	Spike Amt. ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0019 J	0.0020	48 %

U = Undetected J = Estimated Concentration B = Found in Blank

D = Dilution Results E = Result Exceeds Calibration Curve

na = Compound has no corresponding labeled reference

PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

P&R Q01DUP

Lab Name: PACIFIC ANALYTICAL, INC.

Matrix: WATER

Sample wt/vol: 1000.000 ml

Concentrated Extract Volume: 100 ul

Injection Volume: 1 ul

Lab Sample ID: P&R Q01DUP

Lab File ID: 11H2912

Date Sampled:

Date Extracted: 08/22/07

Date Analyzed: 08/29/06

Time Analyzed: 1716

Compound	Sample Conc ug/L	Spike Amt. ug/L	Labeled Cpd. Recovery
N-Nitrosodimethylamine	0.0023	0.0020	58 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

METHOD 1625 ISOTOPE DILUTION
 LABELED COMPOUNDS

Lab Name: PACIFIC ANALYTICAL

Instr. ID: VG11

Cal. Date: 08/29/06

LAB FILE IDs: Conc1 = 11H2905
 Conc2 = 11H2906
 Conc3 = 11H2907
 Conc4 = 11H2908
 Conc5 = 11H2909

COMPOUND	RF Conc1	RF Conc2	RF Conc3	RF Conc4	RF Conc5	RF MEAN	% RSD
N-Nitrosodimethylamine-d6	0.195	0.183	0.184	0.185	0.194	0.188	3.1
=====							

METHOD 1625 ISOTOPE DILUTION
COMPOUNDS HAVING A LABELED REFERENCE

Lab Name: PACIFIC ANALYTICAL

Instr. ID: VG11

Cal. Date: 08/29/06

LAB FILE IDs: Conc1 = 11H2905
 Conc2 = 11H2906
 Conc3 = 11H2907
 Conc4 = 11H2908
 Conc5 = 11H2909

COMPOUND	RX	RR Conc1	RR Conc2	RR Conc3	RR Conc4	RR Conc5
----------	----	-------------	-------------	-------------	-------------	-------------

N-Nitrosodimethylami	999999	0.191	0.430	0.773	4.168	7.816
----------------------	--------	-------	-------	-------	-------	-------

=====

CONCENTRATIONS OF CALIBRATION STANDARDS

Compound	Ical Type	Resp Ref	Calibration Standards				
			Conc1 ug/L	Conc2 ug/L	Conc3 ug/L	Conc4 ug/L	Conc5 ug/L
1 2,2'-Difluorobiphenyl	I	1	0.10	0.10	0.10	0.10	0.10
2 N-Nitrosodimethylamine	L	1	0.10	0.10	0.10	0.10	0.10
3 N-Nitrosodimethylamine	U	2	0.02	0.05	0.10	0.50	1.00

=====

I = internal standard; L = labeled compound; U = unlabeled native
 O = compound referenced to internal standard

EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

0.10 PPM 2N SRC

Lab Name: PACIFIC ANALYTICAL, INC.
Matrix: WATER
Sample wt/vol: NA
Concentrated Extract Volume: NA
Injection Volume: 1 ul

Lab Sample ID: NSTD0.10
Lab File ID: 11H2923
Date Sampled:
Date Extracted:
Date Analyzed: 08/30/06
Time Analyzed: 0054

Compound	Daily Conc ug/mL	Daily Spike ug/mL	Recovery
N-Nitrosodimethylamine	0.1015	0.1000	103 %

U = Undetected J = Estimated Concentration B = Found in Blank
D = Dilution Results E = Result Exceeds Calibration Curve
na = Compound has no corresponding labeled reference
PQL = Practical Quantitation Limit

NNDMA MDL = 0.0005 ug/L

GC/MS SEMI-VOLATILES
RUN LOGInstrument: 1611Page: 857Cal File: 11H29Date: 8/24/06

Notes:

Curtis & Tompkins WDMA
 SIV SEC SFI SFZ QL QH QIE QIK DIM
 5.0 100 10 100 50 5.0 3.0 0.5 750

Inj port = 200°C
 purge = 0.75 min

40°C Hold 2.5 min 5°C/min to 280°C Hold 1 min

SIR

Taped	Sample ID	File Name	OK	Description	OP
		11H2901		Warm-up	03
		02			
		03			
		04			
	NST00.02	05		0.02 ug/ml NWD Std	
	NST00.05	06		0.05	
	NST00.10	07		0.10	
	NST00.50	08		0.50	
	NST01.00	09		1.00	
	NST05.00	10		5.00	
	PRR001	11		OPR	
	PRR001dup	12			
	11713	13		Lab Blank	
	11714	14			
	11715	15			
	2706-001	16			
	2706-002	17			
	2710-001	18			
	2711-001	19			
	2711-002	20			
	2711-003	21			
	2711-004	22			
	NST00.10	23		0.10 ug/ml NWD 2nd Src	
		24			
		25			

2710 Curtis & Tompkins, 1 X NDMA (TAT: 30)

Lab ID NDMA
2710-001 P

Lab ID	Cust ID	Sampled	Rec'd	Login ID
2710-001	DW082106B	08/21/06	08/22/06	01850

Lab ID	Description	Comment
2710-001	2 X AL	OK

Login	Loggin by	Shipper	Shipper Code	CofC
01850	Chris J. Burbach	California Overnight	C10129000030330	OK

JOB #

LOG-IN DATE

8/22/04

Received By (print name):

Received By (signature):

Chris Burbach

Chris Butler

CLIENT <u>Curtis + Tompkins</u>		# of Coolers: <u>1</u>	TEMP: <u>3°C</u>					
Received From <u>Cal overnight</u>	Custody seals Present ☒ Absent* ☐ Intact ☒ Broken ☐	LAB ID # <u>2710-001</u>	SAMPLE # <u>DW0852106B</u> 180802001B DW0852106B	ANALYSIS <u>08/22/06</u> <u>NDMA</u>	# of Containers <u>2</u>	CONTAINER TYPE <u>AL</u>	MATRIX CODE (see table below) <u>WW</u>	CONDITION <u>OK</u>
Custody Seal #'s								
Airbill	☒ Present ☐ Absent* ☐							
Airbill #	<u>10129060030330</u>							
Date Rec'd	<u>8/22/06</u>							
Time Rec'd	<u>0900</u>							
Chain of Custody or Traffic Reports	☒ Present ☐ Absent*							
Sample Label	☒ Present ☐ Absent*							
Sample ID #'s on COC	☒ Listed ☐ Not Listed							
Sample Condition	☒ Intact ☐ Broken ☐ Leaking							
Does information on Custody records, reports and sample tags agree?	☒ Yes ☐ No							
* COMMENTS								

Matrix Codes: DW = Drinking Water WW = Wastewater S = Soil SL = Sludge O = Other
Container Types: AL = Amber Liter VOA = 40 mL vial SJ = Solid jar BT = Brass Tube OTC = Other Type Container

Fourth Quarter 2006

Table E-1
Curtis and Tompkins
Sample Delivery Group Index List
Fourth Quarter 2006
Presidio-wide Groundwater Monitoring Project
Presidio of San Francisco, California

Location ID	Sample Date	SDG Number
Battery Howe/Wagner		
BHWGW01	12/7/2006	191358
BHWGW04	12/7/2006	191358
BHWGW04 (DUP1207062A)	12/7/2006	191358
BHWGW05	12/7/2006	191358
HWWGW100	12/7/2006	191358
HWWGW101	12/7/2006	191358
Building 1047		
1047MW101	12/7/2006	191358
Building 1349/Fill Site 5		
1349MW100	12/5/2006	191286
Building 231/207 Area		
231GW09	12/5/2006	191286
231GW09 (DUP0816062A)	12/5/2006	191286
Building 1065 Area		
1065MW9A	12/5/2006	191286
1065MW9A (DUP1205062C)	12/5/2006	191286
1065MW9B	12/7/2006	191358
1065PZ1A	12/5/2006	191286
1065PZ1B	12/5/2006	191286
1065PZ1B (DUP1205061A)	12/5/2006	191286
1065PZ2A	12/6/2006	191314
1065PZ4A	12/6/2006	191314
1065PZ5AR	12/7/2006	191358
1065MW101	12/6/2006	191314
1065MW102	12/6/2006	191314
Landfill 4		
LF4GW103	12/5/2006	191286
LF4GW104	12/5/2006	191286
Landfill 10		
LF10GW01	12/6/2006	191314
LF10GW02	12/6/2006	191314
LF10GW03	12/6/2006	191314
LF10GW100	12/6/2006	191314
LF10SP01	12/6/2006	191314
Fill Site 6		
LF6GW103	12/5/2006	191286
LF6GW103 (DUP1205062A)	12/5/2006	191286
LF6GW104	12/6/2006	191314
LF6GW105	12/6/2006	191314
LF6GW106	12/6/2006	191314

Table E-1
Curtis and Tompkins
Sample Delivery Group Index List
Fourth Quarter 2006
Presidio-wide Groundwater Monitoring Project
Presidio of San Francisco, California

Location ID	Sample Date	SDG Number
Baker Beach Disturbed Area 3		
BB3GW100	12/6/2006	191314
Mini-CAPs		
1213GW101	12/5/2006	191286
1221GW104	12/6/2006	191314
1221GW104 (DUP0815063A)	12/6/2006	191314
514AGW101	12/6/2006	191314
FM14EX07GW101	12/6/2006	191314
FM14EX07GW102	12/6/2006	191314
Baker Beach Disturbed Area 1 and 2		
BB1PZ100	12/5/2006	191286
BB1PZ101	12/5/2006	191286
Rinsate Samples		
1047MW101RB1065MW9B	12/7/2006	191358
BHWGWO4RBHWGW100	12/7/2006	191358
Trip Blanks		
TB1205061A	12/5/2006	191286
TB1206061A	12/6/2006	191314
TB1207061A	12/7/2006	191358
TB1207061B	12/7/2006	191358
Source Water Samples		
DW120606A		
DW120606B	12/6/2006	191290
Purge Water Sample		
WT120706	12/7/2006	191358



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Number 191286

Treadwell & Rollo
555 Montgomery Street
San Francisco, CA 94111

Project#: 2893.04.51
Location: Presidio

<u>Sample ID</u>	<u>Lab ID</u>
LF6GW103	191286-001
1065MW9A	191286-002
231GW09	191286-003
DUP1205062A	191286-004
DUP1205062C	191286-005
DUP1205062B	191286-006
BB1PZ100	191286-007
BB1PZ101	191286-008
1065PZ1A	191286-009
1065PZ1B	191286-010
DUP1205061A	191286-011
1213GW101	191286-012
1349MW100	191286-013
LF4GW103	191286-014
LF4GW104	191286-015
TB1205061A	191286-016

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis.

Signature: [Signature] Date: 1/5/07
Operations Manager

Signature: [Signature] Date: 1/5/07
Project Manager

CASE NARRATIVE

Laboratory number: 191286
Client: Treadwell & Rollo
Project: 2893.04.51
Location: Presidio
Request Date: 12/06/06
Samples Received: 12/06/06

This hardcopy data package contains sample and QC results for sixteen water samples, requested for the above referenced project on 12/06/06. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):

No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):

Low response was observed for vinyl acetate in the ICV analyzed 10/11/06 23:59; this analyte was not detected at or above the RL in the associated samples. No other analytical problems were encountered.

Pesticides (EPA 8081A):

High ICAL percent RSD (relative standard deviation) was observed for methoxychlor in the calibration analyzed 12/05/06 22:15; average ICAL %RSD met method requirements, and this analyte was not detected at or above the RL in the associated samples. High responses were observed for delta-BHC and methoxychlor in the ICV analyzed 12/13/06 18:06; average ICV drift met method requirements, and these analytes were not detected at or above the RL in the associated samples. High responses were observed for many analytes in the CCV analyzed 12/08/06 22:55; these analytes were not detected at or above the RL in the associated samples. High responses were observed for 4,4'-DDT, endrin, and methoxychlor in the CCV analyzed 12/08/06 14:29; average CCV drift met method requirements, and these analytes were not detected at or above the RL in the associated samples. Low responses were observed for beta-BHC, 4,4'-DDT, and endosulfan II in the CCV analyzed 12/08/06 08:31 and the CCV analyzed 12/15/06 04:40; average CCV drift met method requirements. Low surrogate recoveries were observed for decachlorobiphenyl in BB1PZ100 (lab # 191286-007) and BB1PZ101 (lab # 191286-008); the corresponding TCMX surrogate recoveries were within limits. Low surrogate recovery was observed for TCMX in 1349MW100 (lab # 191286-013); the corresponding decachlorobiphenyl surrogate recovery was within limits. No other analytical problems were encountered.

Polychlorinated Biphenyls (PCBs) (EPA 8082):

No analytical problems were encountered.

CASE NARRATIVE

Laboratory number: 191286
Client: Treadwell & Rollo
Project: 2893.04.51
Location: Presidio
Request Date: 12/06/06
Samples Received: 12/06/06

Polynuclear Aromatics by HPLC (EPA 8310):

Low recoveries were observed for benzo(a)pyrene in the MS/MSD of 514AGW101 (lab # 191314-019); the LCS was within limits, and the associated RPD was within limits. No other analytical problems were encountered.

Metals (EPA 6020 and EPA 7470A) Water:

Responses exceeding the instrument's linear range were observed for sodium in the MS/MSD of 1213GW101 (lab # 191286-012). Lead was detected above the RL in the method blank for batch 120218; this analyte was detected in the sample at a level at least ten times that of the blank. No other analytical problems were encountered.

Metals (EPA 6020 and EPA 7470A) Filtrate:

Responses exceeding the instrument's linear range were observed for sodium in the MS/MSD of 1213GW101 (lab # 191286-012). Lead was detected above the RL in the method blank for batch 120218; this analyte was not detected in samples at or above the RL. No other analytical problems were encountered.

Ion Chromatography (EPA 300.0):

No analytical problems were encountered.

Alkalinity (EPA 310.1):

No analytical problems were encountered.

Sulfide (EPA 376.2):

No analytical problems were encountered.

Total Dissolved Solids (TDS) (EPA 160.1):

High recovery was observed for total dissolved solids in the BSD for batch 120302. Insufficient sample remained for reanalysis, the associated RPD was within limits, and the exceedance was minimal, at one percent above the limit. No other analytical problems were encountered.

Chain of Custody

191286

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

Project Name: Presidio of San Francisco
Location: Presidio of San Francisco
Sampled By (Firm and Samplers): BTs P. Cornish / B. Summersoff
Recorder (signature required): [Signature]
Sent to Laboratory (Name): C&T

SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix				Number of Containers and Preservation	REQUESTED ANALYSES										COMMENTS / NOTES						
				Soil	Water	Other	HCl		H ₂ SO ₄	HNO ₃	NaOH	Other	TPHg (8015M)	TPHd (8015M)	TPHf (8015M)	VOCs (8260) / MTBE	General Chemistry	OCPs (8081)		Metals - Dissolved	Metals - Total	TDS (160.1)	PAHs (8310)	Diss. Metals 15	Total Sulfide
BB1PZ100	12/5/06	955		X					2	5															
BB1PZ101	10/15	1015		X					2	5															
1066PZ1A	14/10	1410		X					1	3															
1065PZ1B	15/10	1510		X					1	3															
DUP1205061A	15/20	1520		X					3	6															
1213Gw101	16/20	1620		X					3	6															
1349MW100	13/45	1345		X					1	6															
LP4Gw103	15/35	1535		X					1	1															
LF4Gw104	15/15	1515		X					1	1															
TB1205061A	-	-		X					2																

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate). 3 - Indicate in the metals column (by number) which metals list is requested. Metals List 23 - Al, Sb, As, Ba, Be, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Ti, V, and Zn. Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Ti, V, and Zn). Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn). (3 - Al, Fe, and Cr). (Other - (13 - As, Cr, Cd, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Ti, V, and Zn). (9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn). (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn).

RELINQUISHED BY: [Signature] RECEIVED BY: [Signature]
PRINT NAME: P. Cornish FIRM: BTs DATE: 12/5/06 TIME: 1300
RELINQUISHED BY: [Signature] RECEIVED BY: [Signature]
PRINT NAME: [Signature] FIRM: C&T DATE: 12/6/06 TIME: 1300
PRINT NAME: [Signature] FIRM: [Signature] DATE: [Signature] TIME: [Signature]
ADDITIONAL REMARKS / LABORATORY NOTES: [Signature]
Method of Shipment: [Signature]
White Copy - Original Yellow Copy - Laboratory Pink Copy - Field

6 HCl / HNO₃ / 3x others
MS/MSD

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 1 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd



Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 191286 Date Received: 12/6/06 Number of Coolers: 5
Client: Threadwell + Pollo Project: Presidio

A. Preliminary Examination Phase

Date Opened: 12/6/06 By (print): John P. (sign) [Signature]

1. Did cooler come with a shipping slip (airbill, etc.)?..... YES ☒ NO

If YES, enter carrier name and airbill number: _____

2. Were custody seals on outside of cooler?..... YES ☒ NO

How many and where? _____ Seal date: 12/6/06 Seal name: PC

3. Were custody seals unbroken and intact at the date and time of arrival?..... YES ☒ NO NA

4. Were custody papers dry and intact when received?..... YES ☒ NO

5. Were custody papers filled out properly (ink, signed, etc.)?..... YES ☒ NO

6. Did you sign the custody papers in the appropriate place?..... YES ☒ NO

7. Was project identifiable from custody papers?..... YES ☒ NO

If YES, enter project name at the top of this form.

8. If required, was sufficient ice used? Samples should be 2-6 degrees C. YES ☒ NO

Type of ice: wet Temperature: 2.2°, 1.7°, 1.4°, 2°

B. Login Phase

Date Logged In: 12/6/06 By (print): John P. (sign) [Signature]

1. Describe type of packing in cooler: Ziploc bags

2. Did all bottles arrive unbroken?..... YES ☒ NO

3. Were labels in good condition and complete (ID, date, time, signature, etc.)?..... YES ☒ NO

4. Did bottle labels agree with custody papers?..... YES ☒ NO

5. Were appropriate containers used for the tests indicated?..... YES ☒ NO

6. Were correct preservatives added to samples?..... YES ☒ NO

7. Was sufficient amount of sample sent for tests indicated?..... YES ☒ NO

8. Were bubbles absent in VOA samples? If NO, list sample IDs below..... YES ☒ NO

9. Was the client contacted concerning this sample delivery?..... YES ☒ NO

If YES, give details below.

Who was called? _____ By whom? _____ Date: _____

Additional Comments:

5 coolers - 4 temp Blanks

B6 - Samples - 007, 008, 014 preserved in lab w/ HNO3.

TPH-Purgeables and BTXE

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	LF6GW103	Batch#:	120117
Lab ID:	191286-001	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Analyzed:	12/06/06
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	105	65-135
Bromofluorobenzene (FID)	99	65-135

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065MW9A	Batch#:	120117
Lab ID:	191286-002	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Analyzed:	12/06/06
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	0.57	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	107	65-135	EPA 8015B
Bromofluorobenzene (FID)	95	65-135	EPA 8015B
Trifluorotoluene (PID)	117	65-135	EPA 8021B
Bromofluorobenzene (PID)	99	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	231GW09	Batch#:	120117
Lab ID:	191286-003	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Analyzed:	12/06/06
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	109	65-135
Bromofluorobenzene (FID)	97	65-135

ND= Not Detected
RL= Reporting Limit

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DUP1205062A	Batch#:	120117
Lab ID:	191286-004	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Analyzed:	12/07/06
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	108	65-135
Bromofluorobenzene (FID)	103	65-135

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	DUP1205062C	Batch#:	120117
Lab ID:	191286-005	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Analyzed:	12/06/06
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	107	65-135	EPA 8015B
Bromofluorobenzene (FID)	97	65-135	EPA 8015B
Trifluorotoluene (PID)	115	65-135	EPA 8021B
Bromofluorobenzene (PID)	101	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DUP1205062B	Batch#:	120117
Lab ID:	191286-006	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Analyzed:	12/07/06
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	108	65-135
Bromofluorobenzene (FID)	99	65-135

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1065PZ1A	Batch#:	120117
Lab ID:	191286-009	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Analyzed:	12/07/06
Diln Fac:	1.000		

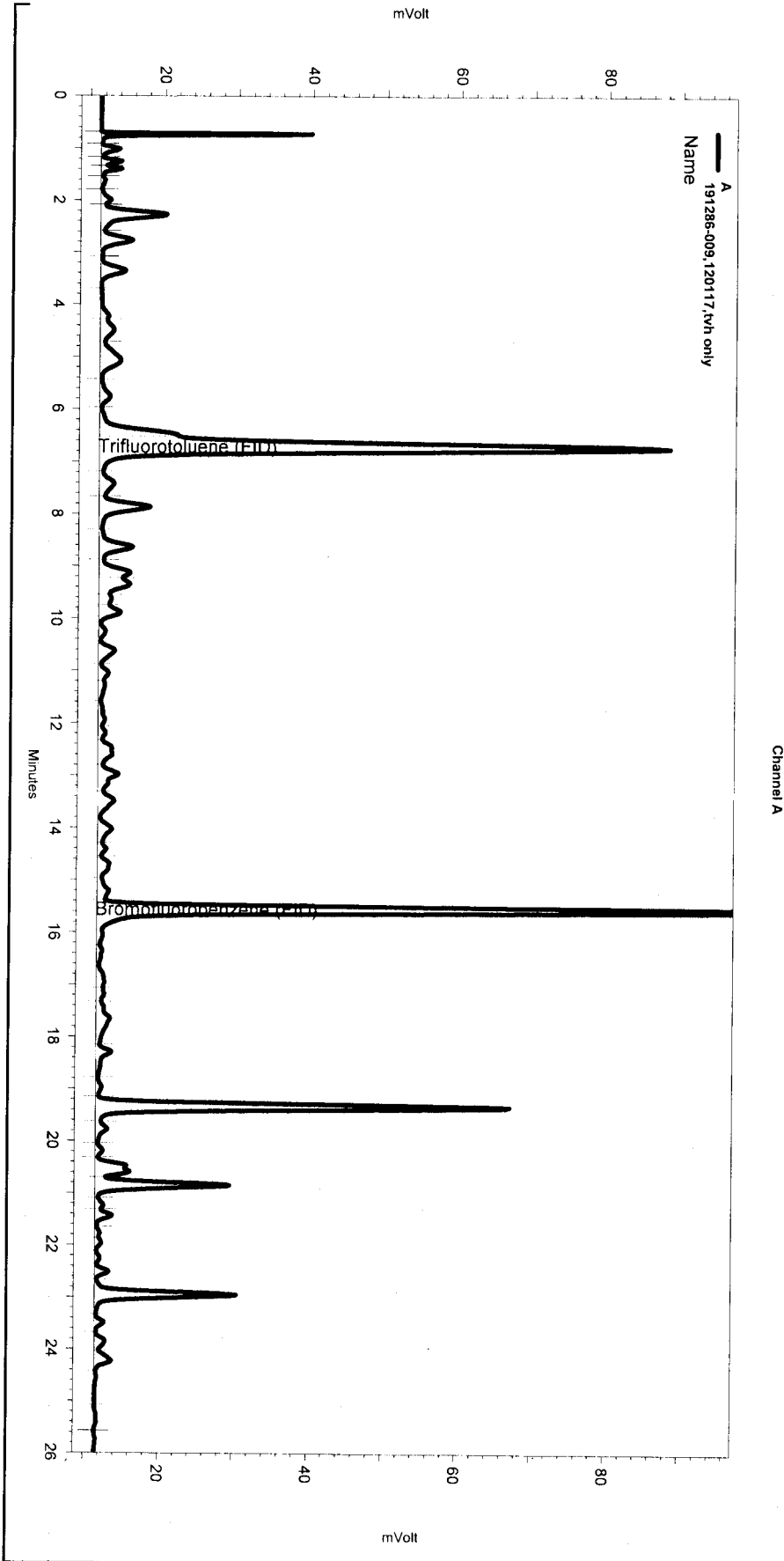
Analyte	Result	RL
Gasoline C7-C12	260 Y	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	107	65-135
Bromofluorobenzene (FID)	106	65-135

Y= Sample exhibits chromatographic pattern which does not resemble standard
RL= Reporting Limit

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC07\Sequence\340.seq
Sample Name: 191286-009,120117,tvh only
Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\340_019
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhtxe334.met

Software Version 3.1.7
Run Date: 12/7/2006 2:46:53 AM
Analysis Date: 12/7/2006 9:32:43 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: a1.3



---< General Method Parameters >---

No items selected for this section

---< A >---

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\340_019				
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Split Peak	6.514	0	0

1065 PZ 1A



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1065PZ1B	Batch#:	120117
Lab ID:	191286-010	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Analyzed:	12/07/06
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	107	65-135
Bromofluorobenzene (FID)	99	65-135

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DUP1205061A	Batch#:	120117
Lab ID:	191286-011	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Analyzed:	12/07/06
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	104	65-135
Bromofluorobenzene (FID)	98	65-135



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1213GW101	Batch#:	120117
Lab ID:	191286-012	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Analyzed:	12/07/06
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	95	65-135
Bromofluorobenzene (FID)	95	65-135

ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins Laboratories Analytical Report

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1349MW100	Batch#:	120117
Lab ID:	191286-013	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Analyzed:	12/07/06
Diln Fac:	5.000		

Analyte	Result	RL
Gasoline C7-C12	1,200 H	250

Surrogate	%REC	Limits
Trifluorotoluene (FID)	103	65-135
Bromofluorobenzene (FID)	101	65-135

H= Heavier hydrocarbons contributed to the quantitation
 RL= Reporting Limit

Sequence File: \\Lims\gdrive\ezchrom\Projects\GC07\Sequence\340.seq
Sample Name: 191286-013,120117,5x,tvh only
Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\340_023
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lims2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\lvhbtxe334.met

Software Version 3.1.7
Run Date: 12/7/2006 5:13:32 AM
Analysis Date: 12/7/2006 9:32:59 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: a1.3

---< General Method Parameters >---

No items selected for this section

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No items selected for this section

Integration Events

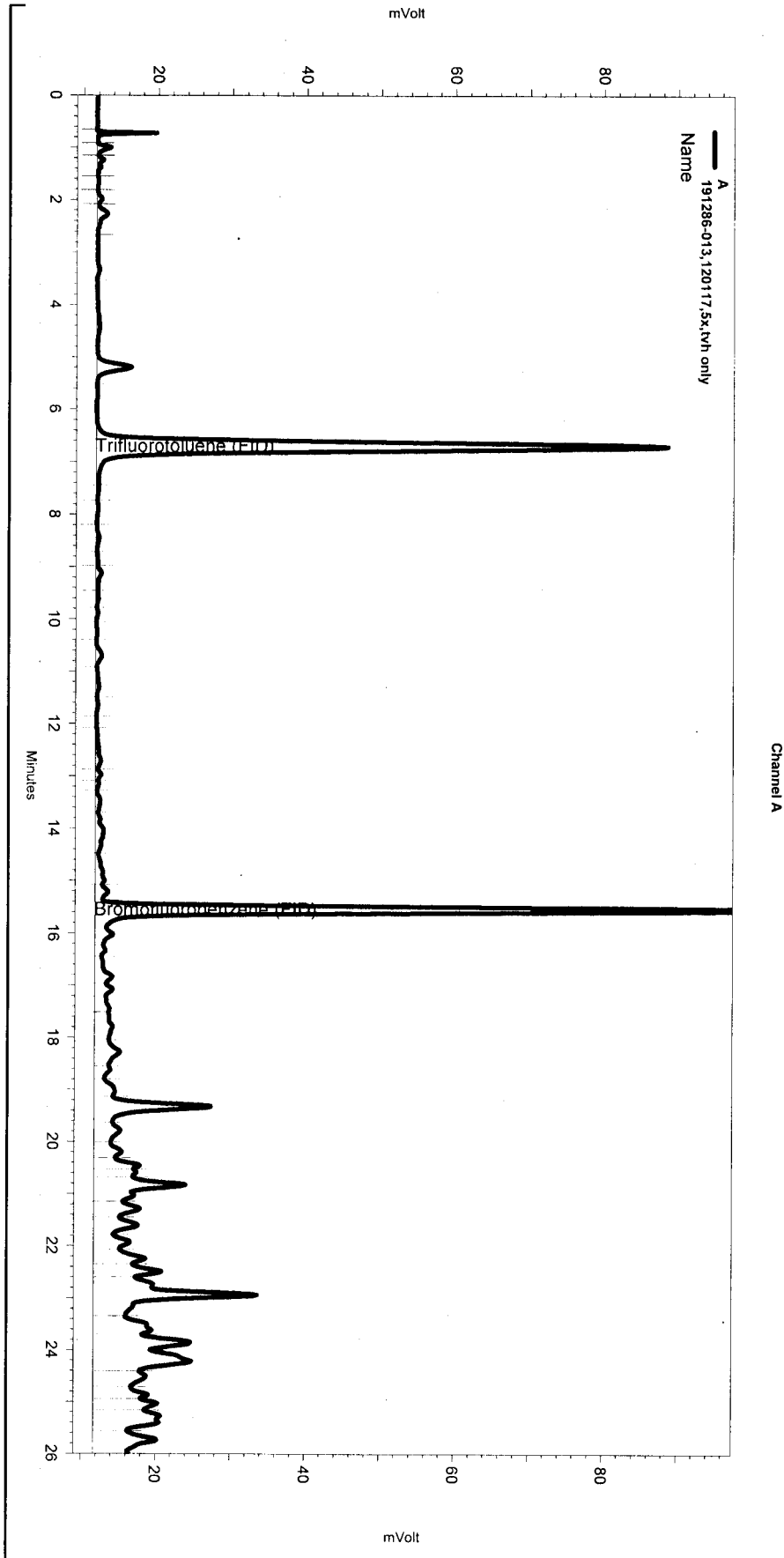
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\340_023

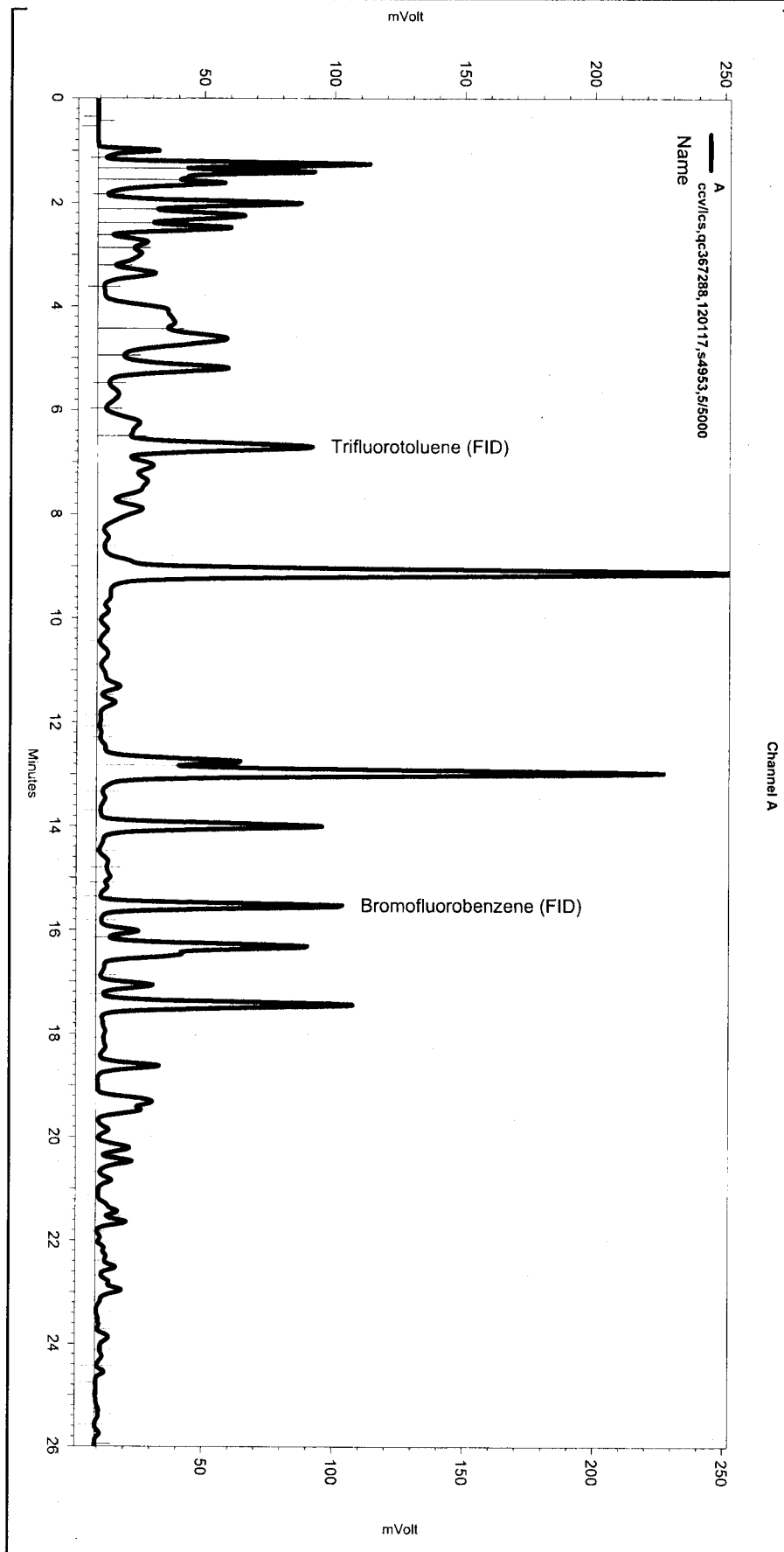
Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Lowest Point Horizontal Baseli	0	26.015	0

1349 MW 100



Sequence File: \\Lims\gdrive\ezchrom\Projects\GC07\Sequence\340.seq
Sample Name: ccv\lcs,qc367288,120117,s4953,5/5000
Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\340_003
Instrument: GC07 (Offline) Vial: N/A Operator: Tvh 2. Analyst (lms2k3\tvh2)
Method Name: \\Lims\gdrive\ezchrom\Projects\GC07\Method\tvhbtxe334.met

Software Version 3.1.7
Run Date: 12/6/2006 11:56:04 AM
Analysis Date: 12/7/2006 9:31:41 AM
Sample Amount: 5 Multiplier: 5
Vial & pH or Core ID: {Data Description}



< General Method Parameters >

No items selected for this section

< A >

No items selected for this section

Integration Events

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
Yes	Width	0	0	0.2
Yes	Threshold	0	0	50

Manual Integration Fixes

Data File: \\Lims\gdrive\ezchrom\Projects\GC07\Data\340_003

Enabled	Event Type	Start (Minutes)	Stop (Minutes)	Value
None				

Gasoline

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report			
Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC367286	Batch#:	120117
Matrix:	Water	Analyzed:	12/06/06
Units:	ug/L		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	116	65-135	EPA 8015B
Bromofluorobenzene (FID)	103	65-135	EPA 8015B
Trifluorotoluene (PID)	126	65-135	EPA 8021B
Bromofluorobenzene (PID)	106	65-135	EPA 8021B

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC367287	Batch#:	120117
Matrix:	Water	Analyzed:	12/06/06
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	20.98	105	65-135
Benzene	20.00	20.21	101	65-135
Toluene	20.00	20.70	104	65-135
Ethylbenzene	20.00	20.43	102	65-135

Surrogate	%REC	Limits
Trifluorotoluene (PID)	111	65-135
Bromofluorobenzene (PID)	95	65-135

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report			
Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC367288	Batch#:	120117
Matrix:	Water	Analyzed:	12/06/06
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,891	95	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	117	65-135
Bromofluorobenzene (FID)	98	65-135

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report			
Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1213GW101	Batch#:	120117
MSS Lab ID:	191286-012	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Analyzed:	12/06/06
Diln Fac:	1.000		

Type: MS Lab ID: QC367289

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	43.80	2,000	1,907	93	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	112	65-135
Bromofluorobenzene (FID)	94	65-135

Type: MSD Lab ID: QC367290

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,900	93	65-135	0	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	112	65-135
Bromofluorobenzene (FID)	95	65-135

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191286 GCVOA Water: EPA 8015B

Inst : GC07
Calnum: 326439908002
Units : ng

Name : gc07gas305
Date : 01-NOV-2006 18:23
X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	305_011	326439908011	TVH 2	01-NOV-2006 18:23	S4090 (1000X), S4579 (5000X)
L2	305_012	326439908012	TVH 3	01-NOV-2006 19:00	S4089 (1000X), S4579 (5000X)
L3	305_013	326439908013	TVH 4	01-NOV-2006 19:36	S4088 (2000X), S4579 (5000X)
L4	305_014	326439908014	TVH 5	01-NOV-2006 20:12	S4088 (1000X), S4579 (5000X)
L5	305_034	326439908034	TVH 1	02-NOV-2006 12:43	S4091 (1000X), S4579 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ²	%RSD	Mtr'2	MxRSD	Flg
Gasoline C7-Cl2	A	1382.9	1309.3	1296.2	1270.3	1430.7	AVRG		7.47E-4		1337.9	5		0.995	20	

00027

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191286 GCVOA Water
EPA 8015B

Inst : GC07
Calnum : 326439908002

Name : gc07gas305
Cal Date: 01-NOV-2006

ICV 326439908035 (305_035 02-NOV-2006) stds: S4693 (1000X), S4579 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Gasoline C7-C12	A	1337.9	1388.3	10000	10380	ng	4	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191286 GCVOA Water: EPA 8021B

Inst : GC07

Calnum: 326481636002

Units : ng

Name : gc07mbtixe334

Date : 30-NOV-2006 19:55

X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	334_010	326481636010	BTXE 1	30-NOV-2006 19:55	S4992 (1000X), S4579 (5000X)
L2	334_011	326481636011	MTBE 1	30-NOV-2006 20:32	S4991 (1250X), S4579 (5000X)
L3	334_012	326481636012	BTXE 2	30-NOV-2006 21:07	S4991 (500X), S4579 (5000X)
L4	334_013	326481636013	BTXE 3	30-NOV-2006 21:44	S4991 (125X), S4579 (5000X)
L5	334_014	326481636014	BTXE 4	30-NOV-2006 22:21	S4990 (1000X), S4579 (5000X)
L6	334_015	326481636015	BTXE 5	30-NOV-2006 22:57	S4990 (500X), S4579 (5000X)
L7	334_016	326481636016	BTXE 6	30-NOV-2006 23:34	S4990 (250X), S4579 (5000X)
L8	334_017	326481636017	MTBE 7	01-DEC-2006 00:10	S4993 (500X), S4579 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Type	a0	a1	a2	Avg	r ²	%RSD	MnR ²	MxRSD	Flg
MTBE	B		4472.1	4238.4	3946.1	3894.0	3603.8	3340.4	3269.0	AVRG		2.62E-4		3823.4	12	0.995	20		
Benzene	B	7602.0		7179.2	6467.3	7053.2	6831.9	6329.9		AVRG		1.45E-4		6910.6	7	0.995	20		
Toluene	B	8360.0		6505.1	5949.8	6440.9	6069.7	5711.9		AVRG		1.54E-4		6506.2	15	0.995	20		
Ethylbenzene	B	6079.6		5450.2	4854.0	5389.1	4985.3	4759.8		AVRG		1.90E-4		5253.0	9	0.995	20		
m,p-Xylenes	B	10210		8303.7	7107.6	7915.6	7383.9	6709.8		AVRG		1.26E-4		7938.4	16	0.995	20		
o-Xylene	B	6700.4		6363.9	5806.3	6187.8	5895.8	5562.6		AVRG		1.64E-4		6086.1	7	0.995	20		
MTBE	C		366.50	362.16	400.21	462.08	454.52	436.01	440.48	AVRG		0.00240		417.42	10	0.995	20		
Benzene	C	741.60		644.56	671.24	863.38	874.41	869.82		AVRG		0.00129		777.50	14	0.995	20		
Toluene	C	646.80		658.60	636.27	792.93	805.29	779.92		AVRG		0.00139		719.97	11	0.995	20		
Ethylbenzene	C	547.60		549.28	532.17	685.36	691.01	671.20		AVRG		0.00163		612.77	13	0.995	20		
m,p-Xylenes	C	714.00		825.28	770.42	961.30	955.33	925.32		AVRG		0.00116		858.61	12	0.995	20		
o-Xylene	C	678.80		613.44	615.24	788.57	783.09	763.32		AVRG		0.00141		707.08	12	0.995	20		

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191286 GCVOA Water
EPA 8021B

Inst : GC07
Calnum : 326481636002

Name : gc07mbtxe334
Cal Date: 30-NOV-2006

ICV 326481636019 (334_019 01-DEC-2006) stds: S4311 (1000X), S4579 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
MTBE	B	3823.4	4085.2	100.0	106.8	ng	7	15	
Benzene	B	6910.6	7265.1	100.0	105.1	ng	5	15	
Toluene	B	6506.2	6732.9	100.0	103.5	ng	3	15	
Ethylbenzene	B	5253.0	5231.2	100.0	99.58	ng	0	15	
m,p-Xylenes	B	7938.4	6878.1	200.0	173.3	ng	-13	15	
o-Xylene	B	6086.1	6487.9	100.0	106.6	ng	7	15	
MTBE	C	417.42	413.79	100.0	99.13	ng	-1	15	
Benzene	C	777.50	776.59	100.0	99.88	ng	0	15	
Toluene	C	719.97	721.05	100.0	100.2	ng	0	15	
Ethylbenzene	C	612.77	589.68	100.0	96.23	ng	-4	15	
m,p-Xylenes	C	858.61	783.54	200.0	182.5	ng	-9	15	
o-Xylene	C	707.08	679.80	100.0	96.14	ng	-4	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191286 GCVOA Water: EPA 8015B / EPA 8021B

Inst : GC07

Calnum: 326481636001

Units : ng

Name : gc07surrogates334

Date : 30-NOV-2006 12:47

X Axis: R

Level	File	Segnum	Sample ID	Analyzed	Stds
L1	334_003	326481636003	TFT/BFB 1	30-NOV-2006 12:47	S4684 (5000X)
L2	334_004	326481636004	TFT/BFB 2	30-NOV-2006 14:31	S4685 (5000X)
L3	334_005	326481636005	TFT/BFB 3	30-NOV-2006 15:07	S4686 (5000X)
L4	334_006	326481636006	TFT/BFB 4	30-NOV-2006 15:44	S4687 (5000X)
L5	334_007	326481636007	TFT/BFB 5	30-NOV-2006 16:55	S4688 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ²	SRSD	MnR^2	MxRSD	Flg
Trifluorotoluene (FID)	A	1821.5	1919.5	1831.4	1910.1	1997.4	AVRG		5.27E-4		1896.0	4		0.995	20	
Bromofluorobenzene (FID)	A	1619.1	1685.2	1581.0	1637.5	1690.0	AVRG		6.09E-4		1642.6	3		0.995	20	
Trifluorotoluene (PID)	B	2569.6	2715.2	2506.8	2615.0	2758.5	AVRG		3.80E-4		2633.0	4		0.995	20	
Bromofluorobenzene (PID)	B	7212.2	7848.8	7093.8	7426.3	7610.6	AVRG		1.34E-4		7438.3	4		0.995	20	
Trifluorotoluene (PID)	C	249.21	266.52	273.22	303.91	325.72	AVRG		0.00352		283.72	11		0.995	20	
Bromofluorobenzene (PID)	C	831.12	929.07	896.33	962.23	1034.5	AVRG		0.00107		930.65	8		0.995	20	

000001

CURTIS & TOMPKINS SPIKE USER REPORT FOR 191286 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: QC367287 IDF : 1.0
 Seqnum : 326490316002.2 File : 340_002 Time : 06-DEC-2006 11:19
 Standards: S4963 (1000X), S4579 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
MTBE	C	326481636002	30-NOV-2006	437.87	100.0	104.9	ng	5	15	u
MTBE	B	326481636002	30-NOV-2006	3654.1	100.0	95.57	ng	-4	15	
Benzene	C	326481636002	30-NOV-2006	785.67	100.0	101.1	ng	1	15	u
Benzene	B	326481636002	30-NOV-2006	6445.2	100.0	93.27	ng	-7	15	
Toluene	C	326481636002	30-NOV-2006	745.28	100.0	103.5	ng	4	15	u
Toluene	B	326481636002	30-NOV-2006	5901.8	100.0	90.71	ng	-9	15	
Ethylbenzene	C	326481636002	30-NOV-2006	625.95	100.0	102.2	ng	2	15	u
Ethylbenzene	B	326481636002	30-NOV-2006	4808.7	100.0	91.54	ng	-8	15	
m,p-Xylenes	C	326481636002	30-NOV-2006	887.52	100.0	103.4	ng	3	15	u
m,p-Xylenes	B	326481636002	30-NOV-2006	7147.9	100.0	90.04	ng	-10	15	
o-Xylene	C	326481636002	30-NOV-2006	710.01	100.0	100.4	ng	0	15	u
o-Xylene	B	326481636002	30-NOV-2006	5589.7	100.0	91.84	ng	-8	15	
Trifluorotoluene (FID)	A	326481636001	30-NOV-2006	1975.3	450.0	468.8	ng	4	15	
Bromofluorobenzene (FID)	A	326481636001	30-NOV-2006	1496.1	450.0	409.9	ng	-9	15	
Trifluorotoluene (PID)	C	326481636001	30-NOV-2006	314.95	450.0	499.5	ng	11	15	u
Trifluorotoluene (PID)	B	326481636001	30-NOV-2006	2489.2	450.0	425.4	ng	-5	15	
Bromofluorobenzene (PID)	C	326481636001	30-NOV-2006	882.06	450.0	426.5	ng	-5	15	u
Bromofluorobenzene (PID)	B	326481636001	30-NOV-2006	6823.6	450.0	412.8	ng	-8	15	

CURTIS & TOMPKINS SPIKE USER REPORT FOR 191286 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: QC367288 IDF : 1.0
 Seqnum : 326490316003.2 File : 340_003 Time : 06-DEC-2006 11:56
 Standards: S4953 (1000X), S4579 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	326439908002	01-NOV-2006	1264.9	10000	9454	ng	-5	15	u
Trifluorotoluene (FID)	A	326481636001	30-NOV-2006	2227.5	450.0	528.7	ng	17	15	c+ u
Bromofluorobenzene (FID)	A	326481636001	30-NOV-2006	1611.6	450.0	441.5	ng	-2	15	u
Trifluorotoluene (PID)	C	326481636001	30-NOV-2006	396.45	450.0	628.8	ng	40	15	c+
Trifluorotoluene (PID)	B	326481636001	30-NOV-2006	2814.7	450.0	481.1	ng	7	15	
Bromofluorobenzene (PID)	C	326481636001	30-NOV-2006	925.58	450.0	447.6	ng	-1	15	
Bromofluorobenzene (PID)	B	326481636001	30-NOV-2006	6464.1	450.0	391.1	ng	-13	15	

JCP 12/07/06 : PID surrogates are not applicable. [general version]

JCP 12/07/06 [Trifluorotoluene (FID) A]: Passes limits of 69-135% [general version]

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191286 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: MBTXE IDF : 1.0
Seqnum : 326490316013 File : 340_013 Time : 06-DEC-2006 23:09
Standards: S4963 (666.7X), S4579 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	326481636001	30-NOV-2006	1841.5	450.0	437.1	ng	-3	15	
Bromofluorobenzene (FID)	A	326481636001	30-NOV-2006	1529.1	450.0	418.9	ng	-7	15	
MTBE	B	326481636002	30-NOV-2006	3554.4	150.0	139.4	ng	-7	15	
Benzene	B	326481636002	30-NOV-2006	6251.6	150.0	135.7	ng	-10	15	
Toluene	B	326481636002	30-NOV-2006	5769.7	150.0	133.0	ng	-11	15	
Ethylbenzene	B	326481636002	30-NOV-2006	4640.9	150.0	132.5	ng	-12	15	
m,p-Xylenes	B	326481636002	30-NOV-2006	6726.4	150.0	127.1	ng	-15	15	
o-Xylene	B	326481636002	30-NOV-2006	5409.8	150.0	133.3	ng	-11	15	
Trifluorotoluene (PID)	B	326481636001	30-NOV-2006	2317.9	450.0	396.1	ng	-12	15	
Bromofluorobenzene (PID)	B	326481636001	30-NOV-2006	6297.3	450.0	381.0	ng	-15	15	
MTBE	C	326481636002	30-NOV-2006	456.12	150.0	163.9	ng	9	15	
Benzene	C	326481636002	30-NOV-2006	813.29	150.0	156.9	ng	5	15	
Toluene	C	326481636002	30-NOV-2006	751.63	150.0	156.6	ng	4	15	
Ethylbenzene	C	326481636002	30-NOV-2006	625.26	150.0	153.1	ng	2	15	
m,p-Xylenes	C	326481636002	30-NOV-2006	884.99	150.0	154.6	ng	3	15	
o-Xylene	C	326481636002	30-NOV-2006	705.62	150.0	149.7	ng	0	15	
Trifluorotoluene (PID)	C	326481636001	30-NOV-2006	299.27	450.0	474.7	ng	5	15	
Bromofluorobenzene (PID)	C	326481636001	30-NOV-2006	901.44	450.0	435.9	ng	-3	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191286 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: TVH IDF : 1.0
Seqnum : 326490316015 File : 340_015 Time : 07-DEC-2006 00:21
Standards: S4953 (666.7X), S4579 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	326439908002	01 NOV-2006	1273.5	15000	14280	ng	-5	15	
Trifluorotoluene (FID)	A	326481636001	30-NOV-2006	2376.1	450.0	563.9	ng	25	15	c+
Bromofluorobenzene (FID)	A	326481636001	30-NOV-2006	1660.2	450.0	454.8	ng	1	15	
Trifluorotoluene (PID)	B	326481636001	30-NOV-2006	3000.0	450.0	512.7	ng	14	15	
Bromofluorobenzene (PID)	B	326481636001	30-NOV-2006	6575.2	450.0	397.8	ng	-12	15	
Trifluorotoluene (PID)	C	326481636001	30-NOV-2006	450.10	450.0	713.9	ng	59	15	c+
Bromofluorobenzene (PID)	C	326481636001	30-NOV-2006	965.68	450.0	466.9	ng	4	15	

JCP 12/07/06 [Trifluorotoluene (FID) A]: Passes limits of 69-135%

JCP 12/07/06 : PID surrogates are not applicable.

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191286 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: TVH IDF : 1.0
Seqnum : 326490316016 File : 340_016 Time : 07-DEC-2006 00:58
Standards: S4953 (666.7X), S4579 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	326439908002	01-NOV-2006	1210.2	15000	13570	ng	-10	15	
Trifluorotoluene (FID)	A	326481636001	30-NOV-2006	2322.3	450.0	551.2	ng	22	15	c+
Bromofluorobenzene (FID)	A	326481636001	30-NOV-2006	1612.2	450.0	441.7	ng	-2	15	
Trifluorotoluene (PID)	B	326481636001	30-NOV-2006	2821.3	450.0	482.2	ng	7	15	
Bromofluorobenzene (PID)	B	326481636001	30-NOV-2006	6366.8	450.0	385.2	ng	-14	15	
Trifluorotoluene (PID)	C	326481636001	30-NOV-2006	445.24	450.0	706.2	ng	57	15	c+
Bromofluorobenzene (PID)	C	326481636001	30-NOV-2006	949.41	450.0	459.1	ng	2	15	

JCP 12/07/06 [Trifluorotoluene (FID) A]: Passes limits of 69-135%

JCP 12/07/06 : PID surrogates are not applicable.

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191286 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC07 Run Name: TVH IDF : 1.0
Seqnum : 326490316027 File : 340_027 Time : 07-DEC-2006 07:39
Standards: S4953 (1000X), S4579 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	326439908002	01-NOV-2006	1185.7	10000	8863	ng	-11	15	
Trifluorotoluene (FID)	A	326481636001	30-NOV-2006	1971.8	450.0	468.0	ng	4	15	
Bromofluorobenzene (FID)	A	326481636001	30-NOV-2006	1597.8	450.0	437.7	ng	-3	15	
Trifluorotoluene (PID)	B	326481636001	30-NOV-2006	2443.7	450.0	417.6	ng	-7	15	
Bromofluorobenzene (PID)	B	326481636001	30-NOV-2006	6350.7	450.0	384.2	ng	-15	15	
Trifluorotoluene (PID)	C	326481636001	30-NOV-2006	354.10	450.0	561.6	ng	25	15	C+
Bromofluorobenzene (PID)	C	326481636001	30-NOV-2006	940.08	450.0	454.6	ng	1	15	

JCP 12/07/06 : PID surrogates are not applicable.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 326439908

Instrument : GC07

Begun : 11/01/06 11:48

Method : EPA 8015B, EPA 8021B

SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	305_001	X	IB			11/01/06 11:48	1.0	1	
002	305_002	X	IB			11/01/06 12:25	1.0	1	
003	305_003	ICAL	TFT/BFB 1			11/01/06 13:05	1.0	2	
004	305_004	ICAL	TFT/BFB 2			11/01/06 13:41	1.0	3	
005	305_005	ICAL	TFT/BFB 3			11/01/06 14:29	1.0	4	
006	305_006	ICAL	TFT/BFB 4			11/01/06 15:06	1.0	5	
007	305_007	ICAL	TFT/BFB 5			11/01/06 15:43	1.0	6	
008	305_008	X	IB			11/01/06 16:33	1.0	1	
009	305_009	X	IB			11/01/06 17:10	1.0	1	
010	305_010	X	ICAL			11/01/06 17:46	1.0	7 1	
011	305_011	ICAL	TVH 2			11/01/06 18:23	1.0	8 1	
012	305_012	ICAL	TVH 3			11/01/06 19:00	1.0	9 1	
013	305_013	ICAL	TVH 4			11/01/06 19:36	1.0	10 1	
014	305_014	ICAL	TVH 5			11/01/06 20:12	1.0	10 1	
015	305_015	X	IB			11/01/06 20:48	1.0	1	
016	305_016	X	TVH			11/01/06 21:24	1.0	11 1	
017	305_017	X	TVH			11/01/06 22:00	1.0	11 1	
018	305_018	X	IB			11/01/06 22:36	1.0	1	
019	305_019	X	CARBMARK			11/01/06 23:13	1.0	12 13 1	
020	305_020	X	IB			11/01/06 23:49	1.0	1	
021	305_021	X	IB			11/02/06 00:25	1.0	1	
022	305_022	ICAL	BTXE 1			11/02/06 01:01	1.0	14 1	
023	305_023	ICAL	MTBE 1			11/02/06 01:38	1.0	15 1	
024	305_024	ICAL	BTXE 2			11/02/06 02:14	1.0	15 1	
025	305_025	ICAL	BTXE 3			11/02/06 02:50	1.0	15 1	
026	305_026	ICAL	BTXE 4			11/02/06 03:26	1.0	16 1	
027	305_027	ICAL	BTXE 5			11/02/06 04:03	1.0	16 1	
028	305_028	ICAL	BTXE 6			11/02/06 04:39	1.0	16 1	
029	305_029	ICAL	MTBE 7			11/02/06 05:15	1.0	17 1	
030	305_030	X	IB			11/02/06 05:51	1.0	1	
031	305_031	ICV	MBTXE			11/02/06 06:28	1.0	18 1	
032	305_032	X	MBTXE			11/02/06 07:04	1.0	18 1	
033	305_033	X	IB			11/02/06 12:07	1.0	1	
034	305_034	ICAL	TVH 1			11/02/06 12:43	1.0	7 1	
035	305_035	ICV	TVH			11/02/06 13:40	1.0	19 1	

Analyst: MJM Date: 11/02/06 Reviewer: MMP Date: 11/03/06

Standards used: 1=S4579 2=S4684 3=S4685 4=S4686 5=S4687 6=S4688 7=S4091 8=S4090 9=S4089 10=S4088 11=S4479 12=S1645

13=S1646 14=S4341 15=S4340 16=S4339 17=S3732 18=S4311 19=S4693

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 326481636

Instrument : GC07 Begun : 11/30/06 11:16
 Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	334_001	X	IB			11/30/06 11:16	1.0	1	
002	334_002	X	IB			11/30/06 11:53	1.0	1	
003	334_003	ICAL	TFT/BFB 1			11/30/06 12:47	1.0	2	
004	334_004	ICAL	TFT/BFB 2			11/30/06 14:31	1.0	3	
005	334_005	ICAL	TFT/BFB 3			11/30/06 15:07	1.0	4	
006	334_006	ICAL	TFT/BFB 4			11/30/06 15:44	1.0	5	
007	334_007	ICAL	TFT/BFB 5			11/30/06 16:55	1.0	6	
008	334_008	X	IB			11/30/06 18:43	1.0	1	
009	334_009	X	IB			11/30/06 19:20	1.0	1	
010	334_010	ICAL	BTXE 1			11/30/06 19:55	1.0	7 1	
011	334_011	ICAL	MTBE 1			11/30/06 20:32	1.0	8 1	
012	334_012	ICAL	BTXE 2			11/30/06 21:07	1.0	8 1	
013	334_013	ICAL	BTXE 3			11/30/06 21:44	1.0	8 1	
014	334_014	ICAL	BTXE 4			11/30/06 22:21	1.0	9 1	
015	334_015	ICAL	BTXE 5			11/30/06 22:57	1.0	9 1	
016	334_016	ICAL	BTXE 6			11/30/06 23:34	1.0	9 1	
017	334_017	ICAL	MTBE 7			12/01/06 00:10	1.0	10 1	
018	334_018	X	IB			12/01/06 00:47	1.0	1	
019	334_019	ICV	MBTXE			12/01/06 01:23	1.0	11 1	
020	334_020	X	ICV			12/01/06 02:00	1.0	11 1	

Analyst: MJM Date: 12/01/06 Reviewer: MMP Date: 12/01/06

Standards used: 1=S4579 2=S4684 3=S4685 4=S4686 5=S4687 6=S4688 7=S4992 8=S4991 9=S4990 10=S4993 11=S4311

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 326490316

Instrument : GC07

Begun : 12/06/06 10:43

Method : EPA 8015B, EPA 8021B

SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	340_001	X	IB			12/06/06 10:43	1.0	1	
002	340_002	CCV/LCS	QC367287	Water	120117	12/06/06 11:19	1.0	2 1	
003	340_003	CCV/LCS	QC367288	Water	120117	12/06/06 11:56	1.0	3 1	
004	340_004	SAMPLE	191056-002	Soil	120010	12/06/06 12:55	20.0	1	
005	340_005	X	IB	Water	120117	12/06/06 14:09	1.0	1	
006	340_006	BLANK	QC367286	Water	120117	12/06/06 18:56	1.0	1	
007	340_007	MS	QC367289	Water	120117	12/06/06 19:32	1.0	3 1	
008	340_008	MSD	QC367290	Water	120117	12/06/06 20:08	1.0	3 1	
009	340_009	SAMPLE	191286-002	Water	120117	12/06/06 20:44	1.0	1	
010	340_010	SAMPLE	191286-005	Water	120117	12/06/06 21:21	1.0	1	
011	340_011	SAMPLE	191286-001	Water	120117	12/06/06 21:57	1.0	1	
012	340_012	SAMPLE	191286-003	Water	120117	12/06/06 22:33	1.0	1	
013	340_013	CCV	MBTXE		120117	12/06/06 23:09	1.0	2 1	
014	340_014	X	MBTXE		120117	12/06/06 23:45	1.0	2 1	
015	340_015	CCV	TVH		120117	12/07/06 00:21	1.0	3 1	
016	340_016	CCV	TVH		120117	12/07/06 00:58	1.0	3 1	
017	340_017	SAMPLE	191286-004	Water	120117	12/07/06 01:34	1.0	1	
018	340_018	SAMPLE	191286-006	Water	120117	12/07/06 02:11	1.0	1	
019	340_019	SAMPLE	191286-009	Water	120117	12/07/06 02:46	1.0	1	
020	340_020	SAMPLE	191286-010	Water	120117	12/07/06 03:23	1.0	1	
021	340_021	SAMPLE	191286-011	Water	120117	12/07/06 04:00	1.0	1	
022	340_022	MSS	191286-012	Water	120117	12/07/06 04:36	1.0	1	
023	340_023	SAMPLE	191286-013	Water	120117	12/07/06 05:13	5.0	1	
024	340_024	SAMPLE	191290-001	Water	120117	12/07/06 05:50	1.0	1	
025	340_025	SAMPLE	191294-007	Water	120117	12/07/06 06:26	1.0	1	
026	340_026	SAMPLE	191294-008	Water	120117	12/07/06 07:02	1.0	1	
027	340_027	CCV	TVH		120117	12/07/06 07:39	1.0	3 1	
028	340_028	CCV	TVH		120117	12/07/06 08:16	1.0	3 1	
029	340_029	SAMPLE	191294-009	Water	120117	12/07/06 08:52	1.0	1	
030	340_030	X	TVH		120117	12/07/06 10:07	1.0	3 1	
031	340_031	CCV	TVH		120117	12/07/06 11:02	1.0	3 1	

Analyst: JCP

Date: 12/07/06

Reviewer: _____

Date: _____

Standards used: 1=S4579 2=S4963 3=S4953

REPORTING SUMMARY FOR 191286 MBTXE Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
191286-001	Gasoline C7-C12	GC07	A	12/06/06 21:57
191286-001	Trifluorotoluene (FID)	GC07	A	12/06/06 21:57
191286-001	Bromofluorobenzene (FID)	GC07	A	12/06/06 21:57
191286-002	Gasoline C7-C12	GC07	A	12/06/06 20:44
191286-002	MTBE	GC07	C	12/06/06 20:44
191286-002	Benzene	GC07	C	12/06/06 20:44
191286-002	Toluene	GC07	C	12/06/06 20:44
191286-002	Ethylbenzene	GC07	C	12/06/06 20:44
191286-002	Trifluorotoluene (FID)	GC07	A	12/06/06 20:44
191286-002	Bromofluorobenzene (FID)	GC07	A	12/06/06 20:44
191286-002	Trifluorotoluene (PID)	GC07	C	12/06/06 20:44
191286-002	Bromofluorobenzene (PID)	GC07	C	12/06/06 20:44
191286-002	Xylene (total)	GC07	C	12/06/06 20:44
191286-003	Gasoline C7-C12	GC07	A	12/06/06 22:33
191286-003	Trifluorotoluene (FID)	GC07	A	12/06/06 22:33
191286-003	Bromofluorobenzene (FID)	GC07	A	12/06/06 22:33
191286-004	Gasoline C7-C12	GC07	A	12/07/06 01:34
191286-004	Trifluorotoluene (FID)	GC07	A	12/07/06 01:34
191286-004	Bromofluorobenzene (FID)	GC07	A	12/07/06 01:34
191286-005	Gasoline C7-C12	GC07	A	12/06/06 21:21
191286-005	MTBE	GC07	C	12/06/06 21:21
191286-005	Benzene	GC07	C	12/06/06 21:21
191286-005	Toluene	GC07	C	12/06/06 21:21
191286-005	Ethylbenzene	GC07	C	12/06/06 21:21
191286-005	Trifluorotoluene (FID)	GC07	A	12/06/06 21:21
191286-005	Bromofluorobenzene (FID)	GC07	A	12/06/06 21:21
191286-005	Trifluorotoluene (PID)	GC07	C	12/06/06 21:21
191286-005	Bromofluorobenzene (PID)	GC07	C	12/06/06 21:21
191286-005	Xylene (total)	GC07	C	12/06/06 21:21
191286-006	Gasoline C7-C12	GC07	A	12/07/06 02:11
191286-006	Trifluorotoluene (FID)	GC07	A	12/07/06 02:11
191286-006	Bromofluorobenzene (FID)	GC07	A	12/07/06 02:11
191286-009	Gasoline C7-C12	GC07	A	12/07/06 02:46
191286-009	Trifluorotoluene (FID)	GC07	A	12/07/06 02:46
191286-009	Bromofluorobenzene (FID)	GC07	A	12/07/06 02:46
191286-010	Gasoline C7-C12	GC07	A	12/07/06 03:23
191286-010	Trifluorotoluene (FID)	GC07	A	12/07/06 03:23
191286-010	Bromofluorobenzene (FID)	GC07	A	12/07/06 03:23
191286-011	Gasoline C7-C12	GC07	A	12/07/06 04:00
191286-011	Trifluorotoluene (FID)	GC07	A	12/07/06 04:00
191286-011	Bromofluorobenzene (FID)	GC07	A	12/07/06 04:00
191286-012	Gasoline C7-C12	GC07	A	12/07/06 04:36
191286-012	Trifluorotoluene (FID)	GC07	A	12/07/06 04:36
191286-012	Bromofluorobenzene (FID)	GC07	A	12/07/06 04:36

REPORTING SUMMARY FOR 191286 MBTXE Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
191286-013	Gasoline C7-C12	GC07	A	12/07/06 05:13
191286-013	Trifluorotoluene (FID)	GC07	A	12/07/06 05:13
191286-013	Bromofluorobenzene (FID)	GC07	A	12/07/06 05:13
QC367286	Gasoline C7-C12	GC07	A	12/06/06 18:56
QC367286	MTBE	GC07	C	12/06/06 18:56
QC367286	Benzene	GC07	C	12/06/06 18:56
QC367286	Toluene	GC07	C	12/06/06 18:56
QC367286	Ethylbenzene	GC07	C	12/06/06 18:56
QC367286	Trifluorotoluene (FID)	GC07	A	12/06/06 18:56
QC367286	Bromofluorobenzene (FID)	GC07	A	12/06/06 18:56
QC367286	Trifluorotoluene (PID)	GC07	C	12/06/06 18:56
QC367286	Bromofluorobenzene (PID)	GC07	C	12/06/06 18:56
QC367286	Xylene (total)	GC07	C	12/06/06 18:56
QC367287	MTBE	GC07	C	12/06/06 11:19
QC367287	Benzene	GC07	C	12/06/06 11:19
QC367287	Toluene	GC07	C	12/06/06 11:19
QC367287	Ethylbenzene	GC07	C	12/06/06 11:19
QC367287	Trifluorotoluene (PID)	GC07	C	12/06/06 11:19
QC367287	Bromofluorobenzene (PID)	GC07	C	12/06/06 11:19
QC367288	Gasoline C7-C12	GC07	A	12/06/06 11:56
QC367288	Trifluorotoluene (FID)	GC07	A	12/06/06 11:56
QC367288	Bromofluorobenzene (FID)	GC07	A	12/06/06 11:56
QC367289	Gasoline C7-C12	GC07	A	12/06/06 19:32
QC367289	Trifluorotoluene (FID)	GC07	A	12/06/06 19:32
QC367289	Bromofluorobenzene (FID)	GC07	A	12/06/06 19:32
QC367290	Gasoline C7-C12	GC07	A	12/06/06 20:08
QC367290	Trifluorotoluene (FID)	GC07	A	12/06/06 20:08
QC367290	Bromofluorobenzene (FID)	GC07	A	12/06/06 20:08

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 01/05/07

Analyte	Units	GC19 A	GC19 X	GC04 A	GC04 J	GC05 A	GC05 G	GC07 A
Gasoline C6-C10	ug/L	12	21	6.7	6.2	14	14	13
Gasoline C6-C12	ug/L	8.9	21	5.5	6.8	11	11	11
Gasoline C7-C12	ug/L	3.3	27	4.8	7.2	7.4	7.4	14
JP-4 C7-C12	ug/L	4.6	4.6	12	12			19
Gasoline C6-C8	ug/L							7.0
Gasoline C8-C10	ug/L							12
Trifluorotoluene (FID)	ug/L			3.9				9.8
Bromofluorobenzene (FID)	ug/L			5.2				7.5

Curtis & Tompkins Laboratories
MDL Summary for EPA 8021B Water
As of 01/05/07

Analyte	Units	GC19 B	GC19 C	GC19 Y	GC19 Z	GC04 B	GC04 C	GC04 K	GC04 L	GC05 B	GC05 C	GC05 H	GC05 I
MTBE	ug/L	0.84	0.85	0.49	0.18	0.48	0.26	0.45	0.83	0.30	0.62	0.73	0.74
Benzene	ug/L	0.24	0.21	0.073	0.033	0.15	0.032	0.094	0.16	0.034	0.057	0.028	0.25
Toluene	ug/L	0.15	0.14	0.13	0.025	0.11	0.098	0.14	0.11	0.048	0.15	0.074	0.20
Ethylbenzene	ug/L	0.12	0.11	0.14	0.024	0.087	0.061	0.038	0.12	0.036	0.17	0.024	0.22
m,p-Xylenes	ug/L	0.11	0.10	0.13	0.039	0.15	0.11	0.10	0.21	0.030	0.17	0.069	0.21
o-Xylene	ug/L	0.19	0.20	0.15	0.015	0.19	0.10	0.12	0.10	0.083	0.19	0.14	0.13

TPH-EXTRACTABLE HYDROCARBONS IN WATER

**Total Extractable Hydrocarbons**

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	12/05/06
Units:	ug/L	Received:	12/06/06
Diln Fac:	1.000	Prepared:	12/14/06
Batch#:	120392	Analyzed:	12/15/06

Field ID:	LF6GW103	Lab ID:	191286-001
Type:	SAMPLE	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24 (SGCU)	ND	50

Surrogate	%REC	Limits
Hexacosane (SGCU)	117	65-135

Field ID:	DUP1205062A	Lab ID:	191286-004
Type:	SAMPLE	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24 (SGCU)	ND	50

Surrogate	%REC	Limits
Hexacosane (SGCU)	84	65-135

Type:	BLANK	Cleanup Method:	EPA 3630C
Lab ID:	QC368414		

Analyte	Result	RL
Diesel C12-C24 (SGCU)	ND	50

Surrogate	%REC	Limits
Hexacosane (SGCU)	95	65-135

ND= Not Detected

RL= Reporting Limit

SGCU= Silica gel cleanup

Total Extractable Hydrocarbons

Lab #: 191286	Location: Presidio
Client: Treadwell & Rollo	Prep: EPA 3520C
Project#: 2893.04.51	Analysis: EPA 8015B
Matrix: Water	Sampled: 12/05/06
Units: ug/L	Received: 12/06/06
Diln Fac: 1.000	Prepared: 12/14/06
Batch#: 120392	

Field ID: 1065MW9A	Analyzed: 12/15/06
Type: SAMPLE	Cleanup Method: EPA 3630C
Lab ID: 191286-002	

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	101	65-135

Field ID: 231GW09	Analyzed: 12/15/06
Type: SAMPLE	Cleanup Method: EPA 3630C
Lab ID: 191286-003	

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	96	65-135

Field ID: DUP1205062C	Analyzed: 12/16/06
Type: SAMPLE	Cleanup Method: EPA 3630C
Lab ID: 191286-005	

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	100	65-135

Field ID: DUP1205062B	Analyzed: 12/16/06
Type: SAMPLE	Cleanup Method: EPA 3630C
Lab ID: 191286-006	

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	91	65-135



Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	12/05/06
Units:	ug/L	Received:	12/06/06
Diln Fac:	1.000	Prepared:	12/14/06
Batch#:	120392		

Field ID: BB1PZ100
Type: SAMPLE
Lab ID: 191286-007

Analyzed: 12/16/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	104	65-135

Field ID: BB1PZ101
Type: SAMPLE
Lab ID: 191286-008

Analyzed: 12/16/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	108	65-135

Field ID: 1065PZ1A
Type: SAMPLE
Lab ID: 191286-009

Analyzed: 12/16/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	98	65-135

Field ID: 1065PZ1B
Type: SAMPLE
Lab ID: 191286-010

Analyzed: 12/16/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	104	65-135



Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	12/05/06
Units:	ug/L	Received:	12/06/06
Diln Fac:	1.000	Prepared:	12/14/06
Batch#:	120392		

Field ID: DUP1205061A
Type: SAMPLE
Lab ID: 191286-011

Analyzed: 12/16/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	97	65-135

Field ID: 1213GW101
Type: SAMPLE
Lab ID: 191286-012

Analyzed: 12/15/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	86	65-135

Field ID: 1349MW100
Type: SAMPLE
Lab ID: 191286-013

Analyzed: 12/16/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	13,000	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	92	65-135

Type: BLANK
Lab ID: QC368414

Analyzed: 12/15/06
Cleanup Method: EPA 3630C

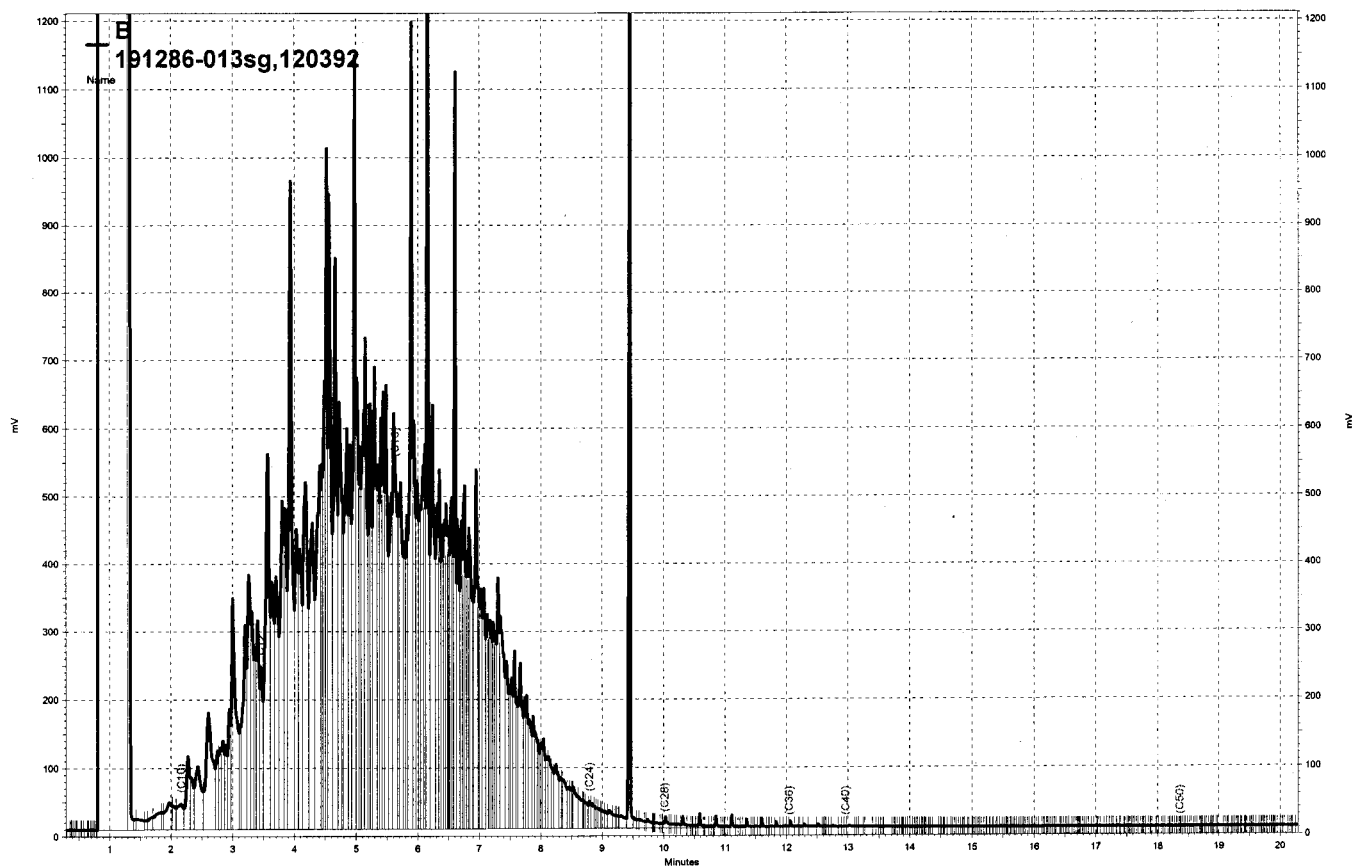
Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	95	65-135

ND= Not Detected
RL= Reporting Limit
Page 3 of 3

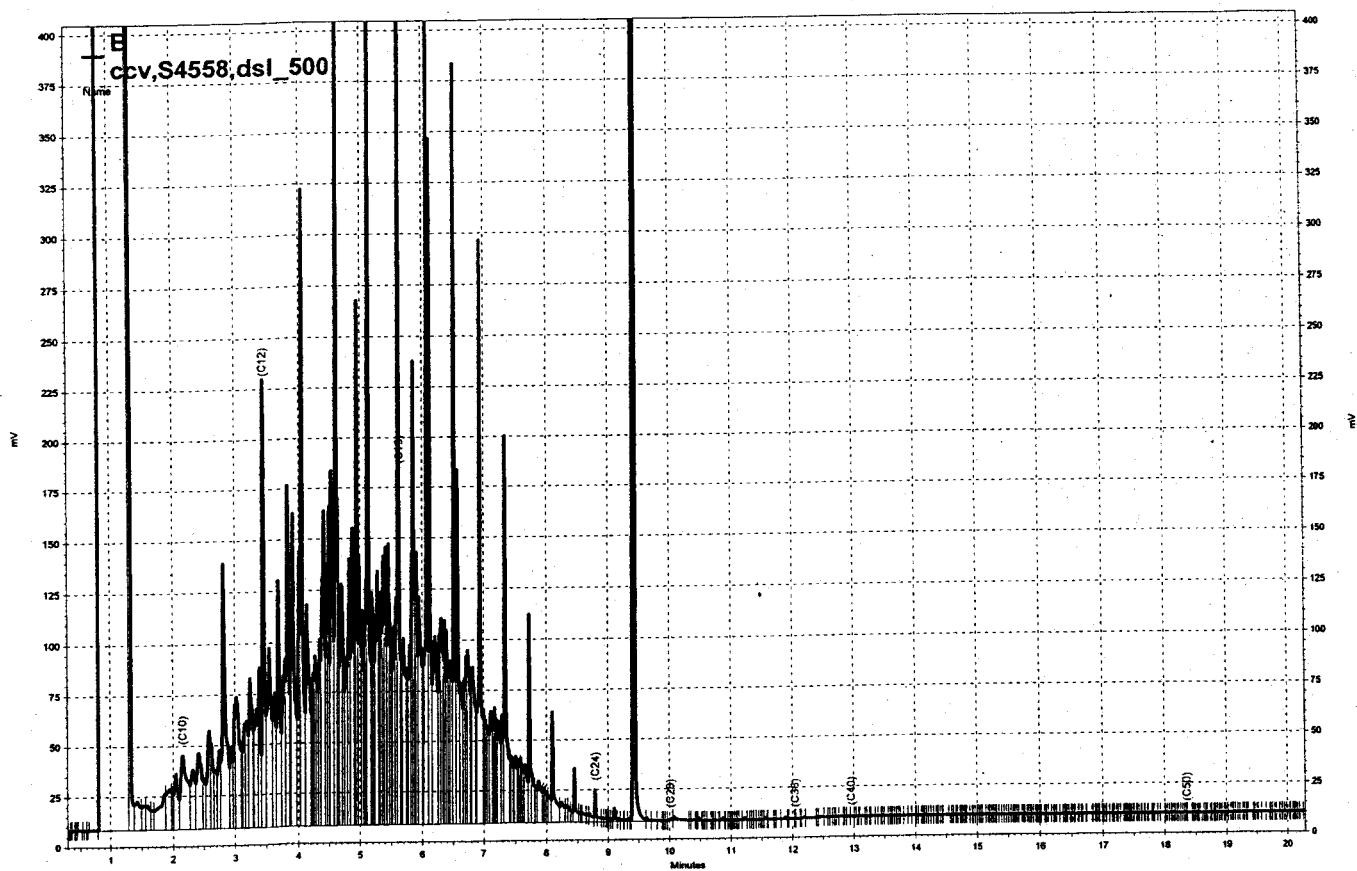
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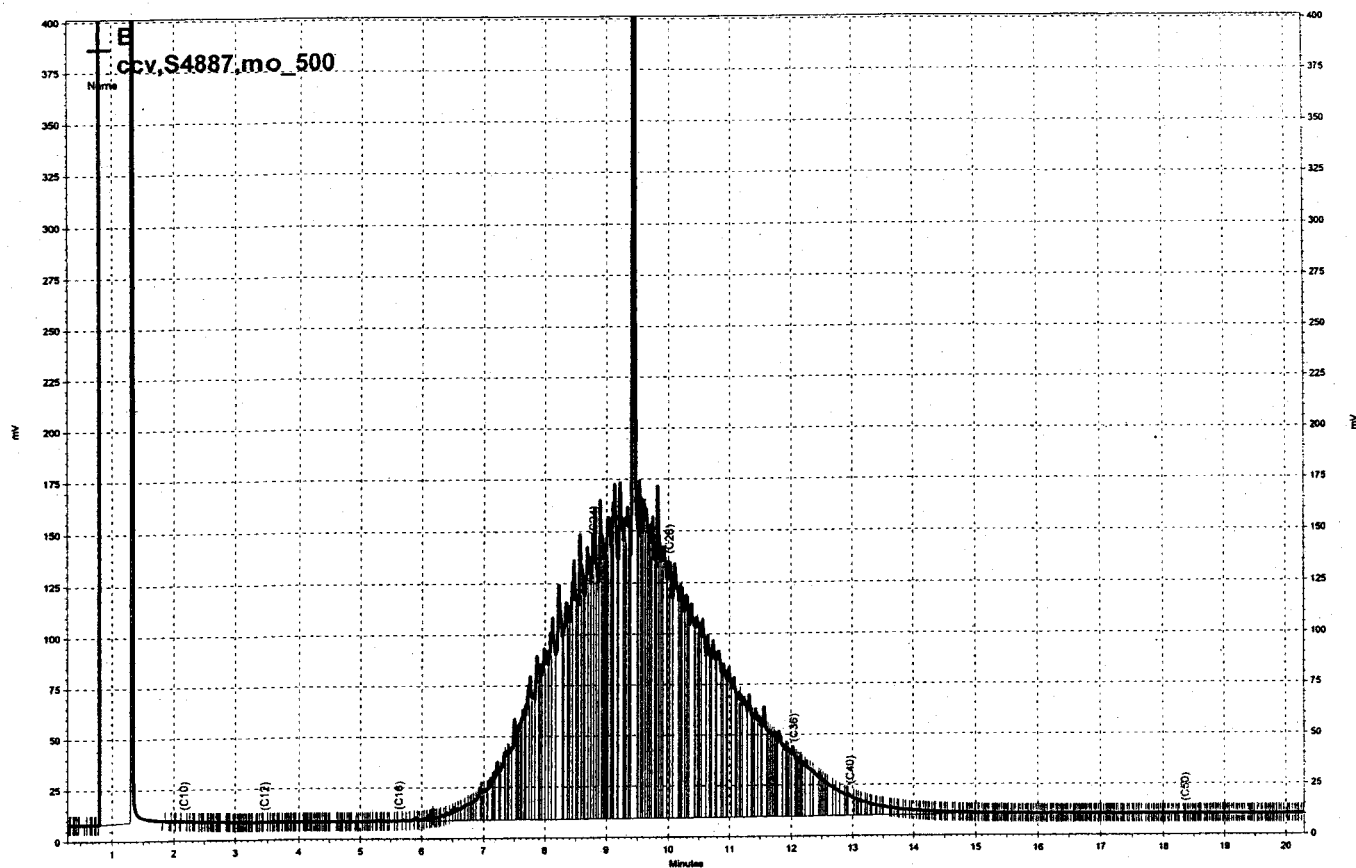
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1349 MW100



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Diesel



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Motor Oil

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC368415	Batch#:	120392
Matrix:	Water	Prepared:	12/14/06
Units:	ug/L	Analyzed:	12/15/06

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,496	100	65-135

Surrogate	%REC	Limits
Hexacosane	103	65-135



Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1213GW101	Batch#:	120392
MSS Lab ID:	191286-012	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Prepared:	12/14/06
Diln Fac:	1.000	Analyzed:	12/15/06

Type: MS
Lab ID: QC368416

Cleanup Method: EPA 3630C

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C12-C24	<20.34	2,500	1,704	68	65-135

Surrogate	%REC	Limits
Hexacosane	75	65-135

Type: MSD
Lab ID: QC368417

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,244	90	65-135	27	35

Surrogate	%REC	Limits
Hexacosane	94	65-135

RPD= Relative Percent Difference

: 00054

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191286 GCSV Water: EPA 8015B

Inst : GC15B Name : diesel Reviewer: MCH
 Calnum : 166428475001 Date : 24-OCT-2006 17:58
 Units : mg/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	297b010	166428475010	DSL_10	24-OCT-2006 17:58	S4539
L2	297b011	166428475011	DSL_100	24-OCT-2006 18:26	S4540
L3	297b012	166428475012	DSL_250	24-OCT-2006 18:53	S4541
L4	297b013	166428475013	DSL_500	24-OCT-2006 19:21	S4542
L5	297b014	166428475014	DSL_1000	24-OCT-2006 19:48	S4543
L6	297b015	166428475015	DSL_2500	24-OCT-2006 20:15	S4544
L7	297b016	166428475016	DSL_5000	24-OCT-2006 20:43	S4538

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ² %RSD	MnR ²	%RSD	Fig
Diesel C12-C24	48331	47665	48162	48149	47529	49750	48832	AVRG		2.07E-5		48345	2	0.995	20	

Instrument amount = a0 + response * a1 + response^2 * a2; AVRQ=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191286 GCSV Water
EPA 8015B

Inst : GC15B
Calnum : 166428475001

Name : diesel
Cal Date: 24-OCT-2006

ICV 166428475017 (297b017 24-OCT-2006) stds: S4615 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	48345	48592	500.0	502.5	mg/L	1	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191286 GCSV Water: EPA 8015B

Inst : GC15B Name : Mo
 Calnum : 166500697001 Date : 13-DEC-2006 17:24
 Units : mg/L X Axis : R
 Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	347b002	166500697002	MO_50	13-DEC-2006 17:24	S4754
L2	347b003	166500697003	MO_250	13-DEC-2006 17:52	S4755
L3	347b004	166500697004	MO_500	13-DEC-2006 18:20	S4756
L4	347b005	166500697005	MO_1000	13-DEC-2006 18:48	S4758
L5	347b006	166500697006	MO_5000	13-DEC-2006 19:15	S4753

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ² %RSD	MxRSD	Fig
Motor Oil C24-C36	30972	36587	37358	37030	30403	AVRG		2.90E-5		34470	10	0.995	20

166500697001

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191286 GCSV Water: EPA 8015B

Inst : GC15B Name : hexacosane Reviewer: MCH
 Calnum : 166428475003 Date : 25-OCT-2006 01:54
 Units : mg/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	297b027	166428475027	HEX_5	25-OCT-2006 01:54	S4639
L2	297b028	166428475028	HEX_10	25-OCT-2006 02:21	S4640
L3	297b029	166428475029	HEX_25	25-OCT-2006 02:48	S4641
L4	297b030	166428475030	HEX_50	25-OCT-2006 03:15	S4642
L5	297b031	166428475031	HEX_75	25-OCT-2006 03:43	S4643
L6	297b032	166428475032	HEX_100	25-OCT-2006 04:10	S4644
L7	297b033	166428475033	HEX_200	25-OCT-2006 04:37	S4645

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	%RSD	MnR ²	MxRSD	Flg
Hexacosane	56505	55011	56380	56689	57299	58362	58005	AVRG		1.76E-5		56893	2		0.995	20	

00050

CONTINUING CALIBRATION SUMMARY FOR 191286 GCSV Water
Curtis & Tompkins Laboratories

Analyte: Diesel C12-C24

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	OntAmt	Units	%D Max	%D Flags
						RF/CF	RF/CF					
GC15B	B	166503050016	15-DEC-2006 16:41	166428475001	24-OCT-2006	48345	52251	250.00	270.19	mg/L	8	15
GC15B	B	166503050030	16-DEC-2006 01:17	166428475001	24-OCT-2006	48345	49653	500.00	513.53	mg/L	3	15
GC15B	B	166503050046	16-DEC-2006 08:39	166428475001	24-OCT-2006	48345	52025	500.00	538.06	mg/L	8	15
GC15B	B	166503050055	16-DEC-2006 12:48	166428475001	24-OCT-2006	48345	50047	1000.0	1035.2	mg/L	4	15

CONTINUING CALIBRATION SUMMARY FOR 191286 GCSV Water
Curtis & Tompkins Laboratories

Analyte: Motor Oil C24-C36

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	OntAmt	Units	%D Max	%D Flags
						RF/CF	RF/CF					
GC15B	B	166503050017	15-DEC-2006 17:09	166500697001	13-DEC-2006	34470	37708	500.00	546.97	mg/L	9	15
GC15B	B	166503050031	16-DEC-2006 01:45	166500697001	13-DEC-2006	34470	37032	500.00	537.17	mg/L	7	15
GC15B	B	166503050047	16-DEC-2006 09:06	166500697001	13-DEC-2006	34470	37072	500.00	537.74	mg/L	8	15
GC15B	B	166503050056	16-DEC-2006 13:15	166500697001	13-DEC-2006	34470	36456	500.00	528.81	mg/L	6	15

CONTINUING CALIBRATION SUMMARY FOR 191286 GCSV Water
Curtis & Tompkins Laboratories

Analyte: Hexacosane

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	OntAmt	Units	%D Max	%D Flags
						RF/CF	RF/CF					
GC15B	B	166503050016	15-DEC-2006 16:41	166428475003	25-OCT-2006	56893	64309	50.000	56.517	mg/L	13	15
GC15B	B	166503050030	16-DEC-2006 01:17	166428475003	25-OCT-2006	56893	58857	50.000	51.726	mg/L	3	15
GC15B	B	166503050046	16-DEC-2006 08:39	166428475003	25-OCT-2006	56893	62280	50.000	54.734	mg/L	9	15
GC15B	B	166503050055	16-DEC-2006 12:48	166428475003	25-OCT-2006	56893	59797	50.000	52.552	mg/L	5	15

SEQUENCE SUMMARY FOR 191286 GCSV Water Curtis & Tompkins Laboratories

Sequence: 166428475 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 24-OCT-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Std	Used	>LR
001	297b001	X	IB			24-OCT-2006	13:15	1.0							
002	297b002	X	IB			24-OCT-2006	13:44	1.0							
003	297b003	X	IB			24-OCT-2006	14:12	1.0							
004	297b004	X	IB			24-OCT-2006	14:39	1.0							
005	297b005	X	CM			24-OCT-2006	15:38	1.0					1		
006	297b006	CCV	DSL_250			24-OCT-2006	16:05	1.0	7	3			2		
007	297b007	CCV	MO_500			24-OCT-2006	16:33	1.0	2	3			3		
008	297b008	CCV	JET_250			24-OCT-2006	17:00	1.0	1	3			4		
009	297b009	X	IB			24-OCT-2006	17:31	1.0							
010	297b010	ICAL	DSL_10			24-OCT-2006	17:58	1.0					5		
011	297b011	ICAL	DSL_100			24-OCT-2006	18:26	1.0					6		
012	297b012	ICAL	DSL_250			24-OCT-2006	18:53	1.0					7		
013	297b013	ICAL	DSL_500			24-OCT-2006	19:21	1.0					8		
014	297b014	ICAL	DSL_1000			24-OCT-2006	19:48	1.0					9		
015	297b015	ICAL	DSL_2500			24-OCT-2006	20:15	1.0					10		
016	297b016	ICAL	DSL_5000			24-OCT-2006	20:43	1.0					11		
017	297b017	ICV	DSL_500			24-OCT-2006	21:15	10.0		3			12		
018	297b018	CCV	MO_500			24-OCT-2006	21:43	1.0	6	3			3		
019	297b019	X	IB			24-OCT-2006	22:13	1.0							
020	297b020	ICAL	MO_50			24-OCT-2006	22:40	1.0					13		
021	297b021	ICAL	MOL_250			24-OCT-2006	23:08	1.0					14		
022	297b022	ICAL	MO_500			24-OCT-2006	23:35	1.0					15		
023	297b023	ICAL	MO_1000			25-OCT-2006	00:03	1.0					16		
024	297b024	ICAL	MO_2500			25-OCT-2006	00:30	1.0					17		
025	297b025	ICAL	MO_5000			25-OCT-2006	00:58	1.0					18		
026	297b026	X	IB			25-OCT-2006	01:26	1.0							
027	297b027	ICAL	HEX_5			25-OCT-2006	01:54	1.0					19		
028	297b028	ICAL	HEX_10			25-OCT-2006	02:21	1.0					20		
029	297b029	ICAL	HEX_25			25-OCT-2006	02:48	1.0					21		
030	297b030	ICAL	HEX_50			25-OCT-2006	03:15	1.0					22		

Std used: 1=S4049 2=S4386 3=S4408 4=S4560 5=S4539 6=S4540 7=S4541 8=S4542 9=S4543 10=S4544 11=S4538 12=S4615 13=S3326 14=S3327 15=S3328 16=S3329 17=S3330 18=S3325 19=S4639
20=S4640 21=S4641 22=S4642 23=S4643 24=S4644 25=S4645 26=S3614 27=S3615 28=S3616 29=S3617 30=S3618 31=S3619 32=S3526

SEQUENCE SUMMARY FOR 191286 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 166428475 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 24-OCT-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Std	Used	>LR
031	297b031	ICAL	HEX 75			25-OCT-2006	03:43	1.0					23		
032	297b032	ICAL	HEX 100			25-OCT-2006	04:10	1.0					24		
033	297b033	ICAL	HEX 200			25-OCT-2006	04:37	1.0					25		
034	297b034	X	IB			25-OCT-2006	05:05	1.0							
035	297b035	ICAL	JET 10			25-OCT-2006	05:33	1.0					26		
036	297b036	ICAL	JET 100			25-OCT-2006	06:00	1.0					27		
037	297b037	ICAL	JET 500			25-OCT-2006	06:28	1.0					28		
038	297b038	ICAL	JET 1000			25-OCT-2006	06:55	1.0					29		
039	297b039	ICAL	JET 2000			25-OCT-2006	07:23	1.0					30		
040	297b040	ICAL	JET 3000			25-OCT-2006	07:50	1.0					31		
041	297b041	ICAL	JET 5000			25-OCT-2006	08:18	1.0					32		
042	297b042	X	IB			25-OCT-2006	08:45	1.0							

Std used: 1=S4049 2=S4386 3=S4408 4=S4560 5=S4539 6=S4540 7=S4541 8=S4542 9=S4543 10=S4544 11=S4538 12=S4615 13=S3326 14=S3327 15=S3328 16=S3329 17=S3330 18=S3325 19=S4639
20=S4640 21=S4641 22=S4642 23=S4643 24=S4644 25=S4645 26=S3614 27=S3615 28=S3616 29=S3617 30=S3618 31=S3619 32=S3526

SEQUENCE SUMMARY FOR 191286 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 166500697 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 13-DEC-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
001	347b001	X	IB			13-DEC-2006	16:57	1.0				1		
002	347b002	ICAL	MO_50			13-DEC-2006	17:24	1.0				2		
003	347b003	ICAL	MO_250			13-DEC-2006	17:52	1.0				3		
004	347b004	ICAL	MO_500			13-DEC-2006	18:20	1.0				4		
005	347b005	ICAL	MO_1000			13-DEC-2006	18:48	1.0				5		
006	347b006	ICAL	MO_5000			13-DEC-2006	19:15	1.0				6		
007	347b007	CCV	MO_500			13-DEC-2006	19:57	1.0		2		3		
008	347b008	CCV	DSL_500			13-DEC-2006	20:24	1.0				7		
009	347b009	BLANK	QC367007 S	120048	Soil	13-DEC-2006	20:52	1.0		0.09982	9			
010	347b010	LCS	QC367008 S	120048	Soil	13-DEC-2006	21:20	1.0		0.09982				
011	347b011	SAMPLE	191106-005 S	120048	Soil	13-DEC-2006	21:47	1.0		0.09974				
012	347b012	SAMPLE	191106-006 S	120048	Soil	13-DEC-2006	22:15	1.0		0.0998				
013	347b013	SAMPLE	191106-007 S	120048	Soil	13-DEC-2006	22:42	1.0		0.09994				
014	347b014	SAMPLE	191106-004 S	120048	Soil	13-DEC-2006	23:10	1.0		0.09996				
015	347b015	SAMPLE	191106-002 S	120048	Soil	13-DEC-2006	23:38	1.0		0.09998				
016	347b016	SAMPLE	191106-003 S	120048	Soil	14-DEC-2006	00:05	1.0		0.09994				
017	347b017	X	IB			14-DEC-2006	00:33	1.0						
018	347b018	MS	QC368074	120310	Soil	14-DEC-2006	01:00	1.0		0.998				
019	347b019	MSD	QC368075	120310	Soil	14-DEC-2006	01:28	1.0		1.016				
020	347b020	CCV	DSL_1000			14-DEC-2006	01:56	1.0		1.0		8		
021	347b021	CCV	MO_500			14-DEC-2006	02:23	1.0		1.0		6		
022	347b022	X	CCV			14-DEC-2006	02:50	1.0				8		
023	347b023	X	CCV			14-DEC-2006	03:18	1.0				6		
024	347b024	SAMPLE	191333-007 S	120188	Soil	14-DEC-2006	03:45	1.0		0.09998				
025	347b025	SAMPLE	191333-008 S	120188	Soil	14-DEC-2006	04:13	1.0		0.09976				
026	347b026	SAMPLE	191327-001 S	120297	Water	14-DEC-2006	04:40	1.0		0.005				
027	347b027	SAMPLE	191327-002 S	120297	Water	14-DEC-2006	05:08	1.0		0.005				
028	347b028	SAMPLE	191372-001 S	120297	Water	14-DEC-2006	05:36	1.0		0.005				
029	347b029	X	IB			14-DEC-2006	06:04	1.0						
030	347b030	SAMPLE	191372-002 S	120297	Water	14-DEC-2006	06:31	1.0		0.005				
031	347b031	SAMPLE	191372-003 S	120297	Water	14-DEC-2006	06:59	1.0		0.005				

Stds used: 1=S4754 2=S4755 3=S4756 4=S4758 5=S4753 6=S4887 7=S4558 8=S4559 9=S4556

SEQUENCE SUMMARY FOR 191286 GCSV Water Curtis & Tompkins Laboratories

Sequence: 166500697 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 13-DEC-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds	Used	>LR
032	347b032	SAMPLE	191372-004	S	120297	Water	14-DEC-2006	07:26	1.0	0.005	3			
033	347b033	SAMPLE	191372-005	S	120297	Water	14-DEC-2006	07:54	1.0	0.005	3			
034	347b034	CCV	DSL_250				14-DEC-2006	08:22	1.0	1.0	3	9		
035	347b035	CCV	MO_500				14-DEC-2006	08:49	1.0	1.0	3	6		

Stds used: 1=S4754 2=S4755 3=S4756 4=S4758 5=S4753 6=S4887 7=S4558 8=S4559 9=S4556

SEQUENCE SUMMARY FOR 191286 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 166503050 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 15-DEC-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
001	349b001	X	PRIMER			15-DEC-2006	08:10	1.0						
002	349b002	X	IB			15-DEC-2006	08:37	1.0						
003	349b003	CCV	DSL_500			15-DEC-2006	09:05	1.0	1.0		3	1		
004	349b004	CCV	MO_500			15-DEC-2006	09:33	1.0	1.0	2	3	2		
005	349b005	SAMPLE	191422-002	120331	Water	15-DEC-2006	10:25	1.0	0.005		3			
006	349b006	SAMPLE	191422-001	120331	Water	15-DEC-2006	10:53	1.0	0.005		3			
007	349b007	SAMPLE	191422-003	120331	Water	15-DEC-2006	11:21	1.0	0.005		3			
008	349b008	SAMPLE	191425-001 S	120331	Water	15-DEC-2006	11:49	1.0	0.005		3			
009	349b009	SAMPLE	191425-002	120331	Water	15-DEC-2006	12:17	3.0	0.005		3			
010	349b010	X	IB			15-DEC-2006	12:45	1.0						
011	349b011	SAMPLE	191388-049	120331	Water	15-DEC-2006	13:13	1.0	0.005		3			
012	349b012	SAMPLE	191388-065	120331	Water	15-DEC-2006	13:41	1.0	0.005		3			
013	349b013	SAMPLE	191388-025	120331	Water	15-DEC-2006	14:09	1.0	0.005		3			
014	349b014	SAMPLE	191388-027	120331	Water	15-DEC-2006	14:38	1.0	0.005		3			
015	349b015	X	IB			15-DEC-2006	16:13	1.0						
016	349b016	CCV	DSL_250			15-DEC-2006	16:41	1.0	1.0		3	3		
017	349b017	CCV	MO_500			15-DEC-2006	17:09	1.0	1.0	2	3	2		
018	349b018	BLANK	QC368414 S	120392	Water	15-DEC-2006	19:44	1.0	0.005		3			
019	349b019	LCS	QC368415 S	120392	Water	15-DEC-2006	20:12	1.0	0.005		3			
020	349b020	MSS	191286-012 S	120392	Water	15-DEC-2006	20:40	1.0	0.005	8	3			
021	349b021	MS	QC368416 S	120392	Water	15-DEC-2006	21:07	1.0	0.005		3			
022	349b022	MSD	QC368417 S	120392	Water	15-DEC-2006	21:35	1.0	0.005		3			
023	349b023	SAMPLE	191286-001 S	120392	Water	15-DEC-2006	22:03	1.0	0.005		3			
024	349b024	X	IB			15-DEC-2006	22:31	1.0						
025	349b025	SAMPLE	191286-002 S	120392	Water	15-DEC-2006	22:58	1.0	0.005		3			
026	349b026	SAMPLE	191286-003 S	120392	Water	15-DEC-2006	23:26	1.0	0.005		3			
027	349b027	SAMPLE	191286-004 S	120392	Water	15-DEC-2006	23:54	1.0	0.005		3			
028	349b028	SAMPLE	191286-005 S	120392	Water	16-DEC-2006	00:22	1.0	0.005		3			
029	349b029	X	IB			16-DEC-2006	00:49	1.0						
030	349b030	CCV	DSL_500			16-DEC-2006	01:17	1.0	1.0		3	1		
031	349b031	CCV	MO_500			16-DEC-2006	01:45	1.0	1.0	2	3	2		

Stds used: 1=S4558 2=S4887 3=S4556 4=S4559

SEQUENCE SUMMARY FOR 191286 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 166503050 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 15-DEC-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Std	Used	>LR
032	349b032	X	CV			16-DEC-2006	02:12	1.0				1		
033	349b033	X	CCV			16-DEC-2006	02:40	1.0				2		
034	349b034	SAMPLE	191286-006	S	120392	Water		0.005			3			
035	349b035	SAMPLE	191315-005	S	120392	Water		0.005			3			
036	349b036	SAMPLE	191315-004	S	120392	Water		0.005			3			
037	349b037	SAMPLE	191315-003	S	120392	Water		0.005			3			
038	349b038	SAMPLE	191315-002	S	120392	Water		0.005			3			
039	349b039	SAMPLE	191315-001	S	120392	Water		0.005			3			
040	349b040	X	IB			16-DEC-2006	05:53	1.0						
041	349b041	SAMPLE	191290-001	S	120392	Water		0.005			3			
042	349b042	SAMPLE	191286-013	S	120392	Water		0.005			3			
043	349b043	SAMPLE	191286-010	S	120392	Water		0.005			3			
044	349b044	SAMPLE	191312-001	S	120392	Water		0.005		2	1	3		16:BUNKC:=41416.0
045	349b045	X	IB			16-DEC-2006	08:11	1.0						
046	349b046	CCV	DSL_500			16-DEC-2006	08:39	1.0			3	1		
047	349b047	CCV	MO_500			16-DEC-2006	09:06	1.0		2	3	2		
048	349b048	X	CV			16-DEC-2006	09:34	1.0				1		
049	349b049	X	CCV			16-DEC-2006	10:02	1.0				2		
050	349b050	SAMPLE	191286-011	S	120392	Water		0.005			3			
051	349b051	SAMPLE	191286-009	S	120392	Water		0.005			3			
052	349b052	SAMPLE	191286-008	S	120392	Water		0.005			3			
053	349b053	SAMPLE	191286-007	S	120392	Water		0.005			3			
054	349b054	X	IB			16-DEC-2006	12:20	1.0						
055	349b055	CCV	DSL_1000			16-DEC-2006	12:48	1.0			3	4		
056	349b056	CCV	MO_500			16-DEC-2006	13:15	1.0		1	3	2		
057	349b057	X	CCV			16-DEC-2006	13:43	1.0				4		
058	349b058	X	CCV			16-DEC-2006	14:11	1.0				2		

Std used: 1=S4558 2=S4887 3=S4556 4=S4559

REPORTING SUMMARY FOR 191286 GCSV Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	D S L :	M O : 2	H X C S
191286-001	GC15B	12/15/06 22:03	1.0	+		+
191286-002	GC15B	12/15/06 22:58	1.0	+	+	+
191286-003	GC15B	12/15/06 23:26	1.0	+	+	+
191286-004	GC15B	12/15/06 23:54	1.0	+		+
191286-005	GC15B	12/16/06 00:22	1.0	+	+	+
191286-006	GC15B	12/16/06 03:08	1.0	+	+	+
191286-007	GC15B	12/16/06 11:52	1.0	+	+	+
191286-008	GC15B	12/16/06 11:24	1.0	+	+	+
191286-009	GC15B	12/16/06 10:57	1.0	+	+	+
191286-010	GC15B	12/16/06 07:16	1.0	+	+	+
191286-011	GC15B	12/16/06 10:30	1.0	+	+	+
191286-012	GC15B	12/15/06 20:40	1.0	+	+	+
191286-013	GC15B	12/16/06 06:49	1.0	+	+	+
QC368414	GC15B	12/15/06 19:44	1.0	+	+	+
QC368415	GC15B	12/15/06 20:12	1.0	+		+
QC368416	GC15B	12/15/06 21:07	1.0	+		+
QC368417	GC15B	12/15/06 21:35	1.0	+		+

Curtis & Tompkins Laboratories Sample Preparation Summary

15-DEC-2006 18:18

Batch Number : 120392
 Date Extracted: 14-DEC-2006
 Extracted by : Jessie O'Brien Mee
 Prep Method : 3520C

Analysis : N/A
 Bgroup : TEH
 Units : mL
 Clean-up :

Spike #1 ID : S5034A
 Spike #2 ID : S4805E
 Spike #3 ID :
 SOP Version : TEH50LL rv10

Sample	Type	Client	Matrix	Init W/V	Units	Final Prep Vol	D.F.	Clean pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
191286-001		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
191286-002		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	TEHM	3630C	
191286-003		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	TEHM	3630C	
191286-004		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	TEH	3630C	
191286-005		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	TEHM	3630C	
191286-006		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	TEHM	3630C	
191286-007		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	TEHM	3630C	
191286-008		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	TEHM	3630C	
191286-009		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	TEHM	3630C	
191286-010		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	TEHM	3630C	
191286-011		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	TEHM	3630C	
191286-012		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	TEHM	3630C	
191286-013		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	TEHM	3630C	
191290-001		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	TEHM	3630C	
191312-001		Blasland, Bouck & Lee	Water	500	mL	2.5	0.005000	1	7	.5	0	TEHM	3630C	
191315-001		Blasland, Bouck & Lee	Water	500	mL	2.5	0.005000	1	7	.5	0	TEHM	3630C	
191315-002		Blasland, Bouck & Lee	Water	500	mL	2.5	0.005000	1	7	.5	0	TEHM	3630C	
191315-003		Blasland, Bouck & Lee	Water	500	mL	2.5	0.005000	1	7	.5	0	TEHM	3630C	
191315-004		Blasland, Bouck & Lee	Water	500	mL	2.5	0.005000	1	7	.5	0	TEHM	3630C	
191315-005		Blasland, Bouck & Lee	Water	500	mL	2.5	0.005000	1	10	.5	0	TEHM	3630C	
QC368414	BLANK		Water	500	mL	2.5	0.005000	1	.5	0	0	TEH	3630C	
QC368415	LCS		Water	500	mL	2.5	0.005000	1	.5	.5	.5	TEH	3630C	
QC368416	MS	of 191286-012	Water	500	mL	2.5	0.005000	1	7	.5	.5	TEH	3630C	
QC368417	MSD	of 191286-012	Water	500	mL	2.5	0.005000	1	7	.5	.5	TEH	3630C	

Prep Chemist: Jessie O'Brien Mee Reviewed By: Ch Date: 12/15/06
 Relinquished By: Ch Received By: Ch Date: 12/18/06

000000

LIMS Batch No: 120392
 LIMS Analysis: TEH/M
 Extracted by: JOM
 Date Extracted: 14 Dec 06

Extraction Method:
☐ mod. EPA 3510 sep. funnel
☒ mod. EPA 3520 cont. L/L
☐ _____

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Cleanup Method (if needed):
☒ EPA 3630 Silica Gel
☐ Other _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
191286-001 I	500	7	2.5	X	
02 G					
03 J					
04 I					
05 G					
06 J					
07 E					
08 F					
09 J					
10 I					
11 J					
12 Z					MSS
13 I					
191290-001 M					
191312-001 F					
191315-001 E					some product in H ₂ O
02 G					
03 E					
04 G					
05 G					
MB 303 414		10			
LCS		NA			
MS		7			
MSD		7			
					191286-012 AA

JOM 12/14/06

0.5 mL of TEH_SURR was added to all samples

0.5 mL of TEH_SP was added to all spikes

pH of all samples adjusted to pH ≤ 2 with H₂SO₄☒ Samples were continually extracted about 450 mL of CH₂Cl₂φ HPLC H₂O

Extraction Start Time:

Extraction End Time:

☐ Samples were extracted 3 times with 60 mL of CH₂Cl₂Extracts filtered through baked, CH₂Cl₂-rinsed granular Na₂SO₄

Concentrated to volumes as noted above

Mfg & Lot# / LIMS # / Time Date/ Initials

S5034A	JOM 12/14/06
S4805E	
FS054522	
EM46305 / JTPC31E23	
1710	
1110	SFL 12/15/06
N/A	
EM46111128	

Jessie Mee 12/14/06
 Extraction Chemist Date

Continued from Page
 Continued on Page

12/5/06
 Reviewed by : 0007

Prep Chemist: JXMBenchbook # **BK 2423**Cleanup Date: 12 Dec 06

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Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
191286-01	120392	1.0	1.0	
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				USS
✓ 13				
191290-01				
15 191312-01				
191315-01				
02				
03				
04				
✓ 05				
MB QC368414				
LCS ↓ 15				
MS ↓ 16				
MSD ↓ 17				
25				
30				

☐ Extracts were cleaned up using C&T assembled g columns

☒ Extracts were cleaned up using 1.0 g cartridges
Extracts were eluted with 4.0 mL CH₂Cl₂

Concentrated to volumes as noted above

Mfg & Lot # / Time / Program

Initials / Date

NA	JXM 12/15/06
SP 8111	↓
CM 46305	↓

JXM 12/15/06
Extraction Chemist / Date

Continued from page
Continued on page

Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 01/05/07

Analyte	Units	GC11A	GC13B B	GC15B	GC17A	GC14B B
JP-5 C10-C16	ug/L	17	16	7.9	5.4	
Jet Fuel A C10-C16	ug/L	14	30	24	33	
Diesel C10-C28	ug/L	18	11	22	37	30
Diesel C10-C24	ug/L	21	15	18	33	26
Diesel C12-C22	ug/L	19	17	20	25	22
Diesel C12-C24	ug/L	20	13	20	33	23
Diesel C12-C28	ug/L		31			
Diesel C12-C32	ug/L	22	14	25	23	36
Diesel C12-C36	ug/L	13	17			
Diesel C10-C20	ug/L		16	13	19	29
Diesel C10-C22	ug/L	21	18	19	27	26
Motor Oil C22-C36	ug/L	120	110	120	140	84
Motor Oil C28-C40	ug/L	67	68	63	78	59
Motor Oil C28-C36	ug/L	64	74	64	69	53
Motor Oil C24-C36	ug/L	150	140	140	170	110
Motor Oil C20-C36	ug/L	120	99	110	130	75
Motor Oil C22-C32	ug/L	140	130	21	160	94
Hexacosane	ug/L	4.5	16	13	3.1	17

Volatile Organics Water

Purgeable Organics by GC/MS

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	231GW09	Batch#:	120329
Lab ID:	191286-003	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Analyzed:	12/13/06
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.08
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	112	80-120
1,2-Dichloroethane-d4	106	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	102	86-115

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

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Purgeable Organics by GC/MS

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DUP1205062B	Batch#:	120329
Lab ID:	191286-006	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Analyzed:	12/13/06
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.08
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	112	80-120
1,2-Dichloroethane-d4	104	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	102	86-115

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1065PZ1A	Batch#:	120366
Lab ID:	191286-009	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Analyzed:	12/14/06
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.08
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	0.9	0.5	

Surrogate	%REC	Limits
Dibromofluoromethane	113	80-120
1,2-Dichloroethane-d4	102	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	102	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1065PZ1B	Batch#:	120366
Lab ID:	191286-010	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Analyzed:	12/14/06
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.08
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-120
1,2-Dichloroethane-d4	102	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	101	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit



Purgeable Organics by GC/MS

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DUP1205061A	Batch#:	120366
Lab ID:	191286-011	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Analyzed:	12/14/06
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.08
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	112	80-120
1,2-Dichloroethane-d4	103	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	100	86-115

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Purgeable Organics by GC/MS

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1213GW101	Batch#:	120314
Lab ID:	191286-012	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Analyzed:	12/13/06
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	0.8	0.5	
Benzene	1.3	0.5	0.1
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	113	80-120
1,2-Dichloroethane-d4	108	76-114
Toluene-d8	107	88-110
Bromofluorobenzene	101	86-115

ND= Not Detected
 RL= Reporting Limit
 MDL= Method Detection Limit
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Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1349MW100	Batch#:	120366
Lab ID:	191286-013	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Analyzed:	12/14/06
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	18	0.5	0.08
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	2.3	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	113	80-120
1,2-Dichloroethane-d4	103	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	100	86-115

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

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Purgeable Organics by GC/MS

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	TB1205061A	Batch#:	120404
Lab ID:	191286-016	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Analyzed:	12/15/06
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	110	80-120
1,2-Dichloroethane-d4	110	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	113	86-115

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit



Batch QC Report

Purgeable Organics by GC/MS

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC368098	Batch#:	120314
Matrix:	Water	Analyzed:	12/13/06
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-120
1,2-Dichloroethane-d4	101	76-114
Toluene-d8	104	88-110
Bromofluorobenzene	102	86-115

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC368160	Batch#:	120329
Matrix:	Water	Analyzed:	12/13/06
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.08
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	108	80-120
1,2-Dichloroethane-d4	101	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	103	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit



Batch QC Report

Purgeable Organics by GC/MS

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC368293	Batch#:	120366
Matrix:	Water	Analyzed:	12/14/06
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.08
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	110	80-120
1,2-Dichloroethane-d4	102	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	102	86-115

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC368469	Batch#:	120404
Matrix:	Water	Analyzed:	12/15/06
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-120
1,2-Dichloroethane-d4	108	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	110	86-115

ND= Not Detected
RL= Reporting Limit
MDL= Method Detection Limit

Batch QC Report
Purgeable Organics by GC/MS

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC368097	Batch#:	120314
Matrix:	Water	Analyzed:	12/13/06
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	23.17	93	65-135
Benzene	25.00	25.61	102	65-135
Trichloroethene	25.00	25.58	102	65-135
Toluene	25.00	25.31	101	65-135
Chlorobenzene	25.00	27.03	108	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	93	80-120
1,2-Dichloroethane-d4	91	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	97	86-115

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC368161	Batch#:	120329
Matrix:	Water	Analyzed:	12/13/06
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	25.83	103	65-135
Benzene	25.00	24.83	99	65-135
Trichloroethene	25.00	25.19	101	65-135
Toluene	25.00	25.90	104	65-135
Chlorobenzene	25.00	25.38	102	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-120
1,2-Dichloroethane-d4	101	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	99	86-115

Batch QC Report
Purgeable Organics by GC/MS

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC368294	Batch#:	120366
Matrix:	Water	Analyzed:	12/14/06
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	24.33	97	65-135
Benzene	25.00	24.88	100	65-135
Trichloroethene	25.00	24.50	98	65-135
Toluene	25.00	25.72	103	65-135
Chlorobenzene	25.00	25.14	101	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-120
1,2-Dichloroethane-d4	102	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	100	86-115

Batch QC Report
Purgeable Organics by GC/MS

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	120404
Units:	ug/L	Analyzed:	12/15/06
Diln Fac:	1.000		

Type: BS Lab ID: QC368467

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	26.90	108	65-135
Benzene	25.00	22.28	89	65-135
Trichloroethene	25.00	21.63	87	65-135
Toluene	25.00	25.03	100	65-135
Chlorobenzene	25.00	25.38	102	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	108	80-120
1,2-Dichloroethane-d4	110	76-114
Toluene-d8	104	88-110
Bromofluorobenzene	104	86-115

Type: BSD Lab ID: QC368468

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	28.73	115	65-135	7	35
Benzene	25.00	21.70	87	65-135	3	35
Trichloroethene	25.00	22.04	88	65-135	2	35
Toluene	25.00	24.87	99	65-135	1	35
Chlorobenzene	25.00	24.24	97	65-135	5	35

Surrogate	%REC	Limits
Dibromofluoromethane	107	80-120
1,2-Dichloroethane-d4	106	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	106	86-115

RPD= Relative Percent Difference

Batch QC Report
Purgeable Organics by GC/MS

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1213GW101	Batch#:	120314
MSS Lab ID:	191286-012	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Analyzed:	12/13/06
Diln Fac:	1.000		

Type: MS Lab ID: QC368142

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.2650	25.00	24.47	98	65-135
Benzene	1.298	25.00	28.25	108	65-135
Trichloroethene	<0.2051	25.00	26.30	105	65-135
Toluene	<0.08280	25.00	26.87	107	65-135
Chlorobenzene	<0.1004	25.00	28.04	112	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	110	80-120
1,2-Dichloroethane-d4	99	76-114
Toluene-d8	105	88-110
Bromofluorobenzene	104	86-115

Type: MSD Lab ID: QC368143

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	24.45	98	65-135	0	35
Benzene	25.00	28.01	107	65-135	1	35
Trichloroethene	25.00	26.10	104	65-135	1	35
Toluene	25.00	26.13	105	65-135	3	35
Chlorobenzene	25.00	27.13	109	65-135	3	35

Surrogate	%REC	Limits
Dibromofluoromethane	108	80-120
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	105	88-110
Bromofluorobenzene	103	86-115

RPD= Relative Percent Difference

Batch QC Report
Purgeable Organics by GC/MS

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	120329
MSS Lab ID:	191371-001	Sampled:	12/07/06
Matrix:	Water	Received:	12/08/06
Units:	ug/L	Analyzed:	12/13/06
Diln Fac:	1.000		

Type: MS Lab ID: QC368181

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.1080	25.00	28.04	112	65-135
Benzene	<0.08408	25.00	27.30	109	65-135
Trichloroethene	5.061	25.00	34.75	119	65-135
Toluene	<0.1415	25.00	28.01	112	65-135
Chlorobenzene	<0.07490	25.00	26.49	106	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	109	80-120
1,2-Dichloroethane-d4	106	76-114
Toluene-d8	104	88-110
Bromofluorobenzene	101	86-115

Type: MSD Lab ID: QC368182

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	26.79	107	65-135	5	35
Benzene	25.00	27.29	109	65-135	0	35
Trichloroethene	25.00	34.03	116	65-135	2	35
Toluene	25.00	27.95	112	65-135	0	35
Chlorobenzene	25.00	26.69	107	65-135	1	35

Surrogate	%REC	Limits
Dibromofluoromethane	105	80-120
1,2-Dichloroethane-d4	103	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	101	86-115

RPD= Relative Percent Difference

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	120366
MSS Lab ID:	191382-006	Sampled:	12/06/06
Matrix:	Water	Received:	12/08/06
Units:	ug/L	Analyzed:	12/14/06
Diln Fac:	1.000		

Type: MS Lab ID: QC368323

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.1080	25.00	26.72	107	65-135
Benzene	<0.08408	25.00	25.82	103	65-135
Trichloroethene	<0.08559	25.00	25.86	103	65-135
Toluene	<0.1415	25.00	27.31	109	65-135
Chlorobenzene	<0.07490	25.00	25.61	102	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-120
1,2-Dichloroethane-d4	101	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	101	86-115

Type: MSD Lab ID: QC368324

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	24.02	96	65-135	11	35
Benzene	25.00	25.12	100	65-135	3	35
Trichloroethene	25.00	25.55	102	65-135	1	35
Toluene	25.00	26.61	106	65-135	3	35
Chlorobenzene	25.00	24.94	100	65-135	3	35

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-120
1,2-Dichloroethane-d4	99	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	99	86-115

RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 191286 MSVOA Water
EPA 8260B

Inst : MSVOA04 Run Name: BFB IDF : 1.0
Seqnum : 436434904001 File : djt01 Time : 29-OCT-2006 00:24

Standards: S3716

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	2904	20.38	
75	30.00% - 60.00% of mass 95	6122	42.96	
95		14250		
96	5.00% - 9.00% of mass 95	1175	8.25	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	10984	77.08	
175	5.00% - 9.00% of mass 174	924	8.41	
176	> 95.00% and < 101.00% of mass 174	10848	98.76	
177	5.00% - 9.00% of mass 176	691	6.37	

Analyst: AM Date: 10/30/06 Reviewer: LW Date: 10/30/06

: 000003

CURTIS & TOMPKINS BFB TUNE FOR 191286 MSVOA Water
EPA 8260B

Inst : MSVOA04 Run Name: BFB IDF : 1.0
Seqnum : 436434904020 File : djt20 Time : 29-OCT-2006 12:34

Standards: S3716

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	10833	23.05	
75	30.00% - 60.00% of mass 95	22144	47.11	
95		47000		
96	5.00% - 9.00% of mass 95	3135	6.67	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	30602	65.11	
175	5.00% - 9.00% of mass 174	2584	8.44	
176	> 95.00% and < 101.00% of mass 174	30405	99.36	
177	5.00% - 9.00% of mass 176	2125	6.99	

Analyst: AM Date: 10/30/06 Reviewer: LW Date: 10/30/06

CURTIS & TOMPKINS BFB TUNE FOR 191286 MSVOA Water
EPA 8260B

Inst : MSVOA04 Run Name: BFB IDF : 1.0
Seqnum : 436500153002 File : dld02 Time : 13-DEC-2006 08:23

Standards: S3716

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	14011	20.54	
75	30.00% - 60.00% of mass 95	28968	42.46	
95		68224		
96	5.00% - 9.00% of mass 95	4451	6.52	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	57760	84.66	
175	5.00% - 9.00% of mass 174	4046	7.00	
176	> 95.00% and < 101.00% of mass 174	55272	95.69	
177	5.00% - 9.00% of mass 176	3845	6.96	

Analyst: ACM Date: 12/13/06 Reviewer: LW Date: 12/14/06

CURTIS & TOMPKINS BFB TUNE FOR 191286 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name: BFB IDF : 1.0
Seqnum : 476409508009 File : hjb09 Time : 11-OCT-2006 15:52

Standards: S3716

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	14184	23.34	
75	30.00% - 60.00% of mass 95	28891	47.54	
95		60772		
96	5.00% - 9.00% of mass 95	4458	7.34	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	31237	51.40	
175	5.00% - 9.00% of mass 174	2680	8.58	
176	> 95.00% and < 101.00% of mass 174	30994	99.22	
177	5.00% - 9.00% of mass 176	2155	6.95	

Analyst: BO Date: 10/12/06 Reviewer: LW Date: 10/12/06

: 000000

CURTIS & TOMPKINS BFB TUNE FOR 191286 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name: BFB IDF : 1.0
Seqnum : 476503048002 File : hlf02 Time : 15-DEC-2006 08:37

Standards: S3716

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	16864	25.93	
75	30.00% - 60.00% of mass 95	34120	52.45	
95		65048		
96	5.00% - 9.00% of mass 95	4569	7.02	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	36024	55.38	
175	5.00% - 9.00% of mass 174	2759	7.66	
176	> 95.00% and < 101.00% of mass 174	34360	95.38	
177	5.00% - 9.00% of mass 176	2411	7.02	

Analyst: BO Date: 12/15/06 Reviewer: SJD Date: 12/18/06

CURTIS & TOMPKINS BFB TUNE FOR 191286 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name: BFB IDF : 1.0
Seqnum : 476503048010 File : hlf10 Time : 15-DEC-2006 14:27

Standards: S3716

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	20008	22.80	
75	30.00% - 60.00% of mass 95	41432	47.21	
95		87760		
96	5.00% - 9.00% of mass 95	6137	6.99	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	48440	55.20	
175	5.00% - 9.00% of mass 174	3564	7.36	
176	> 95.00% and < 101.00% of mass 174	47584	98.23	
177	5.00% - 9.00% of mass 176	3269	6.87	

Analyst: TEW Date: 12/15/06 Reviewer: SJD Date: 12/18/06

CURTIS & TOMPKINS BFB TUNE FOR 191286 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name: BFB IDF : 1.0
Seqnum : 836494841002 File : kl902 Time : 09-DEC-2006 15:46

Standards: S3716

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	12296	17.59	
75	30.00% - 60.00% of mass 95	31954	45.71	
95		69909		
96	5.00% - 9.00% of mass 95	5294	7.57	
173	< 2.00% of mass 174	1060	1.62	
174	> 50.00% and < 100.00% of mass 95	65610	93.85	
175	5.00% - 9.00% of mass 174	4739	7.22	
176	> 95.00% and < 101.00% of mass 174	64815	98.79	
177	5.00% - 9.00% of mass 176	4496	6.94	

Analyst: SJD Date: 12/11/06 Reviewer: LW Date: 12/11/06

CURTIS & TOMPKINS BFB TUNE FOR 191286 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name: BFB IDF : 1.0
Seqnum : 836497483002 File : k1b02 Time : 11-DEC-2006 11:54

Standards: S3716

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	15458	17.21	
75	30.00% - 60.00% of mass 95	41881	46.64	
95		89795		
96	5.00% - 9.00% of mass 95	6369	7.09	
173	< 2.00% of mass 174	452	0.55	
174	> 50.00% and < 100.00% of mass 95	82754	92.16	
175	5.00% - 9.00% of mass 174	5515	6.66	
176	> 95.00% and < 101.00% of mass 174	80192	96.90	
177	5.00% - 9.00% of mass 176	5626	7.02	

Analyst: SJD Date: 12/11/06 Reviewer: LW Date: 12/11/06

CURTIS & TOMPKINS BFB TUNE FOR 191286 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name: BFB IDF : 1.0
Seqnum : 836500315003 File : kld03 Time : 13-DEC-2006 11:22

Standards: S3716

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	13317	17.25	
75	30.00% - 60.00% of mass 95	36040	46.68	
95		77205		
96	5.00% - 9.00% of mass 95	5420	7.02	
173	< 2.00% of mass 174	732	1.10	
174	> 50.00% and < 100.00% of mass 95	66826	86.56	
175	5.00% - 9.00% of mass 174	4955	7.41	
176	> 95.00% and < 101.00% of mass 174	64535	96.57	
177	5.00% - 9.00% of mass 176	4153	6.44	

Analyst: SJD Date: 12/13/06 Reviewer: LW Date: 12/14/06

CURTIS & TOMPKINS BFB TUNE FOR 191286 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name: BFB IDF : 1.0
Seqnum : 836501672002 File : kle02 Time : 14-DEC-2006 09:36

Standards: S3716

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	15314	19.58	
75	30.00% - 60.00% of mass 95	37976	48.56	
95		78208		
96	5.00% - 9.00% of mass 95	4445	5.68	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	75000	95.90	
175	5.00% - 9.00% of mass 174	5048	6.73	
176	> 95.00% and < 101.00% of mass 174	71792	95.72	
177	5.00% - 9.00% of mass 176	5665	7.89	

Analyst: SJD Date: 12/15/06 Reviewer: LW Date: 12/15/06

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191286 MSVOA Water: EPA 8260B

Inst : MSVOA04

Calnum: 436434904003

Units : ug/L

Name : 826G0X04

Date : 29-OCT-2006 02:39

X Axis: R

Type : WATER

Level File	Seqnum	Sample ID	Analyzed	Stds
L1	djt05 436434904005	0.25/0.5PPB	29-OCT-2006 02:39	S4594 (2000000X), S4519 (1000000X), S4172 (2000000X), S4330 (5000X)
L2	djt06 436434904006	0.5/1PPB	29-OCT-2006 03:12	S4594 (1000000X), S4519 (500000X), S4172 (1000000X), S4330 (5000X)
L3	djt07 436434904007	2PPB	29-OCT-2006 03:45	S4594 (2500000X), S4519 (2500000X), S4172 (500000X), S4330 (5000X)
L4	djt08 436434904008	5PPB	29-OCT-2006 04:17	S4594 (1000000X), S4519 (1000000X), S4172 (2000000X), S4330 (5000X)
L5	djt09 436434904009	10PPB	29-OCT-2006 04:50	S4594 (500000X), S4519 (500000X), S4172 (1000000X), S4330 (5000X)
L6	djt10 436434904010	20PPB	29-OCT-2006 05:22	S4594 (250000X), S4519 (250000X), S4172 (500000X), S4330 (5000X)
L7	djt11 436434904011	50PPB	29-OCT-2006 05:55	S4594 (100000X), S4519 (100000X), S4172 (200000X), S4330 (5000X)
L8	djt12 436434904012	75PPB	29-OCT-2006 06:28	S4594 (6667X), S4519 (6667X), S4172 (13330X), S4330 (5000X)
L9	djt13 436434904013	100PPB	29-OCT-2006 07:01	S4594 (5000X), S4519 (5000X), S4172 (100000X), S4330 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ²	%RSD	Max	Min	r ²	Fig
Chloromethane		1.7033	1.6058	1.5359m	1.5841	1.6052	1.6513	1.6531	1.6677	AVRG		0.61508		1.6258	3	15	0.10	0.99		
Vinyl Chloride	1.1485	1.2773	1.3424	1.2549m	1.3454	1.3263	1.2930	1.2916	1.2920	AVRG		0.77779		1.2857	5	15	0.050	0.99		
Bromomethane		0.6684	0.6835m	0.6695m	0.6990	0.6912	0.6953	0.6717	0.7269	AVRG		1.45309		0.6882	3	15	0.050	0.99		
Chloroethane		0.6424	0.6367	0.5713m	0.5968	0.5963	0.6015	0.5837	0.5992	AVRG		1.65706		0.6035	4	15	0.050	0.99		
Acetone			0.7218	0.7049	0.7567	0.5333	0.5646	0.6090	0.5929	AVRG		1.56140		0.6404	13	15	0.050	0.99		
1,1-Dichloroethene		0.8807	0.7842	0.7154	0.7550	0.7285	0.6790	0.6618	0.6929	AVRG		1.35649		0.7372	10	15	0.050	0.99		
Methylene Chloride			0.9728	0.9549	0.9438	0.9501	0.8551	0.8356	0.8443	AVRG		1.10122		0.9081	7	15	0.050	0.99		
Carbon Disulfide		3.2940	3.0951	2.8515	3.0084	2.9568	2.8396	2.7247	2.7888	AVRG		0.33958		2.9449	6	15	0.050	0.99		
MTBE		2.1303	2.0115	2.0386	2.2706	2.1632	2.0677	2.0588	2.0697	AVRG		0.47590		2.1013	4	15	0.050	0.99		
trans-1,2-Dichloroethene		0.9434	0.8218	0.8184	0.8216	0.7873	0.7559	0.7062	0.7257	AVRG		1.25385		0.7975	9	15	0.050	0.99		
Vinyl Acetate		1.4693	1.6137	1.9412	1.5159	2.2114	2.1750			QUAD	0.89418	0.45497	-4.12E-5	1.8211	0.996	15	0.050	0.99		
1,1-Dichloroethane		1.6339	1.5368	1.6337	1.7113	1.6298	1.5809	1.5516	1.5415	AVRG		0.62406		1.6024	4	15	0.10	0.99		
2-Butanone		0.8009	0.6286	0.6579	0.6642	0.5825	0.5959	0.6357	0.6242	AVRG		1.54143		0.6487	10	15	0.050	0.99		
cis-1,2-Dichloroethene		0.9428	0.8976	0.9184	0.9223	0.8622	0.7790	0.7884	0.7837	AVRG		1.16035		0.8618	8	15	0.050	0.99		
Chloroform		1.7182	1.6193	1.5255	1.5400	1.4032	1.3766	1.2776	1.3196	AVRG		0.67912		1.4725	10	15	0.050	0.99		
1,1,1-Trichloroethane		0.9380	0.9386	0.9615	1.0399	1.0578	1.0807	1.0661	1.1186	AVRG		0.97547		1.0252	7	15	0.050	0.99		
Carbon Tetrachloride		0.3087	0.3523	0.3982	0.4636	0.4836	0.4763	0.4771	0.4923	QUAD	0.22359	2.15480	-0.00246	0.4315	1.000	15	0.050	0.99		
1,2-Dichloroethane		0.8595	0.8510	0.8504	0.8552	0.7793	0.7436	0.7269	0.7262	AVRG		1.25155		0.7990	8	15	0.050	0.99		
Benzene		1.6102	1.5882	1.5648	1.6495	1.4855	1.3897	1.3712	1.3670	AVRG		0.66523		1.5032	8	15	0.050	0.99		
1,2-Dichloroethene		0.4067	0.4242	0.4366	0.4669	0.4256	0.4206	0.4182	0.4182	AVRG		2.34135		0.4271	4	15	0.050	0.99		
2-Dichloropropane		0.5023	0.5173	0.5533	0.5664	0.5359	0.4950	0.4855	0.4874	AVRG		1.93090		0.5179	6	15	0.050	0.99		
Bromodichloromethane		0.5947	0.5999	0.6464	0.6649	0.6162	0.6145	0.5882	0.5789	AVRG		1.63141		0.6130	5	15	0.050	0.99		
Methyl-2-Pentanone		0.7802	0.6773	0.7341	0.7565	0.6824	0.6539	0.6739	0.6756	AVRG		1.41999		0.7042	7	15	0.050	0.99		
cis-1,3-Dichloropropene		0.5025	0.5875	0.6167	0.6883	0.6367	0.6323	0.6222	0.6438	AVRG		1.62275		0.6162	9	15	0.050	0.99		

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ²	Max %RSD	Min RF	Min r ²	Flg
Toluene		0.9786	0.8929	0.9255	0.9202	0.8394	0.8462	0.8134	0.8222	AVRG		1.13663		0.8798	7	15	0.050	0.99	
trans-1,3-Dichloropropene		0.4798	0.4960	0.5552	0.6109	0.5791	0.5965	0.5881	0.6038	AVRG		1.77408		0.5637	9	15	0.050	0.99	
1,1,2-Trichloroethane		0.2347	0.2128	0.2484	0.2489	0.2193	0.2202	0.2131	0.2121	AVRG		4.42123		0.2262	7	15	0.050	0.99	
2-Hexanone		0.5427	0.4966	0.5363	0.5696	0.5339	0.4851	0.5357	0.5001	AVRG		1.90479		0.5250	5	15	0.050	0.99	
Tetrachloroethene		0.3951	0.3461	0.3653	0.3679	0.3567	0.3466	0.3527	0.3562	AVRG		2.77147		0.3608	4	15	0.050	0.99	
Dibromochloromethane		0.4477	0.4583	0.5201	0.5505	0.5232	0.5302	0.5267	0.5193	AVRG		1.96265		0.5095	7	15	0.050	0.99	
Chlorobenzene		1.2386	1.1063	1.1590	1.1413	1.1085	1.0945	1.0742	1.0645	AVRG		0.89018		1.1234	5	15	0.30	0.99	
Ethylbenzene		2.0917	1.8662	1.9501	1.8640	1.7577	1.7069	1.6867	1.6435	AVRG		0.54920		1.8208	8	15	0.050	0.99	
m,p-Xylenes	0.8477	0.8191	0.7266	0.7358	0.6851	0.6552	0.6416	0.6128	0.6034	AVRG		1.42240		0.7030	12	15	0.050	0.99	
o-Xylene		0.8037	0.7057	0.7547	0.7041	0.6849	0.6723	0.6447	0.6376	AVRG		1.42659		0.7010	8	15	0.050	0.99	
Styrene		1.4175	1.2139	1.3499	1.2780	1.2215	1.1653	1.1434	1.1234	AVRG		0.80704		1.2391	8	15	0.050	0.99	
Bromoform		0.3760	0.3310	0.3573	0.3792	0.3670	0.3636	0.3789	0.3652	AVRG		2.74144		0.3648	4	15	0.10	0.99	
1,1,2,2-Tetrachloroethane		1.3657	1.2522	1.4030	1.3349	1.3762	1.2919	1.2777	1.3209	AVRG		0.75312		1.3278	4	15	0.30	0.99	
Dibromofluoromethane	0.7427	0.7511	0.7487	0.7388	0.7388	0.7328	0.7503	0.7280	0.7360	AVRG		1.34990		0.7408	1	15	0.050	0.99	
1,2-Dichloroethane-d4	0.5591	0.5615	0.5722	0.5572	0.5677	0.5313	0.4991	0.4887	0.4829	AVRG		1.86731		0.5355	7	15	0.050	0.99	
Toluene-d8	1.0895	1.1015	1.1478	1.1017	1.1194	1.0730	1.0722	1.0847	1.0672	AVRG		0.91305		1.0952	2	15	0.050	0.99	
Bromofluorobenzene	1.3454	1.3488	1.2841	1.3473	1.2864	1.3111	1.3193	1.2816	1.2980	AVRG		0.76129		1.3136	2	15	0.050	0.99	

Analyst: AM

Manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

Page 2 of 2

Date: 10/30/06

Reviewer: LW

Date: 10/30/06

436434904003

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191286 MSVOA Water
EPA 8260B

Inst : MSVOA04 Name : 826GOX04
Calnum : 436434904003 Cal Date: 29-OCT-2006 Type : WATER

ICV 436434904015 (djt15 29-OCT-2006) stds: S4634 (10000X), S4607 (10000X),
S4330 (5000X)

ICV 436434904024 (djt24 29-OCT-2006) stds: S4714 (10000X), S4330 (5000X)

Analyte	ICV Seqnum	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	436434904024	1.6258	1.4558	25.00	22.39	ug/L	-10	30	
Vinyl Chloride	436434904024	1.2857	1.1388	25.00	22.14	ug/L	-11	20	
Bromomethane	436434904024	0.6882	0.6928	25.00	25.17	ug/L	1	30	
Chloroethane	436434904024	0.6035	0.5859	25.00	24.27	ug/L	-3	30	
Acetone	436434904015	0.6404	0.5570	25.00	21.74	ug/L	-13	40	
1,1-Dichloroethene	436434904015	0.7372	0.7605	25.00	25.79	ug/L	3	20	
Methylene Chloride	436434904015	0.9081	0.9321	25.00	25.66	ug/L	3	30	
Carbon Disulfide	436434904015	2.9449	2.5042	25.00	21.26	ug/L	-15	30	
MTBE	436434904015	2.1013	1.9485	25.00	23.18	ug/L	-7	30	
trans-1,2-Dichloroethene	436434904015	0.7975	0.7842	25.00	24.58	ug/L	-2	30	
Vinyl Acetate	436434904015	1.8211	1.9846	25.00	23.37	ug/L	-7	40	
1,1-Dichloroethane	436434904015	1.6024	1.6353	25.00	25.51	ug/L	2	30	
2-Butanone	436434904015	0.6487	0.6373	25.00	24.56	ug/L	-2	40	
cis-1,2-Dichloroethene	436434904015	0.8618	0.8579	25.00	24.89	ug/L	0	30	
Chloroform	436434904015	1.4725	1.4178	25.00	24.07	ug/L	-4	20	
1,1,1-Trichloroethane	436434904015	1.0252	1.0941	25.00	26.68	ug/L	7	30	
Carbon Tetrachloride	436434904015	0.4315	0.5136	25.00	27.49	ug/L	10	30	
1,2-Dichloroethane	436434904015	0.7990	0.7536	25.00	23.58	ug/L	-6	30	
Benzene	436434904015	1.5032	1.5425	25.00	25.65	ug/L	3	30	
Trichloroethene	436434904015	0.4271	0.4624	25.00	27.06	ug/L	8	30	
1,2-Dichloropropane	436434904015	0.5179	0.5214	25.00	25.17	ug/L	1	20	
Bromodichloromethane	436434904015	0.6130	0.6843	25.00	27.91	ug/L	12	30	
4-Methyl-2-Pentanone	436434904015	0.7042	0.6797	25.00	24.13	ug/L	-3	40	
cis-1,3-Dichloropropene	436434904015	0.6162	0.6592	25.00	26.74	ug/L	7	30	
Toluene	436434904015	0.8798	0.9444	25.00	26.83	ug/L	7	20	
trans-1,3-Dichloropropene	436434904015	0.5637	0.5649	25.00	25.05	ug/L	0	30	
1,1,2-Trichloroethane	436434904015	0.2262	0.2350	25.00	25.98	ug/L	4	30	
2-Hexanone	436434904015	0.5250	0.5353	25.00	25.49	ug/L	2	40	
Tetrachloroethene	436434904015	0.3608	0.3900	25.00	27.02	ug/L	8	30	
Dibromochloromethane	436434904015	0.5095	0.5708	25.00	28.00	ug/L	12	30	
Chlorobenzene	436434904015	1.1234	1.1440	25.00	25.46	ug/L	2	30	
Ethylbenzene	436434904015	1.8208	1.9227	25.00	26.40	ug/L	6	20	
m,p-Xylenes	436434904015	0.7030	0.7021	50.00	49.93	ug/L	0	30	
o-Xylene	436434904015	0.7010	0.7315	25.00	26.09	ug/L	4	30	
Styrene	436434904015	1.2391	1.3069	25.00	26.37	ug/L	5	30	
Bromoform	436434904015	0.3648	0.3799	25.00	26.03	ug/L	4	30	
1,1,2,2-Tetrachloroethane	436434904015	1.3278	1.3650	25.00	25.70	ug/L	3	30	

Data File: \\Gcmssserver\DD\chem\MSVOA04.i\102906.b\DJT05.D
 Report Date: 29-Oct-2006 12:42

Curtis & Tompkins

Data file : \\Gcmssserver\DD\chem\MSVOA04.i\102906.b\DJT05.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 29-OCT-2006 02:39 MS Autotune Date: 14-OCT-2006 13:38
 Operator : VOC Inst ID: MSVOA04.i
 Smp Info : ICAL,S4594,0.0005/1000,S4519,0.001/1000
 Misc Info : S4172,0.0005/1000,0.25/0.5PPB
 Comment :
 Method : \\Gcmssserver\DD\chem\MSVOA04.i\102906.b\826GOX04.m
 Meth Date : 29-Oct-2006 12:42 chemist Quant Type: ISTD
 Cal Date : 29-OCT-2006 02:39 Cal File: DJT05.D
 Als bottle: 5 Calibration Sample, Level: 9
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85		4.732	4.732 (0.455)		3484	0.50000	0.3658
2 Chloromethane	50		5.165	5.165 (0.497)		6814	0.50000	0.5914
3 Vinyl Chloride	62		5.313	5.313 (0.511)		4069	0.50000	0.4466
4 Bromomethane	94		5.923	5.923 (0.570)		1203	0.50000	0.2466
5 Chloroethane	64		6.071	6.071 (0.584)		2638	0.50000	0.6169
6 Trichlorofluoromethane	101		6.436	6.436 (0.619)		4335	0.50000	0.4121
7 Ethanol	45		6.702	6.702 (0.645)		2434	0.50000	30.9161
8 Freon 113	101		7.145	7.145 (0.687)		1138	0.25000	0.2184
9 1,1-Dichloroethene	96		7.243	7.243 (0.697)		1687	0.50000	0.3229
10 Acetone	43		7.371	7.371 (0.709)		3851	0.50000	0.8669
11 Isopropanol	45		7.450	7.450 (0.717)		1578	0.50000	3.2999
12 Carbon Disulfide	76		7.647	7.647 (0.736)		6422	0.50000	0.3077
13 Methylene Chloride	84		8.012	8.012 (0.771)		2101	0.25000	0.3265
14 tert-Butyl Alcohol (TBA)	59		8.021	8.021 (0.772)		1692	0.50000	3.0865
15 MTBE	73		8.248	8.248 (0.793)		4174	0.50000	0.2803
16 trans-1,2-Dichloroethene	96		8.327	8.327 (0.801)		1865	0.50000	0.3300
17 Isopropyl Ether (DIPE)	45		8.859	8.859 (0.852)		9703	0.50000	0.2966
18 Vinyl Acetate	43		8.928	8.928 (0.859)		2166	0.25000	0.1678 (M)
19 1,1-Dichloroethane	63		8.977	8.977 (0.864)		2792	0.50000	0.2458
20 Ethyl tert-Butyl Ether (ETBE)	59		9.361	9.361 (0.901)		3726	0.50000	0.2377
21 2-Butanone	43		9.765	9.765 (0.939)		837	0.50000	0.1820
22 2,2-Dichloropropane	77		9.775	9.775 (0.940)		1451	0.50000	0.3056

Compounds	QUANT SIG	AMOUNTS					
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
23 cis-1,2-Dichloroethene	96	9.794	9.794	(0.942)	2024	0.50000	0.3314
24 Bromochloromethane	128	10.139	10.139	(0.975)	262	0.50000	0.0851
25 Tetrahydrofuran	42	10.169	10.169	(0.978)	9573	0.50000	3.4908
26 Chloroform	83	10.198	10.198	(0.981)	2898	0.50000	0.2777
* 27 Pentafluorobenzene	168	10.395	10.395	(1.000)	354296	50.0000	
28 Dibromofluoromethane	113	10.435	10.435	(1.004)	263125	50.0000	50.1266
29 1,1,1-Trichloroethane	97	10.474	10.474	(1.008)	1723	0.50000	0.2371
30 Carbon Tetrachloride	117	10.671	10.671	(0.926)	350	0.25000	0.0645
31 1,1-Dichloropropene	75	10.710	10.710	(0.929)	2322	0.50000	0.3403
32 1,2-Dichloroethane-d4	65	10.996	10.996	(0.954)	351088	50.0000	52.2047
33 Benzene	78	11.016	11.016	(0.956)	5862	0.50000	0.3105
34 Methyl tert-Amyl Ether (TAME)	73	11.035	11.035	(0.957)	3200	0.50000	0.2581
35 1,2-Dichloroethane	62	11.114	11.114	(0.964)	2641	0.50000	0.2632
* 36 1,4-Difluorobenzene	114	11.528	11.528	(1.000)	627904	50.0000	
37 Trichloroethene	95	11.932	11.932	(1.035)	1423	0.50000	0.2653
38 Trifluorotoluene	146	12.296	12.296	(1.067)	1662	0.50000	0.2569
39 1,2-Dichloropropane	63	12.326	12.326	(1.069)	1931	0.50000	0.2969
40 Dibromomethane	93	12.523	12.523	(1.086)	1116	0.50000	0.2501
41 Bromodichloromethane	83	12.670	12.670	(1.099)	1517	0.50000	0.1970
42 2-Chloroethylvinylether	63	13.025	13.025	(1.130)	903	0.50000	0.4193
43 Tetramethyl THF	43	13.242	13.242	(1.149)	4861	0.50000	0.2947
44 cis-1,3-Dichloropropene	75	13.291	13.291	(1.153)	1755	0.50000	0.2267
45 4-Methyl-2-Pentanone	43	13.439	13.439	(1.166)	2775	0.50000	0.3137
46 Toluene-d8	98	13.626	13.626	(1.182)	684100	50.0000	49.7384
47 Toluene	92	13.715	13.715	(1.190)	2784	0.50000	0.2519
48 trans-1,3-Dichloropropene	75	14.049	14.049	(1.219)	1324	0.50000	0.1870
49 1,1,2-Trichloroethane	85	14.305	14.305	(1.241)	624	0.50000	0.2196
50 Tetrachloroethene	166	14.443	14.443	(0.928)	929	0.50000	0.2266
51 2-Hexanone	43	14.542	14.542	(0.934)	2038	0.50000	0.3417
52 1,3-Dichloropropane	76	14.562	14.562	(0.935)	2269	0.50000	0.2632
53 Dibromochloromethane	129	14.828	14.828	(0.953)	1164	0.50000	0.2011
54 1,2-Dibromoethane	107	15.034	15.034	(1.304)	1629	0.50000	0.2710
* 55 Chlorobenzene-d5	117	15.566	15.566	(1.000)	567981	50.0000	
56 Chlorobenzene	112	15.606	15.606	(1.003)	3709	0.50000	0.2906
57 Ethylbenzene	91	15.655	15.655	(1.006)	6485	0.50000	0.3135
58 1,1,1,2-Tetrachloroethane	131	15.684	15.684	(1.008)	992	0.50000	0.2226
59 m,p-Xylenes	106	15.803	15.803	(1.015)	4815	0.50000	0.6029
60 o-Xylene	106	16.305	16.305	(1.047)	2185	0.50000	0.2744
61 Styrene	104	16.325	16.325	(1.049)	3839	0.50000	0.2727
62 Bromoform	173	16.620	16.620	(1.068)	833	0.50000	0.2010
63 Isopropylbenzene	105	16.699	16.699	(0.913)	5677	0.50000	0.2837
64 Cyclohexanone	55	16.945	16.945	(0.926)	3348	0.50000	0.5008
65 Bromofluorobenzene	95	16.965	16.965	(0.927)	355290	50.0000	51.2104
66 1,1,2,2-Tetrachloroethane	83	17.103	17.103	(0.935)	1742	0.50000	0.2483
67 Bromobenzene	156	17.172	17.172	(0.939)	1230	0.50000	0.2417
68 Propylbenzene	91	17.172	17.172	(0.939)	6919	0.50000	0.2854
69 1,2,3-Trichloropropane	110	17.201	17.201	(0.940)	411	0.50000	0.2104
70 2-Chlorotoluene	91	17.349	17.349	(0.948)	5314	0.50000	0.2961
71 1,3,5-Trimethylbenzene	105	17.359	17.359	(0.949)	5509	0.50000	0.3232
72 4-Chlorotoluene	91	17.477	17.477	(0.955)	5365	0.50000	0.3139
73 tert-Butylbenzene	119	17.733	17.733	(0.969)	4147	0.50000	0.2956
74 1,2,4-Trimethylbenzene	105	17.802	17.802	(0.973)	5572	0.50000	0.3067
75 sec-Butylbenzene	105	17.989	17.989	(0.983)	6035	0.50000	0.2891
76 para-Isopropyl Toluene	119	18.127	18.127	(0.991)	5311	0.50000	0.3001

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\102906.b\DJT05.D
Report Date: 29-Oct-2006 12:42

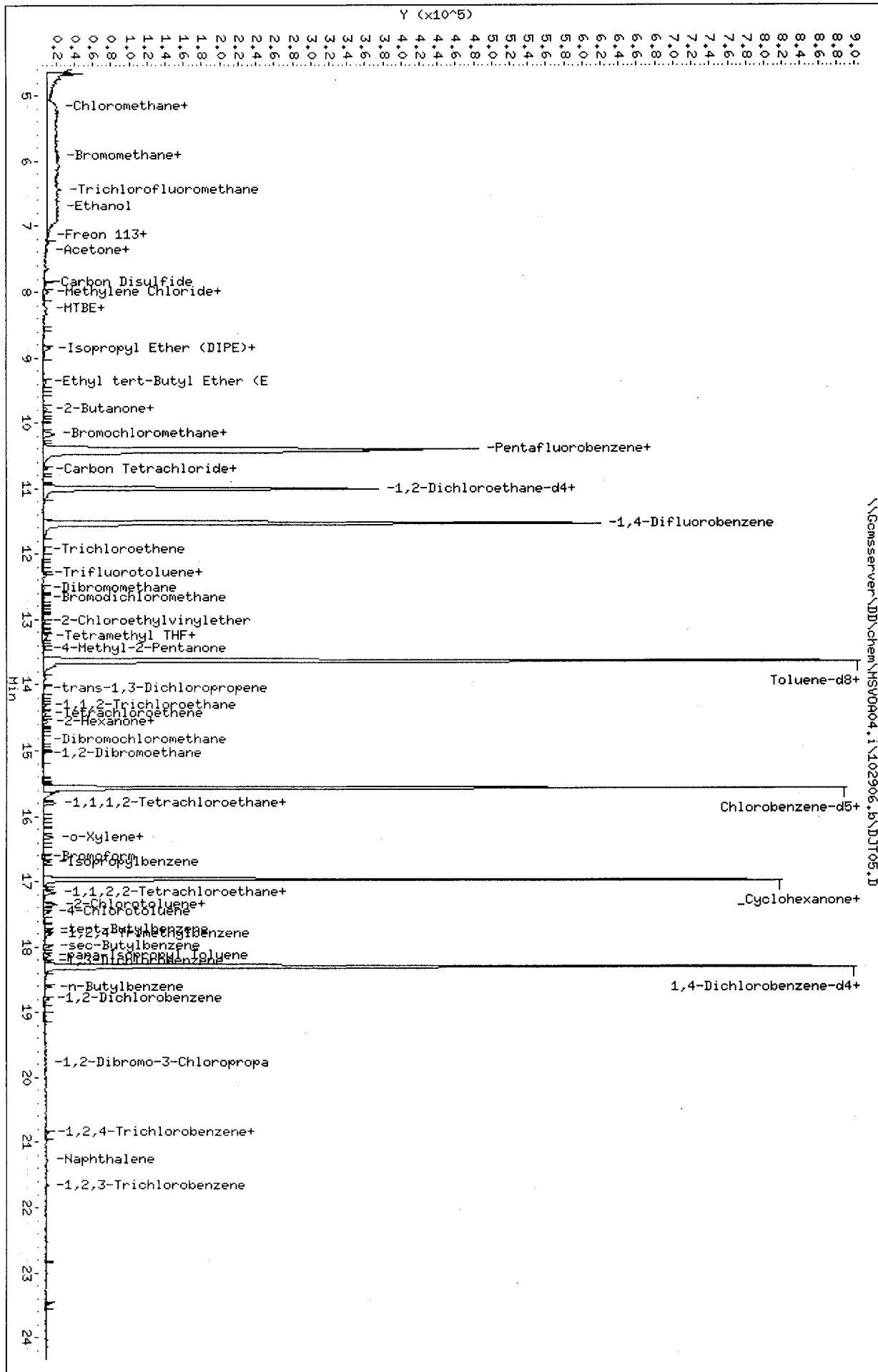
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	====	====	=====	=====	=====		=====	=====
77 1,3-Dichlorobenzene	146	18.216	18.216	(0.996)	2657		0.50000	0.2794
* 78 1,4-Dichlorobenzene-d4	152	18.295	18.295	(1.000)	264087		50.0000	
79 1,4-Dichlorobenzene	146	18.324	18.324	(1.002)	2817		0.50000	0.3008
80 n-Butylbenzene	91	18.610	18.610	(1.017)	4608		0.50000	0.2823
81 1,2-Dichlorobenzene	146	18.787	18.787	(1.027)	2348		0.50000	0.2495
82 1,2-Dibromo-3-Chloropropane	75	19.762	19.762	(1.080)	351		0.25000	0.2195
83 1,2,4-Trichlorobenzene	180	20.855	20.855	(1.140)	1480		0.50000	0.2303
84 Hexachlorobutadiene	225	20.974	20.974	(1.146)	426		0.50000	0.1650
85 Naphthalene	128	21.269	21.269	(1.163)	2810		0.25000	0.1869
86 1,2,3-Trichlorobenzene	180	21.663	21.663	(1.184)	1048		0.50000	0.1823

QC Flag Legend

M - Compound response manually integrated.

Data File: \Ncomserver\DD\chem\MSV0A04.1\102906.b\DJT05.D
 Date : 29-OCT-2006 02:39
 Client ID: DYNA P&I
 Sample Info: ICAL,S4594.0.0005/1000,S4519.0.001/1000
 Purge Volume: 5.0
 Column phase: RTX 624

Instrument: MSV0A04.1
 Operator: WOC
 Column diameter: 0.25



Data File: \\Gcmssserver\DD\chem\MSVOA04.i\102906.b\DJT06.D
 Report Date: 29-Oct-2006 12:43

Curtis & Tompkins

Data file : \\Gcmssserver\DD\chem\MSVOA04.i\102906.b\DJT06.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 29-OCT-2006 03:12 MS Autotune Date: 14-OCT-2006 13:38
 Operator : VOC Inst ID: MSVOA04.i
 Smp Info : ICAL,S4594,0.001/1000,S4519,0.002/1000
 Misc Info : S4172,0.001/1000,0.5/1PPB
 Comment :
 Method : \\Gcmssserver\DD\chem\MSVOA04.i\102906.b\826GOX04.m
 Meth Date : 29-Oct-2006 12:43 chemist Quant Type: ISTD
 Cal Date : 29-OCT-2006 03:12 Cal File: DJT06.D
 Als bottle: 6 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
							CAL-AMT	ON-COL
							(ug/L)	(ug/L)
1 Freon 12	85	4.731	4.731	(0.455)	7662	1.00000	0.8090	
2 Chloromethane	50	5.154	5.154	(0.496)	12003	1.00000	1.0476	
3 Vinyl Chloride	62	5.312	5.312	(0.511)	9001	1.00000	0.9934	
4 Bromomethane	94	5.913	5.913	(0.569)	4710	1.00000	0.9712	
5 Chloroethane	64	6.080	6.080	(0.585)	4527	1.00000	1.0645	
6 Trichlorofluoromethane	101	6.425	6.425	(0.618)	9735	1.00000	0.9307	
7 Ethanol	45	6.711	6.711	(0.646)	5624	50.0000	71.8312	
8 Freon 113	101	7.154	7.154	(0.688)	2526	0.50000	0.4875	
9 1,1-Dichloroethene	96	7.252	7.252	(0.698)	3103	0.50000	0.5973	
10 Acetone	43	7.361	7.361	(0.708)	5102	0.50000	1.1549	
11 Isopropanol	45	7.459	7.459	(0.718)	4161	0.50000	8.7499	
12 Carbon Disulfide	76	7.636	7.636	(0.735)	11606	0.50000	0.5592	
13 Methylene Chloride	84	7.991	7.991	(0.769)	4545	0.50000	0.7102	
14 tert-Butyl Alcohol (TBA)	59	8.011	8.011	(0.771)	2566	5.00000	4.7069	
15 MTBE	73	8.247	8.247	(0.793)	7506	0.50000	0.5069	
16 trans-1,2-Dichloroethene	96	8.326	8.326	(0.801)	3324	0.50000	0.5914	
17 Isopropyl Ether (DIPE)	45	8.858	8.858	(0.852)	18133	0.50000	0.5573	
18 Vinyl Acetate	43	8.927	8.927	(0.859)	5177	0.50000	0.4034	
19 1,1-Dichloroethane	63	8.976	8.976	(0.864)	5757	0.50000	0.5098	
20 Ethyl tert-Butyl Ether (ETBE)	59	9.360	9.360	(0.901)	7097	0.50000	0.4553	
21 2-Butanone	43	9.784	9.784	(0.941)	2822	0.50000	0.6172	
22 2,2-Dichloropropane	77	9.774	9.774	(0.940)	2367	0.50000	0.5013	

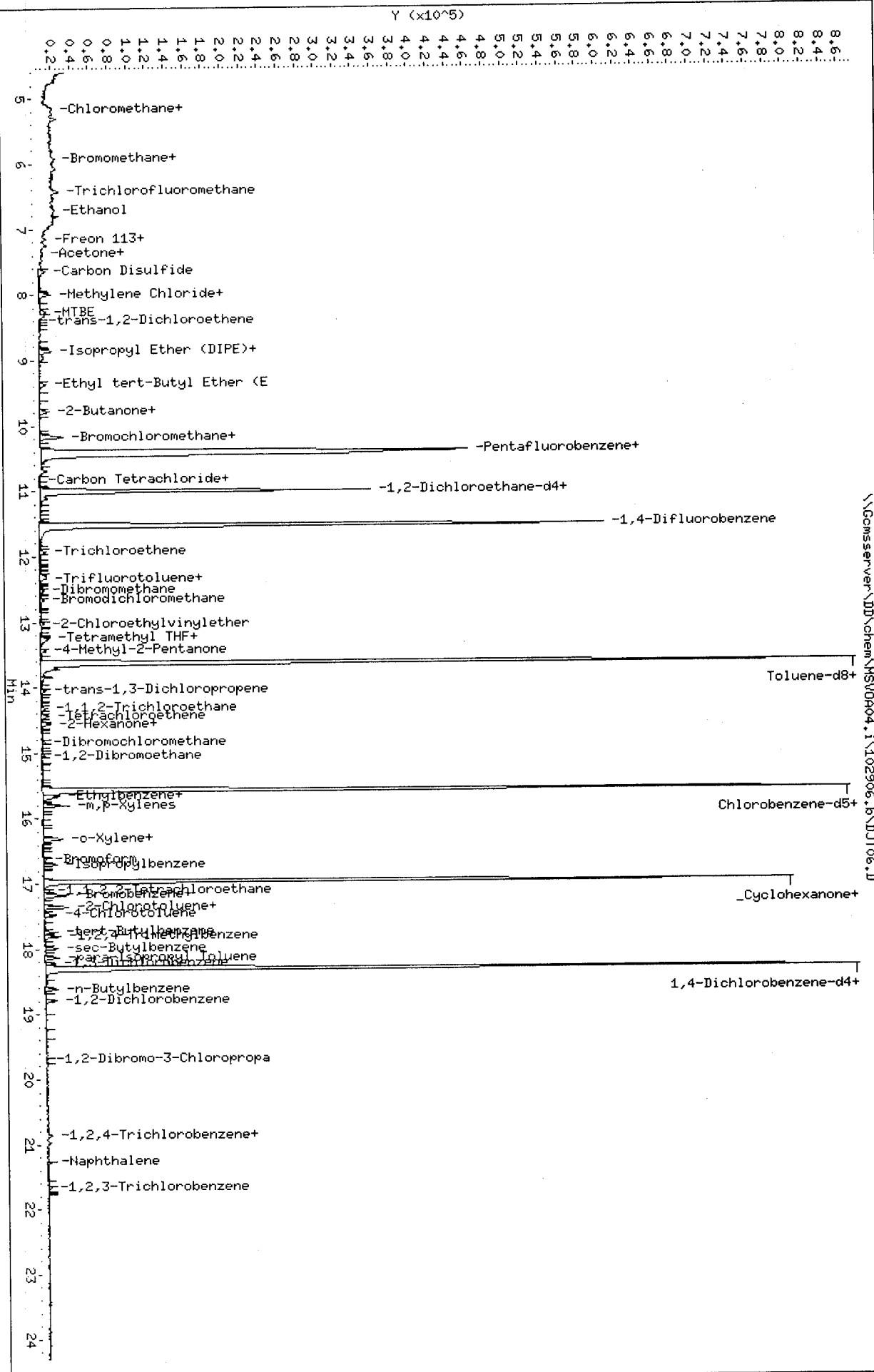
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	----	----	-----	-----	-----		-----	-----
23 cis-1,2-Dichloroethene	96	9.784	9.784	(0.941)	3322		0.50000	0.5470
24 Bromochloromethane	128	10.148	10.148	(0.976)	1664		0.50000	0.5440
25 Tetrahydrofuran	42	10.168	10.168	(0.978)	16639		5.00000	6.1011
26 Chloroform	83	10.187	10.187	(0.980)	6054		0.50000	0.5834
* 27 Pentafluorobenzene	168	10.394	10.394	(1.000)	352341		50.0000	
28 Dibromofluoromethane	113	10.434	10.434	(1.004)	264629		50.0000	50.6928
29 1,1,1-Trichloroethane	97	10.483	10.483	(1.009)	3305		0.50000	0.4574
30 Carbon Tetrachloride	117	10.670	10.670	(0.926)	1892		0.50000	0.3577
31 1,1-Dichloropropene	75	10.690	10.690	(0.927)	3699		0.50000	0.5555
32 1,2-Dichloroethane-d4	65	10.995	10.995	(0.954)	344106		50.0000	52.4279
33 Benzene	78	11.005	11.005	(0.955)	9867		0.50000	0.5355
34 Methyl tert-Amyl Ether (TAME)	73	11.025	11.025	(0.956)	6085		0.50000	0.5030
35 1,2-Dichloroethane	62	11.113	11.113	(0.964)	5267		0.50000	0.5378
* 36 1,4-Difluorobenzene	114	11.527	11.527	(1.000)	612797		50.0000	
37 Trichloroethene	95	11.931	11.931	(1.035)	2492		0.50000	0.4760
38 Trifluorotoluene	146	12.285	12.285	(1.066)	3480		0.50000	0.5513
39 1,2-Dichloropropane	63	12.335	12.335	(1.070)	3078		0.50000	0.4849
40 Dibromomethane	93	12.512	12.512	(1.085)	2288		0.50000	0.5254
41 Bromodichloromethane	83	12.660	12.660	(1.098)	3644		0.50000	0.4850
42 2-Chloroethylvinylether	63	13.024	13.024	(1.130)	1919		1.00000	0.9131
43 Tetramethyl THF	43	13.251	13.251	(1.150)	8803		0.50000	0.5468
44 cis-1,3-Dichloropropene	75	13.290	13.290	(1.153)	3079		0.50000	0.4076
45 4-Methyl-2-Pentanone	43	13.438	13.438	(1.166)	4781		0.50000	0.5539
46 Toluene-d8	98	13.625	13.625	(1.182)	674998		50.0000	50.2864
47 Toluene	92	13.723	13.723	(1.191)	5997		0.50000	0.5561
48 trans-1,3-Dichloropropene	75	14.049	14.049	(1.219)	2940		0.50000	0.4255
49 1,1,2-Trichloroethane	85	14.314	14.314	(1.242)	1438		0.50000	0.5187
50 Tetrachloroethene	166	14.433	14.433	(0.927)	2160		0.50000	0.5474
51 2-Hexanone	43	14.551	14.551	(0.935)	2967		0.50000	0.5168
52 1,3-Dichloropropane	76	14.561	14.561	(0.935)	4072		0.50000	0.4907
53 Dibromochloromethane	129	14.837	14.837	(0.953)	2448		0.50000	0.4393
54 1,2-Dibromoethane	107	15.033	15.033	(1.304)	2771		0.50000	0.4725
* 55 Chlorobenzene-d5	117	15.565	15.565	(1.000)	546736		50.0000	
56 Chlorobenzene	112	15.605	15.605	(1.003)	6772		0.50000	0.5512
57 Ethylbenzene	91	15.664	15.664	(1.006)	11436		0.50000	0.5743
58 1,1,1,2-Tetrachloroethane	131	15.684	15.684	(1.008)	2239		0.50000	0.5220
59 m,p-Xylenes	106	15.802	15.802	(1.015)	8957		1.00000	1.1651
60 o-Xylene	106	16.304	16.304	(1.047)	4394		0.50000	0.5732
61 Styrene	104	16.324	16.324	(1.049)	7750		0.50000	0.5719
62 Bromoform	173	16.619	16.619	(1.068)	2056		0.50000	0.5154
63 Isopropylbenzene	105	16.698	16.698	(0.913)	11676		0.50000	0.6066
64 Cyclohexanone	55	16.944	16.944	(0.926)	4032		0.50000	0.6270
65 Bromofluorobenzene	95	16.964	16.964	(0.927)	342629		50.0000	51.3434
66 1,1,2,2-Tetrachloroethane	83	17.102	17.102	(0.935)	3469		0.50000	0.5142
67 Bromobenzene	156	17.171	17.171	(0.939)	2745		0.50000	0.5608
68 Propylbenzene	91	17.171	17.171	(0.939)	14662		0.50000	0.6289
69 1,2,3-Trichloropropane	110	17.200	17.200	(0.940)	958		0.50000	0.5099
70 2-Chlorotoluene	91	17.348	17.348	(0.948)	9940		0.50000	0.5758
71 1,3,5-Trimethylbenzene	105	17.358	17.358	(0.949)	9398		0.50000	0.5732
72 4-Chlorotoluene	91	17.466	17.466	(0.955)	9257		0.50000	0.5631
73 tert-Butylbenzene	119	17.742	17.742	(0.970)	7856		0.50000	0.5823
74 1,2,4-Trimethylbenzene	105	17.801	17.801	(0.973)	10239		0.50000	0.5859
75 sec-Butylbenzene	105	17.988	17.988	(0.983)	12101		0.50000	0.6028
76 para-Isopropyl Toluene	119	18.126	18.126	(0.991)	9311		0.50000	0.5470

Data File: \\Gcmssserver\DD\chem\MSVOA04.i\102906.b\DJT06.D
Report Date: 29-Oct-2006 12:43

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 1,3-Dichlorobenzene	146	18.215	18.215	(0.996)	5131		0.50000	0.5610
* 78 1,4-Dichlorobenzene-d4	152	18.294	18.294	(1.000)	254016		50.0000	
79 1,4-Dichlorobenzene	146	18.323	18.323	(1.002)	4912		0.50000	0.5454
80 n-Butylbenzene	91	18.609	18.609	(1.017)	8574		0.50000	0.5462
81 1,2-Dichlorobenzene	146	18.786	18.786	(1.027)	5013		0.50000	0.5539
82 1,2-Dibromo-3-Chloropropane	75	19.761	19.761	(1.080)	871		0.50000	0.5664
83 1,2,4-Trichlorobenzene	180	20.864	20.864	(1.141)	2778		0.50000	0.4494
84 Hexachlorobutadiene	225	20.973	20.973	(1.146)	1109		0.50000	0.4466
85 Naphthalene	128	21.278	21.278	(1.163)	4583		0.50000	0.3169
86 1,2,3-Trichlorobenzene	180	21.662	21.662	(1.184)	2301		0.50000	0.4161

Data File: \\Gomsserver\JD\chem\MSV0004.i\102306.b\DJT06.D
 Date : 29-OCT-2006 03:12
 Client ID: DYNA P&T
 Sample Info: ICAL,S4594,0.001/1000,S4519,0.002/1000
 Purge Volume: 5.0
 Column phase: RTX 624

Instrument: MSV0004.i
 Operator: VOC
 Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA04.i\102906.b\DJT07.D
Report Date: 29-Oct-2006 12:45

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA04.i\102906.b\DJT07.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 29-OCT-2006 03:45 MS Autotune Date: 14-OCT-2006 13:38
Operator : VOC Inst ID: MSVOA04.i
Smp Info : ICAL,S4594,0.002/500,S4519,0.002/500
Misc Info : S4172,0.001/500,2PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA04.i\102906.b\826GOX04.m
Meth Date : 29-Oct-2006 12:45 chemist Quant Type: ISTD
Cal Date : 29-OCT-2006 03:45 Cal File: DJT07.D
Als bottle: 7 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.724	4.724 (0.454)		16952	2.00000	1.7866
2 Chloromethane	50	5.167	5.167 (0.497)		22675	2.00000	1.9754
3 Vinyl Chloride	62	5.305	5.305 (0.510)		18955	2.00000	2.0881
4 Bromomethane	94	5.926	5.926 (0.570)		9652	2.00000	1.9864 (M)
5 Chloroethane	64	6.074	6.074 (0.584)		8991	2.00000	2.1102
6 Trichlorofluoromethane	101	6.428	6.428 (0.618)		20315	2.00000	1.9385
7 Ethanol	45	6.724	6.724 (0.647)		20571	200.000	262.2376 (M)
8 Freon 113	101	7.147	7.147 (0.687)		10685	2.00000	2.0582
9 1,1-Dichloroethene	96	7.246	7.246 (0.697)		11073	2.00000	2.1274
10 Acetone	43	7.374	7.374 (0.709)		10192	2.00000	2.3027
11 Isopropanol	45	7.453	7.453 (0.717)		11865	2.00000	24.9027 (M)
12 Carbon Disulfide	76	7.650	7.650 (0.736)		43705	2.00000	2.1020
13 Methylene Chloride	84	7.994	7.994 (0.769)		13737	2.00000	2.1426
14 tert-Butyl Alcohol (TBA)	59	8.014	8.014 (0.771)		10229	20.0000	18.7277
15 MTBE	73	8.250	8.250 (0.793)		28404	2.00000	1.9145
16 trans-1,2-Dichloroethene	96	8.329	8.329 (0.801)		11604	2.00000	2.0607
17 Isopropyl Ether (DIPE)	45	8.861	8.861 (0.852)		65245	2.00000	2.0016
18 Vinyl Acetate	43	8.920	8.920 (0.858)		22787	2.00000	1.7722
19 1,1-Dichloroethane	63	8.969	8.969 (0.863)		21700	2.00000	1.9180
20 Ethyl tert-Butyl Ether (ETBE)	59	9.363	9.363 (0.901)		30370	2.00000	1.9449
21 2-Butanone	43	9.777	9.777 (0.940)		8876	2.00000	1.9378
22 2,2-Dichloropropane	77	9.777	9.777 (0.940)		8827	2.00000	1.8660

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\102906.b\DJT07.D
 Report Date: 29-Oct-2006 12:45

Compounds	QUANT SIG						AMOUNTS	
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	
23 cis-1,2-Dichloroethene	96	9.787	9.787	(0.941)	12675	2.00000	2.0831	
24 Bromochloromethane	128	10.151	10.151	(0.976)	6171	2.00000	2.0137	
25 Tetrahydrofuran	42	10.171	10.171	(0.978)	59336	20.0000	21.7157	
26 Chloroform	83	10.191	10.191	(0.980)	22866	2.00000	2.1994	
* 27 Pentafluorobenzene	168	10.398	10.398	(1.000)	353014	50.0000		
28 Dibromofluoromethane	113	10.437	10.437	(1.004)	264305	50.0000	50.5342	
29 1,1,1-Trichloroethane	97	10.476	10.476	(1.008)	13253	2.00000	1.8310	
30 Carbon Tetrachloride	117	10.673	10.673	(0.926)	8377	2.00000	1.6325	
31 1,1-Dichloropropene	75	10.693	10.693	(0.927)	12501	2.00000	1.9351	
32 1,2-Dichloroethane-d4	65	10.998	10.998	(0.954)	340195	50.0000	53.4242	
33 Benzene	78	11.018	11.018	(0.956)	37769	2.00000	2.1129	
34 Methyl tert-Amyl Ether (TAME)	73	11.028	11.028	(0.956)	24593	2.00000	2.0957	
35 1,2-Dichloroethane	62	11.107	11.107	(0.963)	20239	2.00000	2.1302	
* 36 1,4-Difluorobenzene	114	11.530	11.530	(1.000)	594535	50.0000		
37 Trichloroethene	95	11.924	11.924	(1.034)	10087	2.00000	1.9861	
38 Trifluorotoluene	146	12.289	12.289	(1.066)	12188	2.00000	1.9901	
39 1,2-Dichloropropane	63	12.328	12.328	(1.069)	12303	2.00000	1.9978	
40 Dibromomethane	93	12.515	12.515	(1.085)	9051	2.00000	2.1423	
41 Bromodichloromethane	83	12.673	12.673	(1.099)	14267	2.00000	1.9574	
42 2-Chloroethylvinylether	63	13.018	13.018	(1.129)	3935	2.00000	1.9299	
43 Tetramethyl THF	43	13.254	13.254	(1.149)	32313	2.00000	2.0689	
44 cis-1,3-Dichloropropene	75	13.293	13.293	(1.153)	13971	2.00000	1.9066	
45 4-Methyl-2-Pentanone	43	13.441	13.441	(1.166)	16107	2.00000	1.9234	
46 Toluene-d8	98	13.628	13.628	(1.182)	682382	50.0000	52.3981	
47 Toluene	92	13.717	13.717	(1.190)	21235	2.00000	2.0298	
48 trans-1,3-Dichloropropene	75	14.052	14.052	(1.219)	11795	2.00000	1.7597	
49 1,1,2-Trichloroethane	85	14.308	14.308	(1.241)	5060	2.00000	1.8814	
50 Tetrachloroethene	166	14.436	14.436	(0.927)	7743	2.00000	1.9185	
51 2-Hexanone	43	14.544	14.544	(0.934)	11110	2.00000	1.8920	
52 1,3-Dichloropropane	76	14.564	14.564	(0.935)	16373	2.00000	1.9291	
53 Dibromochloromethane	129	14.840	14.840	(0.953)	10253	2.00000	1.7991	
54 1,2-Dibromoethane	107	15.037	15.037	(1.304)	11055	2.00000	1.9430	
* 55 Chlorobenzene-d5	117	15.569	15.569	(1.000)	559251	50.0000		
56 Chlorobenzene	112	15.608	15.608	(1.003)	24749	2.00000	1.9696	
57 Ethylbenzene	91	15.657	15.657	(1.006)	41747	2.00000	2.0498	
58 1,1,1,2-Tetrachloroethane	131	15.687	15.687	(1.008)	7814	2.00000	1.7812	
59 m,p-Xylenes	106	15.805	15.805	(1.015)	32510	4.00000	4.1342	
60 o-Xylene	106	16.307	16.307	(1.047)	15787	2.00000	2.0135	
61 Styrene	104	16.327	16.327	(1.049)	27155	2.00000	1.9593	
62 Bromoform	173	16.623	16.623	(1.068)	7404	2.00000	1.8147	
63 Isopropylbenzene	105	16.701	16.701	(0.913)	37778	2.00000	1.8965	
64 Cyclohexanone	55	16.948	16.948	(0.926)	6466	2.00000	0.9717	
65 Bromofluorobenzene	95	16.967	16.967	(0.927)	337573	50.0000	48.8797	
66 1,1,2,2-Tetrachloroethane	83	17.105	17.105	(0.935)	13167	2.00000	1.8860	
67 Bromobenzene	156	17.164	17.164	(0.938)	9756	2.00000	1.9259	
68 Propylbenzene	91	17.174	17.174	(0.939)	48394	2.00000	2.0059	
69 1,2,3-Trichloropropane	110	17.194	17.194	(0.940)	3670	2.00000	1.8875	
70 2-Chlorotoluene	91	17.351	17.351	(0.948)	36014	2.00000	2.0161	
71 1,3,5-Trimethylbenzene	105	17.361	17.361	(0.949)	33997	2.00000	2.0038	
72 4-Chlorotoluene	91	17.470	17.470	(0.955)	33747	2.00000	1.9838	
73 tert-Butylbenzene	119	17.736	17.736	(0.969)	26894	2.00000	1.9263	
74 1,2,4-Trimethylbenzene	105	17.805	17.805	(0.973)	35189	2.00000	1.9459	
75 sec-Butylbenzene	105	17.992	17.992	(0.983)	38658	2.00000	1.8609	
76 para-Isopropyl Toluene	119	18.130	18.130	(0.991)	33739	2.00000	1.9153	

Data File: \\Gcmssserver\DD\chem\MSVOA04.i\102906.b\DJT07.D
Report Date: 29-Oct-2006 12:45

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
	MASS					CAL-AMT (ug/L)	ON-COL (ug/L)
=====	====	----	-----	-----	-----	-----	-----
77 1,3-Dichlorobenzene	146	18.218	18.218	(0.996)	18251	2.00000	1.9282
* 78 1,4-Dichlorobenzene-d4	152	18.297	18.297	(1.000)	262882	50.0000	
79 1,4-Dichlorobenzene	146	18.327	18.327	(1.002)	17943	2.00000	1.9253
80 n-Butylbenzene	91	18.612	18.612	(1.017)	30600	2.00000	1.8837
81 1,2-Dichlorobenzene	146	18.789	18.789	(1.027)	17875	2.00000	1.9084
82 1,2-Dibromo-3-Chloropropane	75	19.765	19.765	(1.080)	2569	2.00000	1.6144
83 1,2,4-Trichlorobenzene	180	20.848	20.848	(1.139)	11205	2.00000	1.7516
84 Hexachlorobutadiene	225	20.966	20.966	(1.146)	4644	2.00000	1.8073
85 Naphthalene	128	21.281	21.281	(1.163)	20919	2.00000	1.3978
86 1,2,3-Trichlorobenzene	180	21.656	21.656	(1.184)	9323	2.00000	1.6293

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Gomsserver\DD\chem\MSV0604.i\102906.b\DJT07.D

Date : 29-OCT-2006 03:45

Client ID: DYNA P&T

Sample Info: ICAL,S4594,0.002/500,S4519,0.002/500

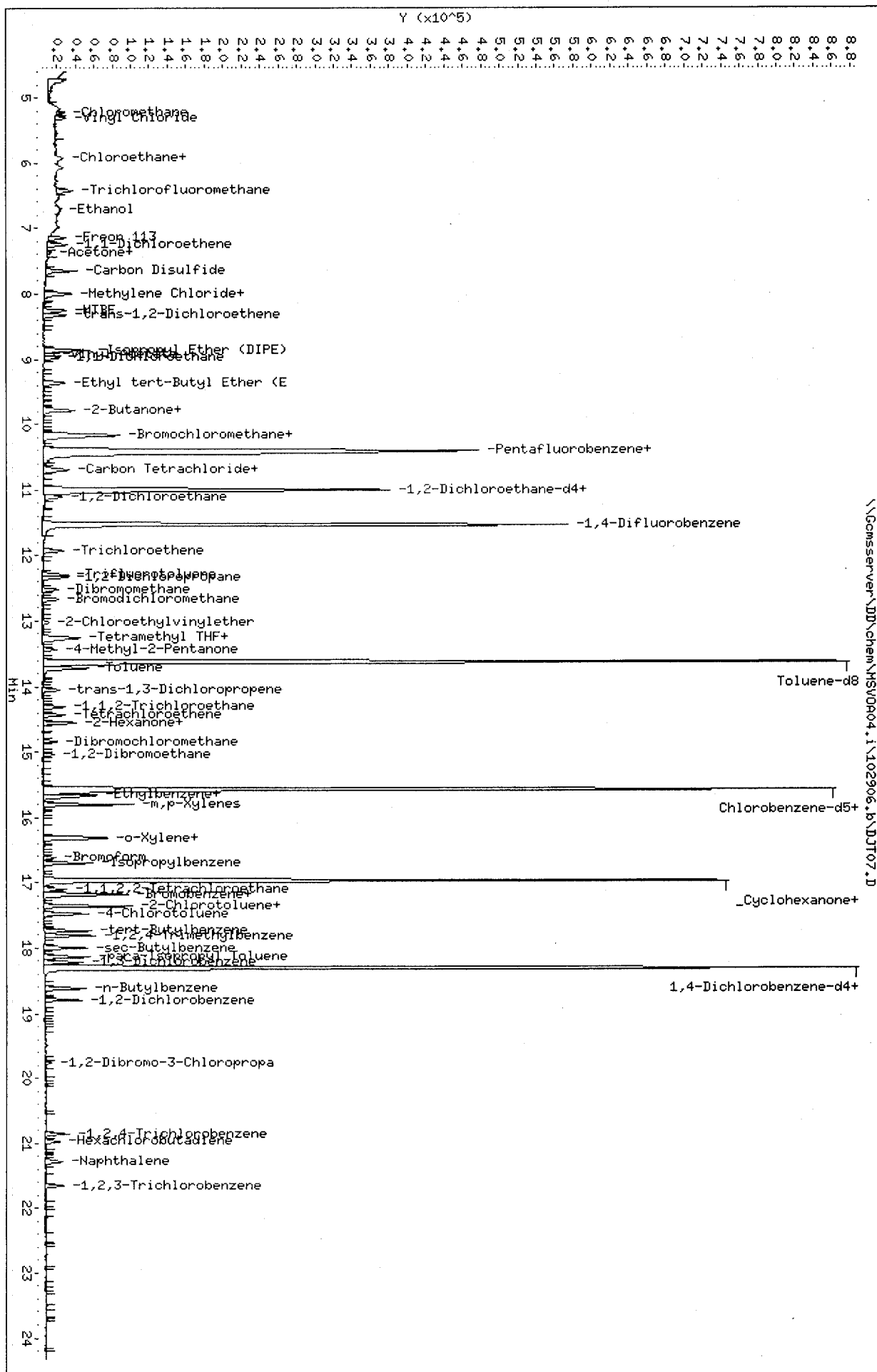
Purge Volume: 5.0

Column phase: RTX 624

Instrument: MSV0604.i

Operator: VDC

Column diameter: 0.25



Data File: \\Gcmssserver\DD\chem\MSVOA04.i\102906.b\DJT08.D
 Report Date: 29-Oct-2006 12:46

Curtis & Tompkins

Data file : \\Gcmssserver\DD\chem\MSVOA04.i\102906.b\DJT08.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 29-OCT-2006 04:17 MS Autotune Date: 14-OCT-2006 13:38
 Operator : VOC Inst ID: MSVOA04.i
 Smp Info : ICAL,S4594,0.005/500,S4519,0.005/500
 Misc Info : S4172,0.0025/500,5PPB
 Comment :
 Method : \\Gcmssserver\DD\chem\MSVOA04.i\102906.b\826GOX04.m
 Meth Date : 29-Oct-2006 12:46 chemist Quant Type: ISTD
 Cal Date : 29-OCT-2006 04:17 Cal File: DJT08.D
 Als bottle: 8 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.734	4.734 (0.455)		47727		5.00000	5.1192
2 Chloromethane	50	5.158	5.158 (0.496)		53277		5.00000	4.7236 (M)
3 Vinyl Chloride	62	5.316	5.316 (0.511)		43528		5.00000	4.8801 (M)
4 Bromomethane	94	5.926	5.926 (0.570)		23222		5.00000	4.8640 (M)
5 Chloroethane	64	6.084	6.084 (0.585)		19817		5.00000	4.7334 (M)
6 Trichlorofluoromethane	101	6.429	6.429 (0.618)		52519		5.00000	5.1004
7 Ethanol	45	6.704	6.704 (0.645)		44025		500.000	571.1700 (M)
8 Freon 113	101	7.157	7.157 (0.688)		20169		5.00000	3.9539
9 1,1-Dichloroethene	96	7.246	7.246 (0.697)		24815		5.00000	4.8521
10 Acetone	43	7.374	7.374 (0.709)		24450		5.00000	5.6219
11 Isopropanol	45	7.453	7.453 (0.717)		25251		50.0000	53.9367 (M)
12 Carbon Disulfide	76	7.650	7.650 (0.736)		98909		5.00000	4.8414
13 Methylene Chloride	84	7.995	7.995 (0.769)		33122		5.00000	5.2576
14 tert-Butyl Alcohol (TBA)	59	8.014	8.014 (0.771)		29539		50.0000	55.0394
15 MTBE	73	8.251	8.251 (0.793)		70711		5.00000	4.8506
16 trans-1,2-Dichloroethene	96	8.330	8.330 (0.801)		28389		5.00000	5.1309
17 Isopropyl Ether (DIPE)	45	8.861	8.861 (0.852)		161667		5.00000	5.0476
18 Vinyl Acetate	43	8.930	8.930 (0.859)		67333		5.00000	5.3297
19 1,1-Dichloroethane	63	8.970	8.970 (0.863)		56668		5.00000	5.0975
20 Ethyl tert-Butyl Ether (ETBE)	59	9.364	9.364 (0.901)		76013		5.00000	4.9541
21 2-Butanone	43	9.777	9.777 (0.940)		22820		5.00000	5.0704
22 2,2-Dichloropropane	77	9.777	9.777 (0.940)		22311		5.00000	4.8002

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
23 cis-1,2-Dichloroethene	96	9.797	9.797	(0.942)	31855	5.00000	5.3280
24 Bromochloromethane	128	10.152	10.152	(0.976)	16043	5.00000	5.3281
25 Tetrahydrofuran	42	10.171	10.171	(0.978)	150113	50.0000	55.9114
26 Chloroform	83	10.191	10.191	(0.980)	52916	5.00000	5.1800
* 27 Pentafluorobenzene	168	10.398	10.398	(1.000)	346869	50.0000	
28 Dibromofluoromethane	113	10.437	10.437	(1.004)	256255	50.0000	49.8631
29 1,1,1-Trichloroethane	97	10.487	10.487	(1.009)	33353	5.00000	4.6897
30 Carbon Tetrachloride	117	10.684	10.684	(0.927)	23904	5.00000	4.6140
31 1,1-Dichloropropene	75	10.703	10.703	(0.928)	32777	5.00000	5.0256
32 1,2-Dichloroethane-d4	65	10.999	10.999	(0.954)	334462	50.0000	52.0236
33 Benzene	78	11.018	11.018	(0.956)	93930	5.00000	5.2048
34 Methyl tert-Amyl Ether (TAME)	73	11.028	11.028	(0.956)	61655	5.00000	5.2039
35 1,2-Dichloroethane	62	11.107	11.107	(0.963)	51045	5.00000	5.3215
* 36 1,4-Difluorobenzene	114	11.531	11.531	(1.000)	600252	50.0000	
37 Trichloroethene	95	11.925	11.925	(1.034)	26205	5.00000	5.1107
38 Trifluorotoluene	146	12.289	12.289	(1.066)	30960	5.00000	5.0072
39 1,2-Dichloropropane	63	12.328	12.328	(1.069)	33212	5.00000	5.3418
40 Dibromomethane	93	12.525	12.525	(1.086)	22190	5.00000	5.2022
41 Bromodichloromethane	83	12.673	12.673	(1.099)	38800	5.00000	5.2726
42 2-Chloroethylvinylether	63	13.018	13.018	(1.129)	10578	5.00000	5.1386
43 Tetramethyl THF	43	13.254	13.254	(1.149)	86254	5.00000	5.4701
44 cis-1,3-Dichloropropene	75	13.294	13.294	(1.153)	37019	5.00000	5.0039
45 4-Methyl-2-Pentanone	43	13.441	13.441	(1.166)	44067	5.00000	5.2123
46 Toluene-d8	98	13.629	13.629	(1.182)	661318	50.0000	50.2970
47 Toluene	92	13.717	13.717	(1.190)	55551	5.00000	5.2595
48 trans-1,3-Dichloropropene	75	14.052	14.052	(1.219)	33326	5.00000	4.9248
49 1,1,2-Trichloroethane	85	14.318	14.318	(1.242)	14913	5.00000	5.4921
50 Tetrachloroethene	166	14.436	14.436	(0.927)	19922	5.00000	5.0615
51 2-Hexanone	43	14.545	14.545	(0.934)	29250	5.00000	5.1075
52 1,3-Dichloropropane	76	14.554	14.554	(0.935)	43482	5.00000	5.2532
53 Dibromochloromethane	129	14.830	14.830	(0.953)	28368	5.00000	5.1039
54 1,2-Dibromoethane	107	15.037	15.037	(1.304)	30327	5.00000	5.2794
* 55 Chlorobenzene-d5	117	15.569	15.569	(1.000)	545423	50.0000	
56 Chlorobenzene	112	15.608	15.608	(1.003)	63216	5.00000	5.1586
57 Ethylbenzene	91	15.658	15.658	(1.006)	106362	5.00000	5.3549
58 1,1,1,2-Tetrachloroethane	131	15.687	15.687	(1.008)	22654	5.00000	5.2950
59 m,p-Xylenes	106	15.796	15.796	(1.015)	80260	10.0000	10.4654
60 o-Xylene	106	16.308	16.308	(1.047)	41165	5.00000	5.3834
61 Styrene	104	16.327	16.327	(1.049)	73625	5.00000	5.4469
62 Bromoform	173	16.623	16.623	(1.068)	19487	5.00000	4.8973
63 Isopropylbenzene	105	16.702	16.702	(0.913)	99376	5.00000	5.1610
64 Cyclohexanone	55	16.938	16.938	(0.926)	20244	5.00000	3.1471
65 Bromofluorobenzene	95	16.958	16.958	(0.927)	342372	50.0000	51.2839
66 1,1,2,2-Tetrachloroethane	83	17.106	17.106	(0.935)	35652	5.00000	5.2829
67 Bromobenzene	156	17.165	17.165	(0.938)	25727	5.00000	5.2539
68 Propylbenzene	91	17.174	17.174	(0.939)	119665	5.00000	5.1311
69 1,2,3-Trichloropropane	110	17.194	17.194	(0.940)	9858	5.00000	5.2449
70 2-Chlorotoluene	91	17.352	17.352	(0.948)	95531	5.00000	5.5325
71 1,3,5-Trimethylbenzene	105	17.362	17.362	(0.949)	91788	5.00000	5.5967
72 4-Chlorotoluene	91	17.470	17.470	(0.955)	89254	5.00000	5.4277
73 tert-Butylbenzene	119	17.736	17.736	(0.969)	67150	5.00000	4.9756
74 1,2,4-Trimethylbenzene	105	17.805	17.805	(0.973)	92138	5.00000	5.2710
75 sec-Butylbenzene	105	17.992	17.992	(0.983)	98597	5.00000	4.9100
76 para-Isopropyl Toluene	119	18.130	18.130	(0.991)	88582	5.00000	5.2021

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\102906.b\DJT08.D
Report Date: 29-Oct-2006 12:46

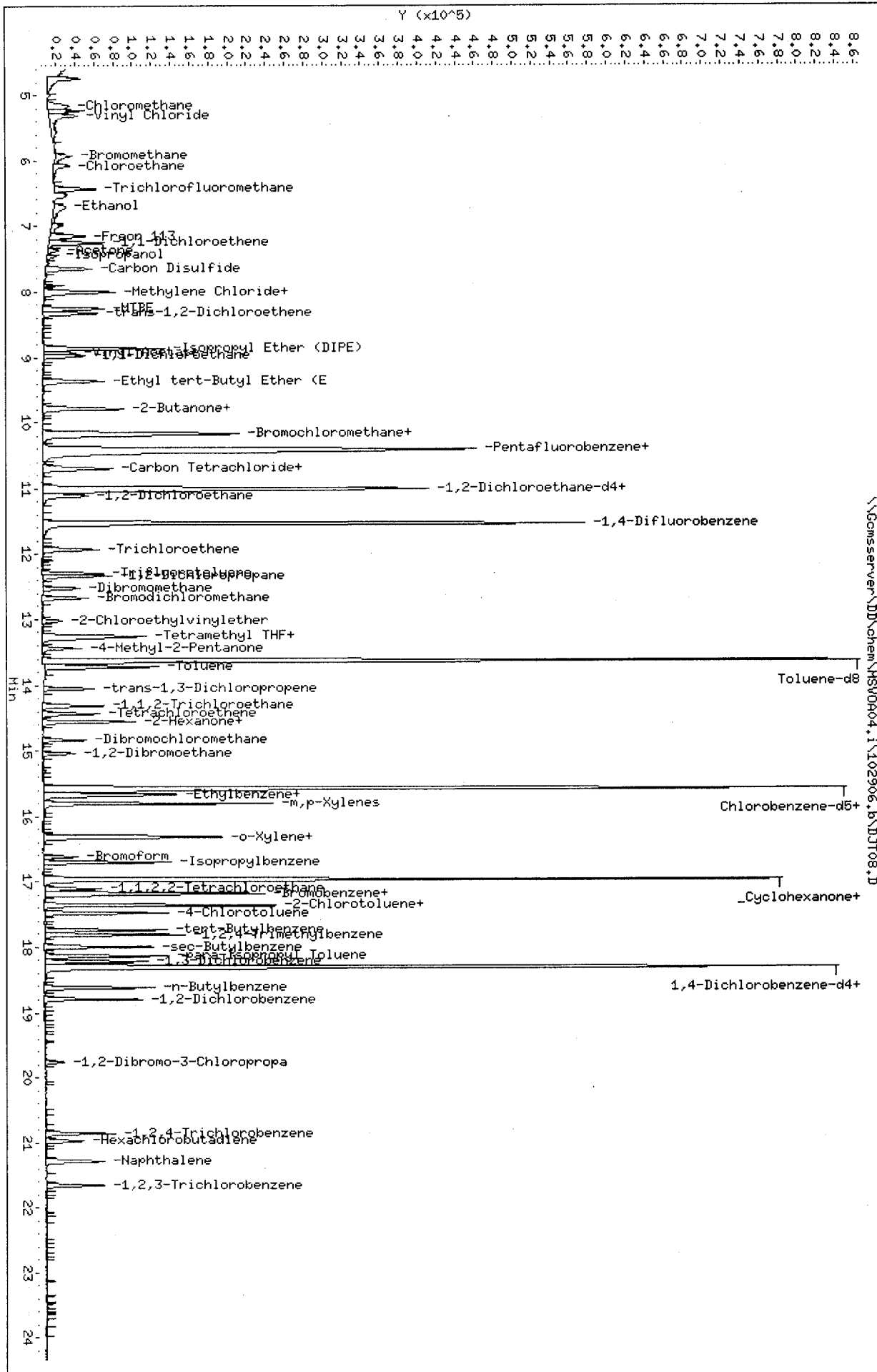
Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
	MASS					CAL-AMT (ug/L)	ON-COL (ug/L)
77 1,3-Dichlorobenzene	146	18.219	18.219	(0.996)	49501	5.00000	5.4102
* 78 1,4-Dichlorobenzene-d4	152	18.297	18.297	(1.000)	254120	50.0000	
79 1,4-Dichlorobenzene	146	18.327	18.327	(1.002)	48339	5.00000	5.3658
80 n-Butylbenzene	91	18.613	18.613	(1.017)	77305	5.00000	4.9229
81 1,2-Dichlorobenzene	146	18.790	18.790	(1.027)	48651	5.00000	5.3734
82 1,2-Dibromo-3-Chloropropane	75	19.755	19.755	(1.080)	7805	5.00000	5.0740
83 1,2,4-Trichlorobenzene	180	20.858	20.858	(1.140)	32752	5.00000	5.2967
84 Hexachlorobutadiene	225	20.976	20.976	(1.146)	12066	5.00000	4.8576
85 Naphthalene	128	21.282	21.282	(1.163)	74519	5.00000	5.1510
86 1,2,3-Trichlorobenzene	180	21.656	21.656	(1.184)	29240	5.00000	5.2864

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Comserver\JD\chem\MSV0A04.i\102906.b\DJT08.D
 Date : 29-OCT-2006 04:17
 Client ID: DYNA P&T
 Sample Info: ICAL,S4594,0.005/500,S4519,0.005/500
 Purge Volume: 5.0
 Column phase: RTX 624

Instrument: MSV0A04.i
 Operator: VDC
 Column diameter: 0.25



Data File: \\Gcmssserver\DD\chem\MSVOA04.i\102906.b\DJT09.D
 Report Date: 29-Oct-2006 12:47

Curtis & Tompkins

Data file : \\Gcmssserver\DD\chem\MSVOA04.i\102906.b\DJT09.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 29-OCT-2006 04:50 MS Autotune Date: 14-OCT-2006 13:38
 Operator : VOC Inst ID: MSVOA04.i
 Smp Info : ICAL,S4594,0.002/100,S4519,0.002/100
 Misc Info : S4172,0.001/100,10PPB
 Comment :
 Method : \\Gcmssserver\DD\chem\MSVOA04.i\102906.b\826GOX04.m
 Meth Date : 29-Oct-2006 12:47 chemist Quant Type: ISTD
 Cal Date : 29-OCT-2006 04:50 Cal File: DJT09.D
 Als bottle: 9 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
1 Freon 12	85	4.735	4.735	(0.455)	90090	10.0000	9.8685
2 Chloromethane	50	5.158	5.158	(0.496)	107612	10.0000	9.7437
3 Vinyl Chloride	62	5.306	5.306	(0.510)	91395	10.0000	10.4644
4 Bromomethane	94	5.926	5.926	(0.570)	47484	10.0000	10.1571
5 Chloroethane	64	6.074	6.074	(0.584)	40538	10.0000	9.8885
6 Trichlorofluoromethane	101	6.429	6.429	(0.618)	102763	10.0000	10.1919
7 Ethanol	45	6.705	6.705	(0.645)	83159	1000.00	1101.8033 (M)
8 Freon 113	101	7.148	7.148	(0.687)	52285	10.0000	10.4676
9 1,1-Dichloroethene	96	7.246	7.246	(0.697)	51291	10.0000	10.2421
10 Acetone	43	7.365	7.365	(0.708)	51404	10.0000	12.0707
11 Isopropanol	45	7.463	7.463	(0.718)	49743	100.000	108.5093
12 Carbon Disulfide	76	7.640	7.640	(0.735)	204360	10.0000	10.2156
13 Methylene Chloride	84	7.995	7.995	(0.769)	64115	10.0000	10.3935
14 tert-Butyl Alcohol (TBA)	59	8.015	8.015	(0.771)	56429	100.000	107.3764
15 MTBE	73	8.251	8.251	(0.793)	154243	10.0000	10.8056
16 trans-1,2-Dichloroethene	96	8.320	8.320	(0.800)	55812	10.0000	10.3016
17 Isopropyl Ether (DIPE)	45	8.862	8.862	(0.852)	337452	10.0000	10.7599
18 Vinyl Acetate	43	8.931	8.931	(0.859)	102973	10.0000	8.3239
19 1,1-Dichloroethane	63	8.970	8.970	(0.863)	116247	10.0000	10.6791
20 Ethyl tert-Butyl Ether (ETBE)	59	9.364	9.364	(0.901)	165957	10.0000	11.0461
21 2-Butanone	43	9.778	9.778	(0.940)	45122	10.0000	10.2387
22 2,2-Dichloropropane	77	9.768	9.768	(0.939)	47192	10.0000	10.3690

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
23 cis-1,2-Dichloroethene	96	9.797	9.797	(0.942)	62652	10.0000	10.7018
24 Bromochloromethane	128	10.152	10.152	(0.976)	30781	10.0000	10.4399
25 Tetrahydrofuran	42	10.162	10.162	(0.977)	279647	100.000	106.3705
26 Chloroform	83	10.191	10.191	(0.980)	104611	10.0000	10.4581
* 27 Pentafluorobenzene	168	10.398	10.398	(1.000)	339654	50.0000	
28 Dibromofluoromethane	113	10.438	10.438	(1.004)	250935	50.0000	49.8651
29 1,1,1-Trichloroethane	97	10.487	10.487	(1.009)	70640	10.0000	10.1436
30 Carbon Tetrachloride	117	10.684	10.684	(0.927)	55172	10.0000	10.7437
31 1,1-Dichloropropene	75	10.704	10.704	(0.929)	68762	10.0000	10.6363
32 1,2-Dichloroethane-d4	65	10.999	10.999	(0.955)	337749	50.0000	52.9993
33 Benzene	78	11.019	11.019	(0.956)	196282	10.0000	10.9726
34 Methyl tert-Amyl Ether (TAME)	73	11.029	11.029	(0.957)	127758	10.0000	10.8786
35 1,2-Dichloroethane	62	11.107	11.107	(0.964)	101762	10.0000	10.7026
* 36 1,4-Difluorobenzene	114	11.521	11.521	(1.000)	594992	50.0000	
37 Trichloroethene	95	11.925	11.925	(1.035)	55559	10.0000	10.9315
38 Trifluorotoluene	146	12.289	12.289	(1.067)	64078	10.0000	10.4552
39 1,2-Dichloropropane	63	12.329	12.329	(1.070)	67397	10.0000	10.9360
40 Dibromomethane	93	12.516	12.516	(1.086)	45911	10.0000	10.8585
41 Bromodichloromethane	83	12.673	12.673	(1.100)	79118	10.0000	10.8466
42 2-Chloroethylvinylether	63	13.018	13.018	(1.130)	22872	10.0000	11.2092
43 Tetramethyl THF	43	13.255	13.255	(1.150)	172392	10.0000	11.0296
44 cis-1,3-Dichloropropene	75	13.294	13.294	(1.154)	81906	10.0000	11.1692
45 4-Methyl-2-Pentanone	43	13.432	13.432	(1.166)	90024	10.0000	10.7423
46 Toluene-d8	98	13.619	13.619	(1.182)	666015	50.0000	51.1020
47 Toluene	92	13.718	13.718	(1.191)	109498	10.0000	10.4588
48 trans-1,3-Dichloropropene	75	14.052	14.052	(1.220)	72691	10.0000	10.8370
49 1,1,2-Trichloroethane	85	14.309	14.309	(1.242)	29616	10.0000	11.0034
50 Tetrachloroethene	166	14.437	14.437	(0.927)	40705	10.0000	10.1967
51 2-Hexanone	43	14.545	14.545	(0.934)	63019	10.0000	10.8497
52 1,3-Dichloropropane	76	14.555	14.555	(0.935)	92736	10.0000	11.0466
53 Dibromochloromethane	129	14.831	14.831	(0.953)	60908	10.0000	10.8048
54 1,2-Dibromoethane	107	15.037	15.037	(1.305)	62274	10.0000	10.9367
* 55 Chlorobenzene-d5	117	15.569	15.569	(1.000)	553181	50.0000	
56 Chlorobenzene	112	15.599	15.599	(1.002)	126270	10.0000	10.1596
57 Ethylbenzene	91	15.658	15.658	(1.006)	206225	10.0000	10.2370
58 1,1,1,2-Tetrachloroethane	131	15.687	15.687	(1.008)	45544	10.0000	10.4958
59 m,p-Xylenes	106	15.796	15.796	(1.015)	151584	20.0000	19.4884
60 o-Xylene	106	16.298	16.298	(1.047)	77902	10.0000	10.0450
61 Styrene	104	16.328	16.328	(1.049)	141390	10.0000	10.3137
62 Bromoform	173	16.623	16.623	(1.068)	41956	10.0000	10.3962
63 Isopropylbenzene	105	16.702	16.702	(0.913)	192459	10.0000	9.8616
64 Cyclohexanone	55	16.938	16.938	(0.926)	86449	10.0000	13.2599
65 Bromofluorobenzene	95	16.958	16.958	(0.927)	331335	50.0000	48.9678
66 1,1,2,2-Tetrachloroethane	83	17.106	17.106	(0.935)	68762	10.0000	10.0532
67 Bromobenzene	156	17.165	17.165	(0.938)	50987	10.0000	10.2734
68 Propylbenzene	91	17.175	17.175	(0.939)	236482	10.0000	10.0048
69 1,2,3-Trichloropropane	110	17.194	17.194	(0.940)	19085	10.0000	10.0184
70 2-Chlorotoluene	91	17.342	17.342	(0.948)	172551	10.0000	9.8596
71 1,3,5-Trimethylbenzene	105	17.362	17.362	(0.949)	162809	10.0000	9.7947
72 4-Chlorotoluene	91	17.470	17.470	(0.955)	167406	10.0000	10.0443
73 tert-Butylbenzene	119	17.736	17.736	(0.969)	134219	10.0000	9.8123
74 1,2,4-Trimethylbenzene	105	17.805	17.805	(0.973)	181029	10.0000	10.2179
75 sec-Butylbenzene	105	17.982	17.982	(0.983)	203222	10.0000	9.9850
76 para-Isopropyl Toluene	119	18.130	18.130	(0.991)	175761	10.0000	10.1840

Data File: \\Gcmssserver\DD\chem\MSVOA04.i\102906.b\DJT09.D
Report Date: 29-Oct-2006 12:47

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
77 1,3-Dichlorobenzene	146	18.219	18.219	(0.996)	94159		10.0000	10.1536
* 78 1,4-Dichlorobenzene-d4	152	18.298	18.298	(1.000)	257560		50.0000	
79 1,4-Dichlorobenzene	146	18.327	18.327	(1.002)	91995		10.0000	10.0754
80 n-Butylbenzene	91	18.613	18.613	(1.017)	160713		10.0000	10.0978
81 1,2-Dichlorobenzene	146	18.790	18.790	(1.027)	93161		10.0000	10.1521
82 1,2-Dibromo-3-Chloropropane	75	19.755	19.755	(1.080)	16244		10.0000	10.4191
83 1,2,4-Trichlorobenzene	180	20.849	20.849	(1.139)	66654		10.0000	10.6354
84 Hexachlorobutadiene	225	20.977	20.977	(1.146)	28203		10.0000	11.2025
85 Naphthalene	128	21.282	21.282	(1.163)	158276		10.0000	10.7945
86 1,2,3-Trichlorobenzene	180	21.656	21.656	(1.184)	59798		10.0000	10.6668

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Comserver\DD\chem\MSV0A04.i\102906.b\DJT09.J

Date : 29-OCT-2006 04:50

Client ID: DYNA P&T

Sample Info: ICAL,S4594,0.002/100,S4519,0.002/100

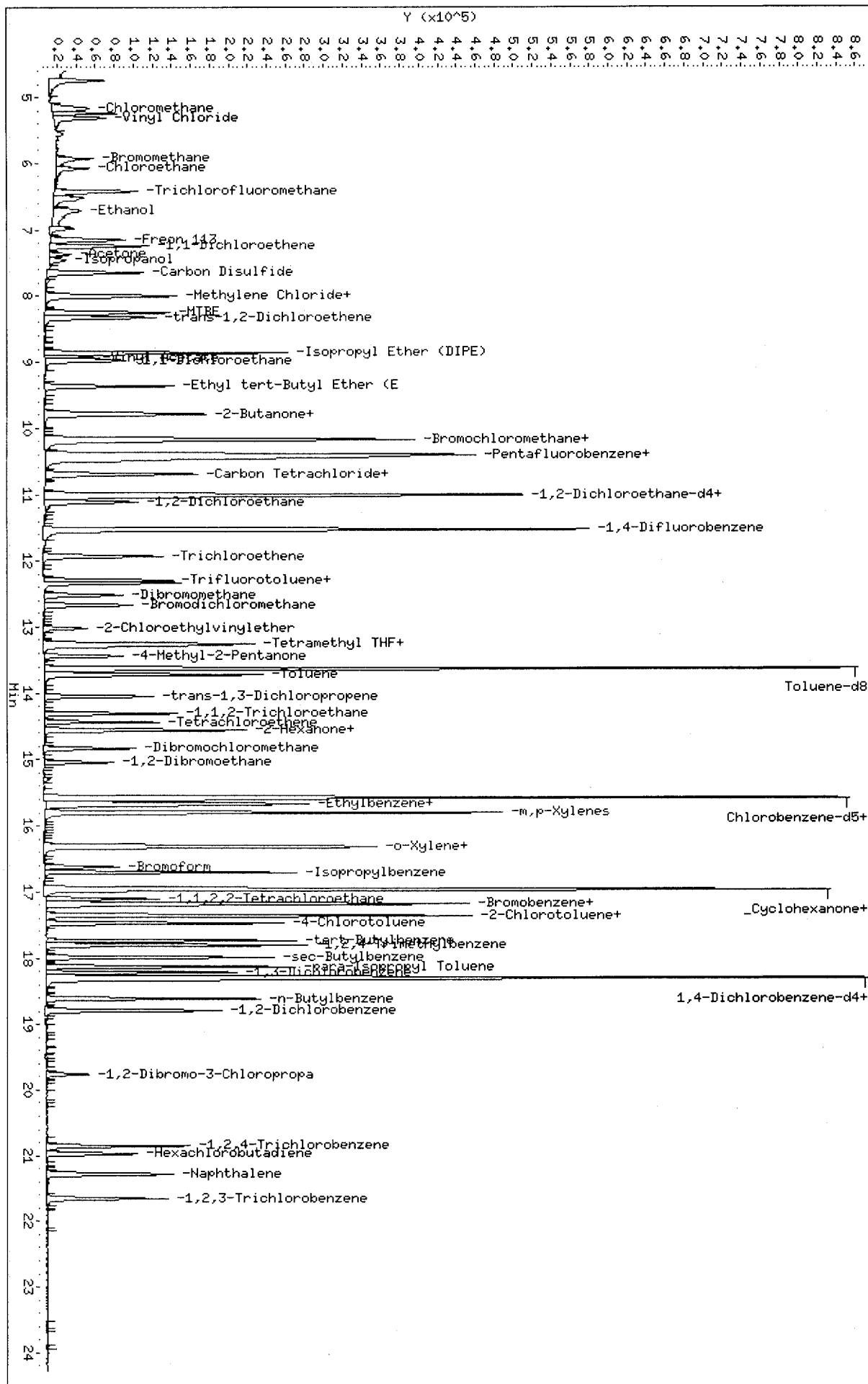
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Column phase: RTX 624

Instrument: MSV0A04.i

Operator: WOC

Column diameter: 0.25



Data File: \\Gcmssserver\DD\chem\MSVOA04.i\102906.b\DJT10.D
 Report Date: 29-Oct-2006 12:49

Curtis & Tompkins

Data file : \\Gcmssserver\DD\chem\MSVOA04.i\102906.b\DJT10.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 29-OCT-2006 05:22 MS Autotune Date: 14-OCT-2006 13:38
 Operator : VOC Inst ID: MSVOA04.i
 Smp Info : ICAL,S4594,0.004/100,S4519,0.004/100
 Misc Info : S4172,0.002/100,20PPB
 Comment :
 Method : \\Gcmssserver\DD\chem\MSVOA04.i\102906.b\826GOX04.m
 Meth Date : 29-Oct-2006 12:49 chemist Quant Type: ISTD
 Cal Date : 29-OCT-2006 05:22 Cal File: DJT10.D
 Als bottle: 10 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG						AMOUNTS	
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.732	4.732	(0.455)		205130	20.0000	21.5834
2 Chloromethane	50	5.165	5.165	(0.497)		227039	20.0000	19.7461
3 Vinyl Chloride	62	5.303	5.303	(0.510)		187590	20.0000	20.6309
4 Bromomethane	94	5.923	5.923	(0.570)		97769	20.0000	20.0883
5 Chloroethane	64	6.071	6.071	(0.584)		84338	20.0000	19.7611
6 Trichlorofluoromethane	101	6.426	6.426	(0.618)		216713	20.0000	20.6452
7 Ethanol	45	6.711	6.711	(0.646)		141553	2000.00	1801.4865 (M)
8 Freon 113	101	7.145	7.145	(0.687)		111970	20.0000	21.5324
9 1,1-Dichloroethene	96	7.243	7.243	(0.697)		103047	20.0000	19.7653
10 Acetone	43	7.371	7.371	(0.709)		75431	20.0000	17.0139
11 Isopropanol	45	7.450	7.450	(0.717)		87493	200.000	183.3266
12 Carbon Disulfide	76	7.637	7.637	(0.735)		418220	20.0000	20.0812
13 Methylene Chloride	84	7.992	7.992	(0.769)		134382	20.0000	20.9249
14 tert-Butyl Alcohol (TBA)	59	8.011	8.011	(0.771)		106217	200.000	194.1412
15 MTBE	73	8.248	8.248	(0.793)		305968	20.0000	20.5891
16 trans-1,2-Dichloroethene	96	8.327	8.327	(0.801)		111355	20.0000	19.7426
17 Isopropyl Ether (DIPE)	45	8.859	8.859	(0.852)		649058	20.0000	19.8791
18 Vinyl Acetate	43	8.927	8.927	(0.859)		312787	20.0000	24.2868
19 1,1-Dichloroethane	63	8.977	8.977	(0.864)		230521	20.0000	20.3415
20 Ethyl tert-Butyl Ether (ETBE)	59	9.361	9.361	(0.901)		319256	20.0000	20.4112
21 2-Butanone	43	9.775	9.775	(0.940)		82395	20.0000	17.9587
22 2,2-Dichloropropane	77	9.775	9.775	(0.940)		96084	20.0000	20.2786

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
23 cis-1,2-Dichloroethene	96	9.794	9.794	(0.942)	121958	20.0000	20.0101
24 Bromochloromethane	128	10.149	10.149	(0.976)	61670	20.0000	20.0912
25 Tetrahydrofuran	42	10.169	10.169	(0.978)	516864	200.000	188.8446
26 Chloroform	83	10.188	10.188	(0.980)	198470	20.0000	19.0585
* 27 Pentafluorobenzene	168	10.395	10.395	(1.000)	353606	50.0000	
28 Dibromofluoromethane	113	10.434	10.434	(1.004)	259111	50.0000	49.4582
29 1,1,1-Trichloroethane	97	10.484	10.484	(1.009)	149618	20.0000	20.6369
30 Carbon Tetrachloride	117	10.681	10.681	(0.927)	121647	20.0000	22.4145
31 1,1-Dichloropropene	75	10.700	10.700	(0.928)	136133	20.0000	19.9250
32 1,2-Dichloroethane-d4	65	10.996	10.996	(0.954)	334057	50.0000	49.6006
33 Benzene	78	11.016	11.016	(0.956)	373636	20.0000	19.7637
34 Methyl tert-Amyl Ether (TAME)	73	11.025	11.025	(0.956)	249681	20.0000	20.1170
35 1,2-Dichloroethane	62	11.114	11.114	(0.964)	196003	20.0000	19.5055
* 36 1,4-Difluorobenzene	114	11.528	11.528	(1.000)	628812	50.0000	
37 Trichloroethene	95	11.922	11.922	(1.034)	107044	20.0000	19.9286
38 Trifluorotoluene	146	12.286	12.286	(1.066)	126906	20.0000	19.5928
39 1,2-Dichloropropane	63	12.326	12.326	(1.069)	134803	20.0000	20.6970
40 Dibromomethane	93	12.513	12.513	(1.085)	90388	20.0000	20.2282
41 Bromodichloromethane	83	12.670	12.670	(1.099)	155002	20.0000	20.1071
42 2-Chloroethylvinylether	63	13.025	13.025	(1.130)	45037	20.0000	20.8848
43 Tetramethyl THF	43	13.251	13.251	(1.150)	319278	20.0000	19.3286
44 cis-1,3-Dichloropropene	75	13.291	13.291	(1.153)	160153	20.0000	20.6649
45 4-Methyl-2-Pentanone	43	13.439	13.439	(1.166)	171639	20.0000	19.3797
46 Toluene-d8	98	13.626	13.626	(1.182)	674717	50.0000	48.9853
47 Toluene	92	13.714	13.714	(1.190)	211135	20.0000	19.0822
48 trans-1,3-Dichloropropene	75	14.049	14.049	(1.219)	145661	20.0000	20.5477
49 1,1,2-Trichloroethane	85	14.315	14.315	(1.242)	55159	20.0000	19.3913
50 Tetrachloroethene	166	14.433	14.433	(0.927)	78522	20.0000	19.7709
51 2-Hexanone	43	14.552	14.552	(0.935)	117538	20.0000	20.3399
52 1,3-Dichloropropane	76	14.561	14.561	(0.935)	170552	20.0000	20.4203
53 Dibromochloromethane	129	14.837	14.837	(0.953)	115187	20.0000	20.5386
54 1,2-Dibromoethane	107	15.034	15.034	(1.304)	119730	20.0000	19.8963
* 55 Chlorobenzene-d5	117	15.566	15.566	(1.000)	550356	50.0000	
56 Chlorobenzene	112	15.606	15.606	(1.003)	244025	20.0000	19.7349
57 Ethylbenzene	91	15.665	15.665	(1.006)	386934	20.0000	19.3060
58 1,1,1,2-Tetrachloroethane	131	15.684	15.684	(1.008)	84728	20.0000	19.6263
59 m,p-Xylenes	106	15.803	15.803	(1.015)	288487	40.0000	37.2798
60 o-Xylene	106	16.305	16.305	(1.047)	150780	20.0000	19.5419
61 Styrene	104	16.325	16.325	(1.049)	268909	20.0000	19.7163
62 Bromoform	173	16.620	16.620	(1.068)	80783	20.0000	20.1198
63 Isopropylbenzene	105	16.699	16.699	(0.913)	366817	20.0000	19.3087
64 Cyclohexanone	55	16.945	16.945	(0.926)	62478	20.0000	9.8446
65 Bromofluorobenzene	95	16.965	16.965	(0.927)	328714	50.0000	49.9060
66 1,1,2,2-Tetrachloroethane	83	17.103	17.103	(0.935)	138018	20.0000	20.7292
67 Bromobenzene	156	17.172	17.172	(0.939)	97153	20.0000	20.1095
68 Propylbenzene	91	17.172	17.172	(0.939)	443495	20.0000	19.2748
69 1,2,3-Trichloropropane	110	17.201	17.201	(0.940)	37411	20.0000	20.1743
70 2-Chlorotoluene	91	17.349	17.349	(0.948)	325235	20.0000	19.0911
71 1,3,5-Trimethylbenzene	105	17.359	17.359	(0.949)	311344	20.0000	19.2417
72 4-Chlorotoluene	91	17.467	17.467	(0.955)	306317	20.0000	18.8805
73 tert-Butylbenzene	119	17.733	17.733	(0.969)	255267	20.0000	19.1710
74 1,2,4-Trimethylbenzene	105	17.802	17.802	(0.973)	326041	20.0000	18.9051
75 sec-Butylbenzene	105	17.989	17.989	(0.983)	391348	20.0000	19.7530
76 para-Isopropyl Toluene	119	18.127	18.127	(0.991)	325784	20.0000	19.3918

Data File: \\Gcmssserver\DD\chem\MSVOA04.i\102906.b\DJT10.D
 Report Date: 29-Oct-2006 12:49

Compounds	QUANT SIG	AMOUNTS					
		CAL-AMT	ON-COL				
	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
77 1,3-Dichlorobenzene	146	18.216	18.216	(0.996)	174296	20.0000	19.3080
* 78 1,4-Dichlorobenzene-d4	152	18.294	18.294	(1.000)	250719	50.0000	
79 1,4-Dichlorobenzene	146	18.324	18.324	(1.002)	170287	20.0000	19.1590
80 n-Butylbenzene	91	18.610	18.610	(1.017)	308711	20.0000	19.9260
81 1,2-Dichlorobenzene	146	18.787	18.787	(1.027)	174765	20.0000	19.5646
82 1,2-Dibromo-3-Chloropropane	75	19.762	19.762	(1.080)	30652	20.0000	20.1971
83 1,2,4-Trichlorobenzene	180	20.855	20.855	(1.140)	124490	20.0000	20.4058
84 Hexachlorobutadiene	225	20.974	20.974	(1.146)	49590	20.0000	20.2352
85 Naphthalene	128	21.279	21.279	(1.163)	298999	20.0000	20.9484
86 1,2,3-Trichlorobenzene	180	21.653	21.653	(1.184)	107539	20.0000	19.7063

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Gomserver\DD\chem\MSV0404.i\102906.b\DJT10.D

Date : 29-Oct-2006 05:22

Client ID: DYNA P&I

Sample Info: ICAL.S4594,0.004/100,S4519,0.004/100

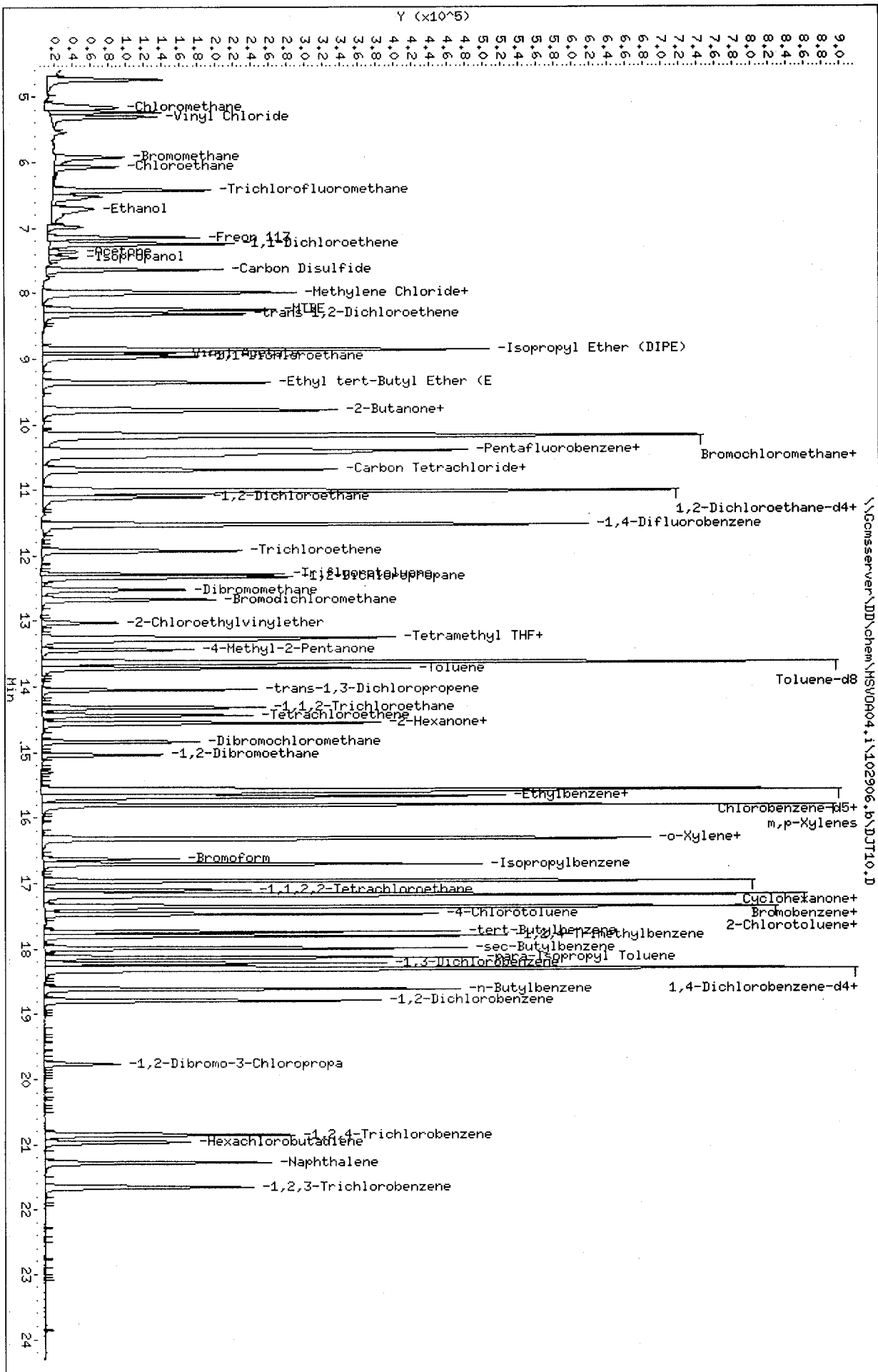
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Column phase: RTX 624

Instrument: MSV0404.i

Operator: VOC

Column diameter: 0.25



Data File: \\Gcmsserver\DD\chem\MSVOA04.i\102906.b\DJT11.D
 Report Date: 29-Oct-2006 12:50

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA04.i\102906.b\DJT11.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 29-OCT-2006 05:55 MS Autotune Date: 14-OCT-2006 13:38
 Operator : VOC Inst ID: MSVOA04.i
 Smp Info : ICAL,S4594,0.01/100,S4519,0.01/100
 Misc Info : S4172,0.005/100,50PPB
 Comment :
 Method : \\Gcmsserver\DD\chem\MSVOA04.i\102906.b\826GOX04.m
 Meth Date : 29-Oct-2006 12:50 chemist Quant Type: ISTD
 Cal Date : 29-OCT-2006 05:55 Cal File: DJT11.D
 Als bottle: 11 Calibration Sample, Level: 6
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.734	4.734	(0.455)	499353	50.0000	52.4737
2 Chloromethane	50	5.158	5.158	(0.496)	584661	50.0000	50.7841
3 Vinyl Chloride	62	5.306	5.306	(0.510)	457809	50.0000	50.2848
4 Bromomethane	94	5.926	5.926	(0.570)	246180	50.0000	50.5170
5 Chloroethane	64	6.074	6.074	(0.584)	212957	50.0000	49.8336
6 Trichlorofluoromethane	101	6.429	6.429	(0.618)	529947	50.0000	50.4209
7 Ethanol	45	6.714	6.714	(0.646)	323234	5000.00	4108.3907
8 Freon 113	101	7.148	7.148	(0.687)	275118	50.0000	52.8388
9 1,1-Dichloroethene	96	7.246	7.246	(0.697)	240393	50.0000	46.0503
10 Acetone	43	7.364	7.364	(0.708)	199910	50.0000	45.0332
11 Isopropanol	45	7.453	7.453	(0.717)	202009	500.0000	422.7326
12 Carbon Disulfide	76	7.640	7.640	(0.735)	1005393	50.0000	48.2130
13 Methylene Chloride	84	7.995	7.995	(0.769)	302766	50.0000	47.0839
14 tert-Butyl Alcohol (TBA)	59	8.014	8.014	(0.771)	247160	500.0000	451.1747
15 MTBE	73	8.251	8.251	(0.793)	732093	50.0000	49.2007
16 trans-1,2-Dichloroethene	96	8.320	8.320	(0.800)	267637	50.0000	47.3897
17 Isopropyl Ether (DIPE)	45	8.852	8.852	(0.851)	1559069	50.0000	47.6895
18 Vinyl Acetate	43	8.921	8.921	(0.858)	770074	50.0000	59.7168
19 1,1-Dichloroethane	63	8.970	8.970	(0.863)	559734	50.0000	49.3284
20 Ethyl tert-Butyl Ether (ETBE)	59	9.364	9.364	(0.901)	781072	50.0000	49.8728
21 2-Butanone	43	9.777	9.777	(0.940)	210980	50.0000	45.9260
22 2,2-Dichloropropane	77	9.768	9.768	(0.939)	234357	50.0000	49.3979

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	----	----	-----	-----	-----	-----	-----
23 cis-1,2-Dichloroethene	96	9.797	9.797	(0.942)	275800	50.0000	45.1936
24 Bromochloromethane	128	10.152	10.152	(0.976)	145445	50.0000	47.3232
25 Tetrahydrofuran	42	10.162	10.162	(0.977)	1224495	500.000	446.8155
26 Chloroform	83	10.191	10.191	(0.980)	487389	50.0000	46.7427
* 27 Pentafluorobenzene	168	10.398	10.398	(1.000)	354060	50.0000	
28 Dibromofluoromethane	113	10.437	10.437	(1.004)	265648	50.0000	50.6409
29 1,1,1-Trichloroethane	97	10.477	10.477	(1.008)	382624	50.0000	52.7081
30 Carbon Tetrachloride	117	10.684	10.684	(0.927)	310024	50.0000	55.1917
31 1,1-Dichloropropene	75	10.703	10.703	(0.928)	336671	50.0000	47.6092
32 1,2-Dichloroethane-d4	65	10.999	10.999	(0.954)	324845	50.0000	46.6008
33 Benzene	78	11.019	11.019	(0.956)	904437	50.0000	46.2220
34 Methyl tert-Amyl Ether (TAME)	73	11.028	11.028	(0.956)	595347	50.0000	46.3446
35 1,2-Dichloroethane	62	11.107	11.107	(0.963)	483951	50.0000	46.5316
* 36 1,4-Difluorobenzene	114	11.531	11.531	(1.000)	650834	50.0000	
37 Trichloroethene	95	11.925	11.925	(1.034)	273713	50.0000	49.2336
38 Trifluorotoluene	146	12.289	12.289	(1.066)	313598	50.0000	46.7776
39 1,2-Dichloropropane	63	12.329	12.329	(1.069)	322154	50.0000	47.7884
40 Dibromomethane	93	12.516	12.516	(1.085)	220544	50.0000	47.6861
41 Bromodichloromethane	83	12.673	12.673	(1.099)	399962	50.0000	50.1281
42 2-Chloroethylvinylether	63	13.018	13.018	(1.129)	103428	50.0000	46.3393
43 Tetramethyl THF	43	13.254	13.254	(1.149)	782925	50.0000	45.7935
44 cis-1,3-Dichloropropene	75	13.294	13.294	(1.153)	411497	50.0000	51.2999
45 4-Methyl-2-Pentanone	43	13.432	13.432	(1.165)	425574	50.0000	46.4257
46 Toluene-d8	98	13.629	13.629	(1.182)	697831	50.0000	48.9491
47 Toluene	92	13.717	13.717	(1.190)	550727	50.0000	48.0900
48 trans-1,3-Dichloropropene	75	14.042	14.042	(1.218)	388241	50.0000	52.9143
49 1,1,2-Trichloroethane	85	14.308	14.308	(1.241)	143324	50.0000	48.6812
50 Tetrachloroethene	166	14.436	14.436	(0.927)	202450	50.0000	48.0263
51 2-Hexanone	43	14.545	14.545	(0.934)	283343	50.0000	46.1966
52 1,3-Dichloropropane	76	14.555	14.555	(0.935)	424397	50.0000	47.8744
53 Dibromochloromethane	129	14.830	14.830	(0.953)	309731	50.0000	52.0330
54 1,2-Dibromoethane	107	15.037	15.037	(1.304)	310066	50.0000	49.7824
* 55 Chlorobenzene-d5	117	15.569	15.569	(1.000)	584142	50.0000	
56 Chlorobenzene	112	15.608	15.608	(1.003)	639333	50.0000	48.7141
57 Ethylbenzene	91	15.658	15.658	(1.006)	997050	50.0000	46.8704
58 1,1,1,2-Tetrachloroethane	131	15.687	15.687	(1.008)	223546	50.0000	48.7870
59 m,p-Xylenes	106	15.796	15.796	(1.015)	749577	100.000	91.2617
60 o-Xylene	106	16.298	16.298	(1.047)	392707	50.0000	47.9533
61 Styrene	104	16.327	16.327	(1.049)	680697	50.0000	47.0218
62 Bromoform	173	16.623	16.623	(1.068)	212390	50.0000	49.8384
63 Isopropylbenzene	105	16.702	16.702	(0.913)	938009	50.0000	47.3666
64 Cyclohexanone	55	16.938	16.938	(0.926)	310174	50.0000	46.8857
65 Bromofluorobenzene	95	16.958	16.958	(0.927)	344807	50.0000	50.2195
66 1,1,2,2-Tetrachloroethane	83	17.106	17.106	(0.935)	337648	50.0000	48.6489
67 Bromobenzene	156	17.165	17.165	(0.938)	240141	50.0000	47.6841
68 Propylbenzene	91	17.175	17.175	(0.939)	1118838	50.0000	46.6477
69 1,2,3-Trichloropropane	110	17.194	17.194	(0.940)	91763	50.0000	47.4712
70 2-Chlorotoluene	91	17.342	17.342	(0.948)	830158	50.0000	46.7473
71 1,3,5-Trimethylbenzene	105	17.362	17.362	(0.949)	808859	50.0000	47.9555
72 4-Chlorotoluene	91	17.470	17.470	(0.955)	815693	50.0000	48.2315
73 tert-Butylbenzene	119	17.736	17.736	(0.969)	688206	50.0000	49.5828
74 1,2,4-Trimethylbenzene	105	17.805	17.805	(0.973)	858732	50.0000	47.7669
75 sec-Butylbenzene	105	17.992	17.992	(0.983)	998147	50.0000	48.3311
76 para-Isopropyl Toluene	119	18.130	18.130	(0.991)	862470	50.0000	49.2486

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\102906.b\DJT11.D
Report Date: 29-Oct-2006 12:50

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
-----	----	----	-----	-----	-----	-----	-----
77 1,3-Dichlorobenzene	146	18.219	18.219	(0.996)	455265	50.0000	48.3812
* 78 1,4-Dichlorobenzene-d4	152	18.297	18.297	(1.000)	261352	50.0000	
79 1,4-Dichlorobenzene	146	18.327	18.327	(1.002)	455526	50.0000	49.1662
80 n-Butylbenzene	91	18.613	18.613	(1.017)	790678	50.0000	48.9587
81 1,2-Dichlorobenzene	146	18.790	18.790	(1.027)	444953	50.0000	47.7850
82 1,2-Dibromo-3-Chloropropane	75	19.765	19.765	(1.080)	75917	50.0000	47.9879
83 1,2,4-Trichlorobenzene	180	20.848	20.848	(1.139)	324005	50.0000	50.9488
84 Hexachlorobutadiene	225	20.967	20.967	(1.146)	134729	50.0000	52.7395
85 Naphthalene	128	21.282	21.282	(1.163)	843011	50.0000	56.6599
86 1,2,3-Trichlorobenzene	180	21.656	21.656	(1.184)	311790	50.0000	54.8103

Data File: \\Gomserver\DD\chem\MSV0A04.i\102906.b\DJT11.D

Date: 29-OCT-2006 05:55

Client ID: DYNA P&T

Sample Info: ICAL,S4594,0.01/100,S4519,0.01/100

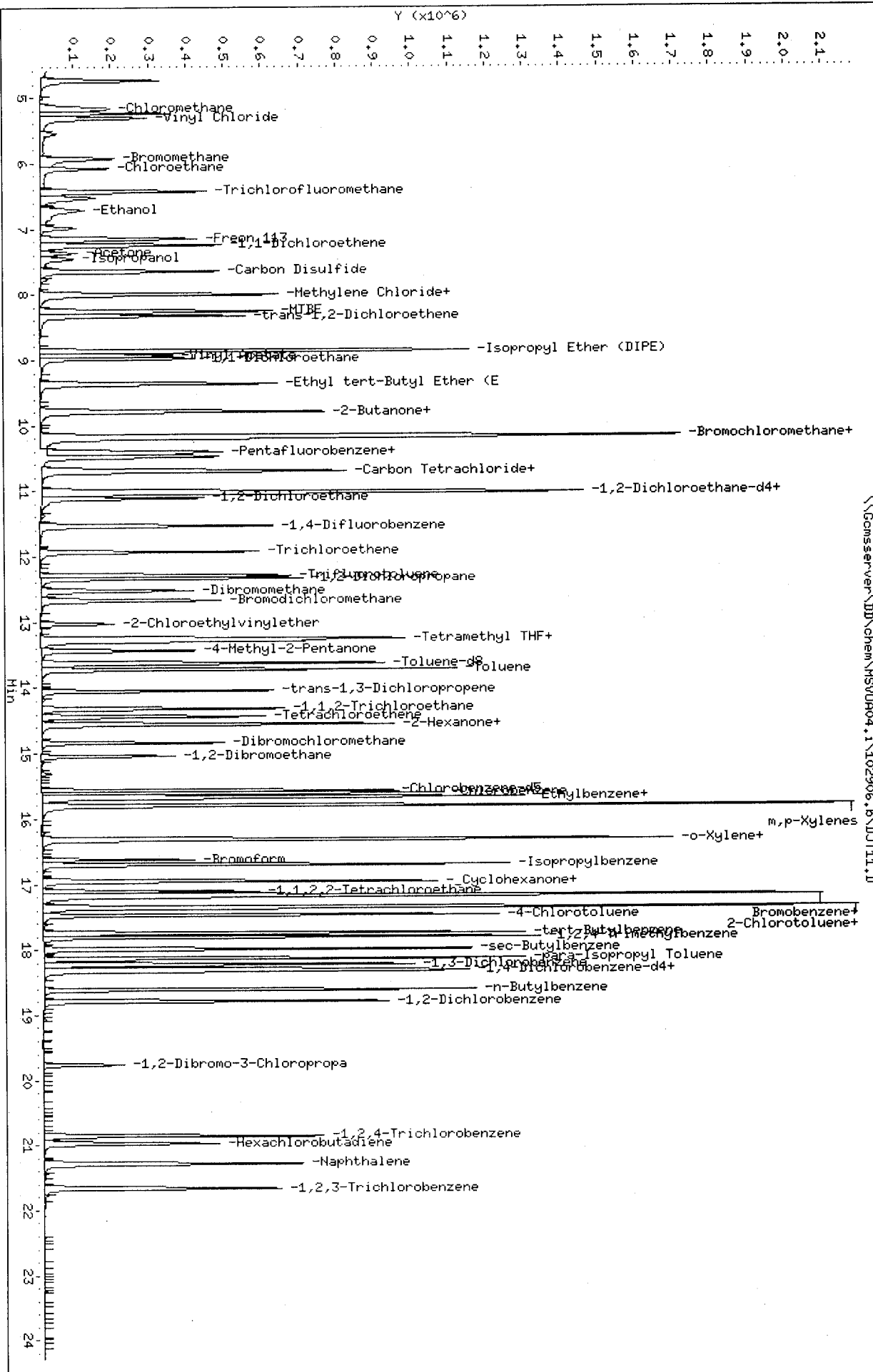
Purge Volume: 5.0

Column phase: RTX 624

Instrument: MSV0A04.i

Operator: VOC

Column diameter: 0.25



Data File: \\Gcmssserver\DD\chem\MSVOA04.i\102906.b\DJT12.D
 Report Date: 29-Oct-2006 12:52

Curtis & Tompkins

Data file : \\Gcmssserver\DD\chem\MSVOA04.i\102906.b\DJT12.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 29-OCT-2006 06:28 MS Autotune Date: 14-OCT-2006 13:38
 Operator : VOC Inst ID: MSVOA04.i
 Smp Info : ICAL,S4594,0.015/100,S4519,0.015/100
 Misc Info : S4172,0.0075/100,75PPB
 Comment :
 Method : \\Gcmssserver\DD\chem\MSVOA04.i\102906.b\826GOX04.m
 Meth Date : 29-Oct-2006 12:51 chemist Quant Type: ISTD
 Cal Date : 29-OCT-2006 06:28 Cal File: DJT12.D
 Als bottle: 12 Calibration Sample, Level: 7
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.728	4.728	(0.455)	773448	75.0000	80.6757
2 Chloromethane	50	5.152	5.152	(0.496)	884473	75.0000	76.2580
3 Vinyl Chloride	62	5.300	5.300	(0.510)	691078	75.0000	75.3454
4 Bromomethane	94	5.920	5.920	(0.570)	359383	75.0000	73.2014
5 Chloroethane	64	6.068	6.068	(0.584)	312280	75.0000	72.5358
6 Trichlorofluoromethane	101	6.423	6.423	(0.618)	783640	75.0000	74.0069
7 Ethanol	45	6.708	6.708	(0.646)	618143	7500.00	7798.6794
8 Freon 113	101	7.142	7.142	(0.687)	403217	75.0000	76.8688
9 1,1-Dichloroethene	96	7.240	7.240	(0.697)	354104	75.0000	67.3316
10 Acetone	43	7.358	7.358	(0.708)	325828	75.0000	72.8558
11 Isopropanol	45	7.457	7.457	(0.718)	384207	750.000	798.0640
12 Carbon Disulfide	76	7.634	7.634	(0.735)	1457826	75.0000	69.3924
13 Methylene Chloride	84	7.989	7.989	(0.769)	447073	75.0000	69.0114
14 tert-Butyl Alcohol (TBA)	59	8.008	8.008	(0.771)	441339	750.000	799.6801
15 MTBE	73	8.245	8.245	(0.793)	1101568	75.0000	73.4841
16 trans-1,2-Dichloroethene	96	8.314	8.314	(0.800)	377856	75.0000	66.4113
17 Isopropyl Ether (DIPE)	45	8.855	8.855	(0.852)	2313455	75.0000	70.2418
18 Vinyl Acetate	43	8.924	8.924	(0.859)	827059	75.0000	63.6617
19 1,1-Dichloroethane	63	8.974	8.974	(0.864)	830172	75.0000	72.6208
20 Ethyl tert-Butyl Ether (ETBE)	59	9.358	9.358	(0.900)	1176461	75.0000	74.5638
21 2-Butanone	43	9.771	9.771	(0.940)	340119	75.0000	73.4897
22 2,2-Dichloropropane	77	9.771	9.771	(0.940)	365094	75.0000	76.3859

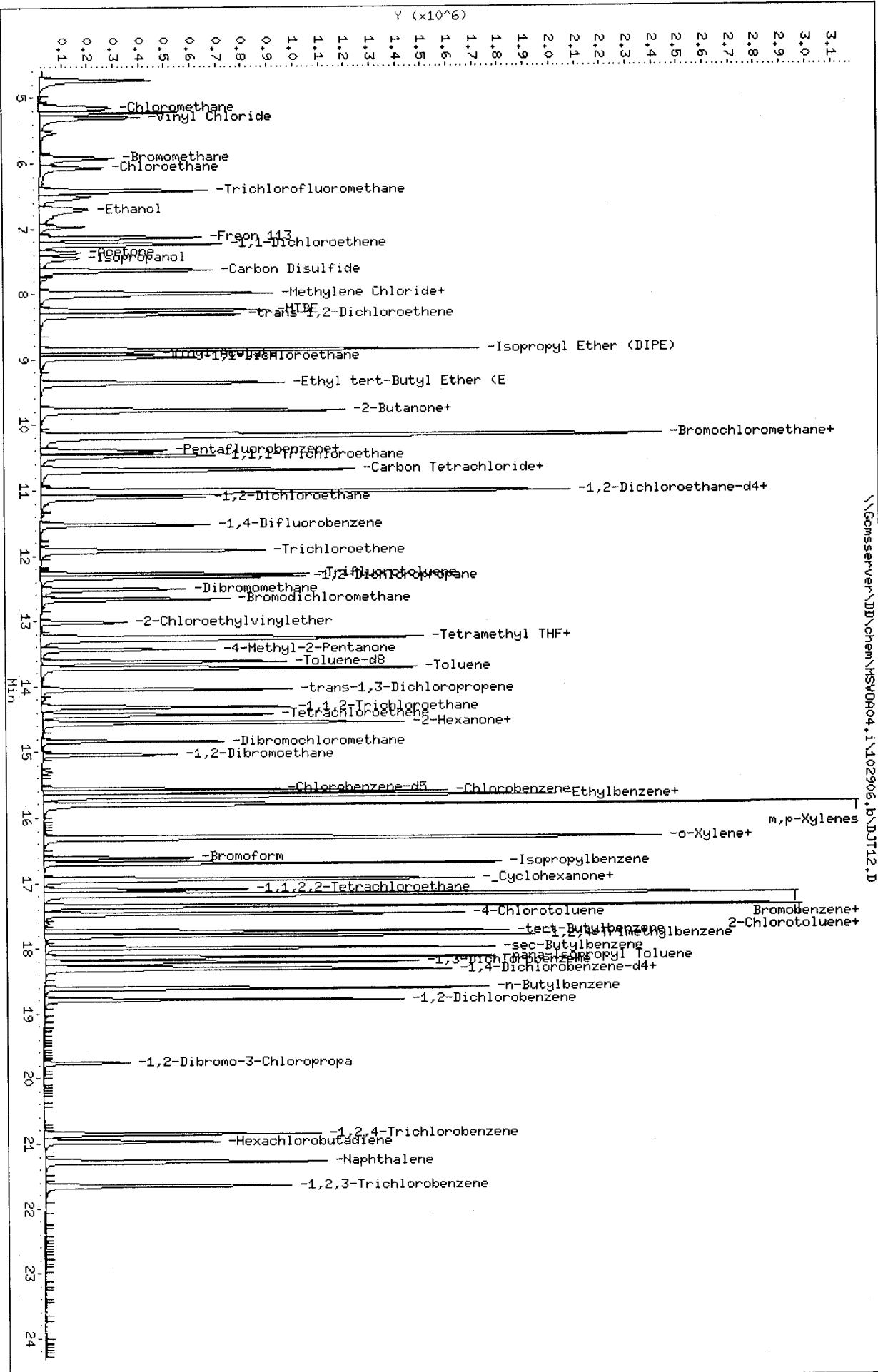
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
23 cis-1,2-Dichloroethene	96	9.791	9.791	(0.942)	421844	75.0000	68.6139
24 Bromochloromethane	128	10.146	10.146	(0.976)	213970	75.0000	69.1044
25 Tetrahydrofuran	42	10.165	10.165	(0.978)	1739398	750.000	630.0102
26 Chloroform	83	10.185	10.185	(0.980)	683554	75.0000	65.0711
* 27 Pentafluorobenzene	168	10.392	10.392	(1.000)	356697	50.0000	
28 Dibromofluoromethane	113	10.431	10.431	(1.004)	259693	50.0000	49.1397
29 1,1,1-Trichloroethane	97	10.481	10.481	(1.009)	570437	75.0000	77.9992
30 Carbon Tetrachloride	117	10.678	10.678	(0.926)	474039	75.0000	82.9227
31 1,1-Dichloropropene	75	10.697	10.697	(0.928)	510681	75.0000	70.9604
32 1,2-Dichloroethane-d4	65	10.993	10.993	(0.954)	323717	50.0000	45.6313
33 Benzene	78	11.013	11.013	(0.956)	1362327	75.0000	68.4120
34 Methyl tert-Amyl Ether (TAME)	73	11.032	11.032	(0.957)	924147	75.0000	70.6888
35 1,2-Dichloroethane	62	11.101	11.101	(0.963)	722238	75.0000	68.2350
* 36 1,4-Difluorobenzene	114	11.525	11.525	(1.000)	662353	50.0000	
37 Trichloroethene	95	11.919	11.919	(1.034)	415543	75.0000	73.4451
38 Trifluorotoluene	146	12.283	12.283	(1.066)	478538	75.0000	70.1394
39 1,2-Dichloropropane	63	12.323	12.323	(1.069)	482340	75.0000	70.3061
40 Dibromomethane	93	12.510	12.510	(1.085)	318408	75.0000	67.6491
41 Bromodichloromethane	83	12.667	12.667	(1.099)	584441	75.0000	71.9754
42 2-Chloroethylvinylether	63	13.022	13.022	(1.130)	172624	75.0000	75.9964
43 Tetramethyl THF	43	13.248	13.248	(1.150)	1180097	75.0000	67.8238
44 cis-1,3-Dichloropropene	75	13.288	13.288	(1.153)	618180	75.0000	75.7262
45 4-Methyl-2-Pentanone	43	13.436	13.436	(1.166)	669512	75.0000	71.7666
46 Toluene-d8	98	13.623	13.623	(1.182)	718473	50.0000	49.5206
47 Toluene	92	13.721	13.721	(1.191)	808113	75.0000	69.3381
48 trans-1,3-Dichloropropene	75	14.046	14.046	(1.219)	584338	75.0000	78.2559
49 1,1,2-Trichloroethane	85	14.312	14.312	(1.242)	211750	75.0000	70.6719
50 Tetrachloroethene	166	14.430	14.430	(0.927)	305511	75.0000	73.3178
51 2-Hexanone	43	14.549	14.549	(0.935)	463961	75.0000	76.5243
52 1,3-Dichloropropane	76	14.558	14.558	(0.935)	637838	75.0000	72.7883
53 Dibromochloromethane	129	14.834	14.834	(0.953)	456168	75.0000	77.5246
54 1,2-Dibromoethane	107	15.041	15.041	(1.305)	465141	75.0000	73.3816
* 55 Chlorobenzene-d5	117	15.563	15.563	(1.000)	577428	50.0000	
56 Chlorobenzene	112	15.602	15.602	(1.003)	930388	75.0000	71.7154
57 Ethylbenzene	91	15.662	15.662	(1.006)	1460889	75.0000	69.4736
58 1,1,1,2-Tetrachloroethane	131	15.691	15.691	(1.008)	347020	75.0000	76.6147
59 m,p-Xylenes	106	15.799	15.799	(1.015)	1061592	150.000	130.7527
60 o-Xylene	106	16.302	16.302	(1.047)	558442	75.0000	68.9840
61 Styrene	104	16.321	16.321	(1.049)	990312	75.0000	69.2051
62 Bromoform	173	16.627	16.627	(1.068)	328213	75.0000	77.9124
63 Isopropylbenzene	105	16.706	16.706	(0.913)	1400806	75.0000	70.5567
64 Cyclohexanone	55	16.942	16.942	(0.926)	742808	75.0000	111.9970
65 Bromofluorobenzene	95	16.962	16.962	(0.927)	335794	50.0000	48.7825
66 1,1,2,2-Tetrachloroethane	83	17.100	17.100	(0.935)	502169	75.0000	72.1695
67 Bromobenzene	156	17.169	17.169	(0.939)	350582	75.0000	69.4371
68 Propylbenzene	91	17.178	17.178	(0.939)	1609448	75.0000	66.9321
69 1,2,3-Trichloropropane	110	17.198	17.198	(0.940)	143761	75.0000	74.1819
70 2-Chlorotoluene	91	17.346	17.346	(0.948)	1145830	75.0000	64.3592
71 1,3,5-Trimethylbenzene	105	17.356	17.356	(0.949)	1132829	75.0000	66.9923
72 4-Chlorotoluene	91	17.474	17.474	(0.955)	1174780	75.0000	69.2875
73 tert-Butylbenzene	119	17.740	17.740	(0.970)	991410	75.0000	71.2460
74 1,2,4-Trimethylbenzene	105	17.799	17.799	(0.973)	1244665	75.0000	69.0584
75 sec-Butylbenzene	105	17.986	17.986	(0.983)	1444436	75.0000	69.7630
76 para-Isopropyl Toluene	119	18.134	18.134	(0.991)	1244343	75.0000	70.8737

Data File: \\Gcmsserver\DD\chem\MSVOA04.i\102906.b\DJT12.D
Report Date: 29-Oct-2006 12:52

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
77 1,3-Dichlorobenzene	146	18.213	18.213	(0.996)	660407	75.0000	70.0033
* 78 1,4-Dichlorobenzene-d4	152	18.291	18.291	(1.000)	262018	50.0000	
79 1,4-Dichlorobenzene	146	18.321	18.321	(1.002)	657652	75.0000	70.8018
80 n-Butylbenzene	91	18.607	18.607	(1.017)	1181418	75.0000	72.9674
81 1,2-Dichlorobenzene	146	18.784	18.784	(1.027)	661374	75.0000	70.8467
82 1,2-Dibromo-3-Chloropropane	75	19.759	19.759	(1.080)	118019	75.0000	74.4114
83 1,2,4-Trichlorobenzene	180	20.852	20.852	(1.140)	482037	75.0000	75.6062
84 Hexachlorobutadiene	225	20.970	20.970	(1.146)	200670	75.0000	78.3524
85 Naphthalene	128	21.276	21.276	(1.163)	1308014	75.0000	87.6899
86 1,2,3-Trichlorobenzene	180	21.650	21.650	(1.184)	455263	75.0000	79.8284

Data File: \\Gomserver\DD\chem\MSV0404.i\102906.b\DJT12.D
 Date: 29-OCT-2006 06:28
 Client ID: DYNA P&T
 Sample Info: ICAL, S4594, 0.015/100, S4519, 0.015/100
 Purge Volume: 5.0
 Column phase: RTX 624

Instrument: MSV0404.i
 Operator: VOC
 Column diameter: 0.25



Data File: \\Gcmssserver\DD\chem\MSVOA04.i\102906.b\DJT13.D
 Report Date: 29-Oct-2006 12:53

Curtis & Tompkins

Data file : \\Gcmssserver\DD\chem\MSVOA04.i\102906.b\DJT13.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 29-OCT-2006 07:01 MS Autotune Date: 14-OCT-2006 13:38
 Operator : VOC Inst ID: MSVOA04.i
 Smp Info : ICAL,S4594,0.02/100,S4519,0.02/100
 Misc Info : S4172,0.01/100,100PPB
 Comment :
 Method : \\Gcmssserver\DD\chem\MSVOA04.i\102906.b\826GOX04.m
 Meth Date : 29-Oct-2006 12:53 chemist Quant Type: ISTD
 Cal Date : 29-OCT-2006 07:01 Cal File: DJT13.D
 Als bottle: 13 Calibration Sample, Level: 8
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.724	4.724 (0.454)	1056638	100.000	108.2559	
2 Chloromethane	50	5.157	5.157 (0.496)	1211246	100.000	102.5762	
3 Vinyl Chloride	62	5.305	5.305 (0.510)	938344	100.000	100.4860	
4 Bromomethane	94	5.916	5.916 (0.569)	527939	100.000	105.6232	
5 Chloroethane	64	6.073	6.073 (0.584)	435215	100.000	99.2946	
6 Trichlorofluoromethane	101	6.418	6.418 (0.617)	1113890	100.000	103.3264	
7 Ethanol	45	6.704	6.704 (0.645)	801809	10000.0	9936.1113	
8 Freon 113	101	7.147	7.147 (0.687)	598946	100.000	112.1533	
9 1,1-Dichloroethene	96	7.245	7.245 (0.697)	503270	100.000	93.9946	
10 Acetone	43	7.363	7.363 (0.708)	430612	100.000	94.5748	
11 Isopropanol	45	7.452	7.452 (0.717)	495028	1000.00	1009.9867	
12 Carbon Disulfide	76	7.639	7.639 (0.735)	2025508	100.000	94.7008	
13 Methylene Chloride	84	7.984	7.984 (0.768)	613196	100.000	92.9727	
14 tert-Butyl Alcohol (TBA)	59	8.014	8.014 (0.771)	566588	1000.00	1008.3813	
15 MTBE	73	8.250	8.250 (0.793)	1503194	100.000	98.4942	
16 trans-1,2-Dichloroethene	96	8.319	8.319 (0.800)	527095	100.000	90.9951	
17 Isopropyl Ether (DIPE)	45	8.851	8.851 (0.851)	3066804	100.000	91.4606	
18 Vinyl Acetate	43	8.920	8.920 (0.858)	1265635	100.000	95.6894	
19 1,1-Dichloroethane	63	8.969	8.969 (0.863)	1119556	100.000	96.1950	
20 Ethyl tert-Butyl Ether (ETBE)	59	9.363	9.363 (0.901)	1621027	100.000	100.9147	
21 2-Butanone	43	9.777	9.777 (0.940)	453379	100.000	96.2211	
22 2,2-Dichloropropane	77	9.767	9.767 (0.939)	509444	100.000	104.6932	

Compounds	QUANT SIG	AMOUNTS						
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
							(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	
23 cis-1,2-Dichloroethene	96	9.786	9.786	(0.941)	569209	100.000	90.9380	
24 Bromochloromethane	128	10.151	10.151	(0.976)	290948	100.000	92.2957	
25 Tetrahydrofuran	42	10.161	10.161	(0.977)	2344754	1000.00	834.1791	
26 Chloroform	83	10.190	10.190	(0.980)	958430	100.000	89.6168	
* 27 Pentafluorobenzene	168	10.397	10.397	(1.000)	363150	50.0000		
28 Dibromofluoromethane	113	10.437	10.437	(1.004)	267292	50.0000	49.6789	
29 1,1,1-Trichloroethane	97	10.476	10.476	(1.008)	812428	100.000	109.1141	
30 Carbon Tetrachloride	117	10.673	10.673	(0.926)	666982	100.000	114.0882	
31 1,1-Dichloropropene	75	10.693	10.693	(0.927)	705042	100.000	95.7962	
32 1,2-Dichloroethane-d4	65	10.998	10.998	(0.954)	327106	50.0000	45.0872	
33 Benzene	78	11.018	11.018	(0.956)	1851876	100.000	90.9348	
34 Methyl tert-Amyl Ether (TAME)	73	11.028	11.028	(0.956)	1259490	100.000	94.2044	
35 1,2-Dichloroethane	62	11.106	11.106	(0.963)	983824	100.000	90.8890	
* 36 1,4-Difluorobenzene	114	11.530	11.530	(1.000)	677365	50.0000		
37 Trichloroethene	95	11.924	11.924	(1.034)	566509	100.000	97.9086	
38 Trifluorotoluene	146	12.288	12.288	(1.066)	701165	100.000	100.4923	
39 1,2-Dichloropropane	63	12.328	12.328	(1.069)	660356	100.000	94.1206	
40 Dibromomethane	93	12.515	12.515	(1.085)	425778	100.000	88.4561	
41 Bromodichloromethane	83	12.663	12.663	(1.098)	784207	100.000	94.4367	
42 2-Chloroethylvinylether	63	13.017	13.017	(1.129)	229718	100.000	98.8903	
43 Tetramethyl THF	43	13.254	13.254	(1.149)	1580443	100.000	88.8199	
44 cis-1,3-Dichloropropene	75	13.293	13.293	(1.153)	872137	100.000	104.4678	
45 4-Methyl-2-Pentanone	43	13.431	13.431	(1.165)	915205	100.000	95.9288	
46 Toluene-d8	98	13.628	13.628	(1.182)	722917	50.0000	48.7226	
47 Toluene	92	13.716	13.716	(1.190)	1113837	100.000	93.4519	
48 trans-1,3-Dichloropropene	75	14.051	14.051	(1.219)	817988	100.000	107.1190	
49 1,1,2-Trichloroethane	85	14.307	14.307	(1.241)	287273	100.000	93.7529	
50 Tetrachloroethene	166	14.435	14.435	(0.927)	425045	100.000	98.7147	
51 2-Hexanone	43	14.544	14.544	(0.934)	596788	100.000	95.2582	
52 1,3-Dichloropropane	76	14.554	14.554	(0.935)	859803	100.000	94.9543	
53 Dibromochloromethane	129	14.829	14.829	(0.953)	619660	100.000	101.9137	
54 1,2-Dibromoethane	107	15.036	15.036	(1.304)	625560	100.000	96.5024	
* 55 Chlorobenzene-d5	117	15.568	15.568	(1.000)	596669	50.0000		
56 Chlorobenzene	112	15.608	15.608	(1.003)	1270342	100.000	94.7618	
57 Ethylbenzene	91	15.657	15.657	(1.006)	1961247	100.000	90.2608	
58 1,1,1,2-Tetrachloroethane	131	15.686	15.686	(1.008)	457762	100.000	97.8052	
59 m,p-Xylenes	106	15.805	15.805	(1.015)	1440005	200.000	171.6412	
60 o-Xylene	106	16.307	16.307	(1.047)	760843	100.000	90.9557	
61 Styrene	104	16.327	16.327	(1.049)	1340556	100.000	90.6599	
62 Bromoform	173	16.622	16.622	(1.068)	435749	100.000	100.1040	
63 Isopropylbenzene	105	16.701	16.701	(0.913)	1855382	100.000	96.6557	
64 _Cyclohexanone	55	16.937	16.937	(0.926)	884709	100.000	137.9637	
65 Bromofluorobenzene	95	16.967	16.967	(0.927)	328819	50.0000	49.4063	
66 1,1,2,2-Tetrachloroethane	83	17.105	17.105	(0.935)	669282	100.000	99.4826	
67 Bromobenzene	156	17.164	17.164	(0.938)	464876	100.000	95.2299	
68 Propylbenzene	91	17.174	17.174	(0.939)	2146519	100.000	92.3266	
69 1,2,3 Trichloropropane	110	17.203	17.203	(0.940)	194559	100.000	103.8347	
70 2-Chlorotoluene	91	17.351	17.351	(0.948)	1551005	100.000	90.1027	
71 1,3,5 Trimethylbenzene	105	17.361	17.361	(0.949)	1533973	100.000	93.8237	
72 4-Chlorotoluene	91	17.469	17.469	(0.955)	1572564	100.000	95.9271	
73 tert-Butylbenzene	119	17.735	17.735	(0.969)	1339543	100.000	99.5630	
74 1,2,4-Trimethylbenzene	105	17.804	17.804	(0.973)	1668795	100.000	95.7638	
75 sec-Butylbenzene	105	17.991	17.991	(0.983)	1999545	100.000	99.8832	
76 para-Isopropyl Toluene	119	18.129	18.129	(0.991)	1680361	100.000	98.9879	

Data File: \\Gcmssserver\DD\chem\MSVOA04.i\102906.b\DJT13.D
Report Date: 29-Oct-2006 12:53

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	
77 1,3-Dichlorobenzene	146	18.218	18.218	(0.996)	866546	100.000	95.0020	
* 78 1,4-Dichlorobenzene-d4	152	18.297	18.297	(1.000)	253336	50.0000		
79 1,4-Dichlorobenzene	146	18.326	18.326	(1.002)	880427	100.000	98.0338	
80 n-Butylbenzene	91	18.612	18.612	(1.017)	1601334	100.000	102.2919	
81 1,2-Dichlorobenzene	146	18.789	18.789	(1.027)	875029	100.000	96.9459	
82 1,2-Dibromo-3-Chloropropane	75	19.764	19.764	(1.080)	159689	100.000	104.1350	
83 1,2,4-Trichlorobenzene	180	20.857	20.857	(1.140)	650348	100.000	105.5011	
84 Hexachlorobutadiene	225	20.976	20.976	(1.146)	290644	100.000	117.3722	
85 Naphthalene	128	21.281	21.281	(1.163)	1741831	100.000	120.7752	
86 1,2,3-Trichlorobenzene	180	21.655	21.655	(1.184)	597213	100.000	108.3075	

Data File: \\Gomserver\DD\chem\MSV0A04.i\102906.b\DJT13.D
 Date : 29-OCT-2006 07:01

Client ID: DYNA P&T

Sample Info: ICAL.S4594,0.02/100,S4519,0.02/100

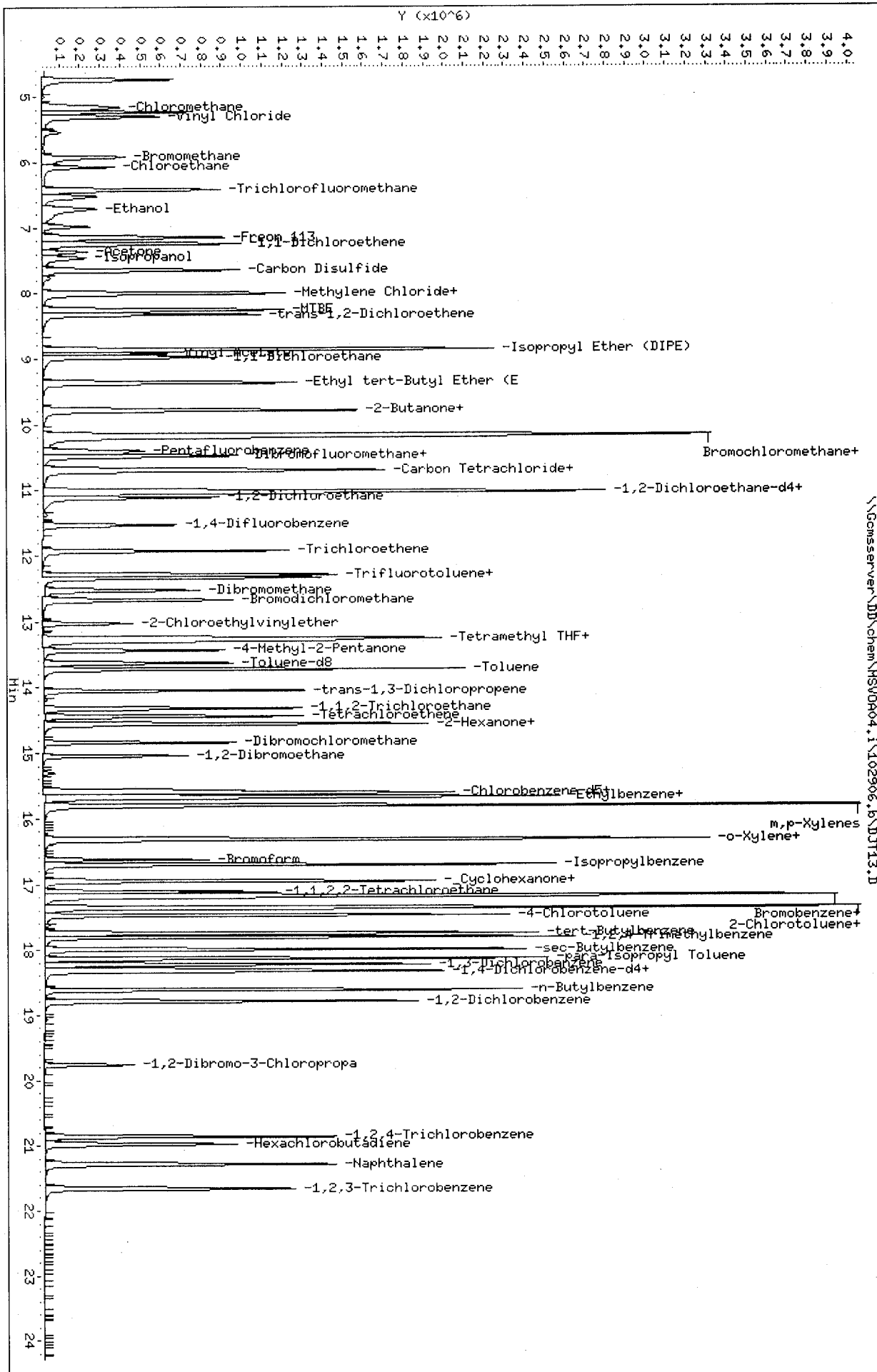
Purge Volume: 5.0

Column Phase: RTX 624

Instrument: MSV0A04.1

Operator: VOC

Column diameter: 0.25



CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191286 MSVOA Water: EPA 8260B

Inst : MSVOA08
 Calnum : 476409508001
 Units : ug/L

Name : 826GOX8
 Date : 11-OCT-2006 17:44
 X Axis : R

Reviewer: LW
 Type : WATER

Level File	Seqnum	Sample ID	Analyzed	Stds
L1	hjb12 476409508012	0.25/0.5PPB	11-OCT-2006 17:44	S4519 (1000000X), S4468 (2000000X), S4172 (2000000X), S4330 (50000X)
L2	hjb13 476409508013	0.5/1PPB	11-OCT-2006 18:21	S4519 (500000X), S4468 (1000000X), S4172 (1000000X), S4330 (50000X)
L3	hjb14 476409508014	2PPB	11-OCT-2006 18:59	S4519 (2500000X), S4468 (2500000X), S4172 (5000000X), S4330 (50000X)
L4	hjb15 476409508015	5PPB	11-OCT-2006 19:36	S4519 (1000000X), S4468 (1000000X), S4172 (2000000X), S4330 (50000X)
L5	hjb16 476409508016	10PPB	11-OCT-2006 20:14	S4519 (500000X), S4468 (500000X), S4172 (1000000X), S4330 (50000X)
L6	hjb17 476409508017	20PPB	11-OCT-2006 20:51	S4519 (250000X), S4468 (250000X), S4172 (500000X), S4330 (50000X)
L7	hjb18 476409508018	50PPB	11-OCT-2006 21:29	S4519 (100000X), S4468 (100000X), S4172 (200000X), S4330 (50000X)
L8	hjb19 476409508019	75PPB	11-OCT-2006 22:06	S4519 (6667X), S4468 (6667X), S4172 (133330X), S4330 (50000X)
L9	hjb20 476409508020	100PPB	11-OCT-2006 22:44	S4519 (50000X), S4468 (50000X), S4172 (100000X), S4330 (50000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ²	%RSD	Max	Min	RF	r ²	Flg
Chloromethane		1.1046m	1.0330m	0.8259m	0.8659m	0.8491m	0.8773m	0.8335	0.8195	AVRG		1.10974		0.9011	12	15	0.10	0.99			
Vinyl Chloride	0.6292m	0.7428m	0.7855m	0.5681	0.6975	0.6582m	0.7398	0.7025	0.7242	AVRG		1.44052		0.6942	10	15	0.050	0.99			
Bromomethane		0.3376m	0.2070m	0.1770m	0.2262m	0.2517m	0.2622	0.2824m	0.3003	QUAD	0.48992	4.08534	-0.02585	0.2555	1.000	15	0.050	0.99			
Chloroethane		0.5054m	0.4699m	0.3548m	0.3918m	0.3849m	0.3905	0.3809	0.3888m	AVRG		2.44875		0.4084	13	15	0.050	0.99			
Acetone			0.3491	0.2761	0.2910	0.3026	0.2319	0.2315	0.2875	AVRG		3.55377		0.2814	15	15	0.050	0.99			
1,1-Dichloroethene		0.4793	0.3443	0.2950	0.2546	0.3195	0.2770	0.3314	0.3432	QUAD	-0.3873	3.73516	-0.02430	0.3305	0.998	15	0.050	0.99			
Methylene Chloride			0.5860m	0.4787	0.5314	0.5257	0.5109	0.5070	0.5206	AVRG		1.91243		0.5229	6	15	0.050	0.99			
Carbon Disulfide		1.8550	1.8727	1.6504	1.4985	1.8097	1.6878	1.8675	1.9439	AVRG		0.56396		1.7732	8	15	0.050	0.99			
MTBE		1.8595	1.6436	1.4976	1.6829	1.6923	1.6044	1.5693	1.6043	AVRG		0.60819		1.6442	7	15	0.050	0.99			
trans-1,2-Dichloroethene		0.4821	0.4182	0.3776	0.3489	0.4122	0.3761	0.4080	0.4273	AVRG		2.46117		0.4063	10	15	0.050	0.99			
Vinyl Acetate			0.8083	0.5912	0.8937	0.9839	1.2396	1.4669	0.4729	QUAD	1.61165	0.94670	-0.00255	0.9973	0.999	15	0.050	0.99			
1,1-Dichloroethane		1.1186m	1.0745	0.9456	0.9439	0.9981	0.9365	0.9464	0.9632	AVRG		1.00925		0.9908	7	15	0.10	0.99			
2-Butanone			0.4502	0.4030	0.4207	0.4178	0.3954	0.3918	0.4247	AVRG		2.41078		0.4148	5	15	0.050	0.99			
cis-1,2-Dichloroethene		0.6938	0.5215	0.4394	0.4702	0.4911	0.4629	0.4600	0.4729	LINR	-0.0809	2.13846		0.5015	1.000	15	0.050	0.99			
Chloroform		1.0173	0.9064	0.7733	0.8116	0.8236	0.7730	0.7798	0.7842	AVRG		1.19957		0.8336	10	15	0.050	0.99			
1,1,1-Trichloroethane		0.5503	0.4789	0.4339	0.3776	0.4595	0.4102	0.4807	0.4993	AVRG		2.16777		0.4613	12	15	0.050	0.99			
Carbon Tetrachloride		0.1636	0.1567	0.1406	0.1155	0.1529	0.1273	0.1637	0.1791	AVRG		6.66950		0.1499	14	15	0.050	0.99			
1,2-Dichloroethane		0.3386	0.3364	0.2961	0.3255	0.3233	0.3026	0.3083	0.3085	AVRG		3.15051		0.3174	5	15	0.050	0.99			
Benzene		0.8999	0.8832	0.7824	0.7757	0.8282	0.7707	0.7698	0.7798	AVRG		1.23273		0.8112	7	15	0.050	0.99			
1,1-Dichloroethene		0.2298	0.2125	0.1837	0.1702	0.1929	0.1725	0.1900	0.2035	AVRG		5.14443		0.1944	10	15	0.050	0.99			
1,2-Dichloropropane		0.3382m	0.3095m	0.2811m	0.2794	0.2876	0.2762	0.2866m	0.2824m	AVRG		3.41735		0.2926	7	15	0.050	0.99			
Bromodichloromethane		0.3181	0.2970	0.2596	0.2801	0.2840	0.2737	0.2799	0.2875	AVRG		3.50893		0.2850	6	15	0.050	0.99			
1,1-Methyl-2-Pentanone			0.3886	0.3536	0.3893	0.3820	0.3818	0.3883	0.3936	AVRG		2.61463		0.3825	3	15	0.050	0.99			
Cis-1,3-Dichloropropene		0.3890	0.3999	0.3448	0.3744	0.3806	0.3535	0.3743	0.3788	AVRG		2.67086		0.3744	5	15	0.050	0.99			

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ² %RSD	Max %RSD	Min RF	Min r ²	Flg
Toluene		0.4721	0.4807	0.4249	0.4321	0.4472	0.4102	0.4403	0.4350	AVRG		2.25822		0.4428	5	15	0.050	0.99	
trans-1,3-Dichloropropene		0.3420	0.3317	0.3064	0.3362	0.3366	0.3106	0.3261	0.3300	AVRG		3.05392		0.3274	4	15	0.050	0.99	
1,1,2-Trichloroethane		0.1470	0.1206	0.1066	0.1137	0.1181	0.1135	0.1144	0.1180	AVRG		8.40457		0.1190	10	15	0.050	0.99	
2-Hexanone			0.3217	0.3193	0.3518	0.3519	0.3341	0.3243	0.3553	AVRG		2.96821		0.3369	5	15	0.050	0.99	
Tetrachloroethene		0.1466	0.1430	0.1199	0.1021	0.1341	0.1123	0.1389	0.1581	AVRG		7.58321		0.1319	14	15	0.050	0.99	
Dibromochloromethane		0.2232	0.2095	0.2082	0.2224	0.2265	0.2231	0.2234	0.2405	AVRG		4.50241		0.2221	5	15	0.050	0.99	
Chlorobenzene		0.6594	0.6052	0.5506	0.5642	0.5786	0.5386	0.5454	0.5703	AVRG		1.73453		0.5765	7	15	0.30	0.99	
Ethylbenzene		1.0815	1.0412	0.9767	0.9310	1.0268	0.8887	0.9554	1.0036	AVRG		1.01201		0.9881	6	15	0.050	0.99	
m,p-Xylenes	0.3990	0.3463	0.3612	0.3189	0.3226	0.3432	0.3090	0.3308	0.3336	AVRG		2.93670		0.3405	8	15	0.050	0.99	
o-Xylene		0.3687	0.3676	0.3236	0.3361	0.3475	0.3197	0.3256	0.3357	AVRG		2.93652		0.3405	6	15	0.050	0.99	
Styrene		0.6700	0.6688	0.6089	0.6551	0.6450	0.6212	0.6209	0.6264	AVRG		1.56360		0.6395	4	15	0.050	0.99	
Bromoform		0.1659	0.1339	0.1181	0.1339	0.1292	0.1298	0.1335	0.1427	AVRG		7.35975		0.1359	10	15	0.10	0.99	
1,1,2,2-Tetrachloroethane		0.9908	0.8985	0.7926	0.8945	0.8820	0.8669	0.8826	0.8553	AVRG		1.13264		0.8829	6	15	0.30	0.99	
Dibromofluoromethane	0.8299	0.8343	0.8316	0.8339	0.8294	0.8321	0.8221	0.8195	0.8137	AVRG		1.20865		0.8274	1	15	0.050	0.99	
1,2-Dichloroethane-d4	0.5075	0.4988	0.5029	0.5076	0.4962	0.4893	0.4744	0.4630	0.4537	AVRG		2.04854		0.4882	4	15	0.050	0.99	
Toluene-d8	1.1355	1.1504	1.1225	1.1371	1.1303	1.1304	1.1357	1.1381	1.1293	AVRG		0.88155		1.1344	1	15	0.050	0.99	
Bromofluorobenzene	1.5109	1.5415	1.5125	1.5439	1.5102	1.5214	1.4662	1.4513	1.4239	AVRG		0.66757		1.4980	3	15	0.050	0.99	

Analyst: BO

Manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; LINR=Linear regression; QUAD=Quadratic regression

Page 2 of 2

Date: 10/12/06

Reviewer: LW

Date: 10/12/06

476409508001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191286 MSVOA Water
EPA 8260B

Inst : MSVOA08
Calnum : 476409508001

Name : 826GOX8
Cal Date: 11-OCT-2006

Type : WATER

ICV 476409508021 (hjb21 11-OCT-2006) stds: S4521 (10000X), S4330 (5000X)
ICV 476409508022 (hjb22 11-OCT-2006) stds: S4368 (10000X), S4375 (10000X),
S4330 (5000X)

Analyte	ICV Seqnum	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	476409508021	0.9011	0.7850	25.00	21.78	ug/L	-13	30	
Vinyl Chloride	476409508021	0.6942	0.6623	25.00	23.85	ug/L	-5	20	
Bromomethane	476409508021	0.2555	0.2468	25.00	24.71	ug/L	-1	30	
Chloroethane	476409508021	0.4084	0.3725	25.00	22.80	ug/L	-9	30	
Acetone	476409508022	0.2814	0.2351	25.00	20.89	ug/L	-16	40	
1,1-Dichloroethene	476409508022	0.3305	0.3137	25.00	27.41	ug/L	10	20	
Methylene Chloride	476409508022	0.5229	0.5375	25.00	25.70	ug/L	3	30	
Carbon Disulfide	476409508022	1.7732	1.3964	25.00	19.69	ug/L	-21	30	v-
MTBE	476409508022	1.6442	1.4369	25.00	21.85	ug/L	-13	30	
trans-1,2-Dichloroethene	476409508022	0.4063	0.3994	25.00	24.58	ug/L	-2	30	
Vinyl Acetate	476409508022	0.9973	0.5185	25.00	13.45	ug/L	-46	40	v- ***
1,1-Dichloroethane	476409508022	0.9908	0.9619	25.00	24.27	ug/L	-3	30	
2-Butanone	476409508022	0.4148	0.3836	25.00	23.12	ug/L	-8	40	
cis-1,2-Dichloroethene	476409508022	0.5015	0.4719	25.00	25.15	ug/L	1	30	
Chloroform	476409508022	0.8336	0.7724	25.00	23.16	ug/L	-7	20	
1,1,1-Trichloroethane	476409508022	0.4613	0.4563	25.00	24.73	ug/L	-1	30	
Carbon Tetrachloride	476409508022	0.1499	0.1597	25.00	26.63	ug/L	7	30	
1,2-Dichloroethane	476409508022	0.3174	0.3006	25.00	23.68	ug/L	-5	30	
Benzene	476409508022	0.8112	0.8240	25.00	25.40	ug/L	2	30	
Trichloroethene	476409508022	0.1944	0.1989	25.00	25.58	ug/L	2	30	
1,2-Dichloropropane	476409508022	0.2926	0.2643	25.00	22.58	ug/L	-10	20	
Bromodichloromethane	476409508022	0.2850	0.2959	25.00	25.96	ug/L	4	30	
4-Methyl-2-Pentanone	476409508022	0.3825	0.3777	25.00	24.69	ug/L	-1	40	
cis-1,3-Dichloropropene	476409508022	0.3744	0.3606	25.00	24.08	ug/L	-4	30	
Toluene	476409508022	0.4428	0.4470	25.00	25.23	ug/L	1	20	
trans-1,3-Dichloropropene	476409508022	0.3274	0.3026	25.00	23.10	ug/L	-8	30	
1,1,2-Trichloroethane	476409508022	0.1190	0.1102	25.00	23.15	ug/L	-7	30	
2-Hexanone	476409508022	0.3369	0.3262	25.00	24.21	ug/L	-3	40	
Tetrachloroethene	476409508022	0.1319	0.1483	25.00	28.12	ug/L	12	30	
Dibromochloromethane	476409508022	0.2221	0.2390	25.00	26.90	ug/L	8	30	
Chlorobenzene	476409508022	0.5765	0.5768	25.00	25.01	ug/L	0	30	
Ethylbenzene	476409508022	0.9881	1.0501	25.00	26.57	ug/L	6	20	
m,p-Xylenes	476409508022	0.3405	0.3626	50.00	53.24	ug/L	6	30	
o-Xylene	476409508022	0.3405	0.3598	25.00	26.41	ug/L	6	30	
Styrene	476409508022	0.6395	0.6749	25.00	26.38	ug/L	6	30	
Bromoform	476409508022	0.1359	0.1307	25.00	24.05	ug/L	-4	30	
1,1,2,2-Tetrachloroethane	476409508022	0.8829	0.7751	25.00	21.95	ug/L	-12	30	

! = warning -- = low bias v = ICV

Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\HJB12.D
Report Date: 12-Oct-2006 08:16

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\HJB12.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 11-OCT-2006 17:44 MS Autotune Date: 27-JUL-2006 10:42
Operator : BO Inst ID: MSVOA08.i
Smp Info : ICAL,S4519,0.001/1000,S4468,0.0005/1000,
Misc Info : S4172,0.0005/1000,0.25/0.5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\826GOX8.m
Meth Date : 12-Oct-2006 08:16 Administra Quant Type: ISTD
Cal Date : 11-OCT-2006 22:44 Cal File: HJB20.D
Als bottle: 12 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.799	4.799	(0.461)	1884	0.50000	0.1519(a)
2 Chloromethane	50	5.283	5.283	(0.508)	5201	0.50000	0.2436(a)
3 Vinyl Chloride	62	5.381	5.381	(0.517)	7453	0.50000	0.4531(aM)
4 Bromomethane	94	6.012	6.012	(0.578)	1381	0.50000	0.7279
5 Chloroethane	64	6.141	6.141	(0.590)	3016	0.50000	0.3117(a)
6 Trichlorofluoromethane	101	6.486	6.486	(0.624)	5257	0.50000	0.4324(a)
7 Ethanol	45	6.732	6.732	(0.647)	5897	25.0000	28.1442
8 Freon 113	101	7.176	7.176	(0.690)	906	0.25000	0.8533
9 1,1-Dichloroethene	96	7.295	7.295	(0.701)	3868	0.25000	0.2218(a)
10 Acetone	43	7.393	7.393	(0.711)	4827	0.25000	0.7240
11 Isopropanol	45	7.472	7.472	(0.718)	2820	2.50000	2.3221
12 Carbon Disulfide	76	7.709	7.709	(0.741)	11959	0.25000	0.2846(a)
13 tert-Butyl Alcohol (TBA)	59	8.025	8.025	(0.771)	4878	2.50000	3.4303
14 Methylene Chloride	84	8.044	8.044	(0.773)	2259	0.25000	0.1823(a)
15 MTBE	73	8.281	8.281	(0.796)	11428	0.25000	0.2933(a)
16 trans-1,2-Dichloroethene	96	8.360	8.360	(0.804)	2806	0.25000	0.2915(a)

Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\HJB12.D
Report Date: 12-Oct-2006 08:16

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
17 Isopropyl Ether (DIPE)	45	8.873	8.873	(0.853)	22876	0.25000	0.3170 (a)
18 Vinyl Acetate	43	8.932	8.932	(0.859)	3849	0.25000	1.7653
19 1,1-Dichloroethane	63	9.001	9.001	(0.865)	7207	0.25000	0.3070 (a)
20 Ethyl tert-Butyl Ether (ETBE)	59	9.376	9.376	(0.901)	11769	0.25000	0.2729 (a)
21 2-Butanone	43	9.780	9.780	(0.940)	3121	0.25000	0.3175 (a)
22 2,2-Dichloropropane	77	9.790	9.790	(0.941)	3254	0.25000	0.2772 (a)
23 cis-1,2-Dichloroethene	96	9.810	9.810	(0.943)	2523	0.25000	0.1468 (a)
24 Tetrahydrofuran	42	10.184	10.184	(0.979)	39343	2.50000	6.7333
25 Bromochloromethane	128	10.184	10.184	(0.979)	1132	0.25000	0.2386 (a)
26 Chloroform	83	10.204	10.204	(0.981)	6697	0.25000	0.3390 (a)
* 27 Pentafluorobenzene	168	10.401	10.401	(1.000)	1184552	50.0000	
28 Dibromofluoromethane	113	10.451	10.451	(1.005)	983011	50.0000	50.1505
29 1,1,1-Trichloroethane	97	10.490	10.490	(1.009)	3599	0.25000	0.3293 (a)
30 Carbon Tetrachloride	117	10.687	10.687	(0.927)	2662	0.25000	0.3341 (a)
31 1,1-Dichloropropene	75	10.707	10.707	(0.929)	4290	0.25000	0.3275 (a)
32 1,2-Dichloroethane-d4	65	11.003	11.003	(0.955)	1348171	50.0000	51.9826
33 Benzene	78	11.023	11.023	(0.956)	13252	0.25000	0.3074 (a)
34 Methyl tert-Amyl Ether (TAME)	73	11.033	11.033	(0.957)	12943	0.25000	0.3289 (a)
35 1,2-Dichloroethane	62	11.121	11.121	(0.965)	4916	0.25000	0.2915 (a)
* 36 1,4-Difluorobenzene	114	11.526	11.526	(1.000)	2656447	50.0000	
37 Trichloroethene	95	11.940	11.940	(1.036)	3453	0.25000	0.3343 (a)
38 Trifluorotoluene	146	12.285	12.285	(1.066)	2625	0.25000	0.2585 (a)
39 1,2-Dichloropropane	63	12.335	12.335	(1.070)	4718	0.25000	0.3034 (a)
40 Dibromomethane	93	12.512	12.512	(1.086)	2230	0.25000	0.2837 (a)
41 Bromodichloromethane	83	12.670	12.670	(1.099)	3974	0.25000	0.2624 (a)
43 Tetramethyl THF	43	13.242	13.242	(1.149)	9199	0.25000	0.2329 (a)
44 cis-1,3-Dichloropropene	75	13.281	13.281	(1.152)	4988	0.25000	0.2507 (a)
45 4-Methyl-2-Pentanone	43	13.410	13.410	(1.163)	8224	0.25000	0.4047 (a)
46 Toluene-d8	98	13.607	13.607	(1.181)	3016276	50.0000	50.0481
47 Toluene	92	13.706	13.706	(1.189)	7265	0.25000	0.3087 (a)
48 trans-1,3-Dichloropropene	75	14.031	14.031	(1.217)	4464	0.25000	0.2565 (a)
49 1,1,2-Trichloroethane	85	14.297	14.297	(1.240)	2433	0.25000	0.3848 (a)
50 Tetrachloroethene	166	14.416	14.416	(0.928)	1872	0.25000	0.3296 (a)
51 2-Hexanone	43	14.514	14.514	(0.934)	5109	0.25000	0.3521 (a)
52 1,3-Dichloropropane	76	14.534	14.534	(0.935)	5537	0.25000	0.2748 (a)
53 Dibromochloromethane	129	14.800	14.800	(0.952)	2430	0.25000	0.2540 (a)
54 1,2-Dibromoethane	107	15.017	15.017	(1.303)	2888	0.25000	0.2768 (a)
* 55 Chlorobenzene-d5	117	15.540	15.540	(1.000)	2153283	50.0000	
56 Chlorobenzene	112	15.570	15.570	(1.002)	7318	0.25000	0.2947 (a)
57 Ethylbenzene	91	15.619	15.619	(1.005)	12850	0.25000	0.3019 (a)
58 1,1,1,2-Tetrachloroethane	131	15.649	15.649	(1.007)	2013	0.25000	0.2418 (a)
59 m,p-Xylenes	106	15.757	15.757	(1.014)	8592	0.50000	0.5859
60 o-Xylene	106	16.260	16.260	(1.046)	4160	0.25000	0.2836 (a)
61 Styrene	104	16.290	16.290	(1.048)	7479	0.25000	0.2715 (a)
62 Bromoform	173	16.586	16.586	(1.067)	2640	0.25000	0.4511 (a)
63 Isopropylbenzene	105	16.655	16.655	(0.912)	10584	0.25000	0.3109 (a)
65 Bromofluorobenzene	95	16.921	16.921	(0.927)	1361050	50.0000	50.4301

Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\HJB12.D
 Report Date: 12-Oct-2006 08:16

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
66 1,1,2,2-Tetrachloroethane	83	17.059	17.059	(0.935)	4780	0.25000	0.3004 (a)
67 Bromobenzene	156	17.128	17.128	(0.938)	2356	0.25000	0.2805 (a)
68 Propylbenzene	91	17.128	17.128	(0.938)	15058	0.25000	0.3253 (a)
69 1,2,3-Trichloropropane	110	17.148	17.148	(0.939)	977	0.25000	0.2784 (a)
70 2-Chlorotoluene	91	17.305	17.305	(0.948)	10165	0.25000	0.3111 (a)
71 1,3,5-Trimethylbenzene	105	17.305	17.305	(0.948)	8406	0.25000	0.2865 (a)
72 4-Chlorotoluene	91	17.424	17.424	(0.955)	10277	0.25000	0.3166 (a)
73 tert-Butylbenzene	119	17.680	17.680	(0.969)	7064	0.25000	0.3179 (a)
74 1,2,4-Trimethylbenzene	105	17.749	17.749	(0.972)	8882	0.25000	0.2899 (a)
75 sec-Butylbenzene	105	17.927	17.927	(0.982)	11221	0.25000	0.3158 (a)
76 para-Isopropyl Toluene	119	18.075	18.075	(0.990)	7986	0.25000	0.2929 (a)
77 1,3-Dichlorobenzene	146	18.173	18.173	(0.996)	5079	0.25000	0.3119 (a)
* 78 1,4-Dichlorobenzene-d4	152	18.252	18.252	(1.000)	900847	50.0000	
79 1,4-Dichlorobenzene	146	18.282	18.282	(1.002)	5673	0.25000	0.3252 (a)
80 n-Butylbenzene	91	18.558	18.558	(1.017)	8440	0.25000	0.3014 (a)
81 1,2-Dichlorobenzene	146	18.745	18.745	(1.027)	4630	0.25000	0.2920 (a)
82 1,2-Dibromo-3-Chloropropane	75	19.732	19.732	(1.081)	886	0.25000	0.3252 (a)
83 1,2,4-Trichlorobenzene	180	20.846	20.846	(1.142)	1652	0.25000	0.2309 (a)
84 Hexachlorobutadiene	225	20.955	20.955	(1.148)	278	0.25000	0.0942 (a)
85 Naphthalene	128	21.280	21.280	(1.166)	5633	0.25000	0.2247 (a)
86 1,2,3-Trichlorobenzene	180	21.665	21.665	(1.187)	1613	0.25000	0.2466 (a)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.

Data File: \NCHSERVER\JD\chem\MSV0A08.i\101106.b\HJBI2.D
Date : 11-OCT-2006 17:44

Client ID: DYNA P&T

Sample Info: ICAL,S4519,0.001/1000,S4468,0.0005/1000,

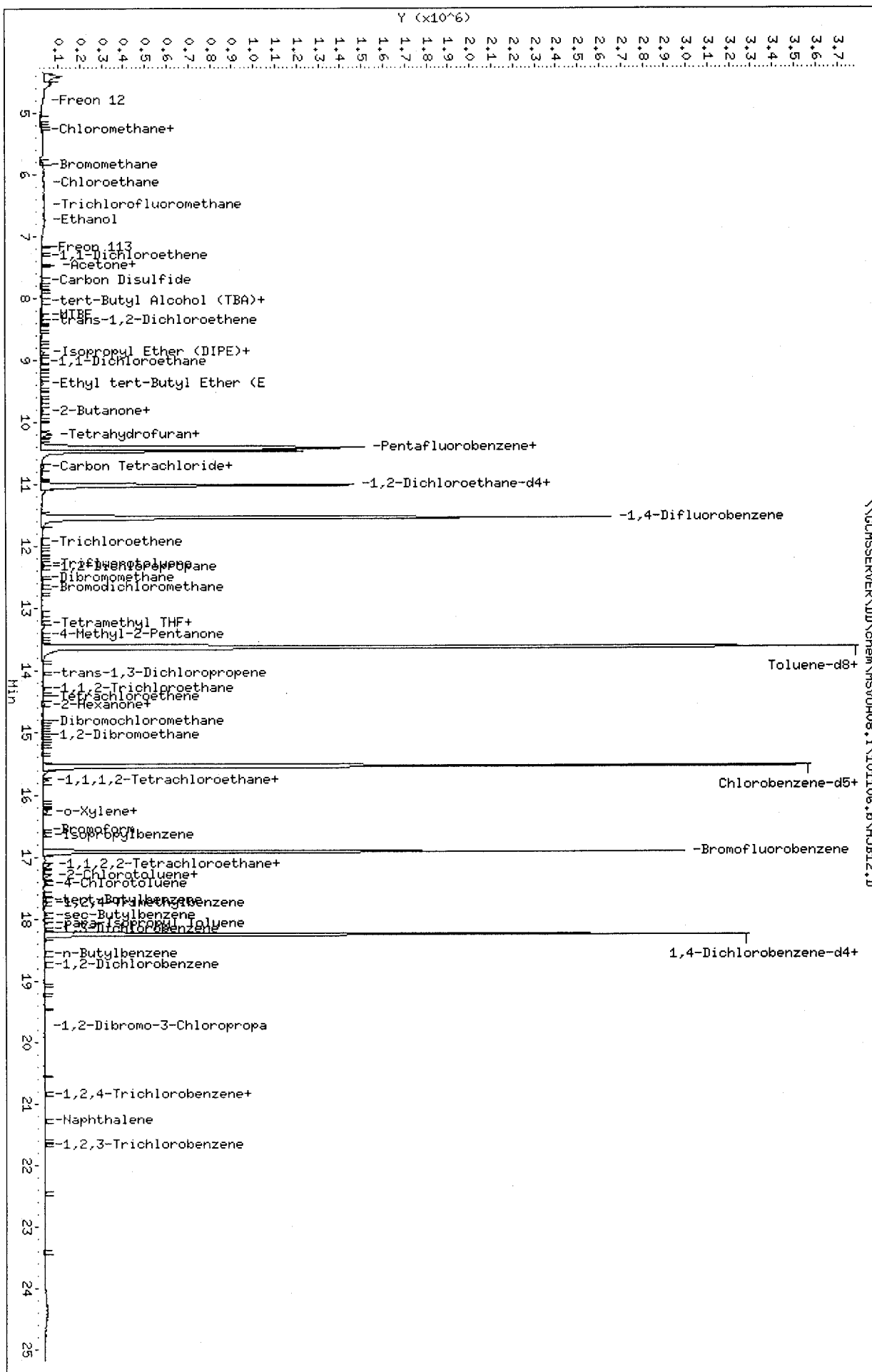
Purge Volume: 5.0

Column phase: RTX 624

Instrument: MSV0A08.i

Operator: BO

Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\HJB13.D
 Report Date: 12-Oct-2006 08:17

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\HJB13.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 11-OCT-2006 18:21 MS Autotune Date: 27-JUL-2006 10:42
 Operator : BO Inst ID: MSVOA08.i
 Smp Info : ICAL,S4519,0.002/1000,S4468,0.001/1000,
 Misc Info : S4172,0.001/1000,0.5/1PPB
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\826GOX8.m
 Meth Date : 12-Oct-2006 08:17 Administra Quant Type: ISTD
 Cal Date : 11-OCT-2006 22:44 Cal File: HJB20.D
 Als bottle: 13 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.793	4.793	(0.461)	14503	1.00000	1.1946 (M)
2 Chloromethane	50	5.306	5.306	(0.510)	25617	1.00000	1.2257 (M)
3 Vinyl Chloride	62	5.375	5.375	(0.517)	17228	1.00000	1.0700 (M)
4 Bromomethane	94	5.986	5.986	(0.575)	7829	1.00000	1.8660 (M)
5 Chloroethane	64	6.154	6.154	(0.591)	11722	1.00000	1.2376 (M)
6 Trichlorofluoromethane	101	6.479	6.479	(0.623)	12043	1.00000	1.0119
7 Ethanol	45	6.746	6.746	(0.648)	11885	50.0000	57.9438 (M)
8 Freon 113	101	7.190	7.190	(0.691)	3054	0.50000	1.2205
9 1,1-Dichloroethene	96	7.298	7.298	(0.701)	5558	0.50000	0.5064
10 Acetone	43	7.407	7.407	(0.712)	6506	0.50000	0.9969
11 Isopropanol	45	7.476	7.476	(0.718)	7285	5.00000	6.1280
12 Carbon Disulfide	76	7.712	7.712	(0.741)	21510	0.50000	0.5230
13 tert-Butyl Alcohol (TBA)	59	8.038	8.038	(0.773)	7741	5.00000	5.5607
14 Methylene Chloride	84	8.057	8.057	(0.774)	5482	0.50000	0.4520 (a)
15 MTBE	73	8.284	8.284	(0.796)	21563	0.50000	0.5654
16 trans-1,2-Dichloroethene	96	8.363	8.363	(0.804)	5590	0.50000	0.5932

Compounds	QUANT SIG			AMOUNTS			
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	----	==	=====	=====	=====	=====	=====
17 Isopropyl Ether (DIPE)	45	8.876	8.876	(0.853)	39005	0.50000	0.5522
18 Vinyl Acetate	43	8.935	8.935	(0.859)	7672	0.50000	1.9245
19 1,1-Dichloroethane	63	9.004	9.004	(0.865)	12971	0.50000	0.5644 (M)
20 Ethyl tert-Butyl Ether (ETBE)	59	9.369	9.369	(0.900)	23124	0.50000	0.5478
21 2-Butanone	43	9.793	9.793	(0.941)	11779	0.50000	1.2244
22 2,2-Dichloropropane	77	9.783	9.783	(0.940)	6296	0.50000	0.5480
23 cis-1,2-Dichloroethene	96	9.813	9.813	(0.943)	8045	0.50000	0.6608
24 Tetrahydrofuran	42	10.178	10.178	(0.978)	56110	5.00000	9.8096
25 Bromochloromethane	128	10.168	10.168	(0.977)	1926	0.50000	0.4147 (a)
26 Chloroform	83	10.208	10.208	(0.981)	11796	0.50000	0.6101
* 27 Pentafluorobenzene	168	10.405	10.405	(1.000)	1159592	50.0000	
28 Dibromofluoromethane	113	10.454	10.454	(1.005)	967408	50.0000	50.4168
29 1,1,1-Trichloroethane	97	10.494	10.494	(1.009)	6381	0.50000	0.5964
30 Carbon Tetrachloride	117	10.691	10.691	(0.927)	4242	0.50000	0.5454
31 1,1-Dichloropropene	75	10.701	10.701	(0.928)	6589	0.50000	0.5153
32 1,2-Dichloroethane-d4	65	11.006	11.006	(0.955)	1293454	50.0000	51.0865
33 Benzene	78	11.026	11.026	(0.956)	23337	0.50000	0.5546
34 Methyl tert-Amyl Ether (TAME)	73	11.036	11.036	(0.957)	20452	0.50000	0.5324
35 1,2-Dichloroethane	62	11.115	11.115	(0.964)	8780	0.50000	0.5333
* 36 1,4-Difluorobenzene	114	11.529	11.529	(1.000)	2593338	50.0000	
37 Trichloroethene	95	11.934	11.934	(1.035)	5960	0.50000	0.5911
38 Trifluorotoluene	146	12.289	12.289	(1.066)	4908	0.50000	0.4950 (a)
39 1,2-Dichloropropane	63	12.328	12.328	(1.069)	8770	0.50000	0.5778 (M)
40 Dibromomethane	93	12.525	12.525	(1.086)	4231	0.50000	0.5514
41 Bromodichloromethane	83	12.663	12.663	(1.098)	8249	0.50000	0.5580
43 Tetramethyl THF	43	13.235	13.235	(1.148)	18450	0.50000	0.4786 (a)
44 cis-1,3-Dichloropropene	75	13.285	13.285	(1.152)	10088	0.50000	0.5194
45 4-Methyl-2-Pentanone	43	13.403	13.403	(1.163)	12451	0.50000	0.6276
46 Toluene-d8	98	13.610	13.610	(1.180)	2983326	50.0000	50.7060
47 Toluene	92	13.709	13.709	(1.189)	12242	0.50000	0.5330
48 trans-1,3-Dichloropropene	75	14.025	14.025	(1.216)	8869	0.50000	0.5222
49 1,1,2-Trichloroethane	85	14.291	14.291	(1.240)	3813	0.50000	0.6178
50 Tetrachloroethene	166	14.419	14.419	(0.928)	3062	0.50000	0.5559
51 2-Hexanone	43	14.508	14.508	(0.934)	6874	0.50000	0.4884 (a)
52 1,3-Dichloropropane	76	14.537	14.537	(0.936)	9683	0.50000	0.4956 (a)
53 Dibromochloromethane	129	14.804	14.804	(0.953)	4662	0.50000	0.5025
54 1,2-Dibromoethane	107	15.021	15.021	(1.303)	5351	0.50000	0.5254
* 55 Chlorobenzene-d5	117	15.534	15.534	(1.000)	2088426	50.0000	
56 Chlorobenzene	112	15.573	15.573	(1.003)	13771	0.50000	0.5718
57 Ethylbenzene	91	15.622	15.622	(1.006)	22586	0.50000	0.5472
58 1,1,1,2-Tetrachloroethane	131	15.652	15.652	(1.008)	4326	0.50000	0.5359
59 m,p-Xylenes	106	15.760	15.760	(1.015)	14463	1.00000	1.0168
60 o-Xylene	106	16.263	16.263	(1.047)	7699	0.50000	0.5412
61 Styrene	104	16.283	16.283	(1.048)	13993	0.50000	0.5238
62 Bromoform	173	16.589	16.589	(1.068)	3464	0.50000	0.6103
63 Isopropylbenzene	105	16.658	16.658	(0.913)	18489	0.50000	0.5667
65 Bromofluorobenzene	95	16.914	16.914	(0.927)	1331113	50.0000	51.4527

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	====	==	=====	=====	=====	=====	=====
66 1,1,2,2-Tetrachloroethane	83	17.062	17.062	(0.935)	8556	0.50000	0.5611
67 Bromobenzene	156	17.121	17.121	(0.938)	4469	0.50000	0.5552
68 Propylbenzene	91	17.121	17.121	(0.938)	26549	0.50000	0.5983
69 1,2,3-Trichloropropane	110	17.151	17.151	(0.940)	1919	0.50000	0.5706
70 2-Chlorotoluene	91	17.299	17.299	(0.948)	17383	0.50000	0.5550
71 1,3,5-Trimethylbenzene	105	17.299	17.299	(0.948)	17043	0.50000	0.6060
72 4-Chlorotoluene	91	17.427	17.427	(0.955)	18748	0.50000	0.6026
73 tert-Butylbenzene	119	17.684	17.684	(0.969)	11437	0.50000	0.5369
74 1,2,4-Trimethylbenzene	105	17.753	17.753	(0.973)	16237	0.50000	0.5529
75 sec-Butylbenzene	105	17.930	17.930	(0.983)	18239	0.50000	0.5355
76 para-Isopropyl Toluene	119	18.078	18.078	(0.991)	14870	0.50000	0.5689
77 1,3-Dichlorobenzene	146	18.167	18.167	(0.996)	8295	0.50000	0.5314
* 78 1,4-Dichlorobenzene-d4	152	18.246	18.246	(1.000)	863523	50.0000	
79 1,4-Dichlorobenzene	146	18.275	18.275	(1.002)	9670	0.50000	0.5783
80 n-Butylbenzene	91	18.552	18.552	(1.017)	14897	0.50000	0.5550
81 1,2-Dichlorobenzene	146	18.749	18.749	(1.028)	8364	0.50000	0.5504
82 1,2-Dibromo-3-Chloropropane	75	19.725	19.725	(1.081)	1534	0.50000	0.5875
83 1,2,4-Trichlorobenzene	180	20.840	20.840	(1.142)	3517	0.50000	0.5128
84 Hexachlorobutadiene	225	20.958	20.958	(1.149)	587	0.50000	0.3245 (a)
85 Naphthalene	128	21.284	21.284	(1.166)	9718	0.50000	0.4045 (a)
86 1,2,3-Trichlorobenzene	180	21.678	21.678	(1.188)	2468	0.50000	0.3936 (aM)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.

Data File: \\GCHSERVER\JD\chem\HSV0A08.1\101106.b\HDB13.D

Date : 11-OCT-2006 18:21

Client ID: DYNA P&T

Sample Info: ICAL.S4519.0.002/1000.S4468.0.001/1000,

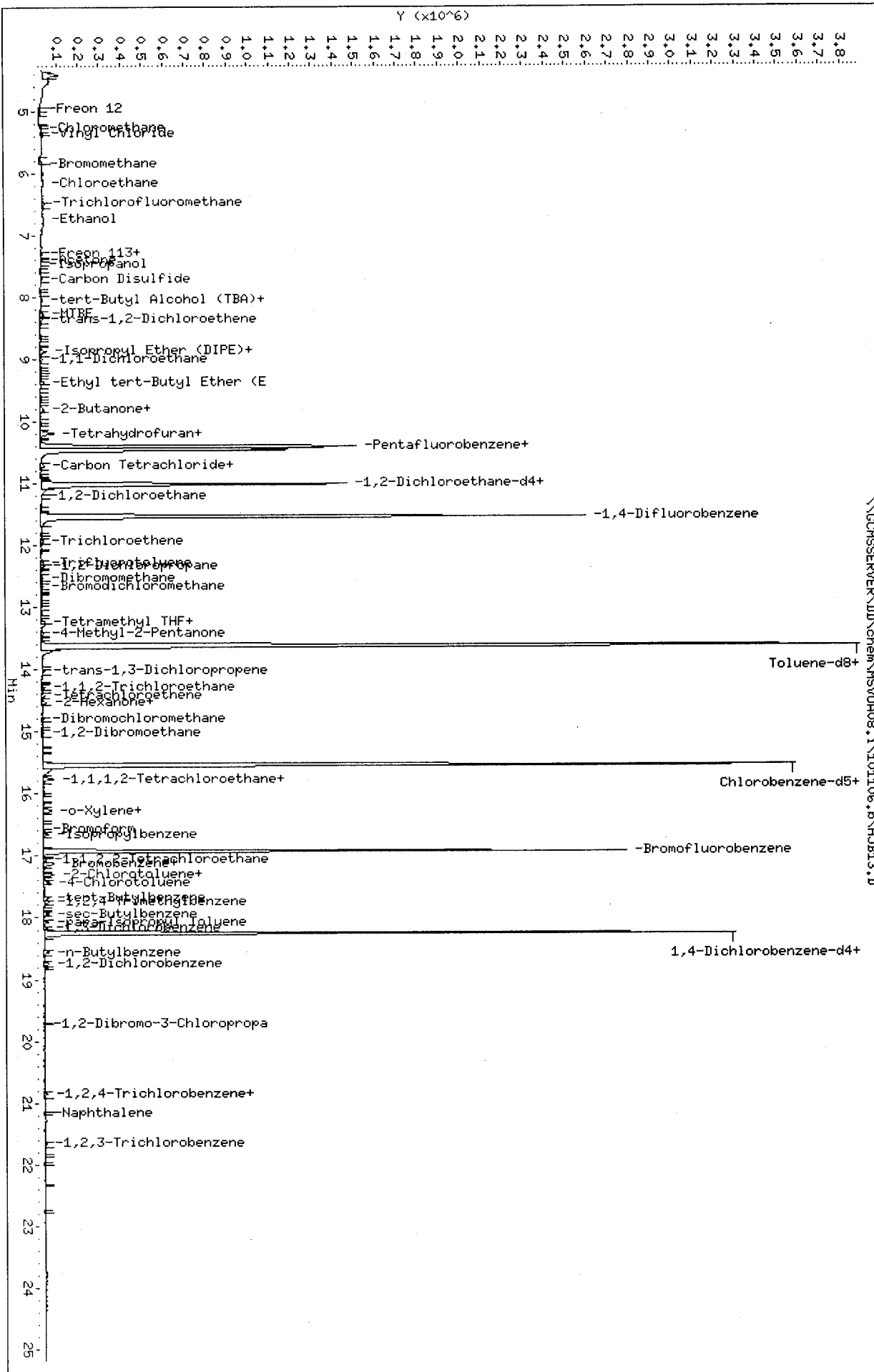
Purge Volume: 5.0

Column phase: RTX 624

Instrument: HSV0A08.1

Operator: BO

Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\HJB14.D
 Report Date: 12-Oct-2006 08:18

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\HJB14.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 11-OCT-2006 18:59 MS Autotune Date: 27-JUL-2006 10:42
 Operator : BO Inst ID: MSVOA08.i
 Smp Info : ICAL,S4519,0.002/500,S4468,0.002/500,
 Misc Info : S4172,0.001/500,2PPB
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\826GOX8.m
 Meth Date : 12-Oct-2006 08:18 Administra Quant Type: ISTD
 Cal Date : 11-OCT-2006 22:44 Cal File: HJB20.D
 Als bottle: 14 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.797	4.797	(0.461)	29344	2.00000	2.2359 (M)
2 Chloromethane	50	5.300	5.300	(0.510)	51795	2.00000	2.2927 (M)
3 Vinyl Chloride	62	5.389	5.389	(0.518)	39387	2.00000	2.2631 (M)
4 Bromomethane	94	6.000	6.000	(0.577)	10379	2.00000	2.1768 (M)
5 Chloroethane	64	6.158	6.158	(0.592)	23559	2.00000	2.3011 (M)
6 Trichlorofluoromethane	101	6.484	6.484	(0.623)	28337	2.00000	2.2026
7 Ethanol	45	6.740	6.740	(0.648)	48977	200.000	220.8910 (M)
8 Freon 113	101	7.194	7.194	(0.692)	12491	2.00000	2.6550
9 1,1-Dichloroethene	96	7.302	7.302	(0.702)	17263	2.00000	2.1731
10 Acetone	43	7.391	7.391	(0.711)	17505	2.00000	2.4813
11 Isopropanol	45	7.470	7.470	(0.718)	28036	20.0000	21.8167
12 Carbon Disulfide	76	7.707	7.707	(0.741)	93898	2.00000	2.1122
13 tert-Butyl Alcohol (TBA)	59	8.032	8.032	(0.772)	31013	20.0000	20.6092
14 Methylene Chloride	84	8.042	8.042	(0.773)	29382	2.00000	2.2413 (M)
15 MTBE	73	8.279	8.279	(0.796)	82410	2.00000	1.9992
16 trans-1,2-Dichloroethene	96	8.358	8.358	(0.804)	20971	2.00000	2.0587

Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\HJB14.D
Report Date: 12-Oct-2006 08:18

Compounds	QUANT SIG			REL RT	RESPONSE	AMOUNTS	
	MASS	RT	EXP RT			CAL-AMT (ug/L)	ON-COL (ug/L)
-----	----	==	=====	=====	=====	=====	=====
17 Isopropyl Ether (DIPE)	45	8.870	8.870	(0.853)	170826	2.00000	2.2375
18 Vinyl Acetate	43	8.930	8.930	(0.859)	40527	2.00000	3.1353
19 1,1-Dichloroethane	63	8.999	8.999	(0.865)	53874	2.00000	2.1687
20 Ethyl tert-Butyl Ether (ETBE)	59	9.373	9.373	(0.901)	95931	2.00000	2.1024
21 2-Butanone	43	9.778	9.778	(0.940)	22575	2.00000	2.1708
22 2,2-Dichloropropane	77	9.788	9.788	(0.941)	27518	2.00000	2.2158
23 cis-1,2-Dichloroethene	96	9.807	9.807	(0.943)	26146	2.00000	2.1493
24 Tetrahydrofuran	42	10.182	10.182	(0.979)	146998	20.0000	23.7741
25 Bromochloromethane	128	10.172	10.172	(0.978)	10753	2.00000	2.1418
26 Chloroform	83	10.212	10.212	(0.982)	45445	2.00000	2.1744
* 27 Pentafluorobenzene	168	10.399	10.399	(1.000)	1253509	50.0000	
28 Dibromofluoromethane	113	10.448	10.448	(1.005)	1042430	50.0000	50.2563
29 1,1,1-Trichloroethane	97	10.498	10.498	(1.009)	24013	2.00000	2.0763
30 Carbon Tetrachloride	117	10.695	10.695	(0.928)	17334	2.00000	2.0908
31 1,1-Dichloropropene	75	10.705	10.705	(0.929)	29634	2.00000	2.1741
32 1,2-Dichloroethane-d4	65	11.001	11.001	(0.955)	1390328	50.0000	51.5099
33 Benzene	78	11.030	11.030	(0.957)	97670	2.00000	2.1775
34 Methyl tert-Amyl Ether (TAME)	73	11.030	11.030	(0.957)	85728	2.00000	2.0934
35 1,2-Dichloroethane	62	11.119	11.119	(0.965)	37204	2.00000	2.1198
* 36 1,4-Difluorobenzene	114	11.524	11.524	(1.000)	2764654	50.0000	
37 Trichloroethene	95	11.928	11.928	(1.035)	23503	2.00000	2.1867
38 Trifluorotoluene	146	12.283	12.283	(1.066)	22046	2.00000	2.0860
39 1,2-Dichloropropane	63	12.332	12.332	(1.070)	34222	2.00000	2.1150 (M)
40 Dibromomethane	93	12.520	12.520	(1.086)	16512	2.00000	2.0187
41 Bromodichloromethane	83	12.668	12.668	(1.099)	32839	2.00000	2.0839
42 2-Chloroethylvinylether	63	13.003	13.003	(1.128)	453	2.00000	0.4808 (a)
43 Tetramethyl THF	43	13.230	13.230	(1.148)	83662	2.00000	2.0360
44 cis-1,3-Dichloropropene	75	13.279	13.279	(1.152)	44224	2.00000	2.1361
45 4-Methyl-2-Pentanone	43	13.417	13.417	(1.164)	42972	2.00000	2.0320
46 Toluene-d8	98	13.614	13.614	(1.181)	3103350	50.0000	49.4775
47 Toluene	92	13.703	13.703	(1.189)	53164	2.00000	2.1712
48 trans-1,3-Dichloropropene	75	14.029	14.029	(1.217)	36686	2.00000	2.0262
49 1,1,2-Trichloroethane	85	14.285	14.285	(1.240)	13332	2.00000	2.0264
50 Tetrachloroethene	166	14.423	14.423	(0.928)	12829	2.00000	2.1690
51 2-Hexanone	43	14.512	14.512	(0.934)	28855	2.00000	1.9095
52 1,3-Dichloropropane	76	14.532	14.532	(0.935)	42613	2.00000	2.0311
53 Dibromochloromethane	129	14.808	14.808	(0.953)	18791	2.00000	1.8863
54 1,2-Dibromoethane	107	15.015	15.015	(1.303)	22652	2.00000	2.0865
* 55 Chlorobenzene-d5	117	15.538	15.538	(1.000)	2242608	50.0000	
56 Chlorobenzene	112	15.577	15.577	(1.003)	54285	2.00000	2.0993
57 Ethylbenzene	91	15.617	15.617	(1.005)	93404	2.00000	2.1074
58 1,1,1,2-Tetrachloroethane	131	15.646	15.646	(1.007)	17887	2.00000	2.0636
59 m,p-Xylenes	106	15.755	15.755	(1.014)	64807	4.00000	4.2432
60 o-Xylene	106	16.258	16.258	(1.046)	32975	2.00000	2.1589
61 Styrene	104	16.287	16.287	(1.048)	59990	2.00000	2.0913
62 Bromoform	173	16.583	16.583	(1.067)	12014	2.00000	1.9713
63 Isopropylbenzene	105	16.652	16.652	(0.912)	74340	2.00000	2.1313

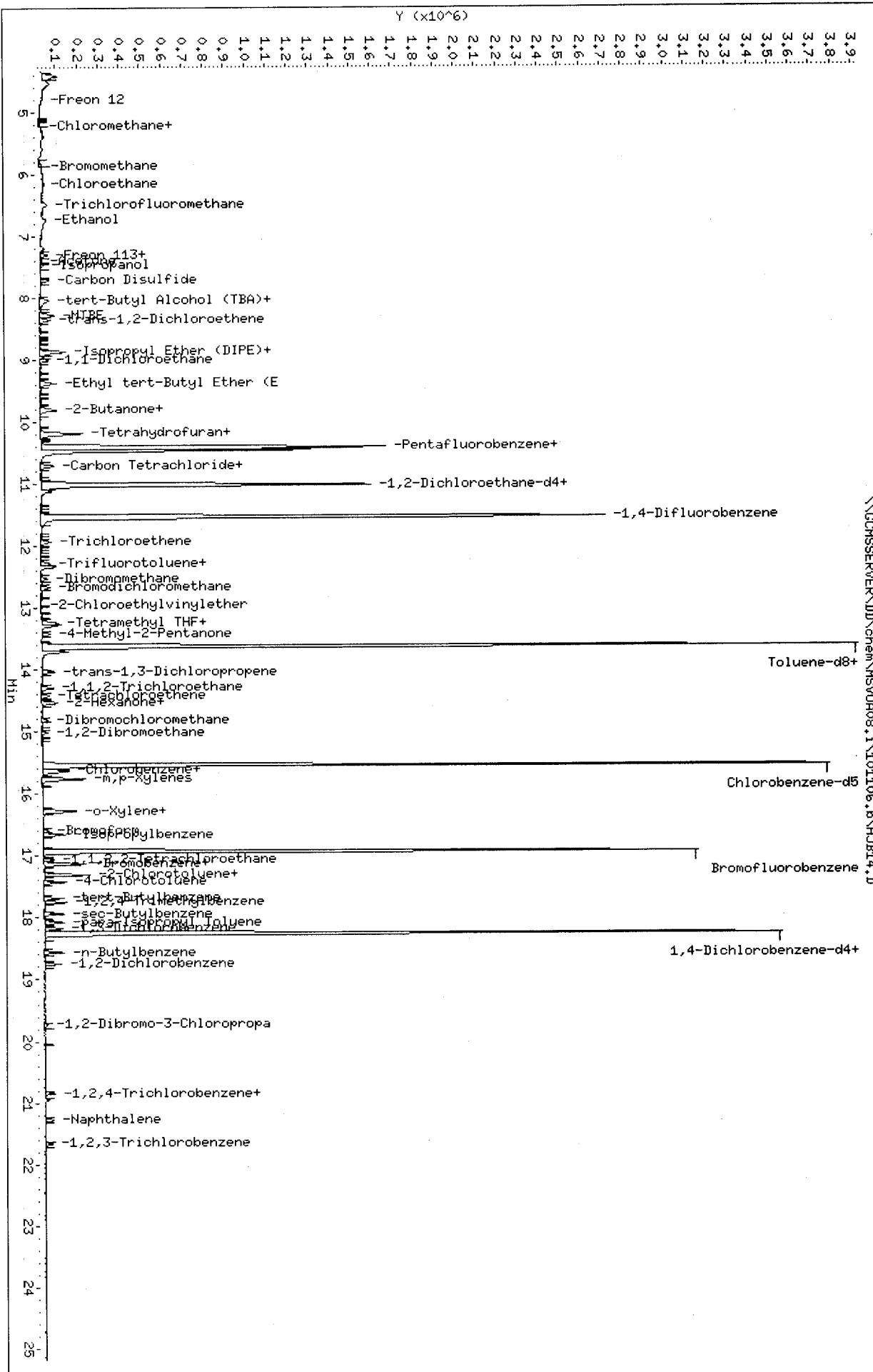
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	====	==	=====	=====	=====	=====	=====
65 Bromofluorobenzene	95	16.919	16.919	(0.927)	1396474	50.0000	50.4862
66 1,1,2,2-Tetrachloroethane	83	17.057	17.057	(0.935)	33184	2.00000	2.0354
67 Bromobenzene	156	17.126	17.126	(0.938)	18917	2.00000	2.1981
68 Propylbenzene	91	17.126	17.126	(0.938)	106272	2.00000	2.2400
69 1,2,3-Trichloropropane	110	17.155	17.155	(0.940)	7206	2.00000	2.0040
70 2-Chlorotoluene	91	17.303	17.303	(0.948)	73661	2.00000	2.1998
71 1,3,5-Trimethylbenzene	105	17.303	17.303	(0.948)	65201	2.00000	2.1684
72 4-Chlorotoluene	91	17.422	17.422	(0.955)	72196	2.00000	2.1704
73 tert-Butylbenzene	119	17.688	17.688	(0.969)	48864	2.00000	2.1457
74 1,2,4-Trimethylbenzene	105	17.747	17.747	(0.972)	69368	2.00000	2.2094
75 sec-Butylbenzene	105	17.934	17.934	(0.983)	76983	2.00000	2.1143
76 para-Isopropyl Toluene	119	18.073	18.073	(0.990)	60297	2.00000	2.1578
77 1,3-Dichlorobenzene	146	18.171	18.171	(0.996)	35339	2.00000	2.1174
* 78 1,4-Dichlorobenzene-d4	152	18.250	18.250	(1.000)	923267	50.0000	
79 1,4-Dichlorobenzene	146	18.280	18.280	(1.002)	38977	2.00000	2.1804
80 n-Butylbenzene	91	18.556	18.556	(1.017)	63505	2.00000	2.2130
81 1,2-Dichlorobenzene	146	18.753	18.753	(1.028)	33910	2.00000	2.0873
82 1,2-Dibromo-3-Chloropropane	75	19.739	19.739	(1.082)	5570	2.00000	1.9952
83 1,2,4-Trichlorobenzene	180	20.844	20.844	(1.142)	15611	2.00000	2.1291
84 Hexachlorobutadiene	225	20.952	20.952	(1.148)	3861	2.00000	2.4840
85 Naphthalene	128	21.278	21.278	(1.166)	45357	2.00000	1.7659
86 1,2,3-Trichlorobenzene	180	21.663	21.663	(1.187)	13635	2.00000	2.0340

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.

Data File: \\GCHSSERVER\DD\chem\MSV0808.1\101106.b\HJ14.D
 Date: 11-OCT-2006 18:59
 Client ID: DYNA P&T
 Sample Info: ICAL,S4519,0.002/500,S4468,0.002/500,
 Purge Volume: 5.0
 Column phase: RTX 624

Instrument: MSV0808.i
 Operator: BO
 Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\HJB15.D
Report Date: 12-Oct-2006 08:19

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\HJB15.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 11-OCT-2006 19:36 MS Autotune Date: 27-JUL-2006 10:42
Operator : BO Inst ID: MSVOA08.i
Smp Info : ICAL,S4519,0.005/500,S4468,0.005/500,
Misc Info : S4172,0.0025/500,5PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\826GOX8.m
Meth Date : 12-Oct-2006 08:19 Administra Quant Type: ISTD
Cal Date : 11-OCT-2006 22:44 Cal File: HJB20.D
Als bottle: 15 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.796	4.796	(0.461)	50675	5.00000	3.8157
2 Chloromethane	50	5.299	5.299	(0.510)	104770	5.00000	4.5828 (M)
3 Vinyl Chloride	62	5.388	5.388	(0.518)	72061	5.00000	4.0916
4 Bromomethane	94	6.000	6.000	(0.577)	22455	5.00000	4.0856 (M)
5 Chloroethane	64	6.157	6.157	(0.592)	45009	5.00000	4.3443 (M)
6 Trichlorofluoromethane	101	6.483	6.483	(0.623)	51157	5.00000	3.9294
7 Ethanol	45	6.739	6.739	(0.648)	101374	500.000	451.8047 (M)
8 Freon 113	101	7.193	7.193	(0.692)	30833	5.00000	5.4318
9 1,1-Dichloroethene	96	7.302	7.302	(0.702)	37424	5.00000	5.0696
10 Acetone	43	7.390	7.390	(0.711)	35029	5.00000	4.9067
11 Isopropanol	45	7.469	7.469	(0.718)	59113	50.0000	45.4563
12 Carbon Disulfide	76	7.706	7.706	(0.741)	209347	5.00000	4.6536
13 tert-Butyl Alcohol (TBA)	59	8.021	8.021	(0.771)	67409	50.0000	44.2663
14 Methylene Chloride	84	8.051	8.051	(0.774)	60723	5.00000	4.5774
15 MTBE	73	8.278	8.278	(0.796)	189972	5.00000	4.5541
16 trans-1,2-Dichloroethene	96	8.357	8.357	(0.804)	47898	5.00000	4.6466

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
-----	----	--	-----	-----	-----	-----	-----
17 Isopropyl Ether (DIPE)	45	8.870	8.870	(0.853)	381334	5.00000	4.9359
18 Vinyl Acetate	43	8.939	8.939	(0.860)	74999	5.00000	4.3879
19 1,1-Dichloroethane	63	8.998	8.998	(0.865)	119943	5.00000	4.7714
20 Ethyl tert-Butyl Ether (ETBE)	59	9.373	9.373	(0.901)	216351	5.00000	4.6855
21 2-Butanone	43	9.777	9.777	(0.940)	51117	5.00000	4.8574
22 2,2-Dichloropropane	77	9.787	9.787	(0.941)	57266	5.00000	4.5568
23 cis-1,2-Dichloroethene	96	9.817	9.817	(0.944)	55734	5.00000	4.6169
24 Tetrahydrofuran	42	10.181	10.181	(0.979)	304981	50.0000	48.7420
25 Bromochloromethane	128	10.172	10.172	(0.978)	22597	5.00000	4.4478
26 Chloroform	83	10.211	10.211	(0.982)	98090	5.00000	4.6379
* 27 Pentafluorobenzene	168	10.398	10.398	(1.000)	1268496	50.0000	
28 Dibromofluoromethane	113	10.448	10.448	(1.005)	1057772	50.0000	50.3934
29 1,1,1-Trichloroethane	97	10.497	10.497	(1.009)	55039	5.00000	4.7028
30 Carbon Tetrachloride	117	10.694	10.694	(0.927)	39250	5.00000	4.6891
31 1,1-Dichloropropene	75	10.714	10.714	(0.929)	65909	5.00000	4.7893
32 1,2-Dichloroethane-d4	65	11.010	11.010	(0.955)	1416852	50.0000	51.9909
33 Benzene	78	11.030	11.030	(0.956)	218386	5.00000	4.8222
34 Methyl tert-Amyl Ether (TAME)	73	11.030	11.030	(0.956)	199615	5.00000	4.8279
35 1,2-Dichloroethane	62	11.118	11.118	(0.964)	82660	5.00000	4.6648
* 36 1,4-Difluorobenzene	114	11.533	11.533	(1.000)	2791334	50.0000	
37 Trichloroethene	95	11.927	11.927	(1.034)	51290	5.00000	4.7263
38 Trifluorotoluene	146	12.282	12.282	(1.065)	49571	5.00000	4.6458
39 1,2-Dichloropropane	63	12.332	12.332	(1.069)	78460	5.00000	4.8028 (M)
40 Dibromomethane	93	12.519	12.519	(1.086)	37765	5.00000	4.5730
41 Bromodichloromethane	83	12.667	12.667	(1.098)	72470	5.00000	4.5550
42 2-Chloroethylvinylether	63	13.022	13.022	(1.129)	1178	5.00000	1.2383 (M)
43 Tetramethyl THF	43	13.229	13.229	(1.147)	207975	5.00000	5.0129
44 cis-1,3-Dichloropropene	75	13.278	13.278	(1.151)	96233	5.00000	4.6039
45 4-Methyl-2-Pentanone	43	13.417	13.417	(1.163)	98714	5.00000	4.6232
46 Toluene-d8	98	13.614	13.614	(1.180)	3174158	50.0000	50.1227
47 Toluene	92	13.703	13.703	(1.188)	118617	5.00000	4.7981
48 trans-1,3-Dichloropropene	75	14.028	14.028	(1.216)	85515	5.00000	4.6779
49 1,1,2-Trichloroethane	85	14.294	14.294	(1.239)	29743	5.00000	4.4777
50 Tetrachloroethene	166	14.413	14.413	(0.928)	27169	5.00000	4.5442
51 2-Hexanone	43	14.511	14.511	(0.934)	72385	5.00000	4.7389
52 1,3-Dichloropropane	76	14.531	14.531	(0.935)	99842	5.00000	4.7081
53 Dibromochloromethane	129	14.807	14.807	(0.953)	47203	5.00000	4.6876
54 1,2-Dibromoethane	107	15.014	15.014	(1.302)	50060	5.00000	4.5670
* 55 Chlorobenzene-d5	117	15.537	15.537	(1.000)	2266890	50.0000	
56 Chlorobenzene	112	15.576	15.576	(1.003)	124813	5.00000	4.7750
57 Ethylbenzene	91	15.616	15.616	(1.005)	221403	5.00000	4.9420
58 1,1,1,2-Tetrachloroethane	131	15.646	15.646	(1.007)	40228	5.00000	4.5915
59 m,p-Xylenes	106	15.764	15.764	(1.015)	144567	10.0000	9.3641
60 o-Xylene	106	16.257	16.257	(1.046)	73346	5.00000	4.7506
61 Styrene	104	16.287	16.287	(1.048)	138041	5.00000	4.7607
62 Bromoform	173	16.582	16.582	(1.067)	26782	5.00000	4.3475
63 Isopropylbenzene	105	16.652	16.652	(0.912)	172171	5.00000	4.8223

Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\HJB15.D
 Report Date: 12-Oct-2006 08:19

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
65 Bromofluorobenzene	95	16.918	16.918	(0.927)	1459028	50.0000	51.5315
66 1,1,2,2-Tetrachloroethane	83	17.056	17.056	(0.935)	74904	5.00000	4.4885
67 Bromobenzene	156	17.125	17.125	(0.938)	42948	5.00000	4.8754
68 Propylbenzene	91	17.125	17.125	(0.938)	240727	5.00000	4.9572
69 1,2,3-Trichloropropane	110	17.155	17.155	(0.940)	17171	5.00000	4.6652
70 2-Chlorotoluene	91	17.302	17.302	(0.948)	171111	5.00000	4.9922
71 1,3,5-Trimethylbenzene	105	17.302	17.302	(0.948)	153815	5.00000	4.9975
72 4-Chlorotoluene	91	17.421	17.421	(0.955)	160363	5.00000	4.7099
73 tert-Butylbenzene	119	17.687	17.687	(0.969)	109264	5.00000	4.6874
74 1,2,4-Trimethylbenzene	105	17.746	17.746	(0.972)	159039	5.00000	4.9488
75 sec-Butylbenzene	105	17.934	17.934	(0.983)	181250	5.00000	4.8632
76 para-Isopropyl Toluene	119	18.072	18.072	(0.990)	136222	5.00000	4.7625
77 1,3-Dichlorobenzene	146	18.170	18.170	(0.996)	82948	5.00000	4.8555
* 78 1,4-Dichlorobenzene-d4	152	18.249	18.249	(1.000)	945057	50.0000	
79 1,4-Dichlorobenzene	146	18.279	18.279	(1.002)	85898	5.00000	4.6944
80 n-Butylbenzene	91	18.555	18.555	(1.017)	137675	5.00000	4.6870
81 1,2-Dichlorobenzene	146	18.742	18.742	(1.027)	78424	5.00000	4.7160
82 1,2-Dibromo-3-Chloropropane	75	19.729	19.729	(1.081)	13669	5.00000	4.7834
83 1,2,4-Trichlorobenzene	180	20.843	20.843	(1.142)	35055	5.00000	4.6707
84 Hexachlorobutadiene	225	20.952	20.952	(1.148)	8591	5.00000	5.4724
85 Naphthalene	128	21.277	21.277	(1.166)	121084	5.00000	4.6056
86 1,2,3-Trichlorobenzene	180	21.672	21.672	(1.188)	33159	5.00000	4.8324

QC Flag Legend

M - Compound response manually integrated.

Data File: \\JOCHSERVER\JD\chem\MSV0A08.i\101106.p\HJ15.D

Date : 11-OCT-2006 19:36

Client ID: DYNA P&I

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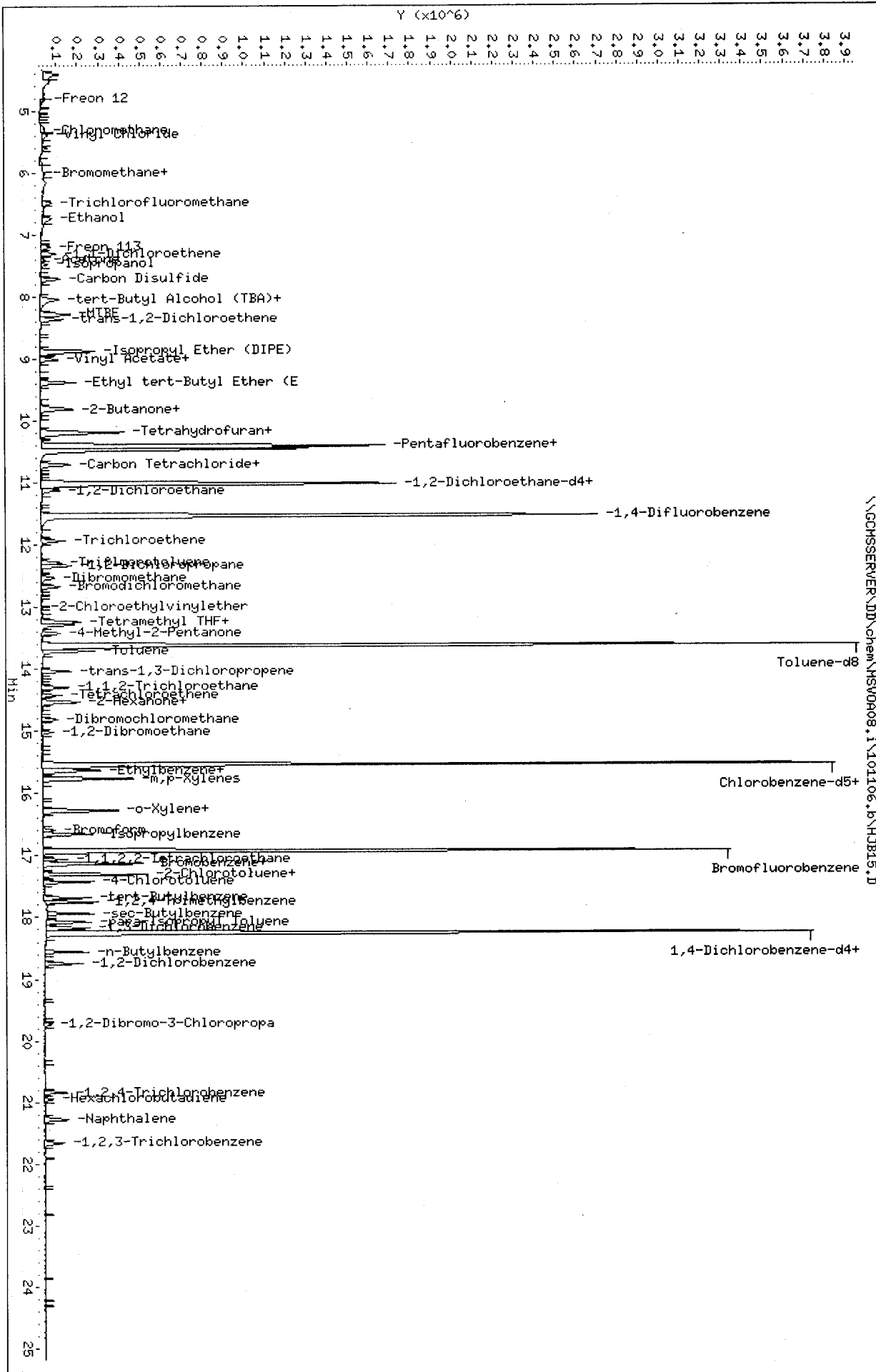
Purge Volume: 5.0

Column phase: RTX 624

Instrument: MSV0A08.i

Operator: BO

Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\HJB16.D
 Report Date: 12-Oct-2006 08:20

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\HJB16.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 11-OCT-2006 20:14 MS Autotune Date: 27-JUL-2006 10:42
 Operator : BO Inst ID: MSVOA08.i
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 Misc Info : S4172,0.001/100,10PPB
 Comment :
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 Meth Date : 12-Oct-2006 08:20 Administra Quant Type: ISTD
 Cal Date : 11-OCT-2006 22:44 Cal File: HJB20.D
 Als bottle: 16 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.793	4.793	(0.461)	129008	10.0000	9.6062 (M)
2 Chloromethane	50	5.306	5.306	(0.510)	222151	10.0000	9.6094 (M)
3 Vinyl Chloride	62	5.385	5.385	(0.518)	178940	10.0000	10.0474
4 Bromomethane	94	6.016	6.016	(0.579)	58040	10.0000	9.6000 (M)
5 Chloroethane	64	6.144	6.144	(0.591)	100523	10.0000	9.5948 (M)
6 Trichlorofluoromethane	101	6.480	6.480	(0.623)	130751	10.0000	9.9316
7 Ethanol	45	6.736	6.736	(0.648)	209654	1000.00	924.0102 (M)
8 Freon 113	101	7.190	7.190	(0.692)	51082	10.0000	8.3923
9 1,1-Dichloroethene	96	7.298	7.298	(0.702)	65316	10.0000	8.9647
10 Acetone	43	7.387	7.387	(0.711)	74646	10.0000	10.3401
11 Isopropanol	45	7.466	7.466	(0.718)	123429	100.000	93.8595
12 Carbon Disulfide	76	7.703	7.703	(0.741)	384446	10.0000	8.4510
13 tert-Butyl Alcohol (TBA)	59	8.018	8.018	(0.771)	146345	100.000	95.0349
14 Methylene Chloride	84	8.048	8.048	(0.774)	136321	10.0000	10.1619
15 MTBE	73	8.275	8.275	(0.796)	431746	10.0000	10.2351
16 trans-1,2-Dichloroethene	96	8.354	8.354	(0.804)	89516	10.0000	8.5876

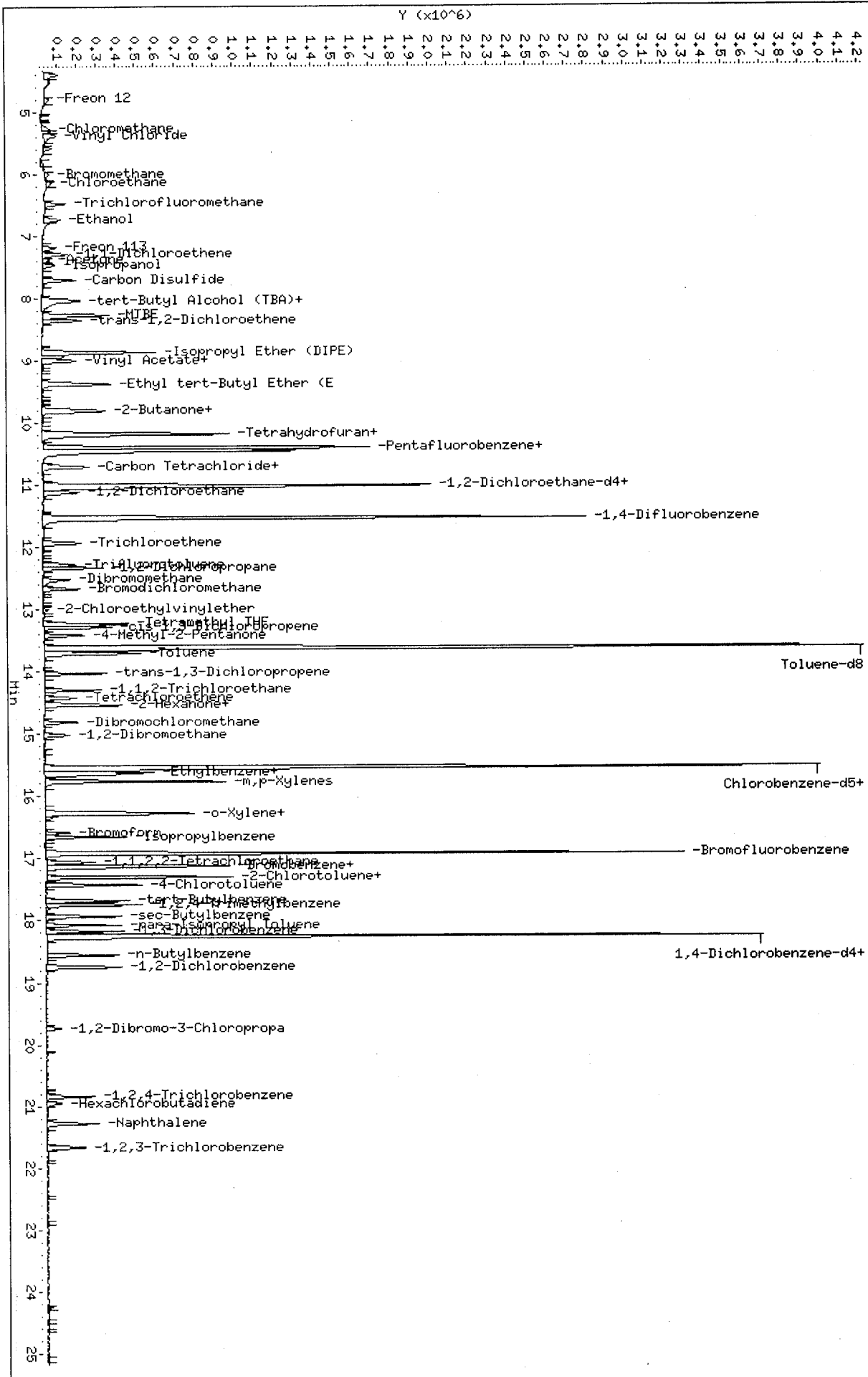
Compounds	QUANT SIG			REL RT	RESPONSE	AMOUNTS	
	MASS	RT	EXP RT			CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
17 Isopropyl Ether (DIPE)	45	8.866	8.866	(0.853)	840170	10.0000	10.7542
18 Vinyl Acetate	43	8.935	8.935	(0.860)	229266	10.0000	9.8680
19 1,1-Dichloroethane	63	8.995	8.995	(0.865)	242164	10.0000	9.5265
20 Ethyl tert-Butyl Ether (ETBE)	59	9.369	9.369	(0.901)	472636	10.0000	10.1221
21 2-Butanone	43	9.774	9.774	(0.940)	107933	10.0000	10.1424
22 2,2-Dichloropropane	77	9.784	9.784	(0.941)	115154	10.0000	9.0614
23 cis-1,2-Dichloroethene	96	9.813	9.813	(0.944)	120622	10.0000	9.9735
24 Tetrahydrofuran	42	10.178	10.178	(0.979)	669980	100.000	105.8870
25 Bromochloromethane	128	10.178	10.178	(0.979)	56391	10.0000	10.9763
26 Chloroform	83	10.208	10.208	(0.982)	208217	10.0000	9.7357
* 27 Pentafluorobenzene	168	10.395	10.395	(1.000)	1282743	50.0000	
28 Dibromofluoromethane	113	10.454	10.454	(1.006)	1063863	50.0000	50.1207
29 1,1,1-Trichloroethane	97	10.494	10.494	(1.009)	96881	10.0000	8.1862
30 Carbon Tetrachloride	117	10.691	10.691	(0.927)	65902	10.0000	7.7035
31 1,1-Dichloropropene	75	10.711	10.711	(0.929)	113215	10.0000	8.0497
32 1,2-Dichloroethane-d4	65	11.007	11.007	(0.955)	1415632	50.0000	50.8270
33 Benzene	78	11.026	11.026	(0.956)	442560	10.0000	9.5618
34 Methyl tert-Amyl Ether (TAME)	73	11.026	11.026	(0.956)	433906	10.0000	10.2685
35 1,2-Dichloroethane	62	11.115	11.115	(0.964)	185694	10.0000	10.2536
* 36 1,4-Difluorobenzene	114	11.529	11.529	(1.000)	2852793	50.0000	
37 Trichloroethene	95	11.934	11.934	(1.035)	97099	10.0000	8.7549
38 Trifluorotoluene	146	12.279	12.279	(1.065)	80015	10.0000	7.3374
39 1,2-Dichloropropane	63	12.328	12.328	(1.069)	159405	10.0000	9.5475
40 Dibromomethane	93	12.516	12.516	(1.086)	85112	10.0000	10.0842
41 Bromodichloromethane	83	12.664	12.664	(1.098)	159824	10.0000	9.8291
42 2-Chloroethylvinylether	63	12.999	12.999	(1.127)	11033	10.0000	11.3486
43 Tetramethyl THF	43	13.226	13.226	(1.147)	443668	10.0000	10.4635
44 cis-1,3-Dichloropropene	75	13.275	13.275	(1.151)	213634	10.0000	10.0004
45 4-Methyl-2-Pentanone	43	13.413	13.413	(1.163)	222100	10.0000	10.1779
46 Toluene-d8	98	13.610	13.610	(1.180)	3224598	50.0000	49.8222
47 Toluene	92	13.699	13.699	(1.188)	246548	10.0000	9.7581
48 trans-1,3-Dichloropropene	75	14.025	14.025	(1.216)	191804	10.0000	10.2663
49 1,1,2-Trichloroethane	85	14.291	14.291	(1.240)	64853	10.0000	9.5531
50 Tetrachloroethene	166	14.419	14.419	(0.928)	46230	10.0000	7.7396
51 2-Hexanone	43	14.508	14.508	(0.934)	159335	10.0000	10.4411
52 1,3-Dichloropropane	76	14.538	14.538	(0.936)	217213	10.0000	10.2522
53 Dibromochloromethane	129	14.814	14.814	(0.954)	100745	10.0000	10.0140
54 1,2-Dibromoethane	107	15.011	15.011	(1.302)	113369	10.0000	10.1200
* 55 Chlorobenzene-d5	117	15.534	15.534	(1.000)	2264789	50.0000	
56 Chlorobenzene	112	15.573	15.573	(1.003)	255567	10.0000	9.7865
57 Ethylbenzene	91	15.623	15.623	(1.006)	421703	10.0000	9.4217
58 1,1,1,2-Tetrachloroethane	131	15.652	15.652	(1.008)	87809	10.0000	10.0315
59 m,p-Xylenes	106	15.761	15.761	(1.015)	292250	20.0000	18.9477
60 o-Xylene	106	16.264	16.264	(1.047)	152219	10.0000	9.8683
61 Styrene	104	16.283	16.283	(1.048)	296741	10.0000	10.2434
62 Bromoform	173	16.589	16.589	(1.068)	60636	10.0000	9.8522
63 Isopropylbenzene	105	16.658	16.658	(0.913)	316032	10.0000	8.8149

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
-----	----	--	-----	-----	-----	-----	-----
65 Bromofluorobenzene	95	16.915	16.915	(0.927)	1433196	50.0000	50.4088
66 1,1,2,2-Tetrachloroethane	83	17.062	17.062	(0.935)	169771	10.0000	10.1311
67 Bromobenzene	156	17.132	17.132	(0.939)	90713	10.0000	10.2548
68 Propylbenzene	91	17.122	17.122	(0.938)	450103	10.0000	9.2304
69 1,2,3-Trichloropropane	110	17.151	17.151	(0.940)	37648	10.0000	10.1862
70 2-Chlorotoluene	91	17.299	17.299	(0.948)	342411	10.0000	9.9484
71 1,3,5-Trimethylbenzene	105	17.299	17.299	(0.948)	288263	10.0000	9.3269
72 4-Chlorotoluene	91	17.427	17.427	(0.955)	333603	10.0000	9.7573
73 tert-Butylbenzene	119	17.684	17.684	(0.969)	210989	10.0000	9.0138
74 1,2,4-Trimethylbenzene	105	17.753	17.753	(0.973)	317222	10.0000	9.8300
75 sec-Butylbenzene	105	17.930	17.930	(0.983)	317750	10.0000	8.4903
76 para-Isopropyl Toluene	119	18.069	18.069	(0.990)	250961	10.0000	8.7376
77 1,3-Dichlorobenzene	146	18.177	18.177	(0.996)	169110	10.0000	9.8580
* 78 1,4-Dichlorobenzene-d4	152	18.246	18.246	(1.000)	949000	50.0000	
79 1,4-Dichlorobenzene	146	18.276	18.276	(1.002)	180793	10.0000	9.8395
80 n-Butylbenzene	91	18.552	18.552	(1.017)	254543	10.0000	8.6297
81 1,2-Dichlorobenzene	146	18.749	18.749	(1.028)	168933	10.0000	10.1165
82 1,2-Dibromo-3-Chloropropane	75	19.725	19.725	(1.081)	27993	10.0000	9.7553
83 1,2,4-Trichlorobenzene	180	20.840	20.840	(1.142)	78424	10.0000	10.4058
84 Hexachlorobutadiene	225	20.958	20.958	(1.149)	15625	10.0000	9.8774
85 Naphthalene	128	21.274	21.274	(1.166)	281757	10.0000	10.6725
86 1,2,3-Trichlorobenzene	180	21.668	21.668	(1.188)	75707	10.0000	10.9874

QC Flag Legend

M - Compound response manually integrated.

Instrument: MSVDA08.i
Operator: BO
Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\HJB17.D
Report Date: 12-Oct-2006 08:21

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\HJB17.D
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Inj Date : 11-OCT-2006 20:51 MS Autotune Date: 27-JUL-2006 10:42
Operator : BO Inst ID: MSVOA08.i
Smp Info : ICAL,S4519,0.004/100,S4468,0.004/100,
Misc Info : S4172,0.002/100,20PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\826GOX8.m
Meth Date : 12-Oct-2006 08:21 Administra Quant Type: ISTD
Cal Date : 11-OCT-2006 22:44 Cal File: HJB20.D
Als bottle: 17 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.787	4.787	(0.460)	238907	20.0000	17.2384 (M)
2 Chloromethane	50	5.300	5.300	(0.510)	449625	20.0000	18.8464 (M)
3 Vinyl Chloride	62	5.379	5.379	(0.517)	348517	20.0000	18.9628 (M)
4 Bromomethane	94	5.991	5.991	(0.576)	133269	20.0000	20.3993 (M)
5 Chloroethane	64	6.149	6.149	(0.591)	203784	20.0000	18.8483 (M)
6 Trichlorofluoromethane	101	6.484	6.484	(0.624)	242782	20.0000	17.8698
7 Ethanol	45	6.740	6.740	(0.648)	470953	2000.00	2011.3175 (M)
8 Freon 113	101	7.194	7.194	(0.692)	157581	20.0000	22.8008
9 1,1-Dichloroethene	96	7.302	7.302	(0.702)	169164	20.0000	22.4865
10 Acetone	43	7.391	7.391	(0.711)	160229	20.0000	21.5075
11 Isopropanol	45	7.470	7.470	(0.718)	266837	200.000	196.6241
12 Carbon Disulfide	76	7.707	7.707	(0.741)	958244	20.0000	20.4118
13 tert-Butyl Alcohol (TBA)	59	8.022	8.022	(0.771)	316886	200.000	199.4059
14 Methylene Chloride	84	8.042	8.042	(0.773)	278366	20.0000	20.1076
15 MTBE	73	8.269	8.269	(0.795)	896066	20.0000	20.5842
16 trans-1,2-Dichloroethene	96	8.358	8.358	(0.804)	218248	20.0000	20.2885

Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\HJB17.D
 Report Date: 12-Oct-2006 08:21

Compounds	QUANT SIG			AMOUNTS			
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
17 Isopropyl Ether (DIPE)	45	8.861	8.861	(0.852)	1291014	20.0000	16.0129
18 Vinyl Acetate	43	8.930	8.930	(0.859)	521001	20.0000	19.2531
19 1,1-Dichloroethane	63	8.999	8.999	(0.865)	528484	20.0000	20.1459
20 Ethyl tert-Butyl Ether (ETBE)	59	9.364	9.364	(0.900)	981905	20.0000	20.3773
21 2-Butanone	43	9.778	9.778	(0.940)	221233	20.0000	20.1450
22 2,2-Dichloropropane	77	9.788	9.788	(0.941)	275455	20.0000	21.0039
23 cis-1,2-Dichloroethene	96	9.808	9.808	(0.943)	260043	20.0000	20.9233
24 Tetrahydrofuran	42	10.173	10.173	(0.978)	1364936	200.000	209.0367
25 Bromochloromethane	128	10.173	10.173	(0.978)	113216	20.0000	21.3542
26 Chloroform	83	10.202	10.202	(0.981)	436111	20.0000	19.7597
* 27 Pentafluorobenzene	168	10.399	10.399	(1.000)	1323763	50.0000	
28 Dibromofluoromethane	113	10.449	10.449	(1.005)	1101499	50.0000	50.2857
29 1,1,1-Trichloroethane	97	10.498	10.498	(1.009)	243299	20.0000	19.9211
30 Carbon Tetrachloride	117	10.695	10.695	(0.928)	178906	20.0000	20.3922
31 1,1-Dichloropropene	75	10.715	10.715	(0.930)	293643	20.0000	20.3584
32 1,2-Dichloroethane-d4	65	11.001	11.001	(0.955)	1431508	50.0000	50.1170
33 Benzene	78	11.031	11.031	(0.957)	969230	20.0000	20.4193
34 Methyl tert-Amyl Ether (TAME)	73	11.031	11.031	(0.957)	892734	20.0000	20.6008
35 1,2-Dichloroethane	62	11.119	11.119	(0.965)	378380	20.0000	20.3730
* 36 1,4-Difluorobenzene	114	11.524	11.524	(1.000)	2925653	50.0000	
37 Trichloroethene	95	11.928	11.928	(1.035)	225700	20.0000	19.8433
38 Trifluorotoluene	146	12.273	12.273	(1.065)	232163	20.0000	20.7594
39 1,2-Dichloropropane	63	12.333	12.333	(1.070)	336554	20.0000	19.6558
40 Dibromomethane	93	12.520	12.520	(1.086)	174088	20.0000	20.1127
41 Bromodichloromethane	83	12.668	12.668	(1.099)	332375	20.0000	19.9319
42 2-Chloroethylvinylether	63	13.003	13.003	(1.128)	40774	20.0000	40.8959
43 Tetramethyl THF	43	13.230	13.230	(1.148)	899335	20.0000	20.6818
44 cis-1,3-Dichloropropene	75	13.279	13.279	(1.152)	445449	20.0000	20.3327
45 4-Methyl-2-Pentanone	43	13.408	13.408	(1.163)	446995	20.0000	19.9737
46 Toluene-d8	98	13.615	13.615	(1.181)	3307194	50.0000	49.8259
47 Toluene	92	13.703	13.703	(1.189)	523287	20.0000	20.1954
48 trans-1,3-Dichloropropene	75	14.029	14.029	(1.217)	393959	20.0000	20.5615
49 1,1,2-Trichloroethane	85	14.295	14.295	(1.240)	138255	20.0000	19.8583
50 Tetrachloroethene	166	14.414	14.414	(0.928)	125532	20.0000	20.3442
51 2-Hexanone	43	14.512	14.512	(0.934)	329321	20.0000	20.8904
52 1,3-Dichloropropane	76	14.532	14.532	(0.935)	455472	20.0000	20.8107
53 Dibromochloromethane	129	14.808	14.808	(0.953)	211972	20.0000	20.3965
54 1,2-Dibromoethane	107	15.015	15.015	(1.303)	226505	20.0000	19.7157
* 55 Chlorobenzene-d5	117	15.538	15.538	(1.000)	2339572	50.0000	
56 Chlorobenzene	112	15.577	15.577	(1.003)	541468	20.0000	20.0718
57 Ethylbenzene	91	15.617	15.617	(1.005)	960950	20.0000	20.7835
58 1,1,1,2-Tetrachloroethane	131	15.656	15.656	(1.008)	181888	20.0000	20.1152
59 m,p-Xylenes	106	15.765	15.765	(1.015)	642333	40.0000	40.3138
60 o-Xylene	106	16.258	16.258	(1.046)	325188	20.0000	20.4080
61 Styrene	104	16.288	16.288	(1.048)	603611	20.0000	20.1705
62 Bromoform	173	16.583	16.583	(1.067)	120913	20.0000	19.0182
63 Isopropylbenzene	105	16.653	16.653	(0.912)	759726	20.0000	20.7193

Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\HJB17.D
 Report Date: 12-Oct-2006 08:21

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
65 Bromofluorobenzene	95	16.919	16.919	(0.927)	1476690	50.0000	50.7832
66 1,1,2,2-Tetrachloroethane	83	17.057	17.057	(0.935)	342412	20.0000	19.9790
67 Bromobenzene	156	17.126	17.126	(0.938)	186861	20.0000	20.6542
68 Propylbenzene	91	17.126	17.126	(0.938)	1036878	20.0000	20.7905
69 1,2,3-Trichloropropane	110	17.156	17.156	(0.940)	76884	20.0000	20.3393
70 2-Chlorotoluene	91	17.303	17.303	(0.948)	743270	20.0000	21.1147
71 1,3,5-Trimethylbenzene	105	17.303	17.303	(0.948)	652623	20.0000	20.6463
72 4-Chlorotoluene	91	17.422	17.422	(0.955)	723476	20.0000	20.6897
73 tert-Butylbenzene	119	17.688	17.688	(0.969)	500550	20.0000	20.9088
74 1,2,4-Trimethylbenzene	105	17.747	17.747	(0.972)	677004	20.0000	20.5123
75 sec-Butylbenzene	105	17.935	17.935	(0.983)	787972	20.0000	20.5863
76 para-Isopropyl Toluene	119	18.073	18.073	(0.990)	600229	20.0000	20.4330
77 1,3-Dichlorobenzene	146	18.171	18.171	(0.996)	360452	20.0000	20.5447
* 78 1,4-Dichlorobenzene-d4	152	18.250	18.250	(1.000)	970591	50.0000	
79 1,4-Dichlorobenzene	146	18.280	18.280	(1.002)	386674	20.0000	20.5762
80 n-Butylbenzene	91	18.556	18.556	(1.017)	622858	20.0000	20.6469
81 1,2-Dichlorobenzene	146	18.743	18.743	(1.027)	352848	20.0000	20.6603
82 1,2-Dibromo-3-Chloropropane	75	19.730	19.730	(1.081)	60785	20.0000	20.7119
83 1,2,4-Trichlorobenzene	180	20.844	20.844	(1.142)	159836	20.0000	20.7363
84 Hexachlorobutadiene	225	20.953	20.953	(1.148)	37289	20.0000	22.3912
85 Naphthalene	128	21.278	21.278	(1.166)	614451	20.0000	22.7567
86 1,2,3-Trichlorobenzene	180	21.663	21.663	(1.187)	152282	20.0000	21.6091

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCHSSERVER\DD\chem\MSV0808.i\101106.b\HCB17.D

Date : 11-OCT-2006 20:51

Client ID: DYNA P&T

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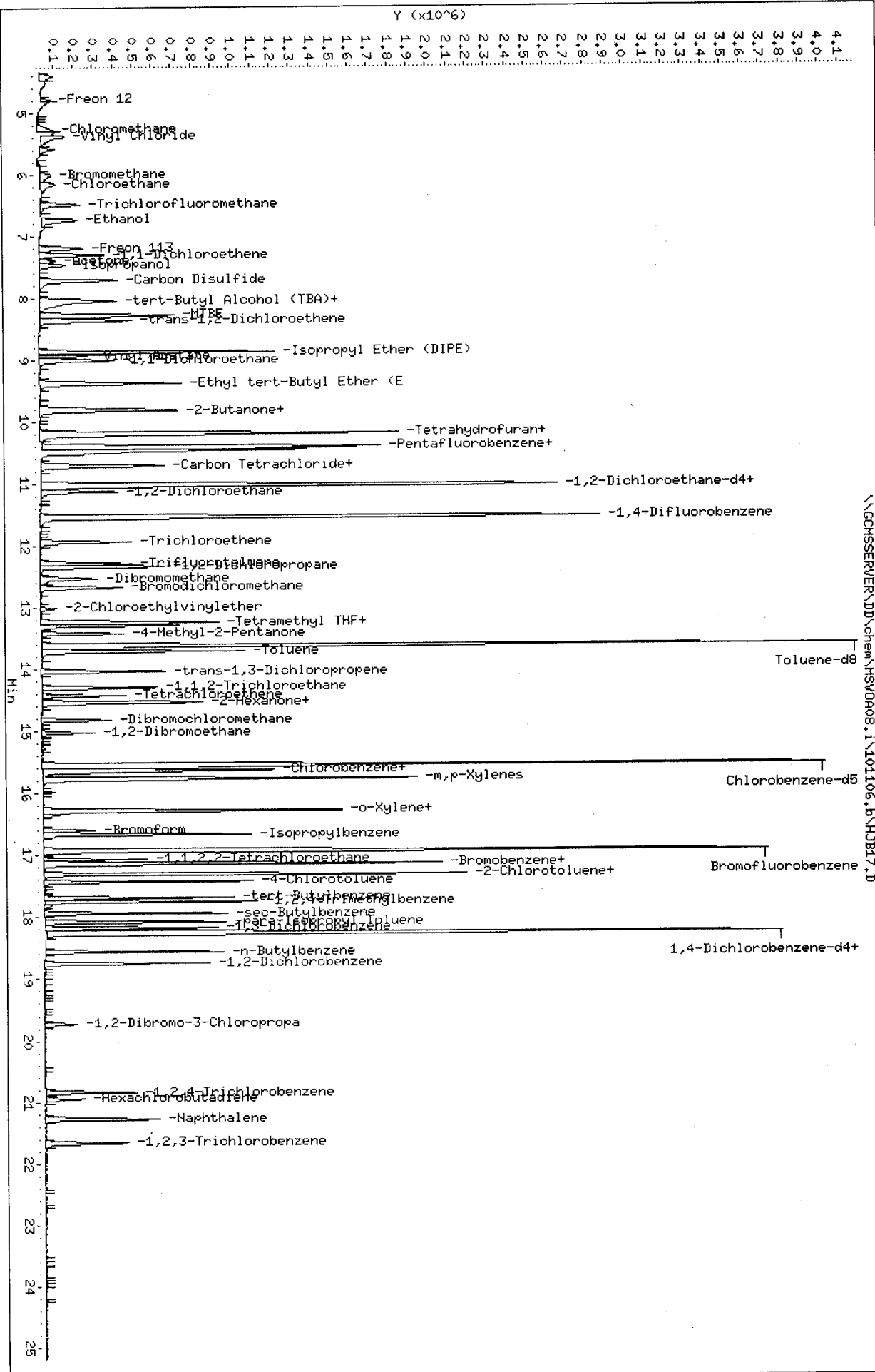
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Instrument: MSV0808.i

Operator: BO

Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\HJB18.D
 Report Date: 12-Oct-2006 08:22

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\HJB18.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 11-OCT-2006 21:29 MS Autotune Date: 27-JUL-2006 10:42
 Operator : BO Inst ID: MSVOA08.i
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 Comment :
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 Meth Date : 12-Oct-2006 08:22 Administra Quant Type: ISTD
 Cal Date : 11-OCT-2006 22:44 Cal File: HJB20.D
 Als bottle: 18 Calibration Sample, Level: 6
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.801	4.801	(0.461)	741384	50.0000	52.8436
2 Chloromethane	50	5.294	5.294	(0.509)	1175676	50.0000	48.6798 (M)
3 Vinyl Chloride	62	5.392	5.392	(0.518)	991373	50.0000	53.2841
4 Bromomethane	94	6.004	6.004	(0.577)	351304	50.0000	49.5975
5 Chloroethane	64	6.162	6.162	(0.592)	523298	50.0000	47.8117
6 Trichlorofluoromethane	101	6.497	6.497	(0.625)	742191	50.0000	53.9636
7 Ethanol	45	6.744	6.744	(0.648)	1184702	5000.00	4997.9663
8 Freon 113	101	7.197	7.197	(0.692)	335406	50.0000	44.0712
9 1,1-Dichloroethene	96	7.306	7.306	(0.702)	371159	50.0000	46.6790
10 Acetone	43	7.394	7.394	(0.711)	310812	50.0000	41.2124
11 Isopropanol	45	7.464	7.464	(0.717)	672894	500.000	489.7996
12 Carbon Disulfide	76	7.710	7.710	(0.741)	2261757	50.0000	47.5920
13 tert-Butyl Alcohol (TBA)	59	8.016	8.016	(0.771)	794574	500.000	493.9131
14 Methylene Chloride	84	8.045	8.045	(0.773)	684644	50.0000	48.8529
15 MTBE	73	8.272	8.272	(0.795)	2150032	50.0000	48.7889
16 trans-1,2-Dichloroethene	96	8.361	8.361	(0.804)	504025	50.0000	46.2843

Compounds	QUANT SIG			AMOUNTS			
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
-----	----	--	-----	-----	-----	-----	-----
17 Isopropyl Ether (DIPE)	45	8.864	8.864	(0.852)	4103648	50.0000	50.2796
18 Vinyl Acetate	43	8.933	8.933	(0.859)	1661204	50.0000	50.4842
19 1,1-Dichloroethane	63	9.002	9.002	(0.865)	1254925	50.0000	47.2558
20 Ethyl tert-Butyl Ether (ETBE)	59	9.367	9.367	(0.900)	2347623	50.0000	48.1267
21 2-Butanone	43	9.771	9.771	(0.939)	529883	50.0000	47.6626
22 2,2-Dichloropropane	77	9.791	9.791	(0.941)	556219	50.0000	41.8964
23 cis-1,2-Dichloroethene	96	9.811	9.811	(0.943)	620377	50.0000	49.4183
24 Tetrahydrofuran	42	10.176	10.176	(0.978)	3089627	500.000	467.4094
25 Bromochloromethane	128	10.176	10.176	(0.978)	269338	50.0000	50.1829
26 Chloroform	83	10.205	10.205	(0.981)	1035839	50.0000	46.3615
* 27 Pentafluorobenzene	168	10.403	10.403	(1.000)	1340075	50.0000	
28 Dibromofluoromethane	113	10.452	10.452	(1.005)	1101610	50.0000	49.6786
29 1,1,1-Trichloroethane	97	10.501	10.501	(1.009)	549710	50.0000	44.4619
30 Carbon Tetrachloride	117	10.699	10.699	(0.928)	381940	50.0000	42.4668
31 1,1-Dichloropropene	75	10.708	10.708	(0.929)	646079	50.0000	43.6942
32 1,2-Dichloroethane-d4	65	11.004	11.004	(0.955)	1422820	50.0000	48.5910
33 Benzene	78	11.024	11.024	(0.956)	2311369	50.0000	47.5006
34 Methyl tert-Amyl Ether (TAME)	73	11.024	11.024	(0.956)	2157605	50.0000	48.5679
35 1,2-Dichloroethane	62	11.123	11.123	(0.965)	907500	50.0000	47.6638
* 36 1,4-Difluorobenzene	114	11.527	11.527	(1.000)	2999220	50.0000	
37 Trichloroethene	95	11.931	11.931	(1.035)	517419	50.0000	44.3752
38 Trifluorotoluene	146	12.277	12.277	(1.065)	491656	50.0000	42.8842
39 1,2-Dichloropropane	63	12.326	12.326	(1.069)	828521	50.0000	47.2013
40 Dibromomethane	93	12.523	12.523	(1.086)	424067	50.0000	47.7915
41 Bromodichloromethane	83	12.671	12.671	(1.099)	820887	50.0000	48.0197
42 2-Chloroethylvinylether	63	13.006	13.006	(1.128)	13433	50.0000	13.1426
43 Tetramethyl THF	43	13.223	13.223	(1.147)	2202086	50.0000	49.3988
44 cis-1,3-Dichloropropene	75	13.283	13.283	(1.152)	1060325	50.0000	47.2118
45 4-Methyl-2-Pentanone	43	13.411	13.411	(1.163)	1145233	50.0000	49.9190
46 Toluene-d8	98	13.608	13.608	(1.181)	3406097	50.0000	50.0572
47 Toluene	92	13.707	13.707	(1.189)	1230375	50.0000	46.3196
48 trans-1,3-Dichloropropene	75	14.022	14.022	(1.216)	931440	50.0000	47.4214
49 1,1,2-Trichloroethane	85	14.289	14.289	(1.240)	340428	50.0000	47.6982
50 Tetrachloroethene	166	14.417	14.417	(0.928)	267872	50.0000	42.5716
51 2-Hexanone	43	14.506	14.506	(0.934)	797120	50.0000	49.5859
52 1,3-Dichloropropane	76	14.535	14.535	(0.936)	1109512	50.0000	49.7124
53 Dibromochloromethane	129	14.811	14.811	(0.954)	532234	50.0000	50.2211
54 1,2-Dibromoethane	107	15.019	15.019	(1.303)	565063	50.0000	47.9784
* 55 Chlorobenzene-d5	117	15.531	15.531	(1.000)	2385780	50.0000	
56 Chlorobenzene	112	15.571	15.571	(1.003)	1284871	50.0000	46.7067
57 Ethylbenzene	91	15.620	15.620	(1.006)	2120355	50.0000	44.9710
58 1,1,1,2-Tetrachloroethane	131	15.650	15.650	(1.008)	438944	50.0000	47.6032
59 m,p-Xylenes	106	15.758	15.758	(1.015)	1474529	100.000	90.7513
60 o-Xylene	106	16.261	16.261	(1.047)	762647	50.0000	46.9348
61 Styrene	104	16.281	16.281	(1.048)	1482154	50.0000	48.5689
62 Bromoform	173	16.587	16.587	(1.068)	309618	50.0000	47.7561
63 Isopropylbenzene	105	16.656	16.656	(0.912)	1745876	50.0000	44.0175

Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\HJB18.D
 Report Date: 12-Oct-2006 08:22

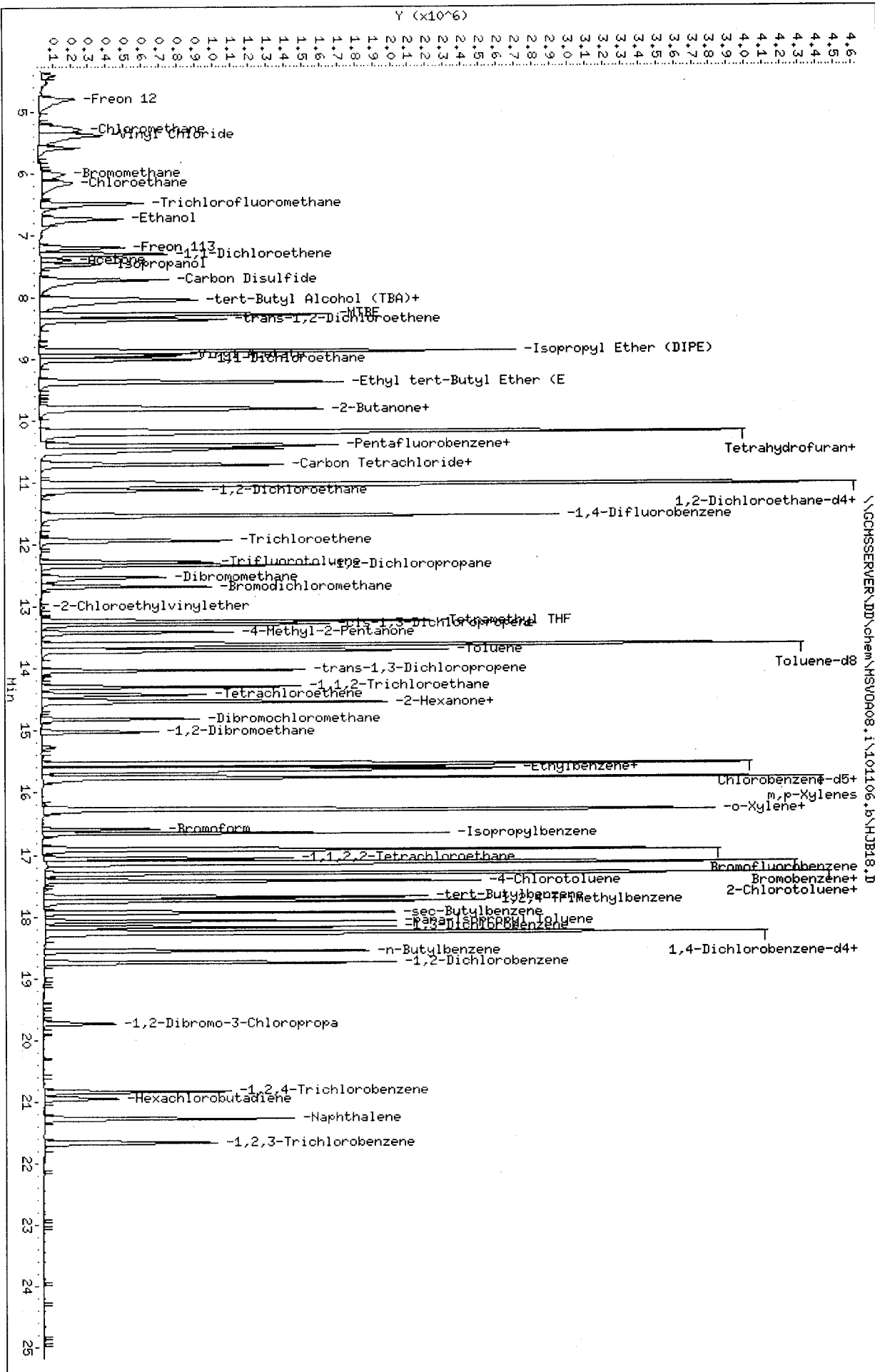
Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	----	==	=====	=====	=====	=====	=====
65 Bromofluorobenzene	95	16.922	16.922	(0.927)	1539357	50.0000	48.9400
66 1,1,2,2-Tetrachloroethane	83	17.060	17.060	(0.935)	910162	50.0000	49.0950
67 Bromobenzene	156	17.129	17.129	(0.938)	443490	50.0000	45.3176
68 Propylbenzene	91	17.119	17.119	(0.938)	2241414	50.0000	41.5484
69 1,2,3-Trichloropropane	110	17.149	17.149	(0.939)	195207	50.0000	47.7408
70 2-Chlorotoluene	91	17.297	17.297	(0.948)	1691834	50.0000	44.4314
71 1,3,5-Trimethylbenzene	105	17.307	17.307	(0.948)	1463262	50.0000	42.7952
72 4-Chlorotoluene	91	17.425	17.425	(0.955)	1674290	50.0000	44.2645
73 tert-Butylbenzene	119	17.681	17.681	(0.969)	1104010	50.0000	42.6332
74 1,2,4-Trimethylbenzene	105	17.751	17.751	(0.972)	1562633	50.0000	43.7697
75 sec-Butylbenzene	105	17.938	17.938	(0.983)	1751330	50.0000	42.2990
76 para-Isopropyl Toluene	119	18.076	18.076	(0.990)	1323924	50.0000	41.6651
77 1,3-Dichlorobenzene	146	18.175	18.175	(0.996)	865026	50.0000	45.5801
* 78 1,4-Dichlorobenzene-d4	152	18.254	18.254	(1.000)	1049887	50.0000	
79 1,4-Dichlorobenzene	146	18.283	18.283	(1.002)	915986	50.0000	45.0613
80 n-Butylbenzene	91	18.559	18.559	(1.017)	1332399	50.0000	40.8314
81 1,2-Dichlorobenzene	146	18.747	18.747	(1.027)	859543	50.0000	46.5276
82 1,2-Dibromo-3-Chloropropane	75	19.733	19.733	(1.081)	147275	50.0000	46.3925
83 1,2,4-Trichlorobenzene	180	20.847	20.847	(1.142)	365093	50.0000	43.7880
84 Hexachlorobutadiene	225	20.956	20.956	(1.148)	84825	50.0000	44.0032
85 Naphthalene	128	21.281	21.281	(1.166)	1551265	50.0000	53.1133
86 1,2,3-Trichlorobenzene	180	21.666	21.666	(1.187)	359967	50.0000	47.2221

QC Flag Legend

M - Compound response manually integrated.

Data File: \\GCMSERVER\JD\chem\MSV0A08.i\101106.b\HJ818.D
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 Sample Info: ICAL,S4519,0.01/100,S4468,0.01/100,
 Purge Volume: 5.0
 Column phase: RTX 624

Instrument: MSV0A08.i
 Operator: BO
 Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\HJB19.D
Report Date: 12-Oct-2006 08:23

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\HJB19.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 11-OCT-2006 22:06 MS Autotune Date: 27-JUL-2006 10:42
Operator : BO Inst ID: MSVOA08.i
Smp Info : ICAL,S4519,0.015/100,S4468,0.015/100,
Misc Info : S4172,0.0075/100,75PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\826GOX8.m
Meth Date : 12-Oct-2006 08:23 Administra Quant Type: ISTD
Cal Date : 11-OCT-2006 22:44 Cal File: HJB20.D
Als bottle: 19 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.797	4.797	(0.461)	1096710	75.0000	75.1304
2 Chloromethane	50	5.290	5.290	(0.509)	1743191	75.0000	69.3715
3 Vinyl Chloride	62	5.389	5.389	(0.518)	1469147	75.0000	75.8929
4 Bromomethane	94	6.000	6.000	(0.577)	590523	75.0000	75.4100 (M)
5 Chloroethane	64	6.148	6.148	(0.591)	796603	75.0000	69.9523
6 Trichlorofluoromethane	101	6.494	6.494	(0.624)	1126898	75.0000	78.7489
7 Ethanol	45	6.740	6.740	(0.648)	1881718	7500.00	7629.8114
8 Freon 113	101	7.194	7.194	(0.692)	749169	75.0000	79.2797
9 1,1-Dichloroethene	96	7.302	7.302	(0.702)	693108	75.0000	77.4403
10 Acetone	43	7.391	7.391	(0.711)	484095	75.0000	61.6930
11 Isopropanol	45	7.470	7.470	(0.718)	1096741	750.000	767.2748
12 Carbon Disulfide	76	7.717	7.717	(0.742)	3905805	75.0000	78.9903
13 tert-Butyl Alcohol (TBA)	59	8.022	8.022	(0.771)	1244498	750.000	743.5077
14 Methylene Chloride	84	8.042	8.042	(0.773)	1060400	75.0000	72.7228
15 MTBE	73	8.269	8.269	(0.795)	3282031	75.0000	71.5804
16 trans-1,2-Dichloroethene	96	8.358	8.358	(0.804)	853403	75.0000	75.3201

Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\HJB19.D
Report Date: 12-Oct-2006 08:23

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ug/L)	ON-COL (ug/L)
17 Isopropyl Ether (DIPE)	45	8.861	8.861	(0.852)	6215047	75.0000	73.1882
18 Vinyl Acetate	43	8.940	8.940	(0.860)	3067887	75.0000	74.8712
19 1,1-Dichloroethane	63	8.999	8.999	(0.865)	1979383	75.0000	71.6378
20 Ethyl tert-Butyl Ether (ETBE)	59	9.374	9.374	(0.901)	3709717	75.0000	73.0927
21 2-Butanone	43	9.778	9.778	(0.940)	819371	75.0000	70.8360
22 2,2-Dichloropropane	77	9.788	9.788	(0.941)	1069676	75.0000	77.4388
23 cis-1,2-Dichloroethene	96	9.817	9.817	(0.944)	962131	75.0000	73.7013
24 Tetrahydrofuran	42	10.172	10.172	(0.978)	4714252	750.000	685.4555
25 Bromochloromethane	128	10.182	10.182	(0.979)	428626	75.0000	76.7559
26 Chloroform	83	10.212	10.212	(0.982)	1630875	75.0000	70.1554
* 27 Pentafluorobenzene	168	10.399	10.399	(1.000)	1394293	50.0000	
28 Dibromofluoromethane	113	10.449	10.449	(1.005)	1142556	50.0000	49.5216
29 1,1,1-Trichloroethane	97	10.498	10.498	(1.009)	1005291	75.0000	78.1486
30 Carbon Tetrachloride	117	10.695	10.695	(0.927)	751048	75.0000	81.8923
31 1,1-Dichloropropene	75	10.715	10.715	(0.929)	1222703	75.0000	81.0924
32 1,2-Dichloroethane-d4	65	11.001	11.001	(0.954)	1415952	50.0000	47.4215
33 Benzene	78	11.031	11.031	(0.956)	3531527	75.0000	71.1727
34 Methyl tert-Amyl Ether (TAME)	73	11.031	11.031	(0.956)	3192036	75.0000	70.4637
35 1,2-Dichloroethane	62	11.119	11.119	(0.964)	1414266	75.0000	72.8441
* 36 1,4-Difluorobenzene	114	11.534	11.534	(1.000)	3058353	50.0000	
37 Trichloroethene	95	11.928	11.928	(1.034)	871440	75.0000	73.2920
38 Trifluorotoluene	146	12.273	12.273	(1.064)	1004640	75.0000	85.9346
39 1,2-Dichloropropane	63	12.332	12.332	(1.069)	1314878	75.0000	73.4610 (M)
40 Dibromomethane	93	12.520	12.520	(1.086)	669298	75.0000	73.9701
41 Bromodichloromethane	83	12.668	12.668	(1.098)	1284048	75.0000	73.6611
42 2-Chloroethylvinylether	63	13.003	13.003	(1.127)	88264	75.0000	84.6868
43 Tetramethyl THF	43	13.230	13.230	(1.147)	3346455	75.0000	73.6187
44 cis-1,3-Dichloropropene	75	13.279	13.279	(1.151)	1716965	75.0000	74.9712
45 4-Methyl-2-Pentanone	43	13.408	13.408	(1.162)	1781299	75.0000	76.1429
46 Toluene-d8	98	13.615	13.615	(1.180)	3480580	50.0000	50.1628
47 Toluene	92	13.703	13.703	(1.188)	2020069	75.0000	74.5786
48 trans-1,3-Dichloropropene	75	14.029	14.029	(1.216)	1495987	75.0000	74.6909
49 1,1,2-Trichloroethane	85	14.285	14.285	(1.239)	524869	75.0000	72.1188
50 Tetrachloroethene	166	14.423	14.423	(0.928)	519463	75.0000	78.9907
51 2-Hexanone	43	14.512	14.512	(0.934)	1212895	75.0000	72.1916
52 1,3-Dichloropropane	76	14.532	14.532	(0.935)	1681388	75.0000	72.0824
53 Dibromochloromethane	129	14.808	14.808	(0.953)	835614	75.0000	75.4429
54 1,2-Dibromoethane	107	15.015	15.015	(1.302)	906617	75.0000	75.4907
* 55 Chlorobenzene-d5	117	15.538	15.538	(1.000)	2493456	50.0000	
56 Chlorobenzene	112	15.577	15.577	(1.003)	2039791	75.0000	70.9470
57 Ethylbenzene	91	15.617	15.617	(1.005)	3573456	75.0000	72.5172
58 1,1,1,2-Tetrachloroethane	131	15.656	15.656	(1.008)	701151	75.0000	72.7558
59 m,p-Xylenes	106	15.765	15.765	(1.015)	2474849	150.000	145.7395
60 o-Xylene	106	16.258	16.258	(1.046)	1217855	75.0000	71.7127
61 Styrene	104	16.287	16.287	(1.048)	2322318	75.0000	72.8141
62 Bromoform	173	16.583	16.583	(1.067)	499245	75.0000	73.6792
63 Isopropylbenzene	105	16.652	16.652	(0.912)	3108326	75.0000	76.0097

Compounds	QUANT SIG	AMOUNTS						
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
							(ug/L)	(ug/L)
=====	====	==	=====	=====	=====	=====	=====	
65 Bromofluorobenzene	95	16.919	16.919	(0.927)	1570940	50.0000	48.4411	
66 1,1,2,2-Tetrachloroethane	83	17.057	17.057	(0.935)	1433030	75.0000	74.9728	
67 Bromobenzene	156	17.126	17.126	(0.938)	706166	75.0000	69.9875	
68 Propylbenzene	91	17.126	17.126	(0.938)	3956075	75.0000	71.1257	
69 1,2,3-Trichloropropane	110	17.155	17.155	(0.940)	302932	75.0000	71.8571	
70 2-Chlorotoluene	91	17.303	17.303	(0.948)	2744121	75.0000	69.8981	
71 1,3,5-Trimethylbenzene	105	17.303	17.303	(0.948)	2467920	75.0000	70.0059	
72 4-Chlorotoluene	91	17.422	17.422	(0.955)	2707326	75.0000	69.4218	
73 tert-Butylbenzene	119	17.688	17.688	(0.969)	2071098	75.0000	77.5722	
74 1,2,4-Trimethylbenzene	105	17.747	17.747	(0.972)	2638731	75.0000	71.6872	
75 sec-Butylbenzene	105	17.935	17.935	(0.983)	3444202	75.0000	80.6827	
76 para-Isopropyl Toluene	119	18.073	18.073	(0.990)	2533151	75.0000	77.3216	
77 1,3-Dichlorobenzene	146	18.171	18.171	(0.996)	1455741	75.0000	74.3979	
* 78 1,4-Dichlorobenzene-d4	152	18.250	18.250	(1.000)	1082462	50.0000		
79 1,4-Dichlorobenzene	146	18.280	18.280	(1.002)	1497320	75.0000	71.4429	
80 n-Butylbenzene	91	18.556	18.556	(1.017)	2597674	75.0000	77.2103	
81 1,2-Dichlorobenzene	146	18.743	18.743	(1.027)	1369976	75.0000	71.9260	
82 1,2-Dibromo-3-Chloropropane	75	19.730	19.730	(1.081)	233821	75.0000	71.4385	
83 1,2,4-Trichlorobenzene	180	20.844	20.844	(1.142)	635284	75.0000	73.9009	
84 Hexachlorobutadiene	225	20.953	20.953	(1.148)	186621	75.0000	79.2792	
85 Naphthalene	128	21.278	21.278	(1.166)	2445377	75.0000	81.2069	
86 1,2,3-Trichlorobenzene	180	21.663	21.663	(1.187)	608683	75.0000	77.4468	

QC Flag Legend

M - Compound response manually integrated.

Data File: \NOCHSERVER\JD\chem\MSV0A08.i\101106.b\HJ319.D

Date : 11-OCT-2006 22:06

Client ID: DYHA P&I

Sample Info: ICAL,S4519,0.015/100,S4468,0.015/100,

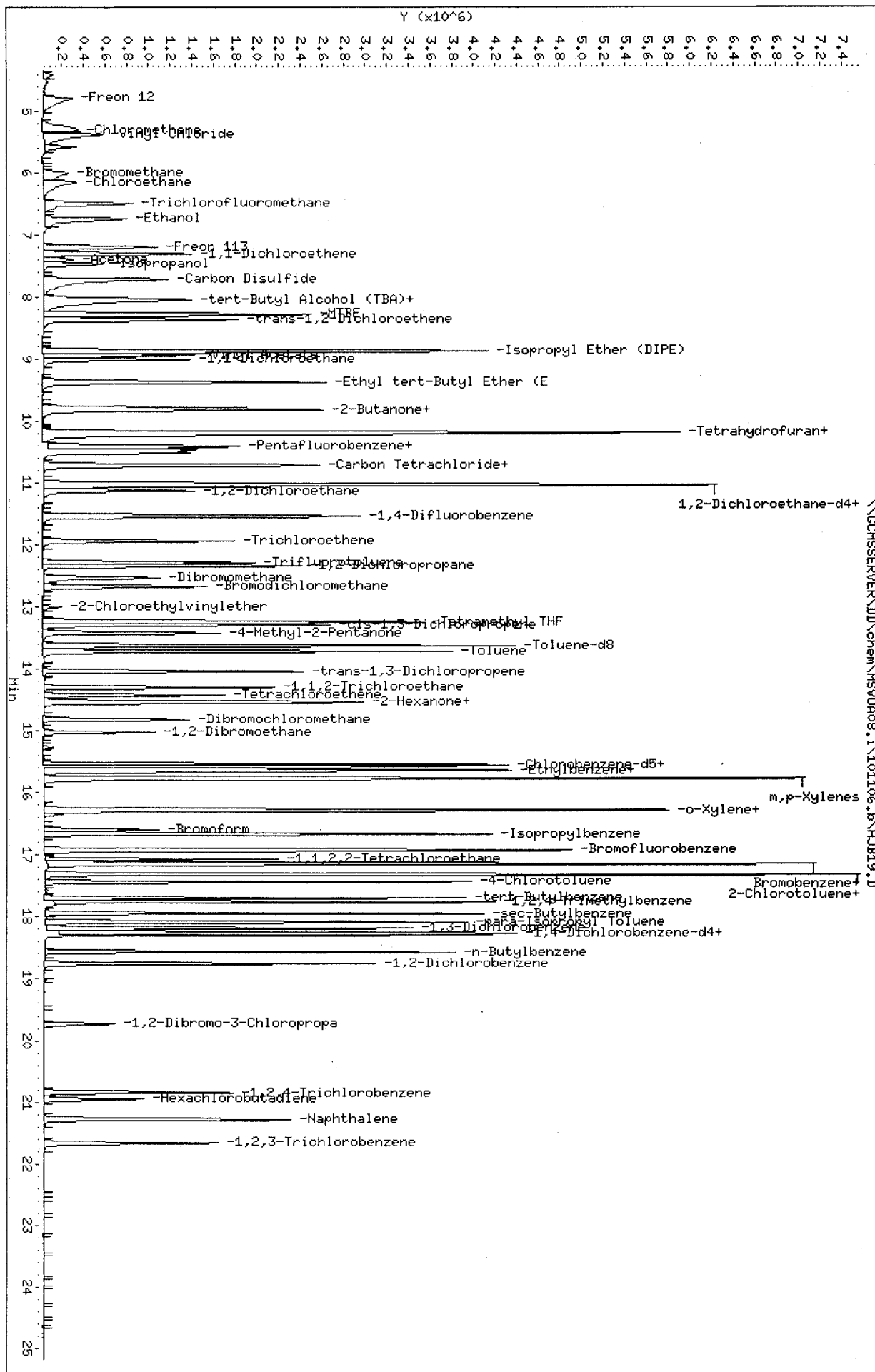
Purge Volume: 5.0

Column phase: RTX 624

Instrument: MSV0A08.i

Operator: BO

Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\HJB20.D
 Report Date: 12-Oct-2006 08:24

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\HJB20.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 11-OCT-2006 22:44 MS Autotune Date: 27-JUL-2006 10:42
 Operator : BO Inst ID: MSVOA08.i
 Smp Info : ICAL,S4519,0.02/100,S4468,0.02/100,
 Misc Info : S4172,0.01/100,100PPB
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\826GOX8.m
 Meth Date : 12-Oct-2006 08:24 Administra Quant Type: ISTD
 Cal Date : 11-OCT-2006 22:44 Cal File: HJB20.D
 Als bottle: 20 Calibration Sample, Level: 8
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.797	4.797 (0.461)		1514788	100.000	104.3064
2 Chloromethane	50	5.300	5.300 (0.510)		2273591	100.000	90.9460
3 Vinyl Chloride	62	5.379	5.379 (0.517)		2009006	100.000	104.3163 (A)
4 Bromomethane	94	6.000	6.000 (0.577)		833164	100.000	99.8644
5 Chloroethane	64	6.148	6.148 (0.591)		1078587	100.000	95.2029 (M)
6 Trichlorofluoromethane	101	6.493	6.493 (0.624)		1544625	100.000	108.4971
7 Ethanol	45	6.740	6.740 (0.648)		2564919	10000.0	10453.6492
8 Freon 113	101	7.194	7.194 (0.692)		1132891	100.000	98.6482
9 1,1-Dichloroethene	96	7.302	7.302 (0.702)		952070	100.000	99.1799
10 Acetone	43	7.391	7.391 (0.711)		797623	100.000	102.1734
11 Isopropanol	45	7.470	7.470 (0.718)		1529693	1000.00	1075.6876
12 Carbon Disulfide	76	7.716	7.716 (0.742)		5392847	100.000	109.6267
13 tert-Butyl Alcohol (TBA)	59	8.022	8.022 (0.771)		1740998	1000.00	1045.5012
14 Methylene Chloride	84	8.042	8.042 (0.773)		1444226	100.000	99.5568
15 MTBE	73	8.269	8.269 (0.795)		4450776	100.000	97.5713
16 trans-1,2-Dichloroethene	96	8.358	8.358 (0.804)		1185507	100.000	105.1710

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
*****	----	==	=====	=====	=====	=====	=====
17 Isopropyl Ether (DIPE)	45	8.861	8.861	(0.852)	7873329	100.000	93.1945
18 Vinyl Acetate	43	8.939	8.939	(0.860)	3415718	100.000	79.4798
19 1,1-Dichloroethane	63	8.999	8.999	(0.865)	2672261	100.000	97.2135
20 Ethyl tert-Butyl Ether (ETBE)	59	9.364	9.364	(0.900)	4785938	100.000	94.7840
21 2-Butanone	43	9.778	9.778	(0.940)	1178247	100.000	102.3870
22 2,2-Dichloropropane	77	9.798	9.798	(0.942)	1453630	100.000	105.7779
23 cis-1,2-Dichloroethene	96	9.817	9.817	(0.944)	1312073	100.000	101.0562
24 Tetrahydrofuran	42	10.172	10.172	(0.978)	6046069	1000.00	883.6384
25 Bromochloromethane	128	10.182	10.182	(0.979)	565381	100.000	101.7676
26 Chloroform	83	10.212	10.212	(0.982)	2175584	100.000	94.0700
* 27 Pentafluorobenzene	168	10.399	10.399	(1.000)	1387136	50.0000	
28 Dibromofluoromethane	113	10.448	10.448	(1.005)	1128760	50.0000	49.1760
29 1,1,1-Trichloroethane	97	10.498	10.498	(1.009)	1385319	100.000	108.2465
30 Carbon Tetrachloride	117	10.695	10.695	(0.927)	1092506	100.000	119.4603
31 1,1-Dichloropropene	75	10.715	10.715	(0.929)	1723517	100.000	114.6303
32 1,2-Dichloroethane-d4	65	11.011	11.011	(0.955)	1383723	50.0000	46.4730
33 Benzene	78	11.030	11.030	(0.956)	4756663	100.000	96.1342
34 Methyl tert-Amyl Ether (TAME)	73	11.030	11.030	(0.956)	4314129	100.000	95.5026
35 1,2-Dichloroethane	62	11.119	11.119	(0.964)	1881695	100.000	97.1934
* 36 1,4-Difluorobenzene	114	11.533	11.533	(1.000)	3049743	50.0000	
37 Trichloroethene	95	11.928	11.928	(1.034)	1241005	100.000	104.6688
38 Trifluorotoluene	146	12.283	12.283	(1.065)	1432009	100.000	122.8365
39 1,2-Dichloropropane	63	12.332	12.332	(1.069)	1722736	100.000	96.5194 (M)
40 Dibromomethane	93	12.520	12.520	(1.086)	917570	100.000	101.6952
41 Bromodichloromethane	83	12.668	12.668	(1.098)	1753585	100.000	100.8807
42 2-Chloroethylvinylether	63	13.003	13.003	(1.127)	201651	100.000	194.0246
43 Tetramethyl THF	43	13.230	13.230	(1.147)	4406321	100.000	97.2084
44 cis-1,3-Dichloropropene	75	13.279	13.279	(1.151)	2310258	100.000	101.1621
45 4-Methyl-2-Pentanone	43	13.407	13.407	(1.162)	2401051	100.000	102.9244
46 Toluene-d8	98	13.614	13.614	(1.180)	3444084	50.0000	49.7770
47 Toluene	92	13.703	13.703	(1.188)	2653412	100.000	98.2375
48 trans-1,3-Dichloropropene	75	14.029	14.029	(1.216)	2012953	100.000	100.7855
49 1,1,2-Trichloroethane	85	14.295	14.295	(1.239)	719715	100.000	99.1706
50 Tetrachloroethene	166	14.423	14.423	(0.928)	755163	100.000	119.8986
51 2-Hexanone	43	14.512	14.512	(0.934)	1696826	100.000	105.4515
52 1,3-Dichloropropane	76	14.532	14.532	(0.935)	2301961	100.000	103.0413
53 Dibromochloromethane	129	14.808	14.808	(0.953)	1148514	100.000	108.2683
54 1,2-Dibromoethane	107	15.015	15.015	(1.302)	1231743	100.000	102.8523
* 55 Chlorobenzene-d5	117	15.538	15.538	(1.000)	2388084	50.0000	
56 Chlorobenzene	112	15.577	15.577	(1.003)	2723989	100.000	98.9250
57 Ethylbenzene	91	15.627	15.627	(1.006)	4793589	100.000	101.5700
58 1,1,1,2-Tetrachloroethane	131	15.656	15.656	(1.008)	966259	100.000	104.6891
59 m,p-Xylenes	106	15.765	15.765	(1.015)	3186865	200.000	195.9496
60 o-Xylene	106	16.258	16.258	(1.046)	1603339	100.000	98.5776
61 Styrene	104	16.287	16.287	(1.048)	2991770	100.000	97.9432
62 Bromoform	173	16.583	16.583	(1.067)	681676	100.000	105.0416
63 Isopropylbenzene	105	16.652	16.652	(0.912)	4183645	100.000	102.5081

Data File: \\GCMSSERVER\DD\chem\MSVOA08.i\101106.b\HJB20.D
 Report Date: 12-Oct-2006 08:24

Compounds	QUANT SIG			REL RT	RESPONSE	AMOUNTS	
	MASS	RT	EXP RT			CAL-AMT (ug/L)	ON-COL (ug/L)
=====	----	==	-----	-----	-----	-----	-----
65 Bromofluorobenzene	95	16.919	16.919	(0.927)	1538219	50.0000	47.5262
66 1,1,2,2-Tetrachloroethane	83	17.057	17.057	(0.935)	1847922	100.000	96.8707
67 Bromobenzene	156	17.126	17.126	(0.938)	924120	100.000	91.7704
68 Propylbenzene	91	17.126	17.126	(0.938)	5273135	100.000	94.9931
69 1,2,3-Trichloropropane	110	17.155	17.155	(0.940)	410310	100.000	97.5209
70 2-Chlorotoluene	91	17.303	17.303	(0.948)	3606118	100.000	92.0371
71 1,3,5-Trimethylbenzene	105	17.303	17.303	(0.948)	3342094	100.000	94.9910
72 4-Chlorotoluene	91	17.422	17.422	(0.955)	3683415	100.000	94.6382
73 tert-Butylbenzene	119	17.688	17.688	(0.969)	2882795	100.000	108.1882
74 1,2,4-Trimethylbenzene	105	17.747	17.747	(0.972)	3525635	100.000	95.9721
75 sec-Butylbenzene	105	17.934	17.934	(0.983)	4681767	100.000	109.8911
76 para-Isopropyl Toluene	119	18.073	18.073	(0.990)	3501607	100.000	107.0947
77 1,3-Dichlorobenzene	146	18.171	18.171	(0.996)	1934686	100.000	99.0713
* 78 1,4-Dichlorobenzene-d4	152	18.250	18.250	(1.000)	1080319	50.0000	
79 1,4-Dichlorobenzene	146	18.280	18.280	(1.002)	1982058	100.000	94.7593
80 n-Butylbenzene	91	18.556	18.556	(1.017)	3708859	100.000	110.4566
81 1,2-Dichlorobenzene	146	18.753	18.753	(1.028)	1859060	100.000	97.7974
82 1,2-Dibromo-3-Chloropropane	75	19.729	19.729	(1.081)	319857	100.000	97.9186
83 1,2,4-Trichlorobenzene	180	20.844	20.844	(1.142)	889750	100.000	103.7076
84 Hexachlorobutadiene	225	20.962	20.962	(1.149)	283271	100.000	98.6678
85 Naphthalene	128	21.278	21.278	(1.166)	3418842	100.000	113.7593
86 1,2,3-Trichlorobenzene	180	21.672	21.672	(1.188)	852251	100.000	108.6527

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.

Data File: \\GCHSERVER\JD\chem\MSV0A08.i\101106.b\HJ20.D

Date: 11-OCT-2006 22:44

Client ID: DYNA P&I

Sample Info: ICAL.S4519.0.02/100.S4468.0.02/100,

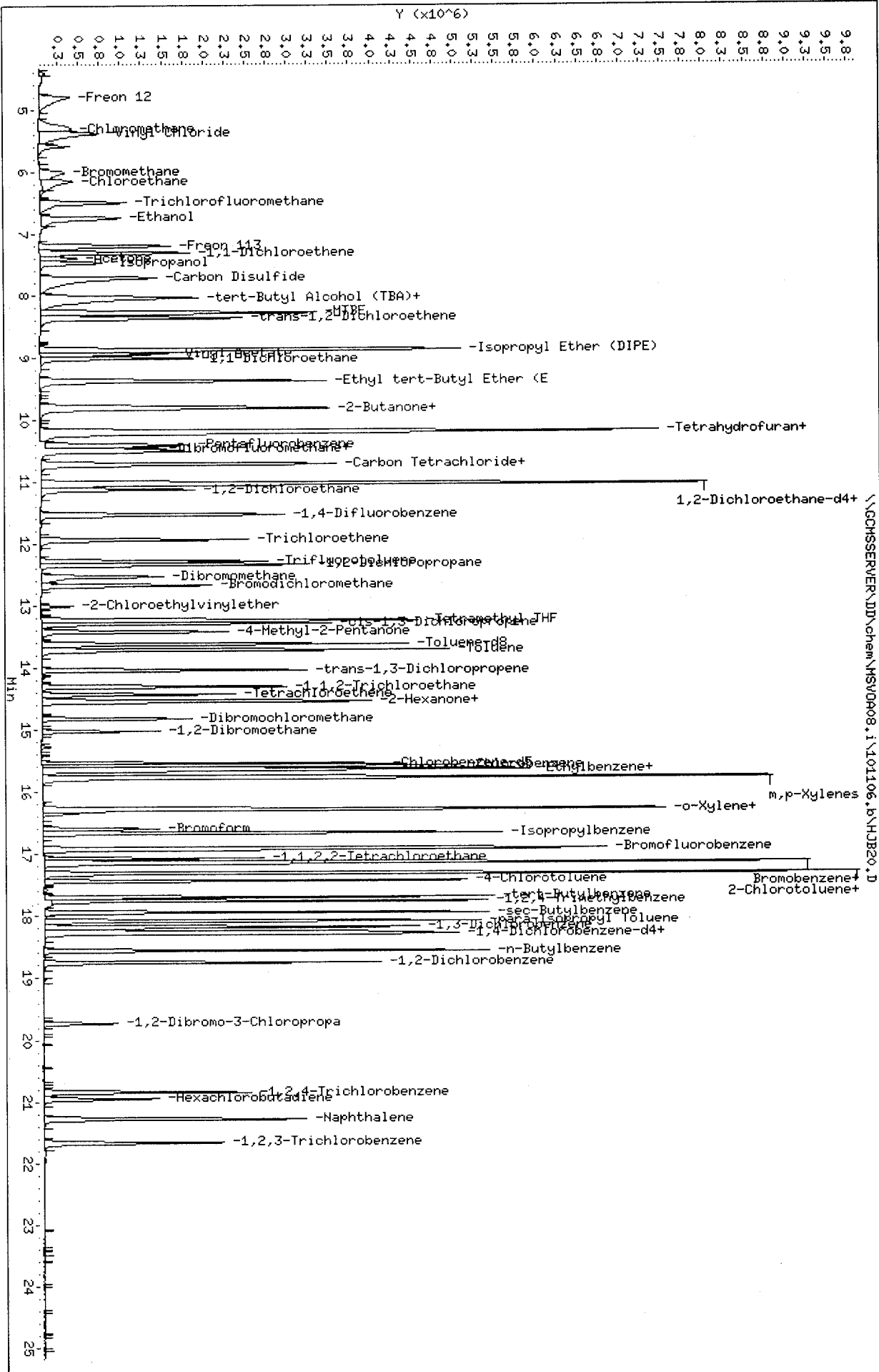
Purge Volume: 5.0

Column phase: RTX 624

Instrument: MSV0A08.i

Operator: BO

Column diameter: 0.25



CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191286 MSVOA Water: EPA 8260B

Inst : MSVOA11
 Calnum : 836494841001
 Units : ug/L

Name : 8260GX11
 Date : 09-DEC-2006 17:17
 X Axis : R

Reviewer: LW
 Type : WATER

Level File		Seqnum	Sample ID	Analyzed	Stds																
L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ²	%RSD	Max	Min	RF	r ²	Flg	
Chloromethane	0.5531m	0.5914m	0.6503m	0.5400	0.5458m	0.5399	0.5477	0.5387	AVRG		1.77506		0.5634	7	15	0.10	0.99				
Vinyl Chloride	0.3560	0.6132m	0.5935m	0.5311m	0.5258m	0.5299m	0.5498m	0.5412m	AVRG		1.87305		0.5339	14	15	0.050	0.99				
Bromomethane	0.3250m	0.2792m	0.3128m	0.2982m	0.3100m	0.3180m	0.3330m	0.3383	AVRG		3.18151		0.3143	6	15	0.050	0.99				
Chloroethane	0.3691m	0.3241m	0.3670m	0.3287m	0.3440m	0.3389m	0.3492m	0.3223	AVRG		2.91630		0.3429	5	15	0.050	0.99				
Acetone			0.2214	0.2109	0.2114	0.1776	0.1758	0.1715	AVRG		5.13454		0.1948	11	15	0.050	0.99				
1,1-Dichloroethene	0.4375m	0.3729	0.3682	0.3827	0.3602	0.3498	0.3408	0.3375	AVRG		2.71232		0.3687	9	15	0.050	0.99				
Methylene Chloride		0.6675m	0.5345m	0.5310m	0.5049m	0.4803m	0.4654m	0.4649	AVRG		1.91865		0.5212	14	15	0.050	0.99				
Carbon Disulfide	1.6547m	1.6789m	1.6858m	1.7725m	1.7156m	1.6482m	1.6353m	1.6069	AVRG		0.59711		1.6747	3	15	0.050	0.99				
MTBE	1.3429	1.5335	1.6704	1.7307	1.7852	1.7217	1.7200	1.7189	AVRG		0.60500		1.6529	9	15	0.050	0.99				
trans-1,2-Dichloroethene		0.5172	0.5230	0.5234	0.5051	0.4689	0.4666	0.4411	AVRG		2.01762		0.4956	6	15	0.050	0.99				
Vinyl Acetate	0.5969m	0.7164	1.0008	0.8408m	0.6839m	1.1039m	1.1155		QUAD	1.29732	1.04260	-0.00207	0.8654	0.993	15	0.050	0.99				
1,1-Dichloroethane	0.7846	0.9047	0.8638	0.8964	0.8754	0.8371	0.8265	0.8130	AVRG		1.17623		0.8502	5	15	0.10	0.99				
2-Butanone		0.2282	0.2213	0.2153	0.2201	0.2064	0.2015	0.2035	AVRG		4.67817		0.2138	5	15	0.050	0.99				
cis-1,2-Dichloroethene	0.6040	0.5350	0.5681	0.5435	0.5394	0.4915	0.4781	0.5101	AVRG		1.87368		0.5337	8	15	0.050	0.99				
Chloroform	0.7684	0.9412	0.9547	0.9186	0.8997	0.8608	0.8589	0.8411	AVRG		1.13583		0.8804	7	15	0.050	0.99				
1,1,1-Trichloroethane	0.8339	0.7448	0.7623	0.8439	0.7918	0.7418	0.7401	0.7187	AVRG		1.29503		0.7722	6	15	0.050	0.99				
Carbon Tetrachloride	0.3239	0.3506	0.3076	0.3429	0.3413	0.2951	0.3152	0.3169	AVRG		3.08475		0.3242	6	15	0.050	0.99				
1,2-Dichloroethane	0.5052	0.5023	0.4906	0.4763	0.4645	0.4453	0.4449	0.4504	AVRG		2.11663		0.4724	5	15	0.050	0.99				
Benzene	1.1142	1.4230	1.3628	1.3854	1.3562	1.2770	1.2682	1.2965	AVRG		0.76313		1.3104	7	15	0.050	0.99				
1,1-Dichloroethene	0.3142	0.3391	0.3124	0.3343	0.3540	0.3013	0.3152	0.3161	AVRG		3.09295		0.3233	5	15	0.050	0.99				
2,2-Dichloropropane	0.2747	0.3434	0.3105	0.3078	0.3073	0.3095	0.3003	0.3077	AVRG		3.25034		0.3077	6	15	0.050	0.99				
Bromodichloromethane	0.3438	0.4391	0.4161	0.4367	0.4216	0.4203	0.4207	0.4274	AVRG		2.40551		0.4157	7	15	0.050	0.99				
2-Methyl-2-Pentanone	0.2046	0.2696	0.2641	0.2799	0.2792	0.2706	0.2667	0.2762	AVRG		3.78965		0.2639	9	15	0.050	0.99				
1,3-Dichloropropane	0.4267	0.5349	0.5058	0.5318	0.5209	0.5292	0.5128	0.5312	AVRG		1.95444		0.5117	7	15	0.050	0.99				

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Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ² %RSD	Max %RSD	Min RF	Min r ²	Flg
Toluene		0.7431	0.8847	0.8229	0.8939	0.8646	0.8321	0.8263	0.8280	AVRG		1.19480		0.8370	6	15	0.050	0.99	
trans-1,3-Dichloropropene		0.4113	0.4738	0.4843	0.5018	0.4953	0.5058	0.4878	0.5035	AVRG		2.07064		0.4829	6	15	0.050	0.99	
1,1,2-Trichloroethane		0.1168	0.1413	0.1555	0.1652	0.1653	0.1535	0.1532	0.1538	AVRG		6.64106		0.1506	10	15	0.050	0.99	
2-Hexanone			0.1572	0.1622	0.1697	0.1883	0.1751	0.1736	0.1779	AVRG		5.83470		0.1720	6	15	0.050	0.99	
Tetrachloroethene		0.2944	0.3377	0.2835	0.3443	0.3393	0.2969	0.2985	0.2991	AVRG		3.20804		0.3117	8	15	0.050	0.99	
Dibromochloromethane		0.2523	0.3072	0.2957	0.3232	0.3191	0.3235	0.3139	0.3253	AVRG		3.25164		0.3075	8	15	0.050	0.99	
Chlorobenzene		0.8943	0.9742	0.9000	0.9625	0.9045	0.8732	0.8529	0.8852	AVRG		1.10698		0.9034	5	15	0.30	0.99	
Ethylbenzene		1.2002	1.4359	1.3744	1.5815	1.5340	1.4225	1.3944	1.4041	AVRG		0.70503		1.4184	8	15	0.050	0.99	
m,p-Xylenes	0.2938	0.2885	0.4368	0.4585	0.5684	0.6007	0.5732	0.5713		LINR	0.45973	1.73787		0.4739	1.000	15	0.050	0.99	
o-Xylene		0.3386	0.4035	0.4246	0.5395	0.5611	0.5674	0.5578		LINR	0.49404	1.76865		0.4846	1.000	15	0.050	0.99	
Styrene		0.6328	0.7951	0.8134	0.9211	0.9182	0.9195	0.9139	0.9489	AVRG		1.16570		0.8579	12	15	0.050	0.99	
Bromoform		0.2025	0.2358	0.2425	0.2504	0.2443	0.2544	0.2453	0.2521	AVRG		4.15088		0.2409	7	15	0.10	0.99	
1,1,2,2-Tetrachloroethane		0.5438	0.6082	0.6397	0.6332	0.5976	0.6031	0.5700	0.5885	AVRG		1.67219		0.5980	5	15	0.30	0.99	
Dibromofluoromethane	0.4798	0.4807	0.4679	0.4623	0.4593	0.4715	0.4637	0.4615	0.4469	AVRG		2.14615		0.4660	2	15	0.050	0.99	
1,2-Dichloroethane-G4		0.3687	0.3744	0.3722	0.3768	0.3790	0.3730	0.3680	0.3753	AVRG		2.67818		0.3734	1	15	0.050	0.99	
Toluene-d8	1.1892	1.1930	1.2003	1.1773	1.1985	1.1976	1.1953	1.1971	1.2189	AVRG		0.83587		1.1964	1	15	0.050	0.99	
Bromofluorobenzene	1.0529	1.0688	1.0917	1.0782	1.0680	1.0661	1.0431	1.0545	1.0400	AVRG		0.94110		1.0626	2	15	0.050	0.99	

Analyst: SJD

Date: 12/11/06

Reviewer: LW

Date: 12/11/06

Manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; LINR=Linear regression; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191286 MSVOA Water
EPA 8260B

Inst : MSVOA11
Calnum : 836494841001

Name : 8260GX11
Cal Date: 09-DEC-2006

Type : WATER

ICV 836497483005 (klb05 11-DEC-2006) stds: S4922 (10000X), S4634 (10000X),
S5074 (10000X), S4792 (2500X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	0.5634	0.5191	25.00	23.04	ug/L	-8	30	
Vinyl Chloride	0.5339	0.5064	25.00	23.72	ug/L	-5	20	m
Bromomethane	0.3143	0.3226	25.00	25.66	ug/L	3	30	
Chloroethane	0.3429	0.3499	25.00	25.51	ug/L	2	30	m
Acetone	0.1948	0.1821	25.00	23.37	ug/L	-7	40	
1,1-Dichloroethene	0.3687	0.3861	25.00	26.18	ug/L	5	20	
Methylene Chloride	0.5212	0.5110	25.00	24.51	ug/L	-2	30	m
Carbon Disulfide	1.6747	1.3221	25.00	19.74	ug/L	-21	30	lv- m
MTBE	1.6529	1.6275	25.00	24.62	ug/L	-2	30	
trans-1,2-Dichloroethene	0.4956	0.5319	25.00	26.83	ug/L	7	30	
Vinyl Acetate	0.8654	0.8154	25.00	21.69	ug/L	-13	40	
1,1-Dichloroethane	0.8502	0.8888	25.00	26.14	ug/L	5	30	
2-Butanone	0.2138	0.2126	25.00	24.87	ug/L	-1	40	
cis-1,2-Dichloroethene	0.5337	0.5680	25.00	26.61	ug/L	6	30	
Chloroform	0.8804	0.9316	25.00	26.45	ug/L	6	20	
1,1,1-Trichloroethane	0.7722	0.8387	25.00	27.15	ug/L	9	30	
Carbon Tetrachloride	0.3242	0.3485	25.00	26.87	ug/L	7	30	
1,2-Dichloroethane	0.4724	0.4553	25.00	24.09	ug/L	-4	30	
Benzene	1.3104	1.3582	25.00	25.91	ug/L	4	30	
Trichloroethene	0.3233	0.3363	25.00	26.01	ug/L	4	30	
1,2-Dichloropropane	0.3077	0.3091	25.00	25.12	ug/L	0	20	
Bromodichloromethane	0.4157	0.4524	25.00	27.20	ug/L	9	30	
4-Methyl-2-Pentanone	0.2639	0.2714	25.00	25.71	ug/L	3	40	
cis-1,3-Dichloropropene	0.5117	0.5560	25.00	27.17	ug/L	9	30	
Toluene	0.8370	0.9219	25.00	27.54	ug/L	10	20	
trans-1,3-Dichloropropene	0.4829	0.5001	25.00	25.89	ug/L	4	30	
1,1,2-Trichloroethane	0.1506	0.1592	25.00	26.43	ug/L	6	30	
2-Hexanone	0.1720	0.1829	25.00	26.59	ug/L	6	40	
Tetrachloroethene	0.3117	0.3636	25.00	29.16	ug/L	17	30	
Dibromochloromethane	0.3075	0.3384	25.00	27.51	ug/L	10	30	
Chlorobenzene	0.9034	0.9528	25.00	26.37	ug/L	5	30	
Ethylbenzene	1.4184	1.6339	25.00	28.80	ug/L	15	20	
m,p-Xylenes	0.4739	0.6475	50.00	56.72	ug/L	13	30	
o-Xylene	0.4846	0.6145	25.00	27.66	ug/L	11	30	
Styrene	0.8579	1.0027	25.00	29.22	ug/L	17	30	
Bromoform	0.2409	0.2614	25.00	27.13	ug/L	9	30	
1,1,2,2-Tetrachloroethane	0.5980	0.6230	25.00	26.04	ug/L	4	30	

Data File: \\Gcmsserver\DD\chem\MSVOA11.i\120906.b\KL905.D
 Report Date: 11-Dec-2006 10:52

Laboratory Name

Data file : \\Gcmsserver\DD\chem\MSVOA11.i\120906.b\KL905.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 09-DEC-2006 17:17 MS Autotune Date: 29-JUL-2005 08:48
 Operator : VOC Inst ID: MSVOA11.i
 Smp Info : ICAL,S4931,0.001/1000,
 Misc Info : S5064,0.0005/1000,S4172,0.0005/1000,0.25/0.5P
 Comment :
 Method : \\Gcmsserver\DD\chem\MSVOA11.i\120906.b\8260GX11.m
 Meth Date : 11-Dec-2006 10:52 target Quant Type: ISTD
 Cal Date : 09-DEC-2006 17:17 Cal File: KL905.D
 Als bottle: 20 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA_WK01

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	AMOUNTS						
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
							(ug/L)	(ug/L)
=====	----	----	-----	-----	-----	-----	-----	
1 Freon 12	85	4.432	4.417	(0.446)	2018	0.50000	0.2329	
2 Chloromethane	50	4.815	4.800	(0.485)	1628	0.50000	0.1730	
3 Vinyl Chloride	62	4.978	4.973	(0.501)	3003	0.50000	0.3355	
4 Bromomethane	94	5.570	5.560	(0.561)	1306	0.50000	0.2470	
5 Chloroethane	64	5.706	5.702	(0.575)	2067	0.50000	0.3580	
6 Trichlorofluoromethane	101	6.031	6.027	(0.607)	4891	0.50000	0.3709	
7 Ethanol	45	6.225	6.226	(0.627)	1327	25.0000	14.5768	
8 Freon 113	101	6.692	6.708	(0.674)	737	0.25000	0.1062	
9 1,1-Dichloroethene	96	6.818	6.824	(0.686)	1007	0.25000	0.1619	
10 Acetone	43	6.902	6.908	(0.695)	740	0.25000	0.2252	
11 Isopropanol	45	6.938	6.939	(0.699)	762	2.50000	1.6098	
12 Carbon Disulfide	76	7.253	7.248	(0.730)	3689	0.25000	0.1316	
13 tert-Butyl Alcohol (TBA)	59	7.505	7.490	(0.756)	1584	2.50000	2.0219	
14 Methylene Chloride	84	7.547	7.552	(0.760)	4757	0.25000	0.4799	
15 MTBE	73	7.783	7.783	(0.784)	4750	0.25000	0.1703	
16 trans-1,2-Dichloroethene	96	7.882	7.878	(0.794)	2577	0.25000	0.3082	
17 Isopropyl Ether (DIPE)	45	8.375	8.385	(0.843)	5312	0.25000	0.1763	
18 Vinyl Acetate	43	8.454	8.470	(0.851)	3573	0.25000	0.2358	
19 1,1-Dichloroethane	63	8.543	8.548	(0.860)	3086	0.25000	0.2151	
20 Ethyl tert-Butyl Ether (ETBE)	59	8.889	8.910	(0.895)	4670	0.25000	0.1926	
21 2-Butanone	43	9.345	9.335	(0.941)	723	0.25000	0.2005	
22 2,2-Dichloropropane	77	9.350	9.361	(0.941)	2810	0.25000	0.2488	

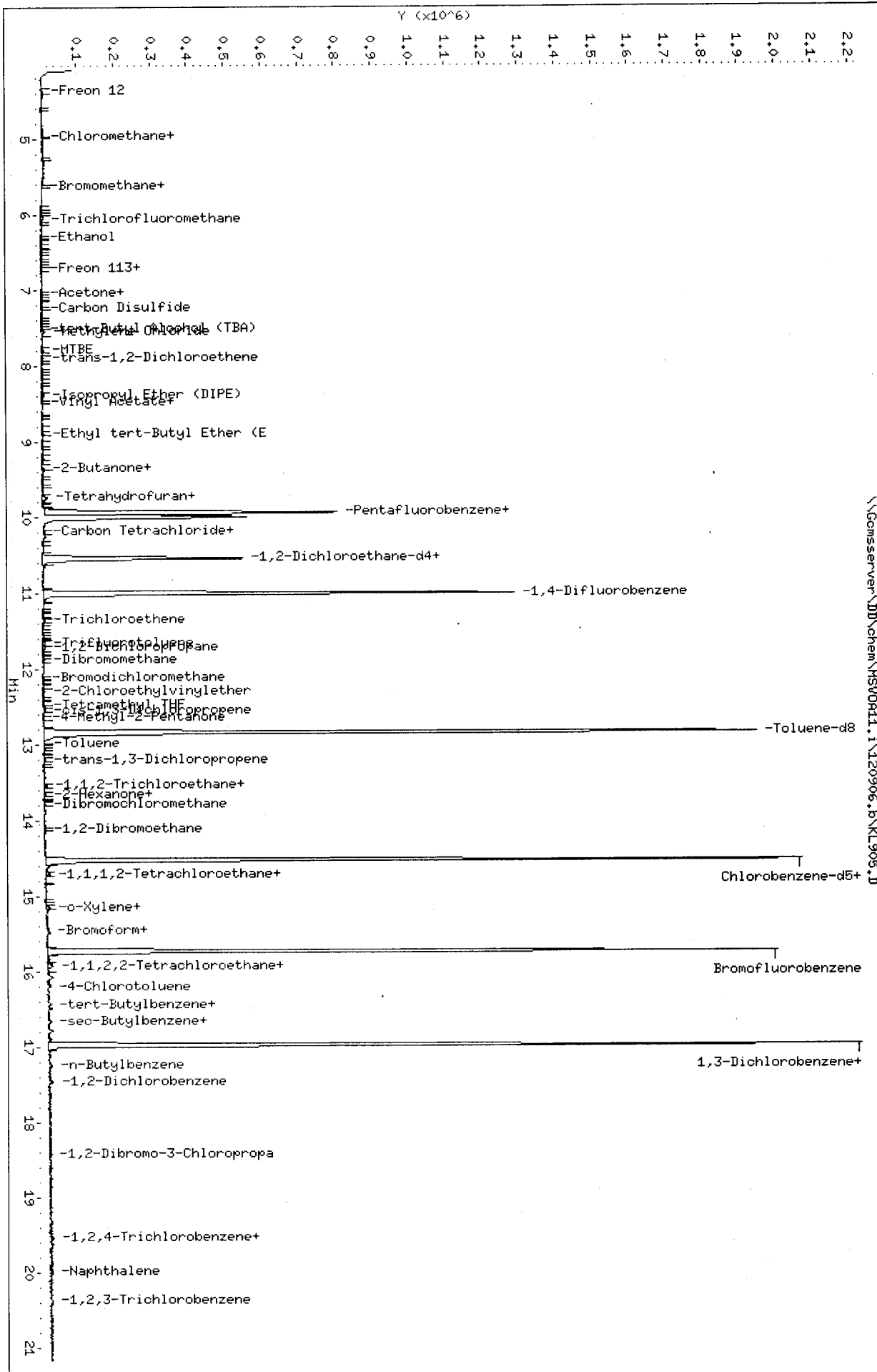
Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
23 cis-1,2-Dichloroethene	96	9.355	9.377 (0.942)		1722	0.25000	0.1912
24 Tetrahydrofuran	42	9.728	9.734 (0.979)		7572	2.50000	3.1211
25 Bromochloromethane	128	9.728	9.744 (0.979)		577	0.25000	0.1366
26 Chloroform	83	9.759	9.760 (0.983)		3139	0.25000	0.2113
* 27 Pentafluorobenzene	168	9.932	9.949 (1.000)		843451	50.0000	
28 Dibromofluoromethane	113	9.995	10.006 (1.006)		404719	50.0000	51.4900
29 1,1,1-Trichloroethane	97	10.048	10.053 (1.012)		3048	0.25000	0.2339
30 Carbon Tetrachloride	117	10.242	10.247 (0.931)		1313	0.25000	0.1471
31 1,1-Dichloropropene	75	10.236	10.258 (0.931)		2191	0.25000	0.2145
32 1,2-Dichloroethane-d4	65	10.535	10.541 (0.958)		503080	50.0000	49.3742
33 Methyl tert-Amyl Ether (TAME)	73	10.546	10.546 (0.959)		4549	0.25000	0.1669
34 Benzene	78	10.556	10.562 (0.960)		7100	0.25000	0.1985
35 1,2-Dichloroethane	62	10.630	10.646 (0.967)		2788	0.25000	0.2162
* 36 1,4-Difluorobenzene	114	10.997	11.008 (1.000)		1364413	50.0000	
37 Trichloroethene	95	11.358	11.364 (1.033)		1747	0.25000	0.1980
38 Trifluorotoluene	146	11.652	11.663 (1.060)		3731	0.25000	0.2515
39 1,2-Dichloropropane	63	11.715	11.726 (1.065)		1412	0.25000	0.1681
40 Dibromomethane	93	11.888	11.888 (1.081)		1042	0.25000	0.1966
41 Bromodichloromethane	83	12.003	12.014 (1.092)		1605	0.25000	0.1414
42 2-Chloroethylvinylether	63	12.292	12.308 (1.118)		1443	0.50000	0.3405
43 Tetramethyl THF	43	12.475	12.497 (1.134)		1777	0.25000	0.1548
44 cis-1,3-Dichloropropene	75	12.538	12.554 (1.140)		2376	0.25000	0.1701
45 4-Methyl-2-Pentanone	43	12.664	12.664 (1.152)		1096	0.25000	0.1522
46 Toluene-d8	98	12.832	12.843 (1.167)		1622572	50.0000	49.7009
47 Toluene	92	12.915	12.927 (1.174)		5018	0.25000	0.2197
48 trans-1,3-Dichloropropene	75	13.199	13.204 (1.200)		2828	0.25000	0.2145
49 1,1,2-Trichloroethane	85	13.440	13.435 (1.222)		433	0.25000	0.1053
50 Tetrachloroethene	166	13.550	13.551 (0.934)		2440	0.25000	0.2697
51 2-Hexanone	43	13.608	13.624 (0.938)		1079	0.25000	0.2162
52 1,3-Dichloropropane	76	13.650	13.655 (0.940)		3428	0.25000	0.2428
53 Dibromochloromethane	129	13.875	13.897 (0.956)		1763	0.25000	0.1975
54 1,2-Dibromoethane	107	14.085	14.085 (1.281)		1540	0.25000	0.1854
* 55 Chlorobenzene-d5	117	14.515	14.526 (1.000)		1450731	50.0000	
56 Chlorobenzene	112	14.557	14.562 (1.003)		5108	0.25000	0.1948
57 Ethylbenzene	91	14.583	14.599 (1.005)		8842	0.25000	0.2148
58 1,1,1,2-Tetrachloroethane	131	14.614	14.625 (1.007)		2041	0.25000	0.2198
59 m,p-Xylenes	106	14.703	14.714 (1.013)		4262	0.50000	0.3193
60 o-Xylene	106	15.133	15.155 (1.043)		2429	0.25000	0.1771
61 Styrene	104	15.165	15.171 (1.045)		4021	0.25000	0.1615
62 Bromoform	173	15.448	15.448 (1.064)		2161	0.25000	0.3091
63 Isopropylbenzene	105	15.485	15.490 (0.913)		6424	0.25000	0.1795
65 Bromofluorobenzene	95	15.726	15.737 (0.927)		817035	50.0000	49.5442
66 1,1,2,2-Tetrachloroethane	83	15.846	15.857 (0.934)		1661	0.25000	0.1789
67 Propylbenzene	91	15.899	15.920 (0.937)		6898	0.25000	0.1736
68 Bromobenzene	156	15.925	15.936 (0.939)		2981	0.25000	0.2558
69 1,2,3-Trichloropropane	75	15.941	15.947 (0.939)		1703	0.25000	0.1617
71 2-Chlorotoluene	91	16.093	16.093 (0.948)		6523	0.25000	0.2047
72 4-Chlorotoluene	91	16.198	16.209 (0.955)		5636	0.25000	0.1928
73 tert-Butylbenzene	119	16.439	16.445 (0.969)		4950	0.25000	0.1943
74 1,2,4-Trimethylbenzene	105	16.476	16.501 (0.971)		4215	0.25000	0.1362
75 sec-Butylbenzene	105	16.649	16.675 (0.981)		5929	0.25000	0.1718
76 para-Isopropyl Toluene	119	16.790	16.800 (0.989)		5891	0.25000	0.2016
77 1,3 Dichlorobenzene	146	16.895	16.911 (0.996)		3801	0.25000	0.1820
* 78 1,4-Dichlorobenzene-d4	152	16.968	16.985 (1.000)		775984	50.0000	

Data File: \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL905.D
Report Date: 11-Dec-2006 10:52

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
79 1,4-Dichlorobenzene	146	16.995	17.011	(1.002)	5190		0.25000	0.2408
80 n-Butylbenzene	91	17.241	17.263	(1.016)	5282		0.25000	0.1970
81 1,2-Dichlorobenzene	146	17.451	17.466	(1.028)	3826		0.25000	0.1937
82 1,2-Dibromo-3-Chloropropane	75	18.421	18.437	(1.086)	188		0.25000	0.1003
83 1,2,4-Trichlorobenzene	180	19.527	19.554	(1.151)	2796		0.25000	0.1946
84 Hexachlorobutadiene	225	19.637	19.653	(1.157)	1267		0.25000	0.1955
85 Naphthalene	128	19.983	20.010	(1.178)	5793		0.25000	0.1714
86 1,2,3-Trichlorobenzene	180	20.371	20.403	(1.201)	2525		0.25000	0.1780

Data File: \\Gomserver\DD\chem\MSV0411.i\120906.b\KL905.D
 Date : 09-DEC-2006 17:17
 Client ID: DYNA P&T
 Sample Info: ICAL,S4931,0.001/1000,
 Purge Volume: 5.0
 Column phase: RTX Volatiles

Instrument: MSV0411.i
 Operator: VOC
 Column diameter: 0.32



Data File: \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL906.D
 Report Date: 11-Dec-2006 11:35

Laboratory Name

Data file : \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL906.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 09-DEC-2006 17:45 MS Autotune Date: 29-JUL-2005 08:48
 Operator : VOC Inst ID: MSVOA11.i
 Smp Info : ICAL,S4931,0.002/1000,
 Misc Info : S5064,0.001/1000,S4172,0.001/1000,0.5/1PPB
 Comment :
 Method : \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\8260GX11.m
 Meth Date : 11-Dec-2006 11:34 target Quant Type: ISTD
 Cal Date : 09-DEC-2006 17:45 Cal File: KL906.D
 Als bottle: 21 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA_WK01

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG						AMOUNTS	
	MASS		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85		4.427	4.417	(0.446)	8075	1.00000	0.9463 (M)
2 Chloromethane	50		4.867	4.800	(0.490)	9190	1.00000	0.9916 (M)
3 Vinyl Chloride	62		4.988	4.973	(0.502)	10189	1.00000	1.1559 (M)
4 Bromomethane	94		5.575	5.560	(0.561)	5400	1.00000	1.0372 (M)
5 Chloroethane	64		5.717	5.702	(0.576)	6133	1.00000	1.0786 (M)
6 Trichlorofluoromethane	101		6.037	6.027	(0.608)	12024	1.00000	0.9258
7 Ethanol	45		6.220	6.226	(0.626)	4343	50.0000	48.4356 (M)
8 Freon 113	101		6.703	6.708	(0.675)	3489	0.50000	0.5108
9 1,1-Dichloroethene	96		6.813	6.824	(0.686)	3635	0.50000	0.5933 (M)
10 Acetone	43		6.902	6.908	(0.695)	2639	0.50000	0.8155 (M)
11 Isopropanol	45		6.938	6.939	(0.699)	1922	5.00000	4.1224
12 Carbon Disulfide	76		7.243	7.248	(0.729)	13747	0.50000	0.4979 (M)
13 tert-Butyl Alcohol (TBA)	59		7.479	7.490	(0.753)	3750	5.00000	4.8599
14 Methylene Chloride	84		7.547	7.552	(0.760)	9298	0.50000	1.0938 (M)
15 MTBE	73		7.783	7.783	(0.784)	11156	0.50000	0.4062
16 trans-1,2-Dichloroethene	96		7.877	7.878	(0.793)	4297	0.50000	0.5217
17 Isopropyl Ether (DIPE)	45		8.386	8.385	(0.844)	12924	0.50000	0.4357
18 Vinyl Acetate	43		8.469	8.470	(0.853)	4959	0.50000	0.3338 (M)
19 1,1-Dichloroethane	63		8.548	8.548	(0.861)	6518	0.50000	0.4614
20 Ethyl tert-Butyl Ether (ETBE)	59		8.899	8.910	(0.896)	9269	0.50000	0.3882 (M)
21 2-Butanone	43		9.319	9.335	(0.938)	1812	0.50000	0.5101
22 2,2-Dichloropropane	77		9.361	9.361	(0.942)	5878	0.50000	0.5285

Data File: \\Gcmsserver\DD\chem\MSVOA11.i\120906.b\KL906.D
Report Date: 11-Dec-2006 11:35

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
23 cis-1,2-Dichloroethene	96	9.366	9.377	(0.943)	5018		0.50000	0.5658
24 Tetrahydrofuran	42	9.733	9.734	(0.980)	13083		5.00000	5.4750
25 Bromochloromethane	128	9.744	9.744	(0.981)	2023		0.50000	0.4864 (M)
26 Chloroform	83	9.759	9.760	(0.983)	6384		0.50000	0.4364
* 27 Pentafluorobenzene	168	9.932	9.949	(1.000)	830766		50.0000	
28 Dibromofluoromethane	113	9.995	10.006	(1.006)	399312		50.0000	51.5778
29 1,1,1-Trichloroethane	97	10.042	10.053	(1.011)	6928		0.50000	0.5399
30 Carbon Tetrachloride	117	10.226	10.247	(0.930)	4403		0.50000	0.4995
31 1,1-Dichloropropene	75	10.268	10.258	(0.934)	4139		0.50000	0.4068 (M)
32 1,2-Dichloroethane-d4	65	10.535	10.541	(0.958)	508990		50.0000	50.1349
33 Methyl tert-Amyl Ether (TAME)	73	10.540	10.546	(0.959)	10860		0.50000	0.3999
34 Benzene	78	10.556	10.562	(0.960)	15147		0.50000	0.4251
35 1,2-Dichloroethane	62	10.640	10.646	(0.968)	6868		0.50000	0.5346
* 36 1,4-Difluorobenzene	114	10.997	11.008	(1.000)	1359497		50.0000	
37 Trichloroethene	95	11.337	11.364	(1.031)	4271		0.50000	0.4858
38 Trifluorotoluene	146	11.662	11.663	(1.061)	6304		0.50000	0.4265
39 1,2-Dichloropropane	63	11.720	11.726	(1.066)	3735		0.50000	0.4464
40 Dibromomethane	93	11.872	11.888	(1.080)	2454		0.50000	0.4647
41 Bromodichloromethane	83	11.998	12.014	(1.091)	4674		0.50000	0.4135
42 2-Chloroethylvinylether	63	12.297	12.308	(1.118)	3169		1.00000	1.8789
43 Tetramethyl THF	43	12.480	12.497	(1.135)	4932		0.50000	0.4314
44 cis-1,3-Dichloropropene	75	12.554	12.554	(1.142)	5801		0.50000	0.4169
45 4-Methyl-2-Pentanone	43	12.653	12.664	(1.151)	2782		0.50000	0.3877
46 Toluene-d8	98	12.832	12.843	(1.167)	1621885		50.0000	49.8595
47 Toluene	92	12.916	12.927	(1.174)	10103		0.50000	0.4439
48 trans-1,3-Dichloropropene	75	13.199	13.204	(1.200)	5591		0.50000	0.4257
49 1,1,2-Trichloroethane	85	13.419	13.435	(1.220)	1588		0.50000	0.3878
50 Tetrachloroethene	166	13.529	13.551	(0.932)	4247		0.50000	0.4721
51 2-Hexanone	43	13.602	13.624	(0.937)	2238		0.50000	0.4510
52 1,3-Dichloropropane	76	13.650	13.655	(0.940)	5339		0.50000	0.3803
53 Dibromochloromethane	129	13.886	13.897	(0.957)	3640		0.50000	0.4102
54 1,2-Dibromoethane	107	14.074	14.085	(1.280)	3700		0.50000	0.4471
* 55 Chlorobenzene-d5	117	14.515	14.526	(1.000)	1442693		50.0000	
56 Chlorobenzene	112	14.551	14.562	(1.003)	12902		0.50000	0.4949
57 Ethylbenzene	91	14.583	14.599	(1.005)	17315		0.50000	0.4230
58 1,1,1,2-Tetrachloroethane	131	14.614	14.625	(1.007)	4505		0.50000	0.4879
59 m,p-Xylenes	106	14.698	14.714	(1.013)	8324		1.00000	1.1367
60 o-Xylene	106	15.133	15.155	(1.043)	4885		0.50000	0.8792
61 Styrene	104	15.154	15.171	(1.044)	9129		0.50000	0.3688
62 Bromoform	173	15.437	15.448	(1.064)	2921		0.50000	0.4202
63 Isopropylbenzene	105	15.479	15.490	(0.912)	12744		0.50000	0.3577
65 Bromofluorobenzene	95	15.731	15.737	(0.927)	825668		50.0000	50.2927
66 1,1,2,2-Tetrachloroethane	83	15.841	15.857	(0.934)	4201		0.50000	0.4546
67 Propylbenzene	91	15.899	15.920	(0.937)	14297		0.50000	0.3615
68 Bromobenzene	156	15.920	15.936	(0.938)	5301		0.50000	0.4569
69 1,2,3-Trichloropropane	75	15.930	15.947	(0.939)	5502		0.50000	0.5250
70 1,3,5-Trimethylbenzene	105	16.061	16.082	(0.947)	10872		0.50000	0.3758
71 2-Chlorotoluene	91	16.082	16.093	(0.948)	12990		0.50000	0.4096
72 4-Chlorotoluene	91	16.192	16.209	(0.954)	12801		0.50000	0.4399
73 tert-Butylbenzene	119	16.423	16.445	(0.968)	9930		0.50000	0.3916
74 1,2,4-Trimethylbenzene	105	16.481	16.501	(0.971)	12069		0.50000	0.3919
75 sec-Butylbenzene	105	16.659	16.675	(0.982)	12894		0.50000	0.3754
76 para-Isopropyl Toluene	119	16.780	16.800	(0.989)	10804		0.50000	0.3629
77 1,3-Dichlorobenzene	146	16.895	16.911	(0.996)	9345		0.50000	0.4494

Data File: \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL906.D
Report Date: 11-Dec-2006 11:35

						AMOUNTS		
		QUANT SIG					CAL-AMT	ON-COL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====		=====	=====	=====	=====	=====	=====	=====
* 78	1,4-Dichlorobenzene-d4	152	16.968	16.985	(1.000)	772513	50.0000	
79	1,4-Dichlorobenzene	146	17.000	17.011	(1.002)	10581	0.50000	0.4933
80	n-Butylbenzene	91	17.246	17.263	(1.016)	10990	0.50000	0.4118
81	1,2-Dichlorobenzene	146	17.456	17.466	(1.029)	8453	0.50000	0.4300
82	1,2-Dibromo-3-Chloropropane	75	18.431	18.437	(1.086)	718	0.50000	0.3696
83	1,2,4-Trichlorobenzene	180	19.543	19.554	(1.152)	6181	0.50000	0.4322
84	Hexachlorobutadiene	225	19.642	19.653	(1.158)	2571	0.50000	0.4044 (M)
85	Naphthalene	128	19.994	20.010	(1.178)	11926	0.50000	0.3545
86	1,2,3-Trichlorobenzene	180	20.371	20.403	(1.201)	7046	0.50000	0.4991

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Gomsserver\JD\chem\MSV0011.i\120906.b\KL906.D

Date : 09-DEC-2006 17:45

Client ID: DYNA P&T

Sample Info: ICAL, S4931, 0.002/1000,

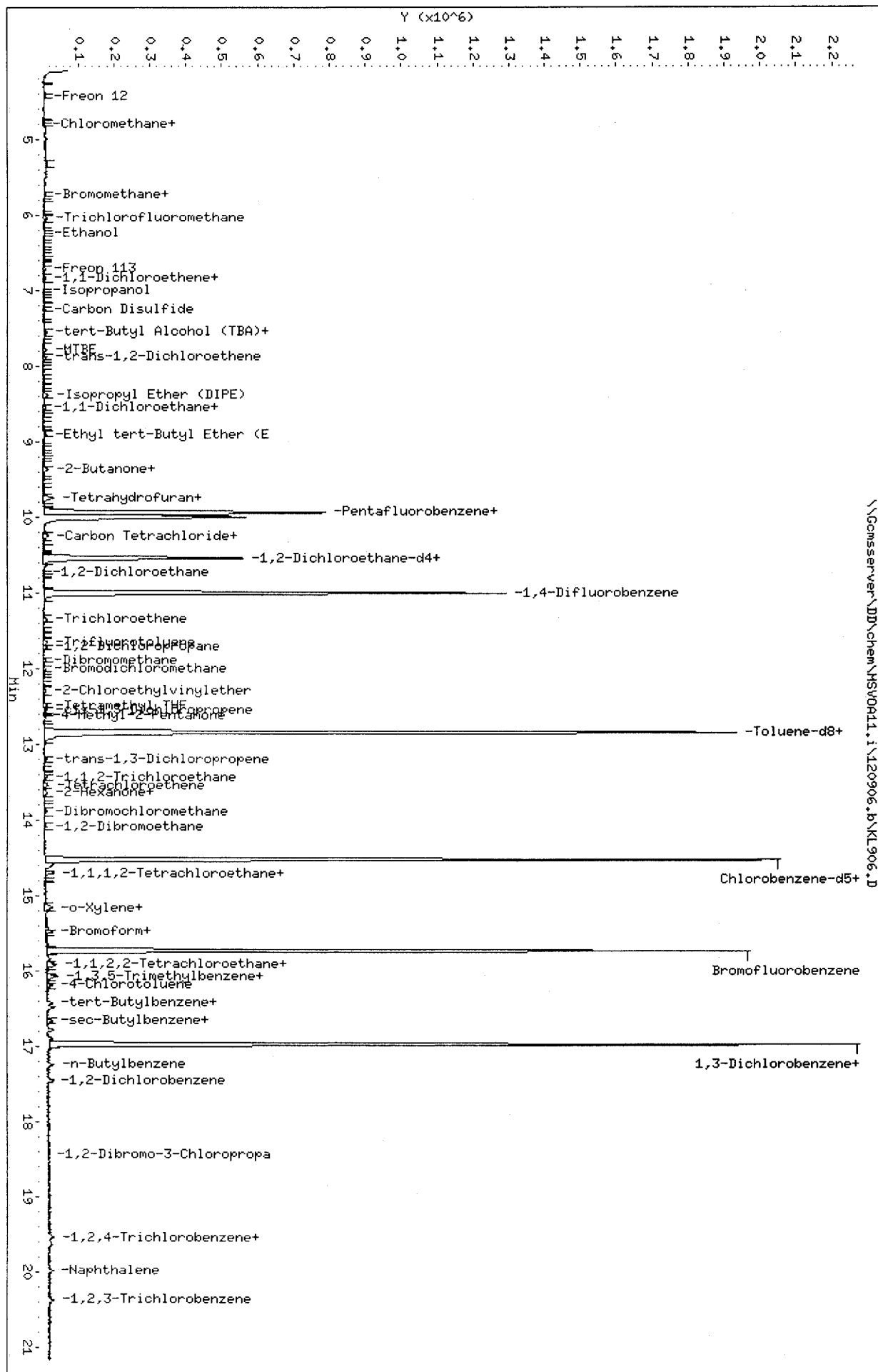
Purge Volume: 5.0

Column phase: RTX Volatiles

Instrument: MSV0011.i

Operator: WOC

Column diameter: 0.32



Data File: \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL907.D
 Report Date: 11-Dec-2006 13:28

Laboratory Name

Data file : \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL907.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 09-DEC-2006 18:13 MS Autotune Date: 29-JUL-2005 08:48
 Operator : VOC Inst ID: MSVOA11.i
 Smp Info : ICAL,S4931,0.002/500,
 Misc Info : S5064,0.002/500,S4172,0.001/500,2PPB
 Comment :
 Method : \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\8260GX11.m
 Meth Date : 11-Dec-2006 13:27 target Quant Type: ISTD
 Cal Date : 09-DEC-2006 18:13 Cal File: KL907.D
 Als bottle: 22 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA_WK01

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.422	4.417 (0.445)		15708	2.00000	1.8277 (M)
2 Chloromethane	50	4.852	4.800 (0.489)		19792	2.00000	2.1078 (M)
3 Vinyl Chloride	62	4.993	4.973 (0.503)		18890	2.00000	2.1278 (M)
4 Bromomethane	94	5.575	5.560 (0.561)		9344	2.00000	1.7820 (M)
5 Chloroethane	64	5.712	5.702 (0.575)		10847	2.00000	1.8941 (M)
6 Trichlorofluoromethane	101	6.037	6.027 (0.608)		25320	2.00000	1.9357
7 Ethanol	45	6.231	6.226 (0.627)		19700	200.000	218.1402 (M)
8 Freon 113	101	6.713	6.708 (0.676)		13227	2.00000	1.9230
9 1,1-Dichloroethene	96	6.828	6.824 (0.688)		12482	2.00000	2.0230
10 Acetone	43	6.902	6.908 (0.695)		7741	2.00000	2.3751
11 Isopropanol	45	6.933	6.939 (0.698)		9213	20.0000	19.6198
12 Carbon Disulfide	76	7.243	7.248 (0.729)		56190	2.00000	2.0206 (M)
13 tert-Butyl Alcohol (TBA)	59	7.479	7.490 (0.753)		14030	20.0000	18.0529
14 Methylene Chloride	84	7.547	7.552 (0.760)		22339	2.00000	2.5811 (M)
15 MTBE	73	7.772	7.783 (0.783)		51324	2.00000	1.8554
16 trans-1,2-Dichloroethene	96	7.877	7.878 (0.793)		17506	2.00000	2.1106
17 Isopropyl Ether (DIPE)	45	8.380	8.385 (0.844)		57320	2.00000	1.9186
18 Vinyl Acetate	43	8.459	8.470 (0.852)		23976	2.00000	2.7868
19 1,1-Dichloroethane	63	8.543	8.548 (0.860)		30279	2.00000	2.1282
20 Ethyl tert-Butyl Ether (ETBE)	59	8.899	8.910 (0.896)		47608	2.00000	1.9800
21 2-Butanone	43	9.324	9.335 (0.939)		7639	2.00000	2.1354
22 2,2-Dichloropropane	77	9.356	9.361 (0.942)		22945	2.00000	2.0485

Compounds	QUANT SIG						AMOUNTS	
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	
23 cis-1,2-Dichloroethene	96	9.371	9.377	(0.944)	17905	2.00000	2.0047	
24 Tetrahydrofuran	42	9.733	9.734	(0.980)	48960	20.0000	20.3431	
25 Bromochloromethane	128	9.733	9.744	(0.980)	8072	2.00000	1.9270 (M)	
26 Chloroform	83	9.759	9.760	(0.983)	31501	2.00000	2.1380	
* 27 Pentafluorobenzene	168	9.932	9.949	(1.000)	836728	50.0000		
28 Dibromofluoromethane	113	9.990	10.006	(1.006)	391502	50.0000	50.2087	
29 1,1,1-Trichloroethane	97	10.048	10.053	(1.012)	24929	2.00000	1.9291	
30 Carbon Tetrachloride	117	10.242	10.247	(0.931)	18739	2.00000	2.1627	
31 1,1-Dichloropropene	75	10.257	10.258	(0.933)	20733	2.00000	2.0731	
32 1,2-Dichloroethane-d4	65	10.535	10.541	(0.958)	498638	50.0000	49.9641	
33 Methyl tert-Amyl Ether (TAME)	73	10.530	10.546	(0.958)	54448	2.00000	2.0398	
34 Benzene	78	10.551	10.562	(0.959)	76067	2.00000	2.1718	
35 1,2-Dichloroethane	62	10.640	10.646	(0.968)	26852	2.00000	2.1264	
* 36 1,4-Difluorobenzene	114	10.997	11.008	(1.000)	1336399	50.0000		
37 Trichloroethene	95	11.353	11.364	(1.032)	18126	2.00000	2.0975	
38 Trifluorotoluene	146	11.652	11.663	(1.060)	30178	2.00000	2.0771	
39 1,2-Dichloropropane	63	11.720	11.726	(1.066)	18358	2.00000	2.2324	
40 Dibromomethane	93	11.883	11.888	(1.081)	11463	2.00000	2.2082	
41 Bromodichloromethane	83	12.003	12.014	(1.092)	23475	2.00000	2.1127	
42 2-Chloroethylvinylether	63	12.297	12.308	(1.118)	7433	2.00000	2.0864	
43 Tetramethyl THF	43	12.486	12.497	(1.135)	20556	2.00000	1.8292	
44 cis-1,3-Dichloropropene	75	12.538	12.554	(1.140)	28591	2.00000	2.0906	
45 4-Methyl-2-Pentanone	43	12.648	12.664	(1.150)	14411	2.00000	2.0432	
46 Toluene-d8	98	12.832	12.843	(1.167)	1604131	50.0000	50.1661	
47 Toluene	92	12.921	12.927	(1.175)	47290	2.00000	2.1139	
48 trans-1,3-Dichloropropene	75	13.193	13.204	(1.200)	25325	2.00000	1.9619	
49 1,1,2-Trichloroethane	85	13.429	13.435	(1.221)	7555	2.00000	1.8771	
50 Tetrachloroethene	166	13.534	13.551	(0.932)	19163	2.00000	2.1666	
51 2-Hexanone	43	13.608	13.624	(0.938)	8919	2.00000	1.8277	
52 1,3-Dichloropropane	76	13.644	13.655	(0.940)	29667	2.00000	2.1489	
53 Dibromochloromethane	129	13.886	13.897	(0.957)	17432	2.00000	1.9977	
54 1,2-Dibromoethane	107	14.074	14.085	(1.280)	16800	2.00000	2.0654	
* 55 Chlorobenzene-d5	117	14.515	14.526	(1.000)	1418682	50.0000		
56 Chlorobenzene	112	14.551	14.562	(1.003)	55281	2.00000	2.1567	
57 Ethylbenzene	91	14.583	14.599	(1.005)	81482	2.00000	2.0246	
58 1,1,1,2-Tetrachloroethane	131	14.620	14.625	(1.007)	17422	2.00000	1.9188	
59 m,p-Xylenes	106	14.703	14.714	(1.013)	49569	4.00000	3.4957	
60 o-Xylene	106	15.133	15.155	(1.043)	22898	2.00000	1.9213	
61 Styrene	104	15.154	15.171	(1.044)	45122	2.00000	1.8537	
62 Bromoform	173	15.432	15.448	(1.063)	13383	2.00000	1.9578	
63 Isopropylbenzene	105	15.479	15.490	(0.912)	69713	2.00000	2.0162	
65 Bromofluorobenzene	95	15.726	15.737	(0.927)	818620	50.0000	51.3700	
66 1,1,2,2-Tetrachloroethane	83	15.846	15.857	(0.934)	18242	2.00000	2.0339	
67 Propylbenzene	91	15.904	15.920	(0.937)	73646	2.00000	1.9185	
68 Bromobenzene	156	15.925	15.936	(0.939)	23305	2.00000	2.0695	
69 1,2,3-Trichloropropane	75	15.930	15.947	(0.939)	21702	2.00000	2.1336	
70 1,3,5-Trimethylbenzene	105	16.067	16.082	(0.947)	57988	2.00000	2.0653	
71 2-Chlorotoluene	91	16.082	16.093	(0.948)	64593	2.00000	2.0983	
72 4-Chlorotoluene	91	16.192	16.209	(0.954)	57821	2.00000	2.0472	
73 tert-Butylbenzene	119	16.434	16.445	(0.968)	48936	2.00000	1.9884	
74 1,2,4-Trimethylbenzene	105	16.481	16.501	(0.971)	59920	2.00000	2.0046	
75 sec-Butylbenzene	105	16.659	16.675	(0.982)	65335	2.00000	1.9597	
76 para-Isopropyl Toluene	119	16.785	16.800	(0.989)	55126	2.00000	1.9077	
77 1,3-Dichlorobenzene	146	16.900	16.911	(0.996)	41285	2.00000	2.0458	

Data File: \\Gcmsserver\DD\chem\MSVOA11.i\120906.b\KL907.D
Report Date: 11-Dec-2006 13:28

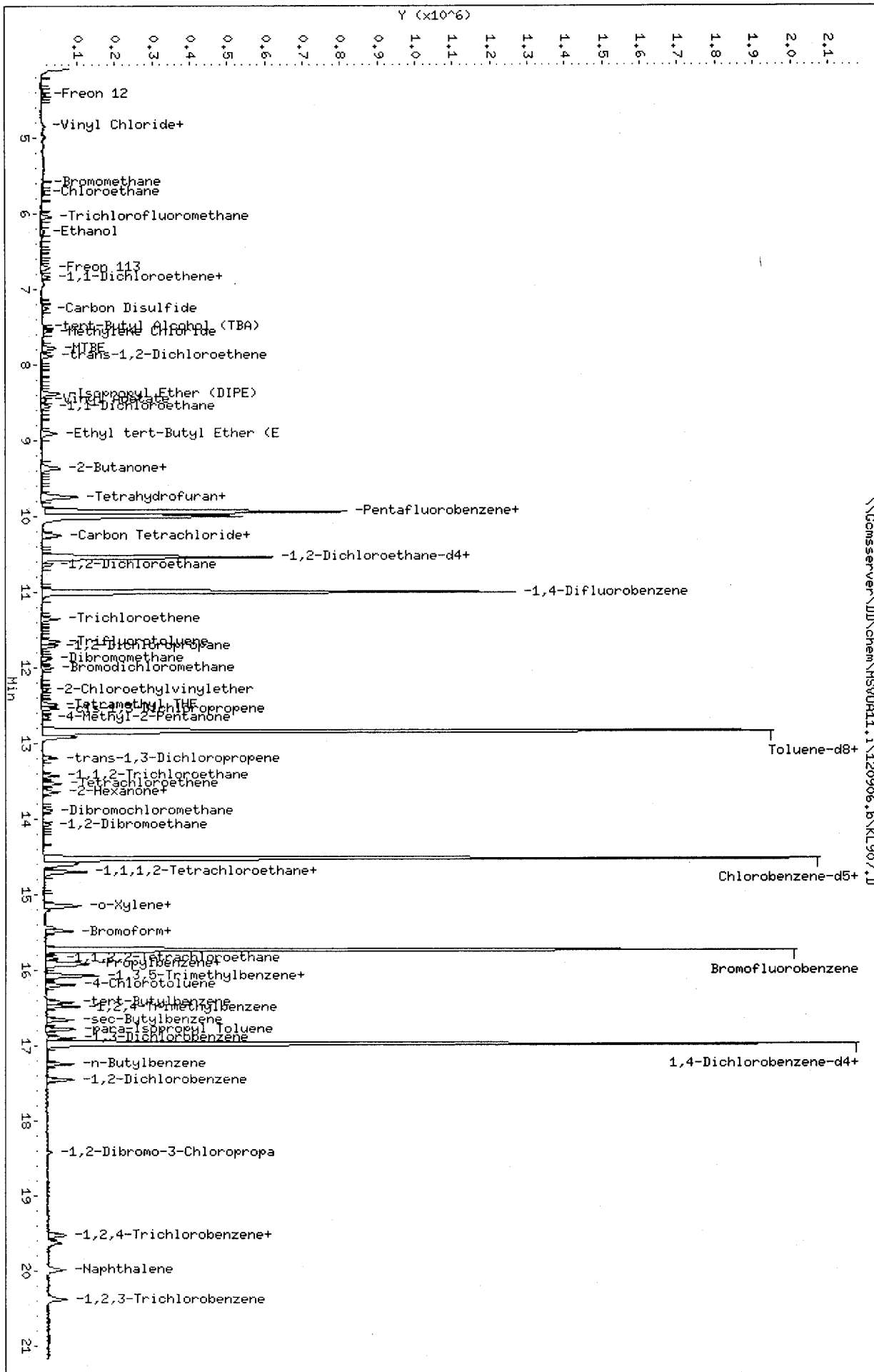
Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
	MASS					CAL-AMT (ug/L)	ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	16.968	16.985	(1.000)	749856	50.0000	
79 1,4-Dichlorobenzene	146	17.005	17.011	(1.002)	42696	2.00000	2.0508
80 n-Butylbenzene	91	17.241	17.263	(1.016)	50148	2.00000	1.9360
81 1,2-Dichlorobenzene	146	17.451	17.466	(1.028)	41124	2.00000	2.1552
82 1,2-Dibromo-3-Chloropropane	75	18.416	18.437	(1.085)	4235	2.00000	2.2462
83 1,2,4-Trichlorobenzene	180	19.527	19.554	(1.151)	27249	2.00000	1.9633
84 Hexachlorobutadiene	225	19.637	19.653	(1.157)	14146	2.00000	2.2926
85 Naphthalene	128	19.988	20.010	(1.178)	56875	2.00000	1.7418
86 1,2,3-Trichlorobenzene	180	20.382	20.403	(1.201)	27748	2.00000	2.0251

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Gomsserver\JD\chem\MSV0411.i\120906.b\KL907.D
 Date : 09-DEC-2006 18:13
 Client ID: DYNA P&T
 Sample Info: ICAL,54931,0.002/500,
 Purge Volume: 5.0
 Column phase: RTX Volatiles

Instrument: MSV0411.i
 Operator: VDC
 Column diameter: 0.32



Data File: \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL908.D
 Report Date: 11-Dec-2006 13:30

Laboratory Name

Data file : \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL908.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 09-DEC-2006 18:41 MS Autotune Date: 29-JUL-2005 08:48
 Operator : VOC Inst ID: MSVOA11.i
 Smp Info : ICAL,S4931,0.005/500,
 Misc Info : S5064,0.005/500,S4172,0.0025/500,5PPB
 Comment :
 Method : \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\8260GX11.m
 Meth Date : 11-Dec-2006 13:30 target Quant Type: ISTD
 Cal Date : 09-DEC-2006 18:41 Cal File: KL908.D
 Als bottle: 23 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA_WK01

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	AMOUNTS						
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
							(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	
1 Freon 12	85	4.427	4.417	(0.446)	51763	5.00000	5.8747	
2 Chloromethane	50	4.836	4.800	(0.487)	55790	5.00000	5.7719 (M)	
3 Vinyl Chloride	62	4.988	4.973	(0.502)	50911	5.00000	5.5739 (M)	
4 Bromomethane	94	5.575	5.560	(0.561)	26833	5.00000	4.9808 (M)	
5 Chloroethane	64	5.706	5.702	(0.575)	31483	5.00000	5.3621 (M)	
6 Trichlorofluoromethane	101	6.042	6.027	(0.608)	76747	5.00000	5.7229	
7 Ethanol	45	6.231	6.226	(0.627)	43928	500.000	474.4363	
8 Freon 113	101	6.708	6.708	(0.675)	31848	5.00000	4.5161	
9 1,1-Dichloroethene	96	6.828	6.824	(0.688)	31583	5.00000	4.9928	
10 Acetone	43	6.917	6.908	(0.696)	18989	5.00000	5.6827	
11 Isopropanol	45	6.944	6.939	(0.699)	24071	50.0000	49.9983	
12 Carbon Disulfide	76	7.253	7.248	(0.730)	144618	5.00000	5.0530 (M)	
13 tert-Butyl Alcohol (TBA)	59	7.499	7.490	(0.755)	38498	50.0000	48.3165	
14 Methylene Chloride	84	7.547	7.552	(0.760)	45849	5.00000	5.1499 (M)	
15 MTBE	73	7.777	7.783	(0.783)	143301	5.00000	5.0530	
16 trans-1,2-Dichloroethene	96	7.877	7.878	(0.793)	44573	5.00000	5.2416	
17 Isopropyl Ether (DIPE)	45	8.380	8.385	(0.844)	153501	5.00000	5.0116	
18 Vinyl Acetate	43	8.464	8.470	(0.852)	85852	5.00000	6.4624	
19 1,1-Dichloroethane	63	8.553	8.548	(0.861)	74103	5.00000	5.0801	
20 Ethyl tert-Butyl Ether (ETBE)	59	8.905	8.910	(0.897)	127372	5.00000	5.1670	
21 2-Butanone	43	9.329	9.335	(0.939)	18985	5.00000	5.1765	
22 2,2-Dichloropropane	77	9.355	9.361	(0.942)	57801	5.00000	5.0334	

Data File: \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL908.D
 Report Date: 11-Dec-2006 13:30

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
23 cis-1,2-Dichloroethene	96	9.371	9.377	(0.944)	48732	5.00000	5.3218
24 Tetrahydrofuran	42	9.728	9.734	(0.979)	125856	50.0000	51.0055
25 Bromochloromethane	128	9.738	9.744	(0.980)	23836	5.00000	5.5503 (M)
26 Chloroform	83	9.749	9.760	(0.982)	81899	5.00000	5.4217
* 27 Pentafluorobenzene	168	9.932	9.949	(1.000)	857862	50.0000	
28 Dibromofluoromethane	113	9.995	10.006	(1.006)	396553	50.0000	49.6036
29 1,1,1-Trichloroethane	97	10.053	10.053	(1.012)	65394	5.00000	4.9359
30 Carbon Tetrachloride	117	10.231	10.247	(0.930)	42403	5.00000	4.7446
31 1,1-Dichloropropene	75	10.252	10.258	(0.932)	49339	5.00000	4.7831
32 1,2-Dichloroethane-d4	65	10.530	10.541	(0.958)	513108	50.0000	49.8462
33 Methyl tert-Amyl Ether (TAME)	73	10.535	10.546	(0.958)	139369	5.00000	5.0620
34 Benzene	78	10.551	10.562	(0.959)	187852	5.00000	5.1999
35 1,2-Dichloroethane	62	10.635	10.646	(0.967)	67625	5.00000	5.1920
* 36 1,4-Difluorobenzene	114	10.996	11.008	(1.000)	1378434	50.0000	
37 Trichloroethene	95	11.348	11.364	(1.032)	43062	5.00000	4.8311
38 Trifluorotoluene	146	11.652	11.663	(1.060)	73338	5.00000	4.8939
39 1,2-Dichloropropane	63	11.715	11.726	(1.065)	42802	5.00000	5.0463
40 Dibromomethane	93	11.877	11.888	(1.080)	26425	5.00000	4.9354
41 Bromodichloromethane	83	12.003	12.014	(1.092)	57350	5.00000	5.0040
42 2-Chloroethylvinylether	63	12.297	12.308	(1.118)	20459	5.00000	4.7036
43 Tetramethyl THF	43	12.485	12.497	(1.135)	56767	5.00000	4.8974
44 cis-1,3-Dichloropropene	75	12.543	12.554	(1.141)	69722	5.00000	4.9428
45 4-Methyl-2-Pentanone	43	12.648	12.664	(1.150)	36409	5.00000	5.0048
46 Toluene-d8	98	12.832	12.843	(1.167)	1622809	50.0000	49.2026
47 Toluene	92	12.915	12.927	(1.174)	113425	5.00000	4.9157
48 trans-1,3-Dichloropropene	75	13.193	13.204	(1.200)	66761	5.00000	5.0143
49 1,1,2-Trichloroethane	85	13.429	13.435	(1.221)	21439	5.00000	5.1644
50 Tetrachloroethene	166	13.534	13.551	(0.932)	40865	5.00000	4.5472
51 2-Hexanone	43	13.608	13.624	(0.938)	23379	5.00000	4.7153
52 1,3-Dichloropropane	76	13.639	13.655	(0.940)	74543	5.00000	5.3142
53 Dibromochloromethane	129	13.885	13.897	(0.957)	42628	5.00000	4.8079
54 1,2-Dibromoethane	107	14.074	14.085	(1.280)	40956	5.00000	4.8817
* 55 Chlorobenzene-d5	117	14.515	14.526	(1.000)	1441486	50.0000	
56 Chlorobenzene	112	14.551	14.562	(1.003)	129736	5.00000	4.9814
57 Ethylbenzene	91	14.588	14.599	(1.005)	198124	5.00000	4.8451
58 1,1,1,2-Tetrachloroethane	131	14.614	14.625	(1.007)	46038	5.00000	4.9902
59 m,p-Xylenes	106	14.703	14.714	(1.013)	132186	10.0000	8.4279
60 o-Xylene	106	15.144	15.155	(1.043)	61201	5.00000	4.2486
61 Styrene	104	15.154	15.171	(1.044)	117244	5.00000	4.7406
62 Bromoform	173	15.437	15.448	(1.064)	34957	5.00000	5.0330
63 Isopropylbenzene	105	15.479	15.490	(0.912)	164178	5.00000	4.6845
65 Bromofluorobenzene	95	15.726	15.737	(0.927)	819500	50.0000	50.7330
66 1,1,2,2-Tetrachloroethane	83	15.846	15.857	(0.934)	48625	5.00000	5.3487
67 Propylbenzene	91	15.904	15.920	(0.937)	183629	5.00000	4.7193
68 Bromobenzene	156	15.925	15.936	(0.939)	58704	5.00000	5.1430
69 1,2,3-Trichloropropane	75	15.941	15.947	(0.939)	55141	5.00000	5.3483
70 1,3,5-Trimethylbenzene	105	16.066	16.082	(0.947)	140311	5.00000	4.9301
71 2-Chlorotoluene	91	16.082	16.093	(0.948)	157039	5.00000	5.0327
72 4-Chlorotoluene	91	16.198	16.209	(0.955)	137778	5.00000	4.8126
73 tert-Butylbenzene	119	16.428	16.445	(0.968)	113859	5.00000	4.5642
74 1,2,4-Trimethylbenzene	105	16.481	16.501	(0.971)	152263	5.00000	5.0254
75 sec-Butylbenzene	105	16.659	16.675	(0.982)	153139	5.00000	4.5316
76 para-Isopropyl Toluene	119	16.785	16.800	(0.989)	132173	5.00000	4.5125
77 1,3-Dichlorobenzene	146	16.900	16.911	(0.996)	101498	5.00000	4.9618

Data File: \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL908.D
Report Date: 11-Dec-2006 13:30

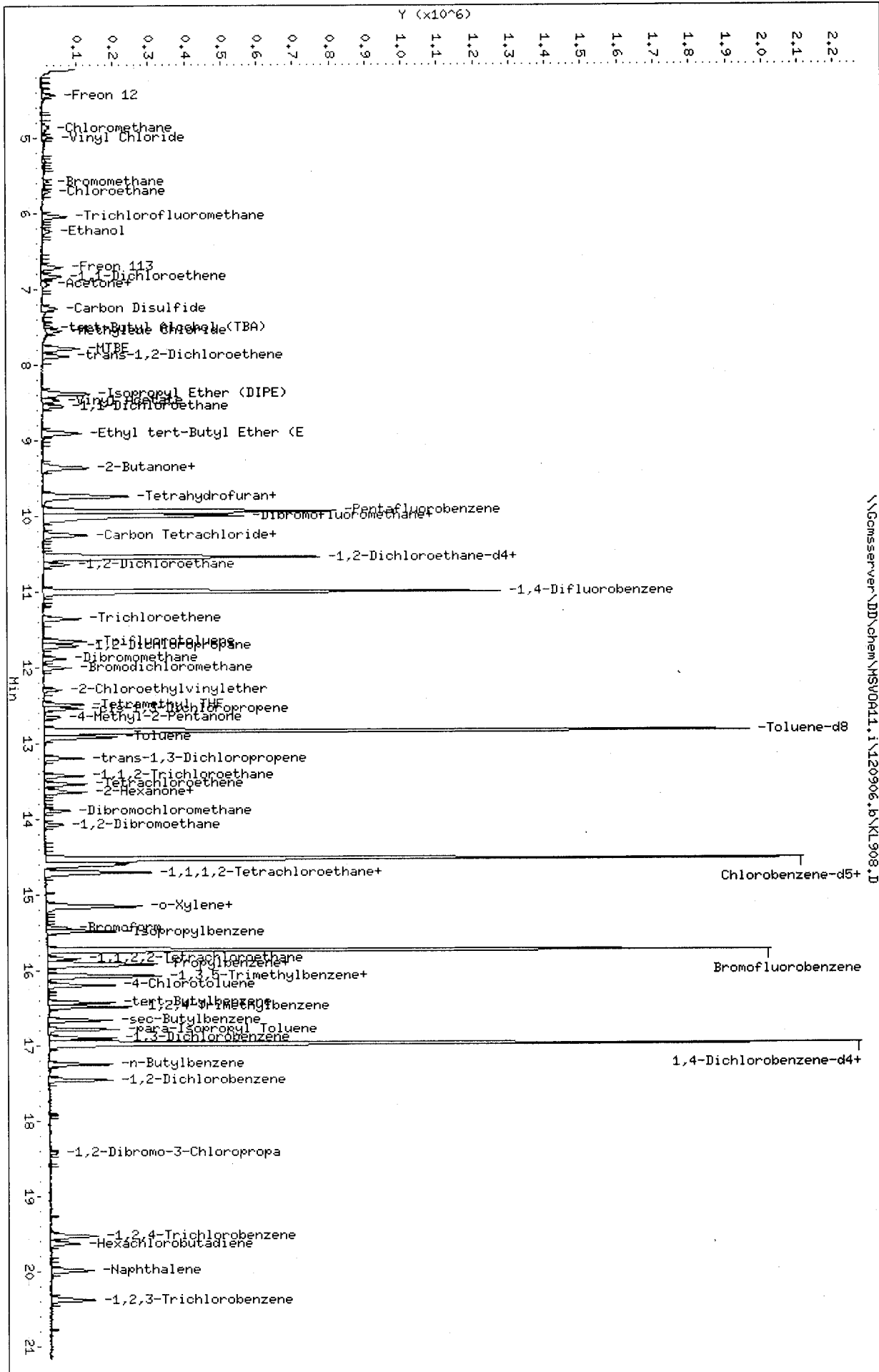
Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
*****	----	----	-----	-----	-----	-----	-----
* 78 1,4-Dichlorobenzene-d4	152	16.968	16.985	(1.000)	760088	50.0000	
79 1,4-Dichlorobenzene	146	16.995	17.011	(1.002)	102431	5.00000	4.8538
80 n-Butylbenzene	91	17.246	17.263	(1.016)	120972	5.00000	4.6074
81 1,2-Dichlorobenzene	146	17.456	17.466	(1.029)	93653	5.00000	4.8420
82 1,2-Dibromo-3-Chloropropane	75	18.415	18.437	(1.085)	9919	5.00000	5.1903
83 1,2,4-Trichlorobenzene	180	19.532	19.554	(1.151)	68505	5.00000	4.8693
84 Hexachlorobutadiene	225	19.627	19.653	(1.157)	28187	5.00000	4.5068
85 Naphthalene	128	19.988	20.010	(1.178)	157419	5.00000	4.7561
86 1,2,3-Trichlorobenzene	180	20.376	20.403	(1.201)	63129	5.00000	4.5453

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Gomserver\DD\chem\MSV0411.i\120906.b\KL908.D
 Date : 09-DEC-2006 18:41
 Client ID: DYNA P&T
 Sample Info: ICAL,S4931,0.005/500,
 Purge Volume: 5.0
 Column phase: RTX Volatiles

Instrument: MSV0411.i
 Operator: VDC
 Column diameter: 0.32



Data File: \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL909.D
 Report Date: 11-Dec-2006 13:29

Laboratory Name

Data file : \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL909.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 09-DEC-2006 19:09 MS Autotune Date: 29-JUL-2005 08:48
 Operator : VOC Inst ID: MSVOA11.i
 Smp Info : ICAL,S4931,0.002/100,
 Misc Info : S5064,0.002/100,S4172,0.001/100,10PPB
 Comment :
 Method : \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\8260GX11.m
 Meth Date : 11-Dec-2006 13:29 target Quant Type: ISTD
 Cal Date : 09-DEC-2006 19:09 Cal File: KL909.D
 Als bottle: 24 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA_WK01

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	AMOUNTS					
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
1 Freon 12	85	4.427	4.417	(0.446)	79114	10.0000	9.0012 (M)
2 Chloromethane	50	4.852	4.800	(0.489)	92426	10.0000	9.6249
3 Vinyl Chloride	62	4.988	4.973	(0.502)	90901	10.0000	9.9771 (M)
4 Bromomethane	94	5.570	5.560	(0.561)	51042	10.0000	9.4981 (M)
5 Chloroethane	64	5.706	5.702	(0.575)	56255	10.0000	9.6051 (M)
6 Trichlorofluoromethane	101	6.037	6.027	(0.608)	121637	10.0000	9.0929
7 Ethanol	45	6.236	6.226	(0.628)	97042	1000.00	1050.6981 (M)
8 Freon 113	101	6.708	6.708	(0.675)	80876	10.0000	11.4971
9 1,1-Dichloroethene	96	6.823	6.824	(0.687)	65494	10.0000	10.3795
10 Acetone	43	6.907	6.908	(0.695)	36090	10.0000	10.8273
11 Isopropanol	45	6.944	6.939	(0.699)	54348	100.000	113.1687
12 Carbon Disulfide	76	7.248	7.248	(0.730)	303350	10.0000	10.6255 (M)
13 tert-Butyl Alcohol (TBA)	59	7.494	7.490	(0.755)	83207	100.000	104.6885
14 Methylene Chloride	84	7.552	7.552	(0.760)	90880	10.0000	10.2335 (M)
15 MTBE	73	7.777	7.783	(0.783)	296198	10.0000	10.4705
16 trans-1,2-Dichloroethene	96	7.882	7.878	(0.794)	89581	10.0000	10.5606
17 Isopropyl Ether (DIPE)	45	8.380	8.385	(0.844)	311934	10.0000	10.2096
18 Vinyl Acetate	43	8.459	8.470	(0.852)	143893	10.0000	9.9166 (M)
19 1,1-Dichloroethane	63	8.543	8.548	(0.860)	153419	10.0000	10.5439
20 Ethyl tert-Butyl Ether (ETBE)	59	8.904	8.910	(0.897)	253139	10.0000	10.2945
21 2-Butanone	43	9.329	9.335	(0.939)	36843	10.0000	10.0708
22 2,2-Dichloropropane	77	9.355	9.361	(0.942)	120178	10.0000	10.4914

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
23 cis-1,2-Dichloroethene	96	9.376	9.377	(0.944)	93025	10.0000	10.1842
24 Tetrahydrofuran	42	9.733	9.734	(0.980)	254953	100.000	103.5822
25 Bromochloromethane	128	9.733	9.744	(0.980)	43156	10.0000	10.0741
26 Chloroform	83	9.754	9.760	(0.982)	157214	10.0000	10.4336
* 27 Pentafluorobenzene	168	9.932	9.949	(1.000)	855728	50.0000	
28 Dibromofluoromethane	113	9.995	10.006	(1.006)	393013	50.0000	49.2833
29 1,1,1-Trichloroethane	97	10.042	10.053	(1.011)	144436	10.0000	10.9292
30 Carbon Tetrachloride	117	10.236	10.247	(0.931)	93669	10.0000	10.5766
31 1,1-Dichloropropene	75	10.252	10.258	(0.932)	116755	10.0000	11.4220
32 1,2-Dichloroethane-d4	65	10.530	10.541	(0.958)	514679	50.0000	50.4552
33 Methyl tert-Amyl Ether (TAME)	73	10.530	10.546	(0.958)	278541	10.0000	10.2092
34 Benzene	78	10.551	10.562	(0.959)	378491	10.0000	10.5726
35 1,2-Dichloroethane	62	10.640	10.646	(0.968)	130131	10.0000	10.0822
* 36 1,4-Difluorobenzene	114	10.996	11.008	(1.000)	1365963	50.0000	
37 Trichloroethene	95	11.353	11.364	(1.032)	91318	10.0000	10.3385
38 Trifluorotoluene	146	11.652	11.663	(1.060)	164956	10.0000	11.1082
39 1,2-Dichloropropane	63	11.709	11.726	(1.065)	84081	10.0000	10.0036
40 Dibromomethane	93	11.883	11.888	(1.081)	54326	10.0000	10.2391
41 Bromodichloromethane	83	12.008	12.014	(1.092)	119303	10.0000	10.5048
42 2-Chloroethylvinylether	63	12.297	12.308	(1.118)	45824	10.0000	9.9380
43 Tetramethyl THF	43	12.485	12.497	(1.135)	118960	10.0000	10.3567
44 cis-1,3-Dichloropropene	75	12.543	12.554	(1.141)	145288	10.0000	10.3940
45 4-Methyl-2-Pentanone	43	12.653	12.664	(1.151)	76468	10.0000	10.6074
46 Toluene-d8	98	12.831	12.843	(1.167)	1637156	50.0000	50.0908
47 Toluene	92	12.915	12.927	(1.174)	244210	10.0000	10.6804
48 trans-1,3-Dichloropropene	75	13.193	13.204	(1.200)	137087	10.0000	10.3903
49 1,1,2-Trichloroethane	85	13.429	13.435	(1.221)	45125	10.0000	10.9694
50 Tetrachloroethene	166	13.539	13.551	(0.933)	100071	10.0000	11.0468
51 2-Hexanone	43	13.613	13.624	(0.938)	49311	10.0000	9.8664
52 1,3-Dichloropropane	76	13.644	13.655	(0.940)	146915	10.0000	10.3904
53 Dibromochloromethane	129	13.885	13.897	(0.957)	93939	10.0000	10.5109
54 1,2-Dibromoethane	107	14.074	14.085	(1.280)	84717	10.0000	10.1900
* 55 Chlorobenzene-d5	117	14.515	14.526	(1.000)	1453044	50.0000	
56 Chlorobenzene	112	14.546	14.562	(1.002)	279711	10.0000	10.6546
57 Ethylbenzene	91	14.583	14.599	(1.005)	459610	10.0000	11.1503
58 1,1,1,2-Tetrachloroethane	131	14.619	14.625	(1.007)	98060	10.0000	10.5446
59 m,p-Xylenes	106	14.703	14.714	(1.013)	330343	20.0000	20.2145
60 o-Xylene	106	15.138	15.155	(1.043)	156774	10.0000	10.0353
61 Styrene	104	15.159	15.171	(1.044)	267678	10.0000	10.7371
62 Bromoform	173	15.437	15.448	(1.064)	72756	10.0000	10.3920
63 Isopropylbenzene	105	15.484	15.490	(0.913)	417247	10.0000	11.4465
65 Bromofluorobenzene	95	15.726	15.737	(0.927)	844314	50.0000	50.2544
66 1,1,2,2-Tetrachloroethane	83	15.841	15.857	(0.934)	100116	10.0000	10.5882
67 Propylbenzene	91	15.904	15.920	(0.937)	451126	10.0000	11.1472
68 Bromobenzene	156	15.925	15.936	(0.939)	127504	10.0000	10.7399
69 1,2,3-Trichloropropane	75	15.935	15.947	(0.939)	108342	10.0000	10.1034
70 1,3,5-Trimethylbenzene	105	16.066	16.082	(0.947)	334101	10.0000	11.2868
71 2-Chlorotoluene	91	16.082	16.093	(0.948)	354873	10.0000	10.9346
72 4-Chlorotoluene	91	16.192	16.209	(0.954)	316083	10.0000	10.6153
73 tert-Butylbenzene	119	16.428	16.445	(0.968)	300039	10.0000	11.5641
74 1,2,4-Trimethylbenzene	105	16.486	16.501	(0.972)	352855	10.0000	11.1970
75 sec-Butylbenzene	105	16.659	16.675	(0.982)	404263	10.0000	11.5016
76 para-Isopropyl Toluene	119	16.785	16.800	(0.989)	342180	10.0000	11.2320
77 1,3-Dichlorobenzene	146	16.900	16.911	(0.996)	229260	10.0000	10.7756

Data File: \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL909.D
Report Date: 11-Dec-2006 13:29

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ug/L)	ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	16.968	16.985	(1.000)	790560	50.0000	
79 1,4-Dichlorobenzene	146	17.000	17.011	(1.002)	234184	10.0000	10.6694
80 n-Butylbenzene	91	17.246	17.263	(1.016)	319140	10.0000	11.6864
81 1,2-Dichlorobenzene	146	17.451	17.466	(1.028)	213144	10.0000	10.5952
82 1,2-Dibromo-3-Chloropropane	75	18.421	18.437	(1.086)	18423	10.0000	9.2686
83 1,2,4-Trichlorobenzene	180	19.532	19.554	(1.151)	155602	10.0000	10.6339
84 Hexachlorobutadiene	225	19.632	19.653	(1.157)	75770	10.0000	11.6479
85 Naphthalene	128	19.983	20.010	(1.178)	363493	10.0000	10.5591
86 1,2,3-Trichlorobenzene	180	20.381	20.403	(1.201)	149682	10.0000	10.3618

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Comserver\DD\chem\MSV0411.i\120906.b\KL909.D

Date : 09-DEC-2006 19:09

Client ID: DYNA P&T

Sample Info: ICAL.S4931.0.002/100,

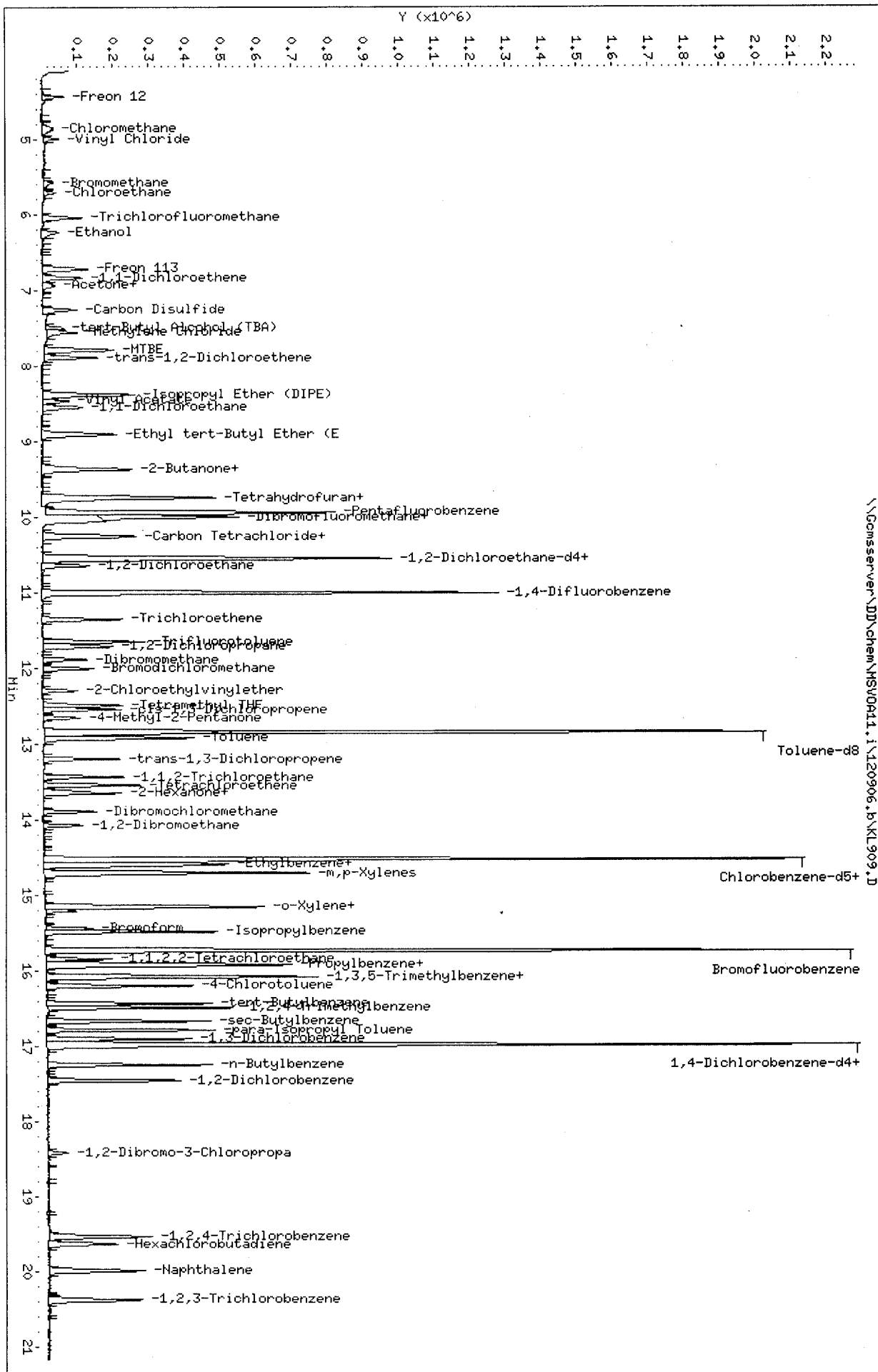
Purge Volume: 5.0

Column phase: RTX Volatiles

Instrument: MSV0411.i

Operator: WOC

Column diameter: 0.32



Data File: \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL910.D
 Report Date: 11-Dec-2006 11:35

Laboratory Name

Data file : \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL910.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 09-DEC-2006 19:37 MS Autotune Date: 29-JUL-2005 08:48
 Operator : VOC Inst ID: MSVOA11.i
 Smp Info : ICAL,S4931,0.004/100,
 Misc Info : S5064,0.004/100,S4172,0.002/100,20PPB
 Comment :
 Method : \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\8260GX11.m
 Meth Date : 11-Dec-2006 11:35 target Quant Type: ISTD
 Cal Date : 09-DEC-2006 19:37 Cal File: KL910.D
 Als bottle: 25 Calibration Sample, Level: 6
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA_WK01

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	AMOUNTS						
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
							(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	
1 Freon 12	85	4.432	4.417	(0.446)	184917	20.0000	20.9036	
2 Chloromethane	50	4.852	4.800	(0.488)	188030	20.0000	19.5706 (M)	
3 Vinyl Chloride	62	4.983	4.973	(0.501)	181154	20.0000	19.8242 (M)	
4 Bromomethane	94	5.570	5.560	(0.561)	106802	20.0000	19.7882 (M)	
5 Chloroethane	64	5.706	5.702	(0.574)	118505	20.0000	20.1036 (M)	
6 Trichlorofluoromethane	101	6.037	6.027	(0.607)	268531	20.0000	19.9447	
7 Ethanol	45	6.231	6.226	(0.627)	198394	2000.00	2134.2297 (M)	
8 Freon 113	101	6.713	6.708	(0.676)	164931	20.0000	23.2951	
9 1,1-Dichloroethene	96	6.828	6.824	(0.687)	124092	20.0000	19.5394	
10 Acetone	43	6.907	6.908	(0.695)	72829	20.0000	21.7087	
11 Isopropanol	45	6.939	6.939	(0.698)	99971	200.000	206.8290	
12 Carbon Disulfide	76	7.248	7.248	(0.729)	591048	20.0000	20.6492 (M)	
13 tert-Butyl Alcohol (TBA)	59	7.494	7.490	(0.754)	168285	200.000	210.3678	
14 Methylene Chloride	84	7.552	7.552	(0.760)	173955	20.0000	19.7391 (M)	
15 MTBE	73	7.777	7.783	(0.783)	615011	20.0000	21.6005	
16 trans-1,2-Dichloroethene	96	7.877	7.878	(0.793)	174026	20.0000	20.3836	
17 Isopropyl Ether (DIPE)	45	8.380	8.385	(0.843)	639260	20.0000	20.7883	
18 Vinyl Acetate	43	8.464	8.470	(0.852)	235619	20.0000	15.2599 (M)	
19 1,1-Dichloroethane	63	8.543	8.548	(0.860)	301579	20.0000	20.5930	
20 Ethyl tert-Butyl Ether (ETBE)	59	8.899	8.910	(0.896)	520146	20.0000	21.0168	
21 2-Butanone	43	9.329	9.335	(0.939)	75814	20.0000	20.5898	
22 2,2-Dichloropropane	77	9.350	9.361	(0.941)	240607	20.0000	20.8695	

Compounds	QUANT SIG	AMOUNTS					
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
23 cis-1,2-Dichloroethene	96	9.371	9.377	(0.943)	185817	20.0000	20.2119
24 Tetrahydrofuran	42	9.733	9.734	(0.979)	517635	200.000	208.9504
25 Bromochloromethane	128	9.733	9.744	(0.979)	86602	20.0000	20.0857
26 Chloroform	83	9.754	9.760	(0.982)	309954	20.0000	20.4379
* 27 Pentafluorobenzene	168	9.938	9.949	(1.000)	861274	50.0000	
28 Dibromofluoromethane	113	9.995	10.006	(1.006)	406069	50.0000	50.5927
29 1,1,1-Trichloroethane	97	10.048	10.053	(1.011)	272796	20.0000	20.5091
30 Carbon Tetrachloride	117	10.236	10.247	(0.931)	187831	20.0000	21.0549
31 1,1-Dichloropropene	75	10.252	10.258	(0.932)	218130	20.0000	21.1845
32 1,2-Dichloroethane-d4	65	10.530	10.541	(0.958)	521442	50.0000	50.7472
33 Methyl tert-Amyl Ether (TAME)	73	10.530	10.546	(0.958)	572732	20.0000	20.8396
34 Benzene	78	10.551	10.562	(0.959)	746400	20.0000	20.6983
35 1,2-Dichloroethane	62	10.635	10.646	(0.967)	255659	20.0000	19.6640
* 36 1,4-Difluorobenzene	114	10.997	11.008	(1.000)	1375950	50.0000	
37 Trichloroethene	95	11.358	11.364	(1.033)	194822	20.0000	21.8966
38 Trifluorotoluene	146	11.652	11.663	(1.060)	332044	20.0000	22.1978
39 1,2-Dichloropropane	63	11.715	11.726	(1.065)	169112	20.0000	19.9742
40 Dibromomethane	93	11.883	11.888	(1.081)	105940	20.0000	19.8221
41 Bromodichloromethane	83	12.003	12.014	(1.092)	232059	20.0000	20.2848
42 2-Chloroethylvinylether	63	12.297	12.308	(1.118)	96971	20.0000	19.2778
43 Tetramethyl THF	43	12.486	12.497	(1.135)	240721	20.0000	20.8053
44 cis-1,3-Dichloropropene	75	12.543	12.554	(1.141)	286694	20.0000	20.3614
45 4-Methyl-2-Pentanone	43	12.653	12.664	(1.151)	153685	20.0000	21.1640
46 Toluene-d8	98	12.832	12.843	(1.167)	1647785	50.0000	50.0500
47 Toluene	92	12.916	12.927	(1.174)	475868	20.0000	20.6609
48 trans-1,3-Dichloropropene	75	13.194	13.204	(1.200)	272603	20.0000	20.5117
49 1,1,2-Trichloroethane	85	13.424	13.435	(1.221)	90966	20.0000	21.9525
50 Tetrachloroethene	166	13.540	13.551	(0.933)	197759	20.0000	21.7670
51 2-Hexanone	43	13.608	13.624	(0.938)	109780	20.0000	21.9015
52 1,3-Dichloropropane	76	13.639	13.655	(0.940)	296649	20.0000	20.9190
53 Dibromochloromethane	129	13.886	13.897	(0.957)	186037	20.0000	20.7552
54 1,2-Dibromoethane	107	14.069	14.085	(1.279)	174204	20.0000	20.8017
* 55 Chlorobenzene-d5	117	14.515	14.526	(1.000)	1457288	50.0000	
56 Chlorobenzene	112	14.546	14.562	(1.002)	527246	20.0000	20.0252
57 Ethylbenzene	91	14.583	14.599	(1.005)	894171	20.0000	21.6298
58 1,1,1,2-Tetrachloroethane	131	14.614	14.625	(1.007)	197505	20.0000	21.1763
59 m,p-Xylenes	106	14.704	14.714	(1.013)	700336	40.0000	42.0818
60 o-Xylene	106	15.139	15.155	(1.043)	327094	20.0000	20.3041
61 Styrene	104	15.160	15.171	(1.044)	535227	20.0000	21.4066
62 Bromoform	173	15.438	15.448	(1.064)	142415	20.0000	20.2824
63 Isopropylbenzene	105	15.479	15.490	(0.912)	833178	20.0000	22.7980
65 Bromofluorobenzene	95	15.726	15.737	(0.927)	845021	50.0000	50.1669
66 1,1,2,2-Tetrachloroethane	83	15.846	15.857	(0.934)	189454	20.0000	19.9849
67 Propylbenzene	91	15.904	15.920	(0.937)	929429	20.0000	22.9068
68 Bromobenzene	156	15.925	15.936	(0.939)	248063	20.0000	20.8411
69 1,2,3-Trichloropropane	75	15.936	15.947	(0.939)	222727	20.0000	20.7168
70 1,3,5-Trimethylbenzene	105	16.061	16.082	(0.947)	650614	20.0000	21.9228
71 2-Chlorotoluene	91	16.082	16.093	(0.948)	711792	20.0000	21.8757
72 4-Chlorotoluene	91	16.198	16.209	(0.955)	646517	20.0000	21.6567
73 tert-Butylbenzene	119	16.428	16.445	(0.968)	579679	20.0000	22.2844
74 1,2,4-Trimethylbenzene	105	16.481	16.501	(0.971)	679859	20.0000	21.5181
75 sec-Butylbenzene	105	16.659	16.675	(0.982)	805569	20.0000	22.8601
76 para-Isopropyl Toluene	119	16.785	16.800	(0.989)	691054	20.0000	22.6254
77 1,3-Dichlorobenzene	146	16.900	16.911	(0.996)	454984	20.0000	21.3300

Data File: \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL910.D
Report Date: 11-Dec-2006 11:35

Compounds	QUANT SIG		RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
	MASS						CAL-AMT (ug/L)	ON-COL (ug/L)
*****	----		----	-----	-----	-----	-----	-----
* 78 1,4-Dichlorobenzene-d4	152		16.968	16.985	(1.000)	792603	50.0000	
79 1,4-Dichlorobenzene	146		17.000	17.011	(1.002)	463783	20.0000	21.0755
80 n-Butylbenzene	91		17.246	17.263	(1.016)	631310	20.0000	23.0580
81 1,2-Dichlorobenzene	146		17.456	17.466	(1.029)	421714	20.0000	20.9090
82 1,2-Dibromo-3-Chloropropane	75		18.416	18.437	(1.085)	36847	20.0000	18.4899
83 1,2,4-Trichlorobenzene	180		19.532	19.554	(1.151)	317147	20.0000	21.6181
84 Hexachlorobutadiene	225		19.632	19.653	(1.157)	144870	20.0000	22.2131
85 Naphthalene	128		19.988	20.010	(1.178)	765711	20.0000	22.1858
86 1,2,3-Trichlorobenzene	180		20.382	20.403	(1.201)	300121	20.0000	20.7225

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Gomserver\DD\chem\MSV0A11.i\120906.b\KL910.D

Date : 09-DEC-2006 19:37

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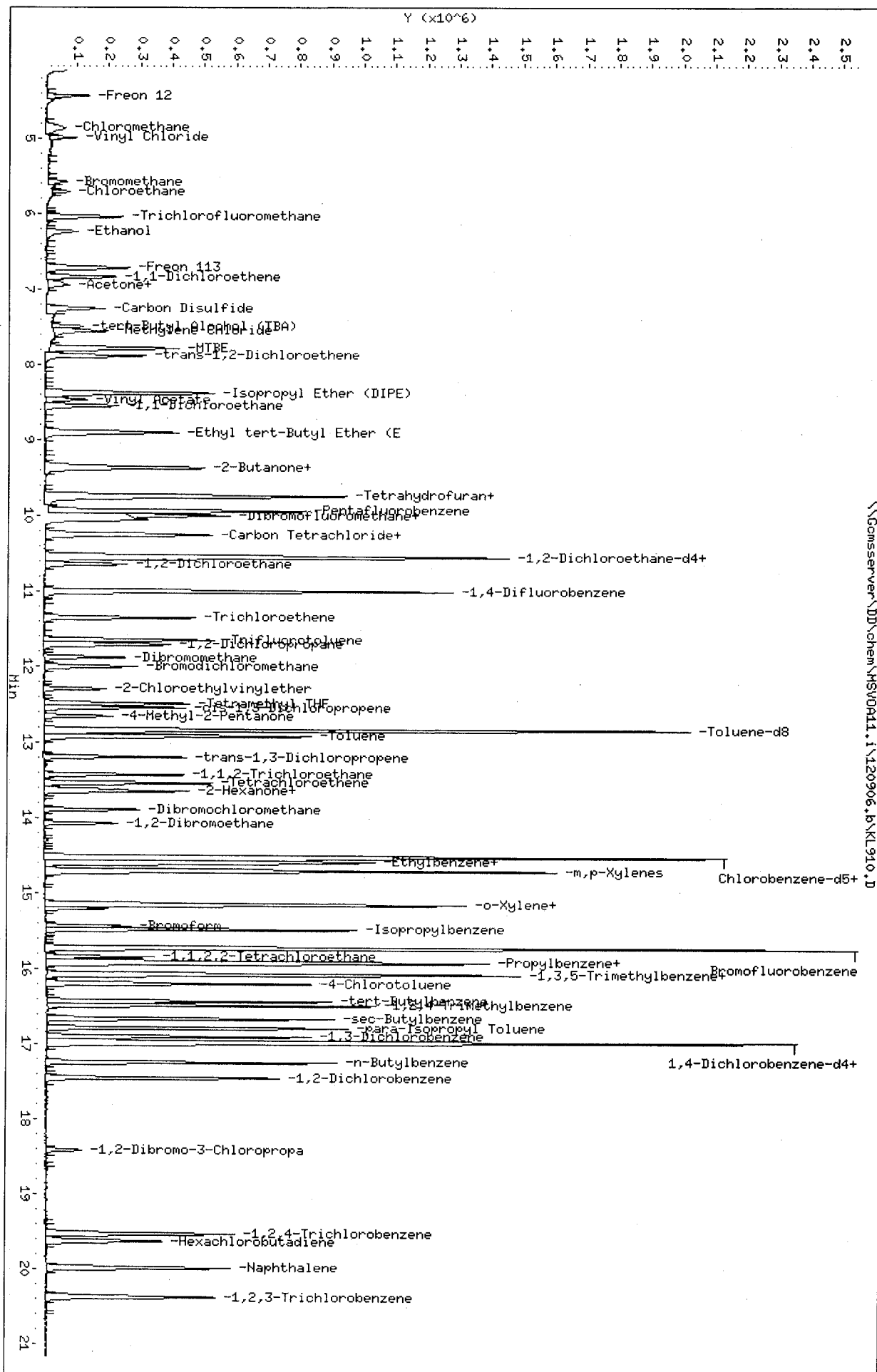
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Instrument: MSV0A11.i

Operator: VDC

Column diameter: 0.32



Data File: \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL911.D
Report Date: 11-Dec-2006 13:31

Laboratory Name

Data file : \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL911.D
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Inj Date : 09-DEC-2006 20:05 MS Autotune Date: 29-JUL-2005 08:48
Operator : VOC Inst ID: MSVOA11.i
Smp Info : ICAL,S4931,0.01/100,
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Meth Date : 11-Dec-2006 13:31 target Quant Type: ISTD
Cal Date : 09-DEC-2006 20:05 Cal File: KL911.D
Als bottle: 26 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA_WK01

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.427	4.417	(0.446)	451596	50.0000	49.5862
2 Chloromethane	50	4.867	4.800	(0.490)	478752	50.0000	47.9203
3 Vinyl Chloride	62	4.988	4.973	(0.502)	469835	50.0000	49.7121 (M)
4 Bromomethane	94	5.570	5.560	(0.561)	281979	50.0000	50.6395 (M)
5 Chloroethane	64	5.706	5.702	(0.575)	300506	50.0000	49.4174 (M)
6 Trichlorofluoromethane	101	6.037	6.027	(0.608)	688866	50.0000	49.6975
7 Ethanol	45	6.236	6.226	(0.628)	455975	5000.00	4764.5321
8 Freon 113	101	6.713	6.708	(0.676)	334667	50.0000	45.9138
9 1,1-Dichloroethene	96	6.834	6.824	(0.688)	310126	50.0000	47.4323
10 Acetone	43	6.907	6.908	(0.695)	157504	50.0000	45.6024
11 Isopropanol	45	6.938	6.939	(0.699)	249873	500.000	502.1384
12 Carbon Disulfide	76	7.248	7.248	(0.730)	1461451	50.0000	49.3063 (M)
13 tert-Butyl Alcohol (TBA)	59	7.489	7.490	(0.754)	427493	500.000	519.0742
14 Methylene Chloride	84	7.552	7.552	(0.760)	425909	50.0000	46.1805 (M)
15 MTBE	73	7.777	7.783	(0.783)	1526593	50.0000	52.0801
16 trans-1,2-Dichloroethene	96	7.882	7.878	(0.794)	415794	50.0000	47.3056
17 Isopropyl Ether (DIPE)	45	8.375	8.385	(0.843)	1627214	50.0000	51.3987
18 Vinyl Acetate	43	8.464	8.470	(0.852)	978842	50.0000	52.5328 (M)
19 1,1-Dichloroethane	63	8.548	8.548	(0.861)	742219	50.0000	49.2288
20 Ethyl tert-Butyl Ether (ETBE)	59	8.905	8.910	(0.897)	1315289	50.0000	51.6213
21 2-Butanone	43	9.329	9.335	(0.939)	183044	50.0000	48.2866
22 2,2-Dichloropropane	77	9.361	9.361	(0.942)	566670	50.0000	47.7421

Data File: \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL911.D
Report Date: 11-Dec-2006 13:31

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
23 cis-1,2-Dichloroethene	96	9.371	9.377	(0.944)	435777	50.0000	46.0420
24 Tetrahydrofuran	42	9.733	9.734	(0.980)	1246724	500.000	488.8286
25 Bromochloromethane	128	9.738	9.744	(0.980)	222526	50.0000	50.1312
26 Chloroform	83	9.754	9.760	(0.982)	763236	50.0000	48.8839
* 27 Pentafluorobenzene	168	9.932	9.949	(1.000)	886696	50.0000	
28 Dibromofluoromethane	113	9.995	10.006	(1.006)	411205	50.0000	49.7637
29 1,1,1-Trichloroethane	97	10.048	10.053	(1.012)	657727	50.0000	48.0310
30 Carbon Tetrachloride	117	10.242	10.247	(0.931)	415670	50.0000	45.5174
31 1,1-Dichloropropene	75	10.252	10.258	(0.932)	514787	50.0000	48.8396
32 1,2-Dichloroethane-d4	65	10.530	10.541	(0.958)	525354	50.0000	49.9460
33 Methyl tert-Amyl Ether (TAME)	73	10.535	10.546	(0.958)	1459260	50.0000	51.8698
34 Benzene	78	10.551	10.562	(0.959)	1798689	50.0000	48.7262
35 1,2-Dichloroethane	62	10.635	10.646	(0.967)	627279	50.0000	47.1318
* 36 1,4-Difluorobenzene	114	10.997	11.008	(1.000)	1408512	50.0000	
37 Trichloroethene	95	11.353	11.364	(1.032)	424333	50.0000	46.5896
38 Trifluorotoluene	146	11.652	11.663	(1.060)	729622	50.0000	47.6491
39 1,2-Dichloropropane	63	11.710	11.726	(1.065)	435978	50.0000	50.3041
40 Dibromomethane	93	11.883	11.888	(1.081)	268923	50.0000	49.1542
41 Bromodichloromethane	83	12.003	12.014	(1.092)	591986	50.0000	50.5507
42 2-Chloroethylvinylether	63	12.292	12.308	(1.118)	258762	50.0000	49.9873
43 Tetramethyl THF	43	12.486	12.497	(1.135)	619045	50.0000	52.2666
44 cis-1,3-Dichloropropene	75	12.543	12.554	(1.141)	745356	50.0000	51.7125
45 4-Methyl-2-Pentanone	43	12.648	12.664	(1.150)	381189	50.0000	51.2801
46 Toluene-d8	98	12.832	12.843	(1.167)	1683615	50.0000	49.9561
47 Toluene	92	12.916	12.927	(1.174)	1172073	50.0000	49.7118
48 trans-1,3-Dichloropropene	75	13.193	13.204	(1.200)	712411	50.0000	52.3654
49 1,1,2-Trichloroethane	85	13.429	13.435	(1.221)	216233	50.0000	50.9763
50 Tetrachloroethene	166	13.534	13.551	(0.932)	440855	50.0000	47.6292
51 2-Hexanone	43	13.608	13.624	(0.938)	259906	50.0000	50.8957
52 1,3-Dichloropropane	76	13.644	13.655	(0.940)	739560	50.0000	51.1902
53 Dibromochloromethane	129	13.886	13.897	(0.957)	480242	50.0000	52.5898
54 1,2-Dibromoethane	107	14.069	14.085	(1.279)	432342	50.0000	50.4326
* 55 Chlorobenzene-d5	117	14.515	14.526	(1.000)	1484675	50.0000	
56 Chlorobenzene	112	14.546	14.562	(1.002)	1296452	50.0000	48.3319
57 Ethylbenzene	91	14.588	14.599	(1.005)	2111945	50.0000	50.1452
58 1,1,1,2-Tetrachloroethane	131	14.614	14.625	(1.007)	474513	50.0000	49.9384
59 m,p-Xylenes	106	14.703	14.714	(1.013)	1701970	100.000	100.0707
60 o-Xylene	106	15.139	15.155	(1.043)	842427	50.0000	50.6719
61 Styrene	104	15.160	15.171	(1.044)	1365145	50.0000	53.5925
62 Bromoform	173	15.437	15.448	(1.064)	377732	50.0000	52.8035
63 Isopropylbenzene	105	15.479	15.490	(0.912)	1940192	50.0000	50.7617
65 Bromofluorobenzene	95	15.726	15.737	(0.927)	864675	50.0000	49.0834
66 1,1,2,2-Tetrachloroethane	83	15.846	15.857	(0.934)	499962	50.0000	50.4277
67 Propylbenzene	91	15.904	15.920	(0.937)	2199561	50.0000	51.8342
68 Bromobenzene	156	15.925	15.936	(0.939)	608302	50.0000	48.8664
69 1,2,3-Trichloropropane	75	15.936	15.947	(0.939)	532022	50.0000	47.3164
70 1,3,5-Trimethylbenzene	105	16.061	16.082	(0.947)	1528996	50.0000	49.2620
71 2-Chlorotoluene	91	16.082	16.093	(0.948)	1674097	50.0000	49.1951
72 4-Chlorotoluene	91	16.192	16.209	(0.954)	1564863	50.0000	50.1213
73 tert-Butylbenzene	119	16.428	16.445	(0.968)	1357520	50.0000	49.8991
74 1,2,4-Trimethylbenzene	105	16.486	16.501	(0.972)	1650210	50.0000	49.9409
75 sec-Butylbenzene	105	16.659	16.675	(0.982)	1857332	50.0000	50.3962
76 para-Isopropyl Toluene	119	16.785	16.800	(0.989)	1636982	50.0000	51.2460
77 1,3-Dichlorobenzene	146	16.900	16.911	(0.996)	1105055	50.0000	49.5348

Data File: \\Gcmsserver\DD\chem\MSVOA11.i\120906.b\KL911.D
 Report Date: 11-Dec-2006 13:31

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
* 78 1,4-Dichlorobenzene-d4	152	16.968	16.985	(1.000)	828941	50.0000	
79 1,4-Dichlorobenzene	146	17.000	17.011	(1.002)	1129243	50.0000	49.0662
80 n-Butylbenzene	91	17.241	17.263	(1.016)	1406165	50.0000	49.1076
81 1,2-Dichlorobenzene	146	17.451	17.466	(1.028)	1066970	50.0000	50.5826
82 1,2-Dibromo-3-Chloropropane	75	18.421	18.437	(1.086)	105100	50.0000	50.4275
83 1,2,4-Trichlorobenzene	180	19.532	19.554	(1.151)	789364	50.0000	51.4479
84 Hexachlorobutadiene	225	19.627	19.653	(1.157)	325645	50.0000	47.7427
85 Naphthalene	128	19.988	20.010	(1.178)	2041392	50.0000	56.5547
86 1,2,3-Trichlorobenzene	180	20.382	20.403	(1.201)	776543	50.0000	51.2677

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Gomsserver\DD\chem\MSV0411.i\120906.b\KL911.D

Date : 09-DEC-2006 20:05

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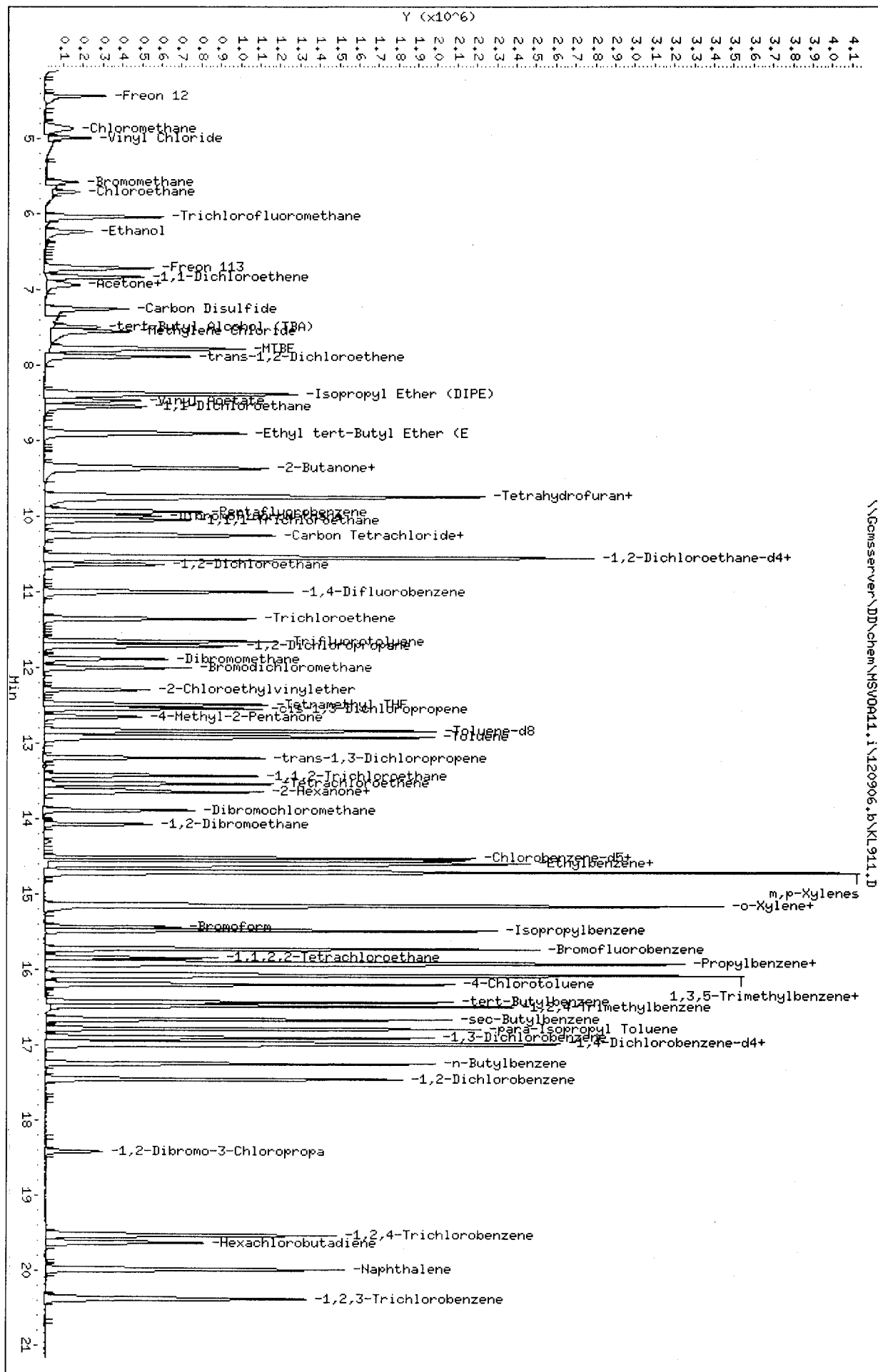
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Instrument: MSV0411.i

Operator: VOC

Column diameter: 0.32



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 Report Date: 11-Dec-2006 13:33

Laboratory Name

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 Method : \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\8260GX11.m
 Meth Date : 11-Dec-2006 13:33 target Quant Type: ISTD
 Cal Date : 09-DEC-2006 20:33 Cal File: KL912.D
 Als bottle: 27 Calibration Sample, Level: 8
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA_WK01

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.427	4.417 (0.446)		640160	75.0000	69.3017
2 Chloromethane	50	4.852	4.800 (0.488)		738832	75.0000	72.9120
3 Vinyl Chloride	62	4.983	4.973 (0.501)		741675	75.0000	77.2330 (M)
4 Bromomethane	94	5.570	5.560 (0.561)		449276	75.0000	79.4669 (M)
5 Chloroethane	64	5.712	5.702 (0.575)		471014	75.0000	76.3670 (M)
6 Trichlorofluoromethane	101	6.037	6.027 (0.607)		1038008	75.0000	73.8322
7 Ethanol	45	6.236	6.226 (0.628)		698355	7500.00	7194.4903
8 Freon 113	101	6.708	6.708 (0.675)		541908	75.0000	73.2994
9 1,1-Dichloroethene	96	6.828	6.824 (0.687)		459696	75.0000	69.3188
10 Acetone	43	6.907	6.908 (0.695)		237107	75.0000	67.6839
11 Isopropanol	45	6.939	6.939 (0.698)		382034	750.000	756.9212
12 Carbon Disulfide	76	7.248	7.248 (0.729)		2206038	75.0000	73.2329 (M)
13 tert-Butyl Alcohol (TBA)	59	7.489	7.490 (0.754)		636425	750.000	761.8900
14 Methylene Chloride	84	7.547	7.552 (0.759)		627784	75.0000	66.9645 (M)
15 MTBE	73	7.777	7.783 (0.783)		2320280	75.0000	78.0429
16 trans-1,2-Dichloroethene	96	7.877	7.878 (0.793)		629412	75.0000	70.6016
17 Isopropyl Ether (DIPE)	45	8.375	8.385 (0.843)		2487393	75.0000	77.4634
18 Vinyl Acetate	43	8.459	8.470 (0.851)		1504826	75.0000	74.0219
19 1,1-Dichloroethane	63	8.543	8.548 (0.860)		1114935	75.0000	72.9090
20 Ethyl tert-Butyl Ether (ETBE)	59	8.899	8.910 (0.896)		2022974	75.0000	78.2785
21 2-Butanone	43	9.329	9.335 (0.939)		271778	75.0000	70.6854
22 2,2-Dichloropropane	77	9.356	9.361 (0.941)		852954	75.0000	70.8503

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 cis-1,2-Dichlorobethene	96	9.371	9.377 (0.943)		645028		75.0000	67.1913
24 Tetrahydrofuran	42	9.728	9.734 (0.979)		1859857		750.000	718.9694
25 Bromochloromethane	128	9.733	9.744 (0.979)		333118		75.0000	73.9895
26 Chloroform	83	9.754	9.760 (0.982)		1158643		75.0000	73.1646
* 27 Pentafluorobenzene	168	9.938	9.949 (1.000)		899353		50.0000	
28 Dibromofluoromethane	113	9.995	10.006 (1.006)		415057		50.0000	49.5230
29 1,1,1-Trichloroethane	97	10.048	10.053 (1.011)		998473		75.0000	71.8881
30 Carbon Tetrachloride	117	10.242	10.247 (0.931)		677053		75.0000	72.9163
31 1,1-Dichloropropene	75	10.252	10.258 (0.932)		818587		75.0000	76.3804
32 1,2-Dichloroethane-d4	65	10.535	10.541 (0.958)		527007		50.0000	49.2762
33 Methyl tert-Amyl Ether (TAME)	73	10.535	10.546 (0.958)		2180413		75.0000	76.2242
34 Benzene	78	10.551	10.562 (0.959)		2724316		75.0000	72.5832
35 1,2-Dichloroethane	62	10.640	10.646 (0.968)		955732		75.0000	70.6256
* 36 1,4-Difluorobenzene	114	10.997	11.008 (1.000)		1432149		50.0000	
37 Trichloroethene	95	11.353	11.364 (1.032)		677226		75.0000	73.1288
38 Trifluorotoluene	146	11.652	11.663 (1.060)		1147726		75.0000	73.7169
39 1,2-Dichloropropane	63	11.715	11.726 (1.065)		645159		75.0000	73.2112
40 Dibromomethane	93	11.883	11.888 (1.081)		408911		75.0000	73.5079
41 Bromodichloromethane	83	11.998	12.014 (1.091)		903699		75.0000	75.8948
42 2-Chloroethylvinylether	63	12.292	12.308 (1.118)		414549		75.0000	76.0841
43 Tetramethyl THF	43	12.486	12.497 (1.135)		932162		75.0000	77.4045
44 cis-1,3-Dichloropropene	75	12.543	12.554 (1.141)		1101550		75.0000	75.1637
45 4-Methyl-2-Pentanone	43	12.648	12.664 (1.150)		572972		75.0000	75.8079
46 Toluene-d8	98	12.832	12.843 (1.167)		1714388		50.0000	50.0296
47 Toluene	92	12.916	12.927 (1.174)		1775148		75.0000	74.0477
48 trans-1,3-Dichloropropene	75	13.194	13.204 (1.200)		1047947		75.0000	75.7575
49 1,1,2-Trichloroethane	85	13.429	13.435 (1.221)		329037		75.0000	76.2894
50 Tetrachloroethene	166	13.540	13.551 (0.933)		687139		75.0000	71.8154
51 2-Hexanone	43	13.608	13.624 (0.938)		399564		75.0000	75.6915
52 1,3-Dichloropropane	76	13.644	13.655 (0.940)		1108854		75.0000	74.2478
53 Dibromochloromethane	129	13.886	13.897 (0.957)		722682		75.0000	76.5569
54 1,2-Dibromoethane	107	14.074	14.085 (1.280)		654334		75.0000	75.0682
* 55 Chlorobenzene-d5	117	14.515	14.526 (1.000)		1534743		50.0000	
56 Chlorobenzene	112	14.551	14.562 (1.003)		1963558		75.0000	70.8137
57 Ethylbenzene	91	14.583	14.599 (1.005)		3210179		75.0000	73.7347
58 1,1,1,2-Tetrachloroethane	131	14.614	14.625 (1.007)		711210		75.0000	72.4069
59 m,p-Xylenes	106	14.704	14.714 (1.013)		2630573		150.000	149.3963
60 o-Xylene	106	15.139	15.155 (1.043)		1284131		75.0000	74.4861
61 Styrene	104	15.160	15.171 (1.044)		2103827		75.0000	79.8971
62 Bromoform	173	15.438	15.448 (1.064)		564676		75.0000	76.3614
63 Isopropylbenzene	105	15.479	15.490 (0.912)		3009566		75.0000	76.5372
65 Bromofluorobenzene	95	15.726	15.737 (0.926)		899291		50.0000	49.6203
66 1,1,2,2-Tetrachloroethane	83	15.841	15.857 (0.933)		729112		75.0000	71.4831
67 Propylbenzene	91	15.904	15.920 (0.937)		3385701		75.0000	77.5544
68 Bromobenzene	156	15.925	15.936 (0.938)		912927		75.0000	71.2861
69 1,2,3-Trichloropropane	75	15.936	15.947 (0.939)		779523		75.0000	67.3890
70 1,3,5-Trimethylbenzene	105	16.061	16.082 (0.946)		2441547		75.0000	76.4626
71 2-Chlorotoluene	91	16.082	16.093 (0.947)		2546776		75.0000	72.7461
72 4-Chlorotoluene	91	16.193	16.209 (0.954)		2362404		75.0000	73.5491
73 tert-Butylbenzene	119	16.428	16.445 (0.968)		2144848		75.0000	76.6339
74 1,2,4-Trimethylbenzene	105	16.486	16.501 (0.971)		2543649		75.0000	74.8259
75 sec-Butylbenzene	105	16.659	16.675 (0.981)		2928655		75.0000	77.2422
76 para-Isopropyl Toluene	119	16.785	16.800 (0.989)		2634395		75.0000	80.1631
77 1,3-Dichlorobenzene	146	16.900	16.911 (0.996)		1663272		75.0000	72.4715

Data File: \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL912.D
Report Date: 11-Dec-2006 13:33

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
	MASS					CAL-AMT (ug/L)	ON-COL (ug/L)
*****	----	----	-----	-----	-----	-----	-----
* 78 1,4-Dichlorobenzene-d4	152	16.974	16.985	(1.000)	852798	50.0000	
79 1,4-Dichlorobenzene	146	17.000	17.011	(1.002)	1665334	75.0000	70.3354
80 n-Butylbenzene	91	17.246	17.263	(1.016)	2190222	75.0000	74.3495
81 1,2-Dichlorobenzene	146	17.451	17.466	(1.028)	1591282	75.0000	73.3286
82 1,2-Dibromo-3-Chloropropane	75	18.416	18.437	(1.085)	151879	75.0000	70.8337
83 1,2,4-Trichlorobenzene	180	19.532	19.554	(1.151)	1168638	75.0000	74.0369
84 Hexachlorobutadiene	225	19.632	19.653	(1.157)	502249	75.0000	71.5747
85 Naphthalene	128	19.988	20.010	(1.178)	2975941	75.0000	80.1391
86 1,2,3-Trichlorobenzene	180	20.376	20.403	(1.200)	1140615	75.0000	73.1973

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Gomserver\DD\chem\MSV0A11.1\120906.b\KL912.D

Date : 09-DEC-2006 20:33

Client ID: DYNA P&T

Sample Info: ICAL,S4931,0.015/100,

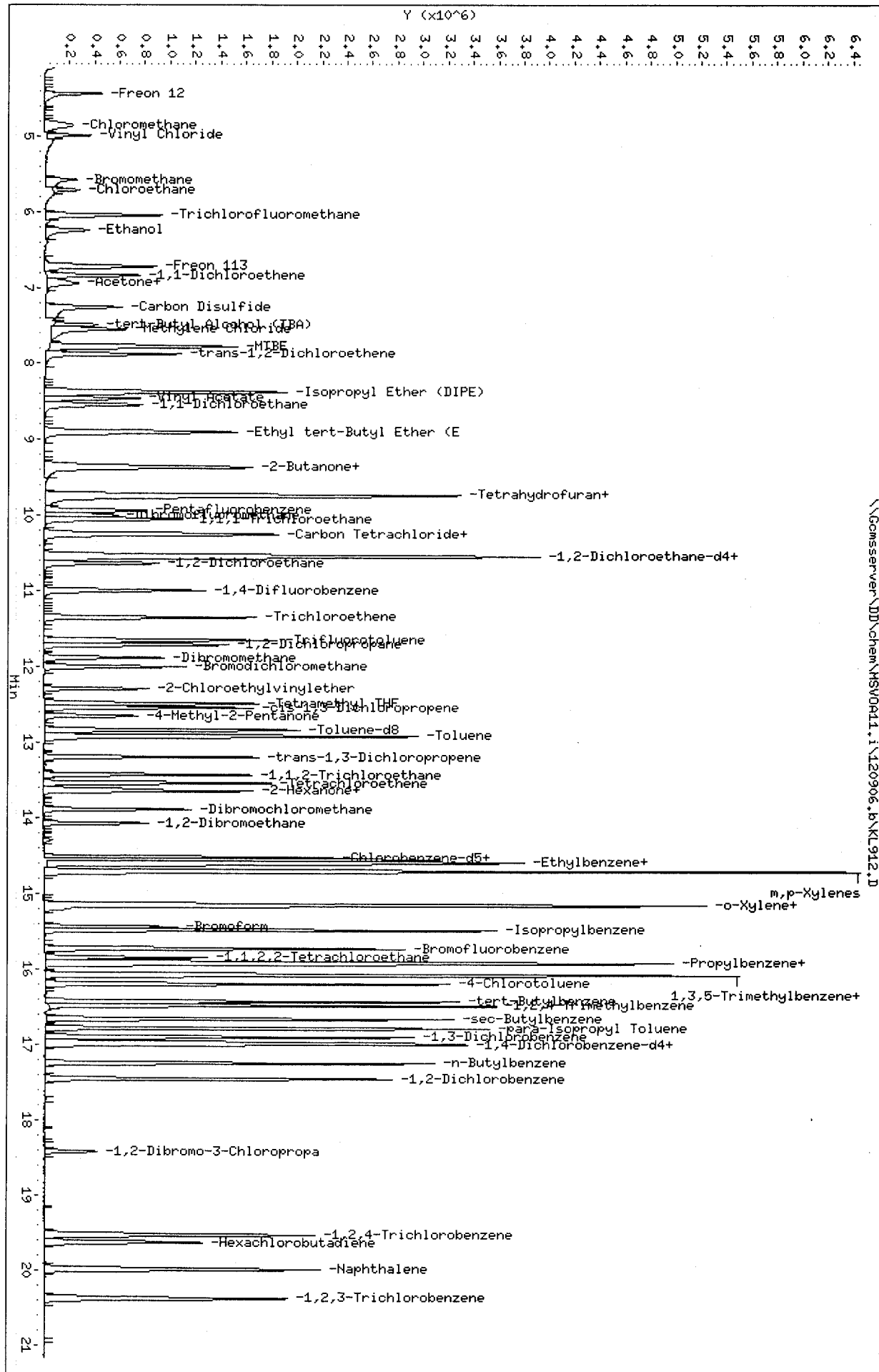
Purge Volume: 5.0

Column phase: RTX Volatiles

Instrument: MSV0A11.i

Operator: VOC

Column diameter: 0.32



Data File: \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL913.D
 Report Date: 11-Dec-2006 11:37

Laboratory Name

Data file : \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL913.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 09-DEC-2006 21:01 MS Autotune Date: 29-JUL-2005 08:48
 Operator : VOC Inst ID: MSVOA11.i
 Smp Info : ICAL,S4931,0.02/100,
 Misc Info : S5064,0.02/100,S4172,0.01/100,100PPB
 Comment :
 Method : \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\8260GX11.m
 Meth Date : 11-Dec-2006 11:37 target Quant Type: ISTD
 Cal Date : 09-DEC-2006 21:01 Cal File: KL913.D
 Als bottle: 28 Calibration Sample, Level: 9
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA_WK01

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	AMOUNTS						
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
							(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	
1 Freon 12	85	4.427	4.417	(0.446)	1063390	100.000	110.3766	
2 Chloromethane	50	4.847	4.800	(0.488)	1010506	100.000	96.5732	
3 Vinyl Chloride	62	4.988	4.973	(0.502)	1015366	100.000	102.0261 (M)	
4 Bromomethane	94	5.575	5.560	(0.561)	634570	100.000	107.9560	
5 Chloroethane	64	5.706	5.702	(0.575)	604570	100.000	94.1725	
6 Trichlorofluoromethane	101	6.037	6.027	(0.608)	1578849	100.000	107.6749	
7 Ethanol	45	6.236	6.226	(0.628)	973643	10000.0	9617.2802	
8 Freon 113	101	6.708	6.708	(0.675)	696592	100.000	90.3404	
9 1,1-Dichloroethene	96	6.828	6.824	(0.688)	633077	100.000	91.5305	
10 Acetone	43	6.912	6.908	(0.696)	321809	100.000	88.0781	
11 Isopropanol	45	6.939	6.939	(0.699)	534418	1000.00	1015.2160	
12 Carbon Disulfide	76	7.248	7.248	(0.730)	3014590	100.000	96.7052	
13 tert-Butyl Alcohol (TBA)	59	7.489	7.490	(0.754)	876716	1000.00	1006.3122	
14 Methylene Chloride	84	7.552	7.552	(0.760)	872075	100.000	90.8624	
15 MTBE	73	7.777	7.783	(0.783)	3224723	100.000	103.9954	
16 trans-1,2-Dichloroethene	96	7.877	7.878	(0.793)	827586	100.000	89.0064	
17 Isopropyl Ether (DIPE)	45	8.380	8.385	(0.844)	3502103	100.000	104.5707	
18 Vinyl Acetate	43	8.464	8.470	(0.852)	2073218	100.000	123.4217 (M)	
19 1,1-Dichloroethane	63	8.543	8.548	(0.860)	1525146	100.000	95.6251	
20 Ethyl tert-Butyl Ether (ETBE)	59	8.905	8.910	(0.897)	2812861	100.000	104.3589	
21 2-Butanone	43	9.329	9.335	(0.939)	381828	100.000	95.2165	
22 2,2-Dichloropropane	77	9.356	9.361	(0.942)	1154857	100.000	91.9758	

Data File: \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL913.D
Report Date: 11-Dec-2006 11:37

Compounds	QUANT SIG	AMOUNTS					
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)
23 cis-1,2-Dichloroethene	96	9.371	9.377	(0.944)	956963	100.000	95.5781
24 Tetrahydrofuran	42	9.728	9.734	(0.979)	2551955	1000.00	945.8726
25 Bromochloromethane	128	9.733	9.744	(0.980)	447350	100.000	95.2682
26 Chloroform	83	9.754	9.760	(0.982)	1577836	100.000	95.5306
* 27 Pentafluorobenzene	168	9.932	9.949	(1.000)	937997	50.0000	
28 Dibromofluoromethane	113	9.995	10.006	(1.006)	419202	50.0000	47.9569
29 1,1,1-Trichloroethane	97	10.048	10.053	(1.012)	1348280	100.000	93.0742
30 Carbon Tetrachloride	117	10.236	10.247	(0.931)	923285	100.000	97.7679
31 1,1-Dichloropropene	75	10.252	10.258	(0.932)	1086173	100.000	99.6495
32 1,2-Dichloroethane-d4	65	10.535	10.541	(0.958)	546645	50.0000	50.2557
33 Methyl tert-Amyl Ether (TAME)	73	10.535	10.546	(0.958)	3058217	100.000	105.1190
34 Benzene	78	10.556	10.562	(0.960)	3776759	100.000	98.9366
35 1,2-Dichloroethane	62	10.640	10.646	(0.968)	1312087	100.000	95.3340
* 36 1,4-Difluorobenzene	114	10.997	11.008	(1.000)	1456563	50.0000	
37 Trichloroethene	95	11.353	11.364	(1.032)	920932	100.000	97.7780
38 Trifluorotoluene	146	11.652	11.663	(1.060)	1540652	100.000	97.2955
39 1,2-Dichloropropane	63	11.715	11.726	(1.065)	896427	100.000	100.0195
40 Dibromomethane	93	11.883	11.888	(1.081)	566402	100.000	100.1127
41 Bromodichloromethane	83	12.003	12.014	(1.092)	1245073	100.000	102.8116
42 2-Chloroethylvinylether	63	12.292	12.308	(1.118)	567935	100.000	100.8377
43 Tetramethyl THF	43	12.486	12.497	(1.135)	1334663	100.000	108.9696
44 cis-1,3-Dichloropropene	75	12.543	12.554	(1.141)	1547488	100.000	103.8223
45 4-Methyl-2-Pentanone	43	12.648	12.664	(1.150)	804507	100.000	104.6574
46 Toluene-d8	98	12.832	12.843	(1.167)	1775474	50.0000	50.9438
47 Toluene	92	12.916	12.927	(1.174)	2412151	100.000	98.9329
48 trans-1,3-Dichloropropene	75	13.193	13.204	(1.200)	1466758	100.000	104.2566
49 1,1,2-Trichloroethane	85	13.429	13.435	(1.221)	448081	100.000	102.1492
50 Tetrachloroethene	166	13.540	13.551	(0.933)	933145	100.000	95.9679
51 2-Hexanone	43	13.613	13.624	(0.938)	554789	100.000	103.4172
52 1,3-Dichloropropane	76	13.644	13.655	(0.940)	1522676	100.000	100.3276
53 Dibromochloromethane	129	13.886	13.897	(0.957)	1014698	100.000	105.7737
54 1,2-Dibromoethane	107	14.074	14.085	(1.280)	911269	100.000	102.7926
* 55 Chlorobenzene-d5	117	14.515	14.526	(1.000)	1559667	50.0000	
56 Chlorobenzene	112	14.546	14.562	(1.002)	2698963	100.000	95.7799
57 Ethylbenzene	91	14.583	14.599	(1.005)	4379732	100.000	98.9906
58 1,1,1,2-Tetrachloroethane	131	14.614	14.625	(1.007)	987461	100.000	98.9250
59 m,p-Xylenes	106	14.703	14.714	(1.013)	3623761	200.000	201.0005
60 o-Xylene	106	15.139	15.155	(1.043)	1771776	100.000	100.4002
61 Styrene	104	15.160	15.171	(1.044)	2959977	100.000	110.6148
62 Bromoform	173	15.438	15.448	(1.064)	786420	100.000	104.6485
63 Isopropylbenzene	105	15.479	15.490	(0.912)	4088987	100.000	101.9110
65 Bromofluorobenzene	95	15.726	15.737	(0.927)	904945	50.0000	48.9348
66 1,1,2,2-Tetrachloroethane	83	15.841	15.857	(0.934)	1024282	100.000	98.4160
67 Propylbenzene	91	15.904	15.920	(0.937)	4646052	100.000	104.2986
68 Bromobenzene	156	15.925	15.936	(0.939)	1279094	100.000	97.8831
69 1,2,3-Trichloropropane	75	15.936	15.947	(0.939)	1088638	100.000	92.2316
70 1,3,5-Trimethylbenzene	105	16.067	16.082	(0.947)	3387738	100.000	103.9753
71 2-Chlorotoluene	91	16.082	16.093	(0.948)	3514973	100.000	98.3960
72 4-Chlorotoluene	91	16.193	16.209	(0.954)	3298637	100.000	100.6455
73 tert-Butylbenzene	119	16.428	16.445	(0.968)	2910604	100.000	101.9164
74 1,2,4-Trimethylbenzene	105	16.486	16.501	(0.972)	3526410	100.000	101.6633
75 sec-Butylbenzene	105	16.659	16.675	(0.982)	3992465	100.000	103.1963
76 para-Isopropyl Toluene	119	16.785	16.800	(0.989)	3586441	100.000	106.9533
77 1,3-Dichlorobenzene	146	16.900	16.911	(0.996)	2305977	100.000	98.4682

Data File: \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL913.D
Report Date: 11-Dec-2006 11:37

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT	ON-COL
							(ug/L)	(ug/L)
*****	----	----	-----	-----	-----		-----	-----
* 78 1,4-Dichlorobenzene-d4	152	16.968	16.985	(1.000)	870181		50.0000	
79 1,4-Dichlorobenzene	146	17.000	17.011	(1.002)	2361137		100.000	97.7305
80 n-Butylbenzene	91	17.246	17.263	(1.016)	2981235		100.000	99.1796
81 1,2-Dichlorobenzene	146	17.451	17.466	(1.028)	2213444		100.000	99.9612
82 1,2-Dibromo-3-Chloropropane	75	18.416	18.437	(1.085)	226322		100.000	103.4441
83 1,2,4-Trichlorobenzene	180	19.532	19.554	(1.151)	1642012		100.000	101.9485
84 Hexachlorobutadiene	225	19.632	19.653	(1.157)	686461		100.000	95.8723
85 Naphthalene	128	19.988	20.010	(1.178)	4183062		100.000	110.3954
86 1,2,3-Trichlorobenzene	180	20.382	20.403	(1.201)	1600214		100.000	100.6401

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Gomserver\JD\chem\MSV0011.i\120906.b\KL913.D

Date : 09-DEC-2006 21:01

Client ID: DYNA P&T

Sample Info: ICPL,S4931,0.02/100,

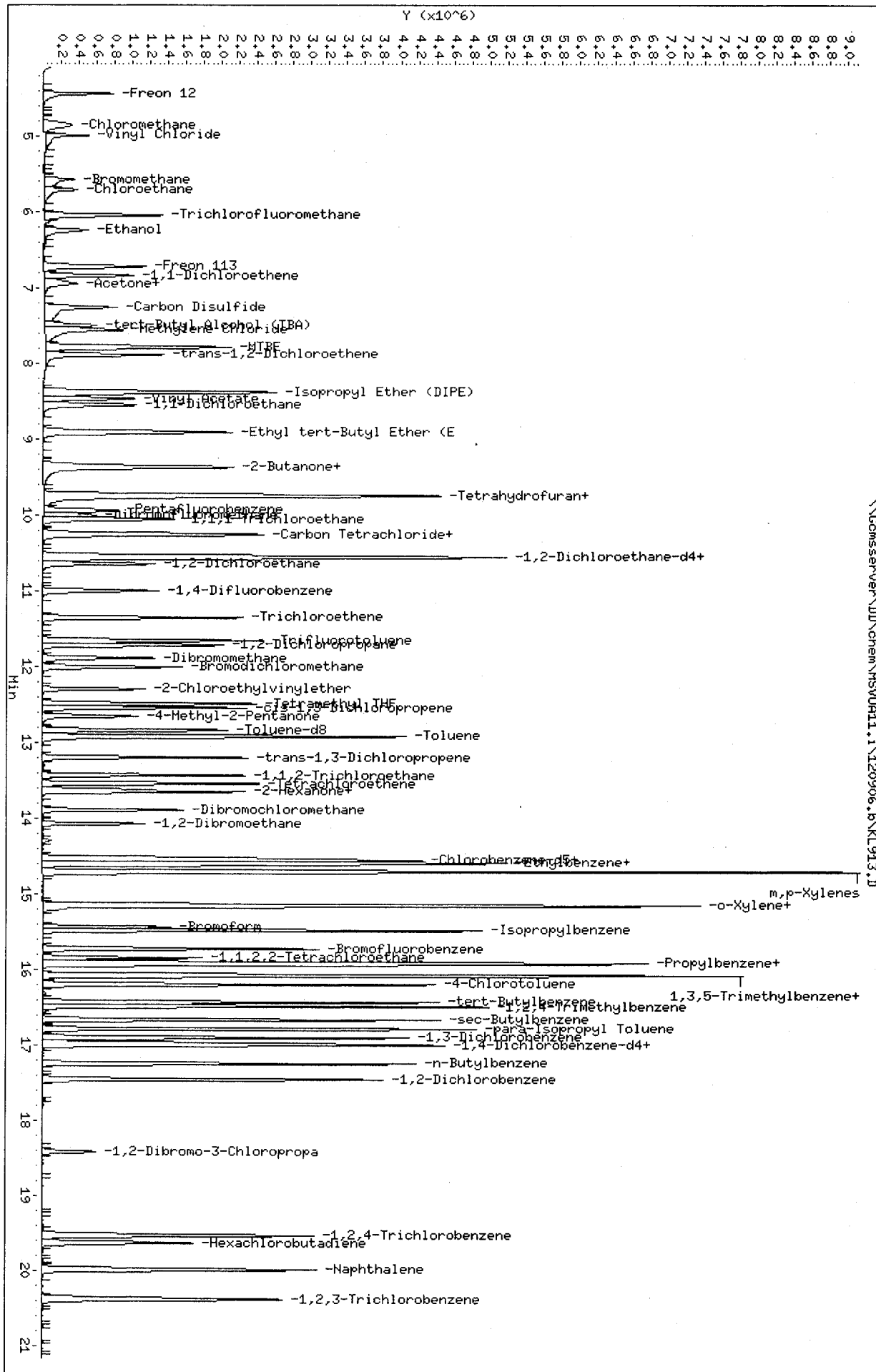
Purge Volume: 5.0

Column phase: RTX Volatiles

Instrument: MSV0011.i

Operator: WOC

Column diameter: 0.32



CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191286 MSVOA Water
EPA 8260B

Inst : MSVOA04 Run Name: 25PPB IDF : 1.0
 Seqnum : 436500153003 File : dld03 Time : 13-DEC-2006 08:44
 Cal : 436434904003 Caldate : 29-OCT-2006 Caltype : WATER
 Standards: S4801 (20000X), S4780 (20000X), S4713 (40000X), S4696 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	1.6258	1.6656	25.00	25.61	ug/L	2	30	0.1000	
Vinyl Chloride	1.2857	1.2074	25.00	23.48	ug/L	-6	20	0.0500	
Bromomethane	0.6882	0.6921	25.00	25.14	ug/L	1	30	0.0500	m
Chloroethane	0.6035	0.5672	25.00	23.50	ug/L	-6	30	0.0500	
Acetone	0.6404	0.5643	25.00	22.03	ug/L	-12	40	0.0500	
1,1-Dichloroethene	0.7372	0.6613	25.00	22.43	ug/L	-10	20	0.0500	
Methylene Chloride	0.9081	0.8579	25.00	23.62	ug/L	-6	30	0.0500	
Carbon Disulfide	2.9449	3.0066	25.00	25.52	ug/L	2	30	0.0500	
MTBE	2.1013	2.0424	25.00	24.30	ug/L	-3	30	0.0500	
trans-1,2-Dichloroethene	0.7975	0.7729	25.00	24.23	ug/L	-3	30	0.0500	
Vinyl Acetate	1.8211	2.2995	25.00	26.91	ug/L	8	40	0.0500	
1,1-Dichloroethane	1.6024	1.4700	25.00	22.93	ug/L	-8	30	0.1000	
2-Butanone	0.6487	0.5674	25.00	21.87	ug/L	-13	40	0.0500	
cis-1,2-Dichloroethene	0.8618	0.7784	25.00	22.58	ug/L	-10	30	0.0500	
Chloroform	1.4725	1.3410	25.00	22.77	ug/L	-9	20	0.0500	
1,1,1-Trichloroethane	1.0252	1.0213	25.00	24.91	ug/L	0	30	0.0500	
Carbon Tetrachloride	0.4315	0.4823	25.00	25.85	ug/L	3	30	0.0500	
1,2-Dichloroethane	0.7990	0.7040	25.00	22.03	ug/L	-12	30	0.0500	
Benzene	1.5032	1.4929	25.00	24.83	ug/L	-1	30	0.0500	
Trichloroethene	0.4271	0.4104	25.00	24.02	ug/L	-4	30	0.0500	
1,2-Dichloropropane	0.5179	0.4794	25.00	23.14	ug/L	-7	20	0.0500	
Bromodichloromethane	0.6130	0.6326	25.00	25.80	ug/L	3	30	0.0500	
4-Methyl-2-Pentanone	0.7042	0.5879	25.00	20.87	ug/L	-17	40	0.0500	
cis-1,3-Dichloropropene	0.6162	0.6498	25.00	26.36	ug/L	5	30	0.0500	
Toluene	0.8798	0.8402	25.00	23.87	ug/L	-5	20	0.0500	
trans-1,3-Dichloropropene	0.5637	0.6013	25.00	26.67	ug/L	7	30	0.0500	
1,1,2-Trichloroethane	0.2262	0.2243	25.00	24.79	ug/L	-1	30	0.0500	
2-Hexanone	0.5250	0.4713	25.00	22.44	ug/L	-10	40	0.0500	
Tetrachloroethene	0.3608	0.3624	25.00	25.11	ug/L	0	30	0.0500	
Dibromochloromethane	0.5095	0.5544	25.00	27.20	ug/L	9	30	0.0500	
Chlorobenzene	1.1234	1.1896	25.00	26.47	ug/L	6	30	0.3000	
Ethylbenzene	1.8208	1.7281	25.00	23.73	ug/L	-5	20	0.0500	
m,p-Xylenes	0.7030	0.6859	50.00	48.78	ug/L	-2	30	0.0500	
o-Xylene	0.7010	0.7077	25.00	25.24	ug/L	1	30	0.0500	
Styrene	1.2391	1.2492	25.00	25.20	ug/L	1	30	0.0500	
Bromoform	0.3648	0.4148	25.00	28.43	ug/L	14	30	0.1000	
1,1,2,2-Tetrachloroethane	1.3278	1.2555	25.00	23.64	ug/L	-5	30	0.3000	
Dibromofluoromethane	0.7408	0.7096	50.00	47.90	ug/L	-4	30	0.0500	
1,2-Dichloroethane-d4	0.5355	0.4779	50.00	44.62	ug/L	-11	30	0.0500	
Toluene-d8	1.0952	1.0780	50.00	49.22	ug/L	-2	30	0.0500	
Bromofluorobenzene	1.3136	1.2675	50.00	48.25	ug/L	-4	30	0.0500	

ISTD (ICAL djt11)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	354060	571890	61.52	10.40	10.36	-0.04
1,4-Difluorobenzene	650834	983383	51.10	11.53	11.48	-0.05
Chlorobenzene-d5	584142	843715	44.44	15.57	15.54	-0.03
1,4-Dichlorobenzene-d4	261352	415529	58.99	18.30	18.27	-0.03

Analyst: ACM

Date: 12/13/06

Reviewer: LW

Date: 12/14/06

m=manual integration

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191286 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name: 25PPB IDF : 1.0
 Seqnum : 476503048003 File : hlf03 Time : 15-DEC-2006 08:55
 Cal : 476409508001 Caldate : 11-OCT-2006 Caltype : WATER
 Standards: S5064 (20000X), S4931 (20000X), S4713 (40000X), S4696 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.9011	1.1231	25.00	31.16	ug/L	25	30	0.1000	!c+
Vinyl Chloride	0.6942	0.7898	25.00	28.44	ug/L	14	20	0.0500	
Bromomethane	0.2555	0.2281	25.00	22.95	ug/L	-8	30	0.0500	
Chloroethane	0.4084	0.4326	25.00	26.48	ug/L	6	30	0.0500	m
Acetone	0.2814	0.3774	25.00	33.53	ug/L	34	40	0.0500	!c+
1,1-Dichloroethene	0.3305	0.3259	25.00	28.43	ug/L	14	20	0.0500	
Methylene Chloride	0.5229	0.5279	25.00	25.24	ug/L	1	30	0.0500	
Carbon Disulfide	1.7732	1.9462	25.00	27.44	ug/L	10	30	0.0500	
MTBE	1.6442	1.5755	25.00	23.96	ug/L	-4	30	0.0500	
trans-1,2-Dichloroethene	0.4063	0.4269	25.00	26.27	ug/L	5	30	0.0500	
Vinyl Acetate	0.9973	1.2647	25.00	28.99	ug/L	16	40	0.0500	
1,1-Dichloroethane	0.9908	1.0801	25.00	27.25	ug/L	9	30	0.1000	
2-Butanone	0.4148	0.4627	25.00	27.89	ug/L	12	40	0.0500	
cis-1,2-Dichloroethene	0.5015	0.4676	25.00	24.92	ug/L	0	30	0.0500	
Chloroform	0.8336	0.8380	25.00	25.13	ug/L	1	20	0.0500	
1,1,1-Trichloroethane	0.4613	0.5215	25.00	28.26	ug/L	13	30	0.0500	
Carbon Tetrachloride	0.1499	0.1709	25.00	28.49	ug/L	14	30	0.0500	
1,2-Dichloroethane	0.3174	0.3448	25.00	27.16	ug/L	9	30	0.0500	
Benzene	0.8112	0.7268	25.00	22.40	ug/L	-10	30	0.0500	
Trichloroethene	0.1944	0.1737	25.00	22.34	ug/L	-11	30	0.0500	
1,2-Dichloropropane	0.2926	0.2663	25.00	22.75	ug/L	-9	20	0.0500	
Bromodichloromethane	0.2850	0.2758	25.00	24.20	ug/L	-3	30	0.0500	
4-Methyl-2-Pentanone	0.3825	0.4007	25.00	26.19	ug/L	5	40	0.0500	
cis-1,3-Dichloropropene	0.3744	0.3540	25.00	23.63	ug/L	-5	30	0.0500	
Toluene	0.4428	0.4418	25.00	24.94	ug/L	0	20	0.0500	
trans-1,3-Dichloropropene	0.3274	0.3306	25.00	25.24	ug/L	1	30	0.0500	
1,1,2-Trichloroethane	0.1190	0.1071	25.00	22.49	ug/L	-10	30	0.0500	
2-Hexanone	0.3369	0.3434	25.00	25.48	ug/L	2	40	0.0500	
Tetrachloroethene	0.1319	0.1255	25.00	23.78	ug/L	-5	30	0.0500	
Dibromochloromethane	0.2221	0.2198	25.00	24.74	ug/L	-1	30	0.0500	
Chlorobenzene	0.5765	0.5693	25.00	24.69	ug/L	-1	30	0.3000	
Ethylbenzene	0.9881	1.0130	25.00	25.63	ug/L	3	20	0.0500	
m,p-Xylenes	0.3405	0.3613	50.00	53.05	ug/L	6	30	0.0500	
o-Xylene	0.3405	0.3649	25.00	26.79	ug/L	7	30	0.0500	
Styrene	0.6395	0.6607	25.00	25.83	ug/L	3	30	0.0500	
Bromoform	0.1359	0.1273	25.00	23.42	ug/L	-6	30	0.1000	
1,1,2,2-Tetrachloroethane	0.8829	0.8356	25.00	23.66	ug/L	-5	30	0.3000	
Dibromofluoromethane	0.8274	0.9212	50.00	55.67	ug/L	11	30	0.0500	
1,2-Dichloroethane-d4	0.4882	0.5704	50.00	58.43	ug/L	17	30	0.0500	
Toluene-d8	1.1344	1.1698	50.00	51.56	ug/L	3	30	0.0500	
Bromofluorobenzene	1.4980	1.6091	50.00	53.71	ug/L	7	30	0.0500	

ISTD (ICAL hjb18)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1340075	1171177	-12.60	10.40	10.39	-0.01
1,4-Difluorobenzene	2999220	2700355	-9.96	11.53	11.52	-0.01
Chlorobenzene-d5	2385780	2179191	-8.66	15.53	15.53	0.00
1,4-Dichlorobenzene-d4	1049887	928874	-11.53	18.25	18.24	-0.01

Analyst: BO Date: 12/15/06 Reviewer: SJD Date: 12/18/06

!=warning +=high bias c=CCV m=manual integration

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191286 MSVOA Water
EPA 8260B

Inst : MSVOA08 Run Name: 25PPB IDF : 1.0
 Seqnum : 476503048011 File : hlf11 Time : 15-DEC-2006 14:44
 Cal : 476409508001 Caldate : 11-OCT-2006 Caltype : WATER
 Standards: S4696 (5000X), S5064 (20000X), S4931 (20000X), S4713 (40000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	%D	Min RF	Flags
Chloromethane	0.9011	0.8529	25.00	23.66	ug/L	-5	30	0.1000		
Vinyl Chloride	0.6942	0.6503	25.00	23.42	ug/L	-6	20	0.0500		
Bromomethane	0.2555	0.2490	25.00	24.92	ug/L	0	30	0.0500	m	
Chloroethane	0.4084	0.3550	25.00	21.73	ug/L	-13	30	0.0500		
Acetone	0.2814	0.2436	25.00	21.64	ug/L	-13	40	0.0500		
1,1-Dichloroethene	0.3305	0.3199	25.00	27.93	ug/L	12	20	0.0500		
Methylene Chloride	0.5229	0.4937	25.00	23.60	ug/L	-6	30	0.0500		
Carbon Disulfide	1.7732	1.7133	25.00	24.16	ug/L	-3	30	0.0500		
MTBE	1.6442	1.4838	25.00	22.56	ug/L	-10	30	0.0500		
trans-1,2-Dichloroethene	0.4063	0.3941	25.00	24.25	ug/L	-3	30	0.0500		
Vinyl Acetate	0.9973	1.3924	25.00	31.47	ug/L	26	40	0.0500		
1,1-Dichloroethane	0.9908	0.9304	25.00	23.48	ug/L	-6	30	0.1000		
2-Butanone	0.4148	0.3736	25.00	22.51	ug/L	-10	40	0.0500		
cis-1,2-Dichloroethene	0.5015	0.4290	25.00	22.86	ug/L	-9	30	0.0500		
Chloroform	0.8336	0.7373	25.00	22.11	ug/L	-12	20	0.0500		
1,1,1-Trichloroethane	0.4613	0.4423	25.00	23.97	ug/L	-4	30	0.0500		
Carbon Tetrachloride	0.1499	0.1458	25.00	24.31	ug/L	-3	30	0.0500		
1,2-Dichloroethane	0.3174	0.2929	25.00	23.07	ug/L	-8	30	0.0500		
Benzene	0.8112	0.6848	25.00	21.11	ug/L	-16	30	0.0500		
Trichloroethene	0.1944	0.1648	25.00	21.20	ug/L	-15	30	0.0500		
1,2-Dichloropropane	0.2926	0.2366	25.00	20.21	ug/L	-19	20	0.0500		
Bromodichloromethane	0.2850	0.2468	25.00	21.65	ug/L	-13	30	0.0500		
4-Methyl-2-Pentanone	0.3825	0.3512	25.00	22.96	ug/L	-8	40	0.0500		
cis-1,3-Dichloropropene	0.3744	0.3249	25.00	21.70	ug/L	-13	30	0.0500		
Toluene	0.4428	0.4167	25.00	23.52	ug/L	-6	20	0.0500		
trans-1,3-Dichloropropene	0.3274	0.2993	25.00	22.85	ug/L	-9	30	0.0500		
1,1,2-Trichloroethane	0.1190	0.0993	25.00	20.86	ug/L	-17	30	0.0500		
2-Hexanone	0.3369	0.3006	25.00	22.31	ug/L	-11	40	0.0500		
Tetrachloroethene	0.1319	0.1196	25.00	22.68	ug/L	-9	30	0.0500		
Dibromochloromethane	0.2221	0.2148	25.00	24.18	ug/L	-3	30	0.0500		
Chlorobenzene	0.5765	0.5570	25.00	24.15	ug/L	-3	30	0.3000		
Ethylbenzene	0.9881	0.9346	25.00	23.64	ug/L	-5	20	0.0500		
m,p-Xylenes	0.3405	0.3482	50.00	51.13	ug/L	2	30	0.0500		
o-Xylene	0.3405	0.3577	25.00	26.26	ug/L	5	30	0.0500		
Styrene	0.6395	0.6271	25.00	24.52	ug/L	-2	30	0.0500		
Bromoform	0.1359	0.1241	25.00	22.84	ug/L	-9	30	0.1000		
1,1,2,2-Tetrachloroethane	0.8829	0.8163	25.00	23.11	ug/L	-8	30	0.3000		
Dibromofluoromethane	0.8274	0.8947	50.00	54.07	ug/L	8	30	0.0500		
1,2-Dichloroethane-d4	0.4882	0.5131	50.00	52.55	ug/L	5	30	0.0500		
Toluene-d8	1.1344	1.1556	50.00	50.94	ug/L	2	30	0.0500		
Bromofluorobenzene	1.4980	1.5710	50.00	52.44	ug/L	5	30	0.0500		

ISTD (ICAL hjb18)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1340075	1367647	2.06	10.40	10.39	-0.01
1,4-Difluorobenzene	2999220	3145203	4.87	11.53	11.52	-0.01
Chlorobenzene-d5	2385780	2533663	6.20	15.53	15.53	0.00
1,4-Dichlorobenzene-d4	1049887	1042397	-0.71	18.25	18.25	0.00

Analyst: BO

Date: 12/15/06

Reviewer: SJD

Date: 12/18/06

m=manual integration

Page 2 of 2

476503048011

: 00225

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191286 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name: 25PPB IDF : 1.0
 Seqnum : 836500315004 File : kld04 Time : 13-DEC-2006 11:44
 Cal : 836494841001 Caldate : 09-DEC-2006 Caltype : WATER
 Standards: S4780 (20000X), S4801 (20000X), S4713 (40000X), S4792 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.5634	0.6128	25.00	27.20	ug/L	9	30	0.1000	
Vinyl Chloride	0.5339	0.6117	25.00	28.65	ug/L	15	20	0.0500	m
Bromomethane	0.3143	0.3352	25.00	26.66	ug/L	7	30	0.0500	m
Chloroethane	0.3429	0.3780	25.00	27.56	ug/L	10	30	0.0500	m
Acetone	0.1948	0.1912	25.00	24.55	ug/L	-2	40	0.0500	
1,1-Dichloroethene	0.3687	0.3368	25.00	22.83	ug/L	-9	20	0.0500	
Methylene Chloride	0.5212	0.4948	25.00	23.73	ug/L	-5	30	0.0500	m
Carbon Disulfide	1.6747	1.6768	25.00	25.03	ug/L	0	30	0.0500	
MTBE	1.6529	1.6840	25.00	25.47	ug/L	2	30	0.0500	
trans-1,2-Dichloroethene	0.4956	0.4978	25.00	25.11	ug/L	0	30	0.0500	
Vinyl Acetate	0.8654	1.0364	25.00	26.92	ug/L	8	40	0.0500	
1,1-Dichloroethane	0.8502	0.8724	25.00	25.65	ug/L	3	30	0.1000	
2-Butanone	0.2138	0.1994	25.00	23.32	ug/L	-7	40	0.0500	
cis-1,2-Dichloroethene	0.5337	0.5402	25.00	25.30	ug/L	1	30	0.0500	
Chloroform	0.8804	0.9309	25.00	26.43	ug/L	6	20	0.0500	
1,1,1-Trichloroethane	0.7722	0.7738	25.00	25.05	ug/L	0	30	0.0500	
Carbon Tetrachloride	0.3242	0.3230	25.00	24.91	ug/L	0	30	0.0500	
1,2-Dichloroethane	0.4724	0.4820	25.00	25.51	ug/L	2	30	0.0500	
Benzene	1.3104	1.3067	25.00	24.93	ug/L	0	30	0.0500	
Trichloroethene	0.3233	0.3095	25.00	23.93	ug/L	-4	30	0.0500	
1,2-Dichloropropane	0.3077	0.3056	25.00	24.83	ug/L	-1	20	0.0500	
Bromodichloromethane	0.4157	0.4343	25.00	26.12	ug/L	4	30	0.0500	
4-Methyl-2-Pentanone	0.2639	0.2506	25.00	23.74	ug/L	-5	40	0.0500	
cis-1,3-Dichloropropene	0.5117	0.5336	25.00	26.07	ug/L	4	30	0.0500	
Toluene	0.8370	0.8419	25.00	25.15	ug/L	1	20	0.0500	
trans-1,3-Dichloropropene	0.4829	0.5029	25.00	26.03	ug/L	4	30	0.0500	
1,1,2-Trichloroethane	0.1506	0.1549	25.00	25.71	ug/L	3	30	0.0500	
2-Hexanone	0.1720	0.1648	25.00	23.95	ug/L	-4	40	0.0500	
Tetrachloroethene	0.3117	0.3002	25.00	24.08	ug/L	-4	30	0.0500	
Dibromochloromethane	0.3075	0.3139	25.00	25.52	ug/L	2	30	0.0500	
Chlorobenzene	0.9034	0.8937	25.00	24.73	ug/L	-1	30	0.3000	
Ethylbenzene	1.4184	1.4349	25.00	25.29	ug/L	1	20	0.0500	
m,p-Xylenes	0.4739	0.5683	50.00	49.84	ug/L	0	30	0.0500	
o-Xylene	0.4846	0.5430	25.00	24.50	ug/L	-2	30	0.0500	
Styrene	0.8579	0.9072	25.00	26.44	ug/L	6	30	0.0500	
Bromoform	0.2409	0.2324	25.00	24.12	ug/L	-4	30	0.1000	
1,1,2,2-Tetrachloroethane	0.5980	0.6108	25.00	25.53	ug/L	2	30	0.3000	
Dibromofluoromethane	0.4660	0.4935	50.00	52.95	ug/L	6	30	0.0500	
1,2-Dichloroethane-d4	0.3734	0.3790	50.00	50.76	ug/L	2	30	0.0500	
Toluene-d8	1.1964	1.2149	50.00	50.78	ug/L	2	30	0.0500	
Bromofluorobenzene	1.0626	1.0997	50.00	51.75	ug/L	3	30	0.0500	

ISTD (ICAL k1911)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	886696	837023	-5.60	9.93	9.93	0.00
1,4-Difluorobenzene	1408512	1372015	-2.59	11.00	11.00	0.00
Chlorobenzene-d5	1484675	1445821	-2.62	14.52	14.52	0.01
1,4-Dichlorobenzene-d4	828941	789321	-4.78	16.97	16.97	0.00

Analyst: SJD

Date: 12/13/06

Reviewer: LW

Date: 12/14/06

m=manual integration

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191286 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name: 25PPB IDF : 1.0
 Seqnum : 836501672003 File : kle03 Time : 14-DEC-2006 09:59
 Cal : 836494841001 Caldate : 09-DEC-2006 Caltype : WATER
 Standards: S4780 (20000X), S4801 (20000X), S4713 (40000X), S4792 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.5634	0.5751	25.00	25.52	ug/L	2	30	0.1000	m
Vinyl Chloride	0.5339	0.5943	25.00	27.83	ug/L	11	20	0.0500	m
Bromomethane	0.3143	0.2705	25.00	21.52	ug/L	-14	30	0.0500	m
Chloroethane	0.3429	0.3734	25.00	27.23	ug/L	9	30	0.0500	m
Acetone	0.1948	0.2030	25.00	26.06	ug/L	4	40	0.0500	
1,1-Dichloroethene	0.3687	0.3611	25.00	24.49	ug/L	-2	20	0.0500	
Methylene Chloride	0.5212	0.4839	25.00	23.21	ug/L	-7	30	0.0500	
Carbon Disulfide	1.6747	1.7393	25.00	25.96	ug/L	4	30	0.0500	m
MTBE	1.6529	1.7215	25.00	26.04	ug/L	4	30	0.0500	
trans-1,2-Dichloroethene	0.4956	0.5102	25.00	25.73	ug/L	3	30	0.0500	
Vinyl Acetate	0.8654	1.0564	25.00	27.39	ug/L	10	40	0.0500	
1,1-Dichloroethane	0.8502	0.8820	25.00	25.94	ug/L	4	30	0.1000	
2-Butanone	0.2138	0.2107	25.00	24.64	ug/L	-1	40	0.0500	
cis-1,2-Dichloroethene	0.5337	0.5418	25.00	25.38	ug/L	2	30	0.0500	
Chloroform	0.8804	0.9280	25.00	26.35	ug/L	5	20	0.0500	
1,1,1-Trichloroethane	0.7722	0.8350	25.00	27.03	ug/L	8	30	0.0500	
Carbon Tetrachloride	0.3242	0.4046	25.00	31.21	ug/L	25	30	0.0500	!c+
1,2-Dichloroethane	0.4724	0.4688	25.00	24.81	ug/L	-1	30	0.0500	
Benzene	1.3104	1.3450	25.00	25.66	ug/L	3	30	0.0500	
Trichloroethene	0.3233	0.3200	25.00	24.75	ug/L	-1	30	0.0500	
1,2-Dichloropropane	0.3077	0.3075	25.00	24.98	ug/L	0	20	0.0500	
Bromodichloromethane	0.4157	0.4263	25.00	25.64	ug/L	3	30	0.0500	
4-Methyl-2-Pentanone	0.2639	0.2583	25.00	24.47	ug/L	-2	40	0.0500	
cis-1,3-Dichloropropene	0.5117	0.5316	25.00	25.98	ug/L	4	30	0.0500	
Toluene	0.8370	0.8631	25.00	25.78	ug/L	3	20	0.0500	
trans-1,3-Dichloropropene	0.4829	0.4978	25.00	25.77	ug/L	3	30	0.0500	
1,1,2-Trichloroethane	0.1506	0.1528	25.00	25.37	ug/L	1	30	0.0500	
2-Hexanone	0.1720	0.1624	25.00	23.61	ug/L	-6	40	0.0500	
Tetrachloroethene	0.3117	0.3127	25.00	25.08	ug/L	0	30	0.0500	
Dibromochloromethane	0.3075	0.3105	25.00	25.24	ug/L	1	30	0.0500	
Chlorobenzene	0.9034	0.8853	25.00	24.50	ug/L	-2	30	0.3000	
Ethylbenzene	1.4184	1.4286	25.00	25.18	ug/L	1	20	0.0500	
m,p-Xylenes	0.4739	0.5604	50.00	49.15	ug/L	-2	30	0.0500	
o-Xylene	0.4846	0.5354	25.00	24.17	ug/L	-3	30	0.0500	
Styrene	0.8579	0.8491	25.00	24.74	ug/L	-1	30	0.0500	
Bromoform	0.2409	0.2362	25.00	24.51	ug/L	-2	30	0.1000	
1,1,2,2-Tetrachloroethane	0.5980	0.6040	25.00	25.25	ug/L	1	30	0.3000	
Dibromofluoromethane	0.4660	0.4892	50.00	52.50	ug/L	5	30	0.0500	
1,2-Dichloroethane-d4	0.3734	0.3832	50.00	51.32	ug/L	3	30	0.0500	
Toluene-d8	1.1964	1.2376	50.00	51.72	ug/L	3	30	0.0500	
Bromofluorobenzene	1.0626	1.0633	50.00	50.03	ug/L	0	30	0.0500	

ISTD (ICAL kl911)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	886696	842062	-5.03	9.93	9.94	0.01
1,4-Difluorobenzene	1408512	1379779	-2.04	11.00	11.00	0.00
Chlorobenzene-d5	1484675	1488382	0.25	14.52	14.52	0.01
1,4-Dichlorobenzene-d4	828941	816511	-1.50	16.97	16.97	0.00

Analyst: SJD Date: 12/15/06 Reviewer: LW Date: 12/15/06

!=warning +=high bias c=CCV m=manual integration

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 436500153

Date : 12/13/06
Sequence : MSVOA04 dld

ICAL Filename: djt11
ICAL Analyzed: 10/29/06 05:55

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	354060	10.40	650834	11.53	584142	15.57	261352	18.30
		LOWER LIMIT	177030	9.90	325417	11.03	292071	15.07	130676	17.80
		UPPER LIMIT	708120	10.90	1301668	12.03	1168284	16.07	522704	18.80
003	CCV	25PPB	571890	10.36	983383	11.48	843715	15.54	415529	18.27
004	LCS	QC368097	614516	10.36	1006214	11.49	854529	15.54	424169	18.27
006	BLANK	QC368098	561664	10.36	918614	11.49	816019	15.54	384299	18.27
007	SAMPLE	191197-003	545587	10.36	880931	11.49	816414	15.54	385601	18.27
008	SAMPLE	191275-001	542393	10.36	925325	11.50	810214	15.54	385569	18.27
009	MSS	191286-012	505418	10.36	845477	11.49	812462	15.54	387066	18.27
010	SAMPLE	191265-006	504226	10.37	820403	11.49	755087	15.54	378177	18.27
011	SAMPLE	191265-008	522056	10.37	876318	11.49	796529	15.55	394426	18.27
012	SAMPLE	191265-014	500889	10.37	842309	11.50	793243	15.55	390080	18.27
013	SAMPLE	191265-016	518562	10.37	853846	11.49	806025	15.54	404687	18.28
014	SAMPLE	191275-002	484000	10.36	801240	11.49	780529	15.54	370861	18.27
015	SAMPLE	191265-007	491733	10.36	813515	11.50	763190	15.54	393329	18.27
016	SAMPLE	191265-009	489491	10.37	816513	11.49	780744	15.54	401846	18.27
017	SAMPLE	191265-010	525227	10.37	892351	11.49	847712	15.54	395522	18.28
018	SAMPLE	191270-002	512608	10.37	825949	11.49	804054	15.54	402803	18.27
019	SAMPLE	191270-001	485327	10.37	815044	11.50	802736	15.55	385356	18.27
020	SAMPLE	191275-004	554388	10.37	982821	11.49	847930	15.54	401122	18.27
021	SAMPLE	191275-003	526447	10.36	930020	11.49	844580	15.54	401183	18.27
022	MS	QC368142	558797	10.37	1018071	11.49	883703	15.55	452035	18.27
023	MSD	QC368143	610689	10.37	1082194	11.49	949375	15.54	468835	18.27

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 476503048

Date : 12/15/06
Sequence : MSVOA08 hlf

ICAL Filename: hjb18
ICAL Analyzed: 10/11/06 21:29

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1340075	10.40	2999220	11.53	2385780	15.53	1049887	18.25
		LOWER LIMIT	670038	9.90	1499610	11.03	1192890	15.03	524944	17.75
		UPPER LIMIT	2680150	10.90	5998440	12.03	4771560	16.03	2099774	18.75
003	CCV	25PPB	1171177	10.39	2700355	11.52	2179191	15.53	928874	18.24
008	BS	QC368467	1260291	10.39	2807747	11.51	2320703	15.52	973534	18.24
009	BSD	QC368468	1339804	10.39	3076953	11.52	2519875	15.53	1002456	18.25
011	CCV	25PPB	1367647	10.39	3145203	11.52	2533663	15.53	1042397	18.25
013	BLANK	QC368469	1265702	10.39	2950648	11.52	2372260	15.53	934508	18.25
014	SAMPLE	191286-016	1264446	10.39	2890684	11.52	2299128	15.53	911936	18.24
015	SAMPLE	191378-006	1242460	10.40	2868320	11.52	2299784	15.53	908444	18.24
016	SAMPLE	191367-010	1186285	10.39	2827001	11.52	2244911	15.53	896740	18.24
017	SAMPLE	191367-012	1145461	10.40	2683122	11.52	2173538	15.53	859537	18.25
018	SAMPLE	191367-013	1123660	10.40	2595875	11.52	2151903	15.53	823249	18.25
019	SAMPLE	191301-002	1126461	10.40	2693496	11.53	2131205	15.53	804004	18.25
020	SAMPLE	191301-003	1080834	10.39	2523984	11.52	2080087	15.54	811049	18.25
021	SAMPLE	191301-005	1033269	10.40	2486921	11.52	2038137	15.53	788580	18.25
022	SAMPLE	191301-007	1062757	10.39	2495007	11.52	1993687	15.54	784183	18.25
023	SAMPLE	191301-009	1038791	10.39	2531021	11.52	2093420	15.53	790258	18.24
024	SAMPLE	191301-011	1048516	10.40	2466485	11.53	2030136	15.53	777989	18.24
025	SAMPLE	191301-012	1043180	10.39	2469390	11.52	2000170	15.54	772665	18.24
026	SAMPLE	191367-007	1011432	10.40	2478687	11.53	2022554	15.53	792364	18.25
027	SAMPLE	191367-008	1011075	10.40	2399955	11.52	1999032	15.53	750861	18.25
028	SAMPLE	191367-009	1029680	10.40	2473028	11.52	2005064	15.53	768807	18.25
029	SAMPLE	191367-011	1016683	10.40	2391003	11.52	1942646	15.53	743416	18.24

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 836500315

Date : 12/13/06
Sequence : MSVOA11 kld

ICAL Filename: kl911
ICAL Analyzed: 12/09/06 20:05

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	886696	9.93	1408512	11.00	1484675	14.52	828941	16.97
		LOWER LIMIT	443348	9.43	704256	10.50	742338	14.02	414471	16.47
		UPPER LIMIT	1773392	10.43	2817024	11.50	2969350	15.02	1657882	17.47
004	CCV	25PPB	837023	9.93	1372015	11.00	1445821	14.52	789321	16.97
005	LCS	QC368161	846648	9.93	1420150	11.00	1484005	14.52	805654	16.97
007	BLANK	QC368160	800856	9.93	1371359	11.00	1438161	14.52	739069	16.97
008	MSS	191371-001	785989	9.93	1324709	11.00	1421098	14.52	745877	16.97
009	SAMPLE	191275-006	789738	9.94	1336876	10.99	1438373	14.52	747420	16.97
010	SAMPLE	191264-005	796295	9.93	1359268	11.00	1424951	14.52	748340	16.97
011	SAMPLE	191264-002	801374	9.93	1335435	11.00	1421898	14.52	715482	16.97
012	SAMPLE	191264-006	800199	9.93	1357596	11.00	1418534	14.52	727420	16.97
013	SAMPLE	191264-012	803998	9.94	1369967	11.00	1425381	14.52	719715	16.97
014	SAMPLE	191192-005	786643	9.94	1322243	10.99	1419726	14.52	719351	16.97
015	SAMPLE	191338-001	761355	9.94	1330645	11.00	1401461	14.52	729569	16.97
016	SAMPLE	191286-003	772380	9.93	1317683	11.00	1401115	14.52	729022	16.97
017	SAMPLE	191286-006	755636	9.94	1309497	11.00	1405847	14.52	725105	16.97
018	SAMPLE	191286-009	756934	9.94	1316193	10.99	1417480	14.52	725966	16.97
019	SAMPLE	191275-009	771197	9.94	1331531	11.00	1427440	14.52	751327	16.97
020	SAMPLE	191275-008	782583	9.93	1319066	11.00	1404919	14.52	717174	16.97
021	SAMPLE	191275-005	769763	9.93	1319409	11.00	1397295	14.52	724333	16.97
022	SAMPLE	191275-007	778136	9.93	1302362	11.00	1400774	14.52	707223	16.97
023	SAMPLE	191275-013	759534	9.93	1327899	10.99	1396302	14.52	714002	16.97
024	SAMPLE	191275-010	775807	9.93	1312107	11.00	1397197	14.52	717906	16.97
025	SAMPLE	191275-011	772185	9.93	1299128	10.99	1393620	14.52	718663	16.97
026	SAMPLE	191275-012	754244	9.93	1292940	10.99	1393857	14.52	716808	16.97
027	MS	QC368181	786003	9.94	1308491	11.00	1431470	14.52	780984	16.97
028	MSD	QC368182	816290	9.94	1357978	11.00	1454463	14.52	796648	16.97

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 836501672

Date : 12/14/06
Sequence : MSVOA11 kle

ICAL Filename: kl911
ICAL Analyzed: 12/09/06 20:05

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	886696	9.93	1408512	11.00	1484675	14.52	828941	16.97
		LOWER LIMIT	443348	9.43	704256	10.50	742338	14.02	414471	16.47
		UPPER LIMIT	1773392	10.43	2817024	11.50	2969350	15.02	1657882	17.47
003	CCV	25PPB	842062	9.94	1379779	11.00	1488382	14.52	816511	16.97
004	LCS	QC368294	845228	9.94	1385709	11.00	1487227	14.52	811809	16.97
006	BLANK	QC368293	787138	9.93	1344186	11.00	1451447	14.52	750333	16.97
007	SAMPLE	191382-001	778542	9.94	1357294	11.00	1461720	14.52	755697	16.97
008	SAMPLE	191382-002	783796	9.93	1352419	10.99	1437023	14.52	728050	16.97
009	SAMPLE	191382-003	787387	9.93	1346440	11.00	1458093	14.52	745785	16.97
010	SAMPLE	191382-004	758196	9.93	1335229	11.00	1433052	14.52	746035	16.97
011	SAMPLE	191382-005	769394	9.93	1345909	11.00	1430125	14.52	743620	16.97
012	SAMPLE	191382-007	759113	9.94	1319189	11.00	1432976	14.52	740275	16.97
013	MSS	191382-006	756628	9.93	1320337	11.00	1415973	14.52	731693	16.97
014	SAMPLE	191286-009	749100	9.94	1327485	11.00	1453099	14.52	760808	16.97
015	SAMPLE	191286-010	770903	9.94	1323809	11.00	1413795	14.52	751222	16.97
016	SAMPLE	191286-011	754455	9.94	1301206	10.99	1413117	14.52	741969	16.97
017	SAMPLE	191286-013	762677	9.94	1334856	11.00	1458644	14.52	798267	16.97
018	SAMPLE	191286-016	847312	9.93	1414614	10.99	1539018	14.52	863056	16.97
019	SAMPLE	191314-013	861751	9.93	1398096	11.00	1533395	14.52	830094	16.97
020	SAMPLE	191314-009	862050	9.94	1436875	11.00	1565311	14.52	854639	16.97
021	SAMPLE	191314-010	871134	9.94	1451713	11.00	1545516	14.52	834879	16.97
022	SAMPLE	191275-010	857457	9.94	1417802	11.00	1526888	14.52	809354	16.97
023	SAMPLE	191275-011	860706	9.93	1423202	10.99	1517316	14.52	803728	16.97
024	SAMPLE	191275-013	823901	9.93	1398438	10.99	1500069	14.52	794450	16.97
025	SAMPLE	191273-003	832413	9.93	1396719	10.99	1508419	14.52	789512	16.97
026	MS	QC368323	845605	9.94	1402497	11.00	1536838	14.52	836486	16.97
027	MSD	QC368324	865174	9.93	1425070	11.00	1555672	14.52	852055	16.97
030	CCV	30PPB	851096	9.94	1406596	11.00	1534100	14.52	842549	16.97
031	LCS	QC368444	861194	9.94	1453318	11.00	1562876	14.52	844840	16.97
033	BLANK	QC368443	828305	9.94	1407125	11.00	1538349	14.52	782173	16.97
034	SAMPLE	191327-006	799986	9.94	1392956	11.00	1502505	14.52	797070	16.97
035	SAMPLE	191327-007	835762	9.93	1400816	10.99	1525231	14.52	789803	16.97
036	SAMPLE	191327-001	805469	9.94	1373469	11.00	1482562	14.52	799122	16.97
037	SAMPLE	191327-002	789659	9.94	1360156	11.00	1484419	14.52	791584	16.97
038	SAMPLE	191378-001	792432	9.93	1363537	11.00	1467328	14.52	769527	16.97
039	MSS	191378-002	778880	9.93	1361557	11.00	1483102	14.52	779311	16.97
040	SAMPLE	191378-003	774153	9.93	1343203	11.00	1464146	14.52	782558	16.97
041	SAMPLE	191378-004	784457	9.93	1375423	11.00	1506549	14.52	782411	16.97
042	SAMPLE	191378-005	778750	9.94	1338404	10.99	1465281	14.52	766591	16.97
043	SAMPLE	191378-006	772067	9.93	1327274	11.00	1449577	14.52	756028	16.97
044	SAMPLE	191378-007	775395	9.93	1351472	11.00	1461944	14.52	761518	16.97
045	SAMPLE	191378-008	776537	9.94	1349315	11.00	1452295	14.52	756788	16.97
046	SAMPLE	191371-009	764039	9.93	1332835	11.00	1458164	14.52	755619	16.97
047	SAMPLE	191371-010	748525	9.94	1322027	11.00	1440975	14.52	756393	16.97
048	SAMPLE	191371-012	760118	9.93	1322441	11.00	1449952	14.52	742779	16.97
049	SAMPLE	191371-013	763220	9.93	1333162	10.99	1439506	14.52	746294	16.97
050	SAMPLE	191371-014	748885	9.93	1311305	11.00	1435151	14.52	742968	16.97
051	SAMPLE	191371-015	730121	9.94	1295268	11.00	1427020	14.52	738902	16.97
052	SAMPLE	191371-011	763165	9.93	1336971	11.00	1440033	14.52	741364	16.97
053	MS	QC368445	761952	9.94	1346052	11.00	1472906	14.52	804363	16.97
054	MSD	QC368446	799808	9.94	1367343	10.99	1501498	14.52	803381	16.97

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 436434904

Instrument : MSVOA04
Method : EPA 8260B

Begun : 10/29/06 00:24
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	djt01	TUN	BFB			10/29/06 00:24	1.0	1	
002	djt02	X	IB			10/29/06 01:02	1.0	2	
003	djt03	X	IB			10/29/06 01:34	1.0	2	
004	djt04	IB	CALIB			10/29/06 02:07	1.0	2	
005	djt05	ICAL	0.25/0.5PPB			10/29/06 02:39	1.0	3 4 5 2	
006	djt06	ICAL	0.5/1PPB			10/29/06 03:12	1.0	3 4 5 2	
007	djt07	ICAL	2PPB			10/29/06 03:45	1.0	3 4 5 2	
008	djt08	ICAL	5PPB			10/29/06 04:17	1.0	3 4 5 2	
009	djt09	ICAL	10PPB			10/29/06 04:50	1.0	3 4 5 2	
010	djt10	ICAL	20PPB			10/29/06 05:22	1.0	3 4 5 2	
011	djt11	ICAL	50PPB			10/29/06 05:55	1.0	3 4 5 2	
012	djt12	ICAL	75PPB			10/29/06 06:28	1.0	3 4 5 2	
013	djt13	ICAL	100PPB			10/29/06 07:01	1.0	3 4 5 2	
014	djt14	ICV	25PPB			10/29/06 07:33	1.0	6 2	
015	djt15	ICV	25PPB			10/29/06 08:06	1.0	7 8 2	
016	djt16	X	IB			10/29/06 08:38	1.0	2	
017	djt17	X	IB			10/29/06 09:11	1.0	2	
018	djt18	X	IB			10/29/06 09:43	1.0	2	
019	djt19	X	IB			10/29/06 12:05	1.0	2	
020	djt20	TUN	BFB			10/29/06 12:34	1.0	1	
021	djt21	CCV	25PPB			10/29/06 13:05	1.0	3 4 5 2	
022	djt22	X	25PPB			10/29/06 14:47	1.0	6 2	
023	djt23	X	IB			10/29/06 15:20	1.0	2	
024	djt24	ICV	25PPB			10/29/06 16:03	1.0	9 2	
025	djt25	X	IB			10/29/06 16:35	1.0	2	
026	djt26	LCS	QC362061	Water	118856	10/29/06 17:08	1.0	8 9 7 2	
027	djt27	X	IB			10/29/06 17:41	1.0	2	
028	djt28	BLANK	QC362062	Water	118856	10/29/06 18:13	1.0	2	
029	djt29	MSS	190314-014	Water	118856	10/29/06 18:46	1.0	2	
030	djt30	MS	QC362063	Water	118856	10/29/06 19:18	1.0	8 9 7 2	
031	djt31	MSD	QC362064	Water	118856	10/29/06 19:51	1.0	8 9 7 2	
032	djt32	X	IB			10/29/06 20:24	1.0	2	
033	djt33	SAMPLE	190121-007	Water	118856	10/29/06 20:56	1.0	2	
034	djt34	SAMPLE	190121-022	Water	118856	10/29/06 21:29	1.0	2	
035	djt35	SAMPLE	190311-013	Water	118856	10/29/06 22:02	1.0	2	
036	djt36	SAMPLE	190311-014	Water	118856	10/29/06 22:34	1.0	2	
037	djt37	SAMPLE	190311-015	Water	118856	10/29/06 23:07	1.0	2	
038	djt38	SAMPLE	190311-016	Water	118856	10/29/06 23:39	1.0	2	
039	djt39	SAMPLE	190311-017	Water	118856	10/30/06 00:12	1.0	2	
040	djt40	X	IB			10/30/06 00:45	1.0	2	
041	djt41	X	IB			10/30/06 01:17	1.0	2	
042	djt42	X	IB			10/30/06 01:50	1.0	2	

Analyst: AM Date: 10/30/06 Reviewer: LW

Date: 10/30/06

Standards used: 1=S3716 2=S4330 3=S4594 4=S4519 5=S4172 6=S4521 7=S4634 8=S4607 9=S4714

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 436500153

Instrument : MSVOA04
Method : EPA 8260B

Begun : 12/13/06 07:53
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	dld01	X	IB			12/13/06 07:53	1.0	1	
002	dld02	TUN	BFB			12/13/06 08:23	1.0	2	
003	dld03	CCV	25PPB			12/13/06 08:44	1.0	3 4 5 1	
004	dld04	LCS	QC368097	Water	120314	12/13/06 09:27	1.0	6 7 8 1	
005	dld05	X	IB			12/13/06 09:59	1.0	1	
006	dld06	BLANK	QC368098	Water	120314	12/13/06 10:32	1.0	1	
007	dld07	SAMPLE	191197-003	Water	120314	12/13/06 11:11	8.333	1	
008	dld08	SAMPLE	191275-001	Water	120314	12/13/06 11:43	1.0	1	
009	dld09	MSS	191286-012	Water	120314	12/13/06 12:16	1.0	1	
010	dld10	SAMPLE	191265-006	Water	120314	12/13/06 12:49	1.0	1	
011	dld11	SAMPLE	191265-008	Water	120314	12/13/06 13:21	1.0	1	
012	dld12	SAMPLE	191265-014	Water	120314	12/13/06 13:54	1.0	1	
013	dld13	SAMPLE	191265-016	Water	120314	12/13/06 14:27	1.0	1	
014	dld14	SAMPLE	191275-002	Water	120314	12/13/06 14:59	1.0	1	
015	dld15	SAMPLE	191265-007	Water	120314	12/13/06 15:32	2.0	1	
016	dld16	SAMPLE	191265-009	Water	120314	12/13/06 16:05	50.0	1	
017	dld17	SAMPLE	191265-010	Water	120314	12/13/06 16:37	125.0	1	
018	dld18	SAMPLE	191270-002	Water	120314	12/13/06 17:10	3.333	1	
019	dld19	SAMPLE	191270-001	Water	120314	12/13/06 17:43	33.33	1	
020	dld20	SAMPLE	191275-004	Water	120314	12/13/06 18:15	33.33	1	
021	dld21	SAMPLE	191275-003	Water	120314	12/13/06 18:48	100.0	1	
022	dld22	MS	QC368142	Water	120314	12/13/06 19:21	1.0	6 7 8 1	
023	dld23	MSD	QC368143	Water	120314	12/13/06 19:53	1.0	6 7 8 1	
024	dld24	X	IB			12/13/06 20:26	1.0	1	
025	dld25	X	IB			12/13/06 20:58	1.0	1	
026	dld26	X	IB			12/13/06 21:31	1.0	1	

Analyst: ACMDate: 12/14/06Reviewer: LWDate: 12/14/06

Standards used: 1=S4696 2=S3716 3=S4801 4=S4780 5=S4713 6=S4922 7=S5052 8=S5074

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 476409508

Instrument : MSVOA08
Method : EPA 8260B

Begun : 10/11/06 09:08
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	hjb01	X	BFB			10/11/06 09:08	1.0	1	
002	hjb02	X	BFB			10/11/06 09:22	1.0	1	
003	hjb03	X	BFB			10/11/06 09:42	1.0	1	
004	hjb04	X	LOW PT			10/11/06 10:19	1.0	2	
005	hjb05	X	LOW PT			10/11/06 11:09	1.0	2	
006	hjb06	X	LOW PT			10/11/06 12:36	1.0	2	
007	hjb07	X	LOW PT			10/11/06 13:50	1.0	2	
008	hjb08	TUN	BFB			10/11/06 15:24	1.0	1	
009	hjb09	TUN	BFB			10/11/06 15:52	1.0	1	
010	hjb10	X	IB			10/11/06 16:30	1.0	2	
011	hjb11	IB	CALIB IB			10/11/06 17:07	1.0	2	
012	hjb12	ICAL	0.25/0.5PPB			10/11/06 17:44	1.0	3 4 5 2	
013	hjb13	ICAL	0.5/1PPB			10/11/06 18:21	1.0	3 4 5 2	
014	hjb14	ICAL	2PPB			10/11/06 18:59	1.0	3 4 5 2	
015	hjb15	ICAL	5PPB			10/11/06 19:36	1.0	3 4 5 2	
016	hjb16	ICAL	10PPB			10/11/06 20:14	1.0	3 4 5 2	
017	hjb17	ICAL	20PPB			10/11/06 20:51	1.0	3 4 5 2	
018	hjb18	ICAL	50PPB			10/11/06 21:29	1.0	3 4 5 2	
019	hjb19	ICAL	75PPB			10/11/06 22:06	1.0	3 4 5 2	
020	hjb20	ICAL	100PPB			10/11/06 22:44	1.0	3 4 5 2	
021	hjb21	ICV	25PPB			10/11/06 23:21	1.0	6 2	
022	hjb22	ICV	25PPB			10/11/06 23:59	1.0	7 8 2	
023	hjb23	X	IB			10/12/06 00:36	1.0	2	
024	hjb24	TUN	BFB			10/12/06 01:14	1.0	1	
025	hjb25	X	CARBON MARKER			10/12/06 01:45	1.0	2	
026	hjb26	X	IB			10/12/06 02:22	1.0	2	
027	hjb27	X	IB			10/12/06 02:59	1.0	2	
028	hjb28	ICAL	TVH500PPB			10/12/06 03:37	1.0	9 2	
029	hjb29	ICAL	TVH100PPB			10/12/06 04:15	1.0	9 2	
030	hjb30	ICAL	TVH200PPB			10/12/06 04:52	1.0	9 2	
031	hjb31	ICAL	TVH500PPB			10/12/06 05:30	1.0	9 2	
032	hjb32	ICAL	TVH1000PPB			10/12/06 06:07	1.0	9 2	
033	hjb33	ICAL	TVH2000PPB			10/12/06 06:45	1.0	9 2	
034	hjb34	ICAL	TVH3000PPB			10/12/06 07:22	1.0	9 2	
035	hjb35	ICAL	TVH5000PPB			10/12/06 08:00	1.0	9 2	
036	hjb36	X	IB			10/12/06 08:38	1.0	2	

Analyst: BODate: 10/12/06Reviewer: ACMDate: 10/13/06

Standards used: 1=S3716 2=S4330 3=S4519 4=S4468 5=S4172 6=S4521 7=S4368 8=S4375 9=S4120

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 476503048

Instrument : MSVOA08
Method : EPA 8260B

Begun : 12/15/06 08:08
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	hlf01	X	IB			12/15/06 08:08	1.0	1	
002	hlf02	TUN	BFB			12/15/06 08:37	1.0	2	
003	hlf03	CCV	25PPB			12/15/06 08:55	1.0	3 4 5 1	
004	hlf04	X	QC368467	Water	120404	12/15/06 09:39	1.0	6 7 8 1	
005	hlf05	X	QC368468	Water	120404	12/15/06 10:17	1.0	6 7 8 1	
006	hlf06	X	QC368467	Water	120404	12/15/06 10:54	1.0	6 7 8 1	
007	hlf07	X	QC368468	Water	120404	12/15/06 11:32	1.0	6 7 8 1	
008	hlf08	BS	QC368467	Water	120404	12/15/06 13:14	1.0	6 7 8 1	
009	hlf09	BSD	QC368468	Water	120404	12/15/06 13:51	1.0	6 7 8 1	
010	hlf10	TUN	BFB			12/15/06 14:27	1.0	2	
011	hlf11	CCV	25PPB			12/15/06 14:44	1.0	1 3 4 5	
012	hlf12	X	IB			12/15/06 15:31	1.0	1	
013	hlf13	BLANK	QC368469	Water	120404	12/15/06 16:09	1.0	1	
014	hlf14	SAMPLE	191286-016	Water	120404	12/15/06 16:46	1.0	1	
015	hlf15	SAMPLE	191378-006	Water	120404	12/15/06 17:24	1.0	1	
016	hlf16	SAMPLE	191367-010	Water	120404	12/15/06 18:02	1.0	1	
017	hlf17	SAMPLE	191367-012	Water	120404	12/15/06 18:40	1.0	1	
018	hlf18	SAMPLE	191367-013	Water	120404	12/15/06 19:17	1.0	1	
019	hlf19	SAMPLE	191301-002	Water	120404	12/15/06 19:55	4.0	1	
020	hlf20	SAMPLE	191301-003	Water	120404	12/15/06 20:33	2.0	1	
021	hlf21	SAMPLE	191301-005	Water	120404	12/15/06 21:10	3.333	1	
022	hlf22	SAMPLE	191301-007	Water	120404	12/15/06 21:48	1.0	1	
023	hlf23	SAMPLE	191301-009	Water	120404	12/15/06 22:26	3.333	1	
024	hlf24	SAMPLE	191301-011	Water	120404	12/15/06 23:04	6.25	1	
025	hlf25	SAMPLE	191301-012	Water	120404	12/15/06 23:42	6.25	1	
026	hlf26	SAMPLE	191367-007	Water	120404	12/16/06 00:21	5.0	1	
027	hlf27	SAMPLE	191367-008	Water	120404	12/16/06 00:59	25.0	1	
028	hlf28	SAMPLE	191367-009	Water	120404	12/16/06 01:37	2.500	1	
029	hlf29	SAMPLE	191367-011	Water	120404	12/16/06 02:15	4.0	1	
030	hlf30	X	IB			12/16/06 02:52	1.0	1	
031	hlf31	X	IB			12/16/06 03:30	1.0	1	
032	hlf32	X	IB			12/16/06 04:07	1.0	1	

BO 12/15/06 : hlf04, hlf05 were not spiked due to analyst error.

TEW 12/15/06 : Fixed Sample ID for Blank after it ran.

Analyst: BO Date: 12/18/06 Reviewer: LW Date: 12/18/06

Standards used: 1=S4696 2=S3716 3=S5064 4=S4931 5=S4713 6=S4922 7=S5074 8=S5052

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 836494841

Instrument : MSVOA11
Method : EPA 8260B

Begun : 12/09/06 15:21
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	k1901	X	IB			12/09/06 15:21	1.0	1	
002	k1902	TUN	BFB			12/09/06 15:46	1.0	2	
003	k1903	X	IB			12/09/06 16:21	1.0	1	
004	k1904	IB	CALIB IB			12/09/06 16:49	1.0	1	
005	k1905	ICAL	0.25/0.5P			12/09/06 17:17	1.0	3 4 5 1	
006	k1906	ICAL	0.5/1PPB			12/09/06 17:45	1.0	3 4 5 1	
007	k1907	ICAL	2PPB			12/09/06 18:13	1.0	3 4 5 1	
008	k1908	ICAL	5PPB			12/09/06 18:41	1.0	3 4 5 1	
009	k1909	ICAL	10PPB			12/09/06 19:09	1.0	3 4 5 1	
010	k1910	ICAL	20PPB			12/09/06 19:37	1.0	3 4 5 1	
011	k1911	ICAL	50PPB			12/09/06 20:05	1.0	3 4 5 1	
012	k1912	ICAL	75PPB			12/09/06 20:33	1.0	3 4 5 1	
013	k1913	ICAL	100PPB			12/09/06 21:01	1.0	3 4 5 1	
014	k1914	X	25PPB			12/09/06 21:29	1.0	6 1	
015	k1915	X	25PPB			12/09/06 21:58	1.0	7 8 1	
016	k1916	X	IB			12/09/06 22:26	1.0	1	
017	k1917	X	IB			12/09/06 22:53	1.0	1	
018	k1918	X	IB			12/09/06 23:21	1.0	1	

Analyst: SJD Date: 12/11/06 Reviewer: LW

Date: 12/11/06

Standards used: 1=S4792 2=S3716 3=S4931 4=S5064 5=S4172 6=S4870 7=S4922 8=S5052

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 836497483

Instrument : MSVOA11
Method : EPA 8260B

Begun : 12/11/06 11:23
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	klb01	X	IB			12/11/06 11:23	1.0	1	
002	klb02	TUN	BFB			12/11/06 11:54	1.0	2	
003	klb03	CCV	25PPB			12/11/06 12:16	1.0	3 4 5 1	
004	klb04	X	QC367825	Water	120246	12/11/06 13:03	1.0	6 7 8 1	
005	klb05	ICV/BS	QC367825	Water	120246	12/11/06 13:59	1.0	6 7 8 1	
006	klb06	BSD	QC367855	Water	120246	12/11/06 14:27	1.0	6 7 8 1	
007	klb07	X	IB			12/11/06 14:55	1.0	1	
008	klb08	BLANK	QC367824	Water	120246	12/11/06 15:34	1.0	1	
009	klb09	SAMPLE	191225-003	Water	120246	12/11/06 16:02	1.0	1	
010	klb10	SAMPLE	191225-004	Water	120246	12/11/06 16:30	1.0	1	
011	klb11	SAMPLE	191225-005	Water	120246	12/11/06 16:58	1.0	1	
012	klb12	SAMPLE	191225-006	Water	120246	12/11/06 17:27	1.0	1	
013	klb13	SAMPLE	191225-007	Water	120246	12/11/06 17:55	1.0	1	
014	klb14	SAMPLE	191225-008	Water	120246	12/11/06 18:23	1.0	1	
015	klb15	SAMPLE	191225-009	Water	120246	12/11/06 18:51	1.0	1	
016	klb16	SAMPLE	191225-010	Water	120246	12/11/06 19:19	1.0	1	
017	klb17	SAMPLE	191225-011	Water	120246	12/11/06 19:47	1.0	1	
018	klb18	SAMPLE	191225-012	Water	120246	12/11/06 20:15	1.0	1	
019	klb19	SAMPLE	191225-013	Water	120246	12/11/06 20:43	1.0	1	
020	klb20	SAMPLE	191222-007	Water	120246	12/11/06 21:11	1.0	1	
021	klb21	SAMPLE	191222-001	Water	120246	12/11/06 21:39	3.333	1	
022	klb22	SAMPLE	191222-002	Water	120246	12/11/06 22:07	6.25	1	
023	klb23	SAMPLE	191222-003	Water	120246	12/11/06 22:35	6.25	1	
024	klb24	SAMPLE	191222-004	Water	120246	12/11/06 23:06	7.143	1	
025	klb25	SAMPLE	191222-005	Water	120246	12/11/06 23:34	8.333	1	
026	klb26	SAMPLE	191222-006	Water	120246	12/12/06 00:02	16.67	1	
027	klb27	X	IB			12/12/06 00:30	1.0	1	
028	klb28	X	IB			12/12/06 00:58	1.0	1	
029	klb29	X	IB			12/12/06 01:26	1.0	1	

Analyst: SJDDate: 12/12/06Reviewer: LWDate: 12/12/06

Standards used: 1=S4792 2=S3716 3=S4780 4=S4801 5=S4713 6=S4922 7=S4634 8=S5074

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 836500315

Instrument : MSVOA11
Method : EPA 8260B

Begun : 12/13/06 10:35
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	kld01	X	IB			12/13/06 10:35	1.0	1	
002	kld02	X	BFB			12/13/06 10:59	1.0	2	
003	kld03	TUN	BFB			12/13/06 11:22	1.0	2	
004	kld04	CCV	25PPB			12/13/06 11:44	1.0	3 4 5 1	
005	kld05	LCS	QC368161	Water	120329	12/13/06 12:22	1.0	6 7 8 1	
006	kld06	X	IB			12/13/06 12:50	1.0	1	
007	kld07	BLANK	QC368160	Water	120329	12/13/06 13:18	1.0	1	
008	kld08	MSS	191371-001	Water	120329	12/13/06 13:46	1.0	1	
009	kld09	SAMPLE	191275-006	Water	120329	12/13/06 14:14	1.0	1	
010	kld10	SAMPLE	191264-005	Water	120329	12/13/06 14:42	14.29	1	
011	kld11	SAMPLE	191264-002	Water	120329	12/13/06 15:10	16.67	1	headspace <= 1 mL
012	kld12	SAMPLE	191264-006	Water	120329	12/13/06 15:38	16.67	1	headspace <= 1 mL
013	kld13	SAMPLE	191264-012	Water	120329	12/13/06 16:07	40.0	1	headspace <= 1 mL
014	kld14	SAMPLE	191192-005	Water	120329	12/13/06 16:35	20.0	1	
015	kld15	SAMPLE	191338-001	Water	120329	12/13/06 17:03	1.0	1	
016	kld16	SAMPLE	191286-003	Water	120329	12/13/06 17:31	1.0	1	
017	kld17	SAMPLE	191286-006	Water	120329	12/13/06 17:59	1.0	1	
018	kld18	SAMPLE	191286-009	Water	120329	12/13/06 18:27	2.0	1	
019	kld19	SAMPLE	191275-009	Water	120329	12/13/06 18:55	1.429	1	
020	kld20	SAMPLE	191275-008	Water	120329	12/13/06 19:23	20.0	1	
021	kld21	SAMPLE	191275-005	Water	120329	12/13/06 19:51	25.0	1	
022	kld22	SAMPLE	191275-007	Water	120329	12/13/06 20:19	62.50	1	
023	kld23	SAMPLE	191275-013	Water	120329	12/13/06 20:47	62.50	1	
024	kld24	SAMPLE	191275-010	Water	120329	12/13/06 21:15	166.7	1	
025	kld25	SAMPLE	191275-011	Water	120329	12/13/06 21:43	166.7	1	
026	kld26	SAMPLE	191275-012	Water	120329	12/13/06 22:11	200.0	1	
027	kld27	MS	QC368181	Water	120329	12/13/06 22:39	1.0	6 7 8 1	
028	kld28	MSD	QC368182	Water	120329	12/13/06 23:07	1.0	6 7 8 1	
029	kld29	X	IB			12/13/06 23:35	1.0	1	
030	kld30	X	IB			12/14/06 00:03	1.0	1	
031	kld31	X	IB			12/14/06 00:31	1.0	1	

Analyst: SJDDate: 12/14/06Reviewer: LWDate: 12/14/06

Standards used: 1=S4792 2=S3716 3=S4780 4=S4801 5=S4713 6=S4922 7=S4634 8=S5074

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 836501672

Instrument : MSVOA11
Method : EPA 8260B

Begun : 12/14/06 09:12
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	kle01	X	IB			12/14/06 09:12	1.0	1	
002	kle02	TUN	BFB			12/14/06 09:36	1.0	2	
003	kle03	CCV	25PPB			12/14/06 09:59	1.0	3 4 5 1	
004	kle04	LCS	QC368294	Water	120366	12/14/06 10:37	1.0	6 7 8 1	
005	kle05	X	IB			12/14/06 11:05	1.0	1	
006	kle06	BLANK	QC368293	Water	120366	12/14/06 11:33	1.0	1	
007	kle07	SAMPLE	191382-001	Water	120366	12/14/06 12:01	1.0	1	
008	kle08	SAMPLE	191382-002	Water	120366	12/14/06 12:29	1.0	1	
009	kle09	SAMPLE	191382-003	Water	120366	12/14/06 12:58	1.0	1	
010	kle10	SAMPLE	191382-004	Water	120366	12/14/06 13:25	1.0	1	
011	kle11	SAMPLE	191382-005	Water	120366	12/14/06 13:54	1.0	1	
012	kle12	SAMPLE	191382-007	Water	120366	12/14/06 14:22	1.0	1	
013	kle13	MSS	191382-006	Water	120366	12/14/06 14:50	1.0	1	
014	kle14	SAMPLE	191286-009	Water	120366	12/14/06 15:18	1.0	1	
015	kle15	SAMPLE	191286-010	Water	120366	12/14/06 15:46	1.0	1	
016	kle16	SAMPLE	191286-011	Water	120366	12/14/06 16:14	1.0	1	
017	kle17	SAMPLE	191286-013	Water	120366	12/14/06 16:42	1.0	1	
018	kle18	SAMPLE	191286-016	Water	120366	12/14/06 17:10	1.0	1	
019	kle19	SAMPLE	191314-013	Water	120366	12/14/06 17:38	1.0	1	
020	kle20	SAMPLE	191314-009	Water	120366	12/14/06 18:06	1.0	1	
021	kle21	SAMPLE	191314-010	Water	120366	12/14/06 18:34	1.0	1	
022	kle22	SAMPLE	191275-010	Water	120366	12/14/06 19:02	100.0	1	
023	kle23	SAMPLE	191275-011	Water	120366	12/14/06 19:31	83.33	1	
024	kle24	SAMPLE	191275-013	Water	120366	12/14/06 19:59	25.0	1	
025	kle25	SAMPLE	191273-003	Water	120366	12/14/06 20:27	333.3	1	headspace <= 1 mL
026	kle26	MS	QC368323	Water	120366	12/14/06 20:55	1.0	6 7 8 1	
027	kle27	MSD	QC368324	Water	120366	12/14/06 21:23	1.0	6 7 8 1	
028	kle28	X	IB			12/14/06 21:51	1.0	1	
029	kle29	TUN	BFB			12/14/06 22:16	1.0	2	
030	kle30	CCV	30PPB			12/14/06 22:39	1.0	3 4 5 1	
031	kle31	LCS	QC368444	Water	120397	12/14/06 23:07	1.0	6 7 8 1	
032	kle32	X	IB			12/14/06 23:35	1.0	1	
033	kle33	BLANK	QC368443	Water	120397	12/15/06 00:03	1.0	1	
034	kle34	SAMPLE	191327-006	Water	120397	12/15/06 00:33	1.0	1	
035	kle35	SAMPLE	191327-007	Water	120397	12/15/06 01:01	1.0	1	
036	kle36	SAMPLE	191327-001	Water	120397	12/15/06 01:29	1.0	1	
037	kle37	SAMPLE	191327-002	Water	120397	12/15/06 01:57	1.0	1	
038	kle38	SAMPLE	191378-001	Water	120397	12/15/06 02:25	1.0	1	
039	kle39	MSS	191378-002	Water	120397	12/15/06 02:53	1.0	1	
040	kle40	SAMPLE	191378-003	Water	120397	12/15/06 03:21	1.0	1	
041	kle41	SAMPLE	191378-004	Water	120397	12/15/06 03:49	1.0	1	
042	kle42	SAMPLE	191378-005	Water	120397	12/15/06 04:17	1.0	1	
043	kle43	SAMPLE	191378-006	Water	120397	12/15/06 04:45	1.0	1	
044	kle44	SAMPLE	191378-007	Water	120397	12/15/06 05:13	1.0	1	
045	kle45	SAMPLE	191378-008	Water	120397	12/15/06 05:41	1.0	1	
046	kle46	SAMPLE	191371-009	Water	120397	12/15/06 06:09	1.0	1	
047	kle47	SAMPLE	191371-010	Water	120397	12/15/06 06:37	1.0	1	
048	kle48	SAMPLE	191371-012	Water	120397	12/15/06 07:06	1.0	1	
049	kle49	SAMPLE	191371-013	Water	120397	12/15/06 07:34	1.0	1	
050	kle50	SAMPLE	191371-014	Water	120397	12/15/06 08:02	1.0	1	
051	kle51	SAMPLE	191371-015	Water	120397	12/15/06 08:30	1.0	1	
052	kle52	SAMPLE	191371-011	Water	120397	12/15/06 08:58	142.9	1	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 836501672

Instrument : MSVOA11
Method : EPA 8260B

Begun : 12/14/06 09:12
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
053	kle53	MS	QC368445	Water	120397	12/15/06 09:26	1.0	6 7 8 1	
054	kle54	MSD	QC368446	Water	120397	12/15/06 09:54	1.0	6 7 8 1	
055	kle55	X	IB			12/15/06 10:22	1.0	1	
056	kle56	X	IB			12/15/06 10:50	1.0	1	

Analyst: SJD Date: 12/15/06 Reviewer: LW

Date: 12/15/06

Standards used: 1=S4792 2=S3716 3=S4780 4=S4801 5=S4713 6=S4922 7=S4634 8=S5074

REPORTING SUMMARY FOR 191286 8260 Water
Curtis & Tompkins Laboratories

[illegible]

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 12-13

PREPPED BY: J.C.

WATER

15 + MS/MSD

120314

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	191147 - 3		C	<2	LV		4	RR 8.3X OD	HOLD 12-14
2	191265 - 6			↓				RR 1X TCE B center	HOLD 12-14
3	7			<2				RR 2X TCE OR	
4	8			↓				RR 1X TCE /CE B	
75	9			<2				RR 50X TCE OR, SURF	
6	14			↓				RR 1X TCE B	
7	16			↓				RR 1X ↓	
8	10		↓	↓	↓			RR 125X surf high	↓
9	12		COEF	<2				1X MS/MSD	
0	191286 - 12		A	L2				33X	
1	191270 - 1		↓	↓				3.3X	
2	2		A	<2				TB	
3	191275 - 1		E	↓				1X	
14	2		C	<2				100X	
15	3		↓	↓				33X	
16	4		↓	↓			↓		
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GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 12/13/06

PREPPED BY: Jio

WATER

120329

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	191192-005		B	<2			11	RR 20x 00	Lochus Weiss
2	191264-012		A		1mL			RR 40x cis 42 >LR	Lochus
3	191264-002							RR 16.7x 0.0	↓
4	191264-006							RR 16.7x 0.0	↓
5	191264-005		B	<2				1/2x Propped	Lochus
6	191275-005		C	<2				25x	
7	-006			<2				1x	
8	-007			<2				62.5x	
9	-008							20x	
0	-009							1.42x	
1	-010							167x	
2	-011							167x	
3	-012							200x	
4	-013							62.5x	
5	191371-001		BACD	<2				1x mss/ms/msp	
6	191386-3		C	<2				1x	
7	-6		C					1x	
8	-9		C	<2				2x	
9	191338-001		C				✓	RR 1x Fro 113 +	
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PREPFORM.XLS

12/23/06

00245

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 12/14/66

PREPPED BY: J.A.

I

WATER

120 366

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	191382-001		B	<2	Bubble		11	12	
2	-002								
3	-003								
4	-004								
5	-005								
6	-006		ACD	<2				mss/mss/msd	
7	-007								
8	191286-009		D						
9	-010		C						
10	-011								
11	-013		A					TB	
12	-016		D	<2				KR 200x C.S. 1/2 SCR	
13	191225-007			<2				RR 100x O.D.	
14	-010							RR 83.3x O.D.	
15	-011							RR 25x O.D.	
16	-013		C	<2				12	
17	191314-009							12	
18	-010		B		1/2 mL			TB	
19	-013		C	<2	1/2 mL			333 X	
20	191273-003								
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PREPFORM.XLS

12/21/95

00246

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 12/15/06

PREPPED BY.

120404

WATER

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	191301-2		C	<2			8	M 4x, 00	
2	-3			↓				M 2x, 00	
3	-5			↓				M 3.3x, 00	
4	-7			<2				M 1x, 00	
5	-9			<2				M 3.3x, 00	
6	-11			↓				M 6.25x, 00	
7	-12			↓				M 6.25x, 00	
8	191301-2		B	<2				M 1x, mexy, oxy, low curve +	
9	191286-16		C	↓				M 1x, mexy curve +	
10	191328-6		B	<2				5x	
11	191367-7			↓				25x	
12	-8			↓				2.5x	
13	-9			↓				1x	
14	-10			<2				4x	
15	-11			<2				1x	
16	-12			↓				1x	
17	-13			↓					
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Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 01/05/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
Ethanol	ug/L	55	22	23	50	11	22	36	10
1,1-Dichloroethene	ug/L	0.27	0.22	0.062	0.17	0.10	0.17	0.089	0.11
Benzene	ug/L	0.11	0.041	0.060	0.061	0.12	0.10	0.027	0.084
Trichloroethene	ug/L	0.21	0.076	0.18	0.17	0.11	0.13	0.087	0.086
Toluene	ug/L	0.083	0.083	0.12	0.092	0.062	0.085	0.053	0.14
Chlorobenzene	ug/L	0.10	0.090	0.11	0.16	0.16	0.098	0.050	0.075
Freon 12	ug/L	0.18	0.099	0.22	0.062	0.15	0.47	0.18	0.20
Chloromethane	ug/L	0.12	0.16	0.12	0.18	0.13	0.34	0.089	0.20
Vinyl Chloride	ug/L	0.19	0.23	0.10	0.066	0.10	0.097	0.16	0.039
Bromomethane	ug/L	0.29	0.30	0.31	0.13	0.31	0.34	0.20	0.23
Chloroethane	ug/L	0.33	0.33	0.15	0.16	0.13	0.45	0.12	0.18
Trichlorofluoromethane	ug/L	0.16	0.057	0.17	0.10	0.080	0.46	0.10	0.19
Acetone	ug/L	0.39	0.87	0.21	0.85	0.16	0.20	0.49	0.15
Freon 113	ug/L	0.062	0.12	0.13	0.25	0.071	0.19	0.091	0.16
Methylene Chloride	ug/L	0.15	0.21	0.11	0.12	0.16	0.29	0.22	0.086
MTBE	ug/L	0.069	0.074	0.065	0.045	0.040	0.15	0.052	0.068
Carbon Disulfide	ug/L	0.039	0.031	0.086	0.076	0.11	0.14	0.037	0.066
trans-1,2-Dichloroethene	ug/L	0.37	0.13	0.18	0.051	0.064	0.15	0.093	0.094
Vinyl Acetate	ug/L	0.076	0.36	0.084	0.99	0.40	0.13	0.10	0.13
1,1-Dichloroethane	ug/L	0.088	0.061	0.048	0.090	0.11	0.14	0.063	0.10
2-Butanone	ug/L	0.16	0.17	0.20	0.50	0.099	0.23	0.26	0.081
cis-1,2-Dichloroethene	ug/L	0.26	0.18	0.083	0.12	0.042	0.12	0.11	0.16
2,2-Dichloropropane	ug/L	0.093	0.17	0.077	0.12	0.066	0.15	0.083	0.14
Chloroform	ug/L	0.082	0.055	0.086	0.060	0.11	0.16	0.044	0.084
Bromochloromethane	ug/L	0.091	0.090	0.10	0.18	0.11	0.18	0.15	0.11
1,1,1-Trichloroethane	ug/L	0.084	0.066	0.14	0.11	0.061	0.12	0.041	0.096
1,1-Dichloropropene	ug/L	0.12	0.11	0.081	0.16	0.16	0.11	0.055	0.084
Carbon Tetrachloride	ug/L	0.089	0.11	0.098	0.17	0.15	0.14	0.056	0.14
1,2-Dichloroethane	ug/L	0.090	0.088	0.099	0.096	0.12	0.18	0.056	0.094
1,2-Dichloropropane	ug/L	0.093	0.060	0.079	0.071	0.14	0.16	0.12	0.086
Bromodichloromethane	ug/L	0.086	0.039	0.067	0.074	0.10	0.14	0.069	0.094
Dibromomethane	ug/L	0.16	0.061	0.092	0.16	0.11	0.18	0.13	0.089
4-Methyl-2-Pentanone	ug/L	0.044	0.076	0.057	0.20	0.13	0.14	0.25	0.067
cis-1,3-Dichloropropene	ug/L	0.068	0.065	0.056	0.20	0.16	0.094	0.044	0.080
trans-1,3-Dichloropropene	ug/L	0.074	0.074	0.044	0.073	0.14	0.13	0.060	0.059
1,1,2-Trichloroethane	ug/L	0.12	0.12	0.14	0.19	0.15	0.21	0.058	0.12
2-Hexanone	ug/L	0.043	0.31	0.047	0.34	0.11	0.13	0.14	0.097
1,3-Dichloropropane	ug/L	0.064	0.067	0.061	0.063	0.10	0.14	0.068	0.049
Tetrachloroethene	ug/L	0.13	0.14	0.12	0.22	0.14	0.092	0.093	0.089
Dibromochloromethane	ug/L	0.099	0.054	0.10	0.085	0.056	0.15	0.063	0.094
1,2-Dibromoethane	ug/L	0.16	0.061	0.10	0.073	0.11	0.13	0.070	0.088
2-Chloroethylvinylether	ug/L	0.093	0.18	0.24	0.17	0.14	0.19	0.23	0.14
1,1,1,2-Tetrachloroethane	ug/L	0.11	0.087	0.10	0.11	0.14	0.10	0.088	0.16
Ethylbenzene	ug/L	0.059	0.076	0.075	0.17	0.041	0.11	0.11	0.069
m,p-Xylenes	ug/L	0.24	0.22	0.14	0.27	0.17	0.19	0.20	0.14

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 01/05/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
o-Xylene	ug/L	0.10	0.058	0.092	0.11	0.16	0.087	0.13	0.078
Styrene	ug/L	0.12	0.092	0.098	0.085	0.16	0.11	0.061	0.055
Bromoform	ug/L	0.12	0.088	0.11	0.18	0.094	0.12	0.15	0.10
Isopropylbenzene	ug/L	0.12	0.059	0.090	0.18	0.059	0.11	0.10	0.089
1,1,2,2-Tetrachloroethane	ug/L	0.13	0.096	0.086	0.047	0.13	0.20	0.055	0.11
1,2,3-Trichloropropane	ug/L	0.31	0.28	0.074	0.11	0.17	0.19	0.16	0.072
Propylbenzene	ug/L	0.075	0.10	0.063	0.21	0.023	0.12	0.11	0.088
Bromobenzene	ug/L	0.12	0.12	0.10	0.19	0.12	0.17	0.085	0.088
1,3,5-Trimethylbenzene	ug/L	0.060	0.095	0.047	0.14	0.057	0.13	0.13	0.069
2-Chlorotoluene	ug/L	0.12	0.11	0.068	0.15	0.025	0.10	0.12	0.080
4-Chlorotoluene	ug/L	0.079	0.069	0.043	0.14	0.037	0.14	0.069	0.078
tert-Butylbenzene	ug/L	0.11	0.15	0.075	0.19	0.038	0.13	0.079	0.082
1,2,4-Trimethylbenzene	ug/L	0.091	0.088	0.066	0.12	0.069	0.082	0.10	0.099
sec-Butylbenzene	ug/L	0.11	0.12	0.062	0.17	0.088	0.088	0.076	0.097
para-Isopropyl Toluene	ug/L	0.058	0.12	0.12	0.14	0.056	0.071	0.045	0.075
1,3-Dichlorobenzene	ug/L	0.080	0.16	0.097	0.18	0.060	0.13	0.10	0.094
1,4-Dichlorobenzene	ug/L	0.068	0.14	0.095	0.18	0.038	0.10	0.17	0.072
n-Butylbenzene	ug/L	0.12	0.15	0.11	0.18	0.21	0.11	0.12	0.073
1,2-Dichlorobenzene	ug/L	0.072	0.14	0.080	0.14	0.16	0.16	0.061	0.081
1,2-Dibromo-3-Chloropropane	ug/L	0.39	0.25	0.21	0.22	0.13	0.17	0.098	0.18
1,2,4-Trichlorobenzene	ug/L	0.12	0.17	0.14	0.16	0.10	0.12	0.17	0.061
Hexachlorobutadiene	ug/L	0.19	0.19	0.29	0.21	0.11	0.065	0.25	0.17
Naphthalene	ug/L	0.12	0.13	0.060	0.10	0.091	0.11	0.16	0.052
1,2,3-Trichlorobenzene	ug/L	0.063	0.17	0.10	0.20	0.095	0.10	0.29	0.15
tert-Butyl Alcohol (TBA)	ug/L	1.3	1.6	0.83	2.5	1.3	1.1	1.3	1.3
Isopropyl Ether (DIPE)	ug/L	0.068	0.070	0.063	0.027	0.030	0.14	0.027	0.089
Ethyl tert-Butyl Ether (ETBE)	ug/L	0.089	0.045	0.024	0.20	0.033	0.13	0.034	0.079
Methyl tert-Amyl Ether (TAME)	ug/L	0.094	0.13	0.055	0.054	0.048	0.10	0.057	0.17
Isopropanol	ug/L	4.6	2.7	1.6	6.6	1.5	1.4	1.1	1.3
Hexane	ug/L				0.33		0.15		
Cyclohexanone	ug/L	3.8	2.4	0.21	1.6	1.6	1.3		1.0
Tetrahydrofuran	ug/L	0.64	1.2	1.1	0.79	1.4	2.1	3.5	0.70
Tetramethyl THF	ug/L	0.067	0.061	0.062	0.20	0.10	0.13	0.078	0.079
Gasoline C6-C10	ug/L		15		4.8	15	8.5		11
Gasoline C7-C12	ug/L		18		2.4	13	7.7		11
Dibromofluoromethane	ug/L	3.1		1.8	2.4	1.5	1.1	3.2	1.1
1,2-Dichloroethane-d4	ug/L	3.0			2.4	1.2	1.7	3.0	1.0
Toluene-d8	ug/L	1.7			1.1	1.0	1.5	1.1	0.96
Bromofluorobenzene	ug/L	2.5			1.2	1.2	2.5	1.5	0.62
Trifluorotoluene	ug/L	0.12		0.065	0.21	0.13		0.14	

PESTICIDE DATA
(WATER)



Curtis & Tompkins, Ltd.

Organochlorine Pesticides

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	LF6GW103	Batch#:	120164
Lab ID:	191286-001	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Prepared:	12/07/06
Diln Fac:	1.000	Analyzed:	12/08/06

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND	0.09
4,4'-DDT	ND	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.09
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	97	65-135
Decachlorobiphenyl	94	65-135

ND= Not Detected
RL= Reporting Limit

Organochlorine Pesticides

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DUP1205062A	Batch#:	120164
Lab ID:	191286-004	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Prepared:	12/07/06
Diln Fac:	1.000	Analyzed:	12/08/06

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND	0.09
4,4'-DDT	ND	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.09
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	92	65-135
Decachlorobiphenyl	84	65-135



Organochlorine Pesticides

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	BB1PZ100	Batch#:	120164
Lab ID:	191286-007	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Prepared:	12/07/06
Diln Fac:	1.000	Analyzed:	12/15/06

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND #	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	75	65-135
Decachlorobiphenyl	51 *	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

**Organochlorine Pesticides**

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	BB1PZ101	Batch#:	120164
Lab ID:	191286-008	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Prepared:	12/07/06
Diln Fac:	1.000	Analyzed:	12/15/06

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND	0.09
4,4'-DDT	ND #	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.09
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	76	65-135
Decachlorobiphenyl	61 *	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit



Organochlorine Pesticides

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	1349MW100	Sampled:	12/05/06
Lab ID:	191286-013	Received:	12/06/06
Matrix:	Water	Prepared:	12/07/06
Units:	ug/L	Analyzed:	12/15/06
Batch#:	120164		

Analyte	Result	RL	Diln Fac
alpha-BHC	ND	0.1	2.000
beta-BHC	ND	0.1	2.000
gamma-BHC	ND	0.2	5.000
delta-BHC	ND	0.1	2.000
Heptachlor	0.2	0.1	2.000
Aldrin	ND	0.1	2.000
Heptachlor epoxide	ND	0.1	2.000
Endosulfan I	ND	0.1	2.000
Dieldrin	0.3	0.2	2.000
4,4'-DDE	0.3	0.2	2.000
Endrin	ND	0.2	2.000
Endosulfan II	ND	0.2	2.000
Endosulfan sulfate	ND	0.2	2.000
4,4'-DDD	ND	0.2	2.000
4,4'-DDT	ND #	0.2	2.000
alpha-Chlordane	ND	0.1	2.000
gamma-Chlordane	ND	0.1	2.000
Methoxychlor	ND	1.0	2.000
Endrin ketone	ND	0.2	2.000
Toxaphene	ND	2.0	2.000

Surrogate	%REC	Limits	Diln Fac
TCMX	63 *	65-135	2.000
Decachlorobiphenyl	67	65-135	2.000

#= CCV drift outside limits; average CCV drift within limits per method requirements

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit



Batch QC Report

Organochlorine Pesticides

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC367482	Batch#:	120164
Matrix:	Water	Prepared:	12/07/06
Units:	ug/L	Analyzed:	12/08/06

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND #	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND #	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	87	65-135
Decachlorobiphenyl	80	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements

ND= Not Detected

RL= Reporting Limit



Curtis & Tompkins, Ltd.

Batch QC Report

Organochlorine Pesticides

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Matrix:	Water	Batch#:	120164
Units:	ug/L	Prepared:	12/07/06
Diln Fac:	1.000	Analyzed:	12/13/06

Type: BS Lab ID: QC367483

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	0.4000	0.4158	104	65-135
Heptachlor	0.4000	0.3977	99	65-135
Aldrin	0.4000	0.3873	97	65-135
Dieldrin	0.8000	0.9019	113	65-135
Endrin	0.8000	0.8929	112	65-135
4,4'-DDT	0.8000	0.9023	113	65-135

Surrogate	%REC	Limits
TCMX	109	65-135
Decachlorobiphenyl	91	65-135

Type: BSD Lab ID: QC367484

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.4000	0.3573	89	65-135	15	35
Heptachlor	0.4000	0.3371	84	65-135	16	35
Aldrin	0.4000	0.3378	84	65-135	14	35
Dieldrin	0.8000	0.7688	96	65-135	16	35
Endrin	0.8000	0.7257	91	65-135	21	35
4,4'-DDT	0.8000	0.7107	89	65-135	24	35

Surrogate	%REC	Limits
TCMX	99	65-135
Decachlorobiphenyl	82	65-135

RPD= Relative Percent Difference

Confirmation Report for 191286 PEST Water
Curtis & Tompkins Laboratories

Units: ug/L

Lab ID	Client ID	Analyte	Result	Confirmation	RPD	%D
191286-013	1349MW100	Heptachlor	0.1782	0.1985	11	11
191286-013	1349MW100	Dieldrin	0.2887	0.4232	38	47
191286-013	1349MW100	4,4'-DDE	0.2670	0.3452	26	29

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191286 PEST Water: EPA 8081A

Inst : GC21

Calnum : 246500585001

Units : pg

Date : 15-DEC-2006 03:54

X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	347_027	246500585027	PEST_1	15-DEC-2006 03:54	S5045
L2	347_028	246500585028	PEST_2	15-DEC-2006 04:23	S5046
L3	347_029	246500585029	PEST_3	15-DEC-2006 04:51	S5047
L4	347_030	246500585030	PEST_4	15-DEC-2006 05:20	S5048
L5	347_031	246500585031	PEST_5	15-DEC-2006 05:49	S5049
L6	347_032	246500585032	PEST_6	15-DEC-2006 06:18	S5050
L7	347_033	246500585033	PEST_7	15-DEC-2006 06:46	S5051

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	%RSD	MnR ²	MaxRSD	Flg
alpha-BHC	A	16764	15560	15329	15412	15569	14958	14558	AVRG	6.47E-5			15450	4	0.995	20	
gamma-BHC	A	14828	13978	13612	13706	13820	13266	12881	AVRG	7.28E-5			13727	4	0.995	20	
beta-BHC	A	6779.5	5099.2	5820.6	5812.6	5811.8	5417.9	5186.5	AVRG	1.71E-4			5846.9	9	0.995	20	
delta-BHC	A	16180	14603	13881	13969	14150	13552	13047	AVRG	7.04E-5			14197	7	0.995	20	
Heptachlor	A	14670	13663	13339	13316	13403	12725	12096	AVRG	7.51E-5			13316	6	0.995	20	
Aldrin	A	13747	12906	12493	12501	12600	12000	11476	AVRG	7.98E-5			12532	6	0.995	20	
Heptachlor epoxide	A	12625	11630	11209	11138	11174	10475	9868.7	AVRG	8.96E-5			11160	8	0.995	20	
gamma-Chlordane	A	12190	11176	10832	10821	10920	10390	10018	AVRG	9.17E-5			10907	6	0.995	20	
alpha-Chlordane	A	11802	10645	10330	10346	10411	9849.5	9521.6	AVRG	9.60E-5			10415	7	0.995	20	
4,4'-DDE	A	11574	10504	10080	10215	10351	9899.9	8756.1	AVRG	9.81E-5			10197	8	0.995	20	
Endosulfan I	A	11424	10406	10081	10064	10091	9546.7	9179.7	AVRG	9.89E-5			10113	7	0.995	20	
Dieldrin	A	11645	10663	10311	10384	10481	9949.1	8752.4	AVRG	9.70E-5			10312	8	0.995	20	
Endrin	A	9567.8	8883.6	8587.2	8672.6	8781.1	8313.9	7595.5	AVRG	1.16E-4			8628.8	7	0.995	20	
4,4'-DDD	A	9655.0	8514.0	8029.4	8120.5	8225.5	7966.3	7397.5	AVRG	1.21E-4			8272.6	8	0.995	20	
Endosulfan II	A	10109	8977.4	8419.4	8418.8	8481.0	8085.4	7445.6	AVRG	1.17E-4			8562.3	10	0.995	20	
4,4'-DDT	A	9052.5	8121.4	7836.3	8078.3	8248.6	8077.0	7523.7	AVRG	1.23E-4			8134.0	6	0.995	20	
Methoxychlor	A	3907.6	3548.2	3317.6	3417.3	3454.5	3064.6	2382.5	AVRG	3.03E-4			3298.9	14	0.995	20	
Endosulfan sulfate	A	8478.5	7390.8	6912.6	6941.6	7008.0	6681.4	6308.5	AVRG	1.41E-4			7103.1	10	0.995	20	
Endrin ketone	A	10059	8635.2	7988.2	8089.0	8166.1	7863.9	7306.8	AVRG	1.20E-4			8301.1	10	0.995	20	
TCMX	A	10889	10115	9681.3	9599.5	9617.7	9108.1	8834.2	AVRG	1.03E-4			9692.1	7	0.995	20	
Decachlorobiphenyl	A	5111.3	4893.6	4623.8	4721.8	4794.2	4610.6	4317.0	AVRG	2.12E-4			4724.6	5	0.995	20	
gamma-BHC	B	23108	22963	20879	21315	20792	19222	17239	AVRG	4.81E-5			20788	10	0.995	20	
gamma-BHC	B	19921	19542	18140	18329	17962	17873	17272	AVRG	5.42E-5			18434	5	0.995	20	
beta-BHC	B	9691.5	8939.0	8176.1	8225.2	7986.3	7895.8	7344.7	AVRG	1.20E-4			8322.6	9	0.995	20	
delta-BHC	B	19133	18925	16959	18034	17547	18094	16338	AVRG	5.60E-5			17861	6	0.995	20	
Heptachlor	B	17369	18429	17170	18159	17598	18007	16400	AVRG	5.68E-5			17590	4	0.995	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	%RSD	MNR^2	MKRSD	Flg
Aldrin	B	19669	19029	17575	17845	17317	17497	15645	AVRG		5.62E-5		17797	7	0.995	20	
Heptachlor epoxide	B	18152	16957	15653	15828	15221	15160	13369	AVRG		6.34E-5		15763	10	0.995	20	
gamma-Chlordane	B	17835	16991	15502	15838	15200	15444	13834	AVRG		6.33E-5		15806	8	0.995	20	
alpha-Chlordane	B	17287	16273	14759	15035	14422	14702	13167	AVRG		6.63E-5		15092	9	0.995	20	
4,4'-DDE	B	17013	16434	14886	15575	14960	14746	11629	AVRG		6.65E-5		15035	11	0.995	20	
Endosulfan I	B	17009	16167	14613	14808	14188	14183	12667	AVRG		6.75E-5		14805	10	0.995	20	
Dieldrin	B	16984	16447	14845	15514	14895	14241	10912	AVRG		6.74E-5		14834	13	0.995	20	
Endrin	B	5565.3	6312.9	5124.8	6150.6	5867.1	6180.2	5428.6	AVRG		1.72E-4		5804.2	8	0.995	20	
4,4'-DDD	B	16028	15250	13313	13689	13054	12937	10327	AVRG		7.40E-5		13514	14	0.995	20	
Endosulfan II	B	14744	14250	12364	12987	12461	12274	9713.1	AVRG		7.88E-5		12685	13	0.995	20	
4,4'-DDT	B	6785.5	8640.0	7807.4	9955.4	9749.3	10932	9204.2	AVRG		1.11E-4		9010.5	16	0.995	20	
Methoxychlor	B	3306.8	4318.0	3649.1	4672.5	4441.5	3939.2	2701.2	AVRG		2.59E-4		3861.2	18	0.995	20	
Endosulfan sulfate	B	12280	12357	10346	11233	10692	10635	8669.9	AVRG		9.18E-5		10888	12	0.995	20	
Endrin ketone	B	17783	18354	14967	16734	15806	15243	11642	AVRG		6.33E-5		15790	14	0.995	20	
TCMX	B	12670	12770	11482	11624	11263	10844	9580.6	AVRG		8.72E-5		11462	10	0.995	20	
Decachlorobiphenyl	B	7526.3	8626.9	6528.6	8028.1	7740.6	7649.6	5944.7	AVRG		1.34E-4		7435.0	12	0.995	20	
Average EPA 8081A	A												(n=22)	8		20	
Average EPA 8081A	B												(n=22)	10		20	

00200

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191286 PEST Water
EPA 8081A

Inst : GC21
Calnum : 246500585001

Cal Date: 15-DEC-2006

ICV 246500585035 (347_035 15-DEC-2006) stds: S5092

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	15450	14046	25.00	22.73	pg	-9	15	
gamma-BHC	A	13727	12587	25.00	22.92	pg	-8	15	
beta-BHC	A	5846.9	5207.4	25.00	22.27	pg	-11	15	
delta-BHC	A	14197	13245	25.00	23.32	pg	-7	15	
Heptachlor	A	13316	11845	25.00	22.24	pg	-11	15	
Aldrin	A	12532	11503	25.00	22.95	pg	-8	15	
Heptachlor epoxide	A	11160	10034	25.00	22.48	pg	-10	15	
gamma-Chlordane	A	10907	10192	25.00	23.36	pg	-7	15	
alpha-Chlordane	A	10415	9621.5	25.00	23.10	pg	-8	15	
4,4'-DDE	A	10197	9680.0	25.00	23.73	pg	-5	15	
Endosulfan I	A	10113	9097.0	25.00	22.49	pg	-10	15	
Dieldrin	A	10312	9613.4	25.00	23.31	pg	-7	15	
Endrin	A	8628.8	8161.0	25.00	23.64	pg	-5	15	
4,4'-DDD	A	8272.6	7665.6	25.00	23.17	pg	-7	15	
Endosulfan II	A	8562.3	8013.4	25.00	23.40	pg	-6	15	
4,4'-DDT	A	8134.0	7437.4	25.00	22.86	pg	-9	15	
Methoxychlor	A	3298.9	3675.3	25.00	27.85	pg	11	15	
Endosulfan sulfate	A	7103.1	6696.2	25.00	23.57	pg	-6	15	
Endrin ketone	A	8301.1	8005.7	25.00	24.11	pg	-4	15	
alpha-BHC	B	20788	17571	25.00	21.13	pg	-15	15	
gamma-BHC	B	18434	19056	25.00	25.84	pg	3	15	
beta-BHC	B	8322.6	7903.2	25.00	23.74	pg	-5	15	
delta-BHC	B	17861	17676	25.00	24.74	pg	-1	15	
Heptachlor	B	17590	17853	25.00	25.37	pg	1	15	
Aldrin	B	17797	17414	25.00	24.46	pg	-2	15	
Heptachlor epoxide	B	15763	15072	25.00	23.90	pg	-4	15	
gamma-Chlordane	B	15806	15616	25.00	24.70	pg	-1	15	
alpha-Chlordane	B	15092	14720	25.00	24.38	pg	-2	15	
4,4'-DDE	B	15035	15424	25.00	25.65	pg	3	15	
Endosulfan I	B	14805	14246	25.00	24.06	pg	-4	15	
Dieldrin	B	14834	14875	25.00	25.07	pg	0	15	
Endrin	B	5804.2	6122.2	25.00	26.37	pg	5	15	
4,4'-DDD	B	13514	13171	25.00	24.37	pg	-3	15	
Endosulfan II	B	12685	13111	25.00	25.84	pg	3	15	
4,4'-DDT	B	9010.5	9149.5	25.00	25.39	pg	2	15	
Methoxychlor	B	3861.2	4498.7	25.00	29.13	pg	17	15	v+ ***
Endosulfan sulfate	B	10888	11106	25.00	25.50	pg	2	15	
Endrin ketone	B	15790	16740	25.00	26.50	pg	6	15	
Average EPA 8081A	A	n=20					8	15	
Average EPA 8081A	B	n=20					4	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191286 PEST Water: EPA 8081A

Inst : GC23 Name : gc23pest_339
 Calnum : 806488872001 Date : 05-DEC-2006 22:15
 Units : pg X Axis : R Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	339_026	806488872026	PEST_1	05-DEC-2006 22:15	S4176
L2	339_027	806488872027	PEST_2	05-DEC-2006 22:36	S3833
L3	339_028	806488872028	PEST_3	05-DEC-2006 22:58	S4177
L4	339_029	806488872029	PEST_4	05-DEC-2006 23:19	S4178
L5	339_030	806488872030	PEST_5	05-DEC-2006 23:41	S3834
L6	339_031	806488872031	PEST_6	06-DEC-2006 00:02	S4745
L7	339_032	806488872032	PEST_7	06-DEC-2006 00:24	S4043

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	AVG	%RSD	Min:2	MaxRSD	Flg
alpha-BHC	A	20152	19999	22191	25039	23350	23883	22781	AVRG		4.45E-5		22485	8	0.995	20	
gamma-BHC	A	18313	17741	19629	21766	20511	21008	21614	AVRG		4.98E-5		20083	8	0.995	20	
beta-BHC	A	7177.5	6762.0	7253.8	7560.2	6789.6	6415.0	9924.3	AVRG		1.35E-4		7411.8	16	0.995	20	
delta-BHC	A	20070	18188	19698	21812	19501	19584	21798	AVRG		4.98E-5		20093	7	0.995	20	
Heptachlor	A	15971	16226	17730	20134	18603	17893	20270	AVRG		5.52E-5		18118	9	0.995	20	
Aldrin	A	16748	16423	17824	19974	18686	18882	19876	AVRG		5.45E-5		18345	8	0.995	20	
Heptachlor epoxide	A	15441	14961	15982	17722	16383	15756	18869	AVRG		6.08E-5		16445	8	0.995	20	
gamma-Chlordane	A	14664	14327	15435	17359	15979	15450	19075	AVRG		6.23E-5		16042	10	0.995	20	
alpha-Chlordane	A	14520	14039	14748	16798	14839	15059	19491	AVRG		6.39E-5		15642	12	0.995	20	
4,4'-DDE	A	11442	12008	13865	17162	16004	14622		AVRG		7.05E-5		14184	16	0.995	20	
Endosulfan I	A	12543	12594	14090	15152	14838	13675	19098	AVRG		6.86E-5		14570	15	0.995	20	
Dieldrin	A	13912	14236	16121	20844	19652	16601		AVRG		5.92E-5		16894	17	0.995	20	
Endrin	A	10791	11436	13013	15947	14225	12650		AVRG		7.69E-5		13010	14	0.995	20	
4,4'-DDD	A	8246.5	8894.5	11257	12532	10831	10092		AVRG		9.70E-5		10309	15	0.995	20	
Endosulfan II	A	11817	11731	14692	17083	16633	15470		AVRG		6.86E-5		14571	16	0.995	20	
4,4'-DDT	A	7517.8	9243.7	11132	13603	12537	11132		AVRG		9.21E-5		10861	20	0.995	20	
Methoxychlor	A	3539.3	4207.6	5126.6	6924.6	5900.8			AVRG		1.95E-4		5139.8	26	0.995	20	rsd ***
Endosulfan sulfate	A	9752.3	9875.8	11782	12703	11468	10194		AVRG		9.12E-5		10963	11	0.995	20	
Endrin ketone	A	11737	11882	16615	18904	17026	14587		AVRG		6.61E-5		15125	19	0.995	20	
TCMX	A	12175	12302	13381	15383	14457	14597		AVRG		7.29E-5		13716	10	0.995	20	
Decachlorobiphenyl	A	6162.5	6836.6	7019.4	8770.8	7333.9	5418.9	9066.0	AVRG		1.38E-4		7229.7	18	0.995	20	
alpha-BHC	B	11220	10381	11769	11496	10794	10682	14689	AVRG		8.64E-5		11576	13	0.995	20	
gamma-BHC	B	9936.5	9050.2	10341	10006	9396.4	9250.6	13024	AVRG		9.86E-5		10143	13	0.995	20	
beta-BHC	B	4389.0	3786.6	4244.7	3999.3	3717.2	3420.9	4395.0	AVRG		2.50E-4		3993.2	9	0.995	20	
delta-BHC	B	12208	9632.6	11083	10418	9540.0	9478.7	13308	AVRG		9.25E-5		10810	14	0.995	20	
Heptachlor	B	8306.0	7923.6	9168.6	8592.3	8114.3	7719.4	11396	AVRG		1.14E-4		8745.8	14	0.995	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2	%RSD	Min^2	MaxRSD	Flg
Aldrin	B	9283.0	8378.8	9480.9	8964.4	8267.9	8154.0	11342	AVRG		1.10E-4		9124.5	12		0.995	20	
Heptachlor epoxide	B	8490.0	7606.2	8725.0	8088.0	7505.0	7196.9	9866.1	AVRG		1.22E-4		8211.0	11		0.995	20	
gamma-Chlordane	B	8407.5	7554.8	8653.1	8024.8	7385.8	7269.5	10266	AVRG		1.22E-4		8223.0	13		0.995	20	
alpha-Chlordane	B	7967.0	7222.2	8272.9	7651.5	7024.7	6877.0	9735.2	AVRG		1.28E-4		7821.5	13		0.995	20	
4,4'-DDE	B	7314.5	6787.9	8005.1	7447.6	7010.8	7446.9	9265.7	AVRG		1.31E-4		7611.2	11		0.995	20	
Endosulfan I	B	7432.5	6763.6	7743.4	7146.0	6594.8	6350.0	8730.6	AVRG		1.38E-4		7255.8	11		0.995	20	
Dieldrin	B	7939.5	7362.6	8593.2	8239.9	7638.3	8010.9	9554.9	AVRG		1.22E-4		8191.3	9		0.995	20	
Endrin	B	6490.8	6108.5	7259.0	6725.1	6218.2	6275.4	8574.0	AVRG		1.47E-4		6807.3	13		0.995	20	
4,4'-DDD	B	6000.8	5392.7	6508.0	5917.9	5445.2	5662.9	8108.1	AVRG		1.63E-4		6147.9	15		0.995	20	
Endosulfan II	B	6349.0	5893.5	6937.7	6422.5	5903.2	6084.2	8290.7	AVRG		1.53E-4		6554.4	13		0.995	20	
4,4'-DDT	B	5453.8	5318.0	6438.8	5772.7	5452.0	5619.0	8363.0	AVRG		1.65E-4		6059.6	18		0.995	20	
Methoxychlor	B	2514.9	2402.8	2974.3	2785.3	2599.0	2543.3		AVRG		3.79E-4		2636.6	8		0.995	20	
Endosulfan sulfate	B	5590.0	5076.6	5927.8	5353.1	4894.6	4754.5	6868.3	AVRG		1.82E-4		5495.0	13		0.995	20	
Endrin ketone	B	6136.3	5598.7	6812.3	6256.0	5592.6	5812.8	7936.4	AVRG		1.59E-4		6306.4	13		0.995	20	
TCMX	B	7394.8	6875.7	7596.5	7404.6	7100.3	6913.9	8947.8	AVRG		1.34E-4		7461.9	9		0.995	20	
Decachlorobiphenyl	B	3833.0	3727.8	4437.8	3756.5	3341.2	3237.8	4963.7	AVRG		2.56E-4		3899.7	16		0.995	20	
Average EPA 8081A	A												(n=22)	13			20	
Average EPA 8081A	B												(n=22)	13			20	

80648872001

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG-Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191286 PEST Water
EPA 8081A

Inst : GC23
Calnum : 806488872001

Name : gc23pest_339
Cal Date: 05-DEC-2006

ICV 806488872036 (339_036 06-DEC-2006) stds: S4518

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	22485	23947	25.00	26.63	pg	7	15	
gamma-BHC	A	20083	20982	25.00	26.12	pg	4	15	
beta-BHC	A	7411.8	6811.9	25.00	22.98	pg	-8	15	
delta-BHC	A	20093	20906	25.00	26.01	pg	4	15	
Heptachlor	A	18118	19639	25.00	27.10	pg	8	15	
Aldrin	A	18345	19874	25.00	27.08	pg	8	15	
Heptachlor epoxide	A	16445	16804	25.00	25.55	pg	2	15	
gamma-Chlordane	A	16042	16582	25.00	25.84	pg	3	15	
alpha-Chlordane	A	15642	15416	25.00	24.64	pg	-1	15	
4,4'-DDE	A	14184	14260	25.00	25.13	pg	1	15	
Endosulfan I	A	14570	14764	25.00	25.33	pg	1	15	
Dieldrin	A	16894	16598	25.00	24.56	pg	-2	15	
Endrin	A	13010	13651	25.00	26.23	pg	5	15	
4,4'-DDD	A	10309	9875.6	25.00	23.95	pg	-4	15	
Endosulfan II	A	14571	13983	25.00	23.99	pg	-4	15	
4,4'-DDT	A	10861	11346	25.00	26.12	pg	4	15	
Methoxychlor	A	5139.8	5064.0	25.00	24.63	pg	-1	15	
Endosulfan sulfate	A	10963	10923	25.00	24.91	pg	0	15	
Endrin ketone	A	15125	14213	25.00	23.49	pg	-6	15	
alpha-BHC	B	11576	11340	25.00	24.49	pg	-2	15	
gamma-BHC	B	10143	9926.0	25.00	24.46	pg	-2	15	
beta-BHC	B	3993.2	3914.3	25.00	24.51	pg	-2	15	
delta-BHC	B	10810	10683	25.00	24.71	pg	-1	15	
Heptachlor	B	8745.8	8735.4	25.00	24.97	pg	0	15	
Aldrin	B	9124.5	9095.7	25.00	24.92	pg	0	15	
Heptachlor epoxide	B	8211.0	7980.6	25.00	24.30	pg	-3	15	
gamma-Chlordane	B	8223.0	8001.4	25.00	24.33	pg	-3	15	
alpha-Chlordane	B	7821.5	7553.9	25.00	24.14	pg	-3	15	
4,4'-DDE	B	7611.2	7368.3	25.00	24.20	pg	-3	15	
Endosulfan I	B	7255.8	7098.2	25.00	24.46	pg	-2	15	
Dieldrin	B	8191.3	7752.0	25.00	23.66	pg	-5	15	
Endrin	B	6807.3	6784.0	25.00	24.91	pg	0	15	
4,4'-DDD	B	6147.9	5902.4	25.00	24.00	pg	-4	15	
Endosulfan II	B	6554.4	6341.5	25.00	24.19	pg	-3	15	
4,4'-DDT	B	6059.6	5872.6	25.00	24.23	pg	-3	15	
Methoxychlor	B	2636.6	2878.5	25.00	27.29	pg	9	15	
Endosulfan sulfate	B	5495.0	5467.1	25.00	24.87	pg	-1	15	
Endrin ketone	B	6306.4	6560.6	25.00	26.01	pg	4	15	
Average EPA 8081A	A	n=20					4	15	
Average EPA 8081A	B	n=20					3	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191286 PEST Water: EPA 8081A

Inst : GC23
 Calnum : 806500136001
 Units : pg

Name : gc23pest_347
 Date : 13-DEC-2006 14:06
 X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	347_008	806500136008	PEST_1	13-DEC-2006 14:06	S5045
L2	347_009	806500136009	PEST_2	13-DEC-2006 14:28	S5046
L3	347_010	806500136010	PEST_3	13-DEC-2006 14:49	S5047
L4	347_011	806500136011	PEST_4	13-DEC-2006 15:11	S5048
L5	347_012	806500136012	PEST_5	13-DEC-2006 15:32	S5049
L6	347_013	806500136013	PEST_6	13-DEC-2006 15:54	S5050
L7	347_014	806500136014	PEST_7	13-DEC-2006 16:15	S5051

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	%RSD	r ²	MxRSD	Flg
alpha-BHC	A	1611.5	1508.6	1609.8	1915.5	1801.0	2075.8	2139.0	AVRG		5.53E-4		1808.7	14	0.995	20	
gamma-BHC	A	1491.5	1369.4	1409.6	1687.4	1580.8	1805.7	1931.1	AVRG		6.21E-4		1610.8	13	0.995	20	
beta-BHC	A	586.00	504.00	519.00	500.80	588.92	575.70	674.43	AVRG		0.00174		574.12	10	0.995	20	
delta-BHC	A	1479.0	1265.0	1345.9	1606.5	1503.5	1679.9	1820.5	AVRG		6.54E-4		1528.6	13	0.995	20	
Heptachlor	A	1417.5	1260.6	1314.5	1610.7	1474.9	1660.7	1797.9	AVRG		6.64E-4		1505.3	13	0.995	20	
Aldrin	A	1454.0	1284.0	1297.7	1551.8	1447.8	1636.4	1745.7	AVRG		6.72E-4		1488.2	11	0.995	20	
Heptachlor epoxide	A	1243.5	1102.6	1120.6	1317.1	1223.2	1326.6	1460.2	AVRG		7.96E-4		1256.3	10	0.995	20	
gamma-Chlordane	A	1168.0	1008.4	1048.3	1253.1	1166.8	1284.5	1455.6	AVRG		8.35E-4		1197.8	13	0.995	20	
alpha-Chlordane	A	1105.0	986.20	1018.8	1195.7	1121.4	1232.7	1428.2	AVRG		8.65E-4		1155.4	13	0.995	20	
4,4'-DDE	A	1016.8	891.60	947.35	1233.3	1167.0	1272.9	1226.6	AVRG		9.03E-4		1107.9	14	0.995	20	
Endosulfan I	A	987.00	918.00	978.80	1151.2	1066.4	1188.8	1464.4	AVRG		9.03E-4		1107.8	17	0.995	20	
Dieldrin	A	1195.8	1019.3	1088.8	1445.5	1372.9	1448.1	1296.1	AVRG		7.89E-4		1266.6	13	0.995	20	
Endrin	A	994.25	836.70	892.80	1159.6	1086.6	1177.5	1117.5	AVRG		9.64E-4		1037.8	13	0.995	20	
4,4'-DDD	A	798.00	648.90	684.15	869.50	829.58	930.58	1026.5	AVRG		0.00121		826.74	16	0.995	20	
Endosulfan II	A	939.50	821.20	885.45	1147.6	1094.8	1230.5	1179.3	AVRG		9.59E-4		1042.6	15	0.995	20	
4,4'-DDT	A	795.75	675.30	731.60	976.03	921.08	1050.5	1095.4	AVRG		0.00112		892.23	18	0.995	20	
Methoxychlor	A	371.35	304.98	340.05	492.47	450.74	393.61	302.82	AVRG		0.00264		379.43	19	0.995	20	
Endosulfan sulfate	A	817.25	667.70	696.80	864.58	815.48	887.93	958.17	AVRG		0.00123		815.42	13	0.995	20	
Endrin ketone	A	961.50	789.60	839.40	1141.0	1077.3	1168.7	1126.2	AVRG		9.85E-4		1014.8	15	0.995	20	
TCMX	A	958.75	840.20	936.25	1129.7	1054.1	1194.2	1233.7	AVRG		9.53E-4		1049.6	14	0.995	20	
Decachlorobiphenyl	A	555.25	436.90	438.90	553.28	503.58	505.54	567.63	AVRG		0.00197		508.73	11	0.995	20	
alpha-BHC	B	1613.0	1349.2	1300.7	1366.0	1451.5	1662.0	1501.6	AVRG		6.83E-4		1463.4	9	0.995	20	
gamma-BHC	B	1455.5	1204.0	1153.6	1207.8	1286.2	1454.0	1337.3	AVRG		7.69E-4		1299.8	9	0.995	20	
beta-BHC	B	620.50	506.00	476.40	479.25	502.00	503.22	454.23	AVRG		0.00198		505.94	11	0.995	20	
delta-BHC	B	1581.5	1274.8	1198.2	1251.7	1373.2	1489.8	1374.3	AVRG		7.33E-4		1363.3	10	0.995	20	
Heptachlor	B	1405.0	1161.8	1085.0	1132.8	1220.2	1363.0	1242.1	AVRG		8.13E-4		1230.0	10	0.995	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ² RSD	MIR ²	MRRSD	Flg
Aldrin	B	1251.5	1136.4	1076.0	1081.0	1165.6	1265.5	1220.0	AVRG		8.54E-4		1170.9	7	0.995	20	
Heptachlor epoxide	B	1275.5	1035.6	943.00	973.90	1044.0	1093.2	1027.3	AVRG		9.47E-4		1056.1	10	0.995	20	
gamma-Chlordane	B	1178.0	1004.8	908.00	951.70	1027.4	1084.2	1051.2	AVRG		9.71E-4		1029.3	9	0.995	20	
alpha-Chlordane	B	1128.0	958.40	872.70	901.35	967.64	1018.4	1002.9	AVRG		0.00102		978.47	9	0.995	20	
4,4'-DDE	B	1133.5	961.80	870.70	951.95	1101.3	1191.0	1028.0	AVRG		9.67E-4		1034.0	11	0.995	20	
Endosulfan I	B	1036.0	929.60	849.40	864.60	934.00	957.72	941.57	AVRG		0.00107		930.41	7	0.995	20	
Dieldrin	B	1187.8	1013.0	920.85	1001.2	1140.7	1217.1	1040.0	AVRG		9.31E-4		1074.4	10	0.995	20	
Endrin	B	1057.0	892.40	799.25	859.88	980.26	1047.6	898.78	AVRG		0.00107		933.59	10	0.995	20	
4,4'-DDD	B	940.25	799.30	706.65	760.58	881.16	956.36	869.14	AVRG		0.00118		844.78	11	0.995	20	
Endosulfan II	B	970.50	836.70	744.55	796.35	908.68	972.41	881.71	AVRG		0.00115		872.99	10	0.995	20	
4,4'-DDT	B	956.50	804.20	714.10	775.05	916.10	1001.7	912.26	AVRG		0.00115		868.56	12	0.995	20	
Methoxychlor	B	432.60	365.50	329.39	375.53	446.45	403.70	289.69	AVRG		0.00265		377.55	15	0.995	20	
Endosulfan sulfate	B	892.25	729.40	645.45	668.08	757.76	785.00	733.33	AVRG		0.00134		744.47	11	0.995	20	
Endrin ketone	B	997.00	835.40	740.15	791.65	930.08	978.64	844.72	AVRG		0.00114		873.95	11	0.995	20	
TCMX	B	996.50	823.50	773.65	817.20	860.36	948.70	849.30	AVRG		0.00115		867.03	9	0.995	20	
Decachlorobiphenyl	B	632.50	537.00	458.85	468.30	556.50	566.06	517.03	AVRG		0.00187		533.75	11	0.995	20	
Average EPA 8081A	A												(n-22)	14		20	
Average EPA 8081A	B												(n-22)	10		20	

00209

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191286 PEST Water
EPA 8081A

Inst : GC23
Calnum : 806500136001

Name : gc23pest_347
Cal Date: 13-DEC-2006

ICV 806500136019 (347_019 13-DEC-2006) stds: S5092

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	1808.7	1969.7	25.00	27.22	pg	9	15	
gamma-BHC	A	1610.8	1801.5	25.00	27.96	pg	12	15	
beta-BHC	A	574.12	610.80	25.00	26.60	pg	6	15	
delta-BHC	A	1528.6	1792.3	25.00	29.31	pg	17	15	v+ ***
Heptachlor	A	1505.3	1683.6	25.00	27.96	pg	12	15	
Aldrin	A	1488.2	1629.5	25.00	27.37	pg	9	15	
Heptachlor epoxide	A	1256.3	1337.8	25.00	26.62	pg	6	15	
gamma-Chlordane	A	1197.8	1348.0	25.00	28.13	pg	13	15	
alpha-Chlordane	A	1155.4	1284.1	25.00	27.78	pg	11	15	
4,4'-DDE	A	1107.9	1189.8	25.00	26.85	pg	7	15	
Endosulfan I	A	1107.8	1209.2	25.00	27.29	pg	9	15	
Dieldrin	A	1266.6	1330.8	25.00	26.27	pg	5	15	
Endrin	A	1037.8	1140.6	25.00	27.48	pg	10	15	
4,4'-DDD	A	826.74	859.20	25.00	25.98	pg	4	15	
Endosulfan II	A	1042.6	1101.7	25.00	26.42	pg	6	15	
4,4'-DDT	A	892.23	954.76	25.00	26.75	pg	7	15	
Methoxychlor	A	379.43	447.08	25.00	29.46	pg	18	15	v+ ***
Endosulfan sulfate	A	815.42	872.16	25.00	26.74	pg	7	15	
Endrin ketone	A	1014.8	1069.8	25.00	26.36	pg	5	15	
alpha-BHC	B	1463.4	1352.5	25.00	23.10	pg	-8	15	
gamma-BHC	B	1299.8	1211.8	25.00	23.31	pg	-7	15	
beta-BHC	B	505.94	462.64	25.00	22.86	pg	-9	15	
delta-BHC	B	1363.3	1322.3	25.00	24.25	pg	-3	15	
Heptachlor	B	1230.0	1132.5	25.00	23.02	pg	-8	15	
Aldrin	B	1170.9	1112.5	25.00	23.75	pg	-5	15	
Heptachlor epoxide	B	1056.1	975.80	25.00	23.10	pg	-8	15	
gamma-Chlordane	B	1029.3	993.64	25.00	24.13	pg	-3	15	
alpha-Chlordane	B	978.47	930.40	25.00	23.77	pg	-5	15	
4,4'-DDE	B	1034.0	952.08	25.00	23.02	pg	-8	15	
Endosulfan I	B	930.41	889.20	25.00	23.89	pg	-4	15	
Dieldrin	B	1074.4	971.04	25.00	22.60	pg	-10	15	
Endrin	B	933.59	887.44	25.00	23.76	pg	-5	15	
4,4'-DDD	B	844.78	765.84	25.00	22.66	pg	-9	15	
Endosulfan II	B	872.99	812.16	25.00	23.26	pg	-7	15	
4,4'-DDT	B	868.56	795.00	25.00	22.88	pg	-8	15	
Methoxychlor	B	377.55	382.56	25.00	25.33	pg	1	15	
Endosulfan sulfate	B	744.47	699.28	25.00	23.48	pg	-6	15	
Endrin ketone	B	873.95	827.24	25.00	23.66	pg	-5	15	
Average EPA 8081A	A	n=20					9	15	
Average EPA 8081A	B	n=20					6	15	

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 191286 PEST Water
EPA 8081A

Inst : GC21 Run Name: PEM IDF : 1.0
Seqnum : 246500585043 File : 347_043 Time : 15-DEC-2006 14:39

Standards: S4410

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	740237	3	15	
4,4'-DDE	A	3466			
4,4'-DDD	A	22139			
Endrin	A	341866	10	15	
Endrin aldehyde	A	14425			
Endrin ketone	A	24324			
4,4'-DDT	B	980403	11	15	
4,4'-DDE	B	7121			
4,4'-DDD	B	108485			
Endrin	B	312429	42	15	
Endrin aldehyde	B	115701			
Endrin ketone	B	107845			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 191286 PEST Water
EPA 8081A

Inst : GC21 Run Name: PEM IDF : 1.0
Seqnum : 246500585050 File : 347_050 Time : 15-DEC-2006 20:46

Standards: S4410

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	651069	4	15	
4,4'-DDE	A	3101			
4,4'-DDD	A	25068			
Endrin	A	308586	12	15	
Endrin aldehyde	A	15228			
Endrin ketone	A	26184			
4,4'-DDT	B	865707	11	15	
4,4'-DDE	B	4730			
4,4'-DDD	B	106073			
Endrin	B	282285	44	15	
Endrin aldehyde	B	91093			
Endrin ketone	B	132071			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 191286 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 806492949002 File : 342_002 Time : 08-DEC-2006 08:10

Standards: S4410

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	1557299	1	15	
4,4'-DDE	A	5794			
4,4'-DDD	A	13540			
Endrin	A	784829	10	15	
Endrin aldehyde	A	4975			
Endrin ketone	A	78837			
4,4'-DDT	B	575102	2	15	
4,4'-DDE	B	2714			
4,4'-DDD	B	8305			
Endrin	B	306468	4	15	
Endrin aldehyde	B	4986			
Endrin ketone	B	8891			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 191286 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 806492949018 File : 342_018 Time : 08-DEC-2006 22:13

Standards: S4410

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	1630522	1	15	
4,4'-DDE	A	5211			
4,4'-DDD	A	16172			
Endrin	A	860128	8	15	
Endrin aldehyde	A	8605			
Endrin ketone	A	66056			
4,4'-DDT	B	860303	1	15	
4,4'-DDE	B	2643			
4,4'-DDD	B	6214			
Endrin	B	434311	2	15	
Endrin aldehyde	B	3367			
Endrin ketone	B	6516			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 191286 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 806500136020 File : 347_020 Time : 13-DEC-2006 18:50

Standards: S4410

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	140421	1	15	
4,4'-DDE	A	628			
4,4'-DDD	A	615			
Endrin	A	73441	3	15	
Endrin aldehyde	A	237			
Endrin ketone	A	2333			
4,4'-DDT	B	101520	1	15	
4,4'-DDE	B	322			
4,4'-DDD	B	537			
Endrin	B	49957	2	15	
Endrin aldehyde	B	277			
Endrin ketone	B	592			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 191286 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 806500136033 File : 347_033 Time : 13-DEC-2006 23:36

Standards: S4410

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	127827	2	15	
4,4'-DDE	A	995			
4,4'-DDD	A	1150			
Endrin	A	67638	4	15	
Endrin aldehyde	A	155			
Endrin ketone	A	2509			
4,4'-DDT	B	88793	2	15	
4,4'-DDE	B	247			
4,4'-DDD	B	1159			
Endrin	B	46017	3	15	
Endrin aldehyde	B	372			
Endrin ketone	B	1170			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 191286 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 806500136094 File : 347_094 Time : 14-DEC-2006 22:36

Standards: S4410

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	104911	3	15	
4,4'-DDE	A	948			
4,4'-DDD	A	2462			
Endrin	A	60806	4	15	
Endrin aldehyde	A	566			
Endrin ketone	A	2270			
4,4'-DDT	B	82893	3	15	
4,4'-DDE	B	325			
4,4'-DDD	B	2464			
Endrin	B	43362	4	15	
Endrin aldehyde	B	481			
Endrin ketone	B	1304			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 191286 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 806500136110 File : 347_110 Time : 15-DEC-2006 04:19

Standards: S4410

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	89998	10	15	
4,4'-DDE	A	773			
4,4'-DDD	A	9434			
Endrin	A	57123	11	15	
Endrin aldehyde	A	1253			
Endrin ketone	A	5815			
4,4'-DDT	B	77295	3	15	
4,4'-DDE	B	390			
4,4'-DDD	B	2094			
Endrin	B	41405	4	15	
Endrin aldehyde	B	373			
Endrin ketone	B	1415			

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191286 PEST Water
EPA 8081A

Inst : GC21 Run Name: PEST_5 IDF : 1.0
 Seqnum : 246500585044 File : 347_044 Time : 15-DEC-2006 15:09
 Cal : 246500585001 Caldate : 15-DEC-2006
 Standards: S5049

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	15450	15989	25.00	25.87	pg	3	15	
gamma-BHC	A	13727	14201	25.00	25.86	pg	3	15	
beta-BHC	A	5846.9	5934.1	25.00	25.37	pg	1	15	
delta-BHC	A	14197	14633	25.00	25.77	pg	3	15	
Heptachlor	A	13316	13051	25.00	24.50	pg	-2	15	
Aldrin	A	12532	12797	25.00	25.53	pg	2	15	
Heptachlor epoxide	A	11160	11214	25.00	25.12	pg	0	15	
gamma-Chlordane	A	10907	10945	25.00	25.09	pg	0	15	
alpha-Chlordane	A	10415	10353	25.00	24.85	pg	-1	15	
4,4'-DDE	A	10197	10384	50.00	50.92	pg	2	15	
Endosulfan I	A	10113	10159	25.00	25.11	pg	0	15	
Dieldrin	A	10312	10536	50.00	51.09	pg	2	15	
Endrin	A	8628.8	7265.2	50.00	42.10	pg	-16	15	c- ***
4,4'-DDD	A	8272.6	8264.5	50.00	49.95	pg	0	15	
Endosulfan II	A	8562.3	8544.9	50.00	49.90	pg	0	15	
4,4'-DDT	A	8134.0	7942.7	50.00	48.82	pg	-2	15	
Methoxychlor	A	3298.9	3329.4	250.0	252.3	pg	1	15	
Endosulfan sulfate	A	7103.1	7697.6	50.00	54.19	pg	8	15	
Endrin ketone	A	8301.1	8172.3	50.00	49.22	pg	-2	15	
TCMX	A	9692.1	9911.8	50.00	51.13	pg	2	15	
Decachlorobiphenyl	A	4724.6	4731.7	50.00	50.08	pg	0	15	
alpha-BHC	B	20788	20558	25.00	24.72	pg	-1	15	
gamma-BHC	B	18434	19568	25.00	26.54	pg	6	15	
beta-BHC	B	8322.6	8877.9	25.00	26.67	pg	7	15	
delta-BHC	B	17861	19255	25.00	26.95	pg	8	15	
Heptachlor	B	17590	19708	25.00	28.01	pg	12	15	
Aldrin	B	17797	18722	25.00	26.30	pg	5	15	
Heptachlor epoxide	B	15763	16321	25.00	25.89	pg	4	15	
gamma-Chlordane	B	15806	16547	25.00	26.17	pg	5	15	
alpha-Chlordane	B	15092	15749	25.00	26.09	pg	4	15	
4,4'-DDE	B	15035	16348	50.00	54.37	pg	9	15	
Endosulfan I	B	14805	15265	25.00	25.78	pg	3	15	
Dieldrin	B	14834	16289	50.00	54.90	pg	10	15	
Endrin	B	5804.2	7961.0	50.00	68.58	pg	37	15	c+ ***
4,4'-DDD	B	13514	14300	50.00	52.91	pg	6	15	
Endosulfan II	B	12685	13729	50.00	54.12	pg	8	15	
4,4'-DDT	B	9010.5	11151	50.00	61.88	pg	24	15	c+ ***
Methoxychlor	B	3861.2	4983.2	250.0	322.6	pg	29	15	c+ ***
Endosulfan sulfate	B	10888	11688	50.00	53.67	pg	7	15	
Endrin ketone	B	15790	16906	50.00	53.53	pg	7	15	
TCMX	B	11462	11762	50.00	51.31	pg	3	15	
Decachlorobiphenyl	B	7435.0	7980.1	50.00	53.67	pg	7	15	
Average EPA 8081A	A	(n=22)					3	15	
Average EPA 8081A	B	(n=22)					9	15	

+ = high bias - = low bias c = CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191286 PEST Water
EPA 8081A

Inst : GC21	Run Name: PEST_4	IDF : 1.0
Seqnum : 246500585051	File : 347_051	Time : 15-DEC-2006 21:14
Cal : 246500585001	Caldate : 15-DEC-2006	
Standards: S5048		

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	15450	14768	20.00	19.12	pg	-4	15	
gamma-BHC	A	13727	13030	20.00	18.98	pg	-5	15	
beta-BHC	A	5846.9	5504.7	20.00	18.83	pg	-6	15	
delta-BHC	A	14197	13275	20.00	18.70	pg	-6	15	
Heptachlor	A	13316	11844	20.00	17.79	pg	-11	15	
Aldrin	A	12532	11816	20.00	18.86	pg	-6	15	
Heptachlor epoxide	A	11160	10372	20.00	18.59	pg	-7	15	
gamma-Chlordane	A	10907	10120	20.00	18.56	pg	-7	15	
alpha-Chlordane	A	10415	9677.7	20.00	18.58	pg	-7	15	
4,4'-DDE	A	10197	9553.8	40.00	37.48	pg	-6	15	
Endosulfan I	A	10113	9372.9	20.00	18.54	pg	-7	15	
Dieldrin	A	10312	9685.1	40.00	37.57	pg	-6	15	
Endrin	A	8628.8	6460.6	40.00	29.95	pg	-25	15	c- ***
4,4'-DDD	A	8272.6	7669.5	40.00	37.08	pg	-7	15	
Endosulfan II	A	8562.3	7901.4	40.00	36.91	pg	-8	15	
4,4'-DDT	A	8134.0	6982.8	40.00	34.34	pg	-14	15	
Methoxychlor	A	3298.9	3004.9	200.0	182.2	pg	-9	15	
Endosulfan sulfate	A	7103.1	7006.9	40.00	39.46	pg	-1	15	
Endrin ketone	A	8301.1	7701.8	40.00	37.11	pg	-7	15	
TCMX	A	9692.1	9297.5	40.00	38.37	pg	-4	15	
Decachlorobiphenyl	A	4724.6	4455.7	40.00	37.72	pg	-6	15	
alpha-BHC	B	20788	19754	20.00	19.00	pg	-5	15	
gamma-BHC	B	18434	18998	20.00	20.61	pg	3	15	
beta-BHC	B	8322.6	8625.0	20.00	20.73	pg	4	15	
delta-BHC	B	17861	18261	20.00	20.45	pg	2	15	
Heptachlor	B	17590	19360	20.00	22.01	pg	10	15	
Aldrin	B	17797	18508	20.00	20.80	pg	4	15	
Heptachlor epoxide	B	15763	16335	20.00	20.73	pg	4	15	
gamma-Chlordane	B	15806	16210	20.00	20.51	pg	3	15	
alpha-Chlordane	B	15092	15345	20.00	20.34	pg	2	15	
4,4'-DDE	B	15035	15903	40.00	42.31	pg	6	15	
Endosulfan I	B	14805	15252	20.00	20.60	pg	3	15	
Dieldrin	B	14834	15871	40.00	42.80	pg	7	15	
Endrin	B	5804.2	7151.5	40.00	49.29	pg	23	15	c+ ***
4,4'-DDD	B	13514	13826	40.00	40.92	pg	2	15	
Endosulfan II	B	12685	13393	40.00	42.23	pg	6	15	
4,4'-DDT	B	9010.5	10278	40.00	45.63	pg	14	15	
Methoxychlor	B	3861.2	4818.7	200.0	249.6	pg	25	15	c+ ***
Endosulfan sulfate	B	10888	11427	40.00	41.98	pg	5	15	
Endrin ketone	B	15790	16914	40.00	42.85	pg	7	15	
TCMX	B	11462	11367	40.00	39.67	pg	-1	15	
Decachlorobiphenyl	B	7435.0	8286.0	40.00	44.58	pg	11	15	
Average EPA 8081A	A	(n=22)					8	15	
Average EPA 8081A	B	(n=22)					7	15	

+ = high bias - = low bias c = CCV

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191286 PEST Water
EPA 8081A

Inst : GC23
Seqnum : 806492949003
Cal : 806488872001
Standards: S4177

Run Name: PEST_3
File : 342_003
Caldate : 05-DEC-2006

IDF : 1.0
Time : 08-DEC-2006 08:31

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	22485	20565	10.00	9.146	pg	-9	15	
gamma-BHC	A	20083	18202	10.00	9.063	pg	-9	15	
beta-BHC	A	7411.8	6059.0	10.00	8.175	pg	-18	15	c- ***
delta-BHC	A	20093	17539	10.00	8.729	pg	-13	15	
Heptachlor	A	18118	16635	10.00	9.181	pg	-8	15	
Aldrin	A	18345	16833	10.00	9.176	pg	-8	15	
Heptachlor epoxide	A	16445	15040	10.00	9.146	pg	-9	15	
gamma-Chlordane	A	16042	15357	10.00	9.573	pg	-4	15	
alpha-Chlordane	A	15642	14199	10.00	9.077	pg	-9	15	
4,4'-DDE	A	14184	13131	20.00	18.52	pg	-7	15	
Endosulfan I	A	14570	13021	10.00	8.937	pg	-11	15	
Dieldrin	A	16894	15745	20.00	18.64	pg	-7	15	
Endrin	A	13010	12352	20.00	18.99	pg	-5	15	
4,4'-DDD	A	10309	9430.8	20.00	18.30	pg	-9	15	
Endosulfan II	A	14571	12302	20.00	16.89	pg	-16	15	c- ***
4,4'-DDT	A	10861	10496	20.00	19.33	pg	-3	15	
Methoxychlor	A	5139.8	5002.6	100.0	97.33	pg	-3	15	rsd ***
Endosulfan sulfate	A	10963	10058	20.00	18.35	pg	-8	15	
Endrin ketone	A	15125	13357	20.00	17.66	pg	-12	15	
TCMX	A	13716	12539	20.00	18.28	pg	-9	15	
Decachlorobiphenyl	A	7229.7	7376.3	20.00	20.41	pg	2	15	
alpha-BHC	B	11576	11251	10.00	9.719	pg	-3	15	
gamma-BHC	B	10143	10206	10.00	10.06	pg	1	15	
beta-BHC	B	3993.2	4223.5	10.00	10.58	pg	6	15	
delta-BHC	B	10810	9976.4	10.00	9.229	pg	-8	15	
Heptachlor	B	8745.8	8461.9	10.00	9.675	pg	-3	15	
Aldrin	B	9124.5	8849.0	10.00	9.698	pg	-3	15	
Heptachlor epoxide	B	8211.0	8018.2	10.00	9.765	pg	-2	15	
gamma-Chlordane	B	8223.0	7935.9	10.00	9.651	pg	-3	15	
alpha-Chlordane	B	7821.5	7546.1	10.00	9.648	pg	-4	15	
4,4'-DDE	B	7611.2	7020.6	20.00	18.45	pg	-8	15	
Endosulfan I	B	7255.8	7109.3	10.00	9.798	pg	-2	15	
Dieldrin	B	8191.3	7767.0	20.00	18.96	pg	-5	15	
Endrin	B	6807.3	6376.5	20.00	18.73	pg	-6	15	
4,4'-DDD	B	6147.9	5634.7	20.00	18.33	pg	-8	15	
Endosulfan II	B	6554.4	6141.0	20.00	18.74	pg	-6	15	
4,4'-DDT	B	6059.6	5613.3	20.00	18.53	pg	-7	15	
Methoxychlor	B	2636.6	2472.1	100.0	93.76	pg	-6	15	
Endosulfan sulfate	B	5495.0	5271.4	20.00	19.19	pg	-4	15	
Endrin ketone	B	6306.4	6227.2	20.00	19.75	pg	-1	15	
TCMX	B	7461.9	7242.1	20.00	19.41	pg	-3	15	
Decachlorobiphenyl	B	3899.7	3935.0	20.00	20.18	pg	1	15	
Average EPA 8081A	A	(n=22)					9	15	
Average EPA 8081A	B	(n=22)					4	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191286 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEST_4 IDF : 1.0
 Seqnum : 806492949020 File : 342_020 Time : 08-DEC-2006 22:55
 Cal : 806488872001 Caldate : 05-DEC-2006
 Standards: S4178

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	%D	Flags
alpha-BHC	A	22485	25748	20.00	22.90	pg	15	15		
gamma-BHC	A	20083	22914	20.00	22.82	pg	14	15		
beta-BHC	A	7411.8	7584.5	20.00	20.47	pg	2	15		
delta-BHC	A	20093	21753	20.00	21.65	pg	8	15		
Heptachlor	A	18118	21224	20.00	23.43	pg	17	15	c+ ***	
Aldrin	A	18345	20483	20.00	22.33	pg	12	15		
Heptachlor epoxide	A	16445	17960	20.00	21.84	pg	9	15		
gamma-Chlordane	A	16042	17755	20.00	22.14	pg	11	15		
alpha-Chlordane	A	15642	16358	20.00	20.92	pg	5	15		
4,4'-DDE	A	14184	16736	40.00	47.20	pg	18	15	c+ ***	
Endosulfan I	A	14570	15511	20.00	21.29	pg	6	15		
Dieldrin	A	16894	20557	40.00	48.67	pg	22	15	c+ ***	
Endrin	A	13010	16105	40.00	49.52	pg	24	15	c+ ***	
4,4'-DDD	A	10309	11740	40.00	45.55	pg	14	15		
Endosulfan II	A	14571	16845	40.00	46.24	pg	16	15	c+ ***	
4,4'-DDT	A	10861	13483	40.00	49.66	pg	24	15	c+ ***	
Methoxychlor	A	5139.8	6674.6	200.0	259.7	pg	30	15	>LR c+ rsd ***	
Endosulfan sulfate	A	10963	12517	40.00	45.67	pg	14	15		
Endrin ketone	A	15125	18736	40.00	49.55	pg	24	15	c+ ***	
TCMX	A	13716	16126	40.00	47.03	pg	18	15	c+	
Decachlorobiphenyl	A	7229.7	8496.6	40.00	47.01	pg	18	15	c+	
alpha-BHC	B	11576	13647	20.00	23.58	pg	18	15	c+ ***	
gamma-BHC	B	10143	12023	20.00	23.71	pg	19	15	c+ ***	
beta-BHC	B	3993.2	4792.9	20.00	24.01	pg	20	15	c+ ***	
delta-BHC	B	10810	12531	20.00	23.18	pg	16	15	c+ ***	
Heptachlor	B	8745.8	10838	20.00	24.78	pg	24	15	c+ ***	
Aldrin	B	9124.5	10572	20.00	23.17	pg	16	15	c+ ***	
Heptachlor epoxide	B	8211.0	9720.7	20.00	23.68	pg	18	15	c+ ***	
gamma-Chlordane	B	8223.0	9685.7	20.00	23.56	pg	18	15	c+ ***	
alpha-Chlordane	B	7821.5	9177.0	20.00	23.47	pg	17	15	c+ ***	
4,4'-DDE	B	7611.2	9381.9	40.00	49.31	pg	23	15	c+ ***	
Endosulfan I	B	7255.8	8503.7	20.00	23.44	pg	17	15	c+ ***	
Dieldrin	B	8191.3	10051	40.00	49.08	pg	23	15	c+ ***	
Endrin	B	6807.3	8536.7	40.00	50.16	pg	25	15	c+ ***	
4,4'-DDD	B	6147.9	7592.4	40.00	49.40	pg	23	15	c+ ***	
Endosulfan II	B	6554.4	8001.9	40.00	48.83	pg	22	15	c+ ***	
4,4'-DDT	B	6059.6	7693.9	40.00	50.79	pg	27	15	c+ ***	
Methoxychlor	B	2636.6	3738.3	200.0	283.6	pg	42	15	c+ ***	
Endosulfan sulfate	B	5495.0	6772.4	40.00	49.30	pg	23	15	c+ ***	
Endrin ketone	B	6306.4	8276.0	40.00	52.49	pg	31	15	c+ ***	
TCMX	B	7461.9	8717.6	40.00	46.73	pg	17	15	c+	
Decachlorobiphenyl	B	3899.7	5184.8	40.00	53.18	pg	33	15	c+	
Average EPA 8081A	A	(n=22)					15	15		
Average EPA 8081A	B	(n=22)					23	15	ac ***	

+ = high bias >LR = overrange ac = average CCV drift out c = CCV rsd = ICAL %RSD failure

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191286 PEST Water
EPA 8081A

Inst : GC23
 Seqnum : 806500136035
 Cal : 806500136001
 Standards: S5047

Run Name: PEST_3
 File : 347_035
 Caldate : 13-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 00:19

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	1808.7	1745.9	10.00	9.653	pg	-3	15	
gamma-BHC	A	1610.8	1528.3	10.00	9.488	pg	-5	15	
beta-BHC	A	574.12	568.00	10.00	9.893	pg	-1	15	
delta-BHC	A	1528.6	1498.2	10.00	9.801	pg	-2	15	
Heptachlor	A	1505.3	1429.4	10.00	9.496	pg	-5	15	
Aldrin	A	1488.2	1443.0	10.00	9.696	pg	-3	15	
Heptachlor epoxide	A	1256.3	1237.7	10.00	9.852	pg	-1	15	
gamma-Chlordane	A	1197.8	1185.8	10.00	9.900	pg	-1	15	
alpha-Chlordane	A	1155.4	1117.9	10.00	9.675	pg	-3	15	
4,4'-DDE	A	1107.9	1097.5	20.00	19.81	pg	-1	15	
Endosulfan I	A	1107.8	1135.0	10.00	10.25	pg	2	15	
Dieldrin	A	1266.6	1258.2	20.00	19.87	pg	-1	15	
Endrin	A	1037.8	1026.2	20.00	19.78	pg	-1	15	
4,4'-DDD	A	826.74	829.30	20.00	20.06	pg	0	15	
Endosulfan II	A	1042.6	994.15	20.00	19.07	pg	-5	15	
4,4'-DDT	A	892.23	858.15	20.00	19.24	pg	-4	15	
Methoxychlor	A	379.43	414.77	100.0	109.3	pg	9	15	
Endosulfan sulfate	A	815.42	816.65	20.00	20.03	pg	0	15	
Endrin ketone	A	1014.8	1013.7	20.00	19.98	pg	0	15	
TCMX	A	1049.6	982.50	20.00	18.72	pg	-6	15	
Decachlorobiphenyl	A	508.73	539.00	20.00	21.19	pg	6	15	
alpha-BHC	B	1463.4	1330.8	10.00	9.094	pg	-9	15	
gamma-BHC	B	1299.8	1199.7	10.00	9.230	pg	-8	15	
beta-BHC	B	505.94	483.60	10.00	9.558	pg	-4	15	
delta-BHC	B	1363.3	1236.8	10.00	9.072	pg	-9	15	
Heptachlor	B	1230.0	1087.6	10.00	8.842	pg	-12	15	
Aldrin	B	1170.9	1087.0	10.00	9.284	pg	-7	15	
Heptachlor epoxide	B	1056.1	984.40	10.00	9.321	pg	-7	15	
gamma-Chlordane	B	1029.3	950.60	10.00	9.235	pg	-8	15	
alpha-Chlordane	B	978.47	909.60	10.00	9.296	pg	-7	15	
4,4'-DDE	B	1034.0	915.25	20.00	17.70	pg	-11	15	
Endosulfan I	B	930.41	883.20	10.00	9.493	pg	-5	15	
Dieldrin	B	1074.4	965.80	20.00	17.98	pg	-10	15	
Endrin	B	933.59	820.90	20.00	17.59	pg	-12	15	
4,4'-DDD	B	844.78	749.55	20.00	17.75	pg	-11	15	
Endosulfan II	B	872.99	787.25	20.00	18.04	pg	-10	15	
4,4'-DDT	B	868.56	724.35	20.00	16.68	pg	-17	15	c- ***
Methoxychlor	B	377.55	341.17	100.0	90.36	pg	-10	15	
Endosulfan sulfate	B	744.47	682.70	20.00	18.34	pg	-8	15	
Endrin ketone	B	873.95	805.90	20.00	18.44	pg	-8	15	
TCMX	B	867.03	819.65	20.00	18.91	pg	-5	15	
Decachlorobiphenyl	B	533.75	505.65	20.00	18.95	pg	-5	15	
Average EPA 8081A	A	(n=22)					3	15	
Average EPA 8081A	B	(n=22)					9	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191286 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEST_3 IDF : 1.0
 Seqnum : 806500136095 File : 347_095 Time : 14-DEC-2006 22:57
 Cal : 806500136001 Caldate : 13-DEC-2006
 Standards: S5047

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	1808.7	1776.0	10.00	9.819	pg	-2	15	
gamma-BHC	A	1610.8	1569.1	10.00	9.741	pg	-3	15	
beta-BHC	A	574.12	581.30	10.00	10.13	pg	1	15	
delta-BHC	A	1528.6	1497.4	10.00	9.796	pg	-2	15	
Heptachlor	A	1505.3	1368.8	10.00	9.094	pg	-9	15	
Aldrin	A	1488.2	1451.8	10.00	9.756	pg	-2	15	
Heptachlor epoxide	A	1256.3	1222.7	10.00	9.733	pg	-3	15	
gamma-Chlordane	A	1197.8	1154.5	10.00	9.638	pg	-4	15	
alpha-Chlordane	A	1155.4	1102.3	10.00	9.540	pg	-5	15	
4,4'-DDE	A	1107.9	1067.2	20.00	19.26	pg	-4	15	
Endosulfan I	A	1107.8	1052.8	10.00	9.504	pg	-5	15	
Dieldrin	A	1266.6	1214.9	20.00	19.18	pg	-4	15	
Endrin	A	1037.8	1010.9	20.00	19.48	pg	-3	15	
4,4'-DDD	A	826.74	803.15	20.00	19.43	pg	-3	15	
Endosulfan II	A	1042.6	995.75	20.00	19.10	pg	-4	15	
4,4'-DDT	A	892.23	779.65	20.00	17.48	pg	-13	15	
Methoxychlor	A	379.43	378.25	100.0	99.69	pg	0	15	
Endosulfan sulfate	A	815.42	793.65	20.00	19.47	pg	-3	15	
Endrin ketone	A	1014.8	985.05	20.00	19.41	pg	-3	15	
TCMX	A	1049.6	1086.5	20.00	20.70	pg	4	15	
Decachlorobiphenyl	A	508.73	518.00	20.00	20.36	pg	2	15	
alpha-BHC	B	1463.4	1502.6	10.00	10.27	pg	3	15	
gamma-BHC	B	1299.8	1376.4	10.00	10.59	pg	6	15	
beta-BHC	B	505.94	538.60	10.00	10.65	pg	6	15	
delta-BHC	B	1363.3	1391.6	10.00	10.21	pg	2	15	
Heptachlor	B	1230.0	1263.8	10.00	10.27	pg	3	15	
Aldrin	B	1170.9	1189.2	10.00	10.16	pg	2	15	
Heptachlor epoxide	B	1056.1	1117.1	10.00	10.58	pg	6	15	
gamma-Chlordane	B	1029.3	1056.1	10.00	10.26	pg	3	15	
alpha-Chlordane	B	978.47	1014.8	10.00	10.37	pg	4	15	
4,4'-DDE	B	1034.0	1044.6	20.00	20.20	pg	1	15	
Endosulfan I	B	930.41	965.80	10.00	10.38	pg	4	15	
Dieldrin	B	1074.4	1105.0	20.00	20.57	pg	3	15	
Endrin	B	933.59	963.85	20.00	20.65	pg	3	15	
4,4'-DDD	B	844.78	888.55	20.00	21.04	pg	5	15	
Endosulfan II	B	872.99	897.10	20.00	20.55	pg	3	15	
4,4'-DDT	B	868.56	844.15	20.00	19.44	pg	-3	15	
Methoxychlor	B	377.55	412.25	100.0	109.2	pg	9	15	
Endosulfan sulfate	B	744.47	797.10	20.00	21.41	pg	7	15	
Endrin ketone	B	873.95	958.90	20.00	21.94	pg	10	15	
TCMX	B	867.03	924.60	20.00	21.33	pg	7	15	
Decachlorobiphenyl	B	533.75	606.30	20.00	22.72	pg	14	15	
Average EPA 8081A	A	(n=22)					4	15	
Average EPA 8081A	B	(n=22)					5	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191286 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEST_4 IDF : 1.0
 Seqnum : 806500136111 File : 347_111 Time : 15-DEC-2006 04:40
 Cal : 806500136001 Caldate : 13-DEC-2006
 Standards: S5048

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	1808.7	1839.2	20.00	20.34	pg	2	15	
gamma-BHC	A	1610.8	1629.3	20.00	20.23	pg	1	15	
beta-BHC	A	574.12	593.70	20.00	20.68	pg	3	15	
delta-BHC	A	1528.6	1572.8	20.00	20.58	pg	3	15	
Heptachlor	A	1505.3	1357.2	20.00	18.03	pg	-10	15	
Aldrin	A	1488.2	1467.0	20.00	19.72	pg	-1	15	
Heptachlor epoxide	A	1256.3	1222.9	20.00	19.47	pg	-3	15	
gamma-Chlordane	A	1197.8	1184.2	20.00	19.77	pg	-1	15	
alpha-Chlordane	A	1155.4	1094.0	20.00	18.94	pg	-5	15	
4,4'-DDE	A	1107.9	1165.3	40.00	42.07	pg	5	15	
Endosulfan I	A	1107.8	1143.3	20.00	20.64	pg	3	15	
Dieldrin	A	1266.6	1330.8	40.00	42.03	pg	5	15	
Endrin	A	1037.8	979.35	40.00	37.75	pg	-6	15	
4,4'-DDD	A	826.74	949.95	40.00	45.96	pg	15	15	
Endosulfan II	A	1042.6	1018.9	40.00	39.09	pg	-2	15	
4,4'-DDT	A	892.23	671.80	40.00	30.12	pg	-25	15	c- ***
Methoxychlor	A	379.43	347.41	200.0	183.1	pg	-8	15	
Endosulfan sulfate	A	815.42	790.50	40.00	38.78	pg	-3	15	
Endrin ketone	A	1014.8	1052.7	40.00	41.49	pg	4	15	
TCMX	A	1049.6	1113.5	40.00	42.44	pg	6	15	
Decachlorobiphenyl	A	508.73	493.78	40.00	38.82	pg	-3	15	
alpha-BHC	B	1463.4	1327.4	20.00	18.14	pg	-9	15	
gamma-BHC	B	1299.8	1154.4	20.00	17.76	pg	-11	15	
beta-BHC	B	505.94	448.35	20.00	17.72	pg	-11	15	
delta-BHC	B	1363.3	1153.9	20.00	16.93	pg	-15	15	
Heptachlor	B	1230.0	1064.4	20.00	17.31	pg	-13	15	
Aldrin	B	1170.9	1018.4	20.00	17.39	pg	-13	15	
Heptachlor epoxide	B	1056.1	893.55	20.00	16.92	pg	-15	15	
gamma-Chlordane	B	1029.3	857.90	20.00	16.67	pg	-17	15	c- ***
alpha-Chlordane	B	978.47	817.20	20.00	16.70	pg	-16	15	c- ***
4,4'-DDE	B	1034.0	856.88	40.00	33.15	pg	-17	15	c- ***
Endosulfan I	B	930.41	797.20	20.00	17.14	pg	-14	15	
Dieldrin	B	1074.4	911.03	40.00	33.92	pg	-15	15	
Endrin	B	933.59	772.35	40.00	33.09	pg	-17	15	c- ***
4,4'-DDD	B	844.78	709.95	40.00	33.62	pg	-16	15	c- ***
Endosulfan II	B	872.99	726.50	40.00	33.29	pg	-17	15	c- ***
4,4'-DDT	B	868.56	647.28	40.00	29.81	pg	-25	15	c- ***
Methoxychlor	B	377.55	327.95	200.0	173.7	pg	-13	15	
Endosulfan sulfate	B	744.47	612.63	40.00	32.92	pg	-18	15	c- ***
Endrin ketone	B	873.95	749.08	40.00	34.28	pg	-14	15	
TCMX	B	867.03	802.45	40.00	37.02	pg	-7	15	
Decachlorobiphenyl	B	533.75	443.00	40.00	33.20	pg	-17	15	c-
Average EPA 8081A	A	(n=22)					5	15	
Average EPA 8081A	B	(n=22)					15	15	

--low bias c=CCV

SEQUENCE SUMMARY FOR 191286 PEST Water Curtis & Tompkins Laboratories

Sequence: 806488872 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 05-DEC-2006
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Std	Used	>LR
001	339_001	X	PRIMER			05-DEC-2006	11:52	1.0							
002	339_002	X	PRIMER			05-DEC-2006	12:13	1.0							
003	339_003	X	PRIMER			05-DEC-2006	12:35	1.0							
004	339_004	X	PRIMER			05-DEC-2006	12:56	1.0							
005	339_005	X	PRIMER			05-DEC-2006	13:17	1.0							
006	339_006	X	HEX			05-DEC-2006	13:39	1.0							
007	339_007	X	HEX			05-DEC-2006	14:00	1.0							
008	339_008	X	PEST_3			05-DEC-2006	14:21	1.0	25			1	ac		
009	339_009	X	PEM			05-DEC-2006	15:19	1.0				1	2		
010	339_010	X	191174-001	119999	Water	05-DEC-2006	16:29	1.0	42					1:GCHLOR=119.396	
011	339_011	X	PRIMER			05-DEC-2006	16:54	1.0							
012	339_012	X	PRIMER			05-DEC-2006	17:15	1.0							
013	339_013	X	PRIMER			05-DEC-2006	17:37	1.0							
014	339_014	X	PRIMER			05-DEC-2006	17:58	1.0							
015	339_015	X	PRIMER			05-DEC-2006	18:20	1.0							
016	339_016	X	PRIMER			05-DEC-2006	18:41	1.0							
017	339_017	X	PRIMER			05-DEC-2006	19:03	1.0							
018	339_018	X	PRIMER			05-DEC-2006	19:24	1.0							
019	339_019	X	PRIMER			05-DEC-2006	19:45	1.0							
020	339_020	X	PRIMER			05-DEC-2006	20:07	1.0							
021	339_021	X	HEX			05-DEC-2006	20:28	1.0							
022	339_022	X	HEX			05-DEC-2006	20:49	1.0							
023	339_023	X	HEX			05-DEC-2006	21:11	1.0							
024	339_024	PEM	PEM			05-DEC-2006	21:32	1.0				1			
025	339_025	X	HEX			05-DEC-2006	21:54	1.0						2:MTXXYCL=259.845	
026	339_026	ICAL	PEST_1			05-DEC-2006	22:15	1.0					3		
027	339_027	ICAL	PEST_2			05-DEC-2006	22:36	1.0					4		
028	339_028	ICAL	PEST_3			05-DEC-2006	22:58	1.0					1		
029	339_029	ICAL	PEST_4			05-DEC-2006	23:19	1.0					5		
030	339_030	ICAL	PEST_5			05-DEC-2006	23:41	1.0					6		

Standards used: 1=S4177 2=S4410 3=S4176 4=S3833 5=S4178 6=S3834 7=S4745 8=S4043 9=S4518
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 191286 PEST Water Curtis & Tompkins Laboratories

Sequence: 806488872 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 05-DEC-2006
 Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Std	Used	>LR
031	339_031	ICAL	PEST_6			06-DEC-2006	00:02	1.0					7		
032	339_032	ICAL	PEST_7			06-DEC-2006	00:24	1.0					8		
033	339_033	X	HEX			06-DEC-2006	00:45	1.0							
034	339_034	X	HEX			06-DEC-2006	01:06	1.0							
035	339_035	X	ICV			06-DEC-2006	01:28	1.0	4	1			9	4:XYL246=271.508	
036	339_036	ICV	ICV			06-DEC-2006	01:49	1.0	4	1			9	4:CL10BZ=293.692	
037	339_037	X	HEX			06-DEC-2006	02:10	1.0							

Std used: 1=S4177 2=S4410 3=S4176 4=S3833 5=S4178 6=S3834 7=S4745 8=S4043 9=S4518
 Bags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 191286 PEST Water Curtis & Tompkins Laboratories

Sequence: 806492949 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Begun: 08-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
001	342_001	X	HEX			08-DEC-2006	07:49	1.0						
002	342_002	PEM	PEM			08-DEC-2006	08:10	1.0	1.0			1		
003	342_003	CCV	PEST_3			08-DEC-2006	08:31	1.0	1.0	3		1		2:MTXYCL=312.477
004	342_004	X	PEST_3			08-DEC-2006	14:29	1.0	1.0	3		1		
005	342_005	X	PEM			08-DEC-2006	16:25	1.0	1.0			1		
006	342_006	X	HEX			08-DEC-2006	17:56	1.0				1		2:MTXYCL=341.831
007	342_007	BLANK	QC367482	120164	Water	08-DEC-2006	18:18	1.0	0.01	2		1		
008	342_008	BS	QC367483	120164	Water	08-DEC-2006	18:39	1.0	0.01	29		1		
009	342_009	BSD	QC367484	120164	Water	08-DEC-2006	19:00	1.0	0.01	30	1	1		4:MTXYCL=386.414
010	342_010	MDLCHC	190176-009	120164	Water	08-DEC-2006	19:22	1.0	0.01			1		9:MTXYCL=411.197
011	342_011	MDLCHC	190176-010	120164	Water	08-DEC-2006	19:43	1.0	0.01			1		
012	342_012	SAMPLE	191245-003	120164	Water	08-DEC-2006	20:05	1.0	0.01	1		1		
013	342_013	SAMPLE	191286-001	120164	Water	08-DEC-2006	20:26	1.0	0.009434			1		
014	342_014	SAMPLE	191286-004	120164	Water	08-DEC-2006	20:47	1.0	0.009434			1		
015	342_015	SAMPLE	191286-007	120164	Water	08-DEC-2006	21:09	1.0	0.009524	2		1		
016	342_016	SAMPLE	191294-001	120164	Water	08-DEC-2006	21:30	1.0	0.01			1		2:GCHLOR=270.853
017	342_017	X	HEX			08-DEC-2006	21:51	1.0				1		
018	342_018	PEM	PEM			08-DEC-2006	22:13	1.0	1.0			1		2:MTXYCL=326.182
019	342_019	X	PEST_4			08-DEC-2006	22:34	1.0	1.0	23		1		1:MTXYCL=286.552
020	342_020	CCV	PEST_4			08-DEC-2006	22:55	1.0	1.0	28		1		1:MTXYCL=259.721
021	342_021	X	PEM			08-DEC-2006	23:17	1.0				1		
022	342_022	X	HEX			08-DEC-2006	23:38	1.0						
023	342_023	SAMPLE	191294-002	120164	Water	09-DEC-2006	00:00	1.0	0.009804			1		
024	342_024	SAMPLE	191294-003	120164	Water	09-DEC-2006	00:21	1.0	0.009901	2		1		
025	342_025	SAMPLE	191294-004	120164	Water	09-DEC-2006	00:43	1.0	0.009901	4		1		
026	342_026	SAMPLE	191294-006	120164	Water	09-DEC-2006	01:04	1.0	0.009804	2		1		2:GCHLOR=330.007
027	342_027	SAMPLE	191294-007	120164	Water	09-DEC-2006	01:25	1.0	0.009804	2		1		
028	342_028	SAMPLE	191294-008	120164	Water	09-DEC-2006	01:47	1.0	0.009804	2		1		
029	342_029	SAMPLE	191294-009	120164	Water	09-DEC-2006	02:08	1.0	0.009804	2		1		1:GCHLOR=171.644
030	342_030	SAMPLE	191286-008	120164	Water	09-DEC-2006	02:30	2.0	0.009434	2	2	1		2:GCHLOR=240.847

Stds used: 1=S4410 2=S4177 3=S4178 4=S3834

Flags used: <=opening >=closing ac=average CCV drift out

SEQUENCE SUMMARY FOR 191286 PEST Water Curtis & Tompkins Laboratories

Sequence: 806492949 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 08-DEC-2006
 Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Std	Used	>LR
031	342_031	SAMPLE	191286-013	120164	Water	09-DEC-2006	02:51	2.0	0.009901	2	3	1	>ac <ac	2:BHC BET=382.238
032	342_032	X	HEX			09-DEC-2006	03:13	1.0						
033	342_033	PEM	PEM			09-DEC-2006	03:34	1.0	1.0			1		2:MTXYCL=320.119
034	342_034	X	PEST_5			09-DEC-2006	03:55	1.0	1.0	24		1	4 ac	1:MTXYCL=364.987
035	342_035	CCV	PEST_5			09-DEC-2006	04:17	1.0	1.0	17		1	4 ac	1:MTXYCL=341.931
036	342_036	X	PEM			09-DEC-2006	04:38	1.0						
037	342_037	X	HEX			09-DEC-2006	05:00	1.0				1		

Std used: 1=S4410 2=S4177 3=S4178 4=S3834
 Flags used: <=opening >=closing ac=average CCV drift out

SEQUENCE SUMMARY FOR 191286 PEST Water Curtis & Tompkins Laboratories

Sequence: 246500585 Instrument: GC21 Gas Chromatograph #21 ECD Begun: 13-DEC-2006
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
001	347_001	X	HEX			13-DEC-2006	15:05	1.0						
002	347_002	X,CCV	PEST_7			13-DEC-2006	15:33	1.0				1		
003	347_003	X,CCV	PEST_1			13-DEC-2006	16:02	1.0				2		
004	347_004	X,CCV	MORE RAMP			13-DEC-2006	16:31	1.0						
005	347_005	X	CCV TEST			14-DEC-2006	16:23	1.0						
006	347_006	X	HEX			14-DEC-2006	16:58	1.0						
007	347_007	X,PEM	PEM			14-DEC-2006	17:27	1.0				3		
008	347_008	X	PRIMER			14-DEC-2006	18:50	1.0						
009	347_009	X	PRIMER			14-DEC-2006	19:19	1.0						
010	347_010	X	PRIMER			14-DEC-2006	19:48	1.0						
011	347_011	X	PRIMER			14-DEC-2006	20:16	1.0						
012	347_012	X	PRIMER			14-DEC-2006	20:45	1.0						
013	347_013	X	PRIMER			14-DEC-2006	21:14	1.0						
014	347_014	X	PRIMER			14-DEC-2006	21:42	1.0						
015	347_015	X	PRIMER			14-DEC-2006	22:11	1.0						
016	347_016	X	PRIMER			14-DEC-2006	22:40	1.0						
017	347_017	X	PRIMER			14-DEC-2006	23:08	1.0						
018	347_018	X	PRIMER			14-DEC-2006	23:37	1.0						
019	347_019	X	PRIMER			15-DEC-2006	00:05	1.0						
020	347_020	X	PRIMER			15-DEC-2006	00:34	1.0						
021	347_021	X	PRIMER			15-DEC-2006	01:02	1.0						
022	347_022	X	PRIMER			15-DEC-2006	01:31	1.0						
023	347_023	X	HEX			15-DEC-2006	02:00	1.0						
024	347_024	X	HEX			15-DEC-2006	02:28	1.0						
025	347_025	PEM	PEM			15-DEC-2006	02:57	1.0	1.0		1	3		
026	347_026	X	HEX			15-DEC-2006	03:26	1.0						
027	347_027	ICAL	PEST_1			15-DEC-2006	03:54	1.0	1.0			2		
028	347_028	ICAL	PEST_2			15-DEC-2006	04:23	1.0	1.0			4		
029	347_029	ICAL	PEST_3			15-DEC-2006	04:51	1.0	1.0			5		
030	347_030	ICAL	PEST_4			15-DEC-2006	05:20	1.0	1.0			6		
031	347_031	ICAL	PEST_5			15-DEC-2006	05:49	1.0	1.0			7		

Stds used: 1=S5051 2=S5045 3=S4410 4=S5046 5=S5047 6=S5048 7=S5049 8=S5050 9=S5092 10=S4518

SEQUENCE SUMMARY FOR 191286 PEST Water Curtis & Tompkins Laboratories

Sequence: 246500585 Instrument: GC21 Gas Chromatograph #21 ECD Begun: 13-DEC-2006
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename	Type	Samplenum	Batch	Matrix Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used	>LR
032	347_032	ICAL	PEST_6		15-DEC-2006	06:18	1.0				8	
033	347_033	ICAL	PEST_7		15-DEC-2006	06:46	1.0				1	
034	347_034	X	HEX		15-DEC-2006	07:15	1.0					
035	347_035	ICV	ICV		15-DEC-2006	07:44	1.0	4	1		9	3:XYL246=218.766
036	347_036	X	ICV		15-DEC-2006	08:12	1.0				9	
037	347_037	X	ICV		15-DEC-2006	08:41	1.0				10	
038	347_038	X	HEX		15-DEC-2006	09:10	1.0					
039	347_039	PEM	PEM		15-DEC-2006	11:28	1.0		1		3	
040	347_040	SAMPLE	191357-001	120226	Soil	11:57	1.0	1	1			
041	347_041	X	HEX		15-DEC-2006	13:41	1.0					
042	347_042	MSS	191357-007	120226	Soil	14:10	1.0		1			
043	347_043	PEM	PEM		15-DEC-2006	14:39	1.0		1		3	
044	347_044	CCV	PEST_5		15-DEC-2006	15:09	1.0	4	1		7	
045	347_045	X	HEX		15-DEC-2006	17:25	1.0					
046	347_046	X	191294-004	120164	Water	18:51	5.0		1			
047	347_047	SAMPLE	191286-013	120164	Water	19:20	5.0		1			
048	347_048	SAMPLE	191294-004	120164	Water	19:48	1.0		1			
049	347_049	X	HEX		15-DEC-2006	20:17	1.0					
050	347_050	PEM	PEM		15-DEC-2006	20:46	1.0		1		3	
051	347_051	CCV	PEST_4		15-DEC-2006	21:14	1.0	3	1		6	
052	347_052	X	PEST_4		15-DEC-2006	21:43	1.0				6	
053	347_053	X	PEM		15-DEC-2006	22:11	1.0		1		3	
054	347_054	X	HEX		15-DEC-2006	22:40	1.0					

Stds used: 1=S5051 2=S5045 3=S4410 4=S5046 5=S5047 6=S5048 7=S5049 8=S5050 9=S5092 10=S4518

SEQUENCE SUMMARY FOR 191286 PEST Water Curtis & Tompkins Laboratories

Sequence: 806500136 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Begun: 13-DEC-2006

#	Filename Type	Samplenum	Batch	Matrix Analyzed	IDF	PDF	IOC SPK uL	Stds Used	>LR
001	347_001	X	HEX	13-DEC-2006	07:36	1.0			
002	347_002	X	PEM	13-DEC-2006	07:57	1.0	1	1:DDT44=168.953	
003	347_003	X	PEST_3	13-DEC-2006	08:18	1.0	1	2 av	
004	347_004	X	ICV	13-DEC-2006	11:24	1.0	39	4:XYL246=245.450	
005	347_005	X	PEST_5	13-DEC-2006	12:19	1.0	9	2:DDT44=60.4392	
006	347_006	X	PEST_3	13-DEC-2006	12:53	1.0	29	5 ac av	
007	347_007	X	HEX	13-DEC-2006	13:45	1.0			
008	347_008	ICAL	PEST_1	13-DEC-2006	14:06	1.0			
009	347_009	ICAL	PEST_2	13-DEC-2006	14:28	1.0			
010	347_010	ICAL	PEST_3	13-DEC-2006	14:49	1.0			
011	347_011	ICAL	PEST_4	13-DEC-2006	15:11	1.0			
012	347_012	ICAL	PEST_5	13-DEC-2006	15:32	1.0			
013	347_013	ICAL	PEST_6	13-DEC-2006	15:54	1.0			
014	347_014	ICAL	PEST_7	13-DEC-2006	16:15	1.0			
015	347_015	X	HEX	13-DEC-2006	16:36	1.0			
016	347_016	X	HEX	13-DEC-2006	16:58	1.0			
017	347_017	X	ICV	13-DEC-2006	17:19	1.0			
018	347_018	X	ICV	13-DEC-2006	17:41	1.0			
019	347_019	ICV	ICV	13-DEC-2006	18:06	1.0	1	4:XYL246=324.939	
020	347_020	PEM	PEM	13-DEC-2006	18:50	1.0	1	1:DDT44=167.366	
021	347_021	X	HEX	13-DEC-2006	19:11	1.0			
022	347_022	BLANK	QC367893	120260 Water	19:41	1.0			
023	347_023	PREPBLK	QC367896	120260 TCLP L	20:02	1.0	1		
024	347_024	BLANK	QC367564	120184 Soil	20:24	1.0	1		
025	347_025	BS	QC367894	120260 Water	20:45	1.0	1		
026	347_026	BSD	QC367895	120260 Water	21:06	1.0	1		
027	347_027	LCS	QC367565	120184 Soil	21:28	1.0	21		
028	347_028	BS	QC367483	120164 Water	21:49	1.0	1		
029	347_029	BSD	QC367484	120164 Water	22:11	1.0	1		
030	347_030	SAMPLE	191317-001	120202 Water	22:32	1.0	10		
031	347_031						1		
032	347_032						1		
033	347_033						1		
034	347_034						1		
035	347_035						1		
036	347_036						1		
037	347_037						1		
038	347_038						1		
039	347_039						1		
040	347_040						1		
041	347_041						1		
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184	347_184						1		
185	347_185						1		
186	347_186						1		
187	347_187								

SEQUENCE SUMMARY FOR 191286 PEST Water Curtis & Tompkins Laboratories

Sequence: 806500136 Instrument: GC23 Gas Chromatograph #23 ECD Begun: 13-DEC-2006
Analytical Method: EPA 8081A SOP Version: 8081_rv7

#	Filename Type	Samplenum	Batch	Matrix Analyzed	IDF	PDF	IOC SPK uL	Stds Used	>LR
031	347_031	SAMPLE	191381-001	120260 Water	13-DEC-2006 22:53	1.0	0.009434	1	1
032	347_032	X	HEX		13-DEC-2006 23:15	1.0			1:GCHLOR=175.607
033	347_033	PEM	PEM		13-DEC-2006 23:36	1.0			1
034	347_034	X	PEST_3		13-DEC-2006 23:58	1.0			5
035	347_035	CCV	PEST_3		14-DEC-2006 00:19	1.0			5
036	347_036	X	PEM		14-DEC-2006 00:40	1.0			1
037	347_037	X	HEX		14-DEC-2006 01:02	1.0			
038	347_038	SAMPLE	191294-002	120164 Water	14-DEC-2006 01:23	1.0	0.009804	1	1
039	347_039	SAMPLE	191294-003	120164 Water	14-DEC-2006 01:45	1.0	0.009901	1	1
040	347_040	SAMPLE	191294-004	120164 Water	14-DEC-2006 02:06	1.0	0.009901	3	2:GCHLOR=403.168
041	347_041	SAMPLE	191294-006	120164 Water	14-DEC-2006 02:27	1.0	0.009804	1	1
042	347_042	SAMPLE	191294-007	120164 Water	14-DEC-2006 02:49	1.0	0.009804	1	1
043	347_043	SAMPLE	191294-008	120164 Water	14-DEC-2006 03:10	1.0	0.009804	1	1
044	347_044	SAMPLE	191294-009	120164 Water	14-DEC-2006 03:31	1.0	0.009804	1	1
045	347_045	SAMPLE	191298-001	120260 TCLP L	14-DEC-2006 03:53	1.0	0.01053	1	1
046	347_046	SAMPLE	191335-008	120184 Soil	14-DEC-2006 04:14	1.0	0.6645	1	1
047	347_047	SAMPLE	191335-006	120184 Soil	14-DEC-2006 04:36	2.0	0.6653	1	1
048	347_048	X	HEX		14-DEC-2006 04:57	1.0			
049	347_049	PEM	PEM		14-DEC-2006 05:19	1.0	1.0		1
050	347_050	X,CCV	PEST_4		14-DEC-2006 05:40	1.0			8
051	347_051	CCV	PEST_4		14-DEC-2006 06:01	1.0			8
052	347_052	X	PEM		14-DEC-2006 06:23	1.0	1.0	1	1
053	347_053	X	HEX		14-DEC-2006 06:44	1.0			
054	347_054	SAMPLE	191331-001	120202 Water	14-DEC-2006 07:06	2.0	0.009434		1
055	347_055	SAMPLE	191335-004	120184 Soil	14-DEC-2006 07:27	5.0	0.6662		1
056	347_056	SAMPLE	191267-015	120184 Soil	14-DEC-2006 07:49	10.0	0.6656	1	1
057	347_057	SAMPLE	191267-025	120184 Soil	14-DEC-2006 08:10	10.0	0.6662	1	1
058	347_058	MSS	191335-001	120184 Soil	14-DEC-2006 08:31	20.0	0.6651		1
059	347_059	SAMPLE	191335-002	120184 Soil	14-DEC-2006 08:53	20.0	0.664		1
060	347_060	SAMPLE	191335-003	120184 Soil	14-DEC-2006 09:14	20.0	0.6658		1

Stds used: 1=S4410 2=S4177 3=S5092 4=S3834 5=S5047 6=S5045 7=S5046 8=S5048 9=S5049 10=S5050 11=S5051 12=S4518
Flags used: >=closing ac=average CCV drift out av=average ICV drift out

SEQUENCE SUMMARY FOR 191286 PEST Water Curtis & Tompkins Laboratories

Sequence: 806500136 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Begun: 13-DEC-2006

#	Filename Type	Samplenum	Batch	Matrix Analyzed	IDF	PDF	IOC SPK uL	Stds Used	>LR
061	347_061 SAMPLE	191335-005	120184	Soil	14-DEC-2006 09:36 20.0	0.6658	1		
062	347_062 SAMPLE	191335-007	120184	Soil	14-DEC-2006 09:57 20.0	0.6647	1		
063	347_063 SAMPLE	191267-005	120184	Soil	14-DEC-2006 10:19 20.0	0.6658	1		
064	347_064 X	HEX			14-DEC-2006 10:40 1.0				
065	347_065 PEM	PEM			14-DEC-2006 11:02 1.0	1.0	1		
066	347_066 CCV	PEST_5			14-DEC-2006 11:23 1.0	1.0	1		
067	347_067 X,CCV	PEST_5			14-DEC-2006 11:45 1.0				
068	347_068 X	PEM			14-DEC-2006 12:06 1.0				
069	347_069 X	HEX			14-DEC-2006 12:28 1.0				
070	347_070 PREPBLK	QC367897	120260	Filtr	14-DEC-2006 12:49 1.0	0.009901	6		
071	347_071 LCS	QC367898	120260	Filtr	14-DEC-2006 13:10 1.0	0.009901	9		
072	347_072 SAMPLE	191347-001	120260	Filtr	14-DEC-2006 13:32 1.0	0.01	2		
073	347_073 SAMPLE	191347-001	120260	Water	14-DEC-2006 13:54 5.0	0.009901	2		
074	347_074 SAMPLE	191267-010	120184	Soil	14-DEC-2006 14:15 20.0	0.6642	6		
075	347_075 SAMPLE	191267-020	120184	Soil	14-DEC-2006 14:37 20.0	0.666	6		
076	347_076 SAMPLE	191267-030	120184	Soil	14-DEC-2006 14:58 20.0	0.6658	5		
077	347_077 X	HEX			14-DEC-2006 15:20 1.0				
078	347_078 PEM	PEM			14-DEC-2006 15:41 1.0	1.0	1		
079	347_079 CCV	PEST_4			14-DEC-2006 16:03 1.0	1.0	1		
080	347_080 X	PEST_4			14-DEC-2006 16:24 1.0				
081	347_081 X	PEM			14-DEC-2006 16:46 1.0				
082	347_082 X	HEX			14-DEC-2006 17:07 1.0				
083	347_083 BLANK	QC367748	120226	Soil	14-DEC-2006 18:39 1.0	0.6649	6		
084	347_084 LCS	QC367749	120226	Soil	14-DEC-2006 19:01 1.0	0.6629	6		
085	347_085 SAMPLE	191357-001	120226	Soil	14-DEC-2006 19:22 1.0	0.6664	6		
086	347_086 SAMPLE	191357-002	120226	Soil	14-DEC-2006 19:44 1.0	0.6629	6		
087	347_087 SAMPLE	191357-003	120226	Soil	14-DEC-2006 20:05 1.0	0.6636	6		
088	347_088 SAMPLE	191357-004	120226	Soil	14-DEC-2006 20:27 1.0	0.6653	6		
089	347_089 SAMPLE	191357-005	120226	Soil	14-DEC-2006 20:48 1.0	0.6651	6		
090	347_090 SAMPLE	191357-006	120226	Soil	14-DEC-2006 21:10 1.0	0.6664	6		

Stds used: 1=S4410 2=S4177 3=S5092 4=S3834 5=S5047 6=S5045 7=S5046 8=S5048 9=S5049 10=S5050 11=S5051 12=S4518
Flags used: >=closing ac=average CCV drift out av=average ICV drift out

SEQUENCE SUMMARY FOR 191286 PEST Water Curtis & Tompkins Laboratories

Sequence: 806500136 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Begun: 13-DEC-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
091	347_091	MSS	191357-007	120226	Soil	14-DEC-2006	21:31	1.0	0.6616	6	1			
092	347_092	SAMPLE	191357-008	120226	Soil	14-DEC-2006	21:53	1.0	0.6656	6	1			
093	347_093	X	HEX			14-DEC-2006	22:14	1.0						
094	347_094	PEM	PEM			14-DEC-2006	22:36	1.0	1.0		1			
095	347_095	CCV	PEST_3			14-DEC-2006	22:57	1.0	1.0		1			
096	347_096	X	PEST_3			14-DEC-2006	23:19	1.0						
097	347_097	X	PEM			14-DEC-2006	23:40	1.0						
098	347_098	X	HEX			15-DEC-2006	00:01	1.0						
099	347_099	SAMPLE	191327-001	120202	Water	15-DEC-2006	00:23	2.0	0.009615	10	1			
100	347_100	SAMPLE	191327-002	120202	Water	15-DEC-2006	00:44	2.0	0.009615	10	1			
101	347_101	SAMPLE	191287-001	120202	Water	15-DEC-2006	01:06	10.0	0.009434	10	2			
102	347_102	SAMPLE	191290-001	120202	Water	15-DEC-2006	01:27	1.0	0.009434	9	2			
103	347_103	SAMPLE	191245-003	120164	Water	15-DEC-2006	01:49	1.0	0.01	10	1			
104	347_104	SAMPLE	191286-007	120164	Water	15-DEC-2006	02:10	1.0	0.009524	9	1			
105	347_105	SAMPLE	191286-008	120164	Water	15-DEC-2006	02:32	1.0	0.009434	9	2			
106	347_106	SAMPLE	191286-013	120164	Water	15-DEC-2006	02:53	2.0	0.009901	10	3			
107	347_107	MS	QC367750	120226	Soil	15-DEC-2006	03:14	1.0	0.6664	10	1			2:GCHLOR=113.210
108	347_108	MSD	QC367751	120226	Soil	15-DEC-2006	03:36	1.0	0.6664	10	1			
109	347_109	X	HEX			15-DEC-2006	03:57	1.0						
110	347_110	PEM	PEM			15-DEC-2006	04:19	1.0	1.0		1			
111	347_111	CCV	PEST_4			15-DEC-2006	04:40	1.0	1.0	10	1			
112	347_112	X	PEST_4			15-DEC-2006	05:02	1.0	1.0	3	1			
113	347_113	X	PEM			15-DEC-2006	05:23	1.0						
114	347_114	X	HEX			15-DEC-2006	05:45	1.0						
115	347_115	BLANK	QC366780	119990	Soil	15-DEC-2006	06:06	1.0	0.6667	10	1			>ac
116	347_116	MDL	191169-001	119990	Soil	15-DEC-2006	06:28	1.0	0.6667	18	1			>ac
117	347_117	MDL	191169-002	119990	Soil	15-DEC-2006	06:49	1.0	0.6667	13	1			>ac
118	347_118	MDL	191169-003	119990	Soil	15-DEC-2006	07:11	1.0	0.6667	25	1			>ac
119	347_119	MDL	191169-004	119990	Soil	15-DEC-2006	07:32	1.0	0.6667	15	1			>ac
120	347_120	MDL	191169-005	119990	Soil	15-DEC-2006	07:54	1.0	0.6667	20	1			>ac

Stds used: 1=S4410 2=S4177 3=S5092 4=S3834 5=S5047 6=S5045 7=S5046 8=S5048 9=S5049 10=S5050 11=S5051 12=S4518
Flags used: >=closing ac=average CCV drift out av=average ICV drift out

SEQUENCE SUMMARY FOR 191286 PEST Water Curtis & Tompkins Laboratories

Sequence: 806500136 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Begun: 13-DEC-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
121	347_121	MDL	191169-006	119990	Soil	15-DEC-2006	08:15	1.0	0.6667	10	1	>ac		
122	347_122	MDL	191169-007	119990	Soil	15-DEC-2006	08:37	1.0	0.6667	11	1	>ac		
123	347_123	MDL	191169-008	119990	Soil	15-DEC-2006	08:58	1.0	0.6667	28	1	>ac		
124	347_124	X	HEX			15-DEC-2006	09:20	1.0						
125	347_125	PEM	PEM			15-DEC-2006	09:41	1.0	1.0		1			
126	347_126	CCV	PEST_5			15-DEC-2006	10:03	1.0	1.0	19	1	ac		
127	347_127	X	PEST_5			15-DEC-2006	10:24	1.0	1.0	20	1	ac		
128	347_128	X	HEX			15-DEC-2006	10:46	1.0						

Stds used: 1=S4410 2=S4177 3=S5092 4=S3834 5=S5047 6=S5045 7=S5046 8=S5048 9=S5049 10=S5050 11=S5051 12=S4518
Flags used: >=closing ac=average CCV drift out av=average ICV drift out

REPORTING SUMMARY FOR 191286 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
191286-001	alpha-BHC	GC23	A	12/08/06 20:26
191286-001	beta-BHC	GC23	A	12/08/06 20:26
191286-001	gamma-BHC	GC23	A	12/08/06 20:26
191286-001	delta-BHC	GC23	A	12/08/06 20:26
191286-001	Heptachlor	GC23	A	12/08/06 20:26
191286-001	Aldrin	GC23	A	12/08/06 20:26
191286-001	Heptachlor epoxide	GC23	A	12/08/06 20:26
191286-001	Endosulfan I	GC23	A	12/08/06 20:26
191286-001	Dieldrin	GC23	A	12/08/06 20:26
191286-001	4,4'-DDE	GC23	A	12/08/06 20:26
191286-001	Endrin	GC23	A	12/08/06 20:26
191286-001	Endosulfan II	GC23	A	12/08/06 20:26
191286-001	Endosulfan sulfate	GC23	A	12/08/06 20:26
191286-001	4,4'-DDD	GC23	A	12/08/06 20:26
191286-001	4,4'-DDT	GC23	A	12/08/06 20:26
191286-001	alpha-Chlordane	GC23	A	12/08/06 20:26
191286-001	gamma-Chlordane	GC23	A	12/08/06 20:26
191286-001	Methoxychlor	GC23	A	12/08/06 20:26
191286-001	Endrin ketone	GC23	A	12/08/06 20:26
191286-001	Toxaphene	GC23	A	12/08/06 20:26
191286-001	TCMX	GC23	A	12/08/06 20:26
191286-001	Decachlorobiphenyl	GC23	A	12/08/06 20:26
191286-004	alpha-BHC	GC23	A	12/08/06 20:47
191286-004	beta-BHC	GC23	A	12/08/06 20:47
191286-004	gamma-BHC	GC23	A	12/08/06 20:47
191286-004	delta-BHC	GC23	A	12/08/06 20:47
191286-004	Heptachlor	GC23	A	12/08/06 20:47
191286-004	Aldrin	GC23	A	12/08/06 20:47
191286-004	Heptachlor epoxide	GC23	A	12/08/06 20:47
191286-004	Endosulfan I	GC23	A	12/08/06 20:47
191286-004	Dieldrin	GC23	A	12/08/06 20:47
191286-004	4,4'-DDE	GC23	A	12/08/06 20:47
191286-004	Endrin	GC23	A	12/08/06 20:47
191286-004	Endosulfan II	GC23	A	12/08/06 20:47
191286-004	Endosulfan sulfate	GC23	A	12/08/06 20:47
191286-004	4,4'-DDD	GC23	A	12/08/06 20:47
191286-004	4,4'-DDT	GC23	A	12/08/06 20:47
191286-004	alpha-Chlordane	GC23	A	12/08/06 20:47
191286-004	gamma-Chlordane	GC23	A	12/08/06 20:47
191286-004	Methoxychlor	GC23	A	12/08/06 20:47
191286-004	Endrin ketone	GC23	A	12/08/06 20:47
191286-004	Toxaphene	GC23	A	12/08/06 20:47
191286-004	TCMX	GC23	A	12/08/06 20:47
191286-004	Decachlorobiphenyl	GC23	A	12/08/06 20:47
191286-007	alpha-BHC	GC23	A	12/15/06 02:10
191286-007	beta-BHC	GC23	A	12/15/06 02:10
191286-007	gamma-BHC	GC23	A	12/15/06 02:10
191286-007	delta-BHC	GC23	A	12/15/06 02:10
191286-007	Heptachlor	GC23	A	12/15/06 02:10
191286-007	Aldrin	GC23	A	12/15/06 02:10
191286-007	Heptachlor epoxide	GC23	A	12/15/06 02:10
191286-007	Endosulfan I	GC23	A	12/15/06 02:10

REPORTING SUMMARY FOR 191286 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
191286-007	Dieldrin	GC23	A	12/15/06 02:10
191286-007	4,4'-DDE	GC23	A	12/15/06 02:10
191286-007	Endrin	GC23	A	12/15/06 02:10
191286-007	Endosulfan II	GC23	A	12/15/06 02:10
191286-007	Endosulfan sulfate	GC23	A	12/15/06 02:10
191286-007	4,4'-DDD	GC23	A	12/15/06 02:10
191286-007	4,4'-DDT	GC23	A	12/15/06 02:10
191286-007	alpha-Chlordane	GC23	A	12/15/06 02:10
191286-007	gamma-Chlordane	GC23	A	12/15/06 02:10
191286-007	Methoxychlor	GC23	A	12/15/06 02:10
191286-007	Endrin ketone	GC23	A	12/15/06 02:10
191286-007	Toxaphene	GC23	A	12/15/06 02:10
191286-007	TCMX	GC23	A	12/15/06 02:10
191286-007	Decachlorobiphenyl	GC23	A	12/15/06 02:10
191286-008	alpha-BHC	GC23	A	12/15/06 02:32
191286-008	beta-BHC	GC23	A	12/15/06 02:32
191286-008	gamma-BHC	GC23	A	12/15/06 02:32
191286-008	delta-BHC	GC23	A	12/15/06 02:32
191286-008	Heptachlor	GC23	A	12/15/06 02:32
191286-008	Aldrin	GC23	A	12/15/06 02:32
191286-008	Heptachlor epoxide	GC23	A	12/15/06 02:32
191286-008	Endosulfan I	GC23	A	12/15/06 02:32
191286-008	Dieldrin	GC23	A	12/15/06 02:32
191286-008	4,4'-DDE	GC23	A	12/15/06 02:32
191286-008	Endrin	GC23	A	12/15/06 02:32
191286-008	Endosulfan II	GC23	A	12/15/06 02:32
191286-008	Endosulfan sulfate	GC23	A	12/15/06 02:32
191286-008	4,4'-DDD	GC23	A	12/15/06 02:32
191286-008	4,4'-DDT	GC23	A	12/15/06 02:32
191286-008	alpha-Chlordane	GC23	A	12/15/06 02:32
191286-008	gamma-Chlordane	GC23	A	12/15/06 02:32
191286-008	Methoxychlor	GC23	A	12/15/06 02:32
191286-008	Endrin ketone	GC23	A	12/15/06 02:32
191286-008	Toxaphene	GC23	A	12/15/06 02:32
191286-008	TCMX	GC23	A	12/15/06 02:32
191286-008	Decachlorobiphenyl	GC23	A	12/15/06 02:32
191286-013	alpha-BHC	GC23	A	12/15/06 02:53
191286-013	beta-BHC	GC23	A	12/15/06 02:53
191286-013	gamma-BHC	GC21	A	12/15/06 19:20
191286-013	delta-BHC	GC23	A	12/15/06 02:53
191286-013	Heptachlor	GC23	A	12/15/06 02:53
191286-013	Aldrin	GC23	A	12/15/06 02:53
191286-013	Heptachlor epoxide	GC23	A	12/15/06 02:53
191286-013	Endosulfan I	GC23	A	12/15/06 02:53
191286-013	Dieldrin	GC23	A	12/15/06 02:53
191286-013	4,4'-DDE	GC23	A	12/15/06 02:53
191286-013	Endrin	GC23	A	12/15/06 02:53
191286-013	Endosulfan II	GC23	A	12/15/06 02:53
191286-013	Endosulfan sulfate	GC23	A	12/15/06 02:53
191286-013	4,4'-DDD	GC23	A	12/15/06 02:53
191286-013	4,4'-DDT	GC23	A	12/15/06 02:53
191286-013	alpha-Chlordane	GC23	A	12/15/06 02:53

REPORTING SUMMARY FOR 191286 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
191286-013	gamma-Chlordane	GC23	A	12/15/06 02:53
191286-013	Methoxychlor	GC23	A	12/15/06 02:53
191286-013	Endrin ketone	GC23	A	12/15/06 02:53
191286-013	Toxaphene	GC23	A	12/15/06 02:53
191286-013	TCMX	GC23	A	12/15/06 02:53
191286-013	Decachlorobiphenyl	GC23	A	12/15/06 02:53
QC367482	alpha-BHC	GC23	A	12/08/06 18:18
QC367482	beta-BHC	GC23	A	12/08/06 18:18
QC367482	gamma-BHC	GC23	A	12/08/06 18:18
QC367482	delta-BHC	GC23	A	12/08/06 18:18
QC367482	Heptachlor	GC23	A	12/08/06 18:18
QC367482	Aldrin	GC23	A	12/08/06 18:18
QC367482	Heptachlor epoxide	GC23	A	12/08/06 18:18
QC367482	Endosulfan I	GC23	A	12/08/06 18:18
QC367482	Dieldrin	GC23	A	12/08/06 18:18
QC367482	4,4'-DDE	GC23	A	12/08/06 18:18
QC367482	Endrin	GC23	A	12/08/06 18:18
QC367482	Endosulfan II	GC23	A	12/08/06 18:18
QC367482	Endosulfan sulfate	GC23	A	12/08/06 18:18
QC367482	4,4'-DDD	GC23	A	12/08/06 18:18
QC367482	4,4'-DDT	GC23	A	12/08/06 18:18
QC367482	alpha-Chlordane	GC23	A	12/08/06 18:18
QC367482	gamma-Chlordane	GC23	A	12/08/06 18:18
QC367482	Methoxychlor	GC23	A	12/08/06 18:18
QC367482	Endrin ketone	GC23	A	12/08/06 18:18
QC367482	Toxaphene	GC23	A	12/08/06 18:18
QC367482	TCMX	GC23	A	12/08/06 18:18
QC367482	Decachlorobiphenyl	GC23	A	12/08/06 18:18
QC367483	gamma-BHC	GC23	A	12/13/06 21:49
QC367483	Heptachlor	GC23	A	12/13/06 21:49
QC367483	Aldrin	GC23	A	12/13/06 21:49
QC367483	Dieldrin	GC23	A	12/13/06 21:49
QC367483	Endrin	GC23	A	12/13/06 21:49
QC367483	4,4'-DDT	GC23	A	12/13/06 21:49
QC367483	TCMX	GC23	A	12/13/06 21:49
QC367483	Decachlorobiphenyl	GC23	A	12/13/06 21:49
QC367484	gamma-BHC	GC23	A	12/13/06 22:11
QC367484	Heptachlor	GC23	A	12/13/06 22:11
QC367484	Aldrin	GC23	A	12/13/06 22:11
QC367484	Dieldrin	GC23	A	12/13/06 22:11
QC367484	Endrin	GC23	A	12/13/06 22:11
QC367484	4,4'-DDT	GC23	A	12/13/06 22:11
QC367484	TCMX	GC23	A	12/13/06 22:11
QC367484	Decachlorobiphenyl	GC23	A	12/13/06 22:11

Curtis & Tompkins Laboratories

Sample Preparation Summary

08-DEC-2006 15:58

Batch Number : 120164
Date Extracted: 07-DEC-2006
Extracted by : Jonee Galvez
Prep Method : 3520C

Analysis : 8081
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S4969A
Spike #2 ID : S4674F
Spike #3 ID : S4647A
SOP Version : 8081w rv14

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
190176-009		MDL Studies	Water	1000	mL	10	0.010000	5	.04	0	.0125	8081		
190176-010		MDL Studies	Water	1000	mL	10	0.010000	5	.04	0	.025	8081		
191245-003		Weston Solutions	Water	1000	mL	10	0.010000	8	.04	0	0	8081		
191286-001		Treadwell & Rollo	Water	1060	mL	10	0.009434	8	.04	0	0	8081		
191286-004		Treadwell & Rollo	Water	1060	mL	10	0.009434	8	.04	0	0	8081		
191286-007		Treadwell & Rollo	Water	1050	mL	10	0.009524	8	.04	0	0	8081		
191286-008		Treadwell & Rollo	Water	1060	mL	10	0.009434	8	.04	0	0	8081		
191286-013		Treadwell & Rollo	Water	1010	mL	10	0.009901	8	.04	0	0	8081		
191294-001		Blasland, Bouck & Lee	Water	1000	mL	10	0.010000	10	.04	0	0	8081		
191294-002		Blasland, Bouck & Lee	Water	1020	mL	10	0.009804	9	.04	0	0	8081		
191294-003		Blasland, Bouck & Lee	Water	1010	mL	10	0.009901	8	.04	0	0	8081		
191294-004		Blasland, Bouck & Lee	Water	1010	mL	10	0.009901	8	.04	0	0	8081		
191294-006		Blasland, Bouck & Lee	Water	1020	mL	10	0.009804	8	.04	0	0	8081		
191294-007		Blasland, Bouck & Lee	Water	1020	mL	10	0.009804	8	.04	0	0	8081		
191294-008		Blasland, Bouck & Lee	Water	1020	mL	10	0.009804	8	.04	0	0	8081		
191294-009		Blasland, Bouck & Lee	Water	1000	mL	10	0.010000	8	.04	0	0	8081		
QC367482	BLANK		Water	1000	mL	10	0.010000	1	.04	.05	0	8081		
QC367483	BS		Water	1000	mL	10	0.010000	1	.04	.05	0	8081		
QC367484	BSD		Water	1000	mL	10	0.010000	1	.04	.05	0	8081		

Prep Chemist: Reviewed By: 

Date: 12/8/06

Relinquished By: Received By: 

Date: 12/8/06

: 00207

LIMS Batch No: 120104LIMS Analysis: 8081Extracted by: JDCDate Extracted: 12/7/06

Extraction Method:

☐ EPA 3510c sep. funnel☒ EPA 3520c cont. L/L☐

Cleanup Method (if needed):

☐ EPA 3640a GPC☐ EPA 3620b Florisil☐

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
191294-176-009	1000	5	10.0		* + 80% Surrogate and used
↓ 10	1000	↓			*
191245-003 R	1000	8			
191286-001 F	1060				
5 ↓ 046	1060				
07 E	1050				
08 U	1060				
↓ 13 R	1010	↓			
191294-001 D	1000	10			
10 191294-002 E	1020	9			
03 B	1010	8			
04 E	1010	7	↓		
05 F	1000	↓			
06 E	1020	8	10.0		Removed from batch wait dry on 12/8/06
15 07 D	1020				
08 B	1020				
↓ 09 A	1020	↓	↓		
↓ 10					
MB QC 3674 R	1000	N/A	10.0		80% 12/7/06 Surrogate and used
20 BS ↓ 3	1000	↓	↓		Surrogate and spike
BSD ↓ 4	1000	↓	↓		

* 0.04 mL of surrogate solution was added to all samples

* 0.05 mL of matrix spike solution was added to all spikes

☒ Samples continuously extracted with about 450 mL of CH_2Cl_2 Extraction Start Time: 1635Extraction End Time: 1040☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2 Extracts filtered through baked, CH_2Cl_2 rinsed granular powdered Na_2SO_4

Exchanged 2x with Hexane

Concentrated: ☒ to volumes as noted above ☐ to clean-up volumeClean-up (if necessary): ☐ GPC (see GPC run log) ☐ Florisil

Mfg & Lot# / LIMS # / Time Date/ Initials

S4969A

S4647A* S4674F

EM 4035

1635

1040

N/A

EM 4011/628

JTB 040555

N/A

N/A

N/A

N/A

N/A

N/A

N/A

N/A

N/A

Extraction Chemist

Date

Continued from Page

Continued on Page

Reviewed by

00255

Curtis & Tompkins Laboratories
MDL Summary for EPA 8081A Water
As of 01/05/07

Analyte	Units	GC21 A	GC21 B	GC16 A	GC16 B	GC23 A	GC23 B
gamma-BHC	ug/L	0.0065	0.0039	0.0032	0.0025	0.0057	0.0061
Heptachlor	ug/L	0.0083	0.0056	0.0057	0.0061	0.0055	0.0063
Aldrin	ug/L	0.0094	0.0070	0.0066	0.0066	0.0055	0.0044
Dieldrin	ug/L	0.011	0.0051	0.0074	0.0070	0.011	0.0090
Endrin	ug/L	0.012	0.011	0.0095	0.0083	0.011	0.014
4,4'-DDT	ug/L	0.012	0.0071	0.011	0.0099	0.012	0.015
alpha-BHC	ug/L	0.0063	0.0040	0.0029	0.0027	0.0059	0.0099
beta-BHC	ug/L	0.0061	0.011	0.0033	0.0052	0.0082	0.012
delta-BHC	ug/L	0.0065	0.0023	0.0040	0.0026	0.0043	0.0081
Heptachlor epoxide	ug/L	0.0066	0.0097	0.0033	0.0032	0.0044	0.0055
gamma-Chlordane	ug/L	0.0064	0.011	0.0041	0.0037	0.0079	0.0057
alpha-Chlordane	ug/L	0.010	0.0052	0.0045	0.0036	0.0063	0.0051
Endosulfan I	ug/L	0.0062	0.0033	0.0043	0.0032	0.0055	0.0057
4,4'-DDE	ug/L	0.011	0.0057	0.010	0.0082	0.014	0.012
Endosulfan II	ug/L	0.013	0.0077	0.0088	0.0073	0.026	0.013
Endosulfan sulfate	ug/L	0.0096	0.0054	0.015	0.0087	0.011	0.013
4,4'-DDD	ug/L	0.011	0.0096	0.0088	0.0090	0.013	0.013
Endrin aldehyde	ug/L	0.010	0.0092	0.0084	0.0086	0.014	0.015
Chlordane (Technical)	ug/L	0.096	0.25	0.17	0.11	0.21	0.20
Methoxychlor	ug/L	0.050	0.018	0.057	0.080	0.052	0.081
Endrin ketone	ug/L	0.0083	0.023	0.027	0.0095	0.010	0.0080
Toxaphene	ug/L	0.49	0.26	0.39	0.34	0.54	0.29

Polychlorinated Biphenyls Water



Curtis & Tompkins, Ltd.

Polychlorinated Biphenyls (PCBs)

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Sampled:	12/05/06
Units:	ug/L	Received:	12/06/06
Diln Fac:	1.000	Prepared:	12/08/06
Batch#:	120200	Analyzed:	12/10/06

Field ID: LF6GW103
Type: SAMPLE

Lab ID: 191286-001
Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.47
Aroclor-1221	ND	0.94
Aroclor-1232	ND	0.47
Aroclor-1242	ND	0.47
Aroclor-1248	ND	0.47
Aroclor-1254	ND	0.47
Aroclor-1260	ND	0.47

Surrogate	%REC	Limits
TCMX	91	65-135
Decachlorobiphenyl	103	65-135

Field ID: DUP1205062A
Type: SAMPLE

Lab ID: 191286-004
Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.47
Aroclor-1221	ND	0.94
Aroclor-1232	ND	0.47
Aroclor-1242	ND	0.47
Aroclor-1248	ND	0.47
Aroclor-1254	ND	0.47
Aroclor-1260	ND	0.47

Surrogate	%REC	Limits
TCMX	91	65-135
Decachlorobiphenyl	94	65-135

Type: BLANK
Lab ID: QC367654

Cleanup Method: EPA 3665A

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	79	65-135
Decachlorobiphenyl	98	65-135

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Polychlorinated Biphenyls (PCBs)

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Batch#:	120200
Units:	ug/L	Prepared:	12/08/06
Diln Fac:	1.000	Analyzed:	12/11/06

Type: BS Cleanup Method: EPA 3665A
 Lab ID: QC367655

Analyte	Spiked	Result	%REC	Limits
Aroclor-1254	5.000	4.798	96	65-135

Surrogate	%REC	Limits
TCMX	90	65-135
Decachlorobiphenyl	117	65-135

Type: BSD Cleanup Method: EPA 3665A
 Lab ID: QC367656

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1254	5.000	5.200	104	65-135	8	35

Surrogate	%REC	Limits
TCMX	89	65-135
Decachlorobiphenyl	105	65-135

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191286 PCBs Water: EPA 8082

Inst : GC22
 Calnum : 256490278001
 Units : pg
 Name : 1660_340
 Date : 06-DEC-2006 20:07
 X Axis : R
 Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Std
L1	340_017	256490278017	PCB10_2	06-DEC-2006 20:07	S4994
L2	340_018	256490278018	PCB25_5	06-DEC-2006 20:33	S4995
L3	340_019	256490278019	PCB100_20	06-DEC-2006 20:59	S4996
L4	340_021	256490278021	PCB500_100	06-DEC-2006 21:52	S4998
L5	340_022	256490278022	PCB750_150	06-DEC-2006 22:18	S4999
L6	340_023	256490278023	PCB1000_200	06-DEC-2006 22:44	S5000
L7	340_029	256490278029	PCB250_50	07-DEC-2006 11:04	S4997

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	%RSD	Min^2	MaxRSD	Flg
Aroclor-1016 Peak # 1	A	397.90	549.92	452.63	476.34	446.91	464.85	444.73	AVRG	0.00216	0.00216	461.90	461.90	10	.99	20	
Aroclor-1016 Peak # 2	A	803.60	937.24	926.43	848.08	765.07	830.17	791.01	AVRG	0.00119	0.00119	843.09	843.09	8	.99	20	
Aroclor-1016 Peak # 3	A	1223.4	1227.8	1205.4	1194.5	1107.7	1251.2	1011.7	AVRG	8.51E-4	8.51E-4	1174.5	1174.5	7	.99	20	
Aroclor-1016 Peak # 4	A	411.90	409.32	414.49	365.98	326.66	369.99	334.88	AVRG	0.00266	0.00266	376.17	376.17	10	.99	20	
Aroclor-1016 Peak # 5	A	486.30	498.76	530.05	494.13	425.02	492.79	421.83	AVRG	0.00209	0.00209	478.41	478.41	8	.99	20	
Aroclor-1260 Peak # 1	A	1847.4	1802.4	1839.5	1830.3	1592.1	1897.6	1386.3	AVRG	5.74E-4	5.74E-4	1742.2	1742.2	11	.99	20	
Aroclor-1260 Peak # 2	A	1483.5	1490.8	1563.6	2024.8	1320.7	1650.4	1117.3	AVRG	6.57E-4	6.57E-4	1521.6	1521.6	19	.99	20	
Aroclor-1260 Peak # 3	A	1070.0	1052.8	1067.1	992.78	855.42	1068.1	770.70	AVRG	0.00102	0.00102	982.43	982.43	12	.99	20	
Aroclor-1260 Peak # 4	A	2408.0	2397.2	2562.5	2581.1	2201.8	2622.9	1854.2	AVRG	4.21E-4	4.21E-4	2375.4	2375.4	11	.99	20	
Aroclor-1260 Peak # 5	A	1115.0	1135.7	1264.7	1175.5	1009.9	1296.2	880.00	AVRG	8.89E-4	8.89E-4	1125.3	1125.3	13	.99	20	
TCMX	A	26090	24510	24598	25407	22633	22166	22068	AVRG	4.18E-5	4.18E-5	23924	23924	7	.99	20	
Decachlorobiphenyl	A	18615	18875	19952	19498	16177	17639	14184	AVRG	5.60E-5	5.60E-5	17849	17849	11	.99	20	
Aroclor-1016 Peak # 1	B	190.20	273.92	284.08	259.50	185.72	233.86	261.64	AVRG	0.00414	0.00414	241.27	241.27	16	.99	20	
Aroclor-1016 Peak # 2	B	353.40	397.16	443.06	370.06	235.71	296.39	364.01	AVRG	0.00285	0.00285	351.40	351.40	19	.99	20	
Aroclor-1016 Peak # 3	B	869.20	982.68	1141.9	1012.5	720.75	848.30	1019.5	AVRG	0.00106	0.00106	942.12	942.12	15	.99	20	
Aroclor-1016 Peak # 4	B	213.90	234.56	274.62	224.54	158.86	178.61	229.60	AVRG	0.00462	0.00462	216.38	216.38	18	.99	20	
Aroclor-1016 Peak # 5	B	238.80	273.00	324.74	266.42	182.49	208.88	278.02	AVRG	0.00395	0.00395	253.19	253.19	19	.99	20	
Aroclor-1260 Peak # 1	B	883.00	966.36	1079.0	894.71	605.79	728.78	935.32	AVRG	0.00115	0.00115	870.42	870.42	18	.99	20	
Aroclor-1260 Peak # 2	B	593.30	709.00	810.43	652.66	448.04	531.07	692.55	AVRG	0.00158	0.00158	633.86	633.86	19	.99	20	
Aroclor-1260 Peak # 3	B	1376.3	1502.6	1704.0	1439.1	966.42	1193.9	1501.5	AVRG	7.23E-4	7.23E-4	1383.4	1383.4	17	.99	20	
Aroclor-1260 Peak # 4	B	538.00	608.64	684.61	552.25	376.40	447.54	588.23	AVRG	0.00184	0.00184	542.24	542.24	19	.99	20	
Aroclor-1260 Peak # 5	B	682.00	820.56	875.03	699.49	471.67	576.88	754.94	AVRG	0.00143	0.00143	697.22	697.22	20	.99	20	
TCMX	B	14391	16818	17718	15269	11226	13248	16363	AVRG	6.66E-5	6.66E-5	15005	15005	15	.99	20	
Decachlorobiphenyl	B	11523	13354	13220	11247	7636.0	10024	11900	AVRG	8.87E-5	8.87E-5	11272	11272	18	.99	20	

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor
 Page 1 of 1

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191286 PCBS Water
EPA 8082

Inst : GC22
Calnum : 256490278001

Name : 1660_340
Cal Date: 06-DEC-2006

ICV 256490278032 (340_032 07-DEC-2006) stds: S4915

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1016	A	461.90		250.0	242.3	pg	-3	15	
Aroclor-1260	A	1742.2		250.0	236.5	pg	-5	15	
Aroclor-1016	B	241.27		250.0	268.4	pg	7	15	
Aroclor-1260	B	870.42		250.0	282.4	pg	13	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191286 PCBS Water: EPA 8082

Inst : GC22
 Calnum : 256493123001
 Units : pg

Name : ar2154
 Date : 08-DEC-2006 12:36
 X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	342_003	256493123003	AR2154	08-DEC-2006 12:36	S5002

Analyte	Ch	L1	Type	a0	a1	a2	Avg	r ²	MnR ²	MxRSD	Flg
Aroclor-1221 Peak # 1	A	87.652	AVRG		0.01141		87.652	0	.99	20	
Aroclor-1221 Peak # 2	A	267.56	AVRG		0.00374		267.56	0	.99	20	
Aroclor-1221 Peak # 3	A	135.18	AVRG		0.00740		135.18	0	.99	20	
Aroclor-1221 Peak # 4	A	681.49	AVRG		0.00147		681.49	0	.99	20	
Aroclor-1221 Peak # 5	A	72.364	AVRG		0.01382		72.364	0	.99	20	
Aroclor-1254 Peak # 1	A	764.67	AVRG		0.00131		764.67	0	.99	20	
Aroclor-1254 Peak # 2	A	942.20	AVRG		0.00106		942.20	0	.99	20	
Aroclor-1254 Peak # 3	A	780.92	AVRG		0.00128		780.92	0	.99	20	
Aroclor-1254 Peak # 4	A	1299.5	AVRG		7.70E-4		1299.5	0	.99	20	
Aroclor-1254 Peak # 5	A	964.58	AVRG		0.00104		964.58	0	.99	20	
Aroclor-1221 Peak # 1	B	103.08	AVRG		0.00970		103.08	0	.99	20	
Aroclor-1221 Peak # 2	B	190.30	AVRG		0.00525		190.30	0	.99	20	
Aroclor-1221 Peak # 3	B	129.22	AVRG		0.00774		129.22	0	.99	20	
Aroclor-1221 Peak # 4	B	470.09	AVRG		0.00213		470.09	0	.99	20	
Aroclor-1221 Peak # 5	B	49.480	AVRG		0.02021		49.480	0	.99	20	
Aroclor-1254 Peak # 1	B	647.20	AVRG		0.00155		647.20	0	.99	20	
Aroclor-1254 Peak # 2	B	690.37	AVRG		0.00145		690.37	0	.99	20	
Aroclor-1254 Peak # 3	B	526.18	AVRG		0.00190		526.18	0	.99	20	
Aroclor-1254 Peak # 4	B	996.76	AVRG		0.00100		996.76	0	.99	20	
Aroclor-1254 Peak # 5	B	745.10	AVRG		0.00134		745.10	0	.99	20	

Instrument amount = a0 + response * a1 + response² * a2; AVRG-Average response factor

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191286 PCBS Water
EPA 8082

Inst : GC22 Run Name: PCB750_150 IDF : 1.0
 Seqnum : 256496478002 File : 344_002 Time : 10-DEC-2006 19:04
 Cal : 256490278001 Caldate : 06-DEC-2006
 Standards: S4999

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1016	A			750.0	708.9	pg	-5	15	
Aroclor-1260	A			750.0	862.2	pg	15	15	
TCMX	A	23924	25057	150.0	157.1	pg	5	15	
Decachlorobiphenyl	A	17849	20602	150.0	173.1	pg	15	15	
Aroclor-1016	B			750.0	763.6	pg	2	15	
Aroclor-1260	B			750.0	882.5	pg	18	15	c+ ***
TCMX	B	15005	15370	150.0	153.7	pg	2	15	
Decachlorobiphenyl	B	11272	13400	150.0	178.3	pg	19	15	c+

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191286 PCBS Water
EPA 8082

Inst : GC22 Run Name: AR2154 IDF : 1.0
Seqnum : 256496478004 File : 344_004 Time : 10-DEC-2006 19:57
Cal : 256493123001 Caldate : 08-DEC-2006
Standards: S5002

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1221	A	250.0	231.2	pg	-8	15	
Aroclor-1254	A	250.0	256.8	pg	3	15	
Aroclor-1221	B	250.0	268.7	pg	7	15	
Aroclor-1254	B	250.0	243.7	pg	-3	15	

Inst
Seqnum
Cal

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191286 PCBS Water
EPA 8082

Inst : GC22 Run Name: PCB500_100 IDF : 1.0
Seqnum : 256496478018 File : 344_018 Time : 11-DEC-2006 02:06
Cal : 256490278001 Caldate : 06-DEC-2006
Standards: S4998

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1016	A			500.0	490.8	pg	-2	15	
Aroclor-1260	A			500.0	556.1	pg	11	15	
TCMX	A	23924	25075	100.0	104.8	pg	5	15	
Decachlorobiphenyl	A	17849	21810	100.0	122.2	pg	22	15	c+
Aroclor-1016	B			500.0	513.6	pg	3	15	
Aroclor-1260	B			500.0	571.0	pg	14	15	
TCMX	B	15005	16396	100.0	109.3	pg	9	15	
Decachlorobiphenyl	B	11272	13034	100.0	115.6	pg	16	15	c+

A
A
T

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191286 PCBS Water
EPA 8082

Inst : GC22 Run Name: AR2154 IDF : 1.0
Seqnum : 256496478020 File : 344_020 Time : 11-DEC-2006 02:59
Cal : 256493123001 Caldate : 08-DEC-2006
Standards: S5002

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1221	A	250.0	261.3	pg	5	15	
Aroclor-1254	A	250.0	268.1	pg	7	15	
Aroclor-1221	B	250.0	234.5	pg	-6	15	
Aroclor-1254	B	250.0	229.5	pg	-8	15	

SEQUENCE SUMMARY FOR 191286 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 256490278 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 06-DEC-2006
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename Type	Samplenum	Batch	Matrix Analyzed	IDF	IQC SPK uL	VL pH	Stdts Used	>LR
001	340_001	X	PCB500_100	06-DEC-2006	11:18	1.0		1	
002	340_002	X	PCB500_100	06-DEC-2006	11:44	1.0		1	
003	340_003	X	HEX	06-DEC-2006	12:10	1.0			
004	340_004	X	PCB10_2	06-DEC-2006	12:37	1.0		2	
005	340_005	X	PCB25_5	06-DEC-2006	13:03	1.0		3	
006	340_006	X	PCB100_20	06-DEC-2006	13:29	1.0		4	
007	340_007	X	PCB250_50	06-DEC-2006	13:56	1.0		5	
008	340_008	X	PCB500_100	06-DEC-2006	14:22	1.0		1	
009	340_009	X	PCB750_150	06-DEC-2006	14:48	1.0		6	
010	340_010	X	PCB1000_200	06-DEC-2006	15:15	1.0		7	
011	340_011	X	HEX	06-DEC-2006	15:41	1.0			
012	340_012	X	ULTRA_1660	06-DEC-2006	16:08	1.0		8	
013	340_013	X	ULTRA_1660	06-DEC-2006	16:34	1.0		8	
014	340_014	X	HEX	06-DEC-2006	17:00	1.0			
015	340_015	X	HEX	06-DEC-2006	17:26	1.0			
016	340_016	X	HEX	06-DEC-2006	19:40	1.0			
017	340_017	ICAL	PCB10_2	06-DEC-2006	20:07	1.0		2	
018	340_018	ICAL	PCB25_5	06-DEC-2006	20:33	1.0		3	
019	340_019	ICAL	PCB100_20	06-DEC-2006	20:59	1.0		4	
020	340_020	X	ICAL	06-DEC-2006	21:25	1.0		5	
021	340_021	ICAL	PCB500_100	06-DEC-2006	21:52	1.0		1	
022	340_022	ICAL	PCB750_150	06-DEC-2006	22:18	1.0		6	
023	340_023	ICAL	PCB1000_200	06-DEC-2006	22:44	1.0		7	
028	340_028	X	HEX	07-DEC-2006	10:37	1.0			
029	340_029	ICAL	PCB250_50	07-DEC-2006	11:04	1.0		5	
030	340_030	X	HEX	07-DEC-2006	13:39	1.0			
031	340_031	X	HEX	07-DEC-2006	13:56	1.0			
032	340_032	ICV	ULTRA_1660	07-DEC-2006	14:22	1.0	1	8	
033	340_033	ICV	ULTRA_1660	07-DEC-2006	14:49	1.0		8	

Stdts used: 1=S4998 2=S4994 3=S4995 4=S4996 5=S4997 6=S4999 7=S5000 8=S4915

SEQUENCE SUMMARY FOR 191286 PCBs Water
Curtis & Tompkins Laboratories

Sequence: 256493123 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 08-DEC-2006
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
001	342_001	X	PCB750_150			08-DEC-2006	10:43	1.0			1	1		4:PCB126=1038.71
002	342_002	CCV	PCB750_150			08-DEC-2006	11:10	1.0		3	1	1		
003	342_003	ICAL	AR2154			08-DEC-2006	12:36	1.0						
004	342_004	X	AR2154			08-DEC-2006	13:03	1.0				2		
005	342_005	X	HEX			08-DEC-2006	18:55	1.0				2		
006	342_006	BLANK	QC367564	120184	Soil	08-DEC-2006	19:22	1.0						
007	342_007	MSS	191335-001	120184	Soil	08-DEC-2006	19:48	1.0						
008	342_008	SAMPLE	191335-002	120184	Soil	08-DEC-2006	20:14	1.0						
009	342_009	SAMPLE	191335-003	120184	Soil	08-DEC-2006	20:41	1.0						
010	342_010	SAMPLE	191335-004	120184	Soil	08-DEC-2006	21:07	1.0						
011	342_011	SAMPLE	191335-005	120184	Soil	08-DEC-2006	21:33	1.0						
012	342_012	SAMPLE	191335-006	120184	Soil	08-DEC-2006	22:00	1.0						
013	342_013	LCS	QC367575	120184	Soil	08-DEC-2006	22:26	1.0						
014	342_014	MS	QC367576	120184	Soil	08-DEC-2006	22:53	1.0						
015	342_015	MSD	QC367577	120184	Soil	08-DEC-2006	23:19	1.0						
016	342_016	X	HEX			08-DEC-2006	23:45	1.0						
017	342_017	CCV	PCB500_100			09-DEC-2006	00:12	1.0		1	1	3		
018	342_018	X	PCB500_100			09-DEC-2006	00:38	1.0		2	1	3		
019	342_019	CCV	AR2154			09-DEC-2006	01:04	1.0			1	2		
020	342_020	X	AR2154			09-DEC-2006	01:31	1.0			1	2		
021	342_021	X	HEX			09-DEC-2006	01:57	1.0						
022	342_022	SAMPLE	191335-007	120184	Soil	09-DEC-2006	02:23	1.0						
023	342_023	SAMPLE	191335-008	120184	Soil	09-DEC-2006	02:50	1.0						
024	342_024	SAMPLE	191306-001	120184	Soil	09-DEC-2006	03:16	1.0						
025	342_025	SAMPLE	191312-002	120184	Soil	09-DEC-2006	03:43	1.0						
026	342_026	SAMPLE	191243-001	120090	Soil	09-DEC-2006	04:09	5.0						
027	342_027	X	HEX			09-DEC-2006	04:35	1.0						
028	342_028	X	PCB250_50			09-DEC-2006	05:02	1.0		2	1	4		
029	342_029	CCV	PCB250_50			09-DEC-2006	05:28	1.0		1	1	4		
030	342_030	CCV	AR2154			09-DEC-2006	05:54	1.0			1	2		
031	342_031	X	AR2154			09-DEC-2006	06:21	1.0			1	2		

Stds used: 1=S4999 2=S5002 3=S4998 4=S4997

SEQUENCE SUMMARY FOR 191286 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 256493123 Instrument: GC22 Gas Chromatograph #22 ECD
 Analytical Method: EPA 8082 SOP Version: 8082_rv.6
 Begun: 08-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
032	342	032	X	HEX			09-DEC-2006	06:47	1.0					

Stds used: 1=S4999 2=S5002 3=S4998 4=S4997

SEQUENCE SUMMARY FOR 191286 PCBs Water
Curtis & Tompkins Laboratories

Sequence: 256496478 Instrument: GC22 Gas Chromatograph #22 ECD Begun: 10-DEC-2006
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds	Used	>LR
001	344_001	X	HEX			10-DEC-2006	18:38	1.0						
002	344_002	CCV	PCB750_150			10-DEC-2006	19:04	1.0	1	1		1		
003	344_003	X	PCB750_150			10-DEC-2006	19:30	1.0	1	1		1		
004	344_004	CCV	AR2154			10-DEC-2006	19:57	1.0	1	1		2		2:PCB126=1108.41
005	344_005	X	AR2154			10-DEC-2006	20:23	1.0	1	1		2		
006	344_006	X	HEX			10-DEC-2006	20:50	1.0						
007	344_007	BLANK	QC367654	120200	Water	10-DEC-2006	21:16	1.0	0.025					
008	344_008	SAMPLE	191317-001	120200	Water	10-DEC-2006	21:42	1.0	0.02358					
009	344_009	SAMPLE	191286-001	120200	Water	10-DEC-2006	22:09	1.0	0.02358					
010	344_010	SAMPLE	191286-004	120200	Water	10-DEC-2006	22:35	1.0	0.02358					
011	344_011	SAMPLE	191290-001	120200	Water	10-DEC-2006	23:01	1.0	0.02404					
012	344_012	SAMPLE	191312-001	120200	Water	10-DEC-2006	23:28	10.0	0.02381	12				12:PCB126=1733.36
013	344_013	SAMPLE	191329-001	120200	Water	10-DEC-2006	23:54	1.0	0.02358					
014	344_014	SAMPLE	191331-001	120200	Water	11-DEC-2006	00:20	1.0	0.02358					
015	344_015	BS	QC367655	120200	Water	11-DEC-2006	00:47	1.0	0.025					
016	344_016	BSD	QC367656	120200	Water	11-DEC-2006	01:13	1.0	0.025					
017	344_017	X	HEX			11-DEC-2006	01:40	1.0						
018	344_018	CCV	PCB500_100			11-DEC-2006	02:06	1.0	1.0			3		
019	344_019	X	PCB500_100			11-DEC-2006	02:32	1.0	1.0	1		3		
020	344_020	CCV	AR2154			11-DEC-2006	02:59	1.0	1.0			2		
021	344_021	X	AR2154			11-DEC-2006	03:25	1.0	1.0			2		
022	344_022	X	HEX			11-DEC-2006	03:51	1.0						

Stds used: 1=S4999 2=S5002 3=S4998

REPORTING SUMMARY FOR 191286 PCBS Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
191286-001	Aroclor-1016	GC22	A	12/10/06 22:09
191286-001	Aroclor-1221	GC22	A	12/10/06 22:09
191286-001	Aroclor-1232	GC22	A	12/10/06 22:09
191286-001	Aroclor-1242	GC22	A	12/10/06 22:09
191286-001	Aroclor-1248	GC22	A	12/10/06 22:09
191286-001	Aroclor-1254	GC22	A	12/10/06 22:09
191286-001	Aroclor-1260	GC22	A	12/10/06 22:09
191286-001	TCMX	GC22	A	12/10/06 22:09
191286-001	Decachlorobiphenyl	GC22	A	12/10/06 22:09
191286-004	Aroclor-1016	GC22	A	12/10/06 22:35
191286-004	Aroclor-1221	GC22	A	12/10/06 22:35
191286-004	Aroclor-1232	GC22	A	12/10/06 22:35
191286-004	Aroclor-1242	GC22	A	12/10/06 22:35
191286-004	Aroclor-1248	GC22	A	12/10/06 22:35
191286-004	Aroclor-1254	GC22	A	12/10/06 22:35
191286-004	Aroclor-1260	GC22	A	12/10/06 22:35
191286-004	TCMX	GC22	A	12/10/06 22:35
191286-004	Decachlorobiphenyl	GC22	A	12/10/06 22:35
QC367654	Aroclor-1016	GC22	A	12/10/06 21:16
QC367654	Aroclor-1221	GC22	A	12/10/06 21:16
QC367654	Aroclor-1232	GC22	A	12/10/06 21:16
QC367654	Aroclor-1242	GC22	A	12/10/06 21:16
QC367654	Aroclor-1248	GC22	A	12/10/06 21:16
QC367654	Aroclor-1254	GC22	A	12/10/06 21:16
QC367654	Aroclor-1260	GC22	A	12/10/06 21:16
QC367654	TCMX	GC22	A	12/10/06 21:16
QC367654	Decachlorobiphenyl	GC22	A	12/10/06 21:16
QC367655	Aroclor-1254	GC22	A	12/11/06 00:47
QC367655	TCMX	GC22	A	12/11/06 00:47
QC367655	Decachlorobiphenyl	GC22	A	12/11/06 00:47
QC367656	Aroclor-1254	GC22	A	12/11/06 01:13
QC367656	TCMX	GC22	A	12/11/06 01:13
QC367656	Decachlorobiphenyl	GC22	A	12/11/06 01:13

Curtis & Tompkins Laboratories Sample Preparation Summary

09-DEC-2006 16:07

Batch Number : 120200
 Date Extracted: 08-DEC-2006
 Extracted by : Stephen Wanta
 Prep Method : 3520C

Analysis : PCB
 Bgroup : N/A
 Units : mL
 Clean-up :

Spike #1 ID : S4969A
 Spike #2 ID : S4933A
 Spike #3 ID :
 SOP Version : PCB W rv7

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
191286-001		Treadwell & Rollo	Water	1060	mL	25	0.023585	1	7	.05	0	PCB	3665A	
191286-004		Treadwell & Rollo	Water	1060	mL	25	0.023585	1	7	.05	0	PCB	3665A	
191290-001		Treadwell & Rollo	Water	1040	mL	25	0.024038	1	7	.05	0	PCB	3665A	
191312-001		Blasland, Bouck & Lee	Water	1050	mL	25	0.023810	1	7	.05	0	PCB	3665A	
191317-001		Strategic Engineering & Scienc	Water	1060	mL	25	0.023585	1	7	.05	0	PCB	3665A	
191329-001		Strategic Engineering & Scienc	Water	1060	mL	25	0.023585	1	7	.05	0	PCB	3665A	
191331-001		Strategic Engineering & Scienc	Water	1060	mL	25	0.023585	1	7	.05	0	PCB	3665A	
QC367654	BLANK		Water	1000	mL	25	0.025000	1		.05	0	PCB	3665A	
QC367655	BS		Water	1000	mL	25	0.025000	1		.05	0	PCB	3665A	
QC367656	BSD		Water	1000	mL	25	0.025000	1		.05	0	PCB	3665A	

00010

Prep Chemist:  Reviewed By:  Date: 12/11/06
 Relinquished By:  Date: 12/11/06

Curtis & Tompkins Laboratories
MDL Summary for EPA 8082 Water
As of 01/05/07

Analyte	Units	GC06 A	GC06 B	GC16 A	GC16 B	GC22 A	GC22 B	GC25 A	GC25 B
Aroclor-1016	ug/L	0.12	0.091	0.044	0.049	0.068	0.18	0.15	0.22
Aroclor-1221	ug/L	0.29	0.43	0.29	0.43	0.20	0.48	0.23	0.49
Aroclor-1232	ug/L	0.11	0.088			0.075	0.21	0.16	0.087
Aroclor-1242	ug/L	0.15	0.16			0.24	0.22	0.14	0.15
Aroclor-1248	ug/L	0.15	0.14	0.073	0.051	0.080	0.19	0.11	0.16
Aroclor-1254	ug/L	0.085	0.097			0.099	0.068	0.11	0.20
Aroclor-1260	ug/L	0.12	0.095	0.036	0.061	0.13	0.15	0.17	0.13

PAH Water Data EPA 8310



Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	LF6GW103	Batch#:	120180
Lab ID:	191286-001	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Prepared:	12/08/06
Diln Fac:	1.000	Analyzed:	12/11/06

Analyte	Result	RL	MDL
Naphthalene	ND	0.94	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.94	
Fluorene	ND	0.94	
Phenanthrene	ND	0.47	
Anthracene	ND	0.47	0.02
Fluoranthene	ND	0.38	0.008
Pyrene	ND	0.19	
Benzo (a) anthracene	ND	0.09	
Chrysene	ND	0.09	
Benzo (b) fluoranthene	ND	0.19	
Benzo (k) fluoranthene	ND	0.09	
Benzo (a) pyrene	ND	0.09	
Dibenz (a, h) anthracene	ND	0.19	
Benzo (g, h, i) perylene	ND	0.19	
Indeno (1, 2, 3-cd) pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	81	65-135
1-Methylnaphthalene (F)	81	65-135

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Polynuclear Aromatics by HPLC

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DUP1205062A	Batch#:	120180
Lab ID:	191286-004	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Prepared:	12/08/06
Diln Fac:	1.000	Analyzed:	12/11/06

Analyte	Result	RL	MDL
Naphthalene	ND	0.94	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.94	
Fluorene	ND	0.94	
Phenanthrene	ND	0.47	
Anthracene	ND	0.47	0.02
Fluoranthene	ND	0.38	0.008
Pyrene	ND	0.19	
Benzo (a) anthracene	ND	0.09	
Chrysene	ND	0.09	
Benzo (b) fluoranthene	ND	0.19	
Benzo (k) fluoranthene	ND	0.09	
Benzo (a) pyrene	ND	0.09	
Dibenz (a, h) anthracene	ND	0.19	
Benzo (g, h, i) perylene	ND	0.19	
Indeno (1, 2, 3-cd) pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	82	65-135
1-Methylnaphthalene (F)	82	65-135

ND= Not Detected
 RL= Reporting Limit
 MDL= Method Detection Limit



Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	BB1PZ100	Batch#:	120180
Lab ID:	191286-007	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Prepared:	12/08/06
Diln Fac:	1.000	Analyzed:	12/11/06

Analyte	Result	RL	MDL
Naphthalene	ND	0.96	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.96	
Fluorene	ND	0.96	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	0.04 J	0.38	0.008
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	83	65-135
1-Methylnaphthalene (F)	82	65-135

J= Estimated value

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Polynuclear Aromatics by HPLC

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	BB1PZ101	Batch#:	120180
Lab ID:	191286-008	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Prepared:	12/08/06
Diln Fac:	1.000	Analyzed:	12/11/06

Analyte	Result	RL	MDL
Naphthalene	ND	0.95	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.95	
Fluorene	ND	0.95	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	ND	0.38	0.008
Pyrene	ND	0.19	
Benzo (a) anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo (b) fluoranthene	ND	0.19	
Benzo (k) fluoranthene	ND	0.10	
Benzo (a) pyrene	ND	0.10	
Dibenz (a, h) anthracene	ND	0.19	
Benzo (g, h, i) perylene	ND	0.19	
Indeno (1, 2, 3-cd) pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	78	65-135
1-Methylnaphthalene (F)	77	65-135



Polynuclear Aromatics by HPLC

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	1213GW101	Batch#:	120180
Lab ID:	191286-012	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Prepared:	12/08/06
Diln Fac:	1.000	Analyzed:	12/11/06

Analyte	Result	RL	MDL
Naphthalene	ND	0.99	
Acenaphthylene	ND	2.0	
Acenaphthene	ND	0.99	
Fluorene	ND	0.99	
Phenanthrene	ND	0.50	
Anthracene	ND	0.50	0.02
Fluoranthene	ND	0.40	0.008
Pyrene	ND	0.20	
Benzo (a) anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo (b) fluoranthene	ND	0.20	
Benzo (k) fluoranthene	ND	0.10	
Benzo (a) pyrene	ND	0.10	
Dibenz (a, h) anthracene	ND	0.20	
Benzo (g, h, i) perylene	ND	0.20	
Indeno (1, 2, 3-cd) pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	80	65-135
1-Methylnaphthalene (F)	80	65-135

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit



Polynuclear Aromatics by HPLC

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	1349MW100	Sampled:	12/05/06
Lab ID:	191286-013	Received:	12/06/06
Matrix:	Water	Prepared:	12/08/06
Units:	ug/L	Analyzed:	12/12/06
Batch#:	120180		

Analyte	Result	RL	MDL	Diln Fac
Naphthalene	ND	1.0		1.000
Acenaphthylene	ND	2.0		1.000
Acenaphthene	12	1.0		1.000
Fluorene	17	10		10.00
Phenanthrene	41	5.0		10.00
Anthracene	1.1	0.50	0.02	1.000
Fluoranthene	41	4.0	0.08	10.00
Pyrene	ND	0.20		1.000
Benzo(a)anthracene	2.3	0.10		1.000
Chrysene	1.2	0.10		1.000
Benzo(b)fluoranthene	1.2	0.20		1.000
Benzo(k)fluoranthene	0.11	0.10		1.000
Benzo(a)pyrene	ND	0.10		1.000
Dibenz(a,h)anthracene	ND	0.20		1.000
Benzo(g,h,i)perylene	ND	0.20		1.000
Indeno(1,2,3-cd)pyrene	ND	0.14		1.000

Surrogate	%REC	Limits	Diln Fac
1-Methylnaphthalene (UV)	135	65-135	1.000
1-Methylnaphthalene (F)	126	65-135	1.000

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC367536	Batch#:	120180
Matrix:	Water	Prepared:	12/08/06
Units:	ug/L	Analyzed:	12/11/06

Analyte	Result	RL	MDL
Naphthalene	ND	1.0	
Acenaphthylene	ND	2.0	
Acenaphthene	ND	1.0	
Fluorene	ND	1.0	
Phenanthrene	ND	0.50	
Anthracene	ND	0.50	0.02
Fluoranthene	ND	0.40	0.008
Pyrene	ND	0.20	
Benzo (a) anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo (b) fluoranthene	ND	0.20	
Benzo (k) fluoranthene	ND	0.10	
Benzo (a) pyrene	ND	0.10	
Dibenz (a, h) anthracene	ND	0.20	
Benzo (g, h, i) perylene	ND	0.20	
Indeno (1, 2, 3-cd) pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	85	65-135
1-Methylnaphthalene (F)	85	65-135

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report
Polynuclear Aromatics by HPLC

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC367537	Batch#:	120180
Matrix:	Water	Prepared:	12/08/06
Units:	ug/L	Analyzed:	12/11/06

Analyte	Spiked	Result	%REC	Limits
Naphthalene	10.00	9.419	94	50-135
Fluorene	2.000	1.894	95	65-135
Pyrene	1.000	0.9518	95	65-135
Benzo(a)pyrene	1.000	0.9542	95	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	90	65-135
1-Methylnaphthalene (F)	90	65-135



Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	1065PZ2A	Batch#:	120180
MSS Lab ID:	191314-011	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Prepared:	12/08/06
Diln Fac:	1.000	Analyzed:	12/11/06

Type: MS Lab ID: QC367538

Analyte	MSS Result	Spiked	Result	%REC	Limits
Naphthalene	<0.04123	9.434	8.529	90	50-135
Fluorene	<0.007146	1.887	1.654	88	65-135
Pyrene	<0.003920	0.9434	0.8720	92	65-135
Benzo(a)pyrene	<0.01656	0.9434	0.7367	78	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	81	65-135
1-Methylnaphthalene (F)	82	65-135

Type: MSD Lab ID: QC367539

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Naphthalene	9.434	7.885	84	50-135	8	35
Fluorene	1.887	1.568	83	65-135	5	35
Pyrene	0.9434	0.8360	89	65-135	4	35
Benzo(a)pyrene	0.9434	0.6952	74	65-135	6	35

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	76	65-135
1-Methylnaphthalene (F)	78	65-135

RPD= Relative Percent Difference



Curtis & Tompkins, Ltd.

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	514AGW101	Batch#:	120180
MSS Lab ID:	191314-019	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Prepared:	12/08/06
Diln Fac:	1.000	Analyzed:	12/11/06

Type: MS Lab ID: QC367540

Analyte	MSS Result	Spiked	Result	%REC	Limits
Naphthalene	<0.04123	9.434	8.743	93	50-135
Fluorene	<0.007146	1.887	1.745	92	65-135
Pyrene	0.03606	0.9434	0.7990	81	65-135
Benzo(a)pyrene	<0.01656	0.9434	0.2761	29 *	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	86	65-135
1-Methylnaphthalene (F)	86	65-135

Type: MSD Lab ID: QC367541

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Naphthalene	9.434	8.196	87	50-135	6	35
Fluorene	1.887	1.617	86	65-135	8	35
Pyrene	0.9434	0.7769	79	65-135	3	35
Benzo(a)pyrene	0.9434	0.3538	38 *	65-135	25	35

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	80	65-135
1-Methylnaphthalene (F)	80	65-135

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Confirmation Report for 191286 HPLC Water
Curtis & Tompkins Laboratories

Units: ug/L

Lab ID	Client ID	Analyte	Result	Confirmation	RPD	%D
191286-007	BB1PZ100	Fluoranthene	0.04451 J	0.02948	41	-34
191286-013	1349MW100	Acenaphthene	11.83	5.348	75	-55
191286-013	1349MW100	Fluorene	16.64	10.54	45	-37
191286-013	1349MW100	Phenanthrene	40.86	21.00	64	-49
191286-013	1349MW100	Anthracene	1.052	0.8565	20	-19
191286-013	1349MW100	Fluoranthene	41.26	30.64	30	-26
191286-013	1349MW100	Benzo(a)anthracene	2.348	4.550	64	94
191286-013	1349MW100	Chrysene	1.180	4.013	109	240
191286-013	1349MW100	Benzo(b)fluoranthene	1.240	0.6425	63	-48
191286-013	1349MW100	Benzo(k)fluoranthene	0.1101	0.4789	125	335

J=estimated

Page 1 of 1

: 00329

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191286 HPLC Water: EPA 8310

Inst : HPLC05
 Calnum : 856422684001
 Units : ug/L

Date : 20-OCT-2006 14:42
 X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	293000006	856422684006		20-OCT-2006 14:42	S4234
L2	293000007	856422684007		20-OCT-2006 15:06	S4233
L3	293000008	856422684008		20-OCT-2006 15:30	S4232
L4	293000009	856422684009		20-OCT-2006 15:53	S4231
L5	293000010	856422684010		20-OCT-2006 16:17	S4230
L6	293000011	856422684011		20-OCT-2006 16:40	S4229
L7	293000012	856422684012		20-OCT-2006 17:04	S4228

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	%RSD	MnR ²	MxRSD	Flg
Naphthalene	1	0.0112	0.0108	0.0106	0.0100	0.0106	0.0110	0.0108	LINR	62.3689	92.4804		0.0107	1.000	0.99	20		
Acenaphthylene	1	0.0082	0.0078	0.0077	0.0073	0.0077	0.0080	0.0078	LINR	100.949	127.623		0.0078	1.000	0.99	20		
Acenaphthene	1	0.0034	0.0038	0.0039	0.0038	0.0040	0.0042	0.0041	LINR	81.6039	241.935		0.0039	1.000	0.99	20		
Fluorene	1	0.0481	0.0498	0.0501	0.0483	0.0506	0.0535	0.0518	LINR	14.3072	19.1646		0.0503	1.000	0.99	20		
Phenanthrene	1	0.1438	0.1399	0.1418	0.1338	0.1419	0.1486	0.1454	LINR	8.77257	6.83833		0.1422	1.000	0.99	20		
Anthracene	1	0.3050	0.3045	0.3026	0.2877	0.3019	0.3162	0.3136	LINR	13.1278	3.17645		0.3045	1.000	0.99	20		
Fluoranthene	1	0.0347	0.0333	0.0325	0.0310	0.0325	0.0342	0.0332	LINR	11.9642	29.9112		0.0330	1.000	0.99	20		
Benzo(a)anthracene	1	0.0574	0.0686	0.0707	0.0677	0.0724	0.0775	0.0767	LINR	21.9712	12.9544		0.0702	1.000	0.99	20		
Chrysene	1	0.1040	0.1048	0.1093	0.1041	0.1085	0.1143	0.1119	LINR	9.26571	8.89174		0.1081	1.000	0.99	20		
Benzo(b)fluoranthene	1	0.0782	0.0839	0.0841	0.0806	0.0854	0.0897	0.0882	LINR	25.1696	11.2738		0.0843	1.000	0.99	20		
Benzo(k)fluoranthene	1	0.0646	0.0608	0.0642	0.0607	0.0650	0.0684	0.0672	LINR	13.7591	14.7909		0.0644	1.000	0.99	20		
Benzo(a)pyrene	1	0.0888	0.0681	0.0680	0.0624	0.0678	0.0708	0.0694	LINR	9.13882	14.3343		0.0708	1.000	0.99	20		
Dibenz(a,h)anthracene	1	0.0214	0.0144	0.0165	0.0161	0.0177	0.0188	0.0186	LINR	46.0475	53.5119		0.0176	1.000	0.99	20		
Benzo(g,h,i)perylene	1	0.0362	0.0265	0.0253	0.0249	0.0264	0.0282	0.0279	LINR	38.7818	35.6147		0.0279	1.000	0.99	20		
Indeno(1,2,3-cd)pyrene	1	0.0914	0.0655	0.0730	0.0695	0.0748	0.0810	0.0798	LINR	23.1302	12.4437		0.0764	1.000	0.99	20		
1-Methylnaphthalene (UV)	1	0.0073	0.0070	0.0070	0.0066	0.0069	0.0072	0.0070	LINR	244.420	141.794		0.0070	1.000	0.99	20		
Acenaphthylene	2	0.0672	0.0660	0.0650	0.0612	0.0630	0.0642		LINR	82.4148	15.6143		0.0644	1.000	0.99	20		
Pyrene	2	0.0985	0.1018	0.1025	0.0966	0.1048	0.1104	0.1069	LINR	9.00456	9.28619		0.1031	1.000	0.99	20		
1-Methylnaphthalene (UV)	2	0.0163	0.0160	0.0157	0.0146	0.0149	0.0151		LINR	47.8928	66.3750		0.0154	1.000	0.99	20		
Naphthalene	3	0.0102	0.0101	0.0099	0.0094	0.0098	0.0102	0.0098	LINR	-19.221	101.261		0.0099	1.000	0.99	20		
Acenaphthene	3	0.0195	0.0191	0.0191	0.0181	0.0191	0.0199		LINR	128.673	50.4217		0.0191	0.999	0.99	20		
Fluorene	3	0.1358	0.1341	0.1326	0.1256	0.1303	0.1346		LINR	18.3555	7.44134		0.1322	1.000	0.99	20		
Phenanthrene	3	0.1225	0.1214	0.1202	0.1138	0.1196	0.1244	0.1208	LINR	2.60995	8.22983		0.1204	1.000	0.99	20		
Anthracene	3	0.3249	0.3242	0.3213	0.3040	0.3173	0.3308	0.3258	LINR	8.01235	3.05700		0.3212	1.000	0.99	20		
Fluoranthene	3	0.0423	0.0418	0.0419	0.0398	0.0416	0.0436	0.0426	LINR	13.7519	23.3663		0.0419	1.000	0.99	20		
Pyrene	3	0.1574	0.1555	0.1573	0.1503	0.1597	0.1667	0.1628	LINR	8.17197	6.10491		0.1585	1.000	0.99	20		

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	%RSD	MnR ²	MxRSD	Flg
Benzo(a)anthracene	3	0.1140	0.1149	0.1167	0.1128	0.1203	0.1274	0.1238	LINR	11.0651	8.01910		0.1186	1.000	1.000	0.99	20	
Chrysene	3	0.1994	0.1982	0.1969	0.1861	0.1926	0.1989	0.1910	LINR	-6.6175	5.20664		0.1947	1.000	1.000	0.99	20	
Benzo(b)fluoranthene	3	0.0613	0.0611	0.0622	0.0590	0.0621	0.0646	0.0628	LINR	7.09058	15.8387		0.0619	1.000	1.000	0.99	20	
Benzo(k)fluoranthene	3	0.4270	0.4223	0.4271	0.4031	0.4185	0.4266		LINR	6.36009	2.34528		0.4208	1.000	1.000	0.99	20	
Benzo(a)pyrene	3	0.1881	0.1864	0.1906	0.1796	0.1876	0.1948	0.1874	LINR	-2.6745	5.30328		0.1878	1.000	1.000	0.99	20	
Dibenz(a,h)anthracene	3	0.0354	0.0361	0.0382	0.0369	0.0399	0.0424	0.0413	LINR	31.5047	24.0098		0.0386	1.000	1.000	0.99	20	
Benzo(g,h,i)perylene	3	0.0678	0.0685	0.0721	0.0691	0.0742	0.0787	0.0773	LINR	34.1300	12.8444		0.0725	1.000	1.000	0.99	20	
Indeno(1,2,3-cd)pyrene	3	0.0769	0.0754	0.0818	0.0779	0.0844	0.0896	0.0861	LINR	9.70583	11.5022		0.0817	0.999	0.999	0.99	20	
1-Methylnaphthalene (F)	3	0.0112	0.0110	0.0109	0.0102	0.0106	0.0108		LINR	209.497	92.6837		0.0108	1.000	1.000	0.99	20	

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

=====

Calibration Table

=====

NEW ICAL *gm* 23 OCT 2006

HPLC05 METHOD 8310

Calib. Data Modified : 10/23/2006 5:18:58 PM

Calculate : External Standard

Based on : Peak Area

Rel. Reference Window : 1.000 %

Abs. Reference Window : 0.150 min

Rel. Non-ref. Window : 1.000 %

Abs. Non-ref. Window : 0.150 min

Do not use Multiplier & Dilution Factor with ISTDs

Uncalibrated Peaks : not reported

Partial Calibration : Yes, identified peaks are recalibrated

Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear

Origin : Ignored

Weight : Equal

Recalibration Settings:

Average Response : Average all calibrations

Average Retention Time: Floating Average New 75%

10/30/06

Calibration Report Options :

Printout of recalibrations within a sequence:

Calibration Table after Recalibration

Normal Report after Recalibration

If the sequence is done with bracketing:

Results of first cycle (ending previous bracket)

Signal 1: DAD1 A, Sig=254,4 Ref=480,80

Signal 2: DAD1 B, Sig=235,4 Ref=480,80

Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime	Lvl	Amount	Area	Amt/Area	Ref Grp Name
[min]	Sig	[ug/l]			
2.618	1	1	166.67000	1.87262	89.00358
		2	500.00000	5.39314	92.71043
		3	2000.00000	21.24130	94.15618
		4	4000.00000	40.15183	99.62186
		5	1.00000e4	105.58833	94.70743
		6	2.00000e4	219.41838	91.15007
		7	4.00000e4	430.61826	92.88970
2.644	3	1	166.67000	1.69219	98.49383
		2	500.00000	5.03479	99.30901
		3	2000.00000	19.85534	100.72855
		4	4000.00000	37.50118	106.66330
		5	1.00000e4	98.35535	101.67215
		6	2.00000e4	203.15842	98.44534
		7	4.00000e4	392.85257	101.81937
3.232	1	1	333.33000	2.73477	121.88589
		2	1000.00000	7.79701	128.25424
		3	4000.00000	30.83273	129.73226
		4	8000.00000	58.40831	136.96682

RetTime [min]	Lvl Sig	Amount [ug/l]	Area	Amt/Area	Ref Grp Name
3.233	2	1 2.00000e4	153.18359	130.56228	
		6 4.00000e4	319.16855	125.32563	
		7 8.00000e4	623.79065	128.24816	
	1	1 333.33000	22.39426	14.88462	Acenaphthylene
		2 1000.00000	65.99164	15.15344	
		3 4000.00000	260.16629	15.37478	
		4 8000.00000	489.73437	16.33539	
		5 2.00000e4	1260.02979	15.87264	
		6 4.00000e4	2566.57837	15.58495	
3.774	1	1 666.67000	4.85469	137.32485	1-Methylnaphthalene (UV)
		2 2000.00000	14.04867	142.36228	
		3 8000.00000	55.73627	143.53310	
		4 1.60000e4	104.83626	152.61895	
		5 4.00000e4	274.65417	145.63769	
		6 8.00000e4	573.35449	139.52973	
		7 1.60000e5	1123.21265	142.44854	
3.775	2	1 666.67000	10.87865	61.28240	1-Methylnaphthalene (UV)
		2 2000.00000	32.02159	62.45786	
		3 8000.00000	125.52388	63.73289	
		4 1.60000e4	233.55998	68.50489	
		5 4.00000e4	594.28253	67.30805	
		6 8.00000e4	1209.07336	66.16637	
3.800	3	1 666.67000	7.47726	89.15966	1-Methylnaphthalene (F)
		2 2000.00000	22.05803	90.66994	
		3 8000.00000	87.30132	91.63664	
		4 1.60000e4	163.54369	97.83319	
		5 4.00000e4	424.00409	94.33871	
		6 8.00000e4	864.49622	92.53944	
4.097	1	1 166.67000	1.55067	107.48240	2-Methylnaphthalene
		2 500.00000	4.46054	112.09418	
		3 2000.00000	17.87906	111.86270	
		4 4000.00000	34.05137	117.46957	
		5 1.00000e4	89.80411	111.35348	
		6 2.00000e4	187.31686	106.77095	
		7 4.00000e4	364.75916	109.66140	
4.123	3	1 166.67000	2.26019	73.74166	2-Methylnaphthalene
		2 500.00000	6.69415	74.69203	
		3 2000.00000	26.65734	75.02623	
		4 4000.00000	50.32135	79.48913	
		5 1.00000e4	131.51395	76.03756	
		6 2.00000e4	273.15500	73.21850	
		7 4.00000e4	524.79846	76.21974	
4.430	1	1 166.67000	5.63797e-1	295.62049	Acenaphthene
		2 500.00000	1.88988	264.56750	
		3 2000.00000	7.72071	259.04338	
		4 4000.00000	15.17353	263.61703	
		5 1.00000e4	40.24534	248.47598	
		6 2.00000e4	84.95349	235.42293	
		7 4.00000e4	163.98227	243.92881	
4.456	3	1 166.67000	3.24780	51.31784	Acenaphthene
		2 500.00000	9.55153	52.34766	
		3 2000.00000	38.27118	52.25865	
		4 4000.00000	72.57647	55.11428	
		5 1.00000e4	191.20360	52.30027	
		6 2.00000e4	397.03738	50.37309	
4.787	1	1 33.33300	1.60423	20.77816	Fluorene
		2 100.00000	4.97697	20.09253	

RetTime [min]	Lvl Sig	Amount [ug/l]	Area	Amt/Area	Ref Grp Name
----- ----- ----- ----- ----- -----					
	3	400.00000	20.02391	19.97612	
	4	800.00000	38.67158	20.68703	
	5	2000.00000	101.16436	19.76981	
	6	4000.00000	213.80600	18.70855	
	7	8000.00000	414.61331	19.29509	
4.814	3	1	33.33300	4.52741	7.36249 Fluorene
		2	100.00000	13.40784	7.45832
		3	400.00000	53.04753	7.54041
		4	800.00000	100.49004	7.96099
		5	2000.00000	260.67688	7.67233
		6	4000.00000	538.53595	7.42754
5.654	1	1	16.66700	2.39616	6.95572 Phenanthrene
		2	50.00000	6.99577	7.14717
		3	200.00000	28.35797	7.05269
		4	400.00000	53.53967	7.47110
		5	1000.00000	141.86998	7.04871
		6	2000.00000	297.28598	6.72753
		7	4000.00000	581.70605	6.87633
5.680	3	1	16.66700	2.04240	8.16048 Phenanthrene
		2	50.00000	6.07206	8.23444
		3	200.00000	24.03204	8.32222
		4	400.00000	45.52298	8.78677
		5	1000.00000	119.56546	8.36362
		6	2000.00000	248.73990	8.04053
		7	4000.00000	483.37540	8.27514
6.401	1	1	16.66700	5.08343	3.27869 Anthracene
		2	50.00000	15.22430	3.28422
		3	200.00000	60.51564	3.30493
		4	400.00000	115.07833	3.47589
		5	1000.00000	301.92731	3.31206
		6	2000.00000	632.47308	3.16219
		7	4000.00000	1254.36133	3.18887
6.427	3	1	16.66700	5.41461	3.07816 Anthracene
		2	50.00000	16.20784	3.08493
		3	200.00000	64.25589	3.11256
		4	400.00000	121.59124	3.28971
		5	1000.00000	317.26334	3.15196
		6	2000.00000	661.61743	3.02289
		7	4000.00000	1303.20703	3.06935
7.245	1	1	33.33300	1.15551	28.84694 Fluoranthene
		2	100.00000	3.33166	30.01503
		3	400.00000	12.98016	30.81627
		4	800.00000	24.77284	32.29344
		5	2000.00000	64.95121	30.79234
		6	4000.00000	136.77095	29.24598
		7	8000.00000	265.86572	30.09038
7.271	3	1	33.33300	1.40892	23.65851 Fluoranthene
		2	100.00000	4.17803	23.93471
		3	400.00000	16.75041	23.88001
		4	800.00000	31.82304	25.13902
		5	2000.00000	83.10880	24.06484
		6	4000.00000	174.21184	22.96055
		7	8000.00000	340.61569	23.48688
7.802	2	1	16.66700	1.64199	10.15049 Pyrene
		2	50.00000	5.09229	9.81877
		3	200.00000	20.50868	9.75197
		4	400.00000	38.62242	10.35668

RetTime [min]	Lvl Sig	Amount [ug/l]	Area	Amt/Area	Ref Grp Name
----- --- ----- ----- ----- -----					
		5 1000.00000	104.77747	9.54404	
		6 2000.00000	220.72879	9.06089	
		7 4000.00000	427.43903	9.35806	
7.828	3	1 16.66700	2.62331	6.35343	Pyrene
		2 50.00000	7.77364	6.43199	
		3 200.00000	31.46188	6.35690	
		4 400.00000	60.12874	6.65239	
		5 1000.00000	159.68500	6.26233	
		6 2000.00000	333.38132	5.99914	
		7 4000.00000	651.39581	6.14066	
9.643	1	1 16.66700	9.57469e-1	17.40736	Benzo(a) anthracene
		2 50.00000	3.42833	14.58438	
		3 200.00000	14.13649	14.14778	
		4 400.00000	27.08596	14.76780	
		5 1000.00000	72.43194	13.80606	
		6 2000.00000	155.09375	12.89543	
		7 4000.00000	306.81271	13.03727	
9.669	3	1 16.66700	1.89931	8.77531	Benzo(a) anthracene
		2 50.00000	5.74275	8.70663	
		3 200.00000	23.33808	8.56969	
		4 400.00000	45.12976	8.86333	
		5 1000.00000	120.34502	8.30944	
		6 2000.00000	254.83763	7.84813	
		7 4000.00000	495.09924	8.07919	
9.924	1	1 16.66700	1.73275	9.61883	Chrysene
		2 50.00000	5.23829	9.54510	
		3 200.00000	21.85947	9.14935	
		4 400.00000	41.63781	9.60665	
		5 1000.00000	108.51689	9.21516	
		6 2000.00000	228.52586	8.75174	
		7 4000.00000	447.41809	8.94018	
9.951	3	1 16.66700	3.32351	5.01488	Chrysene
		2 50.00000	9.90968	5.04557	
		3 200.00000	39.38066	5.07863	
		4 400.00000	74.45260	5.37255	
		5 1000.00000	192.62691	5.19138	
		6 2000.00000	397.78159	5.02788	
		7 4000.00000	763.90112	5.23628	
11.331	1	1 33.33300	2.60658	12.78804	Benzo(b) fluoranthene
		2 100.00000	8.39483	11.91209	
		3 400.00000	33.63747	11.89150	
		4 800.00000	64.49110	12.40481	
		5 2000.00000	170.82089	11.70817	
		6 4000.00000	358.76276	11.14943	
		7 8000.00000	705.74353	11.33556	
11.358	3	1 33.33300	2.04261	16.31880	Benzo(b) fluoranthene
		2 100.00000	6.11495	16.35336	
		3 400.00000	24.88266	16.07545	
		4 800.00000	47.17664	16.95755	
		5 2000.00000	124.19430	16.10380	
		6 4000.00000	258.33447	15.48380	
		7 8000.00000	502.21481	15.92944	
11.876	1	1 16.66700	1.07658	15.48147	Benzo(k) fluoranthene
		2 50.00000	3.04171	16.43813	
		3 200.00000	12.84467	15.57066	
		4 400.00000	24.29218	16.46621	
		5 1000.00000	64.97358	15.39087	

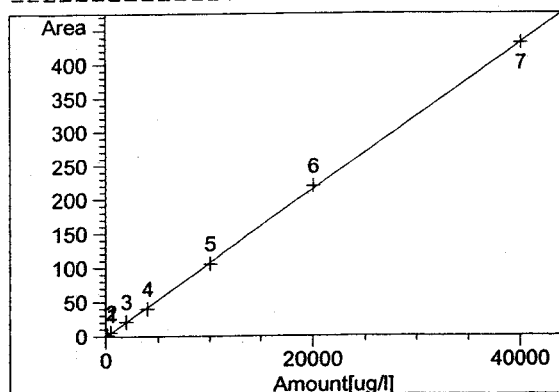
RetTime [min]	Lvl Sig	Amount [ug/l]	Area	Amt/Area	Ref Grp Name
		6 2000.00000	136.72321	14.62809	
		7 4000.00000	268.87424	14.87684	
11.903	3	1 16.66700	7.11749	2.34170	Benzo(k) fluoranthene
		2 50.00000	21.11408	2.36809	
		3 200.00000	85.41601	2.34148	
		4 400.00000	161.22827	2.48095	
		5 1000.00000	418.46454	2.38969	
		6 2000.00000	853.15222	2.34425	
12.503	1	1 16.66700	1.47983	11.26278	Benzo(a) pyrene
		2 50.00000	3.40725	14.67461	
		3 200.00000	13.60957	14.69554	
		4 400.00000	24.97371	16.01685	
		5 1000.00000	67.75494	14.75907	
		6 2000.00000	141.51094	14.13318	
		7 4000.00000	277.64722	14.40677	
12.530	3	1 16.66700	3.13471	5.31692	Benzo(a) pyrene
		2 50.00000	9.31910	5.36533	
		3 200.00000	38.12104	5.24645	
		4 400.00000	71.84358	5.56765	
		5 1000.00000	187.62558	5.32976	
		6 2000.00000	389.56021	5.13399	
		7 4000.00000	749.57336	5.33637	
13.593	1	1 33.33300	7.14428e-1	46.65694	Dibenz(a,h) anthracene
		2 100.00000	1.43965	69.46116	
		3 400.00000	6.61782	60.44291	
		4 800.00000	12.89288	62.04974	
		5 2000.00000	35.30107	56.65551	
		6 4000.00000	75.10837	53.25638	
		7 8000.00000	148.44279	53.89281	
13.621	3	1 33.33300	1.17981	28.25294	Dibenz(a,h) anthracene
		2 100.00000	3.61090	27.69396	
		3 400.00000	15.29729	26.14842	
		4 800.00000	29.55221	27.07073	
		5 2000.00000	79.78617	25.06700	
		6 4000.00000	169.40767	23.61168	
		7 8000.00000	330.60834	24.19782	
14.403	1	1 33.33300	1.20756	27.60349	Benzo(g,h,i) perylene
		2 100.00000	2.64537	37.80186	
		3 400.00000	10.11450	39.54719	
		4 800.00000	19.94430	40.11172	
		5 2000.00000	52.74908	37.91535	
		6 4000.00000	112.78819	35.46471	
		7 8000.00000	223.46182	35.80030	
14.432	3	1 33.33300	2.26050	14.74582	Benzo(g,h,i) perylene
		2 100.00000	6.84581	14.60747	
		3 400.00000	28.85268	13.86353	
		4 800.00000	55.31556	14.46248	
		5 2000.00000	148.45512	13.47208	
		6 4000.00000	314.70059	12.71049	
		7 8000.00000	618.74237	12.92945	
14.788	1	1 16.66700	1.52365	10.93886	Indeno(1,2,3-cd) pyrene
		2 50.00000	3.27349	15.27422	
		3 200.00000	14.59218	13.70597	
		4 400.00000	27.80243	14.38723	
		5 1000.00000	74.76157	13.37586	
		6 2000.00000	161.95921	12.34879	
		7 4000.00000	319.18451	12.53194	

RetTime	Lvl	Amount	Area	Amt/Area	Ref Grp Name
[min]	Sig	[ug/l]			
14.816	3	1	16.66700	1.28091	13.01189
		2	50.00000	3.76963	13.26390
		3	200.00000	16.36380	12.22210
		4	400.00000	31.15694	12.83823
		5	1000.00000	84.35104	11.85522
		6	2000.00000	179.12015	11.16569
		7	4000.00000	344.59106	11.60796

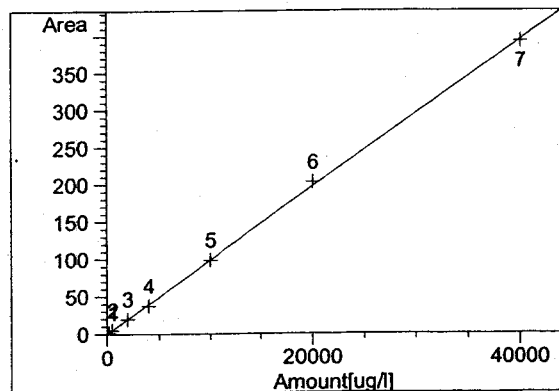
Peak Sum Table

No Entries in table

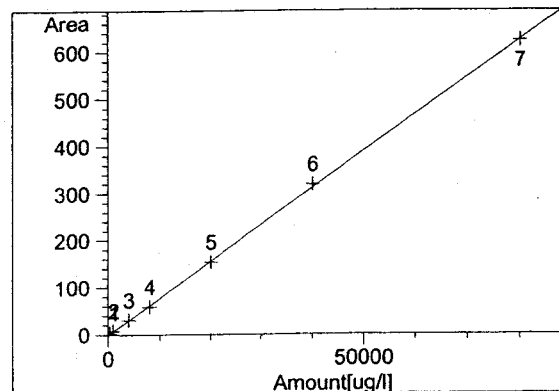
Calibration Curves



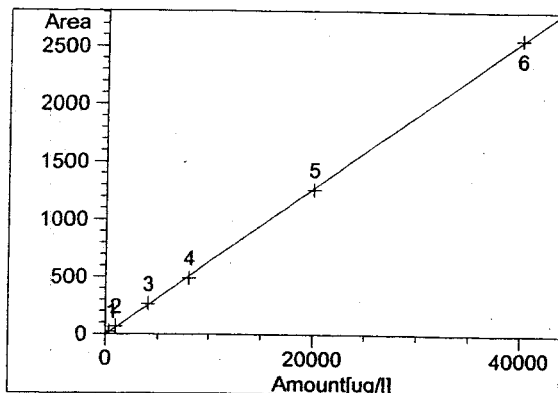
Naphthalene at exp. RT: 2.618
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99991
Residual Std. Dev.: 2.30839
Formula: $y = mx + b$
m: $1.08131e-2$
b: $-6.74401e-1$
x: Amount [ug/l]
y: Area



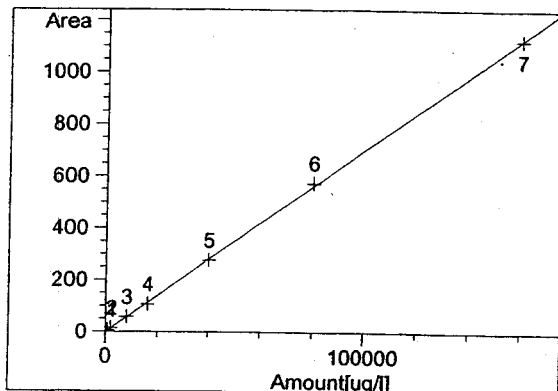
Naphthalene at exp. RT: 2.644
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99984
Residual Std. Dev.: 2.84731
Formula: $y = mx + b$
m: $9.87549e-3$
b: $1.89821e-1$
x: Amount [ug/l]
y: Area



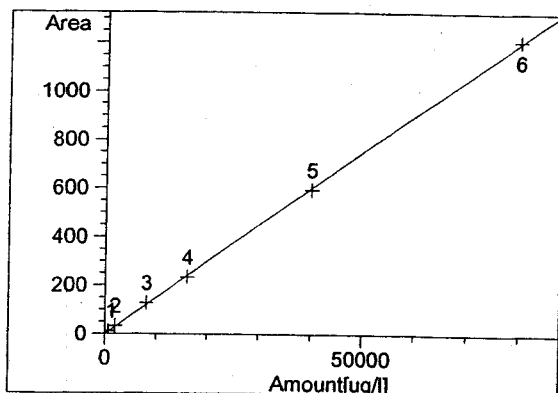
Acenaphthylene at exp. RT: 3.232
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99989
Residual Std. Dev.: 3.71409
Formula: $y = mx + b$
m: $7.83556e-3$
b: $-7.90989e-1$
x: Amount [ug/l]
y: Area



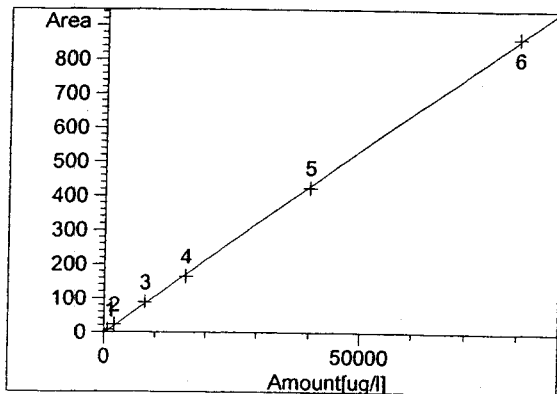
Acenaphthylene at exp. RT: 3.233
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99992
Residual Std. Dev.: 14.34576
Formula: $y = mx + b$
m: $6.40441e-2$
b: -5.27818
x: Amount [ug/l]
y: Area



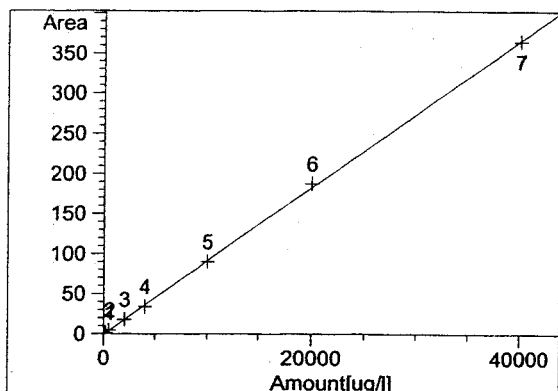
1-Methylnaphthalene (UV) at exp. RT: 3.774
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99990
Residual Std. Dev.: 6.47916
Formula: $y = mx + b$
m: $7.05249e-3$
b: -1.72372
x: Amount [ug/l]
y: Area



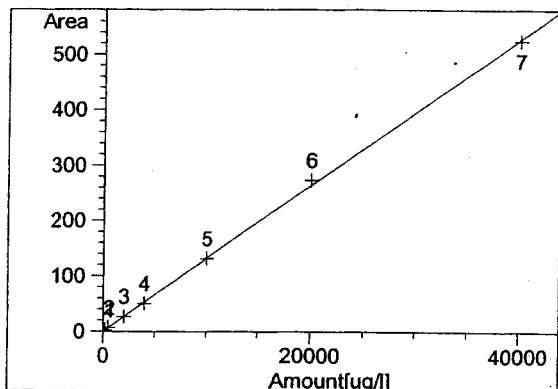
1-Methylnaphthalene (UV) at exp. RT: 3.775
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99992
Residual Std. Dev.: 6.45201
Formula: $y = mx + b$
m: $1.50659e-2$
b: $-7.21416e-1$
x: Amount [ug/l]
y: Area



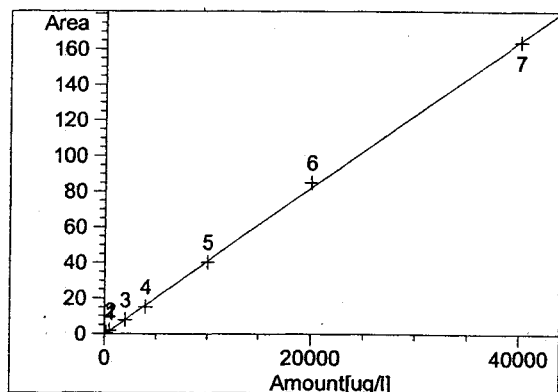
1-Methylnaphthalene (F) at exp. RT: 3.800
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99990
Residual Std. Dev.: 5.29917
Formula: $y = mx + b$
m: $1.07894e-2$
b: -2.26025
x: Amount [ug/l]
y: Area



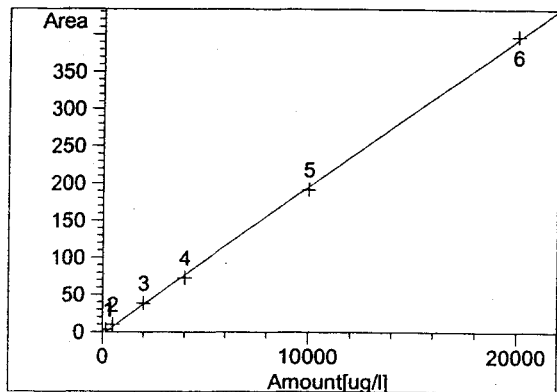
2-Methylnaphthalene at exp. RT: 4.097
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99987
Residual Std. Dev.: 2.39851
Formula: $y = mx + b$
m: $9.17111e-3$
b: $-4.70981e-1$
x: Amount [ug/l]
y: Area



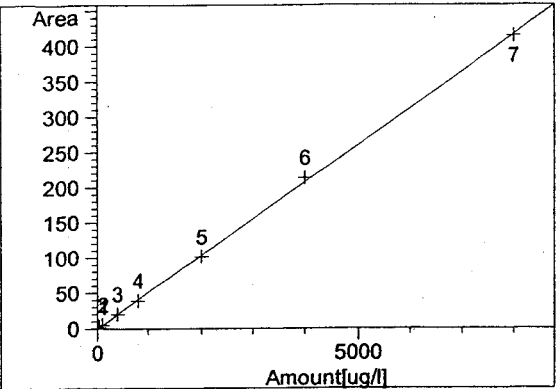
2-Methylnaphthalene at exp. RT: 4.123
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99978
Residual Std. Dev.: 4.44659
Formula: $y = mx + b$
m: $1.32028e-2$
b: $4.55045e-1$
x: Amount [ug/l]
y: Area



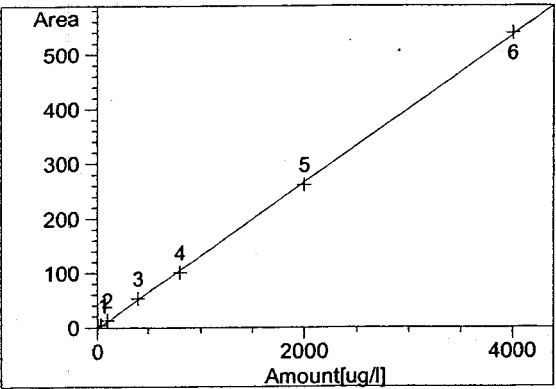
Acenaphthene at exp. RT: 4.430
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99978
Residual Std. Dev.: 1.38832
Formula: $y = mx + b$
m: $4.13335e-3$
b: $-3.37298e-1$
x: Amount [ug/l]
y: Area



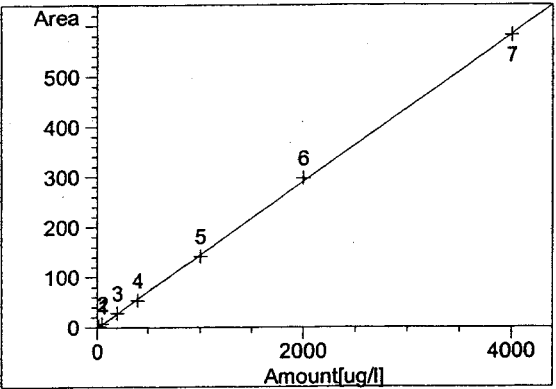
Acenaphthene at exp. RT: 4.456
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99974
Residual Std. Dev.: 3.85744
Formula: $y = mx + b$
m: $1.98327e-2$
b: -2.55193
x: Amount [ug/l]
y: Area



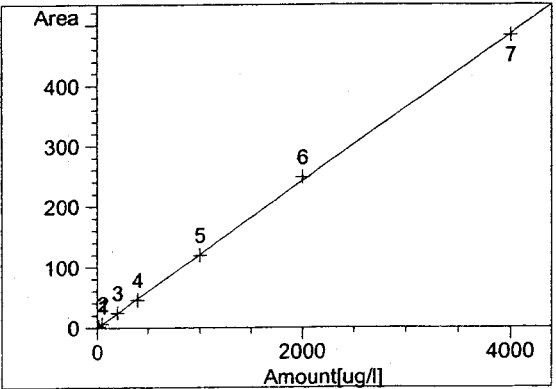
Fluorene at exp. RT: 4.787
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99982
Residual Std. Dev.: 3.17468
Formula: $y = mx + b$
m: 5.21795e-2
b: -7.46540e-1
x: Amount [ug/l]
y: Area



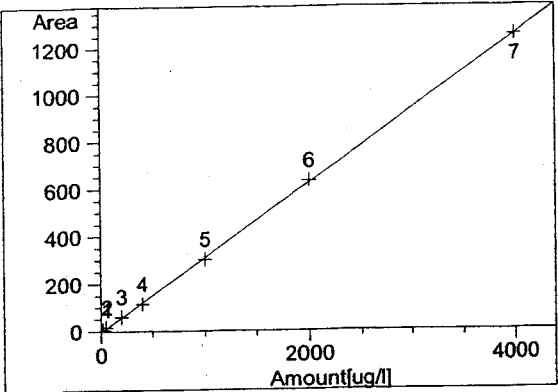
Fluorene at exp. RT: 4.814
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99981
Residual Std. Dev.: 4.46421
Formula: $y = mx + b$
m: 1.34384e-1
b: -2.46669
x: Amount [ug/l]
y: Area



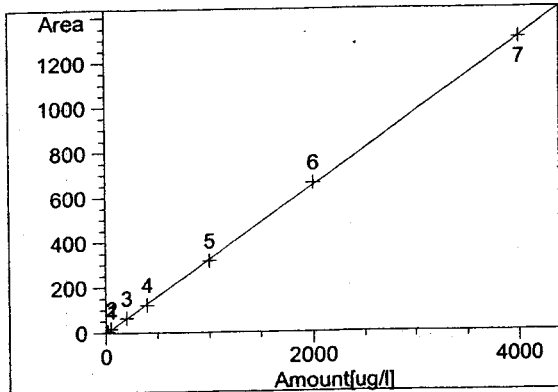
Phenanthrene at exp. RT: 5.654
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99988
Residual Std. Dev.: 3.65004
Formula: $y = mx + b$
m: 1.46235e-1
b: -1.28285
x: Amount [ug/l]
y: Area



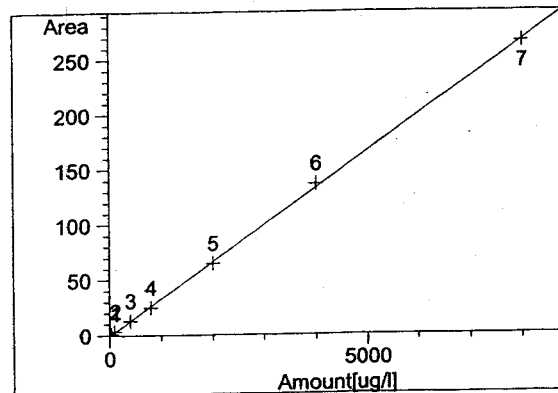
Phenanthrene at exp. RT: 5.680
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99986
Residual Std. Dev.: 3.23902
Formula: $y = mx + b$
m: 1.21509e-1
b: -3.17131e-1
x: Amount [ug/l]
y: Area



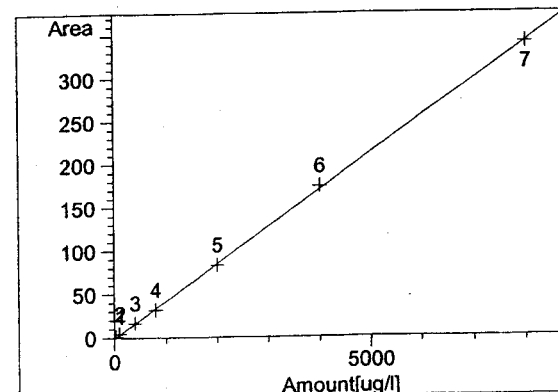
Anthracene at exp. RT: 6.401
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99992
Residual Std. Dev.: 6.36648
Formula: $y = mx + b$
m: 3.14816e-1
b: -4.13283
x: Amount [ug/l]
y: Area



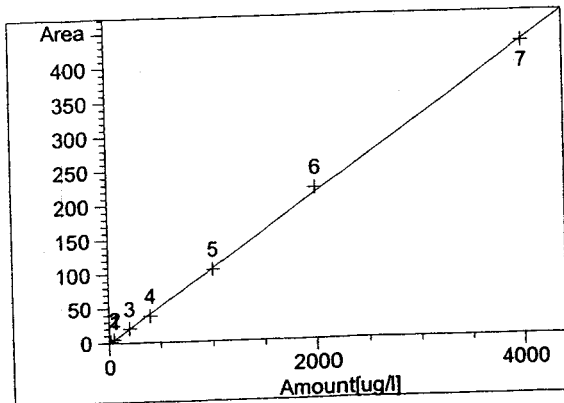
Anthracene at exp. RT: 6.427
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99992
Residual Std. Dev.: 6.60742
Formula: $y = mx + b$
m: 3.27118e-1
b: -2.62098
x: Amount [ug/l]
y: Area



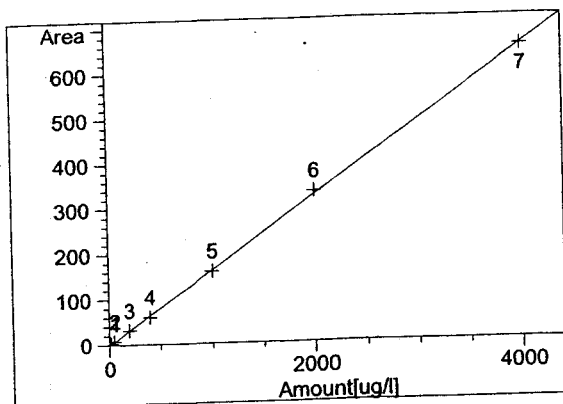
Fluoranthene at exp. RT: 7.245
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99984
Residual Std. Dev.: 1.91720
Formula: $y = mx + b$
m: 3.34323e-2
b: -3.99992e-1
x: Amount [ug/l]
y: Area



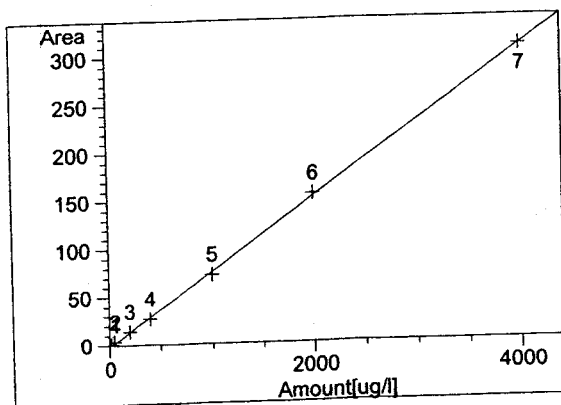
Fluoranthene at exp. RT: 7.271
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99988
Residual Std. Dev.: 2.09597
Formula: $y = mx + b$
m: 4.27967e-2
b: -5.88536e-1
x: Amount [ug/l]
y: Area



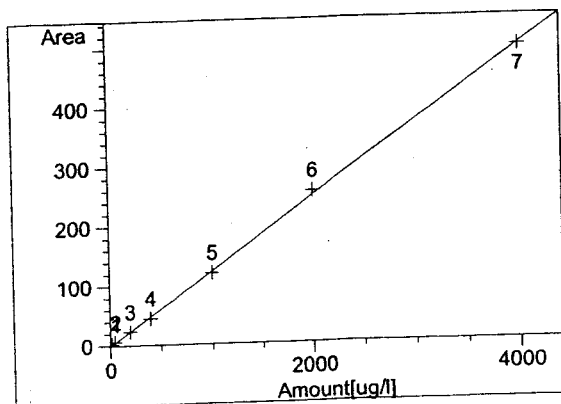
Pyrene at exp. RT: 7.802
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99979
Residual Std. Dev.: 3.53534
Formula: $y = mx + b$
m: 1.07687e-1
b: -9.69671e-1
x: Amount [ug/l]
y: Area



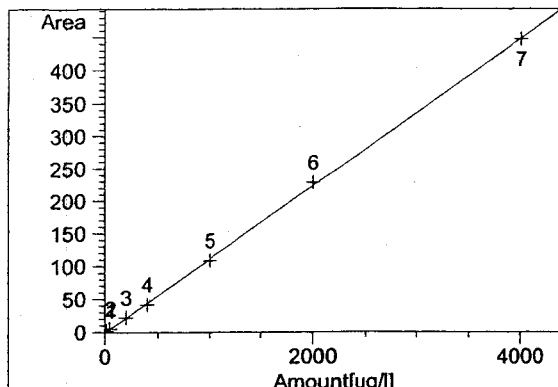
Pyrene at exp. RT: 7.828
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99988
Residual Std. Dev.: 4.08104
Formula: $y = mx + b$
m: 1.63803e-1
b: -1.33859
x: Amount [ug/l]
y: Area



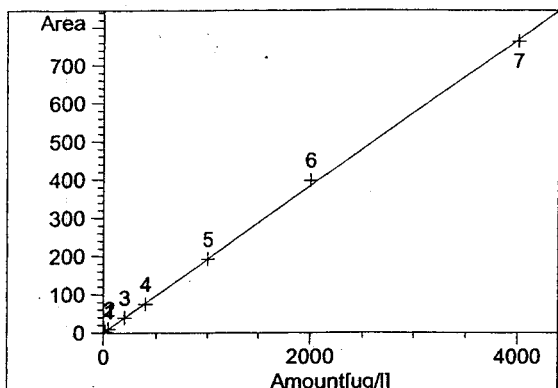
Benzo(a)anthracene at exp. RT: 9.643
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99985
Residual Std. Dev.: 2.15661
Formula: $y = mx + b$
m: 7.71938e-2
b: -1.69604
x: Amount [ug/l]
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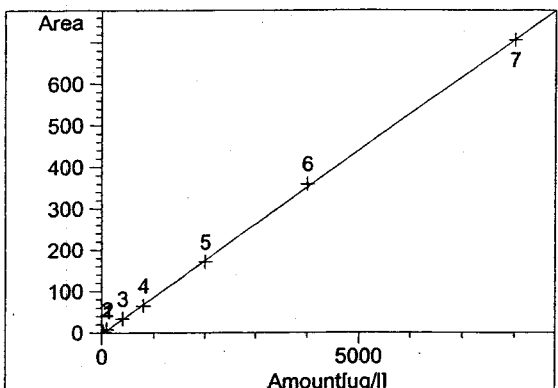
Benzo(a)anthracene at exp. RT: 9.669
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99981
Residual Std. Dev.: 3.85628
Formula: $y = mx + b$
m: 1.24702e-1
b: -1.37985
x: Amount [ug/l]
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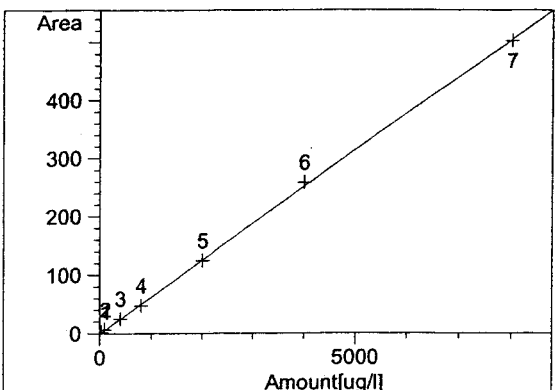
Chrysene at exp. RT: 9.924
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 0.99988
 Residual Std. Dev.: 2.78002
 Formula: $y = mx + b$
 m: 1.12464e-1
 b: -1.04206
 x: Amount [ug/l]
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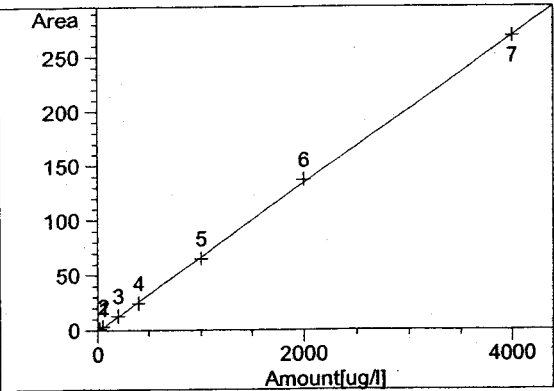
Chrysene at exp. RT: 9.951
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99979
 Residual Std. Dev.: 6.34193
 Formula: $y = mx + b$
 m: 1.92062e-1
 b: 1.27098
 x: Amount [ug/l]
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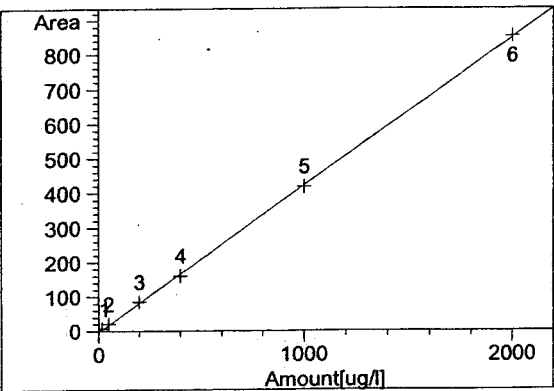
Benzo(b)fluoranthene at exp. RT: 11.331
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 0.99990
 Residual Std. Dev.: 4.11442
 Formula: $y = mx + b$
 m: 8.87012e-2
 b: -2.23257
 x: Amount [ug/l]
 y: Area



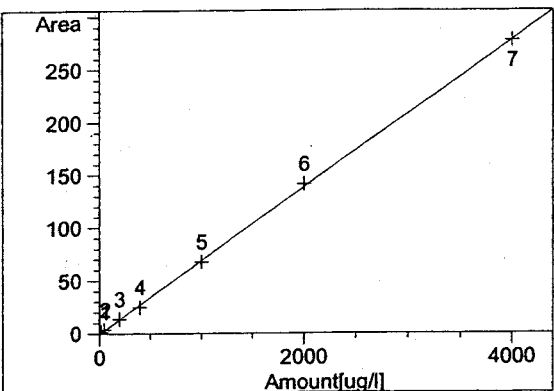
Benzo(b)fluoranthene at exp. RT: 11.358
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99986
 Residual Std. Dev.: 3.34638
 Formula: $y = mx + b$
 m: 6.31366e-2
 b: -4.47674e-1
 x: Amount [ug/l]
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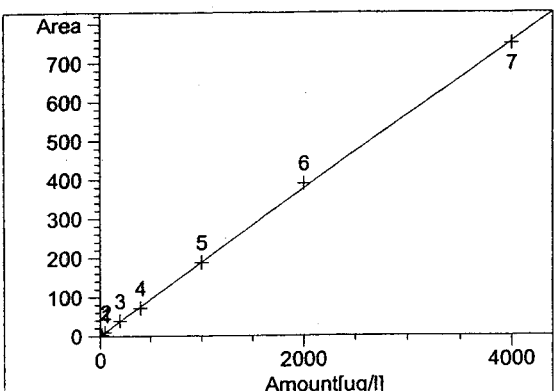
Benzo(k)fluoranthene at exp. RT: 11.876
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99988
Residual Std. Dev.: 1.65788
Formula: $y = mx + b$
m: 6.76093e-2
b: -9.30247e-1
x: Amount [ug/l]
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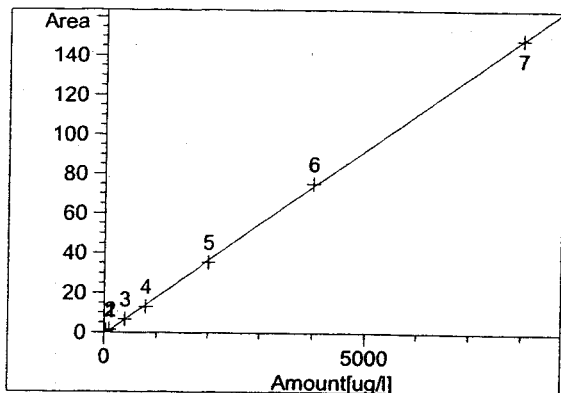
Benzo(k)fluoranthene at exp. RT: 11.903
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99991
Residual Std. Dev.: 5.05238
Formula: $y = mx + b$
m: 4.26206e-1
b: -2.71071
x: Amount [ug/l]
y: Area



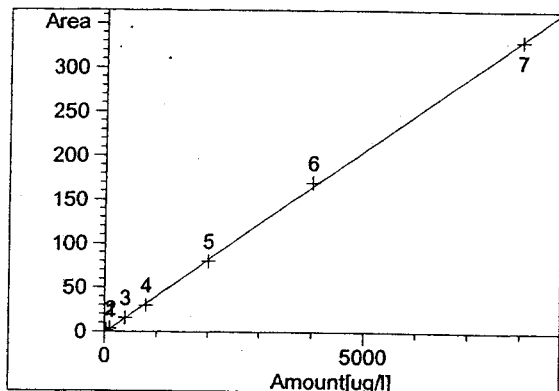
Benzo(a)pyrene at exp. RT: 12.503
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99987
Residual Std. Dev.: 1.78407
Formula: $y = mx + b$
m: 6.97626e-2
b: -6.37548e-1
x: Amount [ug/l]
y: Area



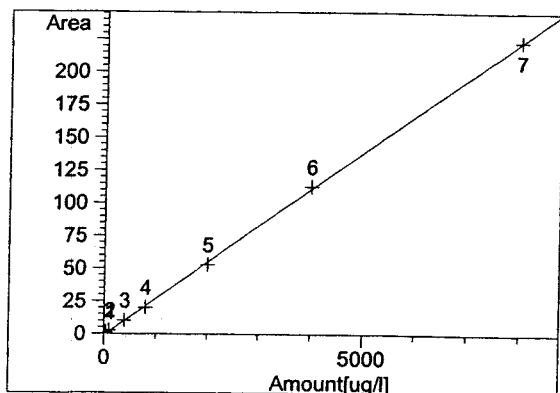
Benzo(a)pyrene at exp. RT: 12.530
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99979
Residual Std. Dev.: 6.14177
Formula: $y = mx + b$
m: 1.88563e-1
b: 5.04316e-1
x: Amount [ug/l]
y: Area



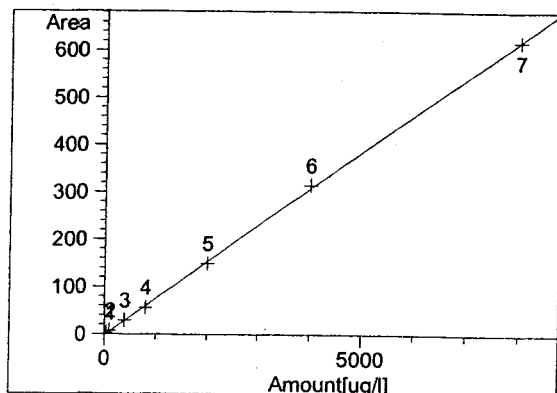
Dibenz(a,h)anthracene at exp. RT: 13.593
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99985
Residual Std. Dev.: 1.05082
Formula: $y = mx + b$
m: $1.86874e-2$
b: $-8.60511e-1$
x: Amount [ug/l]
y: Area



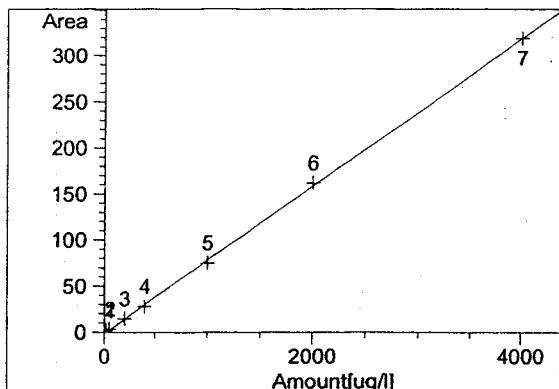
Dibenz(a,h)anthracene at exp. RT: 13.621
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99982
Residual Std. Dev.: 2.50131
Formula: $y = mx + b$
m: $4.16496e-2$
b: -1.31216
x: Amount [ug/l]
y: Area



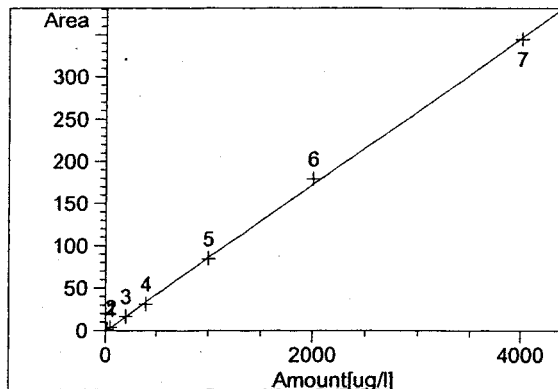
Benzo(g,h,i)perylene at exp. RT: 14.403
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99984
Residual Std. Dev.: 1.58625
Formula: $y = mx + b$
m: $2.80783e-2$
b: -1.08892
x: Amount [ug/l]
y: Area



Benzo(g,h,i)perylene at exp. RT: 14.432
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99986
Residual Std. Dev.: 4.13611
Formula: $y = mx + b$
m: $7.78548e-2$
b: -2.65718
x: Amount [ug/l]
y: Area



Indeno(1,2,3-cd)pyrene at exp. RT: 14.788
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99979
Residual Std. Dev.: 2.66321
Formula: $y = mx + b$
m: 8.03620e-2
b: -1.85879
x: Amount [ug/l]
y: Area



Indeno(1,2,3-cd)pyrene at exp. RT: 14.815
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99972
Residual Std. Dev.: 3.27806
Formula: $y = mx + b$
m: 8.69400e-2
b: -8.43827e-1
x: Amount [ug/l]
y: Area

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CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191286 HPLC Water
EPA 8310

Inst : HPLC05
Calnum : 856422684001

Cal Date: 20-OCT-2006

ICV 856422684015 (293000015 20-OCT-2006) stds: S4555

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Naphthalene	1	0.0107	0.0110	5000	5152	ug/L	3	15	
Acenaphthylene	1	0.0078	0.0082	10000	10570	ug/L	6	15	
Acenaphthene	1	0.0039	0.0044	5000	5383	ug/L	8	15	
Fluorene	1	0.0503	0.0523	1000	1017	ug/L	2	15	
Phenanthrene	1	0.1422	0.1436	500.0	499.7	ug/L	0	15	
Anthracene	1	0.3045	0.3112	500.0	507.4	ug/L	1	15	
Fluoranthene	1	0.0330	0.0337	1000	1020	ug/L	2	15	
Benzo(a)anthracene	1	0.0702	0.0736	500.0	498.6	ug/L	0	15	
Chrysene	1	0.1081	0.1119	500.0	507.0	ug/L	1	15	
Benzo(b)fluoranthene	1	0.0843	0.0881	1000	1019	ug/L	2	15	
Benzo(k)fluoranthene	1	0.0644	0.0667	500.0	507.3	ug/L	1	15	
Benzo(a)pyrene	1	0.0708	0.0702	500.0	512.0	ug/L	2	15	
Dibenz(a,h)anthracene	1	0.0176	0.0182	1000	1019	ug/L	2	15	
Benzo(g,h,i)perylene	1	0.0279	0.0266	1000	986.5	ug/L	-1	15	
Indeno(1,2,3-cd)pyrene	1	0.0764	0.0764	500.0	498.8	ug/L	0	15	
Acenaphthylene	2	0.0644	0.0669	10000	10520	ug/L	5	15	
Pyrene	2	0.1031	0.1079	500.0	510.2	ug/L	2	15	
Naphthalene	3	0.0099	0.0101	5000	5106	ug/L	2	15	
Acenaphthene	3	0.0191	0.0202	5000	5222	ug/L	4	15	
Fluorene	3	0.1322	0.1340	1000	1015	ug/L	2	15	
Phenanthrene	3	0.1204	0.1204	500.0	497.9	ug/L	0	15	
Anthracene	3	0.3212	0.3253	500.0	505.2	ug/L	1	15	
Fluoranthene	3	0.0419	0.0439	1000	1039	ug/L	4	15	
Pyrene	3	0.1585	0.1608	500.0	498.9	ug/L	0	15	
Benzo(a)anthracene	3	0.1186	0.1219	500.0	499.9	ug/L	0	15	
Chrysene	3	0.1947	0.1963	500.0	504.4	ug/L	1	15	
Benzo(b)fluoranthene	3	0.0619	0.0632	1000	1008	ug/L	1	15	
Benzo(k)fluoranthene	3	0.4208	0.4299	500.0	510.7	ug/L	2	15	
Benzo(a)pyrene	3	0.1878	0.1899	500.0	500.9	ug/L	0	15	
Dibenz(a,h)anthracene	3	0.0386	0.0401	1000	995.3	ug/L	0	15	
Benzo(g,h,i)perylene	3	0.0725	0.0740	1000	984.2	ug/L	-2	15	
Indeno(1,2,3-cd)pyrene	3	0.0817	0.0863	500.0	506.0	ug/L	1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191286 HPLC Water
EPA 8310

Inst : HPLC05	Run Name: L	IDF : 1.0
Seqnum : 856497390002	File : 345000002	Time : 11-DEC-2006 10:14
Cal : 856422684001	Caldate : 20-OCT-2006	
Standards: S4232		

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0107	0.0109	2000	2082	ug/L	4	15	
Acenaphthylene	1	0.0078	0.0079	4000	4113	ug/L	3	15	
Acenaphthene	1	0.0039	0.0040	2000	2005	ug/L	0	15	
Fluorene	1	0.0503	0.0513	400.0	407.2	ug/L	2	15	
Phenanthrene	1	0.1422	0.1453	200.0	207.5	ug/L	4	15	
Anthracene	1	0.3045	0.3194	200.0	216.0	ug/L	8	15	
Fluoranthene	1	0.0330	0.0332	400.0	409.5	ug/L	2	15	
Benzo(a)anthracene	1	0.0702	0.0749	200.0	216.1	ug/L	8	15	
Chrysene	1	0.1081	0.1092	200.0	203.5	ug/L	2	15	
Benzo(b)fluoranthene	1	0.0843	0.0873	400.0	418.8	ug/L	5	15	
Benzo(k)fluoranthene	1	0.0644	0.0660	200.0	209.1	ug/L	5	15	
Benzo(a)pyrene	1	0.0708	0.0710	200.0	212.8	ug/L	6	15	
Dibenz(a,h)anthracene	1	0.0176	0.0170	400.0	410.5	ug/L	3	15	
Benzo(g,h,i)perylene	1	0.0279	0.0264	400.0	415.2	ug/L	4	15	
Indeno(1,2,3-cd)pyrene	1	0.0764	0.0755	200.0	211.0	ug/L	6	15	
1-Methylnaphthalene (UV)	1	0.0070	0.0071	8000	8333	ug/L	4	15	
Acenaphthylene	2	0.0644	0.0665	4000	4236	ug/L	6	15	
Pyrene	2	0.1031	0.1059	200.0	205.6	ug/L	3	15	
1-Methylnaphthalene (UV)	2	0.0154	0.0161	8000	8618	ug/L	8	15	
Naphthalene	3	0.0099	0.0103	2000	2064	ug/L	3	15	
Acenaphthene	3	0.0191	0.0204	2000	2184	ug/L	9	15	
Fluorene	3	0.1322	0.1396	400.0	433.8	ug/L	8	15	
Phenanthrene	3	0.1204	0.1257	200.0	209.5	ug/L	5	15	
Anthracene	3	0.3212	0.3460	200.0	219.5	ug/L	10	15	
Fluoranthene	3	0.0419	0.0436	400.0	421.1	ug/L	5	15	
Pyrene	3	0.1585	0.1640	200.0	208.5	ug/L	4	15	
Benzo(a)anthracene	3	0.1186	0.1277	200.0	215.8	ug/L	8	15	
Chrysene	3	0.1947	0.2035	200.0	205.3	ug/L	3	15	
Benzo(b)fluoranthene	3	0.0619	0.0649	400.0	418.3	ug/L	5	15	
Benzo(k)fluoranthene	3	0.4208	0.4472	200.0	216.2	ug/L	8	15	
Benzo(a)pyrene	3	0.1878	0.1993	200.0	208.7	ug/L	4	15	
Dibenz(a,h)anthracene	3	0.0386	0.0400	400.0	416.0	ug/L	4	15	
Benzo(g,h,i)perylene	3	0.0725	0.0757	400.0	423.1	ug/L	6	15	
Indeno(1,2,3-cd)pyrene	3	0.0817	0.0866	200.0	208.9	ug/L	4	15	
1-Methylnaphthalene (F)	3	0.0108	0.0113	8000	8573	ug/L	7	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191286 HPLC Water
EPA 8310

Inst : HPLC05
Seqnum : 856497390013
Cal : 856422684001
Standards: S4231

Run Name: M
File : 345000013
Caldate : 20-OCT-2006

IDF : 1.0
Time : 11-DEC-2006 14:36

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0107	0.0111	4000	4176	ug/L	4	15	
Acenaphthylene	1	0.0078	0.0081	8000	8349	ug/L	4	15	
Acenaphthene	1	0.0039	0.0042	4000	4141	ug/L	4	15	
Fluorene	1	0.0503	0.0529	800.0	824.6	ug/L	3	15	
Phenanthrene	1	0.1422	0.1473	400.0	411.7	ug/L	3	15	
Anthracene	1	0.3045	0.3162	400.0	414.8	ug/L	4	15	
Fluoranthene	1	0.0330	0.0342	800.0	830.7	ug/L	4	15	
Benzo(a)anthracene	1	0.0702	0.0768	400.0	419.7	ug/L	5	15	
Chrysene	1	0.1081	0.1150	400.0	418.2	ug/L	5	15	
Benzo(b)fluoranthene	1	0.0843	0.0888	800.0	826.1	ug/L	3	15	
Benzo(k)fluoranthene	1	0.0644	0.0687	400.0	420.0	ug/L	5	15	
Benzo(a)pyrene	1	0.0708	0.0688	400.0	403.8	ug/L	1	15	
Dibenz(a,h)anthracene	1	0.0176	0.0185	800.0	837.4	ug/L	5	15	
Benzo(g,h,i)perylene	1	0.0279	0.0276	800.0	824.1	ug/L	3	15	
Indeno(1,2,3-cd)pyrene	1	0.0764	0.0785	400.0	413.7	ug/L	3	15	
1-Methylnaphthalene (UV)	1	0.0070	0.0073	16000	16690	ug/L	4	15	
Acenaphthylene	2	0.0644	0.0673	8000	8485	ug/L	6	15	
Pyrene	2	0.1031	0.1096	400.0	416.2	ug/L	4	15	
1-Methylnaphthalene (UV)	2	0.0154	0.0162	16000	17290	ug/L	8	15	
Naphthalene	3	0.0099	0.0102	4000	4107	ug/L	3	15	
Acenaphthene	3	0.0191	0.0200	4000	4172	ug/L	4	15	
Fluorene	3	0.1322	0.1368	800.0	832.6	ug/L	4	15	
Phenanthrene	3	0.1204	0.1246	400.0	412.8	ug/L	3	15	
Anthracene	3	0.3212	0.3328	400.0	414.9	ug/L	4	15	
Fluoranthene	3	0.0419	0.0437	800.0	831.4	ug/L	4	15	
Pyrene	3	0.1585	0.1661	400.0	413.8	ug/L	3	15	
Benzo(a)anthracene	3	0.1186	0.1267	400.0	417.4	ug/L	4	15	
Chrysene	3	0.1947	0.2019	400.0	413.9	ug/L	3	15	
Benzo(b)fluoranthene	3	0.0619	0.0652	800.0	833.2	ug/L	4	15	
Benzo(k)fluoranthene	3	0.4208	0.4464	400.0	425.3	ug/L	6	15	
Benzo(a)pyrene	3	0.1878	0.1956	400.0	412.3	ug/L	3	15	
Dibenz(a,h)anthracene	3	0.0386	0.0409	800.0	816.7	ug/L	2	15	
Benzo(g,h,i)perylene	3	0.0725	0.0758	800.0	813.2	ug/L	2	15	
Indeno(1,2,3-cd)pyrene	3	0.0817	0.0895	400.0	421.5	ug/L	5	15	
1-Methylnaphthalene (F)	3	0.0108	0.0112	16000	16810	ug/L	5	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191286 HPLC Water
EPA 8310

Inst : HPLC05
Seqnum : 856497390027
Cal : 856422684001
Standards: S4230

Run Name: H
File : 345000027
Caldate : 20-OCT-2006

IDF : 1.0
Time : 11-DEC-2006 20:06

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0107	0.0106	10000	9858	ug/L	-1	15	
Acenaphthylene	1	0.0078	0.0077	20000	19730	ug/L	-1	15	
Acenaphthene	1	0.0039	0.0041	10000	10000	ug/L	0	15	
Fluorene	1	0.0503	0.0510	2000	1967	ug/L	-2	15	
Phenanthrene	1	0.1422	0.1413	1000	975.3	ug/L	-2	15	
Anthracene	1	0.3045	0.3035	1000	977.2	ug/L	-2	15	
Fluoranthene	1	0.0330	0.0323	2000	1946	ug/L	-3	15	
Benzo(a)anthracene	1	0.0702	0.0743	1000	984.7	ug/L	-2	15	
Chrysene	1	0.1081	0.1087	1000	975.9	ug/L	-2	15	
Benzo(b)fluoranthene	1	0.0843	0.0860	2000	1963	ug/L	-2	15	
Benzo(k)fluoranthene	1	0.0644	0.0654	1000	980.7	ug/L	-2	15	
Benzo(a)pyrene	1	0.0708	0.0677	1000	980.2	ug/L	-2	15	
Dibenz(a,h)anthracene	1	0.0176	0.0183	2000	2003	ug/L	0	15	
Benzo(g,h,i)perylene	1	0.0279	0.0273	2000	1984	ug/L	-1	15	
Indeno(1,2,3-cd)pyrene	1	0.0764	0.0775	1000	987.2	ug/L	-1	15	
1-Methylnaphthalene (UV)	1	0.0070	0.0069	40000	39400	ug/L	-1	15	
Acenaphthylene	2	0.0644	0.0632	20000	19830	ug/L	-1	15	
Pyrene	2	0.1031	0.1032	1000	967.0	ug/L	-3	15	
1-Methylnaphthalene (UV)	2	0.0154	0.0151	40000	40270	ug/L	1	15	
Naphthalene	3	0.0099	0.0099	10000	9960	ug/L	0	15	
Acenaphthene	3	0.0191	0.0194	10000	9896	ug/L	-1	15	
Fluorene	3	0.1322	0.1297	2000	1948	ug/L	-3	15	
Phenanthrene	3	0.1204	0.1198	1000	988.6	ug/L	-1	15	
Anthracene	3	0.3212	0.3185	1000	981.6	ug/L	-2	15	
Fluoranthene	3	0.0419	0.0416	2000	1960	ug/L	-2	15	
Pyrene	3	0.1585	0.1624	1000	999.8	ug/L	0	15	
Benzo(a)anthracene	3	0.1186	0.1248	1000	1012	ug/L	1	15	
Chrysene	3	0.1947	0.1931	1000	998.8	ug/L	0	15	
Benzo(b)fluoranthene	3	0.0619	0.0629	2000	1999	ug/L	0	15	
Benzo(k)fluoranthene	3	0.4208	0.4216	1000	995.5	ug/L	0	15	
Benzo(a)pyrene	3	0.1878	0.1861	1000	984.2	ug/L	-2	15	
Dibenz(a,h)anthracene	3	0.0386	0.0402	2000	1964	ug/L	-2	15	
Benzo(g,h,i)perylene	3	0.0725	0.0768	2000	2008	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	3	0.0817	0.0867	1000	1007	ug/L	1	15	
1-Methylnaphthalene (F)	3	0.0108	0.0107	40000	39850	ug/L	0	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191286 HPLC Water
EPA 8310

Inst : HPLC05
Seqnum : 856497390041
Cal : 856422684001
Standards: S4231

Run Name: M
File : 345000041
Caldate : 20-OCT-2006

IDF : 1.0
Time : 12-DEC-2006 01:36

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0107	0.0111	4000	4167	ug/L	4	15	
Acenaphthylene	1	0.0078	0.0081	8000	8325	ug/L	4	15	
Acenaphthene	1	0.0039	0.0042	4000	4188	ug/L	5	15	
Fluorene	1	0.0503	0.0529	800.0	825.7	ug/L	3	15	
Phenanthrene	1	0.1422	0.1488	400.0	415.7	ug/L	4	15	
Anthracene	1	0.3045	0.3192	400.0	418.7	ug/L	5	15	
Fluoranthene	1	0.0330	0.0343	800.0	832.4	ug/L	4	15	
Benzo(a)anthracene	1	0.0702	0.0787	400.0	430.0	ug/L	7	15	
Chrysene	1	0.1081	0.1159	400.0	421.3	ug/L	5	15	
Benzo(b)fluoranthene	1	0.0843	0.0904	800.0	840.4	ug/L	5	15	
Benzo(k)fluoranthene	1	0.0644	0.0683	400.0	417.9	ug/L	4	15	
Benzo(a)pyrene	1	0.0708	0.0682	400.0	400.4	ug/L	0	15	
Dibenz(a,h)anthracene	1	0.0176	0.0187	800.0	845.0	ug/L	6	15	
Benzo(g,h,i)perylene	1	0.0279	0.0282	800.0	842.6	ug/L	5	15	
Indeno(1,2,3-cd)pyrene	1	0.0764	0.0824	400.0	433.3	ug/L	8	15	
1-Methylnaphthalene (UV)	1	0.0070	0.0073	16000	16700	ug/L	4	15	
Acenaphthylene	2	0.0644	0.0673	8000	8489	ug/L	6	15	
Pyrene	2	0.1031	0.1089	400.0	413.6	ug/L	3	15	
1-Methylnaphthalene (UV)	2	0.0154	0.0163	16000	17350	ug/L	8	15	
Naphthalene	3	0.0099	0.0101	4000	4091	ug/L	2	15	
Acenaphthene	3	0.0191	0.0202	4000	4198	ug/L	5	15	
Fluorene	3	0.1322	0.1366	800.0	831.3	ug/L	4	15	
Phenanthrene	3	0.1204	0.1242	400.0	411.4	ug/L	3	15	
Anthracene	3	0.3212	0.3340	400.0	416.4	ug/L	4	15	
Fluoranthene	3	0.0419	0.0433	800.0	824.0	ug/L	3	15	
Pyrene	3	0.1585	0.1638	400.0	408.2	ug/L	2	15	
Benzo(a)anthracene	3	0.1186	0.1292	400.0	425.6	ug/L	6	15	
Chrysene	3	0.1947	0.2004	400.0	410.7	ug/L	3	15	
Benzo(b)fluoranthene	3	0.0619	0.0650	800.0	830.2	ug/L	4	15	
Benzo(k)fluoranthene	3	0.4208	0.4463	400.0	425.2	ug/L	6	15	
Benzo(a)pyrene	3	0.1878	0.1933	400.0	407.3	ug/L	2	15	
Dibenz(a,h)anthracene	3	0.0386	0.0410	800.0	819.2	ug/L	2	15	
Benzo(g,h,i)perylene	3	0.0725	0.0777	800.0	832.9	ug/L	4	15	
Indeno(1,2,3-cd)pyrene	3	0.0817	0.0891	400.0	419.8	ug/L	5	15	
1-Methylnaphthalene (F)	3	0.0108	0.0111	16000	16640	ug/L	4	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191286 HPLC Water
EPA 8310

Inst : HPLC05
Seqnum : 856499130002
Cal : 856422684001
Standards: S4232

Run Name: L
File : 346000002
Caldate : 20-OCT-2006

IDF : 1.0
Time : 12-DEC-2006 15:14

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0107	0.0109	2000	2073	ug/L	4	15	
Acenaphthylene	1	0.0078	0.0078	4000	4085	ug/L	2	15	
Acenaphthene	1	0.0039	0.0039	2000	1967	ug/L	-2	15	
Fluorene	1	0.0503	0.0510	400.0	405.4	ug/L	1	15	
Phenanthrene	1	0.1422	0.1435	200.0	205.1	ug/L	3	15	
Anthracene	1	0.3045	0.3123	200.0	211.5	ug/L	6	15	
Fluoranthene	1	0.0330	0.0332	400.0	408.9	ug/L	2	15	
Benzo(a)anthracene	1	0.0702	0.0749	200.0	216.0	ug/L	8	15	
Chrysene	1	0.1081	0.1120	200.0	208.5	ug/L	4	15	
Benzo(b)fluoranthene	1	0.0843	0.0854	400.0	410.2	ug/L	3	15	
Benzo(k)fluoranthene	1	0.0644	0.0658	200.0	208.5	ug/L	4	15	
Benzo(a)pyrene	1	0.0708	0.0655	200.0	196.9	ug/L	-2	15	
Dibenz(a,h)anthracene	1	0.0176	0.0181	400.0	433.5	ug/L	8	15	
Benzo(g,h,i)perylene	1	0.0279	0.0266	400.0	417.0	ug/L	4	15	
Indeno(1,2,3-cd)pyrene	1	0.0764	0.0748	200.0	209.2	ug/L	5	15	
1-Methylnaphthalene (UV)	1	0.0070	0.0071	8000	8267	ug/L	3	15	
Acenaphthylene	2	0.0644	0.0657	4000	4184	ug/L	5	15	
Pyrene	2	0.1031	0.1030	200.0	200.4	ug/L	0	15	
1-Methylnaphthalene (UV)	2	0.0154	0.0160	8000	8519	ug/L	6	15	
Naphthalene	3	0.0099	0.0101	2000	2016	ug/L	1	15	
Acenaphthene	3	0.0191	0.0197	2000	2113	ug/L	6	15	
Fluorene	3	0.1322	0.1344	400.0	418.4	ug/L	5	15	
Phenanthrene	3	0.1204	0.1225	200.0	204.2	ug/L	2	15	
Anthracene	3	0.3212	0.3312	200.0	210.5	ug/L	5	15	
Fluoranthene	3	0.0419	0.0424	400.0	410.1	ug/L	3	15	
Pyrene	3	0.1585	0.1588	200.0	202.1	ug/L	1	15	
Benzo(a)anthracene	3	0.1186	0.1225	200.0	207.5	ug/L	4	15	
Chrysene	3	0.1947	0.1991	200.0	200.7	ug/L	0	15	
Benzo(b)fluoranthene	3	0.0619	0.0635	400.0	409.6	ug/L	2	15	
Benzo(k)fluoranthene	3	0.4208	0.4325	200.0	209.3	ug/L	5	15	
Benzo(a)pyrene	3	0.1878	0.1934	200.0	202.5	ug/L	1	15	
Dibenz(a,h)anthracene	3	0.0386	0.0384	400.0	400.5	ug/L	0	15	
Benzo(g,h,i)perylene	3	0.0725	0.0748	400.0	418.4	ug/L	5	15	
Indeno(1,2,3-cd)pyrene	3	0.0817	0.0824	200.0	199.2	ug/L	0	15	
1-Methylnaphthalene (F)	3	0.0108	0.0110	8000	8395	ug/L	5	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191286 HPLC Water
EPA 8310

Inst : HPLC05	Run Name: H	IDF : 1.0	
Seqnum : 856499130014	File : 346000014	Time : 12-DEC-2006 19:57	
Cal : 856422684001	Caldate : 20-OCT-2006		
Standards: S4230			

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0107	0.0107	10000	9961	ug/L	0	15	
Acenaphthylene	1	0.0078	0.0077	20000	19820	ug/L	-1	15	
Acenaphthene	1	0.0039	0.0041	10000	10020	ug/L	0	15	
Fluorene	1	0.0503	0.0512	2000	1976	ug/L	-1	15	
Phenanthrene	1	0.1422	0.1427	1000	984.9	ug/L	-2	15	
Anthracene	1	0.3045	0.3086	1000	993.5	ug/L	-1	15	
Fluoranthene	1	0.0330	0.0327	2000	1968	ug/L	-2	15	
Benzo(a)anthracene	1	0.0702	0.0753	1000	996.8	ug/L	0	15	
Chrysene	1	0.1081	0.1109	1000	995.1	ug/L	0	15	
Benzo(b)fluoranthene	1	0.0843	0.0857	2000	1957	ug/L	-2	15	
Benzo(k)fluoranthene	1	0.0644	0.0656	1000	983.3	ug/L	-2	15	
Benzo(a)pyrene	1	0.0708	0.0673	1000	973.2	ug/L	-3	15	
Dibenz(a,h)anthracene	1	0.0176	0.0178	2000	1950	ug/L	-3	15	
Benzo(g,h,i)perylene	1	0.0279	0.0273	2000	1982	ug/L	-1	15	
Indeno(1,2,3-cd)pyrene	1	0.0764	0.0767	1000	977.4	ug/L	-2	15	
1-Methylnaphthalene (UV)	1	0.0070	0.0069	40000	39550	ug/L	-1	15	
Acenaphthylene	2	0.0644	0.0632	20000	19830	ug/L	-1	15	
Pyrene	2	0.1031	0.1034	1000	969.4	ug/L	-3	15	
1-Methylnaphthalene (UV)	2	0.0154	0.0150	40000	39990	ug/L	0	15	
Naphthalene	3	0.0099	0.0098	10000	9900	ug/L	-1	15	
Acenaphthene	3	0.0191	0.0193	10000	9856	ug/L	-1	15	
Fluorene	3	0.1322	0.1299	2000	1952	ug/L	-2	15	
Phenanthrene	3	0.1204	0.1190	1000	982.3	ug/L	-2	15	
Anthracene	3	0.3212	0.3219	1000	992.2	ug/L	-1	15	
Fluoranthene	3	0.0419	0.0417	2000	1962	ug/L	-2	15	
Pyrene	3	0.1585	0.1566	1000	964.2	ug/L	-4	15	
Benzo(a)anthracene	3	0.1186	0.1235	1000	1002	ug/L	0	15	
Chrysene	3	0.1947	0.1923	1000	994.4	ug/L	-1	15	
Benzo(b)fluoranthene	3	0.0619	0.0623	2000	1981	ug/L	-1	15	
Benzo(k)fluoranthene	3	0.4208	0.4229	1000	998.6	ug/L	0	15	
Benzo(a)pyrene	3	0.1878	0.1872	1000	990.3	ug/L	-1	15	
Dibenz(a,h)anthracene	3	0.0386	0.0398	2000	1941	ug/L	-3	15	
Benzo(g,h,i)perylene	3	0.0725	0.0750	2000	1960	ug/L	-2	15	
Indeno(1,2,3-cd)pyrene	3	0.0817	0.0850	1000	987.6	ug/L	-1	15	
1-Methylnaphthalene (F)	3	0.0108	0.0106	40000	39390	ug/L	-2	15	

SEQUENCE SUMMARY FOR 191286 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 856422684 Instrument: HPLC05 High Pressure Liquid Chromatograph # 5 Begun: 20-OCT-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
001	29300000	X	PRIMER - 293			20-OCT-2006	12:44	1.0							
002	29300000	X	PRIMER			20-OCT-2006	13:08	1.0							
003	29300000	X	IB - 293			20-OCT-2006	13:32	1.0							
004	29300000	X	IB			20-OCT-2006	13:55	1.0							
005	29300000	X	IB			20-OCT-2006	14:19	1.0							
006	29300000	ICAL				20-OCT-2006	14:42	1.0					1		
007	29300000	ICAL				20-OCT-2006	15:06	1.0					2		
008	29300000	ICAL				20-OCT-2006	15:30	1.0					3		
009	29300000	ICAL				20-OCT-2006	15:53	1.0					4		
010	29300001	ICAL				20-OCT-2006	16:17	1.0					5		
011	29300001	ICAL				20-OCT-2006	16:40	1.0					6		
012	29300001	ICAL				20-OCT-2006	17:04	1.0					7		
013	29300001	X	IB			20-OCT-2006	17:28	1.0							
014	29300001	X	IB			20-OCT-2006	17:51	1.0							
015	29300001	ICV				20-OCT-2006	18:15	1.0					8		
016	29300001	X	ICV			20-OCT-2006	18:38	1.0					8		
017	29300001	X	IB			20-OCT-2006	19:02	1.0							

Stds used: 1=S4234 2=S4233 3=S4232 4=S4231 5=S4230 6=S4229 7=S4228 8=S4555

SEQUENCE SUMMARY FOR 191286 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 856497390 Instrument: HPLC05 High Pressure Liquid Chromatograph # 5 Begun: 11-DEC-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Std	Used	>LR
001	34500000	X	IB - 345			11-DEC-2006	09:50 1.0							
002	34500000	CCV	L			11-DEC-2006	10:14 1.0	1.0			10	1		
003	34500000	X	CCV			11-DEC-2006	10:38 1.0					1		
004	34500000	X	IB			11-DEC-2006	11:01 1.0							
005	34500000	BLANK	QC367536	120180	Water	11-DEC-2006	11:25 1.0	0.002			10			
006	34500000	LCS	QC367537	120180	Water	11-DEC-2006	11:48 1.0	0.002			10			
007	34500000	X	IB			11-DEC-2006	12:12 1.0							
008	34500000	SAMPLE	191317-001	120180	Water	11-DEC-2006	12:36 1.0	0.001887		3	10			
009	34500000	SAMPLE	191317-001	120180	Water	11-DEC-2006	13:02 1.0	0.001887		3	10			
010	34500001	SAMPLE	191329-001	120180	Water	11-DEC-2006	13:25 1.0	0.001887			10			
011	34500001	SAMPLE	191331-001	120180	Water	11-DEC-2006	13:49 1.0	0.001887			10			
012	34500001	X	IB			11-DEC-2006	14:12 1.0							
013	34500001	CCV	M			11-DEC-2006	14:36 1.0	1.0			10	2		
014	34500001	X	CCV			11-DEC-2006	14:59 1.0					2		
015	34500001	X	IB			11-DEC-2006	15:23 1.0							
016	34500001	SAMPLE	191286-001	120180	Water	11-DEC-2006	15:47 1.0	0.001887			10			
017	34500001	SAMPLE	191286-004	120180	Water	11-DEC-2006	16:10 1.0	0.001887			10			
018	34500001	SAMPLE	191286-007	120180	Water	11-DEC-2006	16:34 1.0	0.001923			10			
019	34500001	SAMPLE	191286-008	120180	Water	11-DEC-2006	16:57 1.0	0.001905			10			
020	34500002	SAMPLE	191286-012	120180	Water	11-DEC-2006	17:21 1.0	0.00198			10			
021	34500002	SAMPLE	191290-001	120180	Water	11-DEC-2006	17:44 1.0	0.001923			10			
022	34500002	MSS	191314-011	120180	Water	11-DEC-2006	18:08 1.0	0.001887			10			
023	34500002	SAMPLE	191314-012	120180	Water	11-DEC-2006	18:32 1.0	0.001887			10			
024	34500002	MS	QC367538	120180	Water	11-DEC-2006	18:55 1.0	0.001887		4	10			
025	34500002	MSD	QC367539	120180	Water	11-DEC-2006	19:19 1.0	0.001887		4	10			
026	34500002	X	IB			11-DEC-2006	19:43 1.0							
027	34500002	CCV	H			11-DEC-2006	20:06 1.0	1.0			10	3		
028	34500002	X	CCV			11-DEC-2006	20:30 1.0					3		
029	34500002	X	IB			11-DEC-2006	20:53 1.0							
030	34500003	SAMPLE	191314-014	120180	Water	11-DEC-2006	21:17 1.0	0.001887			10			
031	34500003	SAMPLE	191314-016	120180	Water	11-DEC-2006	21:40 1.0	0.001887			10			

stds used: 1=S4232 2=S4231 3=S4230

SEQUENCE SUMMARY FOR 191286 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 856497390 Instrument: HPLC05 High Pressure Liquid Chromatograph # 5 Begun: 11-DEC-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Std	Used	>LR
032	34500003	SAMPLE	191314-017	120180	Water	11-DEC-2006	22:04	1.0	0.001905		10			
033	34500003	SAMPLE	191314-018	120180	Water	11-DEC-2006	22:28	1.0	0.001905		10			
034	34500003	MSS	191314-019	120180	Water	11-DEC-2006	22:51	1.0	0.001887		10			
035	34500003	MS	QC367540	120180	Water	11-DEC-2006	23:15	1.0	0.001887	14	10			
036	34500003	MSD	QC367541	120180	Water	11-DEC-2006	23:38	1.0	0.001887	12	10			
037	34500003	X	IB			12-DEC-2006	00:02	1.0						
038	34500003	SAMPLE	191286-013	120180	Water	12-DEC-2006	00:26	1.0	0.002	6	10			6:FLA=20962.4
039	34500003	X	IB			12-DEC-2006	00:49	1.0						
040	34500004	X	IB			12-DEC-2006	01:13	1.0						
041	34500004	CCV	M			12-DEC-2006	01:36	1.0	1.0		10			
042	34500004	X	CCV			12-DEC-2006	02:00	1.0				2		
043	34500004	X	IB			12-DEC-2006	02:24	1.0				2		

Std used: 1=S4232 2=S4231 3=S4230

SEQUENCE SUMMARY FOR 191286 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 856499130 Instrument: HPLC05 High Pressure Liquid Chromatograph # 5 Begun: 12-DEC-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds	Used	>LR
001	34600000	X	IB - 346			12-DEC-2006	14:50	1.0						
002	34600000	CCV	L			12-DEC-2006	15:14	1.0			10	1		
003	34600000	X	CCV			12-DEC-2006	15:37	1.0				1		
004	34600000	X	IB			12-DEC-2006	16:01	1.0						
005	34600000	BLANK	QC367910	120265	Water	12-DEC-2006	16:25	1.0	0.002		10			
006	34600000	BS	QC367911	120265	Water	12-DEC-2006	16:48	1.0	0.002		10			
007	34600000	BSD	QC367912	120265	Water	12-DEC-2006	17:12	1.0	0.002		10			
008	34600000	X	IB			12-DEC-2006	17:35	1.0						
009	34600000	SAMPLE	191317-001	120265	Water	12-DEC-2006	17:59	1.0	0.001887		10			
010	34600001	SAMPLE	191381-001	120265	Water	12-DEC-2006	18:23	1.0	0.001887		10			
011	34600001	X	IB			12-DEC-2006	18:46	1.0						
012	34600001	SAMPLE	191286-013	120180	Water	12-DEC-2006	19:10	10.0	0.002		10			
013	34600001	X	IB			12-DEC-2006	19:33	1.0						
014	34600001	CCV	H			12-DEC-2006	19:57	1.0	1.0		10	2		
015	34600001	X	CCV			12-DEC-2006	20:21	1.0				2		
016	34600001	X	IB			12-DEC-2006	20:44	1.0						

Stds used: 1=S4232 2=S4230

REPORTING SUMMARY FOR 191286 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
191286-001	Naphthalene	HPLC05	1	12/11/06 15:47
191286-001	Acenaphthylene	HPLC05	1	12/11/06 15:47
191286-001	Acenaphthene	HPLC05	1	12/11/06 15:47
191286-001	Fluorene	HPLC05	1	12/11/06 15:47
191286-001	Phenanthrene	HPLC05	3	12/11/06 15:47
191286-001	Anthracene	HPLC05	3	12/11/06 15:47
191286-001	Fluoranthene	HPLC05	3	12/11/06 15:47
191286-001	Pyrene	HPLC05	3	12/11/06 15:47
191286-001	Benzo(a)anthracene	HPLC05	3	12/11/06 15:47
191286-001	Chrysene	HPLC05	3	12/11/06 15:47
191286-001	Benzo(b)fluoranthene	HPLC05	3	12/11/06 15:47
191286-001	Benzo(k)fluoranthene	HPLC05	3	12/11/06 15:47
191286-001	Benzo(a)pyrene	HPLC05	3	12/11/06 15:47
191286-001	Dibenz(a,h)anthracene	HPLC05	3	12/11/06 15:47
191286-001	Benzo(g,h,i)perylene	HPLC05	3	12/11/06 15:47
191286-001	Indeno(1,2,3-cd)pyrene	HPLC05	3	12/11/06 15:47
191286-001	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 15:47
191286-001	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 15:47
191286-004	Naphthalene	HPLC05	1	12/11/06 16:10
191286-004	Acenaphthylene	HPLC05	1	12/11/06 16:10
191286-004	Acenaphthene	HPLC05	1	12/11/06 16:10
191286-004	Fluorene	HPLC05	1	12/11/06 16:10
191286-004	Phenanthrene	HPLC05	3	12/11/06 16:10
191286-004	Anthracene	HPLC05	3	12/11/06 16:10
191286-004	Fluoranthene	HPLC05	3	12/11/06 16:10
191286-004	Pyrene	HPLC05	3	12/11/06 16:10
191286-004	Benzo(a)anthracene	HPLC05	3	12/11/06 16:10
191286-004	Chrysene	HPLC05	3	12/11/06 16:10
191286-004	Benzo(b)fluoranthene	HPLC05	3	12/11/06 16:10
191286-004	Benzo(k)fluoranthene	HPLC05	3	12/11/06 16:10
191286-004	Benzo(a)pyrene	HPLC05	3	12/11/06 16:10
191286-004	Dibenz(a,h)anthracene	HPLC05	3	12/11/06 16:10
191286-004	Benzo(g,h,i)perylene	HPLC05	3	12/11/06 16:10
191286-004	Indeno(1,2,3-cd)pyrene	HPLC05	3	12/11/06 16:10
191286-004	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 16:10
191286-004	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 16:10
191286-007	Naphthalene	HPLC05	1	12/11/06 16:34
191286-007	Acenaphthylene	HPLC05	1	12/11/06 16:34
191286-007	Acenaphthene	HPLC05	1	12/11/06 16:34
191286-007	Fluorene	HPLC05	1	12/11/06 16:34
191286-007	Phenanthrene	HPLC05	3	12/11/06 16:34
191286-007	Anthracene	HPLC05	3	12/11/06 16:34
191286-007	Fluoranthene	HPLC05	3	12/11/06 16:34
191286-007	Pyrene	HPLC05	3	12/11/06 16:34
191286-007	Benzo(a)anthracene	HPLC05	3	12/11/06 16:34
191286-007	Chrysene	HPLC05	3	12/11/06 16:34
191286-007	Benzo(b)fluoranthene	HPLC05	3	12/11/06 16:34
191286-007	Benzo(k)fluoranthene	HPLC05	3	12/11/06 16:34
191286-007	Benzo(a)pyrene	HPLC05	3	12/11/06 16:34
191286-007	Dibenz(a,h)anthracene	HPLC05	3	12/11/06 16:34
191286-007	Benzo(g,h,i)perylene	HPLC05	3	12/11/06 16:34
191286-007	Indeno(1,2,3-cd)pyrene	HPLC05	3	12/11/06 16:34

REPORTING SUMMARY FOR 191286 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
191286-007	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 16:34
191286-007	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 16:34
191286-008	Naphthalene	HPLC05	1	12/11/06 16:57
191286-008	Acenaphthylene	HPLC05	1	12/11/06 16:57
191286-008	Acenaphthene	HPLC05	1	12/11/06 16:57
191286-008	Fluorene	HPLC05	1	12/11/06 16:57
191286-008	Phenanthrene	HPLC05	3	12/11/06 16:57
191286-008	Anthracene	HPLC05	3	12/11/06 16:57
191286-008	Fluoranthene	HPLC05	3	12/11/06 16:57
191286-008	Pyrene	HPLC05	3	12/11/06 16:57
191286-008	Benzo(a)anthracene	HPLC05	3	12/11/06 16:57
191286-008	Chrysene	HPLC05	3	12/11/06 16:57
191286-008	Benzo(b)fluoranthene	HPLC05	3	12/11/06 16:57
191286-008	Benzo(k)fluoranthene	HPLC05	3	12/11/06 16:57
191286-008	Benzo(a)pyrene	HPLC05	3	12/11/06 16:57
191286-008	Dibenz(a,h)anthracene	HPLC05	3	12/11/06 16:57
191286-008	Benzo(g,h,i)perylene	HPLC05	3	12/11/06 16:57
191286-008	Indeno(1,2,3-cd)pyrene	HPLC05	3	12/11/06 16:57
191286-008	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 16:57
191286-008	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 16:57
191286-012	Naphthalene	HPLC05	1	12/11/06 17:21
191286-012	Acenaphthylene	HPLC05	1	12/11/06 17:21
191286-012	Acenaphthene	HPLC05	1	12/11/06 17:21
191286-012	Fluorene	HPLC05	1	12/11/06 17:21
191286-012	Phenanthrene	HPLC05	3	12/11/06 17:21
191286-012	Anthracene	HPLC05	3	12/11/06 17:21
191286-012	Fluoranthene	HPLC05	3	12/11/06 17:21
191286-012	Pyrene	HPLC05	3	12/11/06 17:21
191286-012	Benzo(a)anthracene	HPLC05	3	12/11/06 17:21
191286-012	Chrysene	HPLC05	3	12/11/06 17:21
191286-012	Benzo(b)fluoranthene	HPLC05	3	12/11/06 17:21
191286-012	Benzo(k)fluoranthene	HPLC05	3	12/11/06 17:21
191286-012	Benzo(a)pyrene	HPLC05	3	12/11/06 17:21
191286-012	Dibenz(a,h)anthracene	HPLC05	3	12/11/06 17:21
191286-012	Benzo(g,h,i)perylene	HPLC05	3	12/11/06 17:21
191286-012	Indeno(1,2,3-cd)pyrene	HPLC05	3	12/11/06 17:21
191286-012	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 17:21
191286-012	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 17:21
191286-013	Naphthalene	HPLC05	1	12/12/06 00:26
191286-013	Acenaphthylene	HPLC05	1	12/12/06 00:26
191286-013	Acenaphthene	HPLC05	1	12/12/06 00:26
191286-013	Fluorene	HPLC05	1	12/12/06 19:10
191286-013	Phenanthrene	HPLC05	3	12/12/06 19:10
191286-013	Anthracene	HPLC05	3	12/12/06 00:26
191286-013	Fluoranthene	HPLC05	3	12/12/06 19:10
191286-013	Pyrene	HPLC05	3	12/12/06 00:26
191286-013	Benzo(a)anthracene	HPLC05	3	12/12/06 00:26
191286-013	Chrysene	HPLC05	3	12/12/06 00:26
191286-013	Benzo(b)fluoranthene	HPLC05	3	12/12/06 00:26
191286-013	Benzo(k)fluoranthene	HPLC05	3	12/12/06 00:26
191286-013	Benzo(a)pyrene	HPLC05	3	12/12/06 00:26

REPORTING SUMMARY FOR 191286 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
191286-013	Dibenz(a,h)anthracene	HPLC05	3	12/12/06 00:26
191286-013	Benzo(g,h,i)perylene	HPLC05	3	12/12/06 00:26
191286-013	Indeno(1,2,3-cd)pyrene	HPLC05	3	12/12/06 00:26
191286-013	1-Methylnaphthalene (UV)	HPLC05	1	12/12/06 00:26
191286-013	1-Methylnaphthalene (F)	HPLC05	3	12/12/06 00:26
QC367536	Naphthalene	HPLC05	1	12/11/06 11:25
QC367536	Acenaphthylene	HPLC05	1	12/11/06 11:25
QC367536	Acenaphthene	HPLC05	1	12/11/06 11:25
QC367536	Fluorene	HPLC05	1	12/11/06 11:25
QC367536	Phenanthrene	HPLC05	3	12/11/06 11:25
QC367536	Anthracene	HPLC05	3	12/11/06 11:25
QC367536	Fluoranthene	HPLC05	3	12/11/06 11:25
QC367536	Pyrene	HPLC05	3	12/11/06 11:25
QC367536	Benzo(a)anthracene	HPLC05	3	12/11/06 11:25
QC367536	Chrysene	HPLC05	3	12/11/06 11:25
QC367536	Benzo(b)fluoranthene	HPLC05	3	12/11/06 11:25
QC367536	Benzo(k)fluoranthene	HPLC05	3	12/11/06 11:25
QC367536	Benzo(a)pyrene	HPLC05	3	12/11/06 11:25
QC367536	Dibenz(a,h)anthracene	HPLC05	3	12/11/06 11:25
QC367536	Benzo(g,h,i)perylene	HPLC05	3	12/11/06 11:25
QC367536	Indeno(1,2,3-cd)pyrene	HPLC05	3	12/11/06 11:25
QC367536	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 11:25
QC367536	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 11:25
QC367537	Naphthalene	HPLC05	1	12/11/06 11:48
QC367537	Fluorene	HPLC05	1	12/11/06 11:48
QC367537	Pyrene	HPLC05	3	12/11/06 11:48
QC367537	Benzo(a)pyrene	HPLC05	3	12/11/06 11:48
QC367537	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 11:48
QC367537	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 11:48
QC367538	Naphthalene	HPLC05	1	12/11/06 18:55
QC367538	Fluorene	HPLC05	1	12/11/06 18:55
QC367538	Pyrene	HPLC05	3	12/11/06 18:55
QC367538	Benzo(a)pyrene	HPLC05	3	12/11/06 18:55
QC367538	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 18:55
QC367538	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 18:55
QC367539	Naphthalene	HPLC05	1	12/11/06 19:19
QC367539	Fluorene	HPLC05	1	12/11/06 19:19
QC367539	Pyrene	HPLC05	3	12/11/06 19:19
QC367539	Benzo(a)pyrene	HPLC05	3	12/11/06 19:19
QC367539	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 19:19
QC367539	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 19:19
QC367540	Naphthalene	HPLC05	1	12/11/06 23:15
QC367540	Fluorene	HPLC05	1	12/11/06 23:15
QC367540	Pyrene	HPLC05	3	12/11/06 23:15
QC367540	Benzo(a)pyrene	HPLC05	3	12/11/06 23:15
QC367540	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 23:15
QC367540	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 23:15
QC367541	Naphthalene	HPLC05	1	12/11/06 23:38

REPORTING SUMMARY FOR 191286 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC367541	Fluorene	HPLC05	1	12/11/06 23:38
QC367541	Pyrene	HPLC05	3	12/11/06 23:38
QC367541	Benzo(a)pyrene	HPLC05	3	12/11/06 23:38
QC367541	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 23:38
QC367541	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 23:38

Curtis & Tompkins Laboratories

Sample Preparation Summary

11-DEC-2006 14:09

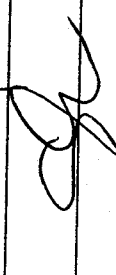
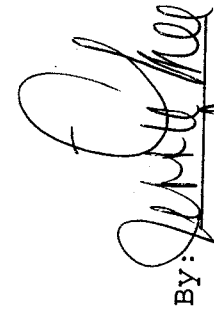
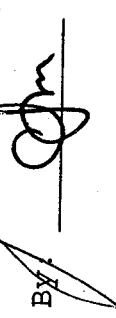
Batch Number : 120180
Date Extracted: 08-DEC-2006
Extracted by : Stephen Wanta
Prep Method : 3520C

Analysis : 8310
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S4962G
Spike #2 ID : S4289B
Spike #3 ID :
SOP Version : 8310w rv6

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
191286-001		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	1	0	8310		
191286-004		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	1	0	8310		
191286-007		Treadwell & Rollo	Water	1040	mL	2	0.001923	1	7	1	0	8310		
191286-008		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	1	0	8310		
191286-012		Treadwell & Rollo	Water	1010	mL	2	0.001980	1	7	1	0	8310		
191286-013		Treadwell & Rollo	Water	1000	mL	2	0.002000	1	7	1	0	8310		
191290-001		Treadwell & Rollo	Water	1040	mL	2	0.001923	1	7	1	0	8310		
191314-011		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	1	0	8310		mss
191314-012		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	1	0	8310		
191314-014		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	1	0	8310		
191314-016		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	1	0	8310		
191314-017		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	1	0	8310		
191314-018		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	1	0	8310		
191314-019		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	1	0	8310		mss
191317-001		Strategic Engineering & Scienc	Water	1060	mL	2	0.001887	1	7	1	0	8310		
191329-001		Strategic Engineering & Scienc	Water	1060	mL	2	0.001887	1	7	1	0	8310		
191331-001		Strategic Engineering & Scienc	Water	1060	mL	2	0.001887	1	7	1	0	8310		
QC367536	BLANK		Water	1000	mL	2	0.002000	1	7	1	0	8310		
QC367537	LCS		Water	1000	mL	2	0.002000	1	7	1	0	8310		
QC367538	MS	of 191314-011	Water	1060	mL	2	0.001887	1	7	1	1	8310		
QC367539	MSD	of 191314-011	Water	1060	mL	2	0.001887	1	7	1	1	8310		
QC367540	MS	of 191314-019	Water	1060	mL	2	0.001887	1	7	1	1	8310		
QC367541	MSD	of 191314-019	Water	1060	mL	2	0.001887	1	7	1	1	8310		

Prep Chemist: JOM for SNW

Relinquished By: Reviewed By: Received By: 

Date: 12/11/06

Date: 11 DEC 2006

00302

LIMS Batch No: 120180
 LIMS Analysis: 8310
 Extracted by: JDC SMW
 Date Extracted: 12/8/06

Extraction Method:

☐ EPA 3510c sep. funnel☒ EPA 3520c cont. L/L☐

Page 3

Cleanup Method (if needed):

☐ EPA 3640a GPC☐ EPA 3630c Silica Gel

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
191280-001 B	1060	7	20		
004 E	↓	↓	↓		
007 D	1040	↓	↓		
008 E	1050	↓	↓		
012 AG	1010	↓	↓		
013 M	1000	↓	↓		
191290-001 J	1040	↓	↓		
19134-011 U	1060	↓	↓		NMS
012 S	↓	↓	↓		
014 L	↓	↓	↓		
016 P	↓	↓	↓		
017 G	1050	↓	↓		
018 F	↓	↓	↓		
019 O	1060	↓	↓		NMS
191317-001 E	↓	↓	↓		NMS due 12/8/06
191329-001 G	↓	↓	↓		
191331-001 L	↓	↓	↓		
UB QC367530	1000	NA	↓		
LCS	27	↓	↓		
MS	38	1060	7		191314-011 NO-CTJS SHL
MSD	39	↓	↓		↓
MS	40	↓	↓		191314-019 NO-CTJS SHL
MSD	41	↓	↓		↓
					12/9/06

0.1 mL of surrogate solution was added to all samples
10 mL of matrix spiking solution was added to all spikes
☒ Samples continuously extracted with about 450 mL of CH₂Cl₂

Extraction Start Time:

Extraction End Time:

☐ Samples were extracted 3 times with 60 mL of CH₂Cl₂Extracts filtered through baked, CH₂Cl₂-rinsed powdered Na₂SO₄

Exchanged 2x with Acetonitrile

Concentrated: ☒ to volumes as noted above ☐ to clean-up volumeClean-up (if necessary): ☐ GPC (see GPC run log) ☐ Silica Gel

Extracts filtered with 0.45 um PTFE syringe filter

Mfg & Lot# / LIMS # / Time Date/ Initials

549626M	12/8/06	
542890	↓	
EM46805	↓	
1310	↓	
0810	12/9/06	LR
N/A	8/12/06	SHL
EM46111628	↓	
EM46059	↓	
N/A	↓	
N/A	↓	
N/A	↓	

Extraction Chemist James Salter Date 12/8/06

Continued from Page

Continued on Page

Reviewed by

Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8310 Water 3520C
As of 01/05/07

Analyte	Units	HPLC02 1	HPLC02 2	HPLC02 3	HPLC04 1	HPLC04 2	HPLC04 3	HPLC05 1	HPLC05 2	HPLC05 3
Naphthalene	ug/L	0.16		0.069	0.094		0.035	0.044		0.036
Acenaphthylene	ug/L	0.37	0.29		0.094	0.072		0.077	0.084	
2-Methylnaphthalene	ug/L				0.094		0.073	0.089		0.077
Acenaphthene	ug/L	0.36		0.098	0.12		0.038	0.080		0.036
Fluorene	ug/L	0.051		0.054	0.0097		0.0080	0.0076		0.0069
Phenanthrene	ug/L	0.030		0.0086	0.0045		0.0042	0.0035		0.0034
Anthracene	ug/L	0.021		0.0077	0.019		0.019	0.018		0.018
Fluoranthene	ug/L	0.13		0.011	0.016		0.0052	0.016		0.0085
Pyrene	ug/L	0.066		0.0048	0.036	0.029	0.0039		0.0062	0.0042
Benzo(a)anthracene	ug/L	0.044		0.0046	0.0093		0.011	0.010		0.010
Chrysene	ug/L	0.036		0.0059	0.0059		0.0032	0.0050		0.0043
Benzo(b)fluoranthene	ug/L	0.032		0.0081	0.011		0.0071	0.0087		0.0074
Benzo(k)fluoranthene	ug/L	0.037		0.0044	0.015		0.0033	0.0059		0.0039
Benzo(a)pyrene	ug/L	0.055		0.0045	0.014		0.015	0.019		0.018
Dibenz(a,h)anthracene	ug/L	0.12		0.026	0.026		0.013	0.030		0.0080
Benzo(g,h,i)perylene	ug/L	0.066		0.014	0.032		0.012	0.020		0.0079
Indeno(1,2,3-cd)pyrene	ug/L	0.065		0.011	0.0064		0.0062	0.013		0.0052
1-Methylnaphthalene (UV)	ug/L	1.2	1.9		1.7	1.8		1.7	1.8	
1-Methylnaphthalene (F)	ug/L			0.72			1.7			1.8

METALS

**Dissolved Target Analyte List Metals**

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF6GW103	Batch#:	120218
Lab ID:	191286-001	Sampled:	12/05/06
Matrix:	Filtrate	Received:	12/06/06
Units:	ug/L	Prepared:	12/10/06
Diln Fac:	10.00		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	12/12/06
Antimony	ND	1.0	12/12/06
Arsenic	ND	5.0	12/12/06
Barium	67	10	12/12/06
Beryllium	ND	2.0	12/12/06
Cadmium	ND	1.0	12/12/06
Calcium	34,000	500	12/12/06
Chromium	28	10	12/12/06
Cobalt	ND	10	12/12/06
Copper	ND	1.0	12/12/06
Iron	ND	100	12/12/06
Lead	ND	3.0	12/12/06
Magnesium	50,000	500	12/12/06
Manganese	ND	10	12/12/06
Nickel	ND	20	12/12/06
Potassium	ND	500	12/12/06
Selenium	ND	5.0	12/12/06
Silver	ND	1.0	12/12/06
Sodium	62,000	500	12/12/06
Thallium	ND	1.0	12/12/06
Vanadium	11	10	12/12/06
Zinc	ND	20	12/14/06

ND= Not Detected

RL= Reporting Limit

**Dissolved Metals**

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065MW9A	Batch#:	120218
Lab ID:	191286-002	Sampled:	12/05/06
Matrix:	Filtrate	Received:	12/06/06
Units:	ug/L	Prepared:	12/10/06
Diln Fac:	10.00		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	12/12/06
Antimony	ND	1.0	12/12/06
Arsenic	27	5.0	12/12/06
Cadmium	ND	1.0	12/12/06
Calcium	55,000	500	12/12/06
Chromium	ND	10	12/12/06
Copper	ND	1.0	12/12/06
Iron	3,700	100	12/12/06
Lead	ND	3.0	12/12/06
Magnesium	78,000	500	12/12/06
Manganese	460	10	12/12/06
Nickel	ND	20	12/12/06
Potassium	16,000	500	12/12/06
Sodium	67,000	500	12/12/06
Vanadium	ND	10	12/12/06
Zinc	ND	20	12/14/06

ND= Not Detected

RL= Reporting Limit

**Dissolved Target Analyte List Metals**

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	231GW09	Batch#:	120218
Lab ID:	191286-003	Sampled:	12/05/06
Matrix:	Filtrate	Received:	12/06/06
Units:	ug/L	Prepared:	12/10/06
Diln Fac:	10.00		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	12/12/06
Antimony	ND	1.0	12/12/06
Arsenic	ND	5.0	12/12/06
Barium	58	10	12/12/06
Beryllium	ND	2.0	12/12/06
Cadmium	ND	1.0	12/12/06
Calcium	25,000	500	12/12/06
Chromium	26	10	12/12/06
Cobalt	ND	10	12/12/06
Copper	ND	1.0	12/12/06
Iron	ND	100	12/12/06
Lead	ND	3.0	12/12/06
Magnesium	41,000	500	12/12/06
Manganese	ND	10	12/12/06
Nickel	ND	20	12/12/06
Potassium	ND	500	12/12/06
Selenium	ND	5.0	12/12/06
Silver	ND	1.0	12/12/06
Sodium	64,000	500	12/12/06
Thallium	ND	1.0	12/12/06
Vanadium	ND	10	12/12/06
Zinc	ND	20	12/14/06

ND= Not Detected

RL= Reporting Limit

**Dissolved Target Analyte List Metals**

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP1205062A	Batch#:	120218
Lab ID:	191286-004	Sampled:	12/05/06
Matrix:	Filtrate	Received:	12/06/06
Units:	ug/L	Prepared:	12/10/06
Diln Fac:	10.00		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	12/12/06
Antimony	ND	1.0	12/12/06
Arsenic	ND	5.0	12/12/06
Barium	69	10	12/12/06
Beryllium	ND	2.0	12/12/06
Cadmium	ND	1.0	12/12/06
Calcium	36,000	500	12/12/06
Chromium	29	10	12/12/06
Cobalt	ND	10	12/12/06
Copper	ND	1.0	12/12/06
Iron	ND	100	12/12/06
Lead	ND	3.0	12/12/06
Magnesium	52,000	500	12/12/06
Manganese	ND	10	12/12/06
Nickel	ND	20	12/12/06
Potassium	ND	500	12/12/06
Selenium	ND	5.0	12/12/06
Silver	ND	1.0	12/12/06
Sodium	62,000	500	12/12/06
Thallium	ND	1.0	12/12/06
Vanadium	10	10	12/12/06
Zinc	ND	20	12/14/06

ND= Not Detected

RL= Reporting Limit

Dissolved Metals

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP1205062C	Batch#:	120218
Lab ID:	191286-005	Sampled:	12/05/06
Matrix:	Filtrate	Received:	12/06/06
Units:	ug/L	Prepared:	12/10/06
Diln Fac:	10.00		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	12/12/06
Antimony	ND	1.0	12/12/06
Arsenic	23	5.0	12/12/06
Cadmium	ND	1.0	12/12/06
Calcium	56,000	500	12/12/06
Chromium	ND	10	12/12/06
Copper	ND	1.0	12/12/06
Iron	2,800	100	12/12/06
Lead	ND	3.0	12/12/06
Magnesium	78,000	500	12/12/06
Manganese	450	10	12/12/06
Nickel	ND	20	12/12/06
Potassium	16,000	500	12/12/06
Sodium	64,000	500	12/12/06
Vanadium	ND	10	12/12/06
Zinc	ND	20	12/14/06

**Dissolved Target Analyte List Metals**

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP1205062B	Batch#:	120218
Lab ID:	191286-006	Sampled:	12/05/06
Matrix:	Filtrate	Received:	12/06/06
Units:	ug/L	Prepared:	12/10/06
Diln Fac:	10.00		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	12/12/06
Antimony	ND	1.0	12/12/06
Arsenic	ND	5.0	12/12/06
Barium	56	10	12/12/06
Beryllium	ND	2.0	12/12/06
Cadmium	ND	1.0	12/12/06
Calcium	25,000	500	12/12/06
Chromium	26	10	12/12/06
Cobalt	ND	10	12/12/06
Copper	ND	1.0	12/12/06
Iron	180	100	12/12/06
Lead	ND	3.0	12/12/06
Magnesium	40,000	500	12/12/06
Manganese	ND	10	12/12/06
Nickel	ND	20	12/12/06
Potassium	ND	500	12/12/06
Selenium	ND	5.0	12/12/06
Silver	ND	1.0	12/12/06
Sodium	66,000	500	12/12/06
Thallium	ND	1.0	12/12/06
Vanadium	ND	10	12/12/06
Zinc	ND	20	12/14/06

ND= Not Detected
RL= Reporting Limit



Target Analyte List Metals

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BB1PZ100	Batch#:	120218
Lab ID:	191286-007	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Prepared:	12/10/06
Diln Fac:	10.00		

Analyte	Result	RL	Analyzed
Aluminum	1,400	100	12/12/06
Antimony	ND	1.0	12/12/06
Arsenic	ND	5.0	12/12/06
Barium	150	10	12/12/06
Beryllium	ND	2.0	12/12/06
Cadmium	ND	1.0	12/12/06
Calcium	45,000	500	12/12/06
Chromium	54	10	12/12/06
Cobalt	ND	10	12/12/06
Copper	19	1.0	12/12/06
Iron	9,200	100	12/12/06
Lead	320	3.0	12/12/06
Magnesium	67,000	500	12/12/06
Manganese	320	10	12/12/06
Nickel	100	20	12/12/06
Potassium	11,000	500	12/12/06
Selenium	ND	5.0	12/12/06
Silver	ND	1.0	12/12/06
Sodium	180,000	500	12/12/06
Thallium	ND	1.0	12/12/06
Vanadium	11	10	12/12/06
Zinc	360	20	12/14/06

ND= Not Detected

RL= Reporting Limit

Dissolved Target Analyte List Metals

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BB1PZ100	Batch#:	120218
Lab ID:	191286-007	Sampled:	12/05/06
Matrix:	Filtrate	Received:	12/06/06
Units:	ug/L	Prepared:	12/10/06
Diln Fac:	10.00		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	12/12/06
Antimony	ND	1.0	12/12/06
Arsenic	ND	5.0	12/12/06
Barium	110	10	12/12/06
Beryllium	ND	2.0	12/12/06
Cadmium	ND	1.0	12/12/06
Calcium	44,000	500	12/12/06
Chromium	ND	10	12/12/06
Cobalt	ND	10	12/12/06
Copper	ND	1.0	12/12/06
Iron	240	100	12/12/06
Lead	ND	3.0	12/12/06
Magnesium	63,000	500	12/12/06
Manganese	130	10	12/12/06
Nickel	ND	20	12/12/06
Potassium	12,000	500	12/12/06
Selenium	ND	5.0	12/12/06
Silver	ND	1.0	12/12/06
Sodium	190,000	500	12/12/06
Thallium	ND	1.0	12/12/06
Vanadium	ND	10	12/12/06
Zinc	ND	20	12/14/06

ND= Not Detected
RL= Reporting Limit



Target Analyte List Metals

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BB1PZ101	Units:	ug/L
Lab ID:	191286-008	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06

Analyte	Result	RL	Diln	Fac	Batch#	Prepared	Analyzed
Aluminum	2,300	100	10.00		120218	12/10/06	12/12/06
Antimony	ND	1.0	10.00		120218	12/10/06	12/12/06
Arsenic	7.4	5.0	10.00		120218	12/10/06	12/12/06
Barium	130	10	10.00		120218	12/10/06	12/12/06
Beryllium	ND	2.0	10.00		120218	12/10/06	12/12/06
Cadmium	ND	1.0	10.00		120218	12/10/06	12/12/06
Calcium	97,000	500	10.00		120218	12/10/06	12/12/06
Chromium	10	10	10.00		120218	12/10/06	12/12/06
Cobalt	ND	10	10.00		120218	12/10/06	12/12/06
Copper	28	1.0	10.00		120218	12/10/06	12/12/06
Iron	4,900	100	10.00		120218	12/10/06	12/12/06
Lead	27	3.0	1.000		120383	12/14/06	12/15/06
Magnesium	120,000	500	10.00		120218	12/10/06	12/12/06
Manganese	2,000	10	50.00		120218	12/10/06	12/14/06
Nickel	31	20	10.00		120218	12/10/06	12/12/06
Potassium	5,400	500	10.00		120218	12/10/06	12/12/06
Selenium	ND	5.0	10.00		120218	12/10/06	12/12/06
Silver	ND	1.0	10.00		120218	12/10/06	12/12/06
Sodium	190,000	500	10.00		120218	12/10/06	12/12/06
Thallium	ND	1.0	10.00		120218	12/10/06	12/12/06
Vanadium	12	10	10.00		120218	12/10/06	12/12/06
Zinc	100	20	10.00		120218	12/10/06	12/14/06

ND= Not Detected
RL= Reporting Limit

**Dissolved Target Analyte List Metals**

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BB1PZ101	Batch#:	120218
Lab ID:	191286-008	Sampled:	12/05/06
Matrix:	Filtrate	Received:	12/06/06
Units:	ug/L	Prepared:	12/10/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	10.00	12/12/06
Antimony	ND	1.0	10.00	12/12/06
Arsenic	5.3	5.0	10.00	12/12/06
Barium	110	10	10.00	12/12/06
Beryllium	ND	2.0	10.00	12/12/06
Cadmium	ND	1.0	10.00	12/12/06
Calcium	96,000	500	10.00	12/12/06
Chromium	ND	10	10.00	12/12/06
Cobalt	ND	10	10.00	12/12/06
Copper	ND	1.0	10.00	12/12/06
Iron	330	100	10.00	12/12/06
Lead	ND	3.0	10.00	12/12/06
Magnesium	120,000	500	10.00	12/12/06
Manganese	3,600	10	20.00	12/14/06
Nickel	ND	20	10.00	12/12/06
Potassium	5,000	500	10.00	12/12/06
Selenium	ND	5.0	10.00	12/12/06
Silver	ND	1.0	10.00	12/12/06
Sodium	190,000	500	10.00	12/12/06
Thallium	ND	1.0	10.00	12/12/06
Vanadium	ND	10	10.00	12/12/06
Zinc	ND	20	10.00	12/14/06

ND= Not Detected

RL= Reporting Limit

Dissolved Metals

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ1A	Batch#:	120218
Lab ID:	191286-009	Sampled:	12/05/06
Matrix:	Filtrate	Received:	12/06/06
Units:	ug/L	Prepared:	12/10/06
Diln Fac:	10.00		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	12/12/06
Antimony	ND	1.0	12/12/06
Arsenic	16	5.0	12/12/06
Cadmium	ND	1.0	12/12/06
Calcium	20,000	500	12/12/06
Chromium	ND	10	12/12/06
Copper	2.2	1.0	12/14/06
Iron	13,000	100	12/12/06
Lead	ND	3.0	12/12/06
Magnesium	43,000	500	12/12/06
Manganese	91	10	12/12/06
Nickel	ND	20	12/12/06
Potassium	880	500	12/12/06
Sodium	180,000	500	12/12/06
Vanadium	ND	10	12/12/06
Zinc	ND	20	12/14/06

ND= Not Detected
 RL= Reporting Limit

Dissolved Metals			
Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ1B	Batch#:	120218
Lab ID:	191286-010	Sampled:	12/05/06
Matrix:	Filtrate	Received:	12/06/06
Units:	ug/L	Prepared:	12/10/06
Diln Fac:	10.00		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	12/12/06
Antimony	ND	1.0	12/12/06
Arsenic	ND	5.0	12/12/06
Cadmium	ND	1.0	12/12/06
Calcium	48,000	500	12/12/06
Chromium	ND	10	12/12/06
Copper	ND	1.0	12/12/06
Iron	210	100	12/12/06
Lead	ND	3.0	12/12/06
Magnesium	67,000	500	12/12/06
Manganese	78	10	12/12/06
Nickel	ND	20	12/12/06
Potassium	38,000	500	12/12/06
Sodium	82,000	500	12/12/06
Vanadium	ND	10	12/12/06
Zinc	ND	20	12/14/06

ND= Not Detected
RL= Reporting Limit

**Dissolved Metals**

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP1205061A	Batch#:	120218
Lab ID:	191286-011	Sampled:	12/05/06
Matrix:	Filtrate	Received:	12/06/06
Units:	ug/L	Prepared:	12/10/06
Diln Fac:	10.00		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	12/12/06
Antimony	ND	1.0	12/12/06
Arsenic	ND	5.0	12/12/06
Cadmium	ND	1.0	12/12/06
Calcium	45,000	500	12/12/06
Chromium	ND	10	12/12/06
Copper	ND	1.0	12/12/06
Iron	110	100	12/12/06
Lead	ND	3.0	12/12/06
Magnesium	64,000	500	12/12/06
Manganese	68	10	12/12/06
Nickel	ND	20	12/12/06
Potassium	36,000	500	12/12/06
Sodium	78,000	500	12/12/06
Vanadium	ND	10	12/12/06
Zinc	ND	20	12/14/06

ND= Not Detected

RL= Reporting Limit

Dissolved Target Analyte List Metals

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1213GW101	Batch#:	120218
Lab ID:	191286-012	Sampled:	12/05/06
Matrix:	Filtrate	Received:	12/06/06
Units:	ug/L	Prepared:	12/10/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	10.00	12/14/06
Antimony	ND	1.0	10.00	12/14/06
Arsenic	ND	5.0	10.00	12/12/06
Barium	33	10	10.00	12/12/06
Beryllium	ND	2.0	10.00	12/12/06
Cadmium	ND	1.0	10.00	12/14/06
Calcium	15,000	500	10.00	12/12/06
Chromium	75	10	10.00	12/12/06
Cobalt	ND	10	10.00	12/12/06
Copper	ND	1.0	10.00	12/12/06
Iron	ND	100	1.000	12/15/06
Lead	ND	3.0	10.00	12/12/06
Magnesium	64,000	500	10.00	12/12/06
Manganese	ND	10	10.00	12/12/06
Nickel	ND	20	10.00	12/12/06
Potassium	560	500	10.00	12/14/06
Selenium	ND	5.0	10.00	12/12/06
Silver	ND	1.0	10.00	12/14/06
Sodium	310,000	500	20.00	12/14/06
Thallium	ND	1.0	1.000	12/15/06
Vanadium	ND	10	10.00	12/12/06
Zinc	ND	20	1.000	12/15/06

ND= Not Detected
RL= Reporting Limit

Dissolved Target Analyte List Metals

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1349MW100	Batch#:	120218
Lab ID:	191286-013	Sampled:	12/05/06
Matrix:	Filtrate	Received:	12/06/06
Units:	ug/L	Prepared:	12/10/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	10.00	12/12/06
Antimony	ND	1.0	10.00	12/12/06
Arsenic	12	5.0	10.00	12/12/06
Barium	530	10	10.00	12/12/06
Beryllium	ND	2.0	10.00	12/12/06
Cadmium	ND	1.0	10.00	12/12/06
Calcium	170,000	500	10.00	12/12/06
Chromium	ND	10	10.00	12/12/06
Cobalt	ND	10	10.00	12/12/06
Copper	ND	1.0	10.00	12/12/06
Iron	58,000	100	10.00	12/12/06
Lead	ND	3.0	10.00	12/12/06
Magnesium	240,000	500	20.00	12/14/06
Manganese	14,000	10	100.0	12/14/06
Nickel	ND	20	10.00	12/12/06
Potassium	2,500	500	10.00	12/12/06
Selenium	ND	5.0	10.00	12/12/06
Silver	ND	1.0	10.00	12/12/06
Sodium	420,000	1,000	100.0	12/14/06
Thallium	ND	1.0	10.00	12/12/06
Vanadium	ND	10	10.00	12/12/06
Zinc	ND	20	10.00	12/14/06

ND= Not Detected
RL= Reporting Limit

Dissolved Metals

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF4GW103	Batch#:	120218
Lab ID:	191286-014	Sampled:	12/05/06
Matrix:	Filtrate	Received:	12/06/06
Units:	ug/L	Prepared:	12/10/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	10.00	12/12/06
Arsenic	ND	5.0	10.00	12/12/06
Cadmium	ND	1.0	10.00	12/12/06
Calcium	160,000	500	10.00	12/12/06
Chromium	ND	10	10.00	12/12/06
Copper	ND	1.0	10.00	12/12/06
Iron	ND	100	10.00	12/12/06
Lead	ND	3.0	10.00	12/12/06
Magnesium	420,000	500	50.00	12/14/06
Manganese	79	10	10.00	12/12/06
Nickel	100	20	10.00	12/12/06
Potassium	1,900	500	10.00	12/12/06
Sodium	150,000	500	10.00	12/12/06
Zinc	ND	20	10.00	12/14/06

ND= Not Detected
 RL= Reporting Limit



Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF4GW104	Batch#:	120218
Lab ID:	191286-015	Sampled:	12/05/06
Matrix:	Filtrate	Received:	12/06/06
Units:	ug/L	Prepared:	12/10/06
Diln Fac:	10.00		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	12/12/06
Arsenic	ND	5.0	12/12/06
Cadmium	ND	1.0	12/12/06
Calcium	78,000	500	12/12/06
Chromium	ND	10	12/12/06
Copper	ND	1.0	12/12/06
Iron	ND	100	12/12/06
Lead	ND	3.0	12/12/06
Magnesium	170,000	500	12/12/06
Manganese	37	10	12/12/06
Nickel	24	20	12/12/06
Potassium	1,500	500	12/12/06
Sodium	82,000	500	12/12/06
Zinc	ND	20	12/14/06

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC367719	Batch#:	120218
Matrix:	Filtrate	Prepared:	12/10/06
Units:	ug/L		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	12/12/06
Antimony	ND	1.0	12/12/06
Arsenic	ND	5.0	12/12/06
Barium	ND	10	12/12/06
Beryllium	ND	2.0	12/12/06
Cadmium	ND	1.0	12/12/06
Calcium	ND	500	12/14/06
Chromium	ND	10	12/12/06
Cobalt	ND	10	12/12/06
Copper	ND	1.0	12/12/06
Iron	ND	100	12/12/06
Lead	15	3.0	12/12/06
Magnesium	ND	500	12/12/06
Manganese	ND	10	12/12/06
Nickel	ND	20	12/12/06
Potassium	ND	500	12/12/06
Selenium	ND	5.0	12/12/06
Silver	ND	1.0	12/12/06
Sodium	ND	500	12/12/06
Thallium	ND	1.0	12/12/06
Vanadium	ND	10	12/12/06
Zinc	ND	20	12/12/06



Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Analyte:	Lead	Diln Fac:	1.000
Type:	BLANK	Batch#:	120383
Lab ID:	QC368373	Prepared:	12/14/06
Matrix:	Water	Analyzed:	12/15/06
Units:	ug/L		

Result

RL

ND

3.0



Curtis & Tompkins, Ltd.

Mercury by Cold Vapor AA

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Prepared:	12/07/06
Diln Fac:	1.000	Analyzed:	12/07/06
Batch#:	120147		

Field ID	Type	Lab ID	Result	RL
BB1PZ100	SAMPLE	191286-007	0.35	0.20
BB1PZ101	SAMPLE	191286-008	ND	0.20
	BLANK	QC367392	ND	0.20

ND= Not Detected
RL= Reporting Limit

**Dissolved Mercury by Cold Vapor AA**

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Sampled:	12/05/06
Units:	ug/L	Received:	12/06/06
Diln Fac:	1.000	Prepared:	12/07/06
Batch#:	120147	Analyzed:	12/07/06

Field ID	Type	Lab ID	Matrix	Result	RL
LF6GW103	SAMPLE	191286-001	Filtrate	ND	0.20
231GW09	SAMPLE	191286-003	Filtrate	ND	0.20
DUP1205062A	SAMPLE	191286-004	Filtrate	ND	0.20
DUP1205062B	SAMPLE	191286-006	Filtrate	ND	0.20
BB1PZ100	SAMPLE	191286-007	Filtrate	ND	0.20
BB1PZ101	SAMPLE	191286-008	Filtrate	ND	0.20
1349MW100	SAMPLE	191286-013	Filtrate	ND	0.20
	BLANK	QC367392	Water	ND	0.20

ND= Not Detected

RL= Reporting Limit



Curtis & Tompkins, Ltd.

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Filtrate	Batch#:	120218
Units:	ug/L	Prepared:	12/10/06
Diln Fac:	1.000		

Type: BS Lab ID: QC367720

Analyte	Spiked	Result	%REC	Limits	Analyzed
Aluminum	10,000	9,336	93	80-120	12/12/06
Antimony	100.0	100.3	100	80-120	12/12/06
Arsenic	100.0	98.90	99	80-120	12/12/06
Barium	100.0	101.8	102	80-120	12/12/06
Beryllium	100.0	108.7	109	80-120	12/12/06
Cadmium	100.0	103.5	104	80-120	12/12/06
Calcium	10,000	10,260	103	80-120	12/12/06
Chromium	100.0	104.9	105	80-120	12/12/06
Cobalt	100.0	107.3	107	80-120	12/12/06
Copper	100.0	101.7	102	80-120	12/12/06
Iron	10,000	10,640	106	80-120	12/12/06
Lead	100.0	97.82	98	80-120	12/12/06
Magnesium	10,000	9,190	92	80-120	12/12/06
Manganese	100.0	106.0	106	80-120	12/12/06
Nickel	100.0	106.8	107	80-120	12/12/06
Potassium	10,000	10,100	101	80-120	12/12/06
Selenium	100.0	98.00	98	80-120	12/12/06
Silver	100.0	106.8	107	80-120	12/12/06
Sodium	10,000	9,838	98	80-120	12/12/06
Thallium	50.00	51.18	102	80-120	12/12/06
Vanadium	100.0	103.8	104	80-120	12/12/06
Zinc	100.0	100.8	101	80-120	12/14/06

Type: BSD Lab ID: QC367721

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
Aluminum	10,000	9,496	95	80-120	2	20	12/12/06
Antimony	100.0	101.7	102	80-120	1	20	12/12/06
Arsenic	100.0	101.2	101	80-120	2	20	12/12/06
Barium	100.0	102.2	102	80-120	0	20	12/12/06
Beryllium	100.0	111.5	112	80-120	3	20	12/12/06
Cadmium	100.0	107.0	107	80-120	3	20	12/12/06
Calcium	10,000	10,440	104	80-120	2	20	12/12/06
Chromium	100.0	105.7	106	80-120	1	20	12/12/06
Cobalt	100.0	108.2	108	80-120	1	20	12/12/06
Copper	100.0	101.5	102	80-120	0	20	12/12/06
Iron	10,000	10,440	104	80-120	2	20	12/12/06
Lead	100.0	97.50	98	80-120	0	20	12/12/06
Magnesium	10,000	9,346	93	80-120	2	20	12/12/06
Manganese	100.0	106.2	106	80-120	0	20	12/12/06
Nickel	100.0	108.9	109	80-120	2	20	12/12/06
Potassium	10,000	10,240	102	80-120	1	20	12/12/06
Selenium	100.0	101.1	101	80-120	3	20	12/12/06
Silver	100.0	107.9	108	80-120	1	20	12/12/06
Sodium	10,000	9,983	100	80-120	1	20	12/12/06
Thallium	50.00	51.68	103	80-120	1	20	12/12/06
Vanadium	100.0	105.2	105	80-120	1	20	12/12/06
Zinc	100.0	103.7	104	80-120	3	20	12/14/06

RPD= Relative Percent Difference

Page 1 of 1

70.0

: 00367



Batch QC Report

Target Analyte List Metals

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Analyte:	Lead	Batch#:	120383
Matrix:	Water	Prepared:	12/14/06
Units:	ug/L	Analyzed:	12/15/06
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC368374	100.0	94.49	94	80-120		
BSD	QC368375	100.0	91.97	92	80-120	3	20



Batch QC Report

Mercury by Cold Vapor AA

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	120147
Field ID:	ZZZZZZZZZZ	Sampled:	12/05/06
MSS Lab ID:	191281-001	Received:	12/06/06
Matrix:	Water	Prepared:	12/07/06
Units:	ug/L	Analyzed:	12/07/06
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC367393		5.000	5.060	101	80-120		
BSD	QC367394		5.000	5.000	100	80-120	1	20
MS	QC367396	<0.05753	5.000	5.250	105	75-125		
MSD	QC367397		5.000	5.160	103	75-125	2	20



Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1213GW101	Batch#:	120218
MSS Lab ID:	191286-012	Sampled:	12/05/06
Matrix:	Filtrate	Received:	12/06/06
Units:	ug/L	Prepared:	12/10/06

Type:

MS

Lab ID:

QC367722

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln	Fac	Analyzed
Aluminum	22.33	10,000	9,694	97	75-125	10.00		12/14/06
Antimony	<0.09301	100.0	99.85	100	75-125	10.00		12/14/06
Arsenic	2.128	100.0	102.9	101	75-125	10.00		12/12/06
Barium	33.42	100.0	133.3	100	75-125	10.00		12/12/06
Beryllium	1.347	100.0	105.6	104	75-125	10.00		12/12/06
Cadmium	<0.05768	100.0	103.7	104	75-125	10.00		12/14/06
Calcium	15,300	10,000	23,670	84	75-125	10.00		12/12/06
Chromium	74.85	100.0	173.0	98	75-125	10.00		12/12/06
Cobalt	0.8038	100.0	105.1	104	75-125	10.00		12/12/06
Copper	<0.2776	100.0	99.51	100	75-125	10.00		12/12/06
Iron	50.24	10,000	10,300	102	75-125	1.000		12/15/06
Lead	1.444	100.0	97.31	96	75-125	10.00		12/12/06
Magnesium	64,380	10,000	70,710	63 NM	75-125	10.00		12/12/06
Manganese	4.781	100.0	109.2	104	75-125	10.00		12/12/06
Nickel	8.365	100.0	113.3	105	75-125	10.00		12/12/06
Potassium	558.0	10,000	10,190	96	75-125	10.00		12/14/06
Selenium	2.394	100.0	106.7	104	75-125	10.00		12/12/06
Silver	0.08211	100.0	100.3	100	75-125	10.00		12/14/06
Sodium	314,000	10,000	298,500 >LR	-155 NM	75-125	10.00		12/14/06
Thallium	0.1137	50.00	48.50	97	75-125	1.000		12/15/06
Vanadium	3.048	100.0	105.1	102	75-125	10.00		12/12/06
Zinc	2.028	100.0	86.95	85	75-125	1.000		12/15/06

NC= Not Calculated

NM= Not Meaningful: Sample concentration > 4X spike concentration

>LR= Response exceeds instrument's linear range

RPD= Relative Percent Difference

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1213GW101	Batch#:	120218
MSS Lab ID:	191286-012	Sampled:	12/05/06
Matrix:	Filtrate	Received:	12/06/06
Units:	ug/L	Prepared:	12/10/06

Type: MSD Lab ID: QC367723

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Analyzed
Aluminum	10,000	10,280	103	75-125	6	20	10.00		12/14/06
Antimony	100.0	105.2	105	75-125	5	20	10.00		12/14/06
Arsenic	100.0	109.0	107	75-125	6	20	10.00		12/12/06
Barium	100.0	137.5	104	75-125	3	20	10.00		12/12/06
Beryllium	100.0	108.6	107	75-125	3	20	10.00		12/12/06
Cadmium	100.0	112.7	113	75-125	8	20	10.00		12/14/06
Calcium	10,000	24,710	94	75-125	4	20	10.00		12/12/06
Chromium	100.0	180.2	105	75-125	4	20	10.00		12/12/06
Cobalt	100.0	107.1	106	75-125	2	20	10.00		12/12/06
Copper	100.0	104.9	105	75-125	5	20	10.00		12/12/06
Iron	10,000	10,340	103	75-125	0	20	1.000		12/15/06
Lead	100.0	99.14	98	75-125	2	20	10.00		12/12/06
Magnesium	10,000	74,500	101 NM	75-125	5	20	10.00		12/12/06
Manganese	100.0	113.1	108	75-125	4	20	10.00		12/12/06
Nickel	100.0	114.2	106	75-125	1	20	10.00		12/12/06
Potassium	10,000	10,650	101	75-125	4	20	10.00		12/14/06
Selenium	100.0	109.6	107	75-125	3	20	10.00		12/12/06
Silver	100.0	106.8	107	75-125	6	20	10.00		12/14/06
Sodium	10,000	319,900 >LR	59 NM	75-125	NC	20	10.00		12/14/06
Thallium	50.00	50.14	100	75-125	3	20	1.000		12/15/06
Vanadium	100.0	106.5	103	75-125	1	20	10.00		12/12/06
Zinc	100.0	85.35	83	75-125	2	20	1.000		12/15/06

NC= Not Calculated

NM= Not Meaningful: Sample concentration > 4X spike concentration

>LR= Response exceeds instrument's linear range

RPD= Relative Percent Difference



Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Analyte:	Lead	Batch#:	120383
Field ID:	BB1PZ101	Sampled:	12/05/06
MSS Lab ID:	191286-008	Received:	12/06/06
Matrix:	Water	Prepared:	12/14/06
Units:	ug/L	Analyzed:	12/15/06
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC368376	27.48	100.0	120.5	93	75-125		
MSD	QC368377		100.0	124.1	97	75-125	3	20

RPD= Relative Percent Difference



Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1213GW101	Units:	ug/L
Type:	Serial Dilution	Batch#:	120218
MSS Lab ID:	191286-012	Sampled:	12/05/06
Lab ID:	QC367724	Received:	12/06/06
Matrix:	Filtrate		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln	Pac	Analyzed
Aluminum	ND	100.0	460.1 J	500.0	NC	10	50.00		12/14/06
Antimony	ND	1.000	ND	5.000	NC	10	50.00		12/14/06
Arsenic	ND	5.000	1.806 J	5.000	NC	10	50.00		12/12/06
Barium	33.42	10.00	36.16	10.00	8	10	50.00		12/14/06
Beryllium	ND	2.000	ND	5.000	NC	10	50.00		12/12/06
Cadmium	ND	1.000	ND	5.000	NC	10	50.00		12/14/06
Calcium	15,300	500.0	15,270	500.0	0	10	50.00		12/12/06
Chromium	74.85	10.00	72.98	10.00	2	10	50.00		12/12/06
Cobalt	ND	10.00	0.8838 J	10.00	NC	10	50.00		12/12/06
Copper	ND	1.000	ND	5.000	NC	10	50.00		12/12/06
Iron	ND	100.0	289.1	125.0	NC	10	5.000		12/15/06
Lead	ND	3.000	ND	5.000	NC	10	50.00		12/12/06
Magnesium	64,380	500.0	66,820	500.0	4	10	50.00		12/12/06
Manganese	ND	10.00	4.639 J	10.00	NC	10	50.00		12/12/06
Nickel	ND	20.00	13.25 J	20.00	NC	10	50.00		12/12/06
Potassium	558.0	500.0	825.5	500.0	NC	10	50.00		12/14/06
Selenium	ND	5.000	2.215 J	5.000	NC	10	50.00		12/12/06
Silver	ND	1.000	ND	5.000	NC	10	50.00		12/14/06
Sodium	314,000	500.0	321,200	1,000	2	10	100.0		12/14/06
Thallium	ND	1.000	ND	1.000	NC	10	5.000		12/15/06
Vanadium	ND	10.00	3.305 J	10.00	NC	10	50.00		12/12/06
Zinc	ND	20.00	3.094 J	20.00	NC	10	5.000		12/15/06

J= Estimated value

NC= Not Calculated

ND= Not Detected

RL= Reporting Limit



Batch QC Report

Target Analyte List Metals			
Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Analyte:	Lead	Units:	ug/L
Field ID:	BB1PZ101	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	120383
MSS Lab ID:	191286-008	Sampled:	12/05/06
Lab ID:	QC368378	Received:	12/06/06
Matrix:	Water	Analyzed:	12/15/06

MSS Result	MSS RL	Result	RL	% Diff	Lim
27.48	3.000	25.88	3.000	6	10



Curtis & Tompkins, Ltd.

Batch QC Report

Mercury by Cold Vapor AA

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	120147
MSS Lab ID:	191281-001	Sampled:	12/05/06
Lab ID:	QC367395	Received:	12/06/06
Matrix:	Water	Analyzed:	12/07/06

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
 Inst : MET06
 Seqnum: 66497847074
 File : 111r0074
 IDF : 10.0
 Lab ID: 191286-012
 Matrix: Filtrate
 Batch : 120218
 Time : 12-DEC-2006 00:36
 Cal : 66497847001
 Units : ug/L

Type : PDS
 Inst : MET06
 Seqnum: 66497847078
 File : 111r0078
 IDF : 10.0
 Lab ID: QC367725
 Matrix: Filtrate
 Batch : 120218
 Time : 12-DEC-2006 00:59
 Cal : 66497847001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S4326 (100X), S4327 (100X), S4635

Analyte	MSS	Ch	Spiked	PDS	Ch %Rec	Limits	Flags
Arsenic	0.2128	E	100.0	100.8	E 101	75-125	u
Barium	3.342	A	100.0	102.0	A 99	75-125	u
Beryllium	0.1347	A	100.0	100.1	A 100	75-125	u
Calcium	1530	A	10000	11390	A 99	75-125	u
Chromium	7.485	E	100.0	104.8	E 97	75-125	u
Cobalt	0.08038	E	100.0	98.97	E 99	75-125	u
Copper	ND	E	100.0	96.09	E 96	75-125	u
Lead	0.1444	A	100.0	91.88	A 92	75-125	u
Magnesium	6438	A	10000	15200	A 88	75-125	u
Manganese	0.4781	E	100.0	99.27	E 99	75-125	u
Molybdenum	0.2763	A	100.0	96.94	A 97	75-125	u
Nickel	0.8365	E	100.0	99.30	E 98	75-125	u
Selenium	0.2394	H	100.0	99.15	H 99	75-125	u
Vanadium	0.3048	E	100.0	98.07	E 98	75-125	u

ISTD (ICALBLK 111r0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	274069	144201	-47.39
Scandium	A	482044	292873	-39.24
Scandium	E	25904	15064	-41.85
Germanium	H	83668	45759	-45.31
Germanium	E	15899	9574	-39.78
Yttrium	A	914802	610444	-33.27
Terbium	A	1864710	1268629	-31.97

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
 Inst : MET06
 Seqnum: 66501883041
 File : 114m0041
 IDF : 20.0
 Lab ID: 191286-012
 Matrix: Filtrate
 Batch : 120218
 Time : 14-DEC-2006 16:55
 Cal : 66501883001
 Units : ug/L

Type : PDS
 Inst : MET06
 Seqnum: 66501883030
 File : 114m0030
 IDF : 20.0
 Lab ID: QC367725
 Matrix: Filtrate
 Batch : 120218
 Time : 14-DEC-2006 15:49
 Cal : 66501883001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF
 PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S4326 (100X), S4327 (100X), S4635

Analyte	MSS	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	0.6870	A	10000	9730	A	97	75-125	u
Antimony	0.01251	A	100.0	98.05	A	98	75-125	u
Arsenic	0.07310	E	100.0	98.10	E	98	75-125	
Barium	1.760	A	100.0	102.4	A	101	75-125	
Beryllium	ND	A	100.0	99.30	A	99	75-125	
Cadmium	ND	A	100.0	102.3	A	102	75-125	u
Calcium	807.5	A	10000	10820	A	100	75-125	
Chromium	3.752	E	100.0	102.9	E	99	75-125	
Cobalt	0.007760	E	100.0	98.60	E	99	75-125	
Copper	ND	E	100.0	97.05	E	97	75-125	
Iron	ND	H	10000	9870	H	99	75-125	u
Lead	ND	A	100.0	97.20	A	97	75-125	
Magnesium	3661	A	10000	13410	A	97	75-125	
Manganese	0.2041	E	100.0	99.70	E	99	75-125	
Molybdenum	0.03597	A	100.0	99.40	A	99	75-125	u
Nickel	0.3641	E	100.0	98.30	E	98	75-125	
Potassium	27.22	A	10000	9780	A	98	75-125	u
Selenium	0.06720	H	100.0	97.80	H	98	75-125	
Silver	ND	A	100.0	96.90	A	97	75-125	u
Sodium	15700	E	10000	25470 >LR	E	98	75-125	>LR b*
Vanadium	0.2377	E	100.0	98.65	E	98	75-125	
Zinc	0.08795	E	100.0	98.75	E	99	75-125	u

ISTD (ICALBLK 114m0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	526509	478315	-9.15
Scandium	A	614228	576301	-6.17
Scandium	E	53435	52414	-1.91
Scandium	H	520999	506591	-2.77
Germanium	H	130321	125526	-3.68
Germanium	E	26590	25951	-2.40
Indium	A	1037040	995850	-3.97
Yttrium	A	928639	884703	-4.73
Terbium	A	1894764	1887759	-0.37

>LR=overrange b=noncompliant u=use

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : PDS
 Inst : MET06
 Seqnum: 66501883059
 File : 114m0059
 IDF : 10.0
 Lab ID: QC367725
 Matrix: Filtrate
 Batch : 120218
 Time : 14-DEC-2006 18:39
 Cal : 66501883001
 MSS : 191286-012
 Units : ug/L

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S4326 (100X), S4327 (100X), S4635

Analyte	MSS Seqnum	Result	Ch	Spiked	PDS	Ch	%Rec	Limits	Flags
Aluminum	66501883087	2.233	A	10000	9706	A	97	75-125	
Antimony	66501883087	ND	A	100.0	96.79	A	97	75-125	
Arsenic	66497847074	0.2128	E	100.0	97.88	E	98	75-125	
Barium	66497847074	3.342	A	100.0	104.6	A	101	75-125	
Beryllium	66497847074	0.1347	A	100.0	98.67	A	99	75-125	
Cadmium	66501883087	ND	A	100.0	101.7	A	102	75-125	
Calcium	66497847074	1530	A	10000	11440	A	99	75-125	
Chromium	66497847074	7.485	E	100.0	104.3	E	97	75-125	
Cobalt	66497847074	0.08038	E	100.0	95.83	E	96	75-125	
Copper	66497847074	ND	E	100.0	98.41	E	98	75-125	
Lead	66497847074	0.1444	A	100.0	95.23	A	95	75-125	
Magnesium	66497847074	6438	A	10000	16720	A	103	75-125	
Manganese	66497847074	0.4781	E	100.0	98.62	E	98	75-125	
Molybdenum	66497847074	0.2763	A	100.0	99.46	A	99	75-125	u
Nickel	66497847074	0.8365	E	100.0	96.29	E	95	75-125	
Potassium	66501883087	55.80	A	10000	9725	A	97	75-125	
Selenium	66497847074	0.2394	H	100.0	94.24	H	94	75-125	
Silver	66501883087	0.008211	A	100.0	96.03	A	96	75-125	
Thallium	66501883087	ND	A	50.00	37.73	A	75	75-125	<c- b*
Vanadium	66497847074	0.3048	E	100.0	97.33	E	97	75-125	
Zinc	66501883087	0.2855	E	100.0	96.96	E	97	75-125	<ib b*

ISTD (ICALBLK 114m0004)	Ch	ICALBLK Abund	PDS Abund	%Drift
Lithium	A	526509	500861	-4.87
Scandium	A	614228	593127	-3.44
Scandium	E	53435	54541	2.07
Germanium	H	130321	129459	-0.66
Germanium	E	26590	26586	-0.02
Indium	A	1037040	1005932	-3.00
Bismuth	A	1388546	1303141	-6.15
Yttrium	A	928639	898942	-3.20
Terbium	A	1894764	1896394	0.09

--low bias <=opening b=noncompliant c=CCV ib=instrument blank u=use

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
 Inst : MET05
 Seqnum: 56501744184
 File : 11410184
 IDF : 1.0
 Lab ID: 191286-008
 Matrix: Water
 Batch : 120383
 Time : 15-DEC-2006 03:28
 Cal : 56501744001
 Units : ug/L

Type : PDS
 Inst : MET05
 Seqnum: 56501744188
 File : 11410188
 IDF : 1.0
 Lab ID: QC368379
 Matrix: Water
 Batch : 120383
 Time : 15-DEC-2006 03:50
 Cal : 56501744001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S4326 (100X), S4327 (100X), S4635

Analyte	MSS	Spiked	PDS	%Rec	Limits	Flags
Aluminum	10110	10000	19020	89	75-125	u
Antimony	1.665	100.0	98.57	97	75-125	u
Arsenic	9.703	100.0	97.81	88	75-125	u
Barium	173.6	100.0	270.2 >LR	97	75-125	>LR b*
Beryllium	0.3421	100.0	91.92	92	75-125	u
Cadmium	0.2975	100.0	93.65	93	75-125	u
Chromium	49.54	100.0	143.2	94	75-125	u
Cobalt	11.83	100.0	100.2	88	75-125	u
Copper	55.56	100.0	143.2	88	75-125	u
Iron	15390	10000	24720 >LR	93	75-125	>LR b*
Lead	27.48	100.0	122.7	95	75-125	u
Molybdenum	3.479	100.0	102.6	99	75-125	u
Nickel	65.87	100.0	154.1	88	75-125	u
Potassium	6463	10000	15570	91	75-125	u
Selenium	0.5626	100.0	82.65	82	75-125	u
Silver	0.1256	100.0	93.96	94	75-125	u
Thallium	0.2589	50.00	47.43	94	75-125	u
Vanadium	34.08	100.0	136.5	102	75-125	u
Zinc	103.0	100.0	180.8	78	75-125	u

ISTD (ICALBLK 11410004)	ICALBLK Abund	PDS Abund	%Drift
Lithium	739106	442779	-40.09
Scandium	529417	343822	-35.06
Germanium	119842	67030	-44.07
Indium	758188	454637	-40.04
Bismuth	901811	525220	-41.76

MISSING READINGS: CA MG MN NA

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET06
Calnum : 66497847001
Units : ug/L

Date : 11-DEC-2006 17:47
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	111r0005	66497847005	11-DEC-2006 17:52	S4977	
L2	111r0006	66497847006	11-DEC-2006 17:58	S4979	
L3	111r0007	66497847007	11-DEC-2006 18:04	S4980	
L4	111r0008	66497847008	11-DEC-2006 18:09	S4981	
L5	111r0009	66497847009	11-DEC-2006 18:15	S4975	
L6	111r0010	66497847010	11-DEC-2006 18:21	S4976	

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	AVG	r ²	MR ²	Fig
Aluminum	A	0.6283	0.6155	0.5792	0.5043	0.5055	0.4946	BLNK	-7.6469	2.01397		0.5546	1.000	0.995	
Antimony	A	0.3532	0.3121	0.3065	0.2836	0.2951	0.3082	BLNK	-0.0129	3.27256		0.3115	1.000	0.995	
Barium	A	0.1067	0.0756	0.0715	0.0661	0.0653	0.0640	BLNK	-0.0469	15.5591		0.0749	1.000	0.995	
Beryllium	A	0.2492	0.2472	0.2658	0.2673	0.2555	0.2632	BLNK	-0.0031	3.79290		0.2597	1.000	0.995	
Cadmium	A	0.0934	0.0838	0.0810	0.0780	0.0784	0.0767	BLNK	-0.0177	12.9761		0.0819	1.000	0.995	
Calcium	A	0.0634	0.0322	0.0245	0.0210	0.0217	0.0211	BLNK	-28.620	47.1672		0.0307	1.000	0.995	
Lead	A	0.9947	0.8010	0.7931	0.7342	0.7457	0.7401	BLNK	-0.0339	1.34938		0.8015	1.000	0.995	
Magnesium	A	0.5469	0.5022	0.4731	0.4114	0.4050	0.3982	BLNK	-8.8648	2.50398		0.4561	1.000	0.995	
Molybdenum	A	0.2924	0.2588	0.2221	0.2114	0.2082	0.2082	BLNK	-0.1606	4.80700		0.2335	1.000	0.995	
Potassium	A	5.0834	1.5687	1.1237	0.6731	0.6324	0.6231	BLNK	-78.971	1.60755		1.6174	1.000	0.995	
Silver	A	0.3417	0.3094	0.3239	0.3063	0.3058	0.3149	BLNK	-0.0085	3.19468		0.3170	1.000	0.995	
Thallium	A	0.8303	0.7663	0.7444	0.7242	0.7392	0.7988	BLNK	-0.0201	1.27138		0.7672	0.999	0.995	
Arsenic	E	0.7622	0.5824	0.5689	0.5407	0.5398	0.5366	BLNK	-0.0326	1.86155		0.5885	1.000	0.995	
Chromium	E	6.4195	3.4745	3.0295	2.6354	2.5038	2.5101	BLNK	-0.1678	0.39897		3.4288	1.000	0.995	
Cobalt	E	4.8544	4.4741	4.2730	4.1731	3.9657	3.9676	BLNK	-0.0293	0.25209		4.2847	1.000	0.995	
Copper	E	40.679	10.785	8.1109	5.1130	4.7045	4.6115	BLNK	-0.6246	0.21677		12.334	1.000	0.995	
Manganese	E	2.6786	1.8644	1.7120	1.6593	1.5978	1.5958	BLNK	-0.0448	0.62739		1.8496	1.000	0.995	
Nickel	E	4.6799	1.8449	1.5343	1.1340	1.0475	1.0326	BLNK	-0.3361	0.96744		1.8789	1.000	0.995	
Sodium	E	2.8912	1.0483	0.7595	0.5284	0.4648	0.4579	BLNK	-56.143	2.18429		1.0250	1.000	0.995	
Vanadium	E	4.8956	2.5120	2.4036	2.0844	2.0044	2.0338	BLNK	-0.1504	0.49355		2.6556	1.000	0.995	
Zinc	E		7.3128	2.6889	2.2473	0.9304	0.8981	BLNK	-1.9442	1.11546		2.8155	0.994	0.995	r2 ***
Iron	H	1.3543	1.0637	0.9710	0.8723	0.8725	0.8268	BLNK	-4.1035	1.19648		0.9934	0.999	0.995	
Selenium	H	0.1367	0.1200	0.1239	0.1197	0.1168	0.1094	BLNK	-0.0191	9.01829		0.1211	0.999	0.995	

2-10-06 r2 failure

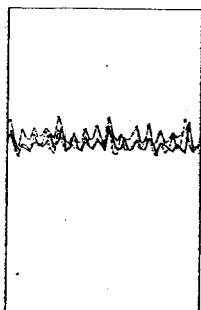
Amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+(blank)

Page 1 of 1

66497847001

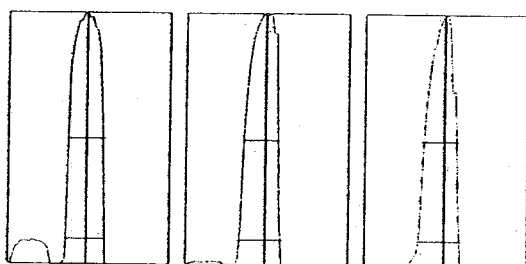
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	20,000	11278.0	11139.5	4.23	0.50
89	50,000	29468.0	29331.7	4.53	0.70
205	50,000	26487.0	27762.8	4.87	2.20

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 1.100%
Doubly Charged: 70/140 1.468%



m/z:	7	89	205
Height:	11,208	29,101	27,892
Axis:	7.00	89.00	205.00
W-50%:	0.70	0.65	0.65
W-10%:	0.7500	0.800	0.800

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===

===Ion Lenses===

===Q-Pole Parameters===

RF Power : 1600 W
RF Matching : 1.74 V
Smpl Depth : 7 mm
Torch-H : 0.5 mm
Torch-V : 0.6 mm
Carrier Gas : 1 L/min
Makeup Gas : 0 L/min
Optional Gas : --- %
Nebulizer Pump : 0.1 rps
Sample Pump : --- rps
S/C Temp : 2 degC

Extract 1 : 0 V
Extract 2 : -170 V
Omega Bias-ce : -36 V
Omega Lens-ce : 0.4 V
Cell Entrance : -30 V
QP Focus : 2 V
Cell Exit : -34 V

AMU Gain : 136
AMU Offset : 125
Axis Gain : 1.0009
Axis Offset : 0
QP Bias : -1 V

===Detector Parameters===

Discriminator : 8 mV
Analog HV : 1740 V
Pulse HV : 1370 V

===Octopole Parameters===

OctP RF : 180 V
OctP Bias : -2 V

===Reaction Cell===

Reaction Mode : OFF
H2 Gas : 0 mL/min
He Gas : 0 mL/min
Optional Gas : --- %

Tune File : he.u
He Gas: 3.7 mL/min
Optional Gas: --- %
QP Focus: -10 V
Cell Exit: -42 V
OctP Bias: -18 V
QP Bias: -13 V

m/z	Count(Mean)	RSD%	Integration Time:
51	37.8	16.85	0.1000sec
59	4047.2	3.48	
75	1.5	90.60	

Tune File : h2.u
H2 Gas: 3 mL/min
Optional Gas: --- %
QP Focus: -8 V
Cell Exit: -42 V
OctP Bias: -18 V
QP Bias: -16 V

m/z	Count(Mean)	RSD%	Integration Time:
56	16078.4	4.14	0.1000sec
59	5700.6	4.59	
78	0.6	134.69	

P/A Factor Tuning Report

Acquired: Dec 11 2006 07:59 am

Mass[amu]	Element	P/A Factor
6	Li	0.068473
7	(Li)	Sensitivity too low
9	Be	Sensitivity too low
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.097579
45	Sc	0.096118
51	V	0.096834
52	Cr	0.101036
55	Mn	0.102846
56	Fe	Sensitivity too high
59	Co	0.107238
60	Ni	Sensitivity too low
63	Cu	0.110756
65	Cu	Sensitivity too low
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.108995
98	Mo	Sensitivity too low
99	(Ru)	Sensitivity too low
107	Ag	0.116599
111	Cd	Sensitivity too low
115	In	0.116969
118	(In)	0.115882
121	Sb	0.114509
137	Ba	Sensitivity too low
159	Tb	0.118651
205	Tl	0.123696
206	(Pb)	0.123617
207	(Pb)	0.123360
208	Pb	0.124340
209	Bi	0.124526

===Detector Parameters===

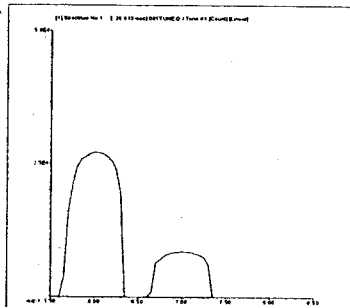
Discriminator: 8.0 mV
Analog HV: 1740 V
Pulse HV: 1370 V

6020 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\06L11r00.B\001TUNE.D
 Date Acquired: Dec 11 2006 05:27 pm
 Acq. Method: TN6020.M
 Operator:
 Sample Name: tun,s4974
 Misc Info:
 Vial Number: 1307
 Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	0.85	5.00	
59 Co	0.66	5.00	
115 In	0.74	5.00	
205 Tl	0.71	5.00	



7 Li

Mass Calib.

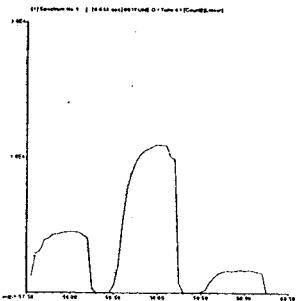
Actual: 7.00
 Required: 6.90 - 7.10

Flag:

Peak Width

Actual: 0.65
 Required: 0.90

Flag:



59 Co

Mass Calib.

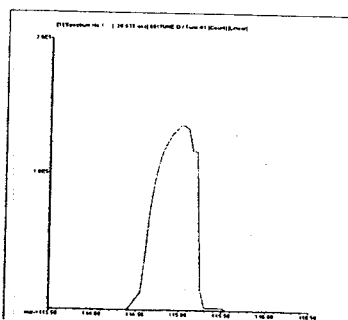
Actual: 59.00
 Required: 58.90 - 59.10

Flag:

Peak Width

Actual: 0.65
 Required: 0.90

Flag:



115 In

Mass Calib.

Actual: 115.00

Required: 114.90 - 115.10

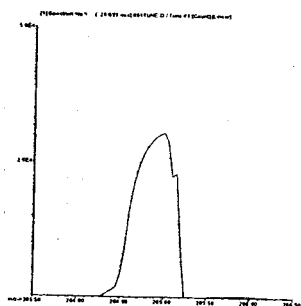
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



205 Tl

Mass Calib.

Actual: 204.95

Required: 204.90 - 205.10

Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:

Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06L11r00.B\002BLNK.D\002BLNK.D#
 Date Acquired: Dec 11 2006 05:33 pm
 Operator:
 Sample Name: rinse
 Misc Info:
 Vial Number: 1101
 Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
 Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
 Last Cal Update: Dec 11 2006 05:37 pm
 Sample Type: 6-Blank
 Total Dil Factor: 1.00

Data Results:

Analytes: Fail
 ISTD: Pass

QC Elements

Element	IS	Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6		3	0.00 ppb	119.54	0.10	
23 Na	45		2	50.17 ppb	20.85	10.00	Fail
24 Mg	45		3	20.02 ppb	18.95	10.00	Fail
27 Al	45		3	22.06 ppb	18.97	10.00	Fail
39 K	45		3	19.53 ppb	34.08	10.00	Fail
44 Ca	45		3	54.90 ppb	23.17	10.00	Fail
51 V	45		2	0.06 ppb	14.08	0.10	
52 Cr	45		2	0.06 ppb	31.06	0.10	
55 Mn	45		2	0.07 ppb	30.07	0.10	
56 Fe	45		1	91.58 ppb	9.85	10.00	Fail
59 Co	45		2	0.10 ppb	16.75	0.10	Fail
60 Ni	45		2	0.07 ppb	61.94	0.10	
63 Cu	72		2	0.02 ppb	152.58	0.10	
66 Zn	72		2	0.18 ppb	21.27	0.10	Fail
72 Ge	---		3	-----	-----	#####	
75 As	72		2	0.03 ppb	37.28	0.10	
78 Se	72		1	0.03 ppb	32.55	0.10	
89 Y	---		1	-----	-----	#####	
89 Y	---		2	-----	-----	#####	
98 Mo	89		3	0.51 ppb	21.50	0.10	Fail
107 Ag	115		3	0.01 ppb	56.74	0.10	
111 Cd	115		3	0.02 ppb	64.35	0.10	
115 In	---		1	-----	-----	#####	
115 In	---		2	-----	-----	#####	
121 Sb	115		3	0.01 ppb	49.64	0.10	
137 Ba	159		3	0.02 ppb	73.92	0.10	
205 Tl	209		3	0.04 ppb	7.30	0.20	
208 Pb	159		3	0.00 ppb	75.69	0.10	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3	274836	1.14	---	#VALUE!	80 - 120	
45 Sc	1	358799	6.13	---	#VALUE!	80 - 120	
45 Sc	2	25349	2.31	---	#VALUE!	80 - 120	
45 Sc	3	490723	2.20	---	#VALUE!	80 - 120	
72 Ge	1	93299	4.87	---	#VALUE!	80 - 120	
72 Ge	2	15388	2.09	---	#VALUE!	80 - 120	
89 Y	3	944680	3.74	---	#VALUE!	80 - 120	
115 In	3	1122327	2.39	---	#VALUE!	80 - 120	
159 Tb	3	1908950	1.81	---	#VALUE!	80 - 120	
209 Bi	3	1444901	1.92	---	#VALUE!	80 - 120	

Tune File# 1 c:\icpchem\1\7500\h2.u
 Tune File# 2 c:\icpchem\1\7500\he.u
 Tune File# 3 c:\icpchem\1\7500\nogas.u

ISTD Ref File : ---

9 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06L11r00.B\003BLNK.D\003BLNK.D#
 Date Acquired: Dec 11 2006 05:38 pm
 Operator:
 Sample Name: rinse
 Misc Info:
 Vial Number: 1101
 Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
 Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
 Last Cal Update: Dec 11 2006 05:42 pm
 Sample Type: 6-Blank
 Total Dil Factor: 1.00

Data Results:
Analytes: Fail
ISTD: Pass

QC Elements

Element	IS Ref	Tune	Conc.	RSD(%)	High Limit	Flag
9 Be	6	3	0.00 ppb	557.18	0.10	
23 Na	45	2	-13.39 ppb	51.17	10.00	
24 Mg	45	3	5.93 ppb	9.44	10.00	
27 Al	45	3	7.42 ppb	8.37	10.00	
39 K	45	3	5.70 ppb	20.87	10.00	
44 Ca	45	3	14.35 ppb	14.11	10.00	Fail
51 V	45	2	0.00 ppb	195.05	0.10	
52 Cr	45	2	0.01 ppb	55.42	0.10	
55 Mn	45	2	0.01 ppb	270.80	0.10	
56 Fe	45	1	20.96 ppb	6.73	10.00	Fail
59 Co	45	2	0.02 ppb	45.12	0.10	
60 Ni	45	2	-0.03 ppb	117.35	0.10	
63 Cu	72	2	-0.01 ppb	259.74	0.10	
66 Zn	72	2	0.05 ppb	218.57	0.10	
72 Ge	---	3	-----	-----	#####	
75 As	72	2	0.01 ppb	134.45	0.10	
78 Se	72	1	0.01 ppb	99.36	0.10	
89 Y	---	1	-----	-----	#####	
89 Y	---	2	-----	-----	#####	
98 Mo	89	3	0.21 ppb	3.75	0.10	Fail
107 Ag	115	3	0.00 ppb	186.78	0.10	
111 Cd	115	3	0.00 ppb	695.53	0.10	
115 In	---	1	-----	-----	#####	
115 In	---	2	-----	-----	#####	
121 Sb	115	3	0.01 ppb	20.98	0.10	
137 Ba	159	3	0.03 ppb	16.37	0.10	
205 Tl	209	3	0.01 ppb	25.37	0.20	
208 Pb	159	3	0.00 ppb	901.97	0.10	

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3	276175	0.41	---	#VALUE!	80 - 120	
45 Sc	1	322685	0.43	---	#VALUE!	80 - 120	
45 Sc	2	26190	0.29	---	#VALUE!	80 - 120	
45 Sc	3	489690	1.65	---	#VALUE!	80 - 120	
72 Ge	1	86327	0.47	---	#VALUE!	80 - 120	
72 Ge	2	15749	1.09	---	#VALUE!	80 - 120	
89 Y	3	926799	1.37	---	#VALUE!	80 - 120	
115 In	3	1105767	0.74	---	#VALUE!	80 - 120	
159 Tb	3	1886683	1.74	---	#VALUE!	80 - 120	
209 Bi	3	1432687	1.10	---	#VALUE!	80 - 120	

Tune File# 1 c:\icpchem\1\7500\h2.u
 Tune File# 2 c:\icpchem\1\7500\he.u
 Tune File# 3 c:\icpchem\1\7500\nogas.u

ISTD Ref File : ---

3 :Element Failures 0 :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06L11r00.B\004CALB.D\004CALB.D#
 Date Acquired: Dec 11 2006 05:44 pm
 Acq. Method: lcj6020.M
 Operator:
 Sample Name: calblank
 Misc Info:
 Vial Number: 1101
 Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
 Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
 Last Cal. Update: Dec 11 2006 05:48 pm
 Sample Type: CalBlk

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)
6 Li	---	3	274,069.22	1.52
7 (Li)	---	3	17,344.23	3.05
9 Be	6	3	4.44	86.60
23 Na	45	2	13,293.41	5.05
24 Mg	45	3	34,140.80	12.94
27 Al	45	3	36,611.67	16.01
39 K	45	3	473,560.03	1.36
44 Ca	45	3	5,851.67	9.04
45 Sc	---	1	310,660.31	0.31
45 Sc	---	2	25,903.88	3.23
45 Sc	---	3	482,044.22	1.58
51 V	45	2	157.41	13.71
52 Cr	45	2	217.41	10.38
55 Mn	45	2	37.04	13.86
56 Fe	45	1	21,310.31	3.79
59 Co	45	2	60.00	26.26
60 Ni	45	2	180.00	4.32
63 Cu	72	2	916.34	3.05
65 Cu	72	2	442.23	7.00
66 Zn	72	2	554.83	9.35
72 Ge	---	1	83,667.70	0.27
72 Ge	---	2	15,899.21	2.51
72 Ge	---	3	118,242.31	1.91
75 As	72	2	5.56	13.86
78 Se	72	1	3.56	39.03
89 Y	---	1	732,419.56	0.42
89 Y	---	2	129,799.45	2.44
89 Y	---	3	914,802.19	1.82
98 Mo	89	3	611.15	11.52
99 (Ru)	89	3	2.22	173.21
107 Ag	115	3	56.67	10.19
111 Cd	115	3	28.89	43.68
115 In	---	1	851,882.31	0.44
115 In	---	2	187,377.77	2.61
115 In	---	3	1,071,473.90	3.38
118 (In)	---	1	707.39	81.85
118 (In)	---	2	93.71	3.81
118 (In)	---	3	458.91	1.83
121 Sb	115	3	84.45	14.95
137 Ba	159	3	112.23	24.19
159 Tb	---	3	1,864,710.00	1.28
205 Tl	209	3	448.91	15.30
206 (Pb)	209	3	226.68	3.89
207 (Pb)	159	3	195.57	4.92
208 Pb	159	3	936.72	2.91
209 Bi	---	3	1,422,568.60	0.86

Tune File# 1 c:\icpchem\1\7500\h2.u
 Tune File# 2 c:\icpchem\1\7500\he.u
 Tune File# 3 c:\icpchem\1\7500\nogas.u

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L11r00.B\005SCALS.D\005SCALS.D#
 Date Acquired: Dec 11 2006 05:50 pm
 Acq. Method: lcj6020.M
 Operator:
 Sample Name: s4977
 Misc Info:
 Vial Number: 1102
 Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
 Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
 Last Cal. Update: Dec 11 2006 05:48 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)
6	Li	---	3	271916.47
7	(Li)	---	3	16954.86
9	Be	6	3	135.56
23	Na	45	2	14594.60
24	Mg	45	3	52887.09
27	Al	45	3	60753.06
39	K	45	3	491537.19
44	Ca	45	3	6132.67
45	Sc	---	1	310065.47
45	Sc	---	2	25238.16
45	Sc	---	3	483512.66
51	V	45	2	247.04
52	Cr	45	2	323.71
55	Mn	45	2	135.19
56	Fe	45	1	83994.41
59	Co	45	2	244.82
60	Ni	45	2	236.30
63	Cu	72	2	1268.96
65	Cu	72	2	635.58
66	Zn	72	2	637.06
72	Ge	---	1	83760.81
72	Ge	---	2	15597.39
72	Ge	---	3	118634.11
75	As	72	2	23.78
78	Se	72	1	22.89
89	Y	---	1	733778.88
89	Y	---	2	127895.41
89	Y	---	3	917281.94
98	Mo	89	3	536.70
99	(Ru)	89	3	1.11
107	Ag	115	3	733.38
111	Cd	115	3	200.01
115	In	---	1	852989.00
115	In	---	2	184995.83
115	In	---	3	1074449.80
118	(In)	---	1	4292.21
118	(In)	---	2	1107.47
118	(In)	---	3	4973.32
121	Sb	115	3	757.83
137	Ba	159	3	398.91
159	Tb	---	3	1869739.50
205	Tl	209	3	1178.99
208	Pb	159	3	3719.24
209	Bi	---	3	1420023.30

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	3	271916	1.15	274069	99.2	80 - 120
45	Sc	1	310065	0.55	310660	99.8	80 - 120
45	Sc	2	25238	1.35	25904	97.4	80 - 120
45	Sc	3	483513	1.32	482044	100.3	80 - 120
72	Ge	1	83761	0.63	83668	100.1	80 - 120
72	Ge	2	15597	0.32	15899	98.1	80 - 120
89	Y	3	917282	1.11	914802	100.3	80 - 120
115	In	3	1074450	3.04	1071474	100.3	80 - 120
159	Tb	3	1869740	0.88	1864710	100.3	80 - 120
209	Bi	3	1420023	0.98	1422569	99.8	80 - 120

Tune File# 1 c:\icpchem\1\7500\h2.u
 Tune File# 2 c:\icpchem\1\7500\he.u
 Tune File# 3 c:\icpchem\1\7500\nogas.u

ISTD Ref File : C:\ICPCHEM\1\DATA\06L11r00.B\004CALB.D\004CALB.D#

0 : Element Failures 0
 0 : ISTD Failures 0

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L11r00.B\006CAL.S.D\006CAL.S.D#
 Date Acquired: Dec 11 2006 05:56 pm
 Acq. Method: lcj6020.M
 Operator:
 Sample Name: s4979
 Misc Info:
 Vial Number: 1103
 Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
 Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
 Last Cal. Update: Dec 11 2006 05:54 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
6	Li	---	3	275930.19	0.74
7	(Li)	---	3	17503.29	1.30
9	Be	6	3	0.12	5.66
23	Na	45	2	52.41	2.61
24	Mg	45	3	25.11	1.02
27	Al	45	3	30.77	1.19
39	K	45	3	78.44	0.78
44	Ca	45	3	1.61	2.44
45	Sc	---	1	313211.25	0.28
45	Sc	---	2	25491.19	0.80
45	Sc	---	3	489369.53	0.53
51	V	45	2	1.26	3.76
52	Cr	45	2	1.74	2.57
55	Mn	45	2	0.93	5.25
56	Fe	45	1	53.18	1.56
59	Co	45	2	2.24	2.36
60	Ni	45	2	0.92	3.93
63	Cu	72	2	5.39	0.46
65	Cu	72	2	2.81	3.25
66	Zn	72	2	3.66	2.93
72	Ge	---	1	84249.42	0.30
72	Ge	---	2	15568.08	0.51
72	Ge	---	3	119985.82	0.19
75	As	72	2	0.29	5.97
78	Se	72	1	0.06	8.06
89	Y	---	1	739822.13	0.21
89	Y	---	2	129165.28	0.99
89	Y	---	3	930520.38	0.59
98	Mo	89	3	0.13	4.72
99	(Ru)	89	3	0.00	173.20
107	Ag	115	3	0.15	7.70
111	Cd	115	3	0.04	7.38
115	In	---	1	858815.13	0.41
115	In	---	2	186460.19	0.54
115	In	---	3	1089535.50	2.57
118	(In)	---	1	19871.77	0.08
118	(In)	---	2	5185.13	2.50
118	(In)	---	3	24020.93	1.43
121	Sb	115	3	0.16	6.18
137	Ba	159	3	0.04	5.74
159	Tb	---	3	1889622.50	0.51
205	Tl	209,	3	0.19	0.66
208	Pb	159	3	0.40	1.91
209	Bi	---	3	1435153.30	0.54

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	3	275930	0.74	274069	100.7	80 - 120
45	Sc	1	313211	0.28	310660	100.8	80 - 120
45	Sc	2	25491	0.80	25904	98.4	80 - 120
45	Sc	3	489370	0.53	482044	101.5	80 - 120
72	Ge	1	84249	0.30	83668	100.7	80 - 120
72	Ge	2	15568	0.51	15899	97.9	80 - 120
89	Y	3	930520	0.59	914802	101.7	80 - 120
115	In	3	1089536	2.57	1071474	101.7	80 - 120
159	Tb	3	1889623	0.51	1864710	101.3	80 - 120
209	Bi	3	1435153	0.54	1422569	100.9	80 - 120

Tune File# 1 c:\icpchem\1\7500\h2.u
 Tune File# 2 c:\icpchem\1\7500\he.u
 Tune File# 3 c:\icpchem\1\7500\nogas.u

ISTD Ref File : C:\ICPCHEM\1\DATA\06L11r00.B\004CALB.D\004CALB.D#

0 : Element Failures 0
 0 : ISTD Failures 0

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L11r00.B\007CALC.D\007CALC.D#
 Date Acquired: Dec 11 2006 06:01 pm
 Acq. Method: lcj6020.M
 Operator:
 Sample Name: s4980
 Misc Info:
 Vial Number: 1104
 Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
 Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
 Last Cal. Update: Dec 11 2006 06:00 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
6	Li	---	3	274280.44	0.76
7	(Li)	---	3	17171.80	1.40
9	Be	6	3	0.27	6.11
23	Na	45	2	75.95	0.75
24	Mg	45	3	47.31	0.70
27	Al	45	3	57.92	0.70
39	K	45	3	112.37	1.11
44	Ca	45	3	2.45	1.73
45	Sc	---	1	311548.22	0.52
45	Sc	---	2	25518.26	0.40
45	Sc	---	3	486069.94	0.29
51	V	45	2	2.40	1.71
52	Cr	45	2	3.03	2.41
55	Mn	45	2	1.71	0.59
56	Fe	45	1	97.10	0.35
59	Co	45	2	4.27	2.17
60	Ni	45	2	1.53	3.41
63	Cu	72	2	8.11	4.01
65	Cu	72	2	3.96	4.69
66	Zn	72	2	2.69	1.25
72	Ge	---	1	84242.29	0.40
72	Ge	---	2	15661.16	0.60
72	Ge	---	3	119155.65	0.71
75	As	72	2	0.57	2.86
78	Se	72	1	0.12	5.27
89	Y	---	1	735144.88	0.54
89	Y	---	2	129012.25	0.45
89	Y	---	3	918533.50	0.60
98	Mo	89	3	0.22	2.35
99	(Ru)	89	3	0.00	173.22
107	Ag	115	3	0.32	1.32
111	Cd	115	3	0.08	1.52
115	In	---	1	855694.19	0.70
115	In	---	2	186344.13	0.53
115	In	---	3	1079813.00	2.77
118	(In)	---	1	39638.04	0.15
118	(In)	---	2	10499.73	0.80
118	(In)	---	3	47992.93	1.08
121	Sb	115	3	0.31	3.10
137	Ba	159	3	0.07	2.33
159	Tb	---	3	1865141.00	0.61
205	Tl	209	3	0.37	1.62
208	Pb	159	3	0.79	0.37
209	Bi	---	3	1407790.40	0.93

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	3	274280	0.76	274069	100.1	80 - 120
45	Sc	1	311548	0.52	310660	100.3	80 - 120
45	Sc	2	25518	0.40	25904	98.5	80 - 120
45	Sc	3	486070	0.29	482044	100.8	80 - 120
72	Ge	1	84242	0.40	83668	100.7	80 - 120
72	Ge	2	15661	0.60	15899	98.5	80 - 120
89	Y	3	918534	0.60	914802	100.4	80 - 120
115	In	3	1079813	2.77	1071474	100.8	80 - 120
159	Tb	3	1865141	0.61	1864710	100.0	80 - 120
209	Bi	3	1407790	0.93	1422569	99.0	80 - 120

Tune File# 1 c:\icpchem\1\7500\h2.u
 Tune File# 2 c:\icpchem\1\7500\he.u
 Tune File# 3 c:\icpchem\1\7500\nogas.u

ISTD Ref File : C:\ICPCHEM\1\DATA\06L11r00.B\004CALB.D\004CALB.D#

0 : Element Failures 0
 0 : ISTD Failures 0

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L11r00.B\008CAL.S.D\008CAL.S.D#
 Date Acquired: Dec 11 2006 06:07 pm
 Acq. Method: lcj6020.M
 Operator:
 Sample Name: s4981
 Misc Info:
 Vial Number: 1105
 Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
 Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
 Last Cal. Update: Dec 11 2006 06:05 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)
6 Li	---	3	276275.59	0.74
7 (Li)	---	3	17350.89	1.76
9 Be	6	3	2.67	2.86
23 Na	45	2	528.41	3.05
24 Mg	45	3	411.41	1.26
27 Al	45	3	504.25	1.53
39 K	45	3	673.14	1.27
44 Ca	45	3	21.03	0.97
45 Sc	---	1	311530.97	0.41
45 Sc	---	2	25546.56	2.71
45 Sc	---	3	490881.97	1.03
51 V	45	2	20.84	4.44
52 Cr	45	2	26.35	3.01
55 Mn	45	2	16.59	2.92
56 Fe	45	1	872.29	0.83
59 Co	45	2	41.73	3.43
60 Ni	45	2	11.34	3.86
63 Cu	72	2	51.13	1.08
65 Cu	72	2	25.62	2.01
66 Zn	72	2	22.47	1.22
72 Ge	---	1	84230.77	0.49
72 Ge	---	2	15949.63	1.26
72 Ge	---	3	120883.97	0.90
75 As	72	2	5.41	0.96
78 Se	72	1	1.20	2.07
89 Y	---	1	733136.25	0.57
89 Y	---	2	129290.11	2.65
89 Y	---	3	931235.50	0.96
98 Mo	89	3	2.11	2.05
99 (Ru)	89	3	0.00	0.00
107 Ag	115	3	3.06	1.82
111 Cd	115	3	0.78	1.57
115 In	---	1	843649.69	0.83
115 In	---	2	184757.72	2.49
115 In	---	3	1104653.30	1.75
118 (In)	---	1	389380.03	0.76
118 (In)	---	2	103060.56	0.49
118 (In)	---	3	466797.81	0.48
121 Sb	115	3	2.94	1.71
137 Ba	159	3	0.66	1.29
159 Tb	---	3	1887310.40	1.22
205 Tl	209	3	3.62	2.01
208 Pb	159	3	7.34	1.34
209 Bi	---	3	1418514.00	0.99

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3	276276	0.74	274069	100.8	80 - 120	
45 Sc	1	311531	0.41	310660	100.3	80 - 120	
45 Sc	2	25547	2.71	25904	98.6	80 - 120	
45 Sc	3	490882	1.03	482044	101.8	80 - 120	
72 Ge	1	84231	0.49	83668	100.7	80 - 120	
72 Ge	2	15950	1.26	15899	100.3	80 - 120	
89 Y	3	931236	0.96	914802	101.8	80 - 120	
115 In	3	1104653	1.75	1071474	103.1	80 - 120	
159 Tb	3	1887310	1.22	1864710	101.2	80 - 120	
209 Bi	3	1418514	0.99	1422569	99.7	80 - 120	

Tune File# 1 c:\icpchem\1\7500\h2.u
 Tune File# 2 c:\icpchem\1\7500\he.u
 Tune File# 3 c:\icpchem\1\7500\nogas.u

ISTD Ref File : C:\ICPCHEM\1\DATA\06L11r00.B\004CALB.D\004CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L11r00.B\009CAL.S.D\009CAL.S.D#
 Date Acquired: Dec 11 2006 06:13 pm
 Acq. Method: lcj6020.M
 Operator:
 Sample Name: s4975
 Misc Info:
 Vial Number: 1106
 Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
 Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
 Last Cal. Update: Dec 11 2006 06:11 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)
6 Li	---	3	274434.59	0.37
7 (Li)	---	3	17316.42	1.15
9 Be	6	3	26.55	0.95
23 Na	45	2	4647.98	2.44
24 Mg	45	3	4049.69	1.05
27 Al	45	3	5055.43	1.49
39 K	45	3	6324.41	0.79
44 Ca	45	3	217.05	0.80
45 Sc	---	1	308487.72	0.97
45 Sc	---	2	26360.98	1.76
45 Sc	---	3	492124.22	0.92
51 V	45	2	200.44	2.18
52 Cr	45	2	250.38	1.63
55 Mn	45	2	158.77	2.39
56 Fe	45	1	8724.96	0.81
59 Co	45	2	396.57	2.19
60 Ni	45	2	104.75	2.51
63 Cu	72	2	470.45	1.48
65 Cu	72	2	234.00	1.53
66 Zn	72	2	93.04	2.61
72 Ge	---	1	83388.83	0.57
72 Ge	---	2	15975.58	1.39
72 Ge	---	3	122270.26	0.92
75 As	72	2	53.98	0.61
78 Se	72	1	11.68	0.64
89 Y	---	1	719635.50	1.15
89 Y	---	2	132713.33	1.99
89 Y	---	3	941609.56	0.21
98 Mo	89	3	20.82	0.52
99 (Ru)	89	3	0.00	43.45
107 Ag	115	3	30.58	1.30
111 Cd	115	3	7.84	1.20
115 In	---	1	807167.13	0.85
115 In	---	2	182941.81	1.65
115 In	---	3	1088528.50	1.27
118 (In)	---	1	3938878.30	0.44
118 (In)	---	2	1012124.90	0.49
118 (In)	---	3	4783865.50	0.56
121 Sb	115	3	29.51	1.13
137 Ba	159	3	6.53	0.32
159 Tb	---	3	1897974.50	0.22
205 Tl	209	3	36.96	1.13
208 Pb	159	3	74.57	0.39
209 Bi	---	3	1379883.80	0.72

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3	274435	0.37	274069	100.1	80 - 120	
45 Sc	1	308488	0.97	310660	99.3	80 - 120	
45 Sc	2	26361	1.76	25904	101.8	80 - 120	
45 Sc	3	492124	0.92	482044	102.1	80 - 120	
72 Ge	1	83389	0.57	83668	99.7	80 - 120	
72 Ge	2	15976	1.39	15899	100.5	80 - 120	
89 Y	3	941610	0.21	914802	102.9	80 - 120	
115 In	3	1088529	1.27	1071474	101.6	80 - 120	
159 Tb	3	1897975	0.22	1864710	101.8	80 - 120	
209 Bi	3	1379884	0.72	1422569	97.0	80 - 120	

Tune File# 1 c:\icpchem\1\7500\h2.u
 Tune File# 2 c:\icpchem\1\7500\he.u
 Tune File# 3 c:\icpchem\1\7500\nogas.u

ISTD Ref File : C:\ICPCHEM\1\DATA\06L11r00.B\004CALB.D\004CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L11r00.B\010CAL.S.D\010CAL.S.D#
 Date Acquired: Dec 11 2006 06:18 pm
 Acq. Method: lcj6020.M
 Operator:
 Sample Name: s4976
 Misc Info:
 Vial Number: 1107
 Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
 Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
 Last Cal. Update: Dec 11 2006 06:17 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
6	Li	---	3	269237.53	1.09
7	(Li)	---	3	16940.42	1.34
9	Be	6	3	52.64	0.27
23	Na	45	2	9157.63	0.89
24	Mg	45	3	7964.11	0.54
27	Al	45	3	9891.07	0.44
39	K	45	3	12462.97	0.55
44	Ca	45	3	422.46	0.67
45	Sc	---	1	312847.66	0.41
45	Sc	---	2	25321.61	1.26
45	Sc	---	3	488743.53	0.35
51	V	45	2	406.76	1.10
52	Cr	45	2	502.02	0.75
55	Mn	45	2	319.16	0.80
56	Fe	45	1	16535.54	0.41
59	Co	45	2	793.51	0.68
60	Ni	45	2	206.53	1.18
63	Cu	72	2	922.30	1.43
65	Cu	72	2	457.09	1.59
66	Zn	72	2	179.62	0.95
72	Ge	---	1	83835.72	0.20
72	Ge	---	2	15456.49	1.44
72	Ge	---	3	122134.26	0.63
75	As	72	2	107.33	1.28
78	Se	72	1	21.88	1.34
89	Y	---	1	728963.88	0.22
89	Y	---	2	127061.29	0.91
89	Y	---	3	921753.31	0.80
98	Mo	89	3	41.65	0.38
99	(Ru)	89	3	0.00	32.62
107	Ag	115	3	62.97	0.62
111	Cd	115	3	15.35	0.52
115	In	---	1	804838.19	0.42
115	In	---	2	170639.00	1.05
115	In	---	3	1063115.50	0.66
118	(In)	---	1	7502091.50	0.12
118	(In)	---	2	2054306.90	0.22
118	(In)	---	3	9250779.00	0.60
121	Sb	115	3	61.65	0.72
137	Ba	159	3	12.81	0.50
159	Tb	---	3	1867976.90	0.65
205	Tl	209	3	79.88	1.67
208	Pb	159	3	148.03	0.20
209	Bi	---	3	1312471.80	1.90

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	3	269238	1.09	274069	98.2	80 - 120
45	Sc	1	312848	0.41	310660	100.7	80 - 120
45	Sc	2	25322	1.26	25904	97.8	80 - 120
45	Sc	3	488744	0.35	482044	101.4	80 - 120
72	Ge	1	83836	0.20	83668	100.2	80 - 120
72	Ge	2	15456	1.44	15899	97.2	80 - 120
89	Y	3	921753	0.80	914802	100.8	80 - 120
115	In	3	1063116	0.66	1071474	99.2	80 - 120
159	Tb	3	1867977	0.65	1864710	100.2	80 - 120
209	Bi	3	1312472	1.90	1422569	92.3	80 - 120

Tune File# 1 c:\icpchem\1\7500\h2.u
 Tune File# 2 c:\icpchem\1\7500\he.u
 Tune File# 3 c:\icpchem\1\7500\nogas.u

ISTD Ref File : C:\ICPCHEM\1\DATA\06L11r00.B\004CALB.D\004CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06
 Seqnum : 66497847012
 Cal : 66497847001
 Standards: S4982

File : 111r0012
 Caldate: 11-DEC-2006

IDF : 1.0
 Time : 11-DEC-2006 18:36

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.5546	0.5125	10000	10310	ug/L	3	10	
Antimony	A	0.3115	0.2991	100.0	97.87	ug/L	-2	10	
Barium	A	0.0749	0.0660	100.0	102.7	ug/L	3	10	
Beryllium	A	0.2597	0.2714	100.0	102.9	ug/L	3	10	
Cadmium	A	0.0819	0.0792	100.0	102.7	ug/L	3	10	
Calcium	A	0.0307	0.0221	10000	10380	ug/L	4	10	
Lead	A	0.8015	0.7540	100.0	101.7	ug/L	2	10	
Magnesium	A	0.4561	0.4107	10000	10280	ug/L	3	10	
Molybdenum	A	0.2335	0.2123	100.0	101.9	ug/L	2	10	
Potassium	A	1.6174	0.6444	10000	10280	ug/L	3	10	
Silver	A	0.3170	0.3088	100.0	98.64	ug/L	-1	10	
Thallium	A	0.7672	0.7528	50.00	47.84	ug/L	-4	10	
Arsenic	E	0.5885	0.5537	100.0	103.0	ug/L	3	10	
Chromium	E	3.4288	2.5602	100.0	102.0	ug/L	2	10	
Cobalt	E	4.2847	4.0936	100.0	103.2	ug/L	3	10	
Copper	E	12.334	4.8238	100.0	103.9	ug/L	4	10	
Manganese	E	1.8496	1.6339	100.0	102.5	ug/L	3	10	
Nickel	E	1.8789	1.0755	100.0	103.7	ug/L	4	10	
Sodium	E	1.0250	0.4722	10000	10260	ug/L	3	10	
Vanadium	E	2.6556	2.0620	100.0	101.6	ug/L	2	10	
Zinc	E	2.8155	0.9477	100.0	103.8	ug/L	4	10	
Iron	H	0.9934	0.8540	10000	10210	ug/L	2	10	
Selenium	H	0.1211	0.1149	100.0	103.6	ug/L	4	10	

ISTD (ICALBLK 111r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	274069	265605	-3.09
Scandium	A	482044	475523	-1.35
Scandium	E	25904	24855	-4.05
Scandium	H	310660	300280	-3.34
Germanium	H	83668	81340	-2.78
Germanium	E	15899	15216	-4.30
Indium	A	1071474	1062216	-0.86
Bismuth	A	1422569	1335067	-6.15
Yttrium	A	914802	909191	-0.61
Terbium	A	1864710	1842271	-1.20

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
 Seqnum : 66497847034 File : l11r0034 IDF : 1.0
 Cal : 66497847001 Caldate: 11-DEC-2006 Time : 11-DEC-2006 20:45
 Standards: S4983, S4635

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.5546	0.4984	10000	10030	ug/L	0	10	
Antimony	A	0.3115	0.3204	100.0	104.8	ug/L	5	10	
Barium	A	0.0749	0.0665	100.0	103.5	ug/L	4	10	
Beryllium	A	0.2597	0.2767	100.0	104.9	ug/L	5	10	
Cadmium	A	0.0819	0.0840	100.0	109.0	ug/L	9	10	
Calcium	A	0.0307	0.0223	10000	10480	ug/L	5	10	
Lead	A	0.8015	0.7516	100.0	101.4	ug/L	1	10	
Magnesium	A	0.4561	0.3983	10000	9964	ug/L	0	10	
Molybdenum	A	0.2335	0.2133	100.0	102.4	ug/L	2	10	
Potassium	A	1.6174	0.6511	10000	10390	ug/L	4	10	
Silver	A	0.3170	0.3280	100.0	104.8	ug/L	5	10	
Thallium	A	0.7672	0.8201	50.00	52.12	ug/L	4	10	
Arsenic	E	0.5885	0.5577	100.0	103.8	ug/L	4	10	
Chromium	E	3.4288	2.5938	100.0	103.3	ug/L	3	10	
Cobalt	E	4.2847	4.1660	100.0	105.0	ug/L	5	10	
Copper	E	12.334	4.7546	100.0	102.4	ug/L	2	10	
Manganese	E	1.8496	1.6594	100.0	104.1	ug/L	4	10	
Nickel	E	1.8789	1.0927	100.0	105.4	ug/L	5	10	
Sodium	E	1.0250	0.4671	10000	10150	ug/L	2	10	
Vanadium	E	2.6556	2.0855	100.0	102.8	ug/L	3	10	
Zinc	E	2.8155	0.9289	100.0	101.7	ug/L	2	10	r2 ***
Iron	H	0.9934	0.8579	10000	10260	ug/L	3	10	
Selenium	H	0.1211	0.1145	100.0	103.2	ug/L	3	10	

ISTD (ICALBLK l11r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	274069	195387	-28.71
Scandium	A	482044	364697	-24.34
Scandium	E	25904	18964	-26.79
Scandium	H	310660	218395	-29.70
Germanium	H	83668	61253	-26.79
Germanium	E	15899	12044	-24.25
Indium	A	1071474	812730	-24.15
Bismuth	A	1422569	1005778	-29.30
Yttrium	A	914802	732403	-19.94
Terbium	A	1864710	1515840	-18.71

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
 Seqnum : 66497847050
 Cal : 66497847001
 Standards: S4983, S4635

File : l11r0050
 Caldate: 11-DEC-2006

IDF : 1.0
 Time : 11-DEC-2006 22:17

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.5546	0.4904	10000	9870	ug/L	-1	10	
Antimony	A	0.3115	0.3140	100.0	102.7	ug/L	3	10	
Barium	A	0.0749	0.0670	100.0	104.2	ug/L	4	10	
Beryllium	A	0.2597	0.2715	100.0	103.0	ug/L	3	10	
Cadmium	A	0.0819	0.0823	100.0	106.7	ug/L	7	10	
Calcium	A	0.0307	0.0220	10000	10340	ug/L	3	10	
Lead	A	0.8015	0.7400	100.0	99.82	ug/L	0	10	
Magnesium	A	0.4561	0.3908	10000	9777	ug/L	-2	10	
Molybdenum	A	0.2335	0.2104	100.0	101.0	ug/L	1	10	
Potassium	A	1.6174	0.6393	10000	10200	ug/L	2	10	
Silver	A	0.3170	0.3234	100.0	103.3	ug/L	3	10	
Thallium	A	0.7672	0.8068	50.00	51.27	ug/L	3	10	
Arsenic	E	0.5885	0.5696	100.0	106.0	ug/L	6	10	
Chromium	E	3.4288	2.6297	100.0	104.7	ug/L	5	10	
Cobalt	E	4.2847	4.2133	100.0	106.2	ug/L	6	10	
Copper	E	12.334	4.8409	100.0	104.3	ug/L	4	10	
Manganese	E	1.8496	1.6679	100.0	104.6	ug/L	5	10	
Nickel	E	1.8789	1.1093	100.0	107.0	ug/L	7	10	
Sodium	E	1.0250	0.4690	10000	10190	ug/L	2	10	
Vanadium	E	2.6556	2.1247	100.0	104.7	ug/L	5	10	
Zinc	E	2.8155	0.9456	100.0	103.5	ug/L	4	10	r2 ***
Iron	H	0.9934	0.8791	10000	10510	ug/L	5	10	
Selenium	H	0.1211	0.1176	100.0	106.0	ug/L	6	10	

ISTD (ICALBLK l11r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	274069	207881	-24.15
Scandium	A	482044	388464	-19.41
Scandium	E	25904	19366	-25.24
Scandium	H	310660	216136	-30.43
Germanium	H	83668	60730	-27.42
Germanium	E	15899	12199	-23.27
Indium	A	1071474	856266	-20.09
Bismuth	A	1422569	1030082	-27.59
Yttrium	A	914802	774152	-15.37
Terbium	A	1864710	1554867	-16.62

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
 Seqnum : 66497847061
 Cal : 66497847001
 Standards: S4983, S4635

File : 111r0061
 Caldate: 11-DEC-2006

IDF : 1.0
 Time : 11-DEC-2006 23:21

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.5546	0.4936	10000	9934	ug/L	-1	10	
Antimony	A	0.3115	0.3183	100.0	104.2	ug/L	4	10	
Barium	A	0.0749	0.0681	100.0	106.0	ug/L	6	10	
Beryllium	A	0.2597	0.2750	100.0	104.3	ug/L	4	10	
Cadmium	A	0.0819	0.0835	100.0	108.4	ug/L	8	10	
Calcium	A	0.0307	0.0221	10000	10380	ug/L	4	10	
Lead	A	0.8015	0.7504	100.0	101.2	ug/L	1	10	
Magnesium	A	0.4561	0.3941	10000	9859	ug/L	-1	10	
Molybdenum	A	0.2335	0.2124	100.0	102.0	ug/L	2	10	
Potassium	A	1.6174	0.6449	10000	10290	ug/L	3	10	
Silver	A	0.3170	0.3278	100.0	104.7	ug/L	5	10	
Thallium	A	0.7672	0.8198	50.00	52.10	ug/L	4	10	
Arsenic	E	0.5885	0.5605	100.0	104.3	ug/L	4	10	
Chromium	E	3.4288	2.5575	100.0	101.9	ug/L	2	10	
Cobalt	E	4.2847	4.1206	100.0	103.8	ug/L	4	10	
Copper	E	12.334	4.7812	100.0	103.0	ug/L	3	10	
Manganese	E	1.8496	1.6310	100.0	102.3	ug/L	2	10	
Nickel	E	1.8789	1.0844	100.0	104.6	ug/L	5	10	
Sodium	E	1.0250	0.4583	10000	9954	ug/L	0	10	
Vanadium	E	2.6556	2.0656	100.0	101.8	ug/L	2	10	
Zinc	E	2.8155	0.9333	100.0	102.2	ug/L	2	10	r2 ***
Iron	H	0.9934	0.8743	10000	10460	ug/L	5	10	
Selenium	H	0.1211	0.1159	100.0	104.5	ug/L	5	10	

ISTD (ICALBLK 111r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	274069	203471	-25.76
Scandium	A	482044	379066	-21.36
Scandium	E	25904	19498	-24.73
Scandium	H	310660	207616	-33.17
Germanium	H	83668	58632	-29.92
Germanium	E	15899	12160	-23.52
Indium	A	1071474	826796	-22.84
Bismuth	A	1422569	998682	-29.80
Yttrium	A	914802	750571	-17.95
Terbium	A	1864710	1500843	-19.51

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
 Seqnum : 66497847081
 Cal : 66497847001
 Standards: S4983, S4635

File : 111r0081
 Caldate: 11-DEC-2006

IDF : 1.0
 Time : 12-DEC-2006 01:16

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.5546	0.4780	10000	9618	ug/L	-4	10	
Antimony	A	0.3115	0.3147	100.0	103.0	ug/L	3	10	
Barium	A	0.0749	0.0672	100.0	104.6	ug/L	5	10	
Beryllium	A	0.2597	0.2763	100.0	104.8	ug/L	5	10	
Cadmium	A	0.0819	0.0826	100.0	107.1	ug/L	7	10	
Calcium	A	0.0307	0.0221	10000	10410	ug/L	4	10	
Lead	A	0.8015	0.7274	100.0	98.12	ug/L	-2	10	
Magnesium	A	0.4561	0.3766	10000	9422	ug/L	-6	10	
Molybdenum	A	0.2335	0.2118	100.0	101.7	ug/L	2	10	
Potassium	A	1.6174	0.6385	10000	10190	ug/L	2	10	
Silver	A	0.3170	0.3234	100.0	103.3	ug/L	3	10	
Thallium	A	0.7672	0.7981	50.00	50.71	ug/L	1	10	
Arsenic	E	0.5885	0.5663	100.0	105.4	ug/L	5	10	
Chromium	E	3.4288	2.5512	100.0	101.6	ug/L	2	10	
Cobalt	E	4.2847	4.1070	100.0	103.5	ug/L	4	10	
Copper	E	12.334	4.6599	100.0	100.4	ug/L	0	10	
Manganese	E	1.8496	1.6393	100.0	102.8	ug/L	3	10	
Nickel	E	1.8789	1.0749	100.0	103.7	ug/L	4	10	
Sodium	E	1.0250	0.4434	10000	9629	ug/L	-4	10	
Vanadium	E	2.6556	2.0584	100.0	101.4	ug/L	1	10	
Zinc	E	2.8155	0.9204	100.0	100.7	ug/L	1	10	r2 ***
Iron	H	0.9934	0.8897	10000	10640	ug/L	6	10	
Selenium	H	0.1211	0.1188	100.0	107.1	ug/L	7	10	

ISTD (ICALBLK 111r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	274069	152752	-44.27
Scandium	A	482044	300744	-37.61
Scandium	E	25904	15755	-39.18
Scandium	H	310660	160202	-48.43
Germanium	H	83668	46808	-44.05
Germanium	E	15899	10056	-36.75
Indium	A	1071474	702807	-34.41
Bismuth	A	1422569	875998	-38.42
Yttrium	A	914802	624816	-31.70
Terbium	A	1864710	1289767	-30.83

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
 Seqnum : 66497847097
 Cal : 66497847001
 Standards: S4983, S4635

File : 111r0097
 Caldate: 11-DEC-2006

IDF : 1.0
 Time : 12-DEC-2006 02:48

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.5546	0.4645	10000	9347	ug/L	-7	10	
Antimony	A	0.3115	0.3070	100.0	100.5	ug/L	1	10	
Barium	A	0.0749	0.0648	100.0	100.7	ug/L	1	10	
Beryllium	A	0.2597	0.2699	100.0	102.4	ug/L	2	10	
Cadmium	A	0.0819	0.0800	100.0	103.8	ug/L	4	10	
Calcium	A	0.0307	0.0214	10000	10060	ug/L	1	10	
Lead	A	0.8015	0.6994	100.0	94.34	ug/L	-6	10	
Magnesium	A	0.4561	0.3673	10000	9188	ug/L	-8	10	
Molybdenum	A	0.2335	0.2060	100.0	98.86	ug/L	-1	10	
Potassium	A	1.6174	0.6219	10000	9918	ug/L	-1	10	
Silver	A	0.3170	0.3162	100.0	101.0	ug/L	1	10	
Thallium	A	0.7672	0.7828	50.00	49.74	ug/L	-1	10	
Arsenic	E	0.5885	0.5600	100.0	104.2	ug/L	4	10	
Chromium	E	3.4288	2.5566	100.0	101.8	ug/L	2	10	
Cobalt	E	4.2847	4.0862	100.0	103.0	ug/L	3	10	
Copper	E	12.334	4.6388	100.0	99.93	ug/L	0	10	
Manganese	E	1.8496	1.6463	100.0	103.2	ug/L	3	10	
Nickel	E	1.8789	1.0795	100.0	104.1	ug/L	4	10	
Sodium	E	1.0250	0.4450	10000	9664	ug/L	-3	10	
Vanadium	E	2.6556	2.0614	100.0	101.6	ug/L	2	10	
Zinc	E	2.8155	0.9081	100.0	99.35	ug/L	-1	10	r2 ***
Iron	H	0.9934	0.8660	10000	10360	ug/L	4	10	
Selenium	H	0.1211	0.1150	100.0	103.7	ug/L	4	10	

ISTD (ICALBLK 111r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	274069	159781	-41.70
Scandium	A	482044	312754	-35.12
Scandium	E	25904	16101	-37.84
Scandium	H	310660	163968	-47.22
Germanium	H	83668	47560	-43.16
Germanium	E	15899	10314	-35.13
Indium	A	1071474	721409	-32.67
Bismuth	A	1422569	887590	-37.61
Yttrium	A	914802	645543	-29.43
Terbium	A	1864710	1327597	-28.80

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
 Seqnum : 66497847109
 Cal : 66497847001
 Standards: S4983, S4635

File : 111r0109
 Caldate: 11-DEC-2006

IDF : 1.0
 Time : 12-DEC-2006 03:57

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.5546	0.4752	10000	9563	ug/L	-4	10	
Antimony	A	0.3115	0.3112	100.0	101.8	ug/L	2	10	
Barium	A	0.0749	0.0664	100.0	103.2	ug/L	3	10	
Beryllium	A	0.2597	0.2696	100.0	102.2	ug/L	2	10	
Cadmium	A	0.0819	0.0813	100.0	105.5	ug/L	6	10	
Calcium	A	0.0307	0.0217	10000	10190	ug/L	2	10	
Lead	A	0.8015	0.7123	100.0	96.08	ug/L	-4	10	
Magnesium	A	0.4561	0.3729	10000	9328	ug/L	-7	10	
Molybdenum	A	0.2335	0.2088	100.0	100.2	ug/L	0	10	
Potassium	A	1.6174	0.6326	10000	10090	ug/L	1	10	
Silver	A	0.3170	0.3208	100.0	102.5	ug/L	3	10	
Thallium	A	0.7672	0.7887	50.00	50.11	ug/L	0	10	
Arsenic	E	0.5885	0.5604	100.0	104.3	ug/L	4	10	
Chromium	E	3.4288	2.5664	100.0	102.2	ug/L	2	10	
Cobalt	E	4.2847	4.1161	100.0	103.7	ug/L	4	10	
Copper	E	12.334	4.6343	100.0	99.83	ug/L	0	10	
Manganese	E	1.8496	1.6592	100.0	104.1	ug/L	4	10	
Nickel	E	1.8789	1.0806	100.0	104.2	ug/L	4	10	
Sodium	E	1.0250	0.4521	10000	9820	ug/L	-2	10	
Vanadium	E	2.6556	2.0724	100.0	102.1	ug/L	2	10	
Zinc	E	2.8155	0.9133	100.0	99.93	ug/L	0	10	r2 ***
Iron	H	0.9934	0.8696	10000	10400	ug/L	4	10	
Selenium	H	0.1211	0.1165	100.0	105.1	ug/L	5	10	

ISTD (ICALBLK 111r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	274069	161085	-41.22
Scandium	A	482044	309701	-35.75
Scandium	E	25904	15877	-38.71
Scandium	H	310660	162241	-47.78
Germanium	H	83668	47153	-43.64
Germanium	E	15899	10215	-35.75
Indium	A	1071474	706381	-34.07
Bismuth	A	1422569	872666	-38.66
Yttrium	A	914802	633049	-30.80
Terbium	A	1864710	1291136	-30.76

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06

IDF : 1.0

Seqnum : 66497847016

File : l11r0016

Time : 11-DEC-2006 19:00

Cal : 66497847001

Caldate: 11-DEC-2006

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.07288	ug/L	
Antimony	A	[0.04379]	0.1000	0.003002	ug/L	!ib
Barium	A	[0.02321]	0.1000	0.005626	ug/L	!ib
Beryllium	A	[0.03501]	0.1000	0.001160	ug/L	!ib
Cadmium	A	[0.02551]	0.1000	0.001660	ug/L	!ib
Calcium	A	ND	10.00	0.1008	ug/L	
Lead	A	[0.03437]	0.1000	0.002114	ug/L	!ib
Magnesium	A	ND	10.00	0.2094	ug/L	
Molybdenum	A	ND	0.1000	0.03128	ug/L	
Potassium	A	ND	10.00	8.951	ug/L	
Silver	A	[0.03550]	0.1000	0.001136	ug/L	!ib
Thallium	A	[0.01543]	0.05000	0.004069	ug/L	!ib
Arsenic	E	[0.03196]	0.1000	0.007097	ug/L	!ib
Chromium	E	ND	0.1000	0	ug/L	
Cobalt	E	[0.01483]	0.1000	0.0006581	ug/L	!ib
Copper	E	ND	0.1000	0.001005	ug/L	
Manganese	E	[0.02245]	0.1000	0.002754	ug/L	!ib
Nickel	E	ND	0.1000	0	ug/L	
Sodium	E	ND	10.00	0	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.5000	0.06332	ug/L	
Iron	H	[1.762]	10.00	0.1610	ug/L	!ib
Selenium	H	[0.02113]	0.1000	0.003852	ug/L	!ib

ISTD (ICALBLK l11r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	274069	260417	-4.98
Scandium	A	482044	459157	-4.75
Scandium	E	25904	24009	-7.32
Scandium	H	310660	284161	-8.53
Germanium	H	83668	77086	-7.87
Germanium	E	15899	14736	-7.32
Indium	A	1071474	1002672	-6.42
Bismuth	A	1422569	1333370	-6.27
Yttrium	A	914802	876711	-4.16
Terbium	A	1864710	1776422	-4.73

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
 Seqnum : 66497847036
 Cal : 66497847001

File : 111r0036
 Caldate: 11-DEC-2006

IDF : 1.0
 Time : 11-DEC-2006 20:57

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.07288	ug/L	
Antimony	A	[0.04676]	0.1000	0.003002	ug/L	!ib
Barium	A	[0.05526]	0.1000	0.005626	ug/L	!ib
Beryllium	A	[0.04936]	0.1000	0.001160	ug/L	!ib
Cadmium	A	[0.02815]	0.1000	0.001660	ug/L	!ib
Calcium	A	ND	10.00	0.1008	ug/L	
Lead	A	[0.03855]	0.1000	0.002114	ug/L	!ib
Magnesium	A	ND	10.00	0.2094	ug/L	
Molybdenum	A	ND	0.1000	0.03128	ug/L	
Potassium	A	ND	10.00	8.951	ug/L	
Silver	A	[0.03561]	0.1000	0.001136	ug/L	!ib
Thallium	A	[0.03759]	0.05000	0.004069	ug/L	!ib
Arsenic	E	[0.03921]	0.1000	0.007097	ug/L	!ib
Chromium	E	ND	0.1000	0	ug/L	
Cobalt	E	[0.01617]	0.1000	0.0006581	ug/L	!ib
Copper	E	[0.01053]	0.1000	0.001005	ug/L	!ib
Manganese	E	[0.02259]	0.1000	0.002754	ug/L	!ib
Nickel	E	ND	0.1000	0	ug/L	
Sodium	E	ND	10.00	0	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.5000	0.06332	ug/L	
Iron	H	[3.678]	10.00	0.1610	ug/L	!ib
Selenium	H	[0.03289]	0.1000	0.003852	ug/L	!ib

ISTD (ICALBLK 111r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	274069	200933	-26.69
Scandium	A	482044	367972	-23.66
Scandium	E	25904	18789	-27.47
Scandium	H	310660	212221	-31.69
Germanium	H	83668	59744	-28.59
Germanium	E	15899	11877	-25.30
Indium	A	1071474	849291	-20.74
Bismuth	A	1422569	1074234	-24.49
Yttrium	A	914802	734038	-19.76
Terbium	A	1864710	1508100	-19.12

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
 Seqnum : 66497847052
 Cal : 66497847001

File : 111r0052
 Caldate: 11-DEC-2006

IDF : 1.0
 Time : 11-DEC-2006 22:29

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.07288	ug/L	
Antimony	A	[0.02682]	0.1000	0.003002	ug/L	!ib
Barium	A	[0.01250]	0.1000	0.005626	ug/L	!ib
Beryllium	A	[0.01722]	0.1000	0.001160	ug/L	!ib
Cadmium	A	[0.005514]	0.1000	0.001660	ug/L	!ib
Calcium	A	ND	10.00	0.1008	ug/L	
Lead	A	[0.01574]	0.1000	0.002114	ug/L	!ib
Magnesium	A	ND	10.00	0.2094	ug/L	
Molybdenum	A	ND	0.1000	0.03128	ug/L	
Potassium	A	ND	10.00	8.951	ug/L	
Silver	A	[0.01769]	0.1000	0.001136	ug/L	!ib
Thallium	A	[0.01794]	0.05000	0.004069	ug/L	!ib
Arsenic	E	[0.06548]	0.1000	0.007097	ug/L	!ib
Chromium	E	ND	0.1000	0	ug/L	
Cobalt	E	[0.02545]	0.1000	0.0006581	ug/L	!ib
Copper	E	[0.006482]	0.1000	0.001005	ug/L	!ib
Manganese	E	[0.05501]	0.1000	0.002754	ug/L	!ib
Nickel	E	ND	0.1000	0	ug/L	
Sodium	E	ND	10.00	0	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.5000	0.06332	ug/L	
Iron	H	[5.609]	10.00	0.1610	ug/L	!ib
Selenium	H	[0.03285]	0.1000	0.003852	ug/L	!ib

ISTD (ICALBLK 111r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	274069	217090	-20.79
Scandium	A	482044	411375	-14.66
Scandium	E	25904	19615	-24.28
Scandium	H	310660	215919	-30.50
Germanium	H	83668	61486	-26.51
Germanium	E	15899	12402	-22.00
Indium	A	1071474	936293	-12.62
Bismuth	A	1422569	1194139	-16.06
Yttrium	A	914802	818337	-10.54
Terbium	A	1864710	1650209	-11.50

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
 Seqnum : 66497847063
 Cal : 66497847001

File : 111r0063
 Caldate: 11-DEC-2006

IDF : 1.0
 Time : 11-DEC-2006 23:32

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	[0.2863]	10.00	0.07288	ug/L	!ib
Antimony	A	[0.06661]	0.1000	0.003002	ug/L	!ib
Barium	A	[0.05914]	0.1000	0.005626	ug/L	!ib
Beryllium	A	[0.05038]	0.1000	0.001160	ug/L	!ib
Cadmium	A	[0.06665]	0.1000	0.001660	ug/L	!ib
Calcium	A	ND	10.00	0.1008	ug/L	
Lead	A	[0.05249]	0.1000	0.002114	ug/L	!ib
Magnesium	A	ND	10.00	0.2094	ug/L	
Molybdenum	A	ND	0.1000	0.03128	ug/L	
Potassium	A	ND	10.00	8.951	ug/L	
Silver	A	[0.05528]	0.1000	0.001136	ug/L	!ib
Thallium	A	0.05027	0.05000	0.004069	ug/L	ib ***
Arsenic	E	[0.04021]	0.1000	0.007097	ug/L	!ib
Chromium	E	ND	0.1000	0	ug/L	
Cobalt	E	[0.03576]	0.1000	0.0006581	ug/L	!ib
Copper	E	[0.02117]	0.1000	0.001005	ug/L	!ib
Manganese	E	[0.05650]	0.1000	0.002754	ug/L	!ib
Nickel	E	ND	0.1000	0	ug/L	
Sodium	E	ND	10.00	0	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.5000	0.06332	ug/L	
Iron	H	[5.440]	10.00	0.1610	ug/L	!ib
Selenium	H	[0.07828]	0.1000	0.003852	ug/L	!ib

ISTD (ICALBLK 111r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	274069	212846	-22.34
Scandium	A	482044	397778	-17.48
Scandium	E	25904	19377	-25.20
Scandium	H	310660	210628	-32.20
Germanium	H	83668	59855	-28.46
Germanium	E	15899	12208	-23.22
Indium	A	1071474	897757	-16.21
Bismuth	A	1422569	1106117	-22.25
Yttrium	A	914802	787567	-13.91
Terbium	A	1864710	1576603	-15.45

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
 Seqnum : 66497847084
 Cal : 66497847001

File : 111r0084
 Caldate: 11-DEC-2006

IDF : 1.0
 Time : 12-DEC-2006 01:34

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.07288	ug/L	
Antimony	A	ND	0.1000	0.003002	ug/L	
Barium	A	ND	0.1000	0.005626	ug/L	
Beryllium	A	[0.01053]	0.1000	0.001160	ug/L	!ib
Cadmium	A	ND	0.1000	0.001660	ug/L	
Calcium	A	ND	10.00	0.1008	ug/L	
Lead	A	ND	0.1000	0.002114	ug/L	
Magnesium	A	ND	10.00	0.2094	ug/L	
Molybdenum	A	ND	0.1000	0.03128	ug/L	
Potassium	A	ND	10.00	8.951	ug/L	
Silver	A	ND	0.1000	0.001136	ug/L	
Thallium	A	[0.008344]	0.05000	0.004069	ug/L	!ib
Arsenic	E	ND	0.1000	0.007097	ug/L	
Chromium	E	ND	0.1000	0	ug/L	
Cobalt	E	ND	0.1000	0.0006581	ug/L	
Copper	E	ND	0.1000	0.001005	ug/L	
Manganese	E	ND	0.1000	0.002754	ug/L	
Nickel	E	ND	0.1000	0	ug/L	
Sodium	E	ND	10.00	0	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.5000	0.06332	ug/L	
Iron	H	[3.884]	10.00	0.1610	ug/L	!ib
Selenium	H	[0.01703]	0.1000	0.003852	ug/L	!ib

ISTD (ICALBLK 111r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	274069	154802	-43.52
Scandium	A	482044	300307	-37.70
Scandium	E	25904	15765	-39.14
Scandium	H	310660	161400	-48.05
Germanium	H	83668	47113	-43.69
Germanium	E	15899	10092	-36.53
Indium	A	1071474	724766	-32.36
Bismuth	A	1422569	917062	-35.53
Yttrium	A	914802	625391	-31.64
Terbium	A	1864710	1285161	-31.08

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
 Seqnum : 66497847100
 Cal : 66497847001

File : 111r0100
 Caldate: 11-DEC-2006

IDF : 1.0
 Time : 12-DEC-2006 03:05

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.07288	ug/L	
Antimony	A	[0.03772]	0.1000	0.003002	ug/L	!ib
Barium	A	[0.02014]	0.1000	0.005626	ug/L	!ib
Beryllium	A	[0.04701]	0.1000	0.001160	ug/L	!ib
Cadmium	A	[0.02852]	0.1000	0.001660	ug/L	!ib
Calcium	A	ND	10.00	0.1008	ug/L	
Lead	A	[0.03764]	0.1000	0.002114	ug/L	!ib
Magnesium	A	ND	10.00	0.2094	ug/L	
Molybdenum	A	ND	0.1000	0.03128	ug/L	
Potassium	A	ND	10.00	8.951	ug/L	
Silver	A	[0.03370]	0.1000	0.001136	ug/L	!ib
Thallium	A	[0.02340]	0.05000	0.004069	ug/L	!ib
Arsenic	E	[0.03604]	0.1000	0.007097	ug/L	!ib
Chromium	E	ND	0.1000	0	ug/L	
Cobalt	E	[0.008206]	0.1000	0.0006581	ug/L	!ib
Copper	E	ND	0.1000	0.001005	ug/L	
Manganese	E	[0.02837]	0.1000	0.002754	ug/L	!ib
Nickel	E	ND	0.1000	0	ug/L	
Sodium	E	ND	10.00	0	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.5000	0.06332	ug/L	
Iron	H	[3.114]	10.00	0.1610	ug/L	!ib
Selenium	H	[0.03148]	0.1000	0.003852	ug/L	!ib

ISTD (ICALBLK 111r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	274069	164448	-40.00
Scandium	A	482044	317099	-34.22
Scandium	E	25904	16187	-37.51
Scandium	H	310660	162748	-47.61
Germanium	H	83668	47487	-43.24
Germanium	E	15899	10252	-35.52
Indium	A	1071474	750367	-29.97
Bismuth	A	1422569	936182	-34.19
Yttrium	A	914802	651326	-28.80
Terbium	A	1864710	1315016	-29.48

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
 Seqnum : 66497847112
 Cal : 66497847001

File : 111r0112
 Caldate: 11-DEC-2006

IDF : 1.0
 Time : 12-DEC-2006 04:15

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	ND	10.00	0.07288	ug/L	
Antimony	A	[0.02398]	0.1000	0.003002	ug/L	!ib
Barium	A	[0.01111]	0.1000	0.005626	ug/L	!ib
Beryllium	A	[0.02413]	0.1000	0.001160	ug/L	!ib
Cadmium	A	[0.01201]	0.1000	0.001660	ug/L	!ib
Calcium	A	ND	10.00	0.1008	ug/L	
Lead	A	[0.02015]	0.1000	0.002114	ug/L	!ib
Magnesium	A	ND	10.00	0.2094	ug/L	
Molybdenum	A	ND	0.1000	0.03128	ug/L	
Potassium	A	ND	10.00	8.951	ug/L	
Silver	A	[0.01663]	0.1000	0.001136	ug/L	!ib
Thallium	A	[0.01630]	0.05000	0.004069	ug/L	!ib
Arsenic	E	[0.02779]	0.1000	0.007097	ug/L	!ib
Chromium	E	ND	0.1000	0	ug/L	
Cobalt	E	[0.008664]	0.1000	0.0006581	ug/L	!ib
Copper	E	ND	0.1000	0.001005	ug/L	
Manganese	E	[0.08748]	0.1000	0.002754	ug/L	!ib
Nickel	E	ND	0.1000	0	ug/L	
Sodium	E	ND	10.00	0	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.5000	0.06332	ug/L	
Iron	H	[3.040]	10.00	0.1610	ug/L	!ib
Selenium	H	[0.03428]	0.1000	0.003852	ug/L	!ib

ISTD (ICALBLK 111r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	274069	162932	-40.55
Scandium	A	482044	306173	-36.48
Scandium	E	25904	15989	-38.28
Scandium	H	310660	160014	-48.49
Germanium	H	83668	46787	-44.08
Germanium	E	15899	10219	-35.73
Indium	A	1071474	728747	-31.99
Bismuth	A	1422569	899143	-36.79
Yttrium	A	914802	629637	-31.17
Terbium	A	1864710	1267783	-32.01

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06
 Seqnum : 66497847017
 Cal : 66497847001
 Standards: S4984, S4635

File : 111r0017
 Caldate: 11-DEC-2006

IDF : 1.0
 Time : 11-DEC-2006 19:05

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	2.654	0.1000	ug/L	
Barium	A	1.531	0.1000	ug/L	
Beryllium	A	[0.02324]	0.1000	ug/L	
Cadmium	A	1.736	0.1000	ug/L	
Lead	A	1.488	0.1000	ug/L	
Silver	A	0.2175	0.1000	ug/L	
Thallium	A	0.05455	0.05000	ug/L	
Arsenic	E	0.2666	0.1000	ug/L	
Chromium	E	1.274	0.1000	ug/L	
Cobalt	E	2.991	0.1000	ug/L	
Copper	E	3.477	0.1000	ug/L	
Manganese	E	1.601	0.1000	ug/L	
Nickel	E	1.250	0.1000	ug/L	
Vanadium	E	0.2017	0.1000	ug/L	
Zinc	E	7.091	0.5000	ug/L	
Selenium	H	0.1345	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	115700	ug/L	116
Calcium	A	300000	350900	ug/L	117
Magnesium	A	100000	112300	ug/L	112
Molybdenum	A	2000	2474	ug/L	124
Potassium	A	100000	116300	ug/L	116
Sodium	E	250000	283800	ug/L	114
Iron	H	250000	277500	ug/L	111

ISTD (ICALBLK 111r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	274069	216335	-21.07
Scandium	A	482044	430924	-10.60
Scandium	E	25904	23011	-11.17
Scandium	H	310660	277682	-10.62
Germanium	H	83668	73046	-12.70
Germanium	E	15899	13825	-13.05
Indium	A	1071474	854016	-20.30
Bismuth	A	1422569	965512	-32.13
Yttrium	A	914802	814648	-10.95
Terbium	A	1864710	1593488	-14.54

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06
 Seqnum : 66497847018 File : 111r0018 IDF : 1.0
 Cal : 66497847001 Caldate: 11-DEC-2006 Time : 11-DEC-2006 19:11
 Standards: S4985, S4635

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	114500	ug/L	15		
Cadmium	A	100.0	118.2	ug/L	18	20	
Calcium	A	300000	349200	ug/L	16		
Magnesium	A	100000	111000	ug/L	11		
Molybdenum	A	2000	2461	ug/L	23		
Potassium	A	100000	115700	ug/L	16		
Silver	A	50.00	54.89	ug/L	10	20	
Arsenic	E	100.0	117.0	ug/L	17	20	
Chromium	E	200.0	225.9	ug/L	13	20	
Cobalt	E	200.0	212.6	ug/L	6	20	
Copper	E	200.0	200.4	ug/L	0	20	
Manganese	E	200.0	223.1	ug/L	12	20	
Nickel	E	200.0	206.9	ug/L	3	20	
Sodium	E	250000	276000	ug/L	10		
Vanadium	E	200.0	230.0	ug/L	15	20	
Zinc	E	100.0	100.7	ug/L	1	20	
Iron	H	250000	272000	ug/L	9		
Selenium	H	100.0	105.4	ug/L	5	20	

ISTD (ICALBLK 111r0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	310660	253157	-18.51
Scandium	A	482044	396358	-17.78
Scandium	E	25904	21252	-17.96
Germanium	H	83668	67722	-19.06
Germanium	E	15899	12977	-18.38
Indium	A	1071474	793697	-25.92
Yttrium	A	914802	756538	-17.30

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06
 Seqnum : 66497847065
 Cal : 66497847001
 Standards: S4984, S4635

File : 111r0065
 Caldate: 11-DEC-2006

IDF : 1.0
 Time : 11-DEC-2006 23:44

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	2.470	0.1000	ug/L	
Barium	A	1.198	0.1000	ug/L	
Beryllium	A	[0.01988]	0.1000	ug/L	
Cadmium	A	1.438	0.1000	ug/L	
Lead	A	1.271	0.1000	ug/L	
Silver	A	0.1651	0.1000	ug/L	
Thallium	A	[0.04941]	0.05000	ug/L	
Arsenic	E	0.2986	0.1000	ug/L	
Chromium	E	1.049	0.1000	ug/L	
Cobalt	E	2.799	0.1000	ug/L	
Copper	E	2.164	0.1000	ug/L	
Manganese	E	1.370	0.1000	ug/L	
Nickel	E	0.9637	0.1000	ug/L	
Vanadium	E	0.1453	0.1000	ug/L	
Zinc	E	4.153	0.5000	ug/L	
Selenium	H	[0.08833]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	104300	ug/L	104
Calcium	A	300000	323600	ug/L	108
Magnesium	A	100000	100300	ug/L	100
Molybdenum	A	2000	2279	ug/L	114
Potassium	A	100000	107500	ug/L	108
Sodium	E	250000	249600	ug/L	100
Iron	H	250000	261400	ug/L	105

ISTD (ICALBLK 111r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	274069	164615	-39.94
Scandium	A	482044	333711	-30.77
Scandium	E	25904	17492	-32.47
Scandium	H	310660	192661	-37.98
Germanium	H	83668	52993	-36.66
Germanium	E	15899	10865	-31.66
Indium	A	1071474	699544	-34.71
Bismuth	A	1422569	793033	-44.25
Yttrium	A	914802	663380	-27.48
Terbium	A	1864710	1308371	-29.84

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06
 Seqnum : 66497847066
 Cal : 66497847001
 Standards: S4985, S4635

File : 111r0066
 Caldate: 11-DEC-2006

IDF : 1.0
 Time : 11-DEC-2006 23:49

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	101100	ug/L	1		
Cadmium	A	100.0	109.2	ug/L	9	20	
Calcium	A	300000	316900	ug/L	6		
Magnesium	A	100000	96970	ug/L	-3		
Molybdenum	A	2000	2251	ug/L	13		
Potassium	A	100000	105300	ug/L	5		
Silver	A	50.00	51.70	ug/L	3	20	
Arsenic	E	100.0	113.4	ug/L	13	20	
Chromium	E	200.0	215.5	ug/L	8	20	
Cobalt	E	200.0	206.5	ug/L	3	20	
Copper	E	200.0	188.7	ug/L	-6	20	
Manganese	E	200.0	214.4	ug/L	7	20	
Nickel	E	200.0	200.7	ug/L	0	20	
Sodium	E	250000	245900	ug/L	-2		
Vanadium	E	200.0	220.5	ug/L	10	20	
Zinc	E	100.0	93.79	ug/L	-6	20	
Iron	H	250000	257900	ug/L	3		
Selenium	H	100.0	104.2	ug/L	4	20	

ISTD (ICALBLK 111r0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	310660	173739	-44.07
Scandium	A	482044	300862	-37.59
Scandium	E	25904	15753	-39.19
Germanium	H	83668	48356	-42.20
Germanium	E	15899	9925	-37.58
Indium	A	1071474	645166	-39.79
Yttrium	A	914802	606812	-33.67

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06
 Seqnum : 66497847113
 Cal : 66497847001
 Standards: S4984, S4635

File : l11r0113
 Caldate: 11-DEC-2006

IDF : 1.0
 Time : 12-DEC-2006 04:21

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	2.368	0.1000	ug/L	
Barium	A	1.298	0.1000	ug/L	
Beryllium	A	[0.01789]	0.1000	ug/L	
Cadmium	A	1.324	0.1000	ug/L	
Lead	A	1.356	0.1000	ug/L	
Silver	A	0.1780	0.1000	ug/L	
Thallium	A	[0.04456]	0.05000	ug/L	
Arsenic	E	0.2681	0.1000	ug/L	
Chromium	E	1.121	0.1000	ug/L	
Cobalt	E	2.811	0.1000	ug/L	
Copper	E	2.079	0.1000	ug/L	
Manganese	E	1.431	0.1000	ug/L	
Nickel	E	1.001	0.1000	ug/L	
Vanadium	E	0.1379	0.1000	ug/L	
Zinc	E	3.989	0.5000	ug/L	
Selenium	H	[0.06543]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	98760	ug/L	99
Calcium	A	300000	315900	ug/L	105
Magnesium	A	100000	94610	ug/L	95
Molybdenum	A	2000	2265	ug/L	113
Potassium	A	100000	104700	ug/L	105
Sodium	E	250000	243700	ug/L	97
Iron	H	250000	261500	ug/L	105

ISTD (ICALBLK l11r0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	274069	120611	-55.99
Scandium	A	482044	255548	-46.99
Scandium	E	25904	13695	-47.13
Scandium	H	310660	145783	-53.07
Germanium	H	83668	41408	-50.51
Germanium	E	15899	8950	-43.71
Indium	A	1071474	570232	-46.78
Bismuth	A	1422569	666919	-53.12
Yttrium	A	914802	530216	-42.04
Terbium	A	1864710	1030491	-44.74

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06
 Seqnum : 66497847114
 Cal : 66497847001
 Standards: S4985, S4635

File : 111r0114
 Caldate: 11-DEC-2006

IDF : 1.0
 Time : 12-DEC-2006 04:26

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	95760	ug/L	-4		
Cadmium	A	100.0	108.3	ug/L	8	20	
Calcium	A	300000	310300	ug/L	3		
Magnesium	A	100000	91440	ug/L	-9		
Molybdenum	A	2000	2233	ug/L	12		
Potassium	A	100000	102900	ug/L	3		
Silver	A	50.00	50.83	ug/L	2	20	
Arsenic	E	100.0	116.9	ug/L	17	20	
Chromium	E	200.0	218.6	ug/L	9	20	
Cobalt	E	200.0	210.3	ug/L	5	20	
Copper	E	200.0	188.9	ug/L	-6	20	
Manganese	E	200.0	220.5	ug/L	10	20	
Nickel	E	200.0	204.7	ug/L	2	20	
Sodium	E	250000	238200	ug/L	-5		
Vanadium	E	200.0	223.1	ug/L	12	20	
Zinc	E	100.0	95.30	ug/L	-5	20	
Iron	H	250000	260700	ug/L	4		
Selenium	H	100.0	104.6	ug/L	5	20	

ISTD (ICALBLK 111r0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	310660	124443	-59.94
Scandium	A	482044	229913	-52.30
Scandium	E	25904	12089	-53.33
Germanium	H	83668	36033	-56.93
Germanium	E	15899	7779	-51.07
Indium	A	1071474	524493	-51.05
Yttrium	A	914802	486881	-46.78

INTERNAL STANDARD SUMMARY Curtis & Tompkins Laboratories

Sequence Date: 11-DEC-2006
Sequence: 66497847
Instrument ID: MET06

(111r0)

ICALBLK Filename: 111r0004
Date Analyzed: 11-DEC-2006
Time Analyzed: 17:47

ICALBLK STD	IS1 (LI READING	IS2 (SC READING	IS3 (GE READING	IS4 (IN READING	IS5 (BI READING	IS6 (Y READING
274069	482044	118242	1071474	1422569	914802	
LOWER LIMIT 82221	144613	35473	321442	426771	274441	
UPPER LIMIT 328883	578453	141891	1285769	1707083	1097763	

TYPE	SAMPLE	#	IS1 (LI READING	IS2 (SC READING	IS3 (GE READING	IS4 (IN READING	IS5 (BI READING	IS6 (Y READING
ICB		016	260417	459157	114221	1002672	1333370	876711
ICSA		017	216335	430924	113443	854016	965512	814648
BLANK	QC367730	024	187146	359473	95818	840821	1075847	730944
BS	QC367731	025	184347	354298	91096	805012	1007389	720331
BSD	QC367732	026	189101	360315	93337	813093	1019328	729516
MSS	191281-001	028	193312	370469	92070	840973	1062629	733493
SER	QC367735	029	199295	371102	94105	853715	1129944	738536
MS	QC367733	030	190322	363824	91931	823955	1042680	729319
MSD	QC367734	031	189786	361886	90778	817254	1025239	722282
CCV		034	195387	364697	93622	812730	1005778	732403
CCB		036	200933	367972	93782	849291	1074234	734038
PDS	QC367736	038	185091	352054	89397	778429	973129	701932
SAMPLE	191281-002	039	186437	354425	89512	811653	1011658	709489
SAMPLE	191281-003	040	188282	356795	90934	813699	1012082	714570
SAMPLE	191281-004	041	184261	346735	88576	800081	1009338	694056
SAMPLE	191312-001	042	191992	360214	91254	831303	1037552	722131
SAMPLE	191315-001	043	185746	358333	89396	795680	972713	707260
SAMPLE	191315-002	044	184428	359285	89146	793569	969129	708384
SAMPLE	191315-003	045	189815	364561	91820	813213	996479	725130
SAMPLE	191315-004	046	189144	362031	90530	819402	1012779	714773
SAMPLE	191315-005	047	191365	372619	91268	818649	1016055	715993
CCV		050	207881	388464	98847	856266	1030082	774152
CCB		052	217090	411375	102299	936293	1194139	818337
SAMPLE	191315-006	054	192573	376946	91673	816596	996950	720812
SAMPLE	191315-007	055	197054	371902	94072	835045	1004854	733289
SAMPLE	191315-008	056	196091	371464	94157	837576	1027813	731780
CCV		061	203471	379066	95855	826796	998682	750571
CCB		063	212846	397778	98351	897757	1106117	787567

INTERNAL STANDARD SUMMARY Curtis & Tompkins Laboratories

Sequence Date: 11-DEC-2006
Sequence: 66497847
Instrument ID: MET06

(111r0)

ICALBLK Filename: 111r0004
Date Analyzed: 11-DEC-2006
Time Analyzed: 17:47

TYPE	SAMPLE	#							
ICSA		065	164615	333711	88700	699544	793033	663380	
BLANK	QC367719	070	127722	257582	73657	637192	819240	553424	
BS	QC367720	071	130787	264396	70209	635165	803963	566600	
BSD	QC367721	072	131771	264559	70577	632625	801616	565749	
MSS	191286-012	074	145036	292977	75316	697752	863089	606233	
SER	QC367724	075	147651	292669	76207	711227	890996	608000	
MS	QC367722	076	144407	290404	74710	688605	855053	603343	
MSD	QC367723	077	143935	295764	75918	697297	864304	609518	
PDS	QC367725	078	144201	292873	75615	680076	841999	610444	
CCV		081	152752	300744	78282	702807	875998	624816	
CCB		084	154802	300307	78098	724766	917062	625391	
SAMPLE	191286-001	085	151060	306152	78227	724250	910189	631282	
SAMPLE	191286-002	086	147430	297144	76599	702517	882338	616513	
SAMPLE	191286-003	087	147590	294938	75767	701493	883130	605797	
SAMPLE	191286-004	088	148153	295805	76290	705069	891357	612604	
SAMPLE	191286-005	089	144119	284166	74398	669323	848164	586839	
SAMPLE	191286-006	090	148781	294333	76178	700821	881454	607425	
SAMPLE	191286-007	091	148305	292329	75770	693613	856990	603467	
SAMPLE	191286-008	092	146669	288192	74789	682022	849459	597804	
SAMPLE	191286-009	093	148793	297426	76182	699448	870455	609786	
SAMPLE	191286-010	094	148569	298684	76513	706113	876597	614556	
CCV		097	159781	312754	80667	721409	887590	645543	
CCB		100	164448	317099	81235	750367	936182	651326	
SAMPLE	191286-011	101	157358	309644	79509	724367	894426	634772	
SAMPLE	191286-013	102	150066	296740	76359	680860	832236	604304	
SAMPLE	191286-014	103	146027	282471	72189	650609	813471	580840	
SAMPLE	191286-015	104	149006	288314	74392	667060	835553	592173	
SAMPLE	191286-007	105	151501	295328	75938	687813	843857	606514	
SAMPLE	191286-008	106	151316	294822	75331	682639	836369	605988	
CCV		109	161085	309701	80187	706381	872666	633049	
CCB		112	162932	306173	79489	728747	899143	629637	
ICSA		113	120611	255548	69329	570232	666919	530216	

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 66497847 Instrument: MET06
Analytical Method: EPA 6020

Agilent ICP-MS MET06
SOP Version: 6020_rv2

Begun: 11-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds Used	>LR
001	111r0001	TUN				11-DEC-2006 17:27	1.0	1.0				1	
002	111r0002	X	RINSE			11-DEC-2006 17:35	1.0					2	
003	111r0003	X	RINSE			11-DEC-2006 17:41	1.0					2	
004	111r0004	ICALBLK	CALBLANK			11-DEC-2006 17:47	1.0	1.0				2	
005	111r0005	ICAL				11-DEC-2006 17:52	1.0	1.0				3	
006	111r0006	ICAL				11-DEC-2006 17:58	1.0	1.0				4	
007	111r0007	ICAL				11-DEC-2006 18:04	1.0	1.0				5	
008	111r0008	ICAL				11-DEC-2006 18:09	1.0	1.0				6	
009	111r0009	ICAL				11-DEC-2006 18:15	1.0	1.0				7	
010	111r0010	ICAL				11-DEC-2006 18:21	1.0	1.0				8	
011	111r0011	X	RINSE			11-DEC-2006 18:31	1.0					9	
012	111r0012	ICV				11-DEC-2006 18:36	1.0	1.0				10	
013	111r0013	X	RINSE			11-DEC-2006 18:42	1.0					11	
014	111r0014	X				11-DEC-2006 18:48	1.0	1.0				12	
015	111r0015	X				11-DEC-2006 18:54	1.0	1.0				13	
016	111r0016	ICB				11-DEC-2006 19:00	1.0	1.0				14	
017	111r0017	ICSA				11-DEC-2006 19:05	1.0	1.0				15	
018	111r0018	ICSA				11-DEC-2006 19:11	1.0	1.0				16	
019	111r0019	X	RINSE			11-DEC-2006 19:17	1.0					17	
020	111r0020	X	RINSE			11-DEC-2006 19:23	1.0					18	
021	111r0021	X	RINSE			11-DEC-2006 19:28	1.0					19	
022	111r0022	XMSS				11-DEC-2006 19:34	50.0	1.0				20	
023	111r0023	X	RINSE			11-DEC-2006 19:40	1.0					21	
024	111r0024	BLANK				11-DEC-2006 19:46	1.0	1.0				22	
025	111r0025	BS	QC367731			11-DEC-2006 19:51	1.0	1.0				23	
026	111r0026	BSD	QC367732			11-DEC-2006 19:57	1.0	1.0				24	
027	111r0027	X	RINSE			11-DEC-2006 20:05	1.0					25	
028	111r0028	MSS	191281-001			11-DEC-2006 20:11	10.0	1.0				26	
029	111r0029	SEK	QC367735			11-DEC-2006 20:16	50.0	1.0				27	
030	111r0030	MS	QC367733			11-DEC-2006 20:22	10.0	1.0				28	
031	111r0031	MSD	QC367734			11-DEC-2006 20:28	10.0	1.0				29	

Stds used: 1=S4974 2=S4635 3=S4977 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst: 

Date: 12/12/06

SEQUENCE SUMMARY

Curtis & Tompkins Laboratories

Sequence: 66497847 Instrument: MET06
Analytical Method: EPA 6020

Agilent ICP-MS MET06
SOP Version: 6020_rv2

Begun: 11-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds Used	>LR
032	111r0032	X	RINSE			11-DEC-2006 20:33	1.0					2	
033	111r0033	X	RINSE			11-DEC-2006 20:39	1.0					2	
034	111r0034	CCV				11-DEC-2006 20:45	1.0		1		1	12 2	
035	111r0035	X	RINSE			11-DEC-2006 20:51	1.0					2	
036	111r0036	CCB				11-DEC-2006 20:57	1.0				1	2	
037	111r0037	X				11-DEC-2006 21:03	1.0				1	2	
038	111r0038	PDS	QC367736	120220	Water	11-DEC-2006 21:09	10.0				1	13 14 2	
039	111r0039	SAMPLE	191281-002	120220	Water	11-DEC-2006 21:15	10.0		7		1	2	
040	111r0040	SAMPLE	191281-003	120220	Water	11-DEC-2006 21:21	10.0		1		1	2	
041	111r0041	SAMPLE	191281-004	120220	Water	11-DEC-2006 21:26	10.0		1		1	2	
042	111r0042	SAMPLE	191312-001	120220	Water	11-DEC-2006 21:32	10.0		1		1	2	
043	111r0043	SAMPLE	191315-001	120220	Water	11-DEC-2006 21:38	10.0		1		1	2	
044	111r0044	SAMPLE	191315-002	120220	Water	11-DEC-2006 21:43	10.0		1		1	2	
045	111r0045	SAMPLE	191315-003	120220	Water	11-DEC-2006 21:49	10.0		1		1	2	
046	111r0046	SAMPLE	191315-004	120220	Water	11-DEC-2006 21:55	10.0		1		1	2	
047	111r0047	SAMPLE	191315-005	120220	Water	11-DEC-2006 22:00	10.0		1		1	2	
048	111r0048	X	RINSE			11-DEC-2006 22:06	1.0					2	
049	111r0049	X	RINSE			11-DEC-2006 22:12	1.0					2	
050	111r0050	CCV				11-DEC-2006 22:17	1.0		1		1	12 2	
051	111r0051	X	RINSE			11-DEC-2006 22:23	1.0					2	
052	111r0052	CCB				11-DEC-2006 22:29	1.0				1	2	
053	111r0053	X				11-DEC-2006 22:35	1.0				1	2	
054	111r0054	SAMPLE	191315-006	120220	Water	11-DEC-2006 22:41	10.0		2		1	2	
055	111r0055	SAMPLE	191315-007	120220	Water	11-DEC-2006 22:46	10.0		1		1	2	
056	111r0056	SAMPLE	191315-008	120220	Water	11-DEC-2006 22:52	10.0		1		1	2	
057	111r0057	X	RINSE			11-DEC-2006 22:58	1.0					2	
058	111r0058	X	RINSE			11-DEC-2006 23:03	1.0					2	
059	111r0059	X				11-DEC-2006 23:09	1.0		1		1	12 2	
060	111r0060	X	RINSE			11-DEC-2006 23:15	1.0					2	
061	111r0061	CCV				11-DEC-2006 23:21	1.0		1		1	12 2	
062	111r0062	X	RINSE			11-DEC-2006 23:27	1.0					2	

Stds used: 1=S4974 2=S4635 3=S4977 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst:

Date:

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 66497847 Instrument: MET06
Analytical Method: EPA 6020

Agilent ICP-MS MET06
SOP Version: 6020_rv2

Begun: 11-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
063	111r0063	CCB				11-DEC-2006 23:32	1.0	1.0	1	1	1	2		
064	111r0064	X				11-DEC-2006 23:38	1.0	1.0		1	1	2		
065	111r0065	ICSA				11-DEC-2006 23:44	1.0	1.0		1	1	10 2	7:CA=323600	
066	111r0066	ICSAB				11-DEC-2006 23:49	1.0	1.0		1	1	11 2	12:CA=316900	
067	111r0067	X				11-DEC-2006 23:55	1.0					2		
068	111r0068	X				12-DEC-2006 00:01	1.0					2		
069	111r0069	X				12-DEC-2006 00:07	1.0					2		
070	111r0070	BLANK				12-DEC-2006 00:12	1.0		2	1	1	2		
071	111r0071	BS				12-DEC-2006 00:18	1.0	1.0	1	1	1	2		
072	111r0072	BSD				12-DEC-2006 00:24	1.0	1.0	1	1	1	2		
073	111r0073	X				12-DEC-2006 00:30	1.0					2		
074	111r0074	MSS				12-DEC-2006 00:36	10.0	1.0	9	1	1	2	1:NA=28580.0	
075	111r0075	SER				12-DEC-2006 00:42	50.0	1.0	2	1	1	2		
076	111r0076	MS				12-DEC-2006 00:47	10.0	1.0	2	1	1	2	1:NA=27990.0	
077	111r0077	MSD				12-DEC-2006 00:53	10.0	1.0	2	1	1	2	1:NA=29710.0	
078	111r0078	PDS				12-DEC-2006 00:59	10.0	1.0	2	1	1	13 14 2	1:NA=36450.0	
079	111r0079	X				12-DEC-2006 01:05	1.0					2		
080	111r0080	X				12-DEC-2006 01:11	1.0					2		
081	111r0081	CCV				12-DEC-2006 01:16	1.0	1.0	1	1	1	12 2		
082	111r0082	X				12-DEC-2006 01:22	1.0					2		
083	111r0083	X				12-DEC-2006 01:28	1.0	1.0	3	1	1	2		
084	111r0084	CCB				12-DEC-2006 01:34	1.0	1.0				2		
085	111r0085	SAMPLE				12-DEC-2006 01:40	10.0	1.0	1	1	1	2		
086	111r0086	SAMPLE				12-DEC-2006 01:45	10.0	1.0	1	1	1	2		
087	111r0087	SAMPLE				12-DEC-2006 01:51	10.0	1.0	1	1	1	2		
088	111r0088	SAMPLE				12-DEC-2006 01:57	10.0	1.0	1	1	1	2		
089	111r0089	SAMPLE				12-DEC-2006 02:02	10.0	1.0	1	1	1	2		
090	111r0090	SAMPLE				12-DEC-2006 02:08	10.0	1.0	1	1	1	2		
091	111r0091	SAMPLE				12-DEC-2006 02:14	10.0	1.0	1	1	1	2		
092	111r0092	SAMPLE				12-DEC-2006 02:19	10.0	1.0	2	1	1	2		
093	111r0093	SAMPLE				12-DEC-2006 02:25	10.0	1.0	2	1	1	2	1:MN=372.600	

Stds used: 1=S4974 2=S4635 3=S4977 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst:

Date:

Page 3 of 4

Sequence: 66497847 Instrument: MET06
Analytical Method: EPA 6020 Agilent ICP-MS MET06
SOP Version: 6020 rv2

Begun: 11-DEC-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds Used	>LR
094	111r0094	SAMPLE	191286-010	120218	Filttra	12-DEC-2006 02:31	10.0	1.0	1	1		2	
095	111r0095	X	RINSE			12-DEC-2006 02:37	1.0					2	
096	111r0096	X	RINSE			12-DEC-2006 02:42	1.0					2	
097	111r0097	CCV				12-DEC-2006 02:48	1.0		1		1	12 2	
098	111r0098	X	RINSE			12-DEC-2006 02:54	1.0					2	
099	111r0099	X				12-DEC-2006 03:00	1.0	1.0	3		1	2	
100	111r0100	CCB				12-DEC-2006 03:05	1.0	1.0			1	2	
101	111r0101	SAMPLE	191286-011	120218	Filttra	12-DEC-2006 03:11	10.0	1.0	1		1	2	
102	111r0102	SAMPLE	191286-013	120218	Filttra	12-DEC-2006 03:17	10.0	1.0	4		1	2	
103	111r0103	SAMPLE	191286-014	120218	Filttra	12-DEC-2006 03:22	10.0	1.0	2		1	2	3:NA=37340.0
104	111r0104	SAMPLE	191286-015	120218	Filttra	12-DEC-2006 03:28	10.0	1.0	1		1	2	1:MG=38860.0
105	111r0105	SAMPLE	191286-007	120218	Water	12-DEC-2006 03:34	10.0	1.0	1		1	2	
106	111r0106	SAMPLE	191286-008	120218	Water	12-DEC-2006 03:39	10.0	1.0	2		1	2	1:MN=405.900
107	111r0107	X	RINSE			12-DEC-2006 03:45	1.0					2	
108	111r0108	X	RINSE			12-DEC-2006 03:51	1.0					2	
109	111r0109	CCV				12-DEC-2006 03:57	1.0		1		1	12 2	
110	111r0110	X	RINSE			12-DEC-2006 04:03	1.0	1.0				2	
111	111r0111	X				12-DEC-2006 04:09	1.0		1		1	2	
112	111r0112	CCB				12-DEC-2006 04:15	1.0	1.0			1	2	
113	111r0113	ICSA				12-DEC-2006 04:21	1.0	1.0			1	10 2	7:CA=315900
114	111r0114	ICSAB				12-DEC-2006 04:26	1.0	1.0			1	11 2	12:CA=310300

Std's used: 1=S4974 2=S4635 3=S4977 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst:

Date:

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET05

Calnum : 56501744001

Units : ug/L

Date : 14-DEC-2006 10:41

X Axis : R

Reviewer: ---

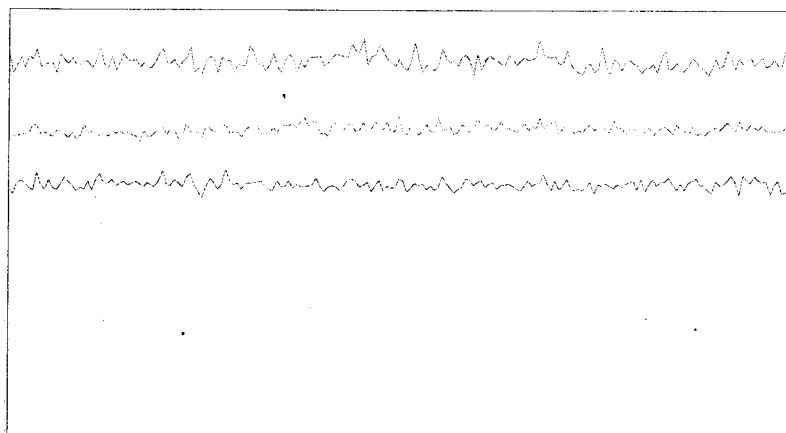
Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	11410005	56501744005	CS1	14-DEC-2006 10:47	S4978
L2	11410006	56501744006	CS2	14-DEC-2006 10:52	S4979
L3	11410007	56501744007	CS3	14-DEC-2006 10:58	S4980
L4	11410008	56501744008	CS4	14-DEC-2006 11:04	S4981
L5	11410009	56501744009	CS5	14-DEC-2006 11:09	S4975
L6	11410010	56501744010	CS6	14-DEC-2006 11:15	S4976

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	RSD	r ²	MnR ²	Flg
Aluminum	1.0212	0.9285	0.8303	0.7417	0.7436	0.7126	BLNK	-5.3227	1.39160		0.8297	1.000	0.995		
Antimony	0.3098	0.3034	0.2862	0.2627	0.2727	0.2722	BLNK	-0.0291	3.67315		0.2845	1.000	0.995		
Arsenic		0.6666	0.6823	0.5088	0.5229	0.5174	BLNK	0.04996	1.92806		0.5796	1.000	0.995		
Barium	0.1308	0.1268	0.1076	0.0968	0.0995	0.0985	BLNK	-0.0661	10.1337		0.1100	1.000	0.995		
Beryllium	0.1873	0.1956	0.1907	0.1790	0.1811	0.1765	BLNK	-0.0170	5.63797		0.1850	1.000	0.995		
Cadmium	0.7697	0.6790	0.5930	0.5733	0.5812	0.5803	BLNK	-0.0672	1.72352		0.6294	1.000	0.995		
Calcium	0.0473	0.0331	0.0273	0.0207	0.0201	0.0195	BLNK	-29.506	51.0755		0.0280	1.000	0.995		
Chromium		12.470	8.8968	4.0131	3.7183	3.6925	BLNK	-1.1192	0.27227		6.5580	1.000	0.995		
Cobalt	5.1599	4.6814	4.8599	4.3535	4.5608	4.4562	BLNK	-0.0323	0.22341		4.6786	1.000	0.995		
Copper	4.5288	2.6837	2.2634	1.2891	1.2348	1.1982	BLNK	-0.5738	0.83232		2.1997	1.000	0.995		
Iron	0.1545	0.1248	0.1124	0.0948	0.0926	0.0893	BLNK	-14.617	11.1219		0.1114	1.000	0.995		
Lead	1.3904	1.2363	1.2193	1.1280	1.2053	1.1919	BLNK	-0.0589	0.83753		1.2285	1.000	0.995		
Magnesium	0.1227	0.1166	0.1167	0.1038	0.1001	0.0956	BLNK	-1.8766	10.3624		0.1092	0.999	0.995		
Manganese	6.4833	5.5169	5.1529	4.3698	4.5725	4.4995	BLNK	-0.1093	0.22169		5.0991	1.000	0.995		
Molybdenum	1.2400	1.1242	1.1918	1.0814	1.1441	1.1717	BLNK	-0.0195	0.85771		1.1589	1.000	0.995		
Nickel	3.2778	1.9776	1.5387	1.0575	0.9967	0.9748	BLNK	-0.4964	1.02427		1.6372	1.000	0.995		
Potassium	2.8176	1.6729	1.1599	0.6582	0.6306	0.6160	BLNK	-89.257	1.62435		1.2592	1.000	0.995		
Selenium			0.0284	0.0438	0.0451	0.0439	BLNK	0.53471	22.5895		0.0403	1.000	0.995		
Silver	3.1454	3.0301	2.8843	2.7676	2.8629	2.9170	BLNK	-0.0350	0.34421		2.9345	1.000	0.995		
Sodium	8.5808	4.4830	2.5904	1.0800	0.9288	0.8735	BLNK	-238.86	1.14670		3.0894	0.999	0.995		
Thallium	1.0409	0.8859	0.8800	0.8220	0.8845	0.9254	BLNK	-0.0259	1.09078		0.9065	0.999	0.995		
Vanadium		3.6840	4.1596	3.7944	3.6966	3.7307	BLNK	-0.0627	0.26863		3.8131	1.000	0.995		
Zinc	8.1185	4.0807	2.5701	0.8393	0.6422	0.6066	BLNK	-2.8051	1.65644		2.8095	0.999	0.995		

$\text{Amount} = a0 + \text{response} * a1 + \text{response}^2 * a2$; BLNK=Y=aX. [blank]

Tune Report

Tune File : ATUNE.U



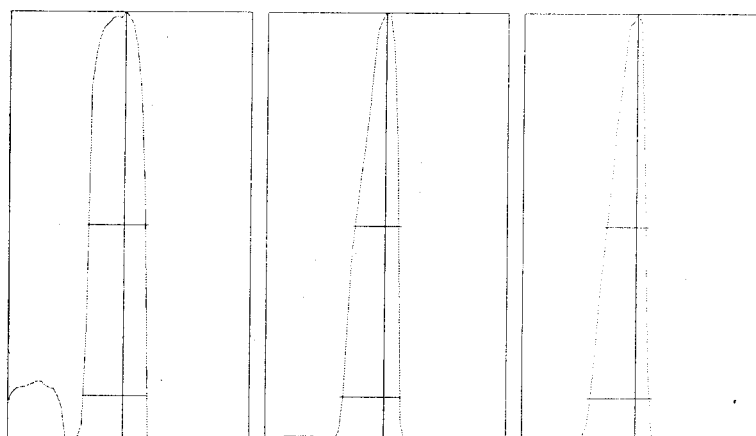
m/z:	7	89	205
Range:	20,000	20,000	20,000
Count:	11,515	18,323	14,512
Mean:	11833.4	17571.3	14371.8
RSD%:	1.86	1.95	1.64
n:	200		

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec

Oxide: 156/140 0.29%
Doubly Charged: 70/140 2.45%

Background:

m/z:	7	89	205
Cps:	11.1	7.8	17.5



m/z:	7	89	205
Height:	12,067	17,533	14,961
Axis:	6.95	89.00	204.95
W-50%:	0.75	0.60	0.55
W-10%:	0.800	0.7500	0.800

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Tuning Parameters

===Plasma Condition===

RF Power: 1270 W
RF Matching: 1.78 V
Smpl Depth: 7.1 mm
Torch-H: -1.3 mm
Torch-V: 0.5 mm
Carrier Gas: 1.09 L/min
Makeup Gas: 0 L/min
Optional Gas: --- %
PeriPump1: 0.1 rps
PeriPump2: --- rps
S/C Temp: 2 degC

===Ion Lenses===

Extract 1: -180 V
Extract 2: -40 V
Einzel 1,3: -100 V
Einzel 2: -7 V
Omega Bias: -45 V
Omega (+): 4 V
Omega (-): -4 V
QP Focus: 9 V
Plate Bias: 0 V

===Q-Pole Parameters===

AMU Gain: 130
AMU Offset: 125
Axis Gain: 0.9989
Axis Offset: -0.01
QP Bias: 1.6 V

===Detector Parameters===

Discriminator: 9.3 mV
Analog HV: 1810 V
Pulse HV: 1160 V

Generated : Dec 14, 2006 08:05:55

Printed : Dec 14, 2006 08:06:02: 00441

Temp.p\$\$

P/A Factor Tuning Report

Acquired: Dec 14 2006 08:28 am

Mass[amu]	Element	P/A Factor
6	Li	0.067486
9	Be	0.078769
23	Na	Sensitivity too high
25	Mg	0.080212
26	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
43	Ca	Sensitivity too low
44	Ca	0.094064
45	Sc	0.095860
51	V	0.090944
52	Cr	0.101230
53	Cr	Sensitivity too low
54	Fe	0.099039
55	Mn	0.103526
57	Fe	0.099164
59	Co	0.106008
60	Ni	0.103422
63	Cu	0.107261
65	Cu	0.105338
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
77	(As)	Sensitivity too low
82	Se	Sensitivity too low
83	(As)	Sensitivity too low
88	(Ca)	Sensitivity too low
89	Y	0.104101
95	Mo	0.102493
98	Mo	0.102839
99	(Mo)	Sensitivity too low
106	(Cd)	Sensitivity too low
108	(Cd)	Sensitivity too low
109	Ag	0.108868
111	Cd	Sensitivity too low
114	Cd	0.109143
115	In	0.109115
118	(In)	0.111286
121	Sb	0.107556
135	Ba	Sensitivity too low
137	Ba	Sensitivity too low
159	Tb	0.114108
166	Er	Sensitivity too low

Temp.p\$\$

205	Tl	0.116104
206	(Pb)	0.114784
207	(Pb)	0.113651
208	Pb	0.116865
209	Bi	0.116435

===Detector Parameters===

Discriminator: 9.3 mV

Analog HV: 1810 V

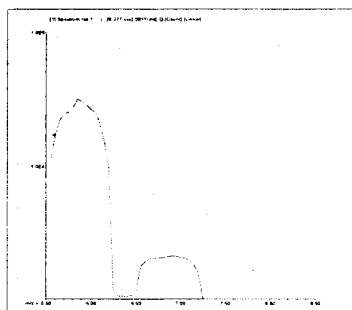
Pulse HV: 1160 V

6020 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\001TUNE.D
Date Acquired: Dec 14 2006 10:24 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s4974
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	0.48	5.00	
59 Co	1.33	5.00	
115 In	1.64	5.00	
205 Tl	2.43	5.00	



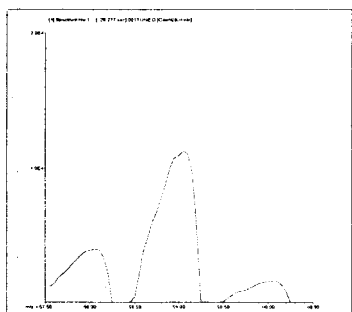
7 Li

Mass Calib.

Actual: 6.90
Required: 6.90 - 7.10
Flag:

Peak Width

Actual: 0.65
Required: 0.90
Flag:



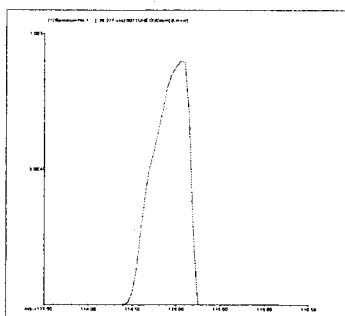
59 Co

Mass Calib.

Actual: 59.05
Required: 58.90 - 59.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



115 In

Mass Calib.

Actual: 115.05

Required: 114.90 - 115.10

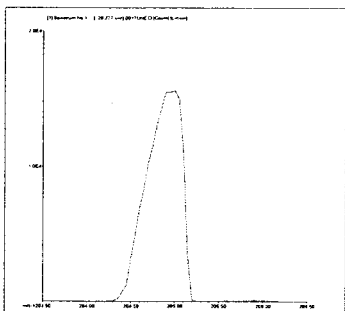
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



205 Tl

Mass Calib.

Actual: 205.00

Required: 204.90 - 205.10

Flag:

Peak Width

Actual: 0.55

Required: 0.90

Flag:

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\004CAL
Date Acquired: Dec 14 2006 10:41 am
Operator:
Sample Name: std-blank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Dec 13 2006 02:14 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	739106.00 A	10570.00	1.43
9 Be	44.44 P	9.62	21.65
23 Na	2205423.00 A	1917.00	0.09
26 Mg	1916.67 P	138.70	7.24
27 Al	40493.33 P	751.70	1.86
39 K	581835.50 P	7785.00	1.34
44 Ca	6115.73 P	161.00	2.63
45 Sc	529416.63 P	4367.00	0.82
51 V	552.89 P	1975.00	357.22
52 Cr	9853.33 P	179.00	1.82
55 Mn	1181.11 P	131.40	11.13
57 Fe	3150.00 P	35.28	1.12
59 Co	346.67 P	63.33	18.27
60 Ni	1161.11 P	86.94	7.49
65 Cu	1653.33 P	127.70	7.72
66 Zn	4058.89 P	77.27	1.90
72 Ge	119842.20 P	1453.00	1.21
75 As	-60.56 P	225.80	372.85
82 Se	-56.44 P	39.40	69.80
95 Mo	54.44 P	18.36	33.72
109 Ag	243.33 P	17.64	7.25
111 Cd	93.33 P	15.73	16.85
115 In	758188.31 P	5430.00	0.72
121 Sb	120.00 P	14.53	12.11
137 Ba	98.89 P	24.57	24.85
205 Tl	428.89 P	44.39	10.35
208 Pb	1268.89 P	70.26	5.54
209 Bi	901811.13 P	8006.00	0.89

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\005CALI.D\005CALI.D#
 Date Acquired: Dec 14 2006 10:47 am
 Operator:
 Sample Name: cs1,s4978
 Misc Info:
 Vial Number: 1102
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 14 2006 10:43 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	725171.38 A	22140.00	3.05
9 Be	678.89 P	5.09	0.75
23 Na	2236721.00 A	10910.00	0.49
26 Mg	31993.33 P	617.10	1.93
27 Al	266313.31 P	3479.00	1.31
39 K	734229.31 M	11770.00	1.60
44 Ca	12330.80 P	58.41	0.47
45 Sc	522124.41 P	24720.00	4.73
51 V	4710.59 P	489.00	10.38
52 Cr	12556.67 P	207.90	1.66
55 Mn	3841.11 P	168.40	4.38
57 Fe	9150.00 P	144.70	1.58
59 Co	3056.67 P	78.81	2.58
60 Ni	1943.33 P	92.80	4.78
65 Cu	2683.20 P	77.68	2.90
66 Zn	4812.22 P	186.90	3.88
72 Ge	118539.30 P	4110.00	3.47
75 As	504.54 P	141.50	28.05
82 Se	-54.44 P	9.71	17.84
95 Mo	733.33 P	58.12	7.93
109 Ag	1863.33 P	26.46	1.42
111 Cd	457.21 P	59.42	13.00
115 In	748254.31 M	24450.00	3.27
121 Sb	1158.89 P	30.97	2.67
137 Ba	490.00 P	41.77	8.52
205 Tl	2338.89 P	100.00	4.28
208 Pb	6244.44 P	93.35	1.49
209 Bi	898780.38 M	22420.00	2.49

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	725171.38	3.05	739106.00	98.1	80 - 120	

45	Sc	522124.41	4.73	529416.63	98.6	80 -	120
72	Ge	118539.34	3.47	119842.22	98.9	80 -	120
115	In	748254.31	3.27	758188.25	98.7	80 -	120
209	Bi	898780.38	2.49	901811.13	99.7	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1410a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\006CALI.D\006CALI.D#
 Date Acquired: Dec 14 2006 10:52 am
 Operator:
 Sample Name: cs2,s4979
 Misc Info:
 Vial Number: 1103
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 14 2006 10:49 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	740799.88 A	5088.00	0.69
9 Be	1448.89 P	20.09	1.39
23 Na	2343897.00 A	15370.00	0.66
26 Mg	60961.11 P	550.40	0.90
27 Al	485480.00 P	3421.00	0.70
39 K	874661.19 A	2094.00	0.24
44 Ca	17330.37 P	261.40	1.51
45 Sc	522843.31 P	473.50	0.09
51 V	4340.48 P	727.40	16.76
52 Cr	14691.11 P	527.50	3.59
55 Mn	6500.00 P	258.30	3.97
57 Fe	14698.89 P	120.50	0.82
59 Co	5515.56 P	157.20	2.85
60 Ni	2330.00 P	39.30	1.69
65 Cu	3161.96 P	119.70	3.79
66 Zn	4807.78 P	139.90	2.91
72 Ge	117817.60 P	111.70	0.09
75 As	785.40 P	157.50	20.05
82 Se	40.89 P	33.69	82.39
95 Mo	1324.44 P	37.17	2.81
109 Ag	3570.00 P	52.39	1.47
111 Cd	799.97 P	31.18	3.90
115 In	747619.81 P	2343.00	0.31
121 Sb	2267.78 P	328.90	14.50
137 Ba	947.78 P	22.19	2.34
205 Tl	4037.78 P	56.21	1.39
208 Pb	11268.89 P	303.80	2.70
209 Bi	911937.88 M	25010.00	2.74

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	740799.88	0.69	739106.00	100.2	80 - 120	

C:\ICPCHEM\1\DATA\06L1410a.B\006CALI.D\006CALI.D#

45	Sc	522843.31	0.09	529416.63	98.8	80 -	120
72	Ge	117817.55	0.09	119842.22	98.3	80 -	120
115	In	747619.75	0.31	758188.25	98.6	80 -	120
209	Bi	911937.88	2.74	901811.13	101.1	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1410a.B\004CALB.D\004CALB.D#

--- :Element Failures	--- :Max. Number of Failures Allowed
0 :ISTD Failures	0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes:	Pass
ISTD:	Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\007CALI.D\007CALI.D#
 Date Acquired: Dec 14 2006 10:58 am
 Operator:
 Sample Name: cs3,s4980
 Misc Info:
 Vial Number: 1104
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 14 2006 10:54 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	741745.88 A	6443.00	0.87
9 Be	2828.89 P	29.12	1.03
23 Na	2730964.00 A	8049.00	0.29
26 Mg	122986.70 P	420.30	0.34
27 Al	875403.50 A	4159.00	0.48
39 K	1222875.00 A	7833.00	0.64
44 Ca	28832.69 P	134.60	0.47
45 Sc	527152.19 P	2395.00	0.45
51 V	9823.88 P	2617.00	26.64
52 Cr	21067.78 P	248.20	1.18
55 Mn	12203.33 P	233.30	1.91
57 Fe	26622.22 P	452.70	1.70
59 Co	11508.89 P	310.40	2.70
60 Ni	3643.33 P	160.20	4.40
65 Cu	5359.48 P	138.70	2.59
66 Zn	6087.78 P	360.60	5.92
72 Ge	118410.70 P	1854.00	1.57
75 As	1615.74 P	20.93	1.30
82 Se	67.78 P	62.03	91.52
95 Mo	2823.33 P	165.00	5.84
109 Ag	6830.00 P	109.30	1.60
111 Cd	1403.48 P	56.32	4.01
115 In	748089.69 P	6998.00	0.94
121 Sb	4283.33 P	147.50	3.44
137 Ba	1610.00 P	100.40	6.24
205 Tl	7924.44 P	191.20	2.41
208 Pb	21957.78 P	638.20	2.91
209 Bi	900418.81 P	10540.00	1.17

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	741745.88	0.87	739106.00	100.4	80 - 120	

C:\ICPCHEM\1\DATA\06L1410a.B\007CALI.D\007CALI.D#

45	Sc	527152.19	0.45	529416.63	99.6	80 -	120
72	Ge	118410.66	1.57	119842.22	98.8	80 -	120
115	In	748089.69	0.94	758188.25	98.7	80 -	120
209	Bi	900418.81	1.17	901811.13	99.8	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1410a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\008CALI.D\008CALI.D#
 Date Acquired: Dec 14 2006 11:04 am
 Operator:
 Sample Name: cs4,s4981
 Misc Info:
 Vial Number: 1105
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 14 2006 11:00 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	735267.38 A	10940.00	1.49
9 Be	26318.89 P	127.60	0.48
23 Na	11286800.00 A	76620.00	0.68
26 Mg	1084335.00 A	15380.00	1.42
27 Al	7751801.00 A	100100.00	1.29
39 K	6878376.00 A	33180.00	0.48
44 Ca	216538.80 P	1922.00	0.89
45 Sc	522523.31 P	3965.00	0.76
51 V	89858.41 P	1167.00	1.30
52 Cr	95053.33 P	1390.00	1.46
55 Mn	103498.90 P	1334.00	1.29
57 Fe	224456.70 P	3155.00	1.41
59 Co	103125.50 P	2532.00	2.46
60 Ni	25051.11 P	655.20	2.62
65 Cu	30534.28 P	554.20	1.82
66 Zn	19874.44 P	171.10	0.86
72 Ge	118429.10 P	1603.00	1.35
75 As	12052.93 P	391.20	3.25
82 Se	1036.89 P	37.53	3.62
95 Mo	25613.33 P	307.50	1.20
109 Ag	65557.78 P	1532.00	2.34
111 Cd	13580.38 P	297.80	2.19
115 In	742957.69 P	5289.00	0.71
121 Sb	39033.33 P	902.90	2.31
137 Ba	14381.11 P	447.50	3.11
205 Tl	73850.00 P	1683.00	2.28
208 Pb	202676.70 P	2905.00	1.43
209 Bi	898382.13 P	9491.00	1.06

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	735267.44	1.49	739106.00	99.5	80 - 120	

C:\ICPCHEM\1\DATA\06L1410a.B\008CALI.D\008CALI.D#

45	Sc	522523.31	0.76	529416.63	98.7	80 -	120
72	Ge	118429.12	1.35	119842.22	98.8	80 -	120
115	In	742957.75	0.71	758188.25	98.0	80 -	120
209	Bi	898382.13	1.06	901811.13	99.6	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1410a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\009CALI.D\009CALI.D#
 Date Acquired: Dec 14 2006 11:09 am
 Operator:
 Sample Name: cs5,s4975
 Misc Info:
 Vial Number: 1106
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 14 2006 11:05 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	705935.69 A	2814.00	0.40
9 Be	255710.00 P	1947.00	0.76
23 Na	95061648.00 A	475200.00	0.50
26 Mg	10242410.00 A	62510.00	0.61
27 Al	76104400.00 A	747200.00	0.98
39 K	64541328.00 A	253600.00	0.39
44 Ca	2057707.00 A	11350.00	0.55
45 Sc	511724.41 P	252.90	0.05
51 V	841037.38 A	7753.00	0.92
52 Cr	845983.13 M	19810.00	2.34
55 Mn	1040305.00 A	4060.00	0.39
57 Fe	2107112.00 A	15480.00	0.73
59 Co	1037667.00 A	8874.00	0.86
60 Ni	226768.91 P	789.60	0.35
65 Cu	280942.19 P	3622.00	1.29
66 Zn	146108.91 P	447.40	0.31
72 Ge	113757.60 P	233.90	0.21
75 As	118979.90 P	1342.00	1.13
82 Se	10265.78 P	117.00	1.14
95 Mo	260288.91 P	2920.00	1.12
109 Ag	651342.19 P	1868.00	0.29
111 Cd	132243.80 P	1991.00	1.51
115 In	712890.13 P	6254.00	0.88
121 Sb	388875.50 P	5851.00	1.50
137 Ba	141873.30 P	2205.00	1.55
205 Tl	744495.50 P	9659.00	1.30
208 Pb	2028821.00 A	13030.00	0.64
209 Bi	841657.69 P	7872.00	0.94

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	705935.69	0.40	739106.00	95.5	80 - 120	

C:\ICPCHEM\1\DATA\06L1410a.B\009CALI.D\009CALI.D#

45	Sc	511724.41	0.05	529416.63	96.7	80 -	120
72	Ge	113757.55	0.21	119842.22	94.9	80 -	120
115	In	712890.13	0.88	758188.25	94.0	80 -	120
209	Bi	841657.75	0.94	901811.13	93.3	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1410a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\010CALI.D\010CALI.D#
 Date Acquired: Dec 14 2006 11:15 am
 Operator:
 Sample Name: cs6,s4976
 Misc Info:
 Vial Number: 1107
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 14 2006 11:11 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	673193.38 A	6480.00	0.96
9 Be	475100.00 P	2662.00	0.56
23 Na	175948000.00 A	296600.00	0.17
26 Mg	19256600.00 A	90460.00	0.47
27 Al	143526590.00 A	942000.00	0.66
39 K	124084800.00 A	284500.00	0.23
44 Ca	3925580.00 A	5695.00	0.15
45 Sc	503576.59 P	3537.00	0.70
51 V	1621244.00 A	1869.00	0.12
52 Cr	1604677.00 A	4401.00	0.27
55 Mn	1955333.00 A	1977.00	0.10
57 Fe	3881919.00 A	12280.00	0.32
59 Co	1936672.00 A	19000.00	0.98
60 Ni	423634.41 P	4694.00	1.11
65 Cu	520732.50 P	2498.00	0.48
66 Zn	263632.19 P	2626.00	1.00
72 Ge	108651.10 P	1163.00	1.07
75 As	224854.80 P	1313.00	0.58
82 Se	19066.67 P	195.60	1.03
95 Mo	509218.91 P	2112.00	0.41
109 Ag	1267609.00 A	4775.00	0.38
111 Cd	252177.00 P	2915.00	1.16
115 In	691983.50 P	6194.00	0.90
121 Sb	753438.88 P	5747.00	0.76
137 Ba	272721.09 P	1468.00	0.54
205 Tl	1480971.00 A	12980.00	0.88
208 Pb	3814654.00 A	15530.00	0.41
209 Bi	800187.69 P	9742.00	1.22

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	673193.44	0.96	739106.00	91.1	80 - 120	

C:\ICPCHEM\1\DATA\06L1410a.B\010CALI.D\010CALI.D#

45	Sc	503576.66	0.70	529416.63	95.1	80 -	120
72	Ge	108651.12	1.07	119842.22	90.7	80 -	120
115	In	691983.50	0.90	758188.25	91.3	80 -	120
209	Bi	800187.75	1.22	901811.13	88.7	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1410a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass

ISTD: Pass

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET05
 Segnum : 56501744012
 Cal : 56501744001
 Standards: S4982

File : 11410012
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 11:25

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	0.8297	0.7315	10000	10170	ug/L	2	10	
Antimony	0.2845	0.2684	100.0	98.54	ug/L	-1	10	
Arsenic	0.5796	0.5151	100.0	99.37	ug/L	-1	10	
Barium	0.1100	0.0948	100.0	95.98	ug/L	-4	10	
Beryllium	0.1850	0.1765	100.0	99.48	ug/L	-1	10	
Cadmium	0.6294	0.5721	100.0	98.53	ug/L	-1	10	
Calcium	0.0280	0.0195	10000	9953	ug/L	0	10	
Chromium	6.5580	3.6481	100.0	98.21	ug/L	-2	10	
Cobalt	4.6786	4.3951	100.0	98.16	ug/L	-2	10	
Copper	2.1997	1.1762	100.0	97.32	ug/L	-3	10	
Iron	0.1114	0.0904	10000	10040	ug/L	0	10	
Lead	1.2285	1.1707	100.0	97.99	ug/L	-2	10	
Magnesium	0.1092	0.0967	10000	10020	ug/L	0	10	
Manganese	5.0991	4.4347	100.0	98.20	ug/L	-2	10	
Molybdenum	1.1589	1.1253	100.0	96.50	ug/L	-4	10	
Nickel	1.6372	0.9632	100.0	98.16	ug/L	-2	10	
Potassium	1.2592	0.6128	10000	9865	ug/L	-1	10	
Selenium	0.0403	0.0437	100.0	99.34	ug/L	-1	10	
Silver	2.9345	2.8686	100.0	98.70	ug/L	-1	10	
Sodium	3.0894	0.8824	10000	9880	ug/L	-1	10	
Thallium	0.9065	0.8230	50.00	44.86	ug/L	-10	10	
Vanadium	3.8131	3.6248	100.0	97.31	ug/L	-3	10	
Zinc	2.8095	0.6149	100.0	99.06	ug/L	-1	10	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	711588	-3.72
Scandium	529417	520783	-1.63
Germanium	119842	114412	-4.53
Indium	758188	733068	-3.31
Bismuth	901811	863080	-4.29

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56501744029
 Cal : 56501744001
 Standards: S4983, S4635

File : 11410029
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 13:00

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.8297	0.7399	10000	10290	ug/L	3	10	
Antimony	0.2845	0.2702	100.0	99.23	ug/L	-1	10	
Arsenic	0.5796	0.5110	100.0	98.58	ug/L	-1	10	
Barium	0.1100	0.0959	100.0	97.16	ug/L	-3	10	
Beryllium	0.1850	0.1784	100.0	100.6	ug/L	1	10	
Cadmium	0.6294	0.5648	100.0	97.27	ug/L	-3	10	
Calcium	0.0280	0.0195	10000	9953	ug/L	0	10	
Chromium	6.5580	3.5524	100.0	95.60	ug/L	-4	10	
Cobalt	4.6786	4.4669	100.0	99.76	ug/L	0	10	
Copper	2.1997	1.1983	100.0	99.16	ug/L	-1	10	
Iron	0.1114	0.0921	10000	10230	ug/L	2	10	
Lead	1.2285	1.1659	100.0	97.59	ug/L	-2	10	
Magnesium	0.1092	0.0984	10000	10200	ug/L	2	10	
Manganese	5.0991	4.4584	100.0	98.73	ug/L	-1	10	
Molybdenum	1.1589	1.1013	100.0	94.44	ug/L	-6	10	
Nickel	1.6372	0.9661	100.0	98.46	ug/L	-2	10	
Potassium	1.2592	0.6093	10000	9808	ug/L	-2	10	
Selenium	0.0403	0.0437	100.0	99.32	ug/L	-1	10	
Silver	2.9345	2.8276	100.0	97.29	ug/L	-3	10	
Sodium	3.0894	0.9156	10000	10260	ug/L	3	10	
Thallium	0.9065	0.8214	50.00	44.77	ug/L	-10	10	
Vanadium	3.8131	3.5784	100.0	96.06	ug/L	-4	10	
Zinc	2.8095	0.6324	100.0	101.9	ug/L	2	10	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	639701	-13.45
Scandium	529417	463074	-12.53
Germanium	119842	104479	-12.82
Indium	758188	659273	-13.05
Bismuth	901811	829843	-7.98

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56501744058
 Cal : 56501744001
 Standards: S4983, S4635

File : 11410058
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 15:42

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.8297	0.7666	10000	10660	ug/L	7	10	
Antimony	0.2845	0.2775	100.0	101.9	ug/L	2	10	
Arsenic	0.5796	0.5304	100.0	102.3	ug/L	2	10	
Barium	0.1100	0.0968	100.0	98.03	ug/L	-2	10	
Beryllium	0.1850	0.1829	100.0	103.1	ug/L	3	10	
Cadmium	0.6294	0.6032	100.0	103.9	ug/L	4	10	
Calcium	0.0280	0.0203	10000	10340	ug/L	3	10	
Chromium	6.5580	3.6402	100.0	97.99	ug/L	-2	10	
Cobalt	4.6786	4.5045	100.0	100.6	ug/L	1	10	
Copper	2.1997	1.2109	100.0	100.2	ug/L	0	10	
Iron	0.1114	0.0922	10000	10240	ug/L	2	10	
Lead	1.2285	1.2027	100.0	100.7	ug/L	1	10	
Magnesium	0.1092	0.1019	10000	10560	ug/L	6	10	
Manganese	5.0991	4.5159	100.0	100.0	ug/L	0	10	
Molybdenum	1.1589	1.1603	100.0	99.50	ug/L	-1	10	
Nickel	1.6372	0.9793	100.0	99.81	ug/L	0	10	
Potassium	1.2592	0.6392	10000	10290	ug/L	3	10	
Selenium	0.0403	0.0455	100.0	103.2	ug/L	3	10	
Silver	2.9345	2.9840	100.0	102.7	ug/L	3	10	
Sodium	3.0894	0.9247	10000	10360	ug/L	4	10	
Thallium	0.9065	0.8548	50.00	46.59	ug/L	-7	10	
Vanadium	3.8131	3.6946	100.0	99.19	ug/L	-1	10	
Zinc	2.8095	0.6283	100.0	101.3	ug/L	1	10	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	618953	-16.26
Scandium	529417	449338	-15.13
Germanium	119842	100094	-16.48
Indium	758188	655982	-13.48
Bismuth	901811	801836	-11.09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56501744075
 Cal : 56501744001
 Standards: S4983, S4635

File : 11410075
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 17:17

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.8297	0.7318	10000	10180	ug/L	2	10	
Antimony	0.2845	0.2632	100.0	96.66	ug/L	-3	10	
Arsenic	0.5796	0.5000	100.0	96.45	ug/L	-4	10	
Barium	0.1100	0.0933	100.0	94.44	ug/L	-6	10	
Beryllium	0.1850	0.1733	100.0	97.69	ug/L	-2	10	
Cadmium	0.6294	0.5590	100.0	96.27	ug/L	-4	10	
Calcium	0.0280	0.0191	10000	9726	ug/L	-3	10	
Chromium	6.5580	3.4462	100.0	92.71	ug/L	-7	10	
Cobalt	4.6786	4.4328	100.0	99.00	ug/L	-1	10	
Copper	2.1997	1.1651	100.0	96.40	ug/L	-4	10	
Iron	0.1114	0.0892	10000	9910	ug/L	-1	10	
Lead	1.2285	1.1592	100.0	97.03	ug/L	-3	10	
Magnesium	0.1092	0.0977	10000	10120	ug/L	1	10	
Manganese	5.0991	4.4033	100.0	97.51	ug/L	-2	10	
Molybdenum	1.1589	1.0807	100.0	92.67	ug/L	-7	10	
Nickel	1.6372	0.9494	100.0	96.75	ug/L	-3	10	
Potassium	1.2592	0.6080	10000	9786	ug/L	-2	10	
Selenium	0.0403	0.0421	100.0	95.72	ug/L	-4	10	
Silver	2.9345	2.7773	100.0	95.56	ug/L	-4	10	
Sodium	3.0894	0.9027	10000	10110	ug/L	1	10	
Thallium	0.9065	0.8184	50.00	44.61	ug/L	-11	10	c- ***
Vanadium	3.8131	3.4858	100.0	93.58	ug/L	-6	10	
Zinc	2.8095	0.6223	100.0	100.3	ug/L	0	10	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	666358	-9.84
Scandium	529417	485169	-8.36
Germanium	119842	108833	-9.19
Indium	758188	696031	-8.20
Bismuth	901811	883136	-2.07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Segnum : 56501744086
 Cal : 56501744001
 Standards: S4983, S4635

File : 11410086
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 18:19

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.8297	0.7315	10000	10170	ug/L	2	10	
Antimony	0.2845	0.2758	100.0	101.3	ug/L	1	10	
Arsenic	0.5796	0.5309	100.0	102.4	ug/L	2	10	
Barium	0.1100	0.0971	100.0	98.33	ug/L	-2	10	
Beryllium	0.1850	0.1787	100.0	100.7	ug/L	1	10	
Cadmium	0.6294	0.5951	100.0	102.5	ug/L	3	10	
Calcium	0.0280	0.0203	10000	10350	ug/L	4	10	
Chromium	6.5580	3.6402	100.0	97.99	ug/L	-2	10	
Cobalt	4.6786	4.6078	100.0	102.9	ug/L	3	10	
Copper	2.1997	1.2171	100.0	100.7	ug/L	1	10	
Iron	0.1114	0.0946	10000	10500	ug/L	5	10	
Lead	1.2285	1.2128	100.0	101.5	ug/L	2	10	
Magnesium	0.1092	0.1018	10000	10550	ug/L	6	10	
Manganese	5.0991	4.6394	100.0	102.7	ug/L	3	10	
Molybdenum	1.1589	1.1628	100.0	99.72	ug/L	0	10	
Nickel	1.6372	0.9939	100.0	101.3	ug/L	1	10	
Potassium	1.2592	0.6403	10000	10310	ug/L	3	10	
Selenium	0.0403	0.0453	100.0	102.9	ug/L	3	10	
Silver	2.9345	2.9685	100.0	102.1	ug/L	2	10	
Sodium	3.0894	0.9224	10000	10340	ug/L	3	10	
Thallium	0.9065	0.8539	50.00	46.55	ug/L	-7	10	
Vanadium	3.8131	3.7486	100.0	100.6	ug/L	1	10	
Zinc	2.8095	0.6363	100.0	102.6	ug/L	3	10	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	656022	-11.24
Scandium	529417	473580	-10.55
Germanium	119842	104619	-12.70
Indium	758188	683901	-9.80
Bismuth	901811	846276	-6.16

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56501744107
 Cal : 56501744001
 Standards: S4983, S4635

File : 11410107
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 20:15

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.8297	0.7352	10000	10230	ug/L	2	10	
Antimony	0.2845	0.2748	100.0	100.9	ug/L	1	10	
Arsenic	0.5796	0.5267	100.0	101.6	ug/L	2	10	
Barium	0.1100	0.0963	100.0	97.56	ug/L	-2	10	
Beryllium	0.1850	0.1805	100.0	101.7	ug/L	2	10	
Cadmium	0.6294	0.6006	100.0	103.5	ug/L	4	10	
Calcium	0.0280	0.0205	10000	10450	ug/L	5	10	
Chromium	6.5580	3.6095	100.0	97.16	ug/L	-3	10	
Cobalt	4.6786	4.6363	100.0	103.5	ug/L	4	10	
Copper	2.1997	1.2244	100.0	101.3	ug/L	1	10	
Iron	0.1114	0.0946	10000	10500	ug/L	5	10	
Lead	1.2285	1.2211	100.0	102.2	ug/L	2	10	
Magnesium	0.1092	0.1025	10000	10620	ug/L	6	10	
Manganese	5.0991	4.5936	100.0	101.7	ug/L	2	10	
Molybdenum	1.1589	1.1508	100.0	98.69	ug/L	-1	10	
Nickel	1.6372	0.9927	100.0	101.2	ug/L	1	10	
Potassium	1.2592	0.6421	10000	10340	ug/L	3	10	
Selenium	0.0403	0.0448	100.0	101.7	ug/L	2	10	
Silver	2.9345	2.9727	100.0	102.3	ug/L	2	10	
Sodium	3.0894	0.9437	10000	10580	ug/L	6	10	
Thallium	0.9065	0.8584	50.00	46.79	ug/L	-6	10	
Vanadium	3.8131	3.6579	100.0	98.20	ug/L	-2	10	
Zinc	2.8095	0.6498	100.0	104.8	ug/L	5	10	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	609315	-17.56
Scandium	529417	436763	-17.50
Germanium	119842	98119	-18.13
Indium	758188	650290	-14.23
Bismuth	901811	815668	-9.55

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Segnum : 56501744124
 Cal : 56501744001
 Standards: S4983, S4635

File : 11410124
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 21:50

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.8297	0.7318	10000	10180	ug/L	2	10	
Antimony	0.2845	0.2737	100.0	100.5	ug/L	1	10	
Arsenic	0.5796	0.5275	100.0	101.8	ug/L	2	10	
Barium	0.1100	0.0956	100.0	96.83	ug/L	-3	10	
Beryllium	0.1850	0.1788	100.0	100.8	ug/L	1	10	
Cadmium	0.6294	0.6063	100.0	104.4	ug/L	4	10	
Calcium	0.0280	0.0204	10000	10380	ug/L	4	10	
Chromium	6.5580	3.5524	100.0	95.60	ug/L	-4	10	
Cobalt	4.6786	4.6664	100.0	104.2	ug/L	4	10	
Copper	2.1997	1.1945	100.0	98.85	ug/L	-1	10	
Iron	0.1114	0.0943	10000	10480	ug/L	5	10	
Lead	1.2285	1.2190	100.0	102.0	ug/L	2	10	
Magnesium	0.1092	0.1019	10000	10560	ug/L	6	10	
Manganese	5.0991	4.6022	100.0	101.9	ug/L	2	10	
Molybdenum	1.1589	1.1482	100.0	98.46	ug/L	-2	10	
Nickel	1.6372	0.9887	100.0	100.8	ug/L	1	10	
Potassium	1.2592	0.6471	10000	10420	ug/L	4	10	
Selenium	0.0403	0.0457	100.0	103.7	ug/L	4	10	
Silver	2.9345	2.9842	100.0	102.7	ug/L	3	10	
Sodium	3.0894	0.9433	10000	10580	ug/L	6	10	
Thallium	0.9065	0.8492	50.00	46.29	ug/L	-7	10	
Vanadium	3.8131	3.7439	100.0	100.5	ug/L	1	10	
Zinc	2.8095	0.6455	100.0	104.1	ug/L	4	10	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	590489	-20.11
Scandium	529417	420941	-20.49
Germanium	119842	94163	-21.43
Indium	758188	630459	-16.85
Bismuth	901811	795613	-11.78

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56501744146
 Cal : 56501744001
 Standards: S4983, S4635

File : 11410146
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 23:55

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.8297	0.7493	10000	10420	ug/L	4	10	
Antimony	0.2845	0.2780	100.0	102.1	ug/L	2	10	
Arsenic	0.5796	0.5299	100.0	102.2	ug/L	2	10	
Barium	0.1100	0.0968	100.0	98.02	ug/L	-2	10	
Beryllium	0.1850	0.1792	100.0	101.0	ug/L	1	10	
Cadmium	0.6294	0.6274	100.0	108.1	ug/L	8	10	
Calcium	0.0280	0.0208	10000	10610	ug/L	6	10	
Chromium	6.5580	3.6195	100.0	97.43	ug/L	-3	10	
Cobalt	4.6786	4.3164	100.0	96.40	ug/L	-4	10	
Copper	2.1997	1.2141	100.0	100.5	ug/L	1	10	
Iron	0.1114	0.0949	10000	10540	ug/L	5	10	
Lead	1.2285	1.2118	100.0	101.4	ug/L	1	10	
Magnesium	0.1092	0.1036	10000	10740	ug/L	7	10	
Manganese	5.0991	4.5290	100.0	100.3	ug/L	0	10	
Molybdenum	1.1589	1.1758	100.0	100.8	ug/L	1	10	
Nickel	1.6372	0.9838	100.0	100.3	ug/L	0	10	
Potassium	1.2592	0.6600	10000	10630	ug/L	6	10	
Selenium	0.0403	0.0457	100.0	103.8	ug/L	4	10	
Silver	2.9345	3.0924	100.0	106.4	ug/L	6	10	
Sodium	3.0894	0.9426	10000	10570	ug/L	6	10	
Thallium	0.9065	0.8574	50.00	46.73	ug/L	-7	10	
Vanadium	3.8131	3.8489	100.0	103.3	ug/L	3	10	
Zinc	2.8095	0.6457	100.0	104.2	ug/L	4	10	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	569156	-22.99
Scandium	529417	397684	-24.88
Germanium	119842	88443	-26.20
Indium	758188	607113	-19.93
Bismuth	901811	756180	-16.15

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56501744163
 Cal : 56501744001
 Standards: S4983, S4635

File : 11410163
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 15-DEC-2006 01:30

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.8297	0.7424	10000	10330	ug/L	3	10	
Antimony	0.2845	0.2747	100.0	100.9	ug/L	1	10	
Arsenic	0.5796	0.5264	100.0	101.5	ug/L	2	10	
Barium	0.1100	0.0957	100.0	96.89	ug/L	-3	10	
Beryllium	0.1850	0.1781	100.0	100.4	ug/L	0	10	
Cadmium	0.6294	0.6146	100.0	105.9	ug/L	6	10	
Calcium	0.0280	0.0205	10000	10440	ug/L	4	10	
Chromium	6.5580	3.5652	100.0	95.95	ug/L	-4	10	
Cobalt	4.6786	4.3173	100.0	96.42	ug/L	-4	10	
Copper	2.1997	1.2120	100.0	100.3	ug/L	0	10	
Iron	0.1114	0.0951	10000	10560	ug/L	6	10	
Lead	1.2285	1.2154	100.0	101.7	ug/L	2	10	
Magnesium	0.1092	0.1031	10000	10680	ug/L	7	10	
Manganese	5.0991	4.5558	100.0	100.9	ug/L	1	10	
Molybdenum	1.1589	1.1513	100.0	98.73	ug/L	-1	10	
Nickel	1.6372	0.9836	100.0	100.3	ug/L	0	10	
Potassium	1.2592	0.6466	10000	10410	ug/L	4	10	
Selenium	0.0403	0.0450	100.0	102.2	ug/L	2	10	
Silver	2.9345	2.9980	100.0	103.2	ug/L	3	10	
Sodium	3.0894	0.9541	10000	10700	ug/L	7	10	
Thallium	0.9065	0.8471	50.00	46.17	ug/L	-8	10	
Vanadium	3.8131	3.8182	100.0	102.5	ug/L	3	10	
Zinc	2.8095	0.6476	100.0	104.5	ug/L	5	10	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	573724	-22.38
Scandium	529417	401176	-24.22
Germanium	119842	89418	-25.39
Indium	758188	604264	-20.30
Bismuth	901811	769319	-14.69

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56501744171
 Cal : 56501744001
 Standards: S4983, S4635

File : 11410171
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 15-DEC-2006 02:15

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.8297	0.7428	10000	10330	ug/L	3	10	
Antimony	0.2845	0.2770	100.0	101.7	ug/L	2	10	
Arsenic	0.5796	0.5324	100.0	102.7	ug/L	3	10	
Barium	0.1100	0.0954	100.0	96.64	ug/L	-3	10	
Beryllium	0.1850	0.1776	100.0	100.1	ug/L	0	10	
Cadmium	0.6294	0.6380	100.0	109.9	ug/L	10	10	
Calcium	0.0280	0.0208	10000	10600	ug/L	6	10	
Chromium	6.5580	3.6311	100.0	97.74	ug/L	-2	10	
Cobalt	4.6786	4.3358	100.0	96.84	ug/L	-3	10	
Copper	2.1997	1.2075	100.0	99.93	ug/L	0	10	
Iron	0.1114	0.0951	10000	10560	ug/L	6	10	
Lead	1.2285	1.1776	100.0	98.57	ug/L	-1	10	
Magnesium	0.1092	0.1029	10000	10660	ug/L	7	10	
Manganese	5.0991	4.4044	100.0	97.53	ug/L	-2	10	
Molybdenum	1.1589	1.1836	100.0	101.5	ug/L	2	10	
Nickel	1.6372	0.9841	100.0	100.3	ug/L	0	10	
Potassium	1.2592	0.6544	10000	10540	ug/L	5	10	
Selenium	0.0403	0.0464	100.0	105.4	ug/L	5	10	
Silver	2.9345	3.1033	100.0	106.8	ug/L	7	10	
Sodium	3.0894	0.9264	10000	10380	ug/L	4	10	
Thallium	0.9065	0.8464	50.00	46.14	ug/L	-8	10	
Vanadium	3.8131	3.8545	100.0	103.5	ug/L	4	10	
Zinc	2.8095	0.6447	100.0	104.0	ug/L	4	10	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	544557	-26.32
Scandium	529417	380127	-28.20
Germanium	119842	83429	-30.38
Indium	758188	584035	-22.97
Bismuth	901811	720631	-20.09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56501744199
 Cal : 56501744001
 Standards: S4983, S4635

File : 11410199
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 15-DEC-2006 04:51

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.8297	0.7488	10000	10420	ug/L	4	10	
Antimony	0.2845	0.2783	100.0	102.2	ug/L	2	10	
Arsenic	0.5796	0.5329	100.0	102.8	ug/L	3	10	
Barium	0.1100	0.0969	100.0	98.08	ug/L	-2	10	
Beryllium	0.1850	0.1769	100.0	99.72	ug/L	0	10	
Cadmium	0.6294	0.6373	100.0	109.8	ug/L	10	10	
Calcium	0.0280	0.0207	10000	10550	ug/L	6	10	
Chromium	6.5580	3.5934	100.0	96.72	ug/L	-3	10	
Cobalt	4.6786	4.3118	100.0	96.30	ug/L	-4	10	
Copper	2.1997	1.2175	100.0	100.8	ug/L	1	10	
Iron	0.1114	0.0946	10000	10500	ug/L	5	10	
Lead	1.2285	1.1715	100.0	98.06	ug/L	-2	10	
Magnesium	0.1092	0.1037	10000	10740	ug/L	7	10	
Manganese	5.0991	4.3735	100.0	96.85	ug/L	-3	10	
Molybdenum	1.1589	1.1853	100.0	101.6	ug/L	2	10	
Nickel	1.6372	0.9853	100.0	100.4	ug/L	0	10	
Potassium	1.2592	0.6628	10000	10680	ug/L	7	10	
Selenium	0.0403	0.0457	100.0	103.8	ug/L	4	10	
Silver	2.9345	3.1250	100.0	107.5	ug/L	8	10	
Sodium	3.0894	0.9379	10000	10520	ug/L	5	10	
Thallium	0.9065	0.8498	50.00	46.32	ug/L	-7	10	
Vanadium	3.8131	3.8243	100.0	102.7	ug/L	3	10	
Zinc	2.8095	0.6437	100.0	103.8	ug/L	4	10	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	525793	-28.86
Scandium	529417	366987	-30.68
Germanium	119842	81213	-32.23
Indium	758188	574973	-24.16
Bismuth	901811	717407	-20.45

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56501744014
 Cal : 56501744001

File : 11410014
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 11:36

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[7.423]	25.00	2.752	ug/L	!ib
Antimony	[0.1363]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.3444]	0.5000	0.1120	ug/L	!ib
Barium	[0.05971]	0.2500	0.03444	ug/L	!ib
Beryllium	[0.06614]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	[0.3517]	0.5000	0.01315	ug/L	!ib
Cobalt	[0.06440]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	[6.987]	25.00	3.223	ug/L	!ib
Lead	[0.06012]	0.2500	0.002523	ug/L	!ib
Magnesium	[7.093]	25.00	1.907	ug/L	!ib
Manganese	[0.05107]	0.2500	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	[0.04355]	0.2500	0.01875	ug/L	!ib
Potassium	ND	25.00	3.213	ug/L	
Selenium	ND	1.000	0.6002	ug/L	
Silver	[0.05596]	0.2500	0.005272	ug/L	!ib
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.3832]	0.5000	0.06366	ug/L	!ib
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	760785	2.93
Scandium	529417	538000	1.62
Germanium	119842	119331	-0.43
Indium	758188	765110	0.91
Bismuth	901811	912624	1.20

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Segnum : 56501744033
 Cal : 56501744001

File : 11410033
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 13:22

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[4.743]	25.00	2.752	ug/L	!ib
Antimony	[0.006279]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.2005]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	ND	0.2500	0.002016	ug/L	
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	[6.814]	25.00	6.782	ug/L	!ib
Chromium	ND	0.5000	0.01315	ug/L	
Cobalt	[0.008891]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	[7.652]	25.00	3.223	ug/L	!ib
Lead	[0.04719]	0.2500	0.002523	ug/L	!ib
Magnesium	[4.771]	25.00	1.907	ug/L	!ib
Manganese	ND	0.2500	0.03082	ug/L	
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	ND	25.00	3.213	ug/L	
Selenium	ND	1.000	0.6002	ug/L	
Silver	ND	0.2500	0.005272	ug/L	
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.5000	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	710787	-3.83
Scandium	529417	502160	-5.15
Germanium	119842	113800	-5.04
Indium	758188	737562	-2.72
Bismuth	901811	917724	1.76

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Segnum : 56501744060
 Cal : 56501744001

File : 11410060
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 15:53

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[4.936]	25.00	2.752	ug/L	!ib
Antimony	[0.05490]	0.2500	0.005910	ug/L	!ib
Arsenic	ND	0.5000	0.1120	ug/L	
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.03543]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	[0.2143]	0.5000	0.01315	ug/L	!ib
Cobalt	[0.03813]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	[5.108]	25.00	3.223	ug/L	!ib
Lead	[0.03492]	0.2500	0.002523	ug/L	!ib
Magnesium	[4.972]	25.00	1.907	ug/L	!ib
Manganese	[0.03339]	0.2500	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	ND	25.00	3.213	ug/L	
Selenium	ND	1.000	0.6002	ug/L	
Silver	[0.03444]	0.2500	0.005272	ug/L	!ib
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.1003]	0.5000	0.06366	ug/L	!ib
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	693681	-6.15
Scandium	529417	488398	-7.75
Germanium	119842	108716	-9.28
Indium	758188	717096	-5.42
Bismuth	901811	881470	-2.26

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56501744078
 Cal : 56501744001

File : 11410078
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 17:34

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	25.00	2.752	ug/L	
Antimony	[0.01143]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.2346]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.004656]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.5000	0.01315	ug/L	
Cobalt	[0.01014]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	ND	25.00	3.223	ug/L	
Lead	[0.05049]	0.2500	0.002523	ug/L	!ib
Magnesium	ND	25.00	1.907	ug/L	
Manganese	ND	0.2500	0.03082	ug/L	
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	ND	25.00	3.213	ug/L	
Selenium	ND	1.000	0.6002	ug/L	
Silver	ND	0.2500	0.005272	ug/L	
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.5000	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	694076	-6.09
Scandium	529417	484300	-8.52
Germanium	119842	110242	-8.01
Indium	758188	712188	-6.07
Bismuth	901811	897887	-0.44

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56501744088
 Cal : 56501744001

File : 11410088
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 18:30

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[6.153]	25.00	2.752	ug/L	!ib
Antimony	[0.07345]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.2428]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.04132]	0.2500	0.002016	ug/L	!ib
Cadmium	[0.08623]	0.2500	0.05722	ug/L	!ib
Calcium	ND	25.00	6.782	ug/L	
Chromium	[0.07947]	0.5000	0.01315	ug/L	!ib
Cobalt	[0.05237]	0.2500	0.003116	ug/L	!ib
Copper	[0.02443]	0.2500	0.02110	ug/L	!ib
Iron	[4.785]	25.00	3.223	ug/L	!ib
Lead	[0.09071]	0.2500	0.002523	ug/L	!ib
Magnesium	[6.691]	25.00	1.907	ug/L	!ib
Manganese	[0.04755]	0.2500	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	ND	25.00	3.213	ug/L	
Selenium	ND	1.000	0.6002	ug/L	
Silver	[0.03599]	0.2500	0.005272	ug/L	!ib
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.5000	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	709742	-3.97
Scandium	529417	498153	-5.91
Germanium	119842	113590	-5.22
Indium	758188	727823	-4.00
Bismuth	901811	969919	7.55

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Segnum : 56501744109
 Cal : 56501744001

File : 11410109
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 20:26

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[7.392]	25.00	2.752	ug/L	!ib
Antimony	[0.09076]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.1997]	0.5000	0.1120	ug/L	!ib
Barium	[0.03875]	0.2500	0.03444	ug/L	!ib
Beryllium	[0.04028]	0.2500	0.002016	ug/L	!ib
Cadmium	[0.05926]	0.2500	0.05722	ug/L	!ib
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.5000	0.01315	ug/L	
Cobalt	[0.05384]	0.2500	0.003116	ug/L	!ib
Copper	[0.02572]	0.2500	0.02110	ug/L	!ib
Iron	[7.388]	25.00	3.223	ug/L	!ib
Lead	[0.04641]	0.2500	0.002523	ug/L	!ib
Magnesium	[12.19]	25.00	1.907	ug/L	!ib
Manganese	[0.1083]	0.2500	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	[0.02156]	0.2500	0.01875	ug/L	!ib
Potassium	ND	25.00	3.213	ug/L	
Selenium	ND	1.000	0.6002	ug/L	
Silver	[0.03876]	0.2500	0.005272	ug/L	!ib
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.2765]	0.5000	0.06366	ug/L	!ib
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	617799	-16.41
Scandium	529417	433413	-18.13
Germanium	119842	97372	-18.75
Indium	758188	666582	-12.08
Bismuth	901811	835820	-7.32

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56501744126
 Cal : 56501744001

File : 11410126
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 22:01

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[6.298]	25.00	2.752	ug/L	!ib
Antimony	[0.08438]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.1560]	0.5000	0.1120	ug/L	!ib
Barium	[0.03463]	0.2500	0.03444	ug/L	!ib
Beryllium	[0.04215]	0.2500	0.002016	ug/L	!ib
Cadmium	[0.07770]	0.2500	0.05722	ug/L	!ib
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.5000	0.01315	ug/L	
Cobalt	[0.05104]	0.2500	0.003116	ug/L	!ib
Copper	[0.02630]	0.2500	0.02110	ug/L	!ib
Iron	[5.885]	25.00	3.223	ug/L	!ib
Lead	[0.04572]	0.2500	0.002523	ug/L	!ib
Magnesium	[12.37]	25.00	1.907	ug/L	!ib
Manganese	[0.1249]	0.2500	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	ND	25.00	3.213	ug/L	
Selenium	[0.6497]	1.000	0.6002	ug/L	!ib
Silver	[0.04897]	0.2500	0.005272	ug/L	!ib
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.5000	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	582705	-21.16
Scandium	529417	406942	-23.13
Germanium	119842	91432	-23.71
Indium	758188	636473	-16.05
Bismuth	901811	792047	-12.17

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Segnum : 56501744148
 Cal : 56501744001

File : 11410148
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 15-DEC-2006 00:06

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[4.708]	25.00	2.752	ug/L	!ib
Antimony	[0.08574]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.4793]	0.5000	0.1120	ug/L	!ib
Barium	[0.03540]	0.2500	0.03444	ug/L	!ib
Beryllium	[0.03793]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	[0.03479]	0.5000	0.01315	ug/L	!ib
Cobalt	[0.03474]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	ND	25.00	3.223	ug/L	
Lead	[0.03989]	0.2500	0.002523	ug/L	!ib
Magnesium	[6.023]	25.00	1.907	ug/L	!ib
Manganese	[0.04088]	0.2500	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	[0.04748]	0.2500	0.01875	ug/L	!ib
Potassium	ND	25.00	3.213	ug/L	
Selenium	ND	1.000	0.6002	ug/L	
Silver	[0.03235]	0.2500	0.005272	ug/L	!ib
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.1803]	0.5000	0.06366	ug/L	!ib
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	582032	-21.25
Scandium	529417	397367	-24.94
Germanium	119842	89796	-25.07
Indium	758188	622339	-17.92
Bismuth	901811	782570	-13.22

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05 IDF : 1.0
 Seqnum : 56501744165 File : 11410165 Time : 15-DEC-2006 01:42
 Cal : 56501744001 Caldate: 14-DEC-2006

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[7.327]	25.00	2.752	ug/L	!ib
Antimony	[0.09109]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.1690]	0.5000	0.1120	ug/L	!ib
Barium	[0.03738]	0.2500	0.03444	ug/L	!ib
Beryllium	[0.05170]	0.2500	0.002016	ug/L	!ib
Cadmium	[0.07969]	0.2500	0.05722	ug/L	!ib
Calcium	ND	25.00	6.782	ug/L	
Chromium	[0.02920]	0.5000	0.01315	ug/L	!ib
Cobalt	[0.05706]	0.2500	0.003116	ug/L	!ib
Copper	[0.03636]	0.2500	0.02110	ug/L	!ib
Iron	[5.296]	25.00	3.223	ug/L	!ib
Lead	[0.05752]	0.2500	0.002523	ug/L	!ib
Magnesium	[8.755]	25.00	1.907	ug/L	!ib
Manganese	[0.05664]	0.2500	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	[0.02076]	0.2500	0.01875	ug/L	!ib
Potassium	ND	25.00	3.213	ug/L	
Selenium	[0.6112]	1.000	0.6002	ug/L	!ib
Silver	[0.04173]	0.2500	0.005272	ug/L	!ib
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.5000	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	577982	-21.80
Scandium	529417	385526	-27.18
Germanium	119842	88084	-26.50
Indium	758188	609554	-19.60
Bismuth	901811	769438	-14.68

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56501744174
 Cal : 56501744001

File : 11410174
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 15-DEC-2006 02:32

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	25.00	2.752	ug/L	
Antimony	[0.03126]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.2370]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.005599]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	[0.03375]	0.5000	0.01315	ug/L	!ib
Cobalt	[0.01580]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	ND	25.00	3.223	ug/L	
Lead	[0.01511]	0.2500	0.002523	ug/L	!ib
Magnesium	[3.123]	25.00	1.907	ug/L	!ib
Manganese	ND	0.2500	0.03082	ug/L	
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	ND	25.00	3.213	ug/L	
Selenium	ND	1.000	0.6002	ug/L	
Silver	ND	0.2500	0.005272	ug/L	
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.07955]	0.5000	0.06366	ug/L	!ib
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	583350	-21.07
Scandium	529417	389118	-26.50
Germanium	119842	87467	-27.01
Indium	758188	612337	-19.24
Bismuth	901811	769060	-14.72

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05 IDF : 1.0
 Seqnum : 56501744201 File : 11410201 Time : 15-DEC-2006 05:02
 Cal : 56501744001 Caldate: 14-DEC-2006

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[8.228]	25.00	2.752	ug/L	!ib
Antimony	[0.08595]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.4067]	0.5000	0.1120	ug/L	!ib
Barium	[0.03589]	0.2500	0.03444	ug/L	!ib
Beryllium	[0.05719]	0.2500	0.002016	ug/L	!ib
Cadmium	[0.09085]	0.2500	0.05722	ug/L	!ib
Calcium	ND	25.00	6.782	ug/L	
Chromium	[0.03981]	0.5000	0.01315	ug/L	!ib
Cobalt	[0.05849]	0.2500	0.003116	ug/L	!ib
Copper	[0.05487]	0.2500	0.02110	ug/L	!ib
Iron	[6.932]	25.00	3.223	ug/L	!ib
Lead	[0.06553]	0.2500	0.002523	ug/L	!ib
Magnesium	[10.28]	25.00	1.907	ug/L	!ib
Manganese	[0.09669]	0.2500	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	ND	25.00	3.213	ug/L	
Selenium	[0.8727]	1.000	0.6002	ug/L	!ib
Silver	[0.05544]	0.2500	0.005272	ug/L	!ib
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.5000	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	541339	-26.76
Scandium	529417	367469	-30.59
Germanium	119842	82059	-31.53
Indium	758188	596051	-21.38
Bismuth	901811	742222	-17.70

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56501744017 File : 11410017
 Cal : 56501744001 Caldate: 14-DEC-2006
 Standards: S4984, S4635

IDF : 1.0
 Time : 14-DEC-2006 11:53

Analyte	Quant	RL	Units	Flags
Antimony	2.420	0.2500	ug/L	
Arsenic	[0]	0.5000	ug/L	
Barium	1.451	0.2500	ug/L	
Beryllium	[0.01179]	0.2500	ug/L	
Cadmium	[0.1442]	0.2500	ug/L	
Chromium	3.495	0.5000	ug/L	
Cobalt	2.796	0.2500	ug/L	
Copper	2.458	0.2500	ug/L	
Lead	1.502	0.2500	ug/L	
Manganese	1.444	0.2500	ug/L	
Nickel	5.315	0.2500	ug/L	
Selenium	[0]	1.000	ug/L	
Silver	[0.1776]	0.2500	ug/L	
Thallium	[0.05492]	0.1250	ug/L	
Vanadium	[0.2756]	0.5000	ug/L	
Zinc	3.724	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	107100	ug/L	107
Calcium	300000	335400	ug/L	112
Iron	250000	250100	ug/L	100
Magnesium	100000	106500	ug/L	107
Molybdenum	2000	2092	ug/L	105
Potassium	100000	109400	ug/L	109
Sodium	250000	250400	ug/L	100

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	588660	-20.36
Scandium	529417	462832	-12.58
Germanium	119842	103404	-13.72
Indium	758188	623223	-17.80
Bismuth	901811	640011	-29.03

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56501744018
 Cal : 56501744001
 Standards: S4985, S4635

File : 11410018
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 11:59

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	98180	ug/L	-2		
Arsenic	100.0	96.26	ug/L	-4	20	
Cadmium	100.0	90.40	ug/L	-10	20	
Calcium	300000	310100	ug/L	3		
Chromium	200.0	205.7	ug/L	3	20	
Cobalt	200.0	191.4	ug/L	-4	20	
Copper	200.0	177.4	ug/L	-11	20	
Iron	250000	231600	ug/L	-7		
Magnesium	100000	96620	ug/L	-3		
Manganese	200.0	199.3	ug/L	0	20	
Molybdenum	2000	1974	ug/L	-1		
Nickel	200.0	183.0	ug/L	-9	20	
Potassium	100000	101000	ug/L	1		
Selenium	100.0	83.07	ug/L	-17	20	
Silver	50.00	44.67	ug/L	-11	20	
Sodium	250000	223400	ug/L	-11		
Vanadium	200.0	209.5	ug/L	5	20	
Zinc	100.0	84.84	ug/L	-15	20	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Scandium	529417	467368	-11.72
Germanium	119842	102866	-14.17

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56501744034 File : 11410034
 Cal : 56501744001 Caldate: 14-DEC-2006
 Standards: S4984, S4635

IDF : 1.0
 Time : 14-DEC-2006 13:28

Analyte	Quant	RL	Units	Flags
Antimony	2.336	0.2500	ug/L	
Arsenic	[0]	0.5000	ug/L	
Barium	1.379	0.2500	ug/L	
Beryllium	[0.008427]	0.2500	ug/L	
Cadmium	[0.1298]	0.2500	ug/L	
Chromium	3.268	0.5000	ug/L	
Cobalt	2.720	0.2500	ug/L	
Copper	2.366	0.2500	ug/L	
Lead	1.465	0.2500	ug/L	
Manganese	1.400	0.2500	ug/L	
Nickel	5.081	0.2500	ug/L	
Selenium	[0]	1.000	ug/L	
Silver	[0.1606]	0.2500	ug/L	
Thallium	[0.04368]	0.1250	ug/L	
Vanadium	[0.2795]	0.5000	ug/L	
Zinc	3.505	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	103600	ug/L	104
Calcium	300000	321700	ug/L	107
Iron	250000	244300	ug/L	98
Magnesium	100000	102700	ug/L	103
Molybdenum	2000	2043	ug/L	102
Potassium	100000	105600	ug/L	106
Sodium	250000	242000	ug/L	97

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	580974	-21.40
Scandium	529417	466222	-11.94
Germanium	119842	103041	-14.02
Indium	758188	632944	-16.52
Bismuth	901811	662727	-26.51

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56501744035
 Cal : 56501744001
 Standards: S4985, S4635

File : 11410035
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 13:34

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	94430	ug/L	-6		
Arsenic	100.0	94.08	ug/L	-6	20	
Cadmium	100.0	88.79	ug/L	-11	20	
Calcium	300000	299700	ug/L	0		
Chromium	200.0	201.6	ug/L	1	20	
Cobalt	200.0	187.9	ug/L	-6	20	
Copper	200.0	173.0	ug/L	-14	20	
Iron	250000	229000	ug/L	-8		
Magnesium	100000	93070	ug/L	-7		
Manganese	200.0	195.5	ug/L	-2	20	
Molybdenum	2000	1971	ug/L	-1		
Nickel	200.0	179.5	ug/L	-10	20	
Potassium	100000	98190	ug/L	-2		
Selenium	100.0	82.13	ug/L	-18	20	
Silver	50.00	44.30	ug/L	-11	20	
Sodium	250000	216900	ug/L	-13		
Vanadium	200.0	205.1	ug/L	3	20	
Zinc	100.0	82.20	ug/L	-18	20	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Scandium	529417	467067	-11.78
Germanium	119842	100756	-15.93

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05		IDF : 1.0
Seqnum : 56501744090	File : 11410090	Time : 14-DEC-2006 18:41
Cal : 56501744001	Caldate: 14-DEC-2006	
Standards: S4984, S4635		

Analyte	Quant	RL	Units	Flags
Antimony	2.312	0.2500	ug/L	
Arsenic	[0.1553]	0.5000	ug/L	
Barium	1.369	0.2500	ug/L	
Beryllium	[0.01073]	0.2500	ug/L	
Cadmium	[0.1632]	0.2500	ug/L	
Chromium	3.309	0.5000	ug/L	
Cobalt	2.702	0.2500	ug/L	
Copper	2.340	0.2500	ug/L	
Lead	1.483	0.2500	ug/L	
Manganese	1.381	0.2500	ug/L	
Nickel	5.082	0.2500	ug/L	
Selenium	[0]	1.000	ug/L	
Silver	[0.1574]	0.2500	ug/L	
Thallium	[0.04155]	0.1250	ug/L	
Vanadium	[0.2934]	0.5000	ug/L	
Zinc	3.588	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	105900	ug/L	106
Calcium	300000	328000	ug/L	109
Iron	250000	248400	ug/L	99
Magnesium	100000	105300	ug/L	105
Molybdenum	2000	2071	ug/L	104
Potassium	100000	107500	ug/L	108
Sodium	250000	250800	ug/L	100

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	554975	-24.91
Scandium	529417	436343	-17.58
Germanium	119842	97215	-18.88
Indium	758188	601658	-20.65
Bismuth	901811	646522	-28.31

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56501744091
 Cal : 56501744001
 Standards: S4985, S4635

File : 11410091
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 18:46

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	98280	ug/L	-2		
Arsenic	100.0	94.81	ug/L	-5	20	
Cadmium	100.0	92.58	ug/L	-7	20	
Calcium	300000	310300	ug/L	3		
Chromium	200.0	207.1	ug/L	4	20	
Cobalt	200.0	194.6	ug/L	-3	20	
Copper	200.0	174.8	ug/L	-13	20	
Iron	250000	237500	ug/L	-5		
Magnesium	100000	96600	ug/L	-3		
Manganese	200.0	202.6	ug/L	1	20	
Molybdenum	2000	2051	ug/L	3		
Nickel	200.0	182.2	ug/L	-9	20	
Potassium	100000	102500	ug/L	3		
Selenium	100.0	83.65	ug/L	-16	20	
Silver	50.00	45.53	ug/L	-9	20	
Sodium	250000	227600	ug/L	-9		
Vanadium	200.0	212.5	ug/L	6	20	
Zinc	100.0	82.77	ug/L	-17	20	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Scandium	529417	426654	-19.41
Germanium	119842	92305	-22.98

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56501744175
 Cal : 56501744001
 Standards: S4984, S4635

File : 11410175
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 15-DEC-2006 02:38

Analyte	Quant	RL	Units	Flags
Antimony	2.391	0.2500	ug/L	
Arsenic	[0]	0.5000	ug/L	
Barium	1.387	0.2500	ug/L	
Beryllium	[0.004444]	0.2500	ug/L	
Cadmium	[0.1030]	0.2500	ug/L	
Chromium	3.329	0.5000	ug/L	
Cobalt	2.804	0.2500	ug/L	
Copper	2.430	0.2500	ug/L	
Lead	1.495	0.2500	ug/L	
Manganese	1.418	0.2500	ug/L	
Nickel	5.190	0.2500	ug/L	
Selenium	[0]	1.000	ug/L	
Silver	[0.1685]	0.2500	ug/L	
Thallium	[0.03074]	0.1250	ug/L	
Vanadium	[0.2111]	0.5000	ug/L	
Zinc	3.661	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	111200	ug/L	111
Calcium	300000	343800	ug/L	115
Iron	250000	253100	ug/L	101
Magnesium	100000	108800	ug/L	109
Molybdenum	2000	2237	ug/L	112
Potassium	100000	112200	ug/L	112
Sodium	250000	257400	ug/L	103

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	467189	-36.79
Scandium	529417	357359	-32.50
Germanium	119842	79760	-33.45
Indium	758188	523485	-30.96
Bismuth	901811	568040	-37.01

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56501744176
 Cal : 56501744001
 Standards: S4985, S4635

File : 11410176
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 15-DEC-2006 02:43

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	99380	ug/L	-1		
Arsenic	100.0	93.07	ug/L	-7	20	
Cadmium	100.0	95.07	ug/L	-5	20	
Calcium	300000	314200	ug/L	5		
Chromium	200.0	207.5	ug/L	4	20	
Cobalt	200.0	192.7	ug/L	-4	20	
Copper	200.0	171.9	ug/L	-14	20	
Iron	250000	235800	ug/L	-6		
Magnesium	100000	96450	ug/L	-4		
Manganese	200.0	202.7	ug/L	1	20	
Molybdenum	2000	2093	ug/L	5		
Nickel	200.0	179.0	ug/L	-11	20	
Potassium	100000	102900	ug/L	3		
Selenium	100.0	81.50	ug/L	-19	20	
Silver	50.00	46.17	ug/L	-8	20	
Sodium	250000	229800	ug/L	-8		
Vanadium	200.0	214.0	ug/L	7	20	
Zinc	100.0	80.87	ug/L	-19	20	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Scandium	529417	375499	-29.07
Germanium	119842	82331	-31.30

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Segnum : 56501744203
 Cal : 56501744001
 Standards: S4984, S4635

File : 11410203
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 15-DEC-2006 05:14

Analyte	Quant	RL	Units	Flags
Antimony	2.277	0.2500	ug/L	
Arsenic	[0.1137]	0.5000	ug/L	
Barium	1.320	0.2500	ug/L	
Beryllium	[0.001928]	0.2500	ug/L	
Cadmium	[0.1160]	0.2500	ug/L	
Chromium	3.359	0.5000	ug/L	
Cobalt	2.681	0.2500	ug/L	
Copper	2.386	0.2500	ug/L	
Lead	1.464	0.2500	ug/L	
Manganese	1.427	0.2500	ug/L	
Nickel	5.253	0.2500	ug/L	
Selenium	[0]	1.000	ug/L	
Silver	[0.1740]	0.2500	ug/L	
Thallium	[0.04643]	0.1250	ug/L	
Vanadium	[0.1916]	0.5000	ug/L	
Zinc	3.509	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	108700	ug/L	109
Calcium	300000	339900	ug/L	113
Iron	250000	251300	ug/L	101
Magnesium	100000	105500	ug/L	106
Molybdenum	2000	2272	ug/L	114
Potassium	100000	111600	ug/L	112
Sodium	250000	249400	ug/L	100

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	431246	-41.65
Scandium	529417	334818	-36.76
Germanium	119842	73495	-38.67
Indium	758188	510422	-32.68
Bismuth	901811	546377	-39.41

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56501744204
 Cal : 56501744001
 Standards: S4985, S4635

File : 11410204
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 15-DEC-2006 05:19

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	96820	ug/L	-3		
Arsenic	100.0	95.36	ug/L	-5	20	
Cadmium	100.0	101.0	ug/L	1	20	
Calcium	300000	315400	ug/L	5		
Chromium	200.0	211.9	ug/L	6	20	
Cobalt	200.0	194.4	ug/L	-3	20	
Copper	200.0	170.4	ug/L	-15	20	
Iron	250000	236800	ug/L	-5		
Magnesium	100000	92550	ug/L	-7		
Manganese	200.0	205.8	ug/L	3	20	
Molybdenum	2000	2193	ug/L	10		
Nickel	200.0	179.2	ug/L	-10	20	
Potassium	100000	103100	ug/L	3		
Selenium	100.0	84.87	ug/L	-15	20	
Silver	50.00	49.41	ug/L	-1	20	
Sodium	250000	218500	ug/L	-13		
Vanadium	200.0	220.5	ug/L	10	20	
Zinc	100.0	80.41	ug/L	-20	20	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Scandium	529417	346476	-34.56
Germanium	119842	72597	-39.42

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 14-DEC-2006
Sequence: 56501744
Instrument ID: MET05

(11410)

ICALBLK Filename: 11410004
Date Analyzed: 14-DEC-2006
Time Analyzed: 10:41

		IS1 (LI READING	IS2 (SC READING	IS3 (GE READING	IS4 (IN READING	IS5 (BI READING	IS6 (TB READING
ICALBLK STD		739106	529417	119842	758188	901811	1227860
LOWER LIMIT		221732	158825	35953	227456	270543	368358
UPPER LIMIT		886927	635300	143811	909826	1082173	1473432

TYPE	SAMPLE	#	IS1 (LI READING	IS2 (SC READING	IS3 (GE READING	IS4 (IN READING	IS5 (BI READING	IS6 (TB READING
ICB		014	760785	538000	119331	765110	912624	1235705
ICSA		017	588660	462832	103404	623223	640011	1025722
BLANK	QC367981	022	560416	398147	94842	570719	706182	875004
SAMPLE	191351-008	023	589467	423113	97799	609924	764612	991226
SAMPLE	191351-006	024	677372	554200	118372	721189	737564	1202708
CCV		029	639701	463074	104479	659273	829843	1106073
CCB		033	710787	502160	113800	737562	917724	1175519
ICSA		034	580974	466222	103041	632944	662727	1058629
BLANK	QC368135	039	567501	400311	89855	605457	736036	893527
BS	QC368136	040	588362	431634	95684	632097	767076	1011286
BSD	QC368137	041	586134	426268	93466	611563	743233	972497
SER	QC368140	043	644610	468968	105566	686731	855874	1135233
MS	QC368138	044	558544	406754	89301	569981	682702	904722
MSD	QC368139	045	562038	415803	89805	583897	695706	926120
PDS	QC368141	046	553847	404034	87110	567582	672543	897853
MSS	191314-003	050	649452	472606	108094	704387	895172	1155797
CCV		058	618953	449338	100094	655982	801836	1054895
CCB		060	693681	488398	108716	717096	881470	1151266
SAMPLE	191358-001	062	699875	488946	109715	717087	878017	1149936
SAMPLE	191358-002	063	708354	494800	111300	718553	873329	1146935
SAMPLE	191358-003	064	719961	500208	111250	731372	884359	1154608
SAMPLE	191358-004	065	726250	503430	111151	732866	886281	1161686
SAMPLE	191358-005	066	698762	482261	108129	696780	878322	1129679
SAMPLE	191358-006	067	636097	423916	94437	614493	767112	978579
SAMPLE	191358-007	068	707589	488449	109304	714913	884959	1145963
SAMPLE	191358-009	069	676856	456313	103269	667021	835756	1079689
SAMPLE	191358-011	070	658371	459122	102552	671123	839882	1091259
SAMPLE	191358-013	071	645916	467937	102449	667898	844802	1098112

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 14-DEC-2006
Sequence: 56501744
Instrument ID: MET05

(11410)

ICALBLK Filename: 11410004
Date Analyzed: 14-DEC-2006
Time Analyzed: 10:41

TYPE	SAMPLE	#							
CCV		075	666358	485169	108833	696031	883136	1164154	
CCB		078	694076	484300	110242	712188	897887	1163618	
SER	QC368140	079	671974	465281	107092	685146	873592	1117868	
MS	QC368138	080	636987	453691	103204	667781	838670	1087516	
MSD	QC368139	081	637371	452368	102211	667621	837642	1093329	
PDS	QC368141	082	623953	453740	101999	655544	813082	1073291	
CCV		086	656022	473580	104619	683901	846276	1121003	
CCB		088	709742	498153	113590	727823	969919	1197689	
ICSA		090	554975	436343	97215	601658	646522	1013362	
BLANK	QC368128	095	540053	375879	86590	557219	699677	848522	
BS	QC368129	096	557918	394421	88138	574157	718477	932736	
BSD	QC368130	097	576166	415072	92190	601336	741542	984717	
MSS	191314-003	099	616378	441276	97559	628284	745469	1026053	
SER	QC368133	100	645378	444230	100288	662612	815950	1059214	
MS	QC368131	101	553556	393768	85079	566601	673303	872134	
MSD	QC368132	102	538091	382101	82316	551846	653474	825590	
MS	QC368217	103	551701	403464	85711	581992	680914	918834	
CCV		107	609315	436763	98119	650290	815668	1059464	
CCB		109	617799	433413	97372	666582	835820	1051741	
MSD	QC368218	111	538887	388543	82637	558854	664413	886599	
PDS	QC368134	112	545626	398039	83820	574699	676181	877240	
SAMPLE	191314-001	113	552048	380498	81965	556520	654901	818244	
SAMPLE	191314-004	114	602878	414210	88783	587173	680202	940114	
SAMPLE	191314-005	115	576302	402469	86051	568560	678263	913636	
SAMPLE	191314-006	116	671780	467993	98008	647175	724984	1060316	
SAMPLE	191314-009	117	536236	396896	80376	562678	624656	818700	
SAMPLE	191314-010	118	578321	416199	86491	610734	672694	862603	
MSS	191314-011	119	517206	365884	78354	527233	622153	781307	
SAMPLE	191314-012	120	502573	360118	75213	522754	599333	768282	
CCV		124	590489	420941	94163	630459	795613	1013761	
CCB		126	582705	406942	91432	636473	792047	985147	
SAMPLE	191314-014	130	525604	369542	77989	539072	631213	791068	
SAMPLE	191314-015	131	543651	388333	82535	555926	652692	835229	
SAMPLE	191314-016	132	575949	416664	87451	599056	690589	935377	

INTERNAL STANDARD SUMMARY Curtis & Tompkins Laboratories

Sequence Date: 14-DEC-2006
Sequence: 56501744
Instrument ID: MET05

(11410)

ICALBLK Filename: 11410004
Date Analyzed: 14-DEC-2006
Time Analyzed: 10:41

TYPE	SAMPLE	#							
MSS	191314-003	136	631118	427596	96065	653632	816844	1027064	
SER	QC368133	137	604197	406838	91116	627441	783242	977194	
MS	QC368131	138	584625	401930	90062	618502	765022	959398	
MSD	QC368132	139	579681	398040	88655	616197	757369	934639	
PDS	QC368134	140	552347	390994	86059	594908	731831	893387	
MSS	191314-011	141	565337	391956	87100	608928	746758	892236	
MS	QC368217	142	575942	406690	88184	636008	769307	946915	
CCV		146	569156	397684	88443	607113	756180	956018	
CCB		148	582032	397367	89796	622339	782570	965958	
MSD	QC368218	150	574468	392424	87262	612041	750159	919159	
SAMPLE	191314-001	151	574792	395467	89036	614779	758987	925124	
SAMPLE	191314-004	152	610023	413134	92750	633134	772819	979468	
SAMPLE	191314-005	153	630296	425478	94069	650202	793338	1015738	
SAMPLE	191314-006	154	651794	443977	96423	670474	796771	1032945	
SAMPLE	191314-009	155	602454	402771	88638	620018	759873	925468	
SAMPLE	191314-010	156	593847	407349	90469	631900	768572	981913	
SAMPLE	191314-012	157	586271	400188	88024	618148	757018	963582	
SAMPLE	191314-014	158	596766	408930	90982	632988	773981	959096	
SAMPLE	191314-015	159	605683	411580	90983	629444	769953	977552	
CCV		163	573724	401176	89418	604264	769319	986225	
CCB		165	577982	385526	88084	609554	769438	957041	
SAMPLE	191314-016	167	578515	394830	89294	609746	753128	923559	
CCV		171	544557	380127	83429	584035	720631	878148	
CCB		174	583350	389118	87467	612337	769060	901389	
ICSA		175	467189	357359	79760	523485	568040	775269	
BLANK	QC368373	180	471772	327859	71559	525276	619362	706082	
BS	QC368374	181	470203	327451	70683	504483	608943	721302	
BSD	QC368375	182	472652	319274	69812	482904	589669	707318	
MSS	191286-008	184	467646	365781	73128	481603	556982	726629	
SER	QC368378	185	539220	386383	82856	580605	682134	840829	
MS	QC368376	186	442642	330228	67712	440622	513853	669962	
MSD	QC368377	187	426000	320331	66062	423183	484356	629798	
PDS	QC368379	188	442779	343822	67030	454637	525220	677940	
CCV		199	525793	366987	81213	574973	717407	879459	

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 14-DEC-2006
Sequence: 56501744
Instrument ID: MET05

(11410)
ICALBLK Filename: 11410004
Date Analyzed: 14-DEC-2006
Time Analyzed: 10:41

TYPE	SAMPLE	#					
CCB	201	541339	367469	82059	596051	742222	830771
ICSA	203	431246	334818	73495	510422	546377	734981

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

Sequence: 56501744 Instrument: MET05
Analytical Method: EPA 6020 Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 14-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
001	11410001	TUN				14-DEC-2006 10:24	1.0	1.0				1		
002	11410002	X	RINSE			14-DEC-2006 10:30	1.0					2		
003	11410003	X	RINSE			14-DEC-2006 10:36	1.0					2		
004	11410004	ICALBLK	STD-BLANK			14-DEC-2006 10:41	1.0	1.0				2		
005	11410005	ICAL	CS1			14-DEC-2006 10:47	1.0	1.0				3		
006	11410006	ICAL	CS2			14-DEC-2006 10:52	1.0	1.0				4		
007	11410007	ICAL	CS3			14-DEC-2006 10:58	1.0	1.0				5		
008	11410008	ICAL	CS4			14-DEC-2006 11:04	1.0	1.0				6		
009	11410009	ICAL	CS5			14-DEC-2006 11:09	1.0	1.0				7		
010	11410010	ICAL	CS6			14-DEC-2006 11:15	1.0	1.0				8		
011	11410011	X	RINSE			14-DEC-2006 11:20	1.0					2		
012	11410012	ICV				14-DEC-2006 11:25	1.0	1.0				9		
013	11410013	X	RINSE			14-DEC-2006 11:31	1.0					2		
014	11410014	ICB				14-DEC-2006 11:36	1.0	1.0				2		
015	11410015	X				14-DEC-2006 11:42	1.0	1.0	3			2		
016	11410016	X				14-DEC-2006 11:48	1.0					2		
017	11410017	ICSA				14-DEC-2006 11:53	1.0	1.0				10 2	7:CA=335400	
018	11410018	ICSAB				14-DEC-2006 11:59	1.0	1.0				11 2	9:CA=310100	
019	11410019	X	RINSE			14-DEC-2006 12:04	1.0					2		
020	11410020	X	RINSE			14-DEC-2006 12:10	1.0					2		
021	11410021	X	RINSE			14-DEC-2006 12:15	1.0					2		
022	11410022	BLANK	QC367981			14-DEC-2006 12:21	1.0	1.0				2		
023	11410023	SAMPLE	191351-008			14-DEC-2006 12:27	1.0	1.0				2		
024	11410024	SAMPLE	191351-006			14-DEC-2006 12:32	5.0	1.0				2		
025	11410025	X	RINSE			14-DEC-2006 12:38	1.0					2		
026	11410026	X	RINSE			14-DEC-2006 12:43	1.0					2		
027	11410027	X	RINSE			14-DEC-2006 12:49	1.0					2		
028	11410028	X	RINSE			14-DEC-2006 12:55	1.0					2		
029	11410029	CCV				14-DEC-2006 13:00	1.0	1.0				12 2		
030	11410030	X	RINSE			14-DEC-2006 13:06	1.0					2		
031	11410031	X				14-DEC-2006 13:11	1.0					2		

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst: 

Date: 12/15/04

SEQUENCE SUMMARY

Curtis & Tompkins Laboratories

Sequence: 56501744 Instrument: MET05 Agilent ICP-MS
 Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 14-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds Used	>LR
032	11410032	X				14-DEC-2006 13:17	1.0					2	
033	11410033	CCB				14-DEC-2006 13:22	1.0	1.0			1	2	
034	11410034	ICSA				14-DEC-2006 13:28	1.0	1.0			1	10 2	7:CA=321700
035	11410035	ICSAB				14-DEC-2006 13:34	1.0	1.0			1	11 2	9:CA=299700
036	11410036	X				14-DEC-2006 13:39	1.0					2	
037	11410037	X				14-DEC-2006 13:45	1.0					2	
038	11410038	X				14-DEC-2006 13:50	1.0					2	
039	11410039	BLANK				14-DEC-2006 13:56	1.0	1.0			1	2	
040	11410040	BS				14-DEC-2006 14:01	1.0	1.0			1	2	
041	11410041	BSD				14-DEC-2006 14:07	1.0	1.0			1	2	
042	11410042	X				14-DEC-2006 14:12	1.0					2	
043	11410043	SER				14-DEC-2006 14:18	5.0	1.0		1	1	2	
044	11410044	MS				14-DEC-2006 14:24	1.0	1.0		4	1	2	5:NA=59030.0
045	11410045	MSD				14-DEC-2006 14:29	1.0	1.0		4	1	2	5:NA=57900.0
046	11410046	PDS				14-DEC-2006 14:35	1.0	1.0			1	13 14 2	5:NA=58030.0
047	11410047	X				14-DEC-2006 14:40	1.0					2	
048	11410048	X				14-DEC-2006 14:46	1.0					2	
049	11410049	X				14-DEC-2006 14:51	1.0					2	
050	11410050	MSS				14-DEC-2006 14:57	10.0	1.0		1		2	
051	11410051	X				14-DEC-2006 15:02	1.0					2	
052	11410052	X				14-DEC-2006 15:08	1.0					2	
053	11410053	X				14-DEC-2006 15:14	1.0					2	
054	11410054	X				14-DEC-2006 15:19	1.0					12 2	
055	11410055	X				14-DEC-2006 15:25	1.0					2	
056	11410056	X				14-DEC-2006 15:30	1.0					2	
057	11410057	X				14-DEC-2006 15:36	1.0					2	
058	11410058	CCV				14-DEC-2006 15:42	1.0	1.0		1		12 2	
059	11410059	X				14-DEC-2006 15:48	1.0					2	
060	11410060	CCB				14-DEC-2006 15:53	1.0	1.0		1		2	
061	11410061	X				14-DEC-2006 15:59	1.0					2	
062	11410062	SAMPLE				14-DEC-2006 16:05	20.0	1.0		1	1	2	

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst:

Date: 12/15/09

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56501744 Instrument: MET05
Analytical Method: EPA 6020 Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 14-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
063	11410063	SAMPLE	191358-002	120324	Water	14-DEC-2006 16:10	50.0	1.0	1	1	1	2		
064	11410064	SAMPLE	191358-003	120324	Water	14-DEC-2006 16:16	20.0	1.0	2	1	1	2		
065	11410065	SAMPLE	191358-004	120324	Water	14-DEC-2006 16:21	20.0	1.0	1	1	1	2		
066	11410066	SAMPLE	191358-005	120324	Water	14-DEC-2006 16:27	20.0	1.0	1	1	1	2		
067	11410067	SAMPLE	191358-006	120324	Water	14-DEC-2006 16:33	1.0	1.0	1	1	1	2		
068	11410068	SAMPLE	191358-007	120324	Water	14-DEC-2006 16:38	20.0	1.0	2	1	1	2		
069	11410069	SAMPLE	191358-009	120324	Filtera	14-DEC-2006 16:44	10.0	1.0		1	1	2		
070	11410070	SAMPLE	191358-011	120324	Filtera	14-DEC-2006 16:49	10.0	1.0		1	1	2		
071	11410071	SAMPLE	191358-013	120324	Water	14-DEC-2006 16:55	20.0	1.0		1	1	2		1:MN=230.350
072	11410072	X	RINSE			14-DEC-2006 17:00	1.0					2		
073	11410073	X	RINSE			14-DEC-2006 17:06	1.0					2		
074	11410074	X	RINSE			14-DEC-2006 17:12	1.0					2		
075	11410075	CCV	RINSE			14-DEC-2006 17:17	1.0	1.0	1	1	1	12	2	
076	11410076	X	RINSE			14-DEC-2006 17:23	1.0					2		
077	11410077	X				14-DEC-2006 17:28	1.0					2		
078	11410078	CCB				14-DEC-2006 17:34	1.0	1.0			1	2		
079	11410079	SER	QC368140	120324	Water	14-DEC-2006 17:40	50.0	1.0	1	2	1	2		
080	11410080	MS	QC368138	120324	Water	14-DEC-2006 17:45	10.0	1.0	1	1	1	2		
081	11410081	MSD	QC368139	120324	Water	14-DEC-2006 17:51	10.0	1.0	1	1	1	2		
082	11410082	PDS	QC368141	120324	Water	14-DEC-2006 17:56	10.0	1.0	1	1	1	13	14	2
083	11410083	X	RINSE			14-DEC-2006 18:02	1.0					2		
084	11410084	X	RINSE			14-DEC-2006 18:08	1.0					2		
085	11410085	X	RINSE			14-DEC-2006 18:13	1.0					2		
086	11410086	CCV				14-DEC-2006 18:19	1.0	1.0			1	12	2	
087	11410087	X	RINSE			14-DEC-2006 18:24	1.0					2		
088	11410088	CCB				14-DEC-2006 18:30	1.0	1.0			1	2		
089	11410089	X				14-DEC-2006 18:35	1.0	1.0			1	2		
090	11410090	ICSA				14-DEC-2006 18:41	1.0	1.0			1	10	2	7:CA=328000
091	11410091	ICSAB				14-DEC-2006 18:46	1.0	1.0			1	11	2	10:CA=310300
092	11410092	X	RINSE			14-DEC-2006 18:52	1.0					2		
093	11410093	X	RINSE			14-DEC-2006 18:57	1.0					2		

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst:  Date: 12/15/06

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56501744 Instrument: MET05 Agilent ICP-MS
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 14-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds Used	>LR
094	11410094	X	RINSE			14-DEC-2006	19:03	1.0				2	
095	11410095	BLANK	QC368128	120323	Filtera	14-DEC-2006	19:09	1.0	1.0		1	2	
096	11410096	BS	QC368129	120323	Filtera	14-DEC-2006	19:14	1.0	1.0		1	2	
097	11410097	BSD	QC368130	120323	Filtera	14-DEC-2006	19:20	1.0	1.0		1	2	
098	11410098	X	RINSE			14-DEC-2006	19:25	1.0				2	
099	11410099	MSS	191314-003	120323	Filtera	14-DEC-2006	19:31	1.0	1.0		1	2	3:NA=49780.0
100	11410100	SER	QC368133	120323	Filtera	14-DEC-2006	19:36	5.0	1.0		1	2	
101	11410101	MS	QC368131	120323	Filtera	14-DEC-2006	19:42	1.0	1.0		1	2	4:NA=58490.0
102	11410102	MSD	QC368132	120323	Filtera	14-DEC-2006	19:48	1.0	1.0		1	2	4:NA=58400.0
103	11410103	MS	QC368217	120323	Filtera	14-DEC-2006	19:53	1.0	1.0		1	2	5:NA=73100.0
104	11410104	X	RINSE			14-DEC-2006	19:59	1.0				2	
105	11410105	X	RINSE			14-DEC-2006	20:04	1.0				2	
106	11410106	X	RINSE			14-DEC-2006	20:10	1.0				2	
107	11410107	CCV				14-DEC-2006	20:15	1.0	1.0		1	12 2	
108	11410108	X	RINSE			14-DEC-2006	20:21	1.0				2	
109	11410109	CCB				14-DEC-2006	20:26	1.0	1.0		1	2	
110	11410110	X				14-DEC-2006	20:32	1.0	1.0		1	2	
111	11410111	MSD	QC368218	120323	Filtera	14-DEC-2006	20:38	1.0	1.0		1	2	5:NA=78760.0
112	11410112	PDS	QC368134	120323	Filtera	14-DEC-2006	20:43	1.0	1.0		1	13 14 2	4:NA=56410.0
113	11410113	SAMPLE	191314-001	120323	Filtera	14-DEC-2006	20:49	1.0	1.0		1	2	4:CA=80560.0
114	11410114	SAMPLE	191314-004	120323	Filtera	14-DEC-2006	20:54	1.0	1.0		1	2	3:MG=84750.0
115	11410115	SAMPLE	191314-005	120323	Filtera	14-DEC-2006	21:00	1.0	1.0		1	2	3:MG=83520.0
116	11410116	SAMPLE	191314-006	120323	Filtera	14-DEC-2006	21:06	1.0	1.0		1	2	3:NA=113400
117	11410117	SAMPLE	191314-009	120323	Filtera	14-DEC-2006	21:11	1.0	1.0		1	2	3:NA=200200
118	11410118	SAMPLE	191314-010	120323	Filtera	14-DEC-2006	21:17	1.0	1.0		1	2	4:NA=123600
119	11410119	MSS	191314-011	120323	Filtera	14-DEC-2006	21:22	1.0	1.0		1	2	4:NA=65670.0
120	11410120	SAMPLE	191314-012	120323	Filtera	14-DEC-2006	21:28	1.0	1.0		1	2	6:NA=111500
121	11410121	X	RINSE			14-DEC-2006	21:33	1.0				2	
122	11410122	X	RINSE			14-DEC-2006	21:39	1.0				2	
123	11410123	X	RINSE			14-DEC-2006	21:45	1.0				2	
124	11410124	CCV				14-DEC-2006	21:50	1.0	1.0		1	12 2	

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst: Date: 12/15/06

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56501744 Instrument: MET05
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 14-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds	Used	>LR
125	11410125	X	RINSE			14-DEC-2006 21:56	1.0					2		
126	11410126	CCB				14-DEC-2006 22:01	1.0	1.0				2		
127	11410127	X				14-DEC-2006 22:07	1.0	1.0	1			2		
128	11410128	TUN				14-DEC-2006 22:13	1.0	1.0				1		
129	11410129	X	RINSE			14-DEC-2006 22:19	1.0					2		
130	11410130	SAMPLE	191314-014	120323	Filtera	14-DEC-2006 22:25	1.0	1.0	3			2		3:NA=58960.0
131	11410131	SAMPLE	191314-015	120323	Filtera	14-DEC-2006 22:30	1.0	1.0	3			2		3:NA=77960.0
132	11410132	SAMPLE	191314-016	120323	Filtera	14-DEC-2006 22:36	1.0	1.0	3			2		3:NA=88540.0
133	11410133	X	RINSE			14-DEC-2006 22:41	1.0					2		
134	11410134	X	RINSE			14-DEC-2006 22:47	1.0					2		
135	11410135	X	RINSE			14-DEC-2006 22:53	1.0					2		
136	11410136	MSS	191314-003	120323	Filtera	14-DEC-2006 22:58	10.0	1.0				2		
137	11410137	SER	QC368133	120323	Filtera	14-DEC-2006 23:04	50.0	1.0	2			2		
138	11410138	MS	QC368131	120323	Filtera	14-DEC-2006 23:10	10.0	1.0				2		
139	11410139	MSD	QC368132	120323	Filtera	14-DEC-2006 23:16	10.0	1.0				2		
140	11410140	PDS	QC368134	120323	Filtera	14-DEC-2006 23:21	10.0	1.0				2		
141	11410141	MSS	191314-011	120323	Filtera	14-DEC-2006 23:27	10.0	1.0				2		
142	11410142	MS	QC368217	120323	Filtera	14-DEC-2006 23:32	10.0	1.0				2		
143	11410143	X	RINSE			14-DEC-2006 23:38	1.0					2		
144	11410144	X	RINSE			14-DEC-2006 23:44	1.0					2		
145	11410145	X	RINSE			14-DEC-2006 23:49	1.0					2		
146	11410146	CCV				14-DEC-2006 23:55	1.0	1.0				2		
147	11410147	X	RINSE			15-DEC-2006 00:00	1.0					2		
148	11410148	CCB				15-DEC-2006 00:06	1.0	1.0				2		
149	11410149	X				15-DEC-2006 00:12	1.0	1.0				2		
150	11410150	MSD	QC368218	120323	Filtera	15-DEC-2006 00:17	10.0	1.0				2		
151	11410151	SAMPLE	191314-001	120323	Filtera	15-DEC-2006 00:23	10.0	1.0				2		
152	11410152	SAMPLE	191314-004	120323	Filtera	15-DEC-2006 00:29	10.0	1.0				2		
153	11410153	SAMPLE	191314-005	120323	Filtera	15-DEC-2006 00:34	10.0	1.0	1			2		
154	11410154	SAMPLE	191314-006	120323	Filtera	15-DEC-2006 00:40	10.0	1.0				2		
155	11410155	SAMPLE	191314-009	120323	Filtera	15-DEC-2006 00:45	20.0	1.0	2			2		

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst: Date: 12/15/06

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

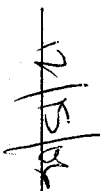
Sequence: 56501744 Instrument: MET05 Agilent ICP-MS
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 14-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
156	11410156	SAMPLE	191314-010	120323	Filtira	15-DEC-2006 00:51	10.0	1.0	1	1	1	2		
157	11410157	SAMPLE	191314-012	120323	Filtira	15-DEC-2006 00:57	10.0	1.0	1	1	1	2		
158	11410158	SAMPLE	191314-014	120323	Filtira	15-DEC-2006 01:02	10.0	1.0	1	1	1	2		
159	11410159	SAMPLE	191314-015	120323	Filtira	15-DEC-2006 01:08	10.0	1.0	1	1	1	2		
160	11410160	X	RINSE			15-DEC-2006 01:13	1.0					2		
161	11410161	X	RINSE			15-DEC-2006 01:19	1.0					2		
162	11410162	X	RINSE			15-DEC-2006 01:25	1.0					2		
163	11410163	CCV	RINSE			15-DEC-2006 01:30	1.0		1	1	1	12	2	
164	11410164	X	RINSE			15-DEC-2006 01:36	1.0					2		
165	11410165	CCB				15-DEC-2006 01:42	1.0		1	1	1	2		
166	11410166	X				15-DEC-2006 01:47	1.0		1	1	1	2		
167	11410167	SAMPLE	191314-016	120323	Filtira	15-DEC-2006 01:53	10.0	1.0	1	1	1	2		
168	11410168	X	RINSE			15-DEC-2006 01:58	1.0					2		
169	11410169	X	RINSE			15-DEC-2006 02:04	1.0					2		
170	11410170	X	RINSE			15-DEC-2006 02:10	1.0					2		
171	11410171	CCV				15-DEC-2006 02:15	1.0		1	1	1	12	2	
172	11410172	X	RINSE			15-DEC-2006 02:21	1.0					2		
173	11410173	X				15-DEC-2006 02:26	1.0		1	1	1	2		
174	11410174	CCB				15-DEC-2006 02:32	1.0					2		
175	11410175	ICSA				15-DEC-2006 02:38	1.0		1	1	1	10	2	7:CA=343800
176	11410176	ICSAB				15-DEC-2006 02:43	1.0		1	1	1	11	2	10:CA=314200
177	11410177	X	RINSE			15-DEC-2006 02:49	1.0					2		
178	11410178	X	RINSE			15-DEC-2006 02:54	1.0					2		
179	11410179	X	RINSE			15-DEC-2006 03:00	1.0					2		
180	11410180	BLANK	QC368373	120383	Filtira	15-DEC-2006 03:05	1.0		1	1	1	2		
181	11410181	BS	QC368374	120383	Filtira	15-DEC-2006 03:11	1.0		1	1	1	2		
182	11410182	BSD	QC368375	120383	Filtira	15-DEC-2006 03:17	1.0		1	1	1	2		
183	11410183	X	RINSE			15-DEC-2006 03:22	1.0					2		
184	11410184	MSS	191286-008	120383	Filtira	15-DEC-2006 03:28	1.0		4	1	1	2		4:NA=176200
185	11410185	SER	QC368378	120383	Filtira	15-DEC-2006 03:33	5.0		1	1	1	2		3:NA=37860.0
186	11410186	MS	QC368376	120383	Filtira	15-DEC-2006 03:39	1.0		1	4	1	2		5:NA=185300

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst: 

Date: 

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56501744 Instrument: MET05
Analytical Method: EPA 6020

Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 14-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
187	11410187	MSD	QC368377	120383	Filttra	15-DEC-2006 03:44	1.0	1.0	2	3	1	2	6:NA=191100	
188	11410188	PDS	QC368379	120383	Filttra	15-DEC-2006 03:50	1.0	1.0	2		1	13 14 2	6:NA=17730C	
189	11410189	X	RINSE			15-DEC-2006 03:55	1.0					2		
190	11410190	X	RINSE			15-DEC-2006 04:01	1.0					2		
191	11410191	X	RINSE			15-DEC-2006 04:07	1.0					2		
192	11410192	X	RINSE			15-DEC-2006 04:12	1.0					12 2		
193	11410193	X	RINSE			15-DEC-2006 04:18	1.0	1.0			1	2		
194	11410194	X				15-DEC-2006 04:23	1.0	1.0	2		1	2		
195	11410195	X				15-DEC-2006 04:29	1.0	1.0	2		1	2		
196	11410196	X	RINSE			15-DEC-2006 04:34	1.0					2		
197	11410197	X	RINSE			15-DEC-2006 04:40	1.0					2		
198	11410198	X	RINSE			15-DEC-2006 04:46	1.0					2		
199	11410199	CCV				15-DEC-2006 04:51	1.0	1.0			1	12 2		
200	11410200	X	RINSE			15-DEC-2006 04:57	1.0					2		
201	11410201	CCB				15-DEC-2006 05:02	1.0	1.0			1	2		
202	11410202	X				15-DEC-2006 05:08	1.0	1.0	1		1	2		
203	11410203	ICSA				15-DEC-2006 05:14	1.0	1.0			1	10 2	7:CA=339900	
204	11410204	ICSAB				15-DEC-2006 05:19	1.0	1.0			1	11 2	10:CA=315400	

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst:

Date:

12/15/06

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET06
 Calnum : 66501883001
 Units : ug/L

Date : 14-DEC-2006 13:02
 X Axis : R

Reviewer: ---

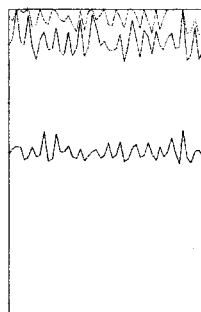
Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	114m0005	66501883005	14-DEC-2006 13:07	S4977	
L2	114m0006	66501883006	14-DEC-2006 13:13	S4979	
L3	114m0007	66501883007	14-DEC-2006 13:18	S4980	
L4	114m0008	66501883008	14-DEC-2006 13:23	S4981	
L5	114m0009	66501883009	14-DEC-2006 13:29	S4975	
L6	114m0010	66501883010	14-DEC-2006 13:37	S4976	

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	AVG	%RSD	MNR^2	Fig
Aluminum	A	0.8032	0.7410	0.7011	0.6485	0.6577	0.6436	BLNK	-1.2363	1.54712		0.6992	1.000	0.995	
Antimony	A	0.4001	0.3612	0.3559	0.3297	0.3329	0.3465	BLNK	-0.0111	2.90953		0.3544	1.000	0.995	
Barium	A	0.0817	0.0672	0.0664	0.0616	0.0611	0.0581	BLNK	-0.0290	17.0418		0.0660	0.999	0.995	
Beryllium	A	0.2513	0.2659	0.2784	0.2746	0.2704	0.2614	BLNK	-0.0008	3.79953		0.2670	1.000	0.995	
Cadmium	A	0.1050	0.0946	0.0956	0.0917	0.0907	0.0869	BLNK	-0.0122	11.4019		0.0941	1.000	0.995	
Calcium	A	0.0805	0.0362	0.0315	0.0231	0.0239	0.0230	BLNK	-21.614	43.2483		0.0363	1.000	0.995	
Lead	A	1.0361	0.8567	0.8566	0.7828	0.8112	0.7988	BLNK	-0.0870	1.24867		0.8571	1.000	0.995	
Magnesium	A	0.6784	0.6522	0.6344	0.5813	0.5850	0.5651	BLNK	-0.6770	1.75713		0.6161	1.000	0.995	
Molybdenum	A	0.2346	0.2295	0.2423	0.2207	0.2284	0.2271	BLNK	-0.0068	4.39893		0.2304	1.000	0.995	
Potassium	A	3.9056	1.3015	1.0496	0.6819	0.6580	0.6401	BLNK	-49.475	1.55820		1.3728	1.000	0.995	
Silver	A	0.3719	0.3863	0.3700	0.3456	0.3422	0.3473	BLNK	-0.0110	2.88783		0.3605	1.000	0.995	
Thallium	A	1.2651	0.8468	0.8199	0.7934	0.8090	0.8702	BLNK	-0.0316	1.16625		0.9007	0.999	0.995	
Arsenic	E	1.2527	0.7191	0.6646	0.5866	0.5695	0.5551	BLNK	-0.1034	1.79317		0.7246	1.000	0.995	
Chromium	E	7.8840	3.8752	3.4684	2.8732	2.8163	2.6971	BLNK	-0.1844	0.36790		3.9357	1.000	0.995	
Cobalt	E	4.7796	4.4742	4.6395	4.3748	4.2768	4.1014	BLNK	-0.0108	0.24174		4.4410	1.000	0.995	
Copper	E	38.886	13.222	12.907	6.8438	6.2598	5.9591	BLNK	-0.5303	0.16663		14.013	0.999	0.995	
Manganese	E	2.3934	1.8859	1.9251	1.7406	1.7110	1.6515	BLNK	-0.0360	0.60126		1.8846	1.000	0.995	
Nickel	E	4.6601	1.8581	1.6587	1.2014	1.1268	1.0716	BLNK	-0.3236	0.92530		1.9295	0.999	0.995	
Sodium	E	2.9495	1.1379	0.9796	0.6691	0.6285	0.6130	BLNK	-35.439	1.62651		1.1629	1.000	0.995	
Vanadium	E	14.875	4.6701	3.3667	2.2268	2.1653	2.1064	BLNK	-0.4486	0.47336		4.9017	1.000	0.995	
Zinc	E	28.941	6.5676	6.0712	1.5011	1.2078	1.1312	BLNK	-2.1789	0.88339		7.5700	0.999	0.995	
Iron	H	1.1032	0.9990	1.0450	0.9445	0.9412	0.9014	BLNK	-1.2262	1.09972		0.9890	1.000	0.995	
Selenium	H	0.1745	0.1656	0.1592	0.1463	0.1456	0.1375	BLNK	-0.0073	7.18679		0.1548	0.999	0.995	

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

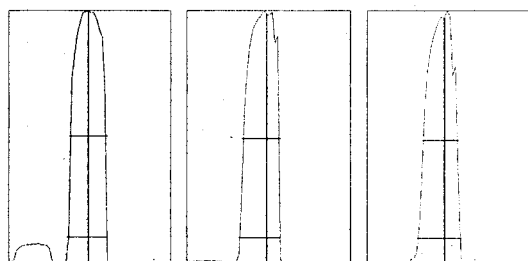
Tune Report

Tune File : nogas.u
Comment :



m/z	Range	Count	Mean	RSD%	Background
7	20,000	10334.0	10700.4	4.95	0.10
89	20,000	17239.0	17899.4	5.05	0.30
205	20,000	18431.0	19732.8	5.47	1.30

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec
n: 50
Oxide: 156/140 1.107%
Doubly Charged: 70/140 1.820%



m/z	7	89	205
Height:	10,859	17,725	19,311
Axis:	7.00	89.00	204.95
W-50%:	0.70	0.70	0.65
W-10%:	0.7500	0.7500	0.800

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec
Y axis : Linear

===Plasma Condition===

RF Power : 1600 W
RF Matching : 1.7 V
SmpI Depth : 7.4 mm
Torch-H : 0.9 mm
Torch-V : 0.7 mm
Carrier Gas : 1.04 L/min
Makeup Gas : 0 L/min
Optional Gas : --- %
Nebulizer Pump : 0.1 rps
Sample Pump : --- rps
S/C Temp : 2 degC

===Ion Lenses===

Extract 1 : 0 V
Extract 2 : -120 V
Omega Bias-ce : -30 V
Omega Lens-ce : -1.2 V
Cell Entrance : -30 V
QP Focus : 2 V
Cell Exit : -36 V
Octopole Parameters:
OctP RF : 180 V
OctP Bias : -3.6 V

===Q-Pole Parameters===

AMU Gain : 136
AMU Offset : 125
Axis Gain : 1.0009
Axis Offset : 0
QP Bias : -1 V

===Detector Parameters===

Discriminator : 8 mV
Analog HV : 1750 V
Pulse HV : 1390 V

===Reaction Cell===

Reaction Mode : OFF
H2 Gas : 0 mL/min
He Gas : 0 mL/min
Optional Gas : --- %

Tune File : he.u
He Gas: 3.5 mL/min
Optional Gas: --- %
QP Focus: -5 V
Cell Exit: -38 V
OctP Bias: -18 V
QP Bias: -13 V
m/z Count(Mean) RSD% Integration Time: 0.1000sec
51 85.8 14.07
59 4623.5 4.91
75 3.2 52.60

Tune File : h2.u
H2 Gas: 3.8 mL/min
Optional Gas: --- %
QP Focus: -8 V
Cell Exit: -44 V
OctP Bias: -18 V
QP Bias: -16 V
m/z Count(Mean) RSD% Integration Time: 0.1000sec
56 7397.5 12.62
59 3949.6 6.13
78 0.4 200.98

P/A Factor Tuning Report

Acquired: Dec 14 2006 00:15 pm

Mass[amu]	Element	P/A Factor
6	Li	0.067619
7	(Li)	Sensitivity too low
9	Be	Sensitivity too low
23	Na	Sensitivity too high
24	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
44	Ca	0.096744
45	Sc	0.095369
51	V	0.096436
52	Cr	0.100461
55	Mn	0.102818
56	Fe	Sensitivity too high
59	Co	0.106719
60	Ni	Sensitivity too low
63	Cu	Sensitivity too low
65	Cu	Sensitivity too low
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
78	Se	Sensitivity too low
89	Y	0.109034
98	Mo	Sensitivity too low
99	(Ru)	Sensitivity too low
107	Ag	0.117079
111	Cd	Sensitivity too low
115	In	0.117916
118	(In)	0.117117
121	Sb	0.115407
137	Ba	Sensitivity too low
159	Tb	0.120120
205	Tl	0.125910
206	(Pb)	0.125361
207	(Pb)	0.125137
208	Pb	0.126570
209	Bi	0.126802

===Detector Parameters===

Discriminator: 8.0 mV

Analog HV: 1750 V

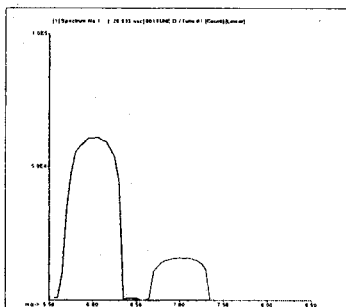
Pulse HV: 1390 V

6020 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\06L14m01.B\001TUNE.D
Date Acquired: Dec 14 2006 12:43 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s4974
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	1.09	5.00	
59 Co	2.75	5.00	
115 In	2.61	5.00	
205 Tl	0.34	5.00	



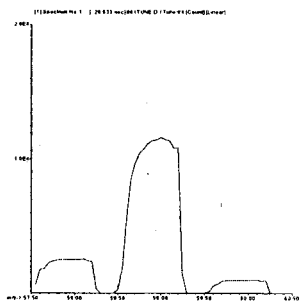
7 Li

Mass Calib.

Actual: 7.00
Required: 6.90 - 7.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



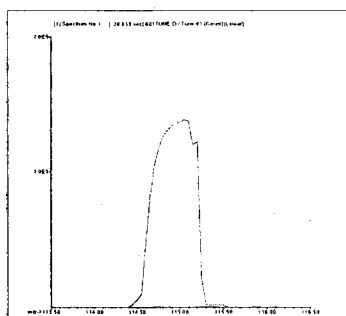
59 Co

Mass Calib.

Actual: 59.00
Required: 58.90 - 59.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



115 In

Mass Calib.

Actual: 115.00

Required: 114.90 - 115.10

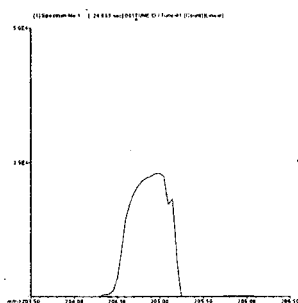
Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:



205 Tl

Mass Calib.

Actual: 204.95

Required: 204.90 - 205.10

Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06L14m01.B\004CALB.D\004CALB.D#
 Date Acquired: Dec 14 2006 01:00 pm
 Acq. Method: lcj6020.M
 Operator:
 Sample Name: calblank
 Misc Info:
 Vial Number: 1101
 Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
 Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
 Last Cal. Update: Dec 14 2006 01:03 pm
 Sample Type: CalBlk

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)
6	Li	---	3	526,508.75 0.53
7	(Li)	---	3	34,143.29 0.94
9	Be	6	3	2.22 86.60
23	Na	45	2	23,284.01 0.73
24	Mg	45	3	4,732.08 5.07
27	Al	45	3	9,815.96 4.21
39	K	45	3	390,051.78 0.42
44	Ca	45	3	6,139.35 0.77
45	Sc	---	1	520,998.81 0.72
45	Sc	---	2	53,434.59 0.54
45	Sc	---	3	614,228.38 0.42
51	V	45	2	1,012.64 2.26
52	Cr	45	2	535.57 5.18
55	Mn	45	2	64.08 6.09
56	Fe	45	1	11,616.21 6.00
59	Co	45	2	47.78 10.66
60	Ni	45	2	373.71 3.60
63	Cu	72	2	1,692.35 3.19
65	Cu	72	2	829.29 5.42
66	Zn	72	2	1,311.56 2.15
72	Ge	---	1	130,321.09 0.34
72	Ge	---	2	26,590.40 0.72
75	As	72	2	30.67 5.75
78	Se	72	1	2.67 43.30
89	Y	---	3	928,638.94 0.14
98	Mo	89	3	28.89 46.63
99	(Ru)	89	3	3.33 100.00
107	Ag	115	3	78.89 13.58
111	Cd	115	3	22.22 22.91
115	In	---	3	1,037,040.10 0.88
118	(In)	---	1	457.05 5.70
118	(In)	---	2	73.33 1.52
118	(In)	---	3	264.46 2.62
121	Sb	115	3	78.89 2.44
137	Ba	159	3	64.45 5.97
159	Tb	---	3	1,894,763.80 0.64
205	Tl	209	3	752.27 7.83
206	(Pb)	209	3	714.49 5.14
207	(Pb)	159	3	567.81 2.37
208	Pb	159	3	2,641.32 3.05
209	Bi	---	3	1,388,546.40 0.34

Tune File# 1 c:\icpchem\1\7500\h2.u
 Tune File# 2 c:\icpchem\1\7500\he.u
 Tune File# 3 c:\icpchem\1\7500\nogas.u

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L14m01.B\005CAL.S.D\005CAL.S.D#
 Date Acquired: Dec 14 2006 01:05 pm
 Acq. Method: lcj6020.M
 Operator:
 Sample Name: s4977
 Misc Info:
 Vial Number: 1102
 Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
 Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
 Last Cal. Update: Dec 14 2006 01:03 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
6	Li	---	3	521669.41	0.70
7	(Li)	---	3	33133.22	0.50
9.	Be	6	3	262.23	0.73
23	Na	45	2	31038.77	0.49
24	Mg	45	3	80935.82	0.58
27	Al	45	3	95826.49	1.25
39	K	45	3	465980.63	0.24
44	Ca	45	3	9603.62	1.38
45	Sc	---	1	517818.97	0.46
45	Sc	---	2	52616.75	0.15
45	Sc	---	3	596552.19	0.28
51	V	45	2	1565.29	2.17
52	Cr	45	2	829.66	0.86
55	Mn	45	2	251.86	6.43
56	Fe	45	1	114249.63	0.62
59	Co	45	2	502.98	1.88
60	Ni	45	2	490.39	7.67
63	Cu	72	2	2027.95	0.67
65	Cu	72	2	1009.68	5.54
66	Zn	72	2	1510.10	5.15
72	Ge	---	1.	129262.16	0.22
72	Ge	---	2	26080.09	1.45
75	As	72	2	65.33	3.68
78	Se	72	1	45.11	20.97
89	Y	---	3	909653.94	0.76
98	Mo	89	3	426.69	2.07
99	(Ru)	89	3	1.11	173.21
107	Ag	115	3	756.72	5.52
111	Cd	115	3	213.34	17.40
115	In	---	3	1017570.20	1.07
118	(In)	---	1	8561.68	1.69
118	(In)	---	2	1659.38	0.25
118	(In)	---	3	5427.96	1.97
121	Sb	115	3	814.50	7.55
137	Ba	159	3	307.79	10.85
159	Tb	---	3	1885718.50	0.81
205	Tl	209	3	1743.52	2.21
208	Pb	159	3	3908.16	5.35
209	Bi	---	3	1378059.00	1.08

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	3	521669	0.70	526509	99.1	80 - 120
45	Sc	1	517819	0.46	520999	99.4	80 - 120
45	Sc	2	52617	0.15	53435	98.5	80 - 120
45	Sc	3	596552	0.28	614228	97.1	80 - 120
72	Ge	1	129262	0.22	130321	99.2	80 - 120
72	Ge	2	26080	1.45	26590	98.1	80 - 120
89	Y	3	909654	0.76	928639	98.0	80 - 120
115	In	3	1017570	1.08	1037040	98.1	80 - 120
159	Tb	3	1885719	0.81	1894764	99.5	80 - 120
209	Bi	3	1378059	1.08	1388546	99.2	80 - 120

Tune File# 1 c:\icpchem\1\7500\h2.u
 Tune File# 2 c:\icpchem\1\7500\he.u
 Tune File# 3 c:\icpchem\1\7500\nogas.u

ISTD Ref File : C:\ICPCHEM\1\DATA\06L14m01.B\004CALB.D\004CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L14m01.B\006CAL.S.D\006CAL.S.D#
 Date Acquired: Dec 14 2006 01:11 pm
 Acq. Method: lcj6020.M
 Operator:
 Sample Name: s4979
 Misc Info:
 Vial Number: 1103
 Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
 Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
 Last Cal. Update: Dec 14 2006 01:09 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)
6 Li	---	3	512846.81	0.75
7 (Li)	---	3	32753.44	1.09
9 Be	6	3	0.13	4.84
23 Na	45	2	56.90	1.60
24 Mg	45	3	32.61	0.75
27 Al	45	3	37.05	0.82
39 K	45	3	65.07	0.74
44 Ca	45	3	1.81	0.56
45 Sc	---	1	514620.41	0.28
45 Sc	---	2	52706.10	0.69
45 Sc	---	3	592952.06	0.17
51 V	45	2	2.34	1.38
52 Cr	45	2	1.94	3.37
55 Mn	45	2	0.94	3.29
56 Fe	45	1	49.95	0.46
59 Co	45	2	2.24	2.14
60 Ni	45	2	0.93	3.40
63 Cu	72	2	6.61	1.37
65 Cu	72	2	3.28	5.05
66 Zn	72	2	3.28	0.96
72 Ge	---	1	127788.28	0.42
72 Ge	---	2	26241.53	0.69
75 As	72	2	0.36	6.52
78 Se	72	1	0.08	2.61
89 Y	---	3	900202.50	0.26
98 Mo	89	3	0.11	3.98
99 (Ru)	89	3	0.00	173.24
107 Ag	115	3	0.19	6.06
111 Cd	115	3	0.05	6.40
115 In	---	3	1004395.60	0.18
118 (In)	---	1	40642.21	0.26
118 (In)	---	2	7852.00	0.43
118 (In)	---	3	25453.70	0.58
121 Sb	115	3	0.18	3.12
137 Ba	159	3	0.03	2.49
159 Tb	---	3	1869275.10	0.12
205 Tl	209	3	0.21	3.20
208 Pb	159	3	0.43	1.31
209 Bi	---	3	1392630.80	0.78

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	3	512847	0.75	526509	97.4	80 - 120	
45 Sc	1	514620	0.28	520999	98.8	80 - 120	
45 Sc	2	52706	0.69	53435	98.6	80 - 120	
45 Sc	3	592952	0.17	614228	96.5	80 - 120	
72 Ge	1	127788	0.42	130321	98.1	80 - 120	
72 Ge	2	26242	0.69	26590	98.7	80 - 120	
89 Y	3	900203	0.26	928639	96.9	80 - 120	
115 In	3	1004396	0.18	1037040	96.9	80 - 120	
159 Tb	3	1869275	0.12	1894764	98.7	80 - 120	
209 Bi	3	1392631	0.78	1388546	100.3	80 - 120	

Tune File# 1 c:\icpchem\1\7500\h2.u
 Tune File# 2 c:\icpchem\1\7500\he.u
 Tune File# 3 c:\icpchem\1\7500\nogas.u

ISTD Ref File : C:\ICPCHEM\1\DATA\06L14m01.B\004CALB.D\004CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L14m01.B\007CAL.S.D\007CAL.S.D#
 Date Acquired: Dec 14 2006 01:16 pm
 Acq. Method: lcj6020.M
 Operator:
 Sample Name: s4980
 Misc Info:
 Vial Number: 1104
 Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
 Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
 Last Cal. Update: Dec 14 2006 01:14 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
6	Li	---	3	522972.75	0.18
7	(Li)	---	3	33657.78	2.40
9	Be	6	3	0.28	5.85
23	Na	45	2	97.96	1.48
24	Mg	45	3	63.44	5.71
27	Al	45	3	70.11	0.84
39	K	45	3	104.96	1.01
44	Ca	45	3	3.15	1.49
45	Sc	---	1	509707.03	0.98
45	Sc	---	2	53162.08	0.96
45	Sc	---	3	609473.00	1.30
51	V	45	2	3.37	1.15
52	Cr	45	2	3.47	1.13
55	Mn	45	2	1.93	0.76
56	Fe	45	1	104.50	0.45
59	Co	45	2	4.64	2.24
60	Ni	45	2	1.66	4.07
63	Cu	72	2	12.91	1.27
65	Cu	72	2	6.42	1.50
66	Zn	72	2	6.07	2.18
72	Ge	---	1	126880.14	0.39
72	Ge	---	2	26363.26	0.10
75	As	72	2	0.66	4.68
78	Se	72	1	0.16	1.71
89	Y	---	3	939678.94	4.10
98	Mo	89	3	0.24	4.93
99	(Ru)	89	3	0.00	0.00
107	Ag	115	3	0.37	6.35
111	Cd	115	3	0.10	3.78
115	In	---	3	1052703.80	4.08
118	(In)	---	1	85412.66	0.78
118	(In)	---	2	16318.14	2.29
118	(In)	---	3	53012.97	1.59
121	Sb	115	3	0.36	4.50
137	Ba	159	3	0.07	2.88
159	Tb	---	3	1907856.60	1.05
205	Tl	209	3	0.41	1.43
208	Pb	159	3	0.86	1.08
209	Bi	---	3	1421403.00	0.63

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	3	522973	0.18	526509	99.3	80 - 120
45	Sc	1	509707	0.98	520999	97.8	80 - 120
45	Sc	2	53162	0.96	53435	99.5	80 - 120
45	Sc	3	609473	1.30	614228	99.2	80 - 120
72	Ge	1	126880	0.39	130321	97.4	80 - 120
72	Ge	2	26363	0.10	26590	99.1	80 - 120
89	Y	3	939679	4.10	928639	101.2	80 - 120
115	In	3	1052704	4.08	1037040	101.5	80 - 120
159	Tb	3	1907857	1.05	1894764	100.7	80 - 120
209	Bi	3	1421403	0.63	1388546	102.4	80 - 120

Tune File# 1 c:\icpchem\1\7500\h2.u
 Tune File# 2 c:\icpchem\1\7500\he.u
 Tune File# 3 c:\icpchem\1\7500\nogas.u

ISTD Ref File : C:\ICPCHEM\1\DATA\06L14m01.B\004CALB.D\004CALB.D#

0:Element Failures 0
 0:ISTD Failures 0

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L14m01.B\008CAL.S.D\008CAL.S.D#
 Date Acquired: Dec 14 2006 01:21 pm
 Acq. Method: lcj6020.M
 Operator:
 Sample Name: s4981
 Misc Info:
 Vial Number: 1105
 Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
 Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
 Last Cal. Update: Dec 14 2006 01:20 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
6	Li	---	3	532203.88	0.36
7	(Li)	---	3	34515.27	1.02
9	Be	6	3	2.75	0.23
23	Na	45	2	669.09	0.99
24	Mg	45	3	581.28	1.51
27	Al	45	3	648.49	0.69
39	K	45	3	681.94	1.13
44	Ca	45	3	23.07	0.89
45	Sc	---	1	538709.38	0.25
45	Sc	---	2	56183.32	0.39
45	Sc	---	3	636172.31	0.79
51	V	45	2	22.27	0.92
52	Cr	45	2	28.73	1.28
55	Mn	45	2	17.41	0.26
56	Fe	45	1	944.46	0.67
59	Co	45	2	43.75	0.54
60	Ni	45	2	12.01	0.69
63	Cu	72	2	68.44	0.26
65	Cu	72	2	33.73	1.51
66	Zn	72	2	15.01	0.60
72	Ge	---	1	133047.67	0.54
72	Ge	---	2	27602.65	0.50
75	As	72	2	5.87	0.99
78	Se	72	1	1.46	0.53
89	Y	---	3	1011990.20	0.86
98	Mo	89	3	2.21	0.13
99	(Ru)	89	3	0.00	100.53
107	Ag	115	3	3.46	2.33
111	Cd	115	3	0.92	2.82
115	In	---	3	1136762.80	1.80
118	(In)	---	1	836829.94	0.77
118	(In)	---	2	160741.59	0.35
118	(In)	---	3	533180.56	0.27
121	Sb	115	3	3.30	1.74
137	Ba	159	3	0.62	1.45
159	Tb	---	3	2006167.90	1.44
205	Tl	209	3	3.97	0.51
208	Pb	159	3	7.83	1.11
209	Bi	---	3	1442843.40	0.65

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	3	532204	0.36	526509	101.1	80 - 120
45	Sc	1	538709	0.25	520999	103.4	80 - 120
45	Sc	2	56183	0.39	53435	105.1	80 - 120
45	Sc	3	636172	0.79	614228	103.6	80 - 120
72	Ge	1	133048	0.54	130321	102.1	80 - 120
72	Ge	2	27603	0.50	26590	103.8	80 - 120
89	Y	3	1011990	0.86	928639	109.0	80 - 120
115	In	3	1136763	1.80	1037040	109.6	80 - 120
159	Tb	3	2006168	1.44	1894764	105.9	80 - 120
209	Bi	3	1442843	0.65	1388546	103.9	80 - 120

Tune File# 1 c:\icpchem\1\7500\h2.u
 Tune File# 2 c:\icpchem\1\7500\he.u
 Tune File# 3 c:\icpchem\1\7500\nogas.u

ISTD Ref File : C:\ICPCHEM\1\DATA\06L14m01.B\004CALB.D\004CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L14m01.B\009CAL.S.D\009CAL.S.D#
 Date Acquired: Dec 14 2006 01:27 pm
 Acq. Method: lcj6020.M
 Operator:
 Sample Name: s4975
 Misc Info:
 Vial Number: 1106
 Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
 Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
 Last Cal. Update: Dec 14 2006 01:25 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
6	Li	---	3	500649.47	3.86
7	(Li)	---	3	32351.63	5.08
9	Be	6	3	27.04	4.06
23	Na	45	2	6284.57	0.67
24	Mg	45	3	5849.92	7.63
27	Al	45	3	6576.61	6.73
39	K	45	3	6579.94	6.82
44	Ca	45	3	238.90	7.43
45	Sc	---	1	513895.91	1.04
45	Sc	---	2	52711.34	0.83
45	Sc	---	3	593690.94	6.77
51	V	45	2	216.53	0.75
52	Cr	45	2	281.63	0.65
55	Mn	45	2	171.10	0.84
56	Fe	45	1	9411.76	2.15
59	Co	45	2	427.68	0.85
60	Ni	45	2	112.68	0.86
63	Cu	72	2	625.98	0.80
65	Cu	72	2	309.54	0.96
66	Zn	72	2	120.78	1.40
72	Ge	---	1	126709.88	0.50
72	Ge	---	2	25994.79	0.45
75	As	72	2	56.95	0.76
78	Se	72	1	14.56	0.36
89	Y	---	3	924930.94	9.70
98	Mo	89	3	22.84	9.93
99	(Ru)	89	3	0.00	104.77
107	Ag	115	3	34.22	8.43
111	Cd	115	3	9.07	8.40
115	In	---	3	1048498.50	8.94
118	(In)	---	1	7916672.00	1.45
118	(In)	---	2	1559161.60	0.94
118	(In)	---	3	5242227.50	0.77
121	Sb	115	3	33.29	9.37
137	Ba	159	3	6.11	7.16
159	Tb	---	3	1901198.10	7.30
205	Tl	209	3	40.45	6.46
208	Pb	159	3	81.12	6.98
209	Bi	---	3	1334931.00	6.39

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	3	500649	3.86	526509	95.1	80 - 120
45	Sc	1	513896	1.04	520999	98.6	80 - 120
45	Sc	2	52711	0.83	53435	98.6	80 - 120
45	Sc	3	593691	6.77	614228	96.7	80 - 120
72	Ge	1	126710	0.50	130321	97.2	80 - 120
72	Ge	2	25995	0.45	26590	97.8	80 - 120
89	Y	3	924931	9.70	928639	99.6	80 - 120
115	In	3	1048499	8.94	1037040	101.1	80 - 120
159	Tb	3	1901198	7.30	1894764	100.3	80 - 120
209	Bi	3	1334931	6.39	1388546	96.1	80 - 120

Tune File# 1 c:\icpchem\1\7500\h2.u
 Tune File# 2 c:\icpchem\1\7500\he.u
 Tune File# 3 c:\icpchem\1\7500\nogas.u

ISTD Ref File : C:\ICPCHEM\1\DATA\06L14m01.B\004CALB.D\004CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L14m01.B\010CAL.S.D\010CAL.S.D#
 Date Acquired: Dec 14 2006 01:35 pm
 Acq. Method: lcj6020.M
 Operator:
 Sample Name: s4976
 Misc Info:
 Vial Number: 1107
 Current Method: C:\ICPCHEM\1\METHODS\lcj6020.M
 Calibration File: C:\ICPCHEM\1\CALIB\lcj6020.C
 Last Cal. Update: Dec 14 2006 01:34 pm
 Sample Type: CalStd

QC Elements

Element	IS Ref	Tune	CPS Mean	RSD(%)	
6	Li	---	3	486162.84	0.44
7	(Li)	---	3	31182.12	1.23
9	Be	6	3	52.27	0.96
23	Na	45	2	12259.01	0.42
24	Mg	45	3	11302.70	1.12
27	Al	45	3	12871.88	0.66
39	K	45	3	12801.34	0.67
44	Ca	45	3	459.38	0.70
45	Sc	---	1	518349.53	0.39
45	Sc	---	2	52109.39	0.63
45	Sc	---	3	576181.00	0.32
51	V	45	2	421.29	0.11
52	Cr	45	2	539.42	0.68
55	Mn	45	2	330.30	0.16
56	Fe	45	1	18027.05	0.68
59	Co	45	2	820.28	0.27
60	Ni	45	2	214.32	0.19
63	Cu	72	2	1191.83	0.51
65	Cu	72	2	588.46	0.39
66	Zn	72	2	226.23	0.51
72	Ge	---	1	127173.20	0.85
72	Ge	---	2	25382.52	0.66
75	As	72	2	111.02	0.88
78	Se	72	1	27.51	0.06
89	Y	---	3	872169.81	0.34
98	Mo	89	3	45.42	1.28
99	(Ru)	89	3	0.00	173.21
107	Ag	115	3	69.47	1.60
111	Cd	115	3	17.39	0.48
115	In	---	3	1009280.90	1.33
118	(In)	---	1	15274505.00	0.38
118	(In)	---	2	2925933.00	0.22
118	(In)	---	3	9684470.00	0.38
121	Sb	115	3	69.29	1.26
137	Ba	159	3	11.62	0.09
159	Tb	---	3	1846662.00	0.08
205	Tl	209	3	87.02	0.36
208	Pb	159	3	159.77	0.37
209	Bi	---	3	1270966.00	0.69

ISTD Elements

Element	Tune	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6	Li	3	486163	0.44	526509	92.3	80 - 120
45	Sc	1	518350	0.39	520999	99.5	80 - 120
45	Sc	2	52109	0.63	53435	97.5	80 - 120
45	Sc	3	576181	0.32	614228	93.8	80 - 120
72	Ge	1	127173	0.85	130321	97.6	80 - 120
72	Ge	2	25383	0.66	26590	95.5	80 - 120
89	Y	3	872170	0.34	928639	93.9	80 - 120
115	In	3	1009281	1.33	1037040	97.3	80 - 120
159	Tb	3	1846662	0.08	1894764	97.5	80 - 120
209	Bi	3	1270966	0.69	1388546	91.5	80 - 120

Tune File# 1 c:\icpchem\1\7500\h2.u
 Tune File# 2 c:\icpchem\1\7500\he.u
 Tune File# 3 c:\icpchem\1\7500\nogas.u

ISTD Ref File : C:\ICPCHEM\1\DATA\06L14m01.B\004CALB.D\004CALB.D#

0 :Element Failures 0
 0 :ISTD Failures 0

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET06
 Seqnum : 66501883012
 Cal : 66501883001
 Standards: S4982

File : 114m0012
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 13:52

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	A	0.6992	0.6384	10000	9876	ug/L	-1	10	
Antimony	A	0.3544	0.3431	100.0	99.82	ug/L	0	10	
Barium	A	0.0660	0.0589	100.0	100.4	ug/L	0	10	
Beryllium	A	0.2670	0.2641	100.0	100.4	ug/L	0	10	
Cadmium	A	0.0941	0.0929	100.0	105.9	ug/L	6	10	
Calcium	A	0.0363	0.0232	10000	10030	ug/L	0	10	
Lead	A	0.8571	0.7794	100.0	97.23	ug/L	-3	10	
Magnesium	A	0.6161	0.5639	10000	9908	ug/L	-1	10	
Molybdenum	A	0.2304	0.2265	100.0	99.63	ug/L	0	10	
Potassium	A	1.3728	0.6320	10000	9798	ug/L	-2	10	
Silver	A	0.3605	0.3455	100.0	99.77	ug/L	0	10	
Thallium	A	0.9007	0.7769	50.00	45.27	ug/L	-9	10	
Arsenic	E	0.7246	0.5548	100.0	99.38	ug/L	-1	10	
Chromium	E	3.9357	2.7091	100.0	99.48	ug/L	-1	10	
Cobalt	E	4.4410	4.1291	100.0	99.80	ug/L	0	10	
Copper	E	14.013	6.0689	100.0	100.6	ug/L	1	10	
Manganese	E	1.8846	1.6537	100.0	99.40	ug/L	-1	10	
Nickel	E	1.9295	1.0884	100.0	100.4	ug/L	0	10	
Sodium	E	1.1629	0.6161	10000	9985	ug/L	0	10	
Vanadium	E	4.9017	2.0911	100.0	98.53	ug/L	-1	10	
Zinc	E	7.5700	1.1974	100.0	103.6	ug/L	4	10	
Iron	H	0.9890	0.9013	10000	9911	ug/L	-1	10	
Selenium	H	0.1548	0.1394	100.0	100.2	ug/L	0	10	

ISTD (ICALBLK 114m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	526509	504265	-4.22
Scandium	A	614228	593791	-3.33
Scandium	E	53435	52833	-1.13
Scandium	H	520999	515328	-1.09
Germanium	H	130321	126910	-2.62
Germanium	E	26590	25858	-2.75
Indium	A	1037040	986495	-4.87
Bismuth	A	1388546	1336415	-3.75
Yttrium	A	928639	896968	-3.41
Terbium	A	1894764	1892744	-0.11

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
 Seqnum : 66501883037
 Cal : 66501883001
 Standards: S4983, S4635

File : 114m0037
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 16:31

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6992	0.6268	10000	9696	ug/L	-3	10	
Antimony	A	0.3544	0.3175	100.0	92.36	ug/L	-8	10	
Barium	A	0.0660	0.0585	100.0	99.72	ug/L	0	10	
Beryllium	A	0.2670	0.2661	100.0	101.1	ug/L	1	10	
Cadmium	A	0.0941	0.0865	100.0	98.58	ug/L	-1	10	
Calcium	A	0.0363	0.0229	10000	9889	ug/L	-1	10	
Lead	A	0.8571	0.7783	100.0	97.10	ug/L	-3	10	
Magnesium	A	0.6161	0.5577	10000	9798	ug/L	-2	10	
Molybdenum	A	0.2304	0.2278	100.0	100.2	ug/L	0	10	
Potassium	A	1.3728	0.6307	10000	9779	ug/L	-2	10	
Silver	A	0.3605	0.3302	100.0	95.36	ug/L	-5	10	
Thallium	A	0.9007	0.7620	50.00	44.40	ug/L	-11	10	c- ***
Arsenic	E	0.7246	0.5809	100.0	104.1	ug/L	4	10	
Chromium	E	3.9357	2.8540	100.0	104.8	ug/L	5	10	
Cobalt	E	4.4410	4.2511	100.0	102.8	ug/L	3	10	
Copper	E	14.013	6.0957	100.0	101.0	ug/L	1	10	
Manganese	E	1.8846	1.7293	100.0	103.9	ug/L	4	10	
Nickel	E	1.9295	1.1115	100.0	102.5	ug/L	3	10	
Sodium	E	1.1629	0.6315	10000	10240	ug/L	2	10	
Vanadium	E	4.9017	2.1829	100.0	102.9	ug/L	3	10	
Zinc	E	7.5700	1.1811	100.0	102.2	ug/L	2	10	
Iron	H	0.9890	0.8572	10000	9425	ug/L	-6	10	
Selenium	H	0.1548	0.1307	100.0	93.95	ug/L	-6	10	

ISTD (ICALBLK 114m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	526509	499011	-5.22
Scandium	A	614228	597710	-2.69
Scandium	E	53435	51828	-3.01
Scandium	H	520999	546462	4.89
Germanium	H	130321	134901	3.51
Germanium	E	26590	25585	-3.78
Indium	A	1037040	1071403	3.31
Bismuth	A	1388546	1347503	-2.96
Yttrium	A	928639	909844	-2.02
Terbium	A	1894764	1924599	1.57

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
 Seqnum : 66501883053
 Cal : 66501883001
 Standards: S4983, S4635

File : 114m0053
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 18:01

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6992	0.6249	10000	9667	ug/L	-3	10	
Antimony	A	0.3544	0.3217	100.0	93.59	ug/L	-6	10	
Barium	A	0.0660	0.0597	100.0	101.7	ug/L	2	10	
Beryllium	A	0.2670	0.2648	100.0	100.6	ug/L	1	10	
Cadmium	A	0.0941	0.0879	100.0	100.2	ug/L	0	10	
Calcium	A	0.0363	0.0230	10000	9938	ug/L	-1	10	
Lead	A	0.8571	0.7892	100.0	98.46	ug/L	-2	10	
Magnesium	A	0.6161	0.5626	10000	9886	ug/L	-1	10	
Molybdenum	A	0.2304	0.2239	100.0	98.50	ug/L	-2	10	
Potassium	A	1.3728	0.6378	10000	9888	ug/L	-1	10	
Silver	A	0.3605	0.3361	100.0	97.04	ug/L	-3	10	
Thallium	A	0.9007	0.7659	50.00	44.63	ug/L	-11	10	c- ***
Arsenic	E	0.7246	0.5644	100.0	101.1	ug/L	1	10	
Chromium	E	3.9357	2.7305	100.0	100.3	ug/L	0	10	
Cobalt	E	4.4410	4.0696	100.0	98.37	ug/L	-2	10	
Copper	E	14.013	5.9304	100.0	98.29	ug/L	-2	10	
Manganese	E	1.8846	1.6790	100.0	100.9	ug/L	1	10	
Nickel	E	1.9295	1.0613	100.0	97.88	ug/L	-2	10	
Sodium	E	1.1629	0.5978	10000	9688	ug/L	-3	10	
Vanadium	E	4.9017	2.0916	100.0	98.56	ug/L	-1	10	
Zinc	E	7.5700	1.1506	100.0	99.46	ug/L	-1	10	
Iron	H	0.9890	0.9166	10000	10080	ug/L	1	10	
Selenium	H	0.1548	0.1382	100.0	99.32	ug/L	-1	10	

ISTD (ICALBLK 114m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	526509	511993	-2.76
Scandium	A	614228	602457	-1.92
Scandium	E	53435	54127	1.30
Scandium	H	520999	506852	-2.72
Germanium	H	130321	125709	-3.54
Germanium	E	26590	26581	-0.04
Indium	A	1037040	1069593	3.14
Bismuth	A	1388546	1354262	-2.47
Yttrium	A	928639	938255	1.04
Terbium	A	1894764	1925616	1.63

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
 Seqnum : 66501883074
 Cal : 66501883001
 Standards: S4983, S4635

File : l14m0074
 Caldate: 14-DEC-2006
 IDF : 1.0
 Time : 14-DEC-2006 20:04

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6992	0.6373	10000	9858	ug/L	-1	10	
Antimony	A	0.3544	0.3356	100.0	97.64	ug/L	-2	10	
Barium	A	0.0660	0.0618	100.0	105.3	ug/L	5	10	
Beryllium	A	0.2670	0.2707	100.0	102.9	ug/L	3	10	
Cadmium	A	0.0941	0.0906	100.0	103.3	ug/L	3	10	
Calcium	A	0.0363	0.0238	10000	10260	ug/L	3	10	
Lead	A	0.8571	0.8143	100.0	101.6	ug/L	2	10	
Magnesium	A	0.6161	0.5802	10000	10190	ug/L	2	10	
Molybdenum	A	0.2304	0.2352	100.0	103.4	ug/L	3	10	
Potassium	A	1.3728	0.6599	10000	10230	ug/L	2	10	
Silver	A	0.3605	0.3436	100.0	99.22	ug/L	-1	10	
Thallium	A	0.9007	0.7892	50.00	45.98	ug/L	-8	10	
Arsenic	E	0.7246	0.5771	100.0	103.4	ug/L	3	10	
Chromium	E	3.9357	2.7811	100.0	102.1	ug/L	2	10	
Cobalt	E	4.4410	4.1433	100.0	100.1	ug/L	0	10	
Copper	E	14.013	5.9227	100.0	98.16	ug/L	-2	10	
Manganese	E	1.8846	1.7042	100.0	102.4	ug/L	2	10	
Nickel	E	1.9295	1.0771	100.0	99.34	ug/L	-1	10	
Sodium	E	1.1629	0.6143	10000	9956	ug/L	0	10	
Vanadium	E	4.9017	2.1381	100.0	100.8	ug/L	1	10	
Zinc	E	7.5700	1.1686	100.0	101.0	ug/L	1	10	
Iron	H	0.9890	1.0134	10000	11140	ug/L	11	10	c+ ***
Selenium	H	0.1548	0.1459	100.0	104.9	ug/L	5	10	

ISTD (ICALBLK l14m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	526509	487360	-7.44
Scandium	A	614228	579278	-5.69
Scandium	E	53435	52929	-0.95
Scandium	H	520999	510728	-1.97
Germanium	H	130321	127634	-2.06
Germanium	E	26590	26198	-1.48
Indium	A	1037040	1042877	0.56
Bismuth	A	1388546	1343177	-3.27
Yttrium	A	928639	896595	-3.45
Terbium	A	1894764	1900824	0.32

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
 Seqnum : 66501883090
 Cal : 66501883001
 Standards: S4983, S4635

File : 114m0090
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 21:32

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6992	0.6196	10000	9585	ug/L	-4	10	
Antimony	A	0.3544	0.3397	100.0	98.82	ug/L	-1	10	
Barium	A	0.0660	0.0619	100.0	105.5	ug/L	6	10	
Beryllium	A	0.2670	0.2705	100.0	102.8	ug/L	3	10	
Cadmium	A	0.0941	0.0920	100.0	104.9	ug/L	5	10	
Calcium	A	0.0363	0.0234	10000	10090	ug/L	1	10	
Lead	A	0.8571	0.8089	100.0	100.9	ug/L	1	10	
Magnesium	A	0.6161	0.5667	10000	9957	ug/L	0	10	
Molybdenum	A	0.2304	0.2305	100.0	101.4	ug/L	1	10	
Potassium	A	1.3728	0.6500	10000	10080	ug/L	1	10	
Silver	A	0.3605	0.3552	100.0	102.6	ug/L	3	10	
Thallium	A	0.9007	0.7907	50.00	46.08	ug/L	-8	10	
Arsenic	E	0.7246	0.5737	100.0	102.8	ug/L	3	10	
Chromium	E	3.9357	2.7806	100.0	102.1	ug/L	2	10	
Cobalt	E	4.4410	4.1335	100.0	99.91	ug/L	0	10	
Copper	E	14.013	5.8224	100.0	96.49	ug/L	-4	10	
Manganese	E	1.8846	1.7267	100.0	103.8	ug/L	4	10	
Nickel	E	1.9295	1.0824	100.0	99.83	ug/L	0	10	
Sodium	E	1.1629	0.6044	10000	9796	ug/L	-2	10	
Vanadium	E	4.9017	2.1452	100.0	101.1	ug/L	1	10	
Zinc	E	7.5700	1.1530	100.0	99.67	ug/L	0	10	
Iron	H	0.9890	0.9224	10000	10140	ug/L	1	10	
Selenium	H	0.1548	0.1392	100.0	100.0	ug/L	0	10	

ISTD (ICALBLK 114m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	526509	503193	-4.43
Scandium	A	614228	599762	-2.36
Scandium	E	53435	53129	-0.57
Scandium	H	520999	498825	-4.26
Germanium	H	130321	124980	-4.10
Germanium	E	26590	26534	-0.21
Indium	A	1037040	1028968	-0.78
Bismuth	A	1388546	1330320	-4.19
Yttrium	A	928639	929530	0.10
Terbium	A	1894764	1892074	-0.14

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET06
 Seqnum : 66501883098
 Cal : 66501883001
 Standards: S4983, S4635

File : 114m0098
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 22:18

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	0.6992	0.6156	10000	9523	ug/L	-5	10	
Antimony	A	0.3544	0.3290	100.0	95.71	ug/L	-4	10	
Barium	A	0.0660	0.0621	100.0	105.8	ug/L	6	10	
Beryllium	A	0.2670	0.2666	100.0	101.3	ug/L	1	10	
Cadmium	A	0.0941	0.0894	100.0	101.9	ug/L	2	10	
Calcium	A	0.0363	0.0231	10000	9986	ug/L	0	10	
Lead	A	0.8571	0.7991	100.0	99.70	ug/L	0	10	
Magnesium	A	0.6161	0.5576	10000	9797	ug/L	-2	10	
Molybdenum	A	0.2304	0.2286	100.0	100.6	ug/L	1	10	
Potassium	A	1.3728	0.6415	10000	9947	ug/L	-1	10	
Silver	A	0.3605	0.3423	100.0	98.85	ug/L	-1	10	
Thallium	A	0.9007	0.7898	50.00	46.02	ug/L	-8	10	
Arsenic	E	0.7246	0.5731	100.0	102.7	ug/L	3	10	
Chromium	E	3.9357	2.7295	100.0	100.2	ug/L	0	10	
Cobalt	E	4.4410	4.0582	100.0	98.09	ug/L	-2	10	
Copper	E	14.013	5.8071	100.0	96.23	ug/L	-4	10	
Manganese	E	1.8846	1.6902	100.0	101.6	ug/L	2	10	
Nickel	E	1.9295	1.0602	100.0	97.77	ug/L	-2	10	
Sodium	E	1.1629	0.5890	10000	9544	ug/L	-5	10	
Vanadium	E	4.9017	2.1098	100.0	99.42	ug/L	-1	10	
Zinc	E	7.5700	1.1456	100.0	99.03	ug/L	-1	10	
Iron	H	0.9890	0.9152	10000	10060	ug/L	1	10	
Selenium	H	0.1548	0.1388	100.0	99.74	ug/L	0	10	

ISTD (ICALBLK 114m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	526509	528948	0.46
Scandium	A	614228	626888	2.06
Scandium	E	53435	55851	4.52
Scandium	H	520999	511582	-1.81
Germanium	H	130321	128397	-1.48
Germanium	E	26590	27533	3.54
Indium	A	1037040	1093862	5.48
Bismuth	A	1388546	1368330	-1.46
Yttrium	A	928639	969537	4.40
Terbium	A	1894764	1945436	2.67

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
 Seqnum : 66501883014
 Cal : 66501883001

File : 114m0014
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 14:06

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	[1.448]	10.00	0.07288	ug/L	!ib
Antimony	A	[0.02224]	0.1000	0.003002	ug/L	!ib
Barium	A	[0.005920]	0.1000	0.005626	ug/L	!ib
Beryllium	A	[0.01631]	0.1000	0.001160	ug/L	!ib
Cadmium	A	[0.004226]	0.1000	0.001660	ug/L	!ib
Calcium	A	ND	10.00	0.1008	ug/L	
Lead	A	[0.01932]	0.1000	0.002114	ug/L	!ib
Magnesium	A	[1.517]	10.00	0.2094	ug/L	!ib
Molybdenum	A	ND	0.1000	0.03128	ug/L	
Potassium	A	ND	10.00	8.951	ug/L	
Silver	A	[0.01362]	0.1000	0.001136	ug/L	!ib
Thallium	A	[0.01755]	0.05000	0.004069	ug/L	!ib
Arsenic	E	ND	0.1000	0.007097	ug/L	
Chromium	E	ND	0.1000	0	ug/L	
Cobalt	E	[0.01410]	0.1000	0.0006581	ug/L	!ib
Copper	E	[0.001092]	0.1000	0.001005	ug/L	!ib
Manganese	E	[0.01769]	0.1000	0.002754	ug/L	!ib
Nickel	E	ND	0.1000	0	ug/L	
Sodium	E	ND	10.00	0	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.06332	ug/L	
Iron	H	[1.725]	10.00	0.1610	ug/L	!ib
Selenium	H	[0.02558]	0.1000	0.003852	ug/L	!ib

ISTD (ICALBLK 114m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	526509	530513	-0.76
Scandium	A	614228	603938	-1.68
Scandium	E	53435	53065	-0.69
Scandium	H	520999	517411	-0.69
Germanium	H	130321	128390	-1.48
Germanium	E	26590	26165	-1.60
Indium	A	1037040	1052821	1.52
Bismuth	A	1388546	1409670	1.52
Yttrium	A	928639	910343	-1.97
Terbium	A	1894764	1901021	0.33

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
 Seqnum : 66501883040
 Cal : 66501883001

IDF : 1.0
 Time : 14-DEC-2006 16:50

File : 114m0040
 Caldate: 14-DEC-2006

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	[2.171]	10.00	0.07288	ug/L	!ib
Antimony	A	[0.009676]	0.1000	0.003002	ug/L	!ib
Barium	A	[0.007656]	0.1000	0.005626	ug/L	!ib
Beryllium	A	[0.009172]	0.1000	0.001160	ug/L	!ib
Cadmium	A	ND	0.1000	0.001660	ug/L	
Calcium	A	ND	10.00	0.1008	ug/L	
Lead	A	[0.01758]	0.1000	0.002114	ug/L	!ib
Magnesium	A	[0.8040]	10.00	0.2094	ug/L	!ib
Molybdenum	A	ND	0.1000	0.03128	ug/L	
Potassium	A	ND	10.00	8.951	ug/L	
Silver	A	[0.01065]	0.1000	0.001136	ug/L	!ib
Thallium	A	ND	0.05000	0.004069	ug/L	
Arsenic	E	ND	0.1000	0.007097	ug/L	
Chromium	E	ND	0.1000	0	ug/L	
Cobalt	E	ND	0.1000	0.0006581	ug/L	
Copper	E	ND	0.1000	0.001005	ug/L	
Manganese	E	[0.009371]	0.1000	0.002754	ug/L	!ib
Nickel	E	ND	0.1000	0	ug/L	
Sodium	E	ND	10.00	0	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	[0.08718]	0.1000	0.06332	ug/L	!ib
Iron	H	[0.4235]	10.00	0.1610	ug/L	!ib
Selenium	H	ND	0.1000	0.003852	ug/L	

ISTD (ICALBLK 114m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	526509	523007	-0.67
Scandium	A	614228	586195	-4.56
Scandium	E	53435	54913	2.77
Scandium	H	520999	547405	5.07
Germanium	H	130321	135138	3.70
Germanium	E	26590	27170	2.18
Indium	A	1037040	1049860	1.24
Bismuth	A	1388546	1375912	-0.91
Yttrium	A	928639	921962	-0.72
Terbium	A	1894764	1872591	-1.17

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
 Seqnum : 66501883055
 Cal : 66501883001

File : 114m0055
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 18:14

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	[1.672]	10.00	0.07288	ug/L	!ib
Antimony	A	[0.01504]	0.1000	0.003002	ug/L	!ib
Barium	A	[0.01024]	0.1000	0.005626	ug/L	!ib
Beryllium	A	[0.02142]	0.1000	0.001160	ug/L	!ib
Cadmium	A	[0.006830]	0.1000	0.001660	ug/L	!ib
Calcium	A	ND	10.00	0.1008	ug/L	
Lead	A	[0.02210]	0.1000	0.002114	ug/L	!ib
Magnesium	A	[2.120]	10.00	0.2094	ug/L	!ib
Molybdenum	A	ND	0.1000	0.03128	ug/L	
Potassium	A	ND	10.00	8.951	ug/L	
Silver	A	[0.01450]	0.1000	0.001136	ug/L	!ib
Thallium	A	ND	0.05000	0.004069	ug/L	
Arsenic	E	ND	0.1000	0.007097	ug/L	
Chromium	E	ND	0.1000	0	ug/L	
Cobalt	E	[0.02765]	0.1000	0.0006581	ug/L	!ib
Copper	E	[0.01437]	0.1000	0.001005	ug/L	!ib
Manganese	E	[0.03664]	0.1000	0.002754	ug/L	!ib
Nickel	E	ND	0.1000	0	ug/L	
Sodium	E	ND	10.00	0	ug/L	
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	0.3055	0.1000	0.06332	ug/L	ib ***
Iron	H	[4.019]	10.00	0.1610	ug/L	!ib
Selenium	H	[0.03711]	0.1000	0.003852	ug/L	!ib

ISTD (ICALBLK 114m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	526509	534705	1.56
Scandium	A	614228	616725	0.41
Scandium	E	53435	55765	4.36
Scandium	H	520999	522925	0.37
Germanium	H	130321	131051	0.56
Germanium	E	26590	27641	3.95
Indium	A	1037040	1109682	7.00
Bismuth	A	1388546	1427209	2.78
Yttrium	A	928639	935297	0.72
Terbium	A	1894764	1945416	2.67

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
 Seqnum : 66501883076
 Cal : 66501883001

File : 114m0076
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 20:16

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	[3.458]	10.00	0.07288	ug/L	!ib
Antimony	A	[0.02765]	0.1000	0.003002	ug/L	!ib
Barium	A	[0.03827]	0.1000	0.005626	ug/L	!ib
Beryllium	A	[0.03228]	0.1000	0.001160	ug/L	!ib
Cadmium	A	[0.02107]	0.1000	0.001660	ug/L	!ib
Calcium	A	ND	10.00	0.1008	ug/L	
Lead	A	[0.03298]	0.1000	0.002114	ug/L	!ib
Magnesium	A	[5.787]	10.00	0.2094	ug/L	!ib
Molybdenum	A	[0.05087]	0.1000	0.03128	ug/L	!ib
Potassium	A	ND	10.00	8.951	ug/L	
Silver	A	[0.02379]	0.1000	0.001136	ug/L	!ib
Thallium	A	ND	0.05000	0.004069	ug/L	
Arsenic	E	[0.01176]	0.1000	0.007097	ug/L	!ib
Chromium	E	ND	0.1000	0	ug/L	
Cobalt	E	[0.02633]	0.1000	0.0006581	ug/L	!ib
Copper	E	ND	0.1000	0.001005	ug/L	
Manganese	E	[0.03418]	0.1000	0.002754	ug/L	!ib
Nickel	E	ND	0.1000	0	ug/L	
Sodium	E	13.20	10.00	0	ug/L	ib ***
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.06332	ug/L	
Iron	H	[3.935]	10.00	0.1610	ug/L	!ib
Selenium	H	[0.02176]	0.1000	0.003852	ug/L	!ib

ISTD (ICALBLK 114m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	526509	508633	-3.40
Scandium	A	614228	588993	-4.11
Scandium	E	53435	54378	1.77
Scandium	H	520999	490862	-5.78
Germanium	H	130321	124362	-4.57
Germanium	E	26590	26997	1.53
Indium	A	1037040	1032109	-0.48
Bismuth	A	1388546	1388693	0.01
Yttrium	A	928639	910450	-1.96
Terbium	A	1894764	1876105	-0.98

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
 Seqnum : 66501883092
 Cal : 66501883001

File : l14m0092
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 21:45

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	[4.203]	10.00	0.07288	ug/L	!ib
Antimony	A	[0.03136]	0.1000	0.003002	ug/L	!ib
Barium	A	[0.04860]	0.1000	0.005626	ug/L	!ib
Beryllium	A	[0.04247]	0.1000	0.001160	ug/L	!ib
Cadmium	A	[0.03175]	0.1000	0.001660	ug/L	!ib
Calcium	A	[1.521]	10.00	0.1008	ug/L	!ib
Lead	A	[0.04076]	0.1000	0.002114	ug/L	!ib
Magnesium	A	10.33	10.00	0.2094	ug/L	ib ***
Molybdenum	A	[0.04883]	0.1000	0.03128	ug/L	!ib
Potassium	A	ND	10.00	8.951	ug/L	
Silver	A	[0.04172]	0.1000	0.001136	ug/L	!ib
Thallium	A	ND	0.05000	0.004069	ug/L	
Arsenic	E	ND	0.1000	0.007097	ug/L	
Chromium	E	ND	0.1000	0	ug/L	
Cobalt	E	[0.03613]	0.1000	0.0006581	ug/L	!ib
Copper	E	[0.01757]	0.1000	0.001005	ug/L	!ib
Manganese	E	[0.05918]	0.1000	0.002754	ug/L	!ib
Nickel	E	ND	0.1000	0	ug/L	
Sodium	E	22.17	10.00	0	ug/L	ib ***
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.06332	ug/L	
Iron	H	[3.473]	10.00	0.1610	ug/L	!ib
Selenium	H	[0.02520]	0.1000	0.003852	ug/L	!ib

ISTD (ICALBLK l14m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	526509	522243	-0.81
Scandium	A	614228	615152	0.15
Scandium	E	53435	55063	3.05
Scandium	H	520999	515140	-1.12
Germanium	H	130321	130169	-0.12
Germanium	E	26590	27219	2.36
Indium	A	1037040	1095419	5.63
Bismuth	A	1388546	1409389	1.50
Yttrium	A	928639	944507	1.71
Terbium	A	1894764	1903977	0.49

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET06
 Seqnum : 66501883100
 Cal : 66501883001

File : 114m0100
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 22:31

Analyte	Ch	Quant	RL	3X IDL	Units	Flags
Aluminum	A	[6.491]	10.00	0.07288	ug/L	!ib
Antimony	A	[0.05292]	0.1000	0.003002	ug/L	!ib
Barium	A	[0.06233]	0.1000	0.005626	ug/L	!ib
Beryllium	A	[0.05731]	0.1000	0.001160	ug/L	!ib
Cadmium	A	[0.05304]	0.1000	0.001660	ug/L	!ib
Calcium	A	[2.459]	10.00	0.1008	ug/L	!ib
Lead	A	[0.06431]	0.1000	0.002114	ug/L	!ib
Magnesium	A	12.12	10.00	0.2094	ug/L	ib ***
Molybdenum	A	[0.06966]	0.1000	0.03128	ug/L	!ib
Potassium	A	ND	10.00	8.951	ug/L	
Silver	A	[0.06133]	0.1000	0.001136	ug/L	!ib
Thallium	A	ND	0.05000	0.004069	ug/L	
Arsenic	E	[0.02656]	0.1000	0.007097	ug/L	!ib
Chromium	E	ND	0.1000	0	ug/L	
Cobalt	E	[0.05040]	0.1000	0.0006581	ug/L	!ib
Copper	E	[0.02697]	0.1000	0.001005	ug/L	!ib
Manganese	E	0.1204	0.1000	0.002754	ug/L	ib ***
Nickel	E	ND	0.1000	0	ug/L	
Sodium	E	19.00	10.00	0	ug/L	ib ***
Vanadium	E	ND	0.1000	0	ug/L	
Zinc	E	ND	0.1000	0.06332	ug/L	
Iron	H	[6.236]	10.00	0.1610	ug/L	!ib
Selenium	H	[0.05184]	0.1000	0.003852	ug/L	!ib

ISTD (ICALBLK 114m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	526509	541354	2.82
Scandium	A	614228	634776	3.35
Scandium	E	53435	55376	3.63
Scandium	H	520999	510532	-2.01
Germanium	H	130321	129470	-0.65
Germanium	E	26590	27425	3.14
Indium	A	1037040	1117332	7.74
Bismuth	A	1388546	1419678	2.24
Yttrium	A	928639	981483	5.69
Terbium	A	1894764	1949289	2.88

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06
 Seqnum : 66501883017
 Cal : 66501883001
 Standards: S4984, S4635

File : l14m0017
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 14:23

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	2.268	0.1000	ug/L	
Barium	A	1.081	0.1000	ug/L	
Beryllium	A	[0.01508]	0.1000	ug/L	
Cadmium	A	2.380	0.1000	ug/L	
Lead	A	1.092	0.1000	ug/L	
Silver	A	0.1744	0.1000	ug/L	
Thallium	A	[0.04361]	0.05000	ug/L	
Arsenic	E	0.2944	0.1000	ug/L	
Chromium	E	0.9398	0.1000	ug/L	
Cobalt	E	2.599	0.1000	ug/L	
Copper	E	1.629	0.1000	ug/L	
Manganese	E	1.202	0.1000	ug/L	
Nickel	E	0.9229	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	3.106	0.1000	ug/L	
Selenium	H	[0.07594]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	98830	ug/L	99
Calcium	A	300000	306300	ug/L	102
Magnesium	A	100000	96600	ug/L	97
Molybdenum	A	2000	2189	ug/L	109
Potassium	A	100000	100100	ug/L	100
Sodium	E	250000	245600	ug/L	98
Iron	H	250000	242300	ug/L	97

ISTD (ICALBLK l14m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	526509	411767	-21.79
Scandium	A	614228	544134	-11.41
Scandium	E	53435	51794	-3.07
Scandium	H	520999	495725	-4.85
Germanium	H	130321	120823	-7.29
Germanium	E	26590	26037	-2.08
Indium	A	1037040	874358	-15.69
Bismuth	A	1388546	990254	-28.68
Yttrium	A	928639	843239	-9.20
Terbium	A	1894764	1722177	-9.11

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06
 Seqnum : 66501883018
 Cal : 66501883001
 Standards: S4985, S4635

File : 114m0018
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 14:28

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	98820	ug/L	-1		
Cadmium	A	100.0	112.2	ug/L	12	20	
Calcium	A	300000	309400	ug/L	3		
Magnesium	A	100000	96270	ug/L	-4		
Molybdenum	A	2000	2217	ug/L	11		
Potassium	A	100000	100600	ug/L	1		
Silver	A	50.00	50.66	ug/L	1	20	
Arsenic	E	100.0	106.0	ug/L	6	20	
Chromium	E	200.0	209.9	ug/L	5	20	
Cobalt	E	200.0	199.0	ug/L	-1	20	
Copper	E	200.0	179.8	ug/L	-10	20	
Manganese	E	200.0	208.9	ug/L	4	20	
Nickel	E	200.0	191.5	ug/L	-4	20	
Sodium	E	250000	251400	ug/L	1		
Vanadium	E	200.0	214.8	ug/L	7	20	
Zinc	E	100.0	90.47	ug/L	-10	20	
Iron	H	250000	248700	ug/L	-1		
Selenium	H	100.0	101.7	ug/L	2	20	

ISTD (ICALBLK 114m0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	520999	485764	-6.76
Scandium	A	614228	535270	-12.85
Scandium	E	53435	49524	-7.32
Germanium	H	130321	118687	-8.93
Germanium	E	26590	25025	-5.89
Indium	A	1037040	857773	-17.29
Yttrium	A	928639	825134	-11.15

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06

IDF : 1.0

Seqnum : 66501883061

File : l14m0061

Time : 14-DEC-2006 18:53

Cal : 66501883001

Caldate: 14-DEC-2006

Standards: S4984, S4635

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	2.270	0.1000	ug/L	
Barium	A	1.149	0.1000	ug/L	
Beryllium	A	[0.03620]	0.1000	ug/L	
Cadmium	A	2.387	0.1000	ug/L	
Lead	A	1.109	0.1000	ug/L	
Silver	A	0.1828	0.1000	ug/L	
Thallium	A	0.08483	0.05000	ug/L	
Arsenic	E	0.3375	0.1000	ug/L	
Chromium	E	0.9463	0.1000	ug/L	
Cobalt	E	2.566	0.1000	ug/L	
Copper	E	1.666	0.1000	ug/L	
Manganese	E	1.197	0.1000	ug/L	
Nickel	E	0.8970	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	3.080	0.1000	ug/L	
Selenium	H	0.1404	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	96640	ug/L	97
Calcium	A	300000	301300	ug/L	100
Magnesium	A	100000	94550	ug/L	95
Molybdenum	A	2000	2147	ug/L	107
Potassium	A	100000	98300	ug/L	98
Sodium	E	250000	239700	ug/L	96
Iron	H	250000	238300	ug/L	95

ISTD (ICALBLK l14m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	526509	411080	-21.92
Scandium	A	614228	548333	-10.73
Scandium	E	53435	52326	-2.07
Scandium	H	520999	501651	-3.71
Germanium	H	130321	122144	-6.27
Germanium	E	26590	26313	-1.04
Indium	A	1037040	886597	-14.51
Bismuth	A	1388546	985783	-29.01
Yttrium	A	928639	854035	-8.03
Terbium	A	1894764	1724690	-8.98

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06
 Seqnum : 66501883062
 Cal : 66501883001
 Standards: S4985, S4635

File : 114m0062
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 18:58

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	97230	ug/L	-3		
Cadmium	A	100.0	108.8	ug/L	9	20	
Calcium	A	300000	304900	ug/L	2		
Magnesium	A	100000	94720	ug/L	-5		
Molybdenum	A	2000	2154	ug/L	8		
Potassium	A	100000	99520	ug/L	0		
Silver	A	50.00	49.21	ug/L	-2	20	
Arsenic	E	100.0	102.7	ug/L	3	20	
Chromium	E	200.0	205.2	ug/L	3	20	
Cobalt	E	200.0	193.8	ug/L	-3	20	
Copper	E	200.0	173.9	ug/L	-13	20	
Manganese	E	200.0	206.5	ug/L	3	20	
Nickel	E	200.0	186.8	ug/L	-7	20	
Sodium	E	250000	244200	ug/L	-2		
Vanadium	E	200.0	209.9	ug/L	5	20	
Zinc	E	100.0	88.60	ug/L	-11	20	
Iron	H	250000	242400	ug/L	-3		
Selenium	H	100.0	99.49	ug/L	-1	20	

ISTD (ICALBLK 114m0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	520999	485113	-6.89
Scandium	A	614228	534400	-13.00
Scandium	E	53435	49956	-6.51
Germanium	H	130321	118629	-8.97
Germanium	E	26590	25429	-4.37
Indium	A	1037040	878119	-15.32
Yttrium	A	928639	844461	-9.06

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET06
 Seqnum : 66501883102
 Cal : 66501883001
 Standards: S4984, S4635

File : 114m0102
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 22:42

Analyte	Ch	Quant	RL	Units	Flags
Antimony	A	2.282	0.1000	ug/L	
Barium	A	1.152	0.1000	ug/L	
Beryllium	A	[0.02423]	0.1000	ug/L	
Cadmium	A	2.516	0.1000	ug/L	
Lead	A	1.101	0.1000	ug/L	
Silver	A	0.1788	0.1000	ug/L	
Thallium	A	[0.02385]	0.05000	ug/L	
Arsenic	E	0.3382	0.1000	ug/L	
Chromium	E	0.9360	0.1000	ug/L	
Cobalt	E	2.490	0.1000	ug/L	
Copper	E	1.576	0.1000	ug/L	
Manganese	E	1.228	0.1000	ug/L	
Nickel	E	0.8807	0.1000	ug/L	
Vanadium	E	[0]	0.1000	ug/L	
Zinc	E	2.917	0.1000	ug/L	
Selenium	H	[0.08271]	0.1000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec
Aluminum	A	100000	94930	ug/L	95
Calcium	A	300000	297400	ug/L	99
Magnesium	A	100000	92440	ug/L	92
Molybdenum	A	2000	2124	ug/L	106
Potassium	A	100000	97550	ug/L	98
Sodium	E	250000	233600	ug/L	93
Iron	H	250000	236500	ug/L	95

ISTD (ICALBLK 114m0004)	Ch	ICALBLK Abund	Abund	%Drift
Lithium	A	526509	413930	-21.38
Scandium	A	614228	556352	-9.42
Scandium	E	53435	52478	-1.79
Scandium	H	520999	494088	-5.17
Germanium	H	130321	120643	-7.43
Germanium	E	26590	26626	0.13
Indium	A	1037040	889285	-14.25
Bismuth	A	1388546	996716	-28.22
Yttrium	A	928639	867362	-6.60
Terbium	A	1894764	1706776	-9.92

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET06
 Seqnum : 66501883103
 Cal : 66501883001
 Standards: S4985, S4635

File : 114m0103
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 22:47

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	A	100000	88690	ug/L	-11		
Cadmium	A	100.0	101.3	ug/L	1	20	
Calcium	A	300000	279100	ug/L	-7		
Magnesium	A	100000	86810	ug/L	-13		
Molybdenum	A	2000	1971	ug/L	-1		
Potassium	A	100000	91400	ug/L	-9		
Silver	A	50.00	45.93	ug/L	-8	20	
Arsenic	E	100.0	102.9	ug/L	3	20	
Chromium	E	200.0	202.7	ug/L	1	20	
Cobalt	E	200.0	191.3	ug/L	-4	20	
Copper	E	200.0	172.0	ug/L	-14	20	
Manganese	E	200.0	205.3	ug/L	3	20	
Nickel	E	200.0	183.5	ug/L	-8	20	
Sodium	E	250000	239400	ug/L	-4		
Vanadium	E	200.0	209.2	ug/L	5	20	
Zinc	E	100.0	88.02	ug/L	-12	20	
Iron	H	250000	238800	ug/L	-4		
Selenium	H	100.0	98.23	ug/L	-2	20	

ISTD (ICALBLK 114m0004)	Ch	ICALBLK Abund	Abund	%Drift
Scandium	H	520999	482215	-7.44
Scandium	A	614228	580330	-5.52
Scandium	E	53435	50133	-6.18
Germanium	H	130321	117649	-9.72
Germanium	E	26590	25304	-4.84
Indium	A	1037040	943928	-8.98
Yttrium	A	928639	914427	-1.53

INTERNAL STANDARD SUMMARY Curtis & Tompkins Laboratories

Sequence Date: 14-DEC-2006
Sequence: 66501883
Instrument ID: MET06

ICALBLK Filename: 114m0004
Date Analyzed: 14-DEC-2006
Time Analyzed: 13:02

ICALBLK STD	IS1 (LI READING	IS2 (SC READING	IS3 (IN READING	IS4 (BI READING	IS5 (Y READING	IS6 (TB READING
526509	614228	1037040	1388546	928639	1894764	
LOWER LIMIT	157953	184269	311112	416564	278592	568429
UPPER LIMIT	631811	737074	1244448	1666255	1114367	2273717

TYPE	SAMPLE	#	IS1 (LI READING	IS2 (SC READING	IS3 (IN READING	IS4 (BI READING	IS5 (Y READING	IS6 (TB READING
ICB	191322-001	014	530513	603938	1052821	1409670	910343	1901021
ICSA	191322-001	017	411767	544134	874358	990254	843239	1722177
SAMPLE	191322-001	022	472186	560519	972955	1368103	863157	1861873
BLANK	QC367719	024	445284	513670	894052	1285670	802105	1779235
BS	QC367720	025	420389	491280	845167	1165533	777743	1726566
BSD	QC367721	026	415614	487537	833824	1104351	758325	1710676
PDS	QC367725	030	478315	576301	995850	1318595	884703	1887759
SER	QC367724	031	501528	586593	1053208	1387733	914538	1905346
CCV		037	499011	597710	1071403	1347503	909844	1924599
CCB		040	523007	586195	1049860	1375912	921962	1872591
MSS	191286-012	041	509555	594467	1033235	1364444	920665	1900163
SAMPLE	191286-008	042	537596	621039	1103687	1384349	974448	1951137
SAMPLE	191286-013	043	512496	593359	1002794	1370473	897509	1884978
SAMPLE	191286-013	044	498352	586254	1006717	1324627	907013	1881158
SAMPLE	191286-014	045	554927	636041	1073009	1379552	950960	1954643
SAMPLE	191286-008	046	547884	620821	1112003	1401845	948373	1938389
SAMPLE	191286-014	047	569360	649139	1123786	1425260	1007369	1968423
SER	QC367724	048	539875	619319	1073356	1417242	941386	1961022
MS	QC367722	049	496507	586265	985334	1313000	881894	1869610
MSD	QC367723	050	493284	578783	960949	1297340	872110	1845106
CCV		053	511993	602457	1069593	1354262	938255	1925616
CCB		055	534705	616725	1109682	1427209	935297	1945416
PDS	QC367725	059	500861	593127	1005932	1303141	898942	1896394
MS	QC367722	060	525660	617528	1020431	1343892	933039	1895475
ICSA		061	411080	548333	886597	985783	854035	1724690
MSD	QC367723	066	469934	574892	972659	1312261	877497	1862705
SAMPLE	191286-001	067	477387	563708	962265	1337843	863662	1840821
SAMPLE	191286-002	068	478201	569661	959509	1321081	867188	1837374

INTERNAL STANDARD SUMMARY Curtis & Tompkins Laboratories

Sequence Date: 14-DEC-2006
Sequence: 66501883
Instrument ID: MET06

(114m0)

ICALBLK Filename: 114m0004
Date Analyzed: 14-DEC-2006
Time Analyzed: 13:02

TYPE	SAMPLE	#							
SAMPLE	191286-003	069	480849	567328	972856	1349521	861686	1847830	
SAMPLE	191286-004	070	480363	564376	966804	1336911	861265	1839274	
SAMPLE	191286-005	071	473408	549727	938806	1303832	837955	1804938	
CCV		074	487360	579278	1042877	1343177	896595	1900824	
CCB		076	508633	588993	1032109	1388693	910450	1876105	
SAMPLE	191286-006	078	477486	566430	987916	1352431	856982	1835933	
SAMPLE	191286-007	079	488115	574663	980035	1308217	879339	1845167	
SAMPLE	191286-008	080	507518	602599	1007608	1329697	910478	1897029	
SAMPLE	191286-009	081	475128	564662	954793	1311856	856157	1820236	
SAMPLE	191286-010	082	478101	553829	947351	1302659	843241	1802358	
SAMPLE	191286-011	083	473496	554719	938849	1279322	840848	1791145	
SAMPLE	191286-013	084	481146	576050	960647	1271282	874228	1844723	
SAMPLE	191286-014	085	534448	620043	1012591	1315201	940275	1881589	
SAMPLE	191286-015	086	526084	602081	992415	1334488	904744	1888866	
MSS	191286-012	087	501400	585931	977315	1295660	875854	1826908	
CCV		090	503193	599762	1028968	1330320	929530	1892074	
CCB		092	522243	615152	1095419	1409389	944507	1903977	
SAMPLE	191286-007	094	486907	578220	971493	1303821	879718	1831684	
SAMPLE	191286-008	095	509526	602456	1004314	1310630	919523	1883065	
CCV		098	528948	626888	1093862	1368330	969537	1945436	
CCB		100	541354	634776	1117332	1419678	981483	1949289	
ICSA		102	413930	556352	889285	996716	867362	1706776	

SEQUENCE SUMMARY

Curtis & Tompkins Laboratories

Sequence: 66501883 Instrument: MET06
Analytical Method: EPA 6020

Agilent ICP-MS MET06
SOP Version: 6020_rv2

Begun: 14-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds Used	>LR
001	114m0001	TUN				14-DEC-2006 12:43	1.0	1.0				1	
002	114m0002	X	RINSE			14-DEC-2006 12:51	1.0					2	
003	114m0003	X	RINSE			14-DEC-2006 12:56	1.0					2	
004	114m0004	ICALBLK	CALBLANK			14-DEC-2006 13:02	1.0	1.0				2	
005	114m0005	ICAL				14-DEC-2006 13:07	1.0	1.0				3	
006	114m0006	ICAL				14-DEC-2006 13:13	1.0	1.0				4	
007	114m0007	ICAL				14-DEC-2006 13:18	1.0	1.0				5	
008	114m0008	ICAL				14-DEC-2006 13:23	1.0	1.0				6	
009	114m0009	ICAL				14-DEC-2006 13:29	1.0	1.0				7	
010	114m0010	ICAL				14-DEC-2006 13:37	1.0	1.0				8	
011	114m0011	X	RINSE			14-DEC-2006 13:47	1.0					2	
012	114m0012	ICV				14-DEC-2006 13:52	1.0	1.0				9	
013	114m0013	X	RINSE			14-DEC-2006 14:00	1.0					2	
014	114m0014	ICB				14-DEC-2006 14:06	1.0	1.0				2	
015	114m0015	X				14-DEC-2006 14:12	1.0	1.0				2	
016	114m0016	X				14-DEC-2006 14:17	1.0	1.0				2	
017	114m0017	ICSA				14-DEC-2006 14:23	1.0	1.0				10 2	7:CA=306300
018	114m0018	ICSAB				14-DEC-2006 14:28	1.0	1.0				11 2	10:CA=309400
019	114m0019	X	RINSE			14-DEC-2006 14:33	1.0					2	
020	114m0020	X	RINSE			14-DEC-2006 14:39	1.0					2	
021	114m0021	X	RINSE			14-DEC-2006 14:44	1.0					2	
022	114m0022	SAMPLE		191322-001	Filtera	14-DEC-2006 14:50	10.0	1.0				2	
023	114m0023	X	RINSE			14-DEC-2006 14:55	1.0	1.0				2	
024	114m0024	BLANK			Filtera	14-DEC-2006 15:01	1.0	1.0				2	
025	114m0025	BS			Filtera	14-DEC-2006 15:06	1.0	1.0				2	
026	114m0026	BSD			Filtera	14-DEC-2006 15:25	1.0	1.0				2	
027	114m0027	X	RINSE			14-DEC-2006 15:32	1.0					2	
028	114m0028	XBLANK			Filtera	14-DEC-2006 15:38	1.0	1.0				2	
029	114m0029	XBLANK			Water	14-DEC-2006 15:43	1.0	1.0				2	
030	114m0030	PDS			Filtera	14-DEC-2006 15:49	20.0	1.0				12 13 2	1:NA=25470.0
031	114m0031	SER			Filtera	14-DEC-2006 15:56	100.0	1.0				2	

Stds used: 1=S4974 2=S4635 3=S4977 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4326 13=S4327 14=S4983

Analyst: 

Date: 12/15/06

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 66501883 Instrument: MET06
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 14-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds Used	>LR
032	114m0032	X	RINSE			14-DEC-2006 16:02	1.0					2	
033	114m0033	X	RINSE			14-DEC-2006 16:07	1.0					2	
034	114m0034	X				14-DEC-2006 16:13	1.0					14 2	
035	114m0035	X	RINSE			14-DEC-2006 16:20	1.0					2	
036	114m0036	X				14-DEC-2006 16:26	1.0					2	
037	114m0037	CCV				14-DEC-2006 16:31	1.0					14 2	
038	114m0038	X	RINSE			14-DEC-2006 16:39	1.0					2	
039	114m0039	X				14-DEC-2006 16:44	1.0					2	
040	114m0040	CCB				14-DEC-2006 16:50	1.0					2	
041	114m0041	MSS				120218 Filtra	14-DEC-2006 16:55	20.0	1.0		1	2	
042	114m0042	SAMPLE				120218 Filtra	14-DEC-2006 17:01	20.0	1.0		1	2	
043	114m0043	SAMPLE				120218 Filtra	14-DEC-2006 17:06	100.0	1.0		2	2	
044	114m0044	SAMPLE				120218 Filtra	14-DEC-2006 17:12	20.0	1.0		3	2	
045	114m0045	SAMPLE				120218 Filtra	14-DEC-2006 17:17	20.0	1.0		1	2	
046	114m0046	SAMPLE				120218 Water	14-DEC-2006 17:23	50.0	1.0		2	2	
047	114m0047	SAMPLE				120218 Filtra	14-DEC-2006 17:28	50.0	1.0		1	2	
048	114m0048	SER				120218 Filtra	14-DEC-2006 17:33	50.0	1.0		2	2	
049	114m0049	MS				120218 Filtra	14-DEC-2006 17:39	10.0	1.0		2	2	
050	114m0050	MSD				120218 Filtra	14-DEC-2006 17:45	10.0	1.0		4	2	
051	114m0051	X	RINSE			14-DEC-2006 17:51	1.0					2	
052	114m0052	X	RINSE			14-DEC-2006 17:56	1.0					2	
053	114m0053	CCV				14-DEC-2006 18:01	1.0				1	14 2	
054	114m0054	X	RINSE			14-DEC-2006 18:09	1.0					2	
055	114m0055	CCB				14-DEC-2006 18:14	1.0				1	2	
056	114m0056	X				14-DEC-2006 18:20	1.0					14 2	
057	114m0057	X	RINSE			14-DEC-2006 18:28	1.0					2	
058	114m0058	X				14-DEC-2006 18:34	1.0					2	
059	114m0059	PDS				120218 Filtra	14-DEC-2006 18:39	10.0	1.0		2	12 13 2	
060	114m0060	MS				14-DEC-2006 18:46	10.0		1.0		4	2	
061	114m0061	ICSA				14-DEC-2006 18:53	1.0		1.0		1	10 2	
062	114m0062	ICSAB				14-DEC-2006 18:58	1.0		1.0		1	11 2	

Stds used: 1=S4974 2=S4635 3=S4977 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4326 13=S4327 14=S4983

Analyst: 

Date: 12/15/06

SEQUENCE SUMMARY

Curtis & Tompkins Laboratories

Sequence: 66501883 Instrument: MET06
 Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 14-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
063	114m0063	X	RINSE			14-DEC-2006 19:04	1.0					2		
064	114m0064	X	RINSE			14-DEC-2006 19:09	1.0					2		
065	114m0065	X	RINSE			14-DEC-2006 19:14	1.0					2		
066	114m0066	MSD	QC367723			120218 Filtra	14-DEC-2006 19:20	10.0	1.0	4	1	2		1:NA=31080.0
067	114m0067	SAMPLE				120218 Filtra	14-DEC-2006 19:26	10.0	1.0	2	1	2		
068	114m0068	SAMPLE				120218 Filtra	14-DEC-2006 19:31	10.0	1.0	1	1	2		
069	114m0069	SAMPLE				120218 Filtra	14-DEC-2006 19:36	10.0	1.0	3	1	2		
070	114m0070	SAMPLE				120218 Filtra	14-DEC-2006 19:42	10.0	1.0	2	1	2		
071	114m0071	SAMPLE				120218 Filtra	14-DEC-2006 19:47	10.0	1.0	1	1	2		
072	114m0072	X	RINSE			14-DEC-2006 19:53	1.0					2		
073	114m0073	X	RINSE			14-DEC-2006 19:58	1.0					2		
074	114m0074	CCV				14-DEC-2006 20:04	1.0			1	1	14	2	
075	114m0075	X	RINSE			14-DEC-2006 20:10	1.0					2		
076	114m0076	CCB				14-DEC-2006 20:16	1.0			1	1	2		
077	114m0077	X				14-DEC-2006 20:21	1.0			4	1	2		
078	114m0078	SAMPLE				120218 Filtra	14-DEC-2006 20:26	10.0	1.0	1	1	2		
079	114m0079	SAMPLE				120218 Filtra	14-DEC-2006 20:32	10.0	1.0	1	1	2		
080	114m0080	SAMPLE				120218 Filtra	14-DEC-2006 20:37	10.0	1.0	2	1	2		1:MN=368.300
081	114m0081	SAMPLE				120218 Filtra	14-DEC-2006 20:43	10.0	1.0	1	1	2		
082	114m0082	SAMPLE				120218 Filtra	14-DEC-2006 20:48	10.0	1.0	1	1	2		
083	114m0083	SAMPLE				120218 Filtra	14-DEC-2006 20:54	10.0	1.0	1	1	2		
084	114m0084	SAMPLE				120218 Filtra	14-DEC-2006 20:59	10.0	1.0	4	1	2		3:NA=41010.0
085	114m0085	SAMPLE				120218 Filtra	14-DEC-2006 21:05	10.0	1.0	2	1	2		1:MG=41390.0
086	114m0086	SAMPLE				120218 Filtra	14-DEC-2006 21:10	10.0	1.0	1	1	2		
087	114m0087	MSS				120218 Filtra	14-DEC-2006 21:15	10.0	1.0	1	1	2		1:NA=31250.0
088	114m0088	X	RINSE			14-DEC-2006 21:21	1.0					2		
089	114m0089	X	RINSE			14-DEC-2006 21:26	1.0					2		
090	114m0090	CCV				14-DEC-2006 21:32	1.0			1	1	14	2	
091	114m0091	X	RINSE			14-DEC-2006 21:40	1.0					2		
092	114m0092	CCB				14-DEC-2006 21:45	1.0			2	1	2		
093	114m0093	X				14-DEC-2006 21:51	1.0			2	1	2		

Stds used: 1=S4974 2=S4635 3=S4977 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4326 13=S4327 14=S4983

Analyst: 

Date: 11/5/04

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 66501883 Instrument: MET06
Analytical Method: EPA 6020 Agilent ICP-MS MET06
SOP Version: 6020_rv2

Begun: 14-DEC-2006

#	Filename	Type	Sample	enum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
094	114m0094	SAMPLE	191286-007		120218	Water	14-DEC-2006 21:56	10.0	1.0			1	2		
095	114m0095	SAMPLE	191286-008		120218	Water	14-DEC-2006 22:02	10.0	1.0	1		1	2	1:MN=405.300	
096	114m0096	X	RINSE				14-DEC-2006 22:07	1.0					2		
097	114m0097	X	RINSE				14-DEC-2006 22:12	1.0					2		
098	114m0098	CCV					14-DEC-2006 22:18	1.0	1.0			1	14	2	
099	114m0099	X	RINSE				14-DEC-2006 22:25	1.0					2		
100	114m0100	CCB					14-DEC-2006 22:31	1.0	1.0	3		1	2		
101	114m0101	X					14-DEC-2006 22:36	1.0	1.0	2		1	2		
102	114m0102	ICSA					14-DEC-2006 22:42	1.0	1.0			1	10	2	7:CA=297400
103	114m0103	ICSAB					14-DEC-2006 22:47	1.0	1.0			1	11	2	10:CA=279100

Stds used: 1=S4974 2=S4635 3=S4977 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4326 13=S4327 14=S4983

Analyst: MD Date: 12/15/00

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET05

Calnum : 56503143001

Units : ug/L

Date : 15-DEC-2006 10:00

X Axis : R

Reviewer: ---

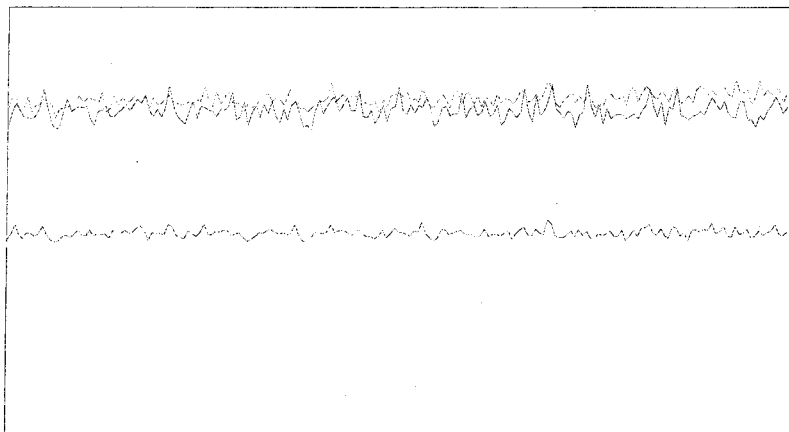
Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	11509005	56503143005	CS1	15-DEC-2006 10:06	S4978
L2	11509006	56503143006	CS2	15-DEC-2006 10:11	S4979
L3	11509007	56503143007	CS3	15-DEC-2006 10:17	S4980
L4	11509008	56503143008	CS4	15-DEC-2006 10:22	S4981
L5	11509009	56503143009	CS5	15-DEC-2006 10:28	S4975
L6	11509010	56503143010	CS6	15-DEC-2006 10:33	S4976

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ²	MnR ²	Flg
Aluminum	0.8405	0.8270	0.8138	0.7216	0.7043	0.6646	BLNK	-2.5147	1.48689		0.7620	0.999	0.995	
Antimony	0.2832	0.2722	0.2807	0.2470	0.2534	0.2474	BLNK	-0.0287	4.02355		0.2640	1.000	0.995	
Arsenic	0.9840	0.7244	0.6922	0.5497	0.5589	0.5323	BLNK	-0.1532	1.86159		0.6736	0.999	0.995	
Barium	0.1082	0.1021	0.1040	0.0916	0.0953	0.0940	BLNK	-0.0376	10.6144		0.0992	1.000	0.995	
Beryllium	0.1868	0.1856	0.1935	0.1790	0.1801	0.1729	BLNK	-0.0063	5.73706		0.1830	1.000	0.995	
Cadmium	0.8101	0.7891	0.7040	0.6607	0.6738	0.6444	BLNK	-0.0784	1.53853		0.7137	1.000	0.995	
Calcium	0.0401	0.0328	0.0271	0.0216	0.0212	0.0202	BLNK	-18.119	49.1286		0.0272	0.999	0.995	
Chromium	14.387	8.7682	6.3943	3.7246	3.5358	3.4736	BLNK	-0.7524	0.28816		6.7140	1.000	0.995	
Cobalt	4.1330	4.2132	4.2655	3.9889	3.9793	3.8239	BLNK	-0.0220	0.25942		4.0673	1.000	0.995	
Copper	3.1553	2.2454	1.7938	1.2117	1.1826	1.1151	BLNK	-0.4175	0.88819		1.7840	0.999	0.995	
Iron	0.1291	0.1085	0.1000	0.0857	0.0855	0.0823	BLNK	-11.740	12.0598		0.0985	1.000	0.995	
Lead	1.2579	1.1981	1.1711	1.1200	1.1831	1.1715	BLNK	-0.0349	0.85221		1.1836	1.000	0.995	
Magnesium	0.1034	0.1037	0.1067	0.0966	0.0911	0.0854	BLNK	-1.0568	11.5548		0.0978	0.999	0.995	
Manganese	5.2092	4.8545	4.7340	4.0790	4.1818	4.0380	BLNK	-0.0791	0.24602		4.5161	1.000	0.995	
Molybdenum	1.3313	1.2768	1.3106	1.2264	1.3048	1.2826	BLNK	-0.0294	0.77721		1.2888	1.000	0.995	
Nickel	2.0785	1.4906	1.3008	0.9453	0.9258	0.8847	BLNK	-0.3064	1.12188		1.2710	1.000	0.995	
Potassium	2.6247	1.6962	1.2411	0.7360	0.6954	0.6604	BLNK	-71.433	1.50461		1.2757	0.999	0.995	
Selenium	-0.075	0.0151	0.0317	0.0498	0.0502	0.0476	BLNK	0.27513	20.7517		0.0198	0.999	0.995	
Silver	3.3681	3.2934	3.4394	3.1164	3.2729	3.1226	BLNK	-0.0237	0.31725		3.2688	0.999	0.995	
Sodium	2.5943	1.7385	1.3206	0.8394	0.7745	0.7210	BLNK	-59.031	1.37127		1.3314	0.999	0.995	
Thallium	0.9408	0.8803	0.8962	0.8395	0.8893	0.9061	BLNK	-0.0261	1.10827		0.8920	1.000	0.995	
Vanadium	6.5014	5.4745	5.4367	3.8730	3.8301	3.8000	BLNK	-0.2860	0.26320		4.8193	1.000	0.995	
Zinc	5.2000	3.0109	2.1364	0.6995	0.6019	0.5541	BLNK	-2.0909	1.79617		2.0338	0.999	0.995	

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

Tune Report

Tune File : ATUNE.U



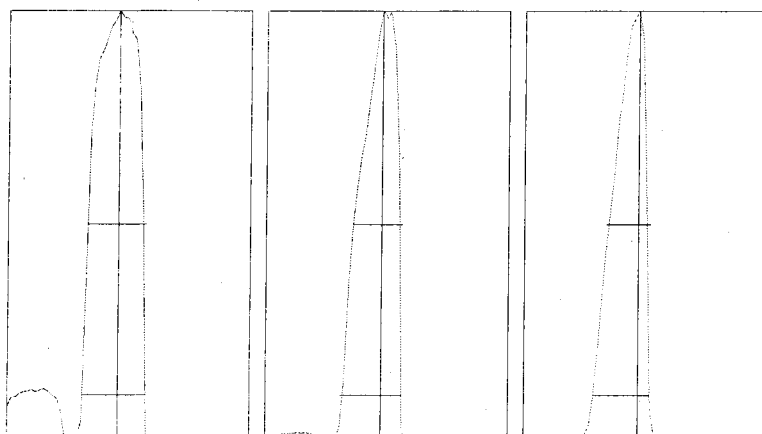
m/z:	7	89	205
Range:	20,000	50,000	20,000
Count:	15,353	23,884	16,033
Mean:	15174.7	23691.9	15727.2
RSD%:	2.82	2.07	2.04
n:	200		

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec

Oxide: 156/140 0.29%
Doubly Charged: 70/140 2.71%

Background:

m/z:	7	89	205
Cps:	9.9	6.7	13.4



m/z:	7	89	205
Height:	15,481	23,769	17,197
Axis:	6.90	88.95	204.95
W-50%:	0.75	0.60	0.55
W-10%:	0.800	0.7500	0.700

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Tuning Parameters

===Plasma Condition===

RF Power: 1270 W
RF Matching: 1.76 V
Smpl Depth: 7.1 mm
Torch-H: -1.3 mm
Torch-V: 0.5 mm
Carrier Gas: 1.09 L/min
Makeup Gas: 0 L/min
Optional Gas: --- %
PeriPump1: 0.1 rps
PeriPump2: --- rps
S/C Temp: 2 degC

===Ion Lenses===

Extract 1: -180 V
Extract 2: -70 V
Einzel 1,3: -100 V
Einzel 2: -7 V
Omega Bias: -45 V
Omega (+): 5 V
Omega (-): -5 V
QP Focus: 8 V
Plate Bias: 0 V

===Q-Pole Parameters===

AMU Gain: 130
AMU Offset: 125
Axis Gain: 0.9989
Axis Offset: -0.01
QP Bias: 1.6 V

===Detector Parameters===

Discriminator: 9.3 mV
Analog HV: 1810 V
Pulse HV: 1160 V

Temp.p\$\$

P/A Factor Tuning Report

Acquired: Dec 15 2006 09:23 am

Mass[amu]	Element	P/A Factor
6	Li	0.070607
9	Be	0.076455
23	Na	Sensitivity too high
25	Mg	Sensitivity too high
26	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
43	Ca	0.091464
44	Ca	0.091947
45	Sc	0.093491
51	V	0.090083
52	Cr	0.094037
53	Cr	0.093196
54	Fe	0.095257
55	Mn	0.095588
57	Fe	0.096823
59	Co	0.097585
60	Ni	0.100800
63	Cu	0.103393
65	Cu	0.101969
66	Zn	0.099463
72	Ge	Sensitivity too low
75	As	Sensitivity too low
77	(As)	Sensitivity too low
82	Se	Sensitivity too low
83	(As)	Sensitivity too low
88	(Ca)	Sensitivity too low
89	Y	0.100434
95	Mo	0.097525
98	Mo	0.099270
99	(Mo)	Sensitivity too low
106	(Cd)	Sensitivity too low
108	(Cd)	Sensitivity too low
109	Ag	0.104788
111	Cd	Sensitivity too low
114	Cd	0.103240
115	In	0.104700
118	(In)	0.102422
121	Sb	0.103756
135	Ba	Sensitivity too low
137	Ba	0.102946
159	Tb	0.108813
166	Er	Sensitivity too low

Temp.p\$\$

205	Tl	0.110364
206	(Pb)	0.109154
207	(Pb)	0.108248
208	Pb	0.110678
209	Bi	0.110244

===Detector Parameters===

Discriminator: 9.3 mV

Analog HV: 1810 V

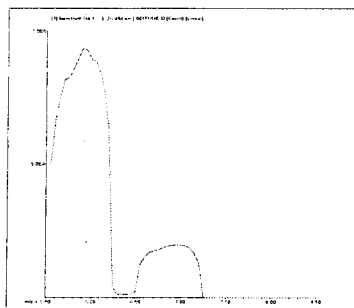
Pulse HV: 1160 V

6020 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\06L1509a.B\001TUNE.D
Date Acquired: Dec 15 2006 09:43 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s4974
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	0.72	5.00	
59 Co	0.94	5.00	
115 In	1.52	5.00	
205 Tl	1.08	5.00	



7 Li

Mass Calib.

Actual: 6.95

Required: 6.90 - 7.10

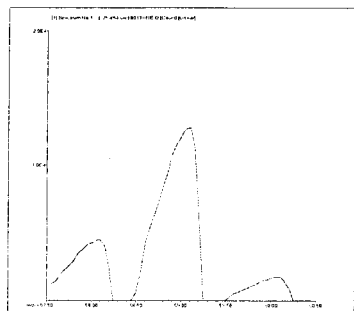
Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:



59 Co

Mass Calib.

Actual: 59.10

Required: 58.90 - 59.10

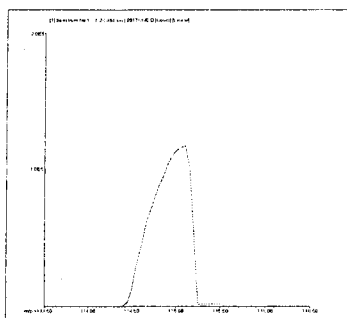
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



115 In

Mass Calib.

Actual: 115.10

Required: 114.90 - 115.10

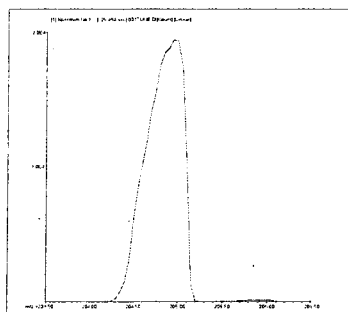
Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:



205 Tl

Mass Calib.

Actual: 204.95

Required: 204.90 - 205.10

Flag:

Peak Width

Actual: 0.55

Required: 0.90

Flag:

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06L1509a.B\004CAL
 Date Acquired: Dec 15 2006 10:00 am
 Operator:
 Sample Name: std-blank
 Misc Info:
 Vial Number: 1101
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 14 2006 11:16 am
 Sample Type: CalBlk
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	914549.69 A	2523.00	0.28
9 Be	20.00 P	15.28	76.40
23 Na	572123.31 P	7724.00	1.35
26 Mg	1215.56 P	25.24	2.08
27 Al	22476.67 P	545.90	2.43
39 K	630965.00 M	5510.00	0.87
44 Ca	4901.64 P	97.15	1.98
45 Sc	664508.88 P	262.70	0.04
51 V	2914.50 P	580.10	19.90
52 Cr	6996.67 P	171.00	2.44
55 Mn	862.22 P	57.96	6.72
57 Fe	2608.89 P	87.20	3.34
59 Co	227.78 P	5.09	2.24
60 Ni	732.22 P	48.80	6.66
65 Cu	1258.88 P	71.67	5.69
66 Zn	3118.89 P	53.89	1.73
72 Ge	134002.20 P	1894.00	1.41
75 As	217.73 P	326.60	150.00
82 Se	-35.56 P	4.91	13.82
95 Mo	101.11 P	35.64	35.25
109 Ag	200.00 P	21.86	10.93
111 Cd	136.42 P	10.74	7.87
115 In	989698.63 A	11570.00	1.17
121 Sb	141.11 P	13.88	9.84
137 Ba	70.00 P	5.77	8.25
205 Tl	498.89 P	8.39	1.68
208 Pb	867.78 P	66.78	7.70
209 Bi	1060404.00 A	5663.00	0.53

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1509a.B\005CALI.D\005CALI.D#
 Date Acquired: Dec 15 2006 10:06 am
 Operator:
 Sample Name: cs1,s4978
 Misc Info:
 Vial Number: 1102
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 15 2006 10:02 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	912385.31 A	1475.00	0.16
9 Be	852.22 P	21.69	2.55
23 Na	863822.19 A	3135.00	0.36
26 Mg	34415.56 P	228.90	0.67
27 Al	279846.69 P	1339.00	0.48
39 K	873930.81 A	7990.00	0.91
44 Ca	13351.96 P	278.80	2.09
45 Sc	665965.50 P	6451.00	0.97
51 V	4334.87 P	956.50	22.07
52 Cr	9584.44 P	147.70	1.54
55 Mn	3470.00 P	103.90	2.99
57 Fe	8603.33 P	232.10	2.70
59 Co	2753.33 P	100.20	3.64
60 Ni	1384.44 P	71.67	5.18
65 Cu	2102.08 P	71.67	3.41
66 Zn	3464.44 P	123.00	3.55
72 Ge	133231.59 P	965.60	0.72
75 As	655.23 P	98.50	15.03
82 Se	-50.00 P	63.63	127.26
95 Mo	886.67 P	61.73	6.96
109 Ag	2243.33 P	59.25	2.64
111 Cd	539.33 P	69.28	12.85
115 In	985258.81 A	5526.00	0.56
121 Sb	1395.56 P	94.77	6.79
137 Ba	533.33 P	41.77	7.83
205 Tl	2472.22 P	93.35	3.78
208 Pb	6612.22 P	96.28	1.46
209 Bi	1051319.00 A	8828.00	0.84

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	912385.25	0.16	914549.63	99.8	80 - 120	

45	Sc	665965.56	0.97	664508.88	100.2	80 -	120
72	Ge	133231.55	0.72	134002.22	99.4	80 -	120
115	In	985258.81	0.56	989698.63	99.6	80 -	120
209	Bi	1051319.40	0.84	1060404.00	99.1	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1509a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1509a.B\006CALI.D\006CALI.D#
 Date Acquired: Dec 15 2006 10:11 am
 Operator:
 Sample Name: cs2,s4979
 Misc Info:
 Vial Number: 1103
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 15 2006 10:07 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	908148.19 A	4115.00	0.45
9 Be	1685.56 P	100.00	5.93
23 Na	1136423.00 A	10820.00	0.95
26 Mg	67806.66 P	898.00	1.32
27 Al	540601.13 P	6196.00	1.15
39 K	1108805.00 A	1695.00	0.15
44 Ca	21425.12 P	111.60	0.52
45 Sc	653688.88 P	1223.00	0.19
51 V	7266.60 P	1998.00	27.50
52 Cr	11626.67 P	70.00	0.60
55 Mn	6437.78 P	196.30	3.05
57 Fe	14391.11 P	137.00	0.95
59 Co	5586.67 P	243.40	4.36
60 Ni	1976.67 P	43.33	2.19
65 Cu	2977.50 P	37.91	1.27
66 Zn	3993.33 P	221.90	5.56
72 Ge	132603.30 P	777.70	0.59
75 As	960.73 P	33.52	3.49
82 Se	20.00 P	14.11	70.55
95 Mo	1693.33 P	89.88	5.31
109 Ag	4367.78 P	185.30	4.24
111 Cd	1046.48 P	45.50	4.35
115 In	968947.38 A	11470.00	1.18
121 Sb	2637.78 P	41.94	1.59
137 Ba	988.89 P	18.95	1.92
205 Tl	4625.56 P	70.74	1.53
208 Pb	12591.11 P	63.80	0.51
209 Bi	1050928.00 A	6051.00	0.58

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	908148.19	0.45	914549.63	99.3	80 - 120	

45	Sc	653688.88	0.19	664508.88	98.4	80 -	120
72	Ge	132603.33	0.59	134002.22	99.0	80 -	120
115	In	968947.38	1.18	989698.63	97.9	80 -	120
209	Bi	1050928.50	0.58	1060404.00	99.1	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1509a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1509a.B\007CALI.D\007CALI.D#
 Date Acquired: Dec 15 2006 10:17 am
 Operator:
 Sample Name: cs3,s4980
 Misc Info:
 Vial Number: 1104
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 15 2006 10:13 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	901881.63 A	3894.00	0.43
9 Be	3490.00 P	171.30	4.91
23 Na	1709771.00 A	16970.00	0.99
26 Mg	138151.09 P	1100.00	0.80
27 Al	1053506.00 A	16480.00	1.56
39 K	1606824.00 A	5742.00	0.36
44 Ca	35102.48 P	337.90	0.96
45 Sc	647380.00 P	7268.00	1.12
51 V	14309.91 P	1349.00	9.43
52 Cr	16818.89 P	249.00	1.48
55 Mn	12451.11 P	440.10	3.53
57 Fe	26306.67 P	280.40	1.07
59 Co	11218.89 P	150.20	1.34
60 Ni	3421.11 P	115.00	3.36
65 Cu	4718.32 P	123.00	2.61
66 Zn	5618.89 P	99.13	1.76
72 Ge	131530.41 P	1470.00	1.12
75 As	1819.10 P	274.50	15.09
82 Se	83.33 P	56.72	68.06
95 Mo	3446.67 P	101.20	2.94
109 Ag	9045.55 P	187.40	2.07
111 Cd	1851.95 P	35.12	1.90
115 In	964882.81 A	7697.00	0.80
121 Sb	5415.56 P	141.10	2.61
137 Ba	2006.67 P	78.39	3.91
205 Tl	9410.00 P	293.60	3.12
208 Pb	24593.33 P	557.10	2.27
209 Bi	1050270.00 A	10730.00	1.02

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	901881.63	0.43	914549.63	98.6	80 - 120	

45	Sc	647380.00	1.12	664508.88	97.4	80 -	120
72	Ge	131530.45	1.12	134002.22	98.2	80 -	120
115	In	964882.75	0.80	989698.63	97.5	80 -	120
209	Bi	1050270.00	1.02	1060404.00	99.0	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1509a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1509a.B\008CALI.D\008CALI.D#
 Date Acquired: Dec 15 2006 10:22 am
 Operator:
 Sample Name: cs4,s4981
 Misc Info:
 Vial Number: 1105
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 15 2006 10:18 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	905731.88 A	8910.00	0.98
9 Be	32420.00 P	771.60	2.38
23 Na	10981410.00 A	105600.00	0.96
26 Mg	1263713.00 A	11930.00	0.94
27 Al	9439525.00 A	108000.00	1.14
39 K	9628804.00 A	27570.00	0.29
44 Ca	283067.91 P	1859.00	0.66
45 Sc	654114.38 P	2377.00	0.36
51 V	103309.20 P	1131.00	1.09
52 Cr	99348.88 P	956.10	0.96
55 Mn	108814.40 P	2481.00	2.28
57 Fe	228628.91 P	4356.00	1.91
59 Co	106414.40 P	2865.00	2.69
60 Ni	25218.89 P	632.30	2.51
65 Cu	32321.38 P	369.20	1.14
66 Zn	18660.00 P	436.60	2.34
72 Ge	133372.00 P	1690.00	1.27
75 As	14663.54 P	176.90	1.21
82 Se	1327.78 P	64.31	4.84
95 Mo	32713.33 P	397.30	1.21
109 Ag	83130.00 P	1192.00	1.43
111 Cd	17625.36 P	349.50	1.98
115 In	963624.19 A	5803.00	0.60
121 Sb	47597.77 P	1163.00	2.44
137 Ba	17660.00 P	357.30	2.02
205 Tl	87766.66 P	1422.00	1.62
208 Pb	234183.30 P	4790.00	2.05
209 Bi	1045494.00 A	4086.00	0.39

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	905731.94	0.98	914549.63	99.0	80 - 120	

45	Sc	654114.38	0.36	664508.88	98.4	80 -	120
72	Ge	133372.00	1.27	134002.22	99.5	80 -	120
115	In	963624.25	0.60	989698.63	97.4	80 -	120
209	Bi	1045494.30	0.39	1060404.00	98.6	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1509a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1509a.B\009CALI.D\009CALI.D#
 Date Acquired: Dec 15 2006 10:28 am
 Operator:
 Sample Name: cs5,s4975
 Misc Info:
 Vial Number: 1106
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 15 2006 10:24 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	876811.88 A	20320.00	2.32
9 Be	315656.69 P	1675.00	0.53
23 Na	100334300.00 A	1430000.00	1.43
26 Mg	11803720.00 A	91350.00	0.77
27 Al	91249824.00 A	1088000.00	1.19
39 K	90097984.00 A	633400.00	0.70
44 Ca	2743674.00 A	29670.00	1.08
45 Sc	647983.31 P	12270.00	1.89
51 V	966591.81 A	10810.00	1.12
52 Cr	892328.13 A	2389.00	0.27
55 Mn	1055369.00 A	8738.00	0.83
57 Fe	2157431.00 A	12270.00	0.57
59 Co	1004266.00 A	8731.00	0.87
60 Ni	233654.41 P	4523.00	1.94
65 Cu	298473.19 P	8181.00	2.74
66 Zn	151906.70 P	2304.00	1.52
72 Ge	126186.00 P	186.60	0.15
75 As	141057.41 P	2203.00	1.56
82 Se	12662.67 P	339.00	2.68
95 Mo	329298.91 P	4524.00	1.37
109 Ag	825993.31 P	8225.00	1.00
111 Cd	170044.00 P	1519.00	0.89
115 In	918055.50 A	14380.00	1.57
121 Sb	465193.31 P	8132.00	1.75
137 Ba	174896.70 P	2219.00	1.27
205 Tl	867960.00 P	12350.00	1.42
208 Pb	2309482.00 A	32070.00	1.39
209 Bi	976294.88 A	15050.00	1.54

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	876811.94	2.32	914549.63	95.9	80 - 120	

45	Sc	647983.31	1.89	664508.88	97.5	80 -	120
72	Ge	126186.00	0.15	134002.22	94.2	80 -	120
115	In	918055.50	1.57	989698.63	92.8	80 -	120
209	Bi	976294.88	1.54	1060404.00	92.1	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1509a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1509a.B\010CALI.D\010CALI.D#
 Date Acquired: Dec 15 2006 10:33 am
 Operator:
 Sample Name: cs6,s4976
 Misc Info:
 Vial Number: 1107
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 15 2006 10:29 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	874485.00 A	7162.00	0.82
9 Be	604604.38 P	3502.00	0.58
23 Na	192145600.00 A	1873000.00	0.97
26 Mg	22754010.00 A	77540.00	0.34
27 Al	177108700.00 A	790000.00	0.45
39 K	175999810.00 A	1233000.00	0.70
44 Ca	5376693.00 A	42970.00	0.80
45 Sc	666246.63 P	5031.00	0.76
51 V	1920722.00 A	12430.00	0.65
52 Cr	1755891.00 A	17740.00	1.01
55 Mn	2041136.00 A	13130.00	0.64
57 Fe	4162452.00 A	29470.00	0.71
59 Co	1932986.00 A	20700.00	1.07
60 Ni	447230.00 P	5140.00	1.15
65 Cu	563696.38 P	6345.00	1.13
66 Zn	280095.50 P	2655.00	0.95
72 Ge	126379.10 P	1684.00	1.33
75 As	269092.31 P	2188.00	0.81
82 Se	24053.33 P	141.90	0.59
95 Mo	648298.88 P	6109.00	0.94
109 Ag	1578477.00 A	18790.00	1.19
111 Cd	325733.19 P	5349.00	1.64
115 In	907808.19 A	7044.00	0.78
121 Sb	898288.88 A	8160.00	0.91
137 Ba	341250.00 P	2626.00	0.77
205 Tl	1695280.00 A	18850.00	1.11
208 Pb	4383647.00 A	51230.00	1.17
209 Bi	935496.63 P	6576.00	0.70

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	874484.94	0.82	914549.63	95.6	80 - 120	

45	Sc	666246.63	0.76	664508.88	100.3	80 -	120
72	Ge	126379.12	1.33	134002.22	94.3	80 -	120
115	In	907808.19	0.78	989698.63	91.7	80 -	120
209	Bi	935496.63	0.70	1060404.00	88.2	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1509a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
 ISTD: Pass

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET05
 Seqnum : 56503143012
 Cal : 56503143001
 Standards: S4982

File : 11509012
 Caldate: 15-DEC-2006
 IDF : 1.0
 Time : 15-DEC-2006 10:44

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	0.7620	0.6951	10000	10330	ug/L	3	10	
Antimony	0.2640	0.2454	100.0	98.70	ug/L	-1	10	
Arsenic	0.6736	0.5398	100.0	100.3	ug/L	0	10	
Barium	0.0992	0.0934	100.0	99.09	ug/L	-1	10	
Beryllium	0.1830	0.1783	100.0	102.3	ug/L	2	10	
Cadmium	0.7137	0.6357	100.0	97.73	ug/L	-2	10	
Calcium	0.0272	0.0208	10000	10180	ug/L	2	10	
Chromium	6.7140	3.3927	100.0	97.01	ug/L	-3	10	
Cobalt	4.0673	3.8654	100.0	100.3	ug/L	0	10	
Copper	1.7840	1.1450	100.0	101.3	ug/L	1	10	
Iron	0.0985	0.0834	10000	10050	ug/L	1	10	
Lead	1.1836	1.1350	100.0	96.69	ug/L	-3	10	
Magnesium	0.0978	0.0903	10000	10440	ug/L	4	10	
Manganese	4.5161	4.0075	100.0	98.51	ug/L	-1	10	
Molybdenum	1.2888	1.2500	100.0	97.12	ug/L	-3	10	
Nickel	1.2710	0.8973	100.0	100.4	ug/L	0	10	
Potassium	1.2757	0.6777	10000	10130	ug/L	1	10	
Selenium	0.0198	0.0487	100.0	101.3	ug/L	1	10	
Silver	3.2688	3.1027	100.0	98.41	ug/L	-2	10	
Sodium	1.3314	0.7755	10000	10580	ug/L	6	10	
Thallium	0.8920	0.8553	50.00	47.37	ug/L	-5	10	
Vanadium	4.8193	3.6851	100.0	96.71	ug/L	-3	10	
Zinc	2.0338	0.5934	100.0	104.5	ug/L	5	10	

ISTD (ICALBLK 11509004)	ICALBLK Abund	Abund	%Drift
Lithium	914550	914887	0.04
Scandium	664509	686009	3.24
Germanium	134002	136585	1.93
Indium	989699	973159	-1.67
Bismuth	1060404	1048908	-1.08

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56503143028
 Cal : 56503143001
 Standards: S4983, S4635

File : 11509028
 Caldate: 15-DEC-2006

IDF : 1.0
 Time : 15-DEC-2006 12:12

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.7620	0.7006	10000	10410	ug/L	4	10	
Antimony	0.2640	0.2446	100.0	98.38	ug/L	-2	10	
Arsenic	0.6736	0.5461	100.0	101.5	ug/L	2	10	
Barium	0.0992	0.0922	100.0	97.85	ug/L	-2	10	
Beryllium	0.1830	0.1750	100.0	100.4	ug/L	0	10	
Cadmium	0.7137	0.6646	100.0	102.2	ug/L	2	10	
Calcium	0.0272	0.0210	10000	10310	ug/L	3	10	
Chromium	6.7140	3.4836	100.0	99.63	ug/L	0	10	
Cobalt	4.0673	3.9259	100.0	101.8	ug/L	2	10	
Copper	1.7840	1.1454	100.0	101.3	ug/L	1	10	
Iron	0.0985	0.0855	10000	10300	ug/L	3	10	
Lead	1.1836	1.1343	100.0	96.63	ug/L	-3	10	
Magnesium	0.0978	0.0907	10000	10480	ug/L	5	10	
Manganese	4.5161	4.1188	100.0	101.2	ug/L	1	10	
Molybdenum	1.2888	1.2864	100.0	99.95	ug/L	0	10	
Nickel	1.2710	0.9028	100.0	101.0	ug/L	1	10	
Potassium	1.2757	0.6788	10000	10140	ug/L	1	10	
Selenium	0.0198	0.0498	100.0	103.5	ug/L	4	10	
Silver	3.2688	3.2197	100.0	102.1	ug/L	2	10	
Sodium	1.3314	0.7837	10000	10690	ug/L	7	10	
Thallium	0.8920	0.8556	50.00	47.39	ug/L	-5	10	
Vanadium	4.8193	3.7862	100.0	99.37	ug/L	-1	10	
Zinc	2.0338	0.5911	100.0	104.1	ug/L	4	10	

ISTD (ICALBLK 11509004)	ICALBLK Abund	Abund	%Drift
Lithium	914550	902799	-1.28
Scandium	664509	657408	-1.07
Germanium	134002	128338	-4.23
Indium	989699	956483	-3.36
Bismuth	1060404	1047164	-1.25

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56503143014
 Cal : 56503143001

File : 11509014
 Caldate: 15-DEC-2006

IDF : 1.0
 Time : 15-DEC-2006 10:55

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[6.077]	25.00	2.752	ug/L	!ib
Antimony	[0.2215]	0.2500	0.005910	ug/L	!ib
Arsenic	ND	0.2500	0.1120	ug/L	
Barium	[0.04961]	0.2500	0.03444	ug/L	!ib
Beryllium	[0.05632]	0.2500	0.002016	ug/L	!ib
Cadmium	[0.07169]	0.2500	0.05722	ug/L	!ib
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.2500	0.01315	ug/L	
Cobalt	[0.04990]	0.2500	0.003116	ug/L	!ib
Copper	[0.02297]	0.2500	0.02110	ug/L	!ib
Iron	[5.391]	25.00	3.223	ug/L	!ib
Lead	[0.05407]	0.2500	0.002523	ug/L	!ib
Magnesium	[6.170]	25.00	1.907	ug/L	!ib
Manganese	[0.04160]	0.2500	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	[0.06846]	0.2500	0.01875	ug/L	!ib
Potassium	ND	25.00	3.213	ug/L	
Selenium	ND	0.2500	0.6002	ug/L	
Silver	[0.05718]	0.2500	0.005272	ug/L	!ib
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11509004)	ICALBLK Abund	Abund	%Drift
Lithium	914550	962643	5.26
Scandium	664509	701183	5.52
Germanium	134002	140822	5.09
Indium	989699	1014749	2.53
Bismuth	1060404	1116604	5.30

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

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Inst      : MET05
Seqnum    : 56503143031
Cal       : 56503143001

```

File : 11509031
Caldate: 15-DEC-2006

```
IDF      : 1.0
Time     : 15-DEC-2006 12:29
```

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[6.439]	25.00	2.752	ug/L	!ib
Antimony	[0.05094]	0.2500	0.005910	ug/L	!ib
Arsenic	ND	0.2500	0.1120	ug/L	
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.02428]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	[13.42]	25.00	6.782	ug/L	!ib
Chromium	[0.02469]	0.2500	0.01315	ug/L	!ib
Cobalt	[0.02098]	0.2500	0.003116	ug/L	!ib
Copper	[0.05310]	0.2500	0.02110	ug/L	!ib
Iron	[12.28]	25.00	3.223	ug/L	!ib
Lead	[0.01692]	0.2500	0.002523	ug/L	!ib
Magnesium	[16.23]	25.00	1.907	ug/L	!ib
Manganese	ND	0.2500	0.03082	ug/L	
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	[0.04037]	0.2500	0.01875	ug/L	!ib
Potassium	ND	25.00	3.213	ug/L	
Selenium	ND	0.2500	0.6002	ug/L	
Silver	[0.01784]	0.2500	0.005272	ug/L	!ib
Sodium	49.89	25.00	3.640	ug/L	ib ***
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11509004)	ICALBLK Abund	Abund	%Drift
Lithium	914550	909428	-0.56
Scandium	664509	644269	-3.05
Germanium	134002	125342	-6.46
Indium	989699	981069	-0.87
Bismuth	1060404	1075009	1.38

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05

Seqnum : 56503143016

Cal : 56503143001

Standards: S4984, S4635

File : 11509016

Caldate: 15-DEC-2006

IDF : 1.0

Time : 15-DEC-2006 11:06

Analyte	Quant	RL	Units	Flags
Antimony	2.847	0.2500	ug/L	
Arsenic	[0.02965]	0.2500	ug/L	
Barium	1.513	0.2500	ug/L	
Beryllium	[0.01640]	0.2500	ug/L	
Cadmium	[0.1179]	0.2500	ug/L	
Chromium	3.903	0.2500	ug/L	
Cobalt	3.202	0.2500	ug/L	
Copper	2.760	0.2500	ug/L	
Lead	1.648	0.2500	ug/L	
Manganese	1.648	0.2500	ug/L	
Nickel	5.815	0.2500	ug/L	
Selenium	[0]	0.2500	ug/L	
Silver	[0.1852]	0.2500	ug/L	
Thallium	[0.04153]	0.1250	ug/L	
Vanadium	[0.03870]	0.2500	ug/L	
Zinc	4.184	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	110100	ug/L	110
Calcium	300000	351200	ug/L	117
Iron	250000	268400	ug/L	107
Magnesium	100000	109700	ug/L	110
Molybdenum	2000	2105	ug/L	105
Potassium	100000	112300	ug/L	112
Sodium	250000	252100	ug/L	101

ISTD (ICALBLK 11509004)	ICALBLK Abund	Abund	%Drift
Lithium	914550	760732	-16.82
Scandium	664509	610116	-8.19
Germanium	134002	120452	-10.11
Indium	989699	779287	-21.26
Bismuth	1060404	705766	-33.44

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05

IDF : 1.0

Seqnum : 56503143017

File : 11509017

Time : 15-DEC-2006 11:12

Cal : 56503143001

Caldate: 15-DEC-2006

Standards: S4985, S4635

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	97400	ug/L	-3		
Arsenic	100.0	99.03	ug/L	-1	20	
Cadmium	100.0	91.48	ug/L	-9	20	
Calcium	300000	324400	ug/L	8		
Chromium	200.0	227.3	ug/L	14	20	
Cobalt	200.0	205.9	ug/L	3	20	
Copper	200.0	187.2	ug/L	-6	20	
Iron	250000	255800	ug/L	2		
Magnesium	100000	96420	ug/L	-4		
Manganese	200.0	220.3	ug/L	10	20	
Molybdenum	2000	1996	ug/L	0		
Nickel	200.0	197.3	ug/L	-1	20	
Potassium	100000	102100	ug/L	2		
Selenium	100.0	84.56	ug/L	-15	20	
Silver	50.00	46.16	ug/L	-8	20	
Sodium	250000	218700	ug/L	-13		
Vanadium	200.0	231.3	ug/L	16	20	
Zinc	100.0	89.40	ug/L	-11	20	

ISTD (ICALBLK 11509004)	ICALBLK Abund	Abund	%Drift
Scandium	664509	637136	-4.12
Germanium	134002	119777	-10.62

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05

IDF : 1.0

Seqnum : 56503143032

File : 11509032

Time : 15-DEC-2006 12:35

Cal : 56503143001

Caldate: 15-DEC-2006

Standards: S4984, S4635

Analyte	Quant	RL	Units	Flags
Antimony	2.700	0.2500	ug/L	
Arsenic	[0]	0.2500	ug/L	
Barium	1.515	0.2500	ug/L	
Beryllium	[0.02033]	0.2500	ug/L	
Cadmium	[0.09708]	0.2500	ug/L	
Chromium	3.921	0.2500	ug/L	
Cobalt	3.097	0.2500	ug/L	
Copper	2.720	0.2500	ug/L	
Lead	1.637	0.2500	ug/L	
Manganese	1.679	0.2500	ug/L	
Nickel	5.797	0.2500	ug/L	
Selenium	[0]	0.2500	ug/L	
Silver	[0.1854]	0.2500	ug/L	
Thallium	[0.05041]	0.1250	ug/L	
Vanadium	[0.1191]	0.2500	ug/L	
Zinc	4.241	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	109700	ug/L	110
Calcium	300000	349300	ug/L	116
Iron	250000	266300	ug/L	107
Magnesium	100000	109500	ug/L	110
Molybdenum	2000	2119	ug/L	106
Potassium	100000	111100	ug/L	111
Sodium	250000	251100	ug/L	100

ISTD (ICALBLK 11509004)	ICALBLK Abund	Abund	%Drift
Lithium	914550	742370	-18.83
Scandium	664509	597106	-10.14
Germanium	134002	117238	-12.51
Indium	989699	776090	-21.58
Bismuth	1060404	711658	-32.89

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56503143033
 Cal : 56503143001
 Standards: S4985, S4635

File : 11509033
 Caldate: 15-DEC-2006

IDF : 1.0
 Time : 15-DEC-2006 12:40

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	96380	ug/L	-4		
Arsenic	100.0	98.24	ug/L	-2	20	
Cadmium	100.0	92.55	ug/L	-7	20	
Calcium	300000	320400	ug/L	7		
Chromium	200.0	228.5	ug/L	14	20	
Cobalt	200.0	204.5	ug/L	2	20	
Copper	200.0	185.2	ug/L	-7	20	
Iron	250000	254700	ug/L	2		
Magnesium	100000	94990	ug/L	-5		
Manganese	200.0	221.5	ug/L	11	20	
Molybdenum	2000	2034	ug/L	2		
Nickel	200.0	195.8	ug/L	-2	20	
Potassium	100000	101400	ug/L	1		
Selenium	100.0	84.62	ug/L	-15	20	
Silver	50.00	47.04	ug/L	-6	20	
Sodium	250000	215700	ug/L	-14		
Vanadium	200.0	232.5	ug/L	16	20	
Zinc	100.0	88.09	ug/L	-12	20	

ISTD (ICALBLK 11509004)	ICALBLK Abund	Abund	%Drift
Scandium	664509	626172	-5.77
Germanium	134002	116258	-13.24

INTERNAL STANDARD SUMMARY

Curtis & Tompkins Laboratories

Sequence Date: 15-DEC-2006
 Sequence: 56503143
 Instrument ID: MET05
 ICALBLK Filename: 11509004
 Date Analyzed: 15-DEC-2006
 Time Analyzed: 10:00

TYPE	SAMPLE	#	IS1 (LI) READING	IS2 (SC) READING	IS3 (GE) READING	IS4 (IN) READING	IS5 (BI) READING	IS6 (TB) READING
ICALBLK STD		014	962643	701183	140822	1014749	1116604	1488745
LOWER LIMIT		016	760732	610116	120452	779287	705766	1155002
UPPER LIMIT		021	872564	641453	127044	927386	952478	1365845
	QC367724	022	764735	579970	108472	732706	712190	1121612
	QC367723	023	752828	567087	107360	713693	687719	1086813
	191286-012	025	793182	576234	105932	735150	705298	1112649
		028	902799	657408	128338	956483	1047164	1409705
		031	909428	644269	125342	981069	1075009	1377064
		032	742370	597106	117238	776090	711658	1159909

565031

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56503143 Instrument: MET05
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 15-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR ...
001	11509001	TUN				15-DEC-2006 09:43	1.0	1.0				1		
002	11509002	X	RINSE			15-DEC-2006 09:49	1.0					2		
003	11509003	X	RINSE			15-DEC-2006 09:55	1.0					2		
004	11509004	ICALBLK	STD-BLANK			15-DEC-2006 10:00	1.0	1.0				2		
005	11509005	ICAL	CS1			15-DEC-2006 10:06	1.0	1.0				3		
006	11509006	ICAL	CS2			15-DEC-2006 10:11	1.0	1.0				4		
007	11509007	ICAL	CS3			15-DEC-2006 10:17	1.0	1.0				5		
008	11509008	ICAL	CS4			15-DEC-2006 10:22	1.0	1.0				6		
009	11509009	ICAL	CS5			15-DEC-2006 10:28	1.0	1.0				7		
010	11509010	ICAL	CS6			15-DEC-2006 10:33	1.0	1.0				8		
011	11509011	X	RINSE			15-DEC-2006 10:39	1.0					9		
012	11509012	ICV				15-DEC-2006 10:44	1.0	1.0				10	2	7:CA=351200
013	11509013	X	RINSE			15-DEC-2006 10:50	1.0	1.0				11	2	11:CA=324400
014	11509014	ICB				15-DEC-2006 10:55	1.0	1.0				12		
015	11509015	X				15-DEC-2006 11:01	1.0					13		
016	11509016	ICSA				15-DEC-2006 11:06	1.0	1.0				14		
017	11509017	ICSAB				15-DEC-2006 11:12	1.0	1.0				15		
018	11509018	X	RINSE			15-DEC-2006 11:17	1.0					16		
019	11509019	X	RINSE			15-DEC-2006 11:23	1.0					17		
020	11509020	X	RINSE			15-DEC-2006 11:28	1.0					18		
021	11509021	SER	QC367724			15-DEC-2006 11:34	5.0	1.0				19		1:NA=60640.0
022	11509022	MS	QC367722			15-DEC-2006 11:39	1.0	1.0				20		3:NA=274100
023	11509023	MSD	QC367723			15-DEC-2006 11:45	1.0	1.0				21		3:NA=287300
024	11509024	X	RINSE			15-DEC-2006 11:50	1.0					22		
025	11509025	MSS	191286-012			15-DEC-2006 11:56	1.0	1.0				23		2:NA=281600
026	11509026	X	RINSE			15-DEC-2006 12:01	1.0					24		
027	11509027	X	RINSE			15-DEC-2006 12:07	1.0					25		
028	11509028	CCV				15-DEC-2006 12:12	1.0	1.0				26		
029	11509029	X	RINSE			15-DEC-2006 12:18	1.0					27		
030	11509030	X				15-DEC-2006 12:23	1.0	1.0				28		
031	11509031	CCB				15-DEC-2006 12:29	1.0	1.0				29		

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983

Analyst:

Date:

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56503143 Instrument: MET05
Analytical Method: EPA 6020

Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 15-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Std	Used	>LR
032	11509032	ICSA				15-DEC-2006	12:35	1.0	1.0		1	10	2	7:CA=349300
033	11509033	ICSAB				15-DEC-2006	12:40	1.0	1.0		1	11	2	11:CA=320400

Std's used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983

Analyst:

Date:

REPORTING SUMMARY FOR 191286 METALS Water

Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	A	S	A	B	B	C	C	C	C	F	P	M	M	H	N	K	S	A	N	T	V	Z
				L	B	S	A	E	D	A	R	O	U	E	B	G	N	G	I	E	G	A	L	N	
191286-007	MET04	12/07/06 15:40	1.0															+							
191286-007	MET06	12/12/06 03:34	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	
191286-007	MET06	12/14/06 21:56	10.0																						+
191286-008	MET04	12/07/06 15:42	1.0															+							
191286-008	MET06	12/12/06 03:39	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	
191286-008	MET06	12/14/06 17:23	50.0														+								
191286-008	MET06	12/14/06 22:02	10.0																						+
191286-008	MET05	12/15/06 03:28	1.0											+											
QC367392	MET04	12/07/06 14:48	1.0															+							
QC367393	MET04	12/07/06 14:50	1.0															+							
QC367394	MET04	12/07/06 14:52	1.0															+							
QC367395	MET04	12/07/06 14:58	5.0															+							
QC367396	MET04	12/07/06 15:02	1.0															+							
QC367397	MET04	12/07/06 15:04	1.0															+							
QC367719	MET06	12/12/06 00:12	1.0	+	+	+	+	+	+		+	+	+	+	+	+	+		+	+	+	+	+	+	
QC367719	MET06	12/12/06 21:35	1.0																						+
QC367719	MET06	12/14/06 15:01	1.0						+																
QC367720	MET06	12/12/06 00:18	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	
QC367720	MET06	12/14/06 15:06	1.0																						+
QC367721	MET06	12/12/06 00:24	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+	
QC367721	MET06	12/14/06 15:25	1.0																						+
QC367722	MET06	12/12/06 00:47	10.0			+	+	+		+	+	+	+		+	+	+		+	+				+	
QC367722	MET06	12/14/06 17:39	10.0	+	+				+											+	+	+			+
QC367722	MET06	12/14/06 18:46	10.0																						
QC367722	MET05	12/15/06 11:39	1.0										+										+		
QC367723	MET06	12/12/06 00:53	10.0			+	+	+		+	+	+	+		+	+	+		+	+				+	
QC367723	MET06	12/14/06 17:45	10.0	+	+				+										+		+	+			+
QC367723	MET06	12/14/06 19:20	10.0																						
QC367723	MET05	12/15/06 11:45	1.0										+										+		
QC367724	MET06	12/12/06 00:42	50.0			+		+		+	+	+	+		+	+	+		+	+			+		
QC367724	MET06	12/14/06 15:56	100.0																			+			
QC367724	MET06	12/14/06 17:33	50.0	+	+		+		+										+	+					
QC367724	MET05	12/15/06 11:34	5.0										+										+		+
QC367725	MET06	12/12/06 00:59	10.0			+	+	+		+	+	+	+		+	+	+		+	+			+		

REPORTING SUMMARY FOR 191286 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S G	A A	N L	T V	Z N
QC367725	MET06	12/14/06 15:49	20.0	+	+			+						+						+	+				+
QC367725	MET06	12/14/06 18:39	10.0																						
QC368373	MET05	12/15/06 03:05	1.0												+										
QC368374	MET05	12/15/06 03:11	1.0												+										
QC368375	MET05	12/15/06 03:17	1.0												+										
QC368376	MET05	12/15/06 03:39	1.0												+										
QC368377	MET05	12/15/06 03:44	1.0												+										
QC368378	MET05	12/15/06 03:33	5.0												+										
QC368379	MET05	12/15/06 03:50	1.0	+	+	+		+	+		+	+	+	+					+	+	+	+		+	+

REPORTING SUMMARY FOR 191286 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	A	S	A	B	B	C	C	C	C	F	P	M	M	H	N	K	S	A	N	T	V	Z
				L	B	S	A	E	D	A	R	O	U	E	B	G	N	G	I	E	G	A	L	N	
191286-001	MET04	12/07/06 15:22	1.0															+							
191286-001	MET06	12/12/06 01:40	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
191286-001	MET06	12/14/06 19:26	10.0																						+
191286-002	MET06	12/12/06 01:45	10.0	+	+	+			+	+	+		+	+	+	+	+	+	+			+		+	
191286-002	MET06	12/14/06 19:31	10.0																						+
191286-003	MET04	12/07/06 15:26	1.0															+							
191286-003	MET06	12/12/06 01:51	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
191286-003	MET06	12/14/06 19:36	10.0																						+
191286-004	MET04	12/07/06 15:29	1.0															+							
191286-004	MET06	12/12/06 01:57	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
191286-004	MET06	12/14/06 19:42	10.0																						+
191286-005	MET06	12/12/06 02:02	10.0	+	+	+			+	+	+		+	+	+	+	+	+	+			+		+	
191286-005	MET06	12/14/06 19:47	10.0																						+
191286-006	MET04	12/07/06 15:31	1.0															+							
191286-006	MET06	12/12/06 02:08	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
191286-006	MET06	12/14/06 20:26	10.0																						+
191286-007	MET04	12/07/06 15:33	1.0															+							
191286-007	MET06	12/12/06 02:14	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
191286-007	MET06	12/14/06 20:32	10.0																						+
191286-008	MET04	12/07/06 15:35	1.0															+							
191286-008	MET06	12/12/06 02:19	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
191286-008	MET06	12/14/06 17:01	20.0															+							
191286-008	MET06	12/14/06 20:37	10.0																						+
191286-009	MET06	12/12/06 02:25	10.0	+	+	+			+	+	+		+	+	+	+	+	+	+			+		+	
191286-009	MET06	12/14/06 20:43	10.0										+												+
191286-010	MET06	12/12/06 02:31	10.0	+	+	+			+	+	+		+	+	+	+	+	+	+			+		+	
191286-010	MET06	12/14/06 20:48	10.0																						+
191286-011	MET06	12/12/06 03:11	10.0	+	+	+			+	+	+		+	+	+	+	+	+	+			+		+	
191286-011	MET06	12/14/06 20:54	10.0																						+
191286-012	MET06	12/12/06 00:36	10.0			+	+	+		+	+	+	+		+	+	+	+	+					+	
191286-012	MET06	12/14/06 16:55	20.0																			+			
191286-012	MET06	12/14/06 21:15	10.0	+	+				+										+		+				
191286-012	MET05	12/15/06 11:56	1.0										+										+		+
191286-013	MET04	12/07/06 15:38	1.0															+							
191286-013	MET06	12/12/06 03:17	10.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
191286-013	MET06	12/14/06 17:06	100.0													+						+			

REPORTING SUMMARY FOR 191286 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	A	S	A	B	B	C	C	C	C	C	F	P	M	M	H	N	K	S	A	N	T	V	Z
				L	B	S	A	E	D	A	R	O	U	E	B	G	N	G	I	E	G	A	L			
191286-013	MET06	12/14/06 17:12	20.0													+										
191286-013	MET06	12/14/06 20:59	10.0																							+
191286-014	MET06	12/12/06 03:22	10.0	+		+			+	+	+		+	+	+		+		+	+			+			
191286-014	MET06	12/14/06 17:17	20.0																							
191286-014	MET06	12/14/06 17:28	50.0													+										
191286-014	MET06	12/14/06 21:05	10.0																							+
191286-015	MET06	12/12/06 03:28	10.0	+		+			+	+	+		+	+	+	+	+		+	+			+			
191286-015	MET06	12/14/06 21:10	10.0																							+
QC367392	MET04	12/07/06 14:48	1.0															+								
QC367393	MET04	12/07/06 14:50	1.0															+								
QC367394	MET04	12/07/06 14:52	1.0															+								
QC367395	MET04	12/07/06 14:58	5.0															+								
QC367396	MET04	12/07/06 15:02	1.0															+								
QC367397	MET04	12/07/06 15:04	1.0															+								
QC367719	MET06	12/12/06 00:12	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC367719	MET06	12/12/06 21:35	1.0																							+
QC367719	MET06	12/14/06 15:01	1.0						+																	
QC367720	MET06	12/12/06 00:18	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC367720	MET06	12/14/06 15:06	1.0																							+
QC367721	MET06	12/12/06 00:24	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC367721	MET06	12/14/06 15:25	1.0																							+
QC367722	MET06	12/12/06 00:47	10.0			+	+	+		+	+	+	+		+	+	+	+		+		+			+	
QC367722	MET06	12/14/06 17:39	10.0	+	+				+											+		+	+			
QC367722	MET06	12/14/06 18:46	10.0																							
QC367722	MET05	12/15/06 11:39	1.0											+										+		+
QC367723	MET06	12/12/06 00:53	10.0			+	+	+		+	+	+	+		+	+	+	+		+		+			+	
QC367723	MET06	12/14/06 17:45	10.0	+	+				+											+		+	+			
QC367723	MET06	12/14/06 19:20	10.0																							
QC367723	MET05	12/15/06 11:45	1.0											+										+		+
QC367724	MET06	12/12/06 00:42	50.0			+		+		+	+	+	+		+	+	+	+		+		+			+	
QC367724	MET06	12/14/06 15:56	100.0																				+			
QC367724	MET06	12/14/06 17:33	50.0	+	+		+		+											+		+				
QC367724	MET05	12/15/06 11:34	5.0											+										+		+

REPORTING SUMMARY FOR 191286 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	A	S	A	B	B	C	C	C	C	C	F	P	M	M	H	N	K	S	A	N	T	V	Z
				L	B	S	A	E	D	A	R	O	U	E	B	G	N	G	I		E	G	A	L		N
QC367725	MET06	12/12/06 00:59 10.0				+	+	+		+	+	+	+		+	+	+		+		+				+	
QC367725	MET06	12/14/06 15:49 20.0		+	+				+					+						+		+				+
QC367725	MET06	12/14/06 18:39 10.0																								

Curtis & Tompkins Laboratories

Sample Preparation Summary

10-DEC-2006 13:42

Batch Number : 120218
Date Extracted: 10-DEC-2006
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S4326
Spike #2 ID : S4327
Spike #3 ID :
SOP Version :

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	D.F.	Clean pH	Sp 1	Sp 2	Sp 3	Analyses	Clean	Comments
191286-001		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
191286-002		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
191286-003		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
191286-004		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
191286-005		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
191286-006		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
191286-007		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
191286-008		Treadwell & Rollo	Water	50	mL	50	1.000000	1				TAL/ICP		
191286-008		Treadwell & Rollo	Water	50	mL	50	1.000000	1				TAL/ICP		
191286-009		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
191286-010		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
191286-011		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
191286-012		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
191286-013		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
191286-014		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				14MET		
191286-015		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				14MET		
QC367719	BLANK		Filtrate	50	mL	50	1.000000	1				ICAP		
QC367720	BS		Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC367721	BSD		Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC367722	MS	of 191286-012	Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC367723	MSD	of 191286-012	Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC367724	SER	of 191286-012	Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC367725	PDS	of 191286-012	Filtrate	50	mL	50	1.000000	1				ICAP		

Prep Chemist:

Reviewed By:

Date:

Relinquished By:

Received By:

Date:

LIMS Batch #: 120213
 Date Digested: 12/10/08
 Digested by: KLA

Digestion Method

☒ EPA 200.8 for ICP-MS
☐ _____

BK BK 2378

Page 5

Continued From: _____

Continued On: _____

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
13K	50	50	N	
13J				
13D				
135-12				Filter (1) Filter (2) (1)
135D-12				
191286-10				
-01				
-02				
-03 G				
-04 D				
-05				
-06 G				
-07 A				
-08				
-09 G				
-10				
-11				
-12 S				
-13 G				
-14 A				
-15				
286-07 B				TOTALS
-08				

5 digestion temperature (90-95 degrees C)
.5 mL of spike solution was added to all spikes

concentrated HCl
 concentrated HNO₃

☐ filtered thru' Whatman # 541

Reagent ID or LIMS #

Initials / Date

34324	KLA 12/10
34327	
C 26-028 BAKER	
C 33068	

KLA 12/10/08
 Prep Chemist Signature / Date

[Signature] 12/10/08
 Reviewer Signature / Date

Curtis & Tompkins Laboratories

Sample Preparation Summary

15-DEC-2006 06:35

Batch Number : 120383
Date Extracted: 14-DEC-2006
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S4326
Spike #2 ID : S4327
Spike #3 ID :
SOP Version :

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
191286-008		Treadwell & Rollo	Water	50	mL	50	1.000000	1				TAL/ICP		
QC368373	BLANK		Water	50	mL	50	1.000000	1				ICAP		
QC368374	BS		Water	50	mL	50	1.000000	1	.5	.5		ICAP		
QC368375	BSD		Water	50	mL	50	1.000000	1	.5	.5		ICAP		
QC368376	MS	of 191286-008	Water	50	mL	50	1.000000	1	.5	.5		ICAP		
QC368377	MSD	of 191286-008	Water	50	mL	50	1.000000	1	.5	.5		ICAP		
QC368378	SER	of 191286-008	Water	50	mL	50	1.000000	1	.5	.5		ICAP		
QC368379	PDS	of 191286-008	Water	50	mL	50	1.000000	1				ICAP		

Prep Chemist: *[Signature]* 12/15/06 Reviewed By: *[Signature]* Date: 12/15/06

Relinquished By: *[Signature]* 12/15/06 Received By: *[Signature]* Date: 12/15/06

Curtis & Tompkins, Ltd.

Continued From: _____
Continued On: _____

20

Reviewer Signature / Date 12/14/00

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 7470A

Inst : MET04
 Calnum : 46491906001
 Units : ug/L

Date : 07-DEC-2006 14:26
 X Axis : R

Reviewer: ---
 Type : WATER

Label	File	Seqnum	Sample ID	Analyzed	Stds
1	120147	46491906002	STD02REP1	07-DEC-2006 14:30	S5037 (500X)
2	120147	46491906003	STD03REP1	07-DEC-2006 14:33	S5037 (200X)
3	120147	46491906004	STD04REP1	07-DEC-2006 14:35	S5037 (50X)
4	120147	46491906005	STD05REP1	07-DEC-2006 14:37	S5037 (20X)
5	120147	46491906006	STD06REP1	07-DEC-2006 14:40	S5037 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	AVG	RSD	R^2	Mar^2	Flg
Mercury	3845.0	2980.0	2484.5	2426.8	2359.0	LINEAR	-0.1288	4.28E-4		2819.1	1.000		.99	

Protocol hgppb

BUSY Dataset/Proto 120706 /hgppb

Protocol Line info Cal Curve Report Ctrl Chart Viewer

Reset

Calib Coeffs

New Cal

Update Coeffs

Spike Coeffs

A

B

C

Rho

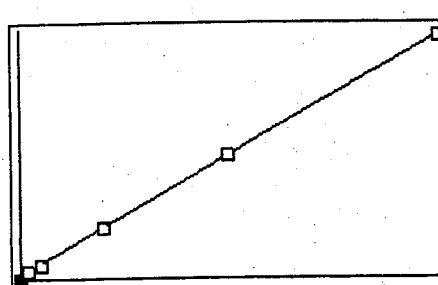
Type

 μ Abs.

23590

Accepted

New



Include S1

Rep 1 ☒

07-Dec-06 14:40

Conc.

10.0

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3
01	.00000	-.038	-.038	212	0	211		
02	.20000	.200	.000	770	0%	769		
03	.50000	.509	.009	1490	0%	1490		
04	2.0000	2.00	-.002	4969	0%	4969		
05	5.0000	5.06	.064	12134	0%	12134		
06	10.000	9.97	-.033	23590	0%	23590		

Ready

NUM

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1				Seq: 1	14:26:25 07 Dec 06			HG
Hg	.000	ppb	211					
		Bkgd 1	17021634					
*** Standard: 2 Rep: 1				Seq: 2	14:30:29 07 Dec 06			HG
Hg	.200	ppb	769					
		Bkgd 1	17014236					
*** Standard: 3 Rep: 1				Seq: 3	14:33:26 07 Dec 06			HG
Hg	.500	ppb	1490					
		Bkgd 1	17007322					
*** Standard: 4 Rep: 1				Seq: 4	14:35:44 07 Dec 06			HG
Hg	2.00	ppb	4969					
		Bkgd 1	17003727					
*** Standard: 5 Rep: 1				Seq: 5	14:37:52 07 Dec 06			HG
Hg	5.00	ppb	12134					
		Bkgd 1	17005401					
*** Standard: 6 Rep: 1				Seq: 6	14:40:19 07 Dec 06			HG
Hg	10.0	ppb	23590					
		Bkgd 1	17000142					
*** Check Standard: 2				Seq: 7	14:42:26 07 Dec 06			HG
Line	Flag		Ck2S5039					
			Intensities					
Hg			12039					
		Bkgd 1	16986013					
*** Check Standard: 1				Seq: 8	14:44:54 07 Dec 06			HG
Line	Flag		Ck1ICB					
			Intensities					
Hg			252					
		Bkgd 1	16988618					
*** Sample ID: qc367392				Seq: 9	14:48:01 07 Dec 06			HG
			120147,1					
Hg	-.007	ppb	285					
		Bkgd 1	16984362					

SEQUENCE SUMMARY

Curtis & Tompkins Laboratories

Begun: 07-DEC-2006

Sequence: 46491906 Instrument: MET04 HydraAA HG Analyzer
 Analytical Method: EPA 7470A SOP Version: HG_water_rv7
 Analyte: Mercury

#	Filename Type	Sample Num	Subj Samp	Batch	Matrix Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	%Rec	RPD	Flags
001	120147	ICAL	STD01REP1		07-DEC-2006	14:26	1.0	1.0								
002	120147	ICAL	STD02REP1		07-DEC-2006	14:30	1.0	1.0								
003	120147	ICAL	STD03REP1		07-DEC-2006	14:33	1.0	1.0								
004	120147	ICAL	STD04REP1		07-DEC-2006	14:35	1.0	1.0								
005	120147	ICAL	STD05REP1		07-DEC-2006	14:37	1.0	1.0								
006	120147	ICAL	STD06REP1		07-DEC-2006	14:40	1.0	1.0								
007	120147	ICV			07-DEC-2006	14:42	1.0	2	5.000	46491906001	5.020		ug/L	100		
008	120147	ICB			07-DEC-2006	14:44	1.0	1.0								
009	120147	BLANK	QC367392	120147	Water	07-DEC-2006	14:48	1.0					0.20	ug/L		
010	120147	BS	QC367393	120147	Water	07-DEC-2006	14:50	1.0					0.20	ug/L		
011	120147	BS	QC367393	120147	Water	07-DEC-2006	14:50	1.0	5.000	46491906001	5.060		0.20	ug/L	101	
012	120147	BSD	QC367394	120147	Water	07-DEC-2006	14:52	1.0	5.000	46491906001	5.000		0.20	ug/L	100	1
013	120147	MSS	191281-001	120147	Water	07-DEC-2006	14:54	1.0					0.20	ug/L		
014	120147	SER	QC367395	191281-001	120147	Water	07-DEC-2006	14:58	5.0				1.0	ug/L		
015	120147	MS	QC367396	191281-001	120147	Water	07-DEC-2006	15:02	1.0				0.20	ug/L	105	
016	120147	MSD	QC367397	191281-001	120147	Water	07-DEC-2006	15:04	1.0				0.20	ug/L	103	2
017	120147	SAMPLE	191245-003	120147	Water	07-DEC-2006	15:06	1.0					0.20	ug/L		
018	120147	SAMPLE	191281-002	120147	Water	07-DEC-2006	15:10	1.0					0.20	ug/L		
019	120147	SAMPLE	191281-003	120147	Water	07-DEC-2006	15:13	1.0					0.20	ug/L		
020	120147	CCV			07-DEC-2006	15:15	1.0	3	2.500	46491906001	2.570		ug/L	103		
021	120147	CCB			07-DEC-2006	15:18	1.0	1.0					0.20	ug/L		
022	120147	SAMPLE	191281-004	120147	Water	07-DEC-2006	15:20	1.0					0.20	ug/L		
023	120147	SAMPLE	191286-001	120147	Filtra	07-DEC-2006	15:22	1.0					0.20	ug/L		
024	120147	SAMPLE	191286-003	120147	Filtra	07-DEC-2006	15:26	1.0					0.20	ug/L		
025	120147	SAMPLE	191286-004	120147	Filtra	07-DEC-2006	15:29	1.0					0.20	ug/L		
026	120147	SAMPLE	191286-006	120147	Filtra	07-DEC-2006	15:31	1.0					0.20	ug/L		
027	120147	SAMPLE	191286-007	120147	Filtra	07-DEC-2006	15:33	1.0					0.20	ug/L		
028	120147	SAMPLE	191286-008	120147	Filtra	07-DEC-2006	15:35	1.0					0.20	ug/L		
029	120147	SAMPLE	191286-013	120147	Filtra	07-DEC-2006	15:38	1.0					0.20	ug/L		
030	120147	SAMPLE	191286-007	120147	Water	07-DEC-2006	15:40	1.0					0.20	ug/L		
031	120147	SAMPLE	191286-008	120147	Water	07-DEC-2006	15:42	1.0					0.20	ug/L		
032	120147	CCV			07-DEC-2006	15:45	1.0	4	5.000	46491906001	5.180		ug/L	104		
033	120147	CCB			07-DEC-2006	15:47	1.0	1.0					0.20	ug/L		
034	120147	SAMPLE	191287-002	120147	Water	07-DEC-2006	15:49	1.0					0.20	ug/L		
035	120147	SAMPLE	191288-001	120147	Water	07-DEC-2006	15:52	1.0					0.20	ug/L		
036	120147	SAMPLE	191290-001	120147	Filtra	07-DEC-2006	15:54	1.0					0.20	ug/L		
037	120147	CCV			07-DEC-2006	15:56	1.0	5	7.500	46491906001	7.580		ug/L	101		
038	120147	CCB			07-DEC-2006	15:59	1.0	1.0					0.20	ug/L		

Flags used: 1=S5037 2=S5039 3=S5040 4=S5041 5=S5042
 Flags used: 1=warning 1b=instrument blank 4=use

Analyst: [Signature] Date: 12/20/06

Curtis & Tompkins Laboratories Sample Preparation Summary 07-DEC-2006 12:27

Batch Number : 120147 Analysis : N/A Spike #1 ID : S5037
 Date Extracted: 07-DEC-2006 Bgroup : HG Spike #2 ID :
 Extracted by : Zachary Abbott Units : mL Spike #3 ID :
 Prep Method : METHOD Clean-up : SOP Version :

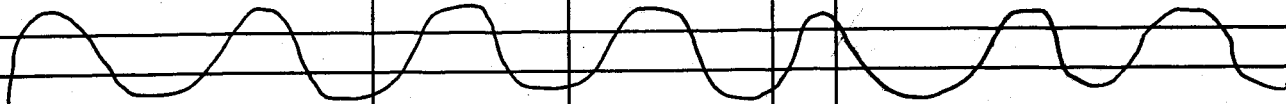
Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
191245-003		Weston Solutions	Water	50	mL	50	1.000000	1				TAL/HG		
191281-001		Blasland, Bouck & Lee	Water	50	mL	50	1.000000	1				P13/HG		
191281-002		Blasland, Bouck & Lee	Water	50	mL	50	1.000000	1				P13/HG		
191281-003		Blasland, Bouck & Lee	Water	50	mL	50	1.000000	1				P13/HG		
191281-004		Blasland, Bouck & Lee	Water	50	mL	50	1.000000	1				P13/HG		
191286-001		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				HG		
191286-003		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				HG		
191286-004		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				HG		
191286-006		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				HG		
191286-007		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				HG		
191286-008		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				HG		
191286-008		Treadwell & Rollo	Water	50	mL	50	1.000000	1				HG		
191286-013		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				HG		
191287-002		Acme Fill Corp.	Water	50	mL	50	1.000000	1				HG		
191288-001		General Chemical	Water	50	mL	50	1.000000	1				T26/HG		
191290-001		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				HG		
QC367392	BLANK		Water	50	mL	50	1.000000	1				HG		
QC367393	BS		Water	50	mL	50	1.000000	1	2.5			HG		
QC367394	BSD		Water	50	mL	50	1.000000	1	2.5			HG		
QC367395	SER	of 191281-001	Water	50	mL	50	1.000000	1				HG		
QC367396	MS	of 191281-001	Water	50	mL	50	1.000000	1	2.5			HG		
QC367397	MSD	of 191281-001	Water	50	mL	50	1.000000	1	2.5			HG		
QC367398	PDS	of 191281-001	Water	50	mL	50	1.000000	1				HG		

Prep Chemist: [Signature] Reviewed By: [Signature] Date: 12/7/06
 Relinquished By: [Signature] Received By: [Signature] Date: 12/7/06

LIMS Batch #: 120147
Date Digested: 12/7/06
Digested by: BA

Digestion Method
☒ EPA 7470A/ EPA 245.1
☐

BK 1929
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Sample # and letter		Volume	Final	Filtered?	Comments
		Sample (mL)	Volume (mL)	(y/n)	
191245-003	I	50	50	N	water
191281-001 MK	D	↓	↓	↓	↓
↓ -002	↓				
↓ -003	↓				
↓ -004	↓				
191286-007	B				
↓ -008	B				
191286-001	D				
↓ -003	G				
↓ -004	D				
↓ -006	G				
↓ -007	A				
↓ -008	A				
↓ -013	G				
191287-002	B	↓	↓	↓	water
191288-001	A				↓
191290-001	H				Filtrate (F.F.)
Blank					water
Bs					
BSD					
ms 191281-001	D	↓	↓	↓	↓
msd ↓	↓				
					

2.5 mL of spike solution was added to all spikes

ICAL Source WS#

ICV / CCV WS#

Digestion of Samples & Standards:

Time ON / Temperature ON

Time OFF/ Temperature OFF

concentrated H_2SO_4

concentrated HNO_3

5% KMnO_4

5% $K_2S_2O_8$

NaCl.hydroxylamine hydrochloride

Stannous Chloride

☐ filtered thru' 0.45 um syringe filter

Reagent ID/ LIMS# / Time

Initials / Date

35037	2a 12/07/02
35037	
35039/40/41/42	
12:15/952	
2:15/952	
B41041	
C30060	
K112006	
K2110806	
M4111706	
smc 120506	
Waltmore P 443832	✓



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories
MDL Summary for EPA 6020 Water 200.8
As of 01/05/07

Analyte	Units	MET06 A	MET06 E	MET06 H	MET05
Aluminum	ug/L	0.40			9.6
Antimony	ug/L	0.0093			0.062
Arsenic	ug/L		0.034		0.34
Barium	ug/L	0.023			0.13
Beryllium	ug/L	0.017			0.12
Cadmium	ug/L	0.0058			0.17
Calcium	ug/L	5.6			15
Chromium	ug/L		0.038		0.18
Cobalt	ug/L		0.0072		0.069
Copper	ug/L		0.028		0.24
Iron	ug/L			1.9	16
Lead	ug/L	0.013			0.088
Magnesium	ug/L	0.73			11
Manganese	ug/L		0.011		0.050
Molybdenum	ug/L	0.0063			0.24
Nickel	ug/L		0.029		0.21
Potassium	ug/L	5.3			8.7
Selenium	ug/L			0.027	0.35
Silver	ug/L	0.0079			0.068
Sodium	ug/L		2.7		14
Thallium	ug/L	0.030			0.030
Vanadium	ug/L		0.026		0.24
Zinc	ug/L		0.062		0.23

Curtis & Tompkins Laboratories
MDL Summary for EPA 7470A Water
As of 01/05/07

Analyte	Units	MET04	MET14
Mercury	ug/L	0.058	0.021

Anions by IC

Chloride

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Batch#:	120153
Matrix:	Water	Received:	12/06/06
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln Fac	Sampled	Analyzed
LF6GW103	SAMPLE	191286-001	39	2.0	10.00	12/05/06 11:00	12/07/06 05:21
1065MW9A	SAMPLE	191286-002	170	5.0	25.00	12/05/06 14:50	12/07/06 05:39
231GW09	SAMPLE	191286-003	38	2.0	10.00	12/05/06 12:15	12/07/06 07:06
DUP1205062A	SAMPLE	191286-004	38	2.0	10.00	12/05/06 11:00	12/07/06 07:23
DUP1205062C	SAMPLE	191286-005	170	5.0	25.00	12/05/06 15:00	12/07/06 07:41
DUP1205062B	SAMPLE	191286-006	37	2.0	10.00	12/05/06 12:15	12/07/06 07:58
BB1PZ100	SAMPLE	191286-007	240	5.0	25.00	12/05/06 09:55	12/07/06 08:15
BB1PZ101	SAMPLE	191286-008	310	5.0	25.00	12/05/06 10:15	12/07/06 08:33
1065PZ1A	SAMPLE	191286-009	71	5.0	25.00	12/05/06 14:10	12/07/06 08:50
1065PZ1B	SAMPLE	191286-010	160	5.0	25.00	12/05/06 15:10	12/07/06 09:08
DUP1205061A	SAMPLE	191286-011	160	5.0	25.00	12/05/06 15:20	12/07/06 09:25
1213GW101	SAMPLE	191286-012	600	10	50.00	12/05/06 16:20	12/06/06 17:20
1349MW100	SAMPLE	191286-013	990	20	100.0	12/05/06 13:45	12/06/06 17:38
LF4GW103	SAMPLE	191286-014	570	20	100.0	12/05/06 15:35	12/06/06 17:55
LF4GW104	SAMPLE	191286-015	320	10	50.00	12/05/06 15:15	12/06/06 18:13
	BLANK	QC367425	ND	0.20	1.000		12/06/06 12:04



Curtis & Tompkins, Ltd.

Fluoride

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Diln Fac:	1.000
Matrix:	Water	Batch#:	120153
Units:	mg/L	Received:	12/06/06

Field ID	Type	Lab ID	Result	RL	Sampled	Analyzed
LF6GW103	SAMPLE	191286-001	ND	0.10	12/05/06 11:00	12/06/06 21:31
1065MW9A	SAMPLE	191286-002	0.15	0.10	12/05/06 14:50	12/06/06 22:06
231GW09	SAMPLE	191286-003	ND	0.10	12/05/06 12:15	12/06/06 18:37
DUP1205062A	SAMPLE	191286-004	ND	0.10	12/05/06 11:00	12/06/06 19:12
DUP1205062C	SAMPLE	191286-005	0.11	0.10	12/05/06 15:00	12/06/06 22:58
DUP1205062B	SAMPLE	191286-006	ND	0.10	12/05/06 12:15	12/06/06 18:55
BB1PZ100	SAMPLE	191286-007	0.11	0.10	12/05/06 09:55	12/06/06 23:16
BB1PZ101	SAMPLE	191286-008	0.25	0.10	12/05/06 10:15	12/07/06 04:46
1065PZ1A	SAMPLE	191286-009	0.23	0.10	12/05/06 14:10	12/06/06 21:49
1065PZ1B	SAMPLE	191286-010	ND	0.10	12/05/06 15:10	12/06/06 22:41
DUP1205061A	SAMPLE	191286-011	ND	0.10	12/05/06 15:20	12/06/06 22:23
1213GW101	SAMPLE	191286-012	ND	0.10	12/05/06 16:20	12/07/06 00:43
1349MW100	SAMPLE	191286-013	0.33	0.10	12/05/06 13:45	12/07/06 01:52
LF4GW103	SAMPLE	191286-014	ND	0.10	12/05/06 15:35	12/07/06 03:02
LF4GW104	SAMPLE	191286-015	ND	0.10	12/05/06 15:15	12/07/06 04:12
	BLANK	QC367425	ND	0.10		12/06/06 12:04

ND= Not Detected

RL= Reporting Limit

: 00587



Curtis & Tompkins, Ltd.

Nitrate Nitrogen

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Batch#:	120153
Matrix:	Water	Received:	12/06/06
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln	Fac	Sampled	Analized
LF6GW103	SAMPLE	191286-001	3.3	0.05	1.000		12/05/06 11:00	12/06/06 21:31
1065MW9A	SAMPLE	191286-002	ND	0.05	1.000		12/05/06 14:50	12/06/06 22:06
231GW09	SAMPLE	191286-003	14	0.50	10.00		12/05/06 12:15	12/07/06 07:06
DUP1205062A	SAMPLE	191286-004	3.2	0.05	1.000		12/05/06 11:00	12/06/06 19:12
DUP1205062C	SAMPLE	191286-005	ND	0.05	1.000		12/05/06 15:00	12/06/06 22:58
DUP1205062B	SAMPLE	191286-006	14	0.50	10.00		12/05/06 12:15	12/07/06 07:58
BB1PZ100	SAMPLE	191286-007	ND	0.05	1.000		12/05/06 09:55	12/06/06 23:16
BB1PZ101	SAMPLE	191286-008	ND	0.05	1.000		12/05/06 10:15	12/07/06 04:46
1065PZ1A	SAMPLE	191286-009	ND	0.05	1.000		12/05/06 14:10	12/06/06 21:49
1065PZ1B	SAMPLE	191286-010	0.22	0.05	1.000		12/05/06 15:10	12/06/06 22:41
DUP1205061A	SAMPLE	191286-011	0.22	0.05	1.000		12/05/06 15:20	12/06/06 22:23
1213GW101	SAMPLE	191286-012	1.8	0.05	1.000		12/05/06 16:20	12/07/06 00:43
1349MW100	SAMPLE	191286-013	ND	0.05	1.000		12/05/06 13:45	12/07/06 01:52
LF4GW103	SAMPLE	191286-014	ND	0.05	1.000		12/05/06 15:35	12/07/06 03:02
LF4GW104	SAMPLE	191286-015	0.64	0.05	1.000		12/05/06 15:15	12/07/06 04:12
	BLANK	QC367425	ND	0.05	1.000			12/06/06 12:04

ND= Not Detected

RL= Reporting Limit

: 00588

Nitrite Nitrogen

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Batch#:	120153
Matrix:	Water	Received:	12/06/06
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln Fac	Sampled	Analyzed
LF6GW103	SAMPLE	191286-001	ND	0.05	1.000	12/05/06 11:00	12/06/06 21:31
1065MW9A	SAMPLE	191286-002	ND	0.05	1.000	12/05/06 14:50	12/06/06 22:06
231GW09	SAMPLE	191286-003	ND	0.05	1.000	12/05/06 12:15	12/06/06 18:37
DUP1205062A	SAMPLE	191286-004	ND	0.05	1.000	12/05/06 11:00	12/06/06 19:12
DUP1205062C	SAMPLE	191286-005	ND	0.05	1.000	12/05/06 15:00	12/06/06 22:58
DUP1205062B	SAMPLE	191286-006	ND	0.05	1.000	12/05/06 12:15	12/06/06 18:55
BB1PZ100	SAMPLE	191286-007	ND	0.05	1.000	12/05/06 09:55	12/06/06 23:16
BB1PZ101	SAMPLE	191286-008	ND	0.05	1.000	12/05/06 10:15	12/07/06 04:46
1065PZ1A	SAMPLE	191286-009	ND	0.05	1.000	12/05/06 14:10	12/06/06 21:49
1065PZ1B	SAMPLE	191286-010	ND	0.05	1.000	12/05/06 15:10	12/06/06 22:41
DUP1205061A	SAMPLE	191286-011	ND	0.05	1.000	12/05/06 15:20	12/06/06 22:23
1213GW101	SAMPLE	191286-012	ND	0.10	2.000	12/05/06 16:20	12/07/06 01:18
1349MW100	SAMPLE	191286-013	ND	0.10	2.000	12/05/06 13:45	12/07/06 02:27
LF4GW103	SAMPLE	191286-014	ND	0.10	2.000	12/05/06 15:35	12/07/06 03:37
LF4GW104	SAMPLE	191286-015	ND	0.05	1.000	12/05/06 15:15	12/07/06 04:12
	BLANK	QC367425	ND	0.05	1.000		12/06/06 12:04

ND= Not Detected

RL= Reporting Limit

Sulfate			
Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Batch#:	120153
Matrix:	Water	Received:	12/06/06
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln Fac	Sampled		Analyzed	
LF6GW103	SAMPLE	191286-001	97	5.0	10.00	12/05/06	11:00	12/07/06	05:21
1065MW9A	SAMPLE	191286-002	20	0.50	1.000	12/05/06	14:50	12/06/06	22:06
231GW09	SAMPLE	191286-003	66	5.0	10.00	12/05/06	12:15	12/07/06	07:06
DUP1205062A	SAMPLE	191286-004	95	5.0	10.00	12/05/06	11:00	12/07/06	07:23
DUP1205062C	SAMPLE	191286-005	19	0.50	1.000	12/05/06	15:00	12/06/06	22:58
DUP1205062B	SAMPLE	191286-006	66	5.0	10.00	12/05/06	12:15	12/07/06	07:58
BB1PZ100	SAMPLE	191286-007	82	13	25.00	12/05/06	09:55	12/07/06	08:15
BB1PZ101	SAMPLE	191286-008	150	13	25.00	12/05/06	10:15	12/07/06	08:33
1065PZ1A	SAMPLE	191286-009	ND	0.50	1.000	12/05/06	14:10	12/06/06	21:49
1065PZ1B	SAMPLE	191286-010	72	13	25.00	12/05/06	15:10	12/07/06	09:08
DUP1205061A	SAMPLE	191286-011	70	13	25.00	12/05/06	15:20	12/07/06	09:25
1213GW101	SAMPLE	191286-012	130	25	50.00	12/05/06	16:20	12/06/06	17:20
1349MW100	SAMPLE	191286-013	ND	0.50	1.000	12/05/06	13:45	12/07/06	01:52
LF4GW103	SAMPLE	191286-014	380	50	100.0	12/05/06	15:35	12/06/06	17:55
LF4GW104	SAMPLE	191286-015	160	25	50.00	12/05/06	15:15	12/06/06	18:13
	BLANK	QC367425	ND	0.50	1.000			12/06/06	12:04

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Chloride			
Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Units:	mg/L
Field ID:	1213GW101	Batch#:	120153
MSS Lab ID:	191286-012	Sampled:	12/05/06 16:20
Matrix:	Water	Received:	12/06/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Analyzed
BS	QC367426		4.000	3.944	99	80-120			1.000		12/06/06 12:22
BSD	QC367427		4.000	3.864	97	80-120	2	20	1.000		12/06/06 12:39
MS	QC367428	600.7	200.0	786.3	93	80-120			100.0		12/06/06 20:56
MSD	QC367429		200.0	787.0	93	80-120	0	25	100.0		12/06/06 21:14

RPD= Relative Percent Difference

Batch QC Report

Fluoride			
Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Units:	mg/L
Field ID:	1213GW101	Batch#:	120153
MSS Lab ID:	191286-012	Sampled:	12/05/06 16:20
Matrix:	Water	Received:	12/06/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Analyzed
BS	QC367426		2.000	2.087	104	80-120			1.000		12/06/06 12:22
BSD	QC367427		2.000	2.009	100	80-120	4	20	1.000		12/06/06 12:39
MS	QC367428	0.07574	100.0	99.95	100	77-120			100.0		12/06/06 20:56
MSD	QC367429		100.0	94.89	95	77-120	5	20	100.0		12/06/06 21:14

Batch QC Report

Nitrate Nitrogen			
Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Units:	mg/L
Field ID:	1213GW101	Batch#:	120153
MSS Lab ID:	191286-012	Sampled:	12/05/06 16:20
Matrix:	Water	Received:	12/06/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Analyzed
BS	QC367426		1.000	1.000	100	80-120			1.000		12/06/06 12:22
BSD	QC367427		1.000	1.006	101	80-120	1	20	1.000		12/06/06 12:39
MS	QC367428	1.754	50.00	50.31	97	80-120			100.0		12/06/06 20:56
MSD	QC367429		50.00	49.36	95	80-120	2	25	100.0		12/06/06 21:14

RPD= Relative Percent Difference

Batch QC Report

Nitrite Nitrogen			
Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Units:	mg/L
Field ID:	1213GW101	Batch#:	120153
MSS Lab ID:	191286-012	Sampled:	12/05/06 16:20
Matrix:	Water	Received:	12/06/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Analyzed
BS	QC367426		1.000	0.9673	97	80-120			1.000		12/06/06 12:22
BSD	QC367427		1.000	0.9610	96	80-120	1	20	1.000		12/06/06 12:39
MS	QC367428	<0.02411	50.00	49.04	98	80-120			100.0		12/06/06 20:56
MSD	QC367429		50.00	48.54	97	80-120	1	25	100.0		12/06/06 21:14

RPD= Relative Percent Difference

Batch QC Report

Sulfate			
Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Units:	mg/L
Field ID:	1213GW101	Batch#:	120153
MSS Lab ID:	191286-012	Sampled:	12/05/06 16:20
Matrix:	Water	Received:	12/06/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Analyzed
BS	QC367426		10.00	9.990	100	80-120			1.000		12/06/06 12:22
BSD	QC367427		10.00	9.741	97	80-120	3	20	1.000		12/06/06 12:39
MS	QC367428	125.1	500.0	608.2	97	80-120			100.0		12/06/06 20:56
MSD	QC367429		500.0	608.2	97	80-120	0	25	100.0		12/06/06 21:14

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191286 IC Water: EPA 300.0

Inst : IC03
 Calnum : 626477375001
 Units : mg/L

Date : 27-NOV-2006 12:32
 X Axis : A

Reviewer: RH
 Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	331_2.000	626477375002	L1	27-NOV-2006 12:32	S4740 (500X)
L2	331_3.000	626477375003	L2	27-NOV-2006 12:50	S4740 (100X)
L3	331_4.000	626477375004	L3	27-NOV-2006 13:07	S4740 (25X)
L4	331_5.000	626477375005	L4	27-NOV-2006 13:25	S4740 (10X)
L5	331_6.000	626477375006	L5	27-NOV-2006 13:42	S4740 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	%RSD	MnR^2	Flg
Fluoride	0.1400	0.1738	0.1846	0.1987	0.2080	QORG		0.18572	0.002247	0.1810	1.000	0.990	
Chloride	0.1664	0.1430	0.1558	0.1641	0.1771	QORG		0.15066	0.001325	0.1613	1.000	0.990	
Nitrogen, Nitrite	0.2857	0.2851	0.3166	0.3213	0.3308	QORG		0.31146	0.003864	0.3079	1.000	0.990	
Nitrogen, Nitrate	0.4014	0.3589	0.3747	0.3707	0.3897	QORG		0.35756	0.006385	0.3791	1.000	0.990	
Sulfate	0.0891	0.1008	0.1092	0.1131	0.1206	QORG		0.10562	2.999E-4	0.1066	1.000	0.990	

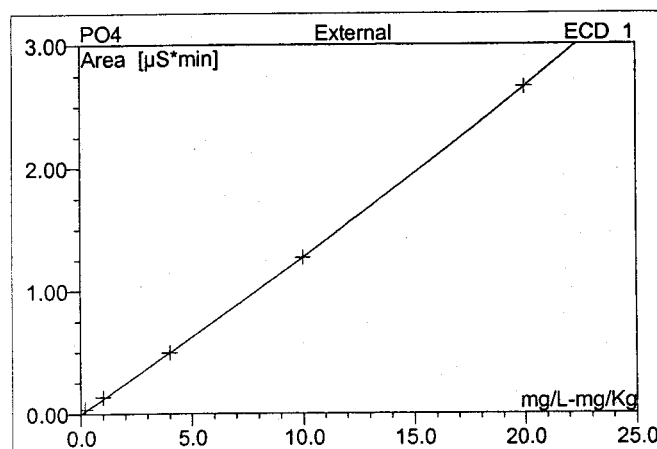
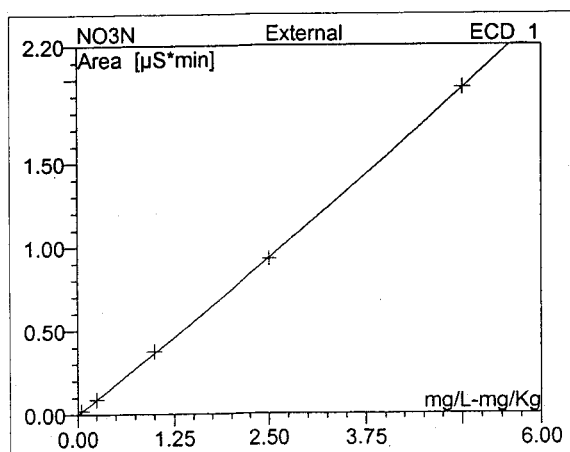
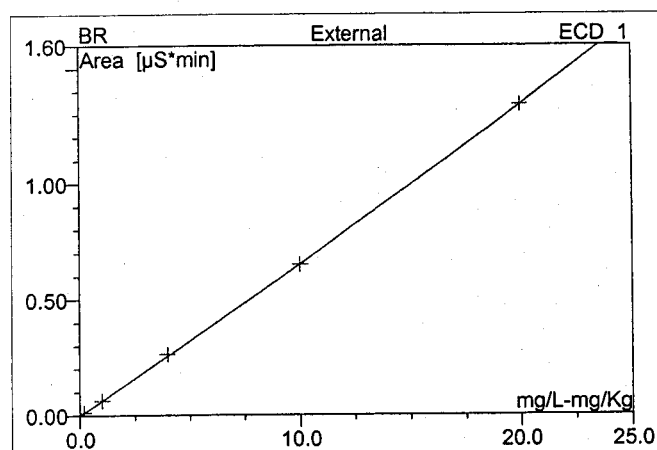
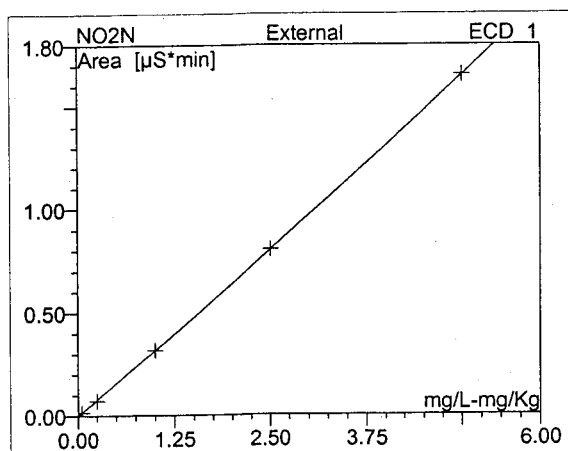
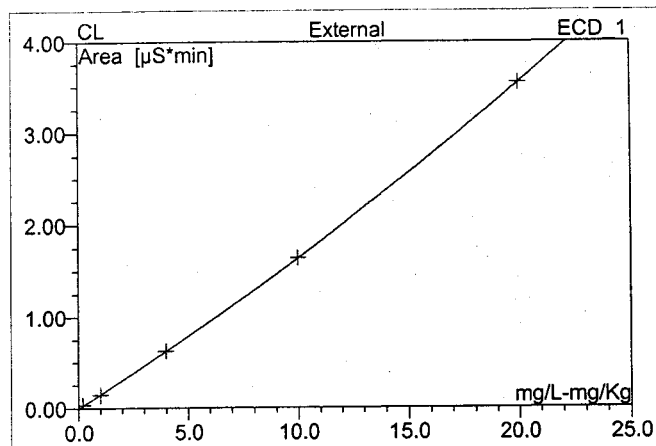
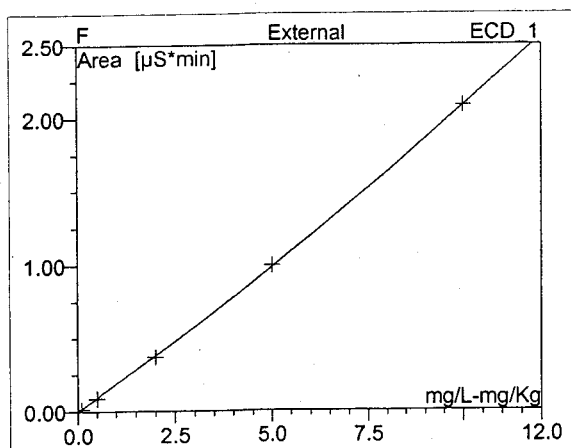
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Instrument response = a0 + amount * a1 + amount^2 * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

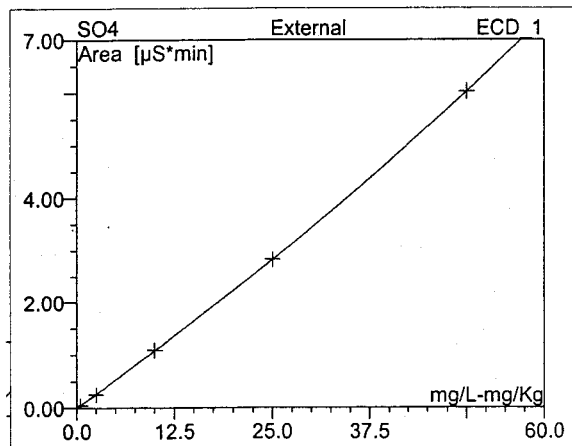
IC03 Calibration Batch Report

Sequence: 331
Program: IC03-7AN
Ini. Date/Time: 11/27/06 13:07

Inj. Vol.: 25.0
Operator: PC_NEWIC
Run Time: 15.01



Sequence:	331	Inj. Vol.:	25.0
Program:	IC03-7AN	Operator:	n.a.
Ini. Date/Time:	11/27/06 13:07	Run Time:	15.01



No.	Ret. Time min	Peak Name	Cal. Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr. Coeff. %
1	2.947	F	Quad	5	0.000000	0.185717	0.002247	99.968280
3	4.370	CL	Quad	5	0.000000	0.150660	0.001325	99.925219
4	5.190	NO2N	Quad	5	0.000000	0.311463	0.003864	99.990563
5	6.663	BR	Quad	5	0.000000	0.063257	0.000196	99.985565
6	7.500	NO3N	Quad	5	0.000000	0.357561	0.006384	99.969306
7	9.540	PO4	Quad	5	0.000000	0.121887	0.000555	99.964829
8	11.527	SO4	Quad	5	0.000000	0.105616	0.000300	99.951392
AVERAGE:					0.000000	0.185166	0.002125	99.965022

No.	Name	Area $\mu\text{S}\cdot\text{min}$ F ECD 1	Area $\mu\text{S}\cdot\text{min}$ CL ECD 1	Area $\mu\text{S}\cdot\text{min}$ NO2N ECD 1	Area $\mu\text{S}\cdot\text{min}$ BR ECD 1	Area $\mu\text{S}\cdot\text{min}$ NO3N ECD 1	Area $\mu\text{S}\cdot\text{min}$ PO4 ECD 1	Area $\mu\text{S}\cdot\text{min}$ SO4 ECD 1
2	ICAL, L1,S474	0.014001	0.033277	0.014285	0.012236	0.020070	0.035727	0.044567
3	ICAL, L2,S474	0.086913	0.142967	0.071273	0.062250	0.089719	0.134894	0.251908
4	ICAL, L3,S474	0.369133	0.623323	0.316571	0.261785	0.374732	0.495623	1.091655
5	ICAL, L4,S474	0.993403	1.640986	0.803364	0.648843	0.926829	1.272087	2.827284
6	ICAL, L5,S474	2.080176	3.542624	1.653755	1.344237	1.948730	2.660379	6.030414

No.	Name	Height μS F ECD 1	Height μS CL ECD 1	Height μS NO2N ECD 1	Height μS BR ECD 1	Height μS NO3N ECD 1	Height μS PO4 ECD 1	Height μS SO4 ECD 1
2	ICAL, L1,S474	0.109270	0.266758	0.082908	0.057646	0.081418	0.104802	0.151678
3	ICAL, L2,S474	0.584488	1.147464	0.454120	0.322522	0.381722	0.404404	0.791894
4	ICAL, L3,S474	2.698538	5.038912	1.964562	1.374302	1.647552	1.592196	3.464522
5	ICAL, L4,S474	7.375572	13.304908	4.960162	3.463314	4.199376	4.117156	9.031506
6	ICAL, L5,S474	16.615428	29.041484	10.376214	7.323652	9.001146	9.082872	19.866438

No.	Name	Amount mg/L-mg/Kg F ECD 1	Amount mg/L-mg/Kg CL ECD 1	Amount mg/L-mg/Kg NO2N ECD 1	Amount mg/L-mg/Kg BR ECD 1	Amount mg/L-mg/Kg NO3N ECD 1	Amount mg/L-mg/Kg PO4 ECD 1	Amount mg/L-mg/Kg SO4 ECD 1
2	ICAL, L1,S474	0.075318	0.220446	0.045837	0.193310	0.056075	0.292722	0.421466
3	ICAL, L2,S474	0.465366	0.941150	0.228186	0.981084	0.249805	1.101194	2.369187
4	ICAL, L3,S474	1.941982	3.996822	1.003896	4.086616	1.029113	3.993610	10.049335
5	ICAL, L4,S474	5.041498	10.010831	2.501675	9.950142	2.482083	9.982720	24.995573
6	ICAL, L5,S474	9.992662	19.997854	4.999511	20.008658	5.003115	20.003987	49.999624

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 1 of 6
Printed: 11/28/2006 4:45:54 PM

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006\331.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON
Last Update: 11/28/2006 4:37:50 PM by ic_analyst

Blank Run Subtraction: No Blank Run Subtraction

Detection Table:

No.	Ret. Time [min]	Param. Name	Param. Value	Channel
1	0.000	Inhibit Integration	On	ECD_1
2	2.250	Sensitivity	0.001 "[Signal]"	ECD_1
3	2.250	Minimum Area	0.001 "[Signal]*min"	ECD_1
4	2.250	Peak Slice	0.50 s	ECD_1
5	2.500	Inhibit Integration	Off	ECD_1

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 2 of 6
Printed: 11/28/2006 4:45:54 PM

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006\331.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON
Last Update: 11/28/2006 4:37:50 PM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off
Dead time:
Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Window	Standard	Int.Type	Cal.Type	Peak Type	Group	Amount	
									ICAL, L1,S4740,500	ICAL, L2,S4740,100
1	F	2.947 min	5.000 RG	External	Area	Quad	Auto		0.100000	0.500000
2	CL	4.370 min	5.000 RG	External	Area	Quad	Auto		0.200000	1.000000
3	NO2N	5.190 min	5.000 RG	External	Area	Quad	Auto		0.050000	0.250000
4	BR	6.663 min	5.000 RG	External	Area	Quad	Auto		0.200000	1.000000
5	NO3N	7.500 min	10.000 RG	External	Area	Quad	Auto		0.050000	0.250000
6	PO4	9.540 min	10.000 RG	External	Area	Quad	Auto		0.200000	1.000000
7	SO4	11.527 min	10.000 RG	External	Area	Quad	Auto		0.500000	2.500000

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 3 of 6
Printed: 11/28/2006 4:45:54 PM

Title: IC03-7AN_CAL

Datasource: DGLD4X01_local

Location: IC3_DX120\IC03-ANIONS-2006\331.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON

Last Update: 11/28/2006 4:37:50 PM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off

Dead time:

Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Amount	Amount	Amount	Comment
			ICAL, L3,S4740,25	ICAL, L4,S4740,10	ICAL, L5,S4740,5	
1	F	2.947 min	2.000000	5.000000	10.000000	
2	CL	4.370 min	4.000000	10.000000	20.000000	
3	NO2N	5.190 min	1.000000	2.500000	5.000000	
4	BR	6.663 min	4.000000	10.000000	20.000000	
5	NO3N	7.500 min	1.000000	2.500000	5.000000	
6	PO4	9.540 min	4.000000	10.000000	20.000000	
7	SO4	11.527 min	10.000000	25.000000	50.000000	

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 4 of 6
Printed: 11/28/2006 4:45:54 PM

Title: IC03-7AN_CAL

Datasource: DGLD4X01_local

Location: IC3_DX120\IC03-ANIONS-2006\331.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON

Last Update: 11/28/2006 4:37:50 PM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg

Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Resp.Fact.	Amount	Amount	Amount	Amount
				ICAL, L1,S4740,500	ICAL, L2,S4740,100	ICAL, L3,S4740,25	ICAL, L4,S4740,10
1	F	2.947 min	1.000000	0.100000	0.500000	2.000000	5.000000
2	CL	4.370 min	1.000000	0.200000	1.000000	4.000000	10.000000
3	NO2N	5.190 min	1.000000	0.050000	0.250000	1.000000	2.500000
4	BR	6.663 min	1.000000	0.200000	1.000000	4.000000	10.000000
5	NO3N	7.500 min	1.000000	0.050000	0.250000	1.000000	2.500000
6	PO4	9.540 min	1.000000	0.200000	1.000000	4.000000	10.000000
7	SO4	11.527 min	1.000000	0.500000	2.500000	10.000000	25.000000

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 6 of 6
Printed: 11/28/2006 4:45:55 PM

Title: IC03-7AN_CAL

Datasource: DGLD4X01_local

Location: IC3_DX120\IC03-ANIONS-2006\331.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON

Last Update: 11/28/2006 4:37:50 PM by ic_analyst

Calibration:

Calibration Mode: Total

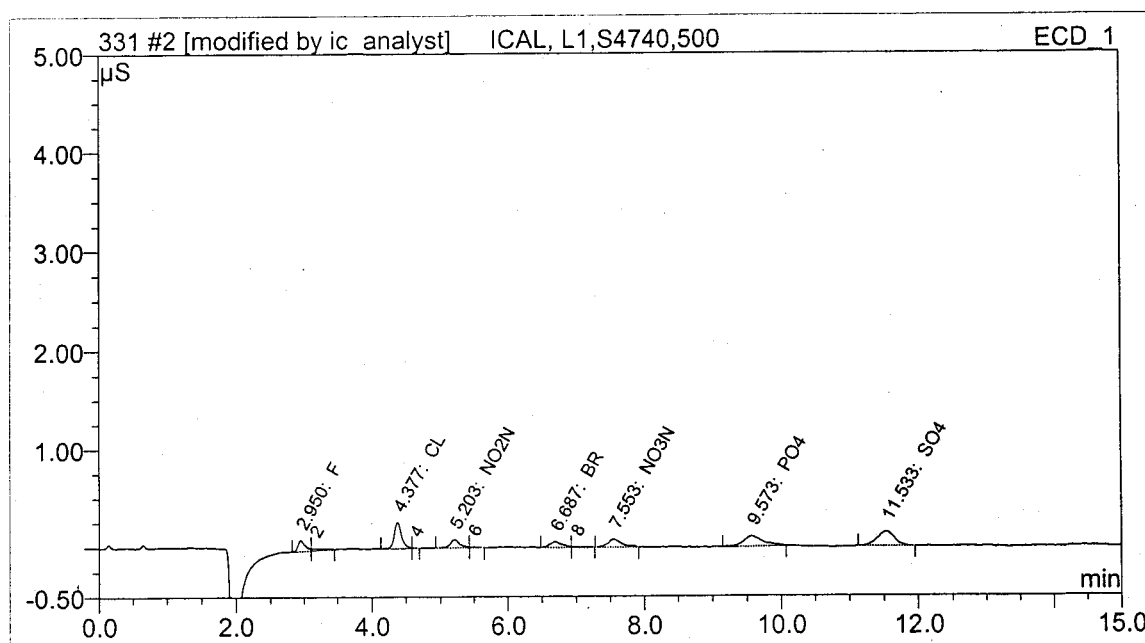
Auto Recalibrate: On

No.	Enabled	Name	Smp.No.	Pos.	Inj. Vol.	Weight	ISTD Amount	Dil. Factor	Inj. Date/Time	Calib.	Comment
1	☒	ICAL, L1,S4740,500	2	210	25.0	1.0000	1.0000	1.0000	11/27/2006 12:32:50 PM	Ok	
2	☒	ICAL, L2,S4740,100	3	211	25.0	1.0000	1.0000	1.0000	11/27/2006 12:50:15 PM	Ok	
3	☒	ICAL, L3,S4740,25	4	212	25.0	1.0000	1.0000	1.0000	11/27/2006 1:07:39 PM	Ok	
4	☒	ICAL, L4,S4740,10	5	213	25.0	1.0000	1.0000	1.0000	11/27/2006 1:25:04 PM	Ok	
5	☒	ICAL, L5,S4740,5	6	214	25.0	1.0000	1.0000	1.0000	11/27/2006 1:42:29 PM	Ok	

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L1,S4740,500	Sample No.:	2
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 12:32 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.950	0.014001	0.0753	0.0753	
3	CL	4.377	0.033277	0.2204	0.2204	
5	NO2N	5.203	0.014285	0.0458	0.0458	
7	BR	6.687	0.012236	0.1933	0.1933	
9	NO3N	7.553	0.020070	0.0561	0.0561	
10	PO4	9.573	0.035727	0.2927	0.2927	
11	SO4	11.533	0.044567	0.4215	0.4215	



ANALYZED BY:

REVIEWED BY:

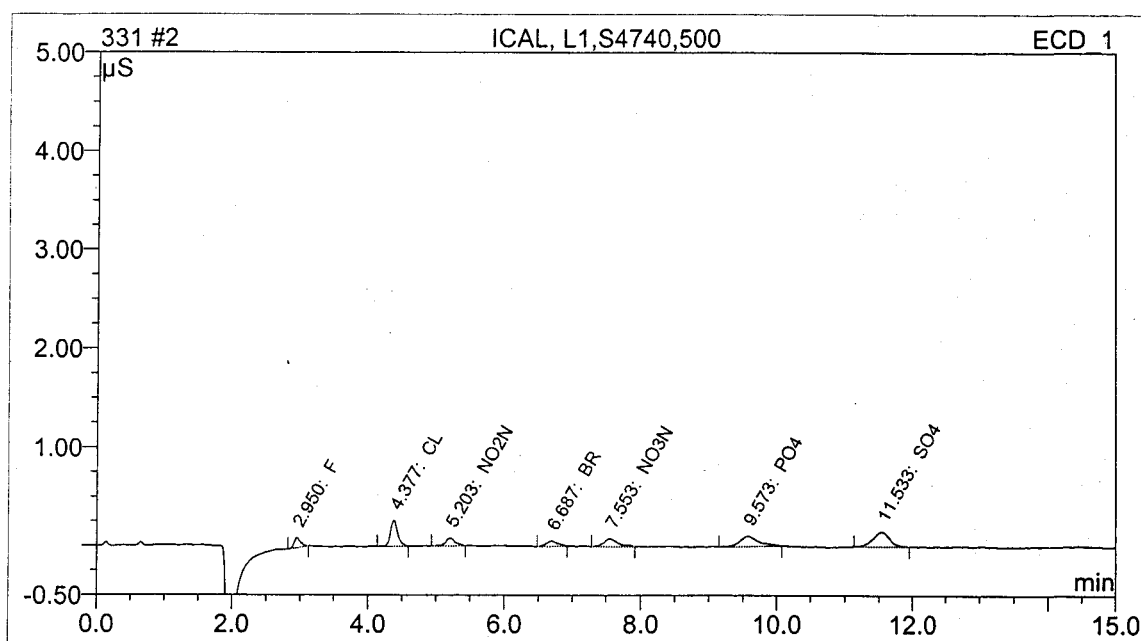
Curtis & Tompkins, Ltd.

: 00605

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L1,S4740,500	Sample No.:	2
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 12:32 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S}\cdot\text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.950	0.011269	0.0606	0.0606	
2	CL	4.377	0.032932	0.2182	0.2182	
3	NO2N	5.203	0.013070	0.0419	0.0419	
4	BR	6.687	0.011075	0.1750	0.1750	
5	NO3N	7.553	0.020070	0.0561	0.0561	
6	PO4	9.573	0.035727	0.2927	0.2927	
7	SO4	11.533	0.044567	0.4215	0.4215	



ANALYZED BY:

REVIEWED BY:

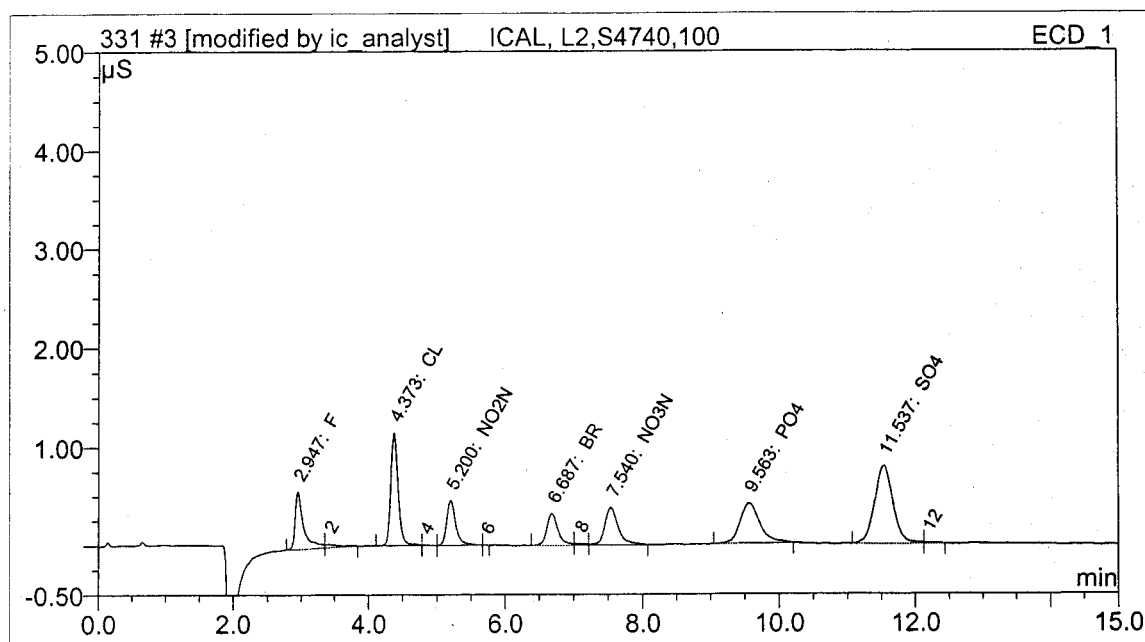
Curtis & Tompkins, Ltd.

: 00606

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L2,S4740,100	Sample No.:	3
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 12:50 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	0.086913	0.4654	0.4654	
3	CL	4.373	0.142967	0.9412	0.9412	
5	NO2N	5.200	0.071273	0.2282	0.2282	
7	BR	6.687	0.062250	0.9811	0.9811	
9	NO3N	7.540	0.089719	0.2498	0.2498	
10	PO4	9.563	0.134894	1.1012	1.1012	
11	SO4	11.537	0.251908	2.3692	2.3692	



ANALYZED BY:

REVIEWED BY:

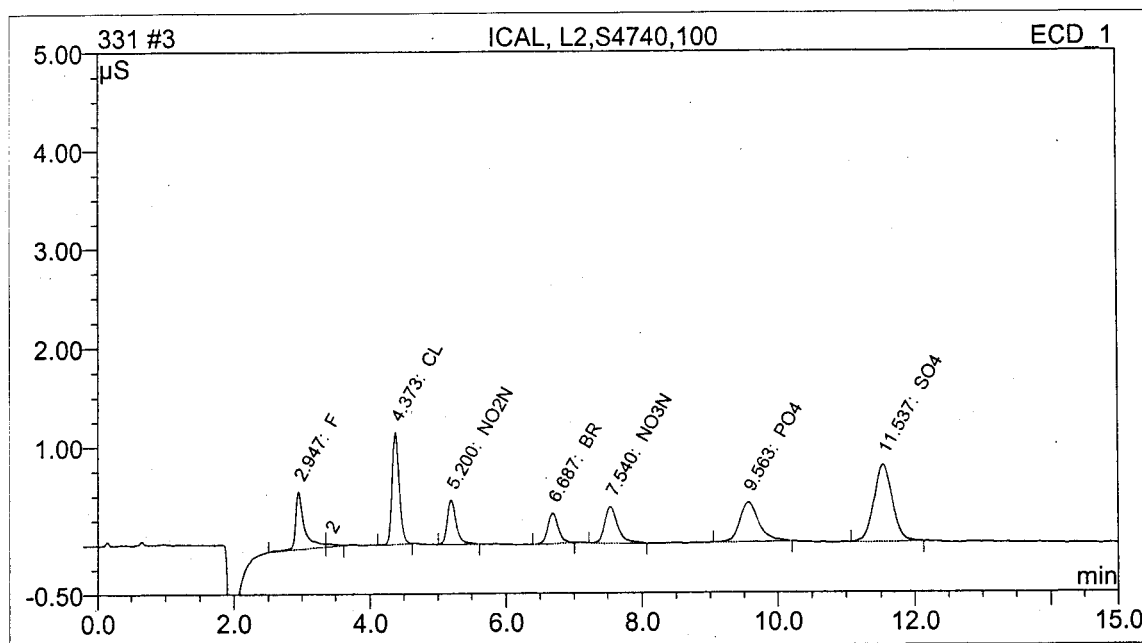
Curtis & Tompkins, Ltd.

: 00607

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L2,S4740,100	Sample No.:	3
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 12:50 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	0.091459	0.4889	0.4889	
3	CL	4.373	0.137235	0.9046	0.9046	
4	NO2N	5.200	0.070082	0.2245	0.2245	
5	BR	6.687	0.056692	0.8958	0.8958	
6	NO3N	7.540	0.085131	0.2374	0.2374	
7	PO4	9.563	0.134894	1.1012	1.1012	
8	SO4	11.537	0.246264	2.3177	2.3177	



ANALYZED BY:

REVIEWED BY:

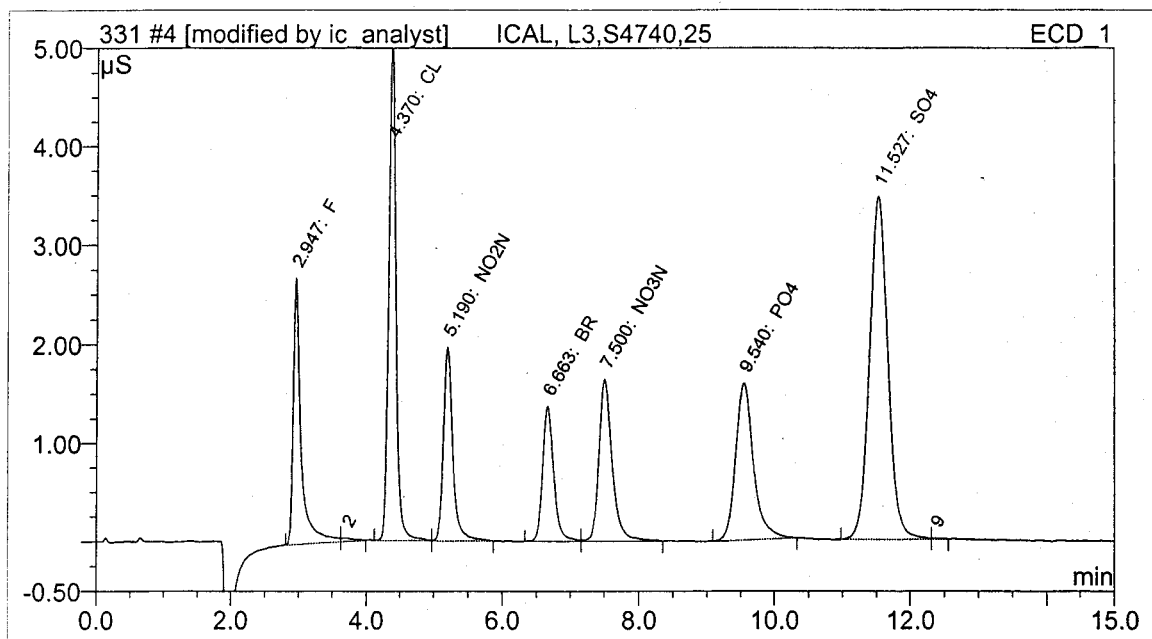
Curtis & Tompkins, Ltd.

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ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L3,S4740,25	Sample No.:	4
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:07 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	0.369133	1.9420	1.9420	
3	CL	4.370	0.623323	3.9968	3.9968	
4	NO2N	5.190	0.316571	1.0039	1.0039	
5	BR	6.663	0.261785	4.0866	4.0866	
6	NO3N	7.500	0.374732	1.0291	1.0291	
7	PO4	9.540	0.495623	3.9936	3.9936	
8	SO4	11.527	1.091655	10.0493	10.0493	



ANALYZED BY:

REVIEWED BY:

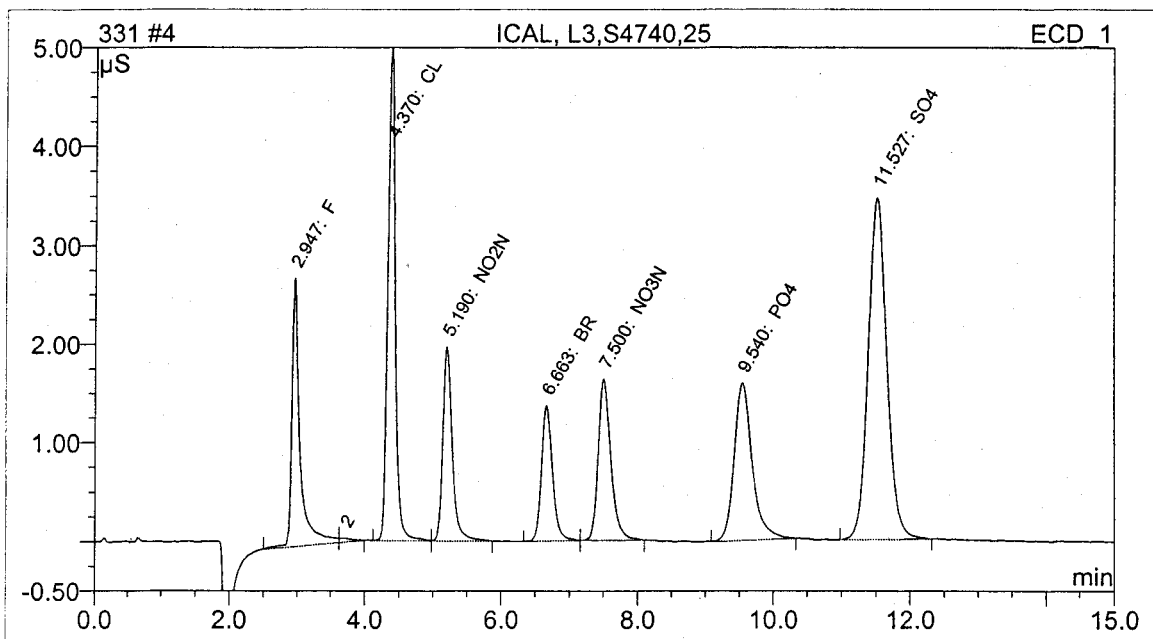
Curtis & Tompkins, Ltd.

: 00605

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L3,S4740,25	Sample No.:	4
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:07 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	0.386242	2.0044	2.0044	
3	CL	4.370	0.623323	3.9968	3.9968	
4	NO2N	5.190	0.316571	1.0039	1.0039	
5	BR	6.663	0.256924	4.0335	4.0335	
6	NO3N	7.500	0.360167	1.0012	1.0012	
7	PO4	9.540	0.495623	3.9936	3.9936	
8	SO4	11.527	1.086097	10.0140	10.0140	



ANALYZED BY:

REVIEWED BY:

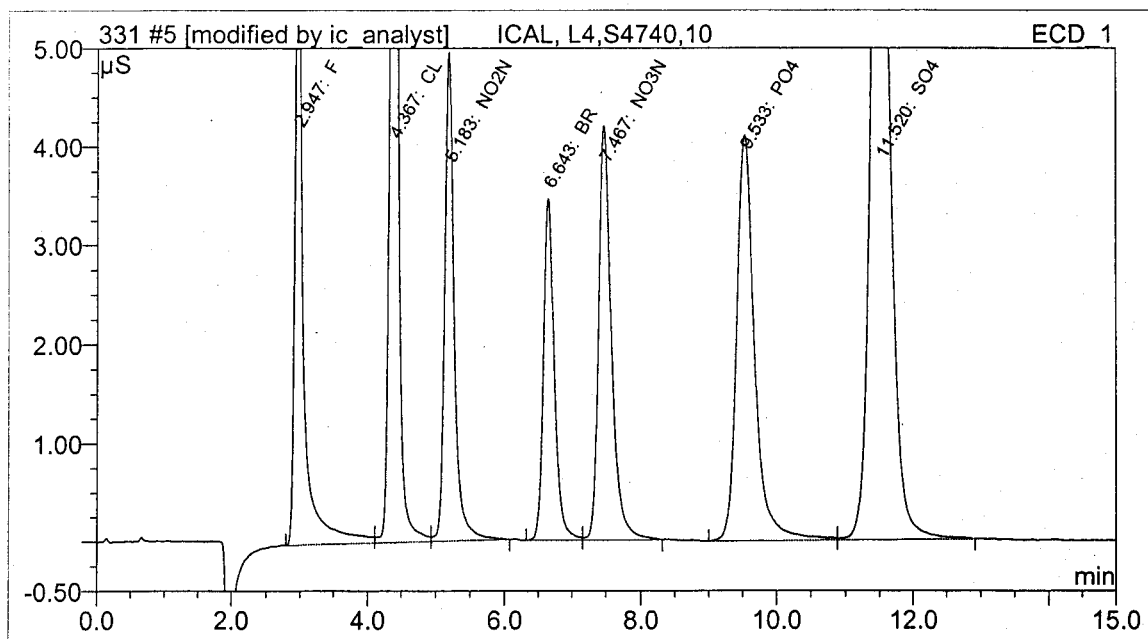
Curtis & Tompkins, Ltd.

00010

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L4,S4740,10	Sample No.:	5
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:25 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	0.993403	5.0415	5.0415	
2	CL	4.367	1.640986	10.0108	10.0108	
3	NO2N	5.183	0.803364	2.5017	2.5017	
4	BR	6.643	0.648843	9.9501	9.9501	
5	NO3N	7.467	0.926829	2.4821	2.4821	
6	PO4	9.533	1.272087	9.9827	9.9827	
7	SO4	11.520	2.827284	24.9956	24.9956	



ANALYZED BY:

REVIEWED BY:

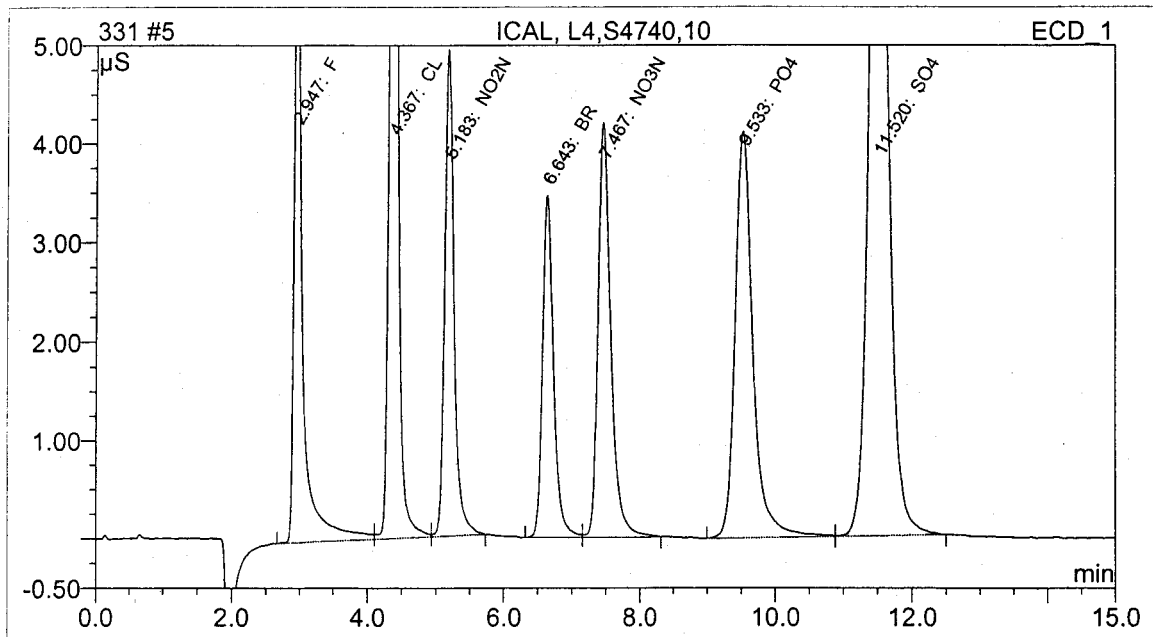
Curtis & Tompkins, Ltd.

000611

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L4,S4740,10	Sample No.:	5
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:25 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	0.994388	5.0429	5.0429	
2	CL	4.367	1.629703	9.9914	9.9914	
3	NO2N	5.183	0.779627	2.4797	2.4797	
4	BR	6.643	0.648843	9.9501	9.9501	
5	NO3N	7.467	0.926829	2.4821	2.4821	
6	PO4	9.533	1.261117	9.9575	9.9575	
7	SO4	11.520	2.793931	24.9110	24.9110	



ANALYZED BY:

REVIEWED BY:

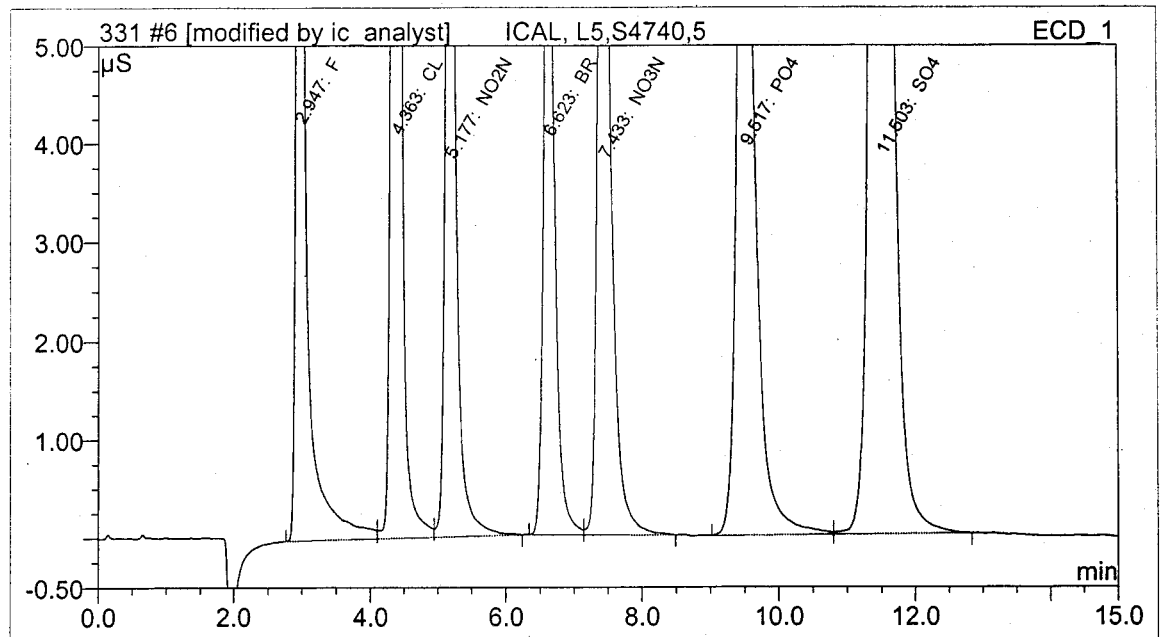
Curtis & Tompkins, Ltd.

00612

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L5,S4740,5	Sample No.:	6
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:42 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	2.080176	9.9927	9.9927	
2	CL	4.363	3.542624	19.9979	19.9979	
3	NO2N	5.177	1.653755	4.9995	4.9995	
4	BR	6.623	1.344237	20.0087	20.0087	
5	NO3N	7.433	1.948730	5.0031	5.0031	
6	PO4	9.517	2.660379	20.0040	20.0040	
7	SO4	11.503	6.030414	49.9996	49.9996	



ANALYZED BY:

REVIEWED BY:

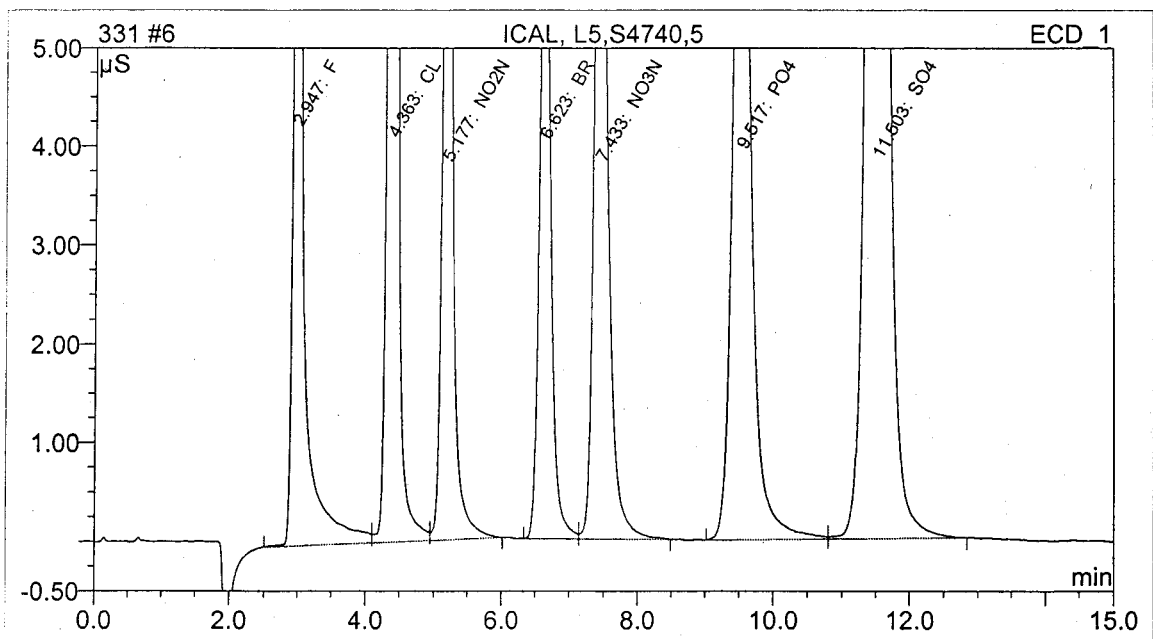
Curtis & Tompkins, Ltd.

00010

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L5,S4740,5	Sample No.:	6
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:42 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	2.098829	9.9937	9.9937	
2	CL	4.363	3.543045	19.9979	19.9979	
3	NO2N	5.177	1.641721	4.9991	4.9991	
4	BR	6.623	1.344237	20.0087	20.0087	
5	NO3N	7.433	1.948730	5.0031	5.0031	
6	PO4	9.517	2.660379	20.0040	20.0040	
7	SO4	11.503	6.030414	49.9996	49.9996	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

: 00614

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191286 IC Water
EPA 300.0

Inst : IC03
Calnum : 626477375001

Cal Date: 27-NOV-2006

ICV 626477375007 (331_7.000 27-NOV-2006) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.1810	0.1712	1.000	0.9120	mg/L	-9	10	
Chloride	0.1613	0.1427	2.000	1.864	mg/L	-7	10	
Nitrogen, Nitrite	0.3079	0.3053	0.5000	0.4871	mg/L	-3	10	
Nitrogen, Nitrate	0.3791	0.3435	0.5000	0.4763	mg/L	-5	10	
Sulfate	0.1066	0.1016	5.000	4.744	mg/L	-5	10	

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 300.0

Inst : IC03
Seqnum : 626477375007
Cal : 626477375001
Standards: S3859 (5X)

File : 331_7.000
Caldate: 27-NOV-2006

IDF : 1.0
Time : 27-NOV-2006 13:59

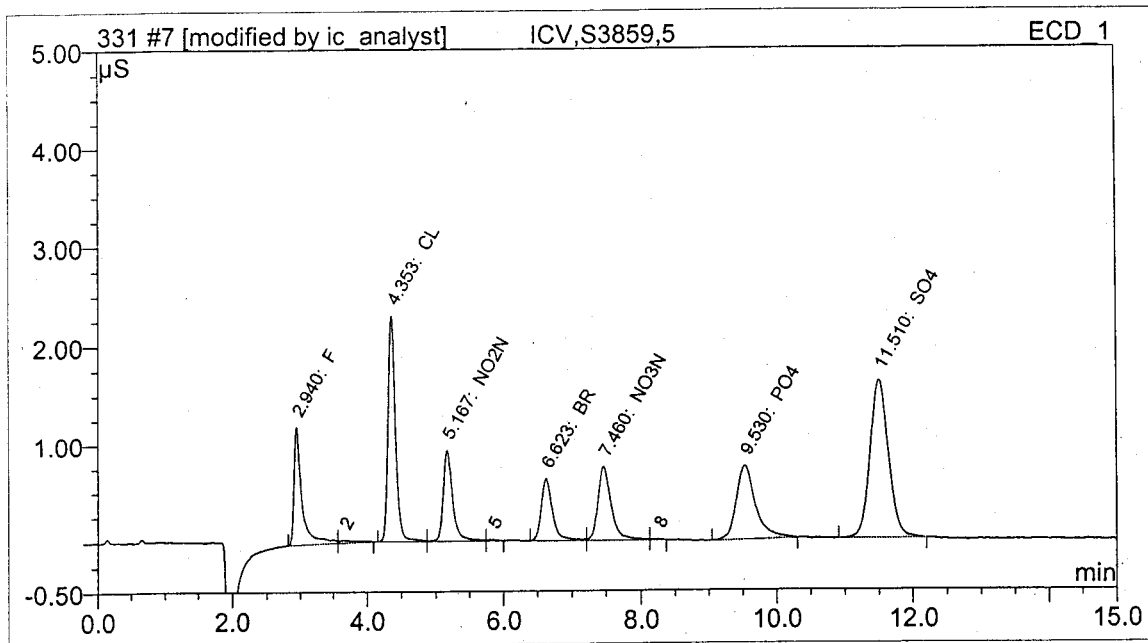
Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.1810	0.1712	1.000	0.9120	mg/L	-9	10	
Chloride	0.1613	0.1427	2.000	1.864	mg/L	-7	10	
Nitrogen, Nitrite	0.3079	0.3053	0.5000	0.4871	mg/L	-3	10	
Bromide	0.0642	0.0613	2.000	1.925	mg/L	-4	10	
Nitrogen, Nitrate	0.3791	0.3435	0.5000	0.4763	mg/L	-5	10	
Orthophosphate (as P)	0.1395	0.1230	2.000	2.001	mg/L	0	10	
Sulfate	0.1066	0.1016	5.000	4.744	mg/L	-5	10	

ms 11/28/06

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICV,S3859,5	Sample No.:	7
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:59 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.940	0.171238	0.9120	0.9120	
3	CL	4.353	0.285357	1.8635	1.8635	
4	NO2N	5.167	0.152642	0.4871	0.4871	
6	BR	6.623	0.122509	1.9252	1.9252	
7	NO3N	7.460	0.171748	0.4763	0.4763	
9	PO4	9.530	0.246093	2.0008	2.0008	
10	SO4	11.510	0.507753	4.7436	4.7436	



ANALYZED BY:

REVIEWED BY:

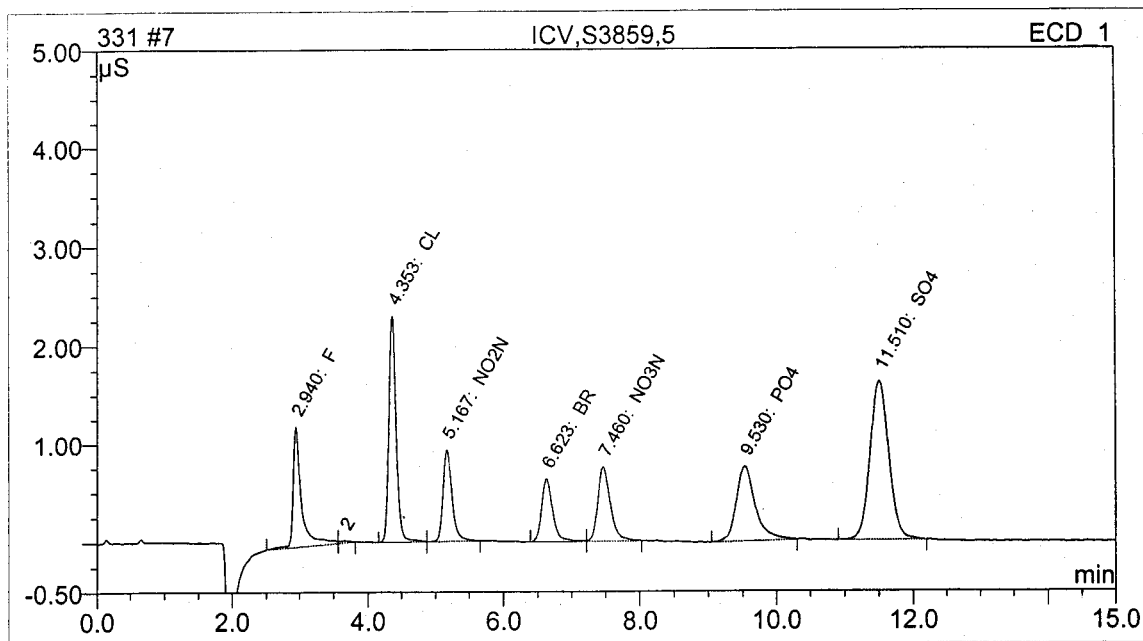
Curtis & Tompkins, Ltd.

00617

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICV,S3859,5	Sample No.:	7
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:59 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.940	0.180935	0.9630	0.9630	
3	CL	4.353	0.283683	1.8528	1.8528	
4	NO2N	5.167	0.146171	0.4666	0.4666	
5	BR	6.623	0.120324	1.8910	1.8910	
6	NO3N	7.460	0.164100	0.4552	0.4552	
7	PO4	9.530	0.246093	2.0008	2.0008	
8	SO4	11.510	0.507753	4.7436	4.7436	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

: 00618

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC03
Seqnum : 626477375008
Cal : 626477375001

File : 331_8.000
Caldate: 27-NOV-2006

IDF : 1.0
Time : 27-NOV-2006 14:17

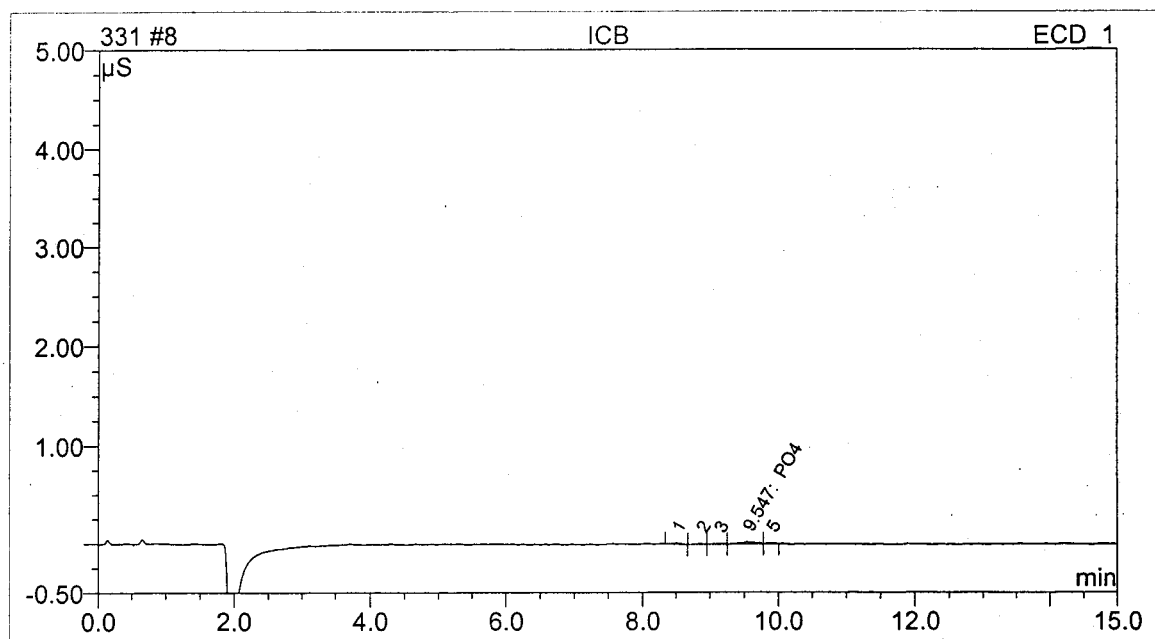
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Bromide	ND	0.2000	0.02767	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Orthophosphate (as P)	[0.05090]	0.2000	0.03686	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

ms 11/28/06

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICB	Sample No.:	8
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 2:17 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
n.a.	CL	n.a.	n.a.	n.a.	n.a.	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
4	PO4	9.547	0.006205	0.0509	0.0509	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

: 00620

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC03
Seqnum : 626477375001
Cal : 626450011001

File : 331_1.000
Caldate: 08-NOV-2006

IDF : 1.0
Time : 27-NOV-2006 12:15

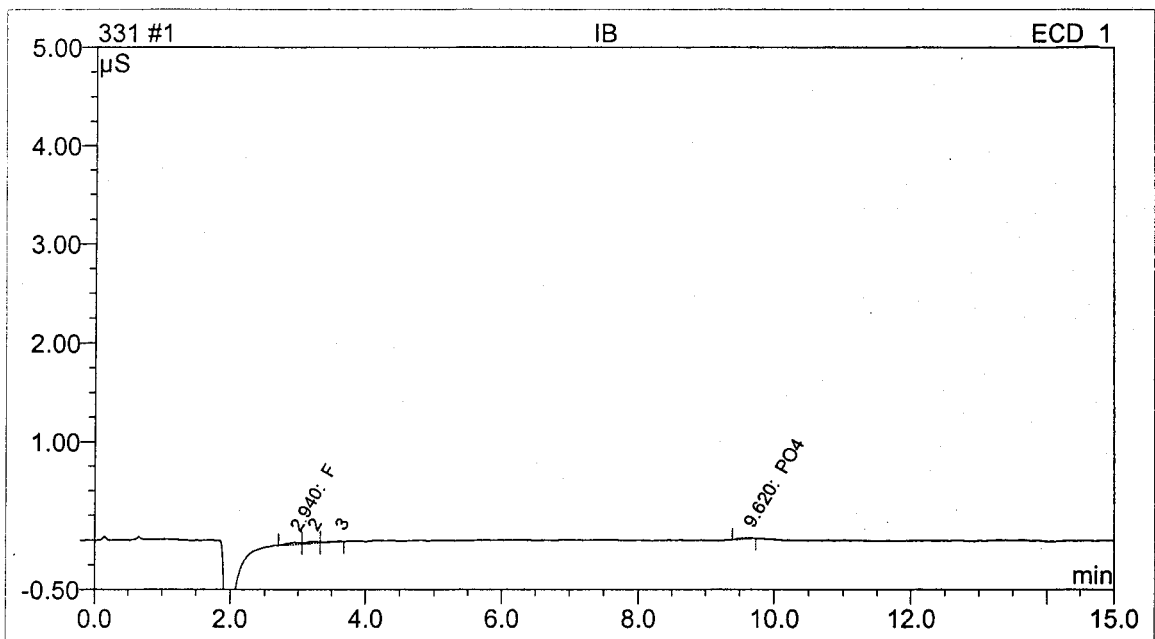
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Bromide	ND	0.2000	0.02767	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Orthophosphate (as P)	ND	0.2000	0.03686	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

MS 11/28/06

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	IB	Sample No.:	1
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 12:15 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.940	0.004714	0.0254	0.0254	
n.a.	CL	n.a.	n.a.	n.a.	n.a.	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
4	PO4	9.620	0.002007	0.0165	0.0165	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

: 00622

CONTINUING CALIBRATION SUMMARY FOR 191286 IC Water
Curtis & Tompkins Laboratories

Analyte: Fluoride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	OntAmt	Units	%D Max	%D	Flags
						RF/CF	RF/CF						
IC03	P	626490359007	06-DEC-2006 11:47	626477375001	27-NOV-2006	0.1810	0.1922	0.5000	0.5143	mg/L	3	10	
IC03	P	626490359018	06-DEC-2006 19:29	626477375001	27-NOV-2006	0.1810	0.1851	2.0000	1.9470	mg/L	-3	10	
IC03	P	626490359032	06-DEC-2006 23:33	626477375001	27-NOV-2006	0.1810	0.2080	5.0000	5.2658	mg/L	5	10	
IC03	P	626490359054	07-DEC-2006 05:56	626477375001	27-NOV-2006	0.1810	0.1920	2.0000	2.0187	mg/L	1	10	

CONTINUING CALIBRATION SUMMARY FOR 191286 IC Water
Curtis & Tompkins Laboratories

Analyte: Chloride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D Flags
						RF/CF	RF/CF					
IC03	P	626490359007	06-DEC-2006 11:47	626477375001	27-NOV-2006	0.1613	0.1540	1.0000	1.0129	mg/L	1	10
IC03	P	626490359018	06-DEC-2006 19:29	626477375001	27-NOV-2006	0.1613	0.1491	4.0000	3.8302	mg/L	-4	10
IC03	P	626490359032	06-DEC-2006 23:33	626477375001	27-NOV-2006	0.1613	0.1620	10.000	9.8906	mg/L	-1	10
IC03	P	626490359054	07-DEC-2006 05:56	626477375001	27-NOV-2006	0.1613	0.1539	4.0000	3.9489	mg/L	-1	10
IC03	P	626490359068	07-DEC-2006 10:00	626477375001	27-NOV-2006	0.1613	0.1602	10.000	9.7920	mg/L	-2	10

CONTINUING CALIBRATION SUMMARY FOR 191286 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrite

Avg												
Instid	Ch	Seqnum	Injected		Calnum	Caldate	RF/CF	RF/CF	SpkAmt	QntAmt	Units	%D Max %D Flags
IC03	P	626490359007	06-DEC-2006	11:47	626477375001	27-NOV-2006	0.3079	0.2989	0.2500	0.2392	mg/L	-4 10
IC03	P	626490359018	06-DEC-2006	19:29	626477375001	27-NOV-2006	0.3079	0.3001	1.0000	0.9523	mg/L	-5 10
IC03	P	626490359032	06-DEC-2006	23:33	626477375001	27-NOV-2006	0.3079	0.3163	2.5000	2.4635	mg/L	-1 10
IC03	P	626490359054	07-DEC-2006	05:56	626477375001	27-NOV-2006	0.3079	0.3070	1.0000	0.9738	mg/L	-3 10

CONTINUING CALIBRATION SUMMARY FOR 191286 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	OntAmt	Units	%D Max	%D Flags
						RF/CF	RF/CF					
IC03	P	626490359007	06-DEC-2006 11:47	626477375001	27-NOV-2006	0.3791	0.3953	0.2500	0.2751	mg/L	10	10
IC03	P	626490359018	06-DEC-2006 19:29	626477375001	27-NOV-2006	0.3791	0.3581	1.0000	0.9841	mg/L	-2	10
IC03	P	626490359032	06-DEC-2006 23:33	626477375001	27-NOV-2006	0.3791	0.3714	2.5000	2.4866	mg/L	-1	10
IC03	P	626490359054	07-DEC-2006 05:56	626477375001	27-NOV-2006	0.3791	0.3604	1.0000	0.9904	mg/L	-1	10
IC03	P	626490359068	07-DEC-2006 10:00	626477375001	27-NOV-2006	0.3791	0.3672	2.5000	2.4593	mg/L	-2	10

CONTINUING CALIBRATION SUMMARY FOR 191286 IC Water
Curtis & Tompkins Laboratories

Analyte: Sulfate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D Flags
						RF/CF	RF/CF					
IC03	P	626490359007	06-DEC-2006 11:47	626477375001	27-NOV-2006	0.1066	0.1100	2.5000	2.5854	mg/L	3 10	
IC03	P	626490359018	06-DEC-2006 19:29	626477375001	27-NOV-2006	0.1066	0.1065	10.000	9.8143	mg/L	-2 10	
IC03	P	626490359032	06-DEC-2006 23:33	626477375001	27-NOV-2006	0.1066	0.1129	25.000	24.961	mg/L	0 10	
IC03	P	626490359054	07-DEC-2006 05:56	626477375001	27-NOV-2006	0.1066	0.1092	10.000	10.056	mg/L	1 10	
IC03	P	626490359068	07-DEC-2006 10:00	626477375001	27-NOV-2006	0.1066	0.1115	25.000	24.666	mg/L	-1 10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 191286 IC Water
EPA 300.0

Inst : IC03
Seqnum : 626490359019
Cal : 626477375001
File : 340_19.000
Caldate: 27-NOV-2006
IDF : 1.0
Time : 06-DEC-2006 19:47

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 191286 IC Water
EPA 300.0

Inst : IC03
Seqnum : 626490359033
Cal : 626477375001

File : 340_33.000
Caldate: 27-NOV-2006

IDF : 1.0
Time : 06-DEC-2006 23:51

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 191286 IC Water
EPA 300.0

Inst : IC03
Seqnum : 626490359055
Cal : 626477375001
IDF : 1.0
File : 340_55.000
Time : 07-DEC-2006 06:14
Caldate: 27-NOV-2006

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 191286 IC Water
EPA 300.0

Inst : IC03
Seqnum : 626490359069
Cal : 626477375001

File : 340_69.000
Caldate: 27-NOV-2006

IDF : 1.0
Time : 07-DEC-2006 10:17

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

SEQUENCE SUMMARY FOR 191286 IC Water
Curtis & Tompkins Laboratories

Sequence: 626477375 Instrument: IC03 Ion Chromatograph Begun: 27-NOV-2006
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Std's	Used	>LR
001	331_1.00	IB				27-NOV-2006	12:15	1.0		25					
002	331_2.00	ICAL	L1			27-NOV-2006	12:32	1.0					1		
003	331_3.00	ICAL	L2			27-NOV-2006	12:50	1.0					1		
004	331_4.00	ICAL	L3			27-NOV-2006	13:07	1.0					1		
005	331_5.00	ICAL	L4			27-NOV-2006	13:25	1.0					1		
006	331_6.00	ICAL	L5			27-NOV-2006	13:42	1.0					1		
007	331_7.00	ICV				27-NOV-2006	13:59	1.0		25			2		
008	331_8.00	ICB				27-NOV-2006	14:17	1.0		25					
009	331_9.00	CCV	L	119854		27-NOV-2006	14:34	1.0	1	25			1		
010	331_10.0	CCB/MB	QC366232	119854	Water	27-NOV-2006	14:52	1.0		25					
011	331_11.0	BS	QC366233	119854	Water	27-NOV-2006	15:09	1.0	1	25			1		
012	331_12.0	BSD	QC366234	119854	Water	27-NOV-2006	15:26	1.0	1	25			1		
013	331_13.0	SAMPLE	190995-001	119854	Water	27-NOV-2006	15:54	1.0	1	25				2:SO4=96.1268	
014	331_14.0	X	BLK	119854		27-NOV-2006	16:27	1.0							
015	331_15.0	MSS	190995-002	119854	Water	27-NOV-2006	16:44	10.0		25					
016	331_16.0	SAMPLE	190995-003	119854	Water	27-NOV-2006	17:02	10.0		25					
017	331_17.0	SAMPLE	190995-004	119854	Water	27-NOV-2006	17:19	10.0		25					
018	331_18.0	SAMPLE	190995-005	119854	Water	27-NOV-2006	17:37	10.0		25					
019	331_19.0	SAMPLE	190995-006	119854	Water	27-NOV-2006	17:54	10.0		25					
020	331_20.0	SAMPLE	190995-007	119854	Water	27-NOV-2006	18:11	10.0		25					
021	331_21.0	CCV	M	119854		27-NOV-2006	18:29	1.0		25			1		
022	331_22.0	CCB		119854		27-NOV-2006	18:46	1.0		25					
023	331_23.0	X	CCV	119854		27-NOV-2006	19:04	1.0					1		
024	331_24.0	X	CCB	119854		27-NOV-2006	19:21	1.0							
025	331_25.0	MS	QC366235	119854	Water	27-NOV-2006	19:39	10.0	1	25			1		
026	331_26.0	MSD	QC366236	119854	Water	27-NOV-2006	19:56	10.0	1	25			1		
027	331_27.0	SAMPLE	190995-001	119854	Water	27-NOV-2006	20:13	10.0		25					
028	331_28.0	SAMPLE	190995-008	119854	Water	27-NOV-2006	20:31	10.0		25					
029	331_29.0	SAMPLE	190995-009	119854	Water	27-NOV-2006	20:49	10.0		25					
030	331_30.0	SAMPLE	190995-010	119854	Water	27-NOV-2006	21:06	10.0		25					
031	331_31.0	SAMPLE	190995-011	119854	Water	27-NOV-2006	21:24	10.0		25					

Std's used: 1=S4740 2=S3859

SEQUENCE SUMMARY FOR 191286 IC Water
Curtis & Tompkins Laboratories

Sequence: 626477375 Instrument: IC03 Ion Chromatograph Begun: 27-NOV-2006
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stdts	Used	>LR
032	331_32.0	SAMPLE	190995-012	119854	Water	27-NOV-2006	21:41	10.0		25					
033	331_33.0	SAMPLE	190995-013	119854	Water	27-NOV-2006	21:59	10.0		25					
034	331_34.0	SAMPLE	190995-014	119854	Water	27-NOV-2006	22:16	10.0		25					
035	331_35.0	CCV	H	119854		27-NOV-2006	22:33	1.0		25			1		
036	331_36.0	CCB		119854		27-NOV-2006	22:51	1.0		25					
037	331_37.0	X	CCV	119854		27-NOV-2006	23:08	1.0					1		
038	331_38.0	X	CCB	119854		27-NOV-2006	23:26	1.0							
039	331_39.0	X	SHUTDOWN	119854		27-NOV-2006	23:43	1.0							

Stdts used: 1=S4740 2=S3859

SEQUENCE SUMMARY FOR 191286 IC Water Curtis & Tompkins Laboratories

Sequence: 626490359 Instrument: IC03 Ion Chromatograph
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

Begun: 06-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Std	Used	>LR
007	340_7.00	CCV	L	120153		06-DEC-2006	11:47	1.0	1	25			1		
008	340_8.00	CCB/MB	QC367425	120153	Water	06-DEC-2006	12:04	1.0		25					
009	340_9.00	BS	QC367426	120153	Water	06-DEC-2006	12:22	1.0		25			1		
010	340_10.0	BSD	QC367427	120153	Water	06-DEC-2006	12:39	1.0		25			1		
011	340_11.0	MSS	191286-012	120153	Water	06-DEC-2006	17:20	50.0		25					
012	340_12.0	SAMPLE	191286-013	120153	Water	06-DEC-2006	17:38	100.0		25					
013	340_13.0	SAMPLE	191286-014	120153	Water	06-DEC-2006	17:55	100.0		25					
014	340_14.0	SAMPLE	191286-015	120153	Water	06-DEC-2006	18:13	50.0		25					
015	340_15.0	SAMPLE	191286-003	120153	Water	06-DEC-2006	18:37	1.0	3	25				3:SO4=65.8524	
016	340_16.0	SAMPLE	191286-006	120153	Water	06-DEC-2006	18:55	1.0	3	25				3:SO4=65.9204	
017	340_17.0	SAMPLE	191286-004	120153	Water	06-DEC-2006	19:12	1.0	2	25				2:SO4=94.0563	
018	340_18.0	CCV	M	120153		06-DEC-2006	19:29	1.0		25			1		
019	340_19.0	CCB	CCV	120153		06-DEC-2006	19:47	1.0		25					
020	340_20.0	X	CCB	120153		06-DEC-2006	20:04	1.0					1		
021	340_21.0	X		120153		06-DEC-2006	20:22	1.0							
022	340_22.0	SAMPLE	191290-001	120153	Water	06-DEC-2006	20:39	1.0		25					
023	340_23.0	MS	QC367428	120153	Water	06-DEC-2006	20:56	100.0		25			1		
024	340_24.0	MSD	QC367429	120153	Water	06-DEC-2006	21:14	100.0		25			1		
025	340_25.0	SAMPLE	191286-001	120153	Water	06-DEC-2006	21:31	1.0	2	25				2:SO4=94.7781	
026	340_26.0	SAMPLE	191286-009	120153	Water	06-DEC-2006	21:49	1.0	1	25				1:CL=66.6205	
027	340_27.0	SAMPLE	191286-002	120153	Water	06-DEC-2006	22:06	1.0	1	25				1:CL=125.136	
028	340_28.0	SAMPLE	191286-011	120153	Water	06-DEC-2006	22:23	1.0	2	25				2:CL=120.481	
029	340_29.0	SAMPLE	191286-010	120153	Water	06-DEC-2006	22:41	1.0	2	25				2:CL=120.417	
030	340_30.0	SAMPLE	191286-005	120153	Water	06-DEC-2006	22:58	1.0	1	25				1:CL=125.133	
031	340_31.0	SAMPLE	191286-007	120153	Water	06-DEC-2006	23:16	1.0	2	25				2:CL=158.389	
032	340_32.0	CCV	H	120153		06-DEC-2006	23:33	1.0		25			1		
033	340_33.0	CCB		120153		06-DEC-2006	23:51	1.0		25					
034	340_34.0	X	CCV	120153		07-DEC-2006	00:08	1.0					1		
035	340_35.0	X	CCB	120153		07-DEC-2006	00:25	1.0							
036	340_36.0	MSS	191286-012	120153	Water	07-DEC-2006	00:43	1.0	2	25				2:CL=205.949	
037	340_37.0	X	BLK	120153		07-DEC-2006	01:00	1.0							

Std used: 1=S4740

SEQUENCE SUMMARY FOR 191286 IC Water
Curtis & Tompkins Laboratories

Sequence: 626490359 Instrument: IC03 Ion Chromatograph Begun: 06-DEC-2006
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Std's	Used	>LR
038	340_38.0	MSS	191286-012	120153	Water	07-DEC-2006	01:18	2.0	2	25					2:CL=153.755
039	340_39.0	X	BLK	120153		07-DEC-2006	01:35	1.0							
040	340_40.0	SAMPLE	191286-013	120153	Water	07-DEC-2006	01:52	1.0		25					
041	340_41.0	X	BLK	120153		07-DEC-2006	02:10	1.0							
042	340_42.0	SAMPLE	191286-013	120153	Water	07-DEC-2006	02:27	2.0	1	25					1:CL=62.3688
043	340_43.0	X	BLK	120153		07-DEC-2006	02:45	1.0							
044	340_44.0	SAMPLE	191286-014	120153	Water	07-DEC-2006	03:02	1.0	1	25					1:SO4=309.812
045	340_45.0	X	BLK	120153		07-DEC-2006	03:19	1.0							
046	340_46.0	SAMPLE	191286-014	120153	Water	07-DEC-2006	03:37	2.0	1	25					1:SO4=177.523
047	340_47.0	X	BLK	120153		07-DEC-2006	03:54	1.0							
048	340_48.0	SAMPLE	191286-015	120153	Water	07-DEC-2006	04:12	1.0	1	25					1:SO4=153.776
049	340_49.0	X	BLK	120153		07-DEC-2006	04:29	1.0							
050	340_50.0	SAMPLE	191286-008	120153	Water	07-DEC-2006	04:46	1.0	1	25					1:SO4=143.040
051	340_51.0	X	BLK	120153		07-DEC-2006	05:04	1.0							
052	340_52.0	SAMPLE	191286-001	120153	Water	07-DEC-2006	05:21	10.0		25					
053	340_53.0	SAMPLE	191286-002	120153	Water	07-DEC-2006	05:39	25.0		25					
054	340_54.0	CCV	M	120153		07-DEC-2006	05:56	1.0		25			1		
055	340_55.0	CCB		120153		07-DEC-2006	06:14	1.0		25					
056	340_56.0	X	CCV	120153		07-DEC-2006	06:31	1.0					1		
057	340_57.0	X	CCB	120153		07-DEC-2006	06:48	1.0							
058	340_58.0	SAMPLE	191286-003	120153	Water	07-DEC-2006	07:06	10.0		25					
059	340_59.0	SAMPLE	191286-004	120153	Water	07-DEC-2006	07:23	10.0		25					
060	340_60.0	SAMPLE	191286-005	120153	Water	07-DEC-2006	07:41	25.0		25					
061	340_61.0	SAMPLE	191286-006	120153	Water	07-DEC-2006	07:58	10.0		25					
062	340_62.0	SAMPLE	191286-007	120153	Water	07-DEC-2006	08:15	25.0		25					
063	340_63.0	SAMPLE	191286-008	120153	Water	07-DEC-2006	08:33	25.0		25					
064	340_64.0	SAMPLE	191286-009	120153	Water	07-DEC-2006	08:50	25.0		25					
065	340_65.0	SAMPLE	191286-010	120153	Water	07-DEC-2006	09:08	25.0		25					
066	340_66.0	SAMPLE	191286-011	120153	Water	07-DEC-2006	09:25	25.0		25					
067	340_67.0	SAMPLE	191294-004	120153	Water	07-DEC-2006	09:42	1.0		25					
068	340_68.0	CCV	H	120153		07-DEC-2006	10:00	1.0		25			1		

Std's used: 1=S4740

SEQUENCE SUMMARY FOR 191286 IC Water

Curtis & Tompkins Laboratories

Sequence: 626490359 Instrument: IC03 Ion Chromatograph
 Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

Begun: 06-DEC-2006

#	Filename Type	Samplenum	Batch	Matrix Analyzed	IDF	IOC SPK uL	VL pH	Stdts Used	>LR
069	340_69.0 CCB		120153	07-DEC-2006	10:17 1.0	1	25		
070	340_70.0 SAMPLE	191294-002	120153	Water	07-DEC-2006 10:35 1.0		25		
071	340_71.0 SAMPLE	191294-001	120153	Water	07-DEC-2006 10:52 1.0		25		
072	340_72.0 SAMPLE	191294-003	120153	Water	07-DEC-2006 11:10 1.0		25		
073	340_73.0 CCV	M	120153		07-DEC-2006 11:29 1.0		25	1	
074	340_74.0 CCB		120153	07-DEC-2006	11:47 1.0		25		

Stdts used: 1=S4740

REPORTING SUMMARY FOR 191286 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	IDF	ANALYZED	F	C	N	N	S
					L	O	O	O
						2	3	4
						N	N	
191286-001	IC03	12/06/06 21:31	1.0	+		+	+	
191286-001	IC03	12/07/06 05:21	10.0		+			+
191286-002	IC03	12/06/06 22:06	1.0	+		+	+	+
191286-002	IC03	12/07/06 05:39	25.0		+			
191286-003	IC03	12/06/06 18:37	1.0	+		+		
191286-003	IC03	12/07/06 07:06	10.0		+		+	+
191286-004	IC03	12/06/06 19:12	1.0	+		+	+	
191286-004	IC03	12/07/06 07:23	10.0		+			+
191286-005	IC03	12/06/06 22:58	1.0	+		+	+	+
191286-005	IC03	12/07/06 07:41	25.0		+			
191286-006	IC03	12/06/06 18:55	1.0	+		+		
191286-006	IC03	12/07/06 07:58	10.0		+		+	+
191286-007	IC03	12/06/06 23:16	1.0	+		+	+	
191286-007	IC03	12/07/06 08:15	25.0		+			+
191286-008	IC03	12/07/06 04:46	1.0	+		+	+	
191286-008	IC03	12/07/06 08:33	25.0		+			+
191286-009	IC03	12/06/06 21:49	1.0	+		+	+	+
191286-009	IC03	12/07/06 08:50	25.0		+			
191286-010	IC03	12/06/06 22:41	1.0	+		+	+	
191286-010	IC03	12/07/06 09:08	25.0		+			+
191286-011	IC03	12/06/06 22:23	1.0	+		+	+	
191286-011	IC03	12/07/06 09:25	25.0		+			+
191286-012	IC03	12/06/06 17:20	50.0		+		+	
191286-012	IC03	12/07/06 00:43	1.0	+			+	
191286-012	IC03	12/07/06 01:18	2.0			+		
191286-013	IC03	12/06/06 17:38	100.0		+			
191286-013	IC03	12/07/06 01:52	1.0	+			+	+
191286-013	IC03	12/07/06 02:27	2.0			+		
191286-014	IC03	12/06/06 17:55	100.0		+			+
191286-014	IC03	12/07/06 03:02	1.0	+			+	
191286-014	IC03	12/07/06 03:37	2.0			+		
191286-015	IC03	12/06/06 18:13	50.0		+			+
191286-015	IC03	12/07/06 04:12	1.0	+		+	+	
QC367425	IC03	12/06/06 12:04	1.0	+	+	+	+	+
QC367426	IC03	12/06/06 12:22	1.0	+	+	+	+	+

REPORTING SUMMARY FOR 191286 IC Water
Curtis & Tompkins Laboratories

Lab ID Inst ID Analyzed IDF					F	C	N	N	S	
						L	O	O	O	
							2	3	4	
							N	N		
QC367427	IC03	12/06/06 12:39	1.0		+	+	+	+	+	
QC367428	IC03	12/06/06 20:56	100.0		+	+	+	+	+	
QC367429	IC03	12/06/06 21:14	100.0		+	+	+	+	+	

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO₄) EPA 314
☐ Cr6+ EPA 7199

Batch#: 120153
 Date Started: 12/6/06
 Prep Chemist: MRS

BK 2431
 Page 5

	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	191286-001 E	0.73	1x 10x	S	
2	-002 F	1.15	25x		
3	-003 I	0.70	10x		
4	-004 E	0.76	10x		
5	-005 F	1.22	25x		
6	-006 I	0.72	10x		
7	-007 C	1.45	25x		
8	-008 C	1.85	25x		
9	-009 I	1.12	25x		
10	-010 I	1.17	25x		
11	-011 I	1.15	25x		
12	-012 V	2.47	2x 50x		MSS
13	-013 H	4.38	2x 100x		
14	-014 B	3.60	2x 100x		
15	-015 B	2.06	50x		
16	191290-001 I	0.01	1x		
17	191294-001 P	0.11	1x	S	
18	-002 P	0.07			
19	-003 O	0.18			
20	-004 P	0.21			
	Blank QLC367425	N/A	1x	N/A	
	BS QLC367426				
	BSD QLC367427				
	MS QLC367428 V		100x	S	
	MSD QLC367429 V		100x	S	

	Eluent Reagent ID	Mfg & Lot # / Time / Program	Initials / Date
BS/BSD Spiked with	0.2 mL of :	100x MRS 8/10/06	MRS 12/6/06
MS/MSD Spiked with	0.1 mL of :	54740	
Filters Used:	Ag: OnGuard II Ag	54740	
	Na: OnGuard II Na	N/A	
	P: OnGuard II P		
	RP: OnGuard II RP		
	S: 0.20um/0.45um	Acrodisc lot # A10646166	

Extraction Chemist / Date

Continued from page
 Continued on page

Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 120153
 Date Started: 06-DEC-2006
 Batched by : Micah Smith

Analysis : N/A
 Bgroup : IC
 Department : GC Organics

Sample	Type	Client	Matrix	Analyses	Due Date
191286-001		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191286-002		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191286-003		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191286-004		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191286-005		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191286-006		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191286-007		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191286-008		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191286-009		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191286-010		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191286-011		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191286-012		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191286-013		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191286-014		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191286-015		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191290-001		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191294-001		Blasland, Bouck &	Water	CHLORIDE, FLUORIDE, NITRATE, SULFATE	12-DEC-2006
191294-002		Blasland, Bouck &	Water	CHLORIDE, FLUORIDE, NITRATE, SULFATE	12-DEC-2006
191294-003		Blasland, Bouck &	Water	CHLORIDE, FLUORIDE, NITRATE, SULFATE	12-DEC-2006
191294-004		Blasland, Bouck &	Water	CHLORIDE, FLUORIDE, NITRATE, SULFATE	12-DEC-2006
QC367425	BLANK		Water		
QC367426	BS		Water		
QC367427	BSD		Water		
QC367428	MS	of 191286-012	Water		
QC367429	MSD	of 191286-012	Water		

Curtis & Tompkins Laboratories
MDL Summary for EPA 300.0 Water
As of 01/05/07

Analyte	Units	IC03	IC01
Fluoride	mg/L	0.023	0.0092
Chloride	mg/L	0.032	0.0061
Nitrogen, Nitrite	mg/L	0.012	0.0081
Bromide	mg/L	0.028	0.036
Nitrogen, Nitrate	mg/L	0.0088	0.0080
Orthophosphate (as P)	mg/L	0.037	0.045
Sulfate	mg/L	0.079	0.047

ALKALINITY



Curtis & Tompkins, Ltd.

Alkalinity

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	12/05/06
Units:	mg/L	Received:	12/06/06
Diln Fac:	1.000	Analyzed:	12/18/06
Batch#:	120455		

Field ID: LF6GW103 Lab ID: 191286-001
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	320	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	320	6.7

Field ID: 1065MW9A Lab ID: 191286-002
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	450	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	450	6.7

Field ID: 231GW09 Lab ID: 191286-003
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	230	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	230	6.7

Field ID: DUP1205062A Lab ID: 191286-004
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	330	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	330	6.7

Field ID: DUP1205062C Lab ID: 191286-005
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	450	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	450	6.7



Alkalinity			
Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	12/05/06
Units:	mg/L	Received:	12/06/06
Diln Fac:	1.000	Analyzed:	12/18/06
Batch#:	120455		

Field ID: DUP1205062B
Type: SAMPLE

Lab ID: 191286-006

Analyte	Result	RL
Alkalinity, Bicarbonate	240	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	240	6.7

Field ID: BB1PZ100
Type: SAMPLE

Lab ID: 191286-007

Analyte	Result	RL
Alkalinity, Bicarbonate	460	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	460	6.7

Field ID: BB1PZ101
Type: SAMPLE

Lab ID: 191286-008

Analyte	Result	RL
Alkalinity, Bicarbonate	670	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	670	6.7

Field ID: 1065PZ1A
Type: SAMPLE

Lab ID: 191286-009

Analyte	Result	RL
Alkalinity, Bicarbonate	590	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	590	6.7

Field ID: 1065PZ1B
Type: SAMPLE

Lab ID: 191286-010

Analyte	Result	RL
Alkalinity, Bicarbonate	360	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	360	6.7

ND= Not Detected
RL= Reporting Limit



Curtis & Tompkins, Ltd.

Alkalinity			
Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	12/05/06
Units:	mg/L	Received:	12/06/06
Diln Fac:	1.000	Analyzed:	12/18/06
Batch#:	120455		

Field ID: DUP1205061A
Type: SAMPLE

Lab ID: 191286-011

Analyte	Result	RL
Alkalinity, Bicarbonate	340	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	340	6.7

Field ID: 1213GW101
Type: SAMPLE

Lab ID: 191286-012

Analyte	Result	RL
Alkalinity, Bicarbonate	380	6.7
Alkalinity, Carbonate	52	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	430	6.7

Field ID: 1349MW100
Type: SAMPLE

Lab ID: 191286-013

Analyte	Result	RL
Alkalinity, Bicarbonate	1,000	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	1,000	6.7

Field ID: LF4GW103
Type: SAMPLE

Lab ID: 191286-014

Analyte	Result	RL
Alkalinity, Bicarbonate	1,300	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	1,300	6.7

Field ID: LF4GW104
Type: SAMPLE

Lab ID: 191286-015

Analyte	Result	RL
Alkalinity, Bicarbonate	620	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	620	6.7

ND= Not Detected
RL= Reporting Limit
Page 3 of 4

110.0

: 00645



Curtis & Tompkins, Ltd.

Alkalinity			
Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	12/05/06
Units:	mg/L	Received:	12/06/06
Diln Fac:	1.000	Analyzed:	12/18/06
Batch#:	120455		

Type: BLANK Lab ID: QC368651

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO ₃	ND	1.0

Batch QC Report

Alkalinity			
Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO ₃	Units:	mg/L
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC368652	Batch#:	120455
Matrix:	Water	Analyzed:	12/18/06

Spiked	Result	%REC	Limits
200.0	187.2	94	90-110



Batch QC Report

Alkalinity			
Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO ₃	Diln Fac:	1.000
Field ID:	1213GW101	Batch#:	120455
MSS Lab ID:	191286-012	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	mg/L	Analyzed:	12/18/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC368653	430.0	333.0	777.3	104	69-112		
MSD	QC368654		333.0	778.7	105	69-112	0	25

Analysis: Alkalinity
Method: EPA 310.1 / SMWW 2320B
SOP#: Alkalinity_v 7.doc

Analysis Date: 12/18/06
Batch No: 120455

H₂SO₄ Normality = 0.02
conc. (mg/L) Na₂CO₃ for QC = 200
Analyst: SJ

QC DATA	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	Alkalinity as CaCO ₃ (mg/L)	Low Alk Vol (mL)	Low Alk as CaCO ₃ (mg/L)	RL (mg/L)	% Rec.	% RPD
MB	5.00	100	0.00	0.00	ND			1.0		
LCS	10.00	25	2.14	4.68	187.20			4.0	94	
191286-012	8.60	15	0.39	6.45	430.00	n/a		6.7		
MS	9.30	15	2.42	11.66	777.33			6.7	104	
MSD	9.50	15	2.66	11.68	778.67			6.7	105	0

SAMPLE	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	Alkalinity as CaCO ₃ (mg/L)	Low Alkalinity Volume (4.5-4.2) (mL)	Low Alkalinity as CaCO ₃ (mg/L)	Reporting Limit (mg/L)
191286-001	6.90	15	0.00	4.87	324.67		n/a	6.7
191286-002	6.90	15	0.00	6.68	445.33		n/a	6.7
191286-003	6.80	15	0.00	3.45	230.00		n/a	6.7
191286-004	7.00	15	0.00	4.99	332.67		n/a	6.7
191286-005	7.00	15	0.00	6.68	445.33		n/a	6.7
191286-006	6.80	15	0.00	3.54	236.00		n/a	6.7
191286-007	8.00	15	0.00	6.92	461.33		n/a	6.7
191286-008	7.40	15	0.00	10.00	666.67		n/a	6.7
191286-009	7.20	15	0.00	8.90	593.33		n/a	6.7
191286-010	7.80	15	0.00	5.41	360.67		n/a	6.7
191286-011	7.90	15	0.00	5.14	342.67		n/a	6.7
191286-012	8.60	15	0.39	6.45	430.00		n/a	6.7
191286-013	6.70	15	0.00	14.95	996.67		n/a	6.7
191286-014	7.30	15	0.00	19.57	1304.67		n/a	6.7
191286-015	7.30	15	0.00	9.32	621.33		n/a	6.7
191290-001	4.70	100	0.00	0.08	rpt low alk	0.20	ND	1.0

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

DMB 12/18/06

Reviewed by/ Date:

QC Limits	RPD	Recovery
LCS/ BS/ BSD	20	90 - 110
MS/ MSD	25	80 - 120

Analysis: Alkalinity
Method: EPA 310.1

Analysis Date: 12/18/06
Batch No: 120455

H₂SO₄ Normality = 0.02
Analyst: SJ

SAMPLE	(P)	(T-P)	Total Alkalinity as CaCO ₃ (mg/L)	Bicarbonate Alkalinity	Carbonate Alkalinity as CaCO ₃ (mg/L)	Hydroxide Alkalinity
191286-001	0.0	324.7	324.666667	324.667	0.000	0.000
191286-002	0.0	445.33	445.333	445.333	0.000	0.000
191286-003	0.0	230.00	230.000	230.000	0.000	0.000
191286-004	0.0	332.67	332.667	332.667	0.000	0.000
191286-005	0.0	445.33	445.333	445.333	0.000	0.000
191286-006	0.0	236.00	236.000	236.000	0.000	0.000
191286-007	0.0	461.33	461.333	461.333	0.000	0.000
191286-008	0.0	666.67	666.667	666.667	0.000	0.000
191286-009	0.0	593.33	593.333	593.333	0.000	0.000
191286-010	0.0	360.67	360.667	360.667	0.000	0.000
191286-011	0.0	342.67	342.667	342.667	0.000	0.000
191286-012	26.0	404.00	430.000	378.000	52.000	0.000
191286-013	0.0	996.67	996.667	996.667	0.000	0.000
191286-014	0.0	1304.67	1304.667	1304.667	0.000	0.000
191286-015	0.0	621.33	621.333	621.333	0.000	0.000
191290-001	0.0 #VALUE!		ND	not applicable	not applicable	not applicable

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

P: Phenolphthalein Alkalinity (using volume to pH 8.3)

T-P: Total Alkalinity minus Phenolphthalein Alkalinity

Carbonate Alkalinity = 2x the smaller of P or (T-P)

Bicarbonate Alkalinity = (T-2P) when P < (T-P)

Hydroxide Alkalinity = (2P-T) when (T-P) < P

Analysis: Alkalinity
Method: EPA 310.1

Analysis Date: 12/18/06
Batch No: 120455

H₂SO₄ Normality = 0.02
Analyst: SJ

SAMPLE	Total Alkalinity as CaCO ₃ (mg/L)	Bicarbonate Alkalinity as HCO ₃ ⁻ (mg/L)	Carbonate Alkalinity as CO ₃ ²⁻ (mg/L)	Hydroxide Alkalinity as OH ⁻ (mg/L)
191286-001	324.667	395.849	0.000	0.000
191286-002	445.333	542.971	0.000	0.000
191286-003	230.000	280.427	0.000	0.000
191286-004	332.667	405.603	0.000	0.000
191286-005	445.333	542.971	0.000	0.000
191286-006	236.000	287.742	0.000	0.000
191286-007	461.333	562.479	0.000	0.000
191286-008	666.667	812.831	0.000	0.000
191286-009	593.333	723.420	0.000	0.000
191286-010	360.667	439.742	0.000	0.000
191286-011	342.667	417.795	0.000	0.000
191286-012	430.000	460.875	31.183	0.000
191286-013	996.667	1215.183	0.000	0.000
191286-014	1304.667	1590.711	0.000	0.000
191286-015	621.333	757.559	0.000	0.000
191290-001	ND	not applicable	not applicable	not applicable

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 120455
 Date Started: 18-DEC-2006
 Batched by : Stephanie Jim

Analysis : ALKALINITY
 Bgroup : N/A
 Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
191286-001		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
191286-002		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
191286-003		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
191286-004		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
191286-005		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
191286-006		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
191286-007		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
191286-008		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
191286-009		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
191286-010		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
191286-011		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
191286-012		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
191286-013		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
191286-014		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
191286-015		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
191290-001		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
QC368651	BLANK		Water	ALKALINITY	
QC368652	LCS		Water	ALKALINITY	
QC368653	MS	of 191286-012	Water	ALKALINITY	
QC368654	MSD	of 191286-012	Water	ALKALINITY	

Sulfide

**Sulfide**

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Batch#:	120273
Matrix:	Water	Sampled:	12/05/06
Units:	mg/L	Received:	12/06/06
Diln Fac:	1.000	Analyzed:	12/12/06

Field ID	Type	Lab ID	Result	RL
1065MW9A	SAMPLE	191286-002	ND	0.04
231GW09	SAMPLE	191286-003	ND	0.04
DUP1205062C	SAMPLE	191286-005	ND	0.04
DUP1205062B	SAMPLE	191286-006	ND	0.04
1065PZ1A	SAMPLE	191286-009	ND	0.04
1065PZ1B	SAMPLE	191286-010	ND	0.04
DUP1205061A	SAMPLE	191286-011	ND	0.04
	BLANK	QC367942	ND	0.04

ND= Not Detected

RL= Reporting Limit



Batch QC Report

Sulfide			
Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Diln Fac:	1.000
Field ID:	DUP1205061A	Batch#:	120273
MSS Lab ID:	191286-011	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	mg/L	Analyzed:	12/12/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC367945		0.3262	0.3049	93	75-125		
MS	QC368037	<0.04000	0.3262	0.2453	75	75-125		
MSD	QC368038		0.3262	0.2456	75	75-125	0	20

Analysis: **SULFIDE**
 Method: EPA 376.2
 Instrument: **HP UV-VIS Spectrometer**
 Wavelength: 626 nm
 SOP#: sulfide_376_rv 4.doc

Matrix: Water
 Batch: **120273**
 Prep Date: **12/12/2006**
 Analysis Date: **12/12/2006**
 Analyst: DMC

INITIAL CALIBRATION DATA

Conc (mg/L)	Absorb	RF	
0.000	0.0000		
0.027	0.0172	0.6370	
0.055	0.0341	0.6200	
0.218	0.1374	0.6303	
0.437	0.2718	0.6220	
0.873	0.5511	0.6313	
1.529	0.8947	0.5852	

Correlation Coefficient (r): 0.9990
 Avg Rf: 0.6210
 %RSD: 3.0

Note: Average Rf used to calculate sample results.

Calibration Date: 11/16/06

CONTINUING CALIBRATION DATA

	Absorb Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.1893	0.3049	93%	90 - 110%
ICB	-0.0002	-0.0003		
CCV	0.1925	0.3100	95%	90 - 110%
CCB	0.0010	0.0016		
CCV	0.1954	0.3147	96%	90 - 110%
CCB	0.0011	0.0018		

Analysis: **SULFIDE**
 Method: **EPA 376.2**
 Instrument: HP UV-VIS Spectrometer
 Wavelength: 626 nm
 Matrix: Water

Batch: **120273**
 Prep Date: **12/12/2006**
 Analysis Date: **12/12/2006**
 Analyst: DMC

SAMPLE & BATCH QC DATA

Sample ID	Sample Vol (mL)	D.F.	Sample Absorb	Color Blk Absorb	Report mg/L	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	% Rec	% RPD
MB	7.5000	1.0000	-0.0002		ND	0.040					
LCS	7.5000	1.0000	0.1893		0.30486	0.040	0.0500	48.9360	0.3262	93	
191286-11	7.5000	1.0000	0.0098		ND	0.040					
191286-11M	7.5000	1.0000	0.1523		0.24527	0.040	0.0500	48.9360	0.3262	75	
191286-11M	7.5000	1.0000	0.1525		0.24559	0.040	0.0500	48.9360	0.3262	75	0
191286-2	7.5000	1.0000	0.0188		ND	0.040					
191286-3	7.5000	1.0000	0.0241		ND	0.040					
191286-5	7.5000	1.0000	0.0146		ND	0.040					
191286-6	7.5000	1.0000	0.0151		ND	0.040					
191286-9	7.5000	1.0000	0.0153		ND	0.040					
191286-10	7.5000	1.0000	0.0098		ND	0.040					
191287-3	7.5000	1.0000	0.0050		ND	0.040					
191290-1	7.5000	1.0000	0.0046		ND	0.040					
191322-5	7.5000	1.0000	0.0037		ND	0.040					
191329-1	7.5000	1.0000	0.0037		ND	0.040					
191331-1	7.5000	1.0000	0.0042		ND	0.040					
191358-13	7.5000	1.0000	0.0252		0.04058	0.040					
191381-1	7.5000	1.0000	0.7803		1.25662	0.040					

QC Limits		Recovery	
LCS/ BS/ BSD	20	90 - 110	
MS/ MSD	20	42 - 121	

Reviewed by/ Date:

S.T.F.
 12.18.06

---> Quantitation Results Report <---

Date : ~~12-02-2006~~ ¹²⁻¹²
 Time : 13:14:14
 Operator : DM ¹²⁻¹²⁻⁰⁶

File Name : Data not stored yet

Sample Name : sulfide Analytical Wavelength : 626 nm
 Solvent Name : CCL 11-16-06 Reference Wavelength : None Selected
 Conc Units : mg/L Confirmation Wavelengths : None Selected
 Dil. Factor : 1.00 Integration Time : 1 seconds

SAMPLE #	Sample Name	Wavelength	Func. Res.	Concentration
1	ICB/M2	Analytical	+0.0002	0.00000
2	ICU/LBB	Analytical	+0.1093	0.31593
3	191286-2	Analytical	+0.0188	0.03137
4	191286-3	Analytical	+0.0241	0.04019
5	191286-5	Analytical	+0.0146	0.02432
6	191286-5	Analytical	+0.0151	0.02521
7	191286-9	Analytical	+0.0153	0.02559
8	191286-10	Analytical	+0.0093	0.01559
9	191286-11	Analytical	+0.0098	0.01635
10	191286-11MSD	Analytical	+0.1323	0.25425
11	CCU	Analytical	+0.1925	0.32130
12	CCB	Analytical	+0.0010	0.00171
13	191286-11MSD	Analytical	+0.1525	0.25453
14	191287-2	Analytical	+0.0050	0.00830
15	191290-1	Analytical	+0.0046	0.00761
16	191322-1	Analytical	+0.0027	0.00616
17	191329-1	Analytical	+0.0037	0.00616
18	191331-1	Analytical	+0.0042	0.00700
19	191358-13	Analytical	+0.0252	0.04210
20	191391-1	Analytical	+0.7900	1.30328
21	CCU	Analytical	+0.1954	0.32130

---> Standard Calibration Report <---

Date : ~~12-02-2006~~ ¹²⁻¹²Time : 13:14:40 ¹²⁻¹²⁻⁰⁶Operator : DM ^{DM}

File Name : C:\NUN\DATA\B01105 STD

Sample Name : sulfide

Solvent Name : CAL 11-16-00

Conc Units : mg/L

Analytical Wavelength : 626 nm

Reference Wavelength : None Selected

Confirmation Wavelengths : None Selected

Integration Time : 1 seconds

Analytical Function : Concentration * +1.0000E+00 * Absorbance

STD #	Concentration	Absorbance	% Error
1	0.00000	-0.0000	*****
2	0.02700	0.0172	-6.090 %
3	0.05300	0.0341	-3.497 %
4	0.07900	0.0574	-4.916 %
5	0.10700	0.0710	-3.670 %
6	0.07300	0.0511	-5.089 %
7	1.00000	0.0947	+2.393 %

---) Standard Calibration Report (---

Date : 12-12-2006

Time : 13:14:41 12-12-06

Operator : DM

File Name : C:\UV\DATA\SS1106.STD

Sample Name : sulfide

Solvent Name : CAL 11-16-06

Conc Units : mg/L

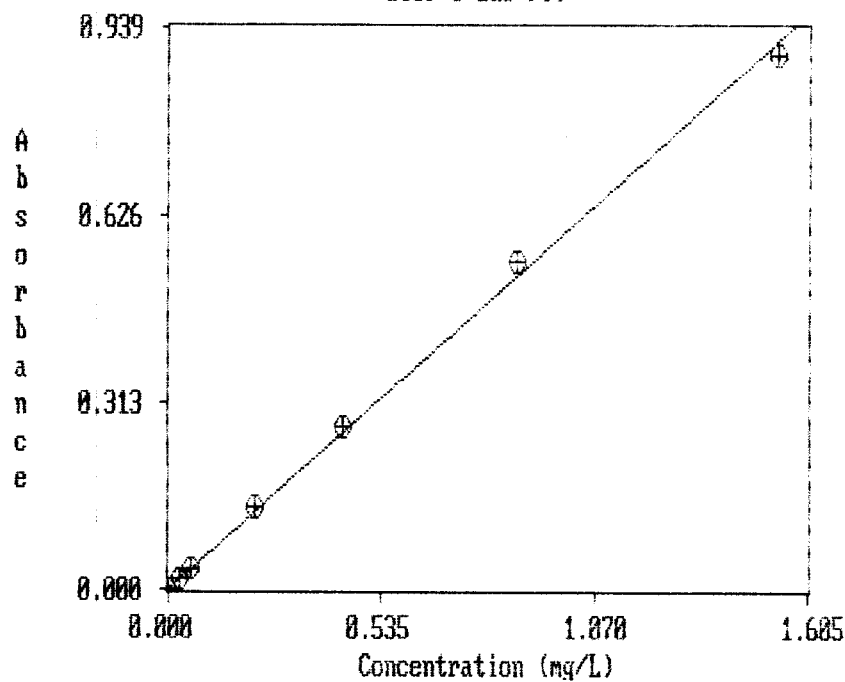
Analytical Wavelength : 626 nm

Reference Wavelength : None Selected

Scatter Wavelengths : None Selected

Integration Time : 1 seconds

Beer's Law Fit



Notebook No. BK 2425

Continued From Page

B120273

conceded
12-12-06 *pm*

249 0455292 → 50ml D11108

5.0 m I. 0254 N

2.70 wt % SiO_2 - 62438N

1270

06583

$$\frac{.06117 \times 16000}{1.0}$$
$$\begin{aligned} &= 978.72 \text{ mg/L} \\ 1.20 &= 48.936 \text{ mg/L} \\ .05 - 75 &= 1.3262 \text{ mg/L} \end{aligned}$$

7503

6002

1893

1925

OG 10

1954

601

Handwritten: 0017

Continued on Page

Read and Understood By

[Signature]

12/12/18

Signed

1234

Signed: _____

PAGE

Date _____

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 120273
 Date Started: 12-DEC-2006
 Batched by : Dennis McCanna

Analysis : DISS SULFIDE
 Bgroup : N/A
 Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
191286-002		Treadwell & Rollo	Water	SULFIDE	18-DEC-2006
191286-003		Treadwell & Rollo	Water	SULFIDE	18-DEC-2006
191286-005		Treadwell & Rollo	Water	SULFIDE	18-DEC-2006
191286-006		Treadwell & Rollo	Water	SULFIDE	18-DEC-2006
191286-009		Treadwell & Rollo	Water	SULFIDE	18-DEC-2006
191286-010		Treadwell & Rollo	Water	SULFIDE	18-DEC-2006
191286-011		Treadwell & Rollo	Water	SULFIDE	18-DEC-2006
191287-003		Acme Fill Corp.	Water	SULFIDE	18-DEC-2006
191290-001		Treadwell & Rollo	Water	SULFIDE	18-DEC-2006
191322-005		ACC Environmental	Water	SULFIDE	13-DEC-2006
191329-001		Strategic Engineer	Water	DISS SULFIDE	12-DEC-2006
191331-001		Strategic Engineer	Water	DISS SULFIDE	13-DEC-2006
191358-013		Treadwell & Rollo	Water	DISS SULFIDE	20-DEC-2006
191381-001		Strategic Engineer	Water	DISS SULFIDE	13-DEC-2006
QC367942	BLANK		Water	SULFIDE	
QC367945	LCS		Water	SULFIDE	
QC368037	MS	of 191286-011	Water	DISS SULFIDE	
QC368038	MSD	of 191286-011	Water	DISS SULFIDE	

Analysis: Sulfide
Method: EPA 376.2
Instrument: HP UV/Vis
Wavelength: 626 nm

Analysis Date: 10/10/2006
Analyst: DM

Instrument Calibrated to report sample results in concentration: mg/L

Concentration: 0.098
Units: mg/L

1	0.060
2	0.064
3	0.071
4	0.075
5	0.073
6	0.074
7	0.070

Average: 0.070 ug/L
Std Deviation: 0.0057186
Student T: 3.143

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev: 0.0180 mg/L
Reporting Limit: 0.04 mg/L
Status: PASS >1/3 RL

✓
10/16/06

TOTAL DISSOLVED SOLIDS

**Total Dissolved Solids (TDS)**

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	mg/L	Analyzed:	12/12/06
Batch#:	120302		

Field ID	Type	Lab ID	Result	RL	Diln Fac
LF6GW103	SAMPLE	191286-001	600	10	1.000
1065MW9A	SAMPLE	191286-002	760	10	1.000
231GW09	SAMPLE	191286-003	520	10	1.000
DUP1205062A	SAMPLE	191286-004	590	10	1.000
DUP1205062C	SAMPLE	191286-005	750	10	1.000
DUP1205062B	SAMPLE	191286-006	530	10	1.000
1065PZ1A	SAMPLE	191286-009	790	10	1.000
1065PZ1B	SAMPLE	191286-010	750	10	1.000
DUP1205061A	SAMPLE	191286-011	770	10	1.000
1349MW100	SAMPLE	191286-013	2,320	11	1.111
LF4GW103	SAMPLE	191286-014	2,480	10	1.000
LF4GW104	SAMPLE	191286-015	1,280	10	1.000
	BLANK	QC368047	ND	10	1.000

ND= Not Detected

RL= Reporting Limit



Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	191286	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Batch#:	120302
Field ID:	ZZZZZZZZZZ	Sampled:	12/11/06
MSS Lab ID:	191381-001	Received:	12/11/06
Matrix:	Water	Analyzed:	12/12/06
Units:	mg/L		

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim	Diln	Fac
BS	QC368048		100.0	114.0		114	79-121				1.000
BSD	QC368049		100.0	122.0		122 *	79-121	7	20		1.000
SDUP	QC368050	21,840		23,260	100.0			6	20		10.00

*= Value outside of QC limits; see narrative

RL= Reporting Limit

RPD= Relative Percent Difference

Analysis: Total Dissolved Solids
 Method: EPA160.1 / SMWW 2540c
 Matrix: Water
 SOP#: tds_rv 9.doc

Analysis Date: 12-Dec-06
 Batch #: 120302
 Analyst: SJ

BATCH QC DATA

Sample	Sample Vol (mL)	DF	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	Report (mg/L)	Reporting Limit (mg/L)	Spike Std Conc (mg/L)	Spike Vol. Used (mL)	Spiking Level (mg/L)	Recovery, %	RPD, %
MB	50	1	54.9885	54.9890	0.0005	ND	10					
BS	50	1	51.0513	51.0570	0.0057	114.0	10	1,000	5	100	114	
BSD	50	1	48.3809	48.3870	0.0061	122.0	10	1,000	5	100	122 *	6.78
191381-001	5	10	24.4066	24.5158	0.1092	21,840.0	100					
SDUP	5	10	27.4311	27.5474	0.1163	23,260.0	100					6.30

QC Limits				Recovery	
LCS/BS/BS	MS/MSD	RPD		79	121
20	20			69	131

SAMPLE DATA

Sample	Sample Vol (mL)	DF	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	Report (mg/L)	Reporting Limit (mg/L)
191251-002	50	1	56.6118	56.6491	0.0373	746.0	10
191286-001	50	1	59.0028	59.0327	0.0299	598.0	10
191286-002	50	1	58.1784	58.2163	0.0379	758.0	10
191286-003	50	1	48.8187	48.8447	0.0260	520.0	10
191286-004	50	1	51.4769	51.5062	0.0293	586.0	10
191286-005	50	1	54.9682	55.0055	0.0373	746.0	10
191286-006	50	1	51.7857	51.8122	0.0265	530.0	10
191286-009	50	1	50.3820	50.4216	0.0396	792.0	10
191286-010	50	1	50.3422	50.3798	0.0376	752.0	10
191286-011	50	1	52.2266	52.2653	0.0387	774.0	10
191286-013	45	1.111	49.1304	49.2350	0.1046	2,324.4	11
191286-014	50	1	48.5044	48.6286	0.1242	2,484.0	10
191286-015	50	1	53.0652	53.1291	0.0639	1,278.0	10
191327-001	50	1	48.1418	48.1470	0.0052	104.0	10
191327-002	50	1	45.4841	45.4912	0.0071	142.0	10
191331-001	50	1	54.4285	54.5516	0.1231	2,462.0	10
191381-001	5	10	24.4066	24.5158	0.1092	21,840.0	100

Note: Because the regulatory holding time is based on the prep date, the analysis date referenced above is the prep date.

Reviewed by/ Date:

[Signature] 12/17/06

TDS (Total Dissolved Solids)
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

LIMS Batch #: 120302

Prep Date: 12/12/06

Benchbook#: **BK 2420**

Prep Time: 14:30

Page: **22**

Filter Mfg/ Lot#: E11.82p. 65560

Spike WS Conc (mg/L): 1000

Spike WS#: 3881

Spike Vol Added (mL): 5

	In	Out	In-2	Out-2	In-3	Out-3
Date:	12/12/06	12/13/06	12/13/06	12/13/06	12/13/06	12/14/06
Time:	15:30	11:00	14:15	15:15	16:35	9:00
Temp (C):	180 90	180	180	180	180	180

ST
min

Sample # / Letter	EC Value (μ S/cm)	Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*
1 MB		50	MAN	54.9885	54.9840	54.9890	X
BS			NEV	51.0513	51.0567	51.0570	X
BSD			BUM	51.48.3809	48.3870	48.3877	X
191251-2 E	1036	50	IHN	56.6118	56.6486	56.6491	X
5 191286-1 E	726		ZED	59.0028	59.0322	59.0327	X
-2 F	1119		BLAB	58.1784	58.2163	58.2163	V
-3 I	691		9	48.8182	48.8448	48.8447	X
-4 E	780		5	51.4769	51.5052	51.5062	X
-5 F	1150		FRA	54.969482	54.90059	54.90055	X
10 -6 I	694		Bot	51.7857	51.8120	51.8122	X
-9 I	1136		Mar	50.3820	50.4220	50.4216	X
-10	1160		SAN	50.3422	50.3796	50.3798	X
-11	1125		5/10	52.2266	52.2683	52.2653	X
-13 H	4040	45	(2)	49.1304	49.2387	49.2352	49.2346
15 -14 B	3750	50	Geo	48.5044	48.6320	48.6294	48.6281
-15 J	2030		(B)	53.0652	53.1201	53.1294	53.1285
191327-1 N	130.4		JAR	48.1418	48.1469	48.1475	48.1470
-2 K	152		CIA	45.4841	45.4913	45.4912	X
191331-1 C	3530		IM	54.4285	54.5579	54.5514	54.5507
20 191381-1 J	31,000	5	ITA	24.4066	24.5180	24.5167	24.5160
SDOP-1			YES	27.4311	27.5490	27.5480	27.5473

* Constant weight must be within 0.0005 from previous reading.


 Analyst / Date 12/12/06

Jan 12-15-06
 Reviewed by / Date

Ltd.

TDS (Total Dissolved Solids)
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

2420

LIMS Batch #: 120302 cont.

Prep Date: _____

Benchbook#: **BK 2420**

Prep Time: _____

Page: **23**

Filter Mfg/ Lot#: _____

Spike WS Conc (mg/L): _____

Spike WS#: _____

Spike Vol Added (mL): _____

	In	Out	In-2	Out-2	In-3	Out-3
Date:	12/14/06	12/14/06	12/19/06	12/14/06		
Time:	11:00	12:00	13:00	14:00		
Temp (C):	180	180	180	180		

^{4th} t (g)*	^{4th} Sample # / Letter	^{5th} EC Value (μ S/cm)	^{6th} Sample Vol. Filtered (mL)	Dish ID	Dish Wt (g)	1st Dry Wt.(g)	2nd Dry Wt (g)*	3rd Dry Wt (g)*

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 120302
 Date Started: 12-DEC-2006
 Batched by : Stephanie Jim

Analysis : TDS
 Bgroup : N/A
 Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
191251-002		Arcadis G&M	Water	TDS	15-DEC-2006
191286-001		Treadwell & Rollo	Water	TDS	18-DEC-2006
191286-002		Treadwell & Rollo	Water	TDS	18-DEC-2006
191286-003		Treadwell & Rollo	Water	TDS	18-DEC-2006
191286-004		Treadwell & Rollo	Water	TDS	18-DEC-2006
191286-005		Treadwell & Rollo	Water	TDS	18-DEC-2006
191286-006		Treadwell & Rollo	Water	TDS	18-DEC-2006
191286-009		Treadwell & Rollo	Water	TDS	18-DEC-2006
191286-010		Treadwell & Rollo	Water	TDS	18-DEC-2006
191286-011		Treadwell & Rollo	Water	TDS	18-DEC-2006
191286-013		Treadwell & Rollo	Water	TDS	18-DEC-2006
191286-014		Treadwell & Rollo	Water	TDS	18-DEC-2006
191286-015		Treadwell & Rollo	Water	TDS	18-DEC-2006
191327-001		Blasland, Bouck &	Water	TDS	13-DEC-2006
191327-002		Blasland, Bouck &	Water	TDS	13-DEC-2006
191331-001		Strategic Engineer	Water	TDS	13-DEC-2006
191381-001		Strategic Engineer	Water	TDS	13-DEC-2006
QC368047	BLANK		Water	TDS	
QC368048	BS		Water	TDS	
QC368049	BSD		Water	TDS	
QC368050	SDUP	of 191381-001	Water	TDS	



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Number 191290

Treadwell & Rollo
555 Montgomery Street
San Francisco, CA 94111

Project#: 2893.04.51
Location: Presidio

Sample ID
DW120606B

Lab ID
191290-001

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAC and pertain only to those samples which were submitted for analysis.

Signature: [Signature]
Operations Manager

Date: 1-5-07

Signature: [Signature]
Project Manager

Date: 1-5-07

CASE NARRATIVE

Laboratory number: 191290
Client: Treadwell & Rollo
Project: 2893.04.51
Location: Presidio
Request Date: 12/06/06
Samples Received: 12/06/06

This hardcopy data package contains sample and QC results for one water sample, requested for the above referenced project on 12/06/06. The sample was received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B):

No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):

No analytical problems were encountered.

Pesticides (EPA 8081A):

High ICAL percent RSD (relative standard deviation) was observed for methoxychlor in the calibration analyzed 12/05/06 22:15; average ICAL %RSD met method requirements. High responses were observed for delta-BHC and methoxychlor in the ICV analyzed 12/13/06 18:06; average ICV drift met method requirements, and these analytes were not detected at or above the RL in the associated sample. Low response was observed for 4,4'-DDT in the CCV analyzed 12/15/06 04:40; average CCV drift met method requirements. No other analytical problems were encountered.

Polychlorinated Biphenyls (PCBs) (EPA 8082):

No analytical problems were encountered.

Polynuclear Aromatics by HPLC (EPA 8310):

Low recoveries were observed for benzo(a)pyrene in the MS/MSD of 514AGW101 (lab # 191314-019); the LCS was within limits, and the associated RPD was within limits. No other analytical problems were encountered.

Metals (EPA 6020 and EPA 7470A):

High responses were observed for aluminum, magnesium, and sodium in the CCV analyzed 12/13/06 22:04 and the CCV analyzed 12/13/06 23:39; these analytes were not detected at or above the RL in the associated sample. Low recoveries were observed for calcium and manganese in the MS of LF10SP01 (lab # 191314-003); the associated RPDs were within limits. Responses exceeding the instrument's linear range were observed for sodium in the MS/MSD of LF10SP01 (lab # 191314-003). High % difference was observed for sodium in the serial dilution of LF10SP01 (lab # 191314-003); this analyte was not detected at or above the RL in the associated sample. No other analytical problems were



CASE NARRATIVE

Laboratory number: 191290
Client: Treadwell & Rollo
Project: 2893.04.51
Location: Presidio
Request Date: 12/06/06
Samples Received: 12/06/06

Metals (EPA 6020 and EPA 7470A):
encountered.

Ion Chromatography (EPA 300.0):
No analytical problems were encountered.

Alkalinity (EPA 310.1):
No analytical problems were encountered.

Sulfide (EPA 376.2):
No analytical problems were encountered.

Total Dissolved Solids (TDS) (EPA 160.1):
No analytical problems were encountered.

Chain of Custody

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 1 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd



Curtis & Tompkins, Ltd.

COOLER RECEIPT CHECKLIST

Login#: 191290 Date Received: 12/6/06 Number of Coolers: 1
Client: Treadwell + Rollo Project: Presidio

A. Preliminary Examination Phase

Date Opened: 12/6/06 By (print): Peter P. (sign) Peter P.

1. Did cooler come with a shipping slip (airbill, etc.)?..... YES NO

If YES, enter carrier name and airbill number: _____

2. Were custody seals on outside of cooler?..... YES NO

How many and where? _____ Seal date: _____ Seal name: _____

3. Were custody seals unbroken and intact at the date and time of arrival?..... YES NO/NA

4. Were custody papers dry and intact when received?..... YES NO

5. Were custody papers filled out properly (ink, signed, etc.)?..... YES NO

6. Did you sign the custody papers in the appropriate place?..... YES NO

7. Was project identifiable from custody papers?..... YES NO

If YES, enter project name at the top of this form.

8. If required, was sufficient ice used? Samples should be 2-6 degrees C. YES NO

Type of ice: WET Temperature: on ice - no temp

B. Login Phase

Date Logged In: 12/6/06 By (print): Peter P. (sign) Peter P.

1. Describe type of packing in cooler: Ziploc bags

2. Did all bottles arrive unbroken?..... YES NO

3. Were labels in good condition and complete (ID, date, time, signature, etc.)?..... YES NO

4. Did bottle labels agree with custody papers?..... YES NO

5. Were appropriate containers used for the tests indicated?..... YES NO

6. Were correct preservatives added to samples?..... YES NO

7. Was sufficient amount of sample sent for tests indicated?..... YES NO

8. Were bubbles absent in VOA samples? If NO, list sample IDs below..... YES NO

9. Was the client contacted concerning this sample delivery?..... YES NO

If YES, give details below.

Who was called? _____ By whom? _____ Date: _____

Additional Comments:

**TOTAL VOLATILE
HYDROCARBONS**



Total Volatile Hydrocarbons

Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DW120606B	Batch#:	120117
Matrix:	Water	Sampled:	12/06/06
Units:	ug/L	Received:	12/06/06
Diln Fac:	1.000		

Type: SAMPLE Analyzed: 12/07/06
Lab ID: 191290-001

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	96	65-135
Bromofluorobenzene (FID)	93	65-135

Type: BLANK Analyzed: 12/06/06
Lab ID: QC367286

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	116	65-135
Bromofluorobenzene (FID)	103	65-135

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC367288	Batch#:	120117
Matrix:	Water	Analyzed:	12/06/06
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,891	95	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	117	65-135
Bromofluorobenzene (FID)	98	65-135

Batch QC Report

Total Volatile Hydrocarbons			
Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1213GW101	Batch#:	120117
MSS Lab ID:	191286-012	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Analyzed:	12/06/06
Diln Fac:	1.000		

Type: MS Lab ID: QC367289

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	43.80	2,000	1,907	93	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	112	65-135
Bromofluorobenzene (FID)	94	65-135

Type: MSD Lab ID: QC367290

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,900	93	65-135	0	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	112	65-135
Bromofluorobenzene (FID)	95	65-135

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191290 GCVOA Water: EPA 8015B

Inst : GC07
 Calnum: 326439908002
 Units : ng

Name : gc07gas305
 Date : 01-NOV-2006 18:23
 X Axis: R

Level	File	Segment	Sample ID	Analyzed	stds
L1	305_011	326439908011	TVH 2	01-NOV-2006 18:23	S4090 (1000X), S4579 (5000X)
L2	305_012	326439908012	TVH 3	01-NOV-2006 19:00	S4089 (1000X), S4579 (5000X)
L3	305_013	326439908013	TVH 4	01-NOV-2006 19:36	S4088 (2000X), S4579 (5000X)
L4	305_014	326439908014	TVH 5	01-NOV-2006 20:12	S4088 (1000X), S4579 (5000X)
L5	305_034	326439908034	TVH 1	02-NOV-2006 12:43	S4091 (1000X), S4579 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ²	MNR ²	MRSD	P19
Gasoline C7-C12	A	1382.9	1309.3	1296.2	1270.3	1430.7	AVRG		7.47E-4		1337.9	5	0.995	20	

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191290 GCVOA Water
EPA 8015B

Inst : GC07
Calnum : 326439908002

Name : gc07gas305
Cal Date: 01-NOV-2006

ICV 326439908035 (305_035 02-NOV-2006) stds: S4693 (1000X), S4579 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Gasoline C7-C12	A	1337.9	1388.3	10000	10380	ng	4	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191290 GCVOA water: EPA 8015B / EPA 8021B

Inst : GC07
Calnum: 326481636001
Units : ng

Name : gc07surrogates334
Date : 30-NOV-2006 12:47
X Axis: R

Level	File	Segment	Sample ID	Analyzed	Stds
L1	334_003	326481636003	TFT/BFB 1	30-NOV-2006 12:47	S4684 (5000X)
L2	334_004	326481636004	TFT/BFB 2	30-NOV-2006 14:31	S4685 (5000X)
L3	334_005	326481636005	TFT/BFB 3	30-NOV-2006 15:07	S4686 (5000X)
L4	334_006	326481636006	TFT/BFB 4	30-NOV-2006 15:44	S4687 (5000X)
L5	334_007	326481636007	TFT/BFB 5	30-NOV-2006 16:55	S4688 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	%RSD	MNR ²	MXRSD	PLg
Trifluorotoluene (FID)	A	1821.5	1919.5	1831.4	1910.1	1997.4	AVRG		5.27E-4		1896.0	4	0.995	20	
Bromofluorobenzene (FID)	A	1619.1	1685.2	1581.0	1637.5	1690.0	AVRG		6.09E-4		1642.6	3	0.995	20	

CURTIS & TOMPKINS SPIKE USER REPORT FOR 191290 GCVOA Water
EPA 8015B

Inst : GC07 Run Name: QC367287 IDF : 1.0
Seqnum : 326490316002.1 File : 340_002 Time : 06-DEC-2006 11:19
Cal : 326481636001 Caldate : 30-NOV-2006
Standards: S4963 (1000X), S4579 (5000X)

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	1896.0	1975.3	450.0	468.8	ng	4	15	
Bromofluorobenzene (FID)	A	1642.6	1496.1	450.0	409.9	ng	-9	15	

CURTIS & TOMPKINS SPIKE USER REPORT FOR 191290 GCVOA Water
EPA 8015B

Inst : GC07 Run Name: QC367288 IDF : 1.0
Seqnum : 326490316003.1 File : 340_003 Time : 06-DEC-2006 11:56
Standards: S4953 (1000X), S4579 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	326439908002	01-NOV-2006	1264.9	10000	9454	ng	-5	15	u
Trifluorotoluene (FID)	A	326481636001	30-NOV-2006	2227.5	450.0	528.7	ng	17	15	c+ u
Bromofluorobenzene (FID)	A	326481636001	30-NOV-2006	1611.6	450.0	441.5	ng	-2	15	u

JCP 12/07/06 : PID surrogates are not applicable. [general version]

JCP 12/07/06 [Trifluorotoluene (FID) A]: Passes limits of 69-135% [general version]

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191290 GCVOA Water
EPA 8015B

Inst : GC07 Run Name: MBTXE IDF : 1.0
 Seqnum : 326490316013 File : 340_013 Time : 06-DEC-2006 23:09
 Cal : 326481636001 Caldate : 30-NOV-2006
 Standards: S4963 (666.7X), S4579 (5000X)

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	1896.0	1841.5	450.0	437.1	ng	-3	15	
Bromofluorobenzene (FID)	A	1642.6	1529.1	450.0	418.9	ng	-7	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191290 GCVOA Water
EPA 8015B

Inst : GC07 Run Name: TVH IDF : 1.0
 Seqnum : 326490316015 File : 340_015 Time : 07-DEC-2006 00:21
 Standards: S4953 (666.7X), S4579 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	326439908002	01-NOV-2006	1273.5	15000	14280	ng	-5	15	
Trifluorotoluene (FID)	A	326481636001	30-NOV-2006	2376.1	450.0	563.9	ng	25	15	c+
Bromofluorobenzene (FID)	A	326481636001	30-NOV-2006	1660.2	450.0	454.8	ng	1	15	

JCP 12/07/06 [Trifluorotoluene (FID) A]: Passes limits of 69-135%

JCP 12/07/06 : PID surrogates are not applicable.

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191290 GCVOA Water
EPA 8015B

Inst : GC07 Run Name: TVH IDF : 1.0
Seqnum : 326490316016 File : 340_016 Time : 07-DEC-2006 00:58
Standards: S4953 (666.7X), S4579 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	326439908002	01-NOV-2006	1210.2	15000	13570	ng	-10	15	
Trifluorotoluene (FID)	A	326481636001	30-NOV-2006	2322.3	450.0	551.2	ng	22	15	c+
Bromofluorobenzene (FID)	A	326481636001	30-NOV-2006	1612.2	450.0	441.7	ng	-2	15	

JCP 12/07/06 [Trifluorotoluene (FID) A]: Passes limits of 69-135%

JCP 12/07/06 : PID surrogates are not applicable.

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191290 GCVOA Water
EPA 8015B

Inst : GC07 Run Name: TVH IDF : 1.0
Seqnum : 326490316027 File : 340_027 Time : 07-DEC-2006 07:39
Standards: S4953 (1000X), S4579 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	326439908002	01-NOV-2006	1185.7	10000	8863	ng	-11	15	
Trifluorotoluene (FID)	A	326481636001	30-NOV-2006	1971.8	450.0	468.0	ng	4	15	
Bromofluorobenzene (FID)	A	326481636001	30-NOV-2006	1597.8	450.0	437.7	ng	-3	15	

JCP 12/07/06 : PID surrogates are not applicable.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 326439908

Instrument : GC07

Begun : 11/01/06 11:48

Method : EPA 8015B, EPA 8021B

SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	305_001	X	IB			11/01/06 11:48	1.0	1	
002	305_002	X	IB			11/01/06 12:25	1.0	1	
003	305_003	ICAL	TFT/BFB 1			11/01/06 13:05	1.0	2	
004	305_004	ICAL	TFT/BFB 2			11/01/06 13:41	1.0	3	
005	305_005	ICAL	TFT/BFB 3			11/01/06 14:29	1.0	4	
006	305_006	ICAL	TFT/BFB 4			11/01/06 15:06	1.0	5	
007	305_007	ICAL	TFT/BFB 5			11/01/06 15:43	1.0	6	
008	305_008	X	IB			11/01/06 16:33	1.0	1	
009	305_009	X	IB			11/01/06 17:10	1.0	1	
010	305_010	X	ICAL			11/01/06 17:46	1.0	7 1	
011	305_011	ICAL	TVH 2			11/01/06 18:23	1.0	8 1	
012	305_012	ICAL	TVH 3			11/01/06 19:00	1.0	9 1	
013	305_013	ICAL	TVH 4			11/01/06 19:36	1.0	10 1	
014	305_014	ICAL	TVH 5			11/01/06 20:12	1.0	10 1	
015	305_015	X	IB			11/01/06 20:48	1.0	1	
016	305_016	X	TVH			11/01/06 21:24	1.0	11 1	
017	305_017	X	TVH			11/01/06 22:00	1.0	11 1	
018	305_018	X	IB			11/01/06 22:36	1.0	1	
019	305_019	X	CARBMARK			11/01/06 23:13	1.0	12 13 1	
020	305_020	X	IB			11/01/06 23:49	1.0	1	
021	305_021	X	IB			11/02/06 00:25	1.0	1	
022	305_022	ICAL	BTXE 1			11/02/06 01:01	1.0	14 1	
023	305_023	ICAL	MTBE 1			11/02/06 01:38	1.0	15 1	
024	305_024	ICAL	BTXE 2			11/02/06 02:14	1.0	15 1	
025	305_025	ICAL	BTXE 3			11/02/06 02:50	1.0	15 1	
026	305_026	ICAL	BTXE 4			11/02/06 03:26	1.0	16 1	
027	305_027	ICAL	BTXE 5			11/02/06 04:03	1.0	16 1	
028	305_028	ICAL	BTXE 6			11/02/06 04:39	1.0	16 1	
029	305_029	ICAL	MTBE 7			11/02/06 05:15	1.0	17 1	
030	305_030	X	IB			11/02/06 05:51	1.0	1	
031	305_031	ICV	MBTXE			11/02/06 06:28	1.0	18 1	
032	305_032	X	MBTXE			11/02/06 07:04	1.0	18 1	
033	305_033	X	IB			11/02/06 12:07	1.0	1	
034	305_034	ICAL	TVH 1			11/02/06 12:43	1.0	7 1	
035	305_035	ICV	TVH			11/02/06 13:40	1.0	19 1	

Analyst: MJM

Date: 11/02/06

Reviewer: MMP

Date: 11/03/06

Standards used: 1=S4579 2=S4684 3=S4685 4=S4686 5=S4687 6=S4688 7=S4091 8=S4090 9=S4089 10=S4088 11=S4479 12=S1645
13=S1646 14=S4341 15=S4340 16=S4339 17=S3732 18=S4311 19=S4693

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 326481636

Instrument : GC07

Begun : 11/30/06 11:16

Method : EPA 8015B, EPA 8021B

SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	334_001	X	IB			11/30/06 11:16	1.0	1	
002	334_002	X	IB			11/30/06 11:53	1.0	1	
003	334_003	ICAL	TFT/BFB 1			11/30/06 12:47	1.0	2	
004	334_004	ICAL	TFT/BFB 2			11/30/06 14:31	1.0	3	
005	334_005	ICAL	TFT/BFB 3			11/30/06 15:07	1.0	4	
006	334_006	ICAL	TFT/BFB 4			11/30/06 15:44	1.0	5	
007	334_007	ICAL	TFT/BFB 5			11/30/06 16:55	1.0	6	
008	334_008	X	IB			11/30/06 18:43	1.0	1	
009	334_009	X	IB			11/30/06 19:20	1.0	1	
010	334_010	ICAL	BTXE 1			11/30/06 19:55	1.0	7 1	
011	334_011	ICAL	MTBE 1			11/30/06 20:32	1.0	8 1	
012	334_012	ICAL	BTXE 2			11/30/06 21:07	1.0	8 1	
013	334_013	ICAL	BTXE 3			11/30/06 21:44	1.0	8 1	
014	334_014	ICAL	BTXE 4			11/30/06 22:21	1.0	9 1	
015	334_015	ICAL	BTXE 5			11/30/06 22:57	1.0	9 1	
016	334_016	ICAL	BTXE 6			11/30/06 23:34	1.0	9 1	
017	334_017	ICAL	MTBE 7			12/01/06 00:10	1.0	10 1	
018	334_018	X	IB			12/01/06 00:47	1.0	1	
019	334_019	ICV	MBTXE			12/01/06 01:23	1.0	11 1	
020	334_020	X	ICV			12/01/06 02:00	1.0	11 1	

Analyst: MJMDate: 12/01/06Reviewer: MMPDate: 12/01/06

Standards used: 1=S4579 2=S4684 3=S4685 4=S4686 5=S4687 6=S4688 7=S4992 8=S4991 9=S4990 10=S4993 11=S4311

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 326490316

Instrument : GC07

Begun : 12/06/06 10:43

Method : EPA 8015B, EPA 8021B

SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	340_001	X	IB			12/06/06 10:43	1.0	1	
002	340_002	CCV/LCS	QC367287	Water	120117	12/06/06 11:19	1.0	2 1	
003	340_003	CCV/LCS	QC367288	Water	120117	12/06/06 11:56	1.0	3 1	
004	340_004	SAMPLE	191056-002	Soil	120010	12/06/06 12:55	20.0	1	
005	340_005	X	IB	Water	120117	12/06/06 14:09	1.0	1	
006	340_006	BLANK	QC367286	Water	120117	12/06/06 18:56	1.0	1	
007	340_007	MS	QC367289	Water	120117	12/06/06 19:32	1.0	3 1	
008	340_008	MSD	QC367290	Water	120117	12/06/06 20:08	1.0	3 1	
009	340_009	SAMPLE	191286-002	Water	120117	12/06/06 20:44	1.0	1	
010	340_010	SAMPLE	191286-005	Water	120117	12/06/06 21:21	1.0	1	
011	340_011	SAMPLE	191286-001	Water	120117	12/06/06 21:57	1.0	1	
012	340_012	SAMPLE	191286-003	Water	120117	12/06/06 22:33	1.0	1	
013	340_013	CCV	MBTXE		120117	12/06/06 23:09	1.0	2 1	
014	340_014	X	MBTXE		120117	12/06/06 23:45	1.0	2 1	
015	340_015	CCV	TVH		120117	12/07/06 00:21	1.0	3 1	
016	340_016	CCV	TVH		120117	12/07/06 00:58	1.0	3 1	
017	340_017	SAMPLE	191286-004	Water	120117	12/07/06 01:34	1.0	1	
018	340_018	SAMPLE	191286-006	Water	120117	12/07/06 02:11	1.0	1	
019	340_019	SAMPLE	191286-009	Water	120117	12/07/06 02:46	1.0	1	
020	340_020	SAMPLE	191286-010	Water	120117	12/07/06 03:23	1.0	1	
021	340_021	SAMPLE	191286-011	Water	120117	12/07/06 04:00	1.0	1	
022	340_022	MSS	191286-012	Water	120117	12/07/06 04:36	1.0	1	
023	340_023	SAMPLE	191286-013	Water	120117	12/07/06 05:13	5.0	1	
024	340_024	SAMPLE	191290-001	Water	120117	12/07/06 05:50	1.0	1	
025	340_025	SAMPLE	191294-007	Water	120117	12/07/06 06:26	1.0	1	
026	340_026	SAMPLE	191294-008	Water	120117	12/07/06 07:02	1.0	1	
027	340_027	CCV	TVH		120117	12/07/06 07:39	1.0	3 1	
028	340_028	CCV	TVH		120117	12/07/06 08:16	1.0	3 1	
029	340_029	SAMPLE	191294-009	Water	120117	12/07/06 08:52	1.0	1	
030	340_030	X	TVH		120117	12/07/06 10:07	1.0	3 1	
031	340_031	CCV	TVH		120117	12/07/06 11:02	1.0	3 1	

Analyst: JCP

Date: 12/07/06

Reviewer:

Date:

Standards used: 1=S4579 2=S4963 3=S4953

REPORTING SUMMARY FOR 191290 TVH Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	G A S :	S T O D	F 3 B Z	B R 4 F
191290-001	GC07	12/07/06 05:50	1.0	+		+	+
QC367286	GC07	12/06/06 18:56	1.0	+		+	+
QC367287	GC07	12/06/06 11:19	1.0				
QC367288	GC07	12/06/06 11:56	1.0	+		+	+
QC367289	GC07	12/06/06 19:32	1.0	+		+	+
QC367290	GC07	12/06/06 20:08	1.0	+		+	+

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 01/05/07

Analyte	Units	GC19 A	GC19 X	GC04 A	GC04 J	GC05 A	GC05 G	GC07 A
Gasoline C6-C10	ug/L	12	21	6.7	6.2	14	14	13
Gasoline C6-C12	ug/L	8.9	21	5.5	6.8	11	11	11
Gasoline C7-C12	ug/L	3.3	27	4.8	7.2	7.4	7.4	14
JP-4 C7-C12	ug/L	4.6	4.6	12	12			19
Gasoline C6-C8	ug/L							7.0
Gasoline C8-C10	ug/L							12
Trifluorotoluene (FID)	ug/L			3.9				9.8
Bromofluorobenzene (FID)	ug/L			5.2				7.5

**TOTAL EXTRACTABLE
HYDROCARBONS**

Total Extractable Hydrocarbons

Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	DW120606B	Batch#:	120392
Matrix:	Water	Sampled:	12/06/06
Units:	ug/L	Received:	12/06/06
Diln Fac:	1.000	Prepared:	12/14/06

Type: SAMPLE Analyzed: 12/16/06
 Lab ID: 191290-001 Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	101	65-135

Type: BLANK Analyzed: 12/15/06
 Lab ID: QC368414 Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	95	65-135

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC368415	Batch#:	120392
Matrix:	Water	Prepared:	12/14/06
Units:	ug/L	Analyzed:	12/15/06

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,496	100	65-135

Surrogate	%REC	Limits
Hexacosane	103	65-135



Curtis & Tompkins, Ltd.

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1213GW101	Batch#:	120392
MSS Lab ID:	191286-012	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Prepared:	12/14/06
Diln Fac:	1.000	Analyzed:	12/15/06

Type: MS
Lab ID: QC368416

Cleanup Method: EPA 3630C

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C12-C24	<20.34	2,500	1,704	68	65-135

Surrogate	%REC	Limits
Hexacosane	75	65-135

Type: MSD
Lab ID: QC368417

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,244	90	65-135	27	35

Surrogate	%REC	Limits
Hexacosane	94	65-135

RPD= Relative Percent Difference

Page 1 of 1

36.0

: 00020

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191290 GCSV Water: EPA 8015B

Inst : GC15B
 Calnum : 166428475001
 Units : mg/L

Name : diesel
 Date : 24-OCT-2006 17:58
 X Axis : R

Reviewer: MCH

Level	File	Segment	Sample ID	Analyzed	Std
L1	297b010	166428475010	DSL_10	24-OCT-2006 17:58	S4539
L2	297b011	166428475011	DSL_100	24-OCT-2006 18:26	S4540
L3	297b012	166428475012	DSL_250	24-OCT-2006 18:53	S4541
L4	297b013	166428475013	DSL_500	24-OCT-2006 19:21	S4542
L5	297b014	166428475014	DSL_1000	24-OCT-2006 19:48	S4543
L6	297b015	166428475015	DSL_2500	24-OCT-2006 20:15	S4544
L7	297b016	166428475016	DSL_5000	24-OCT-2006 20:43	S4538

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	AVG	r ²	%RSD	MWR ²	WRSD	Fig
Diesel C12-C24	48331	47665	48162	48149	47529	49750	48832	AVRG		2.07E-5		48345	2	0.995	20		

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191290 GCSV Water
EPA 8015B

Inst : GC15B
Calnum : 166428475001

Name : diesel
Cal Date: 24-OCT-2006

ICV 166428475017 (297b017 24-OCT-2006) stds: S4615 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	48345	48592	500.0	502.5	mg/L	1	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191290 GCSV Water: EPA 8015B

Inst : GC15B
 Calnum : 166500697001
 Units : mg/L

Name : MO
 Date : 13-DEC-2006 17:24
 X Axis : R

Reviewer: CW

Level	File	Segment	Sample ID	Analyzed	Std
L1	347b002	166500697002	MO_50	13-DEC-2006 17:24	S4754
L2	347b003	166500697003	MO_250	13-DEC-2006 17:52	S4755
L3	347b004	166500697004	MO_500	13-DEC-2006 18:20	S4756
L4	347b005	166500697005	MO_1000	13-DEC-2006 18:48	S4758
L5	347b006	166500697006	MO_5000	13-DEC-2006 19:15	S4753

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ² %RSD	MNR ²	MxRSD	Fig
Motor Oil C24-C36	30972	36587	37358	37030	30403	AVRG		2.90E-5		34470	10	0.995	20	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191290 GCSV Water: EPA 8015B

Inst : GC15B
 Calnum : 166428475003
 Units : mg/L

Name : hexacosane
 Date : 25-OCT-2006 01:54
 X Axis : R

Reviewer: MCH

Level	File	Segment	Sample ID	Analyzed	Stds
L1	297b027	166428475027	HEX_5	25-OCT-2006 01:54	S4639
L2	297b028	166428475028	HEX_10	25-OCT-2006 02:21	S4640
L3	297b029	166428475029	HEX_25	25-OCT-2006 02:48	S4641
L4	297b030	166428475030	HEX_50	25-OCT-2006 03:15	S4642
L5	297b031	166428475031	HEX_75	25-OCT-2006 03:43	S4643
L6	297b032	166428475032	HEX_100	25-OCT-2006 04:10	S4644
L7	297b033	166428475033	HEX_200	25-OCT-2006 04:37	S4645

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	AVG	r ²	MR ²	MRSD	Fig
Hexacosane	56505	55011	56380	56689	57299	58362	58005	AVRG		1.76E-5		56893	2	0.995	20	

CONTINUING CALIBRATION SUMMARY FOR 191290 GCSV Water
Curtis & Tompkins Laboratories

Analyte: Diesel C12-C24

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D	Max	%D	Flags
						RF/CF	RF/CF							
GC15B	B	166503050016	15-DEC-2006 16:41	166428475001	24-OCT-2006	48345	52251	250.00	270.19	mg/L	8	15		
GC15B	B	166503050030	16-DEC-2006 01:17	166428475001	24-OCT-2006	48345	49653	500.00	513.53	mg/L	3	15		
GC15B	B	166503050046	16-DEC-2006 08:39	166428475001	24-OCT-2006	48345	52025	500.00	538.06	mg/L	8	15		

CONTINUING CALIBRATION SUMMARY FOR 191290 GCSV Water
Curtis & Tompkins Laboratories

Analyte: Motor Oil C24-C36

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D	Flags
						RF/CF	RF/CF						
GC15B	B	166503050017	15-DEC-2006 17:09	166500697001	13-DEC-2006	34470	37708	500.00	546.97	mg/L	9	15	
GC15B	B	166503050031	16-DEC-2006 01:45	166500697001	13-DEC-2006	34470	37032	500.00	537.17	mg/L	7	15	
GC15B	B	166503050047	16-DEC-2006 09:06	166500697001	13-DEC-2006	34470	37072	500.00	537.74	mg/L	8	15	

CONTINUING CALIBRATION SUMMARY FOR 191290 GCSV Water
Curtis & Tompkins Laboratories

Analyte: Hexacosane

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	OntAmt	Units	%D Max	%D Flags
						RF/CF	RF/CF					
GC15B	B	166503050016	15-DEC-2006 16:41	166428475003	25-OCT-2006	56893	64309	50.000	56.517	mg/L	13	15
GC15B	B	166503050030	16-DEC-2006 01:17	166428475003	25-OCT-2006	56893	58857	50.000	51.726	mg/L	3	15
GC15B	B	166503050046	16-DEC-2006 08:39	166428475003	25-OCT-2006	56893	62280	50.000	54.734	mg/L	9	15

SEQUENCE SUMMARY FOR 191290 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 166428475 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 24-OCT-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IQC	SPK	UL	VL	pH	Stds	Used	>LR
001	297b001	X	IB			24-OCT-2006 13:15	1.0								
002	297b002	X	IB			24-OCT-2006 13:44	1.0								
003	297b003	X	IB			24-OCT-2006 14:12	1.0								
004	297b004	X	IB			24-OCT-2006 14:39	1.0								
005	297b005	X	CM			24-OCT-2006 15:38	1.0								
006	297b006	CCV	DSL_250			24-OCT-2006 16:05	1.0		7	3					
007	297b007	CCV	MO_500			24-OCT-2006 16:33	1.0		2	3					
008	297b008	CCV	JET_250			24-OCT-2006 17:00	1.0		1	3					
009	297b009	X	IB			24-OCT-2006 17:31	1.0								
010	297b010	ICAL	DSL_10			24-OCT-2006 17:58	1.0								
011	297b011	ICAL	DSL_100			24-OCT-2006 18:26	1.0								
012	297b012	ICAL	DSL_250			24-OCT-2006 18:53	1.0								
013	297b013	ICAL	DSL_500			24-OCT-2006 19:21	1.0								
014	297b014	ICAL	DSL_1000			24-OCT-2006 19:48	1.0								
015	297b015	ICAL	DSL_2500			24-OCT-2006 20:15	1.0								
016	297b016	ICAL	DSL_5000			24-OCT-2006 20:43	1.0								
017	297b017	ICV	DSL_500			24-OCT-2006 21:15	10.0			3					
018	297b018	CCV	MO_500			24-OCT-2006 21:43	1.0		6	3					
019	297b019	X	IB			24-OCT-2006 22:13	1.0								
020	297b020	ICAL	MO_50			24-OCT-2006 22:40	1.0								
021	297b021	ICAL	MOL_250			24-OCT-2006 23:08	1.0								
022	297b022	ICAL	MO_500			24-OCT-2006 23:35	1.0								
023	297b023	ICAL	MO_1000			25-OCT-2006 00:03	1.0								
024	297b024	ICAL	MO_2500			25-OCT-2006 00:30	1.0								
025	297b025	ICAL	MO_5000			25-OCT-2006 00:58	1.0								
026	297b026	X	IB			25-OCT-2006 01:26	1.0								
027	297b027	ICAL	HEX_5			25-OCT-2006 01:54	1.0								
028	297b028	ICAL	HEX_10			25-OCT-2006 02:21	1.0								
029	297b029	ICAL	HEX_25			25-OCT-2006 02:48	1.0								
030	297b030	ICAL	HEX_50			25-OCT-2006 03:15	1.0								

Stds used: 1=S4049 2=S4386 3=S4408 4=S4560 5=S4539 6=S4540 7=S4541 8=S4542 9=S4543 10=S4544 11=S4538 12=S4615 13=S3326 14=S3327 15=S3328 16=S3329 17=S3330 18=S3325 19=S4639
20=S4640 21=S4641 22=S4642 23=S4643 24=S4644 25=S4645 26=S3614 27=S3615 28=S3616 29=S3617 30=S3618 31=S3619 32=S3526

SEQUENCE SUMMARY FOR 191290 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 166428475 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 24-OCT-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	lenum	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR	..
031	297b031	ICAL	HEX_75				25-OCT-2006 03:43	1.0						23			
032	297b032	ICAL	HEX_100				25-OCT-2006 04:10	1.0						24			
033	297b033	ICAL	HEX_200				25-OCT-2006 04:37	1.0						25			
034	297b034	X	IB				25-OCT-2006 05:05	1.0									
035	297b035	ICAL	JET_10				25-OCT-2006 05:33	1.0						26			
036	297b036	ICAL	JET_100				25-OCT-2006 06:00	1.0						27			
037	297b037	ICAL	JET_500				25-OCT-2006 06:28	1.0						28			
038	297b038	ICAL	JET_1000				25-OCT-2006 06:55	1.0						29			
039	297b039	ICAL	JET_2000				25-OCT-2006 07:23	1.0						30			
040	297b040	ICAL	JET_3000				25-OCT-2006 07:50	1.0						31			
041	297b041	ICAL	JET_5000				25-OCT-2006 08:18	1.0						32			
042	297b042	X	IB				25-OCT-2006 08:45	1.0									

Stds used: 1=S4049 2=S4386 3=S4408 4=S4560 5=S4539 6=S4540 7=S4541 8=S4542 9=S4543 10=S4544 11=S4538 12=S4615 13=S3326 14=S3327 15=S3328 16=S3329 17=S3330 18=S3325 19=S4639
20=S4640 21=S4641 22=S4642 23=S4643 24=S4644 25=S4645 26=S3614 27=S3615 28=S3616 29=S3617 30=S3618 31=S3619 32=S3526

SEQUENCE SUMMARY FOR 191290 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 166500697 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 13-DEC-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	num	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
001	347b001	X	IB				13-DEC-2006	16:57	1.0						
002	347b002	ICAL	MO_50				13-DEC-2006	17:24	1.0	1.0			1		
003	347b003	ICAL	MO_250				13-DEC-2006	17:52	1.0	1.0			2		
004	347b004	ICAL	MO_500				13-DEC-2006	18:20	1.0	1.0			3		
005	347b005	ICAL	MO_1000				13-DEC-2006	18:48	1.0	1.0			4		
006	347b006	ICAL	MO_5000				13-DEC-2006	19:15	1.0	1.0			5		
007	347b007	CCV	MO_500				13-DEC-2006	19:57	1.0	1.0			6		
008	347b008	CCV	DSL_500				13-DEC-2006	20:24	1.0	1.0	2		7		
009	347b009	BLANK	QC367007 S		120048	Soil	13-DEC-2006	20:52	1.0	0.09982	9				
010	347b010	LCS	QC367008 S		120048	Soil	13-DEC-2006	21:20	1.0	0.09982					
011	347b011	SAMPLE	191106-005 S		120048	Soil	13-DEC-2006	21:47	1.0	0.09974					
012	347b012	SAMPLE	191106-006 S		120048	Soil	13-DEC-2006	22:15	1.0	0.0998					
013	347b013	SAMPLE	191106-007 S		120048	Soil	13-DEC-2006	22:42	1.0	0.09994					
014	347b014	SAMPLE	191106-004 S		120048	Soil	13-DEC-2006	23:10	1.0	0.09996					
015	347b015	SAMPLE	191106-002 S		120048	Soil	13-DEC-2006	23:38	1.0	0.09998					
016	347b016	SAMPLE	191106-003 S		120048	Soil	14-DEC-2006	00:05	1.0	0.09994					
017	347b017	X	IB				14-DEC-2006	00:33	1.0						
018	347b018	MS	QC368074		120310	Soil	14-DEC-2006	01:00	1.0	0.998					
019	347b019	MSD	QC368075		120310	Soil	14-DEC-2006	01:28	1.0	1.016					
020	347b020	CCV	DSL_1000				14-DEC-2006	01:56	1.0	1.0			8		
021	347b021	CCV	MO_500				14-DEC-2006	02:23	1.0	1.0			6		
022	347b022	X	CCV				14-DEC-2006	02:50	1.0				8		
023	347b023	X	CCV				14-DEC-2006	03:18	1.0				6		
024	347b024	SAMPLE	191333-007 S		120188	Soil	14-DEC-2006	03:45	1.0	0.09998					
025	347b025	SAMPLE	191333-008 S		120188	Soil	14-DEC-2006	04:13	1.0	0.09976					
026	347b026	SAMPLE	191327-001 S		120297	Water	14-DEC-2006	04:40	1.0	0.005					
027	347b027	SAMPLE	191327-002 S		120297	Water	14-DEC-2006	05:08	1.0	0.005					
028	347b028	SAMPLE	191372-001 S		120297	Water	14-DEC-2006	05:36	1.0	0.005					
029	347b029	X	IB				14-DEC-2006	06:04	1.0						
030	347b030	SAMPLE	191372-002 S		120297	Water	14-DEC-2006	06:31	1.0	0.005					
031	347b031	SAMPLE	191372-003 S		120297	Water	14-DEC-2006	06:59	1.0	0.005					

Stds used: 1=S4754 2=S4755 3=S4756 4=S4758 5=S4753 6=S4887 7=S4558 8=S4559 9=S4556

SEQUENCE SUMMARY FOR 191290 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 166500697 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 13-DEC-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used
032	347b032	SAMPLE	191372-004	S	120297	Water	14-DEC-2006 07:26 1.0	0.005		3		
033	347b033	SAMPLE	191372-005	S	120297	Water	14-DEC-2006 07:54 1.0	0.005		3		
034	347b034	CCV	DSL_250				14-DEC-2006 08:22 1.0	1.0		3		9
035	347b035	CCV	MO_500				14-DEC-2006 08:49 1.0	1.0		3		6

Stds used: 1=S4754 2=S4755 3=S4756 4=S4758 5=S4753 6=S4887 7=S4558 8=S4559 9=S4556

SEQUENCE SUMMARY FOR 191290 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 166503050 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 15-DEC-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used	>LR
001	349b001	X	PRIMER			15-DEC-2006 08:10	1.0						
002	349b002	X	IB			15-DEC-2006 08:37	1.0						
003	349b003	CCV	DSL_500			15-DEC-2006 09:05	1.0	1.0				1	
004	349b004	CCV	MO_500			15-DEC-2006 09:33	1.0	1.0	2			2	
005	349b005	SAMPLE	191422-002	120331	Water	15-DEC-2006 10:25	1.0	0.005					
006	349b006	SAMPLE	191422-001	120331	Water	15-DEC-2006 10:53	1.0	0.005					
007	349b007	SAMPLE	191422-003	120331	Water	15-DEC-2006 11:21	1.0	0.005					
008	349b008	SAMPLE	191425-001 S	120331	Water	15-DEC-2006 11:49	1.0	0.005					
009	349b009	SAMPLE	191425-002	120331	Water	15-DEC-2006 12:17	3.0	0.005					
010	349b010	X	IB			15-DEC-2006 12:45	1.0						
011	349b011	SAMPLE	191388-049	120331	Water	15-DEC-2006 13:13	1.0	0.005					
012	349b012	SAMPLE	191388-065	120331	Water	15-DEC-2006 13:41	1.0	0.005					
013	349b013	SAMPLE	191388-025	120331	Water	15-DEC-2006 14:09	1.0	0.005					
014	349b014	SAMPLE	191388-027	120331	Water	15-DEC-2006 14:38	1.0	0.005					
015	349b015	X	IB			15-DEC-2006 16:13	1.0						
016	349b016	CCV	DSL_250			15-DEC-2006 16:41	1.0	1.0				3	
017	349b017	CCV	MO_500			15-DEC-2006 17:09	1.0	1.0	2			2	
018	349b018	BLANK	QC368414 S	120392	Water	15-DEC-2006 19:44	1.0	0.005					
019	349b019	LCS	QC368415 S	120392	Water	15-DEC-2006 20:12	1.0	0.005					
020	349b020	MSS	191286-012 S	120392	Water	15-DEC-2006 20:40	1.0	0.005	8				
021	349b021	MS	QC368416 S	120392	Water	15-DEC-2006 21:07	1.0	0.005					
022	349b022	MSD	QC368417 S	120392	Water	15-DEC-2006 21:35	1.0	0.005					
023	349b023	SAMPLE	191286-001 S	120392	Water	15-DEC-2006 22:03	1.0	0.005					
024	349b024	X	IB			15-DEC-2006 22:31	1.0						
025	349b025	SAMPLE	191286-002 S	120392	Water	15-DEC-2006 22:58	1.0	0.005					
026	349b026	SAMPLE	191286-003 S	120392	Water	15-DEC-2006 23:26	1.0	0.005					
027	349b027	SAMPLE	191286-004 S	120392	Water	15-DEC-2006 23:54	1.0	0.005					
028	349b028	SAMPLE	191286-005 S	120392	Water	16-DEC-2006 00:22	1.0	0.005					
029	349b029	X	IB			16-DEC-2006 00:49	1.0						
030	349b030	CCV	DSL_500			16-DEC-2006 01:17	1.0	1.0				1	
031	349b031	CCV	MO_500			16-DEC-2006 01:45	1.0	1.0	2			2	

Stds used: 1=S4558 2=S4887 3=S4556 4=S4559

SEQUENCE SUMMARY FOR 191290 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 166503050 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 15-DEC-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	num	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
032	349b032	X	CV				16-DEC-2006 02:12	1.0					1		
033	349b033	X	CCV				16-DEC-2006 02:40	1.0					2		
034	349b034	SAMPLE	191286-006	S	120392	Water	16-DEC-2006 03:08	1.0	0.005			3			
035	349b035	SAMPLE	191315-005	S	120392	Water	16-DEC-2006 03:35	1.0	0.005			3			
036	349b036	SAMPLE	191315-004	S	120392	Water	16-DEC-2006 04:03	1.0	0.005			3			
037	349b037	SAMPLE	191315-003	S	120392	Water	16-DEC-2006 04:30	1.0	0.005			3			
038	349b038	SAMPLE	191315-002	S	120392	Water	16-DEC-2006 04:58	1.0	0.005			3			
039	349b039	SAMPLE	191315-001	S	120392	Water	16-DEC-2006 05:26	1.0	0.005			3			
040	349b040	X	IB				16-DEC-2006 05:53	1.0							
041	349b041	SAMPLE	191290-001	S	120392	Water	16-DEC-2006 06:21	1.0	0.005			3			
042	349b042	SAMPLE	191286-013	S	120392	Water	16-DEC-2006 06:49	1.0	0.005			3			
043	349b043	SAMPLE	191286-010	S	120392	Water	16-DEC-2006 07:16	1.0	0.005			3			
044	349b044	SAMPLE	191312-001	S	120392	Water	16-DEC-2006 07:43	1.0	0.005		2	1	3		16:BUNKC:=41416.0
045	349b045	X	IB				16-DEC-2006 08:11	1.0							
046	349b046	CCV	DSL_500				16-DEC-2006 08:39	1.0	1.0			3	1		
047	349b047	CCV	MO_500				16-DEC-2006 09:06	1.0	1.0		2	3	2		
048	349b048	X	CV				16-DEC-2006 09:34	1.0					1		
049	349b049	X	CCV				16-DEC-2006 10:02	1.0					2		
050	349b050	SAMPLE	191286-011	S	120392	Water	16-DEC-2006 10:30	1.0	0.005			3			
051	349b051	SAMPLE	191286-009	S	120392	Water	16-DEC-2006 10:57	1.0	0.005			3			
052	349b052	SAMPLE	191286-008	S	120392	Water	16-DEC-2006 11:24	1.0	0.005			3			
053	349b053	SAMPLE	191286-007	S	120392	Water	16-DEC-2006 11:52	1.0	0.005			3			
054	349b054	X	IB				16-DEC-2006 12:20	1.0							
055	349b055	CCV	DSL_1000				16-DEC-2006 12:48	1.0	1.0			3	4		
056	349b056	CCV	MO_500				16-DEC-2006 13:15	1.0	1.0		1	3	2		
057	349b057	X	CCV				16-DEC-2006 13:43	1.0					4		
058	349b058	X	CCV				16-DEC-2006 14:11	1.0					2		

Stds used: 1=S4558 2=S4887 3=S4556 4=S4559

REPORTING SUMMARY FOR 191290 TEHM Water
Curtis & Tompkins Laboratories

				D S L :	M O : 2	H X C S	
Lab ID	Inst ID	Analyzed	IDF				
191290-001	GC15B	12/16/06 06:21	1.0	+	+	+	
QC368414	GC15B	12/15/06 19:44	1.0	+	+	+	
QC368415	GC15B	12/15/06 20:12	1.0	+		+	
QC368416	GC15B	12/15/06 21:07	1.0	+		+	
QC368417	GC15B	12/15/06 21:35	1.0	+		+	

Curtis & Tompkins Laboratories

Sample Preparation Summary

15-DEC-2006 18:18

Batch Number : 120392
Date Extracted: 14-DEC-2006
Extracted by : Jessie O'Brien Mee
Prep Method : 3520C

Analysis : N/A
Bgroup : TEH
Units : mL
Clean-up :

Spike #1 ID : S5034A
Spike #2 ID : S4805E
Spike #3 ID :
SDP Version : TEH50LL rv10

Sample	Type	Client	Matrix	Init	Units	Final	Prep	Clean	pH	Sp 1	Sp 2	Sp 3	Analyses	Clean	Comments
				W/V	Vol	D.F.	D.F.	D.F.	Vol	Vol	Vol	Vol		Method	
191286-001		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEH	3630C	
191286-002		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEHM	3630C	
191286-003		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEHM	3630C	
191286-004		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEH	3630C	
191286-005		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEHM	3630C	
191286-006		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEHM	3630C	
191286-007		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEHM	3630C	
191286-008		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEHM	3630C	
191286-009		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEHM	3630C	
191286-010		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEHM	3630C	
191286-011		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEHM	3630C	
191286-012		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEHM	3630C	
191286-013		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEHM	3630C	
191290-001		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEHM	3630C	
191312-001		Blasland, Bouck & Lee	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEHM	3630C	
191315-001		Blasland, Bouck & Lee	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEHM	3630C	
191315-002		Blasland, Bouck & Lee	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEHM	3630C	
191315-003		Blasland, Bouck & Lee	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEHM	3630C	
191315-004		Blasland, Bouck & Lee	Water	500	mL	2.5	0.005000	1	7	.5	0	0	TEHM	3630C	
191315-005		Blasland, Bouck & Lee	Water	500	mL	2.5	0.005000	1	10	.5	0	0	TEHM	3630C	
QC368414	BLANK		Water	500	mL	2.5	0.005000	1		.5	0	0	TEH	3630C	
QC368415	LCS		Water	500	mL	2.5	0.005000	1		.5	.5	.5	TEH	3630C	
QC368416	MS	of 191286-012	Water	500	mL	2.5	0.005000	1	7	.5	.5	.5	TEH	3630C	
QC368417	MSD	of 191286-012	Water	500	mL	2.5	0.005000	1	7	.5	.5	.5	TEH	3630C	

Prep Chemist:

Reviewed By:

Date:

Relinquished By:

Received By:

Date:

[Signature]
[Signature]
[Signature]

LIMS Batch No: 120392
 LIMS Analysis: TEH/M
 Extracted by: JOM
 Date Extracted: 14 Dec 06

Extraction Method:
☐ mod. EPA 3510 sep. funnel
☒ mod. EPA 3520 cont. L/L
☐ _____

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 Cleanup Method (if needed):
☒ EPA 3630 Silica Gel
☐ Other _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
191286-001 I	500	7	2.5	X	
02 G					
03 J					
04 I					
05 G					
06 J					
07 E					
08 F					
09 J					
10 ↓					
11 ↓					
12 Z					MSS
13 I					
191290-001 M					
191312-001 F					
191315-001 E					some plastic product in H ₂ O
02 G					
03 E					
04 G					
05 G		10			
MB RC 303 414		NA			
LCS 15		↓			
MS 16		7			191286-012 AA
MSD 17		7			↓

JOM 12/14/06

0.5 mL of TEH SURR was added to all samples

0.5 mL of TEH SP was added to all spikes

pH of all samples adjusted to pH ≤ 2 with H₂SO₄

☒ Samples were continually extracted about 450 mL of CH₂Cl₂
 & HPLC H₂O

Extraction Start Time:

Extraction End Time:

☐ Samples were extracted 3 times with 60 mL of CH₂Cl₂

Extracts filtered through baked, CH₂Cl₂-rinsed granular Na₂SO₄

Concentrated to volumes as noted above

Mfg & Lot# / LIMS # / Time Date/ Initials

S5034A

S4805E

FS054522

EM46305 / JTRC31E23

1710

1110

N/A

EM46111128

JOM 12/14/06

↓

↓

↓

↓

SFL 12/15/06

↓

↓

↓

Jessie Mee 12/14/06
 Extraction Chemist Date

Continued from Page
 Continued on Page

12/5/06
 Reviewed by : Date

Prep Chemist: JXMCleanup Date: 12 Dec 06Benchbook # **BK 2423**

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Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
191286-01	120392	1.0	1.0	
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				USS
✓ 13				
191290-01				
15 191312-01				
191315-01				
02				
03				
04				
20 ✓ 05				
MB QC368414				
LCS ↓ 15				
MS ↓ 16				
MSD ✓ 17				
25				
30				

☐ Extracts were cleaned up using C&T assembled g columns

☒ Extracts were cleaned up using 1.0 g cartridges
Extracts were eluted with 40 mL CH₂Cl₂

Concentrated to volumes as noted above

Mfg & Lot # / Time / Program	Initials / Date
NA	JXM 12/15/06
SP8111	
EM46305	↓

JXM 12/15/06
Extraction Chemist / Date

Continued from page
Continued on page

Review SP8111 Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 01/05/07

Analyte	Units	GC11A	GC13B B	GC15B	GC17A	GC14B B
JP-5 C10-C16	ug/L	17	16	7.9	5.4	
Jet Fuel A C10-C16	ug/L	14	30	24	33	
Diesel C10-C28	ug/L	18	11	22	37	30
Diesel C10-C24	ug/L	21	15	18	33	26
Diesel C12-C22	ug/L	19	17	20	25	22
Diesel C12-C24	ug/L	20	13	20	33	23
Diesel C12-C28	ug/L		31			
Diesel C12-C32	ug/L	22	14	25	23	36
Diesel C12-C36	ug/L	13	17			
Diesel C10-C20	ug/L		16	13	19	29
Diesel C10-C22	ug/L	21	18	19	27	26
Motor Oil C22-C36	ug/L	120	110	120	140	84
Motor Oil C28-C40	ug/L	67	68	63	78	59
Motor Oil C28-C36	ug/L	64	74	64	69	53
Motor Oil C24-C36	ug/L	150	140	140	170	110
Motor Oil C20-C36	ug/L	120	99	110	130	75
Motor Oil C22-C32	ug/L	140	130	21	160	94
Hexacosane	ug/L	4.5	16	13	3.1	17

**VOLATILE ORGANIC
COMPOUNDS**



Purgeable Organics by GC/MS

Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	DW120606B	Batch#:	120370
Lab ID:	191290-001	Sampled:	12/06/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Analyzed:	12/14/06
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.03
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	101	80-120
1,2-Dichloroethane-d4	101	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	101	86-115

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC368305	Batch#:	120370
Matrix:	Water	Analyzed:	12/14/06
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.03
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	100	80-120
1,2-Dichloroethane-d4	100	76-114
Toluene-d8	99	88-110
Bromofluorobenzene	102	86-115

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

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24.0

: 00049

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	120370
Units:	ug/L	Analyzed:	12/14/06
Diln Fac:	1.000		

Type: BS Lab ID: QC368303

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	26.10	104	65-135
Benzene	25.00	25.68	103	65-135
Trichloroethene	25.00	25.86	103	65-135
Toluene	25.00	25.80	103	65-135
Chlorobenzene	25.00	25.79	103	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-120
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	97	86-115

Type: BSD Lab ID: QC368304

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	25.62	102	65-135	2	35
Benzene	25.00	25.38	102	65-135	1	35
Trichloroethene	25.00	25.52	102	65-135	1	35
Toluene	25.00	25.75	103	65-135	0	35
Chlorobenzene	25.00	25.84	103	65-135	0	35

Surrogate	%REC	Limits
Dibromofluoromethane	98	80-120
1,2-Dichloroethane-d4	97	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	98	86-115

RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 191290 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name: BFB IDF : 1.0
Seqnum : 496500266004 File : jld04 Time : 13-DEC-2006 11:42

Standards: S3716

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	111144	22.01	
75	30.00% - 60.00% of mass 95	229482	45.44	
95		505066		
96	5.00% - 9.00% of mass 95	32437	6.42	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	371136	73.48	
175	5.00% - 9.00% of mass 174	27418	7.39	
176	> 95.00% and < 101.00% of mass 174	361706	97.46	
177	5.00% - 9.00% of mass 176	24378	6.74	

Analyst: ACM Date: 12/14/06 Reviewer: LW Date: 12/14/06

CURTIS & TOMPKINS BFB TUNE FOR 191290 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name: BFB IDF : 1.0
Seqnum : 496501739002 File : jle02 Time : 14-DEC-2006 11:39

Standards: S3716

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	117818	21.79	
75	30.00% - 60.00% of mass 95	241642	44.70	
95		540608		
96	5.00% - 9.00% of mass 95	36632	6.78	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	405440	75.00	
175	5.00% - 9.00% of mass 174	30578	7.54	
176	> 95.00% and < 101.00% of mass 174	391872	96.65	
177	5.00% - 9.00% of mass 176	25522	6.51	

Analyst: ACM Date: 12/14/06 Reviewer: LW Date: 12/15/06

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191290 MSVOA Water: EPA 8260B

Inst : MSVOA10
 Calnum : 496500266005
 Units : ug/L

Name : 826GOX10
 Date : 13-DEC-2006 13:15
 X Axis: R

Type : WATER

Level	File	Segment	Sample ID	Analyzed	Std
L1	11d07	496500266007	0.25/0.5PPB	13-DEC-2006 13:15	S5064 (2000000X), S4931 (1000000X), S4172 (2000000X), S4696 (5000X)
L2	11d08	496500266008	0.5/1PPB	13-DEC-2006 13:48	S5064 (1000000X), S4931 (5000000X), S4172 (1000000X), S4696 (5000X)
L3	11d09	496500266009	2PPB	13-DEC-2006 14:21	S5064 (2500000X), S4931 (2500000X), S4172 (5000000X), S4696 (5000X)
L4	11d10	496500266010	5PPB	13-DEC-2006 14:55	S5064 (1000000X), S4931 (1000000X), S4172 (2000000X), S4696 (5000X)
L5	11d11	496500266011	10PPB	13-DEC-2006 15:29	S5064 (5000000X), S4931 (5000000X), S4172 (1000000X), S4696 (5000X)
L6	11d12	496500266012	20PPB	13-DEC-2006 16:02	S5064 (2500000X), S4931 (2500000X), S4172 (5000000X), S4696 (5000X)
L7	11d13	496500266013	50PPB	13-DEC-2006 16:35	S5064 (1000000X), S4931 (1000000X), S4172 (2000000X), S4696 (5000X)
L8	11d14	496500266014	75PPB	13-DEC-2006 17:08	S5064 (6667X), S4931 (6667X), S4172 (13330X), S4696 (5000X)
L9	11d15	496500266015	100PPB	13-DEC-2006 17:41	S5064 (5000X), S4931 (5000X), S4172 (100000X), S4696 (5000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ²	Max	Min	r ²	Fig
Chloromethane	0.6847	0.5631	0.6150m	0.6041	0.6220	0.5911	0.6102	0.6167	AVRG		1.63037			0.6134	6	15	0.10	0.99	
Vinyl Chloride	0.4900m	0.4779	0.4440m	0.5045	0.5235	0.5116	0.5034	0.5130	0.5173	AVRG		2.00654		0.4984	5	15	0.050	0.99	
Bromomethane	0.3473m	0.2965m	0.3137m	0.3191	0.3087	0.3201	0.3427	0.3416	AVRG		3.08916			0.3237	6	15	0.050	0.99	
Chloroethane	0.3808m	0.3088m	0.3372	0.3401	0.3317	0.3285	0.3382	0.3331	AVRG		2.96461			0.3373	6	15	0.050	0.99	
Acetone			0.1690	0.1776	0.1663	0.1452	0.1581	0.1556	AVRG		6.17354			0.1620	7	15	0.050	0.99	
1,1-Dichloroethene	0.3006	0.2777m	0.2935	0.2989	0.3017	0.2824	0.2894	0.2922	AVRG		3.42402			0.2921	3	15	0.050	0.99	
Methylene Chloride		0.5137	0.4615	0.4335	0.4192	0.3874	0.3980	0.3967	AVRG		2.32551			0.4300	10	15	0.050	0.99	
Carbon Disulfide	1.5957	1.3453	1.4973	1.4727	1.4991	1.4137	1.4187	1.4565	AVRG		0.68383			1.4624	5	15	0.050	0.99	
MTBE	1.3723	1.0592	1.2441	1.2869	1.2151	1.1427	1.1942	1.1972	AVRG		0.82375			1.2140	8	15	0.050	0.99	
trans-1,2-Dichloroethene	0.4201	0.3259	0.3650	0.3728	0.3630	0.3387	0.3510	0.3527	AVRG		2.76886			0.3612	8	15	0.050	0.99	
Vinyl Acetate			1.3448m	1.4804m	1.5073m	1.4279	1.4267	1.4396	AVRG		0.69552			1.4378	4	15	0.050	0.99	
1,1-Dichloroethane	0.8400	0.6550	0.7428	0.7221	0.7108	0.6661	0.6842	0.6681	AVRG		1.40621			0.7111	8	15	0.10	0.99	
2-Butanone		0.2259	0.2617	0.2656	0.2587	0.2526	0.2682	0.2648	AVRG		3.89445			0.2568	6	15	0.050	0.99	
cis-1,2-Dichloroethene	0.4424	0.3885m	0.4087	0.3987	0.3883	0.3743	0.3845	0.3863	AVRG		2.52220			0.3965	5	15	0.050	0.99	
Chloroform	0.6132	0.5484	0.6197	0.5930	0.5866	0.5488	0.5838	0.5630	AVRG		1.71803			0.5821	5	15	0.050	0.99	
1,1,1-Trichloroethane	0.3824	0.3583	0.3995	0.3825	0.4007	0.3769	0.3767	0.3953	AVRG		2.60389			0.3840	4	15	0.050	0.99	
Carbon Tetrachloride	0.1536	0.1492	0.1728	0.1611	0.1672	0.1652	0.1542	0.1660	AVRG		6.20437			0.1612	5	15	0.050	0.99	
1,2-Dichloroethane	0.2707	0.2411	0.2769	0.2797	0.2681	0.2628	0.2635	0.2643	AVRG		3.76092			0.2659	4	15	0.050	0.99	
Benzene	1.3420	0.8225	0.8482	0.7895	0.7931	0.7771	0.7567	0.7727	AVRG		1.30718			0.8627	1.000	15	0.050	0.99	
Trichloroethene	0.1862	0.1588	0.1920	0.1733	0.1822	0.1748	0.1713	0.1749	AVRG		5.65956			0.1767	6	15	0.050	0.99	
1,2-Dichloropropane	0.2891	0.2144	0.2570	0.2479	0.2377	0.2313	0.2304	0.2306	AVRG		4.12712			0.2423	9	15	0.050	0.99	
Bromodichloromethane	0.2629	0.2157	0.2599	0.2581	0.2467	0.2410	0.2471	0.2476	AVRG		4.04247			0.2474	6	15	0.050	0.99	
4-Methyl-2-Pentanone	0.3343	0.2683	0.3386	0.3770	0.3575	0.3288	0.3520	0.3310	AVRG		2.97660			0.3360	9	15	0.050	0.99	
cis-1,3-Dichloropropene	0.3732	0.2972	0.3659	0.3550	0.3416	0.3226	0.3368	0.3388	AVRG		2.92910			0.3414	7	15	0.050	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ²	Max	Min	Fig
Toluene		0.5384	0.4160	0.4759	0.4218	0.4432	0.4231	0.4109	0.4260	AVRG		2.25019		0.4444	10	15	0.050	0.99
trans-1,3-Dichloropropene		0.3193	0.2718m	0.3187	0.3203	0.3034	0.2947	0.3030	0.3093	AVRG		3.27806		0.3051	5	15	0.050	0.99
1,1,2-Trichloroethane		0.1079	0.0950	0.1058	0.1071	0.1041	0.0998	0.1024	0.1021	AVRG		9.70885		0.1030	4	15	0.050	0.99
2-Hexanone			0.1623	0.2034	0.2138	0.2064	0.2037	0.2045	0.2138	AVRG		4.97144		0.2011	9	15	0.050	0.99
Tetrachloroethene		0.1849	0.1555	0.1825	0.1497	0.1663	0.1581	0.1483	0.1642	AVRG		6.10952		0.1637	8	15	0.050	0.99
Dibromochloromethane		0.1872	0.1680	0.2109	0.2038	0.2009	0.2003	0.2043	0.2090	AVRG		5.04951		0.1980	7	15	0.050	0.99
Chlorobenzene		0.5492	0.4460	0.5467	0.4800	0.4994	0.4811	0.4788	0.4886	AVRG		2.01524		0.4962	7	15	0.30	0.99
Ethylbenzene		0.9923	0.7689	0.9344	0.7565	0.8338	0.7926	0.7581	0.8030	AVRG		1.20487		0.8300	11	15	0.050	0.99
m,p-Xylenes	0.4765	0.3981	0.2871	0.3397	0.2836	0.3052	0.2932	0.2776	0.2951	LINR	-0.4140	3.45793		0.3285	0.999	15	0.050	0.99
o-Xylene		0.3499	0.2825	0.3404	0.2881	0.2992	0.2890	0.2819	0.2924	AVRG		3.30102		0.3029	9	15	0.050	0.99
Styrene		0.5958	0.4750	0.5872	0.5305	0.5363	0.5303	0.5166	0.5304	AVRG		1.85955		0.5376	7	15	0.050	0.99
Bromoforn		0.1958	0.1249	0.1544	0.1484	0.1419	0.1434	0.1489	0.1517	AVRG		6.61510		0.1512	13	15	0.10	0.99
1,1,2,2-Tetrachloroethane		0.5971	0.5279	0.6215	0.6261	0.5752	0.5451	0.5705	0.5648	AVRG		1.72852		0.5785	6	15	0.30	0.99
Dibromofluoromethane	0.6298	0.6408	0.6396	0.6338	0.6462	0.6210	0.6282	0.6459	0.6380	AVRG		1.57250		0.6359	1	15	0.050	0.99
1,2-Dichloroethane-d4	0.3736	0.3843	0.3748	0.3719	0.3814	0.3612	0.3756	0.3790	0.3712	AVRG		2.66824		0.3748	2	15	0.050	0.99
Toluene-d8	1.1585	1.1405	1.1534	1.1469	1.1524	1.1458	1.1571	1.1483	1.1414	AVRG		0.87004		1.1494	1	15	0.050	0.99
Bromofluorobenzene	1.1946	1.1802	1.1938	1.1972	1.1582	1.1683	1.1561	1.1651	1.1430	AVRG		0.85255		1.1729	2	15	0.050	0.99

Analyst: ACM

Date: 12/14/06

Reviewer: LW

Date: 12/14/06

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; LINR=linear regression

Page 2 of 2

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191290 MSVOA Water
EPA 8260B

Inst : MSVOA10
Calnum : 496500266005

Name : 826GOX10
Cal Date: 13-DEC-2006

Type : WATER

ICV 496500266016 (jld16 13-DEC-2006) stds: S5074 (10000X), S4696 (5000X)
ICV 496500266017 (jld17 13-DEC-2006) stds: S4922 (10000X), S5052 (10000X),
S4696 (5000X)

Analyte	ICV Seqnum	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	496500266016	0.6134	0.5012	25.00	20.43	ug/L	-18	30	
Vinyl Chloride	496500266016	0.4984	0.4184	25.00	20.99	ug/L	-16	20	
Bromomethane	496500266016	0.3237	0.2957	25.00	22.84	ug/L	-9	30	
Chloroethane	496500266016	0.3373	0.3144	25.00	23.30	ug/L	-7	30	
Acetone	496500266017	0.1620	0.1557	25.00	24.03	ug/L	-4	40	
1,1-Dichloroethene	496500266017	0.2921	0.3058	25.00	26.18	ug/L	5	20	
Methylene Chloride	496500266017	0.4300	0.4370	25.00	25.41	ug/L	2	30	
Carbon Disulfide	496500266017	1.4624	1.1667	25.00	19.94	ug/L	-20	30	
MTBE	496500266017	1.2140	1.0972	25.00	22.60	ug/L	-10	30	
trans-1,2-Dichloroethene	496500266017	0.3612	0.3708	25.00	25.66	ug/L	3	30	
Vinyl Acetate	496500266017	1.4378	1.0555	25.00	18.35	ug/L	-27	40	
1,1-Dichloroethane	496500266017	0.7111	0.7378	25.00	25.94	ug/L	4	30	
2-Butanone	496500266017	0.2568	0.2597	25.00	25.29	ug/L	1	40	
cis-1,2-Dichloroethene	496500266017	0.3965	0.4248	25.00	26.79	ug/L	7	30	
Chloroform	496500266017	0.5821	0.6182	25.00	26.55	ug/L	6	20	
1,1,1-Trichloroethane	496500266017	0.3840	0.4248	25.00	27.65	ug/L	11	30	
Carbon Tetrachloride	496500266017	0.1612	0.1860	25.00	28.84	ug/L	15	30	
1,2-Dichloroethane	496500266017	0.2659	0.2738	25.00	25.74	ug/L	3	30	
Benzene	496500266017	0.8627	0.8366	25.00	26.95	ug/L	8	30	
Trichloroethene	496500266017	0.1767	0.1921	25.00	27.18	ug/L	9	30	
1,2-Dichloropropane	496500266017	0.2423	0.2420	25.00	24.97	ug/L	0	20	
Bromodichloromethane	496500266017	0.2474	0.2787	25.00	28.17	ug/L	13	30	
4-Methyl-2-Pentanone	496500266017	0.3360	0.3778	25.00	28.12	ug/L	12	40	
cis-1,3-Dichloropropene	496500266017	0.3414	0.3640	25.00	26.65	ug/L	7	30	
Toluene	496500266017	0.4444	0.4775	25.00	26.86	ug/L	7	20	
trans-1,3-Dichloropropene	496500266017	0.3051	0.2969	25.00	24.33	ug/L	-3	30	
1,1,2-Trichloroethane	496500266017	0.1030	0.1090	25.00	26.46	ug/L	6	30	
2-Hexanone	496500266017	0.2011	0.2111	25.00	26.24	ug/L	5	40	
Tetrachloroethene	496500266017	0.1637	0.1878	25.00	28.68	ug/L	15	30	
Dibromochloromethane	496500266017	0.1980	0.2158	25.00	27.24	ug/L	9	30	
Chlorobenzene	496500266017	0.4962	0.5362	25.00	27.02	ug/L	8	30	
Ethylbenzene	496500266017	0.8300	0.9356	25.00	28.18	ug/L	13	20	
m,p-Xylenes	496500266017	0.3285	0.3382	50.00	58.05	ug/L	16	30	
o-Xylene	496500266017	0.3029	0.3293	25.00	27.18	ug/L	9	30	
Styrene	496500266017	0.5378	0.5999	25.00	27.89	ug/L	12	30	
Bromoform	496500266017	0.1512	0.1564	25.00	25.86	ug/L	3	30	
1,1,2,2-Tetrachloroethane	496500266017	0.5785	0.5970	25.00	25.80	ug/L	3	30	

Data File: \\Gcmssserver\DD\chem\MSVOA10.i\121306.b\JLD07.D
 Report Date: 14-Dec-2006 09:10

Curtis & Tompkins

Data file : \\Gcmssserver\DD\chem\MSVOA10.i\121306.b\JLD07.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 13-DEC-2006 13:15 MS Autotune Date: 10-JUL-2006 14:50
 Operator : VOA Inst ID: MSVOA10.i
 Smp Info : ICAL,S5064,0.0005/1000,S4931,0.001/1000
 Misc Info : S4172,0.0005/1000,0.25/0.5PPB
 Comment :
 Method : \\Gcmssserver\DD\chem\MSVOA10.i\121306.b\826GOX10.m
 Meth Date : 14-Dec-2006 09:09 chemist Quant Type: ISTD
 Cal Date : 13-DEC-2006 13:15 Cal File: JLD07.D
 Als bottle: 7 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.529	4.529	(0.427)	1166	0.50000	0.0984
2 Chloromethane	50	5.011	5.011	(0.472)	8651	0.50000	0.4728
3 Vinyl Chloride	62	5.198	5.198	(0.490)	7308	0.50000	0.4915 (M)
4 Bromomethane	94	5.858	5.858	(0.552)	3563	0.50000	0.3689
5 Chloroethane	64	6.075	6.075	(0.572)	1421	0.50000	0.1412
6 Trichlorofluoromethane	101	6.498	6.498	(0.612)	5340	0.50000	0.4037
7 Ethanol	45	6.676	6.676	(0.629)	3111	25.0000	13.8659
8 Freon 113	101	7.306	7.306	(0.688)	1655	0.25000	0.1900
9 Acetone	43	7.355	7.355	(0.693)	6307	0.25000	1.3052
10 1,1-Dichloroethene	96	7.355	7.355	(0.693)	2567	0.25000	0.2946
11 Isopropanol	45	7.483	7.483	(0.705)	3245	2.50000	2.9843
12 Carbon Disulfide	76	7.789	7.789	(0.734)	12624	0.25000	0.2893
13 Methylene Chloride	84	8.064	8.064	(0.760)	13662	0.25000	1.0650
14 tert-Butyl Alcohol (TBA)	59	8.094	8.094	(0.762)	3145	2.50000	2.5878
15 MTBE	73	8.458	8.458	(0.797)	9821	0.25000	0.2711
16 trans-1,2-Dichloroethene	96	8.498	8.498	(0.801)	3892	0.25000	0.3612
18 Vinyl Acetate	43	9.108	9.108	(0.858)	8728	0.25000	0.2034
19 1,1-Dichloroethane	63	9.118	9.118	(0.859)	6516	0.25000	0.3071
20 Isopropyl Ether (DIPE)	45	9.128	9.128	(0.860)	18199	0.25000	0.2717
21 Ethyl tert-Butyl Ether (ETBE)	59	9.670	9.670	(0.911)	9480	0.25000	0.2455
22 2-Butanone	43	9.916	9.916	(0.934)	2605	0.25000	0.3400
23 cis-1,2-Dichloroethene	96	9.965	9.965	(0.939)	3260	0.25000	0.2756

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
24 2,2-Dichloropropane	77	10.005	10.005	(0.942)	3576	0.25000	0.2769
25 Bromochloromethane	128	10.330	10.330	(0.973)	1155	0.25000	0.2032
26 Chloroform	83	10.399	10.399	(0.980)	5187	0.25000	0.2987
27 Tetrahydrofuran	42	10.418	10.418	(0.981)	20592	2.50000	4.2195
* 28 Pentafluorobenzene	168	10.615	10.615	(1.000)	1491542	50.0000	
29 Dibromofluoromethane	113	10.635	10.635	(1.002)	939435	50.0000	49.5212
30 1,1,1-Trichloroethane	97	10.753	10.753	(1.013)	2940	0.25000	0.2566
31 1,1-Dichloropropene	75	10.999	10.999	(0.932)	3733	0.25000	0.2822
32 Carbon Tetrachloride	117	11.039	11.039	(0.936)	2248	0.25000	0.2585
33 1,2-Dichloroethane-d4	65	11.177	11.177	(0.947)	1007538	50.0000	49.8366
34 1,2-Dichloroethane	62	11.295	11.295	(0.957)	3834	0.25000	0.2673
35 Benzene	78	11.324	11.324	(0.960)	32326	0.25000	0.6946
36 Methyl tert-Amyl Ether (TAME)	73	11.383	11.383	(0.965)	9758	0.25000	0.2735
* 37 1,4-Difluorobenzene	114	11.797	11.797	(1.000)	2697169	50.0000	
38 Trichloroethene	95	12.250	12.250	(1.038)	2863	0.25000	0.3003
39 Trifluorotoluene	146	12.575	12.575	(1.066)	3580	0.25000	0.2624
40 1,2-Dichloropropane	63	12.585	12.585	(1.067)	3684	0.25000	0.2818
41 Dibromomethane	93	12.752	12.752	(1.081)	1168	0.25000	0.1579
42 Bromodichloromethane	83	12.930	12.930	(1.096)	3501	0.25000	0.2623
44 cis-1,3-Dichloropropene	75	13.540	13.540	(1.148)	4382	0.25000	0.2379
45 Tetramethyl THF	43	13.619	13.619	(1.154)	7302	0.25000	0.2817
46 4-Methyl-2-Pentanone	43	13.678	13.678	(1.159)	6039	0.25000	0.3332
47 Toluene-d8	98	13.944	13.944	(1.182)	3124606	50.0000	50.3960
48 Toluene	92	14.033	14.033	(1.190)	9036	0.25000	0.3769
49 trans-1,3-Dichloropropene	75	14.249	14.249	(1.208)	3760	0.25000	0.2284
50 1,1,2-Trichloroethane	85	14.515	14.515	(1.230)	1398	0.25000	0.2516
51 1,3-Dichloropropane	76	14.742	14.742	(0.933)	4518	0.25000	0.2545
53 Tetrachloroethene	166	14.791	14.791	(0.936)	2464	0.25000	0.2913
54 Dibromochloromethane	129	15.067	15.067	(0.953)	2100	0.25000	0.2052
55 1,2-Dibromoethane	107	15.264	15.264	(1.294)	2518	0.25000	0.2367
* 56 Chlorobenzene-d5	117	15.805	15.805	(1.000)	2583701	50.0000	
57 Chlorobenzene	112	15.845	15.845	(1.002)	6807	0.25000	0.2654
58 1,1,1,2-Tetrachloroethane	131	15.904	15.904	(1.006)	2127	0.25000	0.2482
59 Ethylbenzene	91	15.934	15.934	(1.008)	12460	0.25000	0.2905
60 m,p-Xylenes	106	16.071	16.071	(1.017)	12312	0.50000	0.7253
61 o-Xylene	106	16.564	16.564	(1.048)	5552	0.25000	0.3546
62 Styrene	104	16.564	16.564	(1.048)	6587	0.25000	0.2370
63 Bromoform	173	16.820	16.820	(1.064)	2949	0.25000	0.3775
64 Isopropylbenzene	105	16.958	16.958	(0.916)	11138	0.25000	0.3069
65 Cyclohexanone	55	17.106	17.106	(0.924)	4483	2.50000	2.3397
66 Bromofluorobenzene	95	17.155	17.155	(0.927)	1475651	50.0000	50.9215
67 1,1,1,2,2-Tetrachloroethane	83	17.253	17.253	(0.932)	3174	0.25000	0.2220
68 1,2,3-Trichloropropane	75	17.332	17.332	(0.937)	5385	0.25000	0.4241
69 Bromobenzene	156	17.371	17.371	(0.939)	3015	0.25000	0.2915
70 Propylbenzene	91	17.421	17.421	(0.941)	14605	0.25000	0.3249
71 2-Chlorotoluene	91	17.568	17.568	(0.949)	10300	0.25000	0.3231
72 1,3,5-Trimethylbenzene	105	17.588	17.588	(0.951)	8632	0.25000	0.3224
73 4-Chlorotoluene	91	17.687	17.687	(0.956)	9175	0.25000	0.3115
74 tert-Butylbenzene	119	17.992	17.992	(0.972)	6485	0.25000	0.2762
75 1,2,4-Trimethylbenzene	105	18.041	18.041	(0.975)	7746	0.25000	0.3134
76 sec-Butylbenzene	105	18.238	18.238	(0.986)	10192	0.25000	0.2898
77 para-Isopropyl Toluene	119	18.376	18.376	(0.993)	7710	0.25000	0.2978
78 1,3-Dichlorobenzene	146	18.435	18.435	(0.996)	5881	0.25000	0.3133
* 79 1,4-Dichlorobenzene-d4	152	18.504	18.504	(1.000)	1235303	50.0000	

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
80 1,4-Dichlorobenzene	146	18.534	18.534	(1.002)	6233	0.25000	0.3268
81 n-Butylbenzene	91	18.878	18.878	(1.020)	6928	0.25000	0.3186
82 1,2-Dichlorobenzene	146	19.006	19.006	(1.027)	4984	0.25000	0.2765
83 1,2-Dibromo-3-Chloropropane	75	19.991	19.991	(1.080)	336	0.25000	0.1397
84 1,2,4-Trichlorobenzene	180	21.203	21.203	(1.146)	2942	0.25000	0.3914
85 Hexachlorobutadiene	225	21.400	21.400	(1.156)	1090	0.25000	0.3279
86 Naphthalene	128	21.656	21.656	(1.170)	4026	0.25000	0.2455
87 1,2,3-Trichlorobenzene	180	22.040	22.040	(1.191)	1973	0.25000	0.2696

QC Flag Legend

M - Compound response manually integrated.

Column phase: RTX Volatiles

Column diameter: 0.32



Data File: \\Gcmsserver\DD\chem\MSVOA10.i\121306.b\JLD08.D
 Report Date: 14-Dec-2006 09:11

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA10.i\121306.b\JLD08.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 13-DEC-2006 13:48 MS Autotune Date: 10-JUL-2006 14:50
 Operator : VOA Inst ID: MSVOA10.i
 Smp Info : ICAL,S5064,0.001/1000,S4931,0.002/1000
 Misc Info : S4172,0.001/1000,0.5/1PPB
 Comment :
 Method : \\Gcmsserver\DD\chem\MSVOA10.i\121306.b\826GOX10.m
 Meth Date : 14-Dec-2006 09:11 chemist Quant Type: ISTD
 Cal Date : 13-DEC-2006 13:48 Cal File: JLD08.D
 Als bottle: 8 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.528	4.528 (0.427)		7822	1.00000	0.6685 (M)
2 Chloromethane	50	5.021	5.021 (0.473)		20180	1.00000	1.1162
3 Vinyl Chloride	62	5.188	5.188 (0.489)		14087	1.00000	0.9590
4 Bromomethane	94	5.868	5.868 (0.553)		10236	1.00000	1.0728 (M)
5 Chloroethane	64	6.045	6.045 (0.570)		11224	1.00000	1.1289 (M)
6 Trichlorofluoromethane	101	6.498	6.498 (0.612)		11154	1.00000	0.8536
7 Ethanol	45	6.666	6.666 (0.628)		12469	50.0000	56.2481 (M)
8 Freon 113	101	7.316	7.316 (0.689)		3597	0.50000	0.4181
9 Acetone	43	7.355	7.355 (0.693)		7472	0.50000	1.5650
10 1,1-Dichloroethene	96	7.365	7.365 (0.694)		4430	0.50000	0.5146
11 Isopropanol	45	7.483	7.483 (0.705)		7182	5.00000	6.6850 (M)
12 Carbon Disulfide	76	7.788	7.788 (0.734)		23516	0.50000	0.5455
13 Methylene Chloride	84	8.074	8.074 (0.761)		14533	0.50000	1.1466 (M)
14 tert-Butyl Alcohol (TBA)	59	8.103	8.103 (0.763)		6453	5.00000	5.3740
15 MTBE	73	8.448	8.448 (0.796)		20223	0.50000	0.5652
16 trans-1,2-Dichloroethene	96	8.497	8.497 (0.801)		6191	0.50000	0.5816
18 Vinyl Acetate	43	9.108	9.108 (0.858)		34078	0.50000	0.8041
19 1,1-Dichloroethane	63	9.108	9.108 (0.858)		12379	0.50000	0.5906
20 Isopropyl Ether (DIPE)	45	9.128	9.128 (0.860)		37447	0.50000	0.5660 (M)
21 Ethyl tert-Butyl Ether (ETBE)	59	9.669	9.669 (0.911)		20806	0.50000	0.5454
22 2-Butanone	43	9.925	9.925 (0.935)		3560	0.50000	0.4703
23 cis-1,2-Dichloroethene	96	9.975	9.975 (0.940)		6519	0.50000	0.5578

: 000000

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
24 2,2-Dichloropropane	77	9.994	9.994	(0.942)	7265	0.50000	0.5695
25 Bromochloromethane	128	10.339	10.339	(0.974)	2560	0.50000	0.4559
26 Chloroform	83	10.398	10.398	(0.980)	9036	0.50000	0.5267
27 Tetrahydrofuran	42	10.418	10.418	(0.981)	37175	5.00000	7.7098 (M)
* 28 Pentafluorobenzene	168	10.615	10.615	(1.000)	1473693	50.0000	
29 Dibromofluoromethane	113	10.635	10.635	(1.002)	944278	50.0000	50.3794
30 1,1,1-Trichloroethane	97	10.763	10.763	(1.014)	5636	0.50000	0.4979
31 1,1-Dichloropropene	75	10.999	10.999	(0.932)	7283	0.50000	0.5544
32 Carbon Tetrachloride	117	11.048	11.048	(0.937)	4114	0.50000	0.4764
33 1,2-Dichloroethane-d4	65	11.176	11.176	(0.947)	1029388	50.0000	51.2705
34 1,2-Dichloroethane	62	11.304	11.304	(0.958)	7250	0.50000	0.5089
35 Benzene	78	11.324	11.324	(0.960)	35947	0.50000	0.7777
36 Methyl tert-Amyl Ether (TAME)	73	11.393	11.393	(0.966)	18498	0.50000	0.5221
* 37 1,4-Difluorobenzene	114	11.797	11.797	(1.000)	2678591	50.0000	
38 Trichloroethene	95	12.260	12.260	(1.039)	4988	0.50000	0.5269
39 Trifluorotoluene	146	12.565	12.565	(1.065)	6758	0.50000	0.4988
40 1,2-Dichloropropane	63	12.585	12.585	(1.067)	7745	0.50000	0.5966
41 Dibromomethane	93	12.752	12.752	(1.081)	3757	0.50000	0.5114
42 Bromodichloromethane	83	12.929	12.929	(1.096)	7041	0.50000	0.5313
44 cis-1,3-Dichloropropene	75	13.540	13.540	(1.148)	9997	0.50000	0.5465
45 Tetramethyl THF	43	13.619	13.619	(1.154)	13799	0.50000	0.5361
46 4-Methyl-2-Pentanone	43	13.668	13.668	(1.159)	8955	0.50000	0.4975
47 Toluene-d8	98	13.944	13.944	(1.182)	3054849	50.0000	49.6126
48 Toluene	92	14.032	14.032	(1.190)	14421	0.50000	0.6057
49 trans-1,3-Dichloropropene	75	14.239	14.239	(1.207)	8554	0.50000	0.5234
50 1,1,2-Trichloroethane	85	14.505	14.505	(1.230)	2889	0.50000	0.5235
51 1,3-Dichloropropane	76	14.751	14.751	(0.933)	8619	0.50000	0.4925
52 2-Hexanone	43	14.791	14.791	(0.936)	4865	0.50000	0.4747
53 Tetrachloroethene	166	14.791	14.791	(0.936)	4710	0.50000	0.5648
54 Dibromochloromethane	129	15.067	15.067	(0.953)	4768	0.50000	0.4725
55 1,2-Dibromoethane	107	15.264	15.264	(1.294)	5243	0.50000	0.4963
* 56 Chlorobenzene-d5	117	15.805	15.805	(1.000)	2547201	50.0000	
57 Chlorobenzene	112	15.845	15.845	(1.002)	13988	0.50000	0.5533
58 1,1,1,2-Tetrachloroethane	131	15.904	15.904	(1.006)	4745	0.50000	0.5618
59 Ethylbenzene	91	15.933	15.933	(1.008)	25277	0.50000	0.5978
60 m,p-Xylenes	106	16.071	16.071	(1.017)	20280	1.00000	1.2119
61 o-Xylene	106	16.554	16.554	(1.047)	8913	0.50000	0.5775
62 Styrene	104	16.564	16.564	(1.048)	15175	0.50000	0.5539
63 Bromoform	173	16.820	16.820	(1.064)	4988	0.50000	0.6476
64 Isopropylbenzene	105	16.958	16.958	(0.916)	22606	0.50000	0.6153
65 Cyclohexanone	55	17.105	17.105	(0.924)	9111	5.00000	4.6969
66 Bromofluorobenzene	95	17.155	17.155	(0.927)	1475970	50.0000	50.3100
67 1,1,2,2-Tetrachloroethane	83	17.253	17.253	(0.932)	7467	0.50000	0.5160
68 1,2,3-Trichloropropane	75	17.332	17.332	(0.937)	8249	0.50000	0.6417
69 Bromobenzene	156	17.381	17.381	(0.939)	5316	0.50000	0.5076
70 Propylbenzene	91	17.420	17.420	(0.941)	26622	0.50000	0.5850
71 2-Chlorotoluene	91	17.568	17.568	(0.949)	19723	0.50000	0.6112
72 1,3,5-Trimethylbenzene	105	17.598	17.598	(0.951)	16127	0.50000	0.5950
73 4-Chlorotoluene	91	17.686	17.686	(0.956)	17951	0.50000	0.6020
74 tert-Butylbenzene	119	17.992	17.992	(0.972)	13137	0.50000	0.5527
75 1,2,4-Trimethylbenzene	105	18.041	18.041	(0.975)	14546	0.50000	0.5814
76 sec-Butylbenzene	105	18.238	18.238	(0.986)	19852	0.50000	0.5577
77 para-Isopropyl Toluene	119	18.376	18.376	(0.993)	15097	0.50000	0.5760
78 1,3-Dichlorobenzene	146	18.435	18.435	(0.996)	11172	0.50000	0.5879

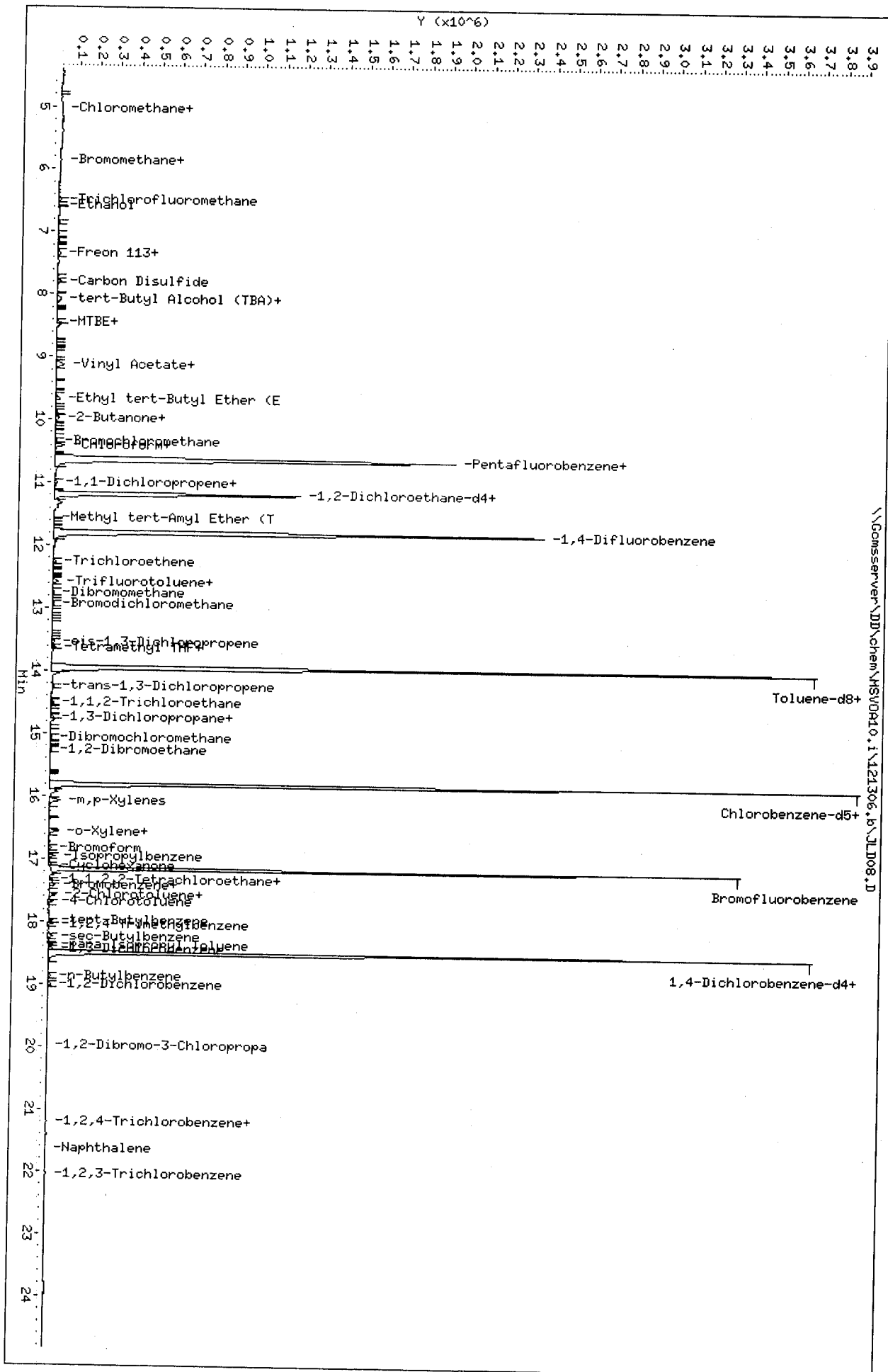
						AMOUNTS	
Compounds	QUANT SIG			REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	MASS	RT	EXP RT				
=====	=====	=====	=====	=====	=====	=====	=====
* 79 1,4-Dichlorobenzene-d4	152	18.504	18.504	(1.000)	1250589	50.0000	
80 1,4-Dichlorobenzene	146	18.533	18.533	(1.002)	11278	0.50000	0.5842
81 n-Butylbenzene	91	18.868	18.868	(1.020)	13192	0.50000	0.5993
82 1,2-Dichlorobenzene	146	19.006	19.006	(1.027)	10384	0.50000	0.5692
83 1,2-Dibromo-3-Chloropropane	75	19.981	19.981	(1.080)	1580	0.50000	0.6491
84 1,2,4-Trichlorobenzene	180	21.212	21.212	(1.146)	4248	0.50000	0.5583
85 Hexachlorobutadiene	225	21.399	21.399	(1.156)	2319	0.50000	0.6892
86 Naphthalene	128	21.646	21.646	(1.170)	7637	0.50000	0.4601
87 1,2,3-Trichlorobenzene	180	22.049	22.049	(1.192)	4266	0.50000	0.5760

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Gomserver\JD\chem\MSV0410.1\121306.b\JLD08.D
 Date : 13-DEC-2006 13:48
 Client ID: DYNA P&T
 Sample Info: ICAL,SS064,0.001/1000,S4931,0.002/1000
 Purge Volume: 5.0
 Column phase: RTX Volatiles

Instrument: MSV0410.1
 Operator: VOA
 Column diameter: 0.32



Data File: \\Gcmssserver\DD\chem\MSVOA10.i\121306.b\JLD09.D
Report Date: 14-Dec-2006 09:12

Curtis & Tompkins

Data file : \\Gcmssserver\DD\chem\MSVOA10.i\121306.b\JLD09.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 13-DEC-2006 14:21 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5064,0.002/500,S4931,0.002/500
Misc Info : S4172,0.001/500,2PPB
Comment :
Method : \\Gcmssserver\DD\chem\MSVOA10.i\121306.b\826GOX10.m
Meth Date : 14-Dec-2006 09:12 chemist Quant Type: ISTD
Cal Date : 13-DEC-2006 14:21 Cal File: JLD09.D
Als bottle: 9 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
	=====	====	=====	=====	=====	(ug/L)	(ug/L)
1 Freon 12	85	4.527	4.527	(0.427)	16821	2.00000	1.4727 (M)
2 Chloromethane	50	5.010	5.010	(0.472)	32406	2.00000	1.8362
3 Vinyl Chloride	62	5.187	5.187	(0.489)	25553	2.00000	1.7819 (M)
4 Bromomethane	94	5.857	5.857	(0.552)	17064	2.00000	1.8320 (M)
5 Chloroethane	64	6.054	6.054	(0.570)	17770	2.00000	1.8309 (M)
6 Trichlorofluoromethane	101	6.487	6.487	(0.611)	20611	2.00000	1.6157
7 Ethanol	45	6.665	6.665	(0.628)	39577	200.000	182.8826 (M)
8 Freon 113	101	7.315	7.315	(0.689)	14274	2.00000	1.6996
9 Acetone	43	7.354	7.354	(0.693)	11545	2.00000	2.4771
10 1,1-Dichloroethene	96	7.354	7.354	(0.693)	15978	2.00000	1.9014 (M)
11 Isopropanol	45	7.482	7.482	(0.705)	19282	20.0000	18.3850 (M)
12 Carbon Disulfide	76	7.787	7.787	(0.734)	77415	2.00000	1.8398
13 Methylene Chloride	84	8.063	8.063	(0.760)	29564	2.00000	2.3894
14 tert-Butyl Alcohol (TBA)	59	8.093	8.093	(0.762)	19401	20.0000	16.5508
15 MTBE	73	8.447	8.447	(0.796)	60950	2.00000	1.7449
16 trans-1,2-Dichloroethene	96	8.496	8.496	(0.800)	18756	2.00000	1.8049
18 Vinyl Acetate	43	9.097	9.097	(0.857)	66800	2.00000	1.6147 (M)
19 1,1-Dichloroethane	63	9.117	9.117	(0.859)	37694	2.00000	1.8422
20 Isopropyl Ether (DIPE)	45	9.127	9.127	(0.860)	119124	2.00000	1.8444
21 Ethyl tert-Butyl Ether (ETBE)	59	9.668	9.668	(0.911)	66610	2.00000	1.7888
22 2-Butanone	43	9.915	9.915	(0.934)	12998	2.00000	1.7592
23 cis-1,2-Dichloroethene	96	9.974	9.974	(0.940)	22359	2.00000	1.9599 (M)

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
24 2,2-Dichloropropane	77	9.984	9.984	(0.941)	23866	2.00000	1.9164
25 Bromochloromethane	128	10.328	10.328	(0.973)	9713	2.00000	1.7722
26 Chloroform	83	10.397	10.397	(0.980)	31556	2.00000	1.8842
27 Tetrahydrofuran	42	10.407	10.407	(0.981)	94912	20.0000	20.1637
* 28 Pentafluorobenzene	168	10.614	10.614	(1.000)	1438647	50.0000	
29 Dibromofluoromethane	113	10.634	10.634	(1.002)	920229	50.0000	50.2923
30 1,1,1-Trichloroethane	97	10.762	10.762	(1.014)	20619	2.00000	1.8659
31 1,1-Dichloropropene	75	10.998	10.998	(0.932)	23811	2.00000	1.8339
32 Carbon Tetrachloride	117	11.037	11.037	(0.936)	15804	2.00000	1.8516
33 1,2-Dichloroethane-d4	65	11.175	11.175	(0.947)	992464	50.0000	50.0075
34 1,2-Dichloroethane	62	11.303	11.303	(0.958)	25534	2.00000	1.8134
35 Benzene	78	11.323	11.323	(0.960)	87115	2.00000	1.9068
36 Methyl tert-Amyl Ether (TAME)	73	11.392	11.392	(0.966)	63957	2.00000	1.8264
* 37 1,4-Difluorobenzene	114	11.796	11.796	(1.000)	2647739	50.0000	
38 Trichloroethene	95	12.259	12.259	(1.039)	16818	2.00000	1.7974
39 Trifluorotoluene	146	12.564	12.564	(1.065)	24345	2.00000	1.8178
40 1,2-Dichloropropane	63	12.574	12.574	(1.066)	22703	2.00000	1.7693
41 Dibromomethane	93	12.751	12.751	(1.081)	13411	2.00000	1.8469
42 Bromodichloromethane	83	12.928	12.928	(1.096)	22845	2.00000	1.7439
44 cis-1,3-Dichloropropene	75	13.539	13.539	(1.148)	31473	2.00000	1.7408
45 Tetramethyl THF	43	13.618	13.618	(1.154)	49260	2.00000	1.9363
46 4-Methyl-2-Pentanone	43	13.677	13.677	(1.159)	28415	2.00000	1.5972
47 Toluene-d8	98	13.943	13.943	(1.182)	3053917	50.0000	50.1754
48 Toluene	92	14.031	14.031	(1.190)	44058	2.00000	1.8721
49 trans-1,3-Dichloropropene	75	14.248	14.248	(1.208)	28788	2.00000	1.7820 (M)
50 1,1,2-Trichloroethane	85	14.504	14.504	(1.230)	10059	2.00000	1.8442
51 1,3-Dichloropropane	76	14.741	14.741	(0.933)	30597	2.00000	1.7528
52 2-Hexanone	43	14.780	14.780	(0.935)	16496	2.00000	1.6136
53 Tetrachloroethene	166	14.780	14.780	(0.935)	15811	2.00000	1.9006
54 Dibromochloromethane	129	15.066	15.066	(0.953)	17079	2.00000	1.6968
55 1,2-Dibromoethane	107	15.253	15.253	(1.293)	18847	2.00000	1.8050
* 56 Chlorobenzene-d5	117	15.804	15.804	(1.000)	2541162	50.0000	
57 Chlorobenzene	112	15.844	15.844	(1.002)	45334	2.00000	1.7975
58 1,1,1,2-Tetrachloroethane	131	15.913	15.913	(1.007)	14882	2.00000	1.7662
59 Ethylbenzene	91	15.932	15.932	(1.008)	78158	2.00000	1.8528
60 m,p-Xylenes	106	16.070	16.070	(1.017)	58366	4.00000	3.4963
61 o-Xylene	106	16.553	16.553	(1.047)	28717	2.00000	1.8651
62 Styrene	104	16.563	16.563	(1.048)	48281	2.00000	1.7665
63 Bromoform	173	16.828	16.828	(1.065)	12691	2.00000	1.6518
64 Isopropylbenzene	105	16.956	16.956	(0.916)	68742	2.00000	1.9067
65 Cyclohexanone	55	17.094	17.094	(0.924)	33305	20.0000	17.4955
66 Bromofluorobenzene	95	17.153	17.153	(0.927)	1465191	50.0000	50.8905
67 1,1,2,2-Tetrachloroethane	83	17.252	17.252	(0.932)	25916	2.00000	1.8250
68 1,2,3-Trichloropropane	75	17.331	17.331	(0.937)	23541	2.00000	1.8662
69 Bromobenzene	156	17.380	17.380	(0.939)	18423	2.00000	1.7928
70 Propylbenzene	91	17.419	17.419	(0.941)	80625	2.00000	1.8055
71 2-Chlorotoluene	91	17.567	17.567	(0.949)	60226	2.00000	1.9018
72 1,3,5-Trimethylbenzene	105	17.587	17.587	(0.950)	47738	2.00000	1.7949
73 4-Chlorotoluene	91	17.685	17.685	(0.956)	54501	2.00000	1.8624
74 tert-Butylbenzene	119	17.991	17.991	(0.972)	42980	2.00000	1.8427
75 1,2,4-Trimethylbenzene	105	18.040	18.040	(0.975)	42081	2.00000	1.7139
76 sec-Butylbenzene	105	18.237	18.237	(0.986)	64824	2.00000	1.8556
77 para-Isopropyl Toluene	119	18.375	18.375	(0.993)	46242	2.00000	1.7978
78 1,3-Dichlorobenzene	146	18.434	18.434	(0.996)	33440	2.00000	1.7933

Data File: \\Gcmssserver\DD\chem\MSVOA10.i\121306.b\JLD09.D
 Report Date: 14-Dec-2006 09:12

						AMOUNTS		
		QUANT SIG					CAL-AMT	ON-COL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====		=====	=====	=====	=====	=====	=====	=====
* 79	1,4-Dichlorobenzene-d4	152	18.503	18.503	(1.000)	1227295	50.0000	
80	1,4-Dichlorobenzene	146	18.532	18.532	(1.002)	34847	2.00000	1.8395
81	n-Butylbenzene	91	18.867	18.867	(1.020)	37451	2.00000	1.7338
82	1,2-Dichlorobenzene	146	19.005	19.005	(1.027)	32027	2.00000	1.7888
83	1,2-Dibromo-3-Chloropropane	75	19.970	19.970	(1.079)	3853	2.00000	1.6131
84	1,2,4-Trichlorobenzene	180	21.201	21.201	(1.146)	12917	2.00000	1.7300 (M)
85	Hexachlorobutadiene	225	21.398	21.398	(1.156)	5957	2.00000	1.8041
86	Naphthalene	128	21.644	21.644	(1.170)	24219	2.00000	1.4869 (M)
87	1,2,3-Trichlorobenzene	180	22.038	22.038	(1.191)	11811	2.00000	1.6250

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Gomsserver\JD\chem\MSV0810.1\121306.b\JLD09.D

Date: 13-DEC-2006 14:21

Client ID: DYNA P&T

Sample Info: ICPL,SS064,0.002/500,S4931,0.002/500

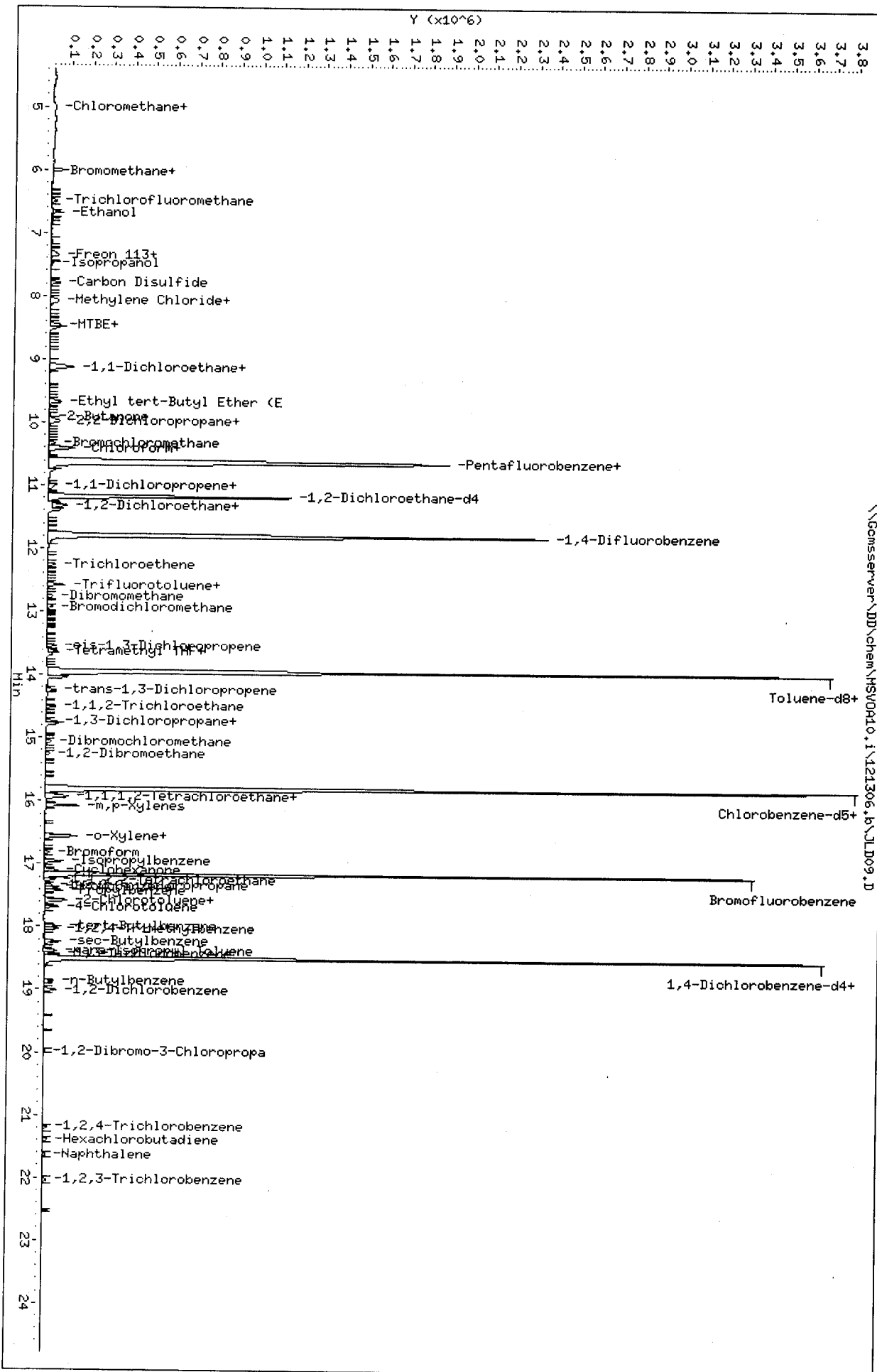
Purge Volume: 5.0

Column phase: RTX Volatiles

Instrument: MSV0810.1

Operator: VOA

Column diameter: 0.32



Data File: \\Gcmssserver\DD\chem\MSVOA10.i\121306.b\JLD10.D
Report Date: 14-Dec-2006 09:14

Curtis & Tompkins

Data file : \\Gcmssserver\DD\chem\MSVOA10.i\121306.b\JLD10.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 13-DEC-2006 14:55 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5064,0.005/500,S4931,0.005/500
Misc Info : S4172,0.0025/500,5PPB
Comment :
Method : \\Gcmssserver\DD\chem\MSVOA10.i\121306.b\826GOX10.m
Meth Date : 14-Dec-2006 09:13 chemist Quant Type: ISTD
Cal Date : 13-DEC-2006 14:55 Cal File: JLD10.D
Als bottle: 10 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
1 Freon 12	85	4.543	4.543	(0.428)	64836	5.00000	5.5311 (M)
2 Chloromethane	50	5.016	5.016	(0.473)	90804	5.00000	5.0134 (M)
3 Vinyl Chloride	62	5.183	5.183	(0.489)	74488	5.00000	5.0615
4 Bromomethane	94	5.872	5.872	(0.553)	46323	5.00000	4.8459 (M)
5 Chloroethane	64	6.030	6.030	(0.568)	49782	5.00000	4.9978
6 Trichlorofluoromethane	101	6.493	6.493	(0.612)	68317	5.00000	5.2183
7 Ethanol	45	6.670	6.670	(0.629)	111932	500.000	503.9809
8 Freon 113	101	7.320	7.320	(0.690)	46730	5.00000	5.4217
9 Acetone	43	7.350	7.350	(0.693)	24955	5.00000	5.2172
10 1,1-Dichloroethene	96	7.350	7.350	(0.693)	43337	5.00000	5.0250
11 Isopropanol	45	7.478	7.478	(0.705)	52353	50.0000	48.6391
12 Carbon Disulfide	76	7.793	7.793	(0.735)	221067	5.00000	5.1193
13 Methylene Chloride	84	8.069	8.069	(0.761)	68133	5.00000	5.3656
14 tert-Butyl Alcohol (TBA)	59	8.088	8.088	(0.762)	61374	50.0000	51.0164
15 MTBE	73	8.453	8.453	(0.797)	183692	5.00000	5.1242
16 trans-1,2-Dichloroethene	96	8.492	8.492	(0.800)	53887	5.00000	5.0527
18 Vinyl Acetate	43	9.093	9.093	(0.857)	198553	5.00000	4.6766 (M)
19 1,1-Dichloroethane	63	9.113	9.113	(0.859)	109675	5.00000	5.2228
20 Isopropyl Ether (DIPE)	45	9.132	9.132	(0.861)	344373	5.00000	5.1954
21 Ethyl tert-Butyl Ether (ETBE)	59	9.664	9.664	(0.911)	198435	5.00000	5.1924
22 2-Butanone	43	9.910	9.910	(0.934)	38637	5.00000	5.0956
23 cis-1,2-Dichloroethene	96	9.969	9.969	(0.940)	60349	5.00000	5.1546

: 000000

Compounds	QUANT SIG						AMOUNTS	
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	
24 2,2-Dichloropropane	77	9.989	9.989	(0.942)	67225	5.00000	5.2600	
25 Bromochloromethane	128	10.334	10.334	(0.974)	28564	5.00000	5.0783	
26 Chloroform	83	10.393	10.393	(0.980)	91495	5.00000	5.3232	
27 Tetrahydrofuran	42	10.413	10.413	(0.981)	255159	50.0000	52.8191	
* 28 Pentafluorobenzene	168	10.610	10.610	(1.000)	1476468	50.0000		
29 Dibromofluoromethane	113	10.639	10.639	(1.003)	935783	50.0000	49.8323	
30 1,1,1-Trichloroethane	97	10.767	10.767	(1.015)	58981	5.00000	5.2009	
31 1,1-Dichloropropene	75	10.994	10.994	(0.932)	70227	5.00000	5.3017	
32 Carbon Tetrachloride	117	11.033	11.033	(0.936)	46682	5.00000	5.3610	
33 1,2-Dichloroethane-d4	65	11.181	11.181	(0.948)	1004695	50.0000	49.6207	
34 1,2-Dichloroethane	62	11.299	11.299	(0.958)	74809	5.00000	5.2077	
35 Benzene	78	11.329	11.329	(0.961)	229108	5.00000	4.9156	
36 Methyl tert-Amyl Ether (TAME)	73	11.388	11.388	(0.966)	186115	5.00000	5.2096	
* 37 1,4-Difluorobenzene	114	11.791	11.791	(1.000)	2701258	50.0000		
38 Trichloroethene	95	12.254	12.254	(1.039)	51864	5.00000	5.4331	
39 Trifluorotoluene	146	12.570	12.570	(1.066)	73201	5.00000	5.3577	
40 1,2-Dichloropropane	63	12.579	12.579	(1.067)	69422	5.00000	5.3033	
41 Dibromomethane	93	12.757	12.757	(1.082)	37587	5.00000	5.0738	
42 Bromodichloromethane	83	12.924	12.924	(1.096)	70195	5.00000	5.2523	
44 cis-1,3-Dichloropropene	75	13.535	13.535	(1.148)	98840	5.00000	5.3588	
45 Tetramethyl THF	43	13.613	13.613	(1.155)	128520	5.00000	4.9519	
46 4-Methyl-2-Pentanone	43	13.673	13.673	(1.160)	91470	5.00000	5.0396	
47 Toluene-d8	98	13.938	13.938	(1.182)	3098075	50.0000	49.8924	
48 Toluene	92	14.037	14.037	(1.190)	128542	5.00000	5.3538	
49 trans-1,3-Dichloropropene	75	14.244	14.244	(1.208)	86081	5.00000	5.2230	
50 1,1,2-Trichloroethane	85	14.500	14.500	(1.230)	28568	5.00000	5.1339	
51 1,3-Dichloropropane	76	14.736	14.736	(0.932)	94645	5.00000	5.3044	
52 2-Hexanone	43	14.766	14.766	(0.934)	52838	5.00000	5.0564	
53 Tetrachloroethene	166	14.776	14.776	(0.935)	47397	5.00000	5.5740	
54 Dibromochloromethane	129	15.061	15.061	(0.953)	54769	5.00000	5.3235	
55 1,2-Dibromoethane	107	15.248	15.248	(1.293)	56795	5.00000	5.3316	
* 56 Chlorobenzene-d5	117	15.810	15.810	(1.000)	2597490	50.0000		
57 Chlorobenzene	112	15.839	15.839	(1.002)	142014	5.00000	5.5090	
58 1,1,1,2-Tetrachloroethane	131	15.908	15.908	(1.006)	45941	5.00000	5.3343	
59 Ethylbenzene	91	15.938	15.938	(1.008)	242718	5.00000	5.6293	
60 m,p-Xylenes	106	16.066	16.066	(1.016)	176460	10.0000	10.3412	
61 o-Xylene	106	16.548	16.548	(1.047)	88425	5.00000	5.6187	
62 Styrene	104	16.558	16.558	(1.047)	152522	5.00000	5.4595	
63 Bromoform	173	16.814	16.814	(1.064)	40096	5.00000	5.1056	
64 Isopropylbenzene	105	16.952	16.952	(0.916)	200683	5.00000	5.5388	
65 Cyclohexanone	55	17.100	17.100	(0.924)	97247	50.0000	50.8317	
66 Bromofluorobenzene	95	17.159	17.159	(0.928)	1476631	50.0000	51.0334	
67 1,1,2,2-Tetrachloroethane	83	17.248	17.248	(0.932)	76659	5.00000	5.3715	
68 1,2,3-Trichloropropane	75	17.336	17.336	(0.937)	69276	5.00000	5.4648	
69 Bromobenzene	156	17.376	17.376	(0.939)	59084	5.00000	5.7212	
70 Propylbenzene	91	17.415	17.415	(0.941)	250987	5.00000	5.5927	
71 2-Chlorotoluene	91	17.563	17.563	(0.949)	182584	5.00000	5.7371	
72 1,3,5-Trimethylbenzene	105	17.592	17.592	(0.951)	144947	5.00000	5.4229	
73 4-Chlorotoluene	91	17.681	17.681	(0.956)	165151	5.00000	5.6157	
74 tert-Butylbenzene	119	17.986	17.986	(0.972)	128786	5.00000	5.4942	
75 1,2,4-Trimethylbenzene	105	18.036	18.036	(0.975)	134100	5.00000	5.4349	
76 sec-Butylbenzene	105	18.242	18.242	(0.986)	187615	5.00000	5.3441	
77 para-Isopropyl Toluene	119	18.380	18.380	(0.994)	136658	5.00000	5.2867	
78 1,3-Dichlorobenzene	146	18.430	18.430	(0.996)	108193	5.00000	5.7736	

Data File: \\Gcmssserver\DD\chem\MSVOA10.i\121306.b\JLD10.D
Report Date: 14-Dec-2006 09:14

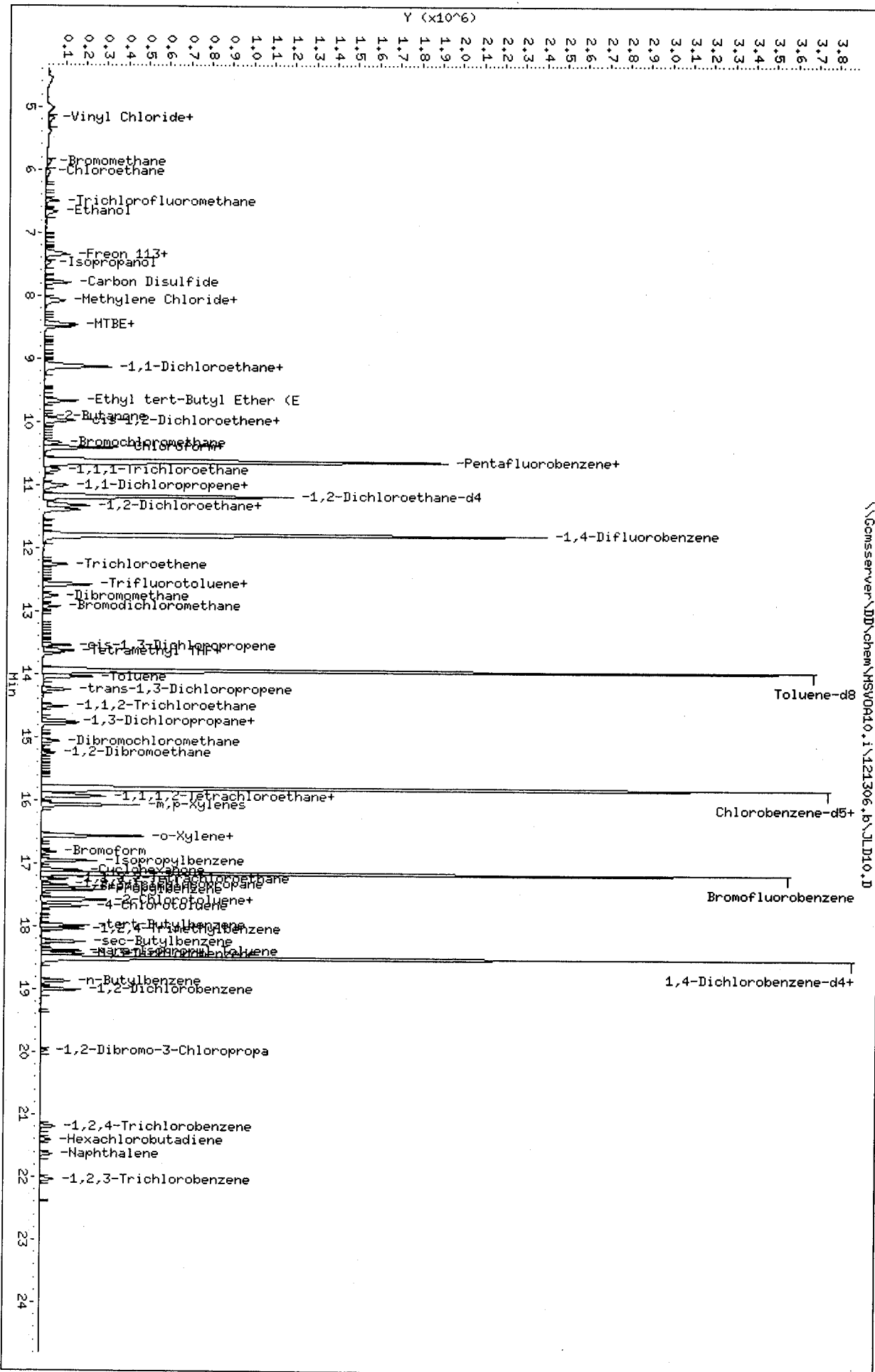
Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	
* 79 1,4-Dichlorobenzene-d4	152	18.498	18.498	(1.000)	1233413	50.0000		
80 1,4-Dichlorobenzene	146	18.528	18.528	(1.002)	109235	5.00000	5.7377	
81 n-Butylbenzene	91	18.863	18.863	(1.020)	105516	5.00000	4.8609	
82 1,2-Dichlorobenzene	146	19.001	19.001	(1.027)	102245	5.00000	5.6826	
83 1,2-Dibromo-3-Chloropropane	75	19.966	19.966	(1.079)	12915	5.00000	5.3802	
84 1,2,4-Trichlorobenzene	180	21.197	21.197	(1.146)	38076	5.00000	5.0743	
85 Hexachlorobutadiene	225	21.404	21.404	(1.157)	16162	5.00000	4.8706	
86 Naphthalene	128	21.630	21.630	(1.169)	80008	5.00000	4.8879 (M)	
87 1,2,3-Trichlorobenzene	180	22.034	22.034	(1.191)	35911	5.00000	4.9162	

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Gomsserver\JDV\chem\MSV0410.1\121306.b\JLD10.D
 Date : 13-DEC-2006 14:55
 Client ID: DYNA P&T
 Sample Info: ICAL, S5064, 0.005/500, S4931, 0.005/500
 Purge Volume: 5.0
 Column phase: RTX Volatiles

Instrument: MSV0410.i
 Operator: VOA
 Column diameter: 0.32



Data File: \\Gcmssserver\DD\chem\MSVOA10.i\121306.b\JLD11.D
Report Date: 14-Dec-2006 09:27

Curtis & Tompkins

Data file : \\Gcmssserver\DD\chem\MSVOA10.i\121306.b\JLD11.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 13-DEC-2006 15:29 MS Autotune Date: 10-JUL-2006 14:50
Operator : VOA Inst ID: MSVOA10.i
Smp Info : ICAL,S5064,0.002/100,S4931,0.002/100
Misc Info : S4172,0.001/100,10PPB
Comment :
Method : \\Gcmssserver\DD\chem\MSVOA10.i\121306.b\826GOX10.m
Meth Date : 14-Dec-2006 09:27 chemist Quant Type: ISTD
Cal Date : 13-DEC-2006 15:29 Cal File: JLD11.D
Als bottle: 11 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.538	4.538	(0.428)	129084	10.0000	10.8652 (M)
2 Chloromethane	50	5.020	5.020	(0.473)	180791	10.0000	9.8486
3 Vinyl Chloride	62	5.188	5.188	(0.489)	156673	10.0000	10.5040
4 Bromomethane	94	5.867	5.867	(0.553)	95495	10.0000	9.8567
5 Chloroethane	64	6.035	6.035	(0.569)	101801	10.0000	10.0839
6 Trichlorofluoromethane	101	6.498	6.498	(0.612)	143956	10.0000	10.8493
7 Ethanol	45	6.665	6.665	(0.628)	230352	1000.00	1023.3368
8 Freon 113	101	7.315	7.315	(0.689)	90511	10.0000	10.3612
9 Acetone	43	7.355	7.355	(0.693)	53154	10.0000	10.9643
10 1,1-Dichloroethene	96	7.355	7.355	(0.693)	89450	10.0000	10.2336
11 Isopropanol	45	7.473	7.473	(0.704)	110798	100.000	101.5646
12 Carbon Disulfide	76	7.798	7.798	(0.735)	440747	10.0000	10.0704
13 Methylene Chloride	84	8.064	8.064	(0.760)	129748	10.0000	10.0816
14 tert-Butyl Alcohol (TBA)	59	8.093	8.093	(0.762)	127392	100.000	104.4803
15 MTBE	73	8.458	8.458	(0.797)	385151	10.0000	10.6007
16 trans-1,2-Dichloroethene	96	8.497	8.497	(0.801)	111580	10.0000	10.3228
18 Vinyl Acetate	43	9.088	9.088	(0.856)	443065	10.0000	10.2965 (M)
19 1,1-Dichloroethane	63	9.118	9.118	(0.859)	216118	10.0000	10.1543
20 Isopropyl Ether (DIPE)	45	9.137	9.137	(0.861)	697361	10.0000	10.3804
21 Ethyl tert-Butyl Ether (ETBE)	59	9.669	9.669	(0.911)	401407	10.0000	10.3635
22 2-Butanone	43	9.915	9.915	(0.934)	79484	10.0000	10.3428
23 cis-1,2-Dichloroethene	96	9.965	9.965	(0.939)	119335	10.0000	10.0567

Compounds	QUANT SIG	AMOUNTS					
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
24 2,2-Dichloropropane	77	9.994	9.994	(0.942)	128531	10.0000	9.9227
25 Bromochloromethane	128	10.329	10.329	(0.973)	60175	10.0000	10.5556
26 Chloroform	83	10.398	10.398	(0.980)	177485	10.0000	10.1883
27 Tetrahydrofuran	42	10.408	10.408	(0.981)	538970	100.000	110.0808
* 28 Pentafluorobenzene	168	10.615	10.615	(1.000)	1496433	50.0000	
29 Dibromofluoromethane	113	10.634	10.634	(1.002)	966998	50.0000	50.8075
30 1,1,1-Trichloroethane	97	10.762	10.762	(1.014)	114481	10.0000	9.9601
31 1,1-Dichloropropene	75	10.999	10.999	(0.932)	130920	10.0000	9.7612
32 Carbon Tetrachloride	117	11.038	11.038	(0.936)	88151	10.0000	9.9980
33 1,2-Dichloroethane-d4	65	11.186	11.186	(0.948)	1043161	50.0000	50.8822
34 1,2-Dichloroethane	62	11.294	11.294	(0.957)	153014	10.0000	10.5199
35 Benzene	78	11.333	11.333	(0.961)	431898	10.0000	9.1517
36 Methyl tert-Amyl Ether (TAME)	73	11.393	11.393	(0.966)	377156	10.0000	10.4264
* 37 1,4-Difluorobenzene	114	11.796	11.796	(1.000)	2735147	50.0000	
38 Trichloroethene	95	12.259	12.259	(1.039)	94813	10.0000	9.8093
39 Trifluorotoluene	146	12.574	12.574	(1.066)	130306	10.0000	9.4191
40 1,2-Dichloropropane	63	12.574	12.574	(1.066)	135612	10.0000	10.2313
41 Dibromomethane	93	12.752	12.752	(1.081)	78573	10.0000	10.4750
42 Bromodichloromethane	83	12.929	12.929	(1.096)	141214	10.0000	10.4355
44 cis-1,3-Dichloropropene	75	13.530	13.530	(1.147)	194177	10.0000	10.3973
45 Tetramethyl THF	43	13.618	13.618	(1.154)	269498	10.0000	10.2552
46 4-Methyl-2-Pentanone	43	13.677	13.677	(1.159)	206242	10.0000	11.2224
47 Toluene-d8	98	13.943	13.943	(1.182)	3152086	50.0000	50.1333
48 Toluene	92	14.032	14.032	(1.190)	230724	10.0000	9.4907
49 trans-1,3-Dichloropropene	75	14.239	14.239	(1.207)	175188	10.0000	10.4980
50 1,1,2-Trichloroethane	85	14.505	14.505	(1.230)	58597	10.0000	10.3999
51 1,3-Dichloropropane	76	14.741	14.741	(0.933)	191908	10.0000	10.7023
52 2-Hexanone	43	14.761	14.761	(0.934)	111648	10.0000	10.6313
53 Tetrachloroethene	166	14.781	14.781	(0.935)	78142	10.0000	9.1442
54 Dibromochloromethane	129	15.066	15.066	(0.953)	106383	10.0000	10.2891
55 1,2-Dibromoethane	107	15.253	15.253	(1.293)	115240	10.0000	10.6841
* 56 Chlorobenzene-d5	117	15.805	15.805	(1.000)	2610438	50.0000	
57 Chlorobenzene	112	15.844	15.844	(1.002)	250587	10.0000	9.6725
58 1,1,1,2-Tetrachloroethane	131	15.913	15.913	(1.007)	82123	10.0000	9.4882
59 Ethylbenzene	91	15.933	15.933	(1.008)	394985	10.0000	9.1154
60 m,p-Xylenes	106	16.071	16.071	(1.017)	296177	20.0000	17.2711
61 o-Xylene	106	16.553	16.553	(1.047)	150431	10.0000	9.5113
62 Styrene	104	16.563	16.563	(1.048)	276988	10.0000	9.8656
63 Bromoform	173	16.819	16.819	(1.064)	77486	10.0000	9.8178
64 Isopropylbenzene	105	16.957	16.957	(0.916)	347110	10.0000	9.2005
65 Cyclohexanone	55	17.095	17.095	(0.924)	237864	100.000	119.4053
66 Bromofluorobenzene	95	17.164	17.164	(0.928)	1487451	50.0000	49.3697
67 1,1,2,2-Tetrachloroethane	83	17.253	17.253	(0.932)	160821	10.0000	10.8221
68 1,2,3-Trichloropropane	75	17.331	17.331	(0.937)	131161	10.0000	9.9365
69 Bromobenzene	156	17.381	17.381	(0.939)	106240	10.0000	9.8797
70 Propylbenzene	91	17.420	17.420	(0.941)	432055	10.0000	9.2459
71 2-Chlorotoluene	91	17.568	17.568	(0.949)	303674	10.0000	9.1637
72 1,3,5-Trimethylbenzene	105	17.587	17.587	(0.951)	257325	10.0000	9.2457
73 4-Chlorotoluene	91	17.676	17.676	(0.955)	282363	10.0000	9.2208
74 tert-Butylbenzene	119	17.991	17.991	(0.972)	223960	10.0000	9.1759
75 1,2,4-Trimethylbenzene	105	18.041	18.041	(0.975)	230885	10.0000	8.9865
76 sec-Butylbenzene	105	18.237	18.237	(0.986)	329301	10.0000	9.0082
77 para-Isopropyl Toluene	119	18.375	18.375	(0.993)	239297	10.0000	8.8904
78 1,3-Dichlorobenzene	146	18.434	18.434	(0.996)	182526	10.0000	9.3542

Data File: \\Gcmssserver\DD\chem\MSVOA10.i\121306.b\JLD11.D
 Report Date: 14-Dec-2006 09:27

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
* 79 1,4-Dichlorobenzene-d4	152	18.503	18.503	(1.000)	1284319		50.0000	
80 1,4-Dichlorobenzene	146	18.533	18.533	(1.002)	187583		10.0000	9.4625
81 n-Butylbenzene	91	18.868	18.868	(1.020)	196630		10.0000	8.6993
82 1,2-Dichlorobenzene	146	19.006	19.006	(1.027)	179466		10.0000	9.5791
83 1,2-Dibromo-3-Chloropropane	75	19.971	19.971	(1.079)	26231		10.0000	10.4943
84 1,2,4-Trichlorobenzene	180	21.192	21.192	(1.145)	68057		10.0000	8.7103
85 Hexachlorobutadiene	225	21.399	21.399	(1.156)	29132		10.0000	8.4314
86 Naphthalene	128	21.635	21.635	(1.169)	178595		10.0000	10.4785
87 1,2,3-Trichlorobenzene	180	22.039	22.039	(1.191)	71949		10.0000	9.4595

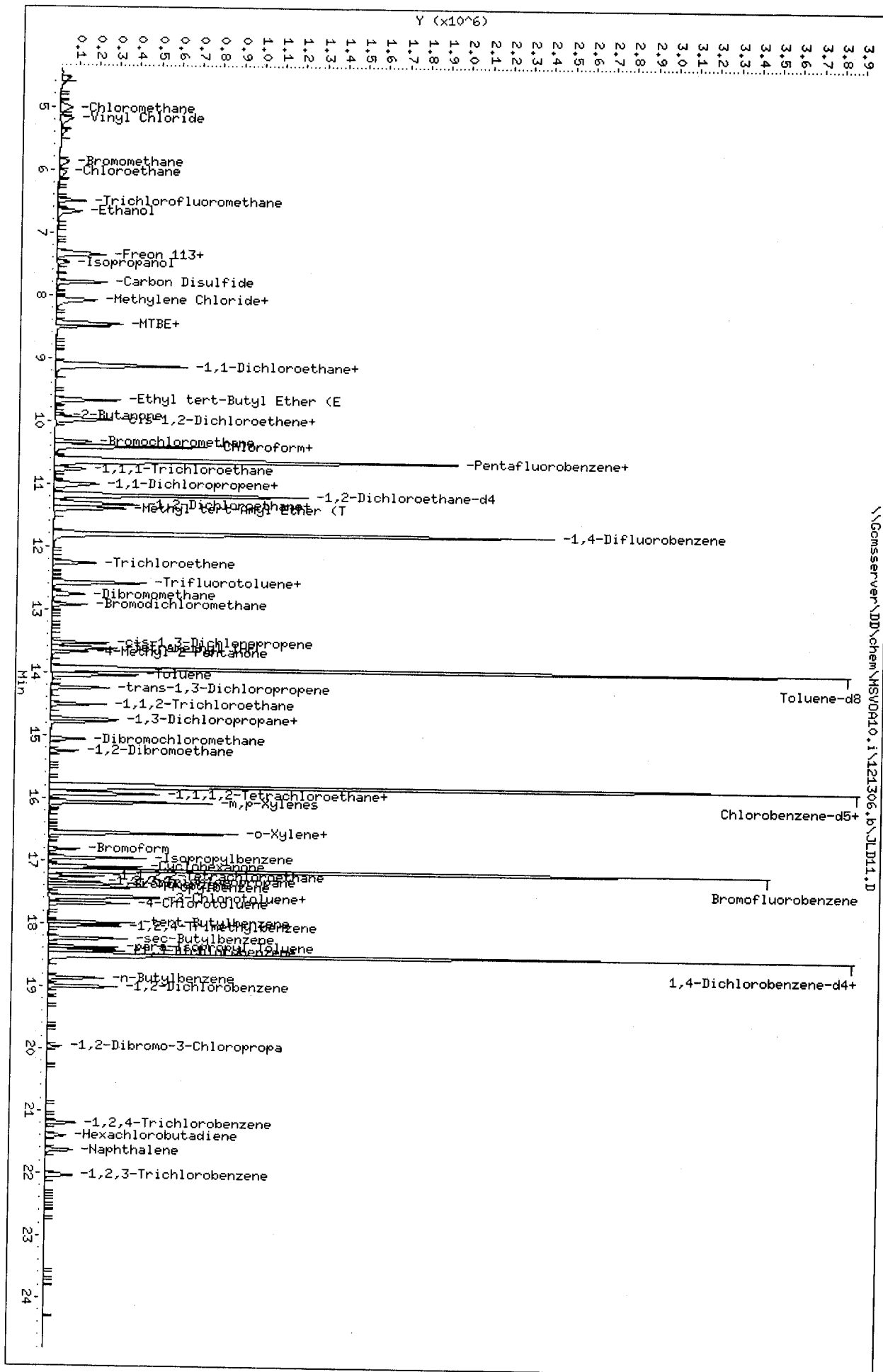
QC Flag Legend

M - Compound response manually integrated.

Data File: \\Gomserver\DD\chem\MSV0010.1\121306.b\JLD11.D
 Date: 13-DEC-2006 15:29
 Client ID: DYNA P&T

Sample Info: ICPL, S5064, 0.002/100, S4931, 0.002/100
 Purge Volume: 5.0
 Column phase: RTX Volatiles

Instrument: MSV0010.1
 Operator: WOA
 Column diameter: 0.32



Data File: \\Gcmssserver\DD\chem\MSVOA10.i\121306.b\JLD12.D
 Report Date: 14-Dec-2006 09:16

Curtis & Tompkins

Data file : \\Gcmssserver\DD\chem\MSVOA10.i\121306.b\JLD12.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 13-DEC-2006 16:02 MS Autotune Date: 10-JUL-2006 14:50
 Operator : VOA Inst ID: MSVOA10.i
 Smp Info : ICAL,S5064,0.004/100,S4931,0.004/100
 Misc Info : S4172,0.002/100,20PPB
 Comment :
 Method : \\Gcmssserver\DD\chem\MSVOA10.i\121306.b\826GOX10.m
 Meth Date : 14-Dec-2006 09:16 chemist Quant Type: ISTD
 Cal Date : 13-DEC-2006 16:02 Cal File: JLD12.D
 Als bottle: 12 Calibration Sample, Level: 6
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG							AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)		
1 Freon 12	85	4.537	4.537 (0.428)		238369	20.0000	20.4743		
2 Chloromethane	50	5.010	5.010 (0.472)		364856	20.0000	20.2820		
3 Vinyl Chloride	62	5.187	5.187 (0.489)		300111	20.0000	20.5321		
4 Bromomethane	94	5.867	5.867 (0.553)		181075	20.0000	19.0722		
5 Chloroethane	64	6.044	6.044 (0.569)		194577	20.0000	19.6681		
6 Trichlorofluoromethane	101	6.487	6.487 (0.611)		263053	20.0000	20.2306		
7 Ethanol	45	6.655	6.655 (0.627)		450343	2000.00	2041.5572		
8 Freon 113	101	7.315	7.315 (0.689)		190763	20.0000	22.2841		
9 Acetone	43	7.344	7.344 (0.692)		97528	20.0000	20.5289		
10 1,1-Dichloroethene	96	7.354	7.354 (0.693)		176960	20.0000	20.6593		
11 Isopropanol	45	7.472	7.472 (0.704)		206696	200.000	193.3456		
12 Carbon Disulfide	76	7.787	7.787 (0.734)		879360	20.0000	20.5030		
13 Methylene Chloride	84	8.073	8.073 (0.761)		245896	20.0000	19.4972		
14 tert-Butyl Alcohol (TBA)	59	8.083	8.083 (0.762)		251427	200.000	210.4243		
15 MTBE	73	8.447	8.447 (0.796)		712752	20.0000	20.0187		
16 trans-1,2-Dichloroethene	96	8.497	8.497 (0.800)		212952	20.0000	20.1042		
18 Vinyl Acetate	43	9.087	9.087 (0.856)		884145	20.0000	20.9671 (M)		
19 1,1-Dichloroethane	63	9.117	9.117 (0.859)		416941	20.0000	19.9907		
20 Isopropyl Ether (DIPE)	45	9.127	9.127 (0.860)		1348563	20.0000	20.4843		
21 Ethyl tert-Butyl Ether (ETBE)	59	9.669	9.669 (0.911)		768614	20.0000	20.2499		
22 2-Butanone	43	9.905	9.905 (0.933)		151771	20.0000	20.1529		
23 cis-1,2-Dichloroethene	96	9.964	9.964 (0.939)		227787	20.0000	19.5889		

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
24 2,2-Dichloropropane	77	9.994	9.994	(0.942)	256779	20.0000	20.2289
25 Bromochloromethane	128	10.328	10.328	(0.973)	114337	20.0000	20.4666
26 Chloroform	83	10.397	10.397	(0.980)	344097	20.0000	20.1565
27 Tetrahydrofuran	42	10.407	10.407	(0.981)	967494	200.000	201.6448
* 28 Pentafluorobenzene	168	10.614	10.614	(1.000)	1466445	50.0000	
29 Dibromofluoromethane	113	10.634	10.634	(1.002)	910715	50.0000	48.8289
30 1,1,1-Trichloroethane	97	10.762	10.762	(1.014)	235027	20.0000	20.8662
31 1,1-Dichloropropene	75	10.998	10.998	(0.932)	268461	20.0000	20.3760
32 Carbon Tetrachloride	117	11.038	11.038	(0.936)	179716	20.0000	20.7498
33 1,2-Dichloroethane-d4	65	11.175	11.175	(0.947)	970519	50.0000	48.1903
34 1,2-Dichloroethane	62	11.294	11.294	(0.957)	288141	20.0000	20.1664
35 Benzene	78	11.323	11.323	(0.960)	852333	20.0000	18.3853
36 Methyl tert-Amyl Ether (TAME)	73	11.392	11.392	(0.966)	710107	20.0000	19.9839
* 37 1,4-Difluorobenzene	114	11.796	11.796	(1.000)	2686827	50.0000	
38 Trichloroethene	95	12.249	12.249	(1.038)	195811	20.0000	20.6229
39 Trifluorotoluene	146	12.574	12.574	(1.066)	295001	20.0000	21.7076
40 1,2-Dichloropropane	63	12.574	12.574	(1.066)	255489	20.0000	19.6223
41 Dibromomethane	93	12.751	12.751	(1.081)	151411	20.0000	20.5485
42 Bromodichloromethane	83	12.919	12.919	(1.095)	265117	20.0000	19.9440
43 2-Chloroethylvinylether	63	13.529	13.529	(1.147)	1322	20.0000	15.9641
44 cis-1,3-Dichloropropene	75	13.529	13.529	(1.147)	367174	20.0000	20.0141
45 Tetramethyl THF	43	13.618	13.618	(1.154)	521890	20.0000	20.2167
46 4-Methyl-2-Pentanone	43	13.667	13.667	(1.159)	384258	20.0000	21.2850
47 Toluene-d8	98	13.943	13.943	(1.182)	3078656	50.0000	49.8460
48 Toluene	92	14.032	14.032	(1.190)	476334	20.0000	19.9462
49 trans-1,3-Dichloropropene	75	14.238	14.238	(1.207)	326061	20.0000	19.8904
50 1,1,2-Trichloroethane	85	14.504	14.504	(1.230)	111826	20.0000	20.2041
51 1,3-Dichloropropane	76	14.741	14.741	(0.933)	352552	20.0000	20.2961
52 2-Hexanone	43	14.760	14.760	(0.934)	208821	20.0000	20.5266
53 Tetrachloroethene	166	14.780	14.780	(0.935)	168230	20.0000	20.3223
54 Dibromochloromethane	129	15.066	15.066	(0.953)	203220	20.0000	20.2898
55 1,2-Dibromoethane	107	15.253	15.253	(1.293)	208550	20.0000	19.6827
* 56 Chlorobenzene-d5	117	15.804	15.804	(1.000)	2528758	50.0000	
57 Chlorobenzene	112	15.844	15.844	(1.002)	505181	20.0000	20.1296
58 1,1,1,2-Tetrachloroethane	131	15.913	15.913	(1.007)	165195	20.0000	19.7025
59 Ethylbenzene	91	15.932	15.932	(1.008)	843421	20.0000	20.0930
60 m,p-Xylenes	106	16.070	16.070	(1.017)	617438	40.0000	37.1679
61 o-Xylene	106	16.553	16.553	(1.047)	302664	20.0000	19.7547
62 Styrene	104	16.553	16.553	(1.047)	542482	20.0000	19.9460
63 Bromoform	173	16.819	16.819	(1.064)	143547	20.0000	18.7755
64 Isopropylbenzene	105	16.957	16.957	(0.916)	734151	20.0000	20.2615
65 Cyclohexanone	55	17.095	17.095	(0.924)	364815	200.000	190.6807
66 Bromofluorobenzene	95	17.163	17.163	(0.928)	1441119	50.0000	49.8032
67 1,1,2,2-Tetrachloroethane	83	17.252	17.252	(0.932)	283819	20.0000	19.8862
68 1,2,3-Trichloropropane	75	17.331	17.331	(0.937)	238417	20.0000	18.8063
69 Bromobenzene	156	17.380	17.380	(0.939)	208504	20.0000	20.1888
70 Propylbenzene	91	17.420	17.420	(0.941)	924265	20.0000	20.5942
71 2-Chlorotoluene	91	17.567	17.567	(0.949)	621819	20.0000	19.5374
72 1,3,5-Trimethylbenzene	105	17.587	17.587	(0.950)	536531	20.0000	20.0721
73 4-Chlorotoluene	91	17.676	17.676	(0.955)	578776	20.0000	19.6794
74 tert-Butylbenzene	119	17.991	17.991	(0.972)	480958	20.0000	20.5175
75 1,2,4-Trimethylbenzene	105	18.040	18.040	(0.975)	493120	20.0000	19.9843
76 sec-Butylbenzene	105	18.237	18.237	(0.986)	734672	20.0000	20.9256
77 para-Isopropyl Toluene	119	18.375	18.375	(0.993)	529941	20.0000	20.4999

Data File: \\Gcmsserver\DD\chem\MSVOA10.i\121306.b\JLD12.D
Report Date: 14-Dec-2006 09:16

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
78 1,3-Dichlorobenzene	146	18.434	18.434	(0.996)	365752		20.0000	19.5168
* 79 1,4-Dichlorobenzene-d4	152	18.503	18.503	(1.000)	1233484		50.0000	
80 1,4-Dichlorobenzene	146	18.532	18.532	(1.002)	367001		20.0000	19.2761
81 n-Butylbenzene	91	18.867	18.867	(1.020)	444313		20.0000	20.4674
82 1,2-Dichlorobenzene	146	19.005	19.005	(1.027)	350786		20.0000	19.4950
83 1,2-Dibromo-3-Chloropropane	75	19.970	19.970	(1.079)	44993		20.0000	18.7423
84 1,2,4-Trichlorobenzene	180	21.192	21.192	(1.145)	145535		20.0000	19.3940
85 Hexachlorobutadiene	225	21.398	21.398	(1.156)	70188		20.0000	21.1511
86 Naphthalene	128	21.625	21.625	(1.169)	319467		20.0000	19.5162
87 1,2,3-Trichlorobenzene	180	22.029	22.029	(1.191)	139656		20.0000	19.1180

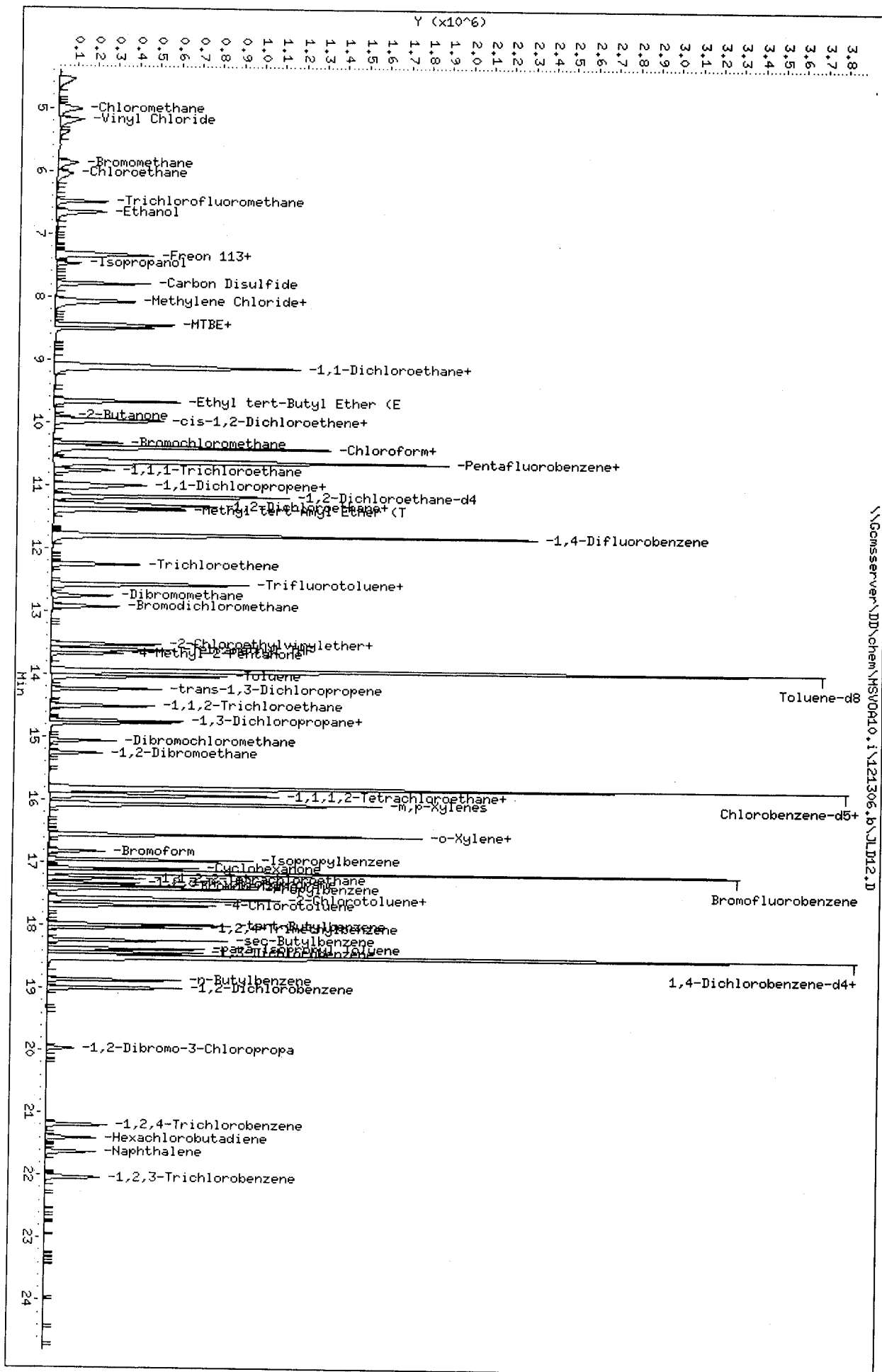
QC Flag Legend

M - Compound response manually integrated.

Data File: \\Gomserver\DD\chem\MSVD010.1\121306.b\JL12.D
 Date : 13-DEC-2006 16:02
 Client ID: DYNA P&T

Sample Info: ICPL,SS064,0.004/100,S4931,0.004/100
 Purge Volume: 5.0
 Column phase: RTX Volatiles

Instrument: MSVD010.1
 Operator: VOA
 Column diameter: 0.32



Curtis & Tompkins

Data file : \\Gcmssserver\DD\chem\MSVOA10.i\121306.b\JLD13.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 13-DEC-2006 16:35 MS Autotune Date: 10-JUL-2006 14:50
 Operator : VOA Inst ID: MSVOA10.i
 Smp Info : ICAL,S5064,0.01/100,S4931,0.01/100
 Misc Info : S4172,0.005/100,50PPB
 Comment :
 Method : \\Gcmssserver\DD\chem\MSVOA10.i\121306.b\826GOX10.m
 Meth Date : 14-Dec-2006 09:30 chemist Quant Type: ISTD
 Cal Date : 13-DEC-2006 16:35 Cal File: JLD13.D
 Als bottle: 13 Calibration Sample, Level: 7
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
1 Freon 12	85	4.538	4.538	(0.428)	724207	50.0000	56.7364
2 Chloromethane	50	5.010	5.010	(0.472)	950367	50.0000	48.1859
3 Vinyl Chloride	62	5.188	5.188	(0.489)	809356	50.0000	50.5046
4 Bromomethane	94	5.877	5.877	(0.554)	514596	50.0000	49.4367
5 Chloroethane	64	6.035	6.035	(0.569)	528235	50.0000	48.7010
6 Trichlorofluoromethane	101	6.488	6.488	(0.611)	736620	50.0000	51.6711
7 Ethanol	45	6.655	6.655	(0.627)	1145123	5000.00	4734.8820
8 Freon 113	101	7.315	7.315	(0.689)	492040	50.0000	52.4254
9 Acetone	43	7.345	7.345	(0.692)	233528	50.0000	44.8349
10 1,1-Dichloroethene	96	7.354	7.354	(0.693)	454046	50.0000	48.3481
11 Isopropanol	45	7.473	7.473	(0.704)	525028	500.000	447.9439
12 Carbon Disulfide	76	7.798	7.798	(0.735)	2272900	50.0000	48.3359
13 Methylene Chloride	84	8.064	8.064	(0.760)	622841	50.0000	45.0442
14 tert-Butyl Alcohol (TBA)	59	8.083	8.083	(0.762)	624532	500.000	476.7357
15 MTBE	73	8.448	8.448	(0.796)	1837228	50.0000	47.0653
16 trans-1,2-Dichloroethene	96	8.497	8.497	(0.801)	544520	50.0000	46.8876
18 Vinyl Acetate	43	9.088	9.088	(0.856)	2295714	50.0000	49.6561
19 1,1-Dichloroethane	63	9.117	9.117	(0.859)	1070885	50.0000	46.8313
20 Isopropyl Ether (DIPE)	45	9.127	9.127	(0.860)	3400493	50.0000	47.1121
21 Ethyl tert-Butyl Ether (ETBE)	59	9.669	9.669	(0.911)	1980813	50.0000	47.5989
22 2-Butanone	43	9.905	9.905	(0.933)	406118	50.0000	49.1860
23 cis-1,2-Dichloroethene	96	9.964	9.964	(0.939)	601776	50.0000	47.2016

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
24 2,2-Dichloropropane	77	9.994	9.994	(0.942)	658006	50.0000	47.2805
25 Bromochloromethane	128	10.329	10.329	(0.973)	308577	50.0000	50.3804
26 Chloroform	83	10.398	10.398	(0.980)	882298	50.0000	47.1400
27 Tetrahydrofuran	42	10.408	10.408	(0.981)	2410193	500.000	458.1730
* 28 Pentafluorobenzene	168	10.614	10.614	(1.000)	1607781	50.0000	
29 Dibromofluoromethane	113	10.634	10.634	(1.002)	1009954	50.0000	49.3895
30 1,1,1-Trichloroethane	97	10.762	10.762	(1.014)	605942	50.0000	49.0677
31 1,1-Dichloropropene	75	10.999	10.999	(0.932)	692773	50.0000	48.9937
32 Carbon Tetrachloride	117	11.038	11.038	(0.936)	476347	50.0000	51.2462
33 1,2-Dichloroethane-d4	65	11.176	11.176	(0.947)	1082988	50.0000	50.1060
34 1,2-Dichloroethane	62	11.294	11.294	(0.957)	757930	50.0000	49.4269
35 Benzene	78	11.333	11.333	(0.961)	2240733	50.0000	45.0363
36 Methyl tert-Amyl Ether (TAME)	73	11.392	11.392	(0.966)	1873409	50.0000	49.1247
* 37 1,4-Difluorobenzene	114	11.796	11.796	(1.000)	2883563	50.0000	
38 Trichloroethene	95	12.259	12.259	(1.039)	504117	50.0000	49.4714
39 Trifluorotoluene	146	12.574	12.574	(1.066)	740936	50.0000	50.8020
40 1,2-Dichloropropane	63	12.574	12.574	(1.066)	666985	50.0000	47.7313
41 Dibromomethane	93	12.752	12.752	(1.081)	389459	50.0000	49.2488
42 Bromodichloromethane	83	12.919	12.919	(1.095)	695006	50.0000	48.7164
43 2-Chloroethylvinylether	63	13.254	13.254	(1.124)	1898	50.0000	51.7373 (MH)
44 cis-1,3-Dichloropropene	75	13.539	13.539	(1.148)	930376	50.0000	47.2535
45 Tetramethyl THF	43	13.618	13.618	(1.154)	1356517	50.0000	48.9629
46 4-Methyl-2-Pentanone	43	13.668	13.668	(1.159)	948115	50.0000	48.9352
47 Toluene-d8	98	13.943	13.943	(1.182)	3336642	50.0000	50.3372
48 Toluene	92	14.032	14.032	(1.190)	1220103	50.0000	47.6053
49 trans-1,3-Dichloropropene	75	14.239	14.239	(1.207)	849704	50.0000	48.2974
50 1,1,2-Trichloroethane	85	14.505	14.505	(1.230)	287698	50.0000	48.4334
51 1,3-Dichloropropane	76	14.741	14.741	(0.933)	920448	50.0000	49.0537
52 2-Hexanone	43	14.761	14.761	(0.934)	556548	50.0000	50.6441
53 Tetrachloroethene	166	14.780	14.780	(0.935)	431758	50.0000	48.2827
54 Dibromochloromethane	129	15.066	15.066	(0.953)	547117	50.0000	50.5677
55 1,2-Dibromoethane	107	15.253	15.253	(1.293)	551840	50.0000	48.5288
* 56 Chlorobenzene-d5	117	15.805	15.805	(1.000)	2731652	50.0000	
57 Chlorobenzene	112	15.844	15.844	(1.002)	1314137	50.0000	48.4742
58 1,1,1,2-Tetrachloroethane	131	15.913	15.913	(1.007)	445127	50.0000	49.1464
59 Ethylbenzene	91	15.933	15.933	(1.008)	2165021	50.0000	47.7470
60 m,p-Xylenes	106	16.071	16.071	(1.017)	1602013	100.000	89.2736
61 o-Xylene	106	16.553	16.553	(1.047)	789405	50.0000	47.6971
62 Styrene	104	16.553	16.553	(1.047)	1448674	50.0000	49.3087
63 Bromoform	173	16.819	16.819	(1.064)	391645	50.0000	47.4212
64 Isopropylbenzene	105	16.957	16.957	(0.916)	1872074	50.0000	46.3741
65 Cyclohexanone	55	17.095	17.095	(0.924)	1002311	500.000	470.2209
66 Bromofluorobenzene	95	17.154	17.154	(0.927)	1588818	50.0000	49.2830
67 1,1,2,2-Tetrachloroethane	83	17.252	17.252	(0.932)	749167	50.0000	47.1145
68 1,2,3-Trichloropropane	75	17.331	17.331	(0.937)	634441	50.0000	44.9184
69 Bromobenzene	156	17.381	17.381	(0.939)	549279	50.0000	47.7371
70 Propylbenzene	91	17.420	17.420	(0.941)	2379736	50.0000	47.5930
71 2-Chlorotoluene	91	17.568	17.568	(0.949)	1642252	50.0000	46.3137
72 1,3,5-Trimethylbenzene	105	17.587	17.587	(0.951)	1422865	50.0000	47.7780
73 4-Chlorotoluene	91	17.676	17.676	(0.955)	1527204	50.0000	46.6083
74 tert-Butylbenzene	119	17.991	17.991	(0.972)	1263520	50.0000	48.3799
75 1,2,4-Trimethylbenzene	105	18.031	18.031	(0.974)	1334881	50.0000	48.5563
76 sec-Butylbenzene	105	18.237	18.237	(0.986)	1922858	50.0000	49.1584
77 para-Isopropyl Toluene	119	18.375	18.375	(0.993)	1414107	50.0000	49.0990

Data File: \\Gcmssserver\DD\chem\MSVOA10.i\121306.b\JLD13.D
Report Date: 14-Dec-2006 09:30

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
78 1,3-Dichlorobenzene	146	18.434	18.434	(0.996)	974882		50.0000	46.6917
* 79 1,4-Dichlorobenzene-d4	152	18.503	18.503	(1.000)	1374258		50.0000	
80 1,4-Dichlorobenzene	146	18.533	18.533	(1.002)	986868		50.0000	46.5240
81 n-Butylbenzene	91	18.868	18.868	(1.020)	1210437		50.0000	50.0473
82 1,2-Dichlorobenzene	146	19.006	19.006	(1.027)	943085		50.0000	47.0433
83 1,2-Dibromo-3-Chloropropane	75	19.971	19.971	(1.079)	121243		50.0000	45.3316
84 1,2,4-Trichlorobenzene	180	21.192	21.192	(1.145)	421539		50.0000	50.4202
85 Hexachlorobutadiene	225	21.399	21.399	(1.156)	175765		50.0000	47.5410
86 Naphthalene	128	21.625	21.625	(1.169)	941195		50.0000	51.6076
87 1,2,3-Trichlorobenzene	180	22.029	22.029	(1.191)	403705		50.0000	49.6037

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\Gomsserver\DD\chem\MSV0410.i\121306.b\JLD13.D

Date : 13-DEC-2006 16:35

Client ID: DYNA P&T

Sample Info: ICAL,SS064,0.01/100,S4931,0.01/100

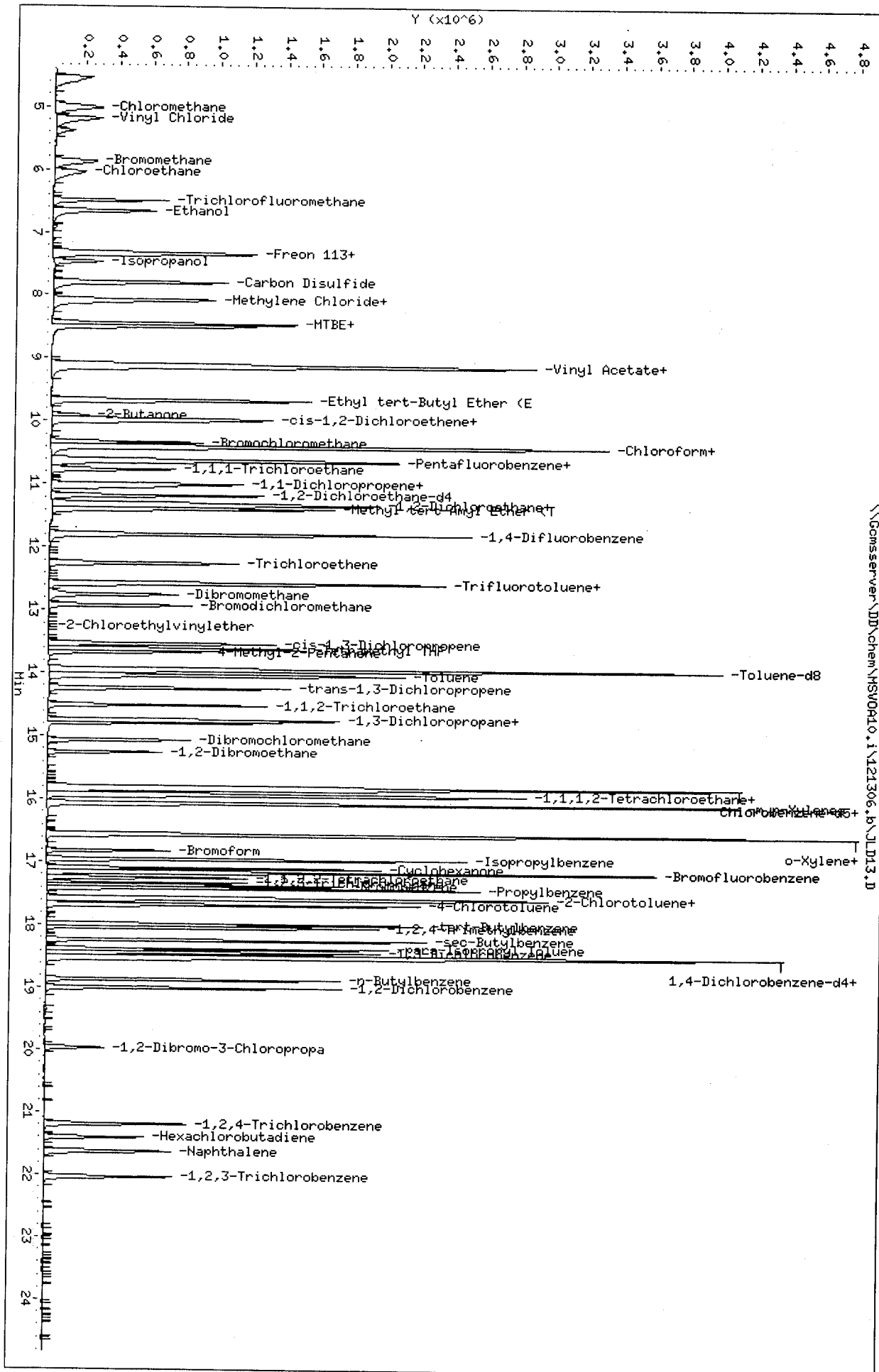
Purge Volume: 5.0

Column phase: RTX Volatiles

Instrument: MSV0410.i

Operator: VOA

Column diameter: 0.32



Data File: \\Gcmsserver\DD\chem\MSVOA10.i\121306.b\JLD14.D
 Report Date: 14-Dec-2006 09:31

Curtis & Tompkins

Data file : \\Gcmsserver\DD\chem\MSVOA10.i\121306.b\JLD14.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 13-DEC-2006 17:08 MS Autotune Date: 10-JUL-2006 14:50
 Operator : VOA Inst ID: MSVOA10.i
 Smp Info : ICAL,S5064,0.015/100,S4931,0.015/100
 Misc Info : S4172,0.0075/100,75PPB
 Comment :
 Method : \\Gcmsserver\DD\chem\MSVOA10.i\121306.b\826GOX10.m
 Meth Date : 14-Dec-2006 09:31 chemist Quant Type: ISTD
 Cal Date : 13-DEC-2006 17:08 Cal File: JLD14.D
 Als bottle: 14 Calibration Sample, Level: 8
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.543	4.543 (0.428)		982561	75.0000	81.5798
2 Chloromethane	50	5.006	5.006 (0.471)		1388517	75.0000	74.6112
3 Vinyl Chloride	62	5.183	5.183 (0.488)		1167455	75.0000	77.2068
4 Bromomethane	94	5.873	5.873 (0.553)		779926	75.0000	79.4074
5 Chloroethane	64	6.040	6.040 (0.569)		769551	75.0000	75.1921
6 Trichlorofluoromethane	101	6.493	6.493 (0.611)		1085532	75.0000	80.6996
7 Ethanol	45	6.651	6.651 (0.626)		1701409	7500.00	7455.7301
8 Freon 113	101	7.321	7.321 (0.689)		635430	75.0000	71.7519
9 Acetone	43	7.340	7.340 (0.691)		359806	75.0000	73.2099
10 1,1-Dichloroethene	96	7.350	7.350 (0.692)		658652	75.0000	74.3293
11 Isopropanol	45	7.468	7.468 (0.703)		798206	750.000	721.7397
12 Carbon Disulfide	76	7.793	7.793 (0.734)		3228277	75.0000	72.7587
13 Methylene Chloride	84	8.069	8.069 (0.760)		905750	75.0000	69.4215
14 tert-Butyl Alcohol (TBA)	59	8.079	8.079 (0.761)		945232	750.000	764.6907
15 MTBE	73	8.453	8.453 (0.796)		2717519	75.0000	73.7793
16 trans-1,2-Dichloroethene	96	8.503	8.503 (0.801)		798754	75.0000	72.8924
18 Vinyl Acetate	43	9.084	9.084 (0.855)		3246491	75.0000	74.4207
19 1,1-Dichloroethane	63	9.113	9.113 (0.858)		1556893	75.0000	72.1566
20 Isopropyl Ether (DIPE)	45	9.133	9.133 (0.860)		4929982	75.0000	72.3869
21 Ethyl tert-Butyl Ether (ETBE)	59	9.665	9.665 (0.910)		2907122	75.0000	74.0357
22 2-Butanone	43	9.901	9.901 (0.932)		610259	75.0000	78.3299
23 cis-1,2-Dichloroethene	96	9.960	9.960 (0.938)		874961	75.0000	72.7336

: 00004

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
	=====	=====	=====	=====	=====	(ug/L)	(ug/L)
24 2,2-Dichloropropane	77	9.990	9.990	(0.941)	932346	75.0000	70.9992
25 Bromochloromethane	128	10.334	10.334	(0.973)	457138	75.0000	79.0989
26 Chloroform	83	10.393	10.393	(0.979)	1328563	75.0000	75.2282
27 Tetrahydrofuran	42	10.403	10.403	(0.980)	3605893	750.000	726.4654
* 28 Pentafluorobenzene	168	10.620	10.620	(1.000)	1517059	50.0000	
29 Dibromofluoromethane	113	10.640	10.640	(1.002)	979943	50.0000	50.7877
30 1,1,1-Trichloroethane	97	10.768	10.768	(1.014)	857301	75.0000	73.5737
31 1,1-Dichloropropene	75	10.994	10.994	(0.932)	973979	75.0000	70.2720
32 Carbon Tetrachloride	117	11.044	11.044	(0.937)	653773	75.0000	71.7544
33 1,2-Dichloroethane-d4	65	11.181	11.181	(0.948)	1071122	50.0000	50.5578
34 1,2-Dichloroethane	62	11.300	11.300	(0.958)	1117022	75.0000	74.3155
35 Benzene	78	11.329	11.329	(0.961)	3208093	75.0000	65.7814
36 Methyl tert-Amyl Ether (TAME)	73	11.388	11.388	(0.966)	2777221	75.0000	74.2953
* 37 1,4-Difluorobenzene	114	11.792	11.792	(1.000)	2826480	50.0000	
38 Trichloroethene	95	12.255	12.255	(1.039)	726139	75.0000	72.6987
39 Trifluorotoluene	146	12.570	12.570	(1.066)	1009804	75.0000	70.6351
40 1,2-Dichloropropane	63	12.580	12.580	(1.067)	976844	75.0000	71.3175
41 Dibromomethane	93	12.757	12.757	(1.082)	574362	75.0000	74.0975
42 Bromodichloromethane	83	12.925	12.925	(1.096)	1047506	75.0000	74.9077
43 2-Chloroethylvinylether	63	13.259	13.259	(1.124)	3361	75.0000	93.4673 (H)
44 cis-1,3-Dichloropropene	75	13.535	13.535	(1.148)	1428082	75.0000	73.9966
45 Tetramethyl THF	43	13.614	13.614	(1.155)	1931833	75.0000	71.1370
46 4-Methyl-2-Pentanone	43	13.673	13.673	(1.160)	1492538	75.0000	78.5905
47 Toluene-d8	98	13.939	13.939	(1.182)	3245533	50.0000	49.9516
48 Toluene	92	14.038	14.038	(1.190)	1742106	75.0000	69.3453
49 trans-1,3-Dichloropropene	75	14.244	14.244	(1.208)	1284825	75.0000	74.5048
50 1,1,2-Trichloroethane	85	14.510	14.510	(1.231)	433977	75.0000	74.5347
51 1,3-Dichloropropane	76	14.737	14.737	(0.932)	1372618	75.0000	74.8615
52 2-Hexanone	43	14.757	14.757	(0.933)	818878	75.0000	76.2573
53 Tetrachloroethene	166	14.786	14.786	(0.935)	593738	75.0000	67.9488
54 Dibromochloromethane	129	15.062	15.062	(0.953)	817967	75.0000	77.3686
55 1,2-Dibromoethane	107	15.249	15.249	(1.293)	837695	75.0000	75.1547
* 56 Chlorobenzene-d5	117	15.810	15.810	(1.000)	2669252	50.0000	
57 Chlorobenzene	112	15.850	15.850	(1.002)	1917007	75.0000	72.3652
58 1,1,1,2-Tetrachloroethane	131	15.909	15.909	(1.006)	658766	75.0000	74.4345
59 Ethylbenzene	91	15.938	15.938	(1.008)	3035482	75.0000	68.5089
60 m,p-Xylenes	106	16.066	16.066	(1.016)	2222766	150.000	126.7613
61 o-Xylene	106	16.549	16.549	(1.047)	1128683	75.0000	69.7912
62 Styrene	104	16.559	16.559	(1.047)	2068440	75.0000	72.0496
63 Bromoform	173	16.825	16.825	(1.064)	596340	75.0000	73.8942
64 Isopropylbenzene	105	16.953	16.953	(0.916)	2616069	75.0000	67.9655
65 Cyclohexanone	55	17.091	17.091	(0.924)	1514925	750.000	745.3785
66 Bromofluorobenzene	95	17.160	17.160	(0.928)	1526672	50.0000	49.6655
67 1,1,2,2-Tetrachloroethane	83	17.248	17.248	(0.932)	1121273	75.0000	73.9561
68 1,2,3-Trichloropropane	75	17.337	17.337	(0.937)	936616	75.0000	69.5474
69 Bromobenzene	156	17.376	17.376	(0.939)	816337	75.0000	74.4078
70 Propylbenzene	91	17.416	17.416	(0.941)	3309869	75.0000	69.4243
71 2-Chlorotoluene	91	17.563	17.563	(0.949)	2323201	75.0000	68.7136
72 1,3,5-Trimethylbenzene	105	17.593	17.593	(0.951)	2007402	75.0000	70.6944
73 4-Chlorotoluene	91	17.682	17.682	(0.956)	2215336	75.0000	70.9075
74 tert-Butylbenzene	119	17.987	17.987	(0.972)	1787143	75.0000	71.7676
75 1,2,4-Trimethylbenzene	105	18.036	18.036	(0.975)	1931901	75.0000	73.7012
76 sec-Butylbenzene	105	18.243	18.243	(0.986)	2603788	75.0000	69.8140
77 para-Isopropyl Toluene	119	18.381	18.381	(0.994)	1960251	75.0000	71.3820

Data File: \\Gcmssserver\DD\chem\MSVOA10.i\121306.b\JLD14.D
 Report Date: 14-Dec-2006 09:31

						AMOUNTS		
		QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	
=====	=====	=====	=====	=====	=====	=====	=====	
78 1,3-Dichlorobenzene	146	18.430	18.430	(0.996)	1431117	75.0000	71.8869	
* 79 1,4-Dichlorobenzene-d4	152	18.499	18.499	(1.000)	1310334	50.0000		
80 1,4-Dichlorobenzene	146	18.529	18.529	(1.002)	1445923	75.0000	71.4907	
81 n-Butylbenzene	91	18.863	18.863	(1.020)	1690714	75.0000	73.3154	
82 1,2-Dichlorobenzene	146	19.001	19.001	(1.027)	1392939	75.0000	72.8728	
83 1,2-Dibromo-3-Chloropropane	75	19.967	19.967	(1.079)	181890	75.0000	71.3246	
84 1,2,4-Trichlorobenzene	180	21.188	21.188	(1.145)	624668	75.0000	78.3614	
85 Hexachlorobutadiene	225	21.404	21.404	(1.157)	232116	75.0000	65.8457	
86 Naphthalene	128	21.621	21.621	(1.169)	1456171	75.0000	83.7400	
87 1,2,3-Trichlorobenzene	180	22.035	22.035	(1.191)	605118	75.0000	77.9787	

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: \\Gomsserver\DD\chem\MSWD010.1\121306.b\JL14.D
 Date: 13-DEC-2006 17:08

Client ID: DYNA P&T

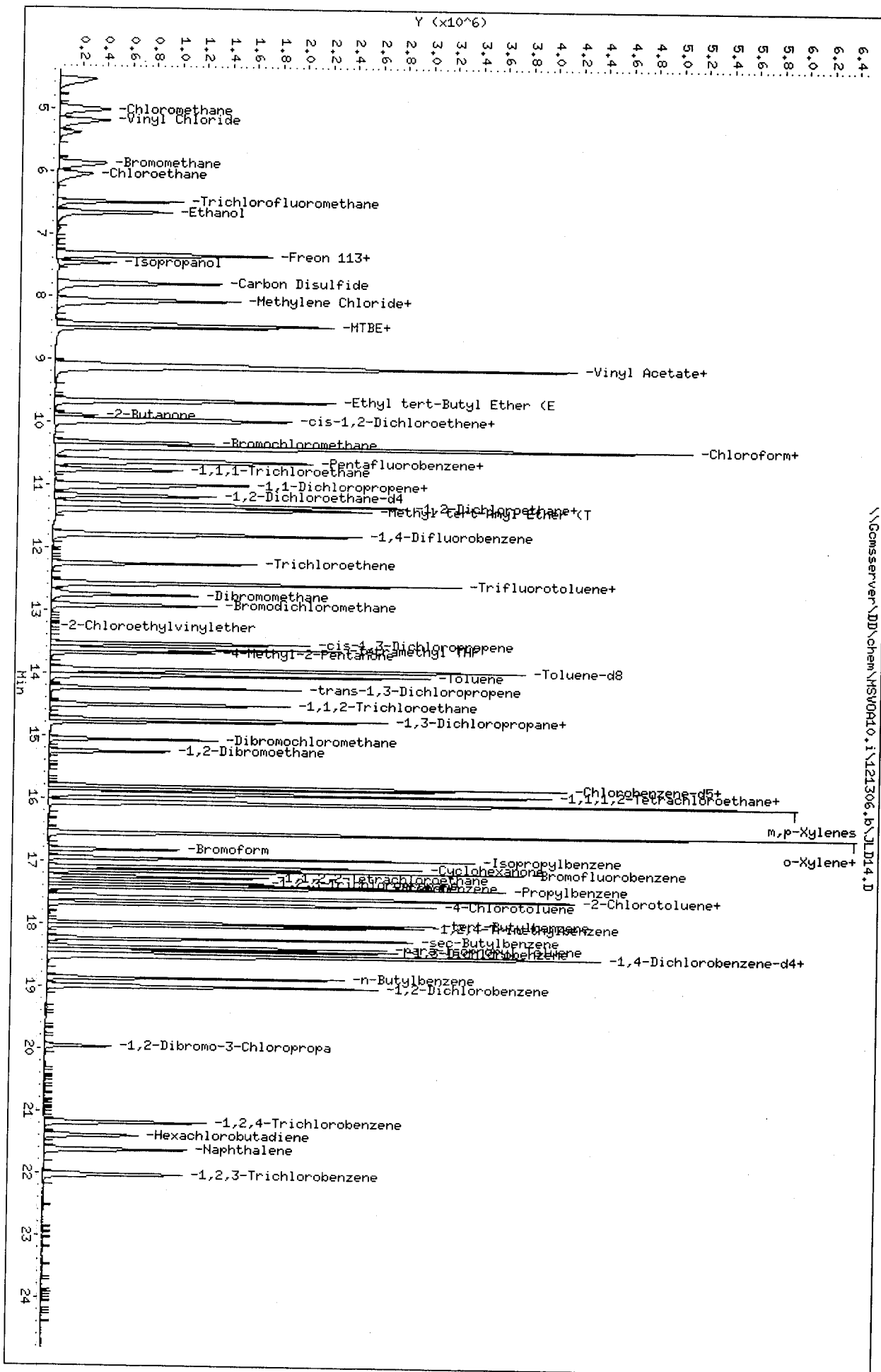
Sample Info: ICAL, S5064, 0.015/100, S4931, 0.015/100

Purge Volume: 5.0

Column phase: RTX Volatiles

Instrument: MSWD010.1

Operator: WDA
 Column diameter: 0.32



Data File: \\Gcmssserver\DD\chem\MSVOA10.i\121306.b\JLD15.D
 Report Date: 14-Dec-2006 09:32

Curtis & Tompkins

Data file : \\Gcmssserver\DD\chem\MSVOA10.i\121306.b\JLD15.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 13-DEC-2006 17:41 MS Autotune Date: 10-JUL-2006 14:50
 Operator : VOA Inst ID: MSVOA10.i
 Smp Info : ICAL,S5064,0.02/100,S4931,0.02/100
 Misc Info : S4172,0.01/100,100PPB
 Comment :
 Method : \\Gcmssserver\DD\chem\MSVOA10.i\121306.b\826GOX10.m
 Meth Date : 14-Dec-2006 09:32 chemist Quant Type: ISTD
 Cal Date : 13-DEC-2006 17:41 Cal File: JLD15.D
 Als bottle: 15 Calibration Sample, Level: 9
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA04

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
1 Freon 12	85	4.545	4.545	(0.428)	1434882	100.000	115.6137
2 Chloromethane	50	5.018	5.018	(0.473)	1928086	100.000	100.5424
3 Vinyl Chloride	62	5.186	5.186	(0.489)	1617404	100.000	103.8016
4 Bromomethane	94	5.875	5.875	(0.554)	1067919	100.000	105.5153
5 Chloroethane	64	6.042	6.042	(0.569)	1041552	100.000	98.7611
6 Trichlorofluoromethane	101	6.496	6.496	(0.612)	1509424	100.000	108.8955
7 Ethanol	45	6.653	6.653	(0.627)	2275029	10000.0	9674.7166
8 Freon 113	101	7.323	7.323	(0.690)	980133	100.000	107.4041
9 Acetone	43	7.343	7.343	(0.692)	486610	100.000	96.0843
10 1,1-Dichloroethene	96	7.352	7.352	(0.693)	913717	100.000	100.0657
11 Isopropanol	45	7.471	7.471	(0.704)	1060273	1000.00	930.3646
12 Carbon Disulfide	76	7.796	7.796	(0.735)	4553639	100.000	99.5961
13 Methylene Chloride	84	8.071	8.071	(0.761)	1240400	100.000	92.2609
14 tert-Butyl Alcohol (TBA)	59	8.081	8.081	(0.762)	1283079	1000.00	1007.3275
15 MTBE	73	8.455	8.455	(0.797)	3743188	100.000	98.6219
16 trans-1,2-Dichloroethene	96	8.495	8.495	(0.800)	1102782	100.000	97.6627
18 Vinyl Acetate	43	9.086	9.086	(0.856)	4500845	100.000	100.1253
19 1,1-Dichloroethane	63	9.115	9.115	(0.859)	2088699	100.000	93.9428
20 Isopropyl Ether (DIPE)	45	9.135	9.135	(0.861)	6575849	100.000	93.6994
21 Ethyl tert-Butyl Ether (ETBE)	59	9.667	9.667	(0.911)	3998514	100.000	98.8204
22 2-Butanone	43	9.903	9.903	(0.933)	827849	100.000	103.1180
23 cis-1,2-Dichloroethene	96	9.962	9.962	(0.939)	1207924	100.000	97.4442

Compounds	QUANT SIG		AMOUNTS				
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
24 2,2-Dichloropropane	77	9.992	9.992	(0.942)	1291921	100.000	95.4734
25 Bromochloromethane	128	10.327	10.327	(0.973)	622371	100.000	104.5063
26 Chloroform	83	10.396	10.396	(0.980)	1760357	100.000	96.7318
27 Tetrahydrofuran	42	10.405	10.405	(0.981)	4815213	1000.00	941.4288
* 28 Pentafluorobenzene	168	10.612	10.612	(1.000)	1563265	50.0000	
29 Dibromofluoromethane	113	10.632	10.632	(1.002)	997328	50.0000	50.1609
30 1,1,1-Trichloroethane	97	10.770	10.770	(1.015)	1235934	100.000	102.9329
31 1,1-Dichloropropene	75	10.996	10.996	(0.932)	1408550	100.000	100.1978
32 Carbon Tetrachloride	117	11.036	11.036	(0.936)	951923	100.000	103.0094
33 1,2-Dichloroethane-d4	65	11.184	11.184	(0.948)	1064261	50.0000	49.5280
34 1,2-Dichloroethane	62	11.292	11.292	(0.957)	1515412	100.000	99.4035
35 Benzene	78	11.331	11.331	(0.961)	4430142	100.000	89.5627
36 Methyl tert-Amyl Ether (TAME)	73	11.390	11.390	(0.966)	3736545	100.000	98.5540
* 37 1,4-Difluorobenzene	114	11.794	11.794	(1.000)	2866769	50.0000	
38 Trichloroethene	95	12.257	12.257	(1.039)	1002856	100.000	98.9916
39 Trifluorotoluene	146	12.572	12.572	(1.066)	1503253	100.000	103.6737
40 1,2-Dichloropropane	63	12.572	12.572	(1.066)	1321879	100.000	95.1516
41 Dibromomethane	93	12.749	12.749	(1.081)	779115	100.000	99.0998
42 Bromodichloromethane	83	12.917	12.917	(1.095)	1419869	100.000	100.1087
43 2-Chloroethylvinylether	63	13.271	13.271	(1.125)	4333	100.000	118.8046 (H)
44 cis-1,3-Dichloropropene	75	13.528	13.528	(1.147)	1942682	100.000	99.2462
45 Tetramethyl THF	43	13.616	13.616	(1.154)	2767942	100.000	100.4931
46 4-Methyl-2-Pentanone	43	13.665	13.665	(1.159)	1897798	100.000	98.5253
47 Toluene-d8	98	13.941	13.941	(1.182)	3272256	50.0000	49.6551
48 Toluene	92	14.030	14.030	(1.190)	2442531	100.000	95.8597
49 trans-1,3-Dichloropropene	75	14.237	14.237	(1.207)	1773264	100.000	101.3834
50 1,1,2-Trichloroethane	85	14.503	14.503	(1.230)	585391	100.000	99.1268
51 1,3-Dichloropropane	76	14.739	14.739	(0.933)	1866306	100.000	101.3214
52 2-Hexanone	43	14.759	14.759	(0.934)	1146503	100.000	106.2789
53 Tetrachloroethene	166	14.778	14.778	(0.935)	880420	100.000	100.2967
54 Dibromochloromethane	129	15.064	15.064	(0.953)	1120848	100.000	105.5323
55 1,2-Dibromoethane	107	15.251	15.251	(1.293)	1145511	100.000	101.3264
* 56 Chlorobenzene-d5	117	15.803	15.803	(1.000)	2681514	50.0000	
57 Chlorobenzene	112	15.842	15.842	(1.002)	2620383	100.000	98.4647
58 1,1,1,2-Tetrachloroethane	131	15.911	15.911	(1.007)	904195	100.000	101.6986
59 Ethylbenzene	91	15.931	15.931	(1.008)	4306255	100.000	96.7451
60 m,p-Xylenes	106	16.069	16.069	(1.017)	3165517	200.000	179.6996
61 o-Xylene	106	16.551	16.551	(1.047)	1568139	100.000	96.5212
62 Styrene	104	16.551	16.551	(1.047)	2844486	100.000	98.6284
63 Bromoform	173	16.817	16.817	(1.064)	813410	100.000	100.3310
64 Isopropylbenzene	105	16.955	16.955	(0.916)	3757801	100.000	94.1292
65 Cyclohexanone	55	17.093	17.093	(0.924)	2164557	1000.00	1026.8480
66 Bromofluorobenzene	95	17.152	17.152	(0.927)	1553359	50.0000	48.7228
67 1,1,2,2-Tetrachloroethane	83	17.250	17.250	(0.932)	1535092	100.000	97.6221
68 1,2,3-Trichloropropane	75	17.329	17.329	(0.937)	1299973	100.000	93.0690
69 Bromobenzene	156	17.378	17.378	(0.939)	1137510	100.000	99.9668
70 Propylbenzene	91	17.418	17.418	(0.941)	4829668	100.000	97.6719
71 2-Chlorotoluene	91	17.566	17.566	(0.949)	3308587	100.000	94.3518
72 1,3,5-Trimethylbenzene	105	17.585	17.585	(0.950)	2949395	100.000	100.1463
73 4-Chlorotoluene	91	17.674	17.674	(0.955)	3104038	100.000	95.7924
74 tert-Butylbenzene	119	17.989	17.989	(0.972)	2598945	100.000	100.6278
75 1,2,4-Trimethylbenzene	105	18.038	18.038	(0.975)	2831421	100.000	104.1467
76 sec-Butylbenzene	105	18.235	18.235	(0.986)	3971778	100.000	102.6771
77 para-Isopropyl Toluene	119	18.373	18.373	(0.993)	2973314	100.000	104.3925

Data File: \\Gcmssserver\DD\chem\MSVOA10.i\121306.b\JLD15.D
Report Date: 14-Dec-2006 09:32

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
78 1,3-Dichlorobenzene	146	18.432	18.432	(0.996)	2000778		100.000	96.9002
* 79 1,4-Dichlorobenzene-d4	152	18.501	18.501	(1.000)	1359035		50.0000	
80 1,4-Dichlorobenzene	146	18.531	18.531	(1.002)	2035683		100.000	97.0434
81 n-Butylbenzene	91	18.866	18.866	(1.020)	2607820		100.000	109.0321
82 1,2-Dichlorobenzene	146	19.003	19.003	(1.027)	1953690		100.000	98.5463
83 1,2-Dibromo-3-Chloropropane	75	19.969	19.969	(1.079)	257856		100.000	97.4898
84 1,2,4-Trichlorobenzene	180	21.190	21.190	(1.145)	917303		100.000	110.9474
85 Hexachlorobutadiene	225	21.397	21.397	(1.157)	371377		100.000	101.5754
86 Naphthalene	128	21.623	21.623	(1.169)	2139438		100.000	118.6238
87 1,2,3-Trichlorobenzene	180	22.027	22.027	(1.191)	900284		100.000	111.8580

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: \\Gomserver\DD\chem\MSV0410.1\121306.0\JL.D15.D

Date: 13-DEC-2006 17:41

Client ID: DYNA P&T

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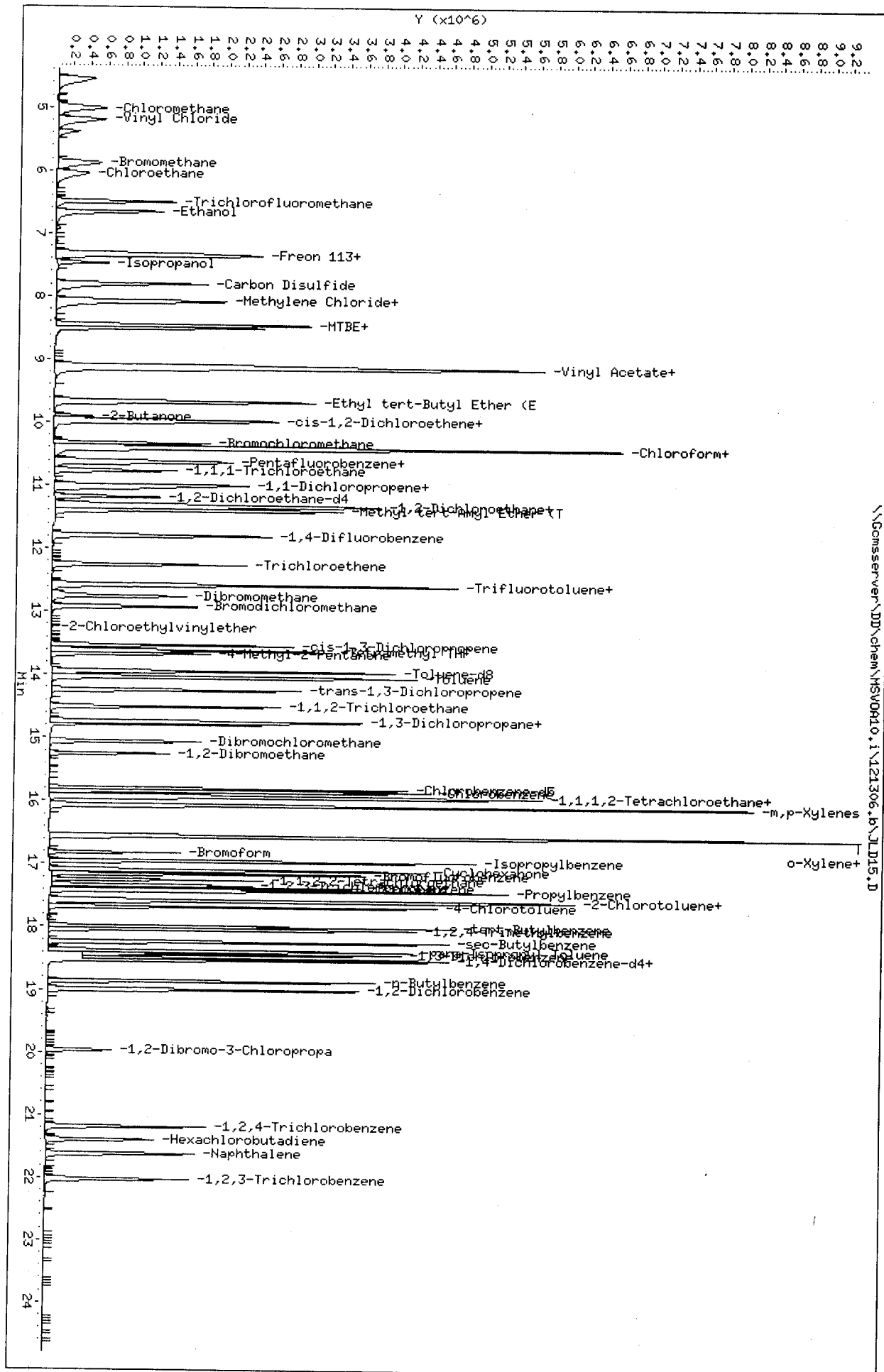
Purge Volume: 5.0

Column phase: RTX Volatiles

Instrument: MSV0410.i

Operator: WDA

Column diameter: 0.32



CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191290 MSVOA Water
EPA 8260B

Inst : MSVOA10 Run Name: 30PPB IDF : 1.0
Seqnum : 496501739003 File : jle03 Time : 14-DEC-2006 11:56
Cal : 496500266005 Caldate : 13-DEC-2006 Caltype : WATER
Standards: S5064 (16670X), S4931 (16670X), S4713 (33330X), S4696 (5000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.6134	0.6071	30.00	29.69	ug/L	-1	30	0.1000	
Vinyl Chloride	0.4984	0.5182	30.00	31.19	ug/L	4	20	0.0500	
Bromomethane	0.3237	0.3136	30.00	29.06	ug/L	-3	30	0.0500	
Chloroethane	0.3373	0.3406	30.00	30.29	ug/L	1	30	0.0500	
Acetone	0.1620	0.1914	30.00	35.44	ug/L	18	40	0.0500	
1,1-Dichloroethene	0.2921	0.2912	30.00	29.91	ug/L	0	20	0.0500	
Methylene Chloride	0.4300	0.4026	30.00	28.09	ug/L	-6	30	0.0500	
Carbon Disulfide	1.4624	1.4585	30.00	29.92	ug/L	0	30	0.0500	
MTBE	1.2140	1.2021	30.00	29.71	ug/L	-1	30	0.0500	
trans-1,2-Dichloroethene	0.3612	0.3529	30.00	29.32	ug/L	-2	30	0.0500	
Vinyl Acetate	1.4378	1.5390	30.00	32.11	ug/L	7	40	0.0500	
1,1-Dichloroethane	0.7111	0.6816	30.00	28.75	ug/L	-4	30	0.1000	
2-Butanone	0.2568	0.2801	30.00	32.72	ug/L	9	40	0.0500	
cis-1,2-Dichloroethene	0.3965	0.3741	30.00	28.31	ug/L	-6	30	0.0500	
Chloroform	0.5821	0.5697	30.00	29.36	ug/L	-2	20	0.0500	
1,1,1-Trichloroethane	0.3840	0.3839	30.00	29.99	ug/L	0	30	0.0500	
Carbon Tetrachloride	0.1612	0.1675	30.00	31.18	ug/L	4	30	0.0500	
1,2-Dichloroethane	0.2659	0.2655	30.00	29.95	ug/L	0	30	0.0500	
Benzene	0.8627	0.7976	30.00	30.89	ug/L	3	30	0.0500	
Trichloroethene	0.1767	0.1766	30.00	29.99	ug/L	0	30	0.0500	
1,2-Dichloropropane	0.2423	0.2352	30.00	29.12	ug/L	-3	20	0.0500	
Bromodichloromethane	0.2474	0.2487	30.00	30.16	ug/L	1	30	0.0500	
4-Methyl-2-Pentanone	0.3360	0.3756	30.00	33.54	ug/L	12	40	0.0500	
cis-1,3-Dichloropropene	0.3414	0.3485	30.00	30.63	ug/L	2	30	0.0500	
Toluene	0.4444	0.4412	30.00	29.78	ug/L	-1	20	0.0500	
trans-1,3-Dichloropropene	0.3051	0.3091	30.00	30.40	ug/L	1	30	0.0500	
1,1,2-Trichloroethane	0.1030	0.1036	30.00	30.18	ug/L	1	30	0.0500	
2-Hexanone	0.2011	0.2198	30.00	32.78	ug/L	9	40	0.0500	
Tetrachloroethene	0.1637	0.1650	30.00	30.24	ug/L	1	30	0.0500	
Dibromochloromethane	0.1980	0.2051	30.00	31.08	ug/L	4	30	0.0500	
Chlorobenzene	0.4962	0.4984	30.00	30.13	ug/L	0	30	0.3000	
Ethylbenzene	0.8300	0.8245	30.00	29.80	ug/L	-1	20	0.0500	
m,p-Xylenes	0.3285	0.3007	60.00	61.98	ug/L	3	30	0.0500	
o-Xylene	0.3029	0.2976	30.00	29.47	ug/L	-2	30	0.0500	
Styrene	0.5378	0.5485	30.00	30.60	ug/L	2	30	0.0500	
Bromoform	0.1512	0.1493	30.00	29.62	ug/L	-1	30	0.1000	
1,1,2,2-Tetrachloroethane	0.5785	0.5874	30.00	30.46	ug/L	2	30	0.3000	
Dibromofluoromethane	0.6359	0.6101	50.00	47.97	ug/L	-4	30	0.0500	
1,2-Dichloroethane-d4	0.3748	0.3669	50.00	48.95	ug/L	-2	30	0.0500	
Toluene-d8	1.1494	1.1335	50.00	49.31	ug/L	-1	30	0.0500	
Bromofluorobenzene	1.1729	1.1502	50.00	49.03	ug/L	-2	30	0.0500	

ISTD (ICAL jld13)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	1607781	1903916	18.42	10.62	10.63	0.02
1,4-Difluorobenzene	2883563	3425352	18.79	11.80	11.80	0.00
Chlorobenzene-d5	2731652	3271407	19.76	15.81	15.82	0.02
1,4-Dichlorobenzene-d4	1374258	1629455	18.57	18.50	18.50	0.00

Analyst: ACM

Date: 12/14/06

Reviewer: LW

Date: 12/15/06

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 496501739

Date : 12/14/06
Sequence : MSVOA10 jle

ICAL Filename: jld13
ICAL Analyzed: 12/13/06 16:35

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	1607781	10.62	2883563	11.80	2731652	15.81	1374258	18.50
		LOWER LIMIT	803891	10.12	1441782	11.30	1365826	15.31	687129	18.00
		UPPER LIMIT	3215562	11.12	5767126	12.30	5463304	16.31	2748516	19.00
003	CCV	30PPB	1903916	10.63	3425352	11.80	3271407	15.82	1629455	18.50
004	BS	QC368303	1812475	10.62	3260108	11.80	3099408	15.81	1552845	18.51
005	BSD	QC368304	1804092	10.62	3278886	11.80	3130339	15.81	1539423	18.50
007	BLANK	QC368305	1828238	10.62	3343228	11.80	3198158	15.82	1508090	18.51
008	SAMPLE	191315-002	1786398	10.63	3213948	11.80	3117588	15.82	1501634	18.51
009	SAMPLE	191275-006	1763486	10.63	3173558	11.80	3090907	15.81	1457830	18.51
010	SAMPLE	191362-002	1795120	10.63	3260296	11.80	3116755	15.82	1505000	18.51
011	SAMPLE	191290-001	1801408	10.62	3296418	11.81	3150050	15.81	1533957	18.50
012	SAMPLE	191362-003	1919849	10.62	3411221	11.80	3338649	15.81	1597246	18.51
013	SAMPLE	191362-004	1819630	10.62	3340400	11.81	3182344	15.82	1518291	18.50
014	SAMPLE	191321-003	1830087	10.62	3318774	11.80	3230829	15.81	1543204	18.51
015	SAMPLE	191321-005	1836832	10.62	3338245	11.80	3256410	15.81	1537146	18.51
016	SAMPLE	191321-006	1853521	10.63	3355609	11.80	3248466	15.82	1527785	18.51
017	SAMPLE	191321-004	1823752	10.63	3335906	11.80	3170281	15.81	1506199	18.51
018	SAMPLE	191321-007	1946972	10.62	3577407	11.80	3429287	15.81	1608363	18.51
019	SAMPLE	191275-003	1846881	10.63	3379227	11.81	3246619	15.82	1538770	18.50
020	SAMPLE	191275-004	1859244	10.63	3454929	11.80	3289633	15.81	1564263	18.51
021	SAMPLE	191275-007	1962781	10.63	3566126	11.80	3386581	15.81	1628100	18.51
022	SAMPLE	191287-001	1864773	10.63	3493727	11.80	3308788	15.81	1562561	18.51

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 496500266

Instrument : MSVOA10
Method : EPA 8260B

Begun : 12/13/06 09:46
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	jld01	X	IB			12/13/06 09:46	1.0	1	
002	jld02	X	LP			12/13/06 10:19	1.0	1	
003	jld03	X	LP			12/13/06 11:11	1.0	1	
004	jld04	TUN	BFB			12/13/06 11:42	1.0	2	
005	jld05	X	IB			12/13/06 12:09	1.0	1	
006	jld06	IB	CALIB			12/13/06 12:42	1.0	1	
007	jld07	ICAL	0.25/0.5PPB			12/13/06 13:15	1.0	3 4 5 1	
008	jld08	ICAL	0.5/1PPB			12/13/06 13:48	1.0	3 4 5 1	
009	jld09	ICAL	2PPB			12/13/06 14:21	1.0	3 4 5 1	
010	jld10	ICAL	5PPB			12/13/06 14:55	1.0	3 4 5 1	
011	jld11	ICAL	10PPB			12/13/06 15:29	1.0	3 4 5 1	
012	jld12	ICAL	20PPB			12/13/06 16:02	1.0	3 4 5 1	
013	jld13	ICAL	50PPB			12/13/06 16:35	1.0	3 4 5 1	
014	jld14	ICAL	75PPB			12/13/06 17:08	1.0	3 4 5 1	
015	jld15	ICAL	100PPB			12/13/06 17:41	1.0	3 4 5 1	
016	jld16	ICV	ICVGAS25PPB			12/13/06 18:15	1.0	6 1	
017	jld17	ICV	ICV25PPB			12/13/06 18:47	1.0	7 8 1	
018	jld18	X	IB			12/13/06 19:20	1.0	1	
019	jld19	X	IB			12/13/06 19:53	1.0	1	
020	jld20	X	IB			12/13/06 20:26	1.0	1	

Analyst: ACM Date: 12/14/06 Reviewer: LW Date: 12/14/06

Standards used: 1=S4696 2=S3716 3=S5064 4=S4931 5=S4172 6=S5074 7=S4922 8=S5052

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 496501739

Instrument : MSVOA10
Method : EPA 8260B

Begun : 12/14/06 10:19
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	jle01	X	IB			12/14/06 10:19	1.0	1	
002	jle02	TUN	BFB			12/14/06 11:39	1.0	2	
003	jle03	CCV	30PPB			12/14/06 11:56	1.0	3 4 5 1	
004	jle04	BS	QC368303	Water	120370	12/14/06 12:43	1.0	6 7 8 1	
005	jle05	BSD	QC368304	Water	120370	12/14/06 13:16	1.0	6 7 8 1	
006	jle06	X	IB			12/14/06 13:49	1.0	1	
007	jle07	BLANK	QC368305	Water	120370	12/14/06 14:22	1.0	1	
008	jle08	SAMPLE	191315-002	Water	120370	12/14/06 14:56	1.0	1	pH > 2
009	jle09	SAMPLE	191275-006	Water	120370	12/14/06 15:29	1.0	1	
010	jle10	SAMPLE	191362-002	Water	120370	12/14/06 16:03	1.0	1	pH > 2
011	jle11	SAMPLE	191290-001	Water	120370	12/14/06 16:37	1.0	1	
012	jle12	SAMPLE	191362-003	Water	120370	12/14/06 17:10	4.0	1	
013	jle13	SAMPLE	191362-004	Water	120370	12/14/06 17:43	4.0	1	
014	jle14	SAMPLE	191321-003	Water	120370	12/14/06 18:16	4.0	1	
015	jle15	SAMPLE	191321-005	Water	120370	12/14/06 18:49	4.0	1	
016	jle16	SAMPLE	191321-006	Water	120370	12/14/06 19:22	4.0	1	
017	jle17	SAMPLE	191321-004	Water	120370	12/14/06 19:56	20.0	1	pH > 2
018	jle18	SAMPLE	191321-007	Water	120370	12/14/06 20:29	62.50	1	
019	jle19	SAMPLE	191275-003	Water	120370	12/14/06 21:02	100.0	1	
020	jle20	SAMPLE	191275-004	Water	120370	12/14/06 21:35	166.7	1	
021	jle21	SAMPLE	191275-007	Water	120370	12/14/06 22:08	200.0	1	
022	jle22	SAMPLE	191287-001	Water	120370	12/14/06 22:41	10.0	1	
023	jle23	X	IB			12/14/06 23:14	1.0	1	
024	jle24	X	IB			12/14/06 23:47	1.0	1	
025	jle25	X	IB			12/15/06 00:20	1.0	1	

Analyst: ACM Date: 12/15/06 Reviewer: LW Date: 12/15/06

Standards used: 1=S4696 2=S3716 3=S5064 4=S4931 5=S4713 6=S4922 7=S5052 8=S5074

REPORTING SUMMARY FOR 191290 8260 Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID Analyzed	IDF	C V B C A D M C M D V D M D T T C D B T D B M D B D T H P D C E X X T S T P D D B B
			L C R L C C T D T C A C E C C T C Z C C D I C Z C C X C B L B Y Y O T B C B C Z R
			M M E E E L S B E A K E L A C A E P C B P M P A O E C B Z L L T Y M A F A M 4
			E E A 1 N E 1 1 1 M 1 L 1 A M K 1 E 1 1 2 M Z M O X E M 1 E F
191290-001	MSVOA10 12/14/06 16:37 1.0		2 2 3 2
QC368303	MSVOA10 12/14/06 12:43 1.0		
QC368304	MSVOA10 12/14/06 13:16 1.0		
QC368305	MSVOA10 12/14/06 14:22 1.0		

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 12-19-06

PREPPED BY.

WATER

120370

(15)

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	191275 - 3		D	<2			10	RR 100X CIS CO ✓	
2	4		↓	↓				RR 167X CIS OR	
3	191362 - 2		BD	7				RR 1X OD silty	
4	3		↓	<2				RR 4X DBFM ↑	
5	4		↓	↓				RR 4X TBA OR	
6	191321 - 3		D	↓				RR 4X OD	
7	4		↓	5				RR 20X DBFM ↑	
8	5		↓	<2				RR 4X OD	
9	6		↓	↓				RR 4X OD	
0	7		↓	↓				RR 62.5X OD	
1	191275 - 6		D	<2				RR 1X o-xylene correct	
2	191287 - 1		C-J	<2				10X Foam Comp 8 vials	
3	191290 - 1		C	↓				1X	
4	191374 - 1		B	7				1.42X Put off	
5	2		↓	↓			↓	1X Put off	
6	191273 - 3		C	—	0.5mL		↓	RR 333X N.A. Phl	on MS 11
7	191315 - 2		↓	7				RR 1X water purge	
8	191275 - 7		E	<2				RR 200X CIS OR	
19									
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PREPFORM.XLS

12/21/06

000008

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 01/05/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
Ethanol	ug/L	55	22	23	50	11	22	36	10
1,1-Dichloroethene	ug/L	0.27	0.22	0.062	0.17	0.10	0.17	0.089	0.11
Benzene	ug/L	0.11	0.041	0.060	0.061	0.12	0.10	0.027	0.084
Trichloroethene	ug/L	0.21	0.076	0.18	0.17	0.11	0.13	0.087	0.086
Toluene	ug/L	0.083	0.083	0.12	0.092	0.062	0.085	0.053	0.14
Chlorobenzene	ug/L	0.10	0.090	0.11	0.16	0.16	0.098	0.050	0.075
Freon 12	ug/L	0.18	0.099	0.22	0.062	0.15	0.47	0.18	0.20
Chloromethane	ug/L	0.12	0.16	0.12	0.18	0.13	0.34	0.089	0.20
Vinyl Chloride	ug/L	0.19	0.23	0.10	0.066	0.10	0.097	0.16	0.039
Bromomethane	ug/L	0.29	0.30	0.31	0.13	0.31	0.34	0.20	0.23
Chloroethane	ug/L	0.33	0.33	0.15	0.16	0.13	0.45	0.12	0.18
Trichlorofluoromethane	ug/L	0.16	0.057	0.17	0.10	0.080	0.46	0.10	0.19
Acetone	ug/L	0.39	0.87	0.21	0.85	0.16	0.20	0.49	0.15
Freon 113	ug/L	0.062	0.12	0.13	0.25	0.071	0.19	0.091	0.16
Methylene Chloride	ug/L	0.15	0.21	0.11	0.12	0.16	0.29	0.22	0.086
MTBE	ug/L	0.069	0.074	0.065	0.045	0.040	0.15	0.052	0.068
Carbon Disulfide	ug/L	0.039	0.031	0.086	0.076	0.11	0.14	0.037	0.066
trans-1,2-Dichloroethene	ug/L	0.37	0.13	0.18	0.051	0.064	0.15	0.093	0.094
Vinyl Acetate	ug/L	0.076	0.36	0.084	0.99	0.40	0.13	0.10	0.13
1,1-Dichloroethane	ug/L	0.088	0.061	0.048	0.090	0.11	0.14	0.063	0.10
2-Butanone	ug/L	0.16	0.17	0.20	0.50	0.099	0.23	0.26	0.081
cis-1,2-Dichloroethene	ug/L	0.26	0.18	0.083	0.12	0.042	0.12	0.11	0.16
2,2-Dichloropropane	ug/L	0.093	0.17	0.077	0.12	0.066	0.15	0.083	0.14
Chloroform	ug/L	0.082	0.055	0.086	0.060	0.11	0.16	0.044	0.084
Bromochloromethane	ug/L	0.091	0.090	0.10	0.18	0.11	0.18	0.15	0.11
1,1,1-Trichloroethane	ug/L	0.084	0.066	0.14	0.11	0.061	0.12	0.041	0.096
1,1-Dichloropropene	ug/L	0.12	0.11	0.081	0.16	0.16	0.11	0.055	0.084
Carbon Tetrachloride	ug/L	0.089	0.11	0.098	0.17	0.15	0.14	0.056	0.14
1,2-Dichloroethane	ug/L	0.090	0.088	0.099	0.096	0.12	0.18	0.056	0.094
1,2-Dichloropropane	ug/L	0.093	0.060	0.079	0.071	0.14	0.16	0.12	0.086
Bromodichloromethane	ug/L	0.086	0.039	0.067	0.074	0.10	0.14	0.069	0.094
Dibromomethane	ug/L	0.16	0.061	0.092	0.16	0.11	0.18	0.13	0.089
4-Methyl-2-Pentanone	ug/L	0.044	0.076	0.057	0.20	0.13	0.14	0.25	0.067
cis-1,3-Dichloropropene	ug/L	0.068	0.065	0.056	0.20	0.16	0.094	0.044	0.080
trans-1,3-Dichloropropene	ug/L	0.074	0.074	0.044	0.073	0.14	0.13	0.060	0.059
1,1,2-Trichloroethane	ug/L	0.12	0.12	0.14	0.19	0.15	0.21	0.058	0.12
2-Hexanone	ug/L	0.043	0.31	0.047	0.34	0.11	0.13	0.14	0.097
1,3-Dichloropropane	ug/L	0.064	0.067	0.061	0.063	0.10	0.14	0.068	0.049
Tetrachloroethene	ug/L	0.13	0.14	0.12	0.22	0.14	0.092	0.093	0.089
Dibromochloromethane	ug/L	0.099	0.054	0.10	0.085	0.056	0.15	0.063	0.094
1,2-Dibromoethane	ug/L	0.16	0.061	0.10	0.073	0.11	0.13	0.070	0.088
2-Chloroethylvinylether	ug/L	0.093	0.18	0.24	0.17	0.14	0.19	0.23	0.14
1,1,1,2-Tetrachloroethane	ug/L	0.11	0.087	0.10	0.11	0.14	0.10	0.088	0.16
Ethylbenzene	ug/L	0.059	0.076	0.075	0.17	0.041	0.11	0.11	0.069
m,p-Xylenes	ug/L	0.24	0.22	0.14	0.27	0.17	0.19	0.20	0.14
o-Xylene	ug/L	0.10	0.058	0.092	0.11	0.16	0.087	0.13	0.078
Styrene	ug/L	0.12	0.092	0.098	0.085	0.16	0.11	0.061	0.055
Bromoform	ug/L	0.12	0.088	0.11	0.18	0.094	0.12	0.15	0.10
Isopropylbenzene	ug/L	0.12	0.059	0.090	0.18	0.059	0.11	0.10	0.089
1,1,2,2-Tetrachloroethane	ug/L	0.13	0.096	0.086	0.047	0.13	0.20	0.055	0.11

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 01/05/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
1,2,3-Trichloropropane	ug/L	0.31	0.28	0.074	0.11	0.17	0.19	0.16	0.072
Propylbenzene	ug/L	0.075	0.10	0.063	0.21	0.023	0.12	0.11	0.088
Bromobenzene	ug/L	0.12	0.12	0.10	0.19	0.12	0.17	0.085	0.088
1,3,5-Trimethylbenzene	ug/L	0.060	0.095	0.047	0.14	0.057	0.13	0.13	0.069
2-Chlorotoluene	ug/L	0.12	0.11	0.068	0.15	0.025	0.10	0.12	0.080
4-Chlorotoluene	ug/L	0.079	0.069	0.043	0.14	0.037	0.14	0.069	0.078
tert-Butylbenzene	ug/L	0.11	0.15	0.075	0.19	0.038	0.13	0.079	0.082
1,2,4-Trimethylbenzene	ug/L	0.091	0.088	0.066	0.12	0.069	0.082	0.10	0.099
sec-Butylbenzene	ug/L	0.11	0.12	0.062	0.17	0.088	0.088	0.076	0.097
para-Isopropyl Toluene	ug/L	0.058	0.12	0.12	0.14	0.056	0.071	0.045	0.075
1,3-Dichlorobenzene	ug/L	0.080	0.16	0.097	0.18	0.060	0.13	0.10	0.094
1,4-Dichlorobenzene	ug/L	0.068	0.14	0.095	0.18	0.038	0.10	0.17	0.072
n-Butylbenzene	ug/L	0.12	0.15	0.11	0.18	0.21	0.11	0.12	0.073
1,2-Dichlorobenzene	ug/L	0.072	0.14	0.080	0.14	0.16	0.16	0.061	0.081
1,2-Dibromo-3-Chloropropane	ug/L	0.39	0.25	0.21	0.22	0.13	0.17	0.098	0.18
1,2,4-Trichlorobenzene	ug/L	0.12	0.17	0.14	0.16	0.10	0.12	0.17	0.061
Hexachlorobutadiene	ug/L	0.19	0.19	0.29	0.21	0.11	0.065	0.25	0.17
Naphthalene	ug/L	0.12	0.13	0.060	0.10	0.091	0.11	0.16	0.052
1,2,3-Trichlorobenzene	ug/L	0.063	0.17	0.10	0.20	0.095	0.10	0.29	0.15
tert-Butyl Alcohol (TBA)	ug/L	1.3	1.6	0.83	2.5	1.3	1.1	1.3	1.3
Isopropyl Ether (DIPE)	ug/L	0.068	0.070	0.063	0.027	0.030	0.14	0.027	0.089
Ethyl tert-Butyl Ether (ETBE)	ug/L	0.089	0.045	0.024	0.20	0.033	0.13	0.034	0.079
Methyl tert-Amyl Ether (TAME)	ug/L	0.094	0.13	0.055	0.054	0.048	0.10	0.057	0.17
Isopropanol	ug/L	4.6	2.7	1.6	6.6	1.5	1.4	1.1	1.3
Hexane	ug/L				0.33		0.15		
Cyclohexanone	ug/L	3.8	2.4	0.21	1.6	1.6	1.3		1.0
Tetrahydrofuran	ug/L	0.64	1.2	1.1	0.79	1.4	2.1	3.5	0.70
Tetramethyl THF	ug/L	0.067	0.061	0.062	0.20	0.10	0.13	0.078	0.079
Gasoline C6-C10	ug/L		15		4.8	15	8.5		11
Gasoline C7-C12	ug/L		18		2.4	13	7.7		11
Dibromofluoromethane	ug/L	3.1		1.8	2.4	1.5	1.1	3.2	1.1
1,2-Dichloroethane-d4	ug/L	3.0			2.4	1.2	1.7	3.0	1.0
Toluene-d8	ug/L	1.7			1.1	1.0	1.5	1.1	0.96
Bromofluorobenzene	ug/L	2.5			1.2	1.2	2.5	1.5	0.62
Trifluorotoluene	ug/L	0.12		0.065	0.21	0.13		0.14	

PESTICIDES

Organochlorine Pesticides

Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Field ID:	DW120606B	Batch#:	120202
Lab ID:	191290-001	Sampled:	12/06/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Prepared:	12/08/06
Diln Fac:	1.000	Analyzed:	12/15/06

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.09
4,4'-DDE	ND	0.09
Endrin	ND	0.09
Endosulfan II	ND	0.09
Endosulfan sulfate	ND	0.09
4,4'-DDD	ND	0.09
4,4'-DDT	ND #	0.09
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.09
Toxaphene	ND	0.9

Surrogate	%REC	Limits
TCMX	49 *	65-135
Decachlorobiphenyl	70	65-135

#= CCV drift outside limits; average CCV drift within limits per method requirements
 *= Value outside of QC limits; see narrative

ND= Not Detected
 RL= Reporting Limit

Batch QC Report

Organochlorine Pesticides

Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC367663	Batch#:	120202
Matrix:	Water	Prepared:	12/08/06
Units:	ug/L	Analyzed:	12/11/06

Analyte	Result	RL
alpha-BHC	ND	0.05
beta-BHC	ND	0.05
gamma-BHC	ND	0.05
delta-BHC	ND	0.05
Heptachlor	ND	0.05
Aldrin	ND	0.05
Heptachlor epoxide	ND	0.05
Endosulfan I	ND	0.05
Dieldrin	ND	0.1
4,4'-DDE	ND	0.1
Endrin	ND	0.1
Endosulfan II	ND	0.1
Endosulfan sulfate	ND	0.1
4,4'-DDD	ND	0.1
4,4'-DDT	ND	0.1
alpha-Chlordane	ND	0.05
gamma-Chlordane	ND	0.05
Methoxychlor	ND	0.5
Endrin ketone	ND	0.1
Toxaphene	ND	1.0

Surrogate	%REC	Limits
TCMX	66	65-135
Decachlorobiphenyl	88	65-135

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Organochlorine Pesticides			
Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8081A
Matrix:	Water	Batch#:	120202
Units:	ug/L	Prepared:	12/08/06
Diln Fac:	1.000	Analyzed:	12/11/06

Type: BS Lab ID: QC367664

Analyte	Spiked	Result	%REC	Limits
gamma-BHC	0.2000	0.1954	98	65-135
Heptachlor	0.2000	0.1868	93	65-135
Aldrin	0.2000	0.1833	92	65-135
Dieldrin	0.4000	0.4231	106	65-135
Endrin	0.4000	0.4337	108	65-135
4,4'-DDT	0.4000	0.4284	107	65-135

Surrogate	%REC	Limits
TCMX	81	65-135
Decachlorobiphenyl	80	65-135

Type: BSD Lab ID: QC367665

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
gamma-BHC	0.2000	0.1777	89	65-135	10	35
Heptachlor	0.2000	0.1688	84	65-135	10	35
Aldrin	0.2000	0.1664	83	65-135	10	35
Dieldrin	0.4000	0.3881	97	65-135	9	35
Endrin	0.4000	0.4026	101	65-135	7	35
4,4'-DDT	0.4000	0.4049	101	65-135	6	35

Surrogate	%REC	Limits
TCMX	82	65-135
Decachlorobiphenyl	98	65-135

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191290 PEST Water: EPA 8081A

Inst : GC23
 Calnum : 806488872001
 Units : pg

Name : gc23pest_339
 Date : 05-DEC-2006 22:15
 X Axis : R

Reviewer: MCH

Level	File	Segment	Sample ID	Analyzed	Stds
L1	339_026	806488872026	PEST_1	05-DEC-2006 22:15	S4176
L2	339_027	806488872027	PEST_2	05-DEC-2006 22:36	S3833
L3	339_028	806488872028	PEST_3	05-DEC-2006 22:58	S4177
L4	339_029	806488872029	PEST_4	05-DEC-2006 23:19	S4178
L5	339_030	806488872030	PEST_5	05-DEC-2006 23:41	S3834
L6	339_031	806488872031	PEST_6	06-DEC-2006 00:02	S4745
L7	339_032	806488872032	PEST_7	06-DEC-2006 00:24	S4043

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	AVG	r ²	MRSD	MRSD	Fig
alpha-BHC	A	20152	19999	22191	25039	23350	23883	22781	AVRG		4.45E-5		22485	8	0.995	20	
gamma-BHC	A	18313	17741	19629	21766	20511	21008	21614	AVRG		4.98E-5		20083	8	0.995	20	
beta-BHC	A	7177.5	6762.0	7253.8	7560.2	6789.6	6415.0	9924.3	AVRG		1.35E-4		7411.8	16	0.995	20	
delta-BHC	A	20070	18188	19698	21812	19501	19584	21798	AVRG		4.98E-5		20093	7	0.995	20	
Heptachlor	A	15971	16226	17730	20134	18603	17893	20270	AVRG		5.52E-5		18118	9	0.995	20	
Aldrin	A	16748	16423	17824	19974	18686	18882	19876	AVRG		5.45E-5		18345	8	0.995	20	
Heptachlor epoxide	A	15441	14961	15982	17722	16383	15756	18869	AVRG		6.08E-5		16445	8	0.995	20	
gamma-Chlordane	A	14664	14327	15435	17359	15979	15450	19075	AVRG		6.23E-5		16042	10	0.995	20	
alpha-Chlordane	A	14520	14039	14748	16798	14839	15059	19491	AVRG		6.39E-5		15642	12	0.995	20	
4,4'-DDE	A	11442	12008	13865	17162	16004	14622		AVRG		7.05E-5		14184	16	0.995	20	
Endosulfan I	A	12543	12594	14090	15152	14838	13675	19098	AVRG		6.86E-5		14570	15	0.995	20	
Diieldrin	A	13912	14236	16121	20844	19652	16601		AVRG		5.92E-5		16894	17	0.995	20	
Endrin	A	10791	11436	13013	15947	14225	12650		AVRG		7.69E-5		13010	14	0.995	20	
4,4'-DDD	A	8246.5	8894.5	11257	12532	10831	10092		AVRG		9.70E-5		10309	15	0.995	20	
Endosulfan II	A	11817	11731	14692	17083	16633	15470		AVRG		6.86E-5		14571	16	0.995	20	
4,4'-DDT	A	7517.8	9243.7	11132	13603	12537	11132		AVRG		9.21E-5		10861	20	0.995	20	
Methoxychlor	A	3539.3	4207.6	5126.6	6924.6	5900.8			AVRG		1.95E-4		5139.8	26	0.995	20	rsd ***
Endosulfan sulfate	A	9752.3	9875.8	11782	12703	11468	10194		AVRG		9.12E-5		10963	11	0.995	20	
Endrin ketone	A	11737	11882	16615	18904	17026	14587		AVRG		6.61E-5		15125	19	0.995	20	
TCMX	A	12175	12302	13381	15383	14457	14597		AVRG		7.29E-5		13716	10	0.995	20	
Decachlorobiphenyl	A	6162.5	6836.6	7019.4	8770.8	7333.9	5418.9	9066.0	AVRG		1.38E-4		7229.7	18	0.995	20	
alpha-BHC	B	11220	10381	11769	11496	10794	10682	14689	AVRG		8.64E-5		11576	13	0.995	20	
gamma-BHC	B	9936.5	9050.2	10341	10006	9396.4	9250.6	13024	AVRG		9.86E-5		10143	13	0.995	20	
beta-BHC	B	4389.0	3786.6	4244.7	3999.3	3717.2	3420.9	4395.0	AVRG		2.50E-4		3993.2	9	0.995	20	
delta-BHC	B	12208	9632.6	11083	10418	9540.0	9478.7	13308	AVRG		9.25E-5		10810	14	0.995	20	
Heptachlor	B	8306.0	7923.6	9168.6	8592.3	8114.3	7719.4	11396	AVRG		1.14E-4		8745.8	14	0.995	20	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	t ² %RSD	MWR ²	MWRSD	Fig
Aldrin	B	923.0	8378.8	9480.9	8964.4	8267.9	8154.0	11342	AVRG		1.10E-4		9124.5	12	0.995	20	
Heptachlor epoxide	B	8490.0	7606.2	8725.0	8088.0	7505.0	7196.9	9866.1	AVRG		1.22E-4		8211.0	11	0.995	20	
gamma-Chlordane	B	8407.5	7554.8	8653.1	8024.8	7385.8	7269.5	10266	AVRG		1.22E-4		8223.0	13	0.995	20	
alpha-Chlordane	B	7967.0	7222.2	8272.9	7651.5	7024.7	6877.0	9735.2	AVRG		1.28E-4		7821.5	13	0.995	20	
4,4'-DDE	B	7314.5	6787.9	8005.1	7447.6	7010.8	7446.9	9265.7	AVRG		1.31E-4		7611.2	11	0.995	20	
Endosulfan I	B	7462.5	6763.6	7743.4	7146.0	6594.8	6350.0	8730.6	AVRG		1.38E-4		7255.8	11	0.995	20	
Dieldrin	B	7939.5	7362.6	8593.2	8239.9	7638.3	8010.9	9554.9	AVRG		1.22E-4		8191.3	9	0.995	20	
Endrin	B	6490.8	6108.5	7259.0	6725.1	6218.2	6275.4	8574.0	AVRG		1.47E-4		6807.3	13	0.995	20	
4,4'-DDD	B	6000.8	5392.7	6508.0	5917.9	5445.2	5662.9	8108.1	AVRG		1.63E-4		6147.9	15	0.995	20	
Endosulfan II	B	6349.0	5893.5	6937.7	6422.5	5903.2	6084.2	8290.7	AVRG		1.53E-4		6554.4	13	0.995	20	
4,4'-DDT	B	5453.8	5318.0	6438.8	5772.7	5452.0	5619.0	8363.0	AVRG		1.65E-4		6059.6	18	0.995	20	
Methoxychlor	B	2514.9	2402.8	2974.3	2785.3	2599.0	2543.3		AVRG		3.79E-4		2636.6	8	0.995	20	
Endosulfan sulfate	B	5590.0	5076.6	5927.8	5353.1	4894.6	4754.5	6868.3	AVRG		1.82E-4		5495.0	13	0.995	20	
Endrin ketone	B	6136.3	5598.7	6812.3	6256.0	5592.6	5812.8	7936.4	AVRG		1.59E-4		6306.4	13	0.995	20	
TCMX	B	7394.8	6875.7	7596.5	7404.6	7100.3	6913.9	8947.8	AVRG		1.34E-4		7461.9	9	0.995	20	
Decachlorobiphenyl	B	3833.0	3727.8	4437.8	3756.5	3341.2	3237.8	4963.7	AVRG		2.56E-4		3899.7	16	0.995	20	
Average EPA 8081A	A												(n=22)	13		20	
Average EPA 8081A	B												(n=22)	13		20	

rsd=ICAL %RSD failure

Instrument amount = a0 + response * a1 + response^2 * a2; AVRg-Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191290 PEST Water
EPA 8081A

Inst : GC23
Calnum : 806488872001

Name : gc23pest_339
Cal Date: 05-DEC-2006

ICV 806488872036 (339_036 06-DEC-2006) stds: S4518

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	22485	23947	25.00	26.63	pg	7	15	
gamma-BHC	A	20083	20982	25.00	26.12	pg	4	15	
beta-BHC	A	7411.8	6811.9	25.00	22.98	pg	-8	15	
delta-BHC	A	20093	20906	25.00	26.01	pg	4	15	
Heptachlor	A	18118	19639	25.00	27.10	pg	8	15	
Aldrin	A	18345	19874	25.00	27.08	pg	8	15	
Heptachlor epoxide	A	16445	16804	25.00	25.55	pg	2	15	
gamma-Chlordane	A	16042	16582	25.00	25.84	pg	3	15	
alpha-Chlordane	A	15642	15416	25.00	24.64	pg	-1	15	
4,4'-DDE	A	14184	14260	25.00	25.13	pg	1	15	
Endosulfan I	A	14570	14764	25.00	25.33	pg	1	15	
Dieldrin	A	16894	16598	25.00	24.56	pg	-2	15	
Endrin	A	13010	13651	25.00	26.23	pg	5	15	
4,4'-DDD	A	10309	9875.6	25.00	23.95	pg	-4	15	
Endosulfan II	A	14571	13983	25.00	23.99	pg	-4	15	
4,4'-DDT	A	10861	11346	25.00	26.12	pg	4	15	
Methoxychlor	A	5139.8	5064.0	25.00	24.63	pg	-1	15	
Endosulfan sulfate	A	10963	10923	25.00	24.91	pg	0	15	
Endrin ketone	A	15125	14213	25.00	23.49	pg	-6	15	
alpha-BHC	B	11576	11340	25.00	24.49	pg	-2	15	
gamma-BHC	B	10143	9926.0	25.00	24.46	pg	-2	15	
beta-BHC	B	3993.2	3914.3	25.00	24.51	pg	-2	15	
delta-BHC	B	10810	10683	25.00	24.71	pg	-1	15	
Heptachlor	B	8745.8	8735.4	25.00	24.97	pg	0	15	
Aldrin	B	9124.5	9095.7	25.00	24.92	pg	0	15	
Heptachlor epoxide	B	8211.0	7980.6	25.00	24.30	pg	-3	15	
gamma-Chlordane	B	8223.0	8001.4	25.00	24.33	pg	-3	15	
alpha-Chlordane	B	7821.5	7553.9	25.00	24.14	pg	-3	15	
4,4'-DDE	B	7611.2	7368.3	25.00	24.20	pg	-3	15	
Endosulfan I	B	7255.8	7098.2	25.00	24.46	pg	-2	15	
Dieldrin	B	8191.3	7752.0	25.00	23.66	pg	-5	15	
Endrin	B	6807.3	6784.0	25.00	24.91	pg	0	15	
4,4'-DDD	B	6147.9	5902.4	25.00	24.00	pg	-4	15	
Endosulfan II	B	6554.4	6341.5	25.00	24.19	pg	-3	15	
4,4'-DDT	B	6059.6	5872.6	25.00	24.23	pg	-3	15	
Methoxychlor	B	2636.6	2878.5	25.00	27.29	pg	9	15	
Endosulfan sulfate	B	5495.0	5467.1	25.00	24.87	pg	-1	15	
Endrin ketone	B	6306.4	6560.6	25.00	26.01	pg	4	15	
Average EPA 8081A	A	n=20					4	15	
Average EPA 8081A	B	n=20					3	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191290 PEST Water: EPA 8081A

Inst : GC23
 Calnum : 806500136001
 Units : pg

Name : gc23pest_347
 Date : 13-DEC-2006 14:06
 X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	347_008	806500136008	PEST_1	13-DEC-2006 14:06	S5045
L2	347_009	806500136009	PEST_2	13-DEC-2006 14:28	S5046
L3	347_010	806500136010	PEST_3	13-DEC-2006 14:49	S5047
L4	347_011	806500136011	PEST_4	13-DEC-2006 15:11	S5048
L5	347_012	806500136012	PEST_5	13-DEC-2006 15:32	S5049
L6	347_013	806500136013	PEST_6	13-DEC-2006 15:54	S5050
L7	347_014	806500136014	PEST_7	13-DEC-2006 16:15	S5051

Analyte	Ch	I1	I2	I3	I4	I5	I6	I7	Type	a0	a1	a2	Avg	r ²	%RSD	MNR ²	MXRSD	Fig
alpha-BHC	A	1611.5	1508.6	1609.8	1915.5	1801.0	2075.8	2139.0	AVRG	5.53E-4			1808.7	14	0.995		20	
gamma-BHC	A	1491.5	1369.4	1409.6	1687.4	1580.8	1805.7	1931.1	AVRG	6.21E-4			1610.8	13	0.995		20	
beta-BHC	A	586.00	504.00	519.00	600.80	558.92	575.70	674.43	AVRG	0.00174			574.12	10	0.995		20	
delta-BHC	A	1479.0	1265.0	1345.9	1606.5	1503.5	1679.9	1820.5	AVRG	6.54E-4			1528.6	13	0.995		20	
Heptachlor	A	1417.5	1260.6	1314.5	1610.7	1474.9	1660.7	1797.9	AVRG	6.64E-4			1505.3	13	0.995		20	
Aldrin	A	1454.0	1284.0	1297.7	1551.8	1447.8	1636.4	1745.7	AVRG	6.72E-4			1488.2	11	0.995		20	
Heptachlor epoxide	A	1243.5	1102.6	1120.6	1317.1	1223.2	1326.6	1460.2	AVRG	7.96E-4			1256.3	10	0.995		20	
gamma-Chlordane	A	1168.0	1008.4	1048.3	1253.1	1166.8	1284.5	1455.6	AVRG	8.35E-4			1197.8	13	0.995		20	
alpha-Chlordane	A	1105.0	986.20	1018.8	1195.7	1121.4	1232.7	1428.2	AVRG	8.65E-4			1155.4	13	0.995		20	
4,4'-DDE	A	1016.8	891.60	947.35	1233.3	1167.0	1272.9	1226.6	AVRG	9.03E-4			1107.9	14	0.995		20	
Endosulfan I	A	987.00	918.00	978.80	1151.2	1066.4	1188.8	1464.4	AVRG	9.03E-4			1107.8	17	0.995		20	
Dieldrin	A	1195.8	1019.3	1088.8	1445.5	1372.9	1448.1	1296.1	AVRG	7.89E-4			1266.6	13	0.995		20	
Endrin	A	994.25	836.70	892.80	1159.6	1086.6	1177.5	1117.5	AVRG	9.64E-4			1037.8	13	0.995		20	
4,4'-DDD	A	798.00	648.90	684.15	869.50	829.58	930.58	1026.5	AVRG	0.00121			826.74	16	0.995		20	
Endosulfan II	A	939.50	821.20	885.45	1147.6	1094.8	1230.5	1179.3	AVRG	9.59E-4			1042.6	15	0.995		20	
4,4'-DDT	A	795.75	675.30	731.60	976.03	921.08	1050.5	1095.4	AVRG	0.00112			892.23	18	0.995		20	
Methoxychlor	A	371.35	304.98	340.05	492.47	450.74	393.61	302.82	AVRG	0.00264			379.43	19	0.995		20	
Endosulfan sulfate	A	817.25	667.70	636.80	864.58	815.48	887.93	958.17	AVRG	0.00123			815.42	13	0.995		20	
Endrin ketone	A	961.50	789.60	839.40	1141.0	1077.3	1168.7	1126.2	AVRG	9.85E-4			1014.8	15	0.995		20	
TCMX	A	958.75	840.20	936.25	1129.7	1054.1	1194.2	1233.7	AVRG	9.53E-4			1049.6	14	0.995		20	
Decachlorobiphenyl	A	555.25	436.90	438.90	553.28	503.58	505.54	567.63	AVRG	0.00197			508.73	11	0.995		20	
alpha-BHC	B	1613.0	1349.2	1300.7	1366.0	1451.5	1662.0	1501.6	AVRG	6.83E-4			1463.4	9	0.995		20	
gamma-BHC	B	1455.5	1204.0	1153.6	1207.8	1286.2	1454.0	1337.3	AVRG	7.69E-4			1299.8	9	0.995		20	
beta-BHC	B	620.50	506.00	476.40	479.25	502.00	503.22	454.23	AVRG	0.00198			505.94	11	0.995		20	
delta-BHC	B	1581.5	1274.8	1198.2	1251.7	1373.2	1489.8	1374.3	AVRG	7.33E-4			1363.3	10	0.995		20	
Heptachlor	B	1405.0	1161.8	1085.0	1132.8	1220.2	1363.0	1242.1	AVRG	8.13E-4			1230.0	10	0.995		20	

Analyte	Ch	I1	I2	I3	I4	I5	I6	I7	Type	a0	a1	a2	Avg	r ²	%RSD	MNR ²	MKRSD	Fig
Aldrin	B	1251.5	1136.4	1076.0	1081.0	1165.6	1265.5	1220.0	AVRG		8.54E-4		1170.9	7	0.995	20		
Heptachlor epoxide	B	1275.5	1035.6	943.00	973.90	1044.0	1093.2	1027.3	AVRG		9.47E-4		1056.1	10	0.995	20		
gamma-Chlordane	B	1178.0	1004.8	908.00	951.70	1027.4	1084.2	1051.2	AVRG		9.71E-4		1029.3	9	0.995	20		
alpha-Chlordane	B	1128.0	958.40	872.70	901.35	967.64	1018.4	1002.9	AVRG		0.00102		978.47	9	0.995	20		
4,4'-DDE	B	1133.5	961.80	870.70	951.95	1101.3	1191.0	1028.0	AVRG		9.67E-4		1034.0	11	0.995	20		
Endosulfan I	B	1036.0	929.60	849.40	864.60	934.00	957.72	941.57	AVRG		0.00107		930.41	7	0.995	20		
Dieldrin	B	1187.8	1013.0	920.85	1001.2	1140.7	1217.1	1040.0	AVRG		9.31E-4		1074.4	10	0.995	20		
Endrin	B	1057.0	892.40	799.25	859.88	980.26	1047.6	898.78	AVRG		0.00107		933.59	10	0.995	20		
4,4'-DDD	B	940.25	799.30	706.65	760.58	881.16	956.36	869.14	AVRG		0.00118		844.78	11	0.995	20		
Endosulfan II	B	970.50	836.70	744.55	796.35	908.68	972.41	881.71	AVRG		0.00115		872.99	10	0.995	20		
4,4'-DDT	B	956.50	804.20	714.10	775.05	916.10	1001.7	912.26	AVRG		0.00115		868.56	12	0.995	20		
Methoxychlor	B	432.60	365.50	329.39	375.53	446.45	403.70	289.69	AVRG		0.00265		377.55	15	0.995	20		
Endosulfan sulfate	B	892.25	729.40	645.45	668.08	757.76	785.00	733.33	AVRG		0.00134		744.47	11	0.995	20		
Endrin ketone	B	997.00	835.40	740.15	791.65	930.08	978.64	844.72	AVRG		0.00114		873.95	11	0.995	20		
TCMX	B	996.50	823.50	773.65	817.20	860.36	948.70	849.30	AVRG		0.00115		867.03	9	0.995	20		
Decachlorobiphenyl	B	632.50	537.00	458.85	468.30	556.50	566.06	517.03	AVRG		0.00187		533.75	11	0.995	20		
Average EPA 8081A	A												(n=22)	14		20		
Average EPA 8081A	B												(n=22)	10		20		

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191290 PEST Water
EPA 8081A

Inst : GC23
Calnum : 806500136001

Name : gc23pest_347
Cal Date: 13-DEC-2006

ICV 806500136019 (347_019 13-DEC-2006) stds: S5092

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
alpha-BHC	A	1808.7	1969.7	25.00	27.22	pg	9	15	
gamma-BHC	A	1610.8	1801.5	25.00	27.96	pg	12	15	
beta-BHC	A	574.12	610.80	25.00	26.60	pg	6	15	
delta-BHC	A	1528.6	1792.3	25.00	29.31	pg	17	15	v+ ***
Heptachlor	A	1505.3	1683.6	25.00	27.96	pg	12	15	
Aldrin	A	1488.2	1629.5	25.00	27.37	pg	9	15	
Heptachlor epoxide	A	1256.3	1337.8	25.00	26.62	pg	6	15	
gamma-Chlordane	A	1197.8	1348.0	25.00	28.13	pg	13	15	
alpha-Chlordane	A	1155.4	1284.1	25.00	27.78	pg	11	15	
4,4'-DDE	A	1107.9	1189.8	25.00	26.85	pg	7	15	
Endosulfan I	A	1107.8	1209.2	25.00	27.29	pg	9	15	
Dieldrin	A	1266.6	1330.8	25.00	26.27	pg	5	15	
Endrin	A	1037.8	1140.6	25.00	27.48	pg	10	15	
4,4'-DDD	A	826.74	859.20	25.00	25.98	pg	4	15	
Endosulfan II	A	1042.6	1101.7	25.00	26.42	pg	6	15	
4,4'-DDT	A	892.23	954.76	25.00	26.75	pg	7	15	
Methoxychlor	A	379.43	447.08	25.00	29.46	pg	18	15	v+ ***
Endosulfan sulfate	A	815.42	872.16	25.00	26.74	pg	7	15	
Endrin ketone	A	1014.8	1069.8	25.00	26.36	pg	5	15	
alpha-BHC	B	1463.4	1352.5	25.00	23.10	pg	-8	15	
gamma-BHC	B	1299.8	1211.8	25.00	23.31	pg	-7	15	
beta-BHC	B	505.94	462.64	25.00	22.86	pg	-9	15	
delta-BHC	B	1363.3	1322.3	25.00	24.25	pg	-3	15	
Heptachlor	B	1230.0	1132.5	25.00	23.02	pg	-8	15	
Aldrin	B	1170.9	1112.5	25.00	23.75	pg	-5	15	
Heptachlor epoxide	B	1056.1	975.80	25.00	23.10	pg	-8	15	
gamma-Chlordane	B	1029.3	993.64	25.00	24.13	pg	-3	15	
alpha-Chlordane	B	978.47	930.40	25.00	23.77	pg	-5	15	
4,4'-DDE	B	1034.0	952.08	25.00	23.02	pg	-8	15	
Endosulfan I	B	930.41	889.20	25.00	23.89	pg	-4	15	
Dieldrin	B	1074.4	971.04	25.00	22.60	pg	-10	15	
Endrin	B	933.59	887.44	25.00	23.76	pg	-5	15	
4,4'-DDD	B	844.78	765.84	25.00	22.66	pg	-9	15	
Endosulfan II	B	872.99	812.16	25.00	23.26	pg	-7	15	
4,4'-DDT	B	868.56	795.00	25.00	22.88	pg	-8	15	
Methoxychlor	B	377.55	382.56	25.00	25.33	pg	1	15	
Endosulfan sulfate	B	744.47	699.28	25.00	23.48	pg	-6	15	
Endrin ketone	B	873.95	827.24	25.00	23.66	pg	-5	15	
Average EPA 8081A	A	n=20					9	15	
Average EPA 8081A	B	n=20					6	15	

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 191290 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 806497427014 File : 345_014 Time : 11-DEC-2006 16:45

Standards: S4410

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	1314586	3	15	
4,4'-DDE	A	14396			
4,4'-DDD	A	24734			
Endrin	A	715447	8	15	
Endrin aldehyde	A	22633			
Endrin ketone	A	36048			
4,4'-DDT	B	1091516	1	15	
4,4'-DDE	B	6170			
4,4'-DDD	B	9761			
Endrin	B	540102	4	15	
Endrin aldehyde	B	11439			
Endrin ketone	B	13957			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 191290 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 806497427027 File : 345_027 Time : 11-DEC-2006 21:47

Standards: S4410

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	1512652	1	15	
4,4'-DDE	A	7099			
4,4'-DDD	A	12364			
Endrin	A	820397	5	15	
Endrin aldehyde	A	3198			
Endrin ketone	A	36178			
4,4'-DDT	B	1277359	1	15	
4,4'-DDE	B	3957			
4,4'-DDD	B	6182			
Endrin	B	605267	2	15	
Endrin aldehyde	B	4741			
Endrin ketone	B	10711			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 191290 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
Seqnum : 806500136094 File : 347_094 Time : 14-DEC-2006 22:36

Standards: S4410

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	104911	3	15	
4,4'-DDE	A	948			
4,4'-DDD	A	2462			
Endrin	A	60806	4	15	
Endrin aldehyde	A	566			
Endrin ketone	A	2270			
4,4'-DDT	B	82893	3	15	
4,4'-DDE	B	325			
4,4'-DDD	B	2464			
Endrin	B	43362	4	15	
Endrin aldehyde	B	481			
Endrin ketone	B	1304			

CURTIS & TOMPKINS PERFORMANCE EVALUATION FOR 191290 PEST Water
EPA 8081A

Inst : GC23 Run Name: PEM IDF : 1.0
 Seqnum : 806500136110 File : 347_110 Time : 15-DEC-2006 04:19

Standards: S4410

Analyte	Ch	Area	% Breakdown	Limit	Flags
4,4'-DDT	A	89998	10	15	
4,4'-DDE	A	773			
4,4'-DDD	A	9434			
Endrin	A	57123	11	15	
Endrin aldehyde	A	1253			
Endrin ketone	A	5815			
4,4'-DDT	B	77295	3	15	
4,4'-DDE	B	390			
4,4'-DDD	B	2094			
Endrin	B	41405	4	15	
Endrin aldehyde	B	373			
Endrin ketone	B	1415			

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191290 PEST Water
EPA 8081A

Inst : GC23
Seqnum : 806497427013
Cal : 806488872001
Standards: S4177

Run Name: PEST_3
File : 345_013
Caldate : 05-DEC-2006

IDF : 1.0
Time : 11-DEC-2006 16:24

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	22485	20207	10.00	8.987	pg	-10	15	
gamma-BHC	A	20083	18314	10.00	9.119	pg	-9	15	
beta-BHC	A	7411.8	6896.2	10.00	9.304	pg	-7	15	
delta-BHC	A	20093	19364	10.00	9.637	pg	-4	15	
Heptachlor	A	18118	16611	10.00	9.168	pg	-8	15	
Aldrin	A	18345	16417	10.00	8.949	pg	-11	15	
Heptachlor epoxide	A	16445	15181	10.00	9.231	pg	-8	15	
gamma-Chlordane	A	16042	14392	10.00	8.972	pg	-10	15	
alpha-Chlordane	A	15642	13984	10.00	8.940	pg	-11	15	
4,4'-DDE	A	14184	14154	20.00	19.96	pg	0	15	
Endosulfan I	A	14570	13139	10.00	9.018	pg	-10	15	
Dieldrin	A	16894	16203	20.00	19.18	pg	-4	15	
Endrin	A	13010	13347	20.00	20.52	pg	3	15	
4,4'-DDD	A	10309	10364	20.00	20.11	pg	1	15	
Endosulfan II	A	14571	13387	20.00	18.37	pg	-8	15	
4,4'-DDT	A	10861	10992	20.00	20.24	pg	1	15	
Methoxychlor	A	5139.8	5895.1	100.0	114.7	pg	15	15	rsd ***
Endosulfan sulfate	A	10963	10779	20.00	19.67	pg	-2	15	
Endrin ketone	A	15125	14092	20.00	18.63	pg	-7	15	
TCMX	A	13716	11839	20.00	17.26	pg	-14	15	
Decachlorobiphenyl	A	7229.7	7538.1	20.00	20.85	pg	4	15	
alpha-BHC	B	11576	12248	10.00	10.58	pg	6	15	
gamma-BHC	B	10143	10844	10.00	10.69	pg	7	15	
beta-BHC	B	3993.2	4529.8	10.00	11.34	pg	13	15	
delta-BHC	B	10810	12037	10.00	11.14	pg	11	15	
Heptachlor	B	8745.8	9719.8	10.00	11.11	pg	11	15	
Aldrin	B	9124.5	10122	10.00	11.09	pg	11	15	
Heptachlor epoxide	B	8211.0	9066.9	10.00	11.04	pg	10	15	
gamma-Chlordane	B	8223.0	9047.9	10.00	11.00	pg	10	15	
alpha-Chlordane	B	7821.5	8503.7	10.00	10.87	pg	9	15	
4,4'-DDE	B	7611.2	8568.8	20.00	22.52	pg	13	15	
Endosulfan I	B	7255.8	8071.4	10.00	11.12	pg	11	15	
Dieldrin	B	8191.3	9368.6	20.00	22.87	pg	14	15	
Endrin	B	6807.3	8034.4	20.00	23.61	pg	18	15	c+ ***
4,4'-DDD	B	6147.9	6969.8	20.00	22.67	pg	13	15	
Endosulfan II	B	6554.4	7463.5	20.00	22.77	pg	14	15	
4,4'-DDT	B	6059.6	6794.1	20.00	22.42	pg	12	15	
Methoxychlor	B	2636.6	3385.7	100.0	128.4	pg	28	15	c+ ***
Endosulfan sulfate	B	5495.0	6502.4	20.00	23.67	pg	18	15	c+ ***
Endrin ketone	B	6306.4	7453.8	20.00	23.64	pg	18	15	c+ ***
TCMX	B	7461.9	7499.2	20.00	20.10	pg	0	15	
Decachlorobiphenyl	B	3899.7	4656.3	20.00	23.88	pg	19	15	c+
Average EPA 8081A	A	(n=22)					7	15	
Average EPA 8081A	B	(n=22)					13	15	

+=high bias c=CCV rsd=ICAL %RSD failure

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191290 PEST Water
EPA 8081A

Inst : GC23
Seqnum : 806497427028
Cal : 806488872001
Standards: S4178

Run Name: PEST_4
File : 345_028
Caldate : 05-DEC-2006

IDF : 1.0
Time : 11-DEC-2006 22:08

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	22485	22785	20.00	20.27	pg	1	15	
gamma-BHC	A	20083	19883	20.00	19.80	pg	-1	15	
beta-BHC	A	7411.8	6697.9	20.00	18.07	pg	-10	15	
delta-BHC	A	20093	19613	20.00	19.52	pg	-2	15	
Heptachlor	A	18118	18050	20.00	19.92	pg	0	15	
Aldrin	A	18345	18093	20.00	19.73	pg	-1	15	
Heptachlor epoxide	A	16445	15733	20.00	19.13	pg	-4	15	
gamma-Chlordane	A	16042	15196	20.00	18.95	pg	-5	15	
alpha-Chlordane	A	15642	14201	20.00	18.16	pg	-9	15	
4,4'-DDE	A	14184	14880	40.00	41.96	pg	5	15	
Endosulfan I	A	14570	13817	20.00	18.97	pg	-5	15	
Dieldrin	A	16894	17638	40.00	41.76	pg	4	15	
Endrin	A	13010	14159	40.00	43.53	pg	9	15	
4,4'-DDD	A	10309	11316	40.00	43.91	pg	10	15	
Endosulfan II	A	14571	13535	40.00	37.16	pg	-7	15	
4,4'-DDT	A	10861	11029	40.00	40.62	pg	2	15	
Methoxychlor	A	5139.8	5842.1	200.0	227.3	pg	14	15	rsd ***
Endosulfan sulfate	A	10963	10308	40.00	37.61	pg	-6	15	
Endrin ketone	A	15125	13570	40.00	35.89	pg	-10	15	
TCMX	A	13716	13924	40.00	40.61	pg	2	15	
Decachlorobiphenyl	A	7229.7	6372.2	40.00	35.26	pg	-12	15	
alpha-BHC	B	11576	17462	20.00	30.17	pg	51	15	c+ ***
gamma-BHC	B	10143	15354	20.00	30.27	pg	51	15	c+ ***
beta-BHC	B	3993.2	5999.1	20.00	30.05	pg	50	15	c+ ***
delta-BHC	B	10810	16364	20.00	30.28	pg	51	15	c+ ***
Heptachlor	B	8745.8	14224	20.00	32.53	pg	63	15	c+ ***
Aldrin	B	9124.5	13639	20.00	29.90	pg	49	15	c+ ***
Heptachlor epoxide	B	8211.0	12297	20.00	29.95	pg	50	15	c+ ***
gamma-Chlordane	B	8223.0	12336	20.00	30.00	pg	50	15	c+ ***
alpha-Chlordane	B	7821.5	11721	20.00	29.97	pg	50	15	c+ ***
4,4'-DDE	B	7611.2	12904	40.00	67.82	pg	70	15	c+ ***
Endosulfan I	B	7255.8	10853	20.00	29.91	pg	50	15	c+ ***
Dieldrin	B	8191.3	13620	40.00	66.51	pg	66	15	c+ ***
Endrin	B	6807.3	11925	40.00	70.07	pg	75	15	c+ ***
4,4'-DDD	B	6147.9	10483	40.00	68.21	pg	71	15	c+ ***
Endosulfan II	B	6554.4	10902	40.00	66.53	pg	66	15	c+ ***
4,4'-DDT	B	6059.6	10771	40.00	71.10	pg	78	15	c+ ***
Methoxychlor	B	2636.6	5739.4	200.0	435.4	pg	118	15	c+ ***
Endosulfan sulfate	B	5495.0	9150.6	40.00	66.61	pg	67	15	c+ ***
Endrin ketone	B	6306.4	11384	40.00	72.21	pg	81	15	c+ ***
TCMX	B	7461.9	11251	40.00	60.31	pg	51	15	c+
Decachlorobiphenyl	B	3899.7	7148.4	40.00	73.32	pg	83	15	c+
Average EPA 8081A	A	(n=22)					6	15	
Average EPA 8081A	B	(n=22)					64	15	ac ***

+=high bias ac=average CCV drift out c=CCV rsd=ICAL %RSD failure

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191290 PEST Water
EPA 8081A

Inst : GC23
Seqnum : 806500136095
Cal : 806500136001
Standards: S5047

Run Name: PEST_3
File : 347_095
Caldate : 13-DEC-2006

IDF : 1.0
Time : 14-DEC-2006 22:57

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	1808.7	1776.0	10.00	9.819	pg	-2	15	
gamma-BHC	A	1610.8	1569.1	10.00	9.741	pg	-3	15	
beta-BHC	A	574.12	581.30	10.00	10.13	pg	1	15	
delta-BHC	A	1528.6	1497.4	10.00	9.796	pg	-2	15	
Heptachlor	A	1505.3	1368.8	10.00	9.094	pg	-9	15	
Aldrin	A	1488.2	1451.8	10.00	9.756	pg	-2	15	
Heptachlor epoxide	A	1256.3	1222.7	10.00	9.733	pg	-3	15	
gamma-Chlordane	A	1197.8	1154.5	10.00	9.638	pg	-4	15	
alpha-Chlordane	A	1155.4	1102.3	10.00	9.540	pg	-5	15	
4,4'-DDE	A	1107.9	1067.2	20.00	19.26	pg	-4	15	
Endosulfan I	A	1107.8	1052.8	10.00	9.504	pg	-5	15	
Dieldrin	A	1266.6	1214.9	20.00	19.18	pg	-4	15	
Endrin	A	1037.8	1010.9	20.00	19.48	pg	-3	15	
4,4'-DDD	A	826.74	803.15	20.00	19.43	pg	-3	15	
Endosulfan II	A	1042.6	995.75	20.00	19.10	pg	-4	15	
4,4'-DDT	A	892.23	779.65	20.00	17.48	pg	-13	15	
Methoxychlor	A	379.43	378.25	100.0	99.69	pg	0	15	
Endosulfan sulfate	A	815.42	793.65	20.00	19.47	pg	-3	15	
Endrin ketone	A	1014.8	985.05	20.00	19.41	pg	-3	15	
TCMX	A	1049.6	1086.5	20.00	20.70	pg	4	15	
Decachlorobiphenyl	A	508.73	518.00	20.00	20.36	pg	2	15	
alpha-BHC	B	1463.4	1502.6	10.00	10.27	pg	3	15	
gamma-BHC	B	1299.8	1376.4	10.00	10.59	pg	6	15	
beta-BHC	B	505.94	538.60	10.00	10.65	pg	6	15	
delta-BHC	B	1363.3	1391.6	10.00	10.21	pg	2	15	
Heptachlor	B	1230.0	1263.8	10.00	10.27	pg	3	15	
Aldrin	B	1170.9	1189.2	10.00	10.16	pg	2	15	
Heptachlor epoxide	B	1056.1	1117.1	10.00	10.58	pg	6	15	
gamma-Chlordane	B	1029.3	1056.1	10.00	10.26	pg	3	15	
alpha-Chlordane	B	978.47	1014.8	10.00	10.37	pg	4	15	
4,4'-DDE	B	1034.0	1044.6	20.00	20.20	pg	1	15	
Endosulfan I	B	930.41	965.80	10.00	10.38	pg	4	15	
Dieldrin	B	1074.4	1105.0	20.00	20.57	pg	3	15	
Endrin	B	933.59	963.85	20.00	20.65	pg	3	15	
4,4'-DDD	B	844.78	888.55	20.00	21.04	pg	5	15	
Endosulfan II	B	872.99	897.10	20.00	20.55	pg	3	15	
4,4'-DDT	B	868.56	844.15	20.00	19.44	pg	-3	15	
Methoxychlor	B	377.55	412.25	100.0	109.2	pg	9	15	
Endosulfan sulfate	B	744.47	797.10	20.00	21.41	pg	7	15	
Endrin ketone	B	873.95	958.90	20.00	21.94	pg	10	15	
TCMX	B	867.03	924.60	20.00	21.33	pg	7	15	
Decachlorobiphenyl	B	533.75	606.30	20.00	22.72	pg	14	15	
Average EPA 8081A	A	(n=22)					4	15	
Average EPA 8081A	B	(n=22)					5	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191290 PEST Water
EPA 8081A

Inst : GC23
Seqnum : 806500136111
Cal : 806500136001
Standards: S5048

Run Name: PEST_4
File : 347_111
Caldate : 13-DEC-2006

IDF : 1.0
Time : 15-DEC-2006 04:40

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
alpha-BHC	A	1808.7	1839.2	20.00	20.34	pg	2	15	
gamma-BHC	A	1610.8	1629.3	20.00	20.23	pg	1	15	
beta-BHC	A	574.12	593.70	20.00	20.68	pg	3	15	
delta-BHC	A	1528.6	1572.8	20.00	20.58	pg	3	15	
Heptachlor	A	1505.3	1357.2	20.00	18.03	pg	-10	15	
Aldrin	A	1488.2	1467.0	20.00	19.72	pg	-1	15	
Heptachlor epoxide	A	1256.3	1222.9	20.00	19.47	pg	-3	15	
gamma-Chlordane	A	1197.8	1184.2	20.00	19.77	pg	-1	15	
alpha-Chlordane	A	1155.4	1094.0	20.00	18.94	pg	-5	15	
4,4'-DDE	A	1107.9	1165.3	40.00	42.07	pg	5	15	
Endosulfan I	A	1107.8	1143.3	20.00	20.64	pg	3	15	
Dieldrin	A	1266.6	1330.8	40.00	42.03	pg	5	15	
Endrin	A	1037.8	979.35	40.00	37.75	pg	-6	15	
4,4'-DDD	A	826.74	949.95	40.00	45.96	pg	15	15	
Endosulfan II	A	1042.6	1018.9	40.00	39.09	pg	-2	15	
4,4'-DDT	A	892.23	671.80	40.00	30.12	pg	-25	15	c- ***
Methoxychlor	A	379.43	347.41	200.0	183.1	pg	-8	15	
Endosulfan sulfate	A	815.42	790.50	40.00	38.78	pg	-3	15	
Endrin ketone	A	1014.8	1052.7	40.00	41.49	pg	4	15	
TCMX	A	1049.6	1113.5	40.00	42.44	pg	6	15	
Decachlorobiphenyl	A	508.73	493.78	40.00	38.82	pg	-3	15	
alpha-BHC	B	1463.4	1327.4	20.00	18.14	pg	-9	15	
gamma-BHC	B	1299.8	1154.4	20.00	17.76	pg	-11	15	
beta-BHC	B	505.94	448.35	20.00	17.72	pg	-11	15	
delta-BHC	B	1363.3	1153.9	20.00	16.93	pg	-15	15	
Heptachlor	B	1230.0	1064.4	20.00	17.31	pg	-13	15	
Aldrin	B	1170.9	1018.4	20.00	17.39	pg	-13	15	
Heptachlor epoxide	B	1056.1	893.55	20.00	16.92	pg	-15	15	
gamma-Chlordane	B	1029.3	857.90	20.00	16.67	pg	-17	15	c- ***
alpha-Chlordane	B	978.47	817.20	20.00	16.70	pg	-16	15	c- ***
4,4'-DDE	B	1034.0	856.88	40.00	33.15	pg	-17	15	c- ***
Endosulfan I	B	930.41	797.20	20.00	17.14	pg	-14	15	
Dieldrin	B	1074.4	911.03	40.00	33.92	pg	-15	15	
Endrin	B	933.59	772.35	40.00	33.09	pg	-17	15	c- ***
4,4'-DDD	B	844.78	709.95	40.00	33.62	pg	-16	15	c- ***
Endosulfan II	B	872.99	726.50	40.00	33.29	pg	-17	15	c- ***
4,4'-DDT	B	868.56	647.28	40.00	29.81	pg	-25	15	c- ***
Methoxychlor	B	377.55	327.95	200.0	173.7	pg	-13	15	
Endosulfan sulfate	B	744.47	612.63	40.00	32.92	pg	-18	15	c- ***
Endrin ketone	B	873.95	749.08	40.00	34.28	pg	-14	15	
TCMX	B	867.03	802.45	40.00	37.02	pg	-7	15	
Decachlorobiphenyl	B	533.75	443.00	40.00	33.20	pg	-17	15	c-
Average EPA 8081A	A	(n=22)					5	15	
Average EPA 8081A	B	(n=22)					15	15	

--low bias c=CCV

SEQUENCE SUMMARY FOR 191290 PEST Water
Curtis & Tompkins Laboratories

Sequence: 806488872 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Begun: 05-DEC-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
001	339_001	X	PRIMER			05-DEC-2006 11:52	1.0								
002	339_002	X	PRIMER			05-DEC-2006 12:13	1.0								
003	339_003	X	PRIMER			05-DEC-2006 12:35	1.0								
004	339_004	X	PRIMER			05-DEC-2006 12:56	1.0								
005	339_005	X	PRIMER			05-DEC-2006 13:17	1.0								
006	339_006	X	HEX			05-DEC-2006 13:39	1.0								
007	339_007	X	HEX			05-DEC-2006 14:00	1.0								
008	339_008	X	PEST_3			05-DEC-2006 14:21	1.0		25	1					
009	339_009	X	PEM			05-DEC-2006 15:19	1.0			1					
010	339_010	X	191174-001	119999	Water	05-DEC-2006 16:29	1.0		42	1					
011	339_011	X	PRIMER			05-DEC-2006 16:54	1.0								
012	339_012	X	PRIMER			05-DEC-2006 17:15	1.0								
013	339_013	X	PRIMER			05-DEC-2006 17:37	1.0								
014	339_014	X	PRIMER			05-DEC-2006 17:58	1.0								
015	339_015	X	PRIMER			05-DEC-2006 18:20	1.0								
016	339_016	X	PRIMER			05-DEC-2006 18:41	1.0								
017	339_017	X	PRIMER			05-DEC-2006 19:03	1.0								
018	339_018	X	PRIMER			05-DEC-2006 19:24	1.0								
019	339_019	X	PRIMER			05-DEC-2006 19:45	1.0								
020	339_020	X	PRIMER			05-DEC-2006 20:07	1.0								
021	339_021	X	HEX			05-DEC-2006 20:28	1.0								
022	339_022	X	HEX			05-DEC-2006 20:49	1.0								
023	339_023	X	HEX			05-DEC-2006 21:11	1.0								
024	339_024	PEM	PEM			05-DEC-2006 21:32	1.0								
025	339_025	X	HEX			05-DEC-2006 21:54	1.0			1					
026	339_026	ICAL	PEST_1			05-DEC-2006 22:15	1.0								
027	339_027	ICAL	PEST_2			05-DEC-2006 22:36	1.0								
028	339_028	ICAL	PEST_3			05-DEC-2006 22:58	1.0								
029	339_029	ICAL	PEST_4			05-DEC-2006 23:19	1.0								
030	339_030	ICAL	PEST_5			05-DEC-2006 23:41	1.0								

Stds used: 1=S4177 2=S4410 3=S4176 4=S3833 5=S4178 6=S3834 7=S4745 8=S4043 9=S4518
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 191290 PEST Water
Curtis & Tompkins Laboratories

Sequence: 806488872 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Begun: 05-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds	Used	>LR
031	339_031	ICAL	PEST_6			06-DEC-2006 00:02	1.0						7		
032	339_032	ICAL	PEST_7			06-DEC-2006 00:24	1.0						8		
033	339_033	X	HEX			06-DEC-2006 00:45	1.0								
034	339_034	X	HEX			06-DEC-2006 01:06	1.0								
035	339_035	X	ICV			06-DEC-2006 01:28	1.0		4	1			9		4:XYL246=271.508
036	339_036	ICV	ICV			06-DEC-2006 01:49	1.0		4	1			9		4:CL10BZ=293.692
037	339_037	X	HEX			06-DEC-2006 02:10	1.0								

Stds used: 1=S4177 2=S4410 3=S4176 4=S3833 5=S4178 6=S3834 7=S4745 8=S4043 9=S4518
Flags used: ac=average CCV drift out

SEQUENCE SUMMARY FOR 191290 PEST Water
Curtis & Tompkins Laboratories

Sequence: 806497427 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Begun: 11-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
001	345_001	X	PRIMER			11-DEC-2006	10:27 1.0							
002	345_002	X	PRIMER			11-DEC-2006	10:49 1.0							
003	345_003	X	PRIMER			11-DEC-2006	11:10 1.0							
004	345_004	X	PRIMER			11-DEC-2006	11:32 1.0							
005	345_005	X	HEX			11-DEC-2006	11:53 1.0							
006	345_006	X	PEM			11-DEC-2006	12:14 1.0	1.0			1			
007	345_007	X	PEST_3			11-DEC-2006	12:36 1.0	1.0			1			
008	345_008	X	PEST_4			11-DEC-2006	13:10 1.0	1.0			1			
009	345_009	X	PRIMER			11-DEC-2006	14:58 1.0	1.0			1			
010	345_010	X	PRIMER			11-DEC-2006	15:19 1.0							
011	345_011	X	PRIMER			11-DEC-2006	15:41 1.0							
012	345_012	X	HEX			11-DEC-2006	16:02 1.0							
013	345_013	CCV	PEST_3			11-DEC-2006	16:24 1.0	1.0		6	1			
014	345_014	PEM	PEM			11-DEC-2006	16:45 1.0	1.0			1			
015	345_015	X	HEX			11-DEC-2006	17:08 1.0							
016	345_016	X	HEX			11-DEC-2006	17:51 1.0							
017	345_017	BLANK	QC367663			11-DEC-2006	18:13 1.0	0.01			1			
018	345_018	PREPBLK	QC367666			11-DEC-2006	18:34 1.0	0.01		1	3			
019	345_019	BS	QC367664			11-DEC-2006	18:56 1.0	0.01		20	18			
020	345_020	BSD	QC367665			11-DEC-2006	19:17 1.0	0.01		20	18			
021	345_021	LCS	QC367667			11-DEC-2006	19:38 1.0	0.01		20	17			
022	345_022	SAMPLE	191359-001			11-DEC-2006	20:00 1.0	0.01			4			
023	345_023	SAMPLE	191317-001			11-DEC-2006	20:21 1.0	0.009434	1		1			
024	345_024	SAMPLE	191329-001			11-DEC-2006	20:43 1.0	0.009434			1			
025	345_025	SAMPLE	191359-001			11-DEC-2006	21:04 5.0	0.01			1			
026	345_026	X	HEX			11-DEC-2006	21:25 1.0							
027	345_027	PEM	PEM			11-DEC-2006	21:47 1.0	1.0			1			
028	345_028	CCV	PEST_4			11-DEC-2006	22:08 1.0	1.0			1			
029	345_029	X	PEST_4			11-DEC-2006	22:30 1.0	1.0			1			
030	345_030	X	PEM			11-DEC-2006	22:51 1.0							

Stds used: 1=S4410 2=S4177 3=S4178 4=S5045 5=S5046 6=S5047 7=S5048 8=S5049 9=S5050 10=S5051 11=S4518
Flags used: >=closing ac=average CCV drift out

SEQUENCE SUMMARY FOR 191290 PEST Water
Curtis & Tompkins Laboratories

Sequence: 806497427 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Begun: 11-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Std's	Used	>LR
031	345_031	X	HEX			11-DEC-2006 23:12	1.0							
032	345_032	ICAL	PEST_1			11-DEC-2006 23:34	1.0	1.0				4		
033	345_033	ICAL	PEST_2			11-DEC-2006 23:55	1.0	1.0				5		
034	345_034	ICAL	PEST_3			12-DEC-2006 00:17	1.0	1.0				6		
035	345_035	ICAL	PEST_4			12-DEC-2006 00:38	1.0	1.0				7		
036	345_036	ICAL	PEST_5			12-DEC-2006 01:00	1.0	1.0				8		
037	345_037	ICAL	PEST_6			12-DEC-2006 01:21	1.0	1.0				9		
038	345_038	ICAL	PEST_7			12-DEC-2006 01:42	1.0	1.0				10		
039	345_039	X	HEX			12-DEC-2006 02:04	1.0							
040	345_040	X	HEX			12-DEC-2006 02:25	1.0							
041	345_041	ICV	ICV			12-DEC-2006 02:46	1.0	1.0			25	1		4:CU10BZ=251.639
042	345_042	ICV	ICV			12-DEC-2006 03:08	1.0	1.0			22	1		4:CU10BZ=251.252
043	345_043	X	HEX			12-DEC-2006 03:29	1.0							

Std's used: 1=S4410 2=S4177 3=S4178 4=S5045 5=S5046 6=S5047 7=S5048 8=S5049 9=S5050 10=S5051 11=S4518
Flags used: >=closing ac=average CCV drift out

SEQUENCE SUMMARY FOR 191290 PEST Water
Curtis & Tompkins Laboratories

Sequence: 806500136 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Begun: 13-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	UL	Stds	Used
001	347_001	X	HEX			13-DEC-2006 07:36	1.0					1	1:DDT44=168.953
002	347_002	X	PEM			13-DEC-2006 07:57	1.0	1.0				2	av
003	347_003	X	PEST_3			13-DEC-2006 08:18	1.0	1.0	6			3	4:XYL246=245.450
004	347_004	X	ICV			13-DEC-2006 11:24	1.0	1.0	39			4	av
005	347_005	X	PEST_5			13-DEC-2006 12:19	1.0	1.0	9			5	2:DDT44=60.4392
006	347_006	X	PEST_3			13-DEC-2006 12:53	1.0	1.0	29				ac av
007	347_007	X	HEX			13-DEC-2006 13:45	1.0						
008	347_008	ICAL	PEST_1			13-DEC-2006 14:06	1.0	1.0				6	
009	347_009	ICAL	PEST_2			13-DEC-2006 14:28	1.0	1.0				7	
010	347_010	ICAL	PEST_3			13-DEC-2006 14:49	1.0	1.0				5	
011	347_011	ICAL	PEST_4			13-DEC-2006 15:11	1.0	1.0				8	
012	347_012	ICAL	PEST_5			13-DEC-2006 15:32	1.0	1.0				9	
013	347_013	ICAL	PEST_6			13-DEC-2006 15:54	1.0	1.0				10	
014	347_014	ICAL	PEST_7			13-DEC-2006 16:15	1.0	1.0				11	
015	347_015	X	HEX			13-DEC-2006 16:36	1.0						
016	347_016	X	HEX			13-DEC-2006 16:58	1.0						
017	347_017	X	ICV			13-DEC-2006 17:19	1.0					12	
018	347_018	X	ICV			13-DEC-2006 17:41	1.0					3	
019	347_019	ICV	ICV			13-DEC-2006 18:06	1.0	1.0	6			3	4:XYL246=324.939
020	347_020	PEM	PEM			13-DEC-2006 18:50	1.0	1.0				1	1:DDT44=167.366
021	347_021	X	HEX			13-DEC-2006 19:11	1.0						
022	347_022	BLANK	QC367893			120260 Water	13-DEC-2006 19:41	1.0	0.01	1		1	
023	347_023	PREPBLK	QC367896			120260 TCLP L	13-DEC-2006 20:02	1.0	0.01053	1		1	
024	347_024	BLANK	QC367564			120184 Soil	13-DEC-2006 20:24	1.0	0.6667	1		1	
025	347_025	BS	QC367894			120260 Water	13-DEC-2006 20:45	1.0	0.01	1		1	
026	347_026	BSD	QC367895			120260 Water	13-DEC-2006 21:06	1.0	0.01	1		21	
027	347_027	LCS	QC367565			120184 Soil	13-DEC-2006 21:28	1.0	0.6656	1		1	
028	347_028	BS	QC367483			120164 Water	13-DEC-2006 21:49	1.0	0.01	1		1	
029	347_029	BSD	QC367484			120164 Water	13-DEC-2006 22:11	1.0	0.01	1		12	
030	347_030	SAMPLE	191317-001			120202 Water	13-DEC-2006 22:32	1.0	0.009434	1		1	

Stds used: 1=S4410 2=S4177 3=S5092 4=S3834 5=S5047 6=S5045 7=S5046 8=S5048 9=S5049 10=S5050 11=S5051 12=S4518
Flags used: >=closing ac=average CCV drift out av=average ICV drift out

SEQUENCE SUMMARY FOR 191290 PEST Water
Curtis & Tompkins Laboratories

Sequence: 806500136 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Begun: 13-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Std's	Used
031	347_031	SAMPLE	191381-001	120260	Water	13-DEC-2006 22:53	1.0	0.009434	1		1		1:GCHLOR=175.607
032	347_032	X	HEX			13-DEC-2006 23:15	1.0						
033	347_033	PEM	PEM			13-DEC-2006 23:36	1.0	1.0			1		
034	347_034	X	PEST_3			13-DEC-2006 23:58	1.0				1		
035	347_035	CCV	PEST_3			14-DEC-2006 00:19	1.0	1.0	1		1		
036	347_036	X	PEM			14-DEC-2006 01:02	1.0						
037	347_037	X	HEX			14-DEC-2006 01:23	1.0	0.009804	1		1		
038	347_038	SAMPLE	191294-002	120164	Water	14-DEC-2006 01:45	1.0	0.009901	1		1		
039	347_039	SAMPLE	191294-003	120164	Water	14-DEC-2006 02:06	1.0	0.009901	3		1		2:GCHLOR=403.168
040	347_040	SAMPLE	191294-004	120164	Water	14-DEC-2006 02:27	1.0	0.009804	1		1		
041	347_041	SAMPLE	191294-006	120164	Water	14-DEC-2006 03:10	1.0	0.009804	1		1		
042	347_042	SAMPLE	191294-007	120164	Water	14-DEC-2006 03:31	1.0	0.009804	1		1		
043	347_043	SAMPLE	191294-008	120164	Water	14-DEC-2006 04:14	1.0	0.6645	1		1		
044	347_044	SAMPLE	191294-009	120164	Water	14-DEC-2006 04:36	2.0	0.6653	1		1		
045	347_045	SAMPLE	191298-001	120260	TCLP L	14-DEC-2006 05:19	1.0	1.0			1		
046	347_046	SAMPLE	191335-008	120184	Soil	14-DEC-2006 06:01	1.0				1		
047	347_047	SAMPLE	191335-006	120184	Soil	14-DEC-2006 06:23	1.0				1		
048	347_048	X	HEX			14-DEC-2006 06:44	1.0						
049	347_049	PEM	PEM			14-DEC-2006 07:06	2.0	0.009434			1		
050	347_050	X,CCV	PEST_4			14-DEC-2006 07:27	5.0	0.6662			1		
051	347_051	CCV	PEST_4			14-DEC-2006 07:49	10.0	0.6656	1		1		
052	347_052	X	PEM			14-DEC-2006 08:10	10.0	0.6662	1		1		
053	347_053	X	HEX			14-DEC-2006 08:31	20.0	0.6651			1		
054	347_054	SAMPLE	191331-001	120202	Water	14-DEC-2006 08:53	20.0	0.664			1		
055	347_055	SAMPLE	191335-004	120184	Soil	14-DEC-2006 09:14	20.0	0.6658			1		
056	347_056	SAMPLE	191267-015	120184	Soil								
057	347_057	SAMPLE	191267-025	120184	Soil								
058	347_058	MSS	191335-001	120184	Soil								
059	347_059	SAMPLE	191335-002	120184	Soil								
060	347_060	SAMPLE	191335-003	120184	Soil								

Std's used: 1=S4410 2=S4177 3=S5092 4=S3834 5=S5047 6=S5045 7=S5046 8=S5048 9=S5049 10=S5050 11=S5051 12=S4518
Flags used: >=closing ac=average CCV drift out av=average ICV drift out

SEQUENCE SUMMARY FOR 191290 PEST Water
Curtis & Tompkins Laboratories

Sequence: 806500136 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Run: 13-DEC-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used	>LR
061	347_061	SAMPLE	191335-005	120184	Soil	14-DEC-2006 09:36	20.0	0.6658			1		
062	347_062	SAMPLE	191335-007	120184	Soil	14-DEC-2006 09:57	20.0	0.6647			1		
063	347_063	SAMPLE	191267-005	120184	Soil	14-DEC-2006 10:19	20.0	0.6658	1		1		
064	347_064	X	HEX			14-DEC-2006 10:40	1.0						
065	347_065	PEM	PEM			14-DEC-2006 11:02	1.0	1.0			1		
066	347_066	CCV	PEST_5			14-DEC-2006 11:23	1.0	1.0	3		1		
067	347_067	X,CCV	PEST_5			14-DEC-2006 11:45	1.0						
068	347_068	X	PEM			14-DEC-2006 12:06	1.0						
069	347_069	X	HEX			14-DEC-2006 12:28	1.0						
070	347_070	PREPBLK	QC367897	120260	Filtira	14-DEC-2006 12:49	1.0	0.009901	6	2	1		
071	347_071	LCS	QC367898	120260	Filtira	14-DEC-2006 13:10	1.0	0.009901	9	24	1		
072	347_072	SAMPLE	191347-001	120260	Filtira	14-DEC-2006 13:32	1.0	0.01	2	4	1		
073	347_073	SAMPLE	191347-001	120260	Water	14-DEC-2006 13:54	5.0	0.009901	2		1		
074	347_074	SAMPLE	191267-010	120184	Soil	14-DEC-2006 14:15	20.0	0.6642	6		1		
075	347_075	SAMPLE	191267-020	120184	Soil	14-DEC-2006 14:37	20.0	0.666	6		1		
076	347_076	SAMPLE	191267-030	120184	Soil	14-DEC-2006 14:58	20.0	0.6658	5		1		
077	347_077	X	HEX			14-DEC-2006 15:20	1.0						
078	347_078	PEM	PEM			14-DEC-2006 15:41	1.0	1.0			1		
079	347_079	CCV	PEST_4			14-DEC-2006 16:03	1.0	1.0	6		1		
080	347_080	X	PEST_4			14-DEC-2006 16:24	1.0						
081	347_081	X	PEM			14-DEC-2006 16:46	1.0						
082	347_082	X	HEX			14-DEC-2006 17:07	1.0						
083	347_083	BLANK	QC367748	120226	Soil	14-DEC-2006 18:39	1.0	0.6649	6		1		
084	347_084	LCS	QC367749	120226	Soil	14-DEC-2006 19:01	1.0	0.6629	6		1		
085	347_085	SAMPLE	191357-001	120226	Soil	14-DEC-2006 19:22	1.0	0.6664	6		1		
086	347_086	SAMPLE	191357-002	120226	Soil	14-DEC-2006 19:44	1.0	0.6629	6		1		
087	347_087	SAMPLE	191357-003	120226	Soil	14-DEC-2006 20:05	1.0	0.6636	6		1		
088	347_088	SAMPLE	191357-004	120226	Soil	14-DEC-2006 20:27	1.0	0.6653	6		1		
089	347_089	SAMPLE	191357-005	120226	Soil	14-DEC-2006 20:48	1.0	0.6651	6		1		
090	347_090	SAMPLE	191357-006	120226	Soil	14-DEC-2006 21:10	1.0	0.6664	6		1		

Stds used: 1=S4410 2=S4177 3=S5092 4=S3834 5=S5047 6=S5045 7=S5046 8=S5048 9=S5049 10=S5050 11=S5051 12=S4518
Flags used: >=closing ac=average CCV drift out av=average ICV drift out

SEQUENCE SUMMARY FOR 191290 PEST Water
Curtis & Tompkins Laboratories

Sequence: 806500136 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Begun: 13-DEC-2006

#	Filename	Type	Sample Num	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds Used	>LR
091	347_091	MSS	191357-007	120226	Soil	14-DEC-2006 21:31	1.0	0.6616	6		1		
092	347_092	SAMPLE	191357-008	120226	Soil	14-DEC-2006 21:53	1.0	0.6656	6		1		
093	347_093	X	HEX			14-DEC-2006 22:14	1.0						
094	347_094	PEM	PEM			14-DEC-2006 22:36	1.0	1.0			1		
095	347_095	CCV	PEST_3			14-DEC-2006 22:57	1.0	1.0			1		
096	347_096	X	PEST_3			14-DEC-2006 23:19	1.0						
097	347_097	X	PEM			14-DEC-2006 23:40	1.0						
098	347_098	X	HEX			15-DEC-2006 00:01	1.0						
099	347_099	SAMPLE	191327-001	120202	Water	15-DEC-2006 00:23	2.0	0.009615	10		1		
100	347_100	SAMPLE	191327-002	120202	Water	15-DEC-2006 00:44	2.0	0.009615	10		1		
101	347_101	SAMPLE	191287-001	120202	Water	15-DEC-2006 01:06	10.0	0.009434	10	2	1		
102	347_102	SAMPLE	191290-001	120202	Water	15-DEC-2006 01:27	1.0	0.009434	9	2	1		
103	347_103	SAMPLE	191245-003	120164	Water	15-DEC-2006 01:49	1.0	0.01	10		1		
104	347_104	SAMPLE	191286-007	120164	Water	15-DEC-2006 02:10	1.0	0.009524	9	1	1		
105	347_105	SAMPLE	191286-008	120164	Water	15-DEC-2006 02:32	1.0	0.009434	9	2	1		
106	347_106	SAMPLE	191286-013	120164	Water	15-DEC-2006 02:53	2.0	0.009901	10	3	1		
107	347_107	MS	QC367750	120226	Soil	15-DEC-2006 03:14	1.0	0.6664			1		
108	347_108	MSD	QC367751	120226	Soil	15-DEC-2006 03:36	1.0	0.6664			1		
109	347_109	X	HEX			15-DEC-2006 03:57	1.0						
110	347_110	PEM	PEM			15-DEC-2006 04:19	1.0	1.0			1		
111	347_111	CCV	PEST_4			15-DEC-2006 04:40	1.0	1.0	10		1		
112	347_112	X	PEST_4			15-DEC-2006 05:02	1.0	1.0	3		1		
113	347_113	X	PEM			15-DEC-2006 05:23	1.0						
114	347_114	X	HEX			15-DEC-2006 05:45	1.0						
115	347_115	BLANK	QC366780	119990	Soil	15-DEC-2006 06:06	1.0	0.6667	10		1		
116	347_116	MDL	191169-001	119990	Soil	15-DEC-2006 06:28	1.0	0.6667	18		1		
117	347_117	MDL	191169-002	119990	Soil	15-DEC-2006 06:49	1.0	0.6667	13		1		
118	347_118	MDL	191169-003	119990	Soil	15-DEC-2006 07:11	1.0	0.6667	25		1		
119	347_119	MDL	191169-004	119990	Soil	15-DEC-2006 07:32	1.0	0.6667	15		1		
120	347_120	MDL	191169-005	119990	Soil	15-DEC-2006 07:54	1.0	0.6667	20		1		

Stds used: 1=S4410 2=S4177 3=S5092 4=S3834 5=S5047 6=S5045 7=S5046 8=S5048 9=S5049 10=S5050 11=S5051 12=S4518
Flags used: >=closing ac=average CCV drift out av=average ICV drift out

SEQUENCE SUMMARY FOR 191290 PEST water
Curtis & Tompkins Laboratories

Sequence: 806500136 Instrument: GC23
Analytical Method: EPA 8081A

Gas Chromatograph #23 ECD
SOP Version: 8081_rv7

Begun: 13-DEC-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Std's Used	>LR
121	347_121	MDL	191169-006	119990	Soil	15-DEC-2006 08:15	1.0	0.6667	10		1	>ac	
122	347_122	MDL	191169-007	119990	Soil	15-DEC-2006 08:37	1.0	0.6667	11		1	>ac	
123	347_123	MDL	191169-008	119990	Soil	15-DEC-2006 08:58	1.0	0.6667	28		1	>ac	
124	347_124	X	HEX			15-DEC-2006 09:20	1.0						
125	347_125	PEM	PEM			15-DEC-2006 09:41	1.0	1.0			1	1	
126	347_126	CCV	PEST_5			15-DEC-2006 10:03	1.0	1.0	19		1	ac	
127	347_127	X	PEST_5			15-DEC-2006 10:24	1.0	1.0	20		1	ac	
128	347_128	X	HEX			15-DEC-2006 10:46	1.0						

Std's used: 1=S4410 2=S4177 3=S5092 4=S3834 5=S5047 6=S5045 7=S5046 8=S5048 9=S5049 10=S5050 11=S5051 12=S4518
Flags used: >=closing ac=average CCV drift out av=average ICV drift out

REPORTING SUMMARY FOR 191290 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
191290-001	alpha-BHC	GC23	A	12/15/06 01:27
191290-001	beta-BHC	GC23	A	12/15/06 01:27
191290-001	gamma-BHC	GC23	A	12/15/06 01:27
191290-001	delta-BHC	GC23	A	12/15/06 01:27
191290-001	Heptachlor	GC23	A	12/15/06 01:27
191290-001	Aldrin	GC23	A	12/15/06 01:27
191290-001	Heptachlor epoxide	GC23	A	12/15/06 01:27
191290-001	Endosulfan I	GC23	A	12/15/06 01:27
191290-001	Dieldrin	GC23	A	12/15/06 01:27
191290-001	4,4'-DDE	GC23	A	12/15/06 01:27
191290-001	Endrin	GC23	A	12/15/06 01:27
191290-001	Endosulfan II	GC23	A	12/15/06 01:27
191290-001	Endosulfan sulfate	GC23	A	12/15/06 01:27
191290-001	4,4'-DDD	GC23	A	12/15/06 01:27
191290-001	4,4'-DDT	GC23	A	12/15/06 01:27
191290-001	alpha-Chlordane	GC23	A	12/15/06 01:27
191290-001	gamma-Chlordane	GC23	A	12/15/06 01:27
191290-001	Methoxychlor	GC23	A	12/15/06 01:27
191290-001	Endrin ketone	GC23	A	12/15/06 01:27
191290-001	Toxaphene	GC23	A	12/15/06 01:27
191290-001	TCMX	GC23	A	12/15/06 01:27
191290-001	Decachlorobiphenyl	GC23	A	12/15/06 01:27
QC367663	alpha-BHC	GC23	A	12/11/06 18:13
QC367663	beta-BHC	GC23	A	12/11/06 18:13
QC367663	gamma-BHC	GC23	A	12/11/06 18:13
QC367663	delta-BHC	GC23	A	12/11/06 18:13
QC367663	Heptachlor	GC23	A	12/11/06 18:13
QC367663	Aldrin	GC23	A	12/11/06 18:13
QC367663	Heptachlor epoxide	GC23	A	12/11/06 18:13
QC367663	Endosulfan I	GC23	A	12/11/06 18:13
QC367663	Dieldrin	GC23	A	12/11/06 18:13
QC367663	4,4'-DDE	GC23	A	12/11/06 18:13
QC367663	Endrin	GC23	A	12/11/06 18:13
QC367663	Endosulfan II	GC23	A	12/11/06 18:13
QC367663	Endosulfan sulfate	GC23	A	12/11/06 18:13
QC367663	4,4'-DDD	GC23	A	12/11/06 18:13
QC367663	4,4'-DDT	GC23	A	12/11/06 18:13
QC367663	alpha-Chlordane	GC23	A	12/11/06 18:13
QC367663	gamma-Chlordane	GC23	A	12/11/06 18:13
QC367663	Methoxychlor	GC23	A	12/11/06 18:13
QC367663	Endrin ketone	GC23	A	12/11/06 18:13
QC367663	Toxaphene	GC23	A	12/11/06 18:13
QC367663	TCMX	GC23	A	12/11/06 18:13
QC367663	Decachlorobiphenyl	GC23	A	12/11/06 18:13
QC367664	gamma-BHC	GC23	A	12/11/06 18:56
QC367664	Heptachlor	GC23	A	12/11/06 18:56
QC367664	Aldrin	GC23	A	12/11/06 18:56
QC367664	Dieldrin	GC23	A	12/11/06 18:56
QC367664	Endrin	GC23	A	12/11/06 18:56
QC367664	4,4'-DDT	GC23	A	12/11/06 18:56
QC367664	TCMX	GC23	A	12/11/06 18:56
QC367664	Decachlorobiphenyl	GC23	A	12/11/06 18:56

REPORTING SUMMARY FOR 191290 PEST Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC367665	gamma-BHC	GC23	A	12/11/06 19:17
QC367665	Heptachlor	GC23	A	12/11/06 19:17
QC367665	Aldrin	GC23	A	12/11/06 19:17
QC367665	Dieldrin	GC23	A	12/11/06 19:17
QC367665	Endrin	GC23	A	12/11/06 19:17
QC367665	4,4'-DDT	GC23	A	12/11/06 19:17
QC367665	TCMX	GC23	A	12/11/06 19:17
QC367665	Decachlorobiphenyl	GC23	A	12/11/06 19:17
QC367667	gamma-BHC	GC23	A	12/11/06 19:38
QC367667	Heptachlor	GC23	A	12/11/06 19:38
QC367667	Aldrin	GC23	A	12/11/06 19:38
QC367667	Dieldrin	GC23	A	12/11/06 19:38
QC367667	Endrin	GC23	A	12/11/06 19:38
QC367667	4,4'-DDT	GC23	A	12/11/06 19:38
QC367667	TCMX	GC23	A	12/11/06 19:38
QC367667	Decachlorobiphenyl	GC23	A	12/11/06 19:38

Curtis & Tompkins Laboratories Sample Preparation Summary 11-DEC-2006 14:19

Batch Number : 120202
 Date Extracted : 08-DEC-2006
 Extracted by : Jonee Galvez
 Prep Method : 3520C
 Analysis : 8081
 Bgroup : N/A
 Units : mL
 Clean-up :
 Spike #1 ID : S4969A
 Spike #2 ID : S4965B
 Spike #3 ID : S4965B
 GDP Version : 8081w rv14

Sample	Type	Client	Matrix	Inte	Units	Final	Prep	Clean	pH	Sp 1	Sp 2	Sp 3	Analyses	Clean	Comments
				W/V		Vol	D.F.	D.F.		Vol	Vol	Vol		Method	
191287-001		Acme Fill Corp.	Water	1060	mL	10	0.009434	1	8	.025	0		8081		
191290-001		Treadwell & Rollo	Water	1060	mL	10	0.009434	1	8	.025	0		8081		
191294-005		Biasland, Bouck & Lee	Water	500	mL	5	0.010000	1	6	.0125	0		8081		
191317-001		Strategic Engineering & Scienc	Water	1060	mL	10	0.009434	1	8	.025	0		8081		
191327-001		Biasland, Bouck & Lee	Water	1040	mL	10	0.009615	1	7	.025	0		8081		
191327-002		Biasland, Bouck & Lee	Water	1040	mL	10	0.009615	1	7	.025	0		8081		
191329-001		Strategic Engineering & Scienc	Water	1060	mL	10	0.009434	1	7	.025	0		8081		
191331-001		Strategic Engineering & Scienc	Water	1060	mL	10	0.009434	1	7	.025	0		8081		
191359-001		Montezuma Wetlands LLC	Filtrate	1000	mL	10	0.010000	1	7	.025	0		8081		
191359-001		Montezuma Wetlands LLC	Water	1000	mL	10	0.010000	1	7	.025	0		8081		
OC367663	BLANK		Water	1000	mL	10	0.010000	1		.025	0		8081		
OC367664	BS		Water	1000	mL	10	0.010000	1		.025	0		8081		
OC367665	BSD		Water	1000	mL	10	0.010000	1		.025	0		8081		
OC367666	PREPBLK		Water	1000	mL	10	0.010000	1		.025	0		8081		
OC367667	LCS		Filtrate	1000	mL	10	0.010000	1	7	.025	.025		8081		

Prep Chemist: JMM for JDS
 Relinquished By: JMM for JFL
 Reviewed By: [Signature] Date: 12/14/06
 Received By: [Signature] Date: 12/11/06

Cleanup Method (if needed):

☐ EPA 3640a GPC
☐ EPA 3620b Florisil
☐

Mfg & Lot# / LIMS # / Time Date/ Initials

S4969A	12/5/06
S4965B	
EM40305	
1055	
1123	12/9/06 KP
NIA	3FL 12/9/06 Ze
EM40111028	
JTB 04055	
✓	
NIA	

Reviewed by : 0013 Date 12/11/20

Curtis & Tompkins Laboratories
MDL Summary for EPA 8081A Water
As of 01/05/07

Analyte	Units	GC21 A	GC21 B	GC16 A	GC16 B	GC23 A	GC23 B
gamma-BHC	ug/L	0.0065	0.0039	0.0032	0.0025	0.0057	0.0061
Heptachlor	ug/L	0.0083	0.0056	0.0057	0.0061	0.0055	0.0063
Aldrin	ug/L	0.0094	0.0070	0.0066	0.0066	0.0055	0.0044
Dieldrin	ug/L	0.011	0.0051	0.0074	0.0070	0.011	0.0090
Endrin	ug/L	0.012	0.011	0.0095	0.0083	0.011	0.014
4,4'-DDT	ug/L	0.012	0.0071	0.011	0.0099	0.012	0.015
alpha-BHC	ug/L	0.0063	0.0040	0.0029	0.0027	0.0059	0.0099
beta-BHC	ug/L	0.0061	0.011	0.0033	0.0052	0.0082	0.012
delta-BHC	ug/L	0.0065	0.0023	0.0040	0.0026	0.0043	0.0081
Heptachlor epoxide	ug/L	0.0066	0.0097	0.0033	0.0032	0.0044	0.0055
gamma-Chlordane	ug/L	0.0064	0.011	0.0041	0.0037	0.0079	0.0057
alpha-Chlordane	ug/L	0.010	0.0052	0.0045	0.0036	0.0063	0.0051
Endosulfan I	ug/L	0.0062	0.0033	0.0043	0.0032	0.0055	0.0057
4,4'-DDE	ug/L	0.011	0.0057	0.010	0.0082	0.014	0.012
Endosulfan II	ug/L	0.013	0.0077	0.0088	0.0073	0.026	0.013
Endosulfan sulfate	ug/L	0.0096	0.0054	0.015	0.0087	0.011	0.013
4,4'-DDD	ug/L	0.011	0.0096	0.0088	0.0090	0.013	0.013
Endrin aldehyde	ug/L	0.010	0.0092	0.0084	0.0086	0.014	0.015
Chlordane (Technical)	ug/L	0.096	0.25	0.17	0.11	0.21	0.20
Methoxychlor	ug/L	0.050	0.018	0.057	0.080	0.052	0.081
Endrin ketone	ug/L	0.0083	0.023	0.027	0.0095	0.010	0.0080
Toxaphene	ug/L	0.49	0.26	0.39	0.34	0.54	0.29

Polychlorinated Biphenyls

Polychlorinated Biphenyls (PCBs)

Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Field ID:	DW120606B	Sampled:	12/06/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Prepared:	12/08/06
Diln Fac:	1.000	Analyzed:	12/10/06
Batch#:	120200		

Type: SAMPLE Cleanup Method: EPA 3665A
 Lab ID: 191290-001

Analyte	Result	RL
Aroclor-1016	ND	0.48
Aroclor-1221	ND	0.96
Aroclor-1232	ND	0.48
Aroclor-1242	ND	0.48
Aroclor-1248	ND	0.48
Aroclor-1254	ND	0.48
Aroclor-1260	ND	0.48

Surrogate	%REC	Limits
TCMX	95	65-135
Decachlorobiphenyl	101	65-135

Type: BLANK Cleanup Method: EPA 3665A
 Lab ID: QC367654

Analyte	Result	RL
Aroclor-1016	ND	0.50
Aroclor-1221	ND	1.0
Aroclor-1232	ND	0.50
Aroclor-1242	ND	0.50
Aroclor-1248	ND	0.50
Aroclor-1254	ND	0.50
Aroclor-1260	ND	0.50

Surrogate	%REC	Limits
TCMX	79	65-135
Decachlorobiphenyl	98	65-135

ND= Not Detected
 RL= Reporting Limit



Curtis & Tompkins, Ltd.

Batch QC Report

Polychlorinated Biphenyls (PCBs)			
Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8082
Matrix:	Water	Batch#:	120200
Units:	ug/L	Prepared:	12/08/06
Diln Fac:	1.000	Analyzed:	12/11/06

Type: BS
Lab ID: QC367655

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits
Aroclor-1254	5.000	4.798	96	65-135

Surrogate	%REC	Limits
TCMX	90	65-135
Decachlorobiphenyl	117	65-135

Type: BSD
Lab ID: QC367656

Cleanup Method: EPA 3665A

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aroclor-1254	5.000	5.200	104	65-135	8	35

Surrogate	%REC	Limits
TCMX	89	65-135
Decachlorobiphenyl	105	65-135

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191290 PCBs Water: EPA 8082

Inst : GC22
 Calnum : 256490278001
 Units : pg

Name : 1660_340
 Date : 06-DEC-2006 20:07
 X Axis : R

Reviewer: MCH

Level	File	Segment	Sample ID	Analyzed	Std
L1	340_017	256490278017	PCB10_2	06-DEC-2006 20:07	S4994
L2	340_018	256490278018	PCB25_5	06-DEC-2006 20:33	S4995
L3	340_019	256490278019	PCB100_20	06-DEC-2006 20:59	S4996
L4	340_021	256490278021	PCB500_100	06-DEC-2006 21:52	S4998
L5	340_022	256490278022	PCB750_150	06-DEC-2006 22:18	S4999
L6	340_023	256490278023	PCB1000_200	06-DEC-2006 22:44	S5000
L7	340_029	256490278029	PCB250_50	07-DEC-2006 11:04	S4997

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	MRSD	MRSD	Fig
Aroclor-1016 Peak # 1	A	397.90	549.92	452.63	476.34	446.91	464.85	444.73	AVRG	0.00216			461.90	10	.99		20
Aroclor-1016 Peak # 2	A	803.60	937.24	926.43	848.08	765.07	830.17	791.01	AVRG	0.00119			843.09	8	.99		20
Aroclor-1016 Peak # 3	A	1223.4	1227.8	1205.4	1194.5	1107.7	1251.2	1011.7	AVRG	8.51E-4			1174.5	7	.99		20
Aroclor-1016 Peak # 4	A	411.90	409.32	414.49	365.98	326.66	369.99	334.88	AVRG	0.00266			376.17	10	.99		20
Aroclor-1016 Peak # 5	A	486.30	498.76	530.05	494.13	425.02	492.79	421.83	AVRG	0.00209			478.41	8	.99		20
Aroclor-1260 Peak # 1	A	1847.4	1802.4	1839.5	1830.3	1592.1	1897.6	1386.3	AVRG	5.74E-4			1742.2	11	.99		20
Aroclor-1260 Peak # 2	A	1483.5	1490.8	1563.6	2024.8	1320.7	1650.4	1117.3	AVRG	6.57E-4			1521.6	19	.99		20
Aroclor-1260 Peak # 3	A	1070.0	1052.8	1067.1	992.78	855.42	1068.1	770.70	AVRG	0.00102			982.43	12	.99		20
Aroclor-1260 Peak # 4	A	2408.0	2397.2	2562.5	2581.1	2201.8	2622.9	1854.2	AVRG	4.21E-4			2375.4	11	.99		20
Aroclor-1260 Peak # 5	A	1115.0	1135.7	1264.7	1175.5	1009.9	1296.2	880.00	AVRG	8.89E-4			1125.3	13	.99		20
TGMX	A	26090	24510	24598	25407	22633	22166	22068	AVRG	4.18E-5			23924	7	.99		20
Decachlorobiphenyl	A	18615	18875	19952	19498	16177	17639	14184	AVRG	5.60E-5			17849	11	.99		20
Aroclor-1016 Peak # 1	B	190.20	273.92	284.08	259.50	185.72	233.86	261.64	AVRG	0.00414			241.27	16	.99		20
Aroclor-1016 Peak # 2	B	353.40	397.16	443.06	370.06	235.71	296.39	364.01	AVRG	0.00285			351.40	19	.99		20
Aroclor-1016 Peak # 3	B	869.20	982.68	1141.9	1012.5	720.75	848.30	1019.5	AVRG	0.00106			942.12	15	.99		20
Aroclor-1016 Peak # 4	B	213.90	234.56	274.62	224.54	158.86	178.61	229.60	AVRG	0.00462			216.38	18	.99		20
Aroclor-1016 Peak # 5	B	238.80	273.00	324.74	266.42	182.49	208.88	278.02	AVRG	0.00395			253.19	19	.99		20
Aroclor-1260 Peak # 1	B	883.00	966.36	1079.0	894.71	605.79	728.78	935.32	AVRG	0.00115			870.42	18	.99		20
Aroclor-1260 Peak # 2	B	593.30	709.00	810.43	652.66	448.04	531.07	692.55	AVRG	0.00158			633.86	19	.99		20
Aroclor-1260 Peak # 3	B	1376.3	1502.6	1704.0	1439.1	966.42	1193.9	1501.5	AVRG	7.23E-4			1383.4	17	.99		20
Aroclor-1260 Peak # 4	B	538.00	608.64	684.61	552.25	376.40	447.54	588.23	AVRG	0.00184			542.24	19	.99		20
Aroclor-1260 Peak # 5	B	682.00	820.56	875.03	699.49	471.67	576.88	754.94	AVRG	0.00143			697.22	20	.99		20
TCMX	B	14391	16818	17718	15269	11226	13248	16363	AVRG	6.66E-5			15005	15	.99		20
Decachlorobiphenyl	B	11523	13354	13220	11247	7636.0	10024	11900	AVRG	8.87E-5			11272	18	.99		20

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191290 PCBS Water
EPA 8082

Inst : GC22
Calnum : 256490278001

Name : 1660 340
Cal Date: 06-DEC-2006

ICV 256490278032 (340_032 07-DEC-2006) stds: S4915

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Aroclor-1016	A	461.90		250.0	242.3	pg	-3	15	
Aroclor-1260	A	1742.2		250.0	236.5	pg	-5	15	
Aroclor-1016	B	241.27		250.0	268.4	pg	7	15	
Aroclor-1260	B	870.42		250.0	282.4	pg	13	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191290 PCBS Water: EPA 8082

Inst : GC22
 Calnum : 256493123001
 Units : pg

Name : ar2154
 Date : 08-DEC-2006 12:36
 X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	342_003	256493123003	AR2154	08-DEC-2006 12:36	S5002

Analyte	Ch	L1	Type	a0	a1	a2	Avg	r ² %RSD	MnR ²	MxRSD	Fig
Aroclor-1221 Peak # 1	A	87.652	AVRG	0.01141			87.652	0	.99	20	
Aroclor-1221 Peak # 2	A	267.56	AVRG	0.00374			267.56	0	.99	20	
Aroclor-1221 Peak # 3	A	135.18	AVRG	0.00740			135.18	0	.99	20	
Aroclor-1221 Peak # 4	A	681.49	AVRG	0.00147			681.49	0	.99	20	
Aroclor-1221 Peak # 5	A	72.364	AVRG	0.01382			72.364	0	.99	20	
Aroclor-1254 Peak # 1	A	764.67	AVRG	0.00131			764.67	0	.99	20	
Aroclor-1254 Peak # 2	A	942.20	AVRG	0.00106			942.20	0	.99	20	
Aroclor-1254 Peak # 3	A	780.92	AVRG	0.00128			780.92	0	.99	20	
Aroclor-1254 Peak # 4	A	1299.5	AVRG	7.70E-4			1299.5	0	.99	20	
Aroclor-1254 Peak # 5	A	964.58	AVRG	0.00104			964.58	0	.99	20	
Aroclor-1221 Peak # 1	B	103.08	AVRG	0.00970			103.08	0	.99	20	
Aroclor-1221 Peak # 2	B	190.30	AVRG	0.00525			190.30	0	.99	20	
Aroclor-1221 Peak # 3	B	129.22	AVRG	0.00774			129.22	0	.99	20	
Aroclor-1221 Peak # 4	B	470.09	AVRG	0.00213			470.09	0	.99	20	
Aroclor-1221 Peak # 5	B	49.480	AVRG	0.02021			49.480	0	.99	20	
Aroclor-1254 Peak # 1	B	647.20	AVRG	0.00155			647.20	0	.99	20	
Aroclor-1254 Peak # 2	B	690.37	AVRG	0.00145			690.37	0	.99	20	
Aroclor-1254 Peak # 3	B	526.18	AVRG	0.00190			526.18	0	.99	20	
Aroclor-1254 Peak # 4	B	996.76	AVRG	0.00100			996.76	0	.99	20	
Aroclor-1254 Peak # 5	B	745.10	AVRG	0.00134			745.10	0	.99	20	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191290 PCBS Water
EPA 8082

Inst : GC22 Run Name: PCB750_150 IDF : 1.0
 Seqnum : 256496478002 File : 344_002 Time : 10-DEC-2006 19:04
 Cal : 256490278001 Caldate : 06-DEC-2006
 Standards: S4999

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1016	A			750.0	708.9	pg	-5	15	
Aroclor-1260	A			750.0	862.2	pg	15	15	
TCMX	A	23924	25057	150.0	157.1	pg	5	15	
Decachlorobiphenyl	A	17849	20602	150.0	173.1	pg	15	15	
Aroclor-1016	B			750.0	763.6	pg	2	15	
Aroclor-1260	B			750.0	882.5	pg	18	15	c+ ***
TCMX	B	15005	15370	150.0	153.7	pg	2	15	
Decachlorobiphenyl	B	11272	13400	150.0	178.3	pg	19	15	c+

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191290 PCBS Water
EPA 8082

Inst : GC22 Run Name: AR2154 IDF : 1.0
 Seqnum : 256496478004 File : 344_004 Time : 10-DEC-2006 19:57
 Cal : 256493123001 Caldate : 08-DEC-2006
 Standards: S5002

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1221	A	250.0	231.2	pg	-8	15	.
Aroclor-1254	A	250.0	256.8	pg	3	15	
Aroclor-1221	B	250.0	268.7	pg	7	15	
Aroclor-1254	B	250.0	243.7	pg	-3	15	

Aroclor
A

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191290 PCBS Water
EPA 8082

Inst : GC22 Run Name: PCB500_100 IDF : 1.0
 Seqnum : 256496478018 File : 344_018 Time : 11-DEC-2006 02:06
 Cal : 256490278001 Caldate : 06-DEC-2006
 Standards: S4998

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1016	A			500.0	490.8	pg	-2	15	
Aroclor-1260	A			500.0	556.1	pg	11	15	
TCMX	A	23924	25075	100.0	104.8	pg	5	15	
Decachlorobiphenyl	A	17849	21810	100.0	122.2	pg	22	15	c+
Aroclor-1016	B			500.0	513.6	pg	3	15	
Aroclor-1260	B			500.0	571.0	pg	14	15	
TCMX	B	15005	16396	100.0	109.3	pg	9	15	
Decachlorobiphenyl	B	11272	13034	100.0	115.6	pg	16	15	c+

10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191290 PCBS Water
EPA 8082

Inst : GC22 Run Name: AR2154 IDF : 1.0
Seqnum : 256496478020 File : 344_020 Time : 11-DEC-2006 02:59
Cal : 256493123001 Caldate : 08-DEC-2006
Standards: S5002

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Aroclor-1221	A	250.0	261.3	pg	5	15	
Aroclor-1254	A	250.0	268.1	pg	7	15	
Aroclor-1221	B	250.0	234.5	pg	-6	15	
Aroclor-1254	B	250.0	229.5	pg	-8	15	

SEQUENCE SUMMARY FOR 191290 PCBs Water
Curtis & Tompkins Laboratories

Sequence: 256490278 Instrument: GC22
Analytical Method: EPA 8082

Gas Chromatograph #22 ECD
SOP Version: 8082_rv.6

Begun: 06-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	UL	VL	pH	Stds	Used	>LR
001	340_001	X	PCB500_100			06-DEC-2006 11:18	1.0						1		
002	340_002	X	PCB500_100			06-DEC-2006 11:44	1.0						1		
003	340_003	X	HEX			06-DEC-2006 12:10	1.0								
004	340_004	X	PCB10_2			06-DEC-2006 12:37	1.0						2		
005	340_005	X	PCB25_5			06-DEC-2006 13:03	1.0						3		
006	340_006	X	PCB100_20			06-DEC-2006 13:29	1.0						4		
007	340_007	X	PCB250_50			06-DEC-2006 13:56	1.0						5		
008	340_008	X	PCB500_100			06-DEC-2006 14:22	1.0						6		
009	340_009	X	PCB750_150			06-DEC-2006 14:48	1.0						7		
010	340_010	X	PCB1000_200			06-DEC-2006 15:15	1.0						8		
011	340_011	X	HEX			06-DEC-2006 15:41	1.0								
012	340_012	X	ULTRA_1660			06-DEC-2006 16:08	1.0								
013	340_013	X	ULTRA_1660			06-DEC-2006 16:34	1.0								
014	340_014	X	HEX			06-DEC-2006 17:00	1.0								
015	340_015	X	HEX			06-DEC-2006 17:26	1.0								
016	340_016	X	HEX			06-DEC-2006 19:40	1.0								
017	340_017	ICAL	PCB10_2			06-DEC-2006 20:07	1.0						2		
018	340_018	ICAL	PCB25_5			06-DEC-2006 20:33	1.0						3		
019	340_019	ICAL	PCB100_20			06-DEC-2006 20:59	1.0						4		
020	340_020	X	ICAL			06-DEC-2006 21:25	1.0						5		
021	340_021	ICAL	PCB500_100			06-DEC-2006 21:52	1.0						1		
022	340_022	ICAL	PCB750_150			06-DEC-2006 22:18	1.0						6		
023	340_023	ICAL	PCB1000_200			06-DEC-2006 22:44	1.0						7		
028	340_028	X	HEX			07-DEC-2006 10:37	1.0								
029	340_029	ICAL	PCB250_50			07-DEC-2006 11:04	1.0						5		
030	340_030	X	HEX			07-DEC-2006 13:39	1.0								
031	340_031	X	HEX			07-DEC-2006 13:56	1.0								
032	340_032	ICV	ULTRA_1660			07-DEC-2006 14:22	1.0			1			8		
033	340_033	ICV	ULTRA_1660			07-DEC-2006 14:49	1.0						8		

Stds used: 1=S4998 2=S4994 3=S4995 4=S4996 5=S4997 6=S4999 7=S5000 8=S4915

SEQUENCE SUMMARY FOR 191290 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 256493123 Instrument: GC22
Analytical Method: EPA 8082

Gas Chromatograph #22 ECD
SOP Version: 8082_rv.6

Begun: 08-DEC-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
001	342_001	X	PCB750_150			08-DEC-2006 10:43	1.0	1.0	3		1	1	4:PCB126=1038.71	
002	342_002	CCV	PCB750_150			08-DEC-2006 11:10	1.0	1.0			1	1		
003	342_003	ICAL	AR2154			08-DEC-2006 12:36	1.0	1.0			1	2		
004	342_004	X	AR2154			08-DEC-2006 13:03	1.0	1.0				2		
005	342_005	X	HEX			08-DEC-2006 18:55	1.0							
006	342_006	BLANK	QC367564			08-DEC-2006 19:22	1.0							
007	342_007	MSS	191335-001			08-DEC-2006 19:48	1.0							
008	342_008	SAMPLE	191335-002			08-DEC-2006 20:14	1.0							
009	342_009	SAMPLE	191335-003			08-DEC-2006 20:41	1.0							
010	342_010	SAMPLE	191335-004			08-DEC-2006 21:07	1.0							
011	342_011	SAMPLE	191335-005			08-DEC-2006 21:33	1.0							
012	342_012	SAMPLE	191335-006			08-DEC-2006 22:00	1.0							
013	342_013	LCS	QC367575			08-DEC-2006 22:26	1.0							
014	342_014	MS	QC367576			08-DEC-2006 22:53	1.0							
015	342_015	MSD	QC367577			08-DEC-2006 23:19	1.0							
016	342_016	X	HEX			08-DEC-2006 23:45	1.0							
017	342_017	CCV	PCB500_100			09-DEC-2006 00:12	1.0	1.0	1		1	3		
018	342_018	X	PCB500_100			09-DEC-2006 00:38	1.0	1.0	2		1	3		
019	342_019	CCV	AR2154			09-DEC-2006 01:04	1.0	1.0			1	2		
020	342_020	X	AR2154			09-DEC-2006 01:31	1.0	1.0			1	2		
021	342_021	X	HEX			09-DEC-2006 01:57	1.0							
022	342_022	SAMPLE	191335-007			09-DEC-2006 02:23	1.0							
023	342_023	SAMPLE	191335-008			09-DEC-2006 02:50	1.0							
024	342_024	SAMPLE	191306-001			09-DEC-2006 03:16	1.0							
025	342_025	SAMPLE	191312-002			09-DEC-2006 03:43	1.0							
026	342_026	SAMPLE	191243-001			09-DEC-2006 04:09	5.0							
027	342_027	X	HEX			09-DEC-2006 04:35	1.0							
028	342_028	X	PCB250_50			09-DEC-2006 05:02	1.0	1.0	2		1	4		
029	342_029	CCV	PCB250_50			09-DEC-2006 05:28	1.0	1.0	1		1	4		
030	342_030	CCV	AR2154			09-DEC-2006 05:54	1.0	1.0			1	2		
031	342_031	X	AR2154			09-DEC-2006 06:21	1.0	1.0			1	2		

Stds used: 1=S4999 2=S5002 3=S4998 4=S4997

SEQUENCE SUMMARY FOR 191290 PCBS Water
Curtis & Tompkins Laboratories

Sequence: 256493123 Instrument: GC22
Analytical Method: EPA 8082

Gas Chromatograph #22 ECD
SOP Version: 8082_rv.6

Begun: 08-DEC-2006

#	Filename	Type	Sample	num	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Std	Used	>LR
032	342	032	X	HEX			09-DEC-2006	06:47	1.0						

Std's used: 1=S4999 2=S5002 3=S4998 4=S4997

SEQUENCE SUMMARY FOR 191290 PCBs Water
Curtis & Tompkins Laboratories

Sequence: 256496478 Instrument: GC22 Gas Chromatograph #22 ECD
Analytical Method: EPA 8082 SOP Version: 8082_rv.6

Begun: 10-DEC-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used	>LR ..
001	344_001	X	HEX			10-DEC-2006 18:38	1.0						
002	344_002	CCV	PCB750_150			10-DEC-2006 19:04	1.0	1.0	1	1		1	
003	344_003	X	PCB750_150			10-DEC-2006 19:30	1.0	1.0	1	1		2:PCB126=1108.41	
004	344_004	CCV	AR2154			10-DEC-2006 19:57	1.0	1.0			1	2	
005	344_005	X	AR2154			10-DEC-2006 20:23	1.0	1.0			1	2	
006	344_006	X	HEX			10-DEC-2006 20:50	1.0						
007	344_007	BLANK	QC367654			10-DEC-2006 21:16	1.0	0.025			1		
008	344_008	SAMPLE	191317-001			10-DEC-2006 21:42	1.0	0.02358			1		
009	344_009	SAMPLE	191286-001			10-DEC-2006 22:09	1.0	0.02358			1		
010	344_010	SAMPLE	191286-004			10-DEC-2006 22:35	1.0	0.02358			1		
011	344_011	SAMPLE	191290-001			10-DEC-2006 23:01	1.0	0.02404			1		
012	344_012	SAMPLE	191312-001			10-DEC-2006 23:28	10.0	0.02381	12		1		
013	344_013	SAMPLE	191329-001			10-DEC-2006 23:54	1.0	0.02358			1		
014	344_014	SAMPLE	191331-001			11-DEC-2006 00:20	1.0	0.02358			1		
015	344_015	BS	QC367655			11-DEC-2006 00:47	1.0	0.025			1		
016	344_016	BSD	QC367656			11-DEC-2006 01:13	1.0	0.025			1		
017	344_017	X	HEX			11-DEC-2006 01:40	1.0						
018	344_018	CCV	PCB500_100			11-DEC-2006 02:06	1.0	1.0			1	3	
019	344_019	X	PCB500_100			11-DEC-2006 02:32	1.0	1.0	1		1	3	
020	344_020	CCV	AR2154			11-DEC-2006 02:59	1.0	1.0			1	2	
021	344_021	X	AR2154			11-DEC-2006 03:25	1.0	1.0			1	2	
022	344_022	X	HEX			11-DEC-2006 03:51	1.0						

Stds used: 1=S4999 2=S5002 3=S4998

REPORTING SUMMARY FOR 191290 PCBS Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
191290-001	Aroclor-1016	GC22	A	12/10/06 23:01
191290-001	Aroclor-1221	GC22	A	12/10/06 23:01
191290-001	Aroclor-1232	GC22	A	12/10/06 23:01
191290-001	Aroclor-1242	GC22	A	12/10/06 23:01
191290-001	Aroclor-1248	GC22	A	12/10/06 23:01
191290-001	Aroclor-1254	GC22	A	12/10/06 23:01
191290-001	Aroclor-1260	GC22	A	12/10/06 23:01
191290-001	TCMX	GC22	A	12/10/06 23:01
191290-001	Decachlorobiphenyl	GC22	A	12/10/06 23:01
QC367654	Aroclor-1016	GC22	A	12/10/06 21:16
QC367654	Aroclor-1221	GC22	A	12/10/06 21:16
QC367654	Aroclor-1232	GC22	A	12/10/06 21:16
QC367654	Aroclor-1242	GC22	A	12/10/06 21:16
QC367654	Aroclor-1248	GC22	A	12/10/06 21:16
QC367654	Aroclor-1254	GC22	A	12/10/06 21:16
QC367654	Aroclor-1260	GC22	A	12/10/06 21:16
QC367654	TCMX	GC22	A	12/10/06 21:16
QC367654	Decachlorobiphenyl	GC22	A	12/10/06 21:16
QC367655	Aroclor-1254	GC22	A	12/11/06 00:47
QC367655	TCMX	GC22	A	12/11/06 00:47
QC367655	Decachlorobiphenyl	GC22	A	12/11/06 00:47
QC367656	Aroclor-1254	GC22	A	12/11/06 01:13
QC367656	TCMX	GC22	A	12/11/06 01:13
QC367656	Decachlorobiphenyl	GC22	A	12/11/06 01:13

Curtis & Tompkins Laboratories

Sample Preparation Summary

09-DEC-2006 16:07

Batch Number : 120200
 Date Extracted : 08-DEC-2006
 Extracted by : Stephen Wanta
 Prep Method : 3520C

Analysis : PCB
 Bg/roup : N/A
 Units : mL
 Clean-up :

Spike #1 ID : S4969A
 Spike #2 ID : S4933A
 Spike #3 ID :
 SDP Version : PCB w rv7

Sample	Type	Client	Matrix	Init	Units	Final	Prep	Clean	pH	Sp 1	Sp 2	Sp 3	Analyses	Clean	Comments
191286-001		Treadwell & Rollo	Water	1060	mL	25	0.023585	1	7	.05	0		PCB	3665A	
191286-004		Treadwell & Rollo	Water	1060	mL	25	0.023585	1	7	.05	0		PCB	3665A	
191290-001		Treadwell & Rollo	Water	1040	mL	25	0.024038	1	7	.05	0		PCB	3665A	
191312-001		Blasland, Bouck & Lee	Water	1050	mL	25	0.023810	1	7	.05	0		PCB	3665A	
191317-001		Strategic Engineering & Science Water	Water	1060	mL	25	0.023585	1	7	.05	0		PCB	3665A	
191329-001		Strategic Engineering & Science Water	Water	1060	mL	25	0.023585	1	7	.05	0		PCB	3665A	
191331-001		Strategic Engineering & Science Water	Water	1060	mL	25	0.023585	1	7	.05	0		PCB	3665A	
QC367654	BLANK		Water	1000	mL	25	0.025000	1		.05	0		PCB	3665A	
QC367655	BS		Water	1000	mL	25	0.025000	1		.05	0		PCB	3665A	
QC367656	BSD		Water	1000	mL	25	0.025000	1		.05	0		PCB	3665A	

Prep Chemist:

Reviewed By:

Date: 12/11/06

Relinquished By:

Received By:

Date:

12/11/06

BK2374

BK 2374
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20

Mfg & Lot# / LIMS # / Time	Date/ Initials
S4969A	Jan 12/2006
S4933A	
EM4630S	
i400	
0810	12/1/06 KR
NIA	SFL 12/9/06
EM461110221	
JTB240E55	
FSD 54522	

Reviewed by

Curtis & Tompkins Laboratories
MDL Summary for EPA 8082 Water
As of 01/05/07

Analyte	Units	GC06 A	GC06 B	GC16 A	GC16 B	GC22 A	GC22 B	GC25 A	GC25 B
Aroclor-1016	ug/L	0.12	0.091	0.044	0.049	0.068	0.18	0.15	0.22
Aroclor-1221	ug/L	0.29	0.43	0.29	0.43	0.20	0.48	0.23	0.49
Aroclor-1232	ug/L	0.11	0.088			0.075	0.21	0.16	0.087
Aroclor-1242	ug/L	0.15	0.16			0.24	0.22	0.14	0.15
Aroclor-1248	ug/L	0.15	0.14	0.073	0.051	0.080	0.19	0.11	0.16
Aroclor-1254	ug/L	0.085	0.097			0.099	0.068	0.11	0.20
Aroclor-1260	ug/L	0.12	0.095	0.036	0.061	0.13	0.15	0.17	0.13

**POLYAROMATIC
HYDROCARBONS**



Polynuclear Aromatics by HPLC

Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	DW120606B	Batch#:	120180
Lab ID:	191290-001	Sampled:	12/06/06
Matrix:	Water	Received:	12/06/06
Units:	ug/L	Prepared:	12/08/06
Diln Fac:	1.000	Analyzed:	12/11/06

Analyte	Result	RL	MDL
Naphthalene	ND	0.96	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.96	
Fluorene	ND	0.96	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	ND	0.38	0.008
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.10	
Benzo(a)pyrene	ND	0.10	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	88	65-135
1-Methylnaphthalene (F)	88	65-135

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC367536	Batch#:	120180
Matrix:	Water	Prepared:	12/08/06
Units:	ug/L	Analyzed:	12/11/06

Analyte	Result	RL	MDL
Naphthalene	ND	1.0	
Acenaphthylene	ND	2.0	
Acenaphthene	ND	1.0	
Fluorene	ND	1.0	
Phenanthrene	ND	0.50	
Anthracene	ND	0.50	0.02
Fluoranthene	ND	0.40	0.008
Pyrene	ND	0.20	
Benzo (a) anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo (b) fluoranthene	ND	0.20	
Benzo (k) fluoranthene	ND	0.10	
Benzo (a) pyrene	ND	0.10	
Dibenz (a, h) anthracene	ND	0.20	
Benzo (g, h, i) perylene	ND	0.20	
Indeno (1, 2, 3-cd) pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	85	65-135
1-Methylnaphthalene (F)	85	65-135

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report
Polynuclear Aromatics by HPLC

Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC367537	Batch#:	120180
Matrix:	Water	Prepared:	12/08/06
Units:	ug/L	Analyzed:	12/11/06

Analyte	Spiked	Result	%REC	Limits
Naphthalene	10.00	9.419	94	50-135
Fluorene	2.000	1.894	95	65-135
Pyrene	1.000	0.9518	95	65-135
Benzo (a) pyrene	1.000	0.9542	95	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	90	65-135
1-Methylnaphthalene (F)	90	65-135

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	1065PZ2A	Batch#:	120180
MSS Lab ID:	191314-011	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Prepared:	12/08/06
Diln Fac:	1.000	Analyzed:	12/11/06

Type: MS Lab ID: QC367538

Analyte	MSS Result	Spiked	Result	%REC	Limits
Naphthalene	<0.04123	9.434	8.529	90	50-135
Fluorene	<0.007146	1.887	1.654	88	65-135
Pyrene	<0.003920	0.9434	0.8720	92	65-135
Benzo(a)pyrene	<0.01656	0.9434	0.7367	78	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	81	65-135
1-Methylnaphthalene (F)	82	65-135

Type: MSD Lab ID: QC367539

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Naphthalene	9.434	7.885	84	50-135	8	35
Fluorene	1.887	1.568	83	65-135	5	35
Pyrene	0.9434	0.8360	89	65-135	4	35
Benzo(a)pyrene	0.9434	0.6952	74	65-135	6	35

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	76	65-135
1-Methylnaphthalene (F)	78	65-135

RPD= Relative Percent Difference



Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	514AGW101	Batch#:	120180
MSS Lab ID:	191314-019	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Prepared:	12/08/06
Diln Fac:	1.000	Analyzed:	12/11/06

Type: MS Lab ID: QC367540

Analyte	MSS Result	Spiked	Result	%REC	Limits
Naphthalene	<0.04123	9.434	8.743	93	50-135
Fluorene	<0.007146	1.887	1.745	92	65-135
Pyrene	0.03606	0.9434	0.7990	81	65-135
Benzo(a)pyrene	<0.01656	0.9434	0.2761	29 *	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	86	65-135
1-Methylnaphthalene (F)	86	65-135

Type: MSD Lab ID: QC367541

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Naphthalene	9.434	8.196	87	50-135	6	35
Fluorene	1.887	1.617	86	65-135	8	35
Pyrene	0.9434	0.7769	79	65-135	3	35
Benzo(a)pyrene	0.9434	0.3538	38 *	65-135	25	35

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	80	65-135
1-Methylnaphthalene (F)	80	65-135

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191290 HPLC Water: EPA 8310

Inst : HPLC05

Calnum : 856422684001

Units : ug/L

Date : 20-OCT-2006 14:42

X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	293000006	856422684006	20-OCT-2006 14:42		S4234
L2	293000007	856422684007	20-OCT-2006 15:06		S4233
L3	293000008	856422684008	20-OCT-2006 15:30		S4232
L4	293000009	856422684009	20-OCT-2006 15:53		S4231
L5	293000010	856422684010	20-OCT-2006 16:17		S4230
L6	293000011	856422684011	20-OCT-2006 16:40		S4229
L7	293000012	856422684012	20-OCT-2006 17:04		S4228

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	%RSD	MNR ²	MRSD	Fig
Naphthalene	1	0.0112	0.0108	0.0106	0.0100	0.0106	0.0110	0.0108	LINR	62.3689	92.4804		0.0107	1.000	0.99	20		
Acenaphthylene	1	0.0082	0.0078	0.0077	0.0073	0.0077	0.0080	0.0078	LINR	100.949	127.623		0.0078	1.000	0.99	20		
Acenaphthene	1	0.0034	0.0038	0.0039	0.0038	0.0040	0.0042	0.0041	LINR	81.6039	241.935		0.0039	1.000	0.99	20		
Fluorene	1	0.0481	0.0498	0.0501	0.0483	0.0506	0.0535	0.0518	LINR	14.3072	19.1646		0.0503	1.000	0.99	20		
Phenanthrene	1	0.1438	0.1399	0.1418	0.1338	0.1419	0.1486	0.1454	LINR	8.77257	6.83833		0.1422	1.000	0.99	20		
Anthracene	1	0.3050	0.3045	0.3026	0.2877	0.3019	0.3162	0.3136	LINR	13.1278	3.17645		0.3045	1.000	0.99	20		
Fluoranthene	1	0.0347	0.0333	0.0325	0.0310	0.0325	0.0342	0.0332	LINR	11.9642	29.9112		0.0330	1.000	0.99	20		
Benzo (a) anthracene	1	0.0574	0.0686	0.0707	0.0677	0.0724	0.0775	0.0767	LINR	21.9712	12.9544		0.0702	1.000	0.99	20		
Chrysene	1	0.1040	0.1048	0.1093	0.1041	0.1085	0.1143	0.1119	LINR	9.26571	8.89174		0.1081	1.000	0.99	20		
Benzo (b) fluoranthene	1	0.0782	0.0839	0.0841	0.0806	0.0854	0.0897	0.0882	LINR	25.1696	11.2738		0.0843	1.000	0.99	20		
Benzo (k) fluoranthene	1	0.0646	0.0608	0.0642	0.0607	0.0650	0.0684	0.0672	LINR	13.7591	14.7909		0.0644	1.000	0.99	20		
Benzo (a) pyrene	1	0.0888	0.0681	0.0680	0.0624	0.0678	0.0708	0.0694	LINR	9.13882	14.3343		0.0708	1.000	0.99	20		
Dibenz (a, h) anthracene	1	0.0214	0.0144	0.0165	0.0161	0.0177	0.0188	0.0186	LINR	46.0475	53.5119		0.0176	1.000	0.99	20		
Benzo (g, h, i) perylene	1	0.0362	0.0265	0.0253	0.0249	0.0264	0.0282	0.0279	LINR	38.7818	35.6147		0.0279	1.000	0.99	20		
Indeno (1,2,3-cd) pyrene	1	0.0914	0.0655	0.0730	0.0695	0.0748	0.0810	0.0798	LINR	23.1302	12.4437		0.0764	1.000	0.99	20		
1-Methylanthracene (UV)	1	0.0073	0.0070	0.0070	0.0066	0.0069	0.0072	0.0070	LINR	244.420	141.794		0.0070	1.000	0.99	20		
Acenaphthylene	2	0.0672	0.0660	0.0650	0.0612	0.0630	0.0642		LINR	82.4148	15.6143		0.0644	1.000	0.99	20		
Pyrene	2	0.0985	0.1018	0.1025	0.0966	0.1048	0.1104	0.1069	LINR	9.00456	9.28619		0.1031	1.000	0.99	20		
1-Methylnaphthalene (UV)	2	0.0163	0.0160	0.0157	0.0146	0.0149	0.0151		LINR	47.8928	66.3750		0.0154	1.000	0.99	20		
Naphthalene	3	0.0102	0.0101	0.0099	0.0094	0.0098	0.0102	0.0098	LINR	-19.221	101.261		0.0099	1.000	0.99	20		
Acenaphthene	3	0.0195	0.0191	0.0191	0.0181	0.0191	0.0199		LINR	128.673	50.4217		0.0191	0.999	0.99	20		
Fluorene	3	0.1358	0.1341	0.1326	0.1256	0.1303	0.1346		LINR	18.3555	7.44134		0.1322	1.000	0.99	20		
Phenanthrene	3	0.1225	0.1214	0.1202	0.1138	0.1196	0.1244	0.1208	LINR	2.60995	8.22983		0.1204	1.000	0.99	20		
Anthracene	3	0.3249	0.3242	0.3213	0.3040	0.3173	0.3308	0.3258	LINR	8.01235	3.05700		0.3212	1.000	0.99	20		
Fluoranthene	3	0.0423	0.0418	0.0419	0.0398	0.0416	0.0436	0.0426	LINR	13.7519	23.3663		0.0419	1.000	0.99	20		
Pyrene	3	0.1574	0.1555	0.1573	0.1503	0.1597	0.1667	0.1628	LINR	8.17197	6.10491		0.1585	1.000	0.99	20		

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	Mn ²	Mx ²	Fig
Benzo(a)anthracene	3	0.1140	0.1149	0.1167	0.1128	0.1203	0.1274	0.1238	LINR	11.0651	8.01910		0.1186	1.000	0.99	20	0.1186
Chrysene	3	0.1994	0.1982	0.1969	0.1861	0.1926	0.1989	0.1910	LINR	-6.6175	5.20664		0.1947	1.000	0.99	20	0.1947
Benzo(b)fluoranthene	3	0.0613	0.0611	0.0622	0.0590	0.0621	0.0646	0.0628	LINR	7.09058	15.8387		0.0619	1.000	0.99	20	0.0619
Benzo(k)fluoranthene	3	0.4270	0.4223	0.4271	0.4031	0.4185	0.4266		LINR	6.36009	2.34628		0.4208	1.000	0.99	20	0.4208
Benzo(a)pyrene	3	0.1881	0.1864	0.1906	0.1796	0.1876	0.1948	0.1874	LINR	-2.6745	5.30328		0.1878	1.000	0.99	20	0.1878
Dibenz(a,h)anthracene	3	0.0354	0.0361	0.0382	0.0369	0.0399	0.0424	0.0413	LINR	31.5047	24.0098		0.0386	1.000	0.99	20	0.0386
Benzo(g,h,i)perylene	3	0.0678	0.0685	0.0721	0.0691	0.0742	0.0787	0.0773	LINR	34.1300	12.8444		0.0725	1.000	0.99	20	0.0725
Indeno(1,2,3-cd)pyrene	3	0.0769	0.0754	0.0818	0.0779	0.0844	0.0896	0.0861	LINR	9.70583	11.5022		0.0817	0.999	0.99	20	0.0817
1-Methylnaphthalene (F)	3	0.0112	0.0110	0.0109	0.0102	0.0106	0.0108		LINR	209.497	92.6837		0.0108	1.000	0.99	20	0.0108

0.1186
0.1947
0.0619
0.4208

Calibration Table

NEW ICAL *gm* 23 OCT 2006
HPLC05 METHOD 8310

Calib. Data Modified : 10/23/2006 5:18:58 PM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 1.000 %
Abs. Reference Window : 0.150 min
Rel. Non-ref. Window : 1.000 %
Abs. Non-ref. Window : 0.150 min

Do not use Multiplier & Dilution Factor with ISTDs

Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
Origin : Ignored
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

10/30/06

Calibration Report Options :
Printout of recalibrations within a sequence:
 Calibration Table after Recalibration
 Normal Report after Recalibration
If the sequence is done with bracketing:
 Results of first cycle (ending previous bracket)

Signal 1: DAD1 A, Sig=254,4 Ref=480,80
Signal 2: DAD1 B, Sig=235,4 Ref=480,80
Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime	Lvl	Amount	Area	Amt/Area	Ref Grp Name
[min]	Sig	[ug/l]			
2.618	1	166.67000	1.87262	89.00358	Naphthalene
	2	500.00000	5.39314	92.71043	
	3	2000.00000	21.24130	94.15618	
	4	4000.00000	40.15183	99.62186	
	5	1.00000e4	105.58833	94.70743	
	6	2.00000e4	219.41838	91.15007	
	7	4.00000e4	430.61826	92.88970	
2.644	3	166.67000	1.69219	98.49383	Naphthalene
	2	500.00000	5.03479	99.30901	
	3	2000.00000	19.85534	100.72855	
	4	4000.00000	37.50118	106.66330	
	5	1.00000e4	98.35535	101.67215	
	6	2.00000e4	203.15842	98.44534	
	7	4.00000e4	392.85257	101.81937	
3.232	1	333.33000	2.73477	121.88589	Acenaphthylene
	2	1000.00000	7.79701	128.25424	
	3	4000.00000	30.83273	129.73226	
	4	8000.00000	58.40831	136.96682	

RetTime [min]	Lvl Sig	Amount [ug/l]	Area	Amt/Area	Ref Grp Name
----- --- ----- ----- ----- -----					
3.233	2	5 2.00000e4	153.18359	130.56228	Acenaphthylene
		6 4.00000e4	319.16855	125.32563	
		7 8.00000e4	623.79065	128.24816	
		1 333.33000	22.39426	14.88462	
		2 1000.00000	65.99164	15.15344	
		3 4000.00000	260.16629	15.37478	
		4 8000.00000	489.73437	16.33539	
3.774	1	5 2.00000e4	1260.02979	15.87264	1-Methylnaphthalene (UV)
		6 4.00000e4	2566.57837	15.58495	
		1 666.67000	4.85469	137.32485	
		2 2000.00000	14.04867	142.36228	
		3 8000.00000	55.73627	143.53310	
		4 1.60000e4	104.83626	152.61895	
		5 4.00000e4	274.65417	145.63769	
3.775	2	6 8.00000e4	573.35449	139.52973	1-Methylnaphthalene (UV)
		7 1.60000e5	1123.21265	142.44854	
		1 666.67000	10.87865	61.28240	
		2 2000.00000	32.02159	62.45786	
		3 8000.00000	125.52388	63.73289	
		4 1.60000e4	233.55998	68.50489	
		5 4.00000e4	594.28253	67.30805	
3.800	3	6 8.00000e4	1209.07336	66.16637	1-Methylnaphthalene (F)
		1 666.67000	7.47726	89.15966	
		2 2000.00000	22.05803	90.66994	
		3 8000.00000	87.30132	91.63664	
		4 1.60000e4	163.54369	97.83319	
		5 4.00000e4	424.00409	94.33871	
		6 8.00000e4	864.49622	92.53944	
4.097	1	1 166.67000	1.55067	107.48240	2-Methylnaphthalene
		2 500.00000	4.46054	112.09418	
		3 2000.00000	17.87906	111.86270	
		4 4000.00000	34.05137	117.46957	
		5 1.00000e4	89.80411	111.35348	
		6 2.00000e4	187.31686	106.77095	
		7 4.00000e4	364.75916	109.66140	
4.123	3	1 166.67000	2.26019	73.74166	2-Methylnaphthalene
		2 500.00000	6.69415	74.69203	
		3 2000.00000	26.65734	75.02623	
		4 4000.00000	50.32135	79.48913	
		5 1.00000e4	131.51395	76.03756	
		6 2.00000e4	273.15500	73.21850	
		7 4.00000e4	524.79846	76.21974	
4.430	1	1 166.67000	5.63797e-1	295.62049	Acenaphthene
		2 500.00000	1.88988	264.56750	
		3 2000.00000	7.72071	259.04338	
		4 4000.00000	15.17353	263.61703	
		5 1.00000e4	40.24534	248.47598	
		6 2.00000e4	84.95349	235.42293	
		7 4.00000e4	163.98227	243.92881	
4.456	3	1 166.67000	3.24780	51.31784	Acenaphthene
		2 500.00000	9.55153	52.34766	
		3 2000.00000	38.27118	52.25865	
		4 4000.00000	72.57647	55.11428	
		5 1.00000e4	191.20360	52.30027	
		6 2.00000e4	397.03738	50.37309	
		7 4.00000e4	797.07378	50.37309	
4.787	1	1 33.33300	1.60423	20.77816	Fluorene
		2 100.00000	4.97697	20.09253	

RetTime [min]	Lvl Sig	Amount [ug/l]	Area	Amt/Area	Ref Grp Name
-----	----	-----	-----	-----	-----
	3	400.00000	20.02391	19.97612	
	4	800.00000	38.67158	20.68703	
	5	2000.00000	101.16436	19.76981	
	6	4000.00000	213.80600	18.70855	
	7	8000.00000	414.61331	19.29509	
4.814	3	1	33.33300	4.52741	7.36249 Fluorene
		2	100.00000	13.40784	7.45832
		3	400.00000	53.04753	7.54041
		4	800.00000	100.49004	7.96099
		5	2000.00000	260.67688	7.67233
		6	4000.00000	538.53595	7.42754
5.654	1	1	16.66700	2.39616	6.95572 Phenanthrene
		2	50.00000	6.99577	7.14717
		3	200.00000	28.35797	7.05269
		4	400.00000	53.53967	7.47110
		5	1000.00000	141.86998	7.04871
		6	2000.00000	297.28598	6.72753
		7	4000.00000	581.70605	6.87633
5.680	3	1	16.66700	2.04240	8.16048 Phenanthrene
		2	50.00000	6.07206	8.23444
		3	200.00000	24.03204	8.32222
		4	400.00000	45.52298	8.78677
		5	1000.00000	119.56546	8.36362
		6	2000.00000	248.73990	8.04053
		7	4000.00000	483.37540	8.27514
6.401	1	1	16.66700	5.08343	3.27869 Anthracene
		2	50.00000	15.22430	3.28422
		3	200.00000	60.51564	3.30493
		4	400.00000	115.07833	3.47589
		5	1000.00000	301.92731	3.31206
		6	2000.00000	632.47308	3.16219
		7	4000.00000	1254.36133	3.18887
6.427	3	1	16.66700	5.41461	3.07816 Anthracene
		2	50.00000	16.20784	3.08493
		3	200.00000	64.25589	3.11256
		4	400.00000	121.59124	3.28971
		5	1000.00000	317.26334	3.15196
		6	2000.00000	661.61743	3.02289
		7	4000.00000	1303.20703	3.06935
7.245	1	1	33.33300	1.15551	28.84694 Fluoranthene
		2	100.00000	3.33166	30.01503
		3	400.00000	12.98016	30.81627
		4	800.00000	24.77284	32.29344
		5	2000.00000	64.95121	30.79234
		6	4000.00000	136.77095	29.24598
		7	8000.00000	265.86572	30.09038
7.271	3	1	33.33300	1.40892	23.65851 Fluoranthene
		2	100.00000	4.17803	23.93471
		3	400.00000	16.75041	23.88001
		4	800.00000	31.82304	25.13902
		5	2000.00000	83.10880	24.06484
		6	4000.00000	174.21184	22.96055
		7	8000.00000	340.61569	23.48688
7.802	2	1	16.66700	1.64199	10.15049 Pyrene
		2	50.00000	5.09229	9.81877
		3	200.00000	20.50868	9.75197
		4	400.00000	38.62242	10.35668

RetTime [min]	Lvl Sig	Amount [ug/l]	Area	Amt/Area	Ref Grp Name
7.828	3	1 16.66700	2.62331	6.35343	Pyrene
		2 50.00000	7.77364	6.43199	
		3 200.00000	31.46188	6.35690	
		4 400.00000	60.12874	6.65239	
		5 1000.00000	159.68500	6.26233	
		6 2000.00000	333.38132	5.99914	
		7 4000.00000	651.39581	6.14066	
9.643	1	1 16.66700	9.57469e-1	17.40736	Benzo(a)anthracene
		2 50.00000	3.42833	14.58438	
		3 200.00000	14.13649	14.14778	
		4 400.00000	27.08596	14.76780	
		5 1000.00000	72.43194	13.80606	
		6 2000.00000	155.09375	12.89543	
		7 4000.00000	306.81271	13.03727	
9.669	3	1 16.66700	1.89931	8.77531	Benzo(a)anthracene
		2 50.00000	5.74275	8.70663	
		3 200.00000	23.33808	8.56969	
		4 400.00000	45.12976	8.86333	
		5 1000.00000	120.34502	8.30944	
		6 2000.00000	254.83763	7.84813	
		7 4000.00000	495.09924	8.07919	
9.924	1	1 16.66700	1.73275	9.61883	Chrysene
		2 50.00000	5.23829	9.54510	
		3 200.00000	21.85947	9.14935	
		4 400.00000	41.63781	9.60665	
		5 1000.00000	108.51689	9.21516	
		6 2000.00000	228.52586	8.75174	
		7 4000.00000	447.41809	8.94018	
9.951	3	1 16.66700	3.32351	5.01488	Chrysene
		2 50.00000	9.90968	5.04557	
		3 200.00000	39.38066	5.07863	
		4 400.00000	74.45260	5.37255	
		5 1000.00000	192.62691	5.19138	
		6 2000.00000	397.78159	5.02788	
		7 4000.00000	763.90112	5.23628	
11.331	1	1 33.33300	2.60658	12.78804	Benzo(b)fluoranthene
		2 100.00000	8.39483	11.91209	
		3 400.00000	33.63747	11.89150	
		4 800.00000	64.49110	12.40481	
		5 2000.00000	170.82089	11.70817	
		6 4000.00000	358.76276	11.14943	
		7 8000.00000	705.74353	11.33556	
11.358	3	1 33.33300	2.04261	16.31880	Benzo(b)fluoranthene
		2 100.00000	6.11495	16.35336	
		3 400.00000	24.88266	16.07545	
		4 800.00000	47.17664	16.95755	
		5 2000.00000	124.19430	16.10380	
		6 4000.00000	258.33447	15.48380	
		7 8000.00000	502.21481	15.92944	
11.876	1	1 16.66700	1.07658	15.48147	Benzo(k)fluoranthene
		2 50.00000	3.04171	16.43813	
		3 200.00000	12.84467	15.57066	
		4 400.00000	24.29218	16.46621	
		5 1000.00000	64.97358	15.39087	

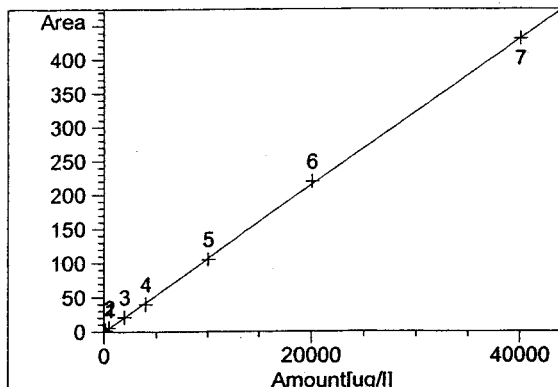
RetTime [min]	Lvl Sig	Amount [ug/l]	Area	Amt/Area	Ref Grp Name
		6 2000.00000	136.72321	14.62809	
		7 4000.00000	268.87424	14.87684	
11.903	3	1 16.66700	7.11749	2.34170	Benzo(k) fluoranthene
		2 50.00000	21.11408	2.36809	
		3 200.00000	85.41601	2.34148	
		4 400.00000	161.22827	2.48095	
		5 1000.00000	418.46454	2.38969	
		6 2000.00000	853.15222	2.34425	
12.503	1	1 16.66700	1.47983	11.26278	Benzo(a) pyrene
		2 50.00000	3.40725	14.67461	
		3 200.00000	13.60957	14.69554	
		4 400.00000	24.97371	16.01685	
		5 1000.00000	67.75494	14.75907	
		6 2000.00000	141.51094	14.13318	
		7 4000.00000	277.64722	14.40677	
12.530	3	1 16.66700	3.13471	5.31692	Benzo(a) pyrene
		2 50.00000	9.31910	5.36533	
		3 200.00000	38.12104	5.24645	
		4 400.00000	71.84358	5.56765	
		5 1000.00000	187.62558	5.32976	
		6 2000.00000	389.56021	5.13399	
		7 4000.00000	749.57336	5.33637	
13.593	1	1 33.33300	7.14428e-1	46.65694	Dibenz(a,h) anthracene
		2 100.00000	1.43965	69.46116	
		3 400.00000	6.61782	60.44291	
		4 800.00000	12.89288	62.04974	
		5 2000.00000	35.30107	56.65551	
		6 4000.00000	75.10837	53.25638	
		7 8000.00000	148.44279	53.89281	
13.621	3	1 33.33300	1.17981	28.25294	Dibenz(a,h) anthracene
		2 100.00000	3.61090	27.69396	
		3 400.00000	15.29729	26.14842	
		4 800.00000	29.55221	27.07073	
		5 2000.00000	79.78617	25.06700	
		6 4000.00000	169.40767	23.61168	
		7 8000.00000	330.60834	24.19782	
14.403	1	1 33.33300	1.20756	27.60349	Benzo(g,h,i) perylene
		2 100.00000	2.64537	37.80186	
		3 400.00000	10.11450	39.54719	
		4 800.00000	19.94430	40.11172	
		5 2000.00000	52.74908	37.91535	
		6 4000.00000	112.78819	35.46471	
		7 8000.00000	223.46182	35.80030	
14.432	3	1 33.33300	2.26050	14.74582	Benzo(g,h,i) perylene
		2 100.00000	6.84581	14.60747	
		3 400.00000	28.85268	13.86353	
		4 800.00000	55.31556	14.46248	
		5 2000.00000	148.45512	13.47208	
		6 4000.00000	314.70059	12.71049	
		7 8000.00000	618.74237	12.92945	
14.788	1	1 16.66700	1.52365	10.93886	Indeno(1,2,3-cd) pyrene
		2 50.00000	3.27349	15.27422	
		3 200.00000	14.59218	13.70597	
		4 400.00000	27.80243	14.38723	
		5 1000.00000	74.76157	13.37586	
		6 2000.00000	161.95921	12.34879	
		7 4000.00000	319.18451	12.53194	

RetTime [min]	Lvl Sig	Amount [ug/l]	Area	Amt/Area	Ref Grp Name
14.816	3 1	16.66700	1.28091	13.01189	Indeno(1,2,3-cd)pyrene
	2	50.00000	3.76963	13.26390	
	3	200.00000	16.36380	12.22210	
	4	400.00000	31.15694	12.83823	
	5	1000.00000	84.35104	11.85522	
	6	2000.00000	179.12015	11.16569	
	7	4000.00000	344.59106	11.60796	

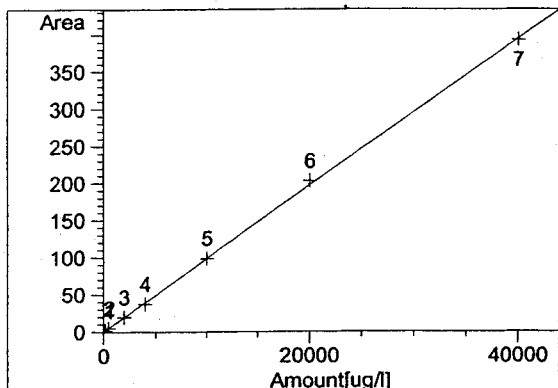
Peak Sum Table

No Entries in table

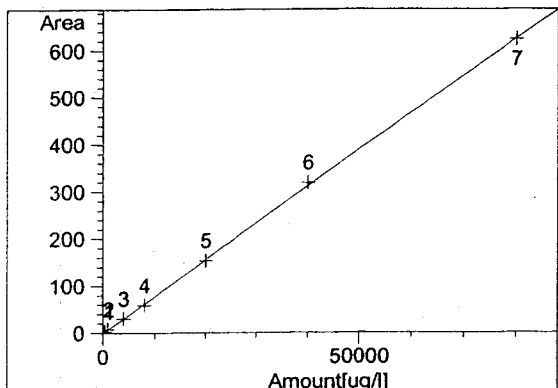
Calibration Curves



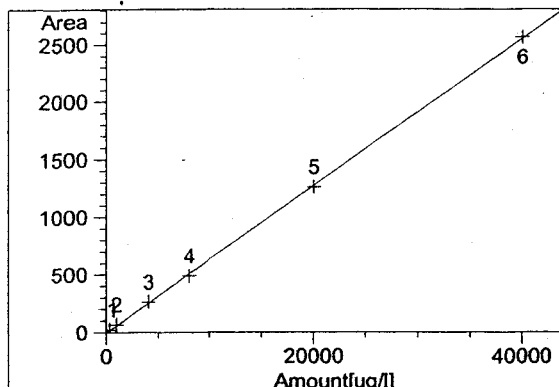
Naphthalene at exp. RT: 2.618
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99991
Residual Std. Dev.: 2.30839
Formula: $y = mx + b$
m: $1.08131e-2$
b: $-6.74401e-1$
x: Amount [ug/l]
y: Area



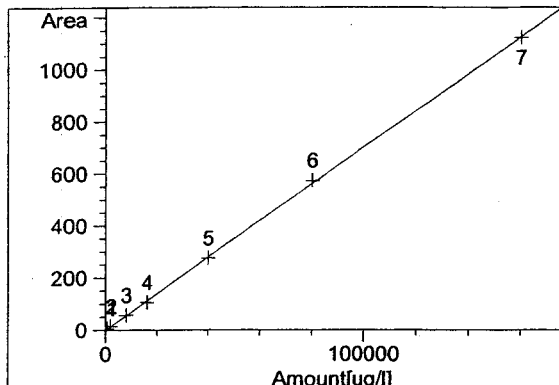
Naphthalene at exp. RT: 2.644
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99984
Residual Std. Dev.: 2.84731
Formula: $y = mx + b$
m: $9.87549e-3$
b: $1.89821e-1$
x: Amount [ug/l]
y: Area



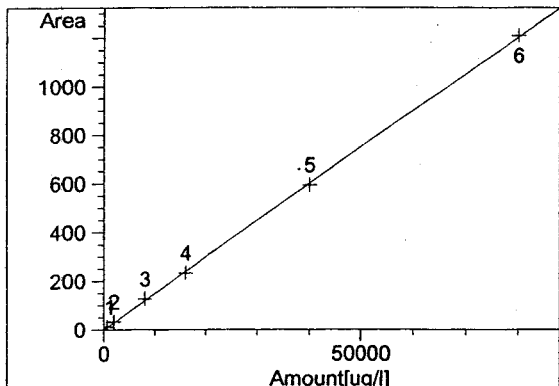
Acenaphthylene at exp. RT: 3.232
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99989
Residual Std. Dev.: 3.71409
Formula: $y = mx + b$
m: $7.83556e-3$
b: $-7.90989e-1$
x: Amount [ug/l]
y: Area



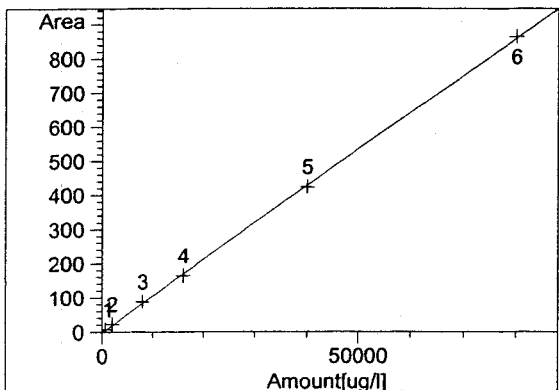
Acenaphthylene at exp. RT: 3.233
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99992
Residual Std. Dev.: 14.34576
Formula: $y = mx + b$
m: $6.40441e-2$
b: -5.27818
x: Amount [ug/l]
y: Area



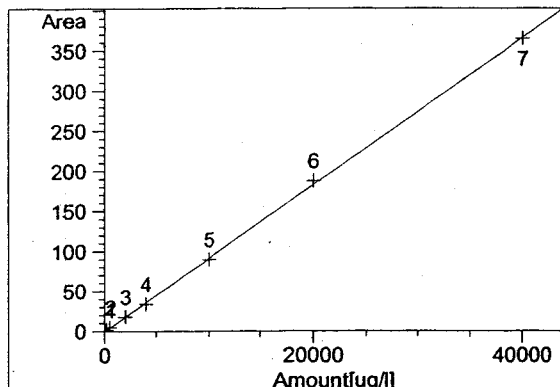
1-Methylnaphthalene (UV) at exp. RT: 3.774
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99990
Residual Std. Dev.: 6.47916
Formula: $y = mx + b$
m: $7.05249e-3$
b: -1.72372
x: Amount [ug/l]
y: Area



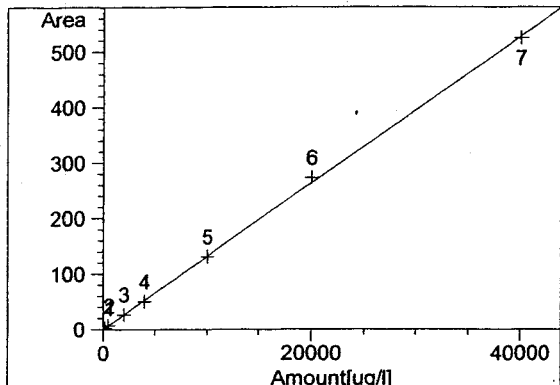
1-Methylnaphthalene (UV) at exp. RT: 3.775
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99992
Residual Std. Dev.: 6.45201
Formula: $y = mx + b$
m: $1.50659e-2$
b: -7.21416e-1
x: Amount [ug/l]
y: Area



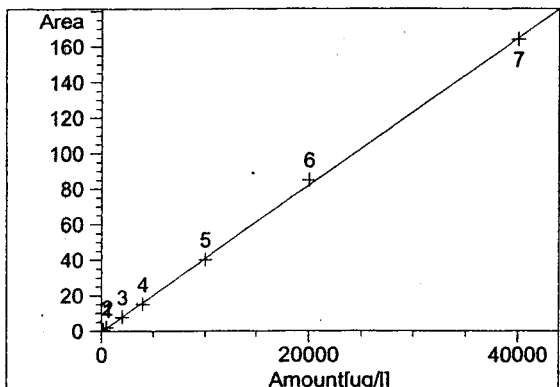
1-Methylnaphthalene (F) at exp. RT: 3.800
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99990
Residual Std. Dev.: 5.29917
Formula: $y = mx + b$
m: $1.07894e-2$
b: -2.26025
x: Amount [ug/l]
y: Area



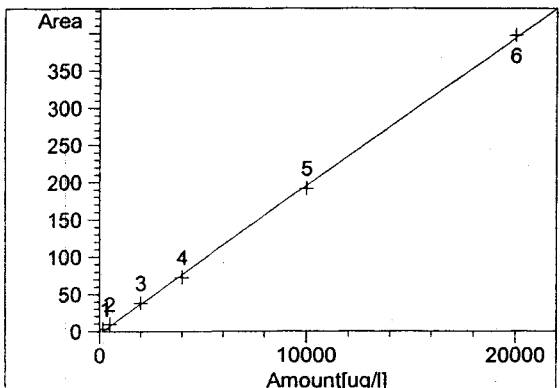
2-Methylnaphthalene at exp. RT: 4.097
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99987
Residual Std. Dev.: 2.39851
Formula: $y = mx + b$
m: $9.17111e-3$
b: $-4.70981e-1$
x: Amount [ug/l]
y: Area



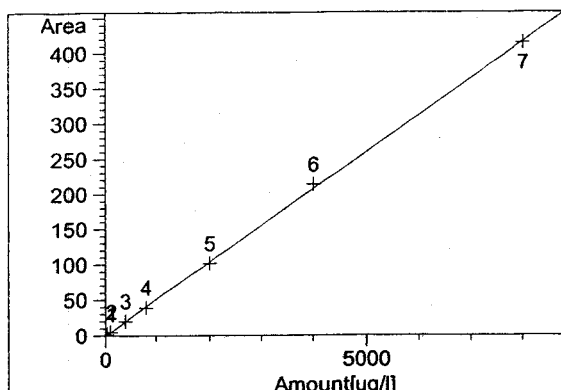
2-Methylnaphthalene at exp. RT: 4.123
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99978
Residual Std. Dev.: 4.44659
Formula: $y = mx + b$
m: $1.32028e-2$
b: $4.55045e-1$
x: Amount [ug/l]
y: Area



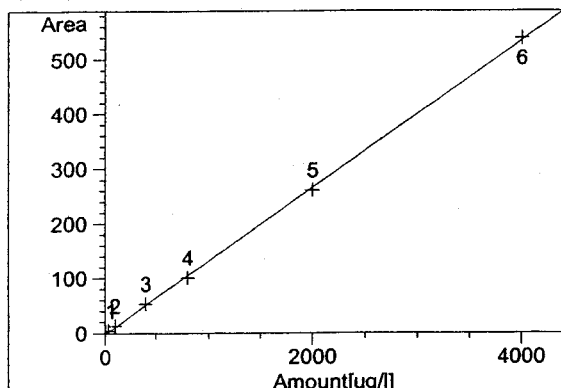
Acenaphthene at exp. RT: 4.430
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99978
Residual Std. Dev.: 1.38832
Formula: $y = mx + b$
m: $4.13335e-3$
b: $-3.37298e-1$
x: Amount [ug/l]
y: Area



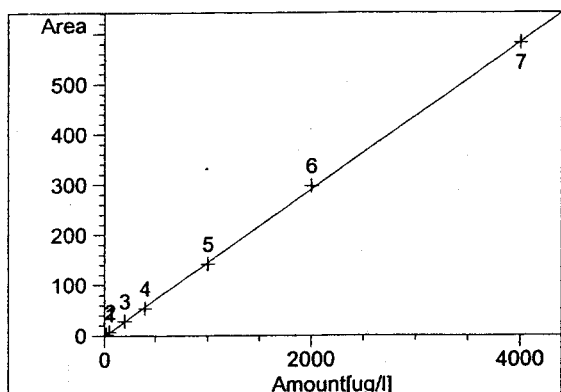
Acenaphthene at exp. RT: 4.456
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99974
Residual Std. Dev.: 3.85744
Formula: $y = mx + b$
m: $1.98327e-2$
b: -2.55193
x: Amount [ug/l]
y: Area



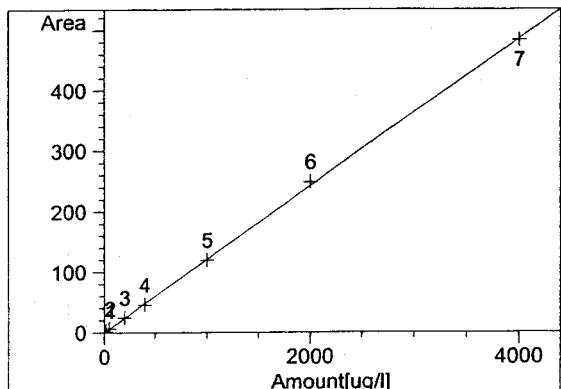
Fluorene at exp. RT: 4.787
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99982
Residual Std. Dev.: 3.17468
Formula: $y = mx + b$
m: $5.21795e-2$
b: $-7.46540e-1$
x: Amount[ug/l]
y: Area



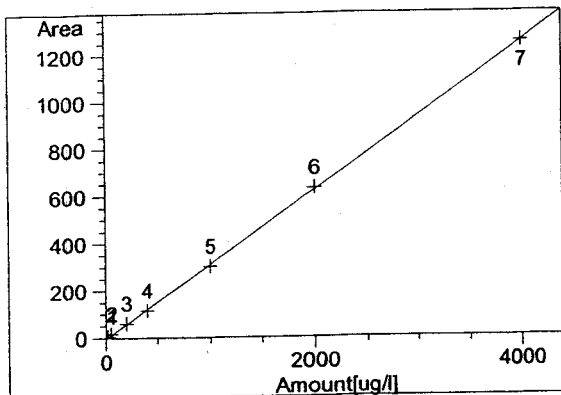
Fluorene at exp. RT: 4.814
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99981
Residual Std. Dev.: 4.46421
Formula: $y = mx + b$
m: $1.34384e-1$
b: -2.46669
x: Amount[ug/l]
y: Area



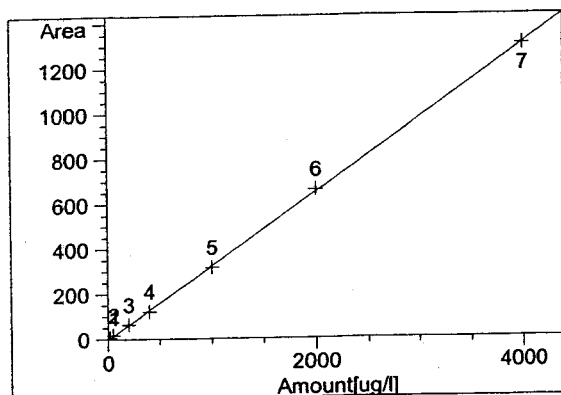
Phenanthrene at exp. RT: 5.654
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99988
Residual Std. Dev.: 3.65004
Formula: $y = mx + b$
m: $1.46235e-1$
b: -1.28285
x: Amount[ug/l]
y: Area



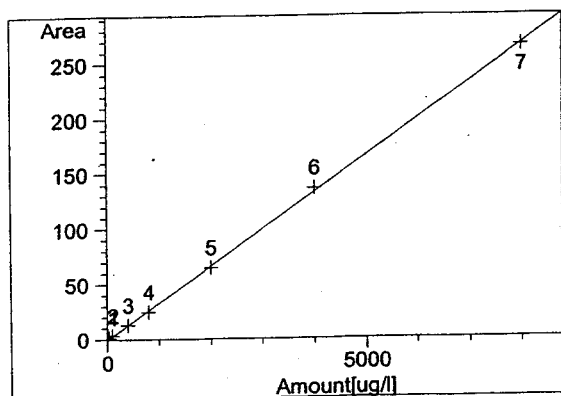
Phenanthrene at exp. RT: 5.680
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99986
Residual Std. Dev.: 3.23902
Formula: $y = mx + b$
m: $1.21509e-1$
b: $-3.17131e-1$
x: Amount[ug/l]
y: Area



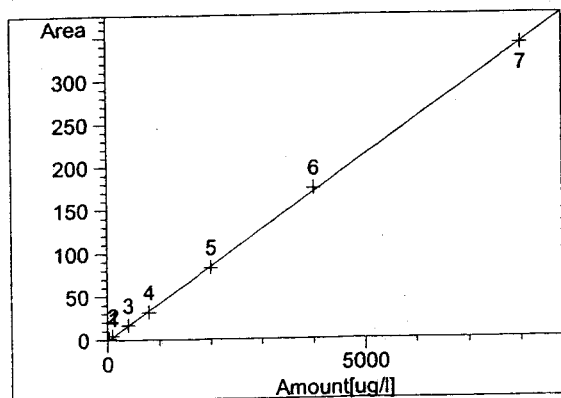
Anthracene at exp. RT: 6.401
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99992
Residual Std. Dev.: 6.36648
Formula: $y = mx + b$
m: $3.14816e-1$
b: -4.13283
x: Amount [ug/l]
y: Area



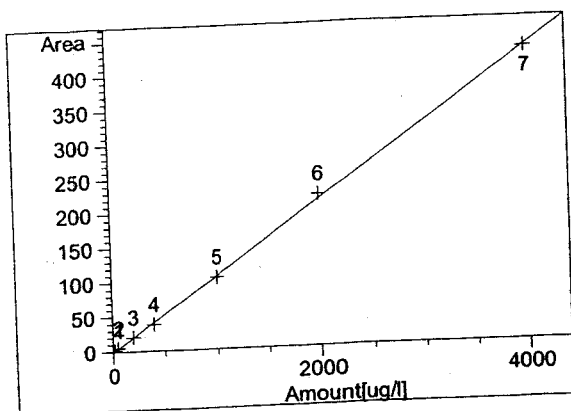
Anthracene at exp. RT: 6.427
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99992
Residual Std. Dev.: 6.60742
Formula: $y = mx + b$
m: $3.27118e-1$
b: -2.62098
x: Amount [ug/l]
y: Area



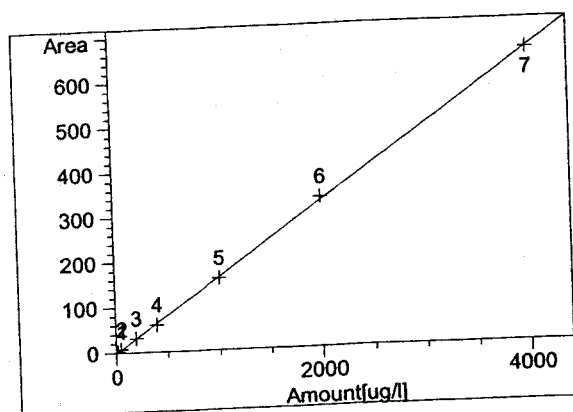
Fluoranthene at exp. RT: 7.245
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99984
Residual Std. Dev.: 1.91720
Formula: $y = mx + b$
m: $3.34323e-2$
b: $-3.99992e-1$
x: Amount [ug/l]
y: Area



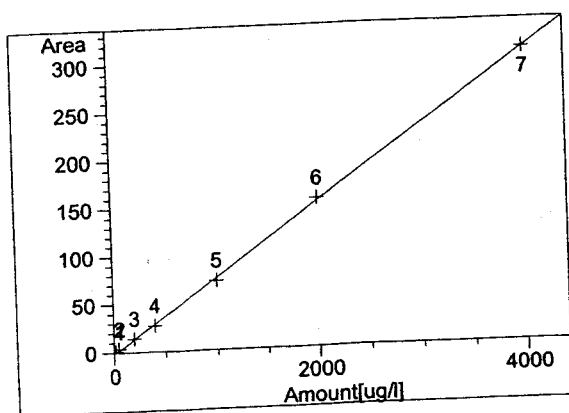
Fluoranthene at exp. RT: 7.271
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99988
Residual Std. Dev.: 2.09597
Formula: $y = mx + b$
m: $4.27967e-2$
b: $-5.88536e-1$
x: Amount [ug/l]
y: Area



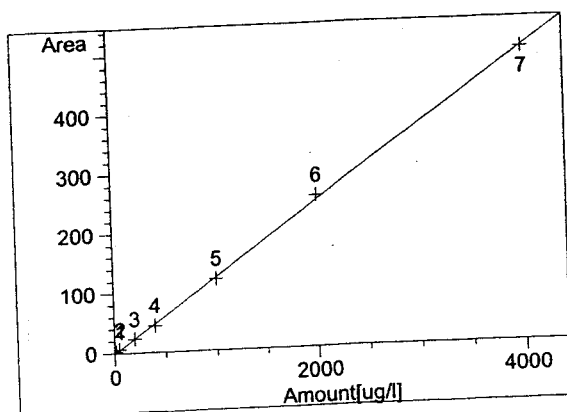
Pyrene at exp. RT: 7.802
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99979
Residual Std. Dev.: 3.53534
Formula: $y = mx + b$
m: $1.07687e-1$
b: $-9.69671e-1$
x: Amount [ug/l]
y: Area



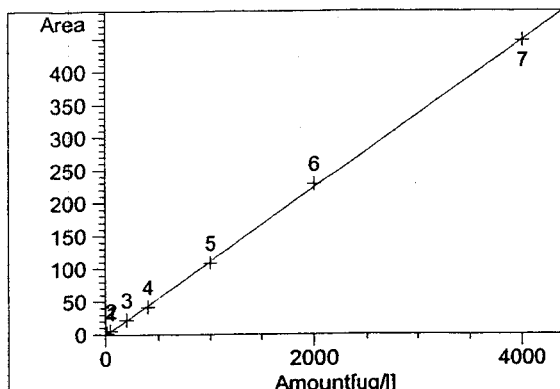
Pyrene at exp. RT: 7.828
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99988
Residual Std. Dev.: 4.08104
Formula: $y = mx + b$
m: $1.63803e-1$
b: -1.33859
x: Amount [ug/l]
y: Area



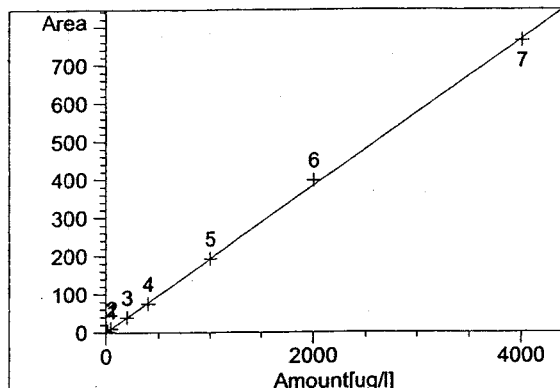
Benzo(a)anthracene at exp. RT: 9.643
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99985
Residual Std. Dev.: 2.15661
Formula: $y = mx + b$
m: $7.71938e-2$
b: -1.69604
x: Amount [ug/l]
y: Area



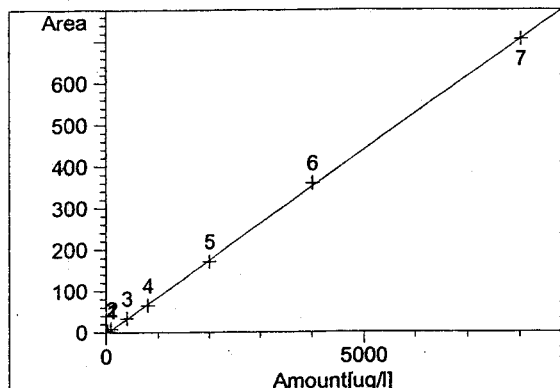
Benzo(a)anthracene at exp. RT: 9.669
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99981
Residual Std. Dev.: 3.85628
Formula: $y = mx + b$
m: $1.24702e-1$
b: -1.37985
x: Amount [ug/l]
y: Area



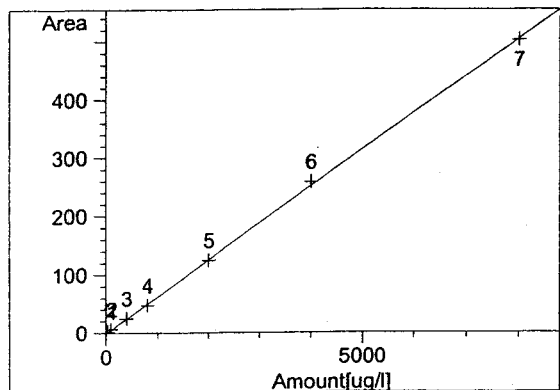
Chrysene at exp. RT: 9.924
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99988
Residual Std. Dev.: 2.78002
Formula: $y = mx + b$
m: $1.12464e-1$
b: -1.04206
x: Amount[ug/l]
y: Area



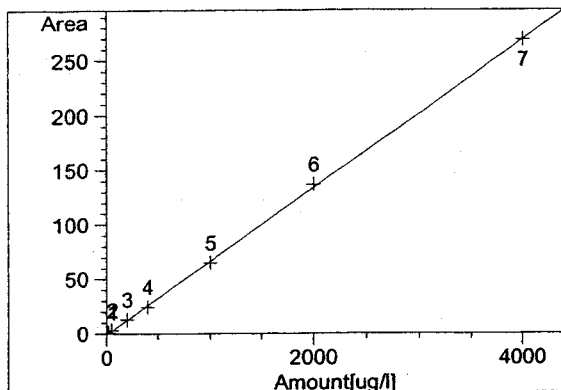
Chrysene at exp. RT: 9.951
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99979
Residual Std. Dev.: 6.34193
Formula: $y = mx + b$
m: $1.92062e-1$
b: 1.27098
x: Amount[ug/l]
y: Area



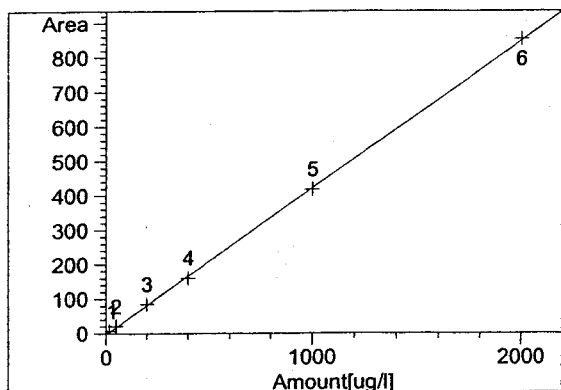
Benzo(b)fluoranthene at exp. RT: 11.331
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99990
Residual Std. Dev.: 4.11442
Formula: $y = mx + b$
m: $8.87012e-2$
b: -2.23257
x: Amount[ug/l]
y: Area



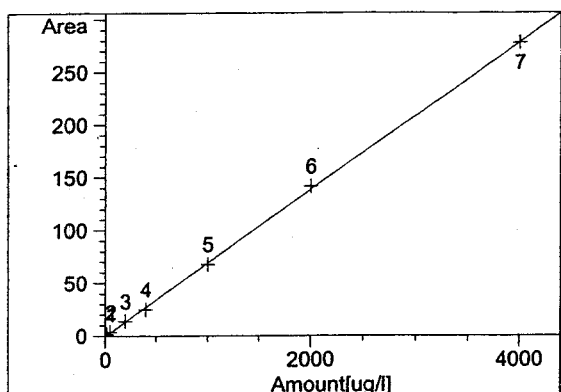
Benzo(b)fluoranthene at exp. RT: 11.358
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99986
Residual Std. Dev.: 3.34638
Formula: $y = mx + b$
m: $6.31366e-2$
b: -4.47674e-1
x: Amount[ug/l]
y: Area



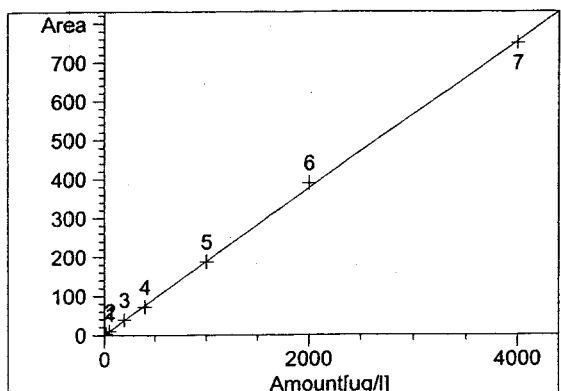
Benzo(k)fluoranthene at exp. RT: 11.876
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99988
Residual Std. Dev.: 1.65788
Formula: $y = mx + b$
m: $6.76093e-2$
b: $-9.30247e-1$
x: Amount [ug/l]
y: Area



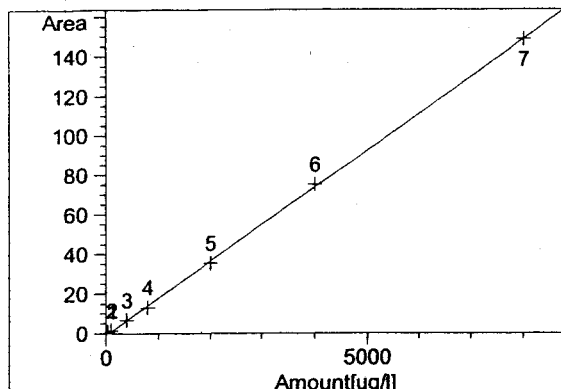
Benzo(k)fluoranthene at exp. RT: 11.903
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99991
Residual Std. Dev.: 5.05238
Formula: $y = mx + b$
m: $4.26206e-1$
b: -2.71071
x: Amount [ug/l]
y: Area



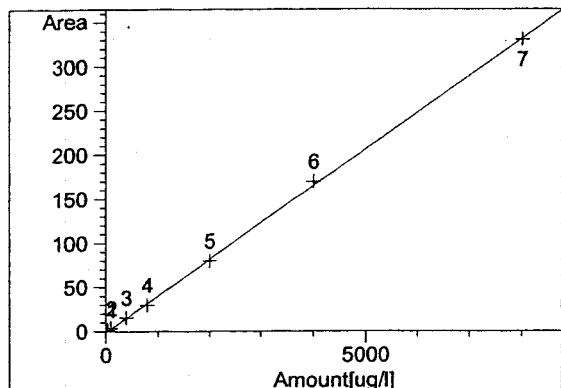
Benzo(a)pyrene at exp. RT: 12.503
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99987
Residual Std. Dev.: 1.78407
Formula: $y = mx + b$
m: $6.97626e-2$
b: $-6.37548e-1$
x: Amount [ug/l]
y: Area



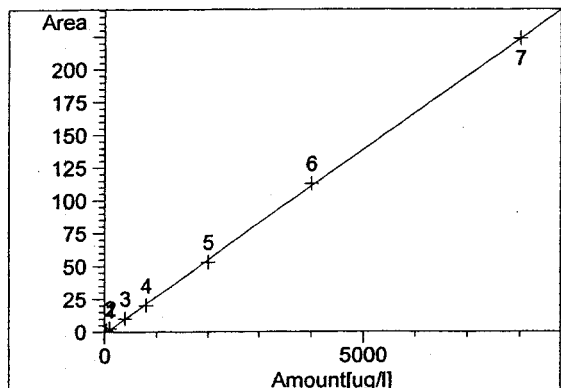
Benzo(a)pyrene at exp. RT: 12.530
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99979
Residual Std. Dev.: 6.14177
Formula: $y = mx + b$
m: $1.88563e-1$
b: $5.04316e-1$
x: Amount [ug/l]
y: Area



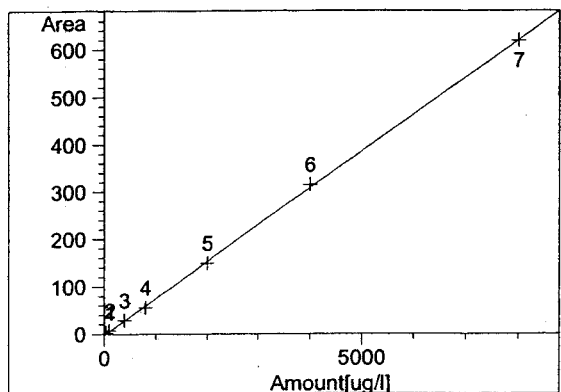
Dibenz(a,h)anthracene at exp. RT: 13.593
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99985
Residual Std. Dev.: 1.05082
Formula: $y = mx + b$
m: $1.86874e-2$
b: $-8.60511e-1$
x: Amount [ug/l]
y: Area



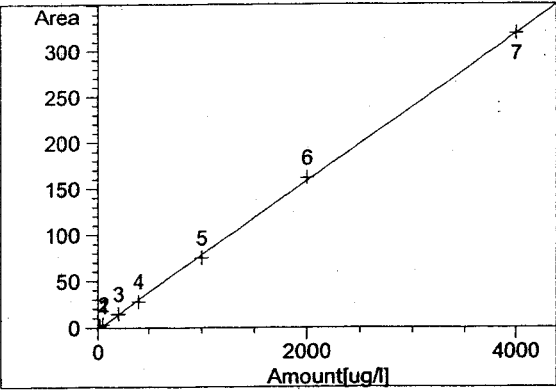
Dibenz(a,h)anthracene at exp. RT: 13.621
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99982
Residual Std. Dev.: 2.50131
Formula: $y = mx + b$
m: $4.16496e-2$
b: -1.31216
x: Amount [ug/l]
y: Area



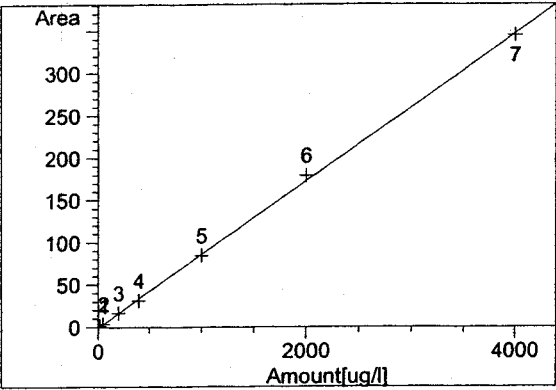
Benzo(g,h,i)perylene at exp. RT: 14.403
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99984
Residual Std. Dev.: 1.58625
Formula: $y = mx + b$
m: $2.80783e-2$
b: -1.08892
x: Amount [ug/l]
y: Area



Benzo(g,h,i)perylene at exp. RT: 14.432
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99986
Residual Std. Dev.: 4.13611
Formula: $y = mx + b$
m: $7.78548e-2$
b: -2.65718
x: Amount [ug/l]
y: Area



Indeno(1,2,3-cd)pyrene at exp. RT: 14.788
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99979
Residual Std. Dev.: 2.66321
Formula: $y = mx + b$
m: 8.03620×10^{-2}
b: -1.85879
x: Amount [ug/l]
y: Area



Indeno(1,2,3-cd)pyrene at exp. RT: 14.816
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99972
Residual Std. Dev.: 3.27806
Formula: $y = mx + b$
m: 8.69400×10^{-2}
b: -8.43827×10^{-1}
x: Amount [ug/l]
y: Area

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CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191290 HPLC Water
EPA 8310

Inst : HPLC05
Calnum : 856422684001

Cal Date: 20-OCT-2006

ICV 856422684015 (293000015 20-OCT-2006) stds: S4555

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Naphthalene	1	0.0107	0.0110	5000	5152	ug/L	3	15	
Acenaphthylene	1	0.0078	0.0082	10000	10570	ug/L	6	15	
Acenaphthene	1	0.0039	0.0044	5000	5383	ug/L	8	15	
Fluorene	1	0.0503	0.0523	1000	1017	ug/L	2	15	
Phenanthrene	1	0.1422	0.1436	500.0	499.7	ug/L	0	15	
Anthracene	1	0.3045	0.3112	500.0	507.4	ug/L	1	15	
Fluoranthene	1	0.0330	0.0337	1000	1020	ug/L	2	15	
Benzo(a)anthracene	1	0.0702	0.0736	500.0	498.6	ug/L	0	15	
Chrysene	1	0.1081	0.1119	500.0	507.0	ug/L	1	15	
Benzo(b)fluoranthene	1	0.0843	0.0881	1000	1019	ug/L	2	15	
Benzo(k)fluoranthene	1	0.0644	0.0667	500.0	507.3	ug/L	1	15	
Benzo(a)pyrene	1	0.0708	0.0702	500.0	512.0	ug/L	2	15	
Dibenz(a,h)anthracene	1	0.0176	0.0182	1000	1019	ug/L	2	15	
Benzo(g,h,i)perylene	1	0.0279	0.0266	1000	986.5	ug/L	-1	15	
Indeno(1,2,3-cd)pyrene	1	0.0764	0.0764	500.0	498.8	ug/L	0	15	
Acenaphthylene	2	0.0644	0.0669	10000	10520	ug/L	5	15	
Pyrene	2	0.1031	0.1079	500.0	510.2	ug/L	2	15	
Naphthalene	3	0.0099	0.0101	5000	5106	ug/L	2	15	
Acenaphthene	3	0.0191	0.0202	5000	5222	ug/L	4	15	
Fluorene	3	0.1322	0.1340	1000	1015	ug/L	2	15	
Phenanthrene	3	0.1204	0.1204	500.0	497.9	ug/L	0	15	
Anthracene	3	0.3212	0.3253	500.0	505.2	ug/L	1	15	
Fluoranthene	3	0.0419	0.0439	1000	1039	ug/L	4	15	
Pyrene	3	0.1585	0.1608	500.0	498.9	ug/L	0	15	
Benzo(a)anthracene	3	0.1186	0.1219	500.0	499.9	ug/L	0	15	
Chrysene	3	0.1947	0.1963	500.0	504.4	ug/L	1	15	
Benzo(b)fluoranthene	3	0.0619	0.0632	1000	1008	ug/L	1	15	
Benzo(k)fluoranthene	3	0.4208	0.4299	500.0	510.7	ug/L	2	15	
Benzo(a)pyrene	3	0.1878	0.1899	500.0	500.9	ug/L	0	15	
Dibenz(a,h)anthracene	3	0.0386	0.0401	1000	995.3	ug/L	0	15	
Benzo(g,h,i)perylene	3	0.0725	0.0740	1000	984.2	ug/L	-2	15	
Indeno(1,2,3-cd)pyrene	3	0.0817	0.0863	500.0	506.0	ug/L	1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191290 HPLC Water
EPA 8310

Inst : HPLC05	Run Name: L	IDF : 1.0
Seqnum : 856497390002	File : 345000002	Time : 11-DEC-2006 10:14
Cal : 856422684001	Caldate : 20-OCT-2006	
Standards: S4232		

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0107	0.0109	2000	2082	ug/L	4	15	
Acenaphthylene	1	0.0078	0.0079	4000	4113	ug/L	3	15	
Acenaphthene	1	0.0039	0.0040	2000	2005	ug/L	0	15	
Fluorene	1	0.0503	0.0513	400.0	407.2	ug/L	2	15	
Phenanthrene	1	0.1422	0.1453	200.0	207.5	ug/L	4	15	
Anthracene	1	0.3045	0.3194	200.0	216.0	ug/L	8	15	
Fluoranthene	1	0.0330	0.0332	400.0	409.5	ug/L	2	15	
Benzo (a) anthracene	1	0.0702	0.0749	200.0	216.1	ug/L	8	15	
Chrysene	1	0.1081	0.1092	200.0	203.5	ug/L	2	15	
Benzo (b) fluoranthene	1	0.0843	0.0873	400.0	418.8	ug/L	5	15	
Benzo (k) fluoranthene	1	0.0644	0.0660	200.0	209.1	ug/L	5	15	
Benzo (a) pyrene	1	0.0708	0.0710	200.0	212.8	ug/L	6	15	
Dibenz (a, h) anthracene	1	0.0176	0.0170	400.0	410.5	ug/L	3	15	
Benzo (g, h, i) perylene	1	0.0279	0.0264	400.0	415.2	ug/L	4	15	
Indeno (1, 2, 3-cd) pyrene	1	0.0764	0.0755	200.0	211.0	ug/L	6	15	
1-Methylnaphthalene (UV)	1	0.0070	0.0071	8000	8333	ug/L	4	15	
Acenaphthylene	2	0.0644	0.0665	4000	4236	ug/L	6	15	
Pyrene	2	0.1031	0.1059	200.0	205.6	ug/L	3	15	
1-Methylnaphthalene (UV)	2	0.0154	0.0161	8000	8618	ug/L	8	15	
Naphthalene	3	0.0099	0.0103	2000	2064	ug/L	3	15	
Acenaphthene	3	0.0191	0.0204	2000	2184	ug/L	9	15	
Fluorene	3	0.1322	0.1396	400.0	433.8	ug/L	8	15	
Phenanthrene	3	0.1204	0.1257	200.0	209.5	ug/L	5	15	
Anthracene	3	0.3212	0.3460	200.0	219.5	ug/L	10	15	
Fluoranthene	3	0.0419	0.0436	400.0	421.1	ug/L	5	15	
Pyrene	3	0.1585	0.1640	200.0	208.5	ug/L	4	15	
Benzo (a) anthracene	3	0.1186	0.1277	200.0	215.8	ug/L	8	15	
Chrysene	3	0.1947	0.2035	200.0	205.3	ug/L	3	15	
Benzo (b) fluoranthene	3	0.0619	0.0649	400.0	418.3	ug/L	5	15	
Benzo (k) fluoranthene	3	0.4208	0.4472	200.0	216.2	ug/L	8	15	
Benzo (a) pyrene	3	0.1878	0.1993	200.0	208.7	ug/L	4	15	
Dibenz (a, h) anthracene	3	0.0386	0.0400	400.0	416.0	ug/L	4	15	
Benzo (g, h, i) perylene	3	0.0725	0.0757	400.0	423.1	ug/L	6	15	
Indeno (1, 2, 3-cd) pyrene	3	0.0817	0.0866	200.0	208.9	ug/L	4	15	
1-Methylnaphthalene (F)	3	0.0108	0.0113	8000	8573	ug/L	7	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191290 HPLC Water
EPA 8310

Inst : HPLC05	Run Name: M	IDF : 1.0
Seqnum : 856497390013	File : 345000013	Time : 11-DEC-2006 14:36
Cal : 856422684001	Caldate : 20-OCT-2006	
Standards: S4231		

Analyte	Ch	Avg RF/CF		Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0107	0.0111	4000	4176	ug/L	4	15	
Acenaphthylene	1	0.0078	0.0081	8000	8349	ug/L	4	15	
Acenaphthene	1	0.0039	0.0042	4000	4141	ug/L	4	15	
Fluorene	1	0.0503	0.0529	800.0	824.6	ug/L	3	15	
Phenanthrene	1	0.1422	0.1473	400.0	411.7	ug/L	3	15	
Anthracene	1	0.3045	0.3162	400.0	414.8	ug/L	4	15	
Fluoranthene	1	0.0330	0.0342	800.0	830.7	ug/L	4	15	
Benzo(a)anthracene	1	0.0702	0.0768	400.0	419.7	ug/L	5	15	
Chrysene	1	0.1081	0.1150	400.0	418.2	ug/L	5	15	
Benzo(b)fluoranthene	1	0.0843	0.0888	800.0	826.1	ug/L	3	15	
Benzo(k)fluoranthene	1	0.0644	0.0687	400.0	420.0	ug/L	5	15	
Benzo(a)pyrene	1	0.0708	0.0688	400.0	403.8	ug/L	1	15	
Dibenz(a,h)anthracene	1	0.0176	0.0185	800.0	837.4	ug/L	5	15	
Benzo(g,h,i)perylene	1	0.0279	0.0276	800.0	824.1	ug/L	3	15	
Indeno(1,2,3-cd)pyrene	1	0.0764	0.0785	400.0	413.7	ug/L	3	15	
1-Methylnaphthalene (UV)	1	0.0070	0.0073	16000	16690	ug/L	4	15	
Acenaphthylene	2	0.0644	0.0673	8000	8485	ug/L	6	15	
Pyrene	2	0.1031	0.1096	400.0	416.2	ug/L	4	15	
1-Methylnaphthalene (UV)	2	0.0154	0.0162	16000	17290	ug/L	8	15	
Naphthalene	3	0.0099	0.0102	4000	4107	ug/L	3	15	
Acenaphthene	3	0.0191	0.0200	4000	4172	ug/L	4	15	
Fluorene	3	0.1322	0.1368	800.0	832.6	ug/L	4	15	
Phenanthrene	3	0.1204	0.1246	400.0	412.8	ug/L	3	15	
Anthracene	3	0.3212	0.3328	400.0	414.9	ug/L	4	15	
Fluoranthene	3	0.0419	0.0437	800.0	831.4	ug/L	4	15	
Pyrene	3	0.1585	0.1661	400.0	413.8	ug/L	3	15	
Benzo(a)anthracene	3	0.1186	0.1267	400.0	417.4	ug/L	4	15	
Chrysene	3	0.1947	0.2019	400.0	413.9	ug/L	3	15	
Benzo(b)fluoranthene	3	0.0619	0.0652	800.0	833.2	ug/L	4	15	
Benzo(k)fluoranthene	3	0.4208	0.4464	400.0	425.3	ug/L	6	15	
Benzo(a)pyrene	3	0.1878	0.1956	400.0	412.3	ug/L	3	15	
Dibenz(a,h)anthracene	3	0.0386	0.0409	800.0	816.7	ug/L	2	15	
Benzo(g,h,i)perylene	3	0.0725	0.0758	800.0	813.2	ug/L	2	15	
Indeno(1,2,3-cd)pyrene	3	0.0817	0.0895	400.0	421.5	ug/L	5	15	
1-Methylnaphthalene (F)	3	0.0108	0.0112	16000	16810	ug/L	5	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191290 HPLC Water
EPA 8310

Inst : HPLC05
Seqnum : 856497390027
Cal : 856422684001
Standards: S4230

Run Name: H
File : 345000027
Caldate : 20-OCT-2006

IDF : 1.0
Time : 11-DEC-2006 20:06

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0107	0.0106	10000	9858	ug/L	-1	15	
Acenaphthylene	1	0.0078	0.0077	20000	19730	ug/L	-1	15	
Acenaphthene	1	0.0039	0.0041	10000	10000	ug/L	0	15	
Fluorene	1	0.0503	0.0510	2000	1967	ug/L	-2	15	
Phenanthrene	1	0.1422	0.1413	1000	975.3	ug/L	-2	15	
Anthracene	1	0.3045	0.3035	1000	977.2	ug/L	-2	15	
Fluoranthene	1	0.0330	0.0323	2000	1946	ug/L	-3	15	
Benzo(a)anthracene	1	0.0702	0.0743	1000	984.7	ug/L	-2	15	
Chrysene	1	0.1081	0.1087	1000	975.9	ug/L	-2	15	
Benzo(b)fluoranthene	1	0.0843	0.0860	2000	1963	ug/L	-2	15	
Benzo(k)fluoranthene	1	0.0644	0.0654	1000	980.7	ug/L	-2	15	
Benzo(a)pyrene	1	0.0708	0.0677	1000	980.2	ug/L	-2	15	
Dibenz(a,h)anthracene	1	0.0176	0.0183	2000	2003	ug/L	0	15	
Benzo(g,h,i)perylene	1	0.0279	0.0273	2000	1984	ug/L	-1	15	
Indeno(1,2,3-cd)pyrene	1	0.0764	0.0775	1000	987.2	ug/L	-1	15	
1-Methylnaphthalene (UV)	1	0.0070	0.0069	40000	39400	ug/L	-1	15	
Acenaphthylene	2	0.0644	0.0632	20000	19830	ug/L	-1	15	
Pyrene	2	0.1031	0.1032	1000	967.0	ug/L	-3	15	
1-Methylnaphthalene (UV)	2	0.0154	0.0151	40000	40270	ug/L	1	15	
Naphthalene	3	0.0099	0.0099	10000	9960	ug/L	0	15	
Acenaphthene	3	0.0191	0.0194	10000	9896	ug/L	-1	15	
Fluorene	3	0.1322	0.1297	2000	1948	ug/L	-3	15	
Phenanthrene	3	0.1204	0.1198	1000	988.6	ug/L	-1	15	
Anthracene	3	0.3212	0.3185	1000	981.6	ug/L	-2	15	
Fluoranthene	3	0.0419	0.0416	2000	1960	ug/L	-2	15	
Pyrene	3	0.1585	0.1624	1000	999.8	ug/L	0	15	
Benzo(a)anthracene	3	0.1186	0.1248	1000	1012	ug/L	1	15	
Chrysene	3	0.1947	0.1931	1000	998.8	ug/L	0	15	
Benzo(b)fluoranthene	3	0.0619	0.0629	2000	1999	ug/L	0	15	
Benzo(k)fluoranthene	3	0.4208	0.4216	1000	995.5	ug/L	0	15	
Benzo(a)pyrene	3	0.1878	0.1861	1000	984.2	ug/L	-2	15	
Dibenz(a,h)anthracene	3	0.0386	0.0402	2000	1964	ug/L	-2	15	
Benzo(g,h,i)perylene	3	0.0725	0.0768	2000	2008	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	3	0.0817	0.0867	1000	1007	ug/L	1	15	
1-Methylnaphthalene (F)	3	0.0108	0.0107	40000	39850	ug/L	0	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191290 HPLC Water
EPA 8310

Inst : HPLC05
Seqnum : 856497390041
Cal : 856422684001
Standards: S4231

Run Name: M
File : 345000041
Caldate : 20-OCT-2006

IDF : 1.0
Time : 12-DEC-2006 01:36

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0107	0.0111	4000	4167	ug/L	4	15	
Acenaphthylene	1	0.0078	0.0081	8000	8325	ug/L	4	15	
Acenaphthene	1	0.0039	0.0042	4000	4188	ug/L	5	15	
Fluorene	1	0.0503	0.0529	800.0	825.7	ug/L	3	15	
Phenanthrene	1	0.1422	0.1488	400.0	415.7	ug/L	4	15	
Anthracene	1	0.3045	0.3192	400.0	418.7	ug/L	5	15	
Fluoranthene	1	0.0330	0.0343	800.0	832.4	ug/L	4	15	
Benzo(a)anthracene	1	0.0702	0.0787	400.0	430.0	ug/L	7	15	
Chrysene	1	0.1081	0.1159	400.0	421.3	ug/L	5	15	
Benzo(b)fluoranthene	1	0.0843	0.0904	800.0	840.4	ug/L	5	15	
Benzo(k)fluoranthene	1	0.0644	0.0683	400.0	417.9	ug/L	4	15	
Benzo(a)pyrene	1	0.0708	0.0682	400.0	400.4	ug/L	0	15	
Dibenz(a,h)anthracene	1	0.0176	0.0187	800.0	845.0	ug/L	6	15	
Benzo(g,h,i)perylene	1	0.0279	0.0282	800.0	842.6	ug/L	5	15	
Indeno(1,2,3-cd)pyrene	1	0.0764	0.0824	400.0	433.3	ug/L	8	15	
1-Methylnaphthalene (UV)	1	0.0070	0.0073	16000	16700	ug/L	4	15	
Acenaphthylene	2	0.0644	0.0673	8000	8489	ug/L	6	15	
Pyrene	2	0.1031	0.1089	400.0	413.6	ug/L	3	15	
1-Methylnaphthalene (UV)	2	0.0154	0.0163	16000	17350	ug/L	8	15	
Naphthalene	3	0.0099	0.0101	4000	4091	ug/L	2	15	
Acenaphthene	3	0.0191	0.0202	4000	4198	ug/L	5	15	
Fluorene	3	0.1322	0.1366	800.0	831.3	ug/L	4	15	
Phenanthrene	3	0.1204	0.1242	400.0	411.4	ug/L	3	15	
Anthracene	3	0.3212	0.3340	400.0	416.4	ug/L	4	15	
Fluoranthene	3	0.0419	0.0433	800.0	824.0	ug/L	3	15	
Pyrene	3	0.1585	0.1638	400.0	408.2	ug/L	2	15	
Benzo(a)anthracene	3	0.1186	0.1292	400.0	425.6	ug/L	6	15	
Chrysene	3	0.1947	0.2004	400.0	410.7	ug/L	3	15	
Benzo(b)fluoranthene	3	0.0619	0.0650	800.0	830.2	ug/L	4	15	
Benzo(k)fluoranthene	3	0.4208	0.4463	400.0	425.2	ug/L	6	15	
Benzo(a)pyrene	3	0.1878	0.1933	400.0	407.3	ug/L	2	15	
Dibenz(a,h)anthracene	3	0.0386	0.0410	800.0	819.2	ug/L	2	15	
Benzo(g,h,i)perylene	3	0.0725	0.0777	800.0	832.9	ug/L	4	15	
Indeno(1,2,3-cd)pyrene	3	0.0817	0.0891	400.0	419.8	ug/L	5	15	
1-Methylnaphthalene (F)	3	0.0108	0.0111	16000	16640	ug/L	4	15	

SEQUENCE SUMMARY FOR 191290 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 856422684 Instrument: HPLC05 High Pressure Liquid Chromatograph # 5 Begun: 20-OCT-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	UL	VL	pH	Stds	Used	>LR
001	29300000	X	PRIMER	- 293		20-OCT-2006	12:44	1.0							
002	29300000	X	PRIMER			20-OCT-2006	13:08	1.0							
003	29300000	X	IB - 293			20-OCT-2006	13:32	1.0							
004	29300000	X	IB			20-OCT-2006	13:55	1.0							
005	29300000	X	IB			20-OCT-2006	14:19	1.0							
006	29300000	ICAL				20-OCT-2006	14:42	1.0							
007	29300000	ICAL				20-OCT-2006	15:06	1.0							
008	29300000	ICAL				20-OCT-2006	15:30	1.0							
009	29300000	ICAL				20-OCT-2006	15:53	1.0							
010	29300001	ICAL				20-OCT-2006	16:17	1.0							
011	29300001	ICAL				20-OCT-2006	16:40	1.0							
012	29300001	ICAL				20-OCT-2006	17:04	1.0							
013	29300001	X	IB			20-OCT-2006	17:28	1.0							
014	29300001	X	IB			20-OCT-2006	17:51	1.0							
015	29300001	ICV				20-OCT-2006	18:15	1.0							
016	29300001	X	ICV			20-OCT-2006	18:38	1.0							
017	29300001	X	IB			20-OCT-2006	19:02	1.0							

Stds used: 1=S4234 2=S4233 3=S4232 4=S4231 5=S4230 6=S4229 7=S4228 8=S4555

SEQUENCE SUMMARY FOR 191290 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 856497390 Instrument: HPLC05 High Pressure Liquid Chromatograph # 5 Begun: 11-DEC-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds Used	>LR
001	34500000	X	IB - 345			11-DEC-2006 09:50	1.0						
002	34500000	CCV	L			11-DEC-2006 10:14	1.0	1.0			10	1	
003	34500000	X	CCV			11-DEC-2006 10:38	1.0					1	
004	34500000	X	IB			11-DEC-2006 11:01	1.0						
005	34500000	BLANK	QC367536		Water	11-DEC-2006 11:25	1.0	0.002			10		
006	34500000	LCS	QC367537		Water	11-DEC-2006 11:48	1.0	0.002			10		
007	34500000	X	IB			11-DEC-2006 12:12	1.0						
008	34500000	SAMPLE	191317-001		Water	11-DEC-2006 12:36	1.0	0.001887		3	10		
009	34500000	SAMPLE	191317-001		Water	11-DEC-2006 13:02	1.0	0.001887		3	10		
010	34500001	SAMPLE	191329-001		Water	11-DEC-2006 13:25	1.0	0.001887			10		
011	34500001	SAMPLE	191331-001		Water	11-DEC-2006 13:49	1.0	0.001887			10		
012	34500001	X	IB			11-DEC-2006 14:12	1.0						
013	34500001	CCV	M			11-DEC-2006 14:36	1.0	1.0			10	2	
014	34500001	X	CCV			11-DEC-2006 14:59	1.0					2	
015	34500001	X	IB			11-DEC-2006 15:23	1.0						
016	34500001	SAMPLE	191286-001		Water	11-DEC-2006 15:47	1.0	0.001887			10		
017	34500001	SAMPLE	191286-004		Water	11-DEC-2006 16:10	1.0	0.001887			10		
018	34500001	SAMPLE	191286-007		Water	11-DEC-2006 16:34	1.0	0.001923			10		
019	34500001	SAMPLE	191286-008		Water	11-DEC-2006 16:57	1.0	0.001905			10		
020	34500002	SAMPLE	191286-012		Water	11-DEC-2006 17:21	1.0	0.00198			10		
021	34500002	SAMPLE	191290-001		Water	11-DEC-2006 17:44	1.0	0.001923			10		
022	34500002	MSS	191314-011		Water	11-DEC-2006 18:08	1.0	0.001887			10		
023	34500002	SAMPLE	191314-012		Water	11-DEC-2006 18:32	1.0	0.001887			10		
024	34500002	MS	QC367538		Water	11-DEC-2006 18:55	1.0	0.001887		4	10		
025	34500002	MSD	QC367539		Water	11-DEC-2006 19:19	1.0	0.001887		4	10		
026	34500002	X	IB			11-DEC-2006 19:43	1.0						
027	34500002	CCV	H			11-DEC-2006 20:06	1.0	1.0			10	3	
028	34500002	X	CCV			11-DEC-2006 20:30	1.0					3	
029	34500002	X	IB			11-DEC-2006 20:53	1.0						
030	34500003	SAMPLE	191314-014		Water	11-DEC-2006 21:17	1.0	0.001887			10		
031	34500003	SAMPLE	191314-016		Water	11-DEC-2006 21:40	1.0	0.001887			10		

Stds used: 1=S4232 2=S4231 3=S4230

SEQUENCE SUMMARY FOR 191290 HPLC Water Curtis & Tompkins Laboratories

Sequence: 856497390 Instrument: HPLC05 High Pressure Liquid Chromatograph # 5 Begun: 11-DEC-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
032	34500003	SAMPLE	191314-017	120180	Water	11-DEC-2006 22:04	1.0	0.001905		10				
033	34500003	SAMPLE	191314-018	120180	Water	11-DEC-2006 22:28	1.0	0.001905		10				
034	34500003	MSS	191314-019	120180	Water	11-DEC-2006 22:51	1.0	0.001887		10				
035	34500003	MS	QC367540	120180	Water	11-DEC-2006 23:15	1.0	0.001887		14	10			
036	34500003	MSD	QC367541	120180	Water	11-DEC-2006 23:38	1.0	0.001887		12	10			
037	34500003	X	IB			12-DEC-2006 00:02	1.0							
038	34500003	SAMPLE	191286-013	120180	Water	12-DEC-2006 00:26	1.0	0.002	6		10			6:FLA=20962.4
039	34500003	X	IB			12-DEC-2006 00:49	1.0							
040	34500004	X	IB			12-DEC-2006 01:13	1.0							
041	34500004	CCV	M			12-DEC-2006 01:36	1.0	1.0		10		2		
042	34500004	X	CCV			12-DEC-2006 02:00	1.0					2		
043	34500004	X	IB			12-DEC-2006 02:24	1.0							

Stds used: 1=S4232 2=S4231 3=S4230

REPORTING SUMMARY FOR 191290 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
191290-001	Naphthalene	HPLC05	1	12/11/06 17:44
191290-001	Acenaphthylene	HPLC05	1	12/11/06 17:44
191290-001	Acenaphthene	HPLC05	1	12/11/06 17:44
191290-001	Fluorene	HPLC05	1	12/11/06 17:44
191290-001	Phenanthrene	HPLC05	3	12/11/06 17:44
191290-001	Anthracene	HPLC05	3	12/11/06 17:44
191290-001	Fluoranthene	HPLC05	3	12/11/06 17:44
191290-001	Pyrene	HPLC05	3	12/11/06 17:44
191290-001	Benzo(a)anthracene	HPLC05	3	12/11/06 17:44
191290-001	Chrysene	HPLC05	3	12/11/06 17:44
191290-001	Benzo(b)fluoranthene	HPLC05	3	12/11/06 17:44
191290-001	Benzo(k)fluoranthene	HPLC05	3	12/11/06 17:44
191290-001	Benzo(a)pyrene	HPLC05	3	12/11/06 17:44
191290-001	Dibenz(a,h)anthracene	HPLC05	3	12/11/06 17:44
191290-001	Benzo(g,h,i)perylene	HPLC05	3	12/11/06 17:44
191290-001	Indeno(1,2,3-cd)pyrene	HPLC05	3	12/11/06 17:44
191290-001	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 17:44
191290-001	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 17:44
QC367536	Naphthalene	HPLC05	1	12/11/06 11:25
QC367536	Acenaphthylene	HPLC05	1	12/11/06 11:25
QC367536	Acenaphthene	HPLC05	1	12/11/06 11:25
QC367536	Fluorene	HPLC05	1	12/11/06 11:25
QC367536	Phenanthrene	HPLC05	3	12/11/06 11:25
QC367536	Anthracene	HPLC05	3	12/11/06 11:25
QC367536	Fluoranthene	HPLC05	3	12/11/06 11:25
QC367536	Pyrene	HPLC05	3	12/11/06 11:25
QC367536	Benzo(a)anthracene	HPLC05	3	12/11/06 11:25
QC367536	Chrysene	HPLC05	3	12/11/06 11:25
QC367536	Benzo(b)fluoranthene	HPLC05	3	12/11/06 11:25
QC367536	Benzo(k)fluoranthene	HPLC05	3	12/11/06 11:25
QC367536	Benzo(a)pyrene	HPLC05	3	12/11/06 11:25
QC367536	Dibenz(a,h)anthracene	HPLC05	3	12/11/06 11:25
QC367536	Benzo(g,h,i)perylene	HPLC05	3	12/11/06 11:25
QC367536	Indeno(1,2,3-cd)pyrene	HPLC05	3	12/11/06 11:25
QC367536	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 11:25
QC367536	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 11:25
QC367537	Naphthalene	HPLC05	1	12/11/06 11:48
QC367537	Fluorene	HPLC05	1	12/11/06 11:48
QC367537	Pyrene	HPLC05	3	12/11/06 11:48
QC367537	Benzo(a)pyrene	HPLC05	3	12/11/06 11:48
QC367537	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 11:48
QC367537	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 11:48
QC367538	Naphthalene	HPLC05	1	12/11/06 18:55
QC367538	Fluorene	HPLC05	1	12/11/06 18:55
QC367538	Pyrene	HPLC05	3	12/11/06 18:55
QC367538	Benzo(a)pyrene	HPLC05	3	12/11/06 18:55
QC367538	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 18:55
QC367538	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 18:55
QC367539	Naphthalene	HPLC05	1	12/11/06 19:19
QC367539	Fluorene	HPLC05	1	12/11/06 19:19

REPORTING SUMMARY FOR 191290 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC367539	Pyrene	HPLC05	3	12/11/06 19:19
QC367539	Benzo(a)pyrene	HPLC05	3	12/11/06 19:19
QC367539	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 19:19
QC367539	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 19:19
QC367540	Naphthalene	HPLC05	1	12/11/06 23:15
QC367540	Fluorene	HPLC05	1	12/11/06 23:15
QC367540	Pyrene	HPLC05	3	12/11/06 23:15
QC367540	Benzo(a)pyrene	HPLC05	3	12/11/06 23:15
QC367540	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 23:15
QC367540	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 23:15
QC367541	Naphthalene	HPLC05	1	12/11/06 23:38
QC367541	Fluorene	HPLC05	1	12/11/06 23:38
QC367541	Pyrene	HPLC05	3	12/11/06 23:38
QC367541	Benzo(a)pyrene	HPLC05	3	12/11/06 23:38
QC367541	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 23:38
QC367541	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 23:38

Curtis & Tompkins Laboratories

Sample Preparation Summary

11-DEC-2006 14:09

Batch Number : 120180
Date Extracted : 08-DEC-2006
Extracted by : Stephen Wanta
Prep Method : 3520C

Analysis : 8310
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S4962G
Spike #2 ID : S4289B
Spike #3 ID :
SOP Version : 8310w rv6

Sample	Type	Client	Matrix	Init	Units	Final	Prep	Clean	pH	Sp 1	Sp 2	Sp 3	Analyses	Clean	Comments
191286-001		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0	0	8310		
191286-004		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0	0	8310		
191286-007		Treadwell & Rollo	Water	1040	mL	2	0.001923	1	7	.1	0	0	8310		
191286-008		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0	0	8310		
191286-012		Treadwell & Rollo	Water	1010	mL	2	0.001980	1	7	.1	0	0	8310		
191286-013		Treadwell & Rollo	Water	1000	mL	2	0.002000	1	7	.1	0	0	8310		
191290-002		Treadwell & Rollo	Water	1040	mL	2	0.001923	1	7	.1	0	0	8310		
191314-011		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0	0	8310		
191314-012		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0	0	8310		
191314-014		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0	0	8310		
191314-016		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	.1	0	0	8310		
191314-017		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0	0	8310		
191314-018		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0	0	8310		
191314-019		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	.1	0	0	8310		
191317-002		Strategic Engineering & Science	Water	1060	mL	2	0.001887	1	7	.1	0	0	8310		
191329-002		Strategic Engineering & Science	Water	1060	mL	2	0.001887	1	7	.1	0	0	8310		
191331-002		Strategic Engineering & Science	Water	1060	mL	2	0.001887	1	7	.1	0	0	8310		
QC367536	BLANK		Water	1060	mL	2	0.002000	1	7	.1	0	0	8310		
QC367537	LCS		Water	1000	mL	2	0.002000	1	7	.1	1	1	8310		
QC367538	MS		Water	1060	mL	2	0.001887	1	7	.1	1	1	8310		
QC367539	MSD		Water	1060	mL	2	0.001887	1	7	.1	1	1	8310		
QC367540	MS		Water	1060	mL	2	0.001887	1	7	.1	1	1	8310		
QC367541	MSD		Water	1060	mL	2	0.001887	1	7	.1	1	1	8310		

Prep Chemist:

JOM for SMM

Reviewed By:

[Signature]

Date:

12/11/06

Relinquished By:

[Signature]

Received By:

[Signature]

Date:

11 DEC 2006

LIMS Batch No: 120180
 LIMS Analysis: 8310
 Extracted by: JDC SMW
 Date Extracted: 12/8/06

Extraction Method:

☐ EPA 3510c sep. funnel☒ EPA 3520c cont. L/L☐

Page 3

Cleanup Method (if needed):

☐ EPA 3640a GPC☐ EPA 3630c Silica Gel

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
191280-001 B	1060	7	20		
004 E	↓				
007 D	1040				
008 E	1050				
012 AG	1010				
013 M	1000				
191290-001 J	1040				
191314-011 U	1060				NSS
012 S	↓				
014 L	↓				
016 P	↓				
017 G	1050				
018 F	↓				
019 O	1060				NSS
191317-001 E	↓				NSS due 12/8/06
191329-001 G	↓				
191331-001 L	↓	↓			
UB QC367536	1000	NA			
LCS	37	↓			
MS	38	1060	7		191314-011 NO-CTJS SHL
MSD	39	↓			↓
MS	40	↓			191314-019 NO-CTJS SHL
MSD	41	↓			↓

0.1 mL of surrogate solution was added to all samples

1.0 mL of matrix spiking solution was added to all spikes

☒ Samples continuously extracted with about 450 mL of CH_2Cl_2

Extraction Start Time:

Extraction End Time:

☐ Samples were extracted 3 times with 60 mL of CH_2Cl_2

Extracts filtered through baked, CH_2Cl_2 -rinsed powdered Na_2SO_4

Exchanged 2x with Acetonitrile

Concentrated: ☒ to volumes as noted above ☐ to clean-up volume

Clean-up (if necessary): ☐ GPC (see GPC run log) ☐ Silica Gel

Extracts filtered with 0.45 um PTFE syringe filter

Mfg & Lot# / LIMS # / Time Date/ Initials

549626M	12/8/06	
542870		
EM4630S		
1310		
0810	12/9/06	14R
N/A	8/12/06	106
EM4611028		
EM46059		
N/A		
NITATMAN LEBB		

Extraction Chemist James Halen Date 12/8/06

Continued from Page

Continued on Page

Reviewed by James Halen Date 12/11/06

Curtis & Tompkins Laboratories
MDL Summary for EPA 8310 Water 3520C
As of 01/05/07

Analyte	Units	HPLC02 1	HPLC02 2	HPLC02 3	HPLC04 1	HPLC04 2	HPLC04 3	HPLC05 1	HPLC05 2	HPLC05 3
Naphthalene	ug/L	0.16		0.069	0.094		0.035	0.044		0.036
Acenaphthylene	ug/L	0.37	0.29		0.094	0.072		0.077	0.084	
2-Methylnaphthalene	ug/L				0.094			0.089		0.077
Acenaphthene	ug/L	0.36		0.098	0.12		0.073	0.080		0.036
Fluorene	ug/L	0.051		0.054	0.0097		0.038	0.0076		0.0069
Phenanthrene	ug/L	0.030		0.0086	0.0045		0.0080	0.0035		0.0034
Anthracene	ug/L	0.021		0.0077	0.019		0.042	0.018		0.018
Fluoranthene	ug/L	0.13		0.011	0.016		0.019	0.016		0.0085
Pyrene	ug/L	0.066		0.0048	0.036	0.029	0.0052	0.016	0.0062	0.0042
Benzo(a)anthracene	ug/L	0.044		0.0046	0.0093		0.0039	0.010		0.010
Chrysene	ug/L	0.036		0.0059	0.0059		0.011	0.0050		0.0043
Benzo(b)fluoranthene	ug/L	0.032		0.0081	0.011		0.0032	0.0087		0.0074
Benzo(k)fluoranthene	ug/L	0.037		0.0044	0.015		0.0071	0.0059		0.0039
Benzo(a)pyrene	ug/L	0.055		0.0045	0.014		0.0033	0.019		0.018
Dibenz(a,h)anthracene	ug/L	0.12		0.026	0.026		0.015	0.030		0.0080
Benzo(g,h,i)perylene	ug/L	0.066		0.014	0.032		0.013	0.020		0.0079
Indeno(1,2,3-cd)pyrene	ug/L	0.065		0.011	0.0064		0.012	0.013		0.0052
1-Methylnaphthalene (UV)	ug/L	1.2	1.9		1.7	1.8	0.0062	1.7	1.8	
1-Methylnaphthalene (F)	ug/L			0.72						1.8

000000

Metals

Filtrate

**Dissolved Target Analyte List Metals**

Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DW120606B	Batch#:	120324
Lab ID:	191290-001	Sampled:	12/06/06
Matrix:	Filtrate	Received:	12/06/06
Units:	ug/L	Prepared:	12/13/06
Diln Fac:	1.000	Analyzed:	12/13/06

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	ND	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	ND	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	ND	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	ND	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected

RL= Reporting Limit

Batch QC Report
Dissolved Target Analyte List Metals

Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC368135	Batch#:	120324
Matrix:	Water	Prepared:	12/13/06
Units:	ug/L		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	12/14/06
Antimony	ND	1.0	12/13/06
Arsenic	ND	5.0	12/13/06
Barium	ND	10	12/13/06
Beryllium	ND	2.0	12/13/06
Cadmium	ND	1.0	12/13/06
Calcium	ND	500	12/13/06
Chromium	ND	10	12/13/06
Cobalt	ND	10	12/13/06
Copper	ND	1.0	12/14/06
Iron	ND	100	12/13/06
Lead	ND	3.0	12/13/06
Magnesium	ND	500	12/14/06
Manganese	ND	10	12/13/06
Nickel	ND	20	12/13/06
Potassium	ND	500	12/13/06
Selenium	ND	5.0	12/13/06
Silver	ND	1.0	12/13/06
Sodium	ND	500	12/14/06
Thallium	ND	1.0	12/13/06
Vanadium	ND	10	12/13/06
Zinc	ND	20	12/13/06

ND= Not Detected
 RL= Reporting Limit



Curtis & Tompkins, Ltd.

Dissolved Mercury by Cold Vapor AA

Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Sampled:	12/06/06
Field ID:	DW120606B	Received:	12/06/06
Units:	ug/L	Prepared:	12/07/06
Diln Fac:	1.000	Analyzed:	12/07/06
Batch#:	120147		

Type	Lab ID	Matrix	Result	RL
SAMPLE	191290-001	Filtrate	ND	0.20
BLANK	QC367392	Water	ND	0.20

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Dissolved Target Analyte List Metals			
Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Water	Batch#:	120324
Units:	ug/L	Prepared:	12/13/06
Diln Fac:	1.000		

Type: BS Lab ID: QC368136

Analyte	Spiked	Result	%REC	Limits	Analyzed
Aluminum	10,000	10,470	105	80-120	12/14/06
Antimony	100.0	101.5	102	80-120	12/13/06
Arsenic	100.0	97.62	98	80-120	12/13/06
Barium	100.0	101.6	102	80-120	12/13/06
Beryllium	100.0	98.15	98	80-120	12/13/06
Cadmium	100.0	102.4	102	80-120	12/13/06
Calcium	10,000	10,670	107	80-120	12/13/06
Chromium	100.0	99.44	99	80-120	12/13/06
Cobalt	100.0	103.1	103	80-120	12/13/06
Copper	100.0	102.0	102	80-120	12/13/06
Iron	10,000	10,320	103	80-120	12/13/06
Lead	100.0	103.8	104	80-120	12/13/06
Magnesium	10,000	10,470	105	80-120	12/14/06
Manganese	100.0	100.9	101	80-120	12/13/06
Nickel	100.0	100.2	100	80-120	12/13/06
Potassium	10,000	10,870	109	80-120	12/13/06
Selenium	100.0	94.35	94	80-120	12/13/06
Silver	100.0	106.1	106	80-120	12/13/06
Sodium	10,000	10,400	104	80-120	12/14/06
Thallium	50.00	48.88	98	80-120	12/13/06
Vanadium	100.0	101.3	101	80-120	12/13/06
Zinc	100.0	98.96	99	80-120	12/13/06

Type: BSD Lab ID: QC368137

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
Aluminum	10,000	10,540	105	80-120	1	20	12/14/06
Antimony	100.0	105.0	105	80-120	3	20	12/13/06
Arsenic	100.0	99.17	99	80-120	2	20	12/13/06
Barium	100.0	102.9	103	80-120	1	20	12/13/06
Beryllium	100.0	101.0	101	80-120	3	20	12/13/06
Cadmium	100.0	103.2	103	80-120	1	20	12/13/06
Calcium	10,000	10,850	109	80-120	2	20	12/13/06
Chromium	100.0	103.5	104	80-120	4	20	12/13/06
Cobalt	100.0	106.2	106	80-120	3	20	12/13/06
Copper	100.0	104.6	105	80-120	3	20	12/13/06
Iron	10,000	10,530	105	80-120	2	20	12/13/06
Lead	100.0	105.6	106	80-120	2	20	12/13/06
Magnesium	10,000	10,610	106	80-120	1	20	12/14/06
Manganese	100.0	103.5	104	80-120	3	20	12/13/06
Nickel	100.0	103.2	103	80-120	3	20	12/13/06
Potassium	10,000	10,980	110	80-120	1	20	12/13/06
Selenium	100.0	95.78	96	80-120	2	20	12/13/06
Silver	100.0	107.6	108	80-120	1	20	12/13/06
Sodium	10,000	10,670	107	80-120	3	20	12/14/06
Thallium	50.00	50.35	101	80-120	3	20	12/13/06
Vanadium	100.0	105.0	105	80-120	4	20	12/13/06
Zinc	100.0	100.4	100	80-120	1	20	12/13/06

RPD= Relative Percent Difference

Batch QC Report

Dissolved Mercury by Cold Vapor AA

Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	120147
Field ID:	ZZZZZZZZZZ	Sampled:	12/05/06
MSS Lab ID:	191281-001	Received:	12/06/06
Matrix:	Water	Prepared:	12/07/06
Units:	ug/L	Analyzed:	12/07/06
Diln Fac: .	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC367393		5.000	5.060	101	80-120		
BSD	QC367394		5.000	5.000	100	80-120	1	20
MS	QC367396	<0.05753	5.000	5.250	105	75-125		
MSD	QC367397		5.000	5.160	103	75-125	2	20

RPD= Relative Percent Difference



Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF10SP01	Batch#:	120324
MSS Lab ID:	191314-003	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Prepared:	12/13/06

Type: MS Lab ID: QC368138

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln	Fac	Analyzed
Aluminum	90.35	10,000	10,190	101	75-125	1.000		12/14/06
Antimony	0.8661	100.0	107.4	107	75-125	1.000		12/13/06
Arsenic	9.596	100.0	104.7	95	75-125	1.000		12/13/06
Barium	59.90	100.0	162.6	103	75-125	1.000		12/13/06
Beryllium	<0.1228	100.0	97.83	98	75-125	1.000		12/13/06
Cadmium	<0.1659	100.0	97.32	97	75-125	1.000		12/13/06
Calcium	38,800	10,000	45,580	68 *	75-125	10.00		12/14/06
Chromium	1.077	100.0	99.69	99	75-125	1.000		12/13/06
Cobalt	2.988	100.0	104.5	102	75-125	1.000		12/13/06
Copper	3.122	100.0	100.1	97	75-125	1.000		12/13/06
Iron	22,300	10,000	30,390	81	75-125	10.00		12/14/06
Lead	4.778	100.0	108.2	103	75-125	1.000		12/13/06
Magnesium	38,610	10,000	46,750	81	75-125	10.00		12/14/06
Manganese	360.9	100.0	431.2	70 *	75-125	10.00		12/14/06
Nickel	11.26	100.0	106.8	96	75-125	1.000		12/13/06
Potassium	4,339	10,000	14,790	105	75-125	1.000		12/13/06
Selenium	<0.3462	100.0	89.90	90	75-125	1.000		12/13/06
Silver	<0.06797	100.0	101.1	101	75-125	1.000		12/13/06
Sodium	50,270	10,000	59,030 >LR	88 NM	75-125	1.000		12/14/06
Thallium	0.03547	50.00	49.33	99	75-125	1.000		12/13/06
Vanadium	13.30	100.0	114.5	101	75-125	1.000		12/13/06
Zinc	14.57	100.0	106.8	92	75-125	1.000		12/13/06

*= Value outside of QC limits; see narrative

NC= Not Calculated

NM= Not Meaningful: Sample concentration > 4X spike concentration

>LR= Response exceeds instrument's linear range

RPD= Relative Percent Difference



Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF10SP01	Batch#:	120324
MSS Lab ID:	191314-003	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Prepared:	12/13/06

Type: MSD Lab ID: QC368139

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Analyzed
Aluminum	10,000	10,210	101	75-125	0	20	1.000		12/14/06
Antimony	100.0	107.1	106	75-125	0	20	1.000		12/13/06
Arsenic	100.0	106.1	97	75-125	1	20	1.000		12/13/06
Barium	100.0	161.7	102	75-125	1	20	1.000		12/13/06
Beryllium	100.0	97.71	98	75-125	0	20	1.000		12/13/06
Cadmium	100.0	99.53	100	75-125	2	20	1.000		12/13/06
Calcium	10,000	47,370	86	75-125	4	20	10.00		12/14/06
Chromium	100.0	98.31	97	75-125	1	20	1.000		12/13/06
Cobalt	100.0	105.6	103	75-125	1	20	1.000		12/13/06
Copper	100.0	100.9	98	75-125	1	20	1.000		12/13/06
Iron	10,000	31,640	93	75-125	4	20	10.00		12/14/06
Lead	100.0	110.9	106	75-125	2	20	1.000		12/13/06
Magnesium	10,000	47,810	92	75-125	2	20	10.00		12/14/06
Manganese	100.0	444.9	84	75-125	3	20	10.00		12/14/06
Nickel	100.0	107.6	96	75-125	1	20	1.000		12/13/06
Potassium	10,000	15,000	107	75-125	1	20	1.000		12/13/06
Selenium	100.0	90.89	91	75-125	1	20	1.000		12/13/06
Silver	100.0	103.3	103	75-125	2	20	1.000		12/13/06
Sodium	10,000	57,900 >LR	76 NM	75-125	NC	20	1.000		12/14/06
Thallium	50.00	50.57	101	75-125	2	20	1.000		12/13/06
Vanadium	100.0	115.1	102	75-125	1	20	1.000		12/13/06
Zinc	100.0	106.7	92	75-125	0	20	1.000		12/13/06

*= Value outside of QC limits; see narrative

NC= Not Calculated

NM= Not Meaningful: Sample concentration > 4X spike concentration

>LR= Response exceeds instrument's linear range

RPD= Relative Percent Difference

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF10SP01	Units:	ug/L
Type:	Serial Dilution	Batch#:	120324
MSS Lab ID:	191314-003	Sampled:	12/06/06
Lab ID:	QC368140	Received:	12/07/06
Matrix:	Water		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln	Fac	Analyzed
Aluminum	ND	100.0	164.9	125.0	NC	10	5.000		12/14/06
Antimony	ND	1.000	1.550	1.250	NC	10	5.000		12/13/06
Arsenic	9.596	5.000	10.13	5.000	NC	10	5.000		12/13/06
Barium	59.90	10.00	59.83	10.00	0	10	5.000		12/13/06
Beryllium	ND	2.000	ND	2.000	NC	10	5.000		12/13/06
Cadmium	ND	1.000	ND	1.250	NC	10	5.000		12/13/06
Calcium	38,800	500.0	42,610	1,250	10	10	50.00		12/14/06
Chromium	ND	10.00	ND	10.00	NC	10	5.000		12/13/06
Cobalt	ND	10.00	3.145 J	10.00	NC	10	5.000		12/13/06
Copper	3.122	1.000	3.168	1.250	NC	10	5.000		12/13/06
Iron	22,300	250.0	21,620	1,250	3	10	50.00		12/14/06
Lead	4.778	3.000	4.916	3.000	3	10	5.000		12/13/06
Magnesium	38,610	500.0	40,100	1,250	4	10	50.00		12/14/06
Manganese	360.9	10.00	355.4	12.50	2	10	50.00		12/14/06
Nickel	ND	20.00	11.80 J	20.00	5	10	5.000		12/13/06
Potassium	4,339	500.0	4,621	500.0	6	10	5.000		12/13/06
Selenium	ND	5.000	ND	5.000	NC	10	5.000		12/13/06
Silver	ND	1.000	ND	1.250	NC	10	5.000		12/13/06
Sodium	50,270	500.0	44,050	1,250	12 *	10	50.00		12/14/06
Thallium	ND	1.000	ND	1.000	NC	10	5.000		12/13/06
Vanadium	13.30	10.00	13.22	10.00	1	10	5.000		12/13/06
Zinc	ND	20.00	15.84 J	20.00	9	10	5.000		12/13/06

*= Value outside of QC limits; see narrative

J= Estimated value

NC= Not Calculated

ND= Not Detected

RL= Reporting Limit



Batch QC Report

Dissolved Mercury by Cold Vapor AA			
Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	120147
MSS Lab ID:	191281-001	Sampled:	12/05/06
Lab ID:	QC367395	Received:	12/06/06
Matrix:	Water	Analyzed:	12/07/06

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
 Inst : MET05
 Seqnum: 56500483085
 File : 11313085
 IDF : 1.0
 Lab ID: 191314-003
 Matrix: Water
 Batch : 120324
 Time : 13-DEC-2006 21:20
 Cal : 56500483001
 Units : ug/L

Type : PDS
 Inst : MET05
 Seqnum: 56500483089
 File : 11313089
 IDF : 1.0
 Lab ID: QC368141
 Matrix: Water
 Batch : 120324
 Time : 13-DEC-2006 21:42
 Cal : 56500483001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S4326 (100X), S4327 (100X), S4635

Analyte	MSS	Spiked	PDS	%Rec	Limits	Flags
Aluminum	90.35	10000	10700	106	75-125	>c+ b*
Antimony	0.8661	100.0	102.0	101	75-125	u
Arsenic	9.596	100.0	100.1	91	75-125	u
Barium	59.90	100.0	157.0	97	75-125	u
Beryllium	ND	100.0	91.01	91	75-125	u
Cadmium	ND	100.0	92.59	93	75-125	u
Chromium	1.077	100.0	92.74	92	75-125	u
Cobalt	2.988	100.0	100.6	98	75-125	u
Copper	3.122	100.0	96.33	93	75-125	u
Lead	4.778	100.0	101.7	97	75-125	u
Molybdenum	0.3996	100.0	98.16	98	75-125	u
Nickel	11.26	100.0	102.2	91	75-125	u
Potassium	4339	10000	14400	101	75-125	u
Selenium	ND	100.0	85.12	85	75-125	u
Silver	ND	100.0	95.97	96	75-125	u
Thallium	0.03547	50.00	47.84	96	75-125	u
Vanadium	13.30	100.0	109.4	96	75-125	u
Zinc	14.57	100.0	101.8	87	75-125	u

ISTD (ICALBLK 11313004)	ICALBLK Abund	PDS Abund	%Drift
Lithium	831127	665734	-19.90
Scandium	642644	481497	-25.08
Germanium	147548	111905	-24.16
Indium	875996	642230	-26.69
Bismuth	993101	749920	-24.49

MISSING READINGS: CA FE MG MN NA

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
 Inst : MET05
 Seqnum: 56500483085
 File : 11313085
 IDF : 1.0
 Lab ID: 191314-003
 Matrix: Water
 Batch : 120324
 Time : 13-DEC-2006 21:20
 Cal : 56500483001
 Units : ug/L

Type : PDS
 Inst : MET05
 Seqnum: 56501744046
 File : 11410046
 IDF : 1.0
 Lab ID: QC368141
 Matrix: Water
 Batch : 120324
 Time : 14-DEC-2006 14:35
 Cal : 56501744001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S4326 (100X), S4327 (100X), S4635

Analyte	MSS	Spiked	PDS	%Rec	Limits	Flags
Aluminum	90.35	10000	9596	95	75-125	u
Antimony	0.8661	100.0	94.56	94	75-125	
Arsenic	9.596	100.0	96.61	87	75-125	
Barium	59.90	100.0	149.0	89	75-125	
Beryllium	ND	100.0	91.35	91	75-125	
Cadmium	ND	100.0	90.24	90	75-125	
Chromium	1.077	100.0	92.84	92	75-125	
Cobalt	2.988	100.0	91.94	89	75-125	
Copper	3.122	100.0	94.89	92	75-125	
Lead	4.778	100.0	97.30	93	75-125	
Molybdenum	0.3996	100.0	95.77	95	75-125	u
Nickel	11.26	100.0	102.6	91	75-125	
Potassium	4339	10000	13240	89	75-125	
Selenium	ND	100.0	80.83	81	75-125	
Silver	ND	100.0	92.66	93	75-125	
Thallium	0.03547	50.00	45.64	91	75-125	
Vanadium	13.30	100.0	110.9	98	75-125	
Zinc	14.57	100.0	98.20	84	75-125	

ISTD (ICALBLK 11410004)	ICALBLK Abund	PDS Abund	%Drift
Lithium	739106	553847	-25.07
Scandium	529417	404034	-23.68
Germanium	119842	87110	-27.31
Indium	758188	567582	-25.14
Bismuth	901811	672543	-25.42

MISSING READINGS: CA FE MG MN NA

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
 Inst : MET05
 Seqnum: 56501744050
 File : 11410050
 IDF : 10.0
 Lab ID: 191314-003
 Matrix: Water
 Batch : 120324
 Time : 14-DEC-2006 14:57
 Cal : 56501744001
 Units : ug/L

Type : PDS
 Inst : MET05
 Seqnum: 56501744082
 File : 11410082
 IDF : 10.0
 Lab ID: QC368141
 Matrix: Water
 Batch : 120324
 Time : 14-DEC-2006 17:56
 Cal : 56501744001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

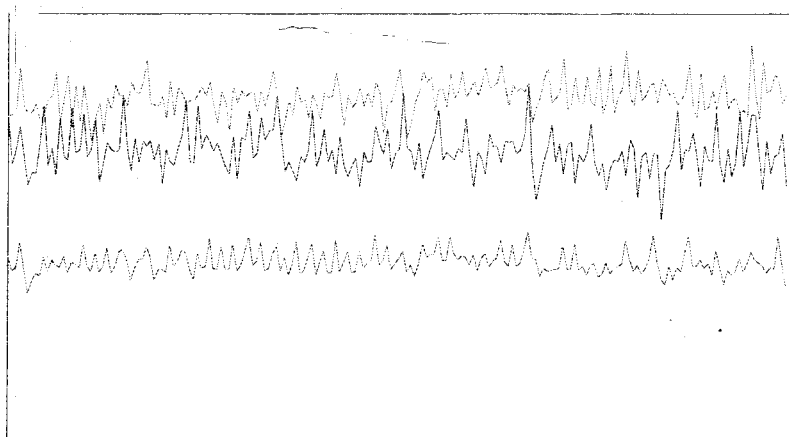
PDS standards: S4326 (100X), S4327 (100X), S4635

Analyte	MSS	Spiked	PDS	%Rec	Limits	Flags
Aluminum	20.13	10000	9782	98	75-125	
Antimony	ND	100.0	87.77	88	75-125	
Arsenic	1.185	100.0	93.02	92	75-125	
Barium	5.217	100.0	97.06	92	75-125	
Beryllium	ND	100.0	92.89	93	75-125	
Cadmium	ND	100.0	93.02	93	75-125	
Calcium	3880	10000	13380	95	75-125	u
Chromium	ND	100.0	89.09	89	75-125	
Cobalt	0.3310	100.0	93.62	93	75-125	
Copper	0.3401	100.0	93.52	93	75-125	
Iron	2230	10000	11740	95	75-125	u
Lead	0.4720	100.0	91.25	91	75-125	
Magnesium	3861	10000	13480	96	75-125	u
Manganese	36.09	100.0	131.0	95	75-125	u
Molybdenum	ND	100.0	90.78	91	75-125	u
Nickel	1.208	100.0	94.24	93	75-125	
Potassium	388.9	10000	9921	95	75-125	
Selenium	0.3837	100.0	92.92	93	75-125	
Silver	ND	100.0	91.54	92	75-125	
Sodium	5027	10000	14650	96	75-125	u
Thallium	ND	50.00	44.27	89	75-125	<c- b*
Vanadium	1.340	100.0	92.45	91	75-125	
Zinc	50.39	100.0	106.1	56*	75-125	

ISTD (ICALBLK 11410004)	ICALBLK Abund	PDS Abund	%Drift
Lithium	739106	623953	-15.58
Scandium	529417	453740	-14.29
Germanium	119842	101999	-14.89
Indium	758188	655544	-13.54
Bismuth	901811	813082	-9.84

Tune Report

Tune File : Autotune.u



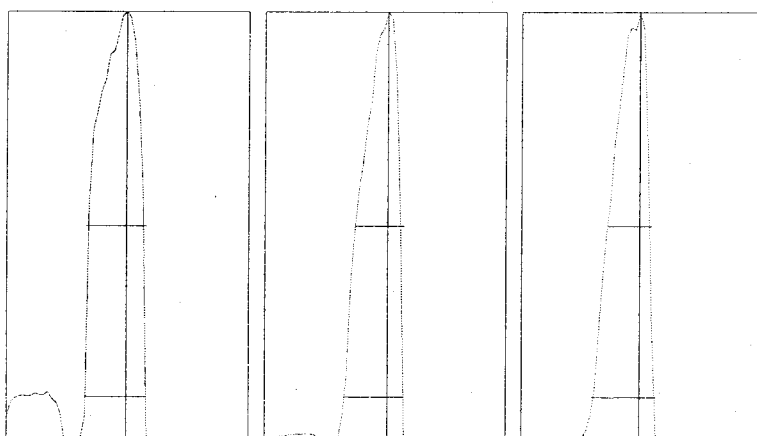
m/z:	7	89	205
Range:	20,000	50,000	20,000
Count:	11,962	17,852	16,248
Mean:	13511.1	20854.4	16083.8
RSD%:	7.49	6.43	4.94
n:	200		

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec

Oxide: 156/140 0.25%
Doubly Charged: 70/140 2.60%

Background:

m/z:	7	89	205
Cps:	23.3	16.0	18.0



m/z:	7	89	205
Height:	13,423	21,406	16,057
Axis:	7.00	89.05	205.00
W-50%:	0.75	0.60	0.55
W-10%:	0.7500	0.7500	0.800

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Tuning Parameters

===Plasma Condition===

RF Power: 1270 W
RF Matching: 1.78 V
Smpl Depth: 7.1 mm
Torch-H: -1.3 mm
Torch-V: 0.5 mm
Carrier Gas: 1.09 L/min
Makeup Gas: 0 L/min
Optional Gas: --- %
PeriPump1: 0.1 rps
PeriPump2: --- rps
S/C Temp: 2 degC

===Ion Lenses===

Extract 1: -200 V
Extract 2: -40 V
Einzel 1,3: -100 V
Einzel 2: -7 V
Omega Bias: -45 V
Omega (+): 4 V
Omega (-): -4 V
QP Focus: 9 V
Plate Bias: 0 V

===Q-Pole Parameters===

AMU Gain: 130
AMU Offset: 125
Axis Gain: 0.9989
Axis Offset: -0.01
QP Bias: 1.6 V

===Detector Parameters===

Discriminator: 9.3 mV
Analog HV: 1810 V
Pulse HV: 1160 V

Temp.p\$\$

P/A Factor Tuning Report

Acquired: Dec 13 2006 01:01 pm

Mass[amu]	Element	P/A Factor
6	Li	0.072792
9	Be	0.082569
23	Na	Sensitivity too high
25	Mg	0.087047
26	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
43	Ca	Sensitivity too low
44	Ca	0.098672
45	Sc	0.099804
51	V	0.094987
52	Cr	0.105159
53	Cr	Sensitivity too low
54	Fe	0.103806
55	Mn	0.107495
57	Fe	0.102488
59	Co	0.109923
60	Ni	0.107444
63	Cu	0.110946
65	Cu	0.109191
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
77	(As)	Sensitivity too low
82	Se	Sensitivity too low
83	(As)	Sensitivity too low
88	(Ca)	Sensitivity too low
89	Y	0.107935
95	Mo	0.105471
98	Mo	0.106155
99	(Mo)	Sensitivity too low
106	(Cd)	Sensitivity too low
108	(Cd)	Sensitivity too low
109	Ag	0.112992
111	Cd	Sensitivity too low
114	Cd	0.111513
115	In	0.113259
118	(In)	Sensitivity too low
121	Sb	0.112173
135	Ba	Sensitivity too low
137	Ba	Sensitivity too low
159	Tb	0.118125
166	Er	Sensitivity too low

Temp.p\$\$

205	Tl	0.120191
206	(Pb)	0.118606
207	(Pb)	0.117997
208	Pb	0.120964
209	Bi	0.120339

===Detector Parameters===

Discriminator: 9.3 mV

Analog HV: 1810 V

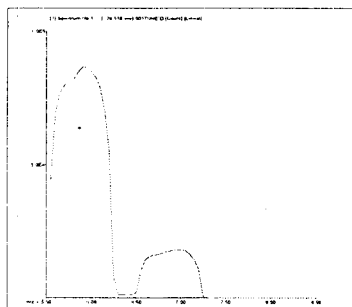
Pulse HV: 1160 V

6020 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\06L1313a.B\001TUNE.D
Date Acquired: Dec 13 2006 01:23 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s4974
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	1.78	5.00	
59 Co	2.36	5.00	
115 In	1.69	5.00	
205 Tl	1.93	5.00	



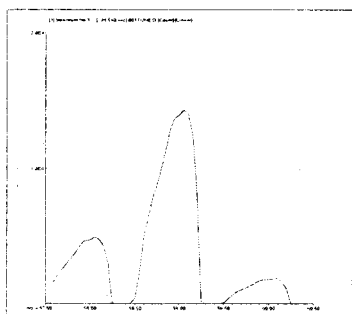
7 Li

Mass Calib.

Actual: 7.00
Required: 6.90 - 7.10
Flag:

Peak Width

Actual: 0.65
Required: 0.90
Flag:



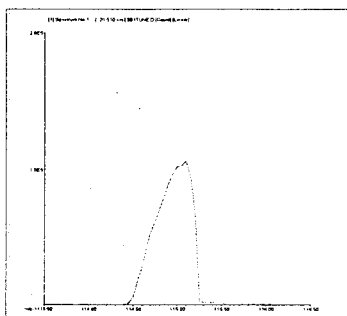
59 Co

Mass Calib.

Actual: 59.05
Required: 58.90 - 59.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



115 In

Mass Calib.

Actual: 115.10

Required: 114.90 - 115.10

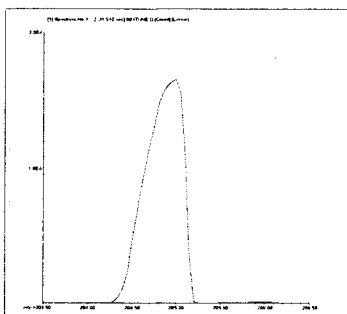
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



205 Tl

Mass Calib.

Actual: 205.00

Required: 204.90 - 205.10

Flag:

Peak Width

Actual: 0.55

Required: 0.90

Flag:

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET05
 Calnum : 56500483001
 Units : ug/L

Date : 13-DEC-2006 13:40
 X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Strs
L1	11313005	56500483005	CS1	13-DEC-2006 13:45	S4978
L2	11313006	56500483006	CS2	13-DEC-2006 13:51	S4979
L3	11313007	56500483007	CS3	13-DEC-2006 13:56	S4980
L4	11313008	56500483008	CS4	13-DEC-2006 14:02	S4981
L5	11313009	56500483009	CS5	13-DEC-2006 14:07	S4975
L6	11313010	56500483010	CS6	13-DEC-2006 14:13	S4976

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ²	*RSD	Mmr ²	F19
Aluminum	0.8439	0.7931	0.7370	0.6572	0.6875	0.6698	BLNK	-4.0605	1.48558		0.7314	1.000	0.995		
Antimony	0.2929	0.2700	0.2599	0.2516	0.2584	0.2593	BLNK	-0.0500	3.86061		0.2654	1.000	0.995		
Arsenic		0.6673	0.5360	0.4995	0.4910	0.4915	BLNK	-0.1111	2.03644		0.5371	1.000	0.995		
Barium	0.1386	0.1060	0.1087	0.0954	0.0998	0.0985	BLNK	-0.0757	10.1286		0.1079	1.000	0.995		
Beryllium	0.2007	0.1806	0.1862	0.1832	0.1850	0.1805	BLNK	-0.0167	5.51350		0.1860	1.000	0.995		
Cadmium	0.6286	0.5834	0.5602	0.5192	0.5119	0.5064	BLNK	-0.0601	1.97108		0.5516	1.000	0.995		
Calcium	0.0486	0.0333	0.0270	0.0197	0.0192	0.0185	BLNK	-36.789	53.7210		0.0277	1.000	0.995		
Chromium	38.243	20.657	12.308	4.5456	3.7648	3.6210	BLNK	-2.3134	0.27778		13.856	1.000	0.995		
Cobalt	4.9262	4.6353	4.7866	4.4483	4.6206	4.4073	BLNK	-0.0341	0.22477		4.6374	0.999	0.995		
Copper	3.6986	2.3862	1.9167	1.3043	1.2239	1.2026	BLNK	-0.4731	0.83090		1.9554	1.000	0.995		
Iron	0.1591	0.1258	0.1134	0.0992	0.0933	0.0890	BLNK	-18.445	11.1415		0.1133	0.999	0.995		
Lead	1.2795	1.2005	1.1323	1.0663	1.1519	1.1428	BLNK	-0.0484	0.87405		1.1622	1.000	0.995		
Magnesium	0.1074	0.1028	0.1050	0.0950	0.0939	0.0909	BLNK	-2.1506	10.9336		0.0992	1.000	0.995		
Manganese		5.4323	5.0067	4.6409	4.6495	4.4973	BLNK	-0.1104	0.22100		4.8453	1.000	0.995		
Molybdenum	1.2183	1.1155	1.0711	1.0131	1.0281	1.0418	BLNK	-0.0743	0.96290		1.0813	1.000	0.995		
Nickel	3.0783	1.8442	1.5410	1.0588	1.0090	0.9810	BLNK	-0.4183	1.01605		1.5854	1.000	0.995		
Potassium	2.1120	1.3307	0.9707	0.6035	0.5936	0.5723	BLNK	-64.535	1.74116		1.0305	1.000	0.995		
Selenium		0.0406	0.0206	0.0406	0.0405	0.0397	BLNK	0.22065	25.0627		0.0364	1.000	0.995		
Silver	2.8712	2.7544	2.6725	2.5803	2.5566	2.4987	BLNK	-0.0327	0.39882		2.6556	1.000	0.995		
Sodium		1.6895	1.3486	0.9434	0.9218	0.8708	BLNK	-43.976	1.13801		1.1548	0.999	0.995		
Thallium	1.1786	0.9822	0.8682	0.8002	0.8857	0.8902	BLNK	-0.0572	1.12546		0.9342	1.000	0.995		
Vanadium	6.9311	5.8096	4.8252	3.7658	3.5861	3.5378	BLNK	-0.2505	0.28229		4.7426	1.000	0.995		
Zinc	6.9161	3.3562	2.2408	0.8125	0.6458	0.6199	BLNK	-2.4135	1.62263		2.4319	1.000	0.995		

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=AX+ [blank]

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06L1313a.B\004CAL
Date Acquired: Dec 13 2006 01:40 pm
Operator:
Sample Name: std-blank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Dec 11 2006 08:39 am
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	831126.81 A	25460.00	3.06
9 Be	50.00 P	17.64	35.28
23 Na	496555.59 P	4007.00	0.81
26 Mg	2525.56 P	240.00	9.50
27 Al	35101.11 P	2338.00	6.66
39 K	476298.91 P	934.20	0.20
44 Ca	8799.30 P	114.70	1.30
45 Sc	642644.38 P	10210.00	1.59
51 V	2643.72 P	2158.00	81.63
52 Cr	24572.22 P	357.90	1.46
55 Mn	1473.33 P	44.10	2.99
57 Fe	4884.44 P	68.66	1.41
59 Co	447.78 P	48.57	10.85
60 Ni	1215.56 P	81.94	6.74
65 Cu	1679.99 P	48.07	2.86
66 Zn	4387.78 P	73.81	1.68
72 Ge	147547.59 P	2661.00	1.80
75 As	161.99 P	125.80	77.66
82 Se	-26.22 P	23.00	87.71
95 Mo	227.78 P	25.24	11.08
109 Ag	242.22 P	16.44	6.79
111 Cd	90.15 P	16.36	18.15
115 In	875996.19 M	14520.00	1.66
121 Sb	226.67 P	6.67	2.94
137 Ba	131.11 P	24.11	18.39
205 Tl	1008.89 P	28.35	2.81
208 Pb	1100.00 P	47.26	4.30
209 Bi	993101.31 A	4383.00	0.44

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1313a.B\005CALI.D\005CALI.D#
 Date Acquired: Dec 13 2006 01:45 pm
 Operator:
 Sample Name: cs1,s4978
 Misc Info:
 Vial Number: 1102
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 13 2006 01:41 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	805747.50 A	38820.00	4.82
9 Be	808.89 P	59.75	7.39
23 Na	783565.19 A	3360.00	0.43
26 Mg	33493.33 P	492.40	1.47
27 Al	263134.41 P	2583.00	0.98
39 K	658561.13 P	5152.00	0.78
44 Ca	15166.65 P	209.40	1.38
45 Sc	623650.00 P	1492.00	0.24
51 V	5053.85 P	1926.00	38.11
52 Cr	27867.78 P	369.60	1.33
55 Mn	4741.11 P	92.64	1.95
57 Fe	11596.67 P	209.50	1.81
59 Co	3590.00 P	97.01	2.70
60 Ni	2243.33 P	78.81	3.51
65 Cu	2695.41 P	107.50	3.99
66 Zn	5040.00 P	195.50	3.88
72 Ge	145744.20 P	430.60	0.30
75 As	217.96 P	200.60	92.04
82 Se	-52.44 P	50.00	95.34
95 Mo	887.78 P	70.11	7.90
109 Ag	2092.22 P	67.36	3.22
111 Cd	458.14 P	51.93	11.34
115 In	853568.63 M	7122.00	0.83
121 Sb	1250.00 P	8.82	0.71
137 Ba	591.11 P	71.83	12.15
205 Tl	2806.67 P	89.69	3.20
208 Pb	6094.44 P	157.50	2.58
209 Bi	952568.00 A	11480.00	1.21

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	805747.44	4.82	831126.81	96.9	80 - 120	

C:\ICPCHEM\1\DATA\06L1313a.B\005CALI.D\005CALI.D#

45 Sc	623650.00	0.24	642644.38	97.0	80 -	120
72 Ge	145744.22	0.30	147547.55	98.8	80 -	120
115 In	853568.56	0.83	875996.19	97.4	80 -	120
209 Bi	952568.00	1.21	993101.31	95.9	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1313a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1313a.B\006CALI.D\006CALI.D#
 Date Acquired: Dec 13 2006 01:51 pm
 Operator:
 Sample Name: cs2,s4979
 Misc Info:
 Vial Number: 1103
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 13 2006 01:47 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	827416.00 A	14190.00	1.72
9 Be	1493.33 P	80.00	5.36
23 Na	1069157.00 A	13730.00	1.28
26 Mg	65051.11 P	2571.00	3.95
27 Al	501824.41 P	21820.00	4.35
39 K	842108.13 A	9847.00	1.17
44 Ca	21093.14 P	225.20	1.07
45 Sc	632901.13 P	5609.00	0.89
51 V	8588.98 P	3004.00	34.98
52 Cr	30554.44 P	191.80	0.63
55 Mn	8035.56 P	248.90	3.10
57 Fe	18602.22 P	420.60	2.26
59 Co	6856.67 P	144.40	2.11
60 Ni	2727.78 P	140.10	5.14
65 Cu	3529.72 P	40.41	1.14
66 Zn	4964.44 P	45.99	0.93
72 Ge	147917.59 P	338.50	0.23
75 As	986.73 P	314.40	31.86
82 Se	60.00 P	86.28	143.80
95 Mo	1650.00 P	128.10	7.76
109 Ag	4074.44 P	170.20	4.18
111 Cd	862.93 P	52.44	6.08
115 In	868735.50 P	10780.00	1.24
121 Sb	2344.44 P	138.90	5.92
137 Ba	920.00 P	123.40	13.41
205 Tl	4680.00 P	144.20	3.08
208 Pb	11440.00 P	465.20	4.07
209 Bi	952798.88 A	9824.00	1.03

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	827415.94	1.72	831126.81	99.6	80 - 120	

C:\ICPCHEM\1\DATA\06L1313a.B\006CALI.D\006CALI.D#

45	Sc	632901.06	0.89	642644.38	98.5	80 -	120
72	Ge	147917.55	0.23	147547.55	100.3	80 -	120
115	In	868735.50	1.24	875996.19	99.2	80 -	120
209	Bi	952798.94	1.03	993101.31	95.9	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1313a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass

ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1313a.B\007CALI.D\007CALI.D#
 Date Acquired: Dec 13 2006 01:56 pm
 Operator:
 Sample Name: cs3,s4980
 Misc Info:
 Vial Number: 1104
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 13 2006 01:52 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	829040.00 A	20330.00	2.45
9 Be	3085.56 P	37.17	1.20
23 Na	1714821.00 A	16020.00	0.93
26 Mg	133452.20 P	1428.00	1.07
27 Al	936894.31 A	15090.00	1.61
39 K	1234495.00 A	21170.00	1.71
44 Ca	34362.42 P	223.30	0.65
45 Sc	636028.88 P	17230.00	2.71
51 V	14375.83 P	881.80	6.13
52 Cr	36655.56 P	310.10	0.85
55 Mn	14908.89 P	130.00	0.87
57 Fe	33778.89 P	301.90	0.89
59 Co	14254.44 P	50.15	0.35
60 Ni	4588.89 P	105.20	2.29
65 Cu	5707.21 P	109.10	1.91
66 Zn	6674.44 P	120.80	1.81
72 Ge	148945.80 P	3038.00	2.04
75 As	1595.33 P	160.80	10.08
82 Se	61.33 P	21.95	35.79
95 Mo	3188.89 P	73.36	2.30
109 Ag	7958.89 P	53.16	0.67
111 Cd	1669.45 P	81.59	4.89
115 In	878062.88 M	9208.00	1.05
121 Sb	4563.33 P	87.37	1.91
137 Ba	1908.89 P	49.14	2.57
205 Tl	8577.78 P	244.10	2.85
208 Pb	22368.89 P	481.20	2.15
209 Bi	987991.81 A	27410.00	2.77

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	829040.00	2.45	831126.81	99.7	80 - 120	

C:\ICPCHEM\1\DATA\06L1313a.B\007CALI.D\007CALI.D#

45	Sc	636028.88	2.71	642644.38	99.0	80 -	120
72	Ge	148945.78	2.04	147547.55	100.9	80 -	120
115	In	878062.88	1.05	875996.19	100.2	80 -	120
209	Bi	987991.81	2.77	993101.31	99.5	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1313a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1313a.B\008CALI.D\008CALI.D#
 Date Acquired: Dec 13 2006 02:02 pm
 Operator:
 Sample Name: cs4,s4981
 Misc Info:
 Vial Number: 1105
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 13 2006 01:58 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	808657.50 A	13110.00	1.62
9 Be	29626.67 P	525.40	1.77
23 Na	11988870.00 A	300700.00	2.51
26 Mg	1207465.00 A	49370.00	4.09
27 Al	8353126.00 A	315700.00	3.78
39 K	7668820.00 A	262700.00	3.43
44 Ca	250280.09 P	5688.00	2.27
45 Sc	635326.63 P	10200.00	1.61
51 V	111134.00 P	2471.00	2.22
52 Cr	134147.80 P	1468.00	1.09
55 Mn	136960.00 P	1398.00	1.02
57 Fe	292875.50 P	6062.00	2.07
59 Co	131275.59 P	849.90	0.65
60 Ni	31246.67 P	418.70	1.34
65 Cu	38492.52 P	706.20	1.83
66 Zn	23980.00 P	449.50	1.87
72 Ge	147556.20 P	611.10	0.41
75 As	14741.66 P	527.80	3.58
82 Se	1198.44 P	43.36	3.62
95 Mo	29896.67 P	508.60	1.70
109 Ag	76153.33 P	1839.00	2.41
111 Cd	15321.11 P	49.11	0.32
115 In	875422.50 M	9835.00	1.12
121 Sb	44043.33 P	483.60	1.10
137 Ba	16708.89 P	276.00	1.65
205 Tl	77848.88 P	1402.00	1.80
208 Pb	207473.30 P	3129.00	1.51
209 Bi	972898.19 A	2821.00	0.29

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	808657.50	1.62	831126.81	97.3	80 - 120	

C:\ICPCHEM\1\DATA\06L1313a.B\008CALI.D\008CALI.D#

45	Sc	635326.63	1.61	642644.38	98.9	80 -	120
72	Ge	147556.22	0.41	147547.55	100.0	80 -	120
115	In	875422.44	1.12	875996.19	99.9	80 -	120
209	Bi	972898.19	0.29	993101.31	98.0	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1313a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1313a.B\009CALI.D\009CALI.D#
 Date Acquired: Dec 13 2006 02:07 pm
 Operator:
 Sample Name: cs5,s4975
 Misc Info:
 Vial Number: 1106
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 13 2006 02:03 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	776673.38 A	18410.00	2.37
9 Be	287275.50 P	785.30	0.27
23 Na	112712500.00 A	347800.00	0.31
26 Mg	11483460.00 A	390700.00	3.40
27 Al	84064632.00 A	1946000.00	2.31
39 K	72579032.00 A	2172000.00	2.99
44 Ca	2343959.00 A	15140.00	0.65
45 Sc	611393.31 P	6139.00	1.00
51 V	1028426.00 A	29250.00	2.84
52 Cr	1079645.00 A	27840.00	2.58
55 Mn	1333207.00 A	36510.00	2.74
57 Fe	2675137.00 A	56650.00	2.12
59 Co	1324873.00 A	12480.00	0.94
60 Ni	289323.31 P	3739.00	1.29
65 Cu	350920.41 P	2293.00	0.65
66 Zn	185157.80 P	2727.00	1.47
72 Ge	143371.30 P	1982.00	1.38
75 As	140806.50 P	3127.00	2.22
82 Se	11600.44 P	274.70	2.37
95 Mo	294824.41 P	6762.00	2.29
109 Ag	733124.38 P	14720.00	2.01
111 Cd	146781.41 P	3880.00	2.64
115 In	815014.63 A	5906.00	0.72
121 Sb	421242.19 P	4660.00	1.11
137 Ba	162701.09 P	5436.00	3.34
205 Tl	755403.31 P	6873.00	0.91
208 Pb	1964741.00 A	34830.00	1.77
209 Bi	852964.31 M	8859.00	1.04

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	776673.38	2.37	831126.81	93.4	80 - 120	

C:\ICPCHEM\1\DATA\06L1313a.B\009CALI.D\009CALI.D#

45 Sc	611393.31	1.00	642644.38	95.1	80 -	120
72 Ge	143371.33	1.38	147547.55	97.2	80 -	120
115 In	815014.56	0.72	875996.19	93.0	80 -	120
209 Bi	852964.31	1.04	993101.31	85.9	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1313a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**

ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1313a.B\010CALI.D\010CALI.D#
 Date Acquired: Dec 13 2006 02:13 pm
 Operator:
 Sample Name: cs6,s4976
 Misc Info:
 Vial Number: 1107
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 13 2006 02:09 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	771036.69 A	8795.00	1.14
9 Be	556655.63 P	18700.00	3.36
23 Na	219169100.00 A	7872000.00	3.59
26 Mg	22871480.00 A	303000.00	1.32
27 Al	168640300.00 A	1145000.00	0.68
39 K	144088500.00 A	1153000.00	0.80
44 Ca	4665029.00 A	76100.00	1.63
45 Sc	629501.13 P	8282.00	1.32
51 V	2014791.00 A	27040.00	1.34
52 Cr	2062189.00 A	33660.00	1.63
55 Mn	2561211.00 A	19560.00	0.76
57 Fe	5067042.00 A	20180.00	0.40
59 Co	2509873.00 A	32170.00	1.28
60 Ni	558660.00 P	4872.00	0.87
65 Cu	684910.50 P	18560.00	2.71
66 Zn	353075.50 P	7578.00	2.15
72 Ge	142375.30 P	681.00	0.48
75 As	279884.91 P	416.30	0.15
82 Se	22604.67 P	320.80	1.42
95 Mo	593301.13 P	3224.00	0.54
109 Ag	1422942.00 A	19310.00	1.36
111 Cd	288390.41 P	404.90	0.14
115 In	791431.63 A	10180.00	1.29
121 Sb	820827.69 P	8759.00	1.07
137 Ba	311883.31 P	2488.00	0.80
205 Tl	1460892.00 A	19250.00	1.32
208 Pb	3751318.00 A	58340.00	1.56
209 Bi	820716.63 P	16330.00	1.99

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	771036.69	1.14	831126.81	92.8	80 - 120	

C:\ICPCHEM\1\DATA\06L1313a.B\010CALI.D\010CALI.D#

45	Sc	629501.06	1.32	642644.38	98.0	80 -	120
72	Ge	142375.33	0.48	147547.55	96.5	80 -	120
115	In	791431.56	1.29	875996.19	90.3	80 -	120
209	Bi	820716.63	1.99	993101.31	82.6	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1313a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET05
 Seqnum : 56500483012
 Cal : 56500483001
 Standards: S4982

File : 11313012
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 14:24

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	0.7314	0.6807	10000	10110	ug/L	1	10	
Antimony	0.2654	0.2568	100.0	99.08	ug/L	-1	10	
Arsenic	0.5371	0.4879	100.0	99.25	ug/L	-1	10	
Barium	0.1079	0.0998	100.0	101.0	ug/L	1	10	
Beryllium	0.1860	0.1799	100.0	99.14	ug/L	-1	10	
Cadmium	0.5516	0.5106	100.0	100.6	ug/L	1	10	
Calcium	0.0277	0.0186	10000	9929	ug/L	-1	10	
Chromium	13.856	3.7576	100.0	102.1	ug/L	2	10	
Cobalt	4.6374	4.5633	100.0	102.5	ug/L	3	10	
Copper	1.9554	1.2406	100.0	102.6	ug/L	3	10	
Iron	0.1133	0.0930	10000	10340	ug/L	3	10	
Lead	1.1622	1.1134	100.0	97.27	ug/L	-3	10	
Magnesium	0.0992	0.0933	10000	10200	ug/L	2	10	
Manganese	4.8453	4.6816	100.0	103.4	ug/L	3	10	
Molybdenum	1.0813	1.0343	100.0	99.52	ug/L	0	10	
Nickel	1.5854	1.0030	100.0	101.5	ug/L	2	10	
Potassium	1.0305	0.5831	10000	10090	ug/L	1	10	
Selenium	0.0364	0.0408	100.0	102.6	ug/L	3	10	
Silver	2.6556	2.6079	100.0	103.9	ug/L	4	10	
Sodium	1.1548	0.9078	10000	10290	ug/L	3	10	
Thallium	0.9342	0.8383	50.00	47.11	ug/L	-6	10	
Vanadium	4.7426	3.6200	100.0	101.9	ug/L	2	10	
Zinc	2.4319	0.6567	100.0	104.1	ug/L	4	10	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	816474	-1.76
Scandium	642644	650250	1.18
Germanium	147548	148536	0.67
Indium	875996	844361	-3.61
Bismuth	993101	925412	-6.82

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56500483042 File : 11313042
 Cal : 56500483001 Caldate: 13-DEC-2006
 Standards: S4983, S4635

IDF : 1.0
 Time : 13-DEC-2006 17:11

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.7314	0.7202	10000	10700	ug/L	7	10	
Antimony	0.2654	0.2608	100.0	100.6	ug/L	1	10	
Arsenic	0.5371	0.4852	100.0	98.70	ug/L	-1	10	
Barium	0.1079	0.1019	100.0	103.2	ug/L	3	10	
Beryllium	0.1860	0.1809	100.0	99.73	ug/L	0	10	
Cadmium	0.5516	0.5130	100.0	101.1	ug/L	1	10	
Calcium	0.0277	0.0195	10000	10450	ug/L	5	10	
Chromium	13.856	3.6775	100.0	99.84	ug/L	0	10	
Cobalt	4.6374	4.5743	100.0	102.8	ug/L	3	10	
Copper	1.9554	1.2340	100.0	102.1	ug/L	2	10	
Iron	0.1133	0.0923	10000	10270	ug/L	3	10	
Lead	1.1622	1.1531	100.0	100.7	ug/L	1	10	
Magnesium	0.0992	0.1001	10000	10940	ug/L	9	10	
Manganese	4.8453	4.6205	100.0	102.0	ug/L	2	10	
Molybdenum	1.0813	1.0301	100.0	99.12	ug/L	-1	10	
Nickel	1.5854	0.9910	100.0	100.3	ug/L	0	10	
Potassium	1.0305	0.5990	10000	10360	ug/L	4	10	
Selenium	0.0364	0.0406	100.0	102.1	ug/L	2	10	
Silver	2.6556	2.5586	100.0	101.9	ug/L	2	10	
Sodium	1.1548	0.9793	10000	11100	ug/L	11	10	c+ ***
Thallium	0.9342	0.8688	50.00	48.83	ug/L	-2	10	
Vanadium	4.7426	3.5786	100.0	100.8	ug/L	1	10	
Zinc	2.4319	0.6623	100.0	105.1	ug/L	5	10	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	811120	-2.41
Scandium	642644	598711	-6.84
Germanium	147548	143932	-2.45
Indium	875996	819929	-6.40
Bismuth	993101	957921	-3.54

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56500483063
 Cal : 56500483001
 Standards: S4983, S4635

File : 11313063
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 19:19

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.7314	0.7259	10000	10780	ug/L	8	10	
Antimony	0.2654	0.2572	100.0	99.23	ug/L	-1	10	
Arsenic	0.5371	0.4822	100.0	98.09	ug/L	-2	10	
Barium	0.1079	0.0997	100.0	101.0	ug/L	1	10	
Beryllium	0.1860	0.1771	100.0	97.65	ug/L	-2	10	
Cadmium	0.5516	0.5090	100.0	100.3	ug/L	0	10	
Calcium	0.0277	0.0191	10000	10220	ug/L	2	10	
Chromium	13.856	3.6086	100.0	97.93	ug/L	-2	10	
Cobalt	4.6374	4.4952	100.0	101.0	ug/L	1	10	
Copper	1.9554	1.2023	100.0	99.43	ug/L	-1	10	
Iron	0.1133	0.0914	10000	10170	ug/L	2	10	
Lead	1.1622	1.1619	100.0	101.5	ug/L	2	10	
Magnesium	0.0992	0.1000	10000	10930	ug/L	9	10	
Manganese	4.8453	4.5278	100.0	99.96	ug/L	0	10	
Molybdenum	1.0813	1.0196	100.0	98.10	ug/L	-2	10	
Nickel	1.5854	0.9711	100.0	98.25	ug/L	-2	10	
Potassium	1.0305	0.5979	10000	10350	ug/L	4	10	
Selenium	0.0364	0.0401	100.0	100.8	ug/L	1	10	
Silver	2.6556	2.5360	100.0	101.0	ug/L	1	10	
Sodium	1.1548	0.9965	10000	11300	ug/L	13	10	c+ ***
Thallium	0.9342	0.8652	50.00	48.63	ug/L	-3	10	
Vanadium	4.7426	3.5437	100.0	99.79	ug/L	0	10	
Zinc	2.4319	0.6427	100.0	101.9	ug/L	2	10	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	782051	-5.90
Scandium	642644	575392	-10.46
Germanium	147548	137481	-6.82
Indium	875996	792053	-9.58
Bismuth	993101	942186	-5.13

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56500483072
 Cal : 56500483001
 Standards: S4983, S4635

File : 11313072
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 20:09

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.7314	0.7309	10000	10850	ug/L	8	10	
Antimony	0.2654	0.2732	100.0	105.4	ug/L	5	10	
Arsenic	0.5371	0.4882	100.0	99.31	ug/L	-1	10	
Barium	0.1079	0.0986	100.0	99.75	ug/L	0	10	
Beryllium	0.1860	0.1788	100.0	98.55	ug/L	-1	10	
Cadmium	0.5516	0.5120	100.0	100.9	ug/L	1	10	
Calcium	0.0277	0.0191	10000	10210	ug/L	2	10	
Chromium	13.856	3.5770	100.0	97.05	ug/L	-3	10	
Cobalt	4.6374	4.4289	100.0	99.51	ug/L	0	10	
Copper	1.9554	1.1784	100.0	97.44	ug/L	-3	10	
Iron	0.1133	0.0910	10000	10120	ug/L	1	10	
Lead	1.1622	1.1565	100.0	101.0	ug/L	1	10	
Magnesium	0.0992	0.1010	10000	11040	ug/L	10	10	
Manganese	4.8453	4.4678	100.0	98.63	ug/L	-1	10	
Molybdenum	1.0813	1.0109	100.0	97.26	ug/L	-3	10	
Nickel	1.5854	0.9537	100.0	96.48	ug/L	-4	10	
Potassium	1.0305	0.5947	10000	10290	ug/L	3	10	
Selenium	0.0364	0.0401	100.0	100.8	ug/L	1	10	
Silver	2.6556	2.5597	100.0	102.0	ug/L	2	10	
Sodium	1.1548	0.9783	10000	11090	ug/L	11	10	c+ ***
Thallium	0.9342	0.8299	50.00	46.64	ug/L	-7	10	
Vanadium	4.7426	3.5015	100.0	98.59	ug/L	-1	10	
Zinc	2.4319	0.6363	100.0	100.8	ug/L	1	10	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	754397	-9.23
Scandium	642644	547796	-14.76
Germanium	147548	131874	-10.62
Indium	875996	756761	-13.61
Bismuth	993101	915119	-7.85

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56500483093
 Cal : 56500483001
 Standards: S4983, S4635

File : 11313093
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 22:04

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.7314	0.7461	10000	11080	ug/L	11	10	c+ ***
Antimony	0.2654	0.2739	100.0	105.7	ug/L	6	10	
Arsenic	0.5371	0.4876	100.0	99.19	ug/L	-1	10	
Barium	0.1079	0.0995	100.0	100.7	ug/L	1	10	
Beryllium	0.1860	0.1749	100.0	96.44	ug/L	-4	10	
Cadmium	0.5516	0.5060	100.0	99.68	ug/L	0	10	
Calcium	0.0277	0.0192	10000	10280	ug/L	3	10	
Chromium	13.856	3.6231	100.0	98.33	ug/L	-2	10	
Cobalt	4.6374	4.5007	100.0	101.1	ug/L	1	10	
Copper	1.9554	1.1853	100.0	98.01	ug/L	-2	10	
Iron	0.1133	0.0916	10000	10190	ug/L	2	10	
Lead	1.1622	1.1563	100.0	101.0	ug/L	1	10	
Magnesium	0.0992	0.1016	10000	11100	ug/L	11	10	c+ ***
Manganese	4.8453	4.5502	100.0	100.4	ug/L	0	10	
Molybdenum	1.0813	1.0064	100.0	96.83	ug/L	-3	10	
Nickel	1.5854	0.9656	100.0	97.69	ug/L	-2	10	
Potassium	1.0305	0.5978	10000	10340	ug/L	3	10	
Selenium	0.0364	0.0395	100.0	99.24	ug/L	-1	10	
Silver	2.6556	2.5509	100.0	101.6	ug/L	2	10	
Sodium	1.1548	0.9796	10000	11100	ug/L	11	10	c+ ***
Thallium	0.9342	0.8330	50.00	46.82	ug/L	-6	10	
Vanadium	4.7426	3.5022	100.0	98.61	ug/L	-1	10	
Zinc	2.4319	0.6466	100.0	102.5	ug/L	3	10	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	776821	-6.53
Scandium	642644	563240	-12.36
Germanium	147548	136072	-7.78
Indium	875996	783060	-10.61
Bismuth	993101	958980	-3.44

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56500483110
 Cal : 56500483001
 Standards: S4983, S4635

File : 11313110
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 23:39

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.7314	0.7548	10000	11210	ug/L	12	10	c+ ***
Antimony	0.2654	0.2678	100.0	103.3	ug/L	3	10	
Arsenic	0.5371	0.4866	100.0	98.99	ug/L	-1	10	
Barium	0.1079	0.0960	100.0	97.20	ug/L	-3	10	
Beryllium	0.1860	0.1724	100.0	95.06	ug/L	-5	10	
Cadmium	0.5516	0.5120	100.0	100.9	ug/L	1	10	
Calcium	0.0277	0.0192	10000	10270	ug/L	3	10	
Chromium	13.856	3.5124	100.0	95.25	ug/L	-5	10	
Cobalt	4.6374	4.3907	100.0	98.65	ug/L	-1	10	
Copper	1.9554	1.1651	100.0	96.33	ug/L	-4	10	
Iron	0.1133	0.0885	10000	9844	ug/L	-2	10	
Lead	1.1622	1.1461	100.0	100.1	ug/L	0	10	
Magnesium	0.0992	0.1024	10000	11200	ug/L	12	10	c+ ***
Manganese	4.8453	4.3524	100.0	96.08	ug/L	-4	10	
Molybdenum	1.0813	1.0108	100.0	97.25	ug/L	-3	10	
Nickel	1.5854	0.9453	100.0	95.63	ug/L	-4	10	
Potassium	1.0305	0.6083	10000	10530	ug/L	5	10	
Selenium	0.0364	0.0399	100.0	100.2	ug/L	0	10	
Silver	2.6556	2.5594	100.0	101.9	ug/L	2	10	
Sodium	1.1548	0.9710	10000	11010	ug/L	10	10	
Thallium	0.9342	0.8203	50.00	46.10	ug/L	-8	10	
Vanadium	4.7426	3.4396	100.0	96.85	ug/L	-3	10	
Zinc	2.4319	0.6267	100.0	99.27	ug/L	-1	10	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	769811	-7.38
Scandium	642644	541174	-15.79
Germanium	147548	129631	-12.14
Indium	875996	756372	-13.66
Bismuth	993101	926582	-6.70

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56500483118
 Cal : 56500483001
 Standards: S4983, S4635

File : 11313118
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 00:23

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.7314	0.7505	10000	11140	ug/L	11	10	c+ ***
Antimony	0.2654	0.2665	100.0	102.8	ug/L	3	10	
Arsenic	0.5371	0.4921	100.0	100.1	ug/L	0	10	
Barium	0.1079	0.0954	100.0	96.56	ug/L	-3	10	
Beryllium	0.1860	0.1700	100.0	93.71	ug/L	-6	10	
Cadmium	0.5516	0.5166	100.0	101.8	ug/L	2	10	
Calcium	0.0277	0.0193	10000	10320	ug/L	3	10	
Chromium	13.856	3.5537	100.0	96.40	ug/L	-4	10	
Cobalt	4.6374	4.3800	100.0	98.41	ug/L	-2	10	
Copper	1.9554	1.1642	100.0	96.26	ug/L	-4	10	
Iron	0.1133	0.0885	10000	9839	ug/L	-2	10	
Lead	1.1622	1.1391	100.0	99.51	ug/L	0	10	
Magnesium	0.0992	0.1020	10000	11150	ug/L	12	10	c+ ***
Manganese	4.8453	4.3325	100.0	95.64	ug/L	-4	10	
Molybdenum	1.0813	1.0120	100.0	97.38	ug/L	-3	10	
Nickel	1.5854	0.9451	100.0	95.61	ug/L	-4	10	
Potassium	1.0305	0.6109	10000	10570	ug/L	6	10	
Selenium	0.0364	0.0405	100.0	101.8	ug/L	2	10	
Silver	2.6556	2.5622	100.0	102.1	ug/L	2	10	
Sodium	1.1548	0.9557	10000	10830	ug/L	8	10	
Thallium	0.9342	0.8159	50.00	45.86	ug/L	-8	10	
Vanadium	4.7426	3.4863	100.0	98.17	ug/L	-2	10	
Zinc	2.4319	0.6261	100.0	99.17	ug/L	-1	10	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	769160	-7.46
Scandium	642644	538532	-16.20
Germanium	147548	126691	-14.14
Indium	875996	741380	-15.37
Bismuth	993101	891243	-10.26

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56500483141
 Cal : 56500483001
 Standards: S4983, S4635

File : 11313141
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 02:32

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.7314	0.7379	10000	10960	ug/L	10	10	
Antimony	0.2654	0.2604	100.0	100.5	ug/L	1	10	
Arsenic	0.5371	0.4732	100.0	96.26	ug/L	-4	10	
Barium	0.1079	0.0922	100.0	93.34	ug/L	-7	10	
Beryllium	0.1860	0.1683	100.0	92.78	ug/L	-7	10	
Cadmium	0.5516	0.5019	100.0	98.87	ug/L	-1	10	
Calcium	0.0277	0.0186	10000	9966	ug/L	0	10	
Chromium	13.856	3.4085	100.0	92.37	ug/L	-8	10	
Cobalt	4.6374	4.2397	100.0	95.26	ug/L	-5	10	
Copper	1.9554	1.1213	100.0	92.69	ug/L	-7	10	
Iron	0.1133	0.0860	10000	9561	ug/L	-4	10	
Lead	1.1622	1.1021	100.0	96.28	ug/L	-4	10	
Magnesium	0.0992	0.1005	10000	10990	ug/L	10	10	
Manganese	4.8453	4.2003	100.0	92.72	ug/L	-7	10	
Molybdenum	1.0813	0.9793	100.0	94.22	ug/L	-6	10	
Nickel	1.5854	0.9011	100.0	91.14	ug/L	-9	10	
Potassium	1.0305	0.5982	10000	10350	ug/L	4	10	
Selenium	0.0364	0.0387	100.0	97.29	ug/L	-3	10	
Silver	2.6556	2.5058	100.0	99.80	ug/L	0	10	
Sodium	1.1548	0.9462	10000	10720	ug/L	7	10	
Thallium	0.9342	0.7826	50.00	43.98	ug/L	-12	10	c- ***
Vanadium	4.7426	3.3656	100.0	94.76	ug/L	-5	10	
Zinc	2.4319	0.6049	100.0	95.74	ug/L	-4	10	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	752959	-9.41
Scandium	642644	529730	-17.57
Germanium	147548	126881	-14.01
Indium	875996	750196	-14.36
Bismuth	993101	951158	-4.22

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56500483158
 Cal : 56500483001
 Standards: S4983, S4635

File : 11313158
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 04:07

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.7314	0.7629	10000	11330	ug/L	13	10	c+ ***
Antimony	0.2654	0.2622	100.0	101.2	ug/L	1	10	
Arsenic	0.5371	0.4784	100.0	97.31	ug/L	-3	10	
Barium	0.1079	0.0928	100.0	93.93	ug/L	-6	10	
Beryllium	0.1860	0.1669	100.0	92.02	ug/L	-8	10	
Cadmium	0.5516	0.5150	100.0	101.5	ug/L	2	10	
Calcium	0.0277	0.0191	10000	10200	ug/L	2	10	
Chromium	13.856	3.2705	100.0	88.53	ug/L	-11	10	c- ***
Cobalt	4.6374	4.2872	100.0	96.33	ug/L	-4	10	
Copper	1.9554	1.1379	100.0	94.07	ug/L	-6	10	
Iron	0.1133	0.0862	10000	9588	ug/L	-4	10	
Lead	1.1622	1.1453	100.0	100.1	ug/L	0	10	
Magnesium	0.0992	0.1034	10000	11310	ug/L	13	10	c+ ***
Manganese	4.8453	4.2369	100.0	93.53	ug/L	-6	10	
Molybdenum	1.0813	1.0004	100.0	96.25	ug/L	-4	10	
Nickel	1.5854	0.9166	100.0	92.71	ug/L	-7	10	
Potassium	1.0305	0.6163	10000	10670	ug/L	7	10	
Selenium	0.0364	0.0388	100.0	97.49	ug/L	-3	10	
Silver	2.6556	2.5624	100.0	102.1	ug/L	2	10	
Sodium	1.1548	0.9698	10000	10990	ug/L	10	10	
Thallium	0.9342	0.8057	50.00	45.28	ug/L	-9	10	
Vanadium	4.7426	3.3021	100.0	92.97	ug/L	-7	10	
Zinc	2.4319	0.6103	100.0	96.61	ug/L	-3	10	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	726576	-12.58
Scandium	642644	497529	-22.58
Germanium	147548	120034	-18.65
Indium	875996	720267	-17.78
Bismuth	993101	904616	-8.91

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56500483168
 Cal : 56500483001
 Standards: S4983, S4635

File : 11313168
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 05:03

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.7314	0.7812	10000	11600	ug/L	16	10	c+ ***
Antimony	0.2654	0.2667	100.0	102.9	ug/L	3	10	
Arsenic	0.5371	0.4768	100.0	96.98	ug/L	-3	10	
Barium	0.1079	0.0940	100.0	95.12	ug/L	-5	10	
Beryllium	0.1860	0.1692	100.0	93.25	ug/L	-7	10	
Cadmium	0.5516	0.5129	100.0	101.0	ug/L	1	10	
Calcium	0.0277	0.0194	10000	10390	ug/L	4	10	
Chromium	13.856	3.2650	100.0	88.38	ug/L	-12	10	c- ***
Cobalt	4.6374	4.3434	100.0	97.59	ug/L	-2	10	
Copper	1.9554	1.1385	100.0	94.13	ug/L	-6	10	
Iron	0.1133	0.0887	10000	9864	ug/L	-1	10	
Lead	1.1622	1.1582	100.0	101.2	ug/L	1	10	
Magnesium	0.0992	0.1055	10000	11530	ug/L	15	10	c+ ***
Manganese	4.8453	4.3126	100.0	95.20	ug/L	-5	10	
Molybdenum	1.0813	0.9868	100.0	94.95	ug/L	-5	10	
Nickel	1.5854	0.9177	100.0	92.83	ug/L	-7	10	
Potassium	1.0305	0.6240	10000	10800	ug/L	8	10	
Selenium	0.0364	0.0389	100.0	97.66	ug/L	-2	10	
Silver	2.6556	2.5597	100.0	102.0	ug/L	2	10	
Sodium	1.1548	0.9916	10000	11240	ug/L	12	10	c+ ***
Thallium	0.9342	0.8154	50.00	45.83	ug/L	-8	10	
Vanadium	4.7426	3.3227	100.0	93.55	ug/L	-6	10	
Zinc	2.4319	0.6170	100.0	97.70	ug/L	-2	10	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	708830	-14.71
Scandium	642644	478772	-25.50
Germanium	147548	116775	-20.86
Indium	875996	687660	-21.50
Bismuth	993101	873618	-12.03

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56500483020
 Cal : 56500483001

File : 11313020
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 15:08

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[9.699]	25.00	2.752	ug/L	!ib
Antimony	[0.02094]	0.2500	0.005910	ug/L	!ib
Arsenic	ND	0.5000	0.1120	ug/L	
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	ND	0.2500	0.002016	ug/L	
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	[23.33]	25.00	6.782	ug/L	!ib
Chromium	[0.08424]	0.2500	0.01315	ug/L	!ib
Cobalt	ND	0.2500	0.003116	ug/L	
Copper	[0.04094]	0.2500	0.02110	ug/L	!ib
Iron	[19.51]	25.00	3.223	ug/L	!ib
Lead	ND	0.2500	0.002523	ug/L	
Magnesium	[9.910]	25.00	1.907	ug/L	!ib
Manganese	ND	0.5000	0.03082	ug/L	
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	[11.91]	25.00	3.213	ug/L	!ib
Selenium	ND	0.5000	0.6002	ug/L	
Silver	ND	0.2500	0.005272	ug/L	
Sodium	[33.34]	50.00	3.640	ug/L	!ib
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	785416	-5.50
Scandium	642644	631072	-1.80
Germanium	147548	152041	3.05
Indium	875996	874114	-0.21
Bismuth	993101	997556	0.45

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56500483044
 Cal : 56500483001

File : 11313044
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 17:22

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[8.398]	25.00	2.752	ug/L	!ib
Antimony	[0.05793]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.2877]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.03391]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.2500	0.01315	ug/L	
Cobalt	[0.02865]	0.2500	0.003116	ug/L	!ib
Copper	[0.04982]	0.2500	0.02110	ug/L	!ib
Iron	[10.58]	25.00	3.223	ug/L	!ib
Lead	[0.02264]	0.2500	0.002523	ug/L	!ib
Magnesium	[7.469]	25.00	1.907	ug/L	!ib
Manganese	[0.05483]	0.5000	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	[0.04886]	0.2500	0.01875	ug/L	!ib
Potassium	[6.110]	25.00	3.213	ug/L	!ib
Selenium	ND	0.5000	0.6002	ug/L	
Silver	[0.02216]	0.2500	0.005272	ug/L	!ib
Sodium	[29.70]	50.00	3.640	ug/L	!ib
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	853735	2.72
Scandium	642644	616274	-4.10
Germanium	147548	148386	0.57
Indium	875996	862856	-1.50
Bismuth	993101	1049773	5.71

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56500483065
 Cal : 56500483001

File : 11313065
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 19:30

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[3.924]	25.00	2.752	ug/L	!ib
Antimony	[0.05674]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.3377]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.01849]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.2500	0.01315	ug/L	
Cobalt	[0.01943]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	ND	25.00	3.223	ug/L	
Lead	[0.01365]	0.2500	0.002523	ug/L	!ib
Magnesium	[4.363]	25.00	1.907	ug/L	!ib
Manganese	[0.08007]	0.5000	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	[0.05017]	0.2500	0.01875	ug/L	!ib
Potassium	[12.83]	25.00	3.213	ug/L	!ib
Selenium	ND	0.5000	0.6002	ug/L	
Silver	[0.01267]	0.2500	0.005272	ug/L	!ib
Sodium	246.1	50.00	3.640	ug/L	ib ***
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	819168	-1.44
Scandium	642644	589799	-8.22
Germanium	147548	143777	-2.56
Indium	875996	842268	-3.85
Bismuth	993101	1061467	6.88

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56500483075
 Cal : 56500483001

File : 11313075
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 20:25

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[3.873]	25.00	2.752	ug/L	!ib
Antimony	[0.01001]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.2168]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.01113]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.2500	0.01315	ug/L	
Cobalt	[0.007155]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	ND	25.00	3.223	ug/L	
Lead	[0.006912]	0.2500	0.002523	ug/L	!ib
Magnesium	[4.831]	25.00	1.907	ug/L	!ib
Manganese	[0.05509]	0.5000	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	[8.879]	25.00	3.213	ug/L	!ib
Selenium	ND	0.5000	0.6002	ug/L	
Silver	[0.008666]	0.2500	0.005272	ug/L	!ib
Sodium	111.8	50.00	3.640	ug/L	ib ***
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	792141	-4.69
Scandium	642644	583984	-9.13
Germanium	147548	140764	-4.60
Indium	875996	822893	-6.06
Bismuth	993101	1035332	4.25

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56500483096
 Cal : 56500483001

File : 11313096
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 22:21

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[8.976]	25.00	2.752	ug/L	!ib
Antimony	[0.06041]	0.2500	0.005910	ug/L	!ib
Arsenic	ND	0.5000	0.1120	ug/L	
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.01726]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	[7.172]	25.00	6.782	ug/L	!ib
Chromium	ND	0.2500	0.01315	ug/L	
Cobalt	[0.01569]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	[8.971]	25.00	3.223	ug/L	!ib
Lead	[0.01189]	0.2500	0.002523	ug/L	!ib
Magnesium	[11.58]	25.00	1.907	ug/L	!ib
Manganese	[0.05993]	0.5000	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	[0.03661]	0.2500	0.01875	ug/L	!ib
Potassium	[9.955]	25.00	3.213	ug/L	!ib
Selenium	ND	0.5000	0.6002	ug/L	
Silver	[0.01339]	0.2500	0.005272	ug/L	!ib
Sodium	69.18	50.00	3.640	ug/L	ib ***
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	792073	-4.70
Scandium	642644	559939	-12.87
Germanium	147548	136379	-7.57
Indium	875996	794696	-9.28
Bismuth	993101	1007855	1.49

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56500483112
 Cal : 56500483001

File : 11313112
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 23:50

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[5.821]	25.00	2.752	ug/L	!ib
Antimony	[0.04278]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.2248]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.03268]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.2500	0.01315	ug/L	
Cobalt	[0.03306]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	ND	25.00	3.223	ug/L	
Lead	[0.02356]	0.2500	0.002523	ug/L	!ib
Magnesium	[10.32]	25.00	1.907	ug/L	!ib
Manganese	[0.08468]	0.5000	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	[0.03657]	0.2500	0.01875	ug/L	!ib
Potassium	[6.309]	25.00	3.213	ug/L	!ib
Selenium	ND	0.5000	0.6002	ug/L	
Silver	[0.02248]	0.2500	0.005272	ug/L	!ib
Sodium	69.90	50.00	3.640	ug/L	ib ***
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	804900	-3.16
Scandium	642644	557219	-13.29
Germanium	147548	135140	-8.41
Indium	875996	795441	-9.20
Bismuth	993101	1019026	2.61

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56500483121
 Cal : 56500483001

IDF : 1.0
 Time : 14-DEC-2006 00:40
 File : 11313121
 Caldate: 13-DEC-2006

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[11.88]	25.00	2.752	ug/L	!ib
Antimony	[0.01184]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.2837]	0.5000	0.1120	ug/L	!ib
Barium	[0.05396]	0.2500	0.03444	ug/L	!ib
Beryllium	[0.01444]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.2500	0.01315	ug/L	
Cobalt	[0.01675]	0.2500	0.003116	ug/L	!ib
Copper	[0.03788]	0.2500	0.02110	ug/L	!ib
Iron	[7.975]	25.00	3.223	ug/L	!ib
Lead	[0.01595]	0.2500	0.002523	ug/L	!ib
Magnesium	[17.35]	25.00	1.907	ug/L	!ib
Manganese	[0.3000]	0.5000	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	[0.08363]	0.2500	0.01875	ug/L	!ib
Potassium	[7.151]	25.00	3.213	ug/L	!ib
Selenium	ND	0.5000	0.6002	ug/L	
Silver	[0.006181]	0.2500	0.005272	ug/L	!ib
Sodium	[47.66]	50.00	3.640	ug/L	!ib
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	806147	-3.01
Scandium	642644	550274	-14.37
Germanium	147548	130874	-11.30
Indium	875996	777358	-11.26
Bismuth	993101	942328	-5.11

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56500483144
 Cal : 56500483001

File : 11313144
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 02:49

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[6.030]	25.00	2.752	ug/L	!ib
Antimony	[0.1102]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.1791]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.01066]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.2500	0.01315	ug/L	
Cobalt	[0.01114]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	ND	25.00	3.223	ug/L	
Lead	[0.01488]	0.2500	0.002523	ug/L	!ib
Magnesium	[8.227]	25.00	1.907	ug/L	!ib
Manganese	[0.07313]	0.5000	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	[8.956]	25.00	3.213	ug/L	!ib
Selenium	ND	0.5000	0.6002	ug/L	
Silver	[0.01122]	0.2500	0.005272	ug/L	!ib
Sodium	[36.35]	50.00	3.640	ug/L	!ib
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	761280	-8.40
Scandium	642644	518329	-19.34
Germanium	147548	124943	-15.32
Indium	875996	756497	-13.64
Bismuth	993101	937707	-5.58

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56500483161
 Cal : 56500483001

File : 11313161
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 04:24

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[4.749]	25.00	2.752	ug/L	!ib
Antimony	[0.04003]	0.2500	0.005910	ug/L	!ib
Arsenic	ND	0.5000	0.1120	ug/L	
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.004416]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.2500	0.01315	ug/L	
Cobalt	ND	0.2500	0.003116	ug/L	
Copper	ND	0.2500	0.02110	ug/L	
Iron	ND	25.00	3.223	ug/L	
Lead	[0.008369]	0.2500	0.002523	ug/L	!ib
Magnesium	[7.414]	25.00	1.907	ug/L	!ib
Manganese	[0.06410]	0.5000	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	[6.843]	25.00	3.213	ug/L	!ib
Selenium	ND	0.5000	0.6002	ug/L	
Silver	[0.005873]	0.2500	0.005272	ug/L	!ib
Sodium	[46.49]	50.00	3.640	ug/L	!ib
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	726998	-12.53
Scandium	642644	491571	-23.51
Germanium	147548	118857	-19.44
Indium	875996	726574	-17.06
Bismuth	993101	911809	-8.19

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56500483170
 Cal : 56500483001

File : 11313170
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 05:14

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[6.843]	25.00	2.752	ug/L	!ib
Antimony	[0.06887]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.4952]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.02956]	0.2500	0.002016	ug/L	!ib
Cadmium	[0.06854]	0.2500	0.05722	ug/L	!ib
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.2500	0.01315	ug/L	
Cobalt	[0.03180]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	ND	25.00	3.223	ug/L	
Lead	[0.03233]	0.2500	0.002523	ug/L	!ib
Magnesium	[13.42]	25.00	1.907	ug/L	!ib
Manganese	[0.05917]	0.5000	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	[0.05226]	0.2500	0.01875	ug/L	!ib
Potassium	[6.039]	25.00	3.213	ug/L	!ib
Selenium	ND	0.5000	0.6002	ug/L	
Silver	[0.02761]	0.2500	0.005272	ug/L	!ib
Sodium	[46.69]	50.00	3.640	ug/L	!ib
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	747567	-10.05
Scandium	642644	498617	-22.41
Germanium	147548	122056	-17.28
Indium	875996	734458	-16.16
Bismuth	993101	935956	-5.75

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56500483021
 Cal : 56500483001
 Standards: S4984, S4635

File : 11313021
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 15:14

Analyte	Quant	RL	Units	Flags
Antimony	2.539	0.2500	ug/L	
Arsenic	[0]	0.5000	ug/L	
Barium	1.412	0.2500	ug/L	
Beryllium	[0.01508]	0.2500	ug/L	
Cadmium	[0.08214]	0.2500	ug/L	
Chromium	3.648	0.2500	ug/L	
Cobalt	2.910	0.2500	ug/L	
Copper	2.451	0.2500	ug/L	
Lead	1.585	0.2500	ug/L	
Manganese	1.415	0.5000	ug/L	
Nickel	5.307	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1627]	0.2500	ug/L	
Thallium	[0.009351]	0.1250	ug/L	
Vanadium	[0.03716]	0.2500	ug/L	
Zinc	3.605	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	106600	ug/L	107
Calcium	300000	336800	ug/L	112
Iron	250000	255600	ug/L	102
Magnesium	100000	107700	ug/L	108
Molybdenum	2000	2057	ug/L	103
Potassium	100000	110000	ug/L	110
Sodium	250000	241700	ug/L	97

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	636953	-23.36
Scandium	642644	563826	-12.26
Germanium	147548	128561	-12.87
Indium	875996	686727	-21.61
Bismuth	993101	610786	-38.50

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56500483024
 Cal : 56500483001
 Standards: S4985, S4635

File : 11313024
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 15:30

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	97220	ug/L	-3		
Arsenic	100.0	94.72	ug/L	-5	20	
Cadmium	100.0	86.70	ug/L	-13	20	
Calcium	300000	300500	ug/L	0		
Chromium	200.0	197.3	ug/L	-1	20	
Cobalt	200.0	186.0	ug/L	-7	20	
Copper	200.0	174.4	ug/L	-13	20	
Iron	250000	226800	ug/L	-9		
Magnesium	100000	98160	ug/L	-2		
Manganese	200.0	189.0	ug/L	-6	20	
Molybdenum	2000	1881	ug/L	-6		
Nickel	200.0	178.8	ug/L	-11	20	
Potassium	100000	98500	ug/L	-2		
Selenium	100.0	81.01	ug/L	-19	20	
Silver	50.00	43.70	ug/L	-13	20	
Sodium	250000	223400	ug/L	-11		
Vanadium	200.0	203.3	ug/L	2	20	
Zinc	100.0	80.12	ug/L	-20	20	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Scandium	642644	588161	-8.48
Germanium	147548	134513	-8.83

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56500483076 File : 11313076
 Cal : 56500483001 Caldate: 13-DEC-2006
 Standards: S4984, S4635

IDF : 1.0
 Time : 13-DEC-2006 20:31

Analyte	Quant	RL	Units	Flags
Antimony	2.500	0.2500	ug/L	
Arsenic	[0]	0.5000	ug/L	
Barium	1.392	0.2500	ug/L	
Beryllium	[0.01204]	0.2500	ug/L	
Cadmium	[0.1941]	0.2500	ug/L	
Chromium	2.495	0.2500	ug/L	
Cobalt	2.783	0.2500	ug/L	
Copper	2.346	0.2500	ug/L	
Lead	1.564	0.2500	ug/L	
Manganese	1.395	0.5000	ug/L	
Nickel	5.043	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1812]	0.2500	ug/L	
Thallium	[0.008073]	0.1250	ug/L	
Vanadium	[0.1217]	0.2500	ug/L	
Zinc	3.613	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	116900	ug/L	117
Calcium	300000	345000	ug/L	115
Iron	250000	250900	ug/L	100
Magnesium	100000	117600	ug/L	118
Molybdenum	2000	2129	ug/L	106
Potassium	100000	114800	ug/L	115
Sodium	250000	264500	ug/L	106

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	661151	-20.45
Scandium	642644	512600	-20.24
Germanium	147548	120235	-18.51
Indium	875996	660917	-24.55
Bismuth	993101	666688	-32.87

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56500483077
 Cal : 56500483001
 Standards: S4985, S4635

File : 11313077
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 20:36

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	105300	ug/L	5		
Arsenic	100.0	98.39	ug/L	-2	20	
Cadmium	100.0	92.54	ug/L	-7	20	
Calcium	300000	316000	ug/L	5		
Chromium	200.0	201.1	ug/L	1	20	
Cobalt	200.0	190.9	ug/L	-5	20	
Copper	200.0	177.5	ug/L	-11	20	
Iron	250000	230300	ug/L	-8		
Magnesium	100000	105000	ug/L	5		
Manganese	200.0	195.3	ug/L	-2	20	
Molybdenum	2000	2011	ug/L	1		
Nickel	200.0	179.8	ug/L	-10	20	
Potassium	100000	105200	ug/L	5		
Selenium	100.0	86.36	ug/L	-14	20	
Silver	50.00	45.95	ug/L	-8	20	
Sodium	250000	235300	ug/L	-6		
Vanadium	200.0	211.8	ug/L	6	20	
Zinc	100.0	85.90	ug/L	-14	20	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Scandium	642644	530802	-17.40
Germanium	147548	119967	-18.69

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Segnum : 56500483122 File : 11313122
 Cal : 56500483001 Caldate: 13-DEC-2006
 Standards: S4984, S4635

IDF : 1.0
 Time : 14-DEC-2006 00:46

Analyte	Quant	RL	Units	Flags
Antimony	2.491	0.2500	ug/L	
Arsenic	[0]	0.5000	ug/L	
Barium	1.425	0.2500	ug/L	
Beryllium	[0.01450]	0.2500	ug/L	
Cadmium	[0.2001]	0.2500	ug/L	
Chromium	2.371	0.2500	ug/L	
Cobalt	2.733	0.2500	ug/L	
Copper	2.347	0.2500	ug/L	
Lead	1.531	0.2500	ug/L	
Manganese	1.510	0.5000	ug/L	
Nickel	5.115	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1835]	0.2500	ug/L	
Thallium	[0.008879]	0.1250	ug/L	
Vanadium	[0.01699]	0.2500	ug/L	
Zinc	3.629	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	118000	ug/L	118
Calcium	300000	346900	ug/L	116
Iron	250000	247000	ug/L	99
Magnesium	100000	118600	ug/L	119
Molybdenum	2000	2163	ug/L	108
Potassium	100000	115800	ug/L	116
Sodium	250000	262900	ug/L	105

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	648968	-21.92
Scandium	642644	496781	-22.70
Germanium	147548	114510	-22.39
Indium	875996	649419	-25.87
Bismuth	993101	658021	-33.74

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
Seqnum : 56500483123
Cal : 56500483001
Standards: S4985, S4635

IDF : 1.0
Time : 14-DEC-2006 00:51

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	107400	ug/L	7		
Arsenic	100.0	98.17	ug/L	-2	20	
Cadmium	100.0	95.06	ug/L	-5	20	
Calcium	300000	320100	ug/L	7		
Chromium	200.0	200.6	ug/L	0	20	
Cobalt	200.0	189.5	ug/L	-5	20	
Copper	200.0	175.3	ug/L	-12	20	
Iron	250000	227500	ug/L	-9		
Magnesium	100000	106100	ug/L	6		
Manganese	200.0	194.6	ug/L	-3	20	
Molybdenum	2000	2070	ug/L	4		
Nickel	200.0	177.2	ug/L	-11	20	
Potassium	100000	107400	ug/L	7		
Selenium	100.0	86.50	ug/L	-14	20	
Silver	50.00	47.53	ug/L	-5	20	
Sodium	250000	233100	ug/L	-7		
Vanadium	200.0	211.1	ug/L	6	20	
Zinc	100.0	84.71	ug/L	-15	20	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Scandium	642644	501214	-22.01
Germanium	147548	112776	-23.57

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56500483172
 Cal : 56500483001
 Standards: S4984, S4635

File : 11313172
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 05:25

Analyte	Quant	RL	Units	Flags
Antimony	2.465	0.2500	ug/L	
Arsenic	[0]	0.5000	ug/L	
Barium	1.344	0.2500	ug/L	
Beryllium	[0.008847]	0.2500	ug/L	
Cadmium	[0.1680]	0.2500	ug/L	
Chromium	2.202	0.2500	ug/L	
Cobalt	2.694	0.2500	ug/L	
Copper	2.379	0.2500	ug/L	
Lead	1.514	0.2500	ug/L	
Manganese	1.374	0.5000	ug/L	
Nickel	4.990	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1813]	0.2500	ug/L	
Thallium	[0.007062]	0.1250	ug/L	
Vanadium	[0.1704]	0.2500	ug/L	
Zinc	3.363	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	119900	ug/L	120
Calcium	300000	343800	ug/L	115
Iron	250000	245700	ug/L	98
Magnesium	100000	119500	ug/L	120
Molybdenum	2000	2214	ug/L	111
Potassium	100000	116700	ug/L	117
Sodium	250000	267700	ug/L	107

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	587259	-29.34
Scandium	642644	454801	-29.23
Germanium	147548	104774	-28.99
Indium	875996	617333	-29.53
Bismuth	993101	656091	-33.94

CURTIIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56500483173
 Cal : 56500483001
 Standards: S4985, S4635

File : 11313173
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 05:30

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	107600	ug/L	8		
Arsenic	100.0	95.85	ug/L	-4	20	
Cadmium	100.0	97.77	ug/L	-2	20	
Calcium	300000	316600	ug/L	6		
Chromium	200.0	199.9	ug/L	0	20	
Cobalt	200.0	187.8	ug/L	-6	20	
Copper	200.0	171.7	ug/L	-14	20	
Iron	250000	223700	ug/L	-11		
Magnesium	100000	105800	ug/L	6		
Manganese	200.0	188.3	ug/L	-6	20	
Molybdenum	2000	2101	ug/L	5		
Nickel	200.0	174.6	ug/L	-13	20	
Potassium	100000	106900	ug/L	7		
Selenium	100.0	84.54	ug/L	-15	20	
Silver	50.00	48.33	ug/L	-3	20	
Sodium	250000	233800	ug/L	-6		
Vanadium	200.0	211.6	ug/L	6	20	
Zinc	100.0	81.81	ug/L	-18	20	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Scandium	642644	464552	-27.71
Germanium	147548	103535	-29.83

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 13-DEC-2006
Sequence: 56500483
Instrument ID: MET05
(11313)
ICALBLK Filename: 11313004
Date Analyzed: 13-DEC-2006
Time Analyzed: 13:40

TYPE	SAMPLE	#							
CCB		075	792141	583984	140764	822893	1035332	1436419	
ICSA		076	661151	512600	120235	660917	666688	1138486	
BLANK	QC368135	081	678053	477284	114671	680587	815870	1135733	
BS	QC368136	082	706894	517472	123046	721011	856600	1231375	
BSD	QC368137	083	701070	502602	118874	688863	816113	1191306	
MSS	191314-003	085	685469	490774	115728	667554	783554	1188340	
SER	QC368140	086	745273	527457	127902	750366	912826	1314127	
MS	QC368138	087	662894	482997	113576	644010	762567	1161858	
MSD	QC368139	088	672160	491459	113976	657309	762438	1160746	
PDS	QC368141	089	665734	481497	111905	642230	749920	1149879	
CCV		093	776821	563240	136072	783060	958980	1407005	
CCB		096	792073	559939	136379	794696	1007855	1393611	
SAMPLE	191290-001	097	717285	485939	119025	689580	845436	1180598	
SAMPLE	191358-001	098	755276	534532	122027	689169	765752	1218209	
SAMPLE	191358-002	099	760169	550439	121971	664734	706926	1210864	
SAMPLE	191358-003	100	782504	545750	123073	693673	754456	1232648	
SAMPLE	191358-004	101	790520	568952	125898	706747	734950	1254358	
SAMPLE	191358-005	102	725850	519842	116656	647108	703662	1163454	
SAMPLE	191358-006	103	767818	508473	120338	700438	847314	1207347	
SAMPLE	191358-007	104	737447	514956	118080	661951	748373	1188066	
SAMPLE	191358-009	105	745987	512300	120702	670797	780069	1209958	
SAMPLE	191358-011	106	673694	483818	109894	642839	732316	1125604	
CCV		110	769811	541174	129631	756372	926582	1312240	
CCB		112	804900	557219	135140	795441	1019026	1374578	
SAMPLE	191358-013	114	701838	832648*	109645	613933	683484	1077256	
CCV		118	769160	538532	126691	741380	891243	1288333	
CCB		121	806147	550274	130874	777358	942328	1315607	
ICSA		122	648968	496781	114510	649419	658021	1096183	
BLANK	QC368128	129	659377	448444	108156	635771	765586	1052918	
BS	QC368129	130	657192	458493	108103	648226	777459	1091987	
BSD	QC368130	131	677752	472160	110676	663529	785837	1117416	
MSS	191314-003	133	744463	512578	120457	700524	821693	1235090	

* = Outside QC Limits

INTERNAL STANDARD SUMMARY Curtis & Tompkins Laboratories

Sequence Date: 13-DEC-2006
Sequence: 56500483
Instrument ID: MET05

(11313)
ICALBLK Filename: 11313004
Date Analyzed: 13-DEC-2006
Time Analyzed: 13:40

TYPE	SAMPLE	#							
SEB	QC368133	134	777148	518777	124798	735476	895029	1275102	
MS	QC368131	135	669239	467580	108346	641102	751187	1103733	
MSD	QC368132	136	666205	465952	107764	632753	741976	1108453	
MS	QC368217	137	662697	479967	107472	656764	752433	1119981	
CCV		141	752959	529730	126881	750196	951158	1305790	
CCB		144	761280	518329	124943	756497	937707	1283688	
MSD	QC368218	145	652736	462037	105540	631277	738779	1094369	
PDS	QC368134	146	682806	481362	109024	658019	759134	1125194	
SAMPLE	191314-001	147	692105	467913	110312	644370	756794	1103496	
SAMPLE	191314-004	148	760707	504640	115867	676405	781873	1181394	
SAMPLE	191314-005	149	731801	502664	114961	671113	795320	1192776	
SAMPLE	191314-006	150	819629	563097	125156	731105	810634	1275637	
SAMPLE	191314-009	151	657365	472793	103194	633859	699812	1073835	
SAMPLE	191314-010	152	708900	507402	111571	699542	762156	1142954	
MSS	191314-011	153	631193	431869	98518	589467	684873	923638	
SAMPLE	191314-012	154	600039	438099	97225	591996	679702	1011982	
CCV		158	726576	497529	120034	720267	904616	1253533	
CCB		161	726998	491571	118857	726574	911809	1213639	
SAMPLE	191314-014	162	654408	445356	102641	622253	733711	1051485	
SAMPLE	191314-015	163	685672	471074	108847	638174	754191	1123907	
SAMPLE	191314-016	164	724233	512671	115944	688899	799156	1213342	
CCV		168	708830	478772	116775	687660	873618	1202157	
CCB		170	747567	498617	122056	734458	935956	1250985	
ICSA		172	587259	454801	104774	617333	656091	1026463	

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56500483 Instrument: MET05 Agilent ICP-MS
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 13-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	UL	Stds Used	>LR
001	11313001	TUN				13-DEC-2006	13:23	1.0				1	
002	11313002	X	RINSE			13-DEC-2006	13:29	1.0				2	
003	11313003	X	RINSE			13-DEC-2006	13:34	1.0				2	
004	11313004	ICALBLK	STD-BLANK			13-DEC-2006	13:40	1.0				2	
005	11313005	ICAL	CS1			13-DEC-2006	13:45	1.0				3	
006	11313006	ICAL	CS2			13-DEC-2006	13:51	1.0				4	
007	11313007	ICAL	CS3			13-DEC-2006	13:56	1.0				5	
008	11313008	ICAL	CS4			13-DEC-2006	14:02	1.0				6	
009	11313009	ICAL	CS5			13-DEC-2006	14:07	1.0				7	
010	11313010	ICAL	CS6			13-DEC-2006	14:13	1.0				8	
011	11313011	X	RINSE			13-DEC-2006	14:18	1.0				2	
012	11313012	ICV				13-DEC-2006	14:24	1.0			1	9	
013	11313013	X	RINSE			13-DEC-2006	14:29	1.0				2	
014	11313014	X				13-DEC-2006	14:35	1.0				2	
015	11313015	X				13-DEC-2006	14:40	1.0				2	
016	11313016	X				13-DEC-2006	14:46	1.0				10 2	
017	11313017	X	RINSE			13-DEC-2006	14:51	1.0				2	
018	11313018	X				13-DEC-2006	14:57	1.0				2	
019	11313019	X				13-DEC-2006	15:02	1.0				2	
020	11313020	ICB				13-DEC-2006	15:08	1.0			1	2	
021	11313021	ICSA				13-DEC-2006	15:14	1.0			1	10 2	7:CA=336800
022	11313022	X				13-DEC-2006	15:19	1.0				11 2	
023	11313023	X	RINSE			13-DEC-2006	15:24	1.0				2	
024	11313024	ICSAB				13-DEC-2006	15:30	1.0			1	11 2	8:CA=300500
025	11313025	X	RINSE			13-DEC-2006	15:35	1.0				2	
026	11313026	X	RINSE			13-DEC-2006	15:41	1.0				2	
027	11313027	X	RINSE			13-DEC-2006	15:46	1.0				2	
028	11313028	BLANK	QC367960	120280	Filtira	13-DEC-2006	15:52	1.0			1	2	
029	11313029	X	RINSE			13-DEC-2006	15:58	1.0				2	
030	11313030	BLANK	QC367981	120288	Water	13-DEC-2006	16:03	1.0			1	2	

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327
Flags used: spk=5% spike rule

Analyst:  Date: 12/14/06

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56500483 Instrument: MET05
Analytical Method: EPA 6020

Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 13-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
031	11313031	BS	QC367982	120288	Water	13-DEC-2006 16:09	1.0	1.0	1	1	1	2		
032	11313032	BSD	QC367983	120288	Water	13-DEC-2006 16:14	1.0	1.0	1	1	1	2		
033	11313033	X	RINSE			13-DEC-2006 16:20	1.0					2		
034	11313034	MSS	191351-001	120288	Water	13-DEC-2006 16:27	1.0	1.0	3	1	1	2	2:CA=21790.0	
035	11313035	X	RINSE			13-DEC-2006 16:32	1.0					2		
036	11313036	X	RINSE			13-DEC-2006 16:38	1.0					2		
037	11313037	BLANK	QC367981	120288	Water	13-DEC-2006 16:43	1.0	1.0	1	1	1	2		
038	11313038	BS	QC367982	120288	Water	13-DEC-2006 16:49	1.0	1.0	1	1	1	2		
039	11313039	X	RINSE			13-DEC-2006 16:54	1.0					2		
040	11313040	X	RINSE			13-DEC-2006 17:00	1.0					2		
041	11313041	X	RINSE			13-DEC-2006 17:05	1.0					2		
042	11313042	CCV				13-DEC-2006 17:11	1.0	1.0	1	1	1	2	12 2	
043	11313043	X	RINSE			13-DEC-2006 17:16	1.0					2		
044	11313044	CCB				13-DEC-2006 17:22	1.0	1.0			1	2		
045	11313045	X				13-DEC-2006 17:28	1.0					2		
046	11313046	BSD	QC367983	120288	Water	13-DEC-2006 17:33	1.0	1.0	1	1	1	2		
047	11313047	X	RINSE			13-DEC-2006 17:39	1.0					2		
048	11313048	MSS	191351-001	120288	Water	13-DEC-2006 17:44	1.0	1.0	3	1	1	2	2:CA=21830.0	
049	11313049	SER	QC367986	120288	Water	13-DEC-2006 17:50	5.0	1.0				2	2:NA=80500.0	
050	11313050	MS	QC367984	120288	Water	13-DEC-2006 17:55	1.0	1.0			1	2	2:CA=29750.0	
051	11313051	MSD	QC367985	120288	Water	13-DEC-2006 18:01	1.0	1.0	1	1	1	2	3:CA=31180.0	
052	11313052	PDS	QC367987	120288	Water	13-DEC-2006 18:06	1.0	1.0	1	1	1	13	14 2	3:CA=30920.0
053	11313053	X	RINSE			13-DEC-2006 18:11	1.0					2		
054	11313054	SAMPLE	191351-003	120288	Water	13-DEC-2006 18:17	1.0	1.0			1	2	3:MG=65590.0	
055	11313055	SAMPLE	191351-005	120288	Water	13-DEC-2006 18:23	1.0	1.0			1	2	3:CA=67180.0	
056	11313056	X	RINSE			13-DEC-2006 18:28	1.0					2		
057	11313057	X	RINSE			13-DEC-2006 18:41	1.0					2		
058	11313058	BLANK	QC367981	120288	Water	13-DEC-2006 18:46	1.0	1.0	1	1	1	2		
059	11313059	SAMPLE	191351-006	120288	Water	13-DEC-2006 18:52	1.0	1.0	1	1	1	2	3:V=670.300	
060	11313060	X	RINSE			13-DEC-2006 19:02	1.0					2		

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327
Flags used: SPK=5% spike rule

Analyst:

Date:

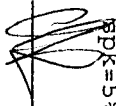
SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56500483 Instrument: MET05
Analytical Method: EPA 6020 Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 13-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
061	11313061	X	RINSE			13-DEC-2006	19:07	1.0				2		
062	11313062	X	RINSE			13-DEC-2006	19:13	1.0				2		
063	11313063	CCV				13-DEC-2006	19:19	1.0				12	2	
064	11313064	X	RINSE			13-DEC-2006	19:24	1.0				2		
065	11313065	CCB				13-DEC-2006	19:30	1.0				2		
066	11313066	X				13-DEC-2006	19:35	1.0				2		
067	11313067	SAMPLE	191351-008	120288	Water	13-DEC-2006	19:41	1.0				2		
068	11313068	SAMPLE	191364-002	120288	Water	13-DEC-2006	19:46	1.0				2		
069	11313069	X	RINSE			13-DEC-2006	19:52	1.0				2		
070	11313070	X	RINSE			13-DEC-2006	19:57	1.0				2		
071	11313071	X	RINSE			13-DEC-2006	20:03	1.0				2		
072	11313072	CCV				13-DEC-2006	20:09	1.0				12	2	
073	11313073	X	RINSE			13-DEC-2006	20:14	1.0				2		
074	11313074	X				13-DEC-2006	20:20	1.0				2		
075	11313075	CCB				13-DEC-2006	20:25	1.0				2		
076	11313076	ICSA				13-DEC-2006	20:31	1.0				10	2	
077	11313077	ICSAB				13-DEC-2006	20:36	1.0				11	2	
078	11313078	X	RINSE			13-DEC-2006	20:42	1.0				2		
079	11313079	X	RINSE			13-DEC-2006	20:47	1.0				2		
080	11313080	X	RINSE			13-DEC-2006	20:53	1.0				2		
081	11313081	BLANK	QC368135	120324	Water	13-DEC-2006	20:58	1.0				2		
082	11313082	BS	QC368136	120324	Water	13-DEC-2006	21:04	1.0				2		
083	11313083	BSD	QC368137	120324	Water	13-DEC-2006	21:09	1.0				2		
084	11313084	X	RINSE			13-DEC-2006	21:15	1.0				2		
085	11313085	MSS	191314-003	120324	Water	13-DEC-2006	21:20	1.0				2		
086	11313086	SER	QC368140	120324	Water	13-DEC-2006	21:26	5.0				2		
087	11313087	MS	QC368138	120324	Water	13-DEC-2006	21:31	1.0				2		
088	11313088	MSD	QC368139	120324	Water	13-DEC-2006	21:37	1.0				2		
089	11313089	PDS	QC368141	120324	Water	13-DEC-2006	21:42	1.0				13	14	
090	11313090	X	RINSE			13-DEC-2006	21:48	1.0				2		

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327
Flags used: RPK=5% spike rule

Analyst:  Date: 12/14/06

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56500483 Instrument: MET05
Analytical Method: EPA 6020

Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 13-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
091	11313091	X	RINSE			13-DEC-2006	21:53	1.0				2		
092	11313092	X	RINSE			13-DEC-2006	21:59	1.0				2		
093	11313093	CCV				13-DEC-2006	22:04	1.0				12 2		
094	11313094	X	RINSE			13-DEC-2006	22:10	1.0				2		
095	11313095	X				13-DEC-2006	22:15	1.0				2		
096	11313096	CCB				13-DEC-2006	22:21	1.0				2		
097	11313097	SAMPLE	191290-001	120324	Filtra	13-DEC-2006	22:27	1.0				2		
098	11313098	SAMPLE	191358-001	120324	Water	13-DEC-2006	22:32	1.0				2		2:NA=134000
099	11313099	SAMPLE	191358-002	120324	Water	13-DEC-2006	22:38	1.0				2		3:NA=280600
100	11313100	SAMPLE	191358-003	120324	Water	13-DEC-2006	22:43	1.0				2		2:NA=213800
101	11313101	SAMPLE	191358-004	120324	Water	13-DEC-2006	22:49	1.0				2		2:NA=213400
102	11313102	SAMPLE	191358-005	120324	Water	13-DEC-2006	22:55	1.0				2		4:NA=215300
103	11313103	SAMPLE	191358-006	120324	Water	13-DEC-2006	23:00	1.0				2		
104	11313104	SAMPLE	191358-007	120324	Water	13-DEC-2006	23:06	1.0				2		2:NA=136100
105	11313105	SAMPLE	191358-009	120324	Filtra	13-DEC-2006	23:11	1.0				2		3:NA=60130.0
106	11313106	SAMPLE	191358-011	120324	Filtra	13-DEC-2006	23:17	1.0				2		6:NA=93090.0
107	11313107	X	RINSE			13-DEC-2006	23:22	1.0				2		
108	11313108	X	RINSE			13-DEC-2006	23:28	1.0				2		
109	11313109	X	RINSE			13-DEC-2006	23:34	1.0				2		
110	11313110	CCV				13-DEC-2006	23:39	1.0				12 2		
111	11313111	X	RINSE			13-DEC-2006	23:45	1.0				2		
112	11313112	CCB				13-DEC-2006	23:50	1.0				2		
113	11313113	X				13-DEC-2006	23:56	1.0				2		
114	11313114	SAMPLE	191358-013	120324	Water	14-DEC-2006	00:01	1.0				2		12:FE=139300
115	11313115	X	RINSE			14-DEC-2006	00:07	1.0				2		
116	11313116	X	RINSE			14-DEC-2006	00:12	1.0				2		
117	11313117	X	RINSE			14-DEC-2006	00:18	1.0				2		
118	11313118	CCV				14-DEC-2006	00:23	1.0				12 2		
119	11313119	X	RINSE			14-DEC-2006	00:29	1.0				2		
120	11313120	X				14-DEC-2006	00:34	1.0				2		

1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst: 

Date: 12/14/06

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56500483 Instrument: MET05 Agilent ICP-MS
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 13-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
121	11313121	CCB				14-DEC-2006 00:40	1.0	1.0			1	2		
122	11313122	ICSA				14-DEC-2006 00:46	1.0	1.0			1	10 2	7:CA=346900	
123	11313123	ICSAB				14-DEC-2006 00:51	1.0	1.0			1	11 2	9:CA=320100	
124	11313124	X	RINSE			14-DEC-2006 00:56	1.0					2		
125	11313125	X	RINSE			14-DEC-2006 01:02	1.0					2		
126	11313126	X	RINSE			14-DEC-2006 01:08	1.0					2		
127	11313127	TUN				14-DEC-2006 01:14	1.0	1.0				1		
128	11313128	X	RINSE			14-DEC-2006 01:20	1.0					2		
129	11313129	BLANK				14-DEC-2006 01:25	1.0	1.0			1	2		
130	11313130	BS	QC368129			120323 Filtra	1.0	1.0			1	2		
131	11313131	BSD	QC368130			14-DEC-2006 01:36	1.0	1.0			1	2		
132	11313132	X	RINSE			14-DEC-2006 01:42	1.0					2		
133	11313133	MSS	191314-003			120323 Filtra	1.0	1.0			1	2	3:NA=53570.0	
134	11313134	SER	QC368133			14-DEC-2006 01:54	5.0	1.0			1	2		
135	11313135	MS	QC368131			120323 Filtra	1.0	1.0			1	2	4:NA=62550.0	
136	11313136	MSD	QC368132			14-DEC-2006 02:05	1.0	1.0			1	2	4:NA=63150.0	
137	11313137	MS	QC368217			120323 Filtra	1.0	1.0			1	2	5:NA=77940.0	
138	11313138	X	RINSE			14-DEC-2006 02:15	1.0					2		
139	11313139	X	RINSE			14-DEC-2006 02:21	1.0					2		
140	11313140	X	RINSE			14-DEC-2006 02:27	1.0					2		
141	11313141	CCV				14-DEC-2006 02:32	1.0	1.0			1	12 2		
142	11313142	X	RINSE			14-DEC-2006 02:38	1.0					2		
143	11313143	X				14-DEC-2006 02:43	1.0	1.0			1	2		
144	11313144	CCB				14-DEC-2006 02:49	1.0	1.0			1	2		
145	11313145	MSD	QC368218			120323 Filtra	1.0	1.0			1	2	5:NA=85040.0	
146	11313146	PDS	QC368134			120323 Filtra	1.0	1.0			1	13 14 2	4:NA=60820.0	
147	11313147	SAMPLE	191314-001			120323 Filtra	1.0	1.0			1	2	4:CA=85090.0	
148	11313148	SAMPLE	191314-004			14-DEC-2006 03:06	1.0	1.0			1	2	3:MG=95260.0	
149	11313149	SAMPLE	191314-005			120323 Filtra	1.0	1.0			1	2	3:MG=91930.0	
150	11313150	SAMPLE	191314-006			120323 Filtra	1.0	1.0			1	2	3:NA=119000	

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327
Flags used: spk=5% spike rule

Analyst: Date: 12/14/06

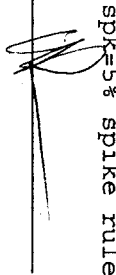
SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56500483 Instrument: MET05
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 13-DEC-2006

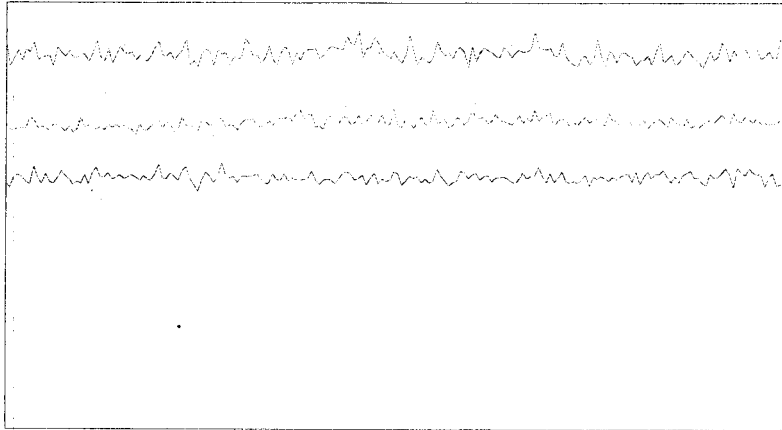
#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
151	11313151	SAMPLE	191314-009	120323	Filtera	14-DEC-2006 03:28	1.0	1.0	4	1	1	2	spk	3:NA=217500
152	11313152	SAMPLE	191314-010	120323	Filtera	14-DEC-2006 03:33	1.0	1.0	5	1	1	2	spk	4:NA=129300
153	11313153	MSS	191314-011	120323	Filtera	14-DEC-2006 03:39	1.0	1.0	6	1	1	2	spk	4:NA=69800.0
154	11313154	SAMPLE	191314-012	120323	Filtera	14-DEC-2006 03:44	1.0	1.0	6	1	1	2	spk	6:NA=118200
155	11313155	X	RINSE			14-DEC-2006 03:50	1.0					2		
156	11313156	X	RINSE			14-DEC-2006 03:56	1.0					2		
157	11313157	X	RINSE			14-DEC-2006 04:01	1.0					2		
158	11313158	CCV	RINSE			14-DEC-2006 04:07	1.0	1.0	3	1	1	12	2	
159	11313159	X	RINSE			14-DEC-2006 04:12	1.0					2		
160	11313160	X				14-DEC-2006 04:18	1.0	1.0	1	1	1	2		
161	11313161	CCB				14-DEC-2006 04:24	1.0	1.0				2		
162	11313162	SAMPLE	191314-014	120323	Filtera	14-DEC-2006 04:29	1.0	1.0	4	1	1	2		3:NA=64740.0
163	11313163	SAMPLE	191314-015	120323	Filtera	14-DEC-2006 04:35	1.0	1.0	4	1	1	2		3:NA=84550.0
164	11313164	SAMPLE	191314-016	120323	Filtera	14-DEC-2006 04:40	1.0	1.0	4	1	1	2		3:NA=97070.0
165	11313165	X	RINSE			14-DEC-2006 04:46	1.0					2		
166	11313166	X	RINSE			14-DEC-2006 04:51	1.0					2		
167	11313167	X	RINSE			14-DEC-2006 04:57	1.0					2		
168	11313168	CCV				14-DEC-2006 05:03	1.0					12	2	
169	11313169	X	RINSE			14-DEC-2006 05:08	1.0	1.0	4	1	1	2		
170	11313170	CCB				14-DEC-2006 05:14	1.0	1.0				2		
171	11313171	X				14-DEC-2006 05:19	1.0	1.0				2		
172	11313172	ICSA				14-DEC-2006 05:25	1.0	1.0				10	2	7:CA=343800
173	11313173	ICSAB				14-DEC-2006 05:30	1.0	1.0				11	2	8:CA=316600

Files used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327
 Files used: spk=5% spike rule

Analyst:  Date: 12/14/06

Tune Report

Tune File : ATUNE.U



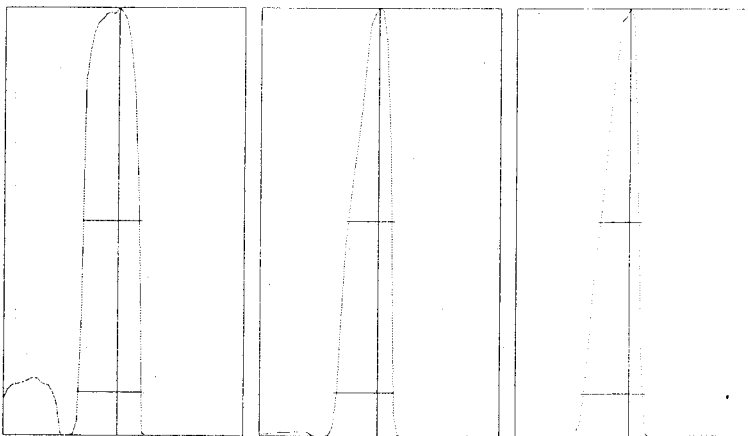
m/z:	7	89	205
Range:	20,000	20,000	20,000
Count:	11,515	18,323	14,512
Mean:	11833.4	17571.3	14371.8
RSD%:	1.86	1.95	1.64
n:	200		

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec

Oxide: 156/140 0.29%
Doubly Charged: 70/140 2.45%

Background:

m/z:	7	89	205
Cps:	11.1	7.8	17.5



m/z:	7	89	205
Height:	12,067	17,533	14,961
Axis:	6.95	89.00	204.95
W-50%:	0.75	0.60	0.55
W-10%:	0.800	0.7500	0.800

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Tuning Parameters

===Plasma Condition===

RF Power: 1270 W
RF Matching: 1.78 V
Smpl Depth: 7.1 mm
Torch-H: -1.3 mm
Torch-V: 0.5 mm
Carrier Gas: 1.09 L/min
Makeup Gas: 0 L/min
Optional Gas: --- %
PeriPump1: 0.1 rps
PeriPump2: --- rps
S/C Temp: 2 degC

===Ion Lenses===

Extract 1: -180 V
Extract 2: -40 V
Einzel 1,3: -100 V
Einzel 2: -7 V
Omega Bias: -45 V
Omega (+): 4 V
Omega (-): -4 V
QP Focus: 9 V
Plate Bias: 0 V

===Q-Pole Parameters===

AMU Gain: 130
AMU Offset: 125
Axis Gain: 0.9989
Axis Offset: -0.01
QP Bias: 1.6 V

===Detector Parameters===

Discriminator: 9.3 mV
Analog HV: 1810 V
Pulse HV: 1160 V

Temp.p\$\$

P/A Factor Tuning Report

Acquired:Dec 14 2006 08:28 am

Mass[amu]	Element	P/A Factor
6	Li	0.067486
9	Be	0.078769
23	Na	Sensitivity too high
25	Mg	0.080212
26	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
43	Ca	Sensitivity too low
44	Ca	0.094064
45	Sc	0.095860
51	V	0.090944
52	Cr	0.101230
53	Cr	Sensitivity too low
54	Fe	0.099039
55	Mn	0.103526
57	Fe	0.099164
59	Co	0.106008
60	Ni	0.103422
63	Cu	0.107261
65	Cu	0.105338
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
77	(As)	Sensitivity too low
82	Se	Sensitivity too low
83	(As)	Sensitivity too low
88	(Ca)	Sensitivity too low
89	Y	0.104101
95	Mo	0.102493
98	Mo	0.102839
99	(Mo)	Sensitivity too low
106	(Cd)	Sensitivity too low
108	(Cd)	Sensitivity too low
109	Ag	0.108868
111	Cd	Sensitivity too low
114	Cd	0.109143
115	In	0.109115
118	(In)	0.111286
121	Sb	0.107556
135	Ba	Sensitivity too low
137	Ba	Sensitivity too low
159	Tb	0.114108
166	Er	Sensitivity too low

Temp.p\$\$

205	Tl	0.116104
206	(Pb)	0.114784
207	(Pb)	0.113651
208	Pb	0.116865
209	Bi	0.116435

===Detector Parameters===

Discriminator: 9.3 mV

Analog HV: 1810 V

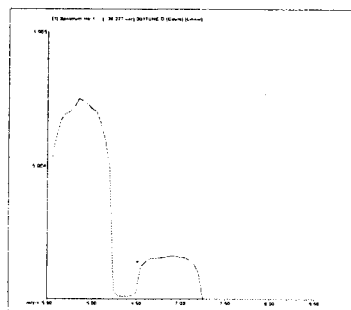
Pulse HV: 1160 V

6020 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\001TUNE.D
Date Acquired: Dec 14 2006 10:24 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s4974
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	0.48	5.00	
59 Co	1.33	5.00	
115 In	1.64	5.00	
205 Tl	2.43	5.00	



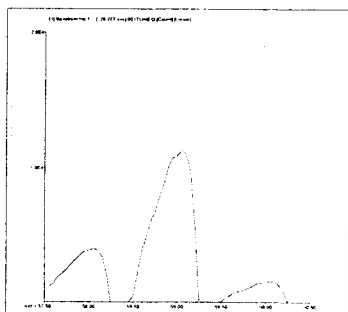
7 Li

Mass Calib.

Actual: 6.90
Required: 6.90 - 7.10
Flag:

Peak Width

Actual: 0.65
Required: 0.90
Flag:



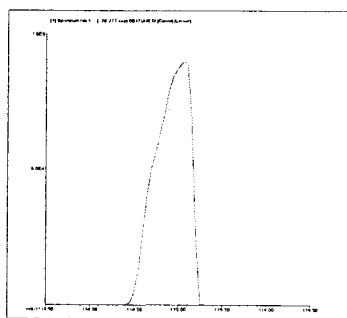
59 Co

Mass Calib.

Actual: 59.05
Required: 58.90 - 59.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



115 In

Mass Calib.

Actual: 115.05

Required: 114.90 - 115.10

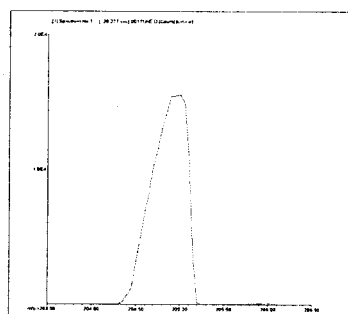
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



205 Tl

Mass Calib.

Actual: 205.00

Required: 204.90 - 205.10

Flag:

Peak Width

Actual: 0.55

Required: 0.90

Flag:

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET05
 Calnum : 56501744001
 Units : ug/L

Date : 14-DEC-2006 10:41
 X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	11410005	56501744005	CS1	14-DEC-2006 10:47	S4978
L2	11410006	56501744006	CS2	14-DEC-2006 10:52	S4979
L3	11410007	56501744007	CS3	14-DEC-2006 10:58	S4980
L4	11410008	56501744008	CS4	14-DEC-2006 11:04	S4981
L5	11410009	56501744009	CS5	14-DEC-2006 11:09	S4975
L6	11410010	56501744010	CS6	14-DEC-2006 11:15	S4976

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ²	MRSD	MR ²	Fig
Aluminum	1.0212	0.9285	0.8303	0.7417	0.7436	0.7126	BLNK	-5.3227	1.39160		0.8297	1.000	0.995		
Antimony	0.3098	0.3034	0.2862	0.2627	0.2727	0.2722	BLNK	-0.0291	3.67315		0.2845	1.000	0.995		
Arsenic		0.6666	0.6823	0.5088	0.5229	0.5174	BLNK	0.04996	1.92806		0.5796	1.000	0.995		
Barium	0.1308	0.1268	0.1076	0.0968	0.0995	0.0985	BLNK	-0.0661	10.1337		0.1100	1.000	0.995		
Beryllium	0.1873	0.1956	0.1907	0.1790	0.1811	0.1765	BLNK	-0.0170	5.63797		0.1850	1.000	0.995		
Cadmium	0.7697	0.6790	0.5930	0.5733	0.5812	0.5803	BLNK	-0.0672	1.72352		0.6294	1.000	0.995		
Calcium	0.0473	0.0331	0.0273	0.0207	0.0201	0.0195	BLNK	-29.506	51.0755		0.0280	1.000	0.995		
Chromium		12.470	8.8968	4.0131	3.7183	3.6925	BLNK	-1.1192	0.27227		6.5580	1.000	0.995		
Cobalt	5.1599	4.6814	4.8599	4.3535	4.5608	4.4562	BLNK	-0.0323	0.22341		4.6786	1.000	0.995		
Copper	4.5288	2.6837	2.2634	1.2891	1.2348	1.1982	BLNK	-0.5738	0.83232		2.1997	1.000	0.995		
Iron	0.1545	0.1248	0.1124	0.0948	0.0926	0.0893	BLNK	-14.617	11.1219		0.1114	1.000	0.995		
Lead	1.3904	1.2363	1.2193	1.1280	1.2053	1.1919	BLNK	-0.0589	0.83753		1.2285	1.000	0.995		
Magnesium	0.1227	0.1166	0.1167	0.1038	0.1001	0.0956	BLNK	-1.8766	10.3624		0.1092	0.999	0.995		
Manganese	6.4833	5.5169	5.1529	4.3698	4.5725	4.4995	BLNK	-0.1093	0.22169		5.0991	1.000	0.995		
Molybdenum	1.2400	1.1242	1.1918	1.0814	1.1441	1.1717	BLNK	-0.0195	0.85771		1.1589	1.000	0.995		
Nickel	3.2778	1.9776	1.5387	1.0575	0.9967	0.9748	BLNK	-0.4964	1.02427		1.6372	1.000	0.995		
Potassium	2.8176	1.6729	1.1599	0.6582	0.6306	0.6160	BLNK	-89.257	1.62435		1.2592	1.000	0.995		
Selenium			0.0284	0.0438	0.0451	0.0439	BLNK	0.53471	22.5895		0.0403	1.000	0.995		
Silver	3.1454	3.0301	2.8843	2.7676	2.8629	2.9170	BLNK	-0.0350	0.34421		2.9345	1.000	0.995		
Sodium	8.5808	4.4830	2.5904	1.0800	0.9288	0.8735	BLNK	-238.86	1.14670		3.0894	0.999	0.995		
Thallium	1.0409	0.8859	0.8800	0.8220	0.8845	0.9254	BLNK	-0.0259	1.09078		0.9065	0.999	0.995		
Vanadium		3.6840	4.1596	3.7944	3.6966	3.7307	BLNK	-0.0627	0.26863		3.8131	1.000	0.995		
Zinc	8.1185	4.0807	2.5701	0.8393	0.6422	0.6066	BLNK	-2.8051	1.65644		2.8095	0.999	0.995		

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=AX+[blank]

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\004CAL
Date Acquired: Dec 14 2006 10:41 am
Operator:
Sample Name: std-blank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Dec 13 2006 02:14 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	739106.00 A	10570.00	1.43
9 Be	44.44 P	9.62	21.65
23 Na	2205423.00 A	1917.00	0.09
26 Mg	1916.67 P	138.70	7.24
27 Al	40493.33 P	751.70	1.86
39 K	581835.50 P	7785.00	1.34
44 Ca	6115.73 P	161.00	2.63
45 Sc	529416.63 P	4367.00	0.82
51 V	552.89 P	1975.00	357.22
52 Cr	9853.33 P	179.00	1.82
55 Mn	1181.11 P	131.40	11.13
57 Fe	3150.00 P	35.28	1.12
59 Co	346.67 P	63.33	18.27
60 Ni	1161.11 P	86.94	7.49
65 Cu	1653.33 P	127.70	7.72
66 Zn	4058.89 P	77.27	1.90
72 Ge	119842.20 P	1453.00	1.21
75 As	-60.56 P	225.80	372.85
82 Se	-56.44 P	39.40	69.80
95 Mo	54.44 P	18.36	33.72
109 Ag	243.33 P	17.64	7.25
111 Cd	93.33 P	15.73	16.85
115 In	758188.31 P	5430.00	0.72
121 Sb	120.00 P	14.53	12.11
137 Ba	98.89 P	24.57	24.85
205 Tl	428.89 P	44.39	10.35
208 Pb	1268.89 P	70.26	5.54
209 Bi	901811.13 P	8006.00	0.89

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\005CALI.D\005CALI.D#
 Date Acquired: Dec 14 2006 10:47 am
 Operator:
 Sample Name: cs1,s4978
 Misc Info:
 Vial Number: 1102
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 14 2006 10:43 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	725171.38 A	22140.00	3.05
9 Be	678.89 P	5.09	0.75
23 Na	2236721.00 A	10910.00	0.49
26 Mg	31993.33 P	617.10	1.93
27 Al	266313.31 P	3479.00	1.31
39 K	734229.31 M	11770.00	1.60
44 Ca	12330.80 P	58.41	0.47
45 Sc	522124.41 P	24720.00	4.73
51 V	4710.59 P	489.00	10.38
52 Cr	12556.67 P	207.90	1.66
55 Mn	3841.11 P	168.40	4.38
57 Fe	9150.00 P	144.70	1.58
59 Co	3056.67 P	78.81	2.58
60 Ni	1943.33 P	92.80	4.78
65 Cu	2683.20 P	77.68	2.90
66 Zn	4812.22 P	186.90	3.88
72 Ge	118539.30 P	4110.00	3.47
75 As	504.54 P	141.50	28.05
82 Se	-54.44 P	9.71	17.84
95 Mo	733.33 P	58.12	7.93
109 Ag	1863.33 P	26.46	1.42
111 Cd	457.21 P	59.42	13.00
115 In	748254.31 M	24450.00	3.27
121 Sb	1158.89 P	30.97	2.67
137 Ba	490.00 P	41.77	8.52
205 Tl	2338.89 P	100.00	4.28
208 Pb	6244.44 P	93.35	1.49
209 Bi	898780.38 M	22420.00	2.49

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	725171.38	3.05	739106.00	98.1	80 - 120	

C:\ICPCHEM\1\DATA\06L1410a.B\005CALI.D\005CALI.D#

45	Sc	522124.41	4.73	529416.63	98.6	80 -	120
72	Ge	118539.34	3.47	119842.22	98.9	80 -	120
115	In	748254.31	3.27	758188.25	98.7	80 -	120
209	Bi	898780.38	2.49	901811.13	99.7	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1410a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\006CALI.D\006CALI.D#
 Date Acquired: Dec 14 2006 10:52 am
 Operator:
 Sample Name: cs2,s4979
 Misc Info:
 Vial Number: 1103
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 14 2006 10:49 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	740799.88 A	5088.00	0.69
9 Be	1448.89 P	20.09	1.39
23 Na	2343897.00 A	15370.00	0.66
26 Mg	60961.11 P	550.40	0.90
27 Al	485480.00 P	3421.00	0.70
39 K	874661.19 A	2094.00	0.24
44 Ca	17330.37 P	261.40	1.51
45 Sc	522843.31 P	473.50	0.09
51 V	4340.48 P	727.40	16.76
52 Cr	14691.11 P	527.50	3.59
55 Mn	6500.00 P	258.30	3.97
57 Fe	14698.89 P	120.50	0.82
59 Co	5515.56 P	157.20	2.85
60 Ni	2330.00 P	39.30	1.69
65 Cu	3161.96 P	119.70	3.79
66 Zn	4807.78 P	139.90	2.91
72 Ge	117817.60 P	111.70	0.09
75 As	785.40 P	157.50	20.05
82 Se	40.89 P	33.69	82.39
95 Mo	1324.44 P	37.17	2.81
109 Ag	3570.00 P	52.39	1.47
111 Cd	799.97 P	31.18	3.90
115 In	747619.81 P	2343.00	0.31
121 Sb	2267.78 P	328.90	14.50
137 Ba	947.78 P	22.19	2.34
205 Tl	4037.78 P	56.21	1.39
208 Pb	11268.89 P	303.80	2.70
209 Bi	911937.88 M	25010.00	2.74

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	740799.88	0.69	739106.00	100.2	80 - 120	

C:\ICPCHEM\1\DATA\06L1410a.B\006CALI.D\006CALI.D#

45	Sc	522843.31	0.09	529416.63	98.8	80 -	120
72	Ge	117817.55	0.09	119842.22	98.3	80 -	120
115	In	747619.75	0.31	758188.25	98.6	80 -	120
209	Bi	911937.88	2.74	901811.13	101.1	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1410a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**

ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\007CALI.D\007CALI.D#
 Date Acquired: Dec 14 2006 10:58 am
 Operator:
 Sample Name: cs3,s4980
 Misc Info:
 Vial Number: 1104
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 14 2006 10:54 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	741745.88 A	6443.00	0.87
9 Be	2828.89 P	29.12	1.03
23 Na	2730964.00 A	8049.00	0.29
26 Mg	122986.70 P	420.30	0.34
27 Al	875403.50 A	4159.00	0.48
39 K	1222875.00 A	7833.00	0.64
44 Ca	28832.69 P	134.60	0.47
45 Sc	527152.19 P	2395.00	0.45
51 V	9823.88 P	2617.00	26.64
52 Cr	21067.78 P	248.20	1.18
55 Mn	12203.33 P	233.30	1.91
57 Fe	26622.22 P	452.70	1.70
59 Co	11508.89 P	310.40	2.70
60 Ni	3643.33 P	160.20	4.40
65 Cu	5359.48 P	138.70	2.59
66 Zn	6087.78 P	360.60	5.92
72 Ge	118410.70 P	1854.00	1.57
75 As	1615.74 P	20.93	1.30
82 Se	67.78 P	62.03	91.52
95 Mo	2823.33 P	165.00	5.84
109 Ag	6830.00 P	109.30	1.60
111 Cd	1403.48 P	56.32	4.01
115 In	748089.69 P	6998.00	0.94
121 Sb	4283.33 P	147.50	3.44
137 Ba	1610.00 P	100.40	6.24
205 Tl	7924.44 P	191.20	2.41
208 Pb	21957.78 P	638.20	2.91
209 Bi	900418.81 P	10540.00	1.17

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	741745.88	0.87	739106.00	100.4	80 - 120	

C:\ICPCHEM\1\DATA\06L1410a.B\007CALI.D\007CALI.D#

45	Sc	527152.19	0.45	529416.63	99.6	80 -	120
72	Ge	118410.66	1.57	119842.22	98.8	80 -	120
115	In	748089.69	0.94	758188.25	98.7	80 -	120
209	Bi	900418.81	1.17	901811.13	99.8	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1410a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\008CALI.D\008CALI.D#
 Date Acquired: Dec 14 2006 11:04 am
 Operator:
 Sample Name: cs4,s4981
 Misc Info:
 Vial Number: 1105
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 14 2006 11:00 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	735267.38 A	10940.00	1.49
9 Be	26318.89 P	127.60	0.48
23 Na	11286800.00 A	76620.00	0.68
26 Mg	1084335.00 A	15380.00	1.42
27 Al	7751801.00 A	100100.00	1.29
39 K	6878376.00 A	33180.00	0.48
44 Ca	216538.80 P	1922.00	0.89
45 Sc	522523.31 P	3965.00	0.76
51 V	89858.41 P	1167.00	1.30
52 Cr	95053.33 P	1390.00	1.46
55 Mn	103498.90 P	1334.00	1.29
57 Fe	224456.70 P	3155.00	1.41
59 Co	103125.50 P	2532.00	2.46
60 Ni	25051.11 P	655.20	2.62
65 Cu	30534.28 P	554.20	1.82
66 Zn	19874.44 P	171.10	0.86
72 Ge	118429.10 P	1603.00	1.35
75 As	12052.93 P	391.20	3.25
82 Se	1036.89 P	37.53	3.62
95 Mo	25613.33 P	307.50	1.20
109 Ag	65557.78 P	1532.00	2.34
111 Cd	13580.38 P	297.80	2.19
115 In	742957.69 P	5289.00	0.71
121 Sb	39033.33 P	902.90	2.31
137 Ba	14381.11 P	447.50	3.11
205 Tl	73850.00 P	1683.00	2.28
208 Pb	202676.70 P	2905.00	1.43
209 Bi	898382.13 P	9491.00	1.06

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	735267.44	1.49	739106.00	99.5	80 - 120	

C:\ICPCHEM\1\DATA\06L1410a.B\008CALI.D\008CALI.D#

45	Sc	522523.31	0.76	529416.63	98.7	80 -	120
72	Ge	118429.12	1.35	119842.22	98.8	80 -	120
115	In	742957.75	0.71	758188.25	98.0	80 -	120
209	Bi	898382.13	1.06	901811.13	99.6	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1410a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\009CALI.D\009CALI.D#
 Date Acquired: Dec 14 2006 11:09 am
 Operator:
 Sample Name: cs5,s4975
 Misc Info:
 Vial Number: 1106
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 14 2006 11:05 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	705935.69 A	2814.00	0.40
9 Be	255710.00 P	1947.00	0.76
23 Na	95061648.00 A	475200.00	0.50
26 Mg	10242410.00 A	62510.00	0.61
27 Al	76104400.00 A	747200.00	0.98
39 K	64541328.00 A	253600.00	0.39
44 Ca	2057707.00 A	11350.00	0.55
45 Sc	511724.41 P	252.90	0.05
51 V	841037.38 A	7753.00	0.92
52 Cr	845983.13 M	19810.00	2.34
55 Mn	1040305.00 A	4060.00	0.39
57 Fe	2107112.00 A	15480.00	0.73
59 Co	1037667.00 A	8874.00	0.86
60 Ni	226768.91 P	789.60	0.35
65 Cu	280942.19 P	3622.00	1.29
66 Zn	146108.91 P	447.40	0.31
72 Ge	113757.60 P	233.90	0.21
75 As	118979.90 P	1342.00	1.13
82 Se	10265.78 P	117.00	1.14
95 Mo	260288.91 P	2920.00	1.12
109 Ag	651342.19 P	1868.00	0.29
111 Cd	132243.80 P	1991.00	1.51
115 In	712890.13 P	6254.00	0.88
121 Sb	388875.50 P	5851.00	1.50
137 Ba	141873.30 P	2205.00	1.55
205 Tl	744495.50 P	9659.00	1.30
208 Pb	2028821.00 A	13030.00	0.64
209 Bi	841657.69 P	7872.00	0.94

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	705935.69	0.40	739106.00	95.5	80 - 120	

C:\ICPCHEM\1\DATA\06L1410a.B\009CALI.D\009CALI.D#

45 Sc	511724.41	0.05	529416.63	96.7	80 -	120
72 Ge	113757.55	0.21	119842.22	94.9	80 -	120
115 In	712890.13	0.88	758188.25	94.0	80 -	120
209 Bi	841657.75	0.94	901811.13	93.3	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1410a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\010CALI.D\010CALI.D#
 Date Acquired: Dec 14 2006 11:15 am
 Operator:
 Sample Name: cs6,s4976
 Misc Info:
 Vial Number: 1107
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 14 2006 11:11 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	673193.38 A	6480.00	0.96
9 Be	475100.00 P	2662.00	0.56
23 Na	175948000.00 A	296600.00	0.17
26 Mg	19256600.00 A	90460.00	0.47
27 Al	143526590.00 A	942000.00	0.66
39 K	124084800.00 A	284500.00	0.23
44 Ca	3925580.00 A	5695.00	0.15
45 Sc	503576.59 P	3537.00	0.70
51 V	1621244.00 A	1869.00	0.12
52 Cr	1604677.00 A	4401.00	0.27
55 Mn	1955333.00 A	1977.00	0.10
57 Fe	3881919.00 A	12280.00	0.32
59 Co	1936672.00 A	19000.00	0.98
60 Ni	423634.41 P	4694.00	1.11
65 Cu	520732.50 P	2498.00	0.48
66 Zn	263632.19 P	2626.00	1.00
72 Ge	108651.10 P	1163.00	1.07
75 As	224854.80 P	1313.00	0.58
82 Se	19066.67 P	195.60	1.03
95 Mo	509218.91 P	2112.00	0.41
109 Ag	1267609.00 A	4775.00	0.38
111 Cd	252177.00 P	2915.00	1.16
115 In	691983.50 P	6194.00	0.90
121 Sb	753438.88 P	5747.00	0.76
137 Ba	272721.09 P	1468.00	0.54
205 Tl	1480971.00 A	12980.00	0.88
208 Pb	3814654.00 A	15530.00	0.41
209 Bi	800187.69 P	9742.00	1.22

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	673193.44	0.96	739106.00	91.1	80 - 120	

C:\ICPCHEM\1\DATA\06L1410a.B\010CALI.D\010CALI.D#

45	Sc	503576.66	0.70	529416.63	95.1	80 -	120
72	Ge	108651.12	1.07	119842.22	90.7	80 -	120
115	In	691983.50	0.90	758188.25	91.3	80 -	120
209	Bi	800187.75	1.22	901811.13	88.7	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1410a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET05
 Seqnum : 56501744012
 Cal : 56501744001
 Standards: S4982

File : 11410012
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 11:25

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	0.8297	0.7315	10000	10170	ug/L	2	10	
Antimony	0.2845	0.2684	100.0	98.54	ug/L	-1	10	
Arsenic	0.5796	0.5151	100.0	99.37	ug/L	-1	10	
Barium	0.1100	0.0948	100.0	95.98	ug/L	-4	10	
Beryllium	0.1850	0.1765	100.0	99.48	ug/L	-1	10	
Cadmium	0.6294	0.5721	100.0	98.53	ug/L	-1	10	
Calcium	0.0280	0.0195	10000	9953	ug/L	0	10	
Chromium	6.5580	3.6481	100.0	98.21	ug/L	-2	10	
Cobalt	4.6786	4.3951	100.0	98.16	ug/L	-2	10	
Copper	2.1997	1.1762	100.0	97.32	ug/L	-3	10	
Iron	0.1114	0.0904	10000	10040	ug/L	0	10	
Lead	1.2285	1.1707	100.0	97.99	ug/L	-2	10	
Magnesium	0.1092	0.0967	10000	10020	ug/L	0	10	
Manganese	5.0991	4.4347	100.0	98.20	ug/L	-2	10	
Molybdenum	1.1589	1.1253	100.0	96.50	ug/L	-4	10	
Nickel	1.6372	0.9632	100.0	98.16	ug/L	-2	10	
Potassium	1.2592	0.6128	10000	9865	ug/L	-1	10	
Selenium	0.0403	0.0437	100.0	99.34	ug/L	-1	10	
Silver	2.9345	2.8686	100.0	98.70	ug/L	-1	10	
Sodium	3.0894	0.8824	10000	9880	ug/L	-1	10	
Thallium	0.9065	0.8230	50.00	44.86	ug/L	-10	10	
Vanadium	3.8131	3.6248	100.0	97.31	ug/L	-3	10	
Zinc	2.8095	0.6149	100.0	99.06	ug/L	-1	10	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	711588	-3.72
Scandium	529417	520783	-1.63
Germanium	119842	114412	-4.53
Indium	758188	733068	-3.31
Bismuth	901811	863080	-4.29

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Segnum : 56501744029
 Cal : 56501744001
 Standards: S4983, S4635

File : 11410029
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 13:00

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.8297	0.7399	10000	10290	ug/L	3	10	
Antimony	0.2845	0.2702	100.0	99.23	ug/L	-1	10	
Arsenic	0.5796	0.5110	100.0	98.58	ug/L	-1	10	
Barium	0.1100	0.0959	100.0	97.16	ug/L	-3	10	
Beryllium	0.1850	0.1784	100.0	100.6	ug/L	1	10	
Cadmium	0.6294	0.5648	100.0	97.27	ug/L	-3	10	
Calcium	0.0280	0.0195	10000	9953	ug/L	0	10	
Chromium	6.5580	3.5524	100.0	95.60	ug/L	-4	10	
Cobalt	4.6786	4.4669	100.0	99.76	ug/L	0	10	
Copper	2.1997	1.1983	100.0	99.16	ug/L	-1	10	
Iron	0.1114	0.0921	10000	10230	ug/L	2	10	
Lead	1.2285	1.1659	100.0	97.59	ug/L	-2	10	
Magnesium	0.1092	0.0984	10000	10200	ug/L	2	10	
Manganese	5.0991	4.4584	100.0	98.73	ug/L	-1	10	
Molybdenum	1.1589	1.1013	100.0	94.44	ug/L	-6	10	
Nickel	1.6372	0.9661	100.0	98.46	ug/L	-2	10	
Potassium	1.2592	0.6093	10000	9808	ug/L	-2	10	
Selenium	0.0403	0.0437	100.0	99.32	ug/L	-1	10	
Silver	2.9345	2.8276	100.0	97.29	ug/L	-3	10	
Sodium	3.0894	0.9156	10000	10260	ug/L	3	10	
Thallium	0.9065	0.8214	50.00	44.77	ug/L	-10	10	
Vanadium	3.8131	3.5784	100.0	96.06	ug/L	-4	10	
Zinc	2.8095	0.6324	100.0	101.9	ug/L	2	10	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	639701	-13.45
Scandium	529417	463074	-12.53
Germanium	119842	104479	-12.82
Indium	758188	659273	-13.05
Bismuth	901811	829843	-7.98

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56501744058
 Cal : 56501744001
 Standards: S4983, S4635

File : 11410058
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 15:42

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.8297	0.7666	10000	10660	ug/L	7	10	
Antimony	0.2845	0.2775	100.0	101.9	ug/L	2	10	
Arsenic	0.5796	0.5304	100.0	102.3	ug/L	2	10	
Barium	0.1100	0.0968	100.0	98.03	ug/L	-2	10	
Beryllium	0.1850	0.1829	100.0	103.1	ug/L	3	10	
Cadmium	0.6294	0.6032	100.0	103.9	ug/L	4	10	
Calcium	0.0280	0.0203	10000	10340	ug/L	3	10	
Chromium	6.5580	3.6402	100.0	97.99	ug/L	-2	10	
Cobalt	4.6786	4.5045	100.0	100.6	ug/L	1	10	
Copper	2.1997	1.2109	100.0	100.2	ug/L	0	10	
Iron	0.1114	0.0922	10000	10240	ug/L	2	10	
Lead	1.2285	1.2027	100.0	100.7	ug/L	1	10	
Magnesium	0.1092	0.1019	10000	10560	ug/L	6	10	
Manganese	5.0991	4.5159	100.0	100.0	ug/L	0	10	
Molybdenum	1.1589	1.1603	100.0	99.50	ug/L	-1	10	
Nickel	1.6372	0.9793	100.0	99.81	ug/L	0	10	
Potassium	1.2592	0.6392	10000	10290	ug/L	3	10	
Selenium	0.0403	0.0455	100.0	103.2	ug/L	3	10	
Silver	2.9345	2.9840	100.0	102.7	ug/L	3	10	
Sodium	3.0894	0.9247	10000	10360	ug/L	4	10	
Thallium	0.9065	0.8548	50.00	46.59	ug/L	-7	10	
Vanadium	3.8131	3.6946	100.0	99.19	ug/L	-1	10	
Zinc	2.8095	0.6283	100.0	101.3	ug/L	1	10	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	618953	-16.26
Scandium	529417	449338	-15.13
Germanium	119842	100094	-16.48
Indium	758188	655982	-13.48
Bismuth	901811	801836	-11.09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56501744075
 Cal : 56501744001
 Standards: S4983, S4635

File : 11410075
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 17:17

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.8297	0.7318	10000	10180	ug/L	2	10	
Antimony	0.2845	0.2632	100.0	96.66	ug/L	-3	10	
Arsenic	0.5796	0.5000	100.0	96.45	ug/L	-4	10	
Barium	0.1100	0.0933	100.0	94.44	ug/L	-6	10	
Beryllium	0.1850	0.1733	100.0	97.69	ug/L	-2	10	
Cadmium	0.6294	0.5590	100.0	96.27	ug/L	-4	10	
Calcium	0.0280	0.0191	10000	9726	ug/L	-3	10	
Chromium	6.5580	3.4462	100.0	92.71	ug/L	-7	10	
Cobalt	4.6786	4.4328	100.0	99.00	ug/L	-1	10	
Copper	2.1997	1.1651	100.0	96.40	ug/L	-4	10	
Iron	0.1114	0.0892	10000	9910	ug/L	-1	10	
Lead	1.2285	1.1592	100.0	97.03	ug/L	-3	10	
Magnesium	0.1092	0.0977	10000	10120	ug/L	1	10	
Manganese	5.0991	4.4033	100.0	97.51	ug/L	-2	10	
Molybdenum	1.1589	1.0807	100.0	92.67	ug/L	-7	10	
Nickel	1.6372	0.9494	100.0	96.75	ug/L	-3	10	
Potassium	1.2592	0.6080	10000	9786	ug/L	-2	10	
Selenium	0.0403	0.0421	100.0	95.72	ug/L	-4	10	
Silver	2.9345	2.7773	100.0	95.56	ug/L	-4	10	
Sodium	3.0894	0.9027	10000	10110	ug/L	1	10	
Thallium	0.9065	0.8184	50.00	44.61	ug/L	-11	10	c- ***
Vanadium	3.8131	3.4858	100.0	93.58	ug/L	-6	10	
Zinc	2.8095	0.6223	100.0	100.3	ug/L	0	10	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	666358	-9.84
Scandium	529417	485169	-8.36
Germanium	119842	108833	-9.19
Indium	758188	696031	-8.20
Bismuth	901811	883136	-2.07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56501744086
 Cal : 56501744001
 Standards: S4983, S4635

File : 11410086
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 18:19

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.8297	0.7315	10000	10170	ug/L	2	10	
Antimony	0.2845	0.2758	100.0	101.3	ug/L	1	10	
Arsenic	0.5796	0.5309	100.0	102.4	ug/L	2	10	
Barium	0.1100	0.0971	100.0	98.33	ug/L	-2	10	
Beryllium	0.1850	0.1787	100.0	100.7	ug/L	1	10	
Cadmium	0.6294	0.5951	100.0	102.5	ug/L	3	10	
Calcium	0.0280	0.0203	10000	10350	ug/L	4	10	
Chromium	6.5580	3.6402	100.0	97.99	ug/L	-2	10	
Cobalt	4.6786	4.6078	100.0	102.9	ug/L	3	10	
Copper	2.1997	1.2171	100.0	100.7	ug/L	1	10	
Iron	0.1114	0.0946	10000	10500	ug/L	5	10	
Lead	1.2285	1.2128	100.0	101.5	ug/L	2	10	
Magnesium	0.1092	0.1018	10000	10550	ug/L	6	10	
Manganese	5.0991	4.6394	100.0	102.7	ug/L	3	10	
Molybdenum	1.1589	1.1628	100.0	99.72	ug/L	0	10	
Nickel	1.6372	0.9939	100.0	101.3	ug/L	1	10	
Potassium	1.2592	0.6403	10000	10310	ug/L	3	10	
Selenium	0.0403	0.0453	100.0	102.9	ug/L	3	10	
Silver	2.9345	2.9685	100.0	102.1	ug/L	2	10	
Sodium	3.0894	0.9224	10000	10340	ug/L	3	10	
Thallium	0.9065	0.8539	50.00	46.55	ug/L	-7	10	
Vanadium	3.8131	3.7486	100.0	100.6	ug/L	1	10	
Zinc	2.8095	0.6363	100.0	102.6	ug/L	3	10	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	656022	-11.24
Scandium	529417	473580	-10.55
Germanium	119842	104619	-12.70
Indium	758188	683901	-9.80
Bismuth	901811	846276	-6.16

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56501744014
 Cal : 56501744001

File : 11410014
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 11:36

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[7.423]	25.00	2.752	ug/L	!ib
Antimony	[0.1363]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.3444]	0.5000	0.1120	ug/L	!ib
Barium	[0.05971]	0.2500	0.03444	ug/L	!ib
Beryllium	[0.06614]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	[0.3517]	0.5000	0.01315	ug/L	!ib
Cobalt	[0.06440]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	[6.987]	25.00	3.223	ug/L	!ib
Lead	[0.06012]	0.2500	0.002523	ug/L	!ib
Magnesium	[7.093]	25.00	1.907	ug/L	!ib
Manganese	[0.05107]	0.2500	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	[0.04355]	0.2500	0.01875	ug/L	!ib
Potassium	ND	25.00	3.213	ug/L	
Selenium	ND	1.000	0.6002	ug/L	
Silver	[0.05596]	0.2500	0.005272	ug/L	!ib
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.3832]	0.5000	0.06366	ug/L	!ib
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	760785	2.93
Scandium	529417	538000	1.62
Germanium	119842	119331	-0.43
Indium	758188	765110	0.91
Bismuth	901811	912624	1.20

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56501744033
 Cal : 56501744001

File : 11410033
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 13:22

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[4.743]	25.00	2.752	ug/L	!ib
Antimony	[0.006279]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.2005]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	ND	0.2500	0.002016	ug/L	
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	[6.814]	25.00	6.782	ug/L	!ib
Chromium	ND	0.5000	0.01315	ug/L	
Cobalt	[0.008891]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	[7.652]	25.00	3.223	ug/L	!ib
Lead	[0.04719]	0.2500	0.002523	ug/L	!ib
Magnesium	[4.771]	25.00	1.907	ug/L	!ib
Manganese	ND	0.2500	0.03082	ug/L	
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	ND	25.00	3.213	ug/L	
Selenium	ND	1.000	0.6002	ug/L	
Silver	ND	0.2500	0.005272	ug/L	
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.5000	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	710787	-3.83
Scandium	529417	502160	-5.15
Germanium	119842	113800	-5.04
Indium	758188	737562	-2.72
Bismuth	901811	917724	1.76

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56501744060
 Cal : 56501744001

IDF : 1.0
 Time : 14-DEC-2006 15:53

File : 11410060
 Caldate: 14-DEC-2006

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[4.936]	25.00	2.752	ug/L	!ib
Antimony	[0.05490]	0.2500	0.005910	ug/L	!ib
Arsenic	ND	0.5000	0.1120	ug/L	
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.03543]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	[0.2143]	0.5000	0.01315	ug/L	!ib
Cobalt	[0.03813]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	[5.108]	25.00	3.223	ug/L	!ib
Lead	[0.03492]	0.2500	0.002523	ug/L	!ib
Magnesium	[4.972]	25.00	1.907	ug/L	!ib
Manganese	[0.03339]	0.2500	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	ND	25.00	3.213	ug/L	
Selenium	ND	1.000	0.6002	ug/L	
Silver	[0.03444]	0.2500	0.005272	ug/L	!ib
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.1003]	0.5000	0.06366	ug/L	!ib
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	693681	-6.15
Scandium	529417	488398	-7.75
Germanium	119842	108716	-9.28
Indium	758188	717096	-5.42
Bismuth	901811	881470	-2.26

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56501744078
 Cal : 56501744001

IDF : 1.0
 Time : 14-DEC-2006 17:34

File : 11410078
 Caldate: 14-DEC-2006

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	25.00	2.752	ug/L	
Antimony	[0.01143]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.2346]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.004656]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.5000	0.01315	ug/L	
Cobalt	[0.01014]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	ND	25.00	3.223	ug/L	
Lead	[0.05049]	0.2500	0.002523	ug/L	!ib
Magnesium	ND	25.00	1.907	ug/L	
Manganese	ND	0.2500	0.03082	ug/L	
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	ND	25.00	3.213	ug/L	
Selenium	ND	1.000	0.6002	ug/L	
Silver	ND	0.2500	0.005272	ug/L	
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.5000	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	694076	-6.09
Scandium	529417	484300	-8.52
Germanium	119842	110242	-8.01
Indium	758188	712188	-6.07
Bismuth	901811	897887	-0.44

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56501744088
 Cal : 56501744001

File : 11410088
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 18:30

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[6.153]	25.00	2.752	ug/L	!ib
Antimony	[0.07345]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.2428]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.04132]	0.2500	0.002016	ug/L	!ib
Cadmium	[0.08623]	0.2500	0.05722	ug/L	!ib
Calcium	ND	25.00	6.782	ug/L	
Chromium	[0.07947]	0.5000	0.01315	ug/L	!ib
Cobalt	[0.05237]	0.2500	0.003116	ug/L	!ib
Copper	[0.02443]	0.2500	0.02110	ug/L	!ib
Iron	[4.785]	25.00	3.223	ug/L	!ib
Lead	[0.09071]	0.2500	0.002523	ug/L	!ib
Magnesium	[6.691]	25.00	1.907	ug/L	!ib
Manganese	[0.04755]	0.2500	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	ND	25.00	3.213	ug/L	
Selenium	ND	1.000	0.6002	ug/L	
Silver	[0.03599]	0.2500	0.005272	ug/L	!ib
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.5000	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	709742	-3.97
Scandium	529417	498153	-5.91
Germanium	119842	113590	-5.22
Indium	758188	727823	-4.00
Bismuth	901811	969919	7.55

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56501744017
 Cal : 56501744001
 Standards: S4984, S4635

File : 11410017
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 11:53

Analyte	Quant	RL	Units	Flags
Antimony	2.420	0.2500	ug/L	
Arsenic	[0]	0.5000	ug/L	
Barium	1.451	0.2500	ug/L	
Beryllium	[0.01179]	0.2500	ug/L	
Cadmium	[0.1442]	0.2500	ug/L	
Chromium	3.495	0.5000	ug/L	
Cobalt	2.796	0.2500	ug/L	
Copper	2.458	0.2500	ug/L	
Lead	1.502	0.2500	ug/L	
Manganese	1.444	0.2500	ug/L	
Nickel	5.315	0.2500	ug/L	
Selenium	[0]	1.000	ug/L	
Silver	[0.1776]	0.2500	ug/L	
Thallium	[0.05492]	0.1250	ug/L	
Vanadium	[0.2756]	0.5000	ug/L	
Zinc	3.724	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	107100	ug/L	107
Calcium	300000	335400	ug/L	112
Iron	250000	250100	ug/L	100
Magnesium	100000	106500	ug/L	107
Molybdenum	2000	2092	ug/L	105
Potassium	100000	109400	ug/L	109
Sodium	250000	250400	ug/L	100

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	588660	-20.36
Scandium	529417	462832	-12.58
Germanium	119842	103404	-13.72
Indium	758188	623223	-17.80
Bismuth	901811	640011	-29.03

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Segnum : 56501744018
 Cal : 56501744001
 Standards: S4985, S4635

File : 11410018
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 11:59

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	98180	ug/L	-2		
Arsenic	100.0	96.26	ug/L	-4	20	
Cadmium	100.0	90.40	ug/L	-10	20	
Calcium	300000	310100	ug/L	3		
Chromium	200.0	205.7	ug/L	3	20	
Cobalt	200.0	191.4	ug/L	-4	20	
Copper	200.0	177.4	ug/L	-11	20	
Iron	250000	231600	ug/L	-7		
Magnesium	100000	96620	ug/L	-3		
Manganese	200.0	199.3	ug/L	0	20	
Molybdenum	2000	1974	ug/L	-1		
Nickel	200.0	183.0	ug/L	-9	20	
Potassium	100000	101000	ug/L	1		
Selenium	100.0	83.07	ug/L	-17	20	
Silver	50.00	44.67	ug/L	-11	20	
Sodium	250000	223400	ug/L	-11		
Vanadium	200.0	209.5	ug/L	5	20	
Zinc	100.0	84.84	ug/L	-15	20	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Scandium	529417	467368	-11.72
Germanium	119842	102866	-14.17

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56501744034 File : 11410034
 Cal : 56501744001 Caldate: 14-DEC-2006
 Standards: S4984, S4635

IDF : 1.0
 Time : 14-DEC-2006 13:28

Analyte	Quant	RL	Units	Flags
Antimony	2.336	0.2500	ug/L	
Arsenic	[0]	0.5000	ug/L	
Barium	1.379	0.2500	ug/L	
Beryllium	[0.008427]	0.2500	ug/L	
Cadmium	[0.1298]	0.2500	ug/L	
Chromium	3.268	0.5000	ug/L	
Cobalt	2.720	0.2500	ug/L	
Copper	2.366	0.2500	ug/L	
Lead	1.465	0.2500	ug/L	
Manganese	1.400	0.2500	ug/L	
Nickel	5.081	0.2500	ug/L	
Selenium	[0]	1.000	ug/L	
Silver	[0.1606]	0.2500	ug/L	
Thallium	[0.04368]	0.1250	ug/L	
Vanadium	[0.2795]	0.5000	ug/L	
Zinc	3.505	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	103600	ug/L	104
Calcium	300000	321700	ug/L	107
Iron	250000	244300	ug/L	98
Magnesium	100000	102700	ug/L	103
Molybdenum	2000	2043	ug/L	102
Potassium	100000	105600	ug/L	106
Sodium	250000	242000	ug/L	97

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	580974	-21.40
Scandium	529417	466222	-11.94
Germanium	119842	103041	-14.02
Indium	758188	632944	-16.52
Bismuth	901811	662727	-26.51

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Segnum : 56501744035
 Cal : 56501744001
 Standards: S4985, S4635

File : 11410035
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 13:34

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	94430	ug/L	-6		
Arsenic	100.0	94.08	ug/L	-6	20	
Cadmium	100.0	88.79	ug/L	-11	20	
Calcium	300000	299700	ug/L	0		
Chromium	200.0	201.6	ug/L	1	20	
Cobalt	200.0	187.9	ug/L	-6	20	
Copper	200.0	173.0	ug/L	-14	20	
Iron	250000	229000	ug/L	-8		
Magnesium	100000	93070	ug/L	-7		
Manganese	200.0	195.5	ug/L	-2	20	
Molybdenum	2000	1971	ug/L	-1		
Nickel	200.0	179.5	ug/L	-10	20	
Potassium	100000	98190	ug/L	-2		
Selenium	100.0	82.13	ug/L	-18	20	
Silver	50.00	44.30	ug/L	-11	20	
Sodium	250000	216900	ug/L	-13		
Vanadium	200.0	205.1	ug/L	3	20	
Zinc	100.0	82.20	ug/L	-18	20	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Scandium	529417	467067	-11.78
Germanium	119842	100756	-15.93

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56501744090
 Cal : 56501744001
 Standards: S4984, S4635

File : 11410090
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 18:41

Analyte	Quant	RL	Units	Flags
Antimony	2.312	0.2500	ug/L	
Arsenic	[0.1553]	0.5000	ug/L	
Barium	1.369	0.2500	ug/L	
Beryllium	[0.01073]	0.2500	ug/L	
Cadmium	[0.1632]	0.2500	ug/L	
Chromium	3.309	0.5000	ug/L	
Cobalt	2.702	0.2500	ug/L	
Copper	2.340	0.2500	ug/L	
Lead	1.483	0.2500	ug/L	
Manganese	1.381	0.2500	ug/L	
Nickel	5.082	0.2500	ug/L	
Selenium	[0]	1.000	ug/L	
Silver	[0.1574]	0.2500	ug/L	
Thallium	[0.04155]	0.1250	ug/L	
Vanadium	[0.2934]	0.5000	ug/L	
Zinc	3.588	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	105900	ug/L	106
Calcium	300000	328000	ug/L	109
Iron	250000	248400	ug/L	99
Magnesium	100000	105300	ug/L	105
Molybdenum	2000	2071	ug/L	104
Potassium	100000	107500	ug/L	108
Sodium	250000	250800	ug/L	100

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	554975	-24.91
Scandium	529417	436343	-17.58
Germanium	119842	97215	-18.88
Indium	758188	601658	-20.65
Bismuth	901811	646522	-28.31

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56501744091
 Cal : 56501744001
 Standards: S4985, S4635

File : 11410091
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 18:46

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	98280	ug/L	-2		
Arsenic	100.0	94.81	ug/L	-5	20	
Cadmium	100.0	92.58	ug/L	-7	20	
Calcium	300000	310300	ug/L	3		
Chromium	200.0	207.1	ug/L	4	20	
Cobalt	200.0	194.6	ug/L	-3	20	
Copper	200.0	174.8	ug/L	-13	20	
Iron	250000	237500	ug/L	-5		
Magnesium	100000	96600	ug/L	-3		
Manganese	200.0	202.6	ug/L	1	20	
Molybdenum	2000	2051	ug/L	3		
Nickel	200.0	182.2	ug/L	-9	20	
Potassium	100000	102500	ug/L	3		
Selenium	100.0	83.65	ug/L	-16	20	
Silver	50.00	45.53	ug/L	-9	20	
Sodium	250000	227600	ug/L	-9		
Vanadium	200.0	212.5	ug/L	6	20	
Zinc	100.0	82.77	ug/L	-17	20	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Scandium	529417	426654	-19.41
Germanium	119842	92305	-22.98

INTERNAL STANDARD SUMMARY Curtis & Tompkins Laboratories

Sequence Date: 14-DEC-2006
Sequence: 56501744
Instrument ID: MET05

(11410)

ICALBLK Filename: 11410004
Date Analyzed: 14-DEC-2006
Time Analyzed: 10:41

ICALBLK STD	IS1 (LI READING	IS2 (SC READING	IS3 (GE READING	IS4 (IN READING	IS5 (BI READING	IS6 (TB READING
ICALBLK STD	739106	529417	119842	758188	901811	1227860
LOWER LIMIT	221732	158825	35953	227456	270543	368358
UPPER LIMIT	886927	635300	143811	909826	1082173	1473432

TYPE	SAMPLE	#	IS1 (LI READING	IS2 (SC READING	IS3 (GE READING	IS4 (IN READING	IS5 (BI READING	IS6 (TB READING
ICB		014	760785	538000	119331	765110	912624	1235705
ICSA		017	588660	462832	103404	623223	640011	1025722
BLANK	QC367981	022	560416	398147	94842	570719	706182	875004
SAMPLE	191351-008	023	589467	423113	97799	609924	764612	991226
SAMPLE	191351-006	024	677372	554200	118372	721189	737564	1202708
CCV		029	639701	463074	104479	659273	829843	1106073
CCB		033	710787	502160	113800	737562	917724	1175519
ICSA		034	580974	466222	103041	632944	662727	1058629
BLANK	QC368135	039	567501	400311	89855	605457	736036	893527
BS	QC368136	040	588362	431634	95684	632097	767076	1011286
BSD	QC368137	041	586134	426268	93466	611563	743233	972497
SER	QC368140	043	644610	468968	105566	686731	855874	1135233
MS	QC368138	044	558544	406754	89301	569981	682702	904722
MSD	QC368139	045	562038	415803	89805	583897	695706	926120
PDS	QC368141	046	553847	404034	87110	567582	672543	897853
MSS	191314-003	050	649452	472606	108094	704387	895172	1155797
CCV		058	618953	449338	100094	655982	801836	1054895
CCB		060	693681	488398	108716	717096	881470	1151266
SAMPLE	191358-001	062	699875	488946	109715	717087	878017	1149936
SAMPLE	191358-002	063	708354	494800	111300	718553	873329	1146935
SAMPLE	191358-003	064	719961	500208	111250	731372	884359	1154608
SAMPLE	191358-004	065	726250	503430	111151	732866	886281	1161686
SAMPLE	191358-005	066	698762	482261	108129	696780	878322	1129679
SAMPLE	191358-006	067	636097	423916	94437	614493	767112	978579
SAMPLE	191358-007	068	707589	488449	109304	714913	884959	1145963
SAMPLE	191358-009	069	676856	456313	103269	667021	835756	1079689
SAMPLE	191358-011	070	658371	459122	102552	671123	839882	1091259
SAMPLE	191358-013	071	645916	467937	102449	667898	844802	1098112

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 14-DEC-2006
Sequence: 56501744
Instrument ID: MET05

(11410)

ICALBLK Filename: 11410004
Date Analyzed: 14-DEC-2006
Time Analyzed: 10:41

TYPE	SAMPLE	#							
CCV		075	666358	485169	108833	696031	883136	1164154	
CCB		078	694076	484300	110242	712188	897887	1163618	
SER	QC368140	079	671974	465281	107092	685146	873592	1117868	
MS	QC368138	080	636987	453691	103204	667781	838670	1087516	
MSD	QC368139	081	637371	452368	102211	667621	837642	1093329	
PDS	QC368141	082	623953	453740	101999	655544	813082	1073291	
CCV		086	656022	473580	104619	683901	846276	1121003	
CCB		088	709742	498153	113590	727823	969919	1197689	
ICSA		090	554975	436343	97215	601658	646522	1013362	
BLANK	QC368128	095	540053	375879	86590	557219	699677	848522	
BS	QC368129	096	557918	394421	88138	574157	718477	932736	
BSD	QC368130	097	576166	415072	92190	601336	741542	984717	
MSS	191314-003	099	616378	441276	97559	628284	745469	1026053	
SER	QC368133	100	645378	444230	100288	662612	815950	1059214	
MS	QC368131	101	553556	393768	85079	566601	673303	872134	
MSD	QC368132	102	538091	382101	82316	551846	653474	825590	
MS	QC368217	103	551701	403464	85711	581992	680914	918834	
CCV		107	609315	436763	98119	650290	815668	1059464	
CCB		109	617799	433413	97372	666582	835820	1051741	
MSD	QC368218	111	538887	388543	82637	558854	664413	886599	
PDS	QC368134	112	545626	398039	83820	574699	676181	877240	
SAMPLE	191314-001	113	552048	380498	81965	556520	654901	818244	
SAMPLE	191314-004	114	602878	414210	88783	587173	680202	940114	
SAMPLE	191314-005	115	576302	402469	86051	568560	678263	913636	
SAMPLE	191314-006	116	671780	467993	98008	647175	724984	1060316	
SAMPLE	191314-009	117	536236	396896	80376	562678	624656	818700	
SAMPLE	191314-010	118	578321	416199	86491	610734	672694	862603	
MSS	191314-011	119	517206	365884	78354	527233	622153	781307	
SAMPLE	191314-012	120	502573	360118	75213	522754	599333	768282	
CCV		124	590489	420941	94163	630459	795613	1013761	
CCB		126	582705	406942	91432	636473	792047	985147	
SAMPLE	191314-014	130	525604	369542	77989	539072	631213	791068	
SAMPLE	191314-015	131	543651	388333	82535	555926	652692	835229	
SAMPLE	191314-016	132	575949	416664	87451	599056	690589	935377	

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 14-DEC-2006
Sequence: 56501744
Instrument ID: MET05

(11410)

ICALBLK Filename: 11410004
Date Analyzed: 14-DEC-2006
Time Analyzed: 10:41

TYPE	SAMPLE	#							
MSS	191314-003	136	631118	427596	96065	653632	816844	1027064	
SER	QC368133	137	604197	406838	91116	627441	783242	9771194	
MS	QC368131	138	584625	401930	90062	618502	765022	959398	
MSD	QC368132	139	579681	398040	88655	616197	757369	934639	
PDS	QC368134	140	552347	390994	86059	594908	731831	893387	
MSS	191314-011	141	565337	391956	87100	608928	746758	892236	
MS	QC368217	142	575942	406690	88184	636008	769307	946915	
CCV		146	569156	397684	88443	607113	756180	956018	
CCB		148	582032	397367	89796	622339	782570	965958	
MSD	QC368218	150	574468	392424	87262	612041	750159	919159	
SAMPLE	191314-001	151	574792	395467	89036	614779	758987	925124	
SAMPLE	191314-004	152	610023	413134	92750	633134	772819	979468	
SAMPLE	191314-005	153	630296	425478	94069	650202	793338	1015738	
SAMPLE	191314-006	154	651794	443977	96423	670474	796771	1032945	
SAMPLE	191314-009	155	602454	402771	88638	620018	759873	925468	
SAMPLE	191314-010	156	593847	407349	90469	631900	768572	981913	
SAMPLE	191314-012	157	586271	400188	88024	618148	757018	963582	
SAMPLE	191314-014	158	596766	408930	90982	632988	773981	959096	
SAMPLE	191314-015	159	605683	411580	90983	629444	769953	977552	
CCV		163	573724	401176	89418	604264	769319	986225	
CCB		165	577982	385526	88084	609554	769438	957041	
SAMPLE	191314-016	167	578515	394830	89294	609746	753128	923559	
CCV		171	544557	380127	83429	584035	720631	878148	
CCB		174	583350	389118	87467	612337	769060	901389	
ICSA		175	467189	357359	79760	523485	568040	775269	
BLANK	QC368373	180	471772	327859	71559	525276	619362	706082	
BS	QC368374	181	470203	327451	70683	504483	608943	721302	
BSD	QC368375	182	472652	319274	69812	482904	589669	707318	
MSS	191286-008	184	467646	365781	73128	481603	556982	726629	
SER	QC368378	185	539220	386383	82856	580605	682134	840829	
MS	QC368376	186	442642	330228	67712	440622	513853	669962	
MSD	QC368377	187	426000	320331	66062	423183	484356	629798	
PDS	QC368379	188	442779	343822	67030	454637	525220	677940	
CCV		199	525793	366987	81213	574973	717407	879459	

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 14-DEC-2006
Sequence: 56501744
Instrument ID: MET05

(11410)
ICALBLK Filename: 11410004
Date Analyzed: 14-DEC-2006
Time Analyzed: 10:41

TYPE	SAMPLE	#					
CCB		201	541339	367469	82059	596051	742222
ICSA		203	431246	334818	73495	510422	546377
							830771
							734981

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56501744 Instrument: MET05
Analytical Method: EPA 6020

Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 14-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds Used	>LR
001	11410001	TUN				14-DEC-2006 10:24	1.0	1.0				1	
002	11410002	X	RINSE			14-DEC-2006 10:30	1.0					2	
003	11410003	X	RINSE			14-DEC-2006 10:36	1.0					2	
004	11410004	ICALBLK	STD-BLANK			14-DEC-2006 10:41	1.0	1.0				2	
005	11410005	ICAL	CS1			14-DEC-2006 10:47	1.0	1.0				3	
006	11410006	ICAL	CS2			14-DEC-2006 10:52	1.0	1.0				4	
007	11410007	ICAL	CS3			14-DEC-2006 10:58	1.0	1.0				5	
008	11410008	ICAL	CS4			14-DEC-2006 11:04	1.0	1.0				6	
009	11410009	ICAL	CS5			14-DEC-2006 11:09	1.0	1.0				7	
010	11410010	ICAL	CS6			14-DEC-2006 11:15	1.0	1.0				8	
011	11410011	X	RINSE			14-DEC-2006 11:20	1.0					2	
012	11410012	ICV				14-DEC-2006 11:25	1.0	1.0			1	9	
013	11410013	X	RINSE			14-DEC-2006 11:31	1.0					2	
014	11410014	ICB				14-DEC-2006 11:36	1.0	1.0			1	2	
015	11410015	X				14-DEC-2006 11:42	1.0	1.0				2	
016	11410016	X				14-DEC-2006 11:48	1.0			3		2	
017	11410017	ICSA				14-DEC-2006 11:53	1.0	1.0			1	10 2	7:CA=335400
018	11410018	ICSAB				14-DEC-2006 11:59	1.0	1.0			1	11 2	9:CA=310100
019	11410019	X	RINSE			14-DEC-2006 12:04	1.0					2	
020	11410020	X	RINSE			14-DEC-2006 12:10	1.0					2	
021	11410021	X	RINSE			14-DEC-2006 12:15	1.0					2	
022	11410022	BLANK	QC367981		120288 Water	14-DEC-2006 12:21	1.0	1.0			1	2	
023	11410023	SAMPLE	191351-008		120288 Water	14-DEC-2006 12:27	1.0	1.0			1	2	
024	11410024	SAMPLE	191351-006		120288 Water	14-DEC-2006 12:32	5.0	1.0			1	2	
025	11410025	X	RINSE			14-DEC-2006 12:38	1.0					2	
026	11410026	X	RINSE			14-DEC-2006 12:43	1.0					2	
027	11410027	X	RINSE			14-DEC-2006 12:49	1.0					2	
028	11410028	X	RINSE			14-DEC-2006 12:55	1.0					2	
029	11410029	CCV				14-DEC-2006 13:00	1.0	1.0			1	12 2	
030	11410030	X	RINSE			14-DEC-2006 13:06	1.0					2	
031	11410031	X				14-DEC-2006 13:11	1.0					2	

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst: 

Date: 12/15/06

Sequence: 56501744 Instrument: MET05
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 14-DEC-2006

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
032	11410032	X				14-DEC-2006 13:17	1.0					2		
033	11410033	CCB				14-DEC-2006 13:22	1.0	1.0			1	2		
034	11410034	ICSA				14-DEC-2006 13:28	1.0	1.0			1	10 2	7:CA=321700	
035	11410035	ICSA				14-DEC-2006 13:34	1.0	1.0			1	11 2	9:CA=299700	
036	11410036	X				14-DEC-2006 13:39	1.0					2		
037	11410037	X				14-DEC-2006 13:45	1.0					2		
038	11410038	X				14-DEC-2006 13:50	1.0					2		
039	11410039	BLANK				14-DEC-2006 13:56	1.0	1.0			1	2		
040	11410040	BS				14-DEC-2006 14:01	1.0	1.0			1	2		
041	11410041	BSD				14-DEC-2006 14:07	1.0	1.0			1	2		
042	11410042	X				14-DEC-2006 14:12	1.0					2		
043	11410043	SER				14-DEC-2006 14:18	5.0	1.0			1	2		
044	11410044	MS				14-DEC-2006 14:24	1.0	1.0			1	2	5:NA=59030.0	
045	11410045	MSD				14-DEC-2006 14:29	1.0	1.0			1	2	5:NA=57900.0	
046	11410046	PDS				14-DEC-2006 14:35	1.0	1.0			1	13 14 2	5:NA=58030.0	
047	11410047	X				14-DEC-2006 14:40	1.0					2		
048	11410048	X				14-DEC-2006 14:46	1.0					2		
049	11410049	X				14-DEC-2006 14:51	1.0					2		
050	11410050	MSS				14-DEC-2006 14:57	10.0	1.0			1	2		
051	11410051	X				14-DEC-2006 15:02	1.0					2		
052	11410052	X				14-DEC-2006 15:08	1.0					2		
053	11410053	X				14-DEC-2006 15:14	1.0					2		
054	11410054	X				14-DEC-2006 15:19	1.0					12 2		
055	11410055	X				14-DEC-2006 15:25	1.0					2		
056	11410056	X				14-DEC-2006 15:30	1.0					2		
057	11410057	X				14-DEC-2006 15:36	1.0					2		
058	11410058	CCV				14-DEC-2006 15:42	1.0	1.0			1	12 2		
059	11410059	X				14-DEC-2006 15:48	1.0					2		
060	11410060	CCB				14-DEC-2006 15:53	1.0	1.0			1	2		
061	11410061	X				14-DEC-2006 15:59	1.0					2		
062	11410062	SAMPLE				14-DEC-2006 16:05	20.0	1.0			1	2		

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst: 

Date: 12/15/09

Sequence: 56501744 Instrument: MET05
Analytical Method: EPA 6020

Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 14-DEC-2006

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
063	11410063	SAMPLE	191358-002	120324	Water	14-DEC-2006 16:10	50.0	1.0	1	1	1	2		
064	11410064	SAMPLE	191358-003	120324	Water	14-DEC-2006 16:16	20.0	1.0	2	1	1	2		
065	11410065	SAMPLE	191358-004	120324	Water	14-DEC-2006 16:21	20.0	1.0	1	1	1	2		
066	11410066	SAMPLE	191358-005	120324	Water	14-DEC-2006 16:27	20.0	1.0	1	1	1	2		
067	11410067	SAMPLE	191358-006	120324	Water	14-DEC-2006 16:33	1.0	1.0	1	1	1	2		
068	11410068	SAMPLE	191358-007	120324	Water	14-DEC-2006 16:38	20.0	1.0	2	1	1	2		
069	11410069	SAMPLE	191358-009	120324	Filtra	14-DEC-2006 16:44	10.0	1.0	1	1	1	2		
070	11410070	SAMPLE	191358-011	120324	Filtra	14-DEC-2006 16:49	10.0	1.0	1	1	1	2		
071	11410071	SAMPLE	191358-013	120324	Water	14-DEC-2006 16:55	20.0	1.0	1	1	1	2		
072	11410072	X	RINSE			14-DEC-2006 17:00	1.0					2		1:MN=230.350
073	11410073	X	RINSE			14-DEC-2006 17:06	1.0					2		
074	11410074	X	RINSE			14-DEC-2006 17:12	1.0					2		
075	11410075	CCV				14-DEC-2006 17:17	1.0	1.0	1	1	1	2		
076	11410076	X	RINSE			14-DEC-2006 17:23	1.0					2		
077	11410077	X				14-DEC-2006 17:28	1.0					2		
078	11410078	CCB				14-DEC-2006 17:34	1.0					2		
079	11410079	SER	QC368140	120324	Water	14-DEC-2006 17:40	50.0	1.0	1	2	1	2		
080	11410080	MS	QC368138	120324	Water	14-DEC-2006 17:45	10.0	1.0	1	1	1	2		
081	11410081	MSD	QC368139	120324	Water	14-DEC-2006 17:51	10.0	1.0	1	1	1	2		
082	11410082	PDS	QC368141	120324	Water	14-DEC-2006 17:56	10.0	1.0	1	1	1	2		
083	11410083	X	RINSE			14-DEC-2006 18:02	1.0					2		
084	11410084	X	RINSE			14-DEC-2006 18:08	1.0					2		
085	11410085	X	RINSE			14-DEC-2006 18:13	1.0					2		
086	11410086	CCV				14-DEC-2006 18:19	1.0	1.0				2		
087	11410087	X	RINSE			14-DEC-2006 18:24	1.0					2		
088	11410088	CCB				14-DEC-2006 18:30	1.0	1.0				2		
089	11410089	X				14-DEC-2006 18:35	1.0	1.0				2		
090	11410090	ICSA				14-DEC-2006 18:41	1.0	1.0				10 2		7:CA=328000
091	11410091	ICSA				14-DEC-2006 18:46	1.0	1.0				11 2		10:CA=310300
092	11410092	X	RINSE			14-DEC-2006 18:52	1.0					2		
093	11410093	X	RINSE			14-DEC-2006 18:57	1.0					2		

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst:  Date: 12/15/14

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56501744 Instrument: MET05 Agilent ICP-MS
 Analytical Method: EPA 6020 SOP Version: 6020_rv2
 Begun: 14-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
094	11410094	X	RINSE			14-DEC-2006	19:03	1.0				2		
095	11410095	BLANK	QC368128	120323	Filtera	14-DEC-2006	19:09	1.0	1.0		1	2		
096	11410096	BS	QC368129	120323	Filtera	14-DEC-2006	19:14	1.0	1.0		1	2		
097	11410097	BSD	QC368130	120323	Filtera	14-DEC-2006	19:20	1.0	1.0		1	2		
098	11410098	X	RINSE			14-DEC-2006	19:25	1.0				2		
099	11410099	MSS	191314-003	120323	Filtera	14-DEC-2006	19:31	1.0	1.0		1	2		
100	11410100	SER	QC368133	120323	Filtera	14-DEC-2006	19:36	5.0	1.0		1	2		
101	11410101	MS	QC368131	120323	Filtera	14-DEC-2006	19:42	1.0	1.0		1	2		
102	11410102	MSD	QC368132	120323	Filtera	14-DEC-2006	19:48	1.0	1.0		1	2		
103	11410103	MS	QC368217	120323	Filtera	14-DEC-2006	19:53	1.0	1.0		1	2		
104	11410104	X	RINSE			14-DEC-2006	19:59	1.0				2		
105	11410105	X	RINSE			14-DEC-2006	20:04	1.0				2		
106	11410106	X	RINSE			14-DEC-2006	20:10	1.0				2		
107	11410107	CCV				14-DEC-2006	20:15	1.0	1.0		1	12	2	
108	11410108	X	RINSE			14-DEC-2006	20:21	1.0				2		
109	11410109	CCB				14-DEC-2006	20:26	1.0	1.0		1	2		
110	11410110	X				14-DEC-2006	20:32	1.0	1.0		1	2		
111	11410111	MSD	QC368218	120323	Filtera	14-DEC-2006	20:38	1.0	1.0		1	2		
112	11410112	PDS	QC368134	120323	Filtera	14-DEC-2006	20:43	1.0	1.0		1	13	14	2
113	11410113	SAMPLE	191314-001	120323	Filtera	14-DEC-2006	20:49	1.0	1.0		1	2		
114	11410114	SAMPLE	191314-004	120323	Filtera	14-DEC-2006	20:54	1.0	1.0		1	2		
115	11410115	SAMPLE	191314-005	120323	Filtera	14-DEC-2006	21:00	1.0	1.0		1	2		
116	11410116	SAMPLE	191314-006	120323	Filtera	14-DEC-2006	21:06	1.0	1.0		1	2		
117	11410117	SAMPLE	191314-009	120323	Filtera	14-DEC-2006	21:11	1.0	1.0		1	2		
118	11410118	SAMPLE	191314-010	120323	Filtera	14-DEC-2006	21:17	1.0	1.0		1	2		
119	11410119	MSS	191314-011	120323	Filtera	14-DEC-2006	21:22	1.0	1.0		1	2		
120	11410120	SAMPLE	191314-012	120323	Filtera	14-DEC-2006	21:28	1.0	1.0		1	2		
121	11410121	X	RINSE			14-DEC-2006	21:33	1.0				2		
122	11410122	X	RINSE			14-DEC-2006	21:39	1.0				2		
123	11410123	X	RINSE			14-DEC-2006	21:45	1.0				2		
124	11410124	CCV				14-DEC-2006	21:50	1.0	1.0		1	12	2	

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst: Date: 12/15/06

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56501744 Instrument: MET05
Analytical Method: EPA 6020

Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 14-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
125	11410125	X	RINSE			14-DEC-2006 21:56	1.0					12		
126	11410126	CCB				14-DEC-2006 22:01	1.0	1.0			1	2		
127	11410127	X				14-DEC-2006 22:07	1.0	1.0	1		1	2		
128	11410128	TUN				14-DEC-2006 22:13	1.0	1.0				1		
129	11410129	X	RINSE			14-DEC-2006 22:19	1.0					2		
130	11410130	SAMPLE	191314-014	120323	Filtera	14-DEC-2006 22:25	1.0	1.0	3		1	2		3:NA=58960.0
131	11410131	SAMPLE	191314-015	120323	Filtera	14-DEC-2006 22:30	1.0	1.0	3		1	2		3:NA=77960.0
132	11410132	SAMPLE	191314-016	120323	Filtera	14-DEC-2006 22:36	1.0	1.0	3		1	2		3:NA=88540.0
133	11410133	X	RINSE			14-DEC-2006 22:41	1.0					2		
134	11410134	X	RINSE			14-DEC-2006 22:47	1.0					2		
135	11410135	X	RINSE			14-DEC-2006 22:53	1.0					2		
136	11410136	MSS	191314-003	120323	Filtera	14-DEC-2006 22:58	10.0	1.0			1	2		
137	11410137	SER	QC368133	120323	Filtera	14-DEC-2006 23:04	50.0	1.0	2		1	2		
138	11410138	MS	QC368131	120323	Filtera	14-DEC-2006 23:10	10.0	1.0			1	2		
139	11410139	MSD	QC368132	120323	Filtera	14-DEC-2006 23:16	10.0	1.0			1	2		
140	11410140	PDS	QC368134	120323	Filtera	14-DEC-2006 23:21	10.0	1.0			1	13 14 2		
141	11410141	MSS	191314-011	120323	Filtera	14-DEC-2006 23:27	10.0	1.0			1	2		
142	11410142	MS	QC368217	120323	Filtera	14-DEC-2006 23:32	10.0	1.0			1	2		
143	11410143	X	RINSE			14-DEC-2006 23:38	1.0					2		
144	11410144	X	RINSE			14-DEC-2006 23:44	1.0					2		
145	11410145	X	RINSE			14-DEC-2006 23:49	1.0					2		
146	11410146	CCV				14-DEC-2006 23:55	1.0	1.0			1	12 2		
147	11410147	X	RINSE			15-DEC-2006 00:00	1.0					2		
148	11410148	CCB				15-DEC-2006 00:06	1.0	1.0			1	2		
149	11410149	X				15-DEC-2006 00:12	1.0	1.0			1	2		
150	11410150	MSD	QC368218	120323	Filtera	15-DEC-2006 00:17	10.0	1.0			1	2		
151	11410151	SAMPLE	191314-001	120323	Filtera	15-DEC-2006 00:23	10.0	1.0			1	2		
152	11410152	SAMPLE	191314-004	120323	Filtera	15-DEC-2006 00:29	10.0	1.0			1	2		
153	11410153	SAMPLE	191314-005	120323	Filtera	15-DEC-2006 00:34	10.0	1.0	1		1	2		
154	11410154	SAMPLE	191314-006	120323	Filtera	15-DEC-2006 00:40	10.0	1.0			1	2		
155	11410155	SAMPLE	191314-009	120323	Filtera	15-DEC-2006 00:45	20.0	1.0	2		1	2		

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst: 

Date: 12/15/06

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56501744 Instrument: MET05
Analytical Method: EPA 6020 Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 14-DEC-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used	>LR
156	11410156	SAMPLE	191314-010	120323	Filttra	15-DEC-2006 00:51	10.0	1.0			1	2	
157	11410157	SAMPLE	191314-012	120323	Filttra	15-DEC-2006 00:57	10.0	1.0			1	2	
158	11410158	SAMPLE	191314-014	120323	Filttra	15-DEC-2006 01:02	10.0	1.0			1	2	
159	11410159	SAMPLE	191314-015	120323	Filttra	15-DEC-2006 01:08	10.0	1.0			1	2	
160	11410160	X	RINSE			15-DEC-2006 01:13	1.0					2	
161	11410161	X	RINSE			15-DEC-2006 01:19	1.0					2	
162	11410162	X	RINSE			15-DEC-2006 01:25	1.0					2	
163	11410163	CCV	RINSE			15-DEC-2006 01:30	1.0				1	12 2	
164	11410164	X	RINSE			15-DEC-2006 01:36	1.0	1.0				2	
165	11410165	CCB				15-DEC-2006 01:42	1.0	1.0			1	2	
166	11410166	X				15-DEC-2006 01:47	1.0	1.0	1		1	2	
167	11410167	SAMPLE	191314-016	120323	Filttra	15-DEC-2006 01:53	10.0	1.0			1	2	
168	11410168	X	RINSE			15-DEC-2006 01:58	1.0					2	
169	11410169	X	RINSE			15-DEC-2006 02:04	1.0					2	
170	11410170	X	RINSE			15-DEC-2006 02:10	1.0					2	
171	11410171	CCV				15-DEC-2006 02:15	1.0	1.0			1	12 2	
172	11410172	X	RINSE			15-DEC-2006 02:21	1.0					2	
173	11410173	X				15-DEC-2006 02:26	1.0	1.0	1		1	2	
174	11410174	CCB				15-DEC-2006 02:32	1.0	1.0			1	2	
175	11410175	ICSA				15-DEC-2006 02:38	1.0	1.0			1	10 2	7:CA=343800
176	11410176	ICSAB				15-DEC-2006 02:43	1.0	1.0			1	11 2	10:CA=314200
177	11410177	X	RINSE			15-DEC-2006 02:49	1.0					2	
178	11410178	X	RINSE			15-DEC-2006 02:54	1.0					2	
179	11410179	X	RINSE			15-DEC-2006 03:00	1.0					2	
180	11410180	BLANK	QC368373	120383	Filttra	15-DEC-2006 03:05	1.0	1.0			1	2	
181	11410181	BS	QC368374	120383	Filttra	15-DEC-2006 03:11	1.0	1.0			1	2	
182	11410182	BSD	QC368375	120383	Filttra	15-DEC-2006 03:17	1.0	1.0			1	2	
183	11410183	X	RINSE			15-DEC-2006 03:22	1.0					2	
184	11410184	MSS	191286-008	120383	Filttra	15-DEC-2006 03:28	1.0	1.0	4		1	2	4:NA=176200
185	11410185	SER	QC368378	120383	Filttra	15-DEC-2006 03:33	5.0	1.0			3	2	3:NA=37860.0
186	11410186	MS	QC368376	120383	Filttra	15-DEC-2006 03:39	1.0	1.0	1		4	2	5:NA=185300

Std used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst:  Date: 12/15/06

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56501744 Instrument: MET05
Analytical Method: EPA 6020

Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 14-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
187	11410187	MSD	QC368377	120383	Filtra	15-DEC-2006 03:44	1.0	1.0	2	3	1	2	6:NA=191100	
188	11410188	PDS	QC368379	120383	Filtra	15-DEC-2006 03:50	1.0	1.0	2		1	13 14 2	6:NA=17730C	
189	11410189	X	RINSE			15-DEC-2006 03:55	1.0					2		
190	11410190	X	RINSE			15-DEC-2006 04:01	1.0					2		
191	11410191	X	RINSE			15-DEC-2006 04:07	1.0					2		
192	11410192	X	RINSE			15-DEC-2006 04:12	1.0					12 2		
193	11410193	X	RINSE			15-DEC-2006 04:18	1.0	1.0			1			
194	11410194	X				15-DEC-2006 04:23	1.0	1.0	2		1	2		
195	11410195	X				15-DEC-2006 04:29	1.0	1.0	2		1	2		
196	11410196	X	RINSE			15-DEC-2006 04:34	1.0					2		
197	11410197	X	RINSE			15-DEC-2006 04:40	1.0					2		
198	11410198	X	RINSE			15-DEC-2006 04:46	1.0					2		
199	11410199	CCV				15-DEC-2006 04:51	1.0	1.0			1	12 2		
200	11410200	X	RINSE			15-DEC-2006 04:57	1.0					2		
201	11410201	CCB				15-DEC-2006 05:02	1.0	1.0			1	2		
202	11410202	X				15-DEC-2006 05:08	1.0	1.0	1		1	2		
203	11410203	ICSA				15-DEC-2006 05:14	1.0	1.0			1	10 2	7:CA=339900	
204	11410204	ICSAB				15-DEC-2006 05:19	1.0	1.0			1	11 2	10:CA=315400	

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst: Date: 12/15/06

REPORTING SUMMARY FOR 191290 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	A	S	A	B	B	C	C	C	C	F	P	M	M	H	N	K	S	A	N	T	V	Z
				L	B	S	A	E	D	A	R	O	U	E	B	G	N	G	I	E	G	A	L	N	
191290-001	MET04	12/07/06 15:54	1.0														+								
191290-001	MET05	12/13/06 22:27	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC367392	MET04	12/07/06 14:48	1.0														+								
QC367393	MET04	12/07/06 14:50	1.0														+								
QC367394	MET04	12/07/06 14:52	1.0														+								
QC367395	MET04	12/07/06 14:58	5.0														+								
QC367396	MET04	12/07/06 15:02	1.0														+								
QC367397	MET04	12/07/06 15:04	1.0														+								
QC368135	MET05	12/13/06 20:58	1.0		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC368135	MET05	12/14/06 13:56	1.0	+									+			+						+			
QC368136	MET05	12/13/06 21:04	1.0		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC368136	MET05	12/14/06 14:01	1.0	+												+						+			
QC368137	MET05	12/13/06 21:09	1.0		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC368137	MET05	12/14/06 14:07	1.0	+												+						+			
QC368138	MET05	12/13/06 21:31	1.0		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC368138	MET05	12/14/06 14:24	1.0	+																		+			
QC368138	MET05	12/14/06 17:45	10.0						+				+		+	+									
QC368139	MET05	12/13/06 21:37	1.0		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC368139	MET05	12/14/06 14:29	1.0	+																		+			
QC368139	MET05	12/14/06 17:51	10.0						+				+		+	+									
QC368140	MET05	12/13/06 21:26	5.0		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC368140	MET05	12/14/06 14:18	5.0	+																					
QC368140	MET05	12/14/06 17:40	50.0						+				+		+	+						+			
QC368141	MET05	12/13/06 21:42	1.0		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
QC368141	MET05	12/14/06 14:35	1.0	+																					
QC368141	MET05	12/14/06 17:56	10.0						+				+		+	+						+			

Curtis & Tompkins Laboratories Sample Preparation Summary

13-DEC-2006 10:14

Batch Number : 120324
Date Extracted: 13-DEC-2006
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S4326
Spike #2 ID : S4327
Spike #3 ID :
SQP Version :

Sample	Type	Client	Matrix	Int	Units	Final	Prep	Clean	pH	Sp 1	Sp 2	Sp 3	Analyses	Clean	Comments
191290-001		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
191314-003		Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
191358-001		Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
191358-002		Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
191358-003		Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
191358-004		Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
191358-005		Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
191358-006		Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
191358-007		Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
191358-009		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					15MET		
191358-011		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					15MET		
191358-013		Treadwell & Rollo	Water	50	mL	50	1.000000	1					AG, AS, CD, (more)		
QC368135	BLANK		Water	50	mL	50	1.000000	1					ICAP		
QC368136	BS		Water	50	mL	50	1.000000	1					ICAP		
QC368137	BSD		Water	50	mL	50	1.000000	1					ICAP		
QC368138	MS	of 191314-003	Water	50	mL	50	1.000000	1					ICAP		
QC368139	MSD	of 191314-003	Water	50	mL	50	1.000000	1					ICAP		
QC368140	SER	of 191314-003	Water	50	mL	50	1.000000	1					ICAP		
QC368141	PDS	of 191314-003	Water	50	mL	50	1.000000	1					ICAP		

Prep Chemist:

Reviewed By:

Date:

Relinquished By:

Received By:

Date:

LIMS Batch #: 120324
 Date Digested: 12/13/06
 Digested by: RAA

Digestion Method

☒ EPA 200.8 for ICP-MS
☐ _____

BK BK 2378

Page 12

Continued From: _____

Continued On: _____

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BK	50	50	N	
B5				
B3D				
M3-03N				
M3D-031				
B1314-031				
358-01A				
02				
03				
04				
05 B				
06 A				
07				
09 D				
011				
358-013M				FIELD FILTERED
290-01H				FIELD FILTERED

.5 digestion temperature (90-95 degrees C)
 mL of spike solution was added to all spikes

concentrated HCl
 concentrated HNO₃

☐ filtered thru' Whatman # 541

Reagent ID or LIMS #	Initials / Date
95	RAA 12/13
34324	
34327	
026024	RAA
136068	
N/A	

RAA 12/13/06
 Prep Chemist Signature / Date

RAA 12/12/06
 Reviewer Signature / Date

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 7470A

Inst : MET04
Calnum : 46491906001
Units : ug/L

Date : 07-DEC-2006 14:26
X Axis : R

Reviewer: ---
Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
I1	120147	46491906002	STD02REP1 07-DEC-2006 14:30		S5037 (500X)
I2	120147	46491906003	STD03REP1 07-DEC-2006 14:33		S5037 (200X)
I3	120147	46491906004	STD04REP1 07-DEC-2006 14:35		S5037 (50X)
I4	120147	46491906005	STD05REP1 07-DEC-2006 14:37		S5037 (20X)
I5	120147	46491906006	STD06REP1 07-DEC-2006 14:40		S5037 (10X)

Analyte	I1	I2	I3	I4	I5	Type	a0	a1	a2	Avg	r ²	%RSD	Mult ²	Fig
Mercury	3845.0	2980.0	2484.5	2426.8	2359.0	LINR	-0.1288	4.28E-4		2819.1	1.000		.99	

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression

File Utility Help

RN > RN > ?

Protocol hgppb

BUSY

Dataset/Proto 120706 /hgppb

Protocol | Line info | Cal Curve | Report | Ctrl Chart | Viewer

Reset

Calib Coeffs

New Cal

Update Coeffs

Spike Coeffs

A

B

C

Rho

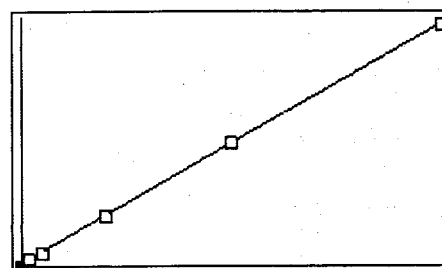
Type

 μ Abs.

23590

Accepted

New



Include S1

Rep 1 ☒

07-Dec-06 14:40

Conc.

10.0

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3
01	.00000	-.038	-.038	212	0	211		
02	.20000	.200	.000	770	0%	769		
03	.50000	.509	.009	1490	0%	1490		
04	2.0000	2.00	-.002	4969	0%	4969		
05	5.0000	5.06	.064	12134	0%	12134		
06	10.000	9.97	-.033	23590	0%	23590		

Ready

NUM

Protocol: hgppb

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 1 Rep: 1				Seq: 1		14:26:25 07 Dec 06		HG
Hg	.000	ppb	211					
		Bkgd 1	17021634					
*** Standard: 2 Rep: 1				Seq: 2		14:30:29 07 Dec 06		HG
Hg	.200	ppb	769					
		Bkgd 1	17014236					
*** Standard: 3 Rep: 1				Seq: 3		14:33:26 07 Dec 06		HG
Hg	.500	ppb	1490					
		Bkgd 1	17007322					
*** Standard: 4 Rep: 1				Seq: 4		14:35:44 07 Dec 06		HG
Hg	2.00	ppb	4969					
		Bkgd 1	17003727					
*** Standard: 5 Rep: 1				Seq: 5		14:37:52 07 Dec 06		HG
Hg	5.00	ppb	12134					
		Bkgd 1	17005401					
*** Standard: 6 Rep: 1				Seq: 6		14:40:19 07 Dec 06		HG
Hg	10.0	ppb	23590					
		Bkgd 1	17000142					
*** Check Standard: 2			Ck2S5039	Seq: 7		14:42:26 07 Dec 06		HG
Line Flag			Intensities					
Hg			12039					
		Bkgd 1	16986013					
*** Check Standard: 1			Ck1ICB	Seq: 8		14:44:54 07 Dec 06		HG
Line Flag			Intensities					
Hg			252					
		Bkgd 1	16988618					
*** Sample ID: qc367392				Seq: 9		14:48:01 07 Dec 06		HG
			120147,1					
Hg	-.007	ppb	285					
		Bkgd 1	16984362					

=====

Sequence: 46491906
Analytical Method: EPA 7470A
Analyte: Mercury

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories
HydraAA HG Analyzer
SOP Version: HG_water_rv7

Begun: 07-DEC-2006

#	Filename	Type	Sample	enum	Subj	Samp	Batch	Matrix	Analyzed	IDF	PDF	stds	Spiked	Calnum	Result	RL	Units	%Rec	Rpd	Flags
001	120147	ICBLBK	STD01RBP1						07-DEC-2006	14:26	1.0	1.0								
002	120147	ICBL	STD02RBP1						07-DEC-2006	14:30	1.0	1.0								
003	120147	ICBL	STD03RBP1						07-DEC-2006	14:33	1.0	1.0								
004	120147	ICBL	STD04RBP1						07-DEC-2006	14:35	1.0	1.0								
005	120147	ICBL	STD05RBP1						07-DEC-2006	14:37	1.0	1.0								
006	120147	ICBL	STD06RBP1						07-DEC-2006	14:40	1.0	1.0								
007	120147	ICV							07-DEC-2006	14:42	1.0	1.0	2	5.000	46491906001	5.020		ug/L	100	
008	120147	ICB							07-DEC-2006	14:44	1.0	1.0			46491906001	ND		ug/L		
009	120147	BLANK	QC367392						07-DEC-2006	14:48	1.0	1.0			46491906001	ND		ug/L		
010	120147	BS	QC367393						07-DEC-2006	14:50	1.0	1.0		5.000	46491906001	5.060		ug/L	101	
011	120147	BSD	QC367394						07-DEC-2006	14:52	1.0	1.0		5.000	46491906001	5.000		ug/L	100	1
012	120147	MSS	191281-001						07-DEC-2006	14:54	1.0	1.0			46491906001	ND		ug/L		
013	120147	SER	QC367395						07-DEC-2006	14:58	5.0	1.0			46491906001	ND		ug/L		
014	120147	MS	QC367396						07-DEC-2006	15:02	1.0	1.0		5.000	46491906001	5.250		ug/L	105	
015	120147	MSD	QC367397						07-DEC-2006	15:04	1.0	1.0		5.000	46491906001	5.160		ug/L	103	2
016	120147	SAMPLE	191245-003						07-DEC-2006	15:06	1.0	1.0			46491906001	ND		ug/L		
017	120147	SAMPLE	191281-002						07-DEC-2006	15:10	1.0	1.0			46491906001	ND		ug/L		
018	120147	SAMPLE	191281-003						07-DEC-2006	15:13	1.0	1.0			46491906001	ND		ug/L		
019	120147	CCV							07-DEC-2006	15:15	1.0	1.0	3	2.500	46491906001	2.570		ug/L	103	
020	120147	CCB							07-DEC-2006	15:18	1.0	1.0			46491906001	ND		ug/L		
021	120147	SAMPLE	191281-004						07-DEC-2006	15:20	1.0	1.0			46491906001	ND		ug/L		
022	120147	SAMPLE	191286-001						07-DEC-2006	15:22	1.0	1.0			46491906001	ND		ug/L		
023	120147	SAMPLE	191286-003						07-DEC-2006	15:26	1.0	1.0			46491906001	ND		ug/L		
024	120147	SAMPLE	191286-004						07-DEC-2006	15:29	1.0	1.0			46491906001	ND		ug/L		
025	120147	SAMPLE	191286-006						07-DEC-2006	15:31	1.0	1.0			46491906001	ND		ug/L		
026	120147	SAMPLE	191286-007						07-DEC-2006	15:33	1.0	1.0			46491906001	ND		ug/L		
027	120147	SAMPLE	191286-008						07-DEC-2006	15:35	1.0	1.0			46491906001	ND		ug/L		
028	120147	SAMPLE	191286-013						07-DEC-2006	15:38	1.0	1.0			46491906001	ND		ug/L		
029	120147	SAMPLE	191286-007						07-DEC-2006	15:40	1.0	1.0			46491906001	0.35		ug/L		
030	120147	SAMPLE	191286-008						07-DEC-2006	15:42	1.0	1.0			46491906001	ND		ug/L		
031	120147	CCV							07-DEC-2006	15:45	1.0	1.0	4	5.000	46491906001	5.180		ug/L	104	
032	120147	CCB							07-DEC-2006	15:47	1.0	1.0			46491906001	[0.07700]		ug/L		
033	120147	SAMPLE	191287-002						07-DEC-2006	15:49	1.0	1.0			46491906001	0.53		ug/L		
034	120147	SAMPLE	191288-001						07-DEC-2006	15:52	1.0	1.0			46491906001	0.29		ug/L		
035	120147	SAMPLE	191290-001						07-DEC-2006	15:54	1.0	1.0			46491906001	ND		ug/L		
036	120147	CCV							07-DEC-2006	15:56	1.0	1.0	5	7.500	46491906001	7.580		ug/L	101	
037	120147	CCB							07-DEC-2006	15:59	1.0	1.0			46491906001	ND		ug/L		

Std used: 1=S5037 2=S5039 3=S5040 4=S5041 5=S5042
Flags used: i=warning ib=instrument blank u=use

Analyst: Jabbar Date: 10/3/06

Curtis & Tompkins Laboratories Sample Preparation Summary

07-DEC-2006 12:27

Batch Number : 120147
 Date Extracted : 07-DEC-2006
 Extracted by : Zachary Abbott
 Prep Method : METHOD

Analysis : N/A
 Bgroup : HG
 Units : mL
 Clean-up :

Spike #1 ID : S5037
 Spike #2 ID :
 Spike #3 ID :
 SDP Version :

Sample	Type	Client	Matrix	Init	Units	Final	Prep	Clean	pH	Sp 1	Sp 2	Sp 3	Analyses	Clean	Comments
				N/Y		Vol	D.F.	D.F.		Vol	Vol	Vol		Method	
191245-003		Weston Solutions	Water	50	mL	50	1.000000	1					TAL/HG		
191281-001		Blaaland, Bouck & Lee	Water	50	mL	50	1.000000	1					PP13/HG		
191281-002		Blaaland, Bouck & Lee	Water	50	mL	50	1.000000	1					PP13/HG		
191281-003		Blaaland, Bouck & Lee	Water	50	mL	50	1.000000	1					PP13/HG		
191281-004		Blaaland, Bouck & Lee	Water	50	mL	50	1.000000	1					PP13/HG		
191286-001		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
191286-003		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
191286-004		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
191286-006		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
191286-007		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
191286-008		Treadwell & Rollo	Water	50	mL	50	1.000000	1					HG		
191286-008		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
191286-013		Treadwell & Rollo	Water	50	mL	50	1.000000	1					HG		
191287-002		Acme Fill Corp.	Filtrate	50	mL	50	1.000000	1					HG		
191288-001		General Chemical	Water	50	mL	50	1.000000	1					T26/HG		
191290-001		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					HG		
QC367392	BLANK		Water	50	mL	50	1.000000	1					HG		
QC367393	BS		Water	50	mL	50	1.000000	1					HG		
QC367394	BSD		Water	50	mL	50	1.000000	1					HG		
QC367395	SER	of 191281-001	Water	50	mL	50	1.000000	1					HG		
QC367396	MS	of 191281-001	Water	50	mL	50	1.000000	1					HG		
QC367397	MSD	of 191281-001	Water	50	mL	50	1.000000	1					HG		
QC367398	PDS	of 191281-001	Water	50	mL	50	1.000000	1					HG		

Prep Chemist:

Reviewed By:

Date:

Relinquished By:

Received By:

Date:

Water Digestion for Mercury

Curtis & Tompkins, Ltd.

LIMS Batch #: 190147
 Date Digested: 12/7/06
 Digested by: BA

Digestion Method
☒ EPA 7470A/ EPA 245.1
☐

BK 1929
 Page 70

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
191245-003 I	50	50	N	water
191281-001 MK D				
↓ -002				
↓ -003				
5 ↓ -004				
191286-007 B				
↓ -008 B				
191286-001 D				Filtrate (F.F.)
↓ -003 G				
10 ↓ -004 D				
↓ -006 G				
↓ -007 A				
↓ -008 A				
↓ -013 G				
15 191287-002 B				water
191288-001 A				
191290-001 H				Filtrate (F.F.)
Blank				water
BS				
20 BSD				
ms 191281-001 D				
MSD ↓				

2.5 mL of spike solution was added to all spikes

Reagent ID/ LIMS# / Time Initials / Date

Digestion of Samples & Standards: Time ON / Temperature ON
 Time OFF/ Temperature OFF
 concentrated H₂SO₄
 concentrated HNO₃
 5% KMnO₄
 5% K₂S₂O₈
 NaCl.hydroxylamine hydrochloride
 Stannous Chloride
☐ filtered thru' 0.45 um syringe filter

55037	BA 12/09/06
ICAL Source WS# 55037	
ICV / CCV WS# 55039/40/41/42	
12:15/95°C	
2:15/95°C	
B41041	
C30060	
K112006	
K2110906	
H4111706	
9mL 120506	
W4111706	

BA 12/7/06
 Prep Chemist / Date

Continued from page X

Continued on page X

BA 12/7/06
 Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 6020 Water 200.8
As of 01/05/07

Analyte	Units	MET06 A	MET06 E	MET06 H	MET05
Aluminum	ug/L	0.40			9.6
Antimony	ug/L	0.0093			0.062
Arsenic	ug/L		0.034		0.34
Barium	ug/L	0.023			0.13
Beryllium	ug/L	0.017			0.12
Cadmium	ug/L	0.0058			0.17
Calcium	ug/L	5.6			15
Chromium	ug/L		0.038		0.18
Cobalt	ug/L		0.0072		0.069
Copper	ug/L		0.028		0.24
Iron	ug/L			1.9	16
Lead	ug/L	0.013			0.088
Magnesium	ug/L	0.73			11
Manganese	ug/L		0.011		0.050
Molybdenum	ug/L	0.0063			0.24
Nickel	ug/L		0.029		0.21
Potassium	ug/L	5.3			8.7
Selenium	ug/L			0.027	0.35
Silver	ug/L	0.0079			0.068
Sodium	ug/L		2.7		14
Thallium	ug/L	0.030			0.030
Vanadium	ug/L		0.026		0.24
Zinc	ug/L		0.062		0.23

Curtis & Tompkins Laboratories
MDL Summary for EPA 7470A Water
As of 01/05/07

Analyte	Units	MET04	MET14
Mercury	ug/L	0.058	0.021

GENERAL CHEMISTRY

Alkalinity			
Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Field ID:	DW120606B	Batch#:	120455
Matrix:	Water	Sampled:	12/06/06
Units:	mg/L	Received:	12/06/06
Diln Fac:	1.000	Analyzed:	12/18/06

Type: SAMPLE Lab ID: 191290-001

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO ₃	ND	1.0

Type: BLANK Lab ID: QC368651

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO ₃	ND	1.0

Batch QC Report

Alkalinity			
Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO ₃	Units:	mg/L
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC368652	Batch#:	120455
Matrix:	Water	Analyzed:	12/18/06

Spiked	Result	%REC	Limits
200.0	187.2	94	90-110

Batch QC Report

Alkalinity			
Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO ₃	Diln Fac:	1.000
Field ID:	1213GW101	Batch#:	120455
MSS Lab ID:	191286-012	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	mg/L	Analyzed:	12/18/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC368653	430.0	333.0	777.3	104	69-112		
MSD	QC368654		333.0	778.7	105	69-112	0	25

Analysis: Alkalinity Analysis Date: 12/18/06
 Method: EPA 310.1 / SMWW 2320B Batch No: 120455
 SOP#: Alkalinity_v7.doc

H₂SO₄ Normality = 0.02
 conc.(mg/L) Na₂CO₃ for QC = 200
 Analyst: SJ

QC DATA

Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	Alkalinity as CaCO ₃ (mg/L)	Low Alk Vol (mL)	Low Alk as CaCO ₃ (mg/L)	RL (mg/L)	% Rec.	% RPD
------------	--------------------	--------------------------	--------------------------	--	------------------	-------------------------------------	-----------	--------	-------

MB	5.00	100	0.00	0.00	ND		1.0		
LCS	10.00	25	2.14	4.68	187.20		4.0	94	

191286-012	8.60	15	0.39	6.45	430.00	n/a	6.7		
MS	9.30	15	2.42	11.66	777.33		6.7	104	
MSD	9.50	15	2.66	11.68	778.67		6.7	105	0

SAMPLE

Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	Alkalinity as CaCO ₃ (mg/L)	Low Alkalinity Volume (4.5-4.2) (mL)	Low Alkalinity as CaCO ₃ (mg/L)	Reporting Limit (mg/L)
------------	--------------------	--------------------------	--------------------------	--	--------------------------------------	--	------------------------

191286-001	6.90	15	0.00	4.87	324.67	n/a	6.7
191286-002	6.90	15	0.00	6.68	445.33	n/a	6.7
191286-003	6.80	15	0.00	3.45	230.00	n/a	6.7
191286-004	7.00	15	0.00	4.99	332.67	n/a	6.7
191286-005	7.00	15	0.00	6.68	445.33	n/a	6.7
191286-006	6.80	15	0.00	3.54	236.00	n/a	6.7
191286-007	8.00	15	0.00	6.92	461.33	n/a	6.7
191286-008	7.40	15	0.00	10.00	666.67	n/a	6.7
191286-009	7.20	15	0.00	8.90	593.33	n/a	6.7
191286-010	7.80	15	0.00	5.41	360.67	n/a	6.7
191286-011	7.90	15	0.00	5.14	342.67	n/a	6.7
191286-012	8.60	15	0.39	6.45	430.00	n/a	6.7
191286-013	6.70	15	0.00	14.95	996.67	n/a	6.7
191286-014	7.30	15	0.00	19.57	1304.67	n/a	6.7
191286-015	7.30	15	0.00	9.32	621.33	n/a	6.7
191290-001	4.70	100	0.00	0.08	rpt low alk	0.20	1.0

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Reviewed by/ Date:

[Signature] 12/18/06

QC Limits	RPD	Recovery
LCS/BS/BSB	20	90 - 110
MS/MSD	25	80 - 120

121000

Analysis: Alkalinity
Method: EPA 310.1

Analysis Date: 12/18/06
Batch No: 120455

H₂SO₄ Normality = 0.02
Analyst: SJ

SAMPLE	(P)	(T-P)	Total Alkalinity as CaCO ₃ (mg/L)	Bicarbonate Alkalinity as CaCO ₃ (mg/L)		
				Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity
191286-001	0.0	324.7	324.666667	324.667	0.000	0.000
191286-002	0.0	445.33	445.333	445.333	0.000	0.000
191286-003	0.0	230.00	230.000	230.000	0.000	0.000
191286-004	0.0	332.67	332.667	332.667	0.000	0.000
191286-005	0.0	445.33	445.333	445.333	0.000	0.000
191286-006	0.0	236.00	236.000	236.000	0.000	0.000
191286-007	0.0	461.33	461.333	461.333	0.000	0.000
191286-008	0.0	666.67	666.667	666.667	0.000	0.000
191286-009	0.0	593.33	593.333	593.333	0.000	0.000
191286-010	0.0	360.67	360.667	360.667	0.000	0.000
191286-011	0.0	342.67	342.667	342.667	0.000	0.000
191286-012	26.0	404.00	430.000	378.000	52.000	0.000
191286-013	0.0	996.67	996.667	996.667	0.000	0.000
191286-014	0.0	1304.67	1304.667	1304.667	0.000	0.000
191286-015	0.0	621.33	621.333	621.333	0.000	0.000
191290-001	0.0	#VALUE!	ND	not applicable	not applicable	not applicable

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

P: Phenolphthalein Alkalinity (using volume to pH 8.3)
T-P: Total Alkalinity minus Phenolphthalein Alkalinity

Carbonate Alkalinity = 2x the smaller of P or (T-P)
Bicarbonate Alkalinity = (T-2P) when P < (T-P)
Hydroxide Alkalinity = (2P-T) when (T-P) < P

Analysis: Alkalinity
Method: EPA 310.1

Analysis Date: 12/18/06
Batch No: 120455

H₂SO₄ Normality = 0.02
Analyst: SJ

SAMPLE	Total Alkalinity as CaCO ₃ (mg/L)	Bicarbonate		Carbonate		Hydroxide	
		Alkalinity as HCO ₃ ⁻ (mg/L)	Alkalinity as CO ₃ ²⁻ (mg/L)	Alkalinity as CO ₃ ²⁻ (mg/L)	Alkalinity as OH ⁻ (mg/L)	Alkalinity as OH ⁻ (mg/L)	Alkalinity as OH ⁻ (mg/L)
191286-001	324.667	395.849	0.000	0.000	0.000	0.000	0.000
191286-002	445.333	542.971	0.000	0.000	0.000	0.000	0.000
191286-003	230.000	280.427	0.000	0.000	0.000	0.000	0.000
191286-004	332.667	405.603	0.000	0.000	0.000	0.000	0.000
191286-005	445.333	542.971	0.000	0.000	0.000	0.000	0.000
191286-006	236.000	287.742	0.000	0.000	0.000	0.000	0.000
191286-007	461.333	562.479	0.000	0.000	0.000	0.000	0.000
191286-008	666.667	812.831	0.000	0.000	0.000	0.000	0.000
191286-009	593.333	723.420	0.000	0.000	0.000	0.000	0.000
191286-010	360.667	439.742	0.000	0.000	0.000	0.000	0.000
191286-011	342.667	417.795	0.000	0.000	0.000	0.000	0.000
191286-012	430.000	460.875	31.183	0.000	0.000	0.000	0.000
191286-013	996.667	1215.183	0.000	0.000	0.000	0.000	0.000
191286-014	1304.667	1590.711	0.000	0.000	0.000	0.000	0.000
191286-015	621.333	757.559	0.000	0.000	0.000	0.000	0.000
191290-001	ND	not applicable	not applicable	not applicable	not applicable	not applicable	not applicable

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 120455
 Date Started: 18-DEC-2006
 Batched by : Stephanie Jim

Analysis : ALKALINITY
 Bgroup : N/A
 Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
191286-001		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
191286-002		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
191286-003		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
191286-004		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
191286-005		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
191286-006		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
191286-007		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
191286-008		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
191286-009		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
191286-010		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
191286-011		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
191286-012		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
191286-013		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
191286-014		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
191286-015		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
191290-001		Treadwell & Rollo	Water	ALKALINITY	18-DEC-2006
QC368651	BLANK		Water	ALKALINITY	
QC368652	LCS		Water	ALKALINITY	
QC368653	MS	of 191286-012	Water	ALKALINITY	
QC368654	MSD	of 191286-012	Water	ALKALINITY	



Curtis & Tompkins Laboratories Analytical Report			
Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Field ID:	DW120606B	Batch#:	120153
Matrix:	Water	Sampled:	12/06/06 09:30
Units:	mg/L	Received:	12/06/06
Diln Fac:	1.000		

Analyzed: 12/06/06 20:39

Type: BLANK Analyzed: 12/06/06 12:04
Lab ID: QC367425

ND= Not Detected
RL= Reporting Limit
Page 1 of 1

22 **SECRET**
23

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report			
Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Matrix:	Water	Diln Fac:	1.000
Units:	mg/L	Batch#:	120153

Type: BS Analyzed: 12/06/06 12:22
 Lab ID: QC367426

Analyte	Spiked	Result	%REC	Limits
Fluoride	2.000	2.087	104	80-120
Chloride	4.000	3.944	99	80-120
Nitrogen, Nitrite	1.000	0.9673	97	80-120
Nitrogen, Nitrate	1.000	1.000	100	80-120
Sulfate	10.00	9.990	100	80-120

Type: BSD Analyzed: 12/06/06 12:39
 Lab ID: QC367427

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Fluoride	2.000	2.009	100	80-120	4	20
Chloride	4.000	3.864	97	80-120	2	20
Nitrogen, Nitrite	1.000	0.9610	96	80-120	1	20
Nitrogen, Nitrate	1.000	1.006	101	80-120	1	20
Sulfate	10.00	9.741	97	80-120	3	20

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report			
Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Field ID:	1213GW101	Diln Fac:	100.0
MSS Lab ID:	191286-012	Batch#:	120153
Matrix:	Water	Sampled:	12/05/06 16:20
Units:	mg/L	Received:	12/06/06

Type: MS Analyzed: 12/06/06 20:56
 Lab ID: QC367428

Analyte	MSS Result	Spiked	Result	%REC	Limits
Fluoride	0.07574	100.0	99.95	100	77-120
Chloride	600.7	200.0	786.3	93	80-120
Nitrogen, Nitrite	<0.02411	50.00	49.04	98	80-120
Nitrogen, Nitrate	1.754	50.00	50.31	97	80-120
Sulfate	125.1	500.0	608.2	97	80-120

Type: MSD Analyzed: 12/06/06 21:14
 Lab ID: QC367429

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Fluoride	100.0	94.89	95	77-120	5	20
Chloride	200.0	787.0	93	80-120	0	25
Nitrogen, Nitrite	50.00	48.54	97	80-120	1	25
Nitrogen, Nitrate	50.00	49.36	95	80-120	2	25
Sulfate	500.0	608.2	97	80-120	0	25

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191290 IC Water: EPA 300.0

Inst : IC03
 Calnum : 626477375001
 Units : mg/L

Date : 27-NOV-2006 12:32
 X Axis : A

Reviewer: RH
 Inj Vol : 25 uL

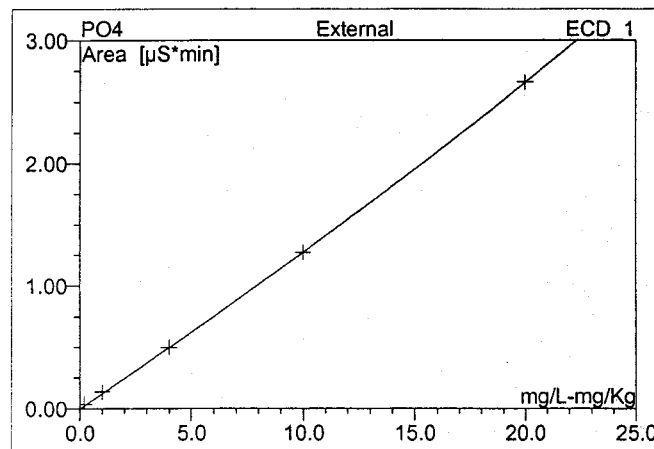
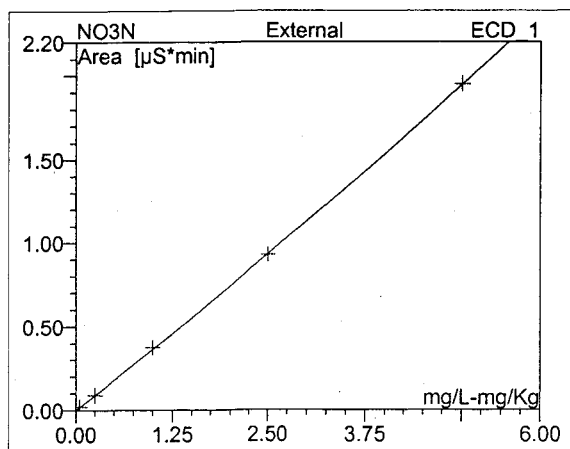
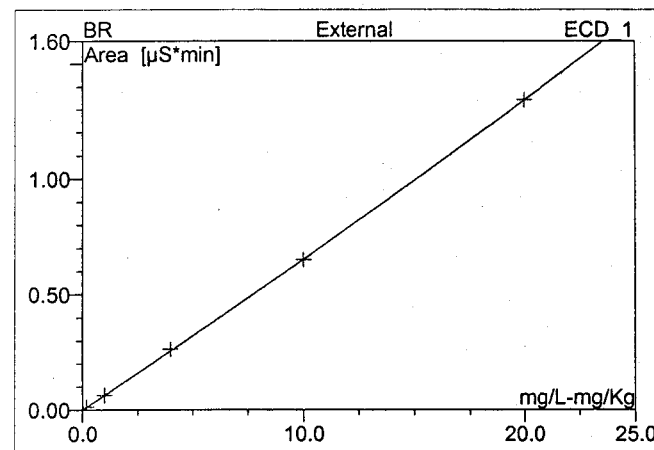
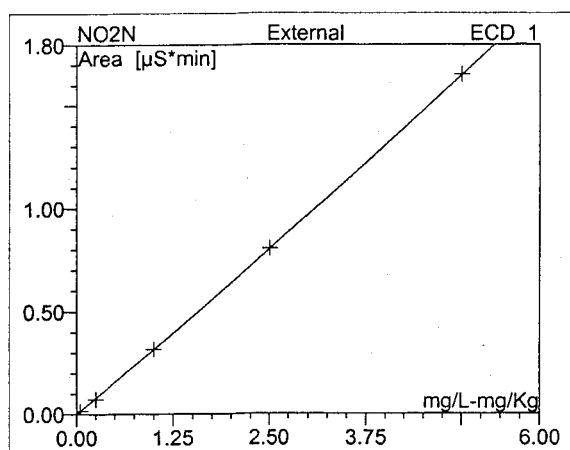
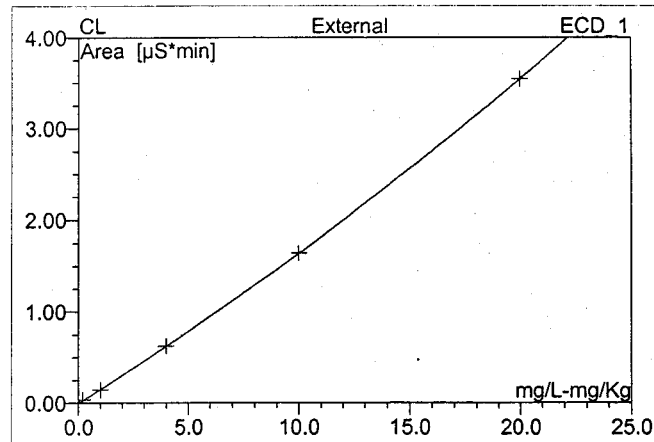
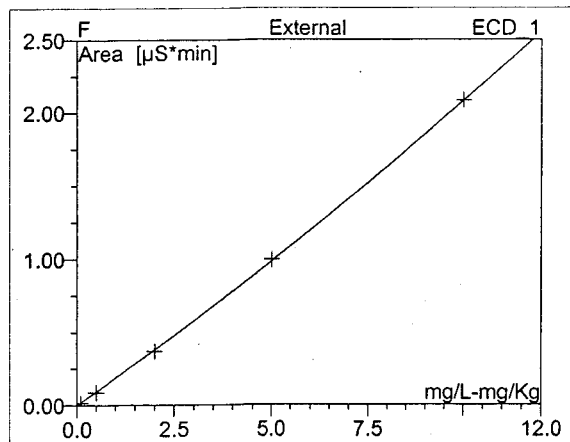
Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	331_2.000	626477375002	L1	27-NOV-2006 12:32	S4740 (500X)
L2	331_3.000	626477375003	L2	27-NOV-2006 12:50	S4740 (100X)
L3	331_4.000	626477375004	L3	27-NOV-2006 13:07	S4740 (25X)
L4	331_5.000	626477375005	L4	27-NOV-2006 13:25	S4740 (10X)
L5	331_6.000	626477375006	L5	27-NOV-2006 13:42	S4740 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ²	%RSD	Mmr ²	Fig
Fluoride	0.1400	0.1738	0.1846	0.1987	0.2080	QORG		0.18572	0.002247	0.1810	1.000	0.990		
Chloride	0.1664	0.1430	0.1558	0.1641	0.1771	QORG		0.15066	0.001325	0.1613	1.000	0.990		
Nitrogen, Nitrite	0.2857	0.2851	0.3166	0.3213	0.3308	QORG		0.31146	0.003864	0.3079	1.000	0.990		
Nitrogen, Nitrate	0.4014	0.3589	0.3747	0.3707	0.3897	QORG		0.35756	0.006385	0.3791	1.000	0.990		
Sulfate	0.0891	0.1008	0.1092	0.1131	0.1206	QORG		0.10562	2.999E-4	0.1066	1.000	0.990		

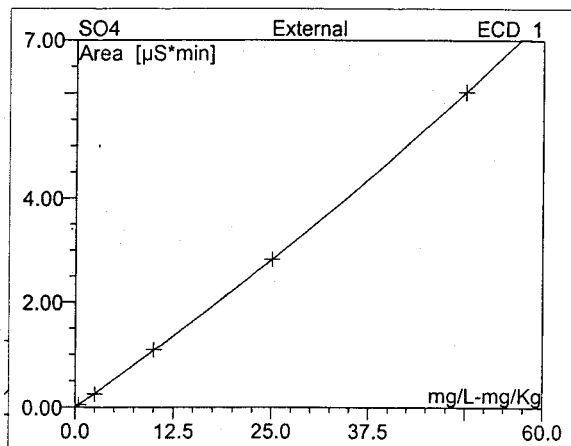
IC03 Calibration Batch Report

Sequence: 331
Program: IC03-7AN
Ini. Date/Time: 11/27/06 13:07

Inj. Vol.: 25.0
Operator: PC_NEWIC
Run Time: 15.01



Sequence:	331	Inj. Vol.:	25.0
Program:	IC03-7AN	Operator:	n.a.
Ini. Date/Time:	11/27/06 13:07	Run Time:	15.01



No.	Ret. Time min	Peak Name	Cal. Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr. Coeff. %
1	2.947	F	Quad	5	0.000000	0.185717	0.002247	99.968280
3	4.370	CL	Quad	5	0.000000	0.150660	0.001325	99.925219
4	5.190	NO2N	Quad	5	0.000000	0.311463	0.003864	99.990563
5	6.663	BR	Quad	5	0.000000	0.063257	0.000196	99.985565
6	7.500	NO3N	Quad	5	0.000000	0.357561	0.006384	99.969306
7	9.540	PO4	Quad	5	0.000000	0.121887	0.000555	99.964829
8	11.527	SO4	Quad	5	0.000000	0.105616	0.000300	99.951392
AVERAGE:					0.000000	0.185166	0.002125	99.965022

No.	Name	Area $\mu\text{S} \cdot \text{min}$ F ECD 1	Area $\mu\text{S} \cdot \text{min}$ CL ECD 1	Area $\mu\text{S} \cdot \text{min}$ NO2N ECD 1	Area $\mu\text{S} \cdot \text{min}$ BR ECD 1	Area $\mu\text{S} \cdot \text{min}$ NO3N ECD 1	Area $\mu\text{S} \cdot \text{min}$ PO4 ECD 1	Area $\mu\text{S} \cdot \text{min}$ SO4 ECD 1
2	ICAL, L1,S474	0.014001	0.033277	0.014285	0.012236	0.020070	0.035727	0.044567
3	ICAL, L2,S474	0.086913	0.142967	0.071273	0.062250	0.089719	0.134894	0.251908
4	ICAL, L3,S474	0.369133	0.623323	0.316571	0.261785	0.374732	0.495623	1.091655
5	ICAL, L4,S474	0.993403	1.640986	0.803364	0.648843	0.926829	1.272087	2.827284
6	ICAL, L5,S474	2.080176	3.542624	1.653755	1.344237	1.948730	2.660379	6.030414

No.	Name	Height μS F ECD 1	Height μS CL ECD 1	Height μS NO2N ECD 1	Height μS BR ECD 1	Height μS NO3N ECD 1	Height μS PO4 ECD 1	Height μS SO4 ECD 1
2	ICAL, L1,S474	0.109270	0.266758	0.082908	0.057646	0.081418	0.104802	0.151678
3	ICAL, L2,S474	0.584488	1.147464	0.454120	0.322522	0.381722	0.404404	0.791894
4	ICAL, L3,S474	2.698538	5.038912	1.964562	1.374302	1.647552	1.592196	3.464522
5	ICAL, L4,S474	7.375572	13.304908	4.960162	3.463314	4.199376	4.117156	9.031506
6	ICAL, L5,S474	16.615428	29.041484	10.376214	7.323652	9.001146	9.082872	19.866438

No.	Name	Amount mg/L-mg/Kg F ECD 1	Amount mg/L-mg/Kg CL ECD 1	Amount mg/L-mg/Kg NO2N ECD 1	Amount mg/L-mg/Kg BR ECD 1	Amount mg/L-mg/Kg NO3N ECD 1	Amount mg/L-mg/Kg PO4 ECD 1	Amount mg/L-mg/Kg SO4 ECD 1
2	ICAL, L1,S474	0.075318	0.220446	0.045837	0.193310	0.056075	0.292722	0.421466
3	ICAL, L2,S474	0.465366	0.941150	0.228186	0.981084	0.249805	1.101194	2.369187
4	ICAL, L3,S474	1.941982	3.996822	1.003896	4.086616	1.029113	3.993610	10.049335
5	ICAL, L4,S474	5.041498	10.010831	2.501675	9.950142	2.482083	9.982720	24.995573
6	ICAL, L5,S474	9.992662	19.997854	4.999511	20.008658	5.003115	20.003987	49.999624

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 1 of 6
Printed: 11/28/2006 4:45:54 PM

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006\331.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON
Last Update: 11/28/2006 4:37:50 PM by ic_analyst

Blank Run Subtraction: No Blank Run Subtraction

Detection Table:

No.	Ret. Time [min]	Param. Name	Param. Value	Channel
1	0.000	Inhibit Integration	On	ECD_1
2	2.250	Sensitivity	0.001 "[Signal]"	ECD_1
3	2.250	Minimum Area	0.001 "[Signal]*min"	ECD_1
4	2.250	Peak Slice	0.50 s	ECD_1
5	2.500	Inhibit Integration	Off	ECD_1

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 2 of 6
Printed: 11/28/2006 4:45:54 PM

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006\331.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON
Last Update: 11/28/2006 4:37:50 PM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off

Dead time:

Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Window	Standard	Int.Type	Cal.Type	Peak Type	Group	Amount	
									ICAL, L1,S4740,500	ICAL, L2,S4740,100
1	F	2.947 min	5.000 RG	External	Area	Quad	Auto		0.100000	0.500000
2	CL	4.370 min	5.000 RG	External	Area	Quad	Auto		0.200000	1.000000
3	NO2N	5.190 min	5.000 RG	External	Area	Quad	Auto		0.050000	0.250000
4	BR	6.663 min	5.000 RG	External	Area	Quad	Auto		0.200000	1.000000
5	NO3N	7.500 min	10.000 RG	External	Area	Quad	Auto		0.050000	0.250000
6	PO4	9.540 min	10.000 RG	External	Area	Quad	Auto		0.200000	1.000000
7	SO4	11.527 min	10.000 RG	External	Area	Quad	Auto		0.500000	2.500000

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 3 of 6
Printed: 11/28/2006 4:45:54 PM

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006\331.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON
Last Update: 11/28/2006 4:37:50 PM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off

Dead time:

Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Amount	Amount	Amount	Comment
			ICAL, L3,S4740,25	ICAL, L4,S4740,10	ICAL, L5,S4740,5	
1	F	2.947 min	2.000000	5.000000	10.000000	
2	CL	4.370 min	4.000000	10.000000	20.000000	
3	NO2N	5.190 min	1.000000	2.500000	5.000000	
4	BR	6.663 min	4.000000	10.000000	20.000000	
5	NO3N	7.500 min	1.000000	2.500000	5.000000	
6	PO4	9.540 min	4.000000	10.000000	20.000000	
7	SO4	11.527 min	10.000000	25.000000	50.000000	

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 4 of 6
Printed: 11/28/2006 4:45:54 PM

Title: IC03-7AN_CAL

Datasource: DGLD4X01_local

Location: IC3_DX120\IC03-ANIONS-2006\331.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON

Last Update: 11/28/2006 4:37:50 PM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg

Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Resp.Fact.	Amount	Amount	Amount	Amount
				ICAL, L1,S4740,500	ICAL, L2,S4740,100	ICAL, L3,S4740,25	ICAL, L4,S4740,10
1	F	2.947 min	1.000000	0.100000	0.500000	2.000000	5.000000
2	CL	4.370 min	1.000000	0.200000	1.000000	4.000000	10.000000
3	NO2N	5.190 min	1.000000	0.050000	0.250000	1.000000	2.500000
4	BR	6.663 min	1.000000	0.200000	1.000000	4.000000	10.000000
5	NO3N	7.500 min	1.000000	0.050000	0.250000	1.000000	2.500000
6	PO4	9.540 min	1.000000	0.200000	1.000000	4.000000	10.000000
7	SO4	11.527 min	1.000000	0.500000	2.500000	10.000000	25.000000

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 6 of 6
Printed: 11/28/2006 4:45:55 PM

Title: IC03-7AN_CAL

Datasource: DGLD4X01_local

Location: IC3_DX120\IC03-ANIONS-2006\331.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON
Last Update: 11/28/2006 4:37:50 PM by ic_analyst

Calibration:

Calibration Mode: Total

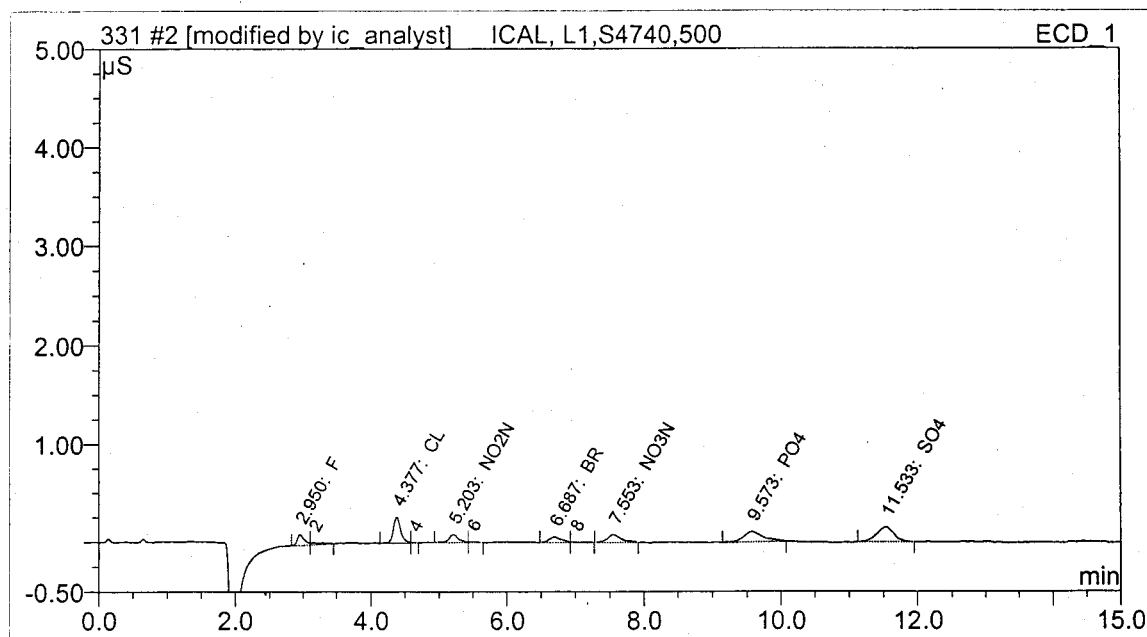
Auto Recalibrate: On

No.	Enabled	Name	Smp.No.	Pos.	Inj. Vol.	Weight	ISTD Amount	Dil. Factor	Inj. Date/Time	Calib. Comment
1	☒	 ICAL, L1,S4740,500	2	210	25.0	1.0000	1.0000	1.0000	11/27/2006 12:32:50 PM	Ok
2	☒	 ICAL, L2,S4740,100	3	211	25.0	1.0000	1.0000	1.0000	11/27/2006 12:50:15 PM	Ok
3	☒	 ICAL, L3,S4740,25	4	212	25.0	1.0000	1.0000	1.0000	11/27/2006 1:07:39 PM	Ok
4	☒	 ICAL, L4,S4740,10	5	213	25.0	1.0000	1.0000	1.0000	11/27/2006 1:25:04 PM	Ok
5	☒	 ICAL, L5,S4740,5	6	214	25.0	1.0000	1.0000	1.0000	11/27/2006 1:42:29 PM	Ok

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L1,S4740,500	Sample No.:	2
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 12:32 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.950	0.014001	0.0753	0.0753	
3	CL	4.377	0.033277	0.2204	0.2204	
5	NO2N	5.203	0.014285	0.0458	0.0458	
7	BR	6.687	0.012236	0.1933	0.1933	
9	NO3N	7.553	0.020070	0.0561	0.0561	
10	PO4	9.573	0.035727	0.2927	0.2927	
11	SO4	11.533	0.044567	0.4215	0.4215	



ANALYZED BY:

REVIEWED BY:

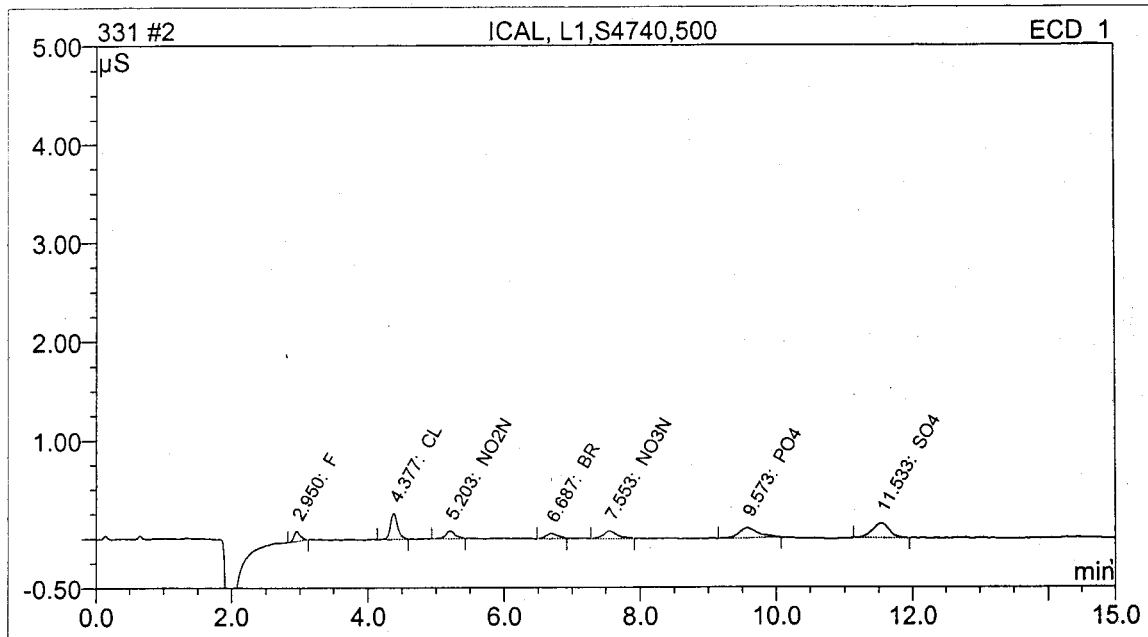
Curtis & Tompkins, Ltd.

: 00334

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L1,S4740,500	Sample No.:	2
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 12:32 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.950	0.011269	0.0606	0.0606	
2	CL	4.377	0.032932	0.2182	0.2182	
3	NO2N	5.203	0.013070	0.0419	0.0419	
4	BR	6.687	0.011075	0.1750	0.1750	
5	NO3N	7.553	0.020070	0.0561	0.0561	
6	PO4	9.573	0.035727	0.2927	0.2927	
7	SO4	11.533	0.044567	0.4215	0.4215	



ANALYZED BY:

REVIEWED BY:

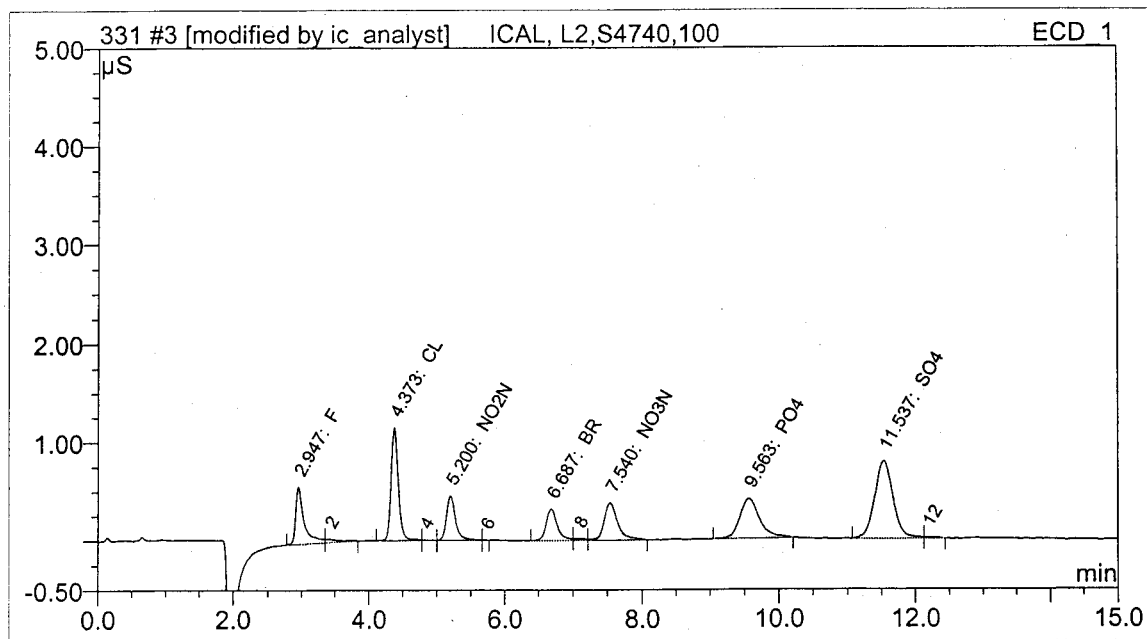
Curtis & Tompkins, Ltd.

: 00335

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L2,S4740,100	Sample No.:	3
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 12:50 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	0.086913	0.4654	0.4654	
3	CL	4.373	0.142967	0.9412	0.9412	
5	NO2N	5.200	0.071273	0.2282	0.2282	
7	BR	6.687	0.062250	0.9811	0.9811	
9	NO3N	7.540	0.089719	0.2498	0.2498	
10	PO4	9.563	0.134894	1.1012	1.1012	
11	SO4	11.537	0.251908	2.3692	2.3692	



ANALYZED BY:

REVIEWED BY:

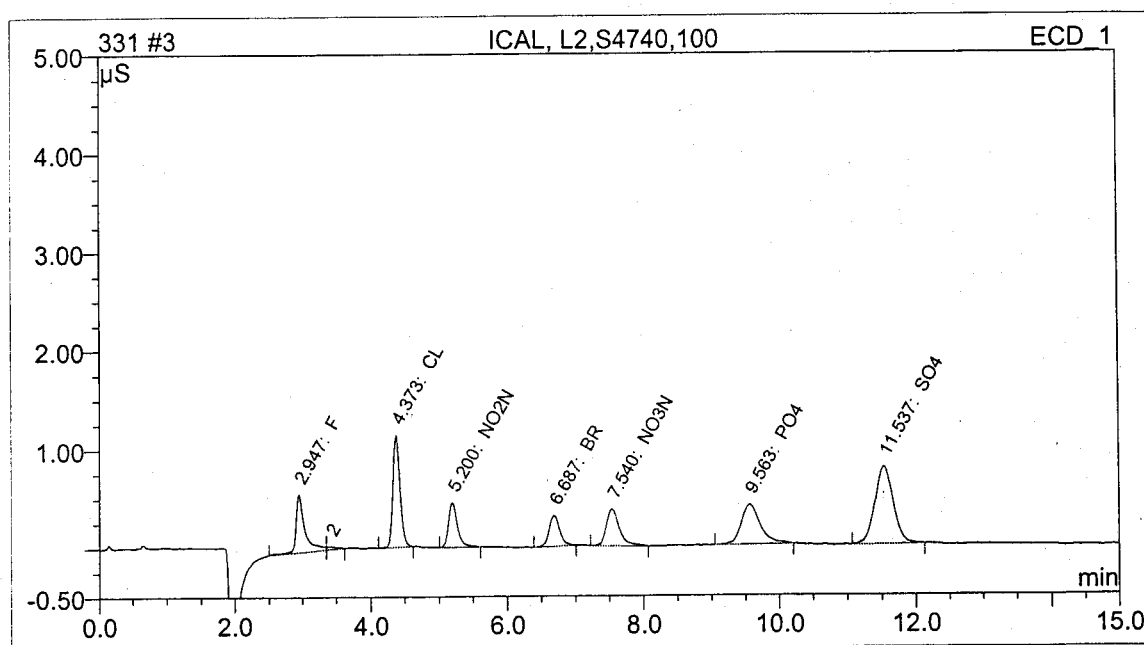
Curtis & Tompkins, Ltd.

: 00336

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L2,S4740,100	Sample No.:	3
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 12:50 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	0.091459	0.4889	0.4889	
3	CL	4.373	0.137235	0.9046	0.9046	
4	NO2N	5.200	0.070082	0.2245	0.2245	
5	BR	6.687	0.056692	0.8958	0.8958	
6	NO3N	7.540	0.085131	0.2374	0.2374	
7	PO4	9.563	0.134894	1.1012	1.1012	
8	SO4	11.537	0.246264	2.3177	2.3177	



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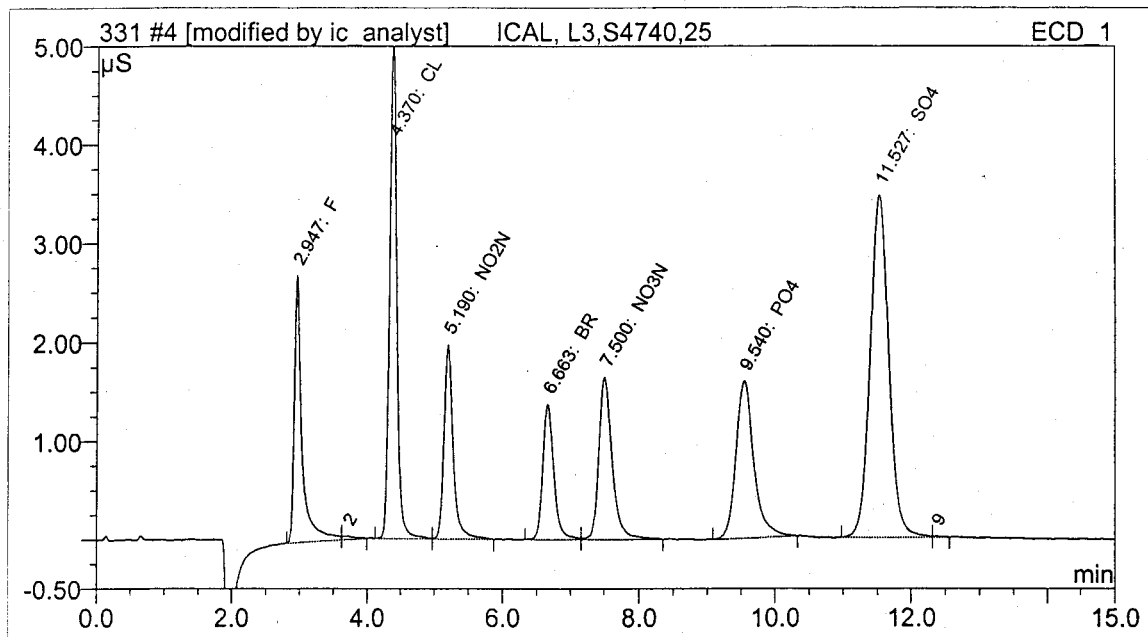
Curtis & Tompkins, Ltd.

: 00337

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L3,S4740,25	Sample No.:	4
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:07 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	0.369133	1.9420	1.9420	
3	CL	4.370	0.623323	3.9968	3.9968	
4	NO2N	5.190	0.316571	1.0039	1.0039	
5	BR	6.663	0.261785	4.0866	4.0866	
6	NO3N	7.500	0.374732	1.0291	1.0291	
7	PO4	9.540	0.495623	3.9936	3.9936	
8	SO4	11.527	1.091655	10.0493	10.0493	



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REVIEWED BY:

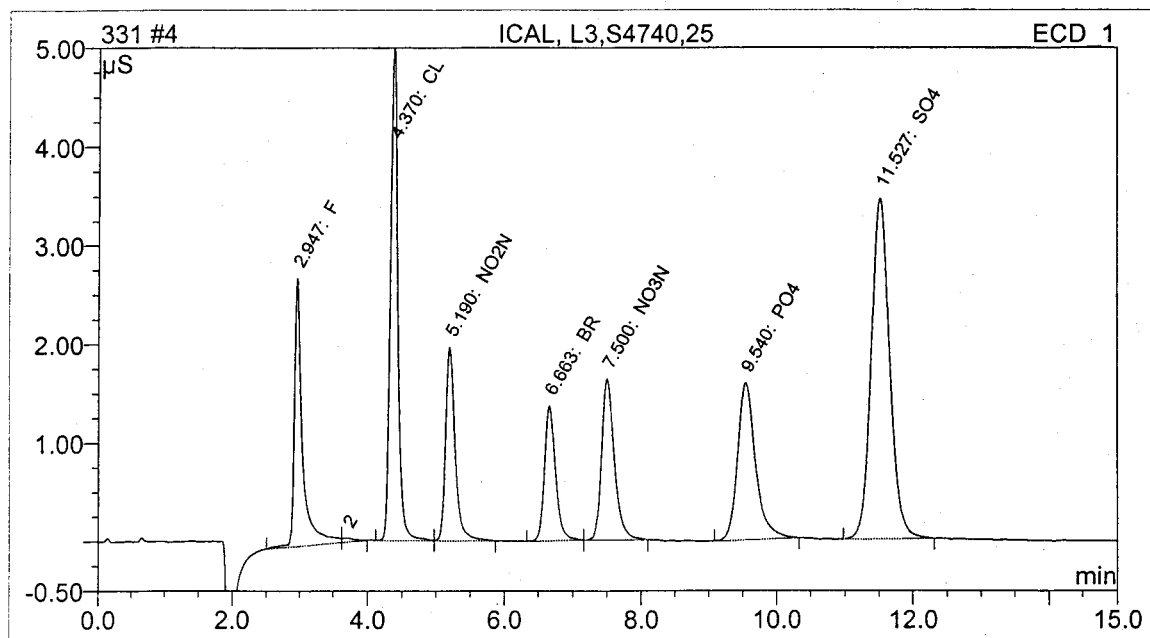
Curtis & Tompkins, Ltd.

: 00338

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L3,S4740,25	Sample No.:	4
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:07 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	0.386242	2.0044	2.0044	
3	CL	4.370	0.623323	3.9968	3.9968	
4	NO2N	5.190	0.316571	1.0039	1.0039	
5	BR	6.663	0.256924	4.0335	4.0335	
6	NO3N	7.500	0.360167	1.0012	1.0012	
7	PO4	9.540	0.495623	3.9936	3.9936	
8	SO4	11.527	1.086097	10.0140	10.0140	



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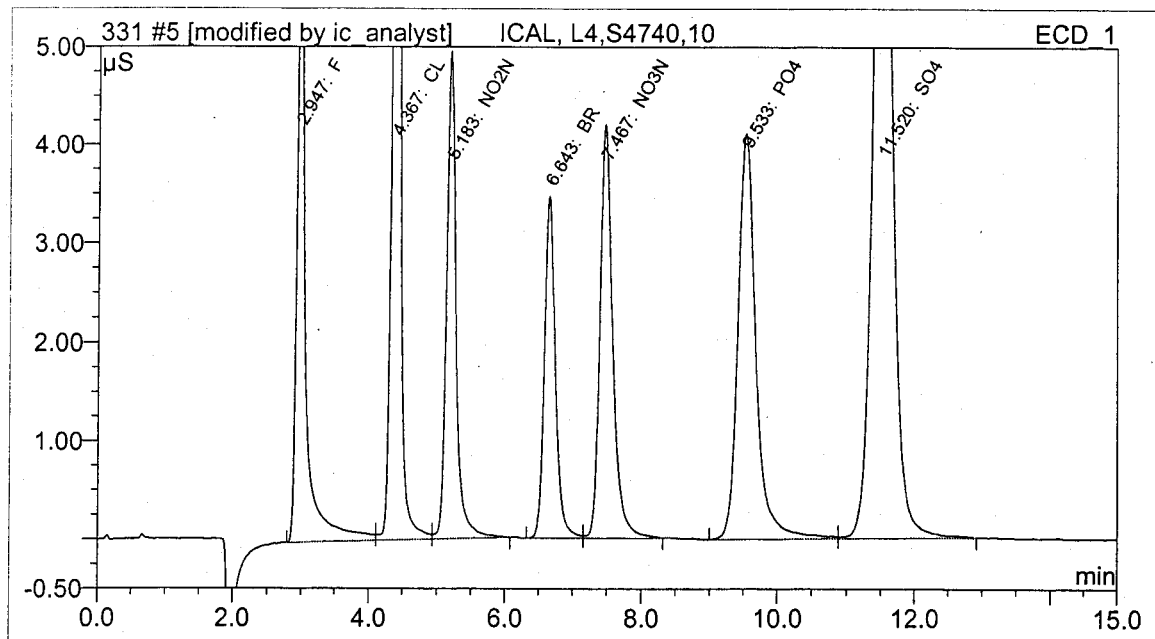
Curtis & Tompkins, Ltd.

: 00335

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L4,S4740,10	Sample No.:	5
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:25 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	0.993403	5.0415	5.0415	
2	CL	4.367	1.640986	10.0108	10.0108	
3	NO2N	5.183	0.803364	2.5017	2.5017	
4	BR	6.643	0.648843	9.9501	9.9501	
5	NO3N	7.467	0.926829	2.4821	2.4821	
6	PO4	9.533	1.272087	9.9827	9.9827	
7	SO4	11.520	2.827284	24.9956	24.9956	



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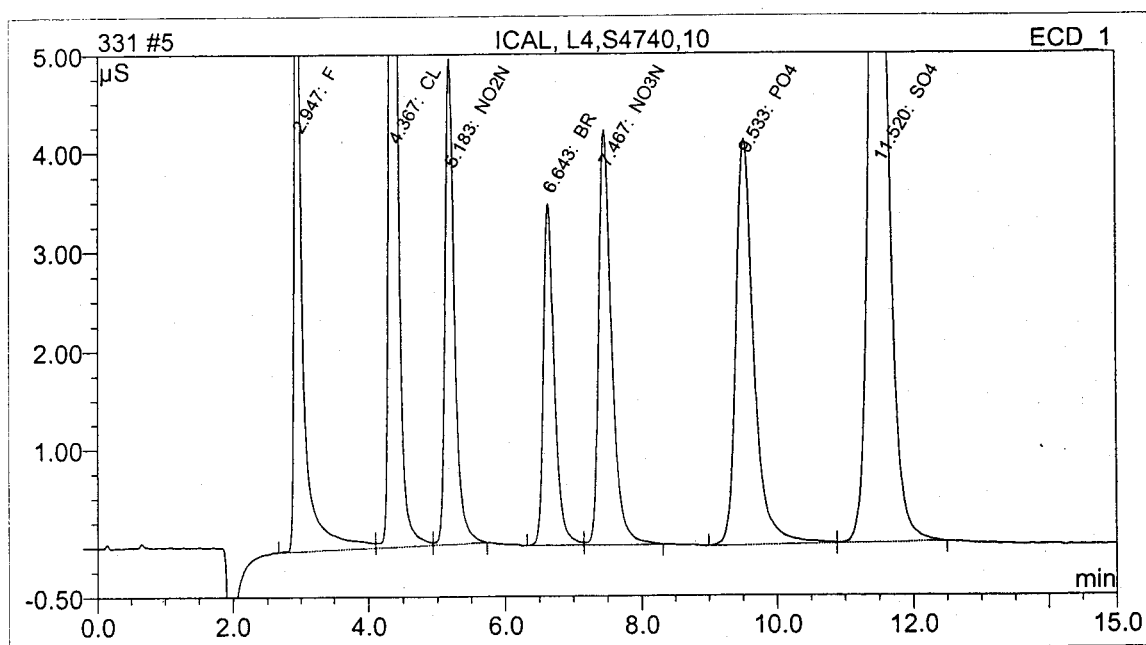
Curtis & Tompkins, Ltd.

: 00340

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L4,S4740,10	Sample No.:	5
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:25 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	0.994388	5.0429	5.0429	
2	CL	4.367	1.629703	9.9914	9.9914	
3	NO2N	5.183	0.779627	2.4797	2.4797	
4	BR	6.643	0.648843	9.9501	9.9501	
5	NO3N	7.467	0.926829	2.4821	2.4821	
6	PO4	9.533	1.261117	9.9575	9.9575	
7	SO4	11.520	2.793931	24.9110	24.9110	



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REVIEWED BY:

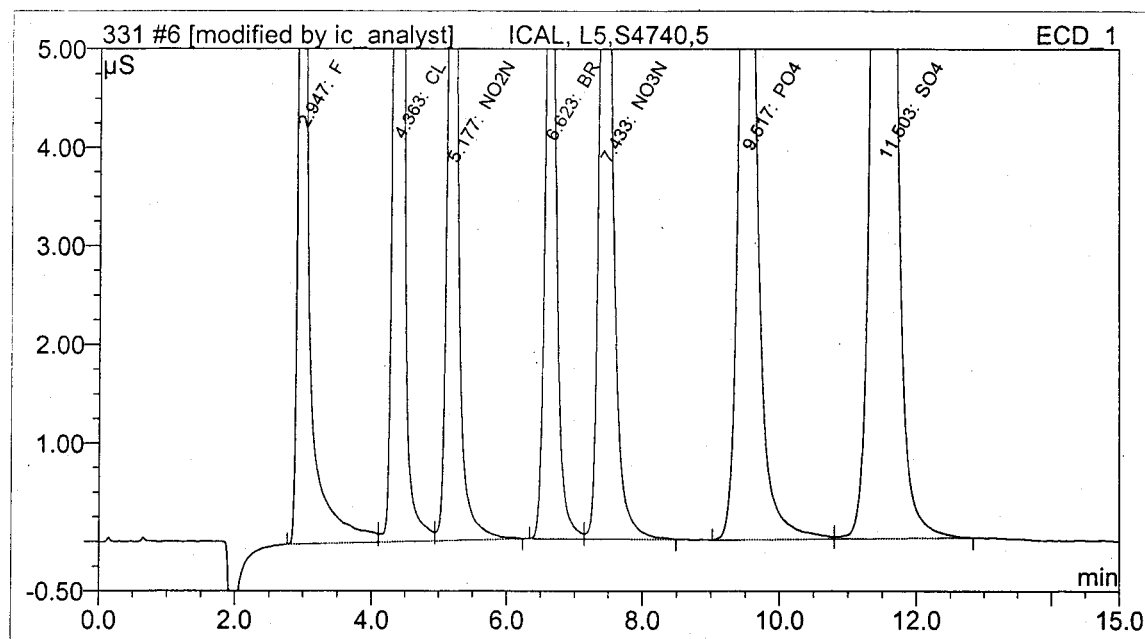
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00041

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L5,S4740,5	Sample No.:	6
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:42 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S}\cdot\text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	2.080176	9.9927	9.9927	
2	CL	4.363	3.542624	19.9979	19.9979	
3	NO2N	5.177	1.653755	4.9995	4.9995	
4	BR	6.623	1.344237	20.0087	20.0087	
5	NO3N	7.433	1.948730	5.0031	5.0031	
6	PO4	9.517	2.660379	20.0040	20.0040	
7	SO4	11.503	6.030414	49.9996	49.9996	



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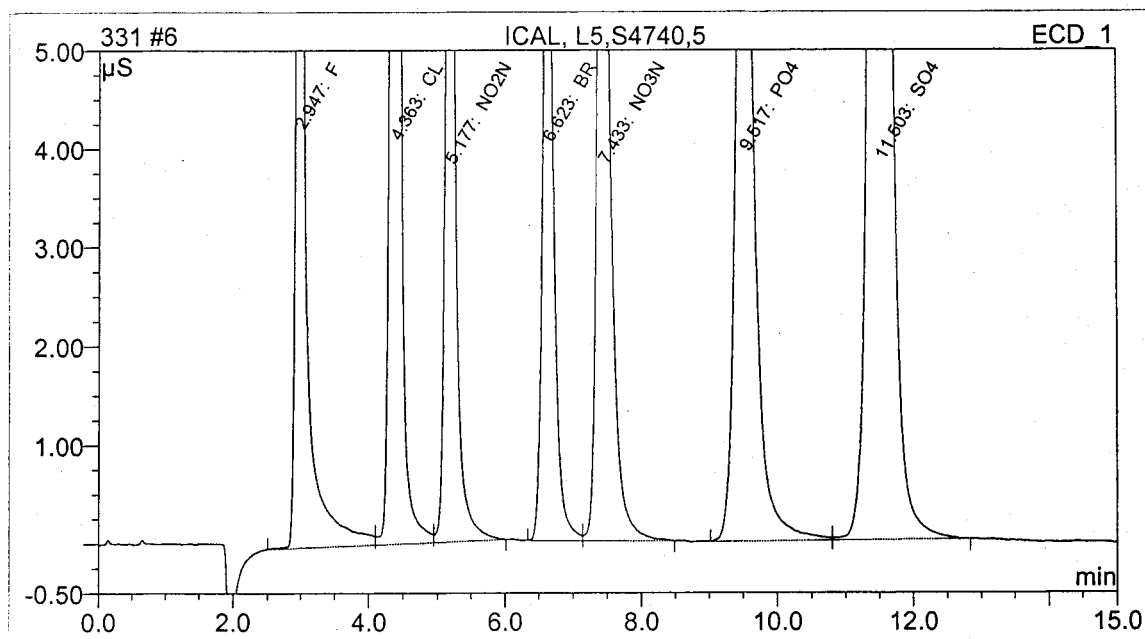
Curtis & Tompkins, Ltd.

: 00342

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L5,S4740,5	Sample No.:	6
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:42 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	2.098829	9.9937	9.9937	
2	CL	4.363	3.543045	19.9979	19.9979	
3	NO2N	5.177	1.641721	4.9991	4.9991	
4	BR	6.623	1.344237	20.0087	20.0087	
5	NO3N	7.433	1.948730	5.0031	5.0031	
6	PO4	9.517	2.660379	20.0040	20.0040	
7	SO4	11.503	6.030414	49.9996	49.9996	



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REVIEWED BY:

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: 00343

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191290 IC Water
EPA 300.0

Inst : IC03
Calnum : 626477375001

Cal Date: 27-NOV-2006

ICV 626477375007 (331_7.000 27-NOV-2006) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.1810	0.1712	1.000	0.9120	mg/L	-9	10	
Chloride	0.1613	0.1427	2.000	1.864	mg/L	-7	10	
Nitrogen, Nitrite	0.3079	0.3053	0.5000	0.4871	mg/L	-3	10	
Nitrogen, Nitrate	0.3791	0.3435	0.5000	0.4763	mg/L	-5	10	
Sulfate	0.1066	0.1016	5.000	4.744	mg/L	-5	10	

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 300.0

Inst : IC03
Seqnum : 626477375007
Cal : 626477375001
Standards: S3859 (5X)

File : 331_7.000
Caldate: 27-NOV-2006

IDF : 1.0
Time : 27-NOV-2006 13:59

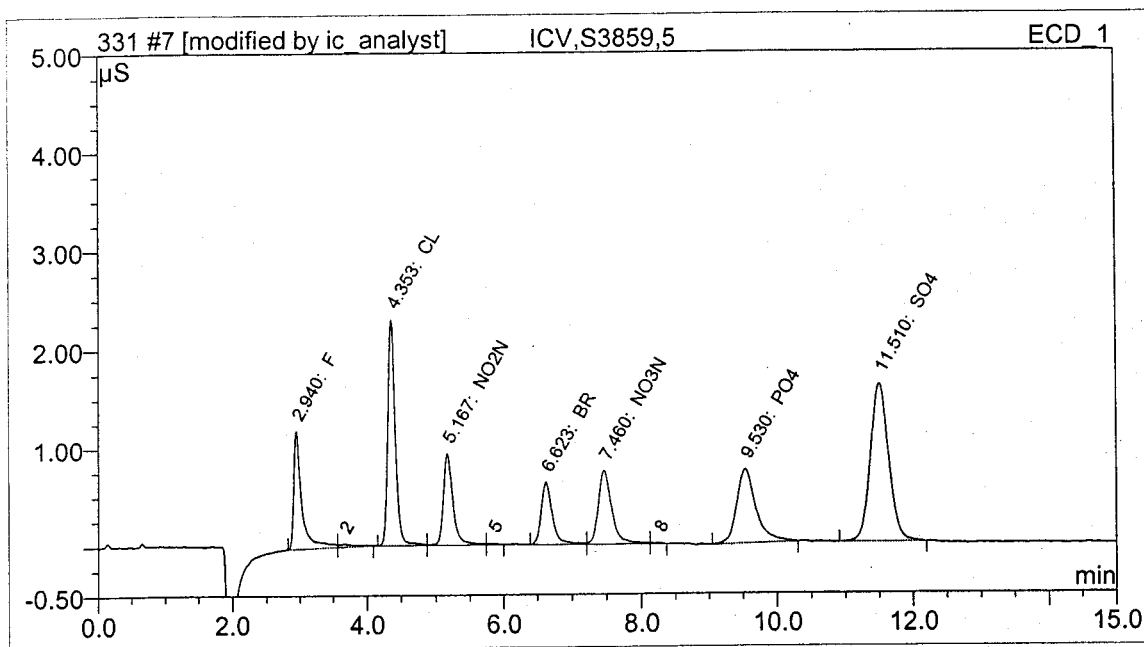
Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.1810	0.1712	1.000	0.9120	mg/L	-9	10	
Chloride	0.1613	0.1427	2.000	1.864	mg/L	-7	10	
Nitrogen, Nitrite	0.3079	0.3053	0.5000	0.4871	mg/L	-3	10	
Bromide	0.0642	0.0613	2.000	1.925	mg/L	-4	10	
Nitrogen, Nitrate	0.3791	0.3435	0.5000	0.4763	mg/L	-5	10	
Orthophosphate (as P)	0.1395	0.1230	2.000	2.001	mg/L	0	10	
Sulfate	0.1066	0.1016	5.000	4.744	mg/L	-5	10	

ms 11/28/06

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICV,S3859,5	Sample No.:	7
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:59 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.940	0.171238	0.9120	0.9120	
3	CL	4.353	0.285357	1.8635	1.8635	
4	NO2N	5.167	0.152642	0.4871	0.4871	
6	BR	6.623	0.122509	1.9252	1.9252	
7	NO3N	7.460	0.171748	0.4763	0.4763	
9	PO4	9.530	0.246093	2.0008	2.0008	
10	SO4	11.510	0.507753	4.7436	4.7436	



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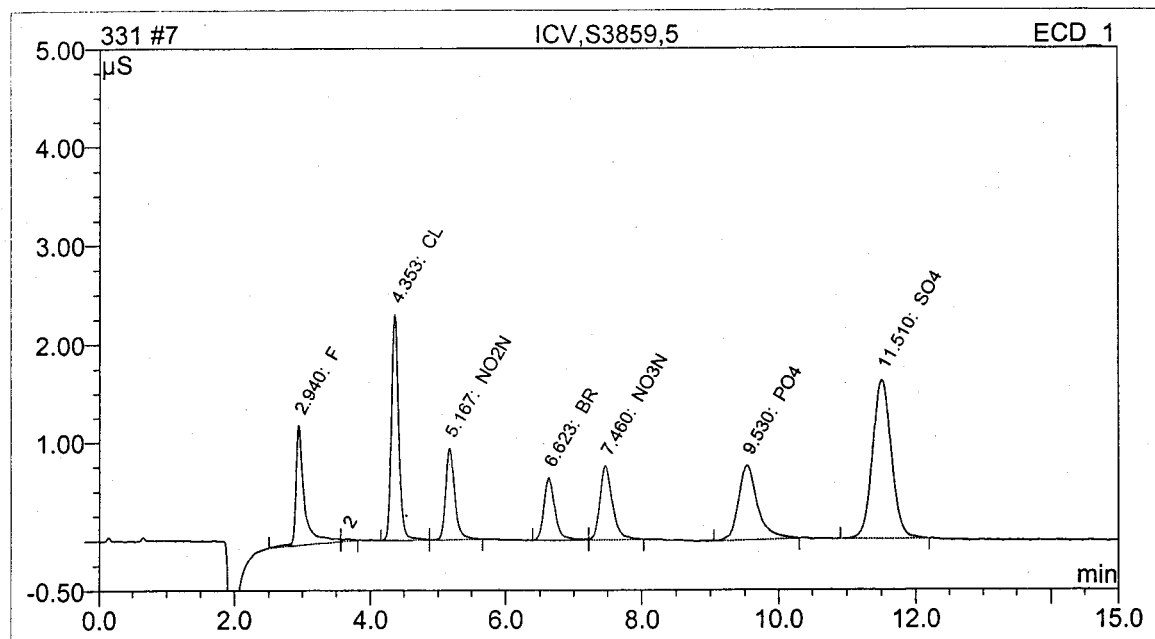
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00346

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICV,S3859,5	Sample No.:	7
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:59 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.940	0.180935	0.9630	0.9630	
3	CL	4.353	0.283683	1.8528	1.8528	
4	NO2N	5.167	0.146171	0.4666	0.4666	
5	BR	6.623	0.120324	1.8910	1.8910	
6	NO3N	7.460	0.164100	0.4552	0.4552	
7	PO4	9.530	0.246093	2.0008	2.0008	
8	SO4	11.510	0.507753	4.7436	4.7436	



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REVIEWED BY:

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00347

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC03
Seqnum : 626477375008
Cal : 626477375001

File : 331_8.000
Caldate: 27-NOV-2006

IDF : 1.0
Time : 27-NOV-2006 14:17

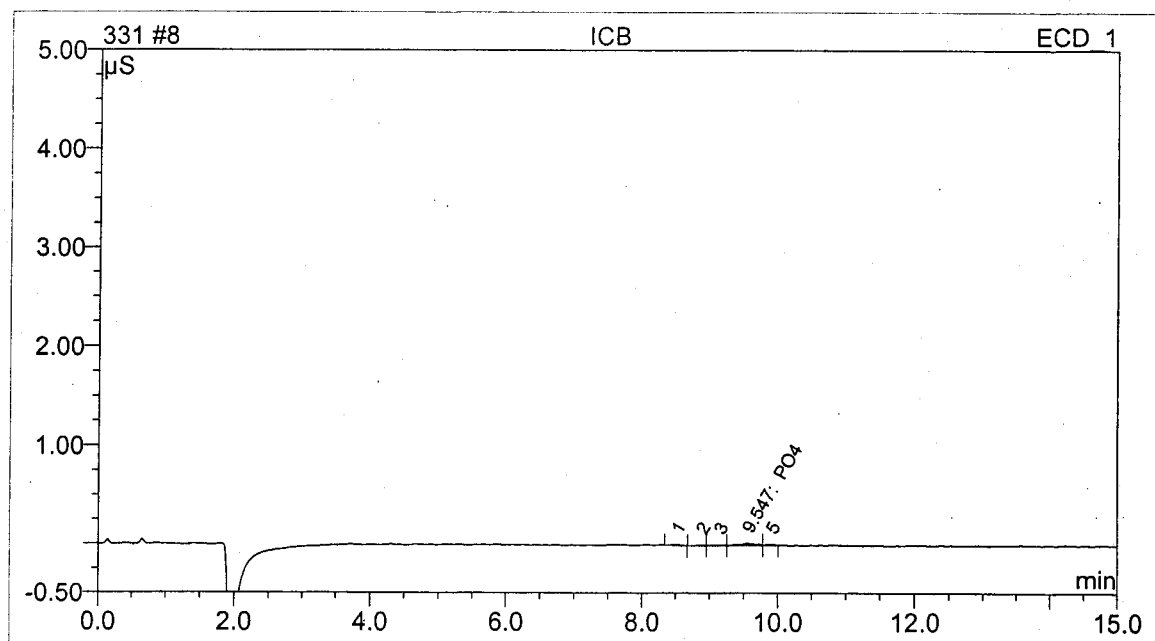
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Bromide	ND	0.2000	0.02767	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Orthophosphate (as P)	[0.05090]	0.2000	0.03686	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

MRS 11/28/06

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICB	Sample No.:	8
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 2:17 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
n.a.	CL	n.a.	n.a.	n.a.	n.a.	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
4	PO4	9.547	0.006205	0.0509	0.0509	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



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REVIEWED BY:

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: 00343

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC03
Seqnum : 626477375001
Cal : 626450011001

File : 331_1.000
Caldate: 08-NOV-2006

IDF : 1.0
Time : 27-NOV-2006 12:15

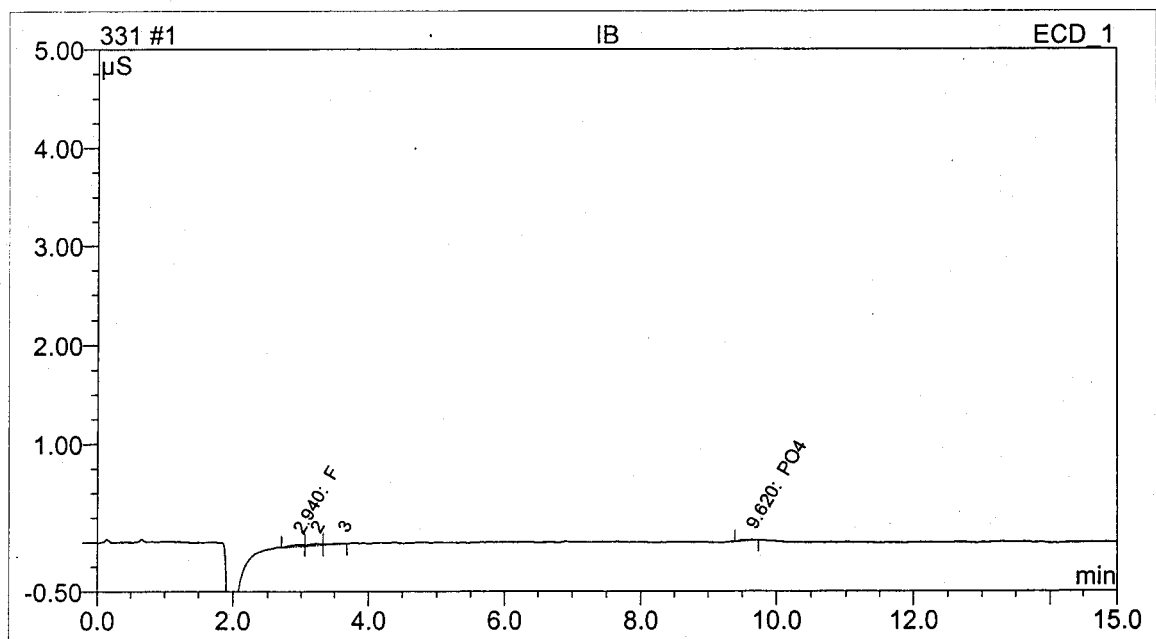
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Bromide	ND	0.2000	0.02767	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Orthophosphate (as P)	ND	0.2000	0.03686	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

MS 11/28/06

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	IB	Sample No.:	1
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 12:15 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.940	0.004714	0.0254	0.0254	
n.a.	CL	n.a.	n.a.	n.a.	n.a.	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
4	PO4	9.620	0.002007	0.0165	0.0165	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



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: 00351

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191290 IC Water
EPA 300.0

Inst : IC03 Run Name: L IDF : 1.0
 Seqnum : 626490359007 File : 340_7.000 Time : 06-DEC-2006 11:47
 Cal : 626477375001 Caldate : 27-NOV-2006
 Standards: S4740 (100X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.1810	0.1922	0.5000	0.5143	mg/L	3	10	
Chloride	0.1613	0.1540	1.000	1.013	mg/L	1	10	
Nitrogen, Nitrite	0.3079	0.2989	0.2500	0.2392	mg/L	-4	10	
Nitrogen, Nitrate	0.3791	0.3953	0.2500	0.2751	mg/L	10	10	
Sulfate	0.1066	0.1100	2.500	2.585	mg/L	3	10	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191290 IC Water
EPA 300.0

Inst : IC03	Run Name: M	IDF : 1.0	
Seqnum : 626490359018	File : 340_18.000	Time : 06-DEC-2006 19:29	
Cal : 626477375001	Caldate : 27-NOV-2006		
Standards: S4740 (25X)			

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.1810	0.1851	2.000	1.947	mg/L	-3	10	
Chloride	0.1613	0.1491	4.000	3.830	mg/L	-4	10	
Nitrogen, Nitrite	0.3079	0.3001	1.000	0.9523	mg/L	-5	10	
Nitrogen, Nitrate	0.3791	0.3581	1.000	0.9841	mg/L	-2	10	
Sulfate	0.1066	0.1065	10.00	9.814	mg/L	-2	10	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191290 IC Water
EPA 300.0

Inst : IC03 Run Name: H IDF : 1.0
Seqnum : 626490359032 File : 340_32.000 Time : 06-DEC-2006 23:33
Cal : 626477375001 Caldate : 27-NOV-2006
Standards: S4740 (10X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.1810	0.2080	5.000	5.266	mg/L	5	10	
Chloride	0.1613	0.1620	10.00	9.891	mg/L	-1	10	
Nitrogen, Nitrite	0.3079	0.3163	2.500	2.464	mg/L	-1	10	
Nitrogen, Nitrate	0.3791	0.3714	2.500	2.487	mg/L	-1	10	
Sulfate	0.1066	0.1129	25.00	24.96	mg/L	0	10	

CURTIS & TOMPKINS BLANK USER REPORT FOR 191290 IC Water
EPA 300.0

Inst : IC03 Lab ID : QC367425
Seqnum : 626490359008.2 Matrix : Water
File : 340_8.000 Batch : 120153 Time : 06-DEC-2006 12:04
Cal : 626477375001 Caldate: 27-NOV-2006
IDF : 1.0 Units : mg/L
PDF : 1.0

Analyte	Result	RL	Flags
Fluoride	ND	0.10	u
Chloride	ND	0.20	u
Nitrogen, Nitrite	ND	0.05	u
Nitrogen, Nitrate	ND	0.05	u
Sulfate	ND	0.50	u

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 191290 IC Water
EPA 300.0

Inst : IC03
Seqnum : 626490359019
Cal : 626477375001
IDF : 1.0
File : 340_19.000
Caldate: 27-NOV-2006
Time : 06-DEC-2006 19:47

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 191290 IC Water
EPA 300.0

Inst : IC03
Seqnum : 626490359033
Cal : 626477375001
IDF : 1.0
File : 340_33.000
Time : 06-DEC-2006 23:51
Caldate: 27-NOV-2006

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

SEQUENCE SUMMARY FOR 191290 IC Water
Curtis & Tompkins Laboratories

Sequence: 626477375 Instrument: IC03
Analytical Method: EPA 300.0

Ion Chromatograph
SOP Version: ANIONS_300_rv6

Begun: 27-NOV-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
001	331_1.00	IB				27-NOV-2006 12:15	1.0			25					
002	331_2.00	ICAL	L1			27-NOV-2006 12:32	1.0						1		
003	331_3.00	ICAL	L2			27-NOV-2006 12:50	1.0						1		
004	331_4.00	ICAL	L3			27-NOV-2006 13:07	1.0						1		
005	331_5.00	ICAL	L4			27-NOV-2006 13:25	1.0						1		
006	331_6.00	ICAL	L5			27-NOV-2006 13:42	1.0						1		
007	331_7.00	ICV				27-NOV-2006 13:59	1.0						2		
008	331_8.00	ICB				27-NOV-2006 14:17	1.0								
009	331_9.00	CCV	L			27-NOV-2006 14:34	1.0	1					1		
010	331_10.00	CCB/MB	QC366232			27-NOV-2006 14:52	1.0								
011	331_11.00	BS	QC366233			27-NOV-2006 15:09	1.0	1					1		
012	331_12.00	BSD	QC366234			27-NOV-2006 15:26	1.0	1					1		
013	331_13.00	SAMPLE	190995-001			27-NOV-2006 15:54	1.0	1							
014	331_14.00	X	BLK			27-NOV-2006 16:27	1.0								2:504=96.1268
015	331_15.00	MSS	190995-002			27-NOV-2006 16:44	10.0								
016	331_16.00	SAMPLE	190995-003			27-NOV-2006 17:02	10.0								
017	331_17.00	SAMPLE	190995-004			27-NOV-2006 17:19	10.0								
018	331_18.00	SAMPLE	190995-005			27-NOV-2006 17:37	10.0								
019	331_19.00	SAMPLE	190995-006			27-NOV-2006 17:54	10.0								
020	331_20.00	SAMPLE	190995-007			27-NOV-2006 18:11	10.0								
021	331_21.00	CCV	M			27-NOV-2006 18:29	1.0						1		
022	331_22.00	CCB				27-NOV-2006 18:46	1.0								
023	331_23.00	X	CCV			27-NOV-2006 19:04	1.0						1		
024	331_24.00	X	CCB			27-NOV-2006 19:21	1.0								
025	331_25.00	MS	QC366235			27-NOV-2006 19:39	10.0	1					1		
026	331_26.00	MSD	QC366236			27-NOV-2006 19:56	10.0						1		
027	331_27.00	SAMPLE	190995-001			27-NOV-2006 20:13	10.0								
028	331_28.00	SAMPLE	190995-008			27-NOV-2006 20:31	10.0								
029	331_29.00	SAMPLE	190995-009			27-NOV-2006 20:49	10.0								
030	331_30.00	SAMPLE	190995-010			27-NOV-2006 21:06	10.0								
031	331_31.00	SAMPLE	190995-011			27-NOV-2006 21:24	10.0								

Stds used: 1=S4740 2=S3859

SEQUENCE SUMMARY FOR 191290 IC Water
Curtis & Tompkins Laboratories

Sequence: 626477375 Instrument: IC03
Analytical Method: EPA 300.0

Ion Chromatograph
SOP Version: ANIONS_300_rv6

Begun: 27-NOV-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
032	331_32.0	SAMPLE	190995-012	119854	Water	27-NOV-2006	21:41	10.0	25						
033	331_33.0	SAMPLE	190995-013	119854	Water	27-NOV-2006	21:59	10.0	25						
034	331_34.0	SAMPLE	190995-014	119854	Water	27-NOV-2006	22:16	10.0	25						
035	331_35.0	CCV	H	119854		27-NOV-2006	22:33	1.0	25			1			
036	331_36.0	CCB		119854		27-NOV-2006	22:51	1.0	25						
037	331_37.0	X	CCV	119854		27-NOV-2006	23:08	1.0				1			
038	331_38.0	X	CCB	119854		27-NOV-2006	23:26	1.0							
039	331_39.0	X	SHUTDOWN	119854		27-NOV-2006	23:43	1.0							

Stds used: 1=S4740 2=S3859

SEQUENCE SUMMARY FOR 191290 IC Water
Curtis & Tompkins Laboratories

Sequence: 626490359 Instrument: IC03
Analytical Method: EPA 300.0

Ion Chromatograph
SOP Version: ANIONS_300_rv6

Begun: 06-DEC-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds Used	>LR
007	340_7.00	CCV	L	120153		06-DEC-2006 11:47	1.0	1	25			1		
008	340_8.00	CCB/MB	QC367425	120153	Water	06-DEC-2006 12:04	1.0		25					
009	340_9.00	BS	QC367426	120153	Water	06-DEC-2006 12:22	1.0		25			1		
010	340_10.0	BSD	QC367427	120153	Water	06-DEC-2006 12:39	1.0		25			1		
011	340_11.0	MSS	191286-012	120153	Water	06-DEC-2006 17:20	50.0		25					
012	340_12.0	SAMPLE	191286-013	120153	Water	06-DEC-2006 17:38	100.0		25					
013	340_13.0	SAMPLE	191286-014	120153	Water	06-DEC-2006 17:55	100.0		25					
014	340_14.0	SAMPLE	191286-015	120153	Water	06-DEC-2006 18:13	50.0		25					
015	340_15.0	SAMPLE	191286-003	120153	Water	06-DEC-2006 18:37	1.0	3	25					3:SO4=65.8524
016	340_16.0	SAMPLE	191286-006	120153	Water	06-DEC-2006 18:55	1.0	3	25					3:SO4=65.9204
017	340_17.0	SAMPLE	191286-004	120153	Water	06-DEC-2006 19:12	1.0	2	25					2:SO4=94.0563
018	340_18.0	CCV	M	120153		06-DEC-2006 19:29	1.0		25			1		
019	340_19.0	CCB		120153		06-DEC-2006 19:47	1.0		25					
020	340_20.0	X	CCV	120153		06-DEC-2006 20:04	1.0					1		
021	340_21.0	X	CCB	120153		06-DEC-2006 20:22	1.0							
022	340_22.0	SAMPLE	191290-001	120153	Water	06-DEC-2006 20:39	1.0		25					
023	340_23.0	MS	QC367428	120153	Water	06-DEC-2006 20:56	100.0		25			1		
024	340_24.0	MSD	QC367429	120153	Water	06-DEC-2006 21:14	100.0		25			1		
025	340_25.0	SAMPLE	191286-001	120153	Water	06-DEC-2006 21:31	1.0	2	25					2:SO4=94.7781
026	340_26.0	SAMPLE	191286-009	120153	Water	06-DEC-2006 21:49	1.0	1	25					1:CL=66.6205
027	340_27.0	SAMPLE	191286-002	120153	Water	06-DEC-2006 22:06	1.0	1	25					1:CL=125.136
028	340_28.0	SAMPLE	191286-011	120153	Water	06-DEC-2006 22:23	1.0	2	25					2:CL=120.481
029	340_29.0	SAMPLE	191286-010	120153	Water	06-DEC-2006 22:41	1.0	2	25					2:CL=120.417
030	340_30.0	SAMPLE	191286-005	120153	Water	06-DEC-2006 22:58	1.0	1	25					1:CL=125.133
031	340_31.0	SAMPLE	191286-007	120153	Water	06-DEC-2006 23:16	1.0	2	25					2:CL=158.389
032	340_32.0	CCV	H	120153		06-DEC-2006 23:33	1.0		25			1		
033	340_33.0	CCB		120153		06-DEC-2006 23:51	1.0		25					
034	340_34.0	X	CCV	120153		07-DEC-2006 00:08	1.0					1		
035	340_35.0	X	CCB	120153		07-DEC-2006 00:25	1.0							
036	340_36.0	MSS	191286-012	120153	Water	07-DEC-2006 00:43	1.0	2	25					2:CL=205.949
037	340_37.0	X	BLK	120153		07-DEC-2006 01:00	1.0							

Stds used: 1=S4740

SEQUENCE SUMMARY FOR 191290 IC Water
Curtis & Tompkins Laboratories

Sequence: 626490359 Instrument: IC03
Analytical Method: EPA 300.0

Ion Chromatograph
SOP Version: ANIONS_300_rv6

Begun: 06-DEC-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
038	340_38.0	MSS	191286-012	120153	Water	07-DEC-2006	01:18 2.0	2		25					2:CL=153.755
039	340_39.0	X	BLK	120153		07-DEC-2006	01:35 1.0								
040	340_40.0	SAMPLE	191286-013	120153	Water	07-DEC-2006	01:52 1.0			25					
041	340_41.0	X	BLK	120153		07-DEC-2006	02:10 1.0								
042	340_42.0	SAMPLE	191286-013	120153	Water	07-DEC-2006	02:27 2.0	1		25					1:CL=62.3688
043	340_43.0	X	BLK	120153		07-DEC-2006	02:45 1.0								
044	340_44.0	SAMPLE	191286-014	120153	Water	07-DEC-2006	03:02 1.0	1		25					1:SO4=309.812
045	340_45.0	X	BLK	120153		07-DEC-2006	03:19 1.0								
046	340_46.0	SAMPLE	191286-014	120153	Water	07-DEC-2006	03:37 2.0	1		25					1:SO4=177.523
047	340_47.0	X	BLK	120153		07-DEC-2006	04:12 1.0								
048	340_48.0	SAMPLE	191286-015	120153	Water	07-DEC-2006	04:29 1.0	1		25					1:SO4=153.776
049	340_49.0	X	BLK	120153		07-DEC-2006	04:46 1.0								
050	340_50.0	SAMPLE	191286-008	120153	Water	07-DEC-2006	05:04 1.0	1		25					1:SO4=143.040
051	340_51.0	X	BLK	120153		07-DEC-2006	05:21 10.0								
052	340_52.0	SAMPLE	191286-001	120153	Water	07-DEC-2006	05:39 25.0			25					
053	340_53.0	SAMPLE	191286-002	120153	Water	07-DEC-2006	05:56 1.0			25					
054	340_54.0	CCV	M	120153		07-DEC-2006	06:14 1.0			25					
055	340_55.0	CCB		120153		07-DEC-2006	06:31 1.0			25					
056	340_56.0	X	CCV	120153		07-DEC-2006	06:48 1.0								
057	340_57.0	X	CCB	120153		07-DEC-2006	07:06 10.0			25					
058	340_58.0	SAMPLE	191286-003	120153	Water	07-DEC-2006	07:23 10.0			25					
059	340_59.0	SAMPLE	191286-004	120153	Water	07-DEC-2006	07:41 25.0			25					
060	340_60.0	SAMPLE	191286-005	120153	Water	07-DEC-2006	07:58 10.0			25					
061	340_61.0	SAMPLE	191286-006	120153	Water	07-DEC-2006	08:15 25.0			25					
062	340_62.0	SAMPLE	191286-007	120153	Water	07-DEC-2006	08:33 25.0			25					
063	340_63.0	SAMPLE	191286-008	120153	Water	07-DEC-2006	08:50 25.0			25					
064	340_64.0	SAMPLE	191286-009	120153	Water	07-DEC-2006	09:08 25.0			25					
065	340_65.0	SAMPLE	191286-010	120153	Water	07-DEC-2006	09:25 25.0			25					
066	340_66.0	SAMPLE	191286-011	120153	Water	07-DEC-2006	09:42 1.0			25					
067	340_67.0	SAMPLE	191294-004	120153	Water	07-DEC-2006	10:00 1.0			25					
068	340_68.0	CCV	H	120153		07-DEC-2006							1		

Stds used: 1=S4740

SEQUENCE SUMMARY FOR 191290 IC Water
Curtis & Tompkins Laboratories

Sequence: 626490359 Instrument: IC03
Analytical Method: EPA 300.0

Ion Chromatograph
SOP Version: ANIONS_300_rv6

Begun: 06-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
069	340_69.0	CCB		120153		07-DEC-2006	10:17	1.0	1	25					
070	340_70.0	SAMPLE	191294-002	120153	Water	07-DEC-2006	10:35	1.0		25					
071	340_71.0	SAMPLE	191294-001	120153	Water	07-DEC-2006	10:52	1.0		25					
072	340_72.0	SAMPLE	191294-003	120153	Water	07-DEC-2006	11:10	1.0		25					
073	340_73.0	CCV	M	120153		07-DEC-2006	11:29	1.0		25			1		
074	340_74.0	CCB		120153		07-DEC-2006	11:47	1.0		25					

Stds used: 1=S4740

REPORTING SUMMARY FOR 191290 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	F	C L	N O 2 N	N O 3 N	S O 4
191290-001	IC03	12/06/06 20:39	1.0	+	+	+	+	+
QC367425	IC03	12/06/06 12:04	1.0	+	+	+	+	+
QC367426	IC03	12/06/06 12:22	1.0	+	+	+	+	+
QC367427	IC03	12/06/06 12:39	1.0	+	+	+	+	+
QC367428	IC03	12/06/06 20:56	100.0	+	+	+	+	+
QC367429	IC03	12/06/06 21:14	100.0	+	+	+	+	+

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO₄) EPA 314
☐ Cr6+ EPA 7199

Batch#: 120153
 Date Started: 12/6/06
 Prep Chemist: MRS

BK 2431
 Page 5

	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	191286-001 E	0.73	1x 10x	S	
2	-002 F	1.15	25x		
3	-003 I	0.70	10x		
4	-004 E	0.76	10x		
5	-005 F	1.22	25x		
6	-006 I	0.72	10x		
7	-007 C	1.45	25x		
8	-008 C	1.85	25x		
9	-009 I	1.12	25x		
10	-010 I	1.17	25x		
11	-011 I	1.15	25x		
12	-012 V	2.47	2x 50x		MSS
13	-013 H	4.38	2x 100x		
14	-014 B	3.60	2x 100x		
15	-015 B	2.06	50x		
16	191290-001 I	0.01	1x		
17	191294-001 P	0.11	1x	S	
18	-002 P	0.07			
19	-003 O	0.18			
20	-004 P	0.21			
	Blank QLC367425	N/A	1x	N/A	
	BS QLC367426				
	BSD QLC367427				
	MS QLC367428 V		100x	S	
	MSD QLC367429 V		100x	S	

	Eluent Reagent ID	Mfg & Lot # / Time / Program	Initials / Date
BS/BSD Spiked with	0.2 mL of :	100x MRS 8/10/06	MRS 12/6/06
MS/MSD Spiked with	0.1 mL of :	54740	
Filters Used:	Ag: OnGuard II Ag	54740	
	Na: OnGuard II Na	N/A	
	P: OnGuard II P		
	RP: OnGuard II RP		
	S: 0.20um/0.45um	Acrodisc lot # A10646166	

Extraction Chemist / Date

Continued from page
 Continued on page

Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 120153
 Date Started: 06-DEC-2006
 Batched by : Micah Smith

Analysis : N/A
 Bgroup : IC
 Department : GC Organics

Sample	Type	Client	Matrix	Analyses	Due Date
191286-001		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191286-002		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191286-003		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191286-004		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191286-005		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191286-006		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191286-007		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191286-008		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191286-009		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191286-010		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191286-011		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191286-012		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191286-013		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191286-014		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191286-015		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191290-001		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	18-DEC-2006
191294-001		Blasland, Bouck &	Water	CHLORIDE, FLUORIDE, NITRATE, SULFATE	12-DEC-2006
191294-002		Blasland, Bouck &	Water	CHLORIDE, FLUORIDE, NITRATE, SULFATE	12-DEC-2006
191294-003		Blasland, Bouck &	Water	CHLORIDE, FLUORIDE, NITRATE, SULFATE	12-DEC-2006
191294-004		Blasland, Bouck &	Water	CHLORIDE, FLUORIDE, NITRATE, SULFATE	12-DEC-2006
QC367425	BLANK		Water		
QC367426	BS		Water		
QC367427	BSD		Water		
QC367428	MS	of 191286-012	Water		
QC367429	MSD	of 191286-012	Water		

Curtis & Tompkins Laboratories
MDL Summary for EPA 300.0 Water
As of 01/05/07

Analyte	Units	IC03	IC01
Fluoride	mg/L	0.023	0.0092
Chloride	mg/L	0.032	0.0061
Nitrogen, Nitrite	mg/L	0.012	0.0081
Bromide	mg/L	0.028	0.036
Nitrogen, Nitrate	mg/L	0.0088	0.0080
Orthophosphate (as P)	mg/L	0.037	0.045
Sulfate	mg/L	0.079	0.047



Curtis & Tompkins, Ltd.

Sulfide			
Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Batch#:	120273
Field ID:	DW120606B	Sampled:	12/06/06
Matrix:	Water	Received:	12/06/06
Units:	mg/L	Analyzed:	12/12/06
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	191290-001	ND	0.04
BLANK	QC367942	ND	0.04

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Sulfide			
Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Diln Fac:	1.000
Field ID:	DUP1205061A	Batch#:	120273
MSS Lab ID:	191286-011	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	mg/L	Analyzed:	12/12/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC367945		0.3262	0.3049	93	75-125		
MS	QC368037	<0.04000	0.3262	0.2453	75	75-125		
MSD	QC368038		0.3262	0.2456	75	75-125	0	20

RPD= Relative Percent Difference

Analysis: **SULFIDE**
 Method: EPA 376.2
 Instrument: HP UV-VIS Spectrometer
 Wavelength: 626 nm
 SOP#: sulfide_376_rv 4.doc

Matrix: Water
 Batch: 120273
 Prep Date: 12/12/2006
 Analysis Date: 12/12/2006
 Analyst: DMC

INITIAL CALIBRATION DATA

Calibration Date: 11/16/06

Conc (mg/L)	Absorb	RF
0.000	0.0000	
0.027	0.0172	0.6370
0.055	0.0341	0.6200
0.218	0.1374	0.6303
0.437	0.2718	0.6220
0.873	0.5511	0.6313
1.529	0.8947	0.5852

Note: Average Rf used to calculate sample results.

Correlation Coefficient (r): 0.9990

Avg Rf: 0.6210

%RSD: 3.0

CONTINUING CALIBRATION DATA

	Absorb Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.1893	0.3049	93%	90 - 110%
ICB	-0.0002	-0.0003		
CCV	0.1925	0.3100	95%	90 - 110%
CCB	0.0010	0.0016		
CCV	0.1954	0.3147	96%	90 - 110%
CCB	0.0011	0.0018		

Analysis: **SULFIDE**
 Method: **EPA 376.2**
 Instrument: **HP UV-VIS Spectrometer**
 Wavelength: **626 nm**
 Matrix: **Water**

Batch: **120273**
 Prep Date: **12/12/2006**
 Analysis Date: **12/12/2006**
 Analyst: **DMC**

SAMPLE & BATCH QC DATA

Sample ID	Sample Vol (mL)	D.F.	Sample Absorb	Color Bk Absorb	Report mg/L	Limit (mg/L)	Reporting Added (mL)	Vol Spike (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	% Rec	% RPD
MB	7.5000	1.0000	-0.0002		ND		0.040					
LCS	7.5000	1.0000	0.1893		0.30486		0.040	0.0500	48.9360	0.3262	93	
191286-11	7.5000	1.0000	0.0098		ND		0.040					
191286-11M	7.5000	1.0000	0.1523		0.24527		0.040	0.0500	48.9360	0.3262	75	
191286-11M	7.5000	1.0000	0.1525		0.24559		0.040	0.0500	48.9360	0.3262	75	0
191286-2	7.5000	1.0000	0.0188		ND		0.040					
191286-3	7.5000	1.0000	0.0241		ND		0.040					
191286-5	7.5000	1.0000	0.0146		ND		0.040					
191286-6	7.5000	1.0000	0.0151		ND		0.040					
191286-9	7.5000	1.0000	0.0153		ND		0.040					
191286-10	7.5000	1.0000	0.0098		ND		0.040					
191287-3	7.5000	1.0000	0.0050		ND		0.040					
191290-1	7.5000	1.0000	0.0046		ND		0.040					
191322-5	7.5000	1.0000	0.0037		ND		0.040					
191329-1	7.5000	1.0000	0.0037		ND		0.040					
191331-1	7.5000	1.0000	0.0042		ND		0.040					
191358-13	7.5000	1.0000	0.0252		0.04058		0.040					
191381-1	7.5000	1.0000	0.7803		1.25662		0.040					

QC Limits		RPD		Recovery	
LCS/BS/BSD	20	20		90 - 110	
MS/MSD	20			42 - 121	

Reviewed by/ Date: 12.18.06

----> Quantitation Results Report <----

Date : 12-12-2006
Time : 13:14:14
Operator : DM

File Name : Data not stored yet

Sample Name : sulfide
Solvent Name : CRL 11-16-06
Conc Units : mg/L
dil. Factor : 1.00

Analytical Wavelength : 626 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

AMPLE #	Sample Name	Wavelength	Func. Res.	Concentration
1	ICB/MS	Analytical	-0.0002	0.00000
2	ICV/LCS	Analytical	+0.1893	0.31593
3	191286-2	Analytical	+0.0188	0.03137
4	191286-3	Analytical	+0.0241	0.04019
5	191286-5	Analytical	+0.0146	0.02432
6	191286-6	Analytical	+0.0151	0.02521
7	191286-9	Analytical	+0.0153	0.02559
8	191286-10	Analytical	+0.0093	0.01559
9	191286-11	Analytical	+0.0098	0.01635
10	191286-11MS	Analytical	+0.1323	0.25425
11	CCV	Analytical	+0.1925	0.32130
12	CCB	Analytical	+0.0010	0.00171
13	191286-11MSD	Analytical	+0.1525	0.25453
14	191287-3	Analytical	+0.0050	0.00830
15	191290-1	Analytical	+0.0046	0.00761
16	191322-5	Analytical	+0.0037	0.00616
17	191329-1	Analytical	+0.0037	0.00616
18	191331-1	Analytical	+0.0042	0.00700
19	191358-13	Analytical	+0.0252	0.04210
20	191391-1	Analytical	+0.7803	0.00371

---> Standard Calibration Report <---

Date : 12-12-2006

Time : 13:14:40

Operator : DM

12-12

12-12-06
DM

1) Name : C:\XUV\DATA\8911051.STD

Sample Name : sulfide

Analytical Wavelength : 626 nm

Solvent Name : CAL 11-16-06

Reference Wavelength : None Selected

Conc. Units : mg/L

Confirmation Wavelengths : None Selected

Integration Time : 1 seconds

Analytical Function : Concentration = +1.669E+00 * Absorbance

STD #	Concentration	Absorbance	% Error
1	0.00000	-0.0000	*****
2	0.02700	0.0172	-6.090 %
3	0.05500	0.0341	-3.497 %
4	0.21800	0.1374	-4.916 %
5	0.43700	0.2718	-3.670 %
6	0.87300	0.5511	-5.085 %
7	1.52900	0.8947	+2.393 %

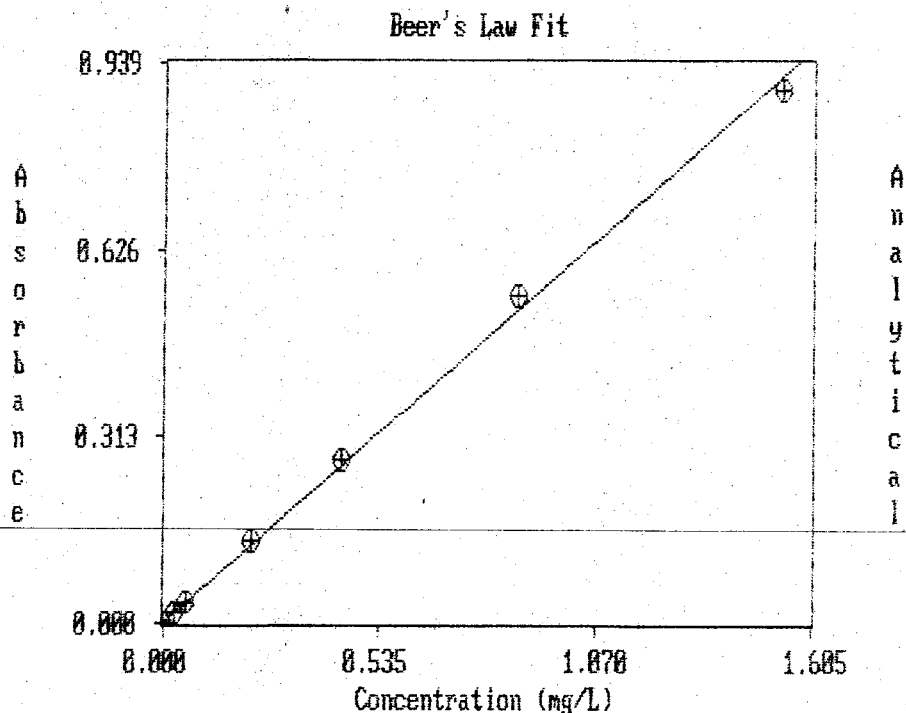
---> Standard Calibration Report <---

Date : 12-12-2006
 Time : 13:14:41
 Operator : DM

File Name : C:\UV\DATA\SS1106.STD

Sample Name : sulfide
 Solvent Name : CAL 11-16-05
 Conc Units : mg/L

Analytical Wavelength : 625 nm
 Reference Wavelength : None Selected
 Confirmation Wavelengths : None Selected
 Integration Time : 1 seconds



Diss Sulfide/Sulfide EPA 376.2
Sample Vol(ml) Final Vol(ml) ABS

B 120273

191286-2	7.5	7.5	.3188	
-3			.0241	
-5			.0146	
-6			.0151	
-9			.0153	
-10			.0093	
-11			.0098	
-12				corrected 12-12-86
191287-3			.0050	1.0 ml S ²
191290-1			.0046	5.0 ml 1.0254N
191322-5			.0037	2.70 ml S ₂ O ₈ - 0.2438N
191329-1			.0037	.1270 .06583
191331-1			.0042	.06117 x 16000 1.0
191358-13			.0252	= 978.72 mg/L 1.20 = 48.936 mg/L .05 - 7.5 = .3262 mg/L
191381-1			.7803	
ICB/MB			.0002	
ICV/LCS			.1893	TV = .3262 mg/L
CCV			.1925	
CCB			.0010	
CCV			.1954	
CCB			.0011	

* Filter thru WHATMAN
45µm Filter at 1039

Continued on Page

Don

12-12-86

Don

12/12/86
00374

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 120273
 Date Started: 12-DEC-2006
 Batched by : Dennis McCanna

Analysis : DISS SULFIDE
 Bgroup : N/A
 Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
191286-002		Treadwell & Rollo	Water	SULFIDE	18-DEC-2006
191286-003		Treadwell & Rollo	Water	SULFIDE	18-DEC-2006
191286-005		Treadwell & Rollo	Water	SULFIDE	18-DEC-2006
191286-006		Treadwell & Rollo	Water	SULFIDE	18-DEC-2006
191286-009		Treadwell & Rollo	Water	SULFIDE	18-DEC-2006
191286-010		Treadwell & Rollo	Water	SULFIDE	18-DEC-2006
191286-011		Treadwell & Rollo	Water	SULFIDE	18-DEC-2006
191287-003		Acme Fill Corp.	Water	SULFIDE	18-DEC-2006
191290-001		Treadwell & Rollo	Water	SULFIDE	18-DEC-2006
191322-005		ACC Environmental	Water	SULFIDE	13-DEC-2006
191329-001		Strategic Engineer	Water	DISS SULFIDE	12-DEC-2006
191331-001		Strategic Engineer	Water	DISS SULFIDE	13-DEC-2006
191358-013		Treadwell & Rollo	Water	DISS SULFIDE	20-DEC-2006
191381-001		Strategic Engineer	Water	DISS SULFIDE	13-DEC-2006
QC367942	BLANK		Water	SULFIDE	
QC367945	LCS		Water	SULFIDE	
QC368037	MS	of 191286-011	Water	DISS SULFIDE	
QC368038	MSD	of 191286-011	Water	DISS SULFIDE	

Analysis: Sulfide
Method: EPA 376.2
Instrument: HP UV/Vis
Wavelength: 626 nm

Analysis Date: 10/10/2006
Analyst: DM

Instrument Calibrated to report sample results in concentration: mg/L

Concentration: 0.098
Units: mg/L

1	0.060
2	0.064
3	0.071
4	0.075
5	0.073
6	0.074
7	0.070

Average: 0.070 ug/L
Std Deviation: 0.0057186
Student T: 3.143

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev: 0.0180 mg/L
Reporting Limit: 0.04 mg/L
Status: PASS >1/3 RL

✓
10/16/06



Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Batch#:	120354
Field ID:	DW120606B	Sampled:	12/06/06
Matrix:	Water	Received:	12/06/06
Units:	mg/L	Analyzed:	12/13/06
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	191290-001	30	10
BLANK	QC368255	ND	10

Batch QC Report

Total Dissolved Solids (TDS)			
Lab #:	191290	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	120354
MSS Lab ID:	191294-009	Sampled:	12/06/06
Matrix:	Water	Received:	12/06/06
Units:	mg/L	Analyzed:	12/13/06

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim
BS	QC368256		100.0	102.0		102	79-121		
BSD	QC368257		100.0	96.00		96	79-121	6	20
SDUP	QC368258	72.00		80.00	10.00			11	20

Analysis: **Total Dissolved Solids**
 Method: **EPA160.1 / SMWW 2540c**
 Matrix: **Water**
 SOP#: **tds_rv 9.doc**

Analysis Date: **13-Dec-06**
 Batch #: **120354**
 Analyst: **SJ**

BATCH QC DATA

Sample	Sample Vol (mL) 50(vol)	DF	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	Report (mg/L)	Reporting Limit (mg/L)	Spike Std Conc (mg/L)	Spike Vol. Used (mL)	Spiking Level (mg/L)	Recovery, %	RPD, %
MB	50	1	54.0834	54.0838	0.0004	ND	10					
BS	50	1	55.1951	55.2002	0.0051	102.0	10	1,000	5	100	102	
BSD	50	1	51.5218	51.5266	0.0048	96.0	10	1,000	5	100	96	6.06
191294-009	50	1	55.5891	55.5927	0.0036	72.0	10					
SDUP	50	1	56.3288	56.3328	0.0040	80.0	10					10.53
191287-002	5	10	26.3504	26.4507	0.1003	20,060.0	100					
SDUP	5	10	24.8574	24.9512	0.0938	18,760.0	100					6.70

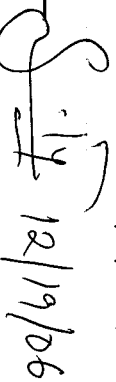
QC Limits		RPD		Recovery	
LCS/BS/BS	20	79	- 121		
MS/MSD	20	69	- 131		

SAMPLE DATA

Sample	Sample Vol (mL) 50(vol)	DF	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	Report (mg/L)	Reporting Limit (mg/L)
191287-002	5	10	26.3504	26.4507	0.1003	20,060.0	100
191290-001	50	1	58.2168	58.2183	0.0015	30.0	10
191294-001	50	1	55.8222	55.8271	0.0049	98.0	10
191294-002	50	1	57.3646	57.3632	-0.0014	ND	10
191294-003	50	1	58.2112	58.2141	0.0029	58.0	10
191294-004	50	1	55.0739	55.0799	0.0060	120.0	10
191294-005	50	1	55.6388	55.6398	0.0010	20.0	10
191294-006	50	1	55.3838	55.3998	0.0160	320.0	10
191294-007	50	1	57.2818	57.2946	0.0128	256.0	10
191294-008	50	1	57.1149	57.1207	0.0058	116.0	10
191294-009	50	1	55.5891	55.5927	0.0036	72.0	10

Note: Because the regulatory holding time is based on the prep date, the analysis date referenced above is the prep date.

Reviewed by/ Date:

 S. J. 12/19/06

Template: Filinorganwetstufids.xls

Curtis & Tompkins, Ltd.

Curtis & Tompkins, Ltd.

Page: 24

Spike WS Conc (mg/L): 1000
Spike Vol Added (mL): 5

* Constant weight must be within 0.0005 from previous reading.

Reviewed by/ Date 12/19/06

TDS (Total Dissolved Solids)
EPA 160.1 / SMWW 2540C

Curtis & Tompkins, Ltd.

2420

LIMS Batch #: 120354 con t

Prep Date:

Benchbook#: BK 2420

Prep Time: _____

Page: 25

Filter Mfg/ Lot#:

Spike WS Conc (mg/L):

Spike WS#: _____

Spike Vol Added (mL):

	In	Out	In-2	Out-2	In-3	Out-3
Date:						
Time:						
Temp (C):						

1st Dry	EC Value	Sample Vol.	Dish	Dish	1st Dry	2nd Dry	3rd Dry
Wt (g)*	Sample # / Letter	(µS/cm)	Filtered (mL)	ID	Wt (g)	Wt (g)	Wt (g)*

534	24.9516	24.9512	X
276	55.8771	X	
652	57.3636	57.3632	X
812	55.0799	X	
640	55.6398	X	
1002	55.3998	X	
1946	X		
12	57.1207	X	
3247	55.5930	55.5927	X
349	56.3324	56.3328	X

* Constant weight must be within 0.0005 from previous reading.

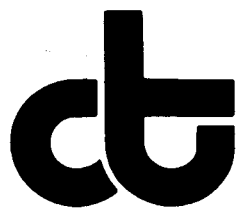
Date**Analyst / Date**Reviewed by: Date:

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 120354
 Date Started: 14-DEC-2006
 Batched by : Stephanie Jim

Analysis : TDS
 Bgroup : N/A
 Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
191287-002		Acme Fill Corp.	Water	TDS	18-DEC-2006
191290-001		Treadwell & Rollo	Water	TDS	18-DEC-2006
191294-001		Blasland, Bouck &	Water	TDS	12-DEC-2006
191294-002		Blasland, Bouck &	Water	TDS	12-DEC-2006
191294-003		Blasland, Bouck &	Water	TDS	12-DEC-2006
191294-004		Blasland, Bouck &	Water	TDS	12-DEC-2006
191294-005		Blasland, Bouck &	Water	TDS	12-DEC-2006
191294-006		Blasland, Bouck &	Water	TDS	12-DEC-2006
191294-007		Blasland, Bouck &	Water	TDS	12-DEC-2006
191294-008		Blasland, Bouck &	Water	TDS	12-DEC-2006
191294-009		Blasland, Bouck &	Water	TDS	12-DEC-2006
QC368255	BLANK		Water	TDS	
QC368256	BS		Water	TDS	
QC368257	BSD		Water	TDS	
QC368258	SDUP	of 191294-009	Water	TDS	



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Number 191314

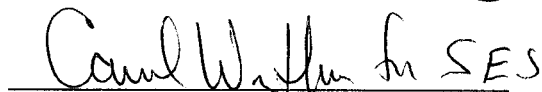
Treadwell & Rollo
555 Montgomery Street
San Francisco, CA 94111

Project#: 2893.04.51
Location: Presidio

<u>Sample ID</u>	<u>Lab ID</u>
LF10GW02	191314-001
LF10GW01	191314-002
LF10SP01	191314-003
1221GW104	191314-004
DUP-1206063A	191314-005
BB3GW100	191314-006
LF10GW03	191314-007
LF10GW0100	191314-008
1065MW101	191314-009
1065MW102	191314-010
1065PZ2A	191314-011
1065PZ4A	191314-012
TB1206061A	191314-013
LF6GW104	191314-014
LF6GW105	191314-015
LF6GW106	191314-016
FM14EX07GW102	191314-017
FM14EX07GW101	191314-018
514AGW101	191314-019

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis.

Signature:  Date: 1/5/07
Operations Manager

Signature:  Date: 1/5/07
Project Manager

CASE NARRATIVE

Laboratory number: 191314
Client: Treadwell & Rollo
Project: 2893.04.51
Location: Presidio
Request Date: 12/07/06
Samples Received: 12/07/06

This hardcopy data package contains sample and QC results for nineteen water samples, requested for the above referenced project on 12/07/06. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):

No analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):

Matrix spikes were not performed for sample 1065PZ2A (191314-011) due to insufficient sample volume. Low recoveries were observed for diesel C12-C24 in the MS/MSD of LF10SP01 (lab # 191314-003); the LCS was within limits, and the associated RPD was within limits. 1065PZ2A (lab # 191314-011) and 1065PZ4A (lab # 191314-012) have higher reporting limits as a result of different volumes extracted. No other analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):

No analytical problems were encountered.

Polynuclear Aromatics by HPLC (EPA 8310):

Low recoveries were observed for benzo(a)pyrene in the MS/MSD of 514AGW101 (lab # 191314-019); the LCS was within limits, and the associated RPD was within limits. No other analytical problems were encountered.

Metals (EPA 6020 and EPA 7470A) Water:

High response was observed for aluminum in the CCV analyzed 12/13/06 22:04; this analyte was not detected at or above the RL in the associated sample. Low recoveries were observed for calcium and manganese in the MS of LF10SP01 (lab # 191314-003); the BS/BSD were within limits, and the associated RPDs were within limits. Responses exceeding the instrument's linear range were observed for sodium in the MS/MSD of LF10SP01 (lab # 191314-003). High % difference was observed for sodium in the serial dilution of LF10SP01 (lab # 191314-003). No other analytical problems were encountered.

Metals (EPA 6020 and EPA 7470A) Filtrate:

Responses exceeding the instrument's linear range were observed for magnesium, manganese, and sodium in the MS/MSD of LF10SP01 (lab # 191314-003) and the MS/MSD of 1065PZ2A (lab # 191314-011). High % differences were observed for calcium and sodium in the serial dilution of LF10SP01 (lab # 191314-003). No other analytical problems were encountered.

CASE NARRATIVE

Laboratory number: 191314
Client: Treadwell & Rollo
Project: 2893.04.51
Location: Presidio
Request Date: 12/07/06
Samples Received: 12/07/06

Ion Chromatography (EPA 300.0):

No analytical problems were encountered.

Alkalinity (EPA 310.1):

No analytical problems were encountered.

Sulfide (EPA 376.2):

Low recoveries were observed for sulfide in the MS/MSD of 1065PZ2A (lab # 191314-011); the LCS was within limits, and the associated RPD was within limits. No other analytical problems were encountered.

Total Dissolved Solids (TDS) (EPA 160.1):

No analytical problems were encountered.

Chain of Custody

Project Name: Presidio of San Francisco		PROJECT MANAGER: Joshua Graber		TURNAROUND TIME: 10 Days																			
Location: Presidio of San Francisco		PROJECT NUMBER: 2893																					
Sampled By (Firm and Samplers): Blake Tech / B. Summerset		RECEIVED BY: [Signature]		DATE: 12/17/06																			
Recorder (signature required): [Signature]		PRINT NAME: AARON GRABER		FIRM: C&T																			
Sent to Laboratory (Name): C&T		RECEIVED BY: [Signature]		DATE: 12/17/06																			
Sent to Laboratory (Name):		PRINT NAME: AARON GRABER		FIRM: C&T																			
RECEIVED BY:		RECEIVED BY:		DATE: 12/17/06																			
PRINT NAME:		PRINT NAME:		FIRM: C&T																			
RECEIVED BY:		RECEIVED BY:		DATE: 12/17/06																			
PRINT NAME:		PRINT NAME:		FIRM: C&T																			
ADDITIONAL REMARKS / LABORATORY NOTES:		ADDITIONAL REMARKS / LABORATORY NOTES:		ADDITIONAL REMARKS / LABORATORY NOTES:																			
SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix		Number of Containers and Preservation		REQUESTED ANALYSES										COMMENTS / NOTES					
				Soil	Water	Other	HCl	H ₂ SO ₄	HNO ₃	NaOH	Other	TPH (8015M)	TPHd (8015M)	VOCs (8260) / MTBE	General Chemistry	OCs (8081)	Metals - Dissolved		Metals - Total	PAHs (8310)	BTEX / MTBE	Diss. Metals (22)	Diss. Metals (15)
LF106W02	12/16/06	1350		X			3	1						X				X					
LF106W01	9/10			X			3							X				X					
LF105P01	14/05			X			9	6						X				X					
1221GWL04	11/20			X				1						X				X					
DUP-12060624	11/30			X				1						X				X					
BB3 GW100	12/55			X				1						X				X					
LF106W03	9/50			X			3							X				X					
LF106W100	15/40			X			3							X				X					
1065 MW101	9/20			X			6	1						X				X					
1065 MW102	9/56			X			6	1						X				X					
1065 PEZ4	10/40			X			9	3						X				X					
1065 PEZ4	11/42			X			3	1						X				X					
TB1206061A	-			X			2							X				X					

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate) 3 - Indicate in the metals column (by number) which metals list is requested. Metals List (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Ti, V, and Zn) Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Ti, V, and Zn) (13 - As, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (Other -)

(9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)

Method of Shipment: White Copy - Original Yellow Copy - Laboratory Pink Copy - Field

191314

[illegible]

000000

Steve Stanley

From: "Gil Shenker" <gshenker@treadwellrollo.com>
To: "Steve Stanley" <steve@ctberk.com>; "Joshua Graber" <jdgraber@treadwellrollo.com>
Cc: "Carole Nuttall" <cnuttall@treadwellrollo.com>; "Greg Johnson" <gejohnson@treadwellrollo.com>; <bjones@blainetech.com>
Sent: Wednesday, December 13, 2006 3:28 PM
Subject: RE: 2893.04.51 - C&T Login Summary (191314)

Hi Steve,

In reviewing the logins I found an error on this chain. Hopefully it's not too late to change this.

Sample 1065PZ2A should be analyzed for BTEX/MTBE not PAH. The wrong box was checked off on the chain.

Same thing for 1065 PZ4A:

Sample 1065PZ4A should be analyzed for BTEX/MTBE not PAH. The wrong box was checked off on the chain.

Thanks,

-Gil

From: Steve Stanley [mailto:steve@ctberk.com]
Sent: Wednesday, December 13, 2006 12:55 AM
To: Joshua Graber
Cc: Carole Nuttall; Gil Shenker; Greg Johnson; bjones@blainetech.com
Subject: 2893.04.51 - C&T Login Summary (191314)

C&T Login Summary for 191314

Project:

Steve Stanley

From: "Gil Shenker" <gshenker@treadwellrollo.com>
To: "Steve Stanley" <steve@ctberk.com>; "Joshua Graber" <jdgraber@treadwellrollo.com>
Cc: "Carole Nuttall" <cnuttall@treadwellrollo.com>; "Greg Johnson" <gejohnson@treadwellrollo.com>; <bjones@blainetech.com>
Sent: Friday, December 15, 2006 10:05 AM
Subject: RE: 2893.04.51 - C&T Login Summary (191358)

Hi Steve,

Please cancel this correction. Not all the wells at this site start with BHW.
The original chain was in fact correct. My mistake.

However the other correction, changing the PAH analysis to BTEX/MTBE for 1065PZ2A and 1065PZ4A is right.
Please go ahead with that one if you haven't already.

Thanks,

-Gil

From: Gil Shenker
Sent: Wednesday, December 13, 2006 3:22 PM
To: 'Steve Stanley'; Joshua Graber
Cc: Carole Nuttall; Greg Johnson; bjones@blainetech.com
Subject: RE: 2893.04.51 - C&T Login Summary (191358)

Hi Steve,

A couple of the samples were mislabeled on the chain, could you please fix them.

HWGW100 should read BHWGW100

And

HWGW101 should read BHWGW101

Thanks,

Gil

From: Steve Stanley [mailto:steve@ctberk.com]
Sent: Monday, December 11, 2006 8:39 PM
To: Joshua Graber
Cc: Carole Nuttall; Gil Shenker; Greg Johnson; bjones@blainetech.com
Subject: 2893.04.51 - C&T Login Summary (191358)

C&T Login Summary for 191358

Project:

191314

Steve Stanley

From: "Greg Johnson" <gejohnson@treadwellrollo.com>
To: "Steve Stanley" <steve@ctberk.com>
Cc: "Dorinda Shipman" <dcshipman@treadwellrollo.com>; "Michael Chamberlain" <mchamberlain@treadwellrollo.com>; "Joshua Graber" <jdgraber@treadwellrollo.com>
Sent: Friday, December 15, 2006 2:45 PM
Subject: RE: 2893.04.51 - C&T Login Summary (191314)

Steve,

Please attempt with the VOA vials, if you can get enough material.

GJ

Greg Johnson, REA
 Project Scientist
 TREADWELL & ROLLO, INC.
 (510) 874-4500 voice
 (510) 874-4507 facsimile

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From: Steve Stanley [<mailto:steve@ctberk.com>]
Sent: Friday, December 15, 2006 1:57 PM
To: Greg Johnson
Subject: Re: 2893.04.51 - C&T Login Summary (191314)

Thanks, Greg!

Steve

Steven Stanley
 Curtis & Tompkins, Ltd.
 Client Services Dept. Manager
 Direct Line: (510) 204-2226

----- Original Message -----

From: Greg Johnson
To: Steve Stanley
Sent: Friday, December 15, 2006 1:36 PM
Subject: RE: 2893.04.51 - C&T Login Summary (191314)

Steve,

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 1 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd



COOLER RECEIPT CHECKLIST

Login#: 191314 Date Received: 12/7/06 Number of Coolers: 4
Client: Treadwell+Keller Project: Presidio

A. Preliminary Examination Phase

Date Opened: 12/7/06 By (print): Peter P. (sign) Peter P.

1. Did cooler come with a shipping slip (airbill, etc.)?..... YES ☒ NO

If YES, enter carrier name and airbill number: _____

2. Were custody seals on outside of cooler?..... YES ☒ NO

How many and where? 1 on lid Seal date: 12/7/06 Seal name: PK

3. Were custody seals unbroken and intact at the date and time of arrival?..... YES ☒ NO

4. Were custody papers dry and intact when received?..... YES ☒ NO

5. Were custody papers filled out properly (ink, signed, etc.)?..... YES ☒ NO

6. Did you sign the custody papers in the appropriate place?..... YES ☒ NO

7. Was project identifiable from custody papers?..... YES ☒ NO

If YES, enter project name at the top of this form.

8. If required, was sufficient ice used? Samples should be 2-6 degrees C. YES ☒ NO

Type of ice: WET Temperature: 1.9°, 1.7°, 2.3°, 3.8°

B. Login Phase

Date Logged In: 12/7/06 By (print): Peter P. (sign) Peter P.

1. Describe type of packing in cooler: Zip loc bags

2. Did all bottles arrive unbroken?..... YES ☒ NO

3. Were labels in good condition and complete (ID, date, time, signature, etc.)?..... YES ☒ NO

4. Did bottle labels agree with custody papers?..... YES ☒ NO

5. Were appropriate containers used for the tests indicated?..... YES ☒ NO

6. Were correct preservatives added to samples?..... YES ☒ NO

7. Was sufficient amount of sample sent for tests indicated?..... YES ☒ NO

8. Were bubbles absent in VOA samples? If NO, list sample IDs below..... YES ☒ NO

9. Was the client contacted concerning this sample delivery?..... YES ☒ NO

If YES, give details below.

Who was called? _____ By whom? _____ Date: _____

Additional Comments:

Sample 005 preserved in lab w/ HNO₃.

TPH-Purgeables and BTXE

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	LF10GW02	Batch#:	120155
Lab ID:	191314-001	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Analyzed:	12/07/06
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	18	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	104	65-135	EPA 8015B
Bromofluorobenzene (FID)	106	65-135	EPA 8015B
Trifluorotoluene (PID)	101	65-135	EPA 8021B
Bromofluorobenzene (PID)	102	65-135	EPA 8021B

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	LF10GW01	Batch#:	120155
Lab ID:	191314-002	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Analyzed:	12/07/06
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	105	65-135
Bromofluorobenzene (FID)	105	65-135

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	LF10SP01	Batch#:	120155
Lab ID:	191314-003	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Analyzed:	12/07/06
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	120	65-135	EPA 8015B
Bromofluorobenzene (FID)	127	65-135	EPA 8015B
Trifluorotoluene (PID)	118	65-135	EPA 8021B
Bromofluorobenzene (PID)	125	65-135	EPA 8021B

Curtis & Tompkins Laboratories Analytical Report

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	LF10GW03	Batch#:	120155
Lab ID:	191314-007	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Analyzed:	12/07/06
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	65-135
Bromofluorobenzene (FID)	103	65-135

Curtis & Tompkins Laboratories Analytical Report

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	LF10GW100	Batch#:	120155
Lab ID:	191314-008	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Analyzed:	12/07/06
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	109	65-135
Bromofluorobenzene (FID)	111	65-135

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1065MW101	Batch#:	120155
Lab ID:	191314-009	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Analyzed:	12/07/06
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	97	65-135
Bromofluorobenzene (FID)	100	65-135

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1065MW102	Batch#:	120155
Lab ID:	191314-010	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Analyzed:	12/08/06
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	99	65-135
Bromofluorobenzene (FID)	105	65-135

Curtis & Tompkins Laboratories Analytical Report

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065PZ2A	Batch#:	120155
Lab ID:	191314-011	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Analyzed:	12/08/06
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	124	65-135	EPA 8015B
Bromofluorobenzene (FID)	128	65-135	EPA 8015B
Trifluorotoluene (PID)	125	65-135	EPA 8021B
Bromofluorobenzene (PID)	128	65-135	EPA 8021B

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065PZ4A	Batch#:	120155
Lab ID:	191314-012	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Analyzed:	12/08/06
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	7.0 C	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	103	65-135	EPA 8015B
Bromofluorobenzene (FID)	106	65-135	EPA 8015B
Trifluorotoluene (PID)	103	65-135	EPA 8021B
Bromofluorobenzene (PID)	106	65-135	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	FM14EX07GW102	Batch#:	120155
Lab ID:	191314-017	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Analyzed:	12/08/06
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	3.1 C	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	123	65-135	EPA 8015B
Bromofluorobenzene (FID)	128	65-135	EPA 8015B
Trifluorotoluene (PID)	122	65-135	EPA 8021B
Bromofluorobenzene (PID)	127	65-135	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit



Curtis & Tompkins Laboratories Analytical Report

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	FM14EX07GW101	Batch#:	120155
Lab ID:	191314-018	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Analyzed:	12/08/06
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	3.3 C	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	120	65-135	EPA 8015B
Bromofluorobenzene (FID)	124	65-135	EPA 8015B
Trifluorotoluene (PID)	119	65-135	EPA 8021B
Bromofluorobenzene (PID)	123	65-135	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	514AGW101	Batch#:	120155
Lab ID:	191314-019	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Analyzed:	12/08/06
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	100	65-135	EPA 8015B
Bromofluorobenzene (FID)	102	65-135	EPA 8015B
Trifluorotoluene (PID)	100	65-135	EPA 8021B
Bromofluorobenzene (PID)	102	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit



Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC367436	Batch#:	120155
Matrix:	Water	Analyzed:	12/07/06
Units:	ug/L		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	93	65-135	EPA 8015B
Bromofluorobenzene (FID)	96	65-135	EPA 8015B
Trifluorotoluene (PID)	91	65-135	EPA 8021B
Bromofluorobenzene (PID)	93	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit



Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8021B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC367437	Batch#:	120155
Matrix:	Water	Analyzed:	12/07/06
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
MTBE	20.00	20.83	104	65-135
Benzene	20.00	18.68	93	65-135
Toluene	20.00	19.41	97	65-135
Ethylbenzene	20.00	19.34	97	65-135

Surrogate	%REC	Limits
Trifluorotoluene (PID)	108	65-135
Bromofluorobenzene (PID)	113	65-135

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC367438	Batch#:	120155
Matrix:	Water	Analyzed:	12/07/06
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,896	95	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	122	65-135
Bromofluorobenzene (FID)	134	65-135

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report			
Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8021B
Field ID:	LF10SP01	Batch#:	120155
MSS Lab ID:	191314-003	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Analyzed:	12/08/06
Diln Fac:	1.000		

Type: MS Lab ID: QC367439

Analyte	MSS Result	Spiked	Result	%REC	Limits
MTBE	<0.8366	20.00	23.53	118	65-135
Benzene	<0.2430	20.00	20.73	104	65-135
Toluene	<0.1469	20.00	21.35	107	65-135
Ethylbenzene	<0.1157	20.00	20.55	103	65-135

Surrogate	%REC	Limits
Trifluorotoluene (PID)	102	65-135
Bromofluorobenzene (PID)	103	65-135

Type: MSD Lab ID: QC367440

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
MTBE	20.00	22.09	110	65-135	6	35
Benzene	20.00	20.47	102	65-135	1	35
Toluene	20.00	21.23	106	65-135	1	35
Ethylbenzene	20.00	20.34	102	65-135	1	35

Surrogate	%REC	Limits
Trifluorotoluene (PID)	116	65-135
Bromofluorobenzene (PID)	118	65-135

RPD= Relative Percent Difference

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1065PZ2A	Batch#:	120155
MSS Lab ID:	191314-011	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Analyzed:	12/08/06
Diln Fac:	1.000		

Type: MS Lab ID: QC367441

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<27.03	2,000	1,944	97	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	109	65-135
Bromofluorobenzene (FID)	123	65-135

Type: MSD Lab ID: QC367442

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,993	100	65-135	2	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	98	65-135
Bromofluorobenzene (FID)	110	65-135

RPD= Relative Percent Difference

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	514AGW101	Batch#:	120155
MSS Lab ID:	191314-019	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Analyzed:	12/08/06
Diln Fac:	1.000		

Type: MS Lab ID: QC367443

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	<27.03	2,000	1,925	96	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	131	65-135
Bromofluorobenzene (FID)	134	65-135

Type: MSD Lab ID: QC367444

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Gasoline C7-C12	2,000	1,923	96	65-135	0	35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	119	65-135
Bromofluorobenzene (FID)	126	65-135

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191314 GCVOA Water: EPA 8015B

Inst : GC19 Name : GC19GAS298 Reviewer: CW
 Calnum : 346430658001 Date : 25-OCT-2006 12:39
 Units : ng X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	298_002	346430658002	TVH 1	25-OCT-2006 12:39	S4091 (1000X), S4579 (5000X)
L2	298_003	346430658003	TVH 2	25-OCT-2006 13:17	S4090 (1000X), S4579 (5000X)
L3	298_004	346430658004	TVH 3	25-OCT-2006 13:55	S4089 (1000X), S4579 (5000X)
L4	298_005	346430658005	TVH 4	25-OCT-2006 14:33	S4088 (2000X), S4579 (5000X)
L5	298_006	346430658006	TVH 5	25-OCT-2006 15:10	S4088 (1000X), S4579 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	%RSD	MnR^2	MxRSD	Flg
Gasoline C7-C12	A	2208.1	1708.4	1705.9	1753.2	1505.8	AVRG		5.63E-4		1776.3	15	0.995	20	

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191314 GCVOA Water
EPA 8015B

Inst : GC19
Calnum : 346430658001

Name : GC19GAS298
Cal Date: 25-OCT-2006

ICV 346430658008 (298_008 25-OCT-2006) stds: S4479 (1000X), S4579 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Gasoline C7-C12	A	1776.3	1578.9	10000	8889	ng	-11	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191314 GCVOA Water: EPA 8021B

Inst : GC19

Calnum: 346481897001

Units : ng

Name : gc19mbtxe334

Date : 30-NOV-2006 16:52

X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	334_002	346481897002	BTXE_1	30-NOV-2006 15:37	S4992 (1000X), S4579 (5000X)
L2	334_004	346481897004	MTBE_1	30-NOV-2006 16:52	S4991 (1250X), S4579 (5000X)
L3	334_005	346481897005	BTXE_2	30-NOV-2006 17:30	S4991 (500X), S4579 (5000X)
L4	334_006	346481897006	BTXE_3	30-NOV-2006 18:08	S4991 (125X), S4579 (5000X)
L5	334_007	346481897007	BTXE_4	30-NOV-2006 18:45	S4990 (1000X), S4579 (5000X)
L6	334_008	346481897008	BTXE_5	30-NOV-2006 19:23	S4990 (500X), S4579 (5000X)
L7	334_009	346481897009	BTXE_6	30-NOV-2006 20:00	S4990 (250X), S4579 (5000X)
L8	334_010	346481897010	MTBE_7	30-NOV-2006 20:38	S4993 (500X), S4579 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Type	a0	a1	a2	Avg	r ²	%RSD	Mr ²	MrSD	Flg
MTBE	B		4307.3	4087.4	3431.0	3580.1	3598.4	3711.6	3458.9	AVRG		2.67E-4		3739.2	9	0.995	20		
Benzene	B	20540		17528	16769	16059	16690	16496		AVRG		5.76E-5		17347	9	0.995	20		
Toluene	B	15522		15870	15290	14700	15296	15090		AVRG		6.54E-5		15295	3	0.995	20		
Ethylbenzene	B	14646		13811	12837	12495	13236	13452		AVRG		7.46E-5		13413	6	0.995	20		
m,p-Xylenes	B	22869		18223	17779	17369	17727	17381		AVRG		5.39E-5		18558	12	0.995	20		
o-Xylene	B	12823		14303	13137	12713	13221	13247		AVRG		7.55E-5		13241	4	0.995	20		
MTBE	C		4877.4	6251.0	4513.1	5481.7	7081.9	7546.8	7143.5	AVRG		1.63E-4		6127.9	19	0.995	20		
Benzene	C	15466		13350	15126	17191	18711	18861		AVRG		6.08E-5		16451	13	0.995	20		
Toluene	C	11919		12131	14374	15914	17263	17515		AVRG		6.73E-5		14853	17	0.995	20		
Ethylbenzene	C	14984		10155	12198	14184	15415	15739		AVRG		7.26E-5		13779	16	0.995	20		
m,p-Xylenes	C	14306		14707	16413	18501	20008	20365		AVRG		5.75E-5		17383	15	0.995	20		
o-Xylene	C	11157		10061	11920	13767	14890	15270		AVRG		7.79E-5		12844	16	0.995	20		

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191314 GCVOA Water
EPA 8021B

Inst : GC19
Calnum : 346481897001

Name : gc19mbtxe334
Cal Date: 30-NOV-2006

ICV 346481897012 (334_012 30-NOV-2006) stds: S4311 (1000X), S4579 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
MTBE	B	3739.2	3957.9	100.0	105.8	ng	6	15	
Benzene	B	17347	19183	100.0	110.6	ng	11	15	
Toluene	B	15295	17404	100.0	113.8	ng	14	15	
Ethylbenzene	B	13413	14936	100.0	111.4	ng	11	15	
m,p-Xylenes	B	18558	17662	200.0	190.3	ng	-5	15	
o-Xylene	B	13241	14689	100.0	110.9	ng	11	15	
MTBE	C	6127.9	5485.2	100.0	89.51	ng	-10	15	
Benzene	C	16451	18297	100.0	111.2	ng	11	15	
Toluene	C	14853	17051	100.0	114.8	ng	15	15	
Ethylbenzene	C	13779	14489	100.0	105.1	ng	5	15	
m,p-Xylenes	C	17383	18545	200.0	213.4	ng	7	15	
o-Xylene	C	12844	13742	100.0	107.0	ng	7	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191314 GCVOA Water: EPA 8015B / EPA 8021B

Inst : GC19

Calnum: 346467175001

Units : ng

Name : GC19TFT/BFB324

Date : 20-NOV-2006 12:01

X Axis: R

Level	File	Seqnum	Sample ID	Analyzed	Std
L1	324_003	346467175003	TFT/BFB_1	20-NOV-2006 12:01	S4684 (5000X)
L2	324_004	346467175004	TFT/BFB_2	20-NOV-2006 12:46	S4685 (5000X)
L3	324_005	346467175005	TFT/BFB_3	20-NOV-2006 13:24	S4686 (5000X)
L4	324_006	346467175006	TFT/BFB_4	20-NOV-2006 14:02	S4687 (5000X)
L5	324_007	346467175007	TFT/BFB_5	20-NOV-2006 14:39	S4688 (5000X)

Analyte	Ch	I1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	%RSD	MnR^2	MxRSD	Flg
Trifluorotoluene (FID)	A	1975.1	1741.9	1761.4	1709.4	1796.6	AVRG		5.57E-4		1796.9	6	0.995	20	
Bromofluorobenzene (FID)	A	1204.0	1026.4	1029.0	989.81	1072.3	AVRG		9.40E-4		1064.3	8	0.995	20	
Trifluorotoluene (PID)	B	5603.8	4942.9	4941.3	4816.5	5045.5	AVRG		1.97E-4		5070.0	6	0.995	20	
Bromofluorobenzene (PID)	B	11233	9373.4	9378.9	9027.7	9856.2	AVRG		1.02E-4		9773.8	9	0.995	20	
Trifluorotoluene (PID)	C	4478.6	4098.6	4780.8	4922.5	5259.3	AVRG		2.12E-4		4708.0	9	0.995	20	
Bromofluorobenzene (PID)	C	10443	9037.4	9745.6	9528.8	10570	AVRG		1.01E-4		9864.9	6	0.995	20	

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS SPIKE USER REPORT FOR 191314 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: QC367438 IDF : 1.0
Seqnum : 346491835002.3 File : 341_002 Time : 07-DEC-2006 13:53
Standards: S4953 (1000X), S4579 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	346430658001	25-OCT-2006	1684.3	10000	9482	ng	-5	15	u
Trifluorotoluene (FID)	A	346467175001	20-NOV-2006	2200.4	450.0	551.1	ng	22	15	c+ u
Bromofluorobenzene (FID)	A	346467175001	20-NOV-2006	1429.6	450.0	604.4	ng	34	15	c+ u
Trifluorotoluene (PID)	B	346467175001	20-NOV-2006	6300.4	450.0	559.2	ng	24	15	c+
Trifluorotoluene (PID)	C	346467175001	20-NOV-2006	6824.4	450.0	652.3	ng	45	15	c+
Bromofluorobenzene (PID)	B	346467175001	20-NOV-2006	12849	450.0	591.6	ng	31	15	c+
Bromofluorobenzene (PID)	C	346467175001	20-NOV-2006	13583	450.0	619.6	ng	38	15	c+

JCP 12/08/06 [Trifluorotoluene (FID) A]: Passes limits of 65-135% [general version]

JCP 12/08/06 [Bromofluorobenzene (FID) A]: Passes limits of 65-135% [general version]

JCP 12/08/06 : PID surrogates are not applicable. [general version]

CURTIS & TOMPKINS SPIKE USER REPORT FOR 191314 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: QC367437 IDF : 1.0
Seqnum : 346491835003.3 File : 341_003 Time : 07-DEC-2006 14:44
Standards: S4963 (1000X), S4579 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
MTBE	B	346481897001	30-NOV-2006	3894.9	100.0	104.2	ng	4	15	u
MTBE	C	346481897001	30-NOV-2006	5309.1	100.0	86.64	ng	-13	15	
Benzene	B	346481897001	30-NOV-2006	16206	100.0	93.42	ng	-7	15	u
Benzene	C	346481897001	30-NOV-2006	15954	100.0	96.98	ng	-3	15	
Toluene	B	346481897001	30-NOV-2006	14845	100.0	97.06	ng	-3	15	u
Toluene	C	346481897001	30-NOV-2006	13784	100.0	92.80	ng	-7	15	
Ethylbenzene	B	346481897001	30-NOV-2006	12972	100.0	96.71	ng	-3	15	u
Ethylbenzene	C	346481897001	30-NOV-2006	12056	100.0	87.49	ng	-13	15	
m,p-Xylenes	B	346481897001	30-NOV-2006	17152	100.0	92.42	ng	-8	15	u
m,p-Xylenes	C	346481897001	30-NOV-2006	16441	100.0	94.58	ng	-5	15	
o-Xylene	B	346481897001	30-NOV-2006	12783	100.0	96.54	ng	-3	15	u
o-Xylene	C	346481897001	30-NOV-2006	11917	100.0	92.78	ng	-7	15	
Trifluorotoluene (FID)	A	346467175001	20-NOV-2006	1952.4	450.0	488.9	ng	9	15	
Bromofluorobenzene (FID)	A	346467175001	20-NOV-2006	1215.2	450.0	513.8	ng	14	15	
Trifluorotoluene (PID)	B	346467175001	20-NOV-2006	5465.3	450.0	485.1	ng	8	15	u
Trifluorotoluene (PID)	C	346467175001	20-NOV-2006	5203.5	450.0	497.4	ng	11	15	
Bromofluorobenzene (PID)	B	346467175001	20-NOV-2006	11031	450.0	507.9	ng	13	15	u
Bromofluorobenzene (PID)	C	346467175001	20-NOV-2006	11443	450.0	522.0	ng	16	15	c+

JCP 12/08/06 [MTBE B]: MTBE fails %Rec low on ChC. Report MTBE from ChB. ChC is for confirm only. [general version]

JCP 12/08/06 : Bromofluorobenzene (PID) C passes limits of 80-120% [general version]

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191314 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: MBTXE IDF : 1.0
Seqnum : 346491835013 File : 341_013 Time : 07-DEC-2006 21:47
Standards: S4963 (666.7X), S4579 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	346467175001	20-NOV-2006	1950.3	450.0	488.4	ng	9	15	
Bromofluorobenzene (FID)	A	346467175001	20-NOV-2006	1199.8	450.0	507.3	ng	13	15	
MTBE	B	346481897001	30-NOV-2006	3585.5	150.0	143.8	ng	-4	15	
Benzene	B	346481897001	30-NOV-2006	16811	150.0	145.4	ng	-3	15	
Toluene	B	346481897001	30-NOV-2006	15382	150.0	150.9	ng	1	15	
Ethylbenzene	B	346481897001	30-NOV-2006	13439	150.0	150.3	ng	0	15	
m,p-Xylenes	B	346481897001	30-NOV-2006	17687	150.0	143.0	ng	-5	15	
o-Xylene	B	346481897001	30-NOV-2006	13312	150.0	150.8	ng	1	15	
Trifluorotoluene (PID)	B	346467175001	20-NOV-2006	5542.3	450.0	491.9	ng	9	15	
Bromofluorobenzene (PID)	B	346467175001	20-NOV-2006	11021	450.0	507.4	ng	13	15	
MTBE	C	346481897001	30-NOV-2006	5219.2	150.0	127.8	ng	-15	15	
Benzene	C	346481897001	30-NOV-2006	16422	150.0	149.7	ng	0	15	
Toluene	C	346481897001	30-NOV-2006	15194	150.0	153.4	ng	2	15	
Ethylbenzene	C	346481897001	30-NOV-2006	13316	150.0	145.0	ng	-3	15	
m,p-Xylenes	C	346481897001	30-NOV-2006	17688	150.0	152.6	ng	2	15	
o-Xylene	C	346481897001	30-NOV-2006	13176	150.0	153.9	ng	3	15	
Trifluorotoluene (PID)	C	346467175001	20-NOV-2006	5190.5	450.0	496.1	ng	10	15	
Bromofluorobenzene (PID)	C	346467175001	20-NOV-2006	11330	450.0	516.8	ng	15	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191314 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 346491835014 File : 341_014 Time : 07-DEC-2006 22:25
Standards: S4953 (666.7X), S4579 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	346430658001	25-OCT-2006	1758.7	15000	14850	ng	-1	15	
Trifluorotoluene (FID)	A	346467175001	20-NOV-2006	2381.5	450.0	596.4	ng	33	15	c+
Bromofluorobenzene (FID)	A	346467175001	20-NOV-2006	1614.5	450.0	682.6	ng	52	15	c+
Trifluorotoluene (PID)	B	346467175001	20-NOV-2006	7657.1	450.0	679.6	ng	51	15	c+
Bromofluorobenzene (PID)	B	346467175001	20-NOV-2006	14619	450.0	673.1	ng	50	15	c+
Trifluorotoluene (PID)	C	346467175001	20-NOV-2006	8902.3	450.0	850.9	ng	89	15	c+
Bromofluorobenzene (PID)	C	346467175001	20-NOV-2006	15655	450.0	714.1	ng	59	15	c+

JCP 12/08/06 [Trifluorotoluene (FID) A]: Passes limits of 65-135%

JCP 12/08/06 [Bromofluorobenzene (FID) A]: Fails high due to coelution with standard.

JCP 12/08/06 : PID surrogates are not applicable.

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191314 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
 Seqnum : 346491835015 File : 341_015 Time : 07-DEC-2006 23:02
 Standards: S4953 (666.7X), S4579 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	346430658001	25-OCT-2006	1758.7	15000	14850	ng	-1	15	
Trifluorotoluene (FID)	A	346467175001	20-NOV-2006	2338.6	450.0	585.7	ng	30	15	c+
Bromofluorobenzene (FID)	A	346467175001	20-NOV-2006	1584.7	450.0	670.0	ng	49	15	c+
Trifluorotoluene (PID)	B	346467175001	20-NOV-2006	7549.4	450.0	670.1	ng	49	15	c+
Bromofluorobenzene (PID)	B	346467175001	20-NOV-2006	14312	450.0	658.9	ng	46	15	c+
Trifluorotoluene (PID)	C	346467175001	20-NOV-2006	8715.5	450.0	833.1	ng	85	15	c+
Bromofluorobenzene (PID)	C	346467175001	20-NOV-2006	15489	450.0	706.5	ng	57	15	c+

JCP 12/08/06 [Trifluorotoluene (FID) A]: Passes limits of 65-135%

JCP 12/08/06 [Bromofluorobenzene (FID) A]: Fails high due to coelution with standard.

JCP 12/08/06 : PID surrogates are not applicable.

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191314 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: MBTXE IDF : 1.0
 Seqnum : 346491835025 File : 341_025 Time : 08-DEC-2006 05:19
 Standards: S4963 (1000X), S4579 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	346467175001	20-NOV-2006	2056.6	450.0	515.0	ng	14	15	
Bromofluorobenzene (FID)	A	346467175001	20-NOV-2006	1251.6	450.0	529.2	ng	18	15	c+
MTBE	B	346481897001	30-NOV-2006	3635.2	100.0	97.22	ng	-3	15	
Benzene	B	346481897001	30-NOV-2006	17511	100.0	100.9	ng	1	15	
Toluene	B	346481897001	30-NOV-2006	15956	100.0	104.3	ng	4	15	
Ethylbenzene	B	346481897001	30-NOV-2006	13408	100.0	99.96	ng	0	15	
m,p-Xylenes	B	346481897001	30-NOV-2006	18610	100.0	100.3	ng	0	15	
o-Xylene	B	346481897001	30-NOV-2006	13656	100.0	103.1	ng	3	15	
Trifluorotoluene (PID)	B	346467175001	20-NOV-2006	5815.7	450.0	516.2	ng	15	15	
Bromofluorobenzene (PID)	B	346467175001	20-NOV-2006	11292	450.0	519.9	ng	16	15	c+
MTBE	C	346481897001	30-NOV-2006	5501.2	100.0	89.77	ng	-10	15	
Benzene	C	346481897001	30-NOV-2006	16227	100.0	98.64	ng	-1	15	
Toluene	C	346481897001	30-NOV-2006	15320	100.0	103.1	ng	3	15	
Ethylbenzene	C	346481897001	30-NOV-2006	13133	100.0	95.31	ng	-5	15	
m,p-Xylenes	C	346481897001	30-NOV-2006	17502	100.0	100.7	ng	1	15	
o-Xylene	C	346481897001	30-NOV-2006	12822	100.0	99.83	ng	0	15	
Trifluorotoluene (PID)	C	346467175001	20-NOV-2006	5575.9	450.0	533.0	ng	18	15	c+
Bromofluorobenzene (PID)	C	346467175001	20-NOV-2006	11810	450.0	538.7	ng	20	15	c+

JCP 12/08/06 [Bromofluorobenzene (FID) A]: Passes limits of 65-135%

JCP 12/08/06 [Bromofluorobenzene (PID) B]: Passes limits of 80-120%

JCP 12/08/06 : Trifluorotoluene (PID) C passes limits of 65-132%

JCP 12/08/06 : Bromofluorobenzene (PID) C passes limits of 80-120%

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191314 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
Seqnum : 346491835027 File : 341_027 Time : 08-DEC-2006 06:34
Standards: S4953 (1000X), S4579 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	346430658001	25-OCT-2006	1735.3	10000	9769	ng	-2	15	
Trifluorotoluene (FID)	A	346467175001	20-NOV-2006	1966.1	450.0	492.4	ng	9	15	
Bromofluorobenzene (FID)	A	346467175001	20-NOV-2006	1237.2	450.0	523.1	ng	16	15	c+
Trifluorotoluene (PID)	B	346467175001	20-NOV-2006	5780.5	450.0	513.1	ng	14	15	
Bromofluorobenzene (PID)	B	346467175001	20-NOV-2006	11011	450.0	506.9	ng	13	15	
Trifluorotoluene (PID)	C	346467175001	20-NOV-2006	6465.6	450.0	618.0	ng	37	15	c+
Bromofluorobenzene (PID)	C	346467175001	20-NOV-2006	11702	450.0	533.8	ng	19	15	c+

JCP 12/08/06 [Bromofluorobenzene (FID) A]: Passes limits of 65-135%

JCP 12/08/06 : PID surrogates are not applicable.

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191314 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC19 Run Name: TVH IDF : 1.0
 Segnum : 346491835033 File : 341_033 Time : 08-DEC-2006 10:32
 Standards: S4953 (2000X), S4579 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	346430658001	25-OCT-2006	1582.8	5000	4455	ng	-11	15	
Trifluorotoluene (FID)	A	346467175001	20-NOV-2006	1913.9	450.0	479.3	ng	7	15	
Bromofluorobenzene (FID)	A	346467175001	20-NOV-2006	1188.9	450.0	502.7	ng	12	15	
Trifluorotoluene (PID)	B	346467175001	20-NOV-2006	5695.1	450.0	505.5	ng	12	15	
Bromofluorobenzene (PID)	B	346467175001	20-NOV-2006	10832	450.0	498.7	ng	11	15	
Trifluorotoluene (PID)	C	346467175001	20-NOV-2006	5991.1	450.0	572.6	ng	27	15	c+
Bromofluorobenzene (PID)	C	346467175001	20-NOV-2006	11540	450.0	526.4	ng	17	15	c+

JCP 12/08/06 : PID surrogates are not applicable.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 346430658

Instrument : GC19 Begun : 10/25/06 10:06
 Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	298_001	X	IB			10/25/06 10:06	1.0	1	
002	298_002	ICAL	TVH 1			10/25/06 12:39	1.0	2 1	
003	298_003	ICAL	TVH 2			10/25/06 13:17	1.0	3 1	
004	298_004	ICAL	TVH 3			10/25/06 13:55	1.0	4 1	
005	298_005	ICAL	TVH 4			10/25/06 14:33	1.0	5 1	
006	298_006	ICAL	TVH 5			10/25/06 15:10	1.0	5 1	
007	298_007	X	IB			10/25/06 15:48	1.0	1	
008	298_008	ICV	TVH			10/25/06 16:42	1.0	6 1	
009	298_009	X	CMARKERS			10/25/06 17:27	1.0	1	
010	298_010	X	IB			10/25/06 23:07	1.0	1	
011	298_011	ICAL	BTXE 1			10/25/06 23:45	1.0	7 1	
012	298_012	ICAL	MTBE 1			10/26/06 00:22	1.0	8 1	
013	298_013	ICAL	BTXE 2			10/26/06 01:00	1.0	8 1	
014	298_014	ICAL	BTXE 3			10/26/06 01:38	1.0	8 1	
015	298_015	ICAL	BTXE 4			10/26/06 02:15	1.0	9 1	
016	298_016	ICAL	BTXE 5			10/26/06 02:53	1.0	9 1	
017	298_017	ICAL	BTXE 6			10/26/06 03:30	1.0	9 1	
018	298_018	ICAL	MTBE 7			10/26/06 04:08	1.0	10 1	
019	298_019	X	IB			10/26/06 04:46	1.0	1	
020	298_020	X	ICV			10/26/06 05:23	1.0	11 1	
021	298_021	ICV	MBTXE			10/26/06 06:01	1.0	11 1	
022	298_022	X	IB			10/26/06 10:24	1.0	1	
023	298_023	ICAL	TFT/BFB 1			10/26/06 11:02	1.0	12	
024	298_024	ICAL	TFT/BFB 2			10/26/06 11:47	1.0	13	
025	298_025	ICAL	TFT/BFB 3			10/26/06 12:30	1.0	14	
026	298_026	ICAL	TFT/BFB 4			10/26/06 13:08	1.0	15	
027	298_027	ICAL	TFT/BFB 5			10/26/06 13:53	1.0	16	
028	298_028	X	IB			10/26/06 15:07	1.0	1	
029	298_029	ICAL	JP4_1			10/26/06 15:45	1.0	17 1	
030	298_030	ICAL	JP4_2			10/26/06 16:22	1.0	18 1	
031	298_031	ICAL	JP4_3			10/26/06 17:00	1.0	19 1	
032	298_032	ICAL	JP4_4			10/26/06 17:38	1.0	20 1	
033	298_033	ICAL	JP4_5			10/26/06 18:15	1.0	20 1	

Analyst: CW Date: 10/27/06 Reviewer: MMP Date: 10/27/06

Standards used: 1=S4579 2=S4091 3=S4090 4=S4089 5=S4088 6=S4479 7=S4341 8=S4340 9=S4339 10=S3732 11=S4311 12=S4684

13=S4685 14=S4686 15=S4687 16=S4688 17=S4692 18=S4691 19=S4690 20=S4649

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 346467175

Instrument : GC19 Begun : 11/20/06 10:15
Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	324_001	X	IB			11/20/06 10:15	1.0	1	
002	324_002	X	IB			11/20/06 10:53	1.0	1	
003	324_003	ICAL	TFT/BFB_1			11/20/06 12:01	1.0	2	
004	324_004	ICAL	TFT/BFB_2			11/20/06 12:46	1.0	3	
005	324_005	ICAL	TFT/BFB_3			11/20/06 13:24	1.0	4	
006	324_006	ICAL	TFT/BFB_4			11/20/06 14:02	1.0	5	
007	324_007	ICAL	TFT/BFB_5			11/20/06 14:39	1.0	6	

Analyst: MMP Date: 11/21/06 Reviewer: _____ Date: _____

Standards used: 1=S4579 2=S4684 3=S4685 4=S4686 5=S4687 6=S4688

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 346481897

Instrument : GC19

Begun : 11/30/06 14:59

Method : EPA 8015B, EPA 8021B

SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	334_001	X	IB			11/30/06 14:59	1.0	1	
002	334_002	ICAL	BTXE_1			11/30/06 15:37	1.0	2 1	
003	334_003	X	ICAL			11/30/06 16:15	1.0	2 1	
004	334_004	ICAL	MTBE_1			11/30/06 16:52	1.0	3 1	
005	334_005	ICAL	BTXE_2			11/30/06 17:30	1.0	3 1	
006	334_006	ICAL	BTXE_3			11/30/06 18:08	1.0	3 1	
007	334_007	ICAL	BTXE_4			11/30/06 18:45	1.0	4 1	
008	334_008	ICAL	BTXE_5			11/30/06 19:23	1.0	4 1	
009	334_009	ICAL	BTXE_6			11/30/06 20:00	1.0	4 1	
010	334_010	ICAL	MTBE_7			11/30/06 20:38	1.0	5 1	
011	334_011	X	IB			11/30/06 21:16	1.0	1	
012	334_012	ICV	MBTXE			11/30/06 21:54	1.0	6 1	
013	334_013	X	ICV			11/30/06 22:31	1.0	6 1	

Analyst: MJMDate: 12/01/06Reviewer: MMPDate: 12/01/06

Standards used: 1=S4579 2=S4992 3=S4991 4=S4990 5=S4993 6=S4311

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 346491835

Instrument : GC19

Begun : 12/07/06 13:15

Method : EPA 8015B, EPA 8021B

SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Std's Used	Annotations
001	341_001	X	MBTXE			12/07/06 13:15	1.0	1 2	
002	341_002	✓CCV/LCS	QC367438	Water	120155	12/07/06 13:53	1.0	3 2	
003	341_003	✓CCV/LCS	QC367437	Water	120155	12/07/06 14:44	1.0	1 2	
004	341_004	BLANK	QC367436	Water	120155	12/07/06 15:37	1.0	2	
005	341_005	SAMPLE	191307-001	Water	120155	12/07/06 16:46	1.0	2	headspace <= 1 mL
006	341_006	SAMPLE	191309-004	Water	120155	12/07/06 17:23	1.0	2	
007	341_007	SAMPLE	191314-001	Water	120155	12/07/06 18:01	1.0	2	
008	341_008	SAMPLE	191314-002	Water	120155	12/07/06 18:39	1.0	2	
009	341_009	MSS	191314-003	Water	120155	12/07/06 19:16	1.0	2	
010	341_010	SAMPLE	191314-007	Water	120155	12/07/06 19:54	1.0	2	
011	341_011	SAMPLE	191314-008	Water	120155	12/07/06 20:32	1.0	2	
012	341_012	X	MBTXE			12/07/06 21:09	1.0	1 2	
013	341_013	✓CCV	MBTXE			12/07/06 21:47	1.0	1 2	
014	341_014	✓CCV	TVH			12/07/06 22:25	1.0	3 2	
015	341_015	✓CCV	TVH			12/07/06 23:02	1.0	3 2	
016	341_016	SAMPLE	191314-009	Water	120155	12/07/06 23:40	1.0	2	
017	341_017	SAMPLE	191314-010	Water	120155	12/08/06 00:18	1.0	2	
018	341_018	MSS	191314-011	Water	120155	12/08/06 00:55	1.0	2	
019	341_019	SAMPLE	191314-012	Water	120155	12/08/06 01:33	1.0	2	
020	341_020	SAMPLE	191314-017	Water	120155	12/08/06 02:11	1.0	2	
021	341_021	SAMPLE	191314-018	Water	120155	12/08/06 02:48	1.0	2	
022	341_022	MSS	191314-019	Water	120155	12/08/06 03:26	1.0	2	
023	341_023	MS	QC367439	Water	120155	12/08/06 04:03	1.0	1 2	
024	341_024	MSD	QC367440	Water	120155	12/08/06 04:41	1.0	1 2	
025	341_025	✓CCV	MBTXE			12/08/06 05:19	1.0	1 2	
026	341_026	CCV	MBTXE			12/08/06 05:56	1.0	1 2	
027	341_027	✓CCV	TVH			12/08/06 06:34	1.0	3 2	
028	341_028	X	TVH			12/08/06 07:12	1.0	3 2	
029	341_029	MS	QC367441	Water	120155	12/08/06 07:49	1.0	3 2	
030	341_030	MSD	QC367442	Water	120155	12/08/06 08:27	1.0	3 2	
031	341_031	MS	QC367443	Water	120155	12/08/06 09:04	1.0	3 2	
032	341_032	MSD	QC367444	Water	120155	12/08/06 09:42	1.0	3 2	
033	341_033	✓CCV	TVH			12/08/06 10:32	1.0	3 2	

Analyst: JCP

Date: 12/08/06

Reviewer: _____

Date: _____

Standards used: 1=S4963 2=S4579 3=S4953

REPORTING SUMMARY FOR 191314 MBTXE Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
191314-001	Gasoline C7-C12	GC19	A	12/07/06 18:01
191314-001	MTBE	GC19	B	12/07/06 18:01
191314-001	Benzene	GC19	B	12/07/06 18:01
191314-001	Toluene	GC19	B	12/07/06 18:01
191314-001	Ethylbenzene	GC19	B	12/07/06 18:01
191314-001	Trifluorotoluene (FID)	GC19	A	12/07/06 18:01
191314-001	Bromofluorobenzene (FID)	GC19	A	12/07/06 18:01
191314-001	Trifluorotoluene (PID)	GC19	B	12/07/06 18:01
191314-001	Bromofluorobenzene (PID)	GC19	B	12/07/06 18:01
191314-001	Xylene (total)	GC19	B	12/07/06 18:01
191314-002	Gasoline C7-C12	GC19	A	12/07/06 18:39
191314-002	Trifluorotoluene (FID)	GC19	A	12/07/06 18:39
191314-002	Bromofluorobenzene (FID)	GC19	A	12/07/06 18:39
191314-003	Gasoline C7-C12	GC19	A	12/07/06 19:16
191314-003	MTBE	GC19	B	12/07/06 19:16
191314-003	Benzene	GC19	B	12/07/06 19:16
191314-003	Toluene	GC19	B	12/07/06 19:16
191314-003	Ethylbenzene	GC19	B	12/07/06 19:16
191314-003	Trifluorotoluene (FID)	GC19	A	12/07/06 19:16
191314-003	Bromofluorobenzene (FID)	GC19	A	12/07/06 19:16
191314-003	Trifluorotoluene (PID)	GC19	B	12/07/06 19:16
191314-003	Bromofluorobenzene (PID)	GC19	B	12/07/06 19:16
191314-003	Xylene (total)	GC19	B	12/07/06 19:16
191314-007	Gasoline C7-C12	GC19	A	12/07/06 19:54
191314-007	Trifluorotoluene (FID)	GC19	A	12/07/06 19:54
191314-007	Bromofluorobenzene (FID)	GC19	A	12/07/06 19:54
191314-008	Gasoline C7-C12	GC19	A	12/07/06 20:32
191314-008	Trifluorotoluene (FID)	GC19	A	12/07/06 20:32
191314-008	Bromofluorobenzene (FID)	GC19	A	12/07/06 20:32
191314-009	Gasoline C7-C12	GC19	A	12/07/06 23:40
191314-009	Trifluorotoluene (FID)	GC19	A	12/07/06 23:40
191314-009	Bromofluorobenzene (FID)	GC19	A	12/07/06 23:40
191314-010	Gasoline C7-C12	GC19	A	12/08/06 00:18
191314-010	Trifluorotoluene (FID)	GC19	A	12/08/06 00:18
191314-010	Bromofluorobenzene (FID)	GC19	A	12/08/06 00:18
191314-011	Gasoline C7-C12	GC19	A	12/08/06 00:55
191314-011	MTBE	GC19	B	12/08/06 00:55
191314-011	Benzene	GC19	B	12/08/06 00:55
191314-011	Toluene	GC19	B	12/08/06 00:55
191314-011	Ethylbenzene	GC19	B	12/08/06 00:55
191314-011	Trifluorotoluene (FID)	GC19	A	12/08/06 00:55
191314-011	Bromofluorobenzene (FID)	GC19	A	12/08/06 00:55
191314-011	Trifluorotoluene (PID)	GC19	B	12/08/06 00:55
191314-011	Bromofluorobenzene (PID)	GC19	B	12/08/06 00:55
191314-011	Xylene (total)	GC19	B	12/08/06 00:55
191314-012	Gasoline C7-C12	GC19	A	12/08/06 01:33

REPORTING SUMMARY FOR 191314 MBTXE Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
191314-012	MTBE	GC19	B	12/08/06 01:33
191314-012	Benzene	GC19	B	12/08/06 01:33
191314-012	Toluene	GC19	B	12/08/06 01:33
191314-012	Ethylbenzene	GC19	B	12/08/06 01:33
191314-012	Trifluorotoluene (FID)	GC19	A	12/08/06 01:33
191314-012	Bromofluorobenzene (FID)	GC19	A	12/08/06 01:33
191314-012	Trifluorotoluene (PID)	GC19	B	12/08/06 01:33
191314-012	Bromofluorobenzene (PID)	GC19	B	12/08/06 01:33
191314-012	Xylene (total)	GC19	B	12/08/06 01:33
191314-017	Gasoline C7-C12	GC19	A	12/08/06 02:11
191314-017	MTBE	GC19	B	12/08/06 02:11
191314-017	Benzene	GC19	B	12/08/06 02:11
191314-017	Toluene	GC19	B	12/08/06 02:11
191314-017	Ethylbenzene	GC19	B	12/08/06 02:11
191314-017	Trifluorotoluene (FID)	GC19	A	12/08/06 02:11
191314-017	Bromofluorobenzene (FID)	GC19	A	12/08/06 02:11
191314-017	Trifluorotoluene (PID)	GC19	B	12/08/06 02:11
191314-017	Bromofluorobenzene (PID)	GC19	B	12/08/06 02:11
191314-017	Xylene (total)	GC19	B	12/08/06 02:11
191314-018	Gasoline C7-C12	GC19	A	12/08/06 02:48
191314-018	MTBE	GC19	B	12/08/06 02:48
191314-018	Benzene	GC19	B	12/08/06 02:48
191314-018	Toluene	GC19	B	12/08/06 02:48
191314-018	Ethylbenzene	GC19	B	12/08/06 02:48
191314-018	Trifluorotoluene (FID)	GC19	A	12/08/06 02:48
191314-018	Bromofluorobenzene (FID)	GC19	A	12/08/06 02:48
191314-018	Trifluorotoluene (PID)	GC19	B	12/08/06 02:48
191314-018	Bromofluorobenzene (PID)	GC19	B	12/08/06 02:48
191314-018	Xylene (total)	GC19	B	12/08/06 02:48
191314-019	Gasoline C7-C12	GC19	A	12/08/06 03:26
191314-019	MTBE	GC19	B	12/08/06 03:26
191314-019	Benzene	GC19	B	12/08/06 03:26
191314-019	Toluene	GC19	B	12/08/06 03:26
191314-019	Ethylbenzene	GC19	B	12/08/06 03:26
191314-019	Trifluorotoluene (FID)	GC19	A	12/08/06 03:26
191314-019	Bromofluorobenzene (FID)	GC19	A	12/08/06 03:26
191314-019	Trifluorotoluene (PID)	GC19	B	12/08/06 03:26
191314-019	Bromofluorobenzene (PID)	GC19	B	12/08/06 03:26
191314-019	Xylene (total)	GC19	B	12/08/06 03:26
QC367436	Gasoline C7-C12	GC19	A	12/07/06 15:37
QC367436	MTBE	GC19	B	12/07/06 15:37
QC367436	Benzene	GC19	B	12/07/06 15:37
QC367436	Toluene	GC19	B	12/07/06 15:37
QC367436	Ethylbenzene	GC19	B	12/07/06 15:37
QC367436	Trifluorotoluene (FID)	GC19	A	12/07/06 15:37
QC367436	Bromofluorobenzene (FID)	GC19	A	12/07/06 15:37
QC367436	Trifluorotoluene (PID)	GC19	B	12/07/06 15:37
QC367436	Bromofluorobenzene (PID)	GC19	B	12/07/06 15:37
QC367436	Xylene (total)	GC19	B	12/07/06 15:37

REPORTING SUMMARY FOR 191314 MBTXE Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC367437	MTBE	GC19	B	12/07/06 14:44
QC367437	Benzene	GC19	B	12/07/06 14:44
QC367437	Toluene	GC19	B	12/07/06 14:44
QC367437	Ethylbenzene	GC19	B	12/07/06 14:44
QC367437	Trifluorotoluene (PID)	GC19	B	12/07/06 14:44
QC367437	Bromofluorobenzene (PID)	GC19	B	12/07/06 14:44
QC367438	Gasoline C7-C12	GC19	A	12/07/06 13:53
QC367438	Trifluorotoluene (FID)	GC19	A	12/07/06 13:53
QC367438	Bromofluorobenzene (FID)	GC19	A	12/07/06 13:53
QC367439	MTBE	GC19	B	12/08/06 04:03
QC367439	Benzene	GC19	B	12/08/06 04:03
QC367439	Toluene	GC19	B	12/08/06 04:03
QC367439	Ethylbenzene	GC19	B	12/08/06 04:03
QC367439	Trifluorotoluene (PID)	GC19	B	12/08/06 04:03
QC367439	Bromofluorobenzene (PID)	GC19	B	12/08/06 04:03
QC367440	MTBE	GC19	B	12/08/06 04:41
QC367440	Benzene	GC19	B	12/08/06 04:41
QC367440	Toluene	GC19	B	12/08/06 04:41
QC367440	Ethylbenzene	GC19	B	12/08/06 04:41
QC367440	Trifluorotoluene (PID)	GC19	B	12/08/06 04:41
QC367440	Bromofluorobenzene (PID)	GC19	B	12/08/06 04:41
QC367441	Gasoline C7-C12	GC19	A	12/08/06 07:49
QC367441	Trifluorotoluene (FID)	GC19	A	12/08/06 07:49
QC367441	Bromofluorobenzene (FID)	GC19	A	12/08/06 07:49
QC367442	Gasoline C7-C12	GC19	A	12/08/06 08:27
QC367442	Trifluorotoluene (FID)	GC19	A	12/08/06 08:27
QC367442	Bromofluorobenzene (FID)	GC19	A	12/08/06 08:27
QC367443	Gasoline C7-C12	GC19	A	12/08/06 09:04
QC367443	Trifluorotoluene (FID)	GC19	A	12/08/06 09:04
QC367443	Bromofluorobenzene (FID)	GC19	A	12/08/06 09:04
QC367444	Gasoline C7-C12	GC19	A	12/08/06 09:42
QC367444	Trifluorotoluene (FID)	GC19	A	12/08/06 09:42
QC367444	Bromofluorobenzene (FID)	GC19	A	12/08/06 09:42

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 01/05/07

Analyte	Units	GC19 A	GC19 X	GC04 A	GC04 J	GC05 A	GC05 G	GC07 A
Gasoline C6-C10	ug/L	12	21	6.7	6.2	14	14	13
Gasoline C6-C12	ug/L	8.9	21	5.5	6.8	11	11	11
Gasoline C7-C12	ug/L	3.3	27	4.8	7.2	7.4	7.4	14
JP-4 C7-C12	ug/L	4.6	4.6	12	12			19
Gasoline C6-C8	ug/L							7.0
Gasoline C8-C10	ug/L							12
Trifluorotoluene (FID)	ug/L			3.9				9.8
Bromofluorobenzene (FID)	ug/L			5.2				7.5

Curtis & Tompkins Laboratories
MDL Summary for EPA 8021B Water
As of 01/05/07

Analyte	Units	GC19 B	GC19 C	GC19 Y	GC19 Z	GC04 B	GC04 C	GC04 K	GC04 L	GC05 B	GC05 C	GC05 H	GC05 I
MTBE	ug/L	0.84	0.85	0.49	0.18	0.48	0.26	0.45	0.83	0.30	0.62	0.73	0.74
Benzene	ug/L	0.24	0.21	0.073	0.033	0.15	0.032	0.094	0.16	0.034	0.057	0.028	0.25
Toluene	ug/L	0.15	0.14	0.13	0.025	0.11	0.098	0.14	0.11	0.048	0.15	0.074	0.20
Ethylbenzene	ug/L	0.12	0.11	0.14	0.024	0.087	0.061	0.038	0.12	0.036	0.17	0.024	0.22
m, p-Xylenes	ug/L	0.11	0.10	0.13	0.039	0.15	0.11	0.10	0.21	0.030	0.17	0.069	0.21
o-Xylene	ug/L	0.19	0.20	0.15	0.015	0.19	0.10	0.12	0.10	0.083	0.19	0.14	0.13

TPH-EXTRACTABLE HYDROCARBONS IN WATER



Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	12/06/06
Units:	ug/L	Received:	12/07/06
Diln Fac:	1.000	Prepared:	12/15/06
Batch#:	120405		

Field ID: LF10GW02
Type: SAMPLE
Lab ID: 191314-001

Analyzed: 12/17/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	97	65-135

Field ID: LF10GW01
Type: SAMPLE
Lab ID: 191314-002

Analyzed: 12/18/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	80	65-135

Field ID: LF10SP01
Type: SAMPLE
Lab ID: 191314-003

Analyzed: 12/17/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	2,700 Y	50
Motor Oil C24-C36	1,100 Y	300

Surrogate	%REC	Limits
Hexacosane	88	65-135

Field ID: LF10GW03
Type: SAMPLE
Lab ID: 191314-007

Analyzed: 12/18/06
Cleanup Method: EPA 3630C

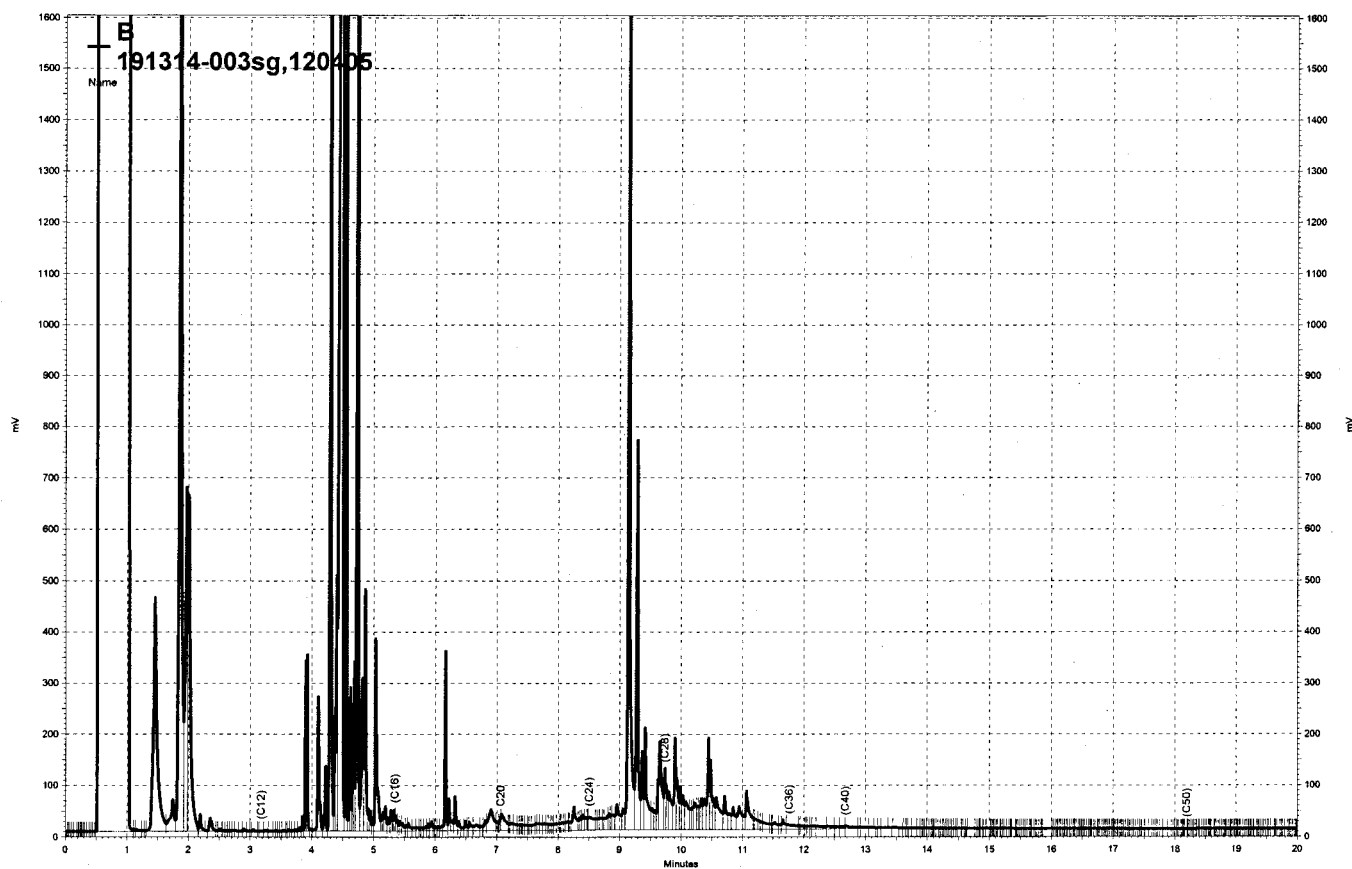
Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	88	65-135

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit



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LF10SPO1



Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	12/06/06
Units:	ug/L	Received:	12/07/06
Diln Fac:	1.000	Prepared:	12/15/06
Batch#:	120405		

Field ID: LF10GW100
Type: SAMPLE
Lab ID: 191314-008

Analyzed: 12/18/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	89	65-135

Field ID: 1065MW101
Type: SAMPLE
Lab ID: 191314-009

Analyzed: 12/18/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	93	65-135

Field ID: 1065MW102
Type: SAMPLE
Lab ID: 191314-010

Analyzed: 12/18/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	106	65-135

Field ID: 1065PZ2A
Type: SAMPLE
Lab ID: 191314-011

Analyzed: 12/18/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	100
Motor Oil C24-C36	ND	600

Surrogate	%REC	Limits
Hexacosane	92	65-135

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

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Curtis & Tompkins, Ltd.

Total Extractable Hydrocarbons

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	12/06/06
Units:	ug/L	Received:	12/07/06
Diln Fac:	1.000	Prepared:	12/15/06
Batch#:	120405		

Field ID: 1065PZ4A
Type: SAMPLE
Lab ID: 191314-012

Analyzed: 12/18/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	100
Motor Oil C24-C36	ND	600

Surrogate	%REC	Limits
Hexacosane	75	65-135

Field ID: LF6GW104
Type: SAMPLE
Lab ID: 191314-014

Analyzed: 12/18/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	95	65-135

Field ID: LF6GW106
Type: SAMPLE
Lab ID: 191314-016

Analyzed: 12/18/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	102	65-135

Field ID: FM14EX07GW102
Type: SAMPLE
Lab ID: 191314-017

Analyzed: 12/18/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	93	65-135

Y= Sample exhibits chromatographic pattern which does not resemble standard

ND= Not Detected

RL= Reporting Limit

**Total Extractable Hydrocarbons**

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	12/06/06
Units:	ug/L	Received:	12/07/06
Diln Fac:	1.000	Prepared:	12/15/06
Batch#:	120405		

Field ID: FM14EX07GW101
Type: SAMPLE
Lab ID: 191314-018

Analyzed: 12/18/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	108	65-135

Field ID: 514AGW101
Type: SAMPLE
Lab ID: 191314-019

Analyzed: 12/17/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	99	65-135

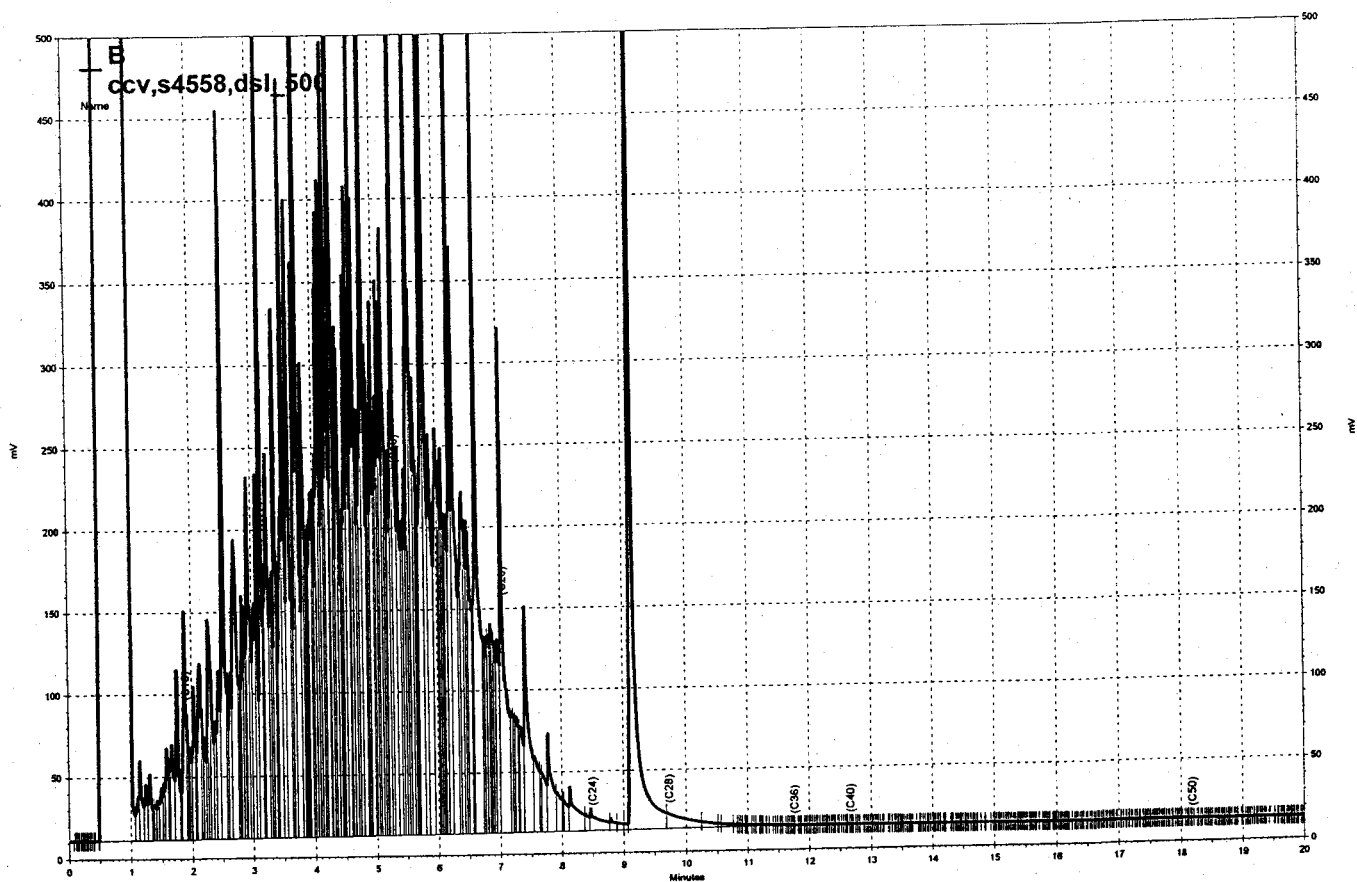
Type: BLANK
Lab ID: QC368470

Analyzed: 12/17/06
Cleanup Method: EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

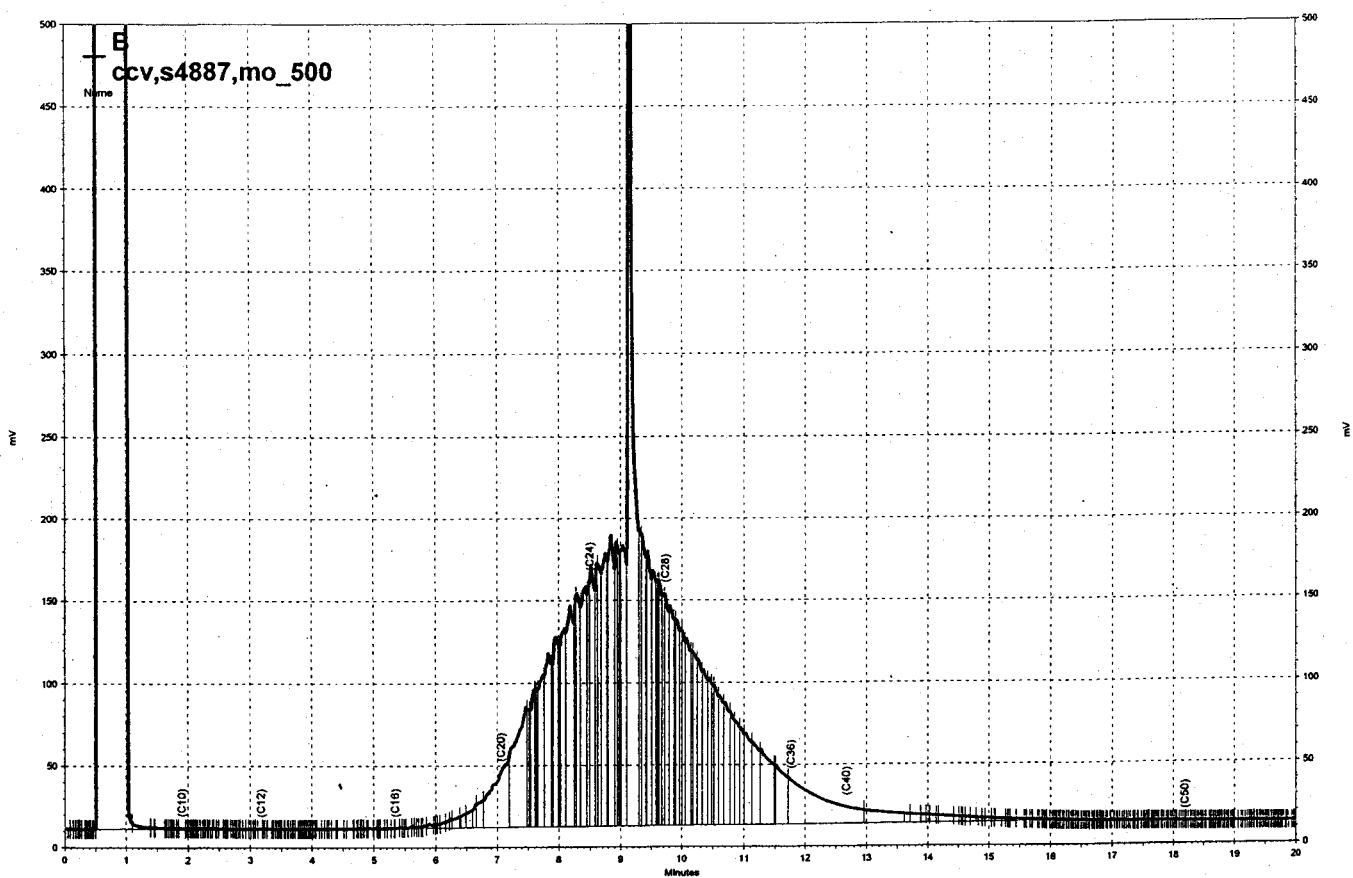
Surrogate	%REC	Limits
Hexacosane	92	65-135

Y= Sample exhibits chromatographic pattern which does not resemble standard
ND= Not Detected
RL= Reporting Limit



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Diesel



Motor Oil

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC368471	Batch#:	120405
Matrix:	Water	Prepared:	12/15/06
Units:	ug/L	Analyzed:	12/17/06

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,430	97	65-135

Surrogate	%REC	Limits
Hexacosane	89	65-135

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	LF10SP01	Batch#:	120405
MSS Lab ID:	191314-003	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Prepared:	12/15/06
Diln Fac:	1.000	Analyzed:	12/17/06

Type: MS
Lab ID: QC368472

Cleanup Method: EPA 3630C

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C12-C24	2,694	2,500	3,445	30 *	65-135

Surrogate	%REC	Limits
Hexacosane	86	65-135

Type: MSD
Lab ID: QC368473

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	3,167	19 *	65-135	8	35

Surrogate	%REC	Limits
Hexacosane	92	65-135

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	514AGW101	Batch#:	120405
MSS Lab ID:	191314-019	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Prepared:	12/15/06
Diln Fac:	1.000	Analyzed:	12/17/06

Type: MS
Lab ID: QC368474

Cleanup Method: EPA 3630C

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C12-C24	<22.89	2,500	2,332	93	65-135

Surrogate	%REC	Limits
Hexacosane	89	65-135

Type: MSD
Lab ID: QC368475

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	2,496	100	65-135	7	35

Surrogate	%REC	Limits
Hexacosane	95	65-135

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191314 GCSV Water: EPA 8015B

Inst : GC15B Name : diesel
 Calnum : 166428475001 Date : 24-OCT-2006 17:58
 Units : mg/L X Axis : R
 Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	297b010	166428475010	DSL_10	24-OCT-2006 17:58	S4539
L2	297b011	166428475011	DSL_100	24-OCT-2006 18:26	S4540
L3	297b012	166428475012	DSL_250	24-OCT-2006 18:53	S4541
L4	297b013	166428475013	DSL_500	24-OCT-2006 19:21	S4542
L5	297b014	166428475014	DSL_1000	24-OCT-2006 19:48	S4543
L6	297b015	166428475015	DSL_2500	24-OCT-2006 20:15	S4544
L7	297b016	166428475016	DSL_5000	24-OCT-2006 20:43	S4538

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	%RSD	Min ²	MaxRSD	Flg
Diesel C12-C24	48331	47665	48162	48149	47529	49750	48832	AVRG		2.07E-5		48345	2	0.995	20		

Instrument amount = a0 + response * a1 + response² * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191314 GCSV Water
EPA 8015B

Inst : GC15B
Calnum : 166428475001

Name : diesel
Cal Date: 24-OCT-2006

ICV 166428475017 (297b017 24-OCT-2006) stds: S4615 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	48345	48592	500.0	502.5	mg/L	1	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191314 GCSV Water: EPA 8015B

Inst : GC15B
 Calnum : 166500697001
 Units : mg/L
 Name : Mo
 Date : 13-DEC-2006 17:24
 X Axis : R
 Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	347b002	166500697002	MO_50	13-DEC-2006 17:24	S4754
L2	347b003	166500697003	MO_250	13-DEC-2006 17:52	S4755
L3	347b004	166500697004	MO_500	13-DEC-2006 18:20	S4756
L4	347b005	166500697005	MO_1000	13-DEC-2006 18:48	S4758
L5	347b006	166500697006	MO_5000	13-DEC-2006 19:15	S4753

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	%RSD	MuR^2	MuRSD	Fig
Motor Oil C24-C36	30972	36587	37358	37030	30403	AVRG		2.90E-5		34470	10	0.995	20	

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Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191314 GCSV Water: EPA 8015B

Inst : GC15B Name : hexacosane Reviewer: MCH
 Calnum : 166428475003 Date : 25-OCT-2006 01:54
 Units : mg/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	297b027	166428475027	HEX_5	25-OCT-2006 01:54	S4639
L2	297b028	166428475028	HEX_10	25-OCT-2006 02:21	S4640
L3	297b029	166428475029	HEX_25	25-OCT-2006 02:48	S4641
L4	297b030	166428475030	HEX_50	25-OCT-2006 03:15	S4642
L5	297b031	166428475031	HEX_75	25-OCT-2006 03:43	S4643
L6	297b032	166428475032	HEX_100	25-OCT-2006 04:10	S4644
L7	297b033	166428475033	HEX_200	25-OCT-2006 04:37	S4645

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	MSD	MnR^2	MxRSD	Flg
Hexacosane	56505	55011	56380	56689	57299	58362	58005	AVRG		1.76E-5		56893	2	0.995	20	

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Instrument amount = a0 + response * a1 + response^2 * a2; AVRQ=Average response factor

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191314 GCSV Water: EPA 8015B

Inst : GC14B Name : DSL
 Calnum : 226500574001 Date : 13-DEC-2006 17:16
 Units : mg/L X Axis : R Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	347_007	226500574007	DSL_10	13-DEC-2006 17:16	S4854
L2	347_008	226500574008	DSL_100	13-DEC-2006 17:45	S4540
L3	347_009	226500574009	DSL_500	13-DEC-2006 18:13	S4542
L4	347_010	226500574010	DSL_1000	13-DEC-2006 18:42	S4543
L5	347_011	226500574011	DSL_5000	13-DEC-2006 19:10	S4538
L6	347_012	226500574012	DSL_7500	13-DEC-2006 19:39	S4694

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r^2	\$ESD	MAR^2	MxRSD	Flg
Diesel C12-C24	B	53137	62937	66021	65280	61342	61527	AVRG		1.62E-5		61707	7		0.995	20	

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191314 GCSV Water
EPA 8015B

Inst : GC14B
Calnum : 226500574001

Name : DSL
Cal Date: 13-DEC-2006

ICV 226500574030 (347_030 14-DEC-2006) stds: S4615 (10X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	B	61707	68119	500.0	552.0	mg/L	10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191314 GCSV Water: EPA 8015B

Inst : GC14B Name : MO Reviewer: CW
 Calnum : 226500574002 Date : 13-DEC-2006 22:00
 Units : mg/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	347_017	226500574017	MO_50	13-DEC-2006 22:00	S4754
L2	347_018	226500574018	MO_250	13-DEC-2006 22:28	S4755
L3	347_019	226500574019	MO_500	13-DEC-2006 22:56	S4756
L4	347_020	226500574020	MO_1000	13-DEC-2006 23:24	S4758
L5	347_021	226500574021	MO_5000	13-DEC-2006 23:52	S4753

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	%RSD	MnR^2	MaxRSD	Flg
Motor Oil C24-C36	B	42484	43518	45432	44686	40215	AVRG		2.31E-5		43267	5	0.995	20	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191314 GCSV Water: EPA 8015B

Inst : GC14B Name : hexacosane Reviewer: CW
 Calnum : 226500574003 Date : 14-DEC-2006 00:48
 Units : mg/L X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	347_023	226500574023	HEX_5	14-DEC-2006 00:48	S4639
L2	347_024	226500574024	HEX_10	14-DEC-2006 01:16	S4640
L3	347_025	226500574025	HEX_25	14-DEC-2006 01:44	S4641
L4	347_026	226500574026	HEX_50	14-DEC-2006 02:12	S4642
L5	347_027	226500574027	HEX_100	14-DEC-2006 02:40	S4644
L6	347_028	226500574028	HEX_200	14-DEC-2006 03:08	S4645

Analyte	Ch	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	\$RSD	MnR^2	MxRSD	Flg
Hexacosane	B	68619	69171	68955	72309	71514	71489	AVRG		1.42E-5		70443	2	0.995	20	

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor

CONTINUING CALIBRATION SUMMARY FOR 191314 GCSV Water
Curtis & Tompkins Laboratories

Analyte: Diesel C12-C24

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D	Flags
						RF/CF	RF/CF						
GC15B	B	166507394003	18-DEC-2006 09:30	166428475001	24-OCT-2006	48345	49439	500.00	511.31	mg/L	2	15	
GC15B	B	166507394018	18-DEC-2006 18:17	166428475001	24-OCT-2006	48345	48227	250.00	249.39	mg/L	0	15	
GC14B	B	226506204003	17-DEC-2006 13:40	226500574001	13-DEC-2006	61707	58941	1000.0	955.18	mg/L	-4	15	
GC14B	B	226506204018	18-DEC-2006 08:53	226500574001	13-DEC-2006	61707	58823	250.00	238.31	mg/L	-5	15	
GC14B	B	226506204032	18-DEC-2006 15:36	226500574001	13-DEC-2006	61707	60689	500.00	491.75	mg/L	-2	15	
GC14B	B	226506204047	18-DEC-2006 22:42	226500574001	13-DEC-2006	61707	60814	500.00	492.76	mg/L	-1	15	

CONTINUING CALIBRATION SUMMARY FOR 191314 GCSV Water
Curtis & Tompkins Laboratories

Analyte: Motor Oil C24-C36

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D	Flags
						RF/CF	RF/CF						
GC15B	B	166507394004	18-DEC-2006 09:57	166500697001	13-DEC-2006	34470	35088	500.00	508.97	mg/L	2	15	
GC15B	B	166507394019	18-DEC-2006 18:45	166500697001	13-DEC-2006	34470	35874	500.00	520.37	mg/L	4	15	
GC14B	B	226506204004	17-DEC-2006 14:08	226500574002	13-DEC-2006	43267	44173	500.00	510.47	mg/L	2	15	
GC14B	B	226506204019	18-DEC-2006 09:21	226500574002	13-DEC-2006	43267	41062	500.00	474.52	mg/L	-5	15	
GC14B	B	226506204033	18-DEC-2006 16:05	226500574002	13-DEC-2006	43267	44122	500.00	509.88	mg/L	2	15	
GC14B	B	226506204048	18-DEC-2006 23:09	226500574002	13-DEC-2006	43267	43070	500.00	497.72	mg/L	0	15	

CONTINUING CALIBRATION SUMMARY FOR 191314 GCSV Water
Curtis & Tompkins Laboratories

Analyte: Hexacosane

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D Flags
						RF/CF	RF/CF					
GC15B	B	166507394003	18-DEC-2006 09:30	166428475003	25-OCT-2006	56893	58258	50.000	51.199	mg/L	2	15
GC15B	B	166507394018	18-DEC-2006 18:17	166428475003	25-OCT-2006	56893	57303	50.000	50.360	mg/L	1	15
GC14B	B	226506204003	17-DEC-2006 13:40	226500574003	14-DEC-2006	70443	66716	50.000	47.355	mg/L	-5	15
GC14B	B	226506204018	18-DEC-2006 08:53	226500574003	14-DEC-2006	70443	67010	50.000	47.563	mg/L	-5	15
GC14B	B	226506204032	18-DEC-2006 15:36	226500574003	14-DEC-2006	70443	68072	50.000	48.317	mg/L	-3	15
GC14B	B	226506204047	18-DEC-2006 22:42	226500574003	14-DEC-2006	70443	71804	50.000	50.966	mg/L	2	15

SEQUENCE SUMMARY FOR 191314 GCSV Water Curtis & Tompkins Laboratories

Sequence: 166428475 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 24-OCT-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Std's	Used	>LR
001	297b001	X	IB			24-OCT-2006	13:15	1.0							
002	297b002	X	IB			24-OCT-2006	13:44	1.0							
003	297b003	X	IB			24-OCT-2006	14:12	1.0							
004	297b004	X	IB			24-OCT-2006	14:39	1.0							
005	297b005	X	CM			24-OCT-2006	15:38	1.0							
006	297b006	CCV	DSL_250			24-OCT-2006	16:05	1.0	7	3					
007	297b007	CCV	MO_500			24-OCT-2006	16:33	1.0	2	3					
008	297b008	CCV	JET_250			24-OCT-2006	17:00	1.0	1	3					
009	297b009	X	IB			24-OCT-2006	17:31	1.0							
010	297b010	ICAL	DSL_10			24-OCT-2006	17:58	1.0							
011	297b011	ICAL	DSL_100			24-OCT-2006	18:26	1.0							
012	297b012	ICAL	DSL_250			24-OCT-2006	18:53	1.0							
013	297b013	ICAL	DSL_500			24-OCT-2006	19:21	1.0							
014	297b014	ICAL	DSL_1000			24-OCT-2006	19:48	1.0							
015	297b015	ICAL	DSL_2500			24-OCT-2006	20:15	1.0							
016	297b016	ICAL	DSL_5000			24-OCT-2006	20:43	1.0							
017	297b017	ICV	DSL_500			24-OCT-2006	21:15	10.0		3					
018	297b018	CCV	MO_500			24-OCT-2006	21:43	1.0	6	3					
019	297b019	X	IB			24-OCT-2006	22:13	1.0							
020	297b020	ICAL	MO_50			24-OCT-2006	22:40	1.0							
021	297b021	ICAL	MOL_250			24-OCT-2006	23:08	1.0							
022	297b022	ICAL	MO_500			24-OCT-2006	23:35	1.0							
023	297b023	ICAL	MO_1000			25-OCT-2006	00:03	1.0							
024	297b024	ICAL	MO_2500			25-OCT-2006	00:30	1.0							
025	297b025	ICAL	MO_5000			25-OCT-2006	00:58	1.0							
026	297b026	X	IB			25-OCT-2006	01:26	1.0							
027	297b027	ICAL	HEX_5			25-OCT-2006	01:54	1.0							
028	297b028	ICAL	HEX_10			25-OCT-2006	02:21	1.0							
029	297b029	ICAL	HEX_25			25-OCT-2006	02:48	1.0							
030	297b030	ICAL	HEX_50			25-OCT-2006	03:15	1.0							

Std's used: 1=S4049 2=S4386 3=S4408 4=S4560 5=S4539 6=S4540 7=S4541 8=S4542 9=S4543 10=S4544 11=S4538 12=S4615 13=S3326 14=S3327 15=S3328 16=S3329 17=S3330 18=S3325 19=S4639
20=S4640 21=S4641 22=S4642 23=S4643 24=S4644 25=S4645 26=S3614 27=S3615 28=S3616 29=S3617 30=S3618 31=S3619 32=S3526

SEQUENCE SUMMARY FOR 191314 GCSV Water Curtis & Tompkins Laboratories

Sequence: 166428475 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 24-OCT-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Std	Used	>LR
031	297b031	ICAL	HEX_75			25-OCT-2006	03:43	1.0					23		
032	297b032	ICAL	HEX_100			25-OCT-2006	04:10	1.0					24		
033	297b033	ICAL	HEX_200			25-OCT-2006	04:37	1.0					25		
034	297b034	X	IB			25-OCT-2006	05:05	1.0							
035	297b035	ICAL	JET_10			25-OCT-2006	05:33	1.0					26		
036	297b036	ICAL	JET_100			25-OCT-2006	06:00	1.0					27		
037	297b037	ICAL	JET_500			25-OCT-2006	06:28	1.0					28		
038	297b038	ICAL	JET_1000			25-OCT-2006	06:55	1.0					29		
039	297b039	ICAL	JET_2000			25-OCT-2006	07:23	1.0					30		
040	297b040	ICAL	JET_3000			25-OCT-2006	07:50	1.0					31		
041	297b041	ICAL	JET_5000			25-OCT-2006	08:18	1.0					32		
042	297b042	X	IB			25-OCT-2006	08:45	1.0							

Std used: 1=S4049 2=S4386 3=S4408 4=S4560 5=S4539 6=S4540 7=S4541 8=S4542 9=S4543 10=S4544 11=S4538 12=S4615 13=S3326 14=S3327 15=S3328 16=S3329 17=S3330 18=S3325 19=S4639
20=S4640 21=S4641 22=S4642 23=S4643 24=S4644 25=S4645 26=S3614 27=S3615 28=S3616 29=S3617 30=S3618 31=S3619 32=S3526

SEQUENCE SUMMARY FOR 191314 GCSV Water Curtis & Tompkins Laboratories

Sequence: 166500697 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 13-DEC-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Std	Used	>LR
001	347b001	X	IB			13-DEC-2006	16:57	1.0						
002	347b002	ICAL	MO_50			13-DEC-2006	17:24	1.0				1		
003	347b003	ICAL	MO_250			13-DEC-2006	17:52	1.0				2		
004	347b004	ICAL	MO_500			13-DEC-2006	18:20	1.0				3		
005	347b005	ICAL	MO_1000			13-DEC-2006	18:48	1.0				4		
006	347b006	ICAL	MO_5000			13-DEC-2006	19:15	1.0				5		
007	347b007	CCV	MO_500			13-DEC-2006	19:57	1.0	2		3	6		
008	347b008	CCV	DSL_500			13-DEC-2006	20:24	1.0			3	7		
009	347b009	BLANK	QC367007 S	120048	Soil	13-DEC-2006	20:52	1.0	0.09982	9	3			
010	347b010	LCS	QC367008 S	120048	Soil	13-DEC-2006	21:20	1.0	0.09982		3			
011	347b011	SAMPLE	191106-005 S	120048	Soil	13-DEC-2006	21:47	1.0	0.09974		3			
012	347b012	SAMPLE	191106-006 S	120048	Soil	13-DEC-2006	22:15	1.0	0.0998		3			
013	347b013	SAMPLE	191106-007 S	120048	Soil	13-DEC-2006	22:42	1.0	0.09994		3			
014	347b014	SAMPLE	191106-004 S	120048	Soil	13-DEC-2006	23:10	1.0	0.09996		3			
015	347b015	SAMPLE	191106-002 S	120048	Soil	13-DEC-2006	23:38	1.0	0.09998		3			
016	347b016	SAMPLE	191106-003 S	120048	Soil	14-DEC-2006	00:05	1.0	0.09994		3			
017	347b017	X	IB			14-DEC-2006	00:33	1.0						
018	347b018	MS	QC368074	120310	Soil	14-DEC-2006	01:00	1.0	0.998		3			
019	347b019	MSD	QC368075	120310	Soil	14-DEC-2006	01:28	1.0	1.016		3			
020	347b020	CCV	DSL_1000			14-DEC-2006	01:56	1.0	1.0		3	8		
021	347b021	CCV	MO_500			14-DEC-2006	02:23	1.0	1.0		3	6		
022	347b022	X	CCV			14-DEC-2006	02:50	1.0				8		
023	347b023	X	CCV			14-DEC-2006	03:18	1.0				6		
024	347b024	SAMPLE	191333-007 S	120188	Soil	14-DEC-2006	03:45	1.0	0.09998		3			
025	347b025	SAMPLE	191333-008 S	120188	Soil	14-DEC-2006	04:13	1.0	0.09976		3			2:BUNKC:=5622.16
026	347b026	SAMPLE	191327-001 S	120297	Water	14-DEC-2006	04:40	1.0	0.005		3			
027	347b027	SAMPLE	191327-002 S	120297	Water	14-DEC-2006	05:08	1.0	0.005		3			
028	347b028	SAMPLE	191372-001 S	120297	Water	14-DEC-2006	05:36	1.0	0.005		3			
029	347b029	X	IB			14-DEC-2006	06:04	1.0						
030	347b030	SAMPLE	191372-002 S	120297	Water	14-DEC-2006	06:31	1.0	0.005		3			
031	347b031	SAMPLE	191372-003 S	120297	Water	14-DEC-2006	06:59	1.0	0.005		3			

Std's used: 1=S4754 2=S4755 3=S4756 4=S4758 5=S4753 6=S4887 7=S4558 8=S4559 9=S4556

SEQUENCE SUMMARY FOR 191314 GCSV Water Curtis & Tompkins Laboratories

Sequence: 166500697 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 13-DEC-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Std	Used	>LR
032	347b032	SAMPLE	191372-004 S	120297	Water	14-DEC-2006	07:26	1.0	0.005		3			
033	347b033	SAMPLE	191372-005 S	120297	Water	14-DEC-2006	07:54	1.0	0.005		3			
034	347b034	CCV	DSL_250			14-DEC-2006	08:22	1.0	1.0		3		9	
035	347b035	CCV	MO_500			14-DEC-2006	08:49	1.0	1.0		3		6	

Std used: 1=S4754 2=S4755 3=S4756 4=S4758 5=S4753 6=S4887 7=S4558 8=S4559 9=S4556

SEQUENCE SUMMARY FOR 191314 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 226500574 Instrument: GC14B Gas Chromatograph #14 (Channel B) TEH Begun: 13-DEC-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
002	347_002	X	IB			13-DEC-2006	14:54	1.0							
003	347_003	X	CM			13-DEC-2006	15:22	1.0					1		
004	347_004	XCCV	DSL_500			13-DEC-2006	15:50	1.0	1	3			2		
005	347_005	XCCV	MO_500			13-DEC-2006	16:19	1.0	6	3			3		
006	347_006	X	IB			13-DEC-2006	16:47	1.0							
007	347_007	ICAL	DSL_10			13-DEC-2006	17:16	1.0					4		
008	347_008	ICAL	DSL_100			13-DEC-2006	17:45	1.0					5		
009	347_009	ICAL	DSL_500			13-DEC-2006	18:13	1.0					6		
010	347_010	ICAL	DSL_1000			13-DEC-2006	18:42	1.0					7		
011	347_011	ICAL	DSL_5000			13-DEC-2006	19:10	1.0					8		
012	347_012	ICAL	DSL_7500			13-DEC-2006	19:39	1.0					9		
013	347_013	X	IB			13-DEC-2006	20:07	1.0							
014	347_014	X	ICV			13-DEC-2006	20:36	1.0		3			10		
015	347_015	X	ICV			13-DEC-2006	21:04	1.0		3			10		
016	347_016	X	IB			13-DEC-2006	21:32	1.0							
017	347_017	ICAL	MO_50			13-DEC-2006	22:00	1.0					11		
018	347_018	ICAL	MO_250			13-DEC-2006	22:28	1.0					12		
019	347_019	ICAL	MO_500			13-DEC-2006	22:56	1.0					13		
020	347_020	ICAL	MO_1000			13-DEC-2006	23:24	1.0					14		
021	347_021	ICAL	MO_5000			13-DEC-2006	23:52	1.0					15		
022	347_022	X	IB			14-DEC-2006	00:20	1.0							
023	347_023	ICAL	HEX_5			14-DEC-2006	00:48	1.0					16		
024	347_024	ICAL	HEX_10			14-DEC-2006	01:16	1.0					17		
025	347_025	ICAL	HEX_25			14-DEC-2006	01:44	1.0					18		
026	347_026	ICAL	HEX_50			14-DEC-2006	02:12	1.0					19		
027	347_027	ICAL	HEX_100			14-DEC-2006	02:40	1.0					20		
028	347_028	ICAL	HEX_200			14-DEC-2006	03:08	1.0					21		
029	347_029	X	IB			14-DEC-2006	03:36	1.0							
030	347_030	ICV	DSL_500			14-DEC-2006	04:04	1.0		3			10		
031	347_031	XICV	DSL_500			14-DEC-2006	04:32	1.0		3			10		

Stds used: 1=S4049 2=S4558 3=S4887 4=S4854 5=S4540 6=S4542 7=S4543 8=S4538 9=S4694 10=S4615 11=S4754 12=S4755 13=S4756 14=S4758 15=S4753 16=S4639 17=S4640 18=S4641 19=S4642
20=S4644 21=S4645

SEQUENCE SUMMARY FOR 191314 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 226500574 Instrument: GC14B Gas Chromatograph #14 (Channel B) TEH Begun: 13-DEC-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Samplenum	Batch	Matrix Analyzed	IDF	IOC SPK uL	VL pH	Stds Used	>LR
032	347_032	X	IB		14-DEC-2006	05:00	1.0			
033	347_033	X	8015-1		14-DEC-2006	05:28	1.0			
034	347_034	X	8015-2		14-DEC-2006	05:57	1.0			
035	347_035	X	8015.1-1		14-DEC-2006	06:25	1.0			
036	347_036	X	8015.1-2		14-DEC-2006	06:54	1.0			
037	347_037	X	8015.2-1		14-DEC-2006	07:22	1.0			
038	347_038	X	8015.2-2		14-DEC-2006	07:50	1.0			
039	347_039	X	IB		14-DEC-2006	08:19	1.0			

.. 000001
 Stds used: 1=S4049 2=S4558 3=S4887 4=S4854 5=S4540 6=S4542 7=S4543 8=S4538 9=S4694 10=S4615 11=S4754 12=S4755 13=S4756 14=S4758 15=S4753 16=S4639 17=S4640 18=S4641 19=S4642
 20=S4644 21=S4645

SEQUENCE SUMMARY FOR 191314 GCSV Water Curtis & Tompkins Laboratories

Sequence: 226506204 Instrument: GC14B Analytical Method: EPA 8015B

Gas Chromatograph #14 (Channel B) TEH
SOP Version: TEH_rv12

Begun: 17-DEC-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
001	351_001	X	PRIMER			17-DEC-2006	12:44	1.0						
002	351_002	X	IB			17-DEC-2006	13:12	1.0						
003	351_003	CCV	DSL_1000			17-DEC-2006	13:40	1.0			3	1		
004	351_004	CCV	MO_500			17-DEC-2006	14:08	1.0			3	2		
005	351_005	CCV	KER_250			17-DEC-2006	14:36	1.0			3	3		
006	351_006	BLANK	QC368470 S	120405	Water	17-DEC-2006	15:34	1.0	0.005		3			
007	351_007	LCS	QC368471 S	120405	Water	17-DEC-2006	16:02	1.0	0.005		3			
008	351_008	MSS	191314-003 S	120405	Water	17-DEC-2006	16:30	1.0	0.005	3	3			
009	351_009	MS	QC368472 S	120405	Water	17-DEC-2006	16:58	1.0	0.005		1	3		
010	351_010	MSD	QC368473 S	120405	Water	17-DEC-2006	17:26	1.0	0.005		1	3		
011	351_011	X	IB			17-DEC-2006	17:54	1.0						
012	351_012	MSS	191314-019 S	120405	Water	17-DEC-2006	18:28	1.0	0.005	3	3			
013	351_013	MS	QC368474 S	120405	Water	17-DEC-2006	18:56	1.0	0.005		3			
014	351_014	MSD	QC368475 S	120405	Water	17-DEC-2006	19:24	1.0	0.005		3			
015	351_015	SAMPLE	191314-001 S	120405	Water	17-DEC-2006	19:52	1.0	0.005		3			
016	351_016	SAMPLE	191541-001	120405	Water	17-DEC-2006	20:20	1.0	0.005		3			6:BUNKC:=17153.9
017	351_017	X	IB			18-DEC-2006	08:25	1.0						
018	351_018	CCV	DSL_250			18-DEC-2006	08:53	1.0	1.0		3	4		
019	351_019	CCV	MO_500			18-DEC-2006	09:21	1.0	1.0		3	2		
020	351_020	CCV	KER_250			18-DEC-2006	09:48	1.0	1.0		3	3		
021	351_021	SAMPLE	191314-002 S	120405	Water	18-DEC-2006	10:25	1.0	0.005		3			
022	351_022	SAMPLE	191314-007 S	120405	Water	18-DEC-2006	10:53	1.0	0.005		3			
023	351_023	BLANK	QC368470	120405	Water	18-DEC-2006	11:23	1.0	0.005		3			
024	351_024	SAMPLE	191314-008 S	120405	Water	18-DEC-2006	11:51	1.0	0.005		3			
025	351_025	SAMPLE	191314-009 S	120405	Water	18-DEC-2006	12:19	1.0	0.005		3			
026	351_026	SAMPLE	191314-010 S	120405	Water	18-DEC-2006	12:47	1.0	0.005		3			
027	351_027	X	IB			18-DEC-2006	13:15	1.0						
028	351_028	SAMPLE	191314-011 S	120405	Water	18-DEC-2006	13:44	1.0	0.01		3			
029	351_029	SAMPLE	191314-012 S	120405	Water	18-DEC-2006	14:12	1.0	0.01		3			
030	351_030	SAMPLE	191314-014 S	120405	Water	18-DEC-2006	14:40	1.0	0.005		3			
031	351_031	SAMPLE	191314-016 S	120405	Water	18-DEC-2006	15:08	1.0	0.005		3			

Stds used: 1=S4559 2=S4887 3=S4452 4=S4556 5=S4558

SEQUENCE SUMMARY FOR 191314 GCSV Water Curtis & Tompkins Laboratories

Sequence: 226506204 Instrument: GC14B Gas Chromatograph #14 (Channel B) TEH Begun: 17-DEC-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Std	Used	>LR
032	351_032	CCV	DSL_500			18-DEC-2006	15:36	1.0	1.0	3		5		
033	351_033	CCV	MO_500			18-DEC-2006	16:05	1.0	1.0	3		2		
034	351_034	CCV	KER_250			18-DEC-2006	16:33	1.0	1.0	3		3		
035	351_035	SAMPLE	191314-017	S	120405	Water	17:05	1.0	0.005	3				
036	351_036	MSS	191388-098	S	120342	Soil	17:33	2.0	0.0999	3				
037	351_037	MS	QC368208	S	120342	Soil	18:01	2.0	0.09992	3				
038	351_038	MSD	QC368209	S	120342	Soil	18:29	2.0	0.09988	1	3			
039	351_039	X	IB			18-DEC-2006	18:57	1.0						
040	351_040	BLANK	QC367994	S	120291	Soil	19:25	1.0	0.09982	3				
041	351_041	LCS	QC367995	S	120291	Soil	19:54	1.0	0.09986	3				
042	351_042	MSS	191303-002	S	120291	Soil	20:22	1.0	0.09986	3				
043	351_043	MS	QC367996	S	120291	Soil	20:50	1.0	0.0999	3				
044	351_044	MSD	QC367997	S	120291	Soil	21:18	1.0	0.09984	3				
045	351_045	X	IB			18-DEC-2006	21:46	1.0						
046	351_046	SAMPLE	191388-025	S	120331	Water	22:14	1.0	0.005	3				
047	351_047	CCV	DSL_500			18-DEC-2006	22:42	1.0	1.0	3		5		
048	351_048	CCV	MO_500			18-DEC-2006	23:09	1.0	1.0	3		2		
049	351_049	X	CCV			18-DEC-2006	23:37	1.0				5		
050	351_050	X	CCV			19-DEC-2006	00:05	1.0				2		
051	351_051	XBLANK	QC368606	S	120441	Water	00:33	1.0	0.005	4	3			
052	351_052	XBLANK	QC368606		120441	Water	01:01	1.0	0.005	4	3			
053	351_053	XBS	QC368607	S	120441	Water	01:29	1.0	0.005	3				
054	351_054	XBSD	QC368608	S	120441	Water	01:57	1.0	0.005	3				
055	351_055	SAMPLE	191510-004	S	120441	Water	02:25	1.0	0.005	3				
056	351_056	SAMPLE	191510-005	S	120441	Water	02:53	1.0	0.005	3				
057	351_057	SAMPLE	191388-027	S	120331	Water	03:21	1.0	0.005	3				
058	351_058	X	IB			19-DEC-2006	03:49	1.0						
059	351_059	SAMPLE	191510-006	S	120441	Water	04:17	1.0	0.005	3				
060	351_060	SAMPLE	191510-012	S	120441	Water	04:45	1.0	0.005	3				
061	351_061	SAMPLE	191531-001	S	120441	Water	05:12	1.0	0.005	3				
062	351_062	SAMPLE	191531-002	S	120441	Water	05:40	1.0	0.005	3				

Std's used: 1=S4559 2=S4887 3=S4452 4=S4556 5=S4558

SEQUENCE SUMMARY FOR 191314 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 226506204 Instrument: GC14B Gas Chromatograph #14 (Channel B) TEH Begun: 17-DEC-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Std	Used	>LR
063	351_063	X	IB			19-DEC-2006	06:08	1.0						
064	351_064	CCV	DSL_1000			19-DEC-2006	06:36	1.0			3	1		
065	351_065	CCV	MO_500			19-DEC-2006	07:03	1.0			3	2		
066	351_066	X	CCV			19-DEC-2006	07:31	1.0				1		
067	351_067	X	CCV			19-DEC-2006	07:59	1.0				2		
068	351_068	SAMPLE	191531-003 S	120441	Water	19-DEC-2006	08:27	1.0						
069	351_069	SAMPLE	191531-004 S	120441	Water	19-DEC-2006	08:54	1.0						
070	351_070	SAMPLE	191531-005 S	120441	Water	19-DEC-2006	09:22	1.0						
071	351_071	X	IB			19-DEC-2006	09:50	1.0						
072	351_072	SAMPLE	191506-007	120441	Water	19-DEC-2006	10:18	1.0						
073	351_073	SAMPLE	191506-008	120441	Water	19-DEC-2006	10:46	1.0						
074	351_074	SAMPLE	191506-009	120441	Water	19-DEC-2006	11:14	1.0						
075	351_075	XBLANK	QC368724	120470	Miscel	19-DEC-2006	11:42	1.0	0.09984	4	3			
076	351_076	BLANK	QC368206 S	120342	Soil	19-DEC-2006	12:10	1.0						
077	351_077	LCS	QC368207 S	120342	Soil	19-DEC-2006	12:38	1.0						
078	351_078	SAMPLE	191388-099 S	120342	Soil	19-DEC-2006	13:07	1.0						
079	351_079	X	IB			19-DEC-2006	13:35	1.0						
080	351_080	CCV	DSL_250			19-DEC-2006	14:03	1.0	1.0		3	4		
081	351_081	CCV	MO_500			19-DEC-2006	14:32	1.0	1.0		3	2		

Std used: 1=S4559 2=S4887 3=S4452 4=S4556 5=S4558

SEQUENCE SUMMARY FOR 191314 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 166507394 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 18-DEC-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
001	352b001	X	PRIMER			18-DEC-2006	08:34	1.0						
002	352b002	X	IB			18-DEC-2006	09:02	1.0						
003	352b003	CCV	DSL_500			18-DEC-2006	09:30	1.0	1.0		3	1		
004	352b004	CCV	MO_500			18-DEC-2006	09:57	1.0	1.0		3	2		
005	352b005	SAMPLE	191526-001	120400	Miscel	18-DEC-2006	12:04	50.0	0.0999	1	3		11:BUNKC:=13877.6	
006	352b006	X	IB			18-DEC-2006	12:32	1.0						
007	352b007	SAMPLE	191526-001	120400	Miscel	18-DEC-2006	13:10	100.0	0.09992		3		2:BUNKC:=7187.18	
008	352b008	SAMPLE	191388-061	S	120306	Soil	18-DEC-2006	13:38	0.09982		3			
009	352b009	SAMPLE	191388-062	S	120306	Soil	18-DEC-2006	14:06	0.09992		3			
010	352b010	SAMPLE	191388-060	S	120306	Soil	18-DEC-2006	14:33	0.09992		3			
011	352b011	X	IB			18-DEC-2006	15:01	1.0						
012	352b012	SAMPLE	191314-018	S	120405	Water	18-DEC-2006	15:29	0.005		3			
013	352b013	SAMPLE	191388-046	S	120306	Soil	18-DEC-2006	15:57	0.09988		3		2:BUNKC:=8886.86	
014	352b014	SAMPLE	191388-056	S	120306	Soil	18-DEC-2006	16:25	0.09998		3			
015	352b015	SAMPLE	191388-045	S	120306	Soil	18-DEC-2006	16:53	0.0997	1	3		5:BUNKC:=9869.17	
016	352b016	SAMPLE	191388-044	S	120306	Soil	18-DEC-2006	17:21	0.09992	1	3		10:BUNKC:=11375.5	
017	352b017	X	IB			18-DEC-2006	17:49	1.0						
018	352b018	CCV	DSL_250			18-DEC-2006	18:17	1.0	1.0		3	3		
019	352b019	CCV	MO_500			18-DEC-2006	18:45	1.0	1.0		3	2		
020	352b020	BLANK	QC368609	S	120442	Water	18-DEC-2006	19:14	0.005	8	3			
021	352b021	BLANK	QC368609		120442	Water	18-DEC-2006	19:42	0.005	8	3			
022	352b022	LCS	QC368610	S	120442	Water	18-DEC-2006	20:09	0.005		3			
023	352b023	MSS	191351-001	S	120442	Water	18-DEC-2006	20:37	0.005	8	3			
024	352b024	MS	QC368611	S	120442	Water	18-DEC-2006	21:05	0.005		3			
025	352b025	MSD	QC368612	S	120442	Water	18-DEC-2006	21:33	0.005		3			
026	352b026	X	IB			18-DEC-2006	22:00	1.0						
027	352b027	SAMPLE	191315-006	S	120442	Water	18-DEC-2006	22:28	0.005		3			
028	352b028	SAMPLE	191315-007	S	120442	Water	18-DEC-2006	22:56	0.005		3			
029	352b029	SAMPLE	191315-008	S	120442	Water	18-DEC-2006	23:23	0.005		3			
030	352b030	SAMPLE	191351-003	S	120442	Water	18-DEC-2006	23:51	0.005		3			
031	352b031	X	IB			19-DEC-2006	00:19	1.0						

Stds used: 1=S4558 2=S4887 3=S4556 4=S4559 5=S4560 6=S4452

SEQUENCE SUMMARY FOR 191314 GCSV Water Curtis & Tompkins Laboratories

Sequence: 166507394 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 18-DEC-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
032	352b032	CCV	DSL_500			19-DEC-2006 00:46	1.0	1.0			3	1		
033	352b033	CCV	MO_500			19-DEC-2006 01:14	1.0	1.0			3	2		
034	352b034	X	CCV			19-DEC-2006 01:41	1.0					1		
035	352b035	X	CCV			19-DEC-2006 02:09	1.0					2		
036	352b036	SAMPLE	191351-004 S	120442	Water	19-DEC-2006 02:37	1.0	0.005			3			
037	352b037	SAMPLE	191351-005 S	120442	Water	19-DEC-2006 03:04	1.0	0.005			3			
038	352b038	SAMPLE	191351-006 S	120442	Water	19-DEC-2006 03:32	1.0	0.005			3			
039	352b039	SAMPLE	191351-008 S	120442	Water	19-DEC-2006 04:00	1.0	0.005			3			
040	352b040	SAMPLE	191351-009 S	120442	Water	19-DEC-2006 04:27	1.0	0.005			3			
041	352b041	X	IB			19-DEC-2006 04:55	1.0							
042	352b042	SAMPLE	191364-001 S	120442	Water	19-DEC-2006 05:22	1.0	0.005	2	1	3		17:BUNKC:=33338.3	
043	352b043	SAMPLE	191364-002 S	120442	Water	19-DEC-2006 05:50	1.0	0.005			3			
044	352b044	SAMPLE	191358-009 S	120442	Water	19-DEC-2006 06:17	1.0	0.005			3			
045	352b045	SAMPLE	191358-011 S	120442	Water	19-DEC-2006 06:45	1.0	0.005			3			
046	352b046	SAMPLE	191518-003	120442	Water	19-DEC-2006 07:12	1.0	0.005			3			
047	352b047	X	IB			19-DEC-2006 07:40	1.0							
048	352b048	CCV	DSL_1000			19-DEC-2006 08:07	1.0	1.0			3	4		
049	352b049	CCV	MO_500			19-DEC-2006 08:35	1.0	1.0			3	2		
050	352b050	SAMPLE	191388-047 S	120306	Soil	19-DEC-2006 09:29	2.0	0.09984			3		4:BUNKC:=7767.48	
051	352b051	SAMPLE	191388-045 S	120306	Soil	19-DEC-2006 09:57	10.0	0.0997			3		2:BUNKC:=5197.01	
052	352b052	SAMPLE	191388-044 S	120306	Soil	19-DEC-2006 10:24	10.0	0.09992			3		2:BUNKC:=6762.31	
053	352b053	SAMPLE	191388-059 S	120306	Soil	19-DEC-2006 10:52	5.0	0.09972			3			
054	352b054	X	IB			19-DEC-2006 11:20	1.0							
055	352b055	CCV	JET_250			19-DEC-2006 11:47	1.0	1.0			3	5		
056	352b056	CCV	KERO_250			19-DEC-2006 12:15	1.0	1.0			3	6		
057	352b057	BLANK	QC368724 S	120470	Miscel	19-DEC-2006 12:45	1.0	0.09984	6		3			

Stds used: 1=S4558 2=S4887 3=S4556 4=S4559 5=S4560 6=S4452

REPORTING SUMMARY FOR 191314 GCSV Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	AnalYZed	IDF	D S L :	M O 2	H X C S
191314-001	GC14B	12/17/06 19:52	1.0	+	+	+
191314-002	GC14B	12/18/06 10:25	1.0	+	+	+
191314-003	GC14B	12/17/06 16:30	1.0	+	+	+
191314-007	GC14B	12/18/06 10:53	1.0	+	+	+
191314-008	GC14B	12/18/06 11:51	1.0	+	+	+
191314-009	GC14B	12/18/06 12:19	1.0	+	+	+
191314-010	GC14B	12/18/06 12:47	1.0	+	+	+
191314-011	GC14B	12/18/06 13:44	1.0	+	+	+
191314-012	GC14B	12/18/06 14:12	1.0	+	+	+
191314-014	GC14B	12/18/06 14:40	1.0	+	+	+
191314-016	GC14B	12/18/06 15:08	1.0	+	+	+
191314-017	GC14B	12/18/06 17:05	1.0	+	+	+
191314-018	GC11A	12/17/06 22:18	1.0			
191314-018	GC15B	12/18/06 15:29	1.0	+	+	+
191314-019	GC14B	12/17/06 18:28	1.0	+	+	+
QC368470	GC14B	12/17/06 15:34	1.0	+	+	+
QC368470	GC14B	12/18/06 11:23	1.0			
QC368471	GC14B	12/17/06 16:02	1.0	+		+
QC368472	GC14B	12/17/06 16:58	1.0	+		+
QC368473	GC14B	12/17/06 17:26	1.0	+		+
QC368474	GC14B	12/17/06 18:56	1.0	+		+
QC368475	GC14B	12/17/06 19:24	1.0	+		+

Curtis & Tompkins Laboratories

Sample Preparation Summary

16-DEC-2006 15:19

Batch Number : 120405
 Date Extracted: 15-DEC-2006
 Extracted by : Pamela D Masiglat
 Prep Method : 3520C

Analysis : TEHM
 Bgroup : N/A
 Units : mL
 Clean-up :

Spike #1 ID : S5034C
 Spike #2 ID : S4805C
 Spike #3 ID :
 SOP Version :

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
191314-001		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	TEHM	3630C	
191314-002		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	6	.5	0	TEHM	3630C	
191314-003		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	6	.5	0	TEHM	3630C	mss
191314-007		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	TEHM	3630C	
191314-008		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	TEHM	3630C	
191314-009		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	TEHM	3630C	
191314-010		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	TEHM	3630C	
191314-011		Treadwell & Rollo	Water	100	mL	1	0.010000	1	2	.1	0	TEHM	3630C	
191314-012		Treadwell & Rollo	Water	100	mL	1	0.010000	1	2	.1	0	TEHM	3630C	
191314-014		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	TEHM	3630C	
191314-016		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	TEHM	3630C	
191314-017		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	TEHM	3630C	
191314-018		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	TEHM	3630C	
191314-019		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0	TEHM	3630C	
191541-001		URS Corporation	Water	500	mL	2.5	0.005000	1	9	.5	0	TEHM	3630C	mss
QC368470	BLANK		Water	500	mL	2.5	0.005000	1	.5	.5	0	TEHM	3630C	
QC368471	LCS		Water	500	mL	2.5	0.005000	1	.5	.5	.5	TEHM	3630C	
QC368472	MS	of 191314-003	Water	500	mL	2.5	0.005000	1	6	.5	.5	TEHM	3630C	
QC368473	MSD	of 191314-003	Water	500	mL	2.5	0.005000	1	6	.5	.5	TEHM	3630C	
QC368474	MS	of 191314-019	Water	500	mL	2.5	0.005000	1	7	.5	.5	TEHM	3630C	
QC368475	MSD	of 191314-019	Water	500	mL	2.5	0.005000	1	7	.5	.5	TEHM	3630C	

Prep Chemist: JM for PDM

Reviewed By: [Signature]

Date: 12/16/06

Relinquished By: [Signature]

Received By: DLM

Date: 12/18/06

LIMS Batch No: 120405
 LIMS Analysis: TEHM
 Extracted by: RAM
 Date Extracted: 12/15/06

Extraction Method:
☐ mod. EPA 3510 sep. funnel
☒ mod. EPA 3520 cont. L/L
☐ _____

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 Cleanup Method (if needed):
☒ EPA 3630 Silica Gel
☐ Other _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
191314-001 F	500	7	2.5	X	
-002 D		6			
-003 G		↓			mb3
-007 D		7			
-008 D					
-009 J					
-010 J					
-014 E					
-016 D					
-017 F					
-018 E					
↓ -019 M		↓			mb3
MB QC368470		7/1			
LCS 1		↓			
MS 2		6			191314-003 T
MSO 3		↓			↓
MS 4		7			191314-019 Q
MSO ↓ 5		↓			↓
191314-11	100	2	1.0	X	Comp E, H, I, prepared in 100 * 0.1 mL surrogate, 100 sample
191314-12	100	↓	↓	↓	Comp A-C presence in HCL
191541-1 A	500	9	2.5		100 JAB 12/15/06
JLM 12/16/06					

Mfg & Lot# / LIMS # / Time Date/ Initials

0.5 mL of TEH_SURR was added to all samples
 * 0.1 / 0.5 mL of TEH_SP was added to all spikes
 pH of all samples adjusted to pH ≤ 2 with H₂SO₄

☒ Samples were continually extracted about 450 mL of CH₂Cl₂

Extraction Start Time: 1010 / * 1640
 Extraction End Time: 0720 / * 1045

☐ Samples were extracted 3 times with 60 mL of CH₂Cl₂

Extracts filtered through baked, CH₂Cl₂-rinsed granular Na₂SO₄
 Concentrated to volumes as noted above

35034 C	RAM 12/15/06
34805 C	
FS054522	
EM46305	
1010 / * 1640	✓
0720 / * 1045	JLM 12/16/06
N/A	
EM4611628	
✓	✓

Pamela Olt-Glat 12/15/06
 Extraction Chemist Date

Continued from Page _____
 Continued on Page _____

[Signature] 12/16/06
 Reviewed by : 000083 Date

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☐ Extracts were cleaned up using C&T assembled g columns
☒ Extracts were cleaned up using 1.0 g cartridges
 Extracts were eluted with 4.0 mL CH_2Cl_2
 Concentrated to volumes as noted above

Mfg & Lot # / Time / Program	Initials / Date
VIA	JCM 12/16/06
SP8111	↓
EM4630S	
✓	

Reviewed by / Date 12/16/06

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 01/05/07

Analyte	Units	GC11A	GC13B B	GC15B	GC17A	GC14B B
JP-5 C10-C16	ug/L	17	16	7.9	5.4	
Jet Fuel A C10-C16	ug/L	14	30	24	33	
Diesel C10-C28	ug/L	18	11	22	37	30
Diesel C10-C24	ug/L	21	15	18	33	26
Diesel C12-C22	ug/L	19	17	20	25	22
Diesel C12-C24	ug/L	20	13	20	33	23
Diesel C12-C28	ug/L		31			
Diesel C12-C32	ug/L	22	14	25	23	36
Diesel C12-C36	ug/L	13	17			
Diesel C10-C20	ug/L		16	13	19	29
Diesel C10-C22	ug/L	21	18	19	27	26
Motor Oil C22-C36	ug/L	120	110	120	140	84
Motor Oil C28-C40	ug/L	67	68	63	78	59
Motor Oil C28-C36	ug/L	64	74	64	69	53
Motor Oil C24-C36	ug/L	150	140	140	170	110
Motor Oil C20-C36	ug/L	120	99	110	130	75
Motor Oil C22-C32	ug/L	140	130	21	160	94
Hexacosane	ug/L	4.5	16	13	3.1	17

Volatile Organics Water



Purgeable Organics by GC/MS

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1065MW101	Batch#:	120366
Lab ID:	191314-009	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Analyzed:	12/14/06
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.08
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-120
1,2-Dichloroethane-d4	95	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	99	86-115

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit



Purgeable Organics by GC/MS

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1065MW102	Batch#:	120366
Lab ID:	191314-010	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Analyzed:	12/14/06
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.08
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-120
1,2-Dichloroethane-d4	96	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	98	86-115

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit



Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	TB1206061A	Batch#:	120366
Lab ID:	191314-013	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Analyzed:	12/14/06
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	7.7	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.08
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	103	80-120
1,2-Dichloroethane-d4	96	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	99	86-115

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

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: 00005

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC368293	Batch#:	120366
Matrix:	Water	Analyzed:	12/14/06
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.08
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	110	80-120
1,2-Dichloroethane-d4	102	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	102	86-115

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC368294	Batch#:	120366
Matrix:	Water	Analyzed:	12/14/06
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	24.33	97	65-135
Benzene	25.00	24.88	100	65-135
Trichloroethene	25.00	24.50	98	65-135
Toluene	25.00	25.72	103	65-135
Chlorobenzene	25.00	25.14	101	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	102	80-120
1,2-Dichloroethane-d4	102	76-114
Toluene-d8	102	88-110
Bromofluorobenzene	100	86-115

Batch QC Report

Purgeable Organics by GC/MS

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	ZZZZZZZZZZ	Batch#:	120366
MSS Lab ID:	191382-006	Sampled:	12/06/06
Matrix:	Water	Received:	12/08/06
Units:	ug/L	Analyzed:	12/14/06
Diln Fac:	1.000		

Type: MS Lab ID: QC368323

Analyte	MSS Result	Spiked	Result	%REC	Limits
1,1-Dichloroethene	<0.1080	25.00	26.72	107	65-135
Benzene	<0.08408	25.00	25.82	103	65-135
Trichloroethene	<0.08559	25.00	25.86	103	65-135
Toluene	<0.1415	25.00	27.31	109	65-135
Chlorobenzene	<0.07490	25.00	25.61	102	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	106	80-120
1,2-Dichloroethane-d4	101	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	101	86-115

Type: MSD Lab ID: QC368324

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	24.02	96	65-135	11	35
Benzene	25.00	25.12	100	65-135	3	35
Trichloroethene	25.00	25.55	102	65-135	1	35
Toluene	25.00	26.61	106	65-135	3	35
Chlorobenzene	25.00	24.94	100	65-135	3	35

Surrogate	%REC	Limits
Dibromofluoromethane	104	80-120
1,2-Dichloroethane-d4	99	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	99	86-115

RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 191314 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name: BFB IDF : 1.0
Seqnum : 836494841002 File : kl902 Time : 09-DEC-2006 15:46

Standards: S3716

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	12296	17.59	
75	30.00% - 60.00% of mass 95	31954	45.71	
95		69909		
96	5.00% - 9.00% of mass 95	5294	7.57	
173	< 2.00% of mass 174	1060	1.62	
174	> 50.00% and < 100.00% of mass 95	65610	93.85	
175	5.00% - 9.00% of mass 174	4739	7.22	
176	> 95.00% and < 101.00% of mass 174	64815	98.79	
177	5.00% - 9.00% of mass 176	4496	6.94	

Analyst: SJD Date: 12/11/06 Reviewer: LW Date: 12/11/06

CURTIS & TOMPKINS BFB TUNE FOR 191314 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name: BFB IDF : 1.0
Seqnum : 836497483002 File : k1b02 Time : 11-DEC-2006 11:54

Standards: S3716

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	15458	17.21	
75	30.00% - 60.00% of mass 95	41881	46.64	
95		89795		
96	5.00% - 9.00% of mass 95	6369	7.09	
173	< 2.00% of mass 174	452	0.55	
174	> 50.00% and < 100.00% of mass 95	82754	92.16	
175	5.00% - 9.00% of mass 174	5515	6.66	
176	> 95.00% and < 101.00% of mass 174	80192	96.90	
177	5.00% - 9.00% of mass 176	5626	7.02	

Analyst: SJD Date: 12/11/06 Reviewer: LW Date: 12/11/06

CURTIS & TOMPKINS BFB TUNE FOR 191314 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name: BFB IDF : 1.0
Seqnum : 836501672002 File : kle02 Time : 14-DEC-2006 09:36

Standards: S3716

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	15314	19.58	
75	30.00% - 60.00% of mass 95	37976	48.56	
95		78208		
96	5.00% - 9.00% of mass 95	4445	5.68	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	75000	95.90	
175	5.00% - 9.00% of mass 174	5048	6.73	
176	> 95.00% and < 101.00% of mass 174	71792	95.72	
177	5.00% - 9.00% of mass 176	5665	7.89	

Analyst: SJD Date: 12/15/06 Reviewer: LW Date: 12/15/06

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191314 MSVOA Water: EPA 8260B

Inst : MSVOA11 Name : 8260GX11 Reviewer: LW
 Calnum : 836494841001 Date : 09-DEC-2006 17:17 Type : WATER
 Units : ug/L X Axis : R

Level File	Seqnum	Sample ID	Analyzed	Std's
L1	kl905	836494841005	0.25/0.5P 09-DEC-2006 17:17	S4931 (1000000X), S5064 (2000000X), S4172 (2000000X), S4792 (25000X)
L2	kl906	836494841006	0.5/1PPB 09-DEC-2006 17:45	S4931 (5000000X), S5064 (10000000X), S4172 (10000000X), S4792 (25000X)
L3	kl907	836494841007	2PPB 09-DEC-2006 18:13	S4931 (25000000X), S5064 (2500000X), S4172 (5000000X), S4792 (25000X)
L4	kl908	836494841008	5PPB 09-DEC-2006 18:41	S4931 (10000000X), S5064 (1000000X), S4172 (2000000X), S4792 (25000X)
L5	kl909	836494841009	10PPB 09-DEC-2006 19:09	S4931 (5000000X), S5064 (500000X), S4172 (1000000X), S4792 (25000X)
L6	kl910	836494841010	20PPB 09-DEC-2006 19:37	S4931 (2500000X), S5064 (250000X), S4172 (500000X), S4792 (25000X)
L7	kl911	836494841011	50PPB 09-DEC-2006 20:05	S4931 (1000000X), S5064 (100000X), S4172 (200000X), S4792 (25000X)
L8	kl912	836494841012	75PPB 09-DEC-2006 20:33	S4931 (6667X), S5064 (6667X), S4172 (13330X), S4792 (25000X)
L9	kl913	836494841013	100PPB 09-DEC-2006 21:01	S4931 (5000X), S5064 (5000X), S4172 (10000X), S4792 (25000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ²	Max	Min	Min	Flg
Chloromethane		0.5531m	0.5914m	0.6503m	0.5400	0.5458m	0.5399	0.5477	0.5387	AVRG		1.77506		0.5634	7	15	0.10	0.99	
Vinyl Chloride	0.3560	0.6132m	0.5644m	0.5935m	0.5311m	0.5258m	0.5299m	0.5498m	0.5412m	AVRG		1.87305		0.5339	14	15	0.050	0.99	
Bromomethane		0.3250m	0.2792m	0.3128m	0.2982m	0.3100m	0.3180m	0.3330m	0.3383	AVRG		3.18151		0.3143	6	15	0.050	0.99	
Chloroethane		0.3691m	0.3241m	0.3670m	0.3287m	0.3440m	0.3389m	0.3492m	0.3223	AVRG		2.91630		0.3429	5	15	0.050	0.99	
Acetone				0.2214	0.2109	0.2114	0.1776	0.1758	0.1715	AVRG		5.13454		0.1948	11	15	0.050	0.99	
1,1-Dichloroethene		0.4375m	0.3729	0.3682	0.3827	0.3602	0.3498	0.3408	0.3375	AVRG		2.71232		0.3687	9	15	0.050	0.99	
Methylene Chloride			0.6675m	0.5345m	0.5310m	0.5049m	0.4803m	0.4654m	0.4649	AVRG		1.91865		0.5212	14	15	0.050	0.99	
Carbon Disulfide		1.6547m	1.6789m	1.6858m	1.7725m	1.7156m	1.6482m	1.6353m	1.6069	AVRG		0.59711		1.6747	3	15	0.050	0.99	
MTBE		1.3429	1.5335	1.6704	1.7307	1.7852	1.7217	1.7200	1.7189	AVRG		0.60500		1.6529	9	15	0.050	0.99	
trans-1,2-Dichloroethene		0.5172	0.5230	0.5196	0.5234	0.5051	0.4689	0.4666	0.4411	AVRG		2.01762		0.4956	6	15	0.050	0.99	
Vinyl Acetate		0.5969m	0.7164	1.0008	0.8408m	0.6839m	1.1039m	1.1155		QUAD	1.29732	1.04260	-0.00207	0.8554	0.993	15	0.050	0.99	
1,1-Dichloroethane		0.7846	0.9047	0.8638	0.8964	0.8754	0.8371	0.8265	0.8130	AVRG		1.17623		0.8502	5	15	0.10	0.99	
2-Butanone			0.2282	0.2213	0.2153	0.2201	0.2064	0.2015	0.2035	AVRG		4.67817		0.2138	5	15	0.050	0.99	
cis-1,2-Dichloroethene		0.6040	0.5350	0.5681	0.5435	0.5394	0.4915	0.4781	0.5101	AVRG		1.87368		0.5337	8	15	0.050	0.99	
Chloroform		0.7684	0.9412	0.9547	0.9186	0.8997	0.8608	0.8589	0.8411	AVRG		1.13583		0.8804	7	15	0.050	0.99	
1,1,1-Trichloroethane		0.8339	0.7448	0.7623	0.8439	0.7918	0.7418	0.7401	0.7187	AVRG		1.29503		0.7722	6	15	0.050	0.99	
Carbon Tetrachloride		0.3239	0.3506	0.3076	0.3429	0.3413	0.2951	0.3152	0.3169	AVRG		3.08475		0.3242	6	15	0.050	0.99	
1,2-Dichloroethane		0.5052	0.5023	0.4906	0.4763	0.4645	0.4453	0.4449	0.4504	AVRG		2.11663		0.4724	5	15	0.050	0.99	
Benzene		1.1142	1.4230	1.3628	1.3854	1.3562	1.2770	1.2682	1.2965	AVRG		0.76313		1.3104	7	15	0.050	0.99	
Trichloroethene		0.3142	0.3391	0.3124	0.3343	0.3540	0.3013	0.3152	0.3161	AVRG		3.09295		0.3233	5	15	0.050	0.99	
1,2-Dichloropropane		0.2747	0.3434	0.3105	0.3078	0.3073	0.3095	0.3003	0.3077	AVRG		3.25034		0.3077	6	15	0.050	0.99	
Bromodichloromethane		0.3438	0.4391	0.4161	0.4367	0.4216	0.4203	0.4207	0.4274	AVRG		2.40551		0.4157	7	15	0.050	0.99	
4-Methyl-2-Pentanone		0.2046	0.2696	0.2641	0.2799	0.2792	0.2706	0.2667	0.2762	AVRG		3.78965		0.2639	9	15	0.050	0.99	
cis-1,3-Dichloropropene		0.4267	0.5349	0.5058	0.5318	0.5209	0.5292	0.5128	0.5312	AVRG		1.95444		0.5117	7	15	0.050	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ² RSD	Max RSD	Min RF	Min r ²	Fig
Toluene		0.7431	0.8847	0.8229	0.8939	0.8646	0.8321	0.8263	0.8280	AVRG		1.19480		0.8370	6	15	0.050	0.99	
trans-1,3-Dichloropropene		0.4113	0.4738	0.4843	0.5018	0.4953	0.5058	0.4878	0.5035	AVRG		2.07064		0.4829	6	15	0.050	0.99	
1,1,2-Trichloroethane		0.1168	0.1413	0.1555	0.1652	0.1653	0.1535	0.1532	0.1538	AVRG		6.64106		0.1506	10	15	0.050	0.99	
2-Hexanone			0.1572	0.1622	0.1697	0.1883	0.1751	0.1736	0.1779	AVRG		5.81470		0.1720	6	15	0.050	0.99	
Tetrachloroethene		0.2944	0.3377	0.2835	0.3443	0.3393	0.2969	0.2985	0.2991	AVRG		3.20804		0.3117	8	15	0.050	0.99	
Dibromochloromethane		0.2523	0.3072	0.2957	0.3232	0.3191	0.3235	0.3139	0.3253	AVRG		3.25164		0.3075	8	15	0.050	0.99	
Chlorobenzene		0.8943	0.9742	0.9000	0.9625	0.9045	0.8732	0.8529	0.8652	AVRG		1.10698		0.9034	5	15	0.30	0.99	
Ethylbenzene		1.2002	1.4359	1.3744	1.5815	1.5340	1.4225	1.3944	1.4041	AVRG		0.70503		1.4184	8	15	0.050	0.99	
m,p-Xylenes	0.2938	0.2885	0.4368	0.4585	0.5684	0.6007	0.5732	0.5713		LINR	0.45973	1.73787		0.4739	1.000	15	0.050	0.99	
o-Xylene		0.3386	0.4035	0.4246	0.5395	0.5611	0.5674	0.5578		LINR	0.49404	1.76865		0.4846	1.000	15	0.050	0.99	
Styrene		0.6328	0.7951	0.8134	0.9211	0.9182	0.9195	0.9139	0.9489	AVRG		1.16570		0.8579	12	15	0.050	0.99	
Bromoform		0.2025	0.2358	0.2425	0.2504	0.2443	0.2544	0.2453	0.2521	AVRG		4.15088		0.2409	7	15	0.10	0.99	
1,1,2,2-Tetrachloroethane		0.5438	0.6082	0.6397	0.6332	0.5976	0.6031	0.5700	0.5885	AVRG		1.67219		0.5980	5	15	0.30	0.99	
Dibromofluoromethane	0.4798	0.4807	0.4679	0.4623	0.4593	0.4715	0.4637	0.4615	0.4469	AVRG		2.14615		0.4660	2	15	0.050	0.99	
1,2-Dichloroethane-d4	0.3687	0.3744	0.3731	0.3722	0.3768	0.3790	0.3730	0.3680	0.3753	AVRG		2.67818		0.3734	1	15	0.050	0.99	
Toluene-d8	1.1892	1.1930	1.2003	1.1773	1.1985	1.1976	1.1953	1.1971	1.2189	AVRG		0.83587		1.1964	1	15	0.050	0.99	
Bromofluorobenzene	1.0529	1.0688	1.0917	1.0782	1.0680	1.0661	1.0431	1.0545	1.0400	AVRG		0.94110		1.0626	2	15	0.050	0.99	

Analyst: SJD

=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; LINR=Linear regression; QUAD=Quadratic regression

Page 2 of 2

Date: 12/11/06

Reviewer: LW

Date: 12/11/06

836494841001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191314 MSVOA Water
EPA 8260B

Inst : MSVOA11
Calnum : 836494841001

Name : 8260GX11
Cal Date: 09-DEC-2006

Type : WATER

ICV 836497483005 (klb05 11-DEC-2006) stds: S4922 (10000X), S4634 (10000X),
S5074 (10000X), S4792 (2500X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	0.5634	0.5191	25.00	23.04	ug/L	-8	30	
Vinyl Chloride	0.5339	0.5064	25.00	23.72	ug/L	-5	20	m
Bromomethane	0.3143	0.3226	25.00	25.66	ug/L	3	30	
Chloroethane	0.3429	0.3499	25.00	25.51	ug/L	2	30	m
Acetone	0.1948	0.1821	25.00	23.37	ug/L	-7	40	
1,1-Dichloroethene	0.3687	0.3861	25.00	26.18	ug/L	5	20	
Methylene Chloride	0.5212	0.5110	25.00	24.51	ug/L	-2	30	m
Carbon Disulfide	1.6747	1.3221	25.00	19.74	ug/L	-21	30	lv- m
MTBE	1.6529	1.6275	25.00	24.62	ug/L	-2	30	
trans-1,2-Dichloroethene	0.4956	0.5319	25.00	26.83	ug/L	7	30	
Vinyl Acetate	0.8654	0.8154	25.00	21.69	ug/L	-13	40	
1,1-Dichloroethane	0.8502	0.8888	25.00	26.14	ug/L	5	30	
2-Butanone	0.2138	0.2126	25.00	24.87	ug/L	-1	40	
cis-1,2-Dichloroethene	0.5337	0.5680	25.00	26.61	ug/L	6	30	
Chloroform	0.8804	0.9316	25.00	26.45	ug/L	6	20	
1,1,1-Trichloroethane	0.7722	0.8387	25.00	27.15	ug/L	9	30	
Carbon Tetrachloride	0.3242	0.3485	25.00	26.87	ug/L	7	30	
1,2-Dichloroethane	0.4724	0.4553	25.00	24.09	ug/L	-4	30	
Benzene	1.3104	1.3582	25.00	25.91	ug/L	4	30	
Trichloroethene	0.3233	0.3363	25.00	26.01	ug/L	4	30	
1,2-Dichloropropane	0.3077	0.3091	25.00	25.12	ug/L	0	20	
Bromodichloromethane	0.4157	0.4524	25.00	27.20	ug/L	9	30	
4-Methyl-2-Pentanone	0.2639	0.2714	25.00	25.71	ug/L	3	40	
cis-1,3-Dichloropropene	0.5117	0.5560	25.00	27.17	ug/L	9	30	
Toluene	0.8370	0.9219	25.00	27.54	ug/L	10	20	
trans-1,3-Dichloropropene	0.4829	0.5001	25.00	25.89	ug/L	4	30	
1,1,2-Trichloroethane	0.1506	0.1592	25.00	26.43	ug/L	6	30	
2-Hexanone	0.1720	0.1829	25.00	26.59	ug/L	6	40	
Tetrachloroethene	0.3117	0.3636	25.00	29.16	ug/L	17	30	
Dibromochloromethane	0.3075	0.3384	25.00	27.51	ug/L	10	30	
Chlorobenzene	0.9034	0.9528	25.00	26.37	ug/L	5	30	
Ethylbenzene	1.4184	1.6339	25.00	28.80	ug/L	15	20	
m,p-Xylenes	0.4739	0.6475	50.00	56.72	ug/L	13	30	
o-Xylene	0.4846	0.6145	25.00	27.66	ug/L	11	30	
Styrene	0.8579	1.0027	25.00	29.22	ug/L	17	30	
Bromoform	0.2409	0.2614	25.00	27.13	ug/L	9	30	
1,1,2,2-Tetrachloroethane	0.5980	0.6230	25.00	26.04	ug/L	4	30	

Data File: \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL905.D
 Report Date: 11-Dec-2006 10:52

Laboratory Name

Data file : \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL905.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 09-DEC-2006 17:17 MS Autotune Date: 29-JUL-2005 08:48
 Operator : VOC Inst ID: MSVOA11.i
 Smp Info : ICAL,S4931,0.001/1000,
 Misc Info : S5064,0.0005/1000,S4172,0.0005/1000,0.25/0.5P
 Comment :
 Method : \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\8260GX11.m
 Meth Date : 11-Dec-2006 10:52 target Quant Type: ISTD
 Cal Date : 09-DEC-2006 17:17 Cal File: KL905.D
 Als bottle: 20 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA_WK01

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	AMOUNTS					
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
1 Freon 12	85	4.432	4.417	(0.446)	2018	0.50000	0.2329
2 Chloromethane	50	4.815	4.800	(0.485)	1628	0.50000	0.1730
3 Vinyl Chloride	62	4.978	4.973	(0.501)	3003	0.50000	0.3355
4 Bromomethane	94	5.570	5.560	(0.561)	1306	0.50000	0.2470
5 Chloroethane	64	5.706	5.702	(0.575)	2067	0.50000	0.3580
6 Trichlorofluoromethane	101	6.031	6.027	(0.607)	4891	0.50000	0.3709
7 Ethanol	45	6.225	6.226	(0.627)	1327	25.0000	14.5768
8 Freon 113	101	6.692	6.708	(0.674)	737	0.25000	0.1062
9 1,1-Dichloroethene	96	6.818	6.824	(0.686)	1007	0.25000	0.1619
10 Acetone	43	6.902	6.908	(0.695)	740	0.25000	0.2252
11 Isopropanol	45	6.938	6.939	(0.699)	762	2.50000	1.6098
12 Carbon Disulfide	76	7.253	7.248	(0.730)	3689	0.25000	0.1316
13 tert-Butyl Alcohol (TBA)	59	7.505	7.490	(0.756)	1584	2.50000	2.0219
14 Methylene Chloride	84	7.547	7.552	(0.760)	4757	0.25000	0.4799
15 MTBE	73	7.783	7.783	(0.784)	4750	0.25000	0.1703
16 trans-1,2-Dichloroethene	96	7.882	7.878	(0.794)	2577	0.25000	0.3082
17 Isopropyl Ether (DIPE)	45	8.375	8.385	(0.843)	5312	0.25000	0.1763
18 Vinyl Acetate	43	8.454	8.470	(0.851)	3573	0.25000	0.2358
19 1,1-Dichloroethane	63	8.543	8.548	(0.860)	3086	0.25000	0.2151
20 Ethyl tert-Butyl Ether (ETBE)	59	8.889	8.910	(0.895)	4670	0.25000	0.1926
21 2-Butanone	43	9.345	9.335	(0.941)	723	0.25000	0.2005
22 2,2-Dichloropropane	77	9.350	9.361	(0.941)	2810	0.25000	0.2488

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 cis-1,2-Dichloroethene	96	9.355	9.377 (0.942)		1722		0.25000	0.1912
24 Tetrahydrofuran	42	9.728	9.734 (0.979)		7572		2.50000	3.1211
25 Bromochloromethane	128	9.728	9.744 (0.979)		577		0.25000	0.1366
26 Chloroform	83	9.759	9.760 (0.983)		3139		0.25000	0.2113
* 27 Pentafluorobenzene	168	9.932	9.949 (1.000)		843451		50.0000	
28 Dibromofluoromethane	113	9.995	10.006 (1.006)		404719		50.0000	51.4900
29 1,1,1-Trichloroethane	97	10.048	10.053 (1.012)		3048		0.25000	0.2339
30 Carbon Tetrachloride	117	10.242	10.247 (0.931)		1313		0.25000	0.1471
31 1,1-Dichloropropene	75	10.236	10.258 (0.931)		2191		0.25000	0.2145
32 1,2-Dichloroethane-d4	65	10.535	10.541 (0.958)		503080		50.0000	49.3742
33 Methyl tert-Amyl Ether (TAME)	73	10.546	10.546 (0.959)		4549		0.25000	0.1669
34 Benzene	78	10.556	10.562 (0.960)		7100		0.25000	0.1985
35 1,2-Dichloroethane	62	10.630	10.646 (0.967)		2788		0.25000	0.2162
* 36 1,4-Difluorobenzene	114	10.997	11.008 (1.000)		1364413		50.0000	
37 Trichloroethene	95	11.358	11.364 (1.033)		1747		0.25000	0.1980
38 Trifluorotoluene	146	11.652	11.663 (1.060)		3731		0.25000	0.2515
39 1,2-Dichloropropane	63	11.715	11.726 (1.065)		1412		0.25000	0.1681
40 Dibromomethane	93	11.888	11.888 (1.081)		1042		0.25000	0.1966
41 Bromodichloromethane	83	12.003	12.014 (1.092)		1605		0.25000	0.1414
42 2-Chloroethylvinylether	63	12.292	12.308 (1.118)		1443		0.50000	0.3405
43 Tetramethyl THF	43	12.475	12.497 (1.134)		1777		0.25000	0.1548
44 cis-1,3-Dichloropropene	75	12.538	12.554 (1.140)		2376		0.25000	0.1701
45 4-Methyl-2-Pentanone	43	12.664	12.664 (1.152)		1096		0.25000	0.1522
46 Toluene-d8	98	12.832	12.843 (1.167)		1622572		50.0000	49.7009
47 Toluene	92	12.915	12.927 (1.174)		5018		0.25000	0.2197
48 trans-1,3-Dichloropropene	75	13.199	13.204 (1.200)		2828		0.25000	0.2145
49 1,1,2-Trichloroethane	85	13.440	13.435 (1.222)		433		0.25000	0.1053
50 Tetrachloroethene	166	13.550	13.551 (0.934)		2440		0.25000	0.2697
51 2-Hexanone	43	13.608	13.624 (0.938)		1079		0.25000	0.2162
52 1,3-Dichloropropane	76	13.650	13.655 (0.940)		3428		0.25000	0.2428
53 Dibromochloromethane	129	13.875	13.897 (0.956)		1763		0.25000	0.1975
54 1,2-Dibromoethane	107	14.085	14.085 (1.281)		1540		0.25000	0.1854
* 55 Chlorobenzene-d5	117	14.515	14.526 (1.000)		1450731		50.0000	
56 Chlorobenzene	112	14.557	14.562 (1.003)		5108		0.25000	0.1948
57 Ethylbenzene	91	14.583	14.599 (1.005)		8842		0.25000	0.2148
58 1,1,1,2-Tetrachloroethane	131	14.614	14.625 (1.007)		2041		0.25000	0.2198
59 m,p-Xylenes	106	14.703	14.714 (1.013)		4262		0.50000	0.3193
60 o-Xylene	106	15.133	15.155 (1.043)		2429		0.25000	0.1771
61 Styrene	104	15.165	15.171 (1.045)		4021		0.25000	0.1615
62 Bromoform	173	15.448	15.448 (1.064)		2161		0.25000	0.3091
63 Isopropylbenzene	105	15.485	15.490 (0.913)		6424		0.25000	0.1795
65 Bromofluorobenzene	95	15.726	15.737 (0.927)		817035		50.0000	49.5442
66 1,1,2,2-Tetrachloroethane	83	15.846	15.857 (0.934)		1661		0.25000	0.1789
67 Propylbenzene	91	15.899	15.920 (0.937)		6898		0.25000	0.1736
68 Bromobenzene	156	15.925	15.936 (0.939)		2981		0.25000	0.2558
69 1,2,3-Trichloropropane	75	15.941	15.947 (0.939)		1703		0.25000	0.1617
71 2-Chlorotoluene	91	16.093	16.093 (0.948)		6523		0.25000	0.2047
72 4-Chlorotoluene	91	16.198	16.209 (0.955)		5636		0.25000	0.1928
73 tert-Butylbenzene	119	16.439	16.445 (0.969)		4950		0.25000	0.1943
74 1,2,4-Trimethylbenzene	105	16.476	16.501 (0.971)		4215		0.25000	0.1362
75 sec-Butylbenzene	105	16.649	16.675 (0.981)		5929		0.25000	0.1718
76 para-Isopropyl Toluene	119	16.790	16.800 (0.989)		5891		0.25000	0.2016
77 1,3-Dichlorobenzene	146	16.895	16.911 (0.996)		3801		0.25000	0.1820
* 78 1,4-Dichlorobenzene-d4	152	16.968	16.985 (1.000)		775984		50.0000	

Data File: \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL905.D
Report Date: 11-Dec-2006 10:52

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
79 1,4-Dichlorobenzene	146	16.995	17.011	(1.002)	5190		0.25000	0.2408
80 n-Butylbenzene	91	17.241	17.263	(1.016)	5282		0.25000	0.1970
81 1,2-Dichlorobenzene	146	17.451	17.466	(1.028)	3826		0.25000	0.1937
82 1,2-Dibromo-3-Chloropropane	75	18.421	18.437	(1.086)	188		0.25000	0.1003
83 1,2,4-Trichlorobenzene	180	19.527	19.554	(1.151)	2796		0.25000	0.1946
84 Hexachlorobutadiene	225	19.637	19.653	(1.157)	1267		0.25000	0.1955
85 Naphthalene	128	19.983	20.010	(1.178)	5793		0.25000	0.1714
86 1,2,3-Trichlorobenzene	180	20.371	20.403	(1.201)	2525		0.25000	0.1780

Data File: \\Gomsserver\DD\chem\MSV0911.i\120906.b\KL905.D

Date : 09-DEC-2006 17:17

Client ID: DYNA P&T

Sample Info: ICAL,S4931,0.001/1000,

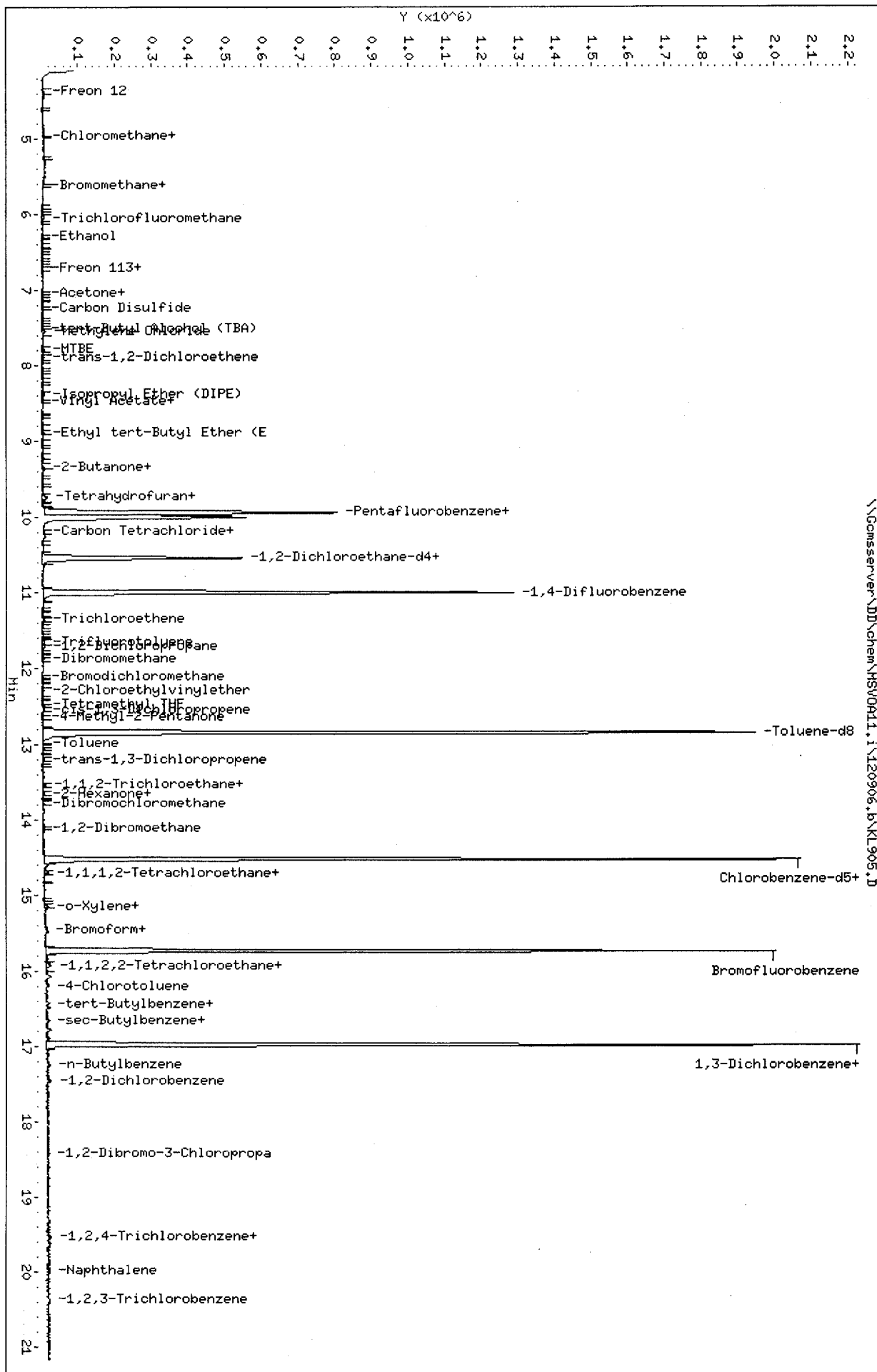
Purge Volume: 5.0

Column phase: RTX Volatiles

Instrument: MSV0911.i

Operator: VOC

Column diameter: 0.32



Data File: \\Gcmsserver\DD\chem\MSVOA11.i\120906.b\KL906.D
 Report Date: 11-Dec-2006 11:35

Laboratory Name

Data file : \\Gcmsserver\DD\chem\MSVOA11.i\120906.b\KL906.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 09-DEC-2006 17:45 MS Autotune Date: 29-JUL-2005 08:48
 Operator : VOC Inst ID: MSVOA11.i
 Smp Info : ICAL,S4931,0.002/1000,
 Misc Info : S5064,0.001/1000,S4172,0.001/1000,0.5/1PPB
 Comment :
 Method : \\Gcmsserver\DD\chem\MSVOA11.i\120906.b\8260GX11.m
 Meth Date : 11-Dec-2006 11:34 target Quant Type: ISTD
 Cal Date : 09-DEC-2006 17:45 Cal File: KL906.D
 Als bottle: 21 Calibration Sample, Level: 2
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA_WK01

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	AMOUNTS						
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
							(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	
1 Freon 12	85	4.427	4.417	(0.446)	8075	1.00000	0.9463 (M)	
2 Chloromethane	50	4.867	4.800	(0.490)	9190	1.00000	0.9916 (M)	
3 Vinyl Chloride	62	4.988	4.973	(0.502)	10189	1.00000	1.1559 (M)	
4 Bromomethane	94	5.575	5.560	(0.561)	5400	1.00000	1.0372 (M)	
5 Chloroethane	64	5.717	5.702	(0.576)	6133	1.00000	1.0786 (M)	
6 Trichlorofluoromethane	101	6.037	6.027	(0.608)	12024	1.00000	0.9258	
7 Ethanol	45	6.220	6.226	(0.626)	4343	50.0000	48.4356 (M)	
8 Freon 113	101	6.703	6.708	(0.675)	3489	0.50000	0.5108	
9 1,1-Dichloroethene	96	6.813	6.824	(0.686)	3635	0.50000	0.5933 (M)	
10 Acetone	43	6.902	6.908	(0.695)	2639	0.50000	0.8155 (M)	
11 Isopropanol	45	6.938	6.939	(0.699)	1922	5.00000	4.1224	
12 Carbon Disulfide	76	7.243	7.248	(0.729)	13747	0.50000	0.4979 (M)	
13 tert-Butyl Alcohol (TBA)	59	7.479	7.490	(0.753)	3750	5.00000	4.8599	
14 Methylene Chloride	84	7.547	7.552	(0.760)	9298	0.50000	1.0938 (M)	
15 MTBE	73	7.783	7.783	(0.784)	11156	0.50000	0.4062	
16 trans-1,2-Dichloroethene	96	7.877	7.878	(0.793)	4297	0.50000	0.5217	
17 Isopropyl Ether (DIPE)	45	8.386	8.385	(0.844)	12924	0.50000	0.4357	
18 Vinyl Acetate	43	8.469	8.470	(0.853)	4959	0.50000	0.3338 (M)	
19 1,1-Dichloroethane	63	8.548	8.548	(0.861)	6518	0.50000	0.4614	
20 Ethyl tert-Butyl Ether (ETBE)	59	8.899	8.910	(0.896)	9269	0.50000	0.3882 (M)	
21 2-Butanone	43	9.319	9.335	(0.938)	1812	0.50000	0.5101	
22 2,2-Dichloropropane	77	9.361	9.361	(0.942)	5878	0.50000	0.5285	

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
23 cis-1,2-Dichloroethene	96	9.366	9.377	(0.943)	5018	0.50000	0.5658
24 Tetrahydrofuran	42	9.733	9.734	(0.980)	13083	5.00000	5.4750
25 Bromochloromethane	128	9.744	9.744	(0.981)	2023	0.50000	0.4864 (M)
26 Chloroform	83	9.759	9.760	(0.983)	6384	0.50000	0.4364
* 27 Pentafluorobenzene	168	9.932	9.949	(1.000)	830766	50.0000	
28 Dibromofluoromethane	113	9.995	10.006	(1.006)	399312	50.0000	51.5778
29 1,1,1-Trichloroethane	97	10.042	10.053	(1.011)	6928	0.50000	0.5399
30 Carbon Tetrachloride	117	10.226	10.247	(0.930)	4403	0.50000	0.4995
31 1,1-Dichloropropene	75	10.268	10.258	(0.934)	4139	0.50000	0.4068 (M)
32 1,2-Dichloroethane-d4	65	10.535	10.541	(0.958)	508990	50.0000	50.1349
33 Methyl tert-Amyl Ether (TAME)	73	10.540	10.546	(0.959)	10860	0.50000	0.3999
34 Benzene	78	10.556	10.562	(0.960)	15147	0.50000	0.4251
35 1,2-Dichloroethane	62	10.640	10.646	(0.968)	6868	0.50000	0.5346
* 36 1,4-Difluorobenzene	114	10.997	11.008	(1.000)	1359497	50.0000	
37 Trichloroethene	95	11.337	11.364	(1.031)	4271	0.50000	0.4858
38 Trifluorotoluene	146	11.662	11.663	(1.061)	6304	0.50000	0.4265
39 1,2-Dichloropropane	63	11.720	11.726	(1.066)	3735	0.50000	0.4464
40 Dibromomethane	93	11.872	11.888	(1.080)	2454	0.50000	0.4647
41 Bromodichloromethane	83	11.998	12.014	(1.091)	4674	0.50000	0.4135
42 2-Chloroethylvinylether	63	12.297	12.308	(1.118)	3169	1.00000	1.8789
43 Tetramethyl THF	43	12.480	12.497	(1.135)	4932	0.50000	0.4314
44 cis-1,3-Dichloropropene	75	12.554	12.554	(1.142)	5801	0.50000	0.4169
45 4-Methyl-2-Pentanone	43	12.653	12.664	(1.151)	2782	0.50000	0.3877
46 Toluene-d8	98	12.832	12.843	(1.167)	1621885	50.0000	49.8595
47 Toluene	92	12.916	12.927	(1.174)	10103	0.50000	0.4439
48 trans-1,3-Dichloropropene	75	13.199	13.204	(1.200)	5591	0.50000	0.4257
49 1,1,2-Trichloroethane	85	13.419	13.435	(1.220)	1588	0.50000	0.3878
50 Tetrachloroethene	166	13.529	13.551	(0.932)	4247	0.50000	0.4721
51 2-Hexanone	43	13.602	13.624	(0.937)	2238	0.50000	0.4510
52 1,3-Dichloropropane	76	13.650	13.655	(0.940)	5339	0.50000	0.3803
53 Dibromochloromethane	129	13.886	13.897	(0.957)	3640	0.50000	0.4102
54 1,2-Dibromoethane	107	14.074	14.085	(1.280)	3700	0.50000	0.4471
* 55 Chlorobenzene-d5	117	14.515	14.526	(1.000)	1442693	50.0000	
56 Chlorobenzene	112	14.551	14.562	(1.003)	12902	0.50000	0.4949
57 Ethylbenzene	91	14.583	14.599	(1.005)	17315	0.50000	0.4230
58 1,1,1,2-Tetrachloroethane	131	14.614	14.625	(1.007)	4505	0.50000	0.4879
59 m,p-Xylenes	106	14.698	14.714	(1.013)	8324	1.00000	1.1367
60 o-Xylene	106	15.133	15.155	(1.043)	4885	0.50000	0.8792
61 Styrene	104	15.154	15.171	(1.044)	9129	0.50000	0.3688
62 Bromoform	173	15.437	15.448	(1.064)	2921	0.50000	0.4202
63 Isopropylbenzene	105	15.479	15.490	(0.912)	12744	0.50000	0.3577
65 Bromofluorobenzene	95	15.731	15.737	(0.927)	825668	50.0000	50.2927
66 1,1,2,2-Tetrachloroethane	83	15.841	15.857	(0.934)	4201	0.50000	0.4546
67 Propylbenzene	91	15.899	15.920	(0.937)	14297	0.50000	0.3615
68 Bromobenzene	156	15.920	15.936	(0.938)	5301	0.50000	0.4569
69 1,2,3-Trichloropropane	75	15.930	15.947	(0.939)	5502	0.50000	0.5250
70 1,3,5-Trimethylbenzene	105	16.061	16.082	(0.947)	10872	0.50000	0.3758
71 2-Chlorotoluene	91	16.082	16.093	(0.948)	12990	0.50000	0.4096
72 4-Chlorotoluene	91	16.192	16.209	(0.954)	12801	0.50000	0.4399
73 tert-Butylbenzene	119	16.423	16.445	(0.968)	9930	0.50000	0.3916
74 1,2,4-Trimethylbenzene	105	16.481	16.501	(0.971)	12069	0.50000	0.3919
75 sec-Butylbenzene	105	16.659	16.675	(0.982)	12894	0.50000	0.3754
76 para-Isopropyl Toluene	119	16.780	16.800	(0.989)	10804	0.50000	0.3629
77 1,3-Dichlorobenzene	146	16.895	16.911	(0.996)	9345	0.50000	0.4494

Data File: \\Gcmsserver\DD\chem\MSVOA11.i\120906.b\KL906.D
 Report Date: 11-Dec-2006 11:35

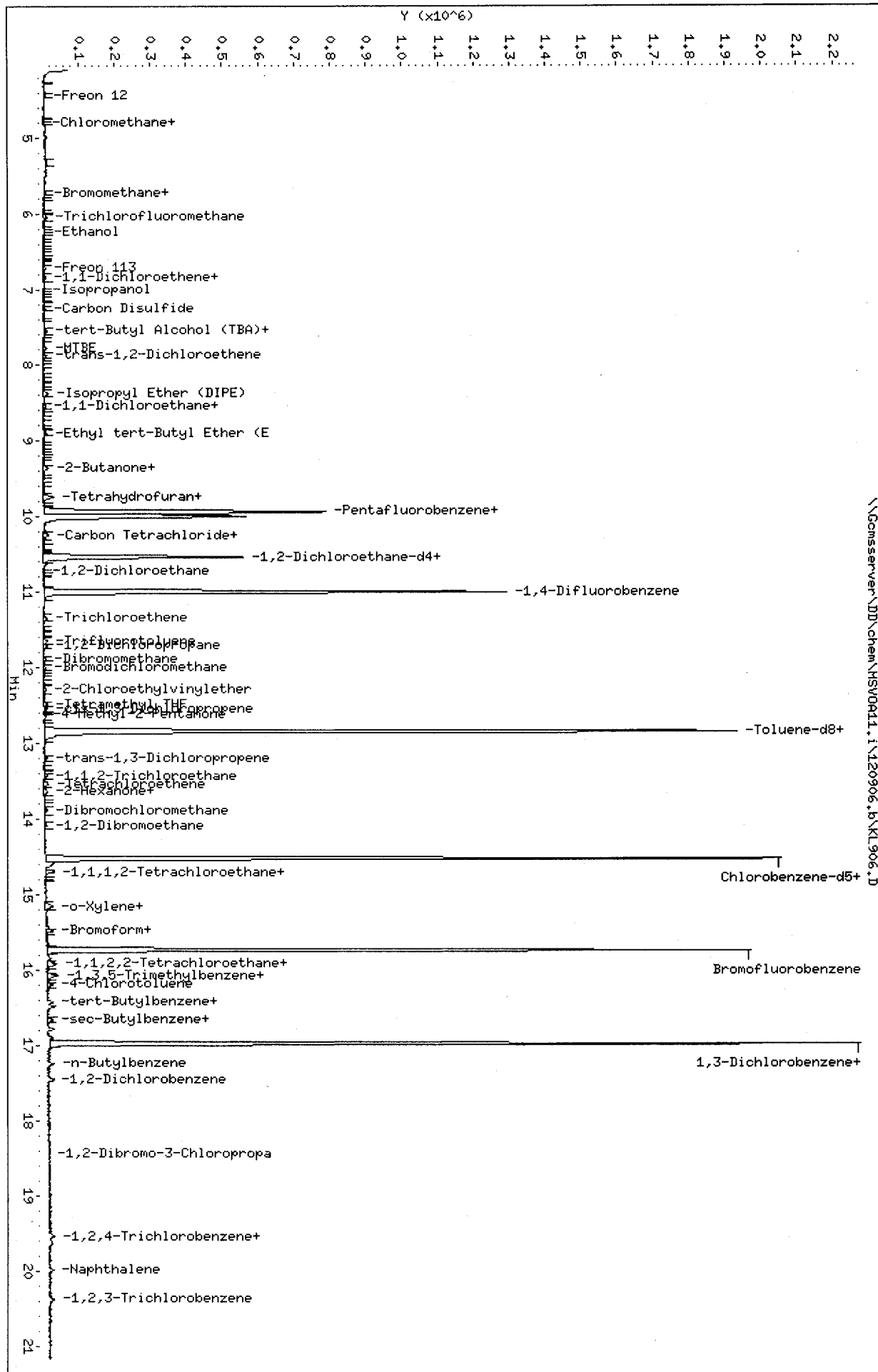
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ug/L)	ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	16.968	16.985	(1.000)	772513	50.0000	
79 1,4-Dichlorobenzene	146	17.000	17.011	(1.002)	10581	0.50000	0.4933
80 n-Butylbenzene	91	17.246	17.263	(1.016)	10990	0.50000	0.4118
81 1,2-Dichlorobenzene	146	17.456	17.466	(1.029)	8453	0.50000	0.4300
82 1,2-Dibromo-3-Chloropropane	75	18.431	18.437	(1.086)	718	0.50000	0.3696
83 1,2,4-Trichlorobenzene	180	19.543	19.554	(1.152)	6181	0.50000	0.4322
84 Hexachlorobutadiene	225	19.642	19.653	(1.158)	2571	0.50000	0.4044 (M)
85 Naphthalene	128	19.994	20.010	(1.178)	11926	0.50000	0.3545
86 1,2,3-Trichlorobenzene	180	20.371	20.403	(1.201)	7046	0.50000	0.4991

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Gomserver\DD\chem\MSV0011.i\120906.b\KL906.D
 Date : 09-DEC-2006 17:45
 Client ID: DYNA P&T
 Sample Info: ICAL,S4931,0.002/1000,
 Purge Volume: 5.0
 Column phase: RTX Volatiles

Instrument: MSV0011.i
 Operator: VOC
 Column diameter: 0.32



Data File: \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL907.D
 Report Date: 11-Dec-2006 13:28

Laboratory Name

Data file : \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL907.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 09-DEC-2006 18:13 MS Autotune Date: 29-JUL-2005 08:48
 Operator : VOC Inst ID: MSVOA11.i
 Smp Info : ICAL,S4931,0.002/500,
 Misc Info : S5064,0.002/500,S4172,0.001/500,2PPB
 Comment :
 Method : \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\8260GX11.m
 Meth Date : 11-Dec-2006 13:27 target Quant Type: ISTD
 Cal Date : 09-DEC-2006 18:13 Cal File: KL907.D
 Als bottle: 22 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA_WK01

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT	SIG	AMOUNTS				
			CAL-AMT	ON-COL			
	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
1 Freon 12	85	4.422	4.417	(0.445)	15708	2.00000	1.8277 (M)
2 Chloromethane	50	4.852	4.800	(0.489)	19792	2.00000	2.1078 (M)
3 Vinyl Chloride	62	4.993	4.973	(0.503)	18890	2.00000	2.1278 (M)
4 Bromomethane	94	5.575	5.560	(0.561)	9344	2.00000	1.7820 (M)
5 Chloroethane	64	5.712	5.702	(0.575)	10847	2.00000	1.8941 (M)
6 Trichlorofluoromethane	101	6.037	6.027	(0.608)	25320	2.00000	1.9357
7 Ethanol	45	6.231	6.226	(0.627)	19700	200.000	218.1402 (M)
8 Freon 113	101	6.713	6.708	(0.676)	13227	2.00000	1.9230
9 1,1-Dichloroethene	96	6.828	6.824	(0.688)	12482	2.00000	2.0230
10 Acetone	43	6.902	6.908	(0.695)	7741	2.00000	2.3751
11 Isopropanol	45	6.933	6.939	(0.698)	9213	20.0000	19.6198
12 Carbon Disulfide	76	7.243	7.248	(0.729)	56190	2.00000	2.0206 (M)
13 tert-Butyl Alcohol (TBA)	59	7.479	7.490	(0.753)	14030	20.0000	18.0529
14 Methylene Chloride	84	7.547	7.552	(0.760)	22339	2.00000	2.5811 (M)
15 MTBE	73	7.772	7.783	(0.783)	51324	2.00000	1.8554
16 trans-1,2-Dichloroethene	96	7.877	7.878	(0.793)	17506	2.00000	2.1106
17 Isopropyl Ether (DIPE)	45	8.380	8.385	(0.844)	57320	2.00000	1.9186
18 Vinyl Acetate	43	8.459	8.470	(0.852)	23976	2.00000	2.7868
19 1,1-Dichloroethane	63	8.543	8.548	(0.860)	30279	2.00000	2.1282
20 Ethyl tert-Butyl Ether (ETBE)	59	8.899	8.910	(0.896)	47608	2.00000	1.9800
21 2-Butanone	43	9.324	9.335	(0.939)	7639	2.00000	2.1354
22 2,2-Dichloropropane	77	9.356	9.361	(0.942)	22945	2.00000	2.0485

Data File: \\Gcmsserver\DD\chem\MSVOA11.i\120906.b\KL907.D
Report Date: 11-Dec-2006 13:28

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
23 cis-1,2-Dichloroethene	96	9.371	9.377	(0.944)	17905		2.00000	2.0047
24 Tetrahydrofuran	42	9.733	9.734	(0.980)	48960		20.0000	20.3431
25 Bromochloromethane	128	9.733	9.744	(0.980)	8072		2.00000	1.9270 (M)
26 Chloroform	83	9.759	9.760	(0.983)	31501		2.00000	2.1380
* 27 Pentafluorobenzene	168	9.932	9.949	(1.000)	836728		50.0000	
28 Dibromofluoromethane	113	9.990	10.006	(1.006)	391502		50.0000	50.2087
29 1,1,1-Trichloroethane	97	10.048	10.053	(1.012)	24929		2.00000	1.9291
30 Carbon Tetrachloride	117	10.242	10.247	(0.931)	18739		2.00000	2.1627
31 1,1-Dichloropropene	75	10.257	10.258	(0.933)	20733		2.00000	2.0731
32 1,2-Dichloroethane-d4	65	10.535	10.541	(0.958)	498638		50.0000	49.9641
33 Methyl tert-Amyl Ether (TAME)	73	10.530	10.546	(0.958)	54448		2.00000	2.0398
34 Benzene	78	10.551	10.562	(0.959)	76067		2.00000	2.1718
35 1,2-Dichloroethane	62	10.640	10.646	(0.968)	26852		2.00000	2.1264
* 36 1,4-Difluorobenzene	114	10.997	11.008	(1.000)	1336399		50.0000	
37 Trichloroethene	95	11.353	11.364	(1.032)	18126		2.00000	2.0975
38 Trifluorotoluene	146	11.652	11.663	(1.060)	30178		2.00000	2.0771
39 1,2-Dichloropropane	63	11.720	11.726	(1.066)	18358		2.00000	2.2324
40 Dibromomethane	93	11.883	11.888	(1.081)	11463		2.00000	2.2082
41 Bromodichloromethane	83	12.003	12.014	(1.092)	23475		2.00000	2.1127
42 2-Chloroethylvinylether	63	12.297	12.308	(1.118)	7433		2.00000	2.0864
43 Tetramethyl THF	43	12.486	12.497	(1.135)	20556		2.00000	1.8292
44 cis-1,3-Dichloropropene	75	12.538	12.554	(1.140)	28591		2.00000	2.0906
45 4-Methyl-2-Pentanone	43	12.648	12.664	(1.150)	14411		2.00000	2.0432
46 Toluene-d8	98	12.832	12.843	(1.167)	1604131		50.0000	50.1661
47 Toluene	92	12.921	12.927	(1.175)	47290		2.00000	2.1139
48 trans-1,3-Dichloropropene	75	13.193	13.204	(1.200)	25325		2.00000	1.9619
49 1,1,2-Trichloroethane	85	13.429	13.435	(1.221)	7555		2.00000	1.8771
50 Tetrachloroethene	166	13.534	13.551	(0.932)	19163		2.00000	2.1666
51 2-Hexanone	43	13.608	13.624	(0.938)	8919		2.00000	1.8277
52 1,3-Dichloropropane	76	13.644	13.655	(0.940)	29667		2.00000	2.1489
53 Dibromochloromethane	129	13.886	13.897	(0.957)	17432		2.00000	1.9977
54 1,2-Dibromoethane	107	14.074	14.085	(1.280)	16800		2.00000	2.0654
* 55 Chlorobenzene-d5	117	14.515	14.526	(1.000)	1418682		50.0000	
56 Chlorobenzene	112	14.551	14.562	(1.003)	55281		2.00000	2.1567
57 Ethylbenzene	91	14.583	14.599	(1.005)	81482		2.00000	2.0246
58 1,1,1,2-Tetrachloroethane	131	14.620	14.625	(1.007)	17422		2.00000	1.9188
59 m,p-Xylenes	106	14.703	14.714	(1.013)	49569		4.00000	3.4957
60 o-Xylene	106	15.133	15.155	(1.043)	22898		2.00000	1.9213
61 Styrene	104	15.154	15.171	(1.044)	45122		2.00000	1.8537
62 Bromoform	173	15.432	15.448	(1.063)	13383		2.00000	1.9578
63 Isopropylbenzene	105	15.479	15.490	(0.912)	69713		2.00000	2.0162
65 Bromofluorobenzene	95	15.726	15.737	(0.927)	818620		50.0000	51.3700
66 1,1,2,2-Tetrachloroethane	83	15.846	15.857	(0.934)	18242		2.00000	2.0339
67 Propylbenzene	91	15.904	15.920	(0.937)	73646		2.00000	1.9185
68 Bromobenzene	156	15.925	15.936	(0.939)	23305		2.00000	2.0695
69 1,2,3-Trichloropropane	75	15.930	15.947	(0.939)	21702		2.00000	2.1336
70 1,3,5-Trimethylbenzene	105	16.067	16.082	(0.947)	57988		2.00000	2.0653
71 2-Chlorotoluene	91	16.082	16.093	(0.948)	64593		2.00000	2.0983
72 4-Chlorotoluene	91	16.192	16.209	(0.954)	57821		2.00000	2.0472
73 tert-Butylbenzene	119	16.434	16.445	(0.968)	48936		2.00000	1.9884
74 1,2,4-Trimethylbenzene	105	16.481	16.501	(0.971)	59920		2.00000	2.0046
75 sec-Butylbenzene	105	16.659	16.675	(0.982)	65335		2.00000	1.9597
76 para-Isopropyl Toluene	119	16.785	16.800	(0.989)	55126		2.00000	1.9077
77 1,3-Dichlorobenzene	146	16.900	16.911	(0.996)	41285		2.00000	2.0458

Data File: \\Gcmsserver\DD\chem\MSVOA11.i\120906.b\KL907.D
Report Date: 11-Dec-2006 13:28

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)	
* 78 1,4-Dichlorobenzene-d4	152	16.968	16.985	(1.000)	749856	50.0000		
79 1,4-Dichlorobenzene	146	17.005	17.011	(1.002)	42696	2.00000	2.0508	
80 n-Butylbenzene	91	17.241	17.263	(1.016)	50148	2.00000	1.9360	
81 1,2-Dichlorobenzene	146	17.451	17.466	(1.028)	41124	2.00000	2.1552	
82 1,2-Dibromo-3-Chloropropane	75	18.416	18.437	(1.085)	4235	2.00000	2.2462	
83 1,2,4-Trichlorobenzene	180	19.527	19.554	(1.151)	27249	2.00000	1.9633	
84 Hexachlorobutadiene	225	19.637	19.653	(1.157)	14146	2.00000	2.2926	
85 Naphthalene	128	19.988	20.010	(1.178)	56875	2.00000	1.7418	
86 1,2,3-Trichlorobenzene	180	20.382	20.403	(1.201)	27748	2.00000	2.0251	

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Gomsserver\JD\chem\MSV0411.i\120906.b\KL907.D

Date : 09-DEC-2006 18:13

Client ID: DYN6 P&T

Sample Info: ICAL, S4931, 0.002/500,

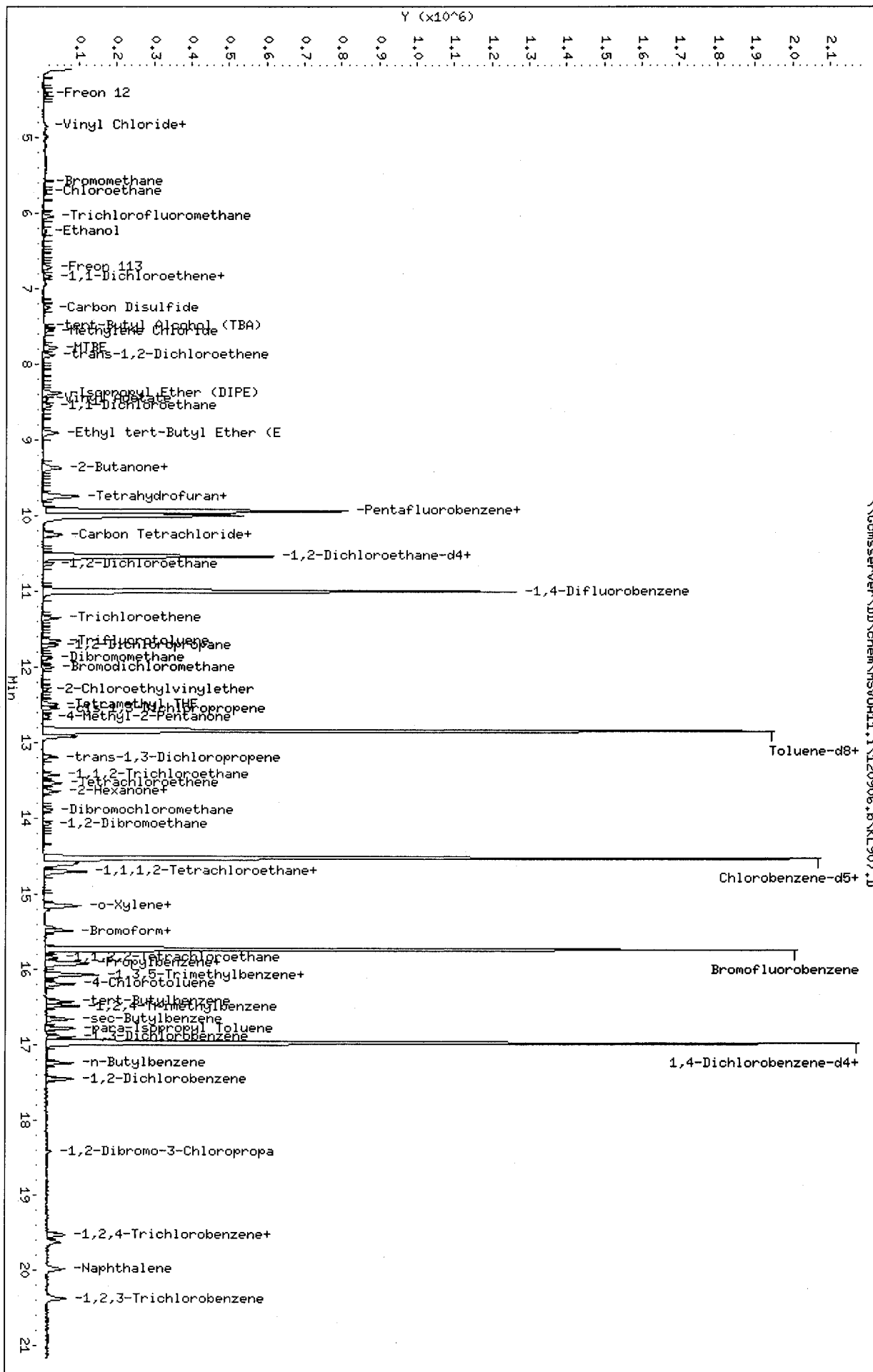
Purge Volume: 5.0

Column phase: RTX Volatiles

Instrument: MSV0411.i

Operator: VOC

Column diameter: 0.32



Data File: \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL908.D
 Report Date: 11-Dec-2006 13:30

Laboratory Name

Data file : \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL908.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 09-DEC-2006 18:41 MS Autotune Date: 29-JUL-2005 08:48
 Operator : VOC Inst ID: MSVOA11.i
 Smp Info : ICAL,S4931,0.005/500,
 Misc Info : S5064,0.005/500,S4172,0.0025/500,5PPB
 Comment :
 Method : \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\8260GX11.m
 Meth Date : 11-Dec-2006 13:30 target Quant Type: ISTD
 Cal Date : 09-DEC-2006 18:41 Cal File: KL908.D
 Als bottle: 23 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA_WK01

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	AMOUNTS					
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
MASS							
1 Freon 12	85	4.427	4.417 (0.446)		51763	5.00000	5.8747
2 Chloromethane	50	4.836	4.800 (0.487)		55790	5.00000	5.7719 (M)
3 Vinyl Chloride	62	4.988	4.973 (0.502)		50911	5.00000	5.5739 (M)
4 Bromomethane	94	5.575	5.560 (0.561)		26833	5.00000	4.9808 (M)
5 Chloroethane	64	5.706	5.702 (0.575)		31483	5.00000	5.3621 (M)
6 Trichlorofluoromethane	101	6.042	6.027 (0.608)		76747	5.00000	5.7229
7 Ethanol	45	6.231	6.226 (0.627)		43928	500.000	474.4363
8 Freon 113	101	6.708	6.708 (0.675)		31848	5.00000	4.5161
9 1,1-Dichloroethene	96	6.828	6.824 (0.688)		31583	5.00000	4.9928
10 Acetone	43	6.917	6.908 (0.696)		18989	5.00000	5.6827
11 Isopropanol	45	6.944	6.939 (0.699)		24071	50.0000	49.9983
12 Carbon Disulfide	76	7.253	7.248 (0.730)		144618	5.00000	5.0530 (M)
13 tert-Butyl Alcohol (TBA)	59	7.499	7.490 (0.755)		38498	50.0000	48.3165
14 Methylene Chloride	84	7.547	7.552 (0.760)		45849	5.00000	5.1499 (M)
15 MTBE	73	7.777	7.783 (0.783)		143301	5.00000	5.0530
16 trans-1,2-Dichloroethene	96	7.877	7.878 (0.793)		44573	5.00000	5.2416
17 Isopropyl Ether (DIPE)	45	8.380	8.385 (0.844)		153501	5.00000	5.0116
18 Vinyl Acetate	43	8.464	8.470 (0.852)		85852	5.00000	6.4624
19 1,1-Dichloroethane	63	8.553	8.548 (0.861)		74103	5.00000	5.0801
20 Ethyl tert-Butyl Ether (ETBE)	59	8.905	8.910 (0.897)		127372	5.00000	5.1670
21 2-Butanone	43	9.329	9.335 (0.939)		18985	5.00000	5.1765
22 2,2-Dichloropropane	77	9.355	9.361 (0.942)		57801	5.00000	5.0334

Compounds	QUANT SIG						AMOUNTS	
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	
23 cis-1,2-Dichloroethene	96	9.371	9.377	(0.944)	48732	5.00000	5.3218	
24 Tetrahydrofuran	42	9.728	9.734	(0.979)	125856	50.0000	51.0055	
25 Bromochloromethane	128	9.738	9.744	(0.980)	23836	5.00000	5.5503 (M)	
26 Chloroform	83	9.749	9.760	(0.982)	81899	5.00000	5.4217	
* 27 Pentafluorobenzene	168	9.932	9.949	(1.000)	857862	50.0000		
28 Dibromofluoromethane	113	9.995	10.006	(1.006)	396553	50.0000	49.6036	
29 1,1,1-Trichloroethane	97	10.053	10.053	(1.012)	65394	5.00000	4.9359	
30 Carbon Tetrachloride	117	10.231	10.247	(0.930)	42403	5.00000	4.7446	
31 1,1-Dichloropropene	75	10.252	10.258	(0.932)	49339	5.00000	4.7831	
32 1,2-Dichloroethane-d4	65	10.530	10.541	(0.958)	513108	50.0000	49.8462	
33 Methyl tert-Amyl Ether (TAME)	73	10.535	10.546	(0.958)	139369	5.00000	5.0620	
34 Benzene	78	10.551	10.562	(0.959)	187852	5.00000	5.1999	
35 1,2-Dichloroethane	62	10.635	10.646	(0.967)	67625	5.00000	5.1920	
* 36 1,4-Difluorobenzene	114	10.996	11.008	(1.000)	1378434	50.0000		
37 Trichloroethene	95	11.348	11.364	(1.032)	43062	5.00000	4.8311	
38 Trifluorotoluene	146	11.652	11.663	(1.060)	73338	5.00000	4.8939	
39 1,2-Dichloropropane	63	11.715	11.726	(1.065)	42802	5.00000	5.0463	
40 Dibromomethane	93	11.877	11.888	(1.080)	26425	5.00000	4.9354	
41 Bromodichloromethane	83	12.003	12.014	(1.092)	57350	5.00000	5.0040	
42 2-Chloroethylvinylether	63	12.297	12.308	(1.118)	20459	5.00000	4.7036	
43 Tetramethyl THF	43	12.485	12.497	(1.135)	56767	5.00000	4.8974	
44 cis-1,3-Dichloropropene	75	12.543	12.554	(1.141)	69722	5.00000	4.9428	
45 4-Methyl-2-Pentanone	43	12.648	12.664	(1.150)	36409	5.00000	5.0048	
46 Toluene-d8	98	12.832	12.843	(1.167)	1622809	50.0000	49.2026	
47 Toluene	92	12.915	12.927	(1.174)	113425	5.00000	4.9157	
48 trans-1,3-Dichloropropene	75	13.193	13.204	(1.200)	66761	5.00000	5.0143	
49 1,1,2-Trichloroethane	85	13.429	13.435	(1.221)	21439	5.00000	5.1644	
50 Tetrachloroethene	166	13.534	13.551	(0.932)	40865	5.00000	4.5472	
51 2-Hexanone	43	13.608	13.624	(0.938)	23379	5.00000	4.7153	
52 1,3-Dichloropropane	76	13.639	13.655	(0.940)	74543	5.00000	5.3142	
53 Dibromochloromethane	129	13.885	13.897	(0.957)	42628	5.00000	4.8079	
54 1,2-Dibromoethane	107	14.074	14.085	(1.280)	40956	5.00000	4.8817	
* 55 Chlorobenzene-d5	117	14.515	14.526	(1.000)	1441486	50.0000		
56 Chlorobenzene	112	14.551	14.562	(1.003)	129736	5.00000	4.9814	
57 Ethylbenzene	91	14.588	14.599	(1.005)	198124	5.00000	4.8451	
58 1,1,1,2-Tetrachloroethane	131	14.614	14.625	(1.007)	46038	5.00000	4.9902	
59 m,p-Xylenes	106	14.703	14.714	(1.013)	132186	10.0000	8.4279	
60 o-Xylene	106	15.144	15.155	(1.043)	61201	5.00000	4.2486	
61 Styrene	104	15.154	15.171	(1.044)	117244	5.00000	4.7406	
62 Bromoform	173	15.437	15.448	(1.064)	34957	5.00000	5.0330	
63 Isopropylbenzene	105	15.479	15.490	(0.912)	164178	5.00000	4.6845	
65 Bromofluorobenzene	95	15.726	15.737	(0.927)	819500	50.0000	50.7330	
66 1,1,2,2-Tetrachloroethane	83	15.846	15.857	(0.934)	48625	5.00000	5.3487	
67 Propylbenzene	91	15.904	15.920	(0.937)	183629	5.00000	4.7193	
68 Bromobenzene	156	15.925	15.936	(0.939)	58704	5.00000	5.1430	
69 1,2,3-Trichloropropane	75	15.941	15.947	(0.939)	55141	5.00000	5.3483	
70 1,3,5-Trimethylbenzene	105	16.066	16.082	(0.947)	140311	5.00000	4.9301	
71 2-Chlorotoluene	91	16.082	16.093	(0.948)	157039	5.00000	5.0327	
72 4-Chlorotoluene	91	16.198	16.209	(0.955)	137778	5.00000	4.8126	
73 tert-Butylbenzene	119	16.428	16.445	(0.968)	113859	5.00000	4.5642	
74 1,2,4-Trimethylbenzene	105	16.481	16.501	(0.971)	152263	5.00000	5.0254	
75 sec-Butylbenzene	105	16.659	16.675	(0.982)	153139	5.00000	4.5316	
76 para-Isopropyl Toluene	119	16.785	16.800	(0.989)	132173	5.00000	4.5125	
77 1,3-Dichlorobenzene	146	16.900	16.911	(0.996)	101498	5.00000	4.9618	

Data File: \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL908.D
 Report Date: 11-Dec-2006 13:30

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	16.968	16.985	(1.000)	760088		50.0000	
79 1,4-Dichlorobenzene	146	16.995	17.011	(1.002)	102431		5.00000	4.8538
80 n-Butylbenzene	91	17.246	17.263	(1.016)	120972		5.00000	4.6074
81 1,2-Dichlorobenzene	146	17.456	17.466	(1.029)	93653		5.00000	4.8420
82 1,2-Dibromo-3-Chloropropane	75	18.415	18.437	(1.085)	9919		5.00000	5.1903
83 1,2,4-Trichlorobenzene	180	19.532	19.554	(1.151)	68505		5.00000	4.8693
84 Hexachlorobutadiene	225	19.627	19.653	(1.157)	28187		5.00000	4.5068
85 Naphthalene	128	19.988	20.010	(1.178)	157419		5.00000	4.7561
86 1,2,3-Trichlorobenzene	180	20.376	20.403	(1.201)	63129		5.00000	4.5453

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Gomsserver\JD\chem\MSV0011.i\120906.b\KL908.D

Date : 09-DEC-2006 18:41

Client ID: DYNA P&T

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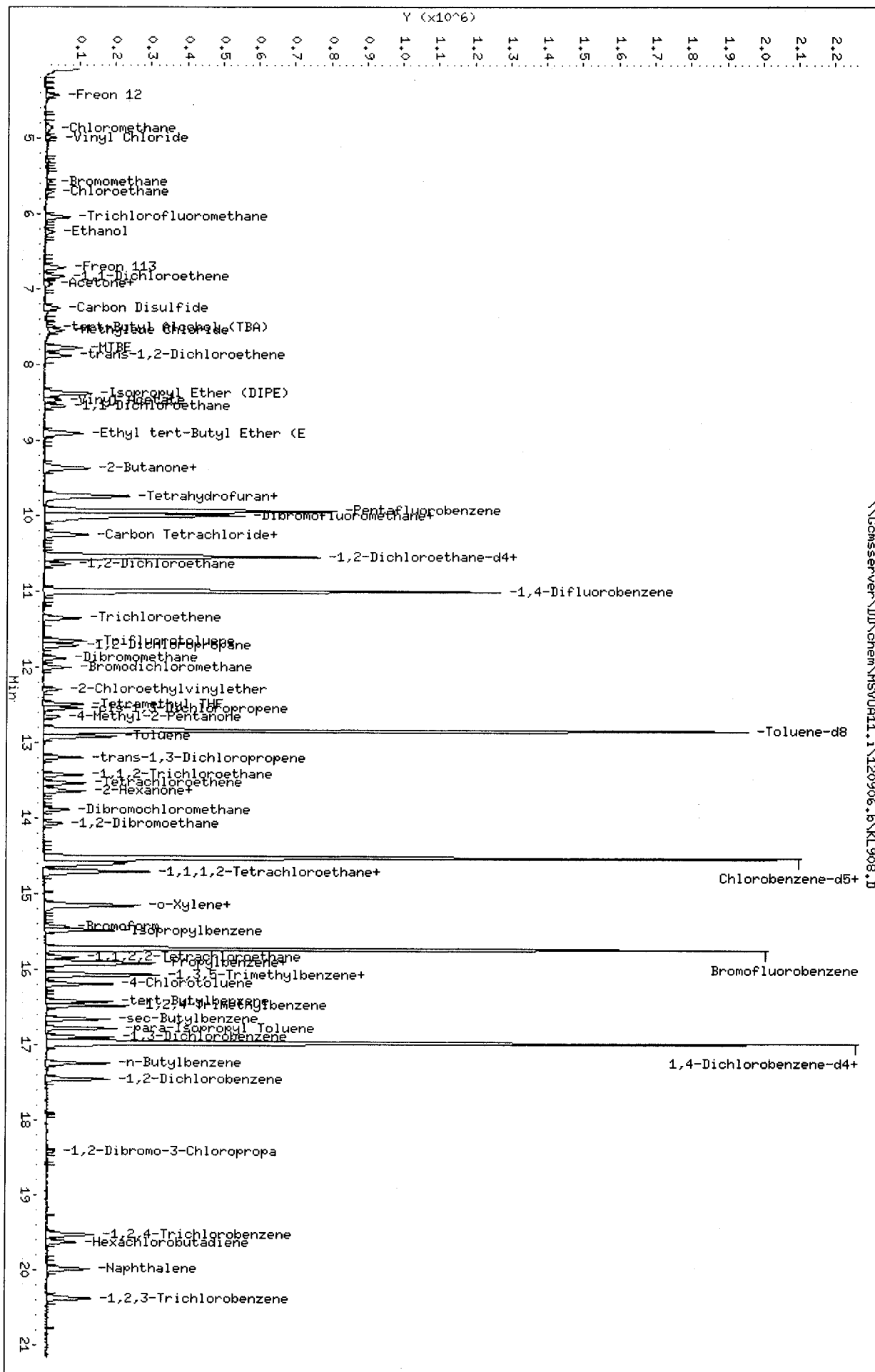
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Instrument: MSV0011.i

Operator: VOC

Column diameter: 0.32



Data File: \\Gcmsserver\DD\chem\MSVOA11.i\120906.b\KL909.D
Report Date: 11-Dec-2006 13:29

Laboratory Name

Data file : \\Gcmsserver\DD\chem\MSVOA11.i\120906.b\KL909.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 09-DEC-2006 19:09 MS Autotune Date: 29-JUL-2005 08:48
Operator : VOC Inst ID: MSVOA11.i
Smp Info : ICAL,S4931,0.002/100,
Misc Info : S5064,0.002/100,S4172,0.001/100,10PPB
Comment :
Method : \\Gcmsserver\DD\chem\MSVOA11.i\120906.b\8260GX11.m
Meth Date : 11-Dec-2006 13:29 target Quant Type: ISTD
Cal Date : 09-DEC-2006 19:09 Cal File: KL909.D
Als bottle: 24 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.10
Processing Host: PC_MSVOA_WK01

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	AMOUNTS					
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
1 Freon 12	85	4.427	4.417	(0.446)	79114	10.0000	9.0012 (M)
2 Chloromethane	50	4.852	4.800	(0.489)	92426	10.0000	9.6249
3 Vinyl Chloride	62	4.988	4.973	(0.502)	90901	10.0000	9.9771 (M)
4 Bromomethane	94	5.570	5.560	(0.561)	51042	10.0000	9.4981 (M)
5 Chloroethane	64	5.706	5.702	(0.575)	56255	10.0000	9.6051 (M)
6 Trichlorofluoromethane	101	6.037	6.027	(0.608)	121637	10.0000	9.0929
7 Ethanol	45	6.236	6.226	(0.628)	97042	1000.00	1050.6981 (M)
8 Freon 113	101	6.708	6.708	(0.675)	80876	10.0000	11.4971
9 1,1-Dichloroethene	96	6.823	6.824	(0.687)	65494	10.0000	10.3795
10 Acetone	43	6.907	6.908	(0.695)	36090	10.0000	10.8273
11 Isopropanol	45	6.944	6.939	(0.699)	54348	100.000	113.1687
12 Carbon Disulfide	76	7.248	7.248	(0.730)	303350	10.0000	10.6255 (M)
13 tert-Butyl Alcohol (TBA)	59	7.494	7.490	(0.755)	83207	100.000	104.6885
14 Methylene Chloride	84	7.552	7.552	(0.760)	90880	10.0000	10.2335 (M)
15 MTBE	73	7.777	7.783	(0.783)	296198	10.0000	10.4705
16 trans-1,2-Dichloroethene	96	7.882	7.878	(0.794)	89581	10.0000	10.5606
17 Isopropyl Ether (DIPE)	45	8.380	8.385	(0.844)	311934	10.0000	10.2096
18 Vinyl Acetate	43	8.459	8.470	(0.852)	143893	10.0000	9.9166 (M)
19 1,1-Dichloroethane	63	8.543	8.548	(0.860)	153419	10.0000	10.5439
20 Ethyl tert-Butyl Ether (ETBE)	59	8.904	8.910	(0.897)	253139	10.0000	10.2945
21 2-Butanone	43	9.329	9.335	(0.939)	36843	10.0000	10.0708
22 2,2-Dichloropropane	77	9.355	9.361	(0.942)	120178	10.0000	10.4914

Compounds	QUANT SIG						AMOUNTS	
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====	
23 cis-1,2-Dichloroethene	96	9.376	9.377	(0.944)	93025	10.0000	10.1842	
24 Tetrahydrofuran	42	9.733	9.734	(0.980)	254953	100.000	103.5822	
25 Bromochloromethane	128	9.733	9.744	(0.980)	43156	10.0000	10.0741	
26 Chloroform	83	9.754	9.760	(0.982)	157214	10.0000	10.4336	
* 27 Pentafluorobenzene	168	9.932	9.949	(1.000)	855728	50.0000		
28 Dibromofluoromethane	113	9.995	10.006	(1.006)	393013	50.0000	49.2833	
29 1,1,1-Trichloroethane	97	10.042	10.053	(1.011)	144436	10.0000	10.9292	
30 Carbon Tetrachloride	117	10.236	10.247	(0.931)	93669	10.0000	10.5766	
31 1,1-Dichloropropene	75	10.252	10.258	(0.932)	116755	10.0000	11.4220	
32 1,2-Dichloroethane-d4	65	10.530	10.541	(0.958)	514679	50.0000	50.4552	
33 Methyl tert-Amyl Ether (TAME)	73	10.530	10.546	(0.958)	278541	10.0000	10.2092	
34 Benzene	78	10.551	10.562	(0.959)	378491	10.0000	10.5726	
35 1,2-Dichloroethane	62	10.640	10.646	(0.968)	130131	10.0000	10.0822	
* 36 1,4-Difluorobenzene	114	10.996	11.008	(1.000)	1365963	50.0000		
37 Trichloroethene	95	11.353	11.364	(1.032)	91318	10.0000	10.3385	
38 Trifluorotoluene	146	11.652	11.663	(1.060)	164956	10.0000	11.1082	
39 1,2-Dichloropropane	63	11.709	11.726	(1.065)	84081	10.0000	10.0036	
40 Dibromomethane	93	11.883	11.888	(1.081)	54326	10.0000	10.2391	
41 Bromodichloromethane	83	12.008	12.014	(1.092)	119303	10.0000	10.5048	
42 2-Chloroethylvinylether	63	12.297	12.308	(1.118)	45824	10.0000	9.9380	
43 Tetramethyl THF	43	12.485	12.497	(1.135)	118960	10.0000	10.3567	
44 cis-1,3-Dichloropropene	75	12.543	12.554	(1.141)	145288	10.0000	10.3940	
45 4-Methyl-2-Pentanone	43	12.653	12.664	(1.151)	76468	10.0000	10.6074	
46 Toluene-d8	98	12.831	12.843	(1.167)	1637156	50.0000	50.0908	
47 Toluene	92	12.915	12.927	(1.174)	244210	10.0000	10.6804	
48 trans-1,3-Dichloropropene	75	13.193	13.204	(1.200)	137087	10.0000	10.3903	
49 1,1,2-Trichloroethane	85	13.429	13.435	(1.221)	45125	10.0000	10.9694	
50 Tetrachloroethene	166	13.539	13.551	(0.933)	100071	10.0000	11.0468	
51 2-Hexanone	43	13.613	13.624	(0.938)	49311	10.0000	9.8664	
52 1,3-Dichloropropane	76	13.644	13.655	(0.940)	146915	10.0000	10.3904	
53 Dibromochloromethane	129	13.885	13.897	(0.957)	93939	10.0000	10.5109	
54 1,2-Dibromoethane	107	14.074	14.085	(1.280)	84717	10.0000	10.1900	
* 55 Chlorobenzene-d5	117	14.515	14.526	(1.000)	1453044	50.0000		
56 Chlorobenzene	112	14.546	14.562	(1.002)	279711	10.0000	10.6546	
57 Ethylbenzene	91	14.583	14.599	(1.005)	459610	10.0000	11.1503	
58 1,1,1,2-Tetrachloroethane	131	14.619	14.625	(1.007)	98060	10.0000	10.5446	
59 m,p-Xylenes	106	14.703	14.714	(1.013)	330343	20.0000	20.2145	
60 o-Xylene	106	15.138	15.155	(1.043)	156774	10.0000	10.0353	
61 Styrene	104	15.159	15.171	(1.044)	267678	10.0000	10.7371	
62 Bromoform	173	15.437	15.448	(1.064)	72756	10.0000	10.3920	
63 Isopropylbenzene	105	15.484	15.490	(0.913)	417247	10.0000	11.4465	
65 Bromofluorobenzene	95	15.726	15.737	(0.927)	844314	50.0000	50.2544	
66 1,1,2,2-Tetrachloroethane	83	15.841	15.857	(0.934)	100116	10.0000	10.5882	
67 Propylbenzene	91	15.904	15.920	(0.937)	451126	10.0000	11.1472	
68 Bromobenzene	156	15.925	15.936	(0.939)	127504	10.0000	10.7399	
69 1,2,3-Trichloropropane	75	15.935	15.947	(0.939)	108342	10.0000	10.1034	
70 1,3,5-Trimethylbenzene	105	16.066	16.082	(0.947)	334101	10.0000	11.2868	
71 2-Chlorotoluene	91	16.082	16.093	(0.948)	354873	10.0000	10.9346	
72 4-Chlorotoluene	91	16.192	16.209	(0.954)	316083	10.0000	10.6153	
73 tert-Butylbenzene	119	16.428	16.445	(0.968)	300039	10.0000	11.5641	
74 1,2,4-Trimethylbenzene	105	16.486	16.501	(0.972)	352855	10.0000	11.1970	
75 sec-Butylbenzene	105	16.659	16.675	(0.982)	404263	10.0000	11.5016	
76 para-Isopropyl Toluene	119	16.785	16.800	(0.989)	342180	10.0000	11.2320	
77 1,3-Dichlorobenzene	146	16.900	16.911	(0.996)	229260	10.0000	10.7756	

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
*****	****	----	-----	-----	-----		-----	-----
* 78 1,4-Dichlorobenzene-d4	152	16.968	16.985	(1.000)	790560		50.0000	
79 1,4-Dichlorobenzene	146	17.000	17.011	(1.002)	234184		10.0000	10.6694
80 n-Butylbenzene	91	17.246	17.263	(1.016)	319140		10.0000	11.6864
81 1,2-Dichlorobenzene	146	17.451	17.466	(1.028)	213144		10.0000	10.5952
82 1,2-Dibromo-3-Chloropropane	75	18.421	18.437	(1.086)	18423		10.0000	9.2686
83 1,2,4-Trichlorobenzene	180	19.532	19.554	(1.151)	155602		10.0000	10.6339
84 Hexachlorobutadiene	225	19.632	19.653	(1.157)	75770		10.0000	11.6479
85 Naphthalene	128	19.983	20.010	(1.178)	363493		10.0000	10.5591
86 1,2,3-Trichlorobenzene	180	20.381	20.403	(1.201)	149682		10.0000	10.3618

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Gomsserver\DD\chem\MSV0011.i\120906.b\KL909.D

Date : 09-DEC-2006 19:09

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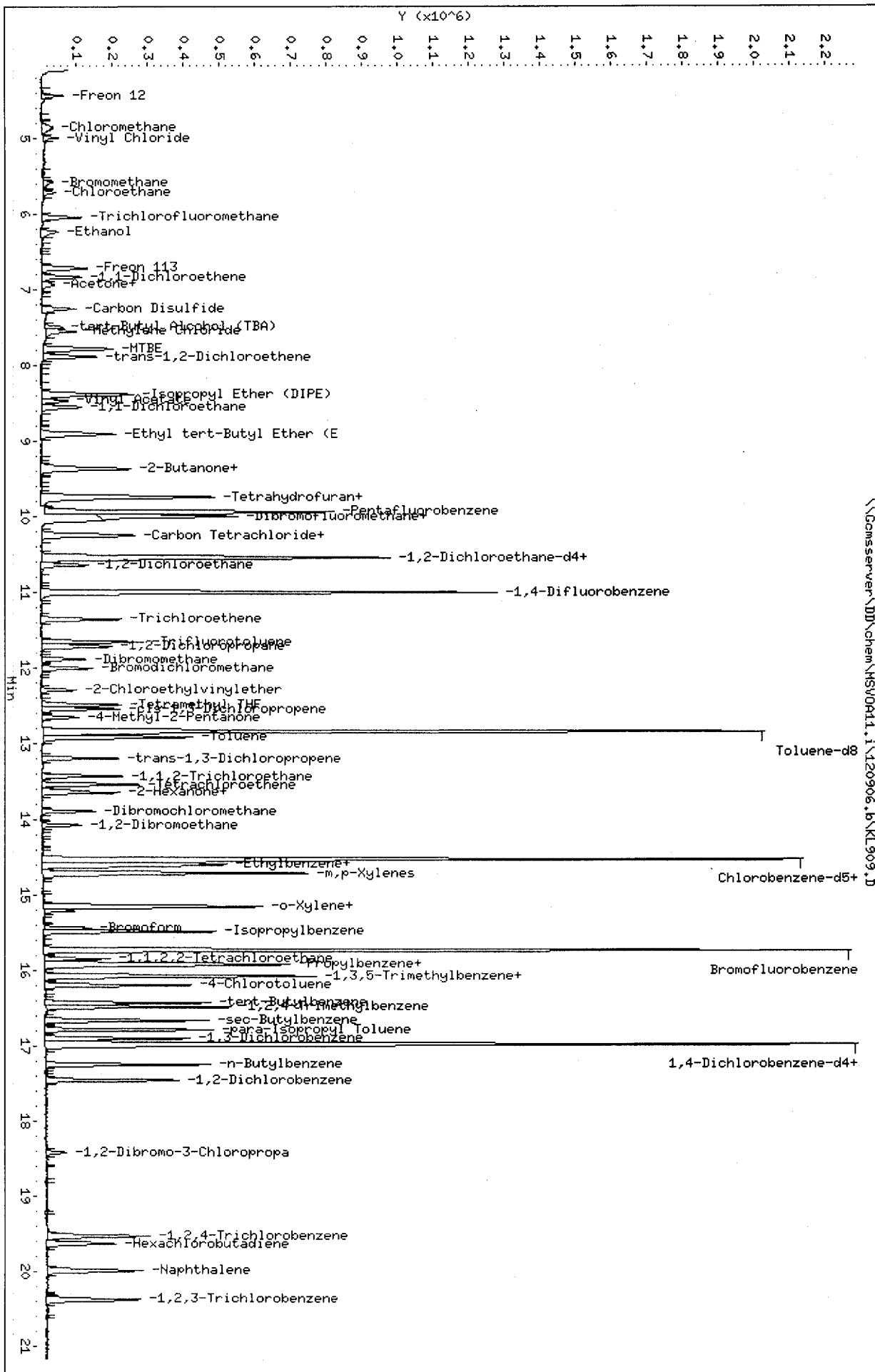
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Column phase: RTX Volatiles

Instrument: MSV0011.i

Operator: VDC

Column diameter: 0.32



Data File: \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL910.D
 Report Date: 11-Dec-2006 11:35

Laboratory Name

Data file : \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL910.D
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 Inj Date : 09-DEC-2006 19:37 MS Autotune Date: 29-JUL-2005 08:48
 Operator : VOC Inst ID: MSVOA11.i
 Smp Info : ICAL,S4931,0.004/100,
 Misc Info : S5064,0.004/100,S4172,0.002/100,20PPB
 Comment :
 Method : \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\8260GX11.m
 Meth Date : 11-Dec-2006 11:35 target Quant Type: ISTD
 Cal Date : 09-DEC-2006 19:37 Cal File: KL910.D
 Als bottle: 25 Calibration Sample, Level: 6
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA_WK01

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	AMOUNTS					
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
1 Freon 12	85	4.432	4.417	(0.446)	184917	20.0000	20.9036
2 Chloromethane	50	4.852	4.800	(0.488)	188030	20.0000	19.5706 (M)
3 Vinyl Chloride	62	4.983	4.973	(0.501)	181154	20.0000	19.8242 (M)
4 Bromomethane	94	5.570	5.560	(0.561)	106802	20.0000	19.7882 (M)
5 Chloroethane	64	5.706	5.702	(0.574)	118505	20.0000	20.1036 (M)
6 Trichlorofluoromethane	101	6.037	6.027	(0.607)	268531	20.0000	19.9447
7 Ethanol	45	6.231	6.226	(0.627)	198394	2000.00	2134.2297 (M)
8 Freon 113	101	6.713	6.708	(0.676)	164931	20.0000	23.2951
9 1,1-Dichloroethene	96	6.828	6.824	(0.687)	124092	20.0000	19.5394
10 Acetone	43	6.907	6.908	(0.695)	72829	20.0000	21.7087
11 Isopropanol	45	6.939	6.939	(0.698)	99971	200.000	206.8290
12 Carbon Disulfide	76	7.248	7.248	(0.729)	591048	20.0000	20.6492 (M)
13 tert-Butyl Alcohol (TBA)	59	7.494	7.490	(0.754)	168285	200.000	210.3678
14 Methylene Chloride	84	7.552	7.552	(0.760)	173955	20.0000	19.7391 (M)
15 MTBE	73	7.777	7.783	(0.783)	615011	20.0000	21.6005
16 trans-1,2-Dichloroethene	96	7.877	7.878	(0.793)	174026	20.0000	20.3836
17 Isopropyl Ether (DIPE)	45	8.380	8.385	(0.843)	639260	20.0000	20.7883
18 Vinyl Acetate	43	8.464	8.470	(0.852)	235619	20.0000	15.2599 (M)
19 1,1-Dichloroethane	63	8.543	8.548	(0.860)	301579	20.0000	20.5930
20 Ethyl tert-Butyl Ether (ETBE)	59	8.899	8.910	(0.896)	520146	20.0000	21.0168
21 2-Butanone	43	9.329	9.335	(0.939)	75814	20.0000	20.5898
22 2,2-Dichloropropane	77	9.350	9.361	(0.941)	240607	20.0000	20.8695

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
23 cis-1,2-Dichloroethene	96	9.371	9.377	(0.943)	185817	20.0000	20.2119
24 Tetrahydrofuran	42	9.733	9.734	(0.979)	517635	200.000	208.9504
25 Bromochloromethane	128	9.733	9.744	(0.979)	86602	20.0000	20.0857
26 Chloroform	83	9.754	9.760	(0.982)	309954	20.0000	20.4379
* 27 Pentafluorobenzene	168	9.938	9.949	(1.000)	861274	50.0000	
28 Dibromofluoromethane	113	9.995	10.006	(1.006)	406069	50.0000	50.5927
29 1,1,1-Trichloroethane	97	10.048	10.053	(1.011)	272796	20.0000	20.5091
30 Carbon Tetrachloride	117	10.236	10.247	(0.931)	187831	20.0000	21.0549
31 1,1-Dichloropropene	75	10.252	10.258	(0.932)	218130	20.0000	21.1845
32 1,2-Dichloroethane-d4	65	10.530	10.541	(0.958)	521442	50.0000	50.7472
33 Methyl tert-Amyl Ether (TAME)	73	10.530	10.546	(0.958)	572732	20.0000	20.8396
34 Benzene	78	10.551	10.562	(0.959)	746400	20.0000	20.6983
35 1,2-Dichloroethane	62	10.635	10.646	(0.967)	255659	20.0000	19.6640
* 36 1,4-Difluorobenzene	114	10.997	11.008	(1.000)	1375950	50.0000	
37 Trichloroethene	95	11.358	11.364	(1.033)	194822	20.0000	21.8966
38 Trifluorotoluene	146	11.652	11.663	(1.060)	332044	20.0000	22.1978
39 1,2-Dichloropropane	63	11.715	11.726	(1.065)	169112	20.0000	19.9742
40 Dibromomethane	93	11.883	11.888	(1.081)	105940	20.0000	19.8221
41 Bromodichloromethane	83	12.003	12.014	(1.092)	232059	20.0000	20.2848
42 2-Chloroethylvinylether	63	12.297	12.308	(1.118)	96971	20.0000	19.2778
43 Tetramethyl THF	43	12.486	12.497	(1.135)	240721	20.0000	20.8053
44 cis-1,3-Dichloropropene	75	12.543	12.554	(1.141)	286694	20.0000	20.3614
45 4-Methyl-2-Pentanone	43	12.653	12.664	(1.151)	153685	20.0000	21.1640
46 Toluene-d8	98	12.832	12.843	(1.167)	1647785	50.0000	50.0500
47 Toluene	92	12.916	12.927	(1.174)	475868	20.0000	20.6609
48 trans-1,3-Dichloropropene	75	13.194	13.204	(1.200)	272603	20.0000	20.5117
49 1,1,2-Trichloroethane	85	13.424	13.435	(1.221)	90966	20.0000	21.9525
50 Tetrachloroethene	166	13.540	13.551	(0.933)	197759	20.0000	21.7670
51 2-Hexanone	43	13.608	13.624	(0.938)	109780	20.0000	21.9015
52 1,3-Dichloropropane	76	13.639	13.655	(0.940)	296649	20.0000	20.9190
53 Dibromochloromethane	129	13.886	13.897	(0.957)	186037	20.0000	20.7552
54 1,2-Dibromoethane	107	14.069	14.085	(1.279)	174204	20.0000	20.8017
* 55 Chlorobenzene-d5	117	14.515	14.526	(1.000)	1457288	50.0000	
56 Chlorobenzene	112	14.546	14.562	(1.002)	527246	20.0000	20.0252
57 Ethylbenzene	91	14.583	14.599	(1.005)	894171	20.0000	21.6298
58 1,1,1,2-Tetrachloroethane	131	14.614	14.625	(1.007)	197505	20.0000	21.1763
59 m,p-Xylenes	106	14.704	14.714	(1.013)	700336	40.0000	42.0818
60 o-Xylene	106	15.139	15.155	(1.043)	327094	20.0000	20.3041
61 Styrene	104	15.160	15.171	(1.044)	535227	20.0000	21.4066
62 Bromoform	173	15.438	15.448	(1.064)	142415	20.0000	20.2824
63 Isopropylbenzene	105	15.479	15.490	(0.912)	833178	20.0000	22.7980
65 Bromofluorobenzene	95	15.726	15.737	(0.927)	845021	50.0000	50.1669
66 1,1,2,2-Tetrachloroethane	83	15.846	15.857	(0.934)	189454	20.0000	19.9849
67 Propylbenzene	91	15.904	15.920	(0.937)	929429	20.0000	22.9068
68 Bromobenzene	156	15.925	15.936	(0.939)	248063	20.0000	20.8411
69 1,2,3-Trichloropropane	75	15.936	15.947	(0.939)	222727	20.0000	20.7168
70 1,3,5-Trimethylbenzene	105	16.061	16.082	(0.947)	650614	20.0000	21.9228
71 2-Chlorotoluene	91	16.082	16.093	(0.948)	711792	20.0000	21.8757
72 4-Chlorotoluene	91	16.198	16.209	(0.955)	646517	20.0000	21.6567
73 tert-Butylbenzene	119	16.428	16.445	(0.968)	579679	20.0000	22.2844
74 1,2,4-Trimethylbenzene	105	16.481	16.501	(0.971)	679859	20.0000	21.5181
75 sec-Butylbenzene	105	16.659	16.675	(0.982)	805569	20.0000	22.8601
76 para-Isopropyl Toluene	119	16.785	16.800	(0.989)	691054	20.0000	22.6254
77 1,3-Dichlorobenzene	146	16.900	16.911	(0.996)	454984	20.0000	21.3300

Data File: \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL910.D
Report Date: 11-Dec-2006 11:35

Compounds	QUANT SIG		RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
	MASS						CAL-AMT (ug/L)	ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152		16.968	16.985	(1.000)	792603	50.0000	
79 1,4-Dichlorobenzene	146		17.000	17.011	(1.002)	463783	20.0000	21.0755
80 n-Butylbenzene	91		17.246	17.263	(1.016)	631310	20.0000	23.0580
81 1,2-Dichlorobenzene	146		17.456	17.466	(1.029)	421714	20.0000	20.9090
82 1,2-Dibromo-3-Chloropropane	75		18.416	18.437	(1.085)	36847	20.0000	18.4899
83 1,2,4-Trichlorobenzene	180		19.532	19.554	(1.151)	317147	20.0000	21.6181
84 Hexachlorobutadiene	225		19.632	19.653	(1.157)	144870	20.0000	22.2131
85 Naphthalene	128		19.988	20.010	(1.178)	765711	20.0000	22.1858
86 1,2,3-Trichlorobenzene	180		20.382	20.403	(1.201)	300121	20.0000	20.7225

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Gomsserver\DD\chem\MSV0411.i\120906.b\KL910.D

Date : 09-DEC-2006 19:37

Client ID: DYNA P&T

Sample Info: ICAL, S4931, 0.004/100,

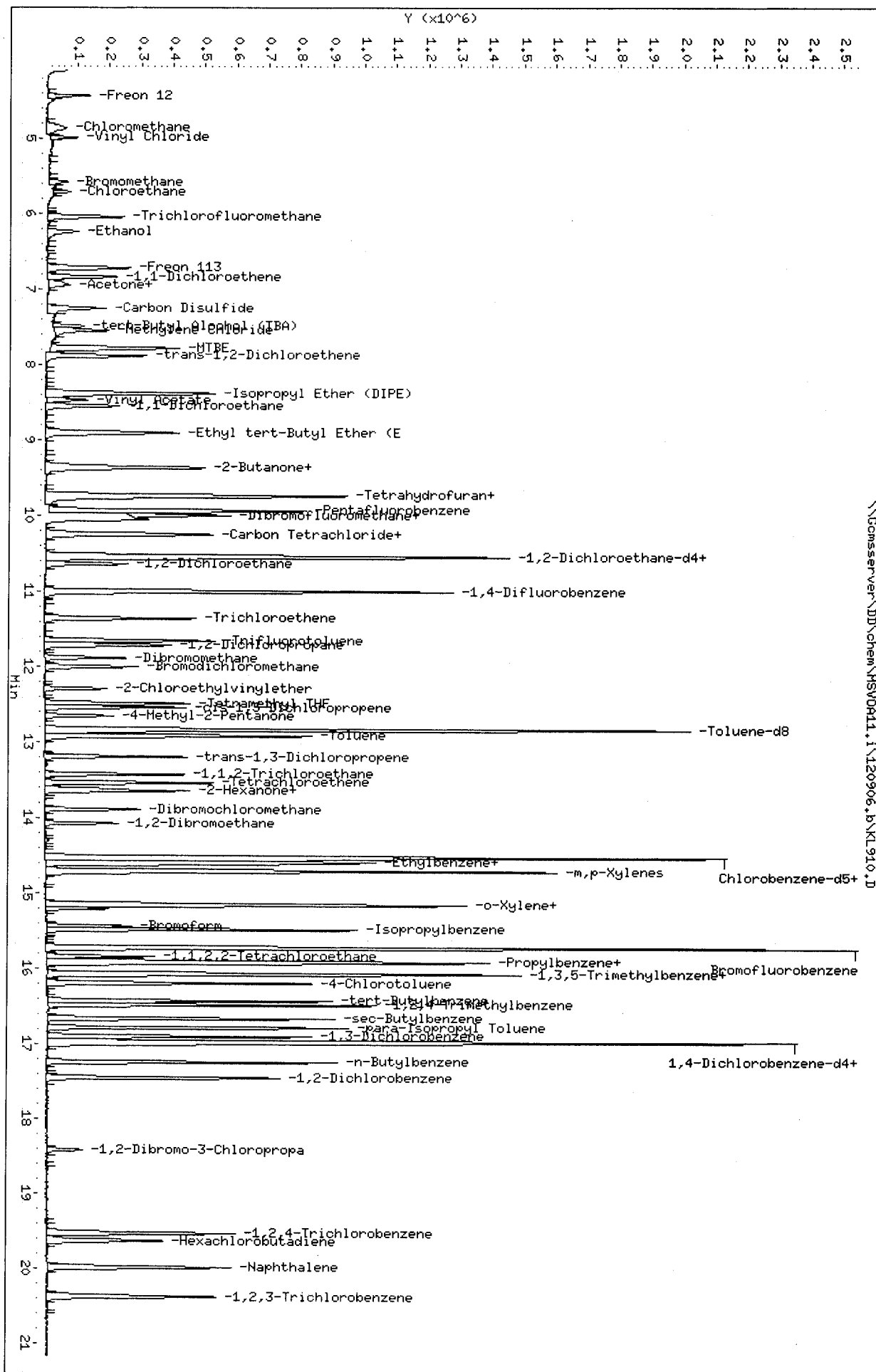
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Instrument: MSV0411.i

Operator: WOC

Column diameter: 0.32



Data File: \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL911.D
 Report Date: 11-Dec-2006 13:31

Laboratory Name

Data file : \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL911.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 09-DEC-2006 20:05 MS Autotune Date: 29-JUL-2005 08:48
 Operator : VOC Inst ID: MSVOA11.i
 Smp Info : ICAL,S4931,0.01/100,
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 Comment :
 Method : \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\8260GX11.m
 Meth Date : 11-Dec-2006 13:31 target Quant Type: ISTD
 Cal Date : 09-DEC-2006 20:05 Cal File: KL911.D
 Als bottle: 26 Calibration Sample, Level: 7
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA_WK01

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	AMOUNTS					
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
1 Freon 12	85	4.427	4.417	(0.446)	451596	50.0000	49.5862
2 Chloromethane	50	4.867	4.800	(0.490)	478752	50.0000	47.9203
3 Vinyl Chloride	62	4.988	4.973	(0.502)	469835	50.0000	49.7121 (M)
4 Bromomethane	94	5.570	5.560	(0.561)	281979	50.0000	50.6395 (M)
5 Chloroethane	64	5.706	5.702	(0.575)	300506	50.0000	49.4174 (M)
6 Trichlorofluoromethane	101	6.037	6.027	(0.608)	688866	50.0000	49.6975
7 Ethanol	45	6.236	6.226	(0.628)	455975	5000.00	4764.5321
8 Freon 113	101	6.713	6.708	(0.676)	334667	50.0000	45.9138
9 1,1-Dichloroethene	96	6.834	6.824	(0.688)	310126	50.0000	47.4323
10 Acetone	43	6.907	6.908	(0.695)	157504	50.0000	45.6024
11 Isopropanol	45	6.938	6.939	(0.699)	249873	500.000	502.1384
12 Carbon Disulfide	76	7.248	7.248	(0.730)	1461451	50.0000	49.3063 (M)
13 tert-Butyl Alcohol (TBA)	59	7.489	7.490	(0.754)	427493	500.000	519.0742
14 Methylene Chloride	84	7.552	7.552	(0.760)	425909	50.0000	46.1805 (M)
15 MTBE	73	7.777	7.783	(0.783)	1526593	50.0000	52.0801
16 trans-1,2-Dichloroethene	96	7.882	7.878	(0.794)	415794	50.0000	47.3056
17 Isopropyl Ether (DIPE)	45	8.375	8.385	(0.843)	1627214	50.0000	51.3987
18 Vinyl Acetate	43	8.464	8.470	(0.852)	978842	50.0000	52.5328 (M)
19 1,1-Dichloroethane	63	8.548	8.548	(0.861)	742219	50.0000	49.2288
20 Ethyl tert-Butyl Ether (ETBE)	59	8.905	8.910	(0.897)	1315289	50.0000	51.6213
21 2-Butanone	43	9.329	9.335	(0.939)	183044	50.0000	48.2866
22 2,2-Dichloropropane	77	9.361	9.361	(0.942)	566670	50.0000	47.7421

Data File: \\Gcmsserver\DD\chem\MSVOA11.i\120906.b\KL911.D
Report Date: 11-Dec-2006 13:31

Compounds	QUANT SIG	AMOUNTS					
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
23 cis-1,2-Dichloroethene	96	9.371	9.377	(0.944)	435777	50.0000	46.0420
24 Tetrahydrofuran	42	9.733	9.734	(0.980)	1246724	500.000	488.8286
25 Bromochloromethane	128	9.738	9.744	(0.980)	222526	50.0000	50.1312
26 Chloroform	83	9.754	9.760	(0.982)	763236	50.0000	48.8839
* 27 Pentafluorobenzene	168	9.932	9.949	(1.000)	886696	50.0000	
28 Dibromofluoromethane	113	9.995	10.006	(1.006)	411205	50.0000	49.7637
29 1,1,1-Trichloroethane	97	10.048	10.053	(1.012)	657727	50.0000	48.0310
30 Carbon Tetrachloride	117	10.242	10.247	(0.931)	415670	50.0000	45.5174
31 1,1-Dichloropropene	75	10.252	10.258	(0.932)	514787	50.0000	48.8396
32 1,2-Dichloroethane-d4	65	10.530	10.541	(0.958)	525354	50.0000	49.9460
33 Methyl tert-Amyl Ether (TAME)	73	10.535	10.546	(0.958)	1459260	50.0000	51.8698
34 Benzene	78	10.551	10.562	(0.959)	1798689	50.0000	48.7262
35 1,2-Dichloroethane	62	10.635	10.646	(0.967)	627279	50.0000	47.1318
* 36 1,4-Difluorobenzene	114	10.997	11.008	(1.000)	1408512	50.0000	
37 Trichloroethene	95	11.353	11.364	(1.032)	424333	50.0000	46.5896
38 Trifluorotoluene	146	11.652	11.663	(1.060)	729622	50.0000	47.6491
39 1,2-Dichloropropane	63	11.710	11.726	(1.065)	435978	50.0000	50.3041
40 Dibromomethane	93	11.883	11.888	(1.081)	268923	50.0000	49.1542
41 Bromodichloromethane	83	12.003	12.014	(1.092)	591986	50.0000	50.5507
42 2-Chloroethylvinylether	63	12.292	12.308	(1.118)	258762	50.0000	49.9873
43 Tetramethyl THF	43	12.486	12.497	(1.135)	619045	50.0000	52.2666
44 cis-1,3-Dichloropropene	75	12.543	12.554	(1.141)	745356	50.0000	51.7125
45 4-Methyl-2-Pentanone	43	12.648	12.664	(1.150)	381189	50.0000	51.2801
46 Toluene-d8	98	12.832	12.843	(1.167)	1683615	50.0000	49.9561
47 Toluene	92	12.916	12.927	(1.174)	1172073	50.0000	49.7118
48 trans-1,3-Dichloropropene	75	13.193	13.204	(1.200)	712411	50.0000	52.3654
49 1,1,2-Trichloroethane	85	13.429	13.435	(1.221)	216233	50.0000	50.9763
50 Tetrachloroethene	166	13.534	13.551	(0.932)	440855	50.0000	47.6292
51 2-Hexanone	43	13.608	13.624	(0.938)	259906	50.0000	50.8957
52 1,3-Dichloropropane	76	13.644	13.655	(0.940)	739560	50.0000	51.1902
53 Dibromochloromethane	129	13.886	13.897	(0.957)	480242	50.0000	52.5898
54 1,2-Dibromoethane	107	14.069	14.085	(1.279)	432342	50.0000	50.4326
* 55 Chlorobenzene-d5	117	14.515	14.526	(1.000)	1484675	50.0000	
56 Chlorobenzene	112	14.546	14.562	(1.002)	1296452	50.0000	48.3319
57 Ethylbenzene	91	14.588	14.599	(1.005)	2111945	50.0000	50.1452
58 1,1,1,2-Tetrachloroethane	131	14.614	14.625	(1.007)	474513	50.0000	49.9384
59 m,p-Xylenes	106	14.703	14.714	(1.013)	1701970	100.000	100.0707
60 o-Xylene	106	15.139	15.155	(1.043)	842427	50.0000	50.6719
61 Styrene	104	15.160	15.171	(1.044)	1365145	50.0000	53.5925
62 Bromoform	173	15.437	15.448	(1.064)	377732	50.0000	52.8035
63 Isopropylbenzene	105	15.479	15.490	(0.912)	1940192	50.0000	50.7617
65 Bromofluorobenzene	95	15.726	15.737	(0.927)	864675	50.0000	49.0834
66 1,1,2,2-Tetrachloroethane	83	15.846	15.857	(0.934)	499962	50.0000	50.4277
67 Propylbenzene	91	15.904	15.920	(0.937)	2199561	50.0000	51.8342
68 Bromobenzene	156	15.925	15.936	(0.939)	608302	50.0000	48.8664
69 1,2,3-Trichloropropane	75	15.936	15.947	(0.939)	532022	50.0000	47.3164
70 1,3,5-Trimethylbenzene	105	16.061	16.082	(0.947)	1528996	50.0000	49.2620
71 2-Chlorotoluene	91	16.082	16.093	(0.948)	1674097	50.0000	49.1951
72 4-Chlorotoluene	91	16.192	16.209	(0.954)	1564863	50.0000	50.1213
73 tert-Butylbenzene	119	16.428	16.445	(0.968)	1357520	50.0000	49.8991
74 1,2,4-Trimethylbenzene	105	16.486	16.501	(0.972)	1650210	50.0000	49.9409
75 sec-Butylbenzene	105	16.659	16.675	(0.982)	1857332	50.0000	50.3962
76 para-Isopropyl Toluene	119	16.785	16.800	(0.989)	1636982	50.0000	51.2460
77 1,3-Dichlorobenzene	146	16.900	16.911	(0.996)	1105055	50.0000	49.5348

Data File: \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL911.D
 Report Date: 11-Dec-2006 13:31

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
* 78 1,4-Dichlorobenzene-d4	152	16.968	16.985	(1.000)	828941		50.0000	
79 1,4-Dichlorobenzene	146	17.000	17.011	(1.002)	1129243		50.0000	49.0662
80 n-Butylbenzene	91	17.241	17.263	(1.016)	1406165		50.0000	49.1076
81 1,2-Dichlorobenzene	146	17.451	17.466	(1.028)	1066970		50.0000	50.5826
82 1,2-Dibromo-3-Chloropropane	75	18.421	18.437	(1.086)	105100		50.0000	50.4275
83 1,2,4-Trichlorobenzene	180	19.532	19.554	(1.151)	789364		50.0000	51.4479
84 Hexachlorobutadiene	225	19.627	19.653	(1.157)	325645		50.0000	47.7427
85 Naphthalene	128	19.988	20.010	(1.178)	2041392		50.0000	56.5547
86 1,2,3-Trichlorobenzene	180	20.382	20.403	(1.201)	776543		50.0000	51.2677

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Gomserver\DD\chem\MSV00411.i\120906.b\KL911.D

Date : 09-DEC-2006 20:05

Client ID: DYNA P&T

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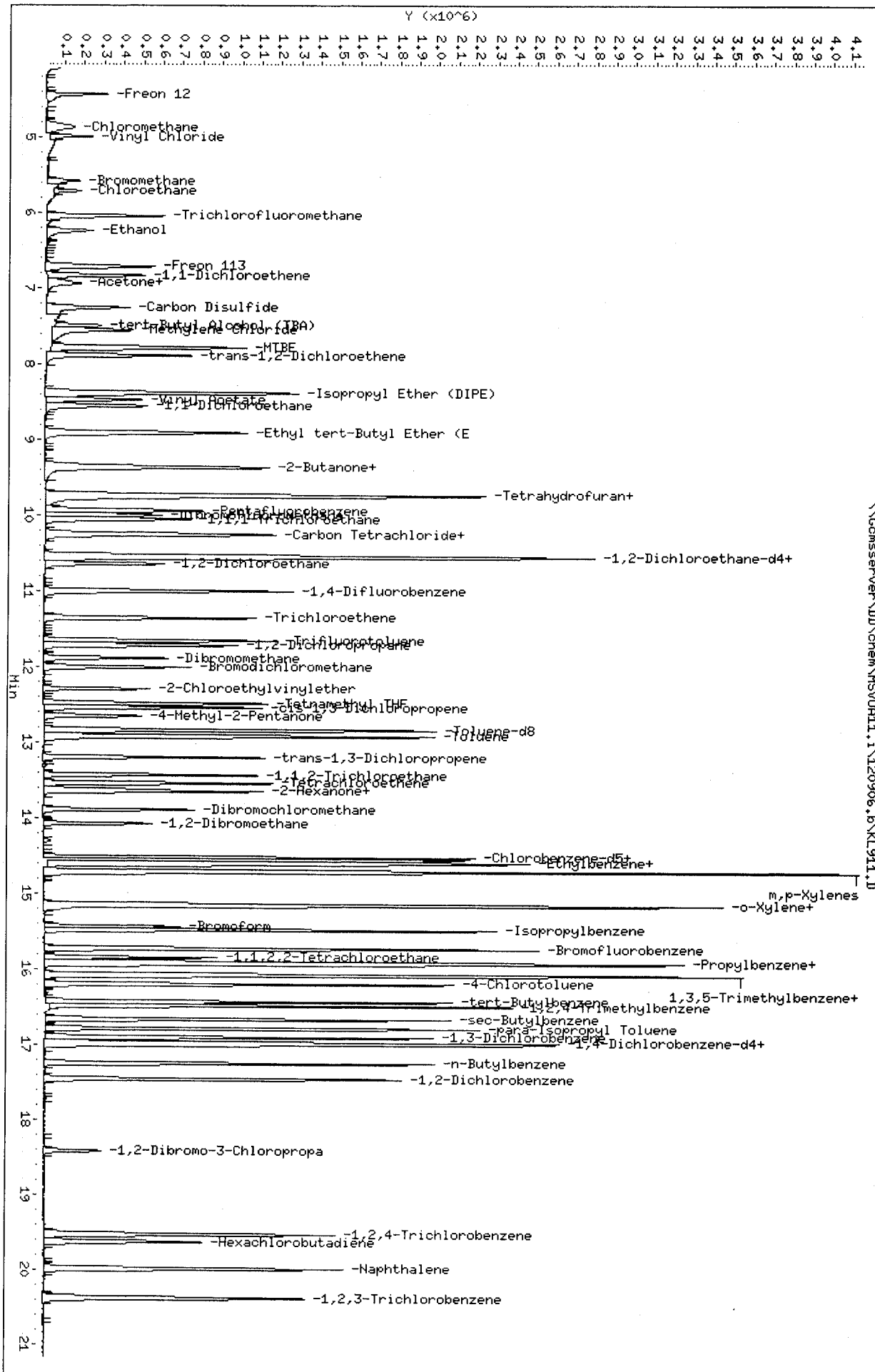
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Column phase: RTX Volatiles

Instrument: MSV00411.i

Operator: VDC

Column diameter: 0.32



Data File: \\Gcmsserver\DD\chem\MSVOA11.i\120906.b\KL912.D
 Report Date: 11-Dec-2006 13:33

Laboratory Name

Data file : \\Gcmsserver\DD\chem\MSVOA11.i\120906.b\KL912.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 09-DEC-2006 20:33 MS Autotune Date: 29-JUL-2005 08:48
 Operator : VOC Inst ID: MSVOA11.i
 Smp Info : ICAL,S4931,0.015/100,
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 Comment :
 Method : \\Gcmsserver\DD\chem\MSVOA11.i\120906.b\8260GX11.m
 Meth Date : 11-Dec-2006 13:33 target Quant Type: ISTD
 Cal Date : 09-DEC-2006 20:33 Cal File: KL912.D
 Als bottle: 27 Calibration Sample, Level: 8
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA_WK01

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG	AMOUNTS					
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
1 Freon 12	85	4.427	4.417	(0.446)	640160	75.0000	69.3017
2 Chloromethane	50	4.852	4.800	(0.488)	738832	75.0000	72.9120
3 Vinyl Chloride	62	4.983	4.973	(0.501)	741675	75.0000	77.2330 (M)
4 Bromomethane	94	5.570	5.560	(0.561)	449276	75.0000	79.4669 (M)
5 Chloroethane	64	5.712	5.702	(0.575)	471014	75.0000	76.3670 (M)
6 Trichlorofluoromethane	101	6.037	6.027	(0.607)	1038008	75.0000	73.8322
7 Ethanol	45	6.236	6.226	(0.628)	698355	7500.00	7194.4903
8 Freon 113	101	6.708	6.708	(0.675)	541908	75.0000	73.2994
9 1,1-Dichloroethene	96	6.828	6.824	(0.687)	459696	75.0000	69.3188
10 Acetone	43	6.907	6.908	(0.695)	237107	75.0000	67.6839
11 Isopropanol	45	6.939	6.939	(0.698)	382034	750.000	756.9212
12 Carbon Disulfide	76	7.248	7.248	(0.729)	2206038	75.0000	73.2329 (M)
13 tert-Butyl Alcohol (TBA)	59	7.489	7.490	(0.754)	636425	750.000	761.8900
14 Methylene Chloride	84	7.547	7.552	(0.759)	627784	75.0000	66.9645 (M)
15 MTBE	73	7.777	7.783	(0.783)	2320280	75.0000	78.0429
16 trans-1,2-Dichloroethene	96	7.877	7.878	(0.793)	629412	75.0000	70.6016
17 Isopropyl Ether (DIPE)	45	8.375	8.385	(0.843)	2487393	75.0000	77.4634
18 Vinyl Acetate	43	8.459	8.470	(0.851)	1504826	75.0000	74.0219
19 1,1-Dichloroethane	63	8.543	8.548	(0.860)	1114935	75.0000	72.9090
20 Ethyl tert-Butyl Ether (ETBE)	59	8.899	8.910	(0.896)	2022974	75.0000	78.2785
21 2-Butanone	43	9.329	9.335	(0.939)	271778	75.0000	70.6854
22 2,2-Dichloropropane	77	9.356	9.361	(0.941)	852954	75.0000	70.8503

Compounds	QUANT SIG	AMOUNTS					
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)
=====	====	====	=====	=====	=====	=====	=====
23 cis-1,2-Dichloroethene	96	9.371	9.377	(0.943)	645028	75.0000	67.1913
24 Tetrahydrofuran	42	9.728	9.734	(0.979)	1859857	750.000	718.9694
25 Bromochloromethane	128	9.733	9.744	(0.979)	333118	75.0000	73.9895
26 Chloroform	83	9.754	9.760	(0.982)	1158643	75.0000	73.1646
* 27 Pentafluorobenzene	168	9.938	9.949	(1.000)	899353	50.0000	
28 Dibromofluoromethane	113	9.995	10.006	(1.006)	415057	50.0000	49.5230
29 1,1,1-Trichloroethane	97	10.048	10.053	(1.011)	998473	75.0000	71.8881
30 Carbon Tetrachloride	117	10.242	10.247	(0.931)	677053	75.0000	72.9163
31 1,1-Dichloropropene	75	10.252	10.258	(0.932)	818587	75.0000	76.3804
32 1,2-Dichloroethane-d4	65	10.535	10.541	(0.958)	527007	50.0000	49.2762
33 Methyl tert-Amyl Ether (TAME)	73	10.535	10.546	(0.958)	2180413	75.0000	76.2242
34 Benzene	78	10.551	10.562	(0.959)	2724316	75.0000	72.5832
35 1,2-Dichloroethane	62	10.640	10.646	(0.968)	955732	75.0000	70.6256
* 36 1,4-Difluorobenzene	114	10.997	11.008	(1.000)	1432149	50.0000	
37 Trichloroethene	95	11.353	11.364	(1.032)	677226	75.0000	73.1288
38 Trifluorotoluene	146	11.652	11.663	(1.060)	1147726	75.0000	73.7169
39 1,2-Dichloropropane	63	11.715	11.726	(1.065)	645159	75.0000	73.2112
40 Dibromomethane	93	11.883	11.888	(1.081)	408911	75.0000	73.5079
41 Bromodichloromethane	83	11.998	12.014	(1.091)	903699	75.0000	75.8948
42 2-Chloroethylvinylether	63	12.292	12.308	(1.118)	414549	75.0000	76.0841
43 Tetramethyl THF	43	12.486	12.497	(1.135)	932162	75.0000	77.4045
44 cis-1,3-Dichloropropene	75	12.543	12.554	(1.141)	1101550	75.0000	75.1637
45 4-Methyl-2-Pentanone	43	12.648	12.664	(1.150)	572972	75.0000	75.8079
46 Toluene-d8	98	12.832	12.843	(1.167)	1714388	50.0000	50.0296
47 Toluene	92	12.916	12.927	(1.174)	1775148	75.0000	74.0477
48 trans-1,3-Dichloropropene	75	13.194	13.204	(1.200)	1047947	75.0000	75.7575
49 1,1,2-Trichloroethane	85	13.429	13.435	(1.221)	329037	75.0000	76.2894
50 Tetrachloroethene	166	13.540	13.551	(0.933)	687139	75.0000	71.8154
51 2-Hexanone	43	13.608	13.624	(0.938)	399564	75.0000	75.6915
52 1,3-Dichloropropane	76	13.644	13.655	(0.940)	1108854	75.0000	74.2478
53 Dibromochloromethane	129	13.886	13.897	(0.957)	722682	75.0000	76.5569
54 1,2-Dibromoethane	107	14.074	14.085	(1.280)	654334	75.0000	75.0682
* 55 Chlorobenzene-d5	117	14.515	14.526	(1.000)	1534743	50.0000	
56 Chlorobenzene	112	14.551	14.562	(1.003)	1963558	75.0000	70.8137
57 Ethylbenzene	91	14.583	14.599	(1.005)	3210179	75.0000	73.7347
58 1,1,1,2-Tetrachloroethane	131	14.614	14.625	(1.007)	711210	75.0000	72.4069
59 m,p-Xylenes	106	14.704	14.714	(1.013)	2630573	150.000	149.3963
60 o-Xylene	106	15.139	15.155	(1.043)	1284131	75.0000	74.4861
61 Styrene	104	15.160	15.171	(1.044)	2103827	75.0000	79.8971
62 Bromoform	173	15.438	15.448	(1.064)	564676	75.0000	76.3614
63 Isopropylbenzene	105	15.479	15.490	(0.912)	3009566	75.0000	76.5372
65 Bromofluorobenzene	95	15.726	15.737	(0.926)	899291	50.0000	49.6203
66 1,1,2,2-Tetrachloroethane	83	15.841	15.857	(0.933)	729112	75.0000	71.4831
67 Propylbenzene	91	15.904	15.920	(0.937)	3385701	75.0000	77.5544
68 Bromobenzene	156	15.925	15.936	(0.938)	912927	75.0000	71.2861
69 1,2,3-Trichloropropane	75	15.936	15.947	(0.939)	779523	75.0000	67.3890
70 1,3,5-Trimethylbenzene	105	16.061	16.082	(0.946)	2441547	75.0000	76.4626
71 2-Chlorotoluene	91	16.082	16.093	(0.947)	2546776	75.0000	72.7461
72 4-Chlorotoluene	91	16.193	16.209	(0.954)	2362404	75.0000	73.5491
73 tert-Butylbenzene	119	16.428	16.445	(0.968)	2144848	75.0000	76.6339
74 1,2,4-Trimethylbenzene	105	16.486	16.501	(0.971)	2543649	75.0000	74.8259
75 sec-Butylbenzene	105	16.659	16.675	(0.981)	2928655	75.0000	77.2422
76 para-Isopropyl Toluene	119	16.785	16.800	(0.989)	2634395	75.0000	80.1631
77 1,3-Dichlorobenzene	146	16.900	16.911	(0.996)	1663272	75.0000	72.4715

Data File: \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL912.D
Report Date: 11-Dec-2006 13:33

						AMOUNTS		
		QUANT	SIG			CAL-AMT	ON-COL	
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====		----	----	-----	-----	-----	-----	-----
*	78 1,4-Dichlorobenzene-d4	152	16.974	16.985	(1.000)	852798	50.0000	
	79 1,4-Dichlorobenzene	146	17.000	17.011	(1.002)	1665334	75.0000	70.3354
	80 n-Butylbenzene	91	17.246	17.263	(1.016)	2190222	75.0000	74.3495
	81 1,2-Dichlorobenzene	146	17.451	17.466	(1.028)	1591282	75.0000	73.3286
	82 1,2-Dibromo-3-Chloropropane	75	18.416	18.437	(1.085)	151879	75.0000	70.8337
	83 1,2,4-Trichlorobenzene	180	19.532	19.554	(1.151)	1168638	75.0000	74.0369
	84 Hexachlorobutadiene	225	19.632	19.653	(1.157)	502249	75.0000	71.5747
	85 Naphthalene	128	19.988	20.010	(1.178)	2975941	75.0000	80.1391
	86 1,2,3-Trichlorobenzene	180	20.376	20.403	(1.200)	1140615	75.0000	73.1973

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Gomsserver\JD\chem\MSV0411.i\120906.b\KL912.D

Date : 09-DEC-2006 20:33

Client ID: DYNA P&I

Sample Info: ICAL, S4931, 0.015/100,

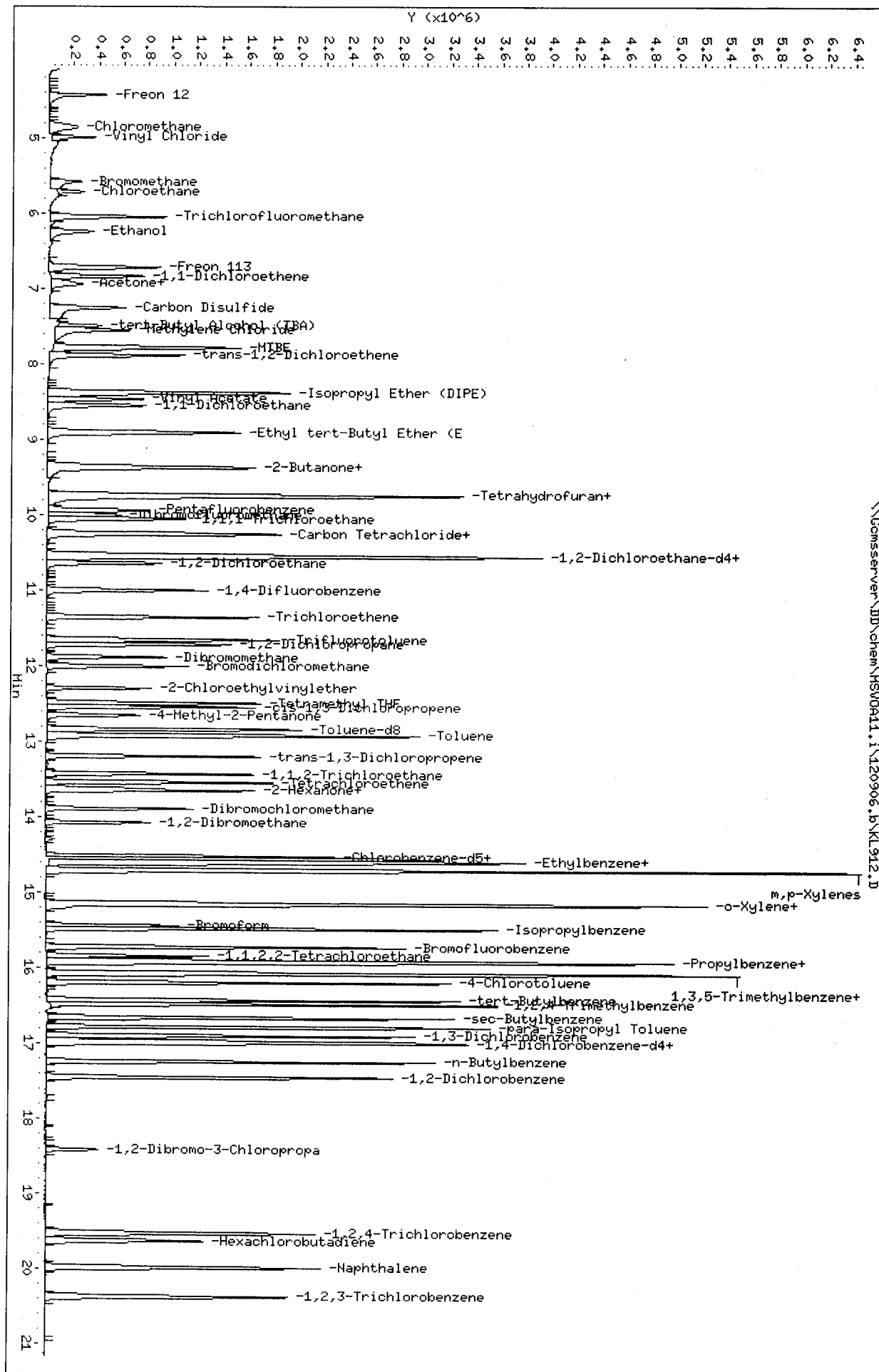
Purge Volume: 5.0

Column phase: RTX Volatiles

Instrument: MSV0411.i

Operator: VDC

Column diameter: 0.32



Data File: \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL913.D
 Report Date: 11-Dec-2006 11:37

Laboratory Name

Data file : \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\KL913.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 09-DEC-2006 21:01 MS Autotune Date: 29-JUL-2005 08:48
 Operator : VOC Inst ID: MSVOA11.i
 Smp Info : ICAL,S4931,0.02/100,
 Misc Info : S5064,0.02/100,S4172,0.01/100,100PPB
 Comment :
 Method : \\Gcmssserver\DD\chem\MSVOA11.i\120906.b\8260GX11.m
 Meth Date : 11-Dec-2006 11:37 target Quant Type: ISTD
 Cal Date : 09-DEC-2006 21:01 Cal File: KL913.D
 Als bottle: 28 Calibration Sample, Level: 9
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.10
 Processing Host: PC_MSVOA_WK01

Concentration Formula: Amt * DF * Uf/Vo * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS					AMOUNTS	
		RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.427	4.417 (0.446)		1063390	100.000	110.3766
2 Chloromethane	50	4.847	4.800 (0.488)		1010506	100.000	96.5732
3 Vinyl Chloride	62	4.988	4.973 (0.502)		1015366	100.000	102.0261 (M)
4 Bromomethane	94	5.575	5.560 (0.561)		634570	100.000	107.9560
5 Chloroethane	64	5.706	5.702 (0.575)		604570	100.000	94.1725
6 Trichlorofluoromethane	101	6.037	6.027 (0.608)		1578849	100.000	107.6749
7 Ethanol	45	6.236	6.226 (0.628)		973643	10000.0	9617.2802
8 Freon 113	101	6.708	6.708 (0.675)		696592	100.000	90.3404
9 1,1-Dichloroethene	96	6.828	6.824 (0.688)		633077	100.000	91.5305
10 Acetone	43	6.912	6.908 (0.696)		321809	100.000	88.0781
11 Isopropanol	45	6.939	6.939 (0.699)		534418	1000.00	1015.2160
12 Carbon Disulfide	76	7.248	7.248 (0.730)		3014590	100.000	96.7052
13 tert-Butyl Alcohol (TBA)	59	7.489	7.490 (0.754)		876716	1000.00	1006.3122
14 Methylene Chloride	84	7.552	7.552 (0.760)		872075	100.000	90.8624
15 MTBE	73	7.777	7.783 (0.783)		3224723	100.000	103.9954
16 trans-1,2-Dichloroethene	96	7.877	7.878 (0.793)		827586	100.000	89.0064
17 Isopropyl Ether (DIPE)	45	8.380	8.385 (0.844)		3502103	100.000	104.5707
18 Vinyl Acetate	43	8.464	8.470 (0.852)		2073218	100.000	123.4217 (M)
19 1,1-Dichloroethane	63	8.543	8.548 (0.860)		1525146	100.000	95.6251
20 Ethyl tert-Butyl Ether (ETBE)	59	8.905	8.910 (0.897)		2812861	100.000	104.3589
21 2-Butanone	43	9.329	9.335 (0.939)		381828	100.000	95.2165
22 2,2-Dichloropropane	77	9.356	9.361 (0.942)		1154857	100.000	91.9758

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====		=====	=====
23 cis-1,2-Dichloroethene	96	9.371	9.377 (0.944)		956963		100.000	95.5781
24 Tetrahydrofuran	42	9.728	9.734 (0.979)		2551955		1000.00	945.8726
25 Bromochloromethane	128	9.733	9.744 (0.980)		447350		100.000	95.2682
26 Chloroform	83	9.754	9.760 (0.982)		1577836		100.000	95.5306
* 27 Pentafluorobenzene	168	9.932	9.949 (1.000)		937997		50.0000	
28 Dibromofluoromethane	113	9.995	10.006 (1.006)		419202		50.0000	47.9569
29 1,1,1-Trichloroethane	97	10.048	10.053 (1.012)		1348280		100.000	93.0742
30 Carbon Tetrachloride	117	10.236	10.247 (0.931)		923285		100.000	97.7679
31 1,1-Dichloropropene	75	10.252	10.258 (0.932)		1086173		100.000	99.6495
32 1,2-Dichloroethane-d4	65	10.535	10.541 (0.958)		546645		50.0000	50.2557
33 Methyl tert-Amyl Ether (TAME)	73	10.535	10.546 (0.958)		3058217		100.000	105.1190
34 Benzene	78	10.556	10.562 (0.960)		3776759		100.000	98.9366
35 1,2-Dichloroethane	62	10.640	10.646 (0.968)		1312087		100.000	95.3340
* 36 1,4-Difluorobenzene	114	10.997	11.008 (1.000)		1456563		50.0000	
37 Trichloroethene	95	11.353	11.364 (1.032)		920932		100.000	97.7780
38 Trifluorotoluene	146	11.652	11.663 (1.060)		1540652		100.000	97.2955
39 1,2-Dichloropropane	63	11.715	11.726 (1.065)		896427		100.000	100.0195
40 Dibromomethane	93	11.883	11.888 (1.081)		566402		100.000	100.1127
41 Bromodichloromethane	83	12.003	12.014 (1.092)		1245073		100.000	102.8116
42 2-Chloroethylvinylether	63	12.292	12.308 (1.118)		567935		100.000	100.8377
43 Tetramethyl THF	43	12.486	12.497 (1.135)		1334663		100.000	108.9696
44 cis-1,3-Dichloropropene	75	12.543	12.554 (1.141)		1547488		100.000	103.8223
45 4-Methyl-2-Pentanone	43	12.648	12.664 (1.150)		804507		100.000	104.6574
46 Toluene-d8	98	12.832	12.843 (1.167)		1775474		50.0000	50.9438
47 Toluene	92	12.916	12.927 (1.174)		2412151		100.000	98.9329
48 trans-1,3-Dichloropropene	75	13.193	13.204 (1.200)		1466758		100.000	104.2566
49 1,1,2-Trichloroethane	85	13.429	13.435 (1.221)		448081		100.000	102.1492
50 Tetrachloroethene	166	13.540	13.551 (0.933)		933145		100.000	95.9679
51 2-Hexanone	43	13.613	13.624 (0.938)		554789		100.000	103.4172
52 1,3-Dichloropropane	76	13.644	13.655 (0.940)		1522676		100.000	100.3276
53 Dibromochloromethane	129	13.886	13.897 (0.957)		1014698		100.000	105.7737
54 1,2-Dibromoethane	107	14.074	14.085 (1.280)		911269		100.000	102.7926
* 55 Chlorobenzene-d5	117	14.515	14.526 (1.000)		1559667		50.0000	
56 Chlorobenzene	112	14.546	14.562 (1.002)		2698963		100.000	95.7799
57 Ethylbenzene	91	14.583	14.599 (1.005)		4379732		100.000	98.9906
58 1,1,1,2-Tetrachloroethane	131	14.614	14.625 (1.007)		987461		100.000	98.9250
59 m,p-Xylenes	106	14.703	14.714 (1.013)		3623761		200.000	201.0005
60 o-Xylene	106	15.139	15.155 (1.043)		1771776		100.000	100.4002
61 Styrene	104	15.160	15.171 (1.044)		2959977		100.000	110.6148
62 Bromoform	173	15.438	15.448 (1.064)		786420		100.000	104.6485
63 Isopropylbenzene	105	15.479	15.490 (0.912)		4088987		100.000	101.9110
65 Bromofluorobenzene	95	15.726	15.737 (0.927)		904945		50.0000	48.9348
66 1,1,2,2-Tetrachloroethane	83	15.841	15.857 (0.934)		1024282		100.000	98.4160
67 Propylbenzene	91	15.904	15.920 (0.937)		4646052		100.000	104.2986
68 Bromobenzene	156	15.925	15.936 (0.939)		1279094		100.000	97.8831
69 1,2,3-Trichloropropane	75	15.936	15.947 (0.939)		1088638		100.000	92.2316
70 1,3,5-Trimethylbenzene	105	16.067	16.082 (0.947)		3387738		100.000	103.9753
71 2-Chlorotoluene	91	16.082	16.093 (0.948)		3514973		100.000	98.3960
72 4-Chlorotoluene	91	16.193	16.209 (0.954)		3298637		100.000	100.6455
73 tert-Butylbenzene	119	16.428	16.445 (0.968)		2910604		100.000	101.9164
74 1,2,4-Trimethylbenzene	105	16.486	16.501 (0.972)		3526410		100.000	101.6633
75 sec-Butylbenzene	105	16.659	16.675 (0.982)		3992465		100.000	103.1963
76 para-Isopropyl Toluene	119	16.785	16.800 (0.989)		3586441		100.000	106.9533
77 1,3-Dichlorobenzene	146	16.900	16.911 (0.996)		2305977		100.000	98.4682

Data File: \\Gcmsserver\DD\chem\MSVOA11.i\120906.b\KL913.D
 Report Date: 11-Dec-2006 11:37

						AMOUNTS	
QUANT SIG						CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
* 78 1,4-Dichlorobenzene-d4	152	16.968	16.985	(1.000)	870181	50.0000	
79 1,4-Dichlorobenzene	146	17.000	17.011	(1.002)	2361137	100.000	97.7305
80 n-Butylbenzene	91	17.246	17.263	(1.016)	2981235	100.000	99.1796
81 1,2-Dichlorobenzene	146	17.451	17.466	(1.028)	2213444	100.000	99.9612
82 1,2-Dibromo-3-Chloropropane	75	18.416	18.437	(1.085)	226322	100.000	103.4441
83 1,2,4-Trichlorobenzene	180	19.532	19.554	(1.151)	1642012	100.000	101.9485
84 Hexachlorobutadiene	225	19.632	19.653	(1.157)	686461	100.000	95.8723
85 Naphthalene	128	19.988	20.010	(1.178)	4183062	100.000	110.3954
86 1,2,3-Trichlorobenzene	180	20.382	20.403	(1.201)	1600214	100.000	100.6401

QC Flag Legend

M - Compound response manually integrated.

Data File: \\Gomserver\DD\chem\MSV0011.i\120906.b\KL913.D

Date : 09-DEC-2006 21:01

Client ID: DYNA P&I

Sample Info: ICAL, S4931, 0.02/100,

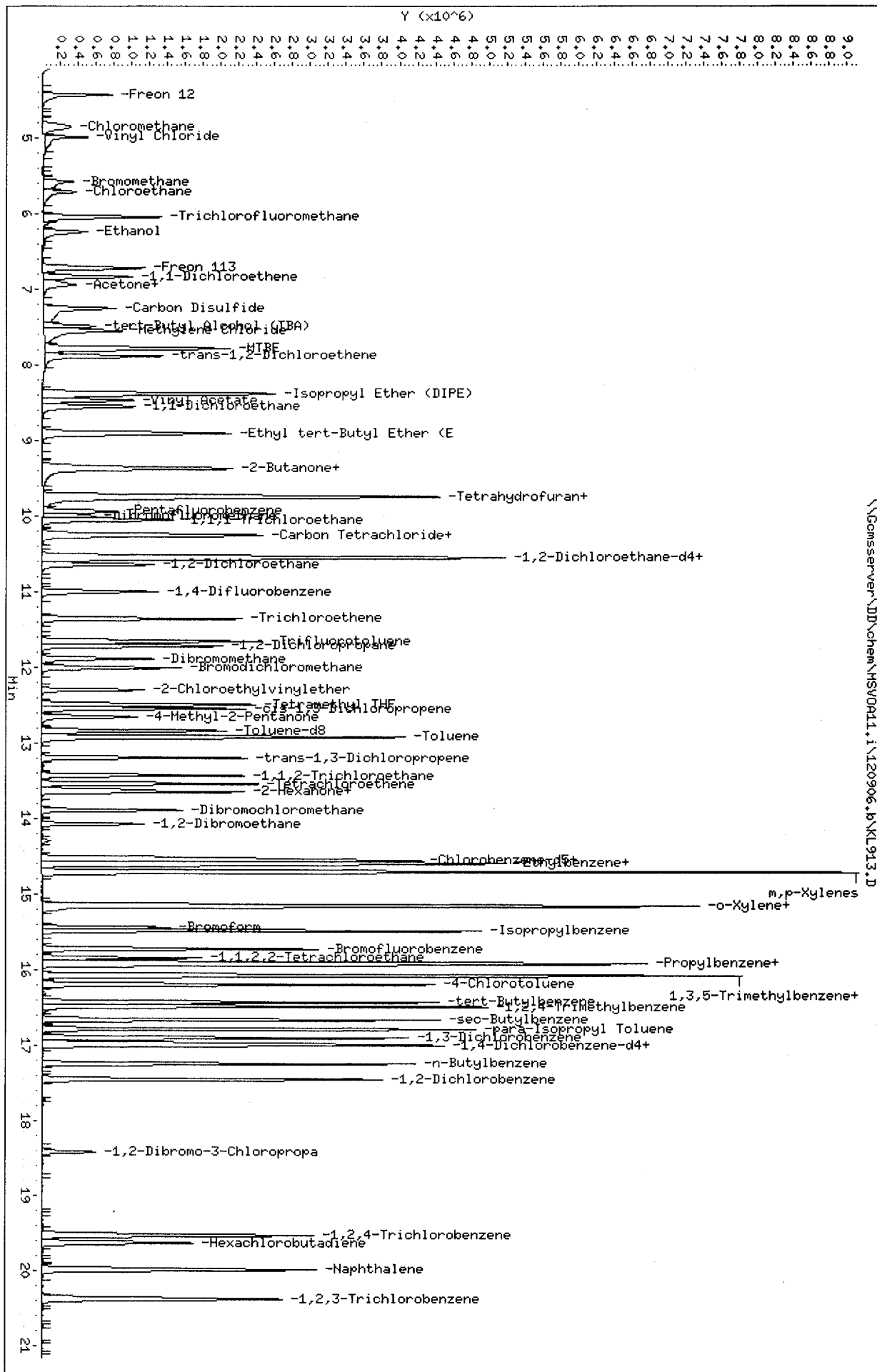
Purge Volume: 5.0

Column phase: RTX Volatiles

Instrument: MSV0011.i

Operator: VOC

Column diameter: 0.32



CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191314 MSVOA Water
EPA 8260B

Inst : MSVOA11 Run Name: 25PPB IDF : 1.0
 Seqnum : 836501672003 File : kle03 Time : 14-DEC-2006 09:59
 Cal : 836494841001 Caldate : 09-DEC-2006 Caltype : WATER
 Standards: S4780 (20000X), S4801 (20000X), S4713 (40000X), S4792 (2500X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	0.5634	0.5751	25.00	25.52	ug/L	2	30	0.1000	m
Vinyl Chloride	0.5339	0.5943	25.00	27.83	ug/L	11	20	0.0500	m
Bromomethane	0.3143	0.2705	25.00	21.52	ug/L	-14	30	0.0500	m
Chloroethane	0.3429	0.3734	25.00	27.23	ug/L	9	30	0.0500	m
Acetone	0.1948	0.2030	25.00	26.06	ug/L	4	40	0.0500	
1,1-Dichloroethene	0.3687	0.3611	25.00	24.49	ug/L	-2	20	0.0500	
Methylene Chloride	0.5212	0.4839	25.00	23.21	ug/L	-7	30	0.0500	
Carbon Disulfide	1.6747	1.7393	25.00	25.96	ug/L	4	30	0.0500	m
MTBE	1.6529	1.7215	25.00	26.04	ug/L	4	30	0.0500	
trans-1,2-Dichloroethene	0.4956	0.5102	25.00	25.73	ug/L	3	30	0.0500	
Vinyl Acetate	0.8654	1.0564	25.00	27.39	ug/L	10	40	0.0500	
1,1-Dichloroethane	0.8502	0.8820	25.00	25.94	ug/L	4	30	0.1000	
2-Butanone	0.2138	0.2107	25.00	24.64	ug/L	-1	40	0.0500	
cis-1,2-Dichloroethene	0.5337	0.5418	25.00	25.38	ug/L	2	30	0.0500	
Chloroform	0.8804	0.9280	25.00	26.35	ug/L	5	20	0.0500	
1,1,1-Trichloroethane	0.7722	0.8350	25.00	27.03	ug/L	8	30	0.0500	
Carbon Tetrachloride	0.3242	0.4046	25.00	31.21	ug/L	25	30	0.0500	!c+
1,2-Dichloroethane	0.4724	0.4688	25.00	24.81	ug/L	-1	30	0.0500	
Benzene	1.3104	1.3450	25.00	25.66	ug/L	3	30	0.0500	
Trichloroethene	0.3233	0.3200	25.00	24.75	ug/L	-1	30	0.0500	
1,2-Dichloropropane	0.3077	0.3075	25.00	24.98	ug/L	0	20	0.0500	
Bromodichloromethane	0.4157	0.4263	25.00	25.64	ug/L	3	30	0.0500	
4-Methyl-2-Pentanone	0.2639	0.2583	25.00	24.47	ug/L	-2	40	0.0500	
cis-1,3-Dichloropropene	0.5117	0.5316	25.00	25.98	ug/L	4	30	0.0500	
Toluene	0.8370	0.8631	25.00	25.78	ug/L	3	20	0.0500	
trans-1,3-Dichloropropene	0.4829	0.4978	25.00	25.77	ug/L	3	30	0.0500	
1,1,2-Trichloroethane	0.1506	0.1528	25.00	25.37	ug/L	1	30	0.0500	
2-Hexanone	0.1720	0.1624	25.00	23.61	ug/L	-6	40	0.0500	
Tetrachloroethene	0.3117	0.3127	25.00	25.08	ug/L	0	30	0.0500	
Dibromochloromethane	0.3075	0.3105	25.00	25.24	ug/L	1	30	0.0500	
Chlorobenzene	0.9034	0.8853	25.00	24.50	ug/L	-2	30	0.3000	
Ethylbenzene	1.4184	1.4286	25.00	25.18	ug/L	1	20	0.0500	
m,p-Xylenes	0.4739	0.5604	50.00	49.15	ug/L	-2	30	0.0500	
o-Xylene	0.4846	0.5354	25.00	24.17	ug/L	-3	30	0.0500	
Styrene	0.8579	0.8491	25.00	24.74	ug/L	-1	30	0.0500	
Bromoform	0.2409	0.2362	25.00	24.51	ug/L	-2	30	0.1000	
1,1,2,2-Tetrachloroethane	0.5980	0.6040	25.00	25.25	ug/L	1	30	0.3000	
Dibromofluoromethane	0.4660	0.4892	50.00	52.50	ug/L	5	30	0.0500	
1,2-Dichloroethane-d4	0.3734	0.3832	50.00	51.32	ug/L	3	30	0.0500	
Toluene-d8	1.1964	1.2376	50.00	51.72	ug/L	3	30	0.0500	
Bromofluorobenzene	1.0626	1.0633	50.00	50.03	ug/L	0	30	0.0500	

ISTD (ICAL kl911)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	886696	842062	-5.03	9.93	9.94	0.01
1,4-Difluorobenzene	1408512	1379779	-2.04	11.00	11.00	0.00
Chlorobenzene-d5	1484675	1488382	0.25	14.52	14.52	0.01
1,4-Dichlorobenzene-d4	828941	816511	-1.50	16.97	16.97	0.00

Analyst: SJD Date: 12/15/06 Reviewer: LW Date: 12/15/06

!=warning +=high bias c=CCV m=manual integration

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 836501672

Date : 12/14/06
Sequence : MSVOA11 kle

ICAL Filename: kl911
ICAL Analyzed: 12/09/06 20:05

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	886696	9.93	1408512	11.00	1484675	14.52	828941	16.97
		LOWER LIMIT	443348	9.43	704256	10.50	742338	14.02	414471	16.47
		UPPER LIMIT	1773392	10.43	2817024	11.50	2969350	15.02	1657882	17.47
003	CCV	25PPB	842062	9.94	1379779	11.00	1488382	14.52	816511	16.97
004	LCS	QC368294	845228	9.94	1385709	11.00	1487227	14.52	811809	16.97
006	BLANK	QC368293	787138	9.93	1344186	11.00	1451447	14.52	750333	16.97
007	SAMPLE	191382-001	778542	9.94	1357294	11.00	1461720	14.52	755697	16.97
008	SAMPLE	191382-002	783796	9.93	1352419	10.99	1437023	14.52	728050	16.97
009	SAMPLE	191382-003	787387	9.93	1346440	11.00	1458093	14.52	745785	16.97
010	SAMPLE	191382-004	758196	9.93	1335229	11.00	1433052	14.52	746035	16.97
011	SAMPLE	191382-005	769394	9.93	1345909	11.00	1430125	14.52	743620	16.97
012	SAMPLE	191382-007	759113	9.94	1319189	11.00	1432976	14.52	740275	16.97
013	MSS	191382-006	756628	9.93	1320337	11.00	1415973	14.52	731693	16.97
014	SAMPLE	191286-009	749100	9.94	1327485	11.00	1453099	14.52	760808	16.97
015	SAMPLE	191286-010	770903	9.94	1323809	11.00	1413795	14.52	751222	16.97
016	SAMPLE	191286-011	754455	9.94	1301206	10.99	1413117	14.52	741969	16.97
017	SAMPLE	191286-013	762677	9.94	1334856	11.00	1458644	14.52	798267	16.97
018	SAMPLE	191286-016	847312	9.93	1414614	10.99	1539018	14.52	863056	16.97
019	SAMPLE	191314-013	861751	9.93	1398096	11.00	1533395	14.52	830094	16.97
020	SAMPLE	191314-009	862050	9.94	1436875	11.00	1565311	14.52	854639	16.97
021	SAMPLE	191314-010	871134	9.94	1451713	11.00	1545516	14.52	834879	16.97
022	SAMPLE	191275-010	857457	9.94	1417802	11.00	1526888	14.52	809354	16.97
023	SAMPLE	191275-011	860706	9.93	1423202	10.99	1517316	14.52	803728	16.97
024	SAMPLE	191275-013	823901	9.93	1398438	10.99	1500069	14.52	794450	16.97
025	SAMPLE	191273-003	832413	9.93	1396719	10.99	1508419	14.52	789512	16.97
026	MS	QC368323	845605	9.94	1402497	11.00	1536838	14.52	836486	16.97
027	MSD	QC368324	865174	9.93	1425070	11.00	1555672	14.52	852055	16.97
030	CCV	30PPB	851096	9.94	1406596	11.00	1534100	14.52	842549	16.97
031	LCS	QC368444	861194	9.94	1453318	11.00	1562876	14.52	844840	16.97
033	BLANK	QC368443	828305	9.94	1407125	11.00	1538349	14.52	782173	16.97
034	SAMPLE	191327-006	799986	9.94	1392956	11.00	1502505	14.52	797070	16.97
035	SAMPLE	191327-007	835762	9.93	1400816	10.99	1525231	14.52	789803	16.97
036	SAMPLE	191327-001	805469	9.94	1373469	11.00	1482562	14.52	799122	16.97
037	SAMPLE	191327-002	789659	9.94	1360156	11.00	1484419	14.52	791584	16.97
038	SAMPLE	191378-001	792432	9.93	1363537	11.00	1467328	14.52	769527	16.97
039	MSS	191378-002	778880	9.93	1361557	11.00	1483102	14.52	779311	16.97
040	SAMPLE	191378-003	774153	9.93	1343203	11.00	1464146	14.52	782558	16.97
041	SAMPLE	191378-004	784457	9.93	1375423	11.00	1506549	14.52	782411	16.97
042	SAMPLE	191378-005	778750	9.94	1338404	10.99	1465281	14.52	766591	16.97
043	SAMPLE	191378-006	772067	9.93	1327274	11.00	1449577	14.52	756028	16.97
044	SAMPLE	191378-007	775395	9.93	1351472	11.00	1461944	14.52	761518	16.97
045	SAMPLE	191378-008	776537	9.94	1349315	11.00	1452295	14.52	756788	16.97
046	SAMPLE	191371-009	764039	9.93	1332835	11.00	1458164	14.52	755619	16.97
047	SAMPLE	191371-010	748525	9.94	1322027	11.00	1440975	14.52	756393	16.97
048	SAMPLE	191371-012	760118	9.93	1322441	11.00	1449952	14.52	742779	16.97
049	SAMPLE	191371-013	763220	9.93	1333162	10.99	1439506	14.52	746294	16.97
050	SAMPLE	191371-014	748885	9.93	1311305	11.00	1435151	14.52	742968	16.97
051	SAMPLE	191371-015	730121	9.94	1295268	11.00	1427020	14.52	738902	16.97
052	SAMPLE	191371-011	763165	9.93	1336971	11.00	1440033	14.52	741364	16.97
053	MS	QC368445	761952	9.94	1346052	11.00	1472906	14.52	804363	16.97
054	MSD	QC368446	799808	9.94	1367343	10.99	1501498	14.52	803381	16.97

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 836494841

Instrument : MSVOA11
Method : EPA 8260B

Begun : 12/09/06 15:21
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	kl901	X	IB			12/09/06 15:21	1.0	1	
002	kl902	TUN	BFB			12/09/06 15:46	1.0	2	
003	kl903	X	IB			12/09/06 16:21	1.0	1	
004	kl904	IB	CALIB IB			12/09/06 16:49	1.0	1	
005	kl905	ICAL	0.25/0.5P			12/09/06 17:17	1.0	3 4 5 1	
006	kl906	ICAL	0.5/1PPB			12/09/06 17:45	1.0	3 4 5 1	
007	kl907	ICAL	2PPB			12/09/06 18:13	1.0	3 4 5 1	
008	kl908	ICAL	5PPB			12/09/06 18:41	1.0	3 4 5 1	
009	kl909	ICAL	10PPB			12/09/06 19:09	1.0	3 4 5 1	
010	kl910	ICAL	20PPB			12/09/06 19:37	1.0	3 4 5 1	
011	kl911	ICAL	50PPB			12/09/06 20:05	1.0	3 4 5 1	
012	kl912	ICAL	75PPB			12/09/06 20:33	1.0	3 4 5 1	
013	kl913	ICAL	100PPB			12/09/06 21:01	1.0	3 4 5 1	
014	kl914	X	25PPB			12/09/06 21:29	1.0	6 1	
015	kl915	X	25PPB			12/09/06 21:58	1.0	7 8 1	
016	kl916	X	IB			12/09/06 22:26	1.0	1	
017	kl917	X	IB			12/09/06 22:53	1.0	1	
018	kl918	X	IB			12/09/06 23:21	1.0	1	

Analyst: SJD Date: 12/11/06 Reviewer: LW Date: 12/11/06

Standards used: 1=S4792 2=S3716 3=S4931 4=S5064 5=S4172 6=S4870 7=S4922 8=S5052

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 836497483

Instrument : MSVOA11
Method : EPA 8260B

Begun : 12/11/06 11:23
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	klb01	X	IB			12/11/06 11:23	1.0	1	
002	klb02	TUN	BFB			12/11/06 11:54	1.0	2	
003	klb03	CCV	25PPB			12/11/06 12:16	1.0	3 4 5 1	
004	klb04	X	QC367825	Water	120246	12/11/06 13:03	1.0	6 7 8 1	
005	klb05	ICV/BS	QC367825	Water	120246	12/11/06 13:59	1.0	6 7 8 1	
006	klb06	BSD	QC367855	Water	120246	12/11/06 14:27	1.0	6 7 8 1	
007	klb07	X	IB			12/11/06 14:55	1.0	1	
008	klb08	BLANK	QC367824	Water	120246	12/11/06 15:34	1.0	1	
009	klb09	SAMPLE	191225-003	Water	120246	12/11/06 16:02	1.0	1	
010	klb10	SAMPLE	191225-004	Water	120246	12/11/06 16:30	1.0	1	
011	klb11	SAMPLE	191225-005	Water	120246	12/11/06 16:58	1.0	1	
012	klb12	SAMPLE	191225-006	Water	120246	12/11/06 17:27	1.0	1	
013	klb13	SAMPLE	191225-007	Water	120246	12/11/06 17:55	1.0	1	
014	klb14	SAMPLE	191225-008	Water	120246	12/11/06 18:23	1.0	1	
015	klb15	SAMPLE	191225-009	Water	120246	12/11/06 18:51	1.0	1	
016	klb16	SAMPLE	191225-010	Water	120246	12/11/06 19:19	1.0	1	
017	klb17	SAMPLE	191225-011	Water	120246	12/11/06 19:47	1.0	1	
018	klb18	SAMPLE	191225-012	Water	120246	12/11/06 20:15	1.0	1	
019	klb19	SAMPLE	191225-013	Water	120246	12/11/06 20:43	1.0	1	
020	klb20	SAMPLE	191222-007	Water	120246	12/11/06 21:11	1.0	1	
021	klb21	SAMPLE	191222-001	Water	120246	12/11/06 21:39	3.333	1	
022	klb22	SAMPLE	191222-002	Water	120246	12/11/06 22:07	6.25	1	
023	klb23	SAMPLE	191222-003	Water	120246	12/11/06 22:35	6.25	1	
024	klb24	SAMPLE	191222-004	Water	120246	12/11/06 23:06	7.143	1	
025	klb25	SAMPLE	191222-005	Water	120246	12/11/06 23:34	8.333	1	
026	klb26	SAMPLE	191222-006	Water	120246	12/12/06 00:02	16.67	1	
027	klb27	X	IB			12/12/06 00:30	1.0	1	
028	klb28	X	IB			12/12/06 00:58	1.0	1	
029	klb29	X	IB			12/12/06 01:26	1.0	1	

Analyst: SJD Date: 12/12/06 Reviewer: LW Date: 12/12/06

Standards used: 1=S4792 2=S3716 3=S4780 4=S4801 5=S4713 6=S4922 7=S4634 8=S5074

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 836501672

Instrument : MSVOA11
Method : EPA 8260B

Begun : 12/14/06 09:12
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	kle01	X	IB			12/14/06 09:12	1.0	1	
002	kle02	TUN	BFB			12/14/06 09:36	1.0	2	
003	kle03	CCV	25PPB			12/14/06 09:59	1.0	3 4 5 1	
004	kle04	LCS	QC368294	Water	120366	12/14/06 10:37	1.0	6 7 8 1	
005	kle05	X	IB			12/14/06 11:05	1.0	1	
006	kle06	BLANK	QC368293	Water	120366	12/14/06 11:33	1.0	1	
007	kle07	SAMPLE	191382-001	Water	120366	12/14/06 12:01	1.0	1	
008	kle08	SAMPLE	191382-002	Water	120366	12/14/06 12:29	1.0	1	
009	kle09	SAMPLE	191382-003	Water	120366	12/14/06 12:58	1.0	1	
010	kle10	SAMPLE	191382-004	Water	120366	12/14/06 13:25	1.0	1	
011	kle11	SAMPLE	191382-005	Water	120366	12/14/06 13:54	1.0	1	
012	kle12	SAMPLE	191382-007	Water	120366	12/14/06 14:22	1.0	1	
013	kle13	MSS	191382-006	Water	120366	12/14/06 14:50	1.0	1	
014	kle14	SAMPLE	191286-009	Water	120366	12/14/06 15:18	1.0	1	
015	kle15	SAMPLE	191286-010	Water	120366	12/14/06 15:46	1.0	1	
016	kle16	SAMPLE	191286-011	Water	120366	12/14/06 16:14	1.0	1	
017	kle17	SAMPLE	191286-013	Water	120366	12/14/06 16:42	1.0	1	
018	kle18	SAMPLE	191286-016	Water	120366	12/14/06 17:10	1.0	1	
019	kle19	SAMPLE	191314-013	Water	120366	12/14/06 17:38	1.0	1	
020	kle20	SAMPLE	191314-009	Water	120366	12/14/06 18:06	1.0	1	
021	kle21	SAMPLE	191314-010	Water	120366	12/14/06 18:34	1.0	1	
022	kle22	SAMPLE	191275-010	Water	120366	12/14/06 19:02	100.0	1	
023	kle23	SAMPLE	191275-011	Water	120366	12/14/06 19:31	83.33	1	
024	kle24	SAMPLE	191275-013	Water	120366	12/14/06 19:59	25.0	1	
025	kle25	SAMPLE	191273-003	Water	120366	12/14/06 20:27	333.3	1	headspace <= 1 mL
026	kle26	MS	QC368323	Water	120366	12/14/06 20:55	1.0	6 7 8 1	
027	kle27	MSD	QC368324	Water	120366	12/14/06 21:23	1.0	6 7 8 1	
028	kle28	X	IB			12/14/06 21:51	1.0	1	
029	kle29	TUN	BFB			12/14/06 22:16	1.0	2	
030	kle30	CCV	30PPB			12/14/06 22:39	1.0	3 4 5 1	
031	kle31	LCS	QC368444	Water	120397	12/14/06 23:07	1.0	6 7 8 1	
032	kle32	X	IB			12/14/06 23:35	1.0	1	
033	kle33	BLANK	QC368443	Water	120397	12/15/06 00:03	1.0	1	
034	kle34	SAMPLE	191327-006	Water	120397	12/15/06 00:33	1.0	1	
035	kle35	SAMPLE	191327-007	Water	120397	12/15/06 01:01	1.0	1	
036	kle36	SAMPLE	191327-001	Water	120397	12/15/06 01:29	1.0	1	
037	kle37	SAMPLE	191327-002	Water	120397	12/15/06 01:57	1.0	1	
038	kle38	SAMPLE	191378-001	Water	120397	12/15/06 02:25	1.0	1	
039	kle39	MSS	191378-002	Water	120397	12/15/06 02:53	1.0	1	
040	kle40	SAMPLE	191378-003	Water	120397	12/15/06 03:21	1.0	1	
041	kle41	SAMPLE	191378-004	Water	120397	12/15/06 03:49	1.0	1	
042	kle42	SAMPLE	191378-005	Water	120397	12/15/06 04:17	1.0	1	
043	kle43	SAMPLE	191378-006	Water	120397	12/15/06 04:45	1.0	1	
044	kle44	SAMPLE	191378-007	Water	120397	12/15/06 05:13	1.0	1	
045	kle45	SAMPLE	191378-008	Water	120397	12/15/06 05:41	1.0	1	
046	kle46	SAMPLE	191371-009	Water	120397	12/15/06 06:09	1.0	1	
047	kle47	SAMPLE	191371-010	Water	120397	12/15/06 06:37	1.0	1	
048	kle48	SAMPLE	191371-012	Water	120397	12/15/06 07:06	1.0	1	
049	kle49	SAMPLE	191371-013	Water	120397	12/15/06 07:34	1.0	1	
050	kle50	SAMPLE	191371-014	Water	120397	12/15/06 08:02	1.0	1	
051	kle51	SAMPLE	191371-015	Water	120397	12/15/06 08:30	1.0	1	
052	kle52	SAMPLE	191371-011	Water	120397	12/15/06 08:58	142.9	1	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 836501672

Instrument : MSVOA11
Method : EPA 8260B

Begun : 12/14/06 09:12
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
053	kle53	MS	QC368445	Water	120397	12/15/06 09:26	1.0	6 7 8 1	
054	kle54	MSD	QC368446	Water	120397	12/15/06 09:54	1.0	6 7 8 1	
055	kle55	X	IB			12/15/06 10:22	1.0	1	
056	kle56	X	IB			12/15/06 10:50	1.0	1	

Analyst: SJD Date: 12/15/06 Reviewer: LW Date: 12/15/06

Standards used: 1=S4792 2=S3716 3=S4780 4=S4801 5=S4713 6=S4922 7=S4634 8=S5074

REPORTING SUMMARY FOR 191314 8260 Water
Curtis & Tompkins Laboratories

				C V B C A D M C M D V D M D T T C D B T D B M D B D T H P D C E X X T S T P D D B B L C R L C C T D T C A C E C C C T C Z C C D I C Z C C X C B L B Y Y O T B C B C Z R M M E E E L S B E A K E L A C A E P C B P M P A O E C B Z L L T Y M A F A M 4 E E A 1 N E 1 1 1 M 1 L 1 A M K 1 E 1 1 2 M Z M O X E M 1 E F																									
Lab ID	Inst ID	Analyzed	IDF	2 3 2 2 2 3 2																									
191314-009	MSVOA11	12/14/06 18:06	1.0	+ +																									

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 12/14/08

PREPPED BY: J29

I

WATER

120366

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	191382-001		B	<2	Bubble		11	12	
2	-002								
3	-003								
4	-004								
5	-005								
6	-006		ACD	<2				MS/MS/MSD	
7	-007								
8	191286-009		D					12	
9	-010		C						
10	-011								
11	-013								
12	-016		A					7B	
13	191225-007		D	<2				RR 200x C.C. 1/2 SLR	
14	-010			<2				RR 100x O.D.	
15	-011							RR 82.3x O.D.	
16	-013							RR 25x O.D.	
17	191314-009		C	<2				12	
18	-010							12	
19	-013		B		Ken			7B	
20	191273-003		C	<2	1/2 mL			333 X	
21									
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Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 01/05/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
Ethanol	ug/L	55	22	23	50	11	22	36	10
1,1-Dichloroethene	ug/L	0.27	0.22	0.062	0.17	0.10	0.17	0.089	0.11
Benzene	ug/L	0.11	0.041	0.060	0.061	0.12	0.10	0.027	0.084
Trichloroethene	ug/L	0.21	0.076	0.18	0.17	0.11	0.13	0.087	0.086
Toluene	ug/L	0.083	0.083	0.12	0.092	0.062	0.085	0.053	0.14
Chlorobenzene	ug/L	0.10	0.090	0.11	0.16	0.16	0.098	0.050	0.075
Freon 12	ug/L	0.18	0.099	0.22	0.062	0.15	0.47	0.18	0.20
Chloromethane	ug/L	0.12	0.16	0.12	0.18	0.13	0.34	0.089	0.20
Vinyl Chloride	ug/L	0.19	0.23	0.10	0.066	0.10	0.097	0.16	0.039
Bromomethane	ug/L	0.29	0.30	0.31	0.13	0.31	0.34	0.20	0.23
Chloroethane	ug/L	0.33	0.33	0.15	0.16	0.13	0.45	0.12	0.18
Trichlorofluoromethane	ug/L	0.16	0.057	0.17	0.10	0.080	0.46	0.10	0.19
Acetone	ug/L	0.39	0.87	0.21	0.85	0.16	0.20	0.49	0.15
Freon 113	ug/L	0.062	0.12	0.13	0.25	0.071	0.19	0.091	0.16
Methylene Chloride	ug/L	0.15	0.21	0.11	0.12	0.16	0.29	0.22	0.086
MTBE	ug/L	0.069	0.074	0.065	0.045	0.040	0.15	0.052	0.068
Carbon Disulfide	ug/L	0.039	0.031	0.086	0.076	0.11	0.14	0.037	0.066
trans-1,2-Dichloroethene	ug/L	0.37	0.13	0.18	0.051	0.064	0.15	0.093	0.094
Vinyl Acetate	ug/L	0.076	0.36	0.084	0.99	0.40	0.13	0.10	0.13
1,1-Dichloroethane	ug/L	0.088	0.061	0.048	0.090	0.11	0.14	0.063	0.10
2-Butanone	ug/L	0.16	0.17	0.20	0.50	0.099	0.23	0.26	0.081
cis-1,2-Dichloroethene	ug/L	0.26	0.18	0.083	0.12	0.042	0.12	0.11	0.16
2,2-Dichloropropane	ug/L	0.093	0.17	0.077	0.12	0.066	0.15	0.083	0.14
Chloroform	ug/L	0.082	0.055	0.086	0.060	0.11	0.16	0.044	0.084
Bromochloromethane	ug/L	0.091	0.090	0.10	0.18	0.11	0.18	0.15	0.11
1,1,1-Trichloroethane	ug/L	0.084	0.066	0.14	0.11	0.061	0.12	0.041	0.096
1,1-Dichloropropene	ug/L	0.12	0.11	0.081	0.16	0.16	0.11	0.055	0.084
Carbon Tetrachloride	ug/L	0.089	0.11	0.098	0.17	0.15	0.14	0.056	0.14
1,2-Dichloroethane	ug/L	0.090	0.088	0.099	0.096	0.12	0.18	0.056	0.094
1,2-Dichloropropane	ug/L	0.093	0.060	0.079	0.071	0.14	0.16	0.12	0.086
Bromodichloromethane	ug/L	0.086	0.039	0.067	0.074	0.10	0.14	0.069	0.094
Dibromomethane	ug/L	0.16	0.061	0.092	0.16	0.11	0.18	0.13	0.089
4-Methyl-2-Pentanone	ug/L	0.044	0.076	0.057	0.20	0.13	0.14	0.25	0.067
cis-1,3-Dichloropropene	ug/L	0.068	0.065	0.056	0.20	0.16	0.094	0.044	0.080
trans-1,3-Dichloropropene	ug/L	0.074	0.074	0.044	0.073	0.14	0.13	0.060	0.059
1,1,2-Trichloroethane	ug/L	0.12	0.12	0.14	0.19	0.15	0.21	0.058	0.12
2-Hexanone	ug/L	0.043	0.31	0.047	0.34	0.11	0.13	0.14	0.097
1,3-Dichloropropane	ug/L	0.064	0.067	0.061	0.063	0.10	0.14	0.068	0.049
Tetrachloroethene	ug/L	0.13	0.14	0.12	0.22	0.14	0.092	0.093	0.089
Dibromochloromethane	ug/L	0.099	0.054	0.10	0.085	0.056	0.15	0.063	0.094
1,2-Dibromoethane	ug/L	0.16	0.061	0.10	0.073	0.11	0.13	0.070	0.088
2-Chloroethylvinylether	ug/L	0.093	0.18	0.24	0.17	0.14	0.19	0.23	0.14
1,1,1,2-Tetrachloroethane	ug/L	0.11	0.087	0.10	0.11	0.14	0.10	0.088	0.16
Ethylbenzene	ug/L	0.059	0.076	0.075	0.17	0.041	0.11	0.11	0.069
m,p-Xylenes	ug/L	0.24	0.22	0.14	0.27	0.17	0.19	0.20	0.14

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 01/05/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
o-Xylene	ug/L	0.10	0.058	0.092	0.11	0.16	0.087	0.13	0.078
Styrene	ug/L	0.12	0.092	0.098	0.085	0.16	0.11	0.061	0.055
Bromoform	ug/L	0.12	0.088	0.11	0.18	0.094	0.12	0.15	0.10
Isopropylbenzene	ug/L	0.12	0.059	0.090	0.18	0.059	0.11	0.10	0.089
1,1,2,2-Tetrachloroethane	ug/L	0.13	0.096	0.086	0.047	0.13	0.20	0.055	0.11
1,2,3-Trichloropropane	ug/L	0.31	0.28	0.074	0.11	0.17	0.19	0.16	0.072
Propylbenzene	ug/L	0.075	0.10	0.063	0.21	0.023	0.12	0.11	0.088
Bromobenzene	ug/L	0.12	0.12	0.10	0.19	0.12	0.17	0.085	0.088
1,3,5-Trimethylbenzene	ug/L	0.060	0.095	0.047	0.14	0.057	0.13	0.13	0.069
2-Chlorotoluene	ug/L	0.12	0.11	0.068	0.15	0.025	0.10	0.12	0.080
4-Chlorotoluene	ug/L	0.079	0.069	0.043	0.14	0.037	0.14	0.069	0.078
tert-Butylbenzene	ug/L	0.11	0.15	0.075	0.19	0.038	0.13	0.079	0.082
1,2,4-Trimethylbenzene	ug/L	0.091	0.088	0.066	0.12	0.069	0.082	0.10	0.099
sec-Butylbenzene	ug/L	0.11	0.12	0.062	0.17	0.088	0.088	0.076	0.097
para-Isopropyl Toluene	ug/L	0.058	0.12	0.12	0.14	0.056	0.071	0.045	0.075
1,3-Dichlorobenzene	ug/L	0.080	0.16	0.097	0.18	0.060	0.13	0.10	0.094
1,4-Dichlorobenzene	ug/L	0.068	0.14	0.095	0.18	0.038	0.10	0.17	0.072
n-Butylbenzene	ug/L	0.12	0.15	0.11	0.18	0.21	0.11	0.12	0.073
1,2-Dichlorobenzene	ug/L	0.072	0.14	0.080	0.14	0.16	0.16	0.061	0.081
1,2-Dibromo-3-Chloropropane	ug/L	0.39	0.25	0.21	0.22	0.13	0.17	0.098	0.18
1,2,4-Trichlorobenzene	ug/L	0.12	0.17	0.14	0.16	0.10	0.12	0.17	0.061
Hexachlorobutadiene	ug/L	0.19	0.19	0.29	0.21	0.11	0.065	0.25	0.17
Naphthalene	ug/L	0.12	0.13	0.060	0.10	0.091	0.11	0.16	0.052
1,2,3-Trichlorobenzene	ug/L	0.063	0.17	0.10	0.20	0.095	0.10	0.29	0.15
tert-Butyl Alcohol (TBA)	ug/L	1.3	1.6	0.83	2.5	1.3	1.1	1.3	1.3
Isopropyl Ether (DIPE)	ug/L	0.068	0.070	0.063	0.027	0.030	0.14	0.027	0.089
Ethyl tert-Butyl Ether (ETBE)	ug/L	0.089	0.045	0.024	0.20	0.033	0.13	0.034	0.079
Methyl tert-Amyl Ether (TAME)	ug/L	0.094	0.13	0.055	0.054	0.048	0.10	0.057	0.17
Isopropanol	ug/L	4.6	2.7	1.6	6.6	1.5	1.4	1.1	1.3
Hexane	ug/L				0.33		0.15		
Cyclohexanone	ug/L	3.8	2.4	0.21	1.6	1.6	1.3		1.0
Tetrahydrofuran	ug/L	0.64	1.2	1.1	0.79	1.4	2.1	3.5	0.70
Tetramethyl THF	ug/L	0.067	0.061	0.062	0.20	0.10	0.13	0.078	0.079
Gasoline C6-C10	ug/L		15		4.8	15	8.5		11
Gasoline C7-C12	ug/L		18		2.4	13	7.7		11
Dibromofluoromethane	ug/L	3.1		1.8	2.4	1.5	1.1	3.2	1.1
1,2-Dichloroethane-d4	ug/L	3.0			2.4	1.2	1.7	3.0	1.0
Toluene-d8	ug/L	1.7			1.1	1.0	1.5	1.1	0.96
Bromofluorobenzene	ug/L	2.5			1.2	1.2	2.5	1.5	0.62
Trifluorotoluene	ug/L	0.12		0.065	0.21	0.13		0.14	

PAH Water Data

EPA 8310



Polynuclear Aromatics by HPLC

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	1065PZ2A	Batch#:	120180
Lab ID:	191314-011	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Prepared:	12/08/06
Diln Fac:	1.000	Analyzed:	12/11/06

Analyte	Result	RL	MDL
Naphthalene	ND	0.94	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.94	
Fluorene	ND	0.94	
Phenanthrene	ND	0.47	
Anthracene	ND	0.47	0.02
Fluoranthene	ND	0.38	0.008
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.09	
Chrysene	ND	0.09	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.09	
Benzo(a)pyrene	ND	0.09	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	72	65-135
1-Methylnaphthalene (F)	73	65-135

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit



Polynuclear Aromatics by HPLC

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	1065PZ4A	Batch#:	120180
Lab ID:	191314-012	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Prepared:	12/08/06
Diln Fac:	1.000	Analyzed:	12/11/06

Analyte	Result	RL	MDL
Naphthalene	ND	0.94	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.94	
Fluorene	ND	0.94	
Phenanthrene	ND	0.47	
Anthracene	ND	0.47	0.02
Fluoranthene	ND	0.38	0.008
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.09	
Chrysene	ND	0.09	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.09	
Benzo(a)pyrene	ND	0.09	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	87	65-135
1-Methylnaphthalene (F)	88	65-135

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit



Polynuclear Aromatics by HPLC

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	LF6GW104	Batch#:	120180
Lab ID:	191314-014	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Prepared:	12/08/06
Diln Fac:	1.000	Analyzed:	12/11/06

Analyte	Result	RL	MDL
Naphthalene	ND	0.94	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.94	
Fluorene	ND	0.94	
Phenanthrene	ND	0.47	
Anthracene	ND	0.47	0.02
Fluoranthene	ND	0.38	0.008
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.09	
Chrysene	ND	0.09	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.09	
Benzo(a)pyrene	ND	0.09	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	82	65-135
1-Methylnaphthalene (F)	83	65-135

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit



Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	LF6GW106	Batch#:	120180
Lab ID:	191314-016	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Prepared:	12/08/06
Diln Fac:	1.000	Analyzed:	12/11/06

Analyte	Result	RL	MDL
Naphthalene	ND	0.94	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.94	
Fluorene	ND	0.94	
Phenanthrene	ND	0.47	
Anthracene	ND	0.47	0.02
Fluoranthene	ND	0.38	0.008
Pyrene	ND	0.19	
Benzo(a) anthracene	ND	0.09	
Chrysene	ND	0.09	
Benzo(b) fluoranthene	ND	0.19	
Benzo(k) fluoranthene	ND	0.09	
Benzo(a) pyrene	ND	0.09	
Dibenz(a,h) anthracene	ND	0.19	
Benzo(g,h,i) perylene	ND	0.19	
Indeno(1,2,3-cd) pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	85	65-135
1-Methylnaphthalene (F)	84	65-135

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit



Polynuclear Aromatics by HPLC

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	FM14EX07GW102	Batch#:	120180
Lab ID:	191314-017	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Prepared:	12/08/06
Diln Fac:	1.000	Analyzed:	12/11/06

Analyte	Result	RL	MDL
Naphthalene	ND	0.95	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.95	
Fluorene	ND	0.95	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	ND	0.38	0.008
Pyrene	ND	0.19	
Benzo (a) anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo (b) fluoranthene	ND	0.19	
Benzo (k) fluoranthene	ND	0.10	
Benzo (a) pyrene	ND	0.10	
Dibenz (a, h) anthracene	ND	0.19	
Benzo (g, h, i) perylene	ND	0.19	
Indeno (1, 2, 3-cd) pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	82	65-135
1-Methylnaphthalene (F)	81	65-135

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit



Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	FM14EX07GW101	Batch#:	120180
Lab ID:	191314-018	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Prepared:	12/08/06
Diln Fac:	1.000	Analyzed:	12/11/06

Analyte	Result	RL	MDL
Naphthalene	ND	0.95	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.95	
Fluorene	ND	0.95	
Phenanthrene	ND	0.48	
Anthracene	ND	0.48	0.02
Fluoranthene	0.05 J	0.38	0.008
Pyrene	ND	0.19	
Benzo (a) anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo (b) fluoranthene	ND	0.19	
Benzo (k) fluoranthene	ND	0.10	
Benzo (a) pyrene	ND	0.10	
Dibenz (a, h) anthracene	ND	0.19	
Benzo (g, h, i) perylene	ND	0.19	
Indeno (1, 2, 3-cd) pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	81	65-135
1-Methylnaphthalene (F)	81	65-135

J= Estimated value

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit



Curtis & Tompkins, Ltd.

Polynuclear Aromatics by HPLC

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	514AGW101	Batch#:	120180
Lab ID:	191314-019	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Prepared:	12/08/06
Diln Fac:	1.000	Analyzed:	12/11/06

Analyte	Result	RL	MDL
Naphthalene	ND	0.94	
Acenaphthylene	ND	1.9	
Acenaphthene	ND	0.94	
Fluorene	ND	0.94	
Phenanthrene	ND	0.47	
Anthracene	ND	0.47	0.02
Fluoranthene	0.07 J	0.38	0.008
Pyrene	ND	0.19	
Benzo(a)anthracene	ND	0.09	
Chrysene	ND	0.09	
Benzo(b)fluoranthene	ND	0.19	
Benzo(k)fluoranthene	ND	0.09	
Benzo(a)pyrene	ND	0.09	
Dibenz(a,h)anthracene	ND	0.19	
Benzo(g,h,i)perylene	ND	0.19	
Indeno(1,2,3-cd)pyrene	ND	0.13	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	83	65-135
1-Methylnaphthalene (F)	82	65-135

J= Estimated value

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC367536	Batch#:	120180
Matrix:	Water	Prepared:	12/08/06
Units:	ug/L	Analyzed:	12/11/06

Analyte	Result	RL	MDL
Naphthalene	ND	1.0	
Acenaphthylene	ND	2.0	
Acenaphthene	ND	1.0	
Fluorene	ND	1.0	
Phenanthrene	ND	0.50	
Anthracene	ND	0.50	0.02
Fluoranthene	ND	0.40	0.008
Pyrene	ND	0.20	
Benzo (a) anthracene	ND	0.10	
Chrysene	ND	0.10	
Benzo (b) fluoranthene	ND	0.20	
Benzo (k) fluoranthene	ND	0.10	
Benzo (a) pyrene	ND	0.10	
Dibenz (a, h) anthracene	ND	0.20	
Benzo (g, h, i) perylene	ND	0.20	
Indeno (1, 2, 3-cd) pyrene	ND	0.14	

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	85	65-135
1-Methylnaphthalene (F)	85	65-135

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC367537	Batch#:	120180
Matrix:	Water	Prepared:	12/08/06
Units:	ug/L	Analyzed:	12/11/06

Analyte	Spiked	Result	%REC	Limits
Naphthalene	10.00	9.419	94	50-135
Fluorene	2.000	1.894	95	65-135
Pyrene	1.000	0.9518	95	65-135
Benzo(a)pyrene	1.000	0.9542	95	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	90	65-135
1-Methylnaphthalene (F)	90	65-135

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	1065PZ2A	Batch#:	120180
MSS Lab ID:	191314-011	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Prepared:	12/08/06
Diln Fac:	1.000	Analyzed:	12/11/06

Type: MS Lab ID: QC367538

Analyte	MSS Result	Spiked	Result	%REC	Limits
Naphthalene	<0.04123	9.434	8.529	90	50-135
Fluorene	<0.007146	1.887	1.654	88	65-135
Pyrene	<0.003920	0.9434	0.8720	92	65-135
Benzo(a)pyrene	<0.01656	0.9434	0.7367	78	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	81	65-135
1-Methylnaphthalene (F)	82	65-135

Type: MSD Lab ID: QC367539

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Naphthalene	9.434	7.885	84	50-135	8	35
Fluorene	1.887	1.568	83	65-135	5	35
Pyrene	0.9434	0.8360	89	65-135	4	35
Benzo(a)pyrene	0.9434	0.6952	74	65-135	6	35

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	76	65-135
1-Methylnaphthalene (F)	78	65-135

RPD= Relative Percent Difference

Batch QC Report

Polynuclear Aromatics by HPLC

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8310
Field ID:	514AGW101	Batch#:	120180
MSS Lab ID:	191314-019	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Prepared:	12/08/06
Diln Fac:	1.000	Analyzed:	12/11/06

Type: MS Lab ID: QC367540

Analyte	MSS Result	Spiked	Result	%REC	Limits
Naphthalene	<0.04123	9.434	8.743	93	50-135
Fluorene	<0.007146	1.887	1.745	92	65-135
Pyrene	0.03606	0.9434	0.7990	81	65-135
Benzo(a)pyrene	<0.01656	0.9434	0.2761	29 *	65-135

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	86	65-135
1-Methylnaphthalene (F)	86	65-135

Type: MSD Lab ID: QC367541

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Naphthalene	9.434	8.196	87	50-135	6	35
Fluorene	1.887	1.617	86	65-135	8	35
Pyrene	0.9434	0.7769	79	65-135	3	35
Benzo(a)pyrene	0.9434	0.3538	38 *	65-135	25	35

Surrogate	%REC	Limits
1-Methylnaphthalene (UV)	80	65-135
1-Methylnaphthalene (F)	80	65-135

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Confirmation Report for 191314 HPLC Water
Curtis & Tompkins Laboratories

Units: ug/L

Lab ID	Client ID	Analyte	Result	Confirmation	RPD	%D
191314-018	FM14EX07GW101	Fluoranthene	0.04719 J	0.06642	34	41
191314-019	514AGW101	Fluoranthene	0.06596 J	0.09906	40	50

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191314 HPLC Water: EPA 8310

Inst : HPLC05

Calnum : 856422684001

Units : ug/L

Date : 20-OCT-2006 14:42

X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	293000006	856422684006	20-OCT-2006 14:42	S4234	
L2	293000007	856422684007	20-OCT-2006 15:06	S4233	
L3	293000008	856422684008	20-OCT-2006 15:30	S4232	
L4	293000009	856422684009	20-OCT-2006 15:53	S4231	
L5	293000010	856422684010	20-OCT-2006 16:17	S4230	
L6	293000011	856422684011	20-OCT-2006 16:40	S4229	
L7	293000012	856422684012	20-OCT-2006 17:04	S4228	

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	MRSD	MR ²	MRSD	Flg
Naphthalene	1	0.0112	0.0108	0.0106	0.0100	0.0106	0.0110	0.0108	LINR	62.3689	92.4804		0.0107	1.000	0.99	20		
Acenaphthylene	1	0.0082	0.0078	0.0077	0.0073	0.0077	0.0080	0.0078	LINR	100.949	127.623		0.0078	1.000	0.99	20		
Acenaphthene	1	0.0034	0.0038	0.0039	0.0038	0.0040	0.0042	0.0041	LINR	81.6039	241.935		0.0039	1.000	0.99	20		
Fluorene	1	0.0481	0.0498	0.0501	0.0483	0.0506	0.0535	0.0518	LINR	14.3072	19.1646		0.0503	1.000	0.99	20		
Phenanthrene	1	0.1438	0.1399	0.1418	0.1338	0.1419	0.1486	0.1454	LINR	8.77257	6.83833		0.1422	1.000	0.99	20		
Anthracene	1	0.3050	0.3045	0.3026	0.2877	0.3019	0.3162	0.3136	LINR	13.1278	3.17645		0.3045	1.000	0.99	20		
Fluoranthene	1	0.0347	0.0333	0.0325	0.0310	0.0325	0.0342	0.0332	LINR	11.9642	29.9112		0.0330	1.000	0.99	20		
Benzo(a)anthracene	1	0.0574	0.0686	0.0707	0.0677	0.0724	0.0775	0.0767	LINR	21.9712	12.9544		0.0702	1.000	0.99	20		
Chrysene	1	0.1040	0.1048	0.1093	0.1041	0.1085	0.1143	0.1119	LINR	9.26571	8.89174		0.1081	1.000	0.99	20		
Benzo(b)fluoranthene	1	0.0782	0.0839	0.0841	0.0806	0.0854	0.0897	0.0882	LINR	25.1696	11.2738		0.0843	1.000	0.99	20		
Benzo(k)fluoranthene	1	0.0646	0.0608	0.0642	0.0607	0.0650	0.0684	0.0672	LINR	13.7591	14.7909		0.0644	1.000	0.99	20		
Benzo(a)pyrene	1	0.0888	0.0681	0.0680	0.0624	0.0678	0.0708	0.0694	LINR	9.13882	14.3343		0.0708	1.000	0.99	20		
Dibenz(a,h)anthracene	1	0.0214	0.0144	0.0165	0.0161	0.0177	0.0188	0.0186	LINR	46.0475	53.5119		0.0176	1.000	0.99	20		
Benzo(g,h,i)perylene	1	0.0362	0.0265	0.0253	0.0249	0.0264	0.0282	0.0279	LINR	38.7818	35.6147		0.0279	1.000	0.99	20		
Indeno(1,2,3-cd)pyrene	1	0.0914	0.0655	0.0730	0.0695	0.0748	0.0810	0.0798	LINR	23.1302	12.4437		0.0764	1.000	0.99	20		
1-Methylnaphthalene (UV)	1	0.0073	0.0070	0.0070	0.0066	0.0069	0.0072	0.0070	LINR	244.420	141.794		0.0070	1.000	0.99	20		
Acenaphthylene	2	0.0672	0.0660	0.0650	0.0612	0.0630	0.0642		LINR	82.4148	15.6143		0.0644	1.000	0.99	20		
Pyrene	2	0.0985	0.1018	0.1025	0.0966	0.1048	0.1104	0.1069	LINR	9.00456	9.28619		0.1031	1.000	0.99	20		
1-Methylnaphthalene (UV)	2	0.0163	0.0160	0.0157	0.0146	0.0149	0.0151		LINR	47.8928	66.3750		0.0154	1.000	0.99	20		
Naphthalene	3	0.0102	0.0101	0.0099	0.0094	0.0098	0.0102	0.0098	LINR	-19.221	101.261		0.0099	1.000	0.99	20		
Acenaphthene	3	0.0195	0.0191	0.0191	0.0181	0.0191	0.0199		LINR	128.673	50.4217		0.0191	0.999	0.99	20		
Fluorene	3	0.1358	0.1341	0.1326	0.1256	0.1303	0.1346		LINR	18.3555	7.44134		0.1322	1.000	0.99	20		
Phenanthrene	3	0.1225	0.1214	0.1202	0.1138	0.1196	0.1244	0.1208	LINR	2.50995	8.22983		0.1204	1.000	0.99	20		
Anthracene	3	0.3249	0.3242	0.3213	0.3040	0.3173	0.3308	0.3258	LINR	8.01235	3.05700		0.3212	1.000	0.99	20		
Fluoranthene	3	0.0423	0.0418	0.0419	0.0398	0.0416	0.0436	0.0426	LINR	13.7519	23.3663		0.0419	1.000	0.99	20		
Pyrene	3	0.1574	0.1555	0.1573	0.1503	0.1597	0.1667	0.1628	LINR	8.17197	6.10491		0.1585	1.000	0.99	20		

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r^2	Mtr^2	NxRSD	Flg
Benzo(a)anthracene	3	0.1140	0.1149	0.1167	0.1128	0.1203	0.1274	0.1238	LINR	11.0651	8.01910		0.1186	1.000	0.99	20	
Chrysene	3	0.1994	0.1982	0.1969	0.1861	0.1926	0.1989	0.1910	LINR	-6.6175	5.20664		0.1947	1.000	0.99	20	
Benzo(b)fluoranthene	3	0.0613	0.0611	0.0622	0.0590	0.0621	0.0646	0.0628	LINR	7.09058	15.8387		0.0619	1.000	0.99	20	
Benzo(k)fluoranthene	3	0.4270	0.4223	0.4271	0.4031	0.4185	0.4266		LINR	6.36009	2.34628		0.4208	1.000	0.99	20	
Benzo(a)pyrene	3	0.1881	0.1864	0.1906	0.1796	0.1876	0.1948	0.1874	LINR	-2.6745	5.30328		0.1878	1.000	0.99	20	
Dibenz(a,h)anthracene	3	0.0354	0.0361	0.0382	0.0369	0.0399	0.0424	0.0413	LINR	31.5047	24.0098		0.0386	1.000	0.99	20	
Benzo(g,h,i)perylene	3	0.0678	0.0685	0.0721	0.0691	0.0742	0.0787	0.0773	LINR	34.1300	12.8444		0.0725	1.000	0.99	20	
Indeno(1,2,3-cd)pyrene	3	0.0769	0.0754	0.0818	0.0779	0.0844	0.0896	0.0861	LINR	9.70583	11.5022		0.0817	0.999	0.99	20	
1-Methylnaphthalene (F)	3	0.0112	0.0110	0.0109	0.0102	0.0106	0.0108		LINR	209.497	92.6837		0.0108	1.000	0.99	20	

00100

Instrument amount = a0 + response * a1 + response^2 * a2; LINR-Linear regression

Calibration Table

NEW ICAL *Jim* 23 OCT 2006
HPLC05 METHOD 8310

Calib. Data Modified : 10/23/2006 5:18:58 PM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 1.000 %
Abs. Reference Window : 0.150 min
Rel. Non-ref. Window : 1.000 %
Abs. Non-ref. Window : 0.150 min
Do not use Multiplier & Dilution Factor with ISTDs
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
Origin : Ignored
Weight : Equal

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

10/30/06

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: DAD1 A, Sig=254,4 Ref=480,80
Signal 2: DAD1 B, Sig=235,4 Ref=480,80
Signal 3: FLD1 A, Ex=273, Em=323, TT

RetTime	Lvl	Amount	Area	Amt/Area	Ref Grp Name
[min]	Sig	[ug/l]			
2.618	1	1 166.67000	1.87262	89.00358	Naphthalene
		2 500.00000	5.39314	92.71043	
		3 2000.00000	21.24130	94.15618	
		4 4000.00000	40.15183	99.62186	
		5 1.00000e4	105.58833	94.70743	
		6 2.00000e4	219.41838	91.15007	
		7 4.00000e4	430.61826	92.88970	
2.644	3	1 166.67000	1.69219	98.49383	Naphthalene
		2 500.00000	5.03479	99.30901	
		3 2000.00000	19.85534	100.72855	
		4 4000.00000	37.50118	106.66330	
		5 1.00000e4	98.35535	101.67215	
		6 2.00000e4	203.15842	98.44534	
		7 4.00000e4	392.85257	101.81937	
3.232	1	1 333.33000	2.73477	121.88589	Acenaphthylene
		2 1000.00000	7.79701	128.25424	
		3 4000.00000	30.83273	129.73226	
		4 8000.00000	58.40831	136.96682	

RetTime [min]	Lvl Sig	Amount [ug/l]	Area	Amt/Area	Ref Grp Name
3.233	2	5 2.00000e4	153.18359	130.56228	
		6 4.00000e4	319.16855	125.32563	
		7 8.00000e4	623.79065	128.24816	
	1	1 333.33000	22.39426	14.88462	Acenaphthylene
		2 1000.00000	65.99164	15.15344	
		3 4000.00000	260.16629	15.37478	
		4 8000.00000	489.73437	16.33539	
		5 2.00000e4	1260.02979	15.87264	
		6 4.00000e4	2566.57837	15.58495	
3.774	1	1 666.67000	4.85469	137.32485	1-Methylnaphthalene (UV)
		2 2000.00000	14.04867	142.36228	
		3 8000.00000	55.73627	143.53310	
		4 1.60000e4	104.83626	152.61895	
		5 4.00000e4	274.65417	145.63769	
		6 8.00000e4	573.35449	139.52973	
		7 1.60000e5	1123.21265	142.44854	
3.775	2	1 666.67000	10.87865	61.28240	1-Methylnaphthalene (UV)
		2 2000.00000	32.02159	62.45786	
		3 8000.00000	125.52388	63.73289	
		4 1.60000e4	233.55998	68.50489	
		5 4.00000e4	594.28253	67.30805	
		6 8.00000e4	1209.07336	66.16637	
3.800	3	1 666.67000	7.47726	89.15966	1-Methylnaphthalene (F)
		2 2000.00000	22.05803	90.66994	
		3 8000.00000	87.30132	91.63664	
		4 1.60000e4	163.54369	97.83319	
		5 4.00000e4	424.00409	94.33871	
		6 8.00000e4	864.49622	92.53944	
4.097	1	1 166.67000	1.55067	107.48240	2-Methylnaphthalene
		2 500.00000	4.46054	112.09418	
		3 2000.00000	17.87906	111.86270	
		4 4000.00000	34.05137	117.46957	
		5 1.00000e4	89.80411	111.35348	
		6 2.00000e4	187.31686	106.77095	
		7 4.00000e4	364.75916	109.66140	
4.123	3	1 166.67000	2.26019	73.74166	2-Methylnaphthalene
		2 500.00000	6.69415	74.69203	
		3 2000.00000	26.65734	75.02623	
		4 4000.00000	50.32135	79.48913	
		5 1.00000e4	131.51395	76.03756	
		6 2.00000e4	273.15500	73.21850	
		7 4.00000e4	524.79846	76.21974	
4.430	1	1 166.67000	5.63797e-1	295.62049	Acenaphthene
		2 500.00000	1.88988	264.56750	
		3 2000.00000	7.72071	259.04338	
		4 4000.00000	15.17353	263.61703	
		5 1.00000e4	40.24534	248.47598	
		6 2.00000e4	84.95349	235.42293	
		7 4.00000e4	163.98227	243.92881	
4.456	3	1 166.67000	3.24780	51.31784	Acenaphthene
		2 500.00000	9.55153	52.34766	
		3 2000.00000	38.27118	52.25865	
		4 4000.00000	72.57647	55.11428	
		5 1.00000e4	191.20360	52.30027	
		6 2.00000e4	397.03738	50.37309	
4.787	1	1 33.33300	1.60423	20.77816	Fluorene
		2 100.00000	4.97697	20.09253	

RetTime	Lvl	Amount	Area	Amt/Area	Ref	Grp	Name
[min]	Sig	[ug/l]					
-----	----	-----	-----	-----	----	----	-----
		3 400.00000	20.02391	19.97612			
		4 800.00000	38.67158	20.68703			
		5 2000.00000	101.16436	19.76981			
		6 4000.00000	213.80600	18.70855			
		7 8000.00000	414.61331	19.29509			
4.814	3	1 33.33300	4.52741	7.36249			Fluorene
		2 100.00000	13.40784	7.45832			
		3 400.00000	53.04753	7.54041			
		4 800.00000	100.49004	7.96099			
		5 2000.00000	260.67688	7.67233			
		6 4000.00000	538.53595	7.42754			
5.654	1	1 16.66700	2.39616	6.95572			Phenanthrene
		2 50.00000	6.99577	7.14717			
		3 200.00000	28.35797	7.05269			
		4 400.00000	53.53967	7.47110			
		5 1000.00000	141.86998	7.04871			
		6 2000.00000	297.28598	6.72753			
		7 4000.00000	581.70605	6.87633			
5.680	3	1 16.66700	2.04240	8.16048			Phenanthrene
		2 50.00000	6.07206	8.23444			
		3 200.00000	24.03204	8.32222			
		4 400.00000	45.52298	8.78677			
		5 1000.00000	119.56546	8.36362			
		6 2000.00000	248.73990	8.04053			
		7 4000.00000	483.37540	8.27514			
6.401	1	1 16.66700	5.08343	3.27869			Anthracene
		2 50.00000	15.22430	3.28422			
		3 200.00000	60.51564	3.30493			
		4 400.00000	115.07833	3.47589			
		5 1000.00000	301.92731	3.31206			
		6 2000.00000	632.47308	3.16219			
		7 4000.00000	1254.36133	3.18887			
6.427	3	1 16.66700	5.41461	3.07816			Anthracene
		2 50.00000	16.20784	3.08493			
		3 200.00000	64.25589	3.11256			
		4 400.00000	121.59124	3.28971			
		5 1000.00000	317.26334	3.15196			
		6 2000.00000	661.61743	3.02289			
		7 4000.00000	1303.20703	3.06935			
7.245	1	1 33.33300	1.15551	28.84694			Fluoranthene
		2 100.00000	3.33166	30.01503			
		3 400.00000	12.98016	30.81627			
		4 800.00000	24.77284	32.29344			
		5 2000.00000	64.95121	30.79234			
		6 4000.00000	136.77095	29.24598			
		7 8000.00000	265.86572	30.09038			
7.271	3	1 33.33300	1.40892	23.65851			Fluoranthene
		2 100.00000	4.17803	23.93471			
		3 400.00000	16.75041	23.88001			
		4 800.00000	31.82304	25.13902			
		5 2000.00000	83.10880	24.06484			
		6 4000.00000	174.21184	22.96055			
		7 8000.00000	340.61569	23.48688			
7.802	2	1 16.66700	1.64199	10.15049			Pyrene
		2 50.00000	5.09229	9.81877			
		3 200.00000	20.50868	9.75197			
		4 400.00000	38.62242	10.35668			

RetTime [min]	Lvl Sig	Amount [ug/l]	Area	Amt/Area	Ref Grp Name
7.828	3	5 1000.00000	104.77747	9.54404	Pyrene
		6 2000.00000	220.72879	9.06089	
		7 4000.00000	427.43903	9.35806	
		1 16.66700	2.62331	6.35343	
		2 50.00000	7.77364	6.43199	
		3 200.00000	31.46188	6.35690	
		4 400.00000	60.12874	6.65239	
9.643	1	5 1000.00000	159.68500	6.26233	Benzo(a) anthracene
		6 2000.00000	333.38132	5.99914	
		7 4000.00000	651.39581	6.14066	
		1 16.66700	9.57469e-1	17.40736	
		2 50.00000	3.42833	14.58438	
		3 200.00000	14.13649	14.14778	
		4 400.00000	27.08596	14.76780	
9.669	3	5 1000.00000	72.43194	13.80606	Benzo(a) anthracene
		6 2000.00000	155.09375	12.89543	
		7 4000.00000	306.81271	13.03727	
		1 16.66700	1.89931	8.77531	
		2 50.00000	5.74275	8.70663	
		3 200.00000	23.33808	8.56969	
		4 400.00000	45.12976	8.86333	
9.924	1	5 1000.00000	120.34502	8.30944	Chrysene
		6 2000.00000	254.83763	7.84813	
		7 4000.00000	495.09924	8.07919	
		1 16.66700	1.73275	9.61883	
		2 50.00000	5.23829	9.54510	
		3 200.00000	21.85947	9.14935	
		4 400.00000	41.63781	9.60665	
9.951	3	5 1000.00000	108.51689	9.21516	Chrysene
		6 2000.00000	228.52586	8.75174	
		7 4000.00000	447.41809	8.94018	
		1 16.66700	3.32351	5.01488	
		2 50.00000	9.90968	5.04557	
		3 200.00000	39.38066	5.07863	
		4 400.00000	74.45260	5.37255	
11.331	1	5 1000.00000	192.62691	5.19138	Benzo(b) fluoranthene
		6 2000.00000	397.78159	5.02788	
		7 4000.00000	763.90112	5.23628	
		1 33.33300	2.60658	12.78804	
		2 100.00000	8.39483	11.91209	
		3 400.00000	33.63747	11.89150	
		4 800.00000	64.49110	12.40481	
11.358	3	5 2000.00000	170.82089	11.70817	Benzo(b) fluoranthene
		6 4000.00000	358.76276	11.14943	
		7 8000.00000	705.74353	11.33556	
		1 33.33300	2.04261	16.31880	
		2 100.00000	6.11495	16.35336	
		3 400.00000	24.88266	16.07545	
		4 800.00000	47.17664	16.95755	
11.876	1	5 2000.00000	124.19430	16.10380	Benzo(k) fluoranthene
		6 4000.00000	258.33447	15.48380	
		7 8000.00000	502.21481	15.92944	
		1 16.66700	1.07658	15.48147	
		2 50.00000	3.04171	16.43813	
		3 200.00000	12.84467	15.57066	
		4 400.00000	24.29218	16.46621	
		5 1000.00000	64.97358	15.39087	

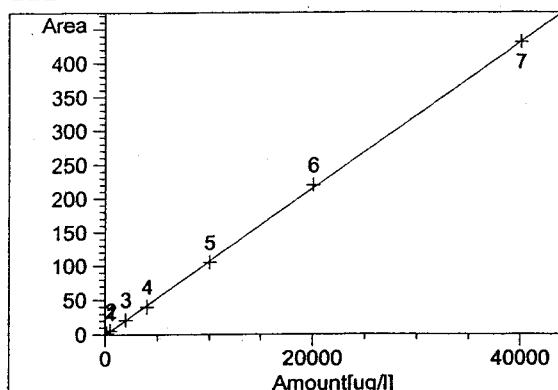
RetTime [min]	Lvl Sig	Amount [ug/l]	Area	Amt/Area	Ref Grp Name
11.903	3	6 2000.00000	136.72321	14.62809	
		7 4000.00000	268.87424	14.87684	
	1	1 16.66700	7.11749	2.34170	Benzo(k) fluoranthene
	2	50.00000	21.11408	2.36809	
	3	200.00000	85.41601	2.34148	
	4	400.00000	161.22827	2.48095	
	5	1000.00000	418.46454	2.38969	
12.503	1	6 2000.00000	853.15222	2.34425	
	1	1 16.66700	1.47983	11.26278	Benzo(a) pyrene
	2	50.00000	3.40725	14.67461	
	3	200.00000	13.60957	14.69554	
	4	400.00000	24.97371	16.01685	
	5	1000.00000	67.75494	14.75907	
	6	2000.00000	141.51094	14.13318	
	7	4000.00000	277.64722	14.40677	
12.530	3	1 16.66700	3.13471	5.31692	Benzo(a) pyrene
	2	50.00000	9.31910	5.36533	
	3	200.00000	38.12104	5.24645	
	4	400.00000	71.84358	5.56765	
	5	1000.00000	187.62558	5.32976	
	6	2000.00000	389.56021	5.13399	
	7	4000.00000	749.57336	5.33637	
13.593	1	1 33.33300	7.14428e-1	46.65694	Dibenz(a,h) anthracene
	2	100.00000	1.43965	69.46116	
	3	400.00000	6.61782	60.44291	
	4	800.00000	12.89288	62.04974	
	5	2000.00000	35.30107	56.65551	
	6	4000.00000	75.10837	53.25638	
	7	8000.00000	148.44279	53.89281	
13.621	3	1 33.33300	1.17981	28.25294	Dibenz(a,h) anthracene
	2	100.00000	3.61090	27.69396	
	3	400.00000	15.29729	26.14842	
	4	800.00000	29.55221	27.07073	
	5	2000.00000	79.78617	25.06700	
	6	4000.00000	169.40767	23.61168	
	7	8000.00000	330.60834	24.19782	
14.403	1	1 33.33300	1.20756	27.60349	Benzo(g,h,i) perylene
	2	100.00000	2.64537	37.80186	
	3	400.00000	10.11450	39.54719	
	4	800.00000	19.94430	40.11172	
	5	2000.00000	52.74908	37.91535	
	6	4000.00000	112.78819	35.46471	
	7	8000.00000	223.46182	35.80030	
14.432	3	1 33.33300	2.26050	14.74582	Benzo(g,h,i) perylene
	2	100.00000	6.84581	14.60747	
	3	400.00000	28.85268	13.86353	
	4	800.00000	55.31556	14.46248	
	5	2000.00000	148.45512	13.47208	
	6	4000.00000	314.70059	12.71049	
	7	8000.00000	618.74237	12.92945	
14.788	1	1 16.66700	1.52365	10.93886	Indeno(1,2,3-cd) pyrene
	2	50.00000	3.27349	15.27422	
	3	200.00000	14.59218	13.70597	
	4	400.00000	27.80243	14.38723	
	5	1000.00000	74.76157	13.37586	
	6	2000.00000	161.95921	12.34879	
	7	4000.00000	319.18451	12.53194	

RetTime [min]	Lvl Sig	Amount [ug/l]	Area	Amt/Area	Ref Grp Name
14.816	3 1	16.66700	1.28091	13.01189	Indeno(1,2,3-cd)pyrene
	2	50.00000	3.76963	13.26390	
	3	200.00000	16.36380	12.22210	
	4	400.00000	31.15694	12.83823	
	5	1000.00000	84.35104	11.85522	
	6	2000.00000	179.12015	11.16569	
	7	4000.00000	344.59106	11.60796	

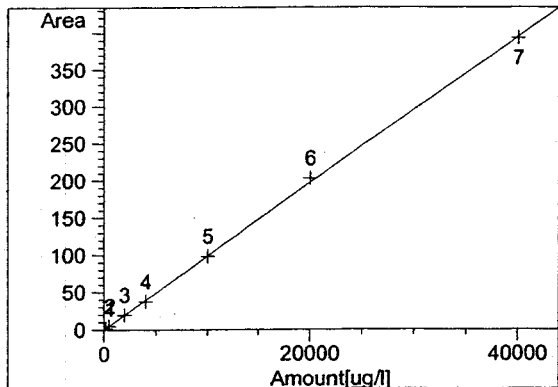
Peak Sum Table

No Entries in table

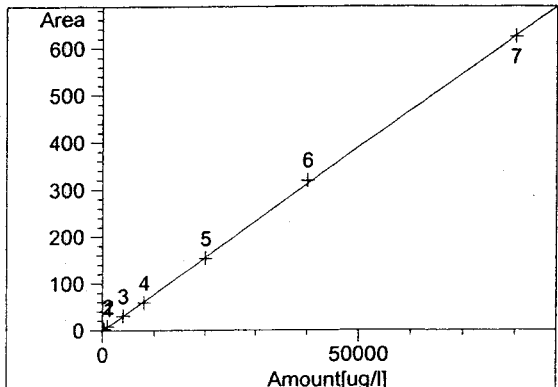
Calibration Curves



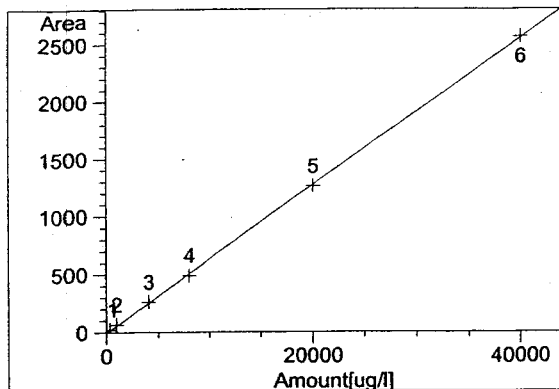
Naphthalene at exp. RT: 2.618
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99991
Residual Std. Dev.: 2.30839
Formula: $y = mx + b$
m: $1.08131e-2$
b: $-6.74401e-1$
x: Amount [ug/l]
y: Area



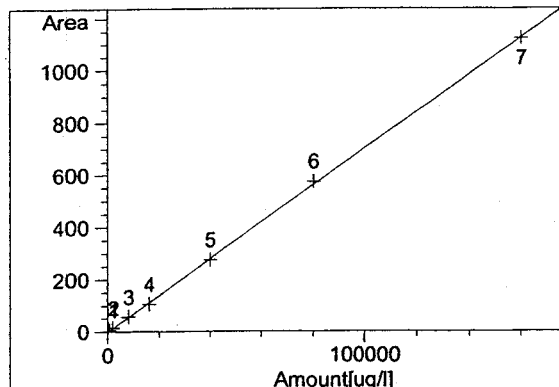
Naphthalene at exp. RT: 2.644
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99984
Residual Std. Dev.: 2.84731
Formula: $y = mx + b$
m: $9.87549e-3$
b: $1.89821e-1$
x: Amount [ug/l]
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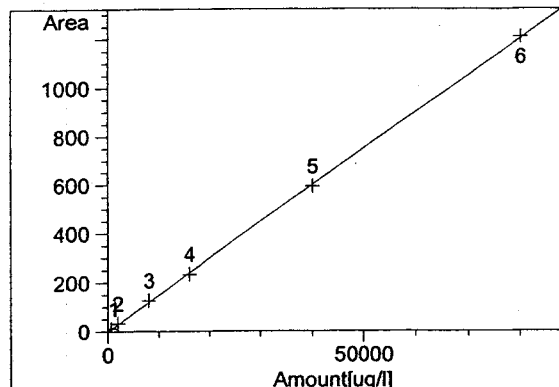
Acenaphthylene at exp. RT: 3.232
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99989
Residual Std. Dev.: 3.71409
Formula: $y = mx + b$
m: $7.83556e-3$
b: $-7.90989e-1$
x: Amount [ug/l]
y: Area



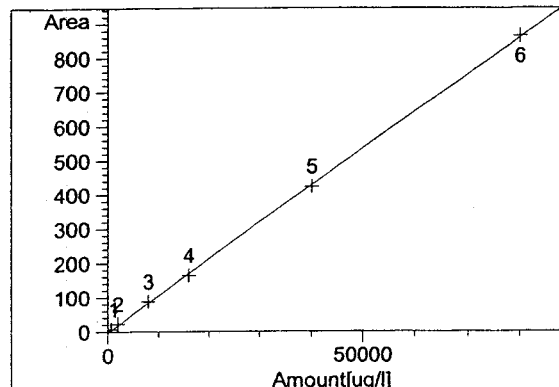
Acenaphthylene at exp. RT: 3.233
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99992
Residual Std. Dev.: 14.34576
Formula: $y = mx + b$
m: $6.40441e-2$
b: -5.27818
x: Amount [ug/l]
y: Area



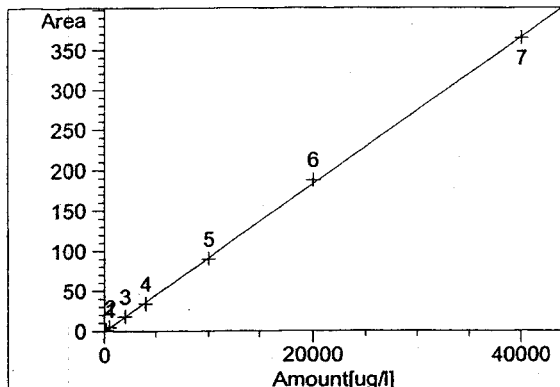
1-Methylnaphthalene (UV) at exp. RT: 3.774
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99990
Residual Std. Dev.: 6.47916
Formula: $y = mx + b$
m: $7.05249e-3$
b: -1.72372
x: Amount [ug/l]
y: Area



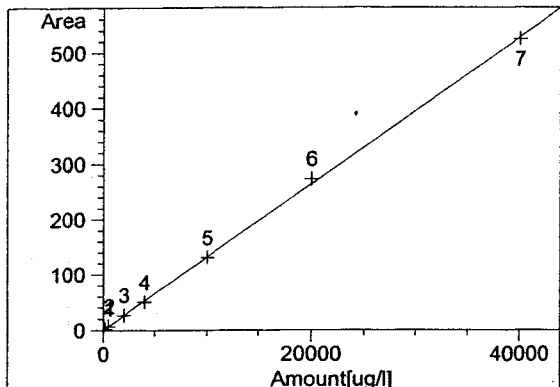
1-Methylnaphthalene (UV) at exp. RT: 3.775
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99992
Residual Std. Dev.: 6.45201
Formula: $y = mx + b$
m: $1.50659e-2$
b: $-7.21416e-1$
x: Amount [ug/l]
y: Area



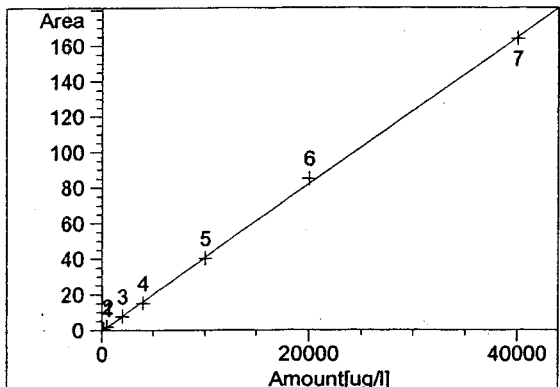
1-Methylnaphthalene (F) at exp. RT: 3.800
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99990
Residual Std. Dev.: 5.29917
Formula: $y = mx + b$
m: $1.07894e-2$
b: -2.26025
x: Amount [ug/l]
y: Area



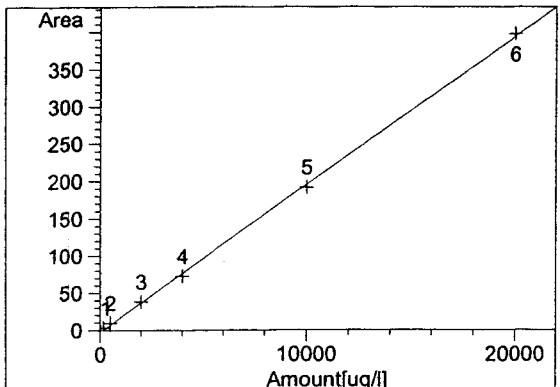
2-Methylnaphthalene at exp. RT: 4.097
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99987
Residual Std. Dev.: 2.39851
Formula: $y = mx + b$
m: $9.17111e-3$
b: $-4.70981e-1$
x: Amount [ug/l]
y: Area



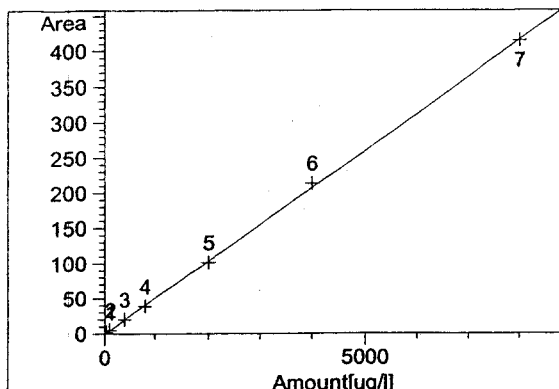
2-Methylnaphthalene at exp. RT: 4.123
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99978
Residual Std. Dev.: 4.44659
Formula: $y = mx + b$
m: $1.32028e-2$
b: $4.55045e-1$
x: Amount [ug/l]
y: Area



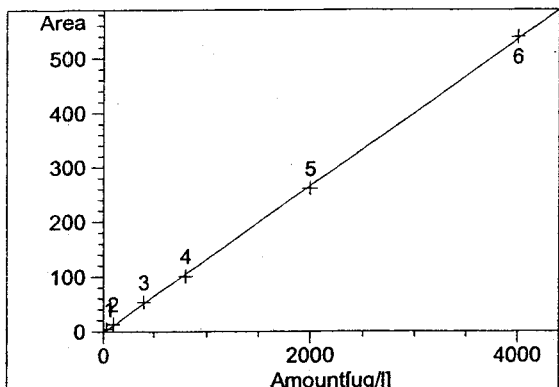
Acenaphthene at exp. RT: 4.430
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99978
Residual Std. Dev.: 1.38832
Formula: $y = mx + b$
m: $4.13335e-3$
b: $-3.37298e-1$
x: Amount [ug/l]
y: Area



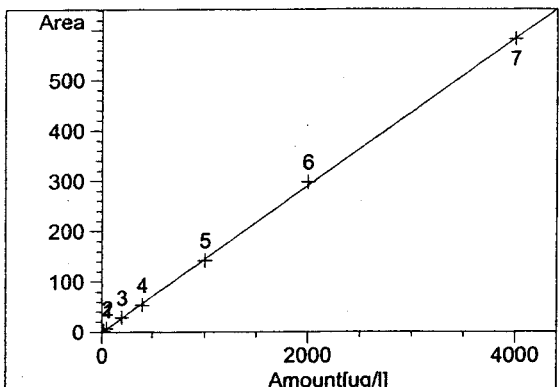
Acenaphthene at exp. RT: 4.456
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99974
Residual Std. Dev.: 3.85744
Formula: $y = mx + b$
m: $1.98327e-2$
b: -2.55193
x: Amount [ug/l]
y: Area



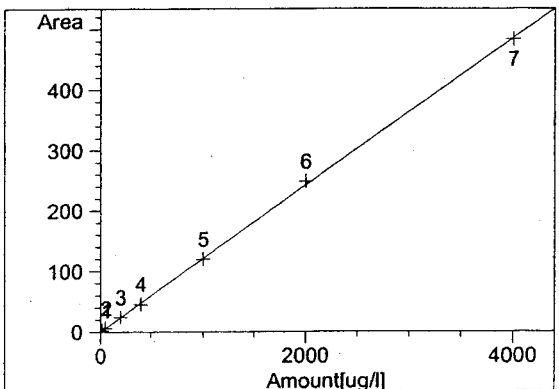
Fluorene at exp. RT: 4.787
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 0.99982
 Residual Std. Dev.: 3.17468
 Formula: $y = mx + b$
 m: $5.21795e-2$
 b: $-7.46540e-1$
 x: Amount [ug/l]
 y: Area



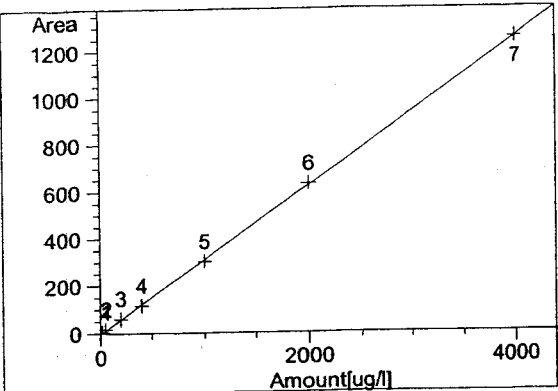
Fluorene at exp. RT: 4.814
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99981
 Residual Std. Dev.: 4.46421
 Formula: $y = mx + b$
 m: $1.34384e-1$
 b: -2.46669
 x: Amount [ug/l]
 y: Area



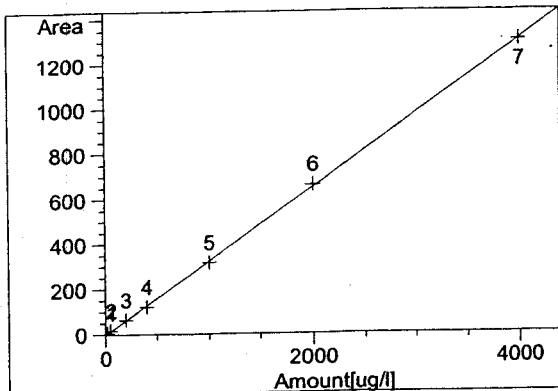
Phenanthrene at exp. RT: 5.654
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 0.99988
 Residual Std. Dev.: 3.65004
 Formula: $y = mx + b$
 m: $1.46235e-1$
 b: -1.28285
 x: Amount [ug/l]
 y: Area



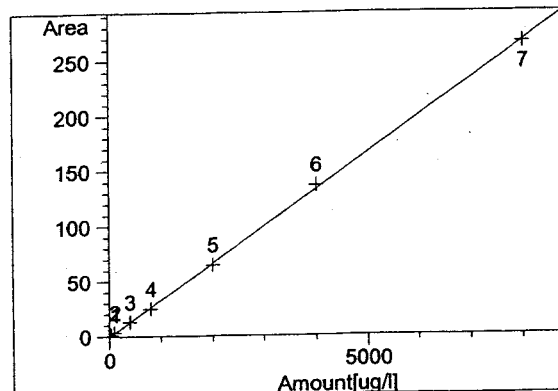
Phenanthrene at exp. RT: 5.680
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99986
 Residual Std. Dev.: 3.23902
 Formula: $y = mx + b$
 m: $1.21509e-1$
 b: $-3.17131e-1$
 x: Amount [ug/l]
 y: Area



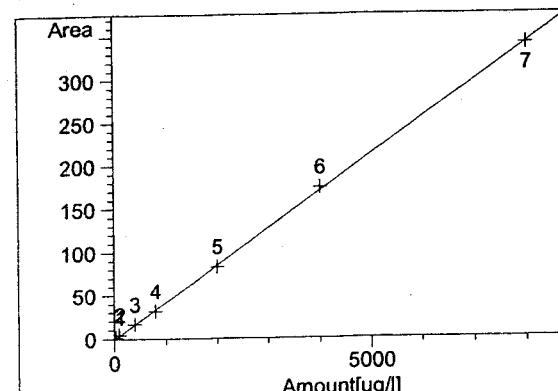
Anthracene at exp. RT: 6.401
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99992
Residual Std. Dev.: 6.36648
Formula: $y = mx + b$
m: 3.14816e-1
b: -4.13283
x: Amount [ug/l]
y: Area



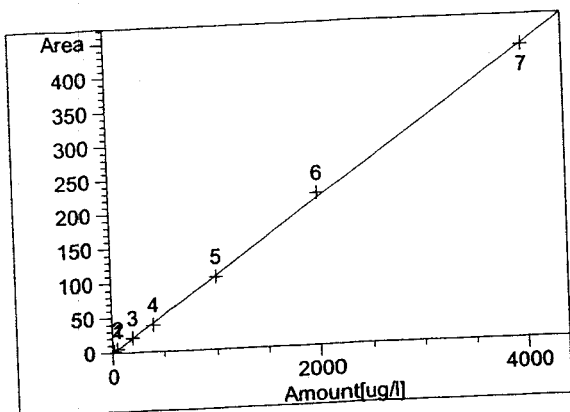
Anthracene at exp. RT: 6.427
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99992
Residual Std. Dev.: 6.60742
Formula: $y = mx + b$
m: 3.27118e-1
b: -2.62098
x: Amount [ug/l]
y: Area



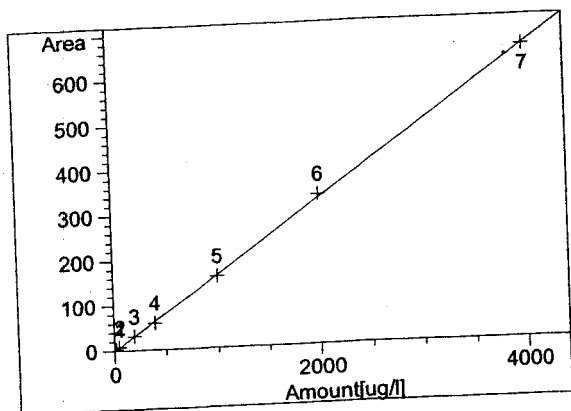
Fluoranthene at exp. RT: 7.245
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99984
Residual Std. Dev.: 1.91720
Formula: $y = mx + b$
m: 3.34323e-2
b: -3.99992e-1
x: Amount [ug/l]
y: Area



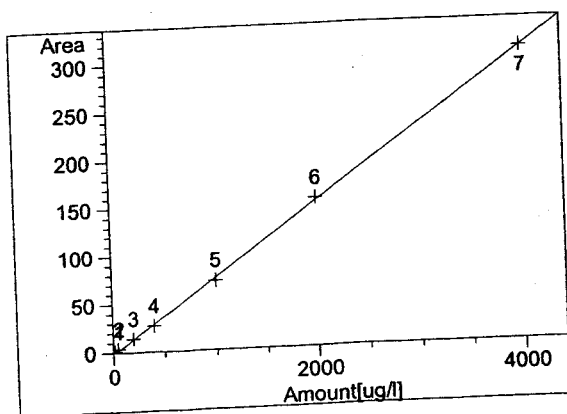
Fluoranthene at exp. RT: 7.271
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99988
Residual Std. Dev.: 2.09597
Formula: $y = mx + b$
m: 4.27967e-2
b: -5.88536e-1
x: Amount [ug/l]
y: Area



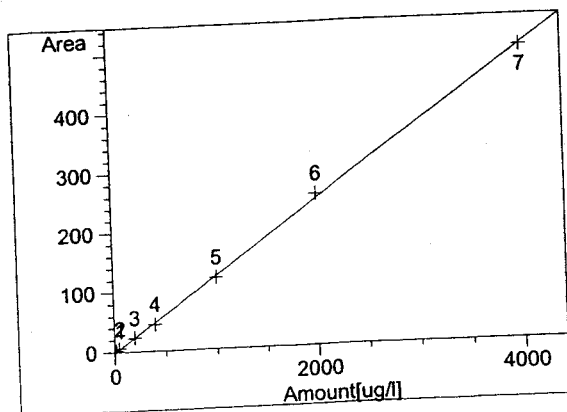
Pyrene at exp. RT: 7.802
DAD1 B, Sig=235,4 Ref=480,80
Correlation: 0.99979
Residual Std. Dev.: 3.53534
Formula: $y = mx + b$
m: $1.07687e-1$
b: $-9.69671e-1$
x: Amount [ug/l]
y: Area



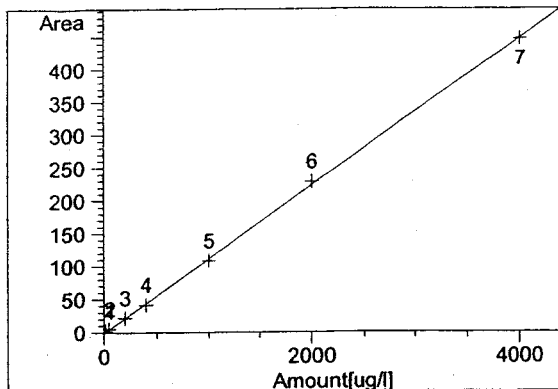
Pyrene at exp. RT: 7.828
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99988
Residual Std. Dev.: 4.08104
Formula: $y = mx + b$
m: $1.63803e-1$
b: -1.33859
x: Amount [ug/l]
y: Area



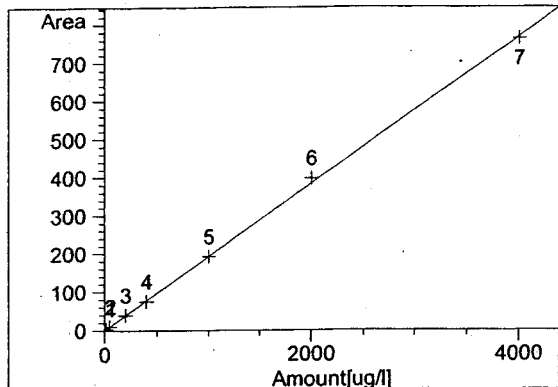
Benzo(a)anthracene at exp. RT: 9.643
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99985
Residual Std. Dev.: 2.15661
Formula: $y = mx + b$
m: $7.71938e-2$
b: -1.69604
x: Amount [ug/l]
y: Area



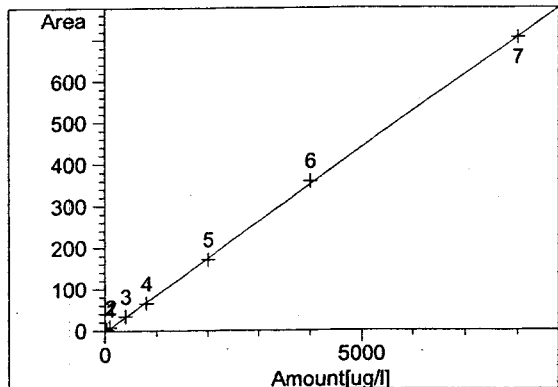
Benzo(a)anthracene at exp. RT: 9.669
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99981
Residual Std. Dev.: 3.85628
Formula: $y = mx + b$
m: $1.24702e-1$
b: -1.37985
x: Amount [ug/l]
y: Area



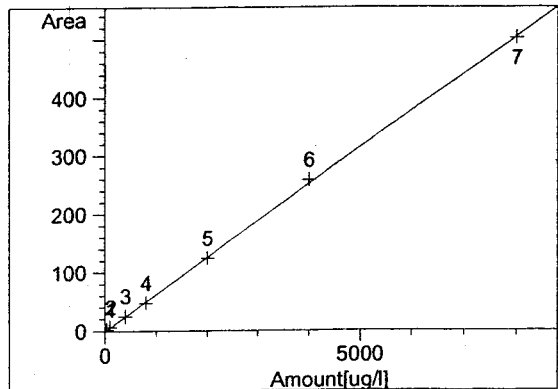
Chrysene at exp. RT: 9.924
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 0.99988
 Residual Std. Dev.: 2.78002
 Formula: $y = mx + b$
 m: $1.12464e-1$
 b: -1.04206
 x: Amount [ug/l]
 y: Area



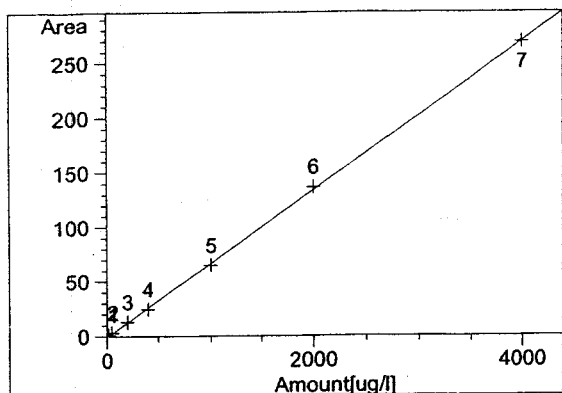
Chrysene at exp. RT: 9.951
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99979
 Residual Std. Dev.: 6.34193
 Formula: $y = mx + b$
 m: $1.92062e-1$
 b: 1.27098
 x: Amount [ug/l]
 y: Area



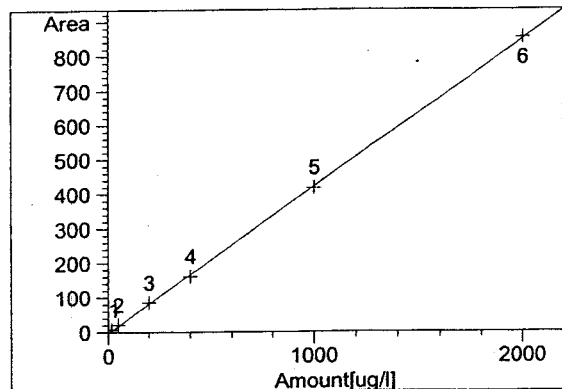
Benzo(b)fluoranthene at exp. RT: 11.331
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 0.99990
 Residual Std. Dev.: 4.11442
 Formula: $y = mx + b$
 m: $8.87012e-2$
 b: -2.23257
 x: Amount [ug/l]
 y: Area



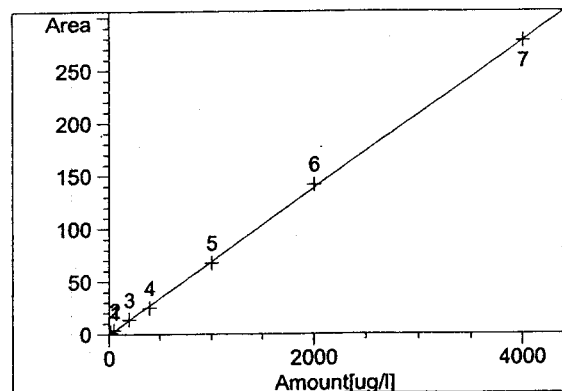
Benzo(b)fluoranthene at exp. RT: 11.358
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99986
 Residual Std. Dev.: 3.34638
 Formula: $y = mx + b$
 m: $6.31366e-2$
 b: $-4.47674e-1$
 x: Amount [ug/l]
 y: Area



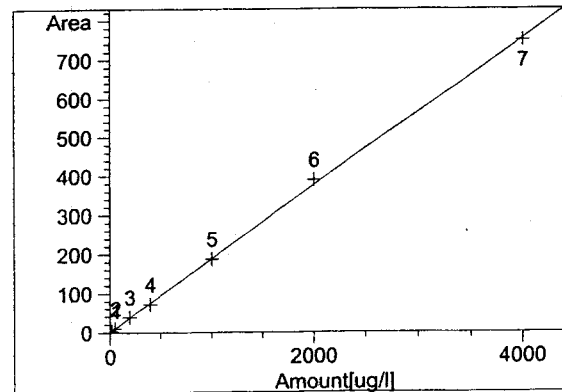
Benzo(k)fluoranthene at exp. RT: 11.876
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 0.99988
 Residual Std. Dev.: 1.65788
 Formula: $y = mx + b$
 m: $6.76093e-2$
 b: $-9.30247e-1$
 x: Amount [ug/l]
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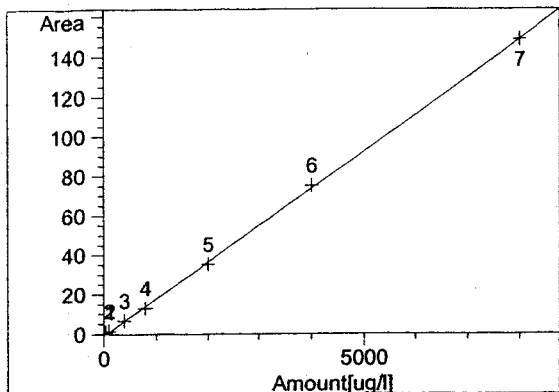
Benzo(k)fluoranthene at exp. RT: 11.903
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99991
 Residual Std. Dev.: 5.05238
 Formula: $y = mx + b$
 m: $4.26206e-1$
 b: -2.71071
 x: Amount [ug/l]
 y: Area



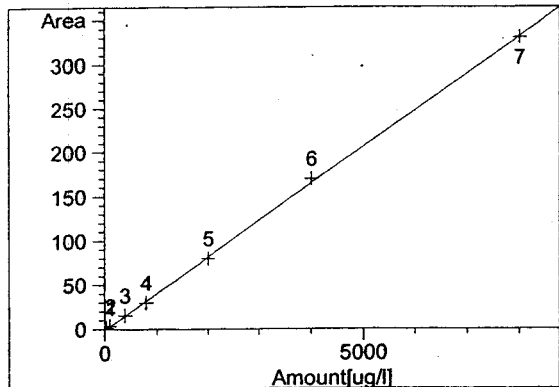
Benzo(a)pyrene at exp. RT: 12.503
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 0.99987
 Residual Std. Dev.: 1.78407
 Formula: $y = mx + b$
 m: $6.97626e-2$
 b: $-6.37548e-1$
 x: Amount [ug/l]
 y: Area



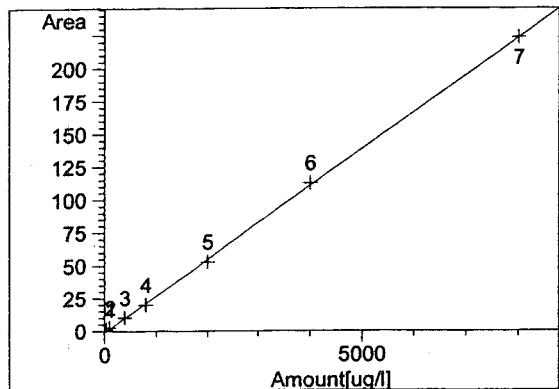
Benzo(a)pyrene at exp. RT: 12.530
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99979
 Residual Std. Dev.: 6.14177
 Formula: $y = mx + b$
 m: $1.88563e-1$
 b: $5.04316e-1$
 x: Amount [ug/l]
 y: Area



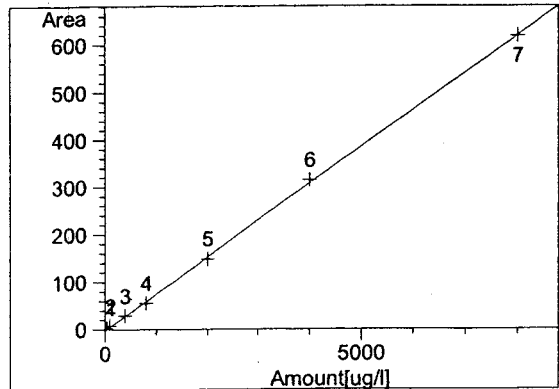
Dibenzo(a,h)anthracene at exp. RT: 13.593
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 0.99985
 Residual Std. Dev.: 1.05082
 Formula: $y = mx + b$
 m: $1.86874e-2$
 b: $-8.60511e-1$
 x: Amount[ug/l]
 y: Area



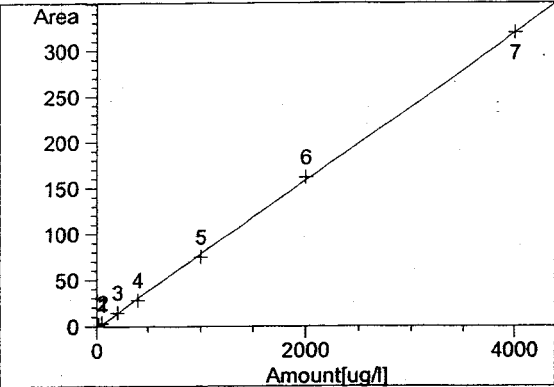
Dibenzo(a,h)anthracene at exp. RT: 13.621
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99982
 Residual Std. Dev.: 2.50131
 Formula: $y = mx + b$
 m: $4.16496e-2$
 b: -1.31216
 x: Amount[ug/l]
 y: Area



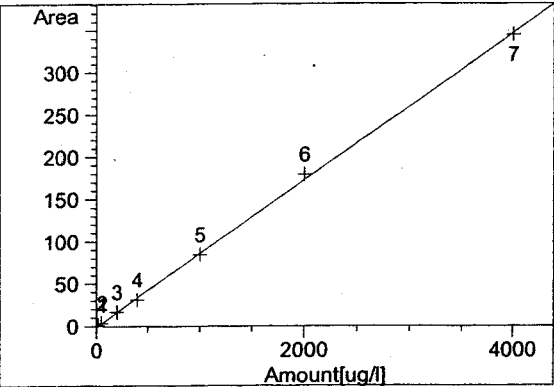
Benzo(g,h,i)perylene at exp. RT: 14.403
 DAD1 A, Sig=254,4 Ref=480,80
 Correlation: 0.99984
 Residual Std. Dev.: 1.58625
 Formula: $y = mx + b$
 m: $2.80783e-2$
 b: -1.08892
 x: Amount[ug/l]
 y: Area



Benzo(g,h,i)perylene at exp. RT: 14.432
 FLD1 A, Ex=273, Em=323, TT
 Correlation: 0.99986
 Residual Std. Dev.: 4.13611
 Formula: $y = mx + b$
 m: $7.78548e-2$
 b: -2.65718
 x: Amount[ug/l]
 y: Area



Indeno(1,2,3-cd)pyrene at exp. RT: 14.788
DAD1 A, Sig=254,4 Ref=480,80
Correlation: 0.99979
Residual Std. Dev.: 2.66321
Formula: $y = mx + b$
m: 8.03620e-2
b: -1.85879
x: Amount [ug/l]
y: Area



Indeno(1,2,3-cd)pyrene at exp. RT: 14.816
FLD1 A, Ex=273, Em=323, TT
Correlation: 0.99972
Residual Std. Dev.: 3.27806
Formula: $y = mx + b$
m: 8.69400e-2
b: -8.43827e-1
x: Amount [ug/l]
y: Area

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CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191314 HPLC Water
EPA 8310

Inst : HPLC05
Calnum : 856422684001

Cal Date: 20-OCT-2006

ICV 856422684015 (293000015 20-OCT-2006) stds: S4555

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Naphthalene	1	0.0107	0.0110	5000	5152	ug/L	3	15	
Acenaphthylene	1	0.0078	0.0082	10000	10570	ug/L	6	15	
Acenaphthene	1	0.0039	0.0044	5000	5383	ug/L	8	15	
Fluorene	1	0.0503	0.0523	1000	1017	ug/L	2	15	
Phenanthrene	1	0.1422	0.1436	500.0	499.7	ug/L	0	15	
Anthracene	1	0.3045	0.3112	500.0	507.4	ug/L	1	15	
Fluoranthene	1	0.0330	0.0337	1000	1020	ug/L	2	15	
Benzo(a)anthracene	1	0.0702	0.0736	500.0	498.6	ug/L	0	15	
Chrysene	1	0.1081	0.1119	500.0	507.0	ug/L	1	15	
Benzo(b)fluoranthene	1	0.0843	0.0881	1000	1019	ug/L	2	15	
Benzo(k)fluoranthene	1	0.0644	0.0667	500.0	507.3	ug/L	1	15	
Benzo(a)pyrene	1	0.0708	0.0702	500.0	512.0	ug/L	2	15	
Dibenz(a,h)anthracene	1	0.0176	0.0182	1000	1019	ug/L	2	15	
Benzo(g,h,i)perylene	1	0.0279	0.0266	1000	986.5	ug/L	-1	15	
Indeno(1,2,3-cd)pyrene	1	0.0764	0.0764	500.0	498.8	ug/L	0	15	
Acenaphthylene	2	0.0644	0.0669	10000	10520	ug/L	5	15	
Pyrene	2	0.1031	0.1079	500.0	510.2	ug/L	2	15	
Naphthalene	3	0.0099	0.0101	5000	5106	ug/L	2	15	
Acenaphthene	3	0.0191	0.0202	5000	5222	ug/L	4	15	
Fluorene	3	0.1322	0.1340	1000	1015	ug/L	2	15	
Phenanthrene	3	0.1204	0.1204	500.0	497.9	ug/L	0	15	
Anthracene	3	0.3212	0.3253	500.0	505.2	ug/L	1	15	
Fluoranthene	3	0.0419	0.0439	1000	1039	ug/L	4	15	
Pyrene	3	0.1585	0.1608	500.0	498.9	ug/L	0	15	
Benzo(a)anthracene	3	0.1186	0.1219	500.0	499.9	ug/L	0	15	
Chrysene	3	0.1947	0.1963	500.0	504.4	ug/L	1	15	
Benzo(b)fluoranthene	3	0.0619	0.0632	1000	1008	ug/L	1	15	
Benzo(k)fluoranthene	3	0.4208	0.4299	500.0	510.7	ug/L	2	15	
Benzo(a)pyrene	3	0.1878	0.1899	500.0	500.9	ug/L	0	15	
Dibenz(a,h)anthracene	3	0.0386	0.0401	1000	995.3	ug/L	0	15	
Benzo(g,h,i)perylene	3	0.0725	0.0740	1000	984.2	ug/L	-2	15	
Indeno(1,2,3-cd)pyrene	3	0.0817	0.0863	500.0	506.0	ug/L	1	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191314 HPLC Water
EPA 8310

Inst : HPLC05	Run Name: L	IDF : 1.0
Seqnum : 856497390002	File : 345000002	Time : 11-DEC-2006 10:14
Cal : 856422684001	Caldate : 20-OCT-2006	
Standards: S4232		

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0107	0.0109	2000	2082	ug/L	4	15	
Acenaphthylene	1	0.0078	0.0079	4000	4113	ug/L	3	15	
Acenaphthene	1	0.0039	0.0040	2000	2005	ug/L	0	15	
Fluorene	1	0.0503	0.0513	400.0	407.2	ug/L	2	15	
Phenanthrene	1	0.1422	0.1453	200.0	207.5	ug/L	4	15	
Anthracene	1	0.3045	0.3194	200.0	216.0	ug/L	8	15	
Fluoranthene	1	0.0330	0.0332	400.0	409.5	ug/L	2	15	
Benzo(a)anthracene	1	0.0702	0.0749	200.0	216.1	ug/L	8	15	
Chrysene	1	0.1081	0.1092	200.0	203.5	ug/L	2	15	
Benzo(b)fluoranthene	1	0.0843	0.0873	400.0	418.8	ug/L	5	15	
Benzo(k)fluoranthene	1	0.0644	0.0660	200.0	209.1	ug/L	5	15	
Benzo(a)pyrene	1	0.0708	0.0710	200.0	212.8	ug/L	6	15	
Dibenz(a,h)anthracene	1	0.0176	0.0170	400.0	410.5	ug/L	3	15	
Benzo(g,h,i)perylene	1	0.0279	0.0264	400.0	415.2	ug/L	4	15	
Indeno(1,2,3-cd)pyrene	1	0.0764	0.0755	200.0	211.0	ug/L	6	15	
1-Methylnaphthalene (UV)	1	0.0070	0.0071	8000	8333	ug/L	4	15	
Acenaphthylene	2	0.0644	0.0665	4000	4236	ug/L	6	15	
Pyrene	2	0.1031	0.1059	200.0	205.6	ug/L	3	15	
1-Methylnaphthalene (UV)	2	0.0154	0.0161	8000	8618	ug/L	8	15	
Naphthalene	3	0.0099	0.0103	2000	2064	ug/L	3	15	
Acenaphthene	3	0.0191	0.0204	2000	2184	ug/L	9	15	
Fluorene	3	0.1322	0.1396	400.0	433.8	ug/L	8	15	
Phenanthrene	3	0.1204	0.1257	200.0	209.5	ug/L	5	15	
Anthracene	3	0.3212	0.3460	200.0	219.5	ug/L	10	15	
Fluoranthene	3	0.0419	0.0436	400.0	421.1	ug/L	5	15	
Pyrene	3	0.1585	0.1640	200.0	208.5	ug/L	4	15	
Benzo(a)anthracene	3	0.1186	0.1277	200.0	215.8	ug/L	8	15	
Chrysene	3	0.1947	0.2035	200.0	205.3	ug/L	3	15	
Benzo(b)fluoranthene	3	0.0619	0.0649	400.0	418.3	ug/L	5	15	
Benzo(k)fluoranthene	3	0.4208	0.4472	200.0	216.2	ug/L	8	15	
Benzo(a)pyrene	3	0.1878	0.1993	200.0	208.7	ug/L	4	15	
Dibenz(a,h)anthracene	3	0.0386	0.0400	400.0	416.0	ug/L	4	15	
Benzo(g,h,i)perylene	3	0.0725	0.0757	400.0	423.1	ug/L	6	15	
Indeno(1,2,3-cd)pyrene	3	0.0817	0.0866	200.0	208.9	ug/L	4	15	
1-Methylnaphthalene (F)	3	0.0108	0.0113	8000	8573	ug/L	7	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191314 HPLC Water
EPA 8310

Inst : HPLC05	Run Name: M	IDF : 1.0
Seqnum : 856497390013	File : 345000013	Time : 11-DEC-2006 14:36
Cal : 856422684001	Caldate : 20-OCT-2006	
Standards: S4231		

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0107	0.0111	4000	4176	ug/L	4	15	
Acenaphthylene	1	0.0078	0.0081	8000	8349	ug/L	4	15	
Acenaphthene	1	0.0039	0.0042	4000	4141	ug/L	4	15	
Fluorene	1	0.0503	0.0529	800.0	824.6	ug/L	3	15	
Phenanthrene	1	0.1422	0.1473	400.0	411.7	ug/L	3	15	
Anthracene	1	0.3045	0.3162	400.0	414.8	ug/L	4	15	
Fluoranthene	1	0.0330	0.0342	800.0	830.7	ug/L	4	15	
Benzo(a)anthracene	1	0.0702	0.0768	400.0	419.7	ug/L	5	15	
Chrysene	1	0.1081	0.1150	400.0	418.2	ug/L	5	15	
Benzo(b)fluoranthene	1	0.0843	0.0888	800.0	826.1	ug/L	3	15	
Benzo(k)fluoranthene	1	0.0644	0.0687	400.0	420.0	ug/L	5	15	
Benzo(a)pyrene	1	0.0708	0.0688	400.0	403.8	ug/L	1	15	
Dibenz(a,h)anthracene	1	0.0176	0.0185	800.0	837.4	ug/L	5	15	
Benzo(g,h,i)perylene	1	0.0279	0.0276	800.0	824.1	ug/L	3	15	
Indeno(1,2,3-cd)pyrene	1	0.0764	0.0785	400.0	413.7	ug/L	3	15	
1-Methylnaphthalene (UV)	1	0.0070	0.0073	16000	16690	ug/L	4	15	
Acenaphthylene	2	0.0644	0.0673	8000	8485	ug/L	6	15	
Pyrene	2	0.1031	0.1096	400.0	416.2	ug/L	4	15	
1-Methylnaphthalene (UV)	2	0.0154	0.0162	16000	17290	ug/L	8	15	
Naphthalene	3	0.0099	0.0102	4000	4107	ug/L	3	15	
Acenaphthene	3	0.0191	0.0200	4000	4172	ug/L	4	15	
Fluorene	3	0.1322	0.1368	800.0	832.6	ug/L	4	15	
Phenanthrene	3	0.1204	0.1246	400.0	412.8	ug/L	3	15	
Anthracene	3	0.3212	0.3328	400.0	414.9	ug/L	4	15	
Fluoranthene	3	0.0419	0.0437	800.0	831.4	ug/L	4	15	
Pyrene	3	0.1585	0.1661	400.0	413.8	ug/L	3	15	
Benzo(a)anthracene	3	0.1186	0.1267	400.0	417.4	ug/L	4	15	
Chrysene	3	0.1947	0.2019	400.0	413.9	ug/L	3	15	
Benzo(b)fluoranthene	3	0.0619	0.0652	800.0	833.2	ug/L	4	15	
Benzo(k)fluoranthene	3	0.4208	0.4464	400.0	425.3	ug/L	6	15	
Benzo(a)pyrene	3	0.1878	0.1956	400.0	412.3	ug/L	3	15	
Dibenz(a,h)anthracene	3	0.0386	0.0409	800.0	816.7	ug/L	2	15	
Benzo(g,h,i)perylene	3	0.0725	0.0758	800.0	813.2	ug/L	2	15	
Indeno(1,2,3-cd)pyrene	3	0.0817	0.0895	400.0	421.5	ug/L	5	15	
1-Methylnaphthalene (F)	3	0.0108	0.0112	16000	16810	ug/L	5	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191314 HPLC Water
EPA 8310

Inst : HPLC05	Run Name: H	IDF : 1.0
Seqnum : 856497390027	File : 345000027	Time : 11-DEC-2006 20:06
Cal : 856422684001	Caldate : 20-OCT-2006	
Standards: S4230		

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0107	0.0106	10000	9858	ug/L	-1	15	
Acenaphthylene	1	0.0078	0.0077	20000	19730	ug/L	-1	15	
Acenaphthene	1	0.0039	0.0041	10000	10000	ug/L	0	15	
Fluorene	1	0.0503	0.0510	2000	1967	ug/L	-2	15	
Phenanthrene	1	0.1422	0.1413	1000	975.3	ug/L	-2	15	
Anthracene	1	0.3045	0.3035	1000	977.2	ug/L	-2	15	
Fluoranthene	1	0.0330	0.0323	2000	1946	ug/L	-3	15	
Benzo(a)anthracene	1	0.0702	0.0743	1000	984.7	ug/L	-2	15	
Chrysene	1	0.1081	0.1087	1000	975.9	ug/L	-2	15	
Benzo(b)fluoranthene	1	0.0843	0.0860	2000	1963	ug/L	-2	15	
Benzo(k)fluoranthene	1	0.0644	0.0654	1000	980.7	ug/L	-2	15	
Benzo(a)pyrene	1	0.0708	0.0677	1000	980.2	ug/L	-2	15	
Dibenz(a,h)anthracene	1	0.0176	0.0183	2000	2003	ug/L	0	15	
Benzo(g,h,i)perylene	1	0.0279	0.0273	2000	1984	ug/L	-1	15	
Indeno(1,2,3-cd)pyrene	1	0.0764	0.0775	1000	987.2	ug/L	-1	15	
1-Methylnaphthalene (UV)	1	0.0070	0.0069	40000	39400	ug/L	-1	15	
Acenaphthylene	2	0.0644	0.0632	20000	19830	ug/L	-1	15	
Pyrene	2	0.1031	0.1032	1000	967.0	ug/L	-3	15	
1-Methylnaphthalene (UV)	2	0.0154	0.0151	40000	40270	ug/L	1	15	
Naphthalene	3	0.0099	0.0099	10000	9960	ug/L	0	15	
Acenaphthene	3	0.0191	0.0194	10000	9896	ug/L	-1	15	
Fluorene	3	0.1322	0.1297	2000	1948	ug/L	-3	15	
Phenanthrene	3	0.1204	0.1198	1000	988.6	ug/L	-1	15	
Anthracene	3	0.3212	0.3185	1000	981.6	ug/L	-2	15	
Fluoranthene	3	0.0419	0.0416	2000	1960	ug/L	-2	15	
Pyrene	3	0.1585	0.1624	1000	999.8	ug/L	0	15	
Benzo(a)anthracene	3	0.1186	0.1248	1000	1012	ug/L	1	15	
Chrysene	3	0.1947	0.1931	1000	998.8	ug/L	0	15	
Benzo(b)fluoranthene	3	0.0619	0.0629	2000	1999	ug/L	0	15	
Benzo(k)fluoranthene	3	0.4208	0.4216	1000	995.5	ug/L	0	15	
Benzo(a)pyrene	3	0.1878	0.1861	1000	984.2	ug/L	-2	15	
Dibenz(a,h)anthracene	3	0.0386	0.0402	2000	1964	ug/L	-2	15	
Benzo(g,h,i)perylene	3	0.0725	0.0768	2000	2008	ug/L	0	15	
Indeno(1,2,3-cd)pyrene	3	0.0817	0.0867	1000	1007	ug/L	1	15	
1-Methylnaphthalene (F)	3	0.0108	0.0107	40000	39850	ug/L	0	15	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191314 HPLC Water
EPA 8310

Inst : HPLC05	Run Name: M	IDF : 1.0
Seqnum : 856497390041	File : 345000041	Time : 12-DEC-2006 01:36
Cal : 856422684001	Caldate : 20-OCT-2006	
Standards: S4231		

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Naphthalene	1	0.0107	0.0111	4000	4167	ug/L	4	15	
Acenaphthylene	1	0.0078	0.0081	8000	8325	ug/L	4	15	
Acenaphthene	1	0.0039	0.0042	4000	4188	ug/L	5	15	
Fluorene	1	0.0503	0.0529	800.0	825.7	ug/L	3	15	
Phenanthrene	1	0.1422	0.1488	400.0	415.7	ug/L	4	15	
Anthracene	1	0.3045	0.3192	400.0	418.7	ug/L	5	15	
Fluoranthene	1	0.0330	0.0343	800.0	832.4	ug/L	4	15	
Benzo(a)anthracene	1	0.0702	0.0787	400.0	430.0	ug/L	7	15	
Chrysene	1	0.1081	0.1159	400.0	421.3	ug/L	5	15	
Benzo(b)fluoranthene	1	0.0843	0.0904	800.0	840.4	ug/L	5	15	
Benzo(k)fluoranthene	1	0.0644	0.0683	400.0	417.9	ug/L	4	15	
Benzo(a)pyrene	1	0.0708	0.0682	400.0	400.4	ug/L	0	15	
Dibenz(a,h)anthracene	1	0.0176	0.0187	800.0	845.0	ug/L	6	15	
Benzo(g,h,i)perylene	1	0.0279	0.0282	800.0	842.6	ug/L	5	15	
Indeno(1,2,3-cd)pyrene	1	0.0764	0.0824	400.0	433.3	ug/L	8	15	
1-Methylnaphthalene (UV)	1	0.0070	0.0073	16000	16700	ug/L	4	15	
Acenaphthylene	2	0.0644	0.0673	8000	8489	ug/L	6	15	
Pyrene	2	0.1031	0.1089	400.0	413.6	ug/L	3	15	
1-Methylnaphthalene (UV)	2	0.0154	0.0163	16000	17350	ug/L	8	15	
Naphthalene	3	0.0099	0.0101	4000	4091	ug/L	2	15	
Acenaphthene	3	0.0191	0.0202	4000	4198	ug/L	5	15	
Fluorene	3	0.1322	0.1366	800.0	831.3	ug/L	4	15	
Phenanthrene	3	0.1204	0.1242	400.0	411.4	ug/L	3	15	
Anthracene	3	0.3212	0.3340	400.0	416.4	ug/L	4	15	
Fluoranthene	3	0.0419	0.0433	800.0	824.0	ug/L	3	15	
Pyrene	3	0.1585	0.1638	400.0	408.2	ug/L	2	15	
Benzo(a)anthracene	3	0.1186	0.1292	400.0	425.6	ug/L	6	15	
Chrysene	3	0.1947	0.2004	400.0	410.7	ug/L	3	15	
Benzo(b)fluoranthene	3	0.0619	0.0650	800.0	830.2	ug/L	4	15	
Benzo(k)fluoranthene	3	0.4208	0.4463	400.0	425.2	ug/L	6	15	
Benzo(a)pyrene	3	0.1878	0.1933	400.0	407.3	ug/L	2	15	
Dibenz(a,h)anthracene	3	0.0386	0.0410	800.0	819.2	ug/L	2	15	
Benzo(g,h,i)perylene	3	0.0725	0.0777	800.0	832.9	ug/L	4	15	
Indeno(1,2,3-cd)pyrene	3	0.0817	0.0891	400.0	419.8	ug/L	5	15	
1-Methylnaphthalene (F)	3	0.0108	0.0111	16000	16640	ug/L	4	15	

SEQUENCE SUMMARY FOR 191314 HPLC Water Curtis & Tompkins Laboratories

Sequence: 856422684 Instrument: HPLC05 High Pressure Liquid Chromatograph # 5 Begun: 20-OCT-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds	Used	>LR
001	29300000	X	PRIMER - 293			20-OCT-2006	12:44	1.0							
002	29300000	X	PRIMER			20-OCT-2006	13:08	1.0							
003	29300000	X	IB - 293			20-OCT-2006	13:32	1.0							
004	29300000	X	IB			20-OCT-2006	13:55	1.0							
005	29300000	X	IB			20-OCT-2006	14:19	1.0							
006	29300000	ICAL				20-OCT-2006	14:42	1.0					1		
007	29300000	ICAL				20-OCT-2006	15:06	1.0					2		
008	29300000	ICAL				20-OCT-2006	15:30	1.0					3		
009	29300000	ICAL				20-OCT-2006	15:53	1.0					4		
010	29300001	ICAL				20-OCT-2006	16:17	1.0					5		
011	29300001	ICAL				20-OCT-2006	16:40	1.0					6		
012	29300001	ICAL				20-OCT-2006	17:04	1.0					7		
013	29300001	X	IB			20-OCT-2006	17:28	1.0							
014	29300001	X	IB			20-OCT-2006	17:51	1.0							
015	29300001	ICV				20-OCT-2006	18:15	1.0							
016	29300001	X	ICV			20-OCT-2006	18:38	1.0					8		
017	29300001	X	IB			20-OCT-2006	19:02	1.0					8		

Stds used: 1=S4234 2=S4233 3=S4232 4=S4231 5=S4230 6=S4229 7=S4228 8=S4555

SEQUENCE SUMMARY FOR 191314 HPLC Water
Curtis & Tompkins Laboratories

Sequence: 856497390 Instrument: HPLC05 High Pressure Liquid Chromatograph # 5 Begun: 11-DEC-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Std	Used	>LR
001	34500000	X	IB - 345			11-DEC-2006	09:50	1.0						
002	34500000	CCV	L			11-DEC-2006	10:14	1.0			10	1		
003	34500000	X	CCV			11-DEC-2006	10:38	1.0				1		
004	34500000	X	IB			11-DEC-2006	11:01	1.0						
005	34500000	BLANK	QC367536	120180	Water	11-DEC-2006	11:25	1.0	0.002		10			
006	34500000	LCS	QC367537	120180	Water	11-DEC-2006	11:48	1.0	0.002		10			
007	34500000	X	IB			11-DEC-2006	12:12	1.0						
008	34500000	SAMPLE	191317-001	120180	Water	11-DEC-2006	12:36	1.0	0.001887	3	10			
009	34500000	SAMPLE	191317-001	120180	Water	11-DEC-2006	13:02	1.0	0.001887	3	10			
010	34500001	SAMPLE	191329-001	120180	Water	11-DEC-2006	13:25	1.0	0.001887		10			
011	34500001	SAMPLE	191331-001	120180	Water	11-DEC-2006	13:49	1.0	0.001887		10			
012	34500001	X	IB			11-DEC-2006	14:12	1.0						
013	34500001	CCV	M			11-DEC-2006	14:36	1.0	1.0		10	2		
014	34500001	X	CCV			11-DEC-2006	14:59	1.0				2		
015	34500001	X	IB			11-DEC-2006	15:23	1.0						
016	34500001	SAMPLE	191286-001	120180	Water	11-DEC-2006	15:47	1.0	0.001887		10			
017	34500001	SAMPLE	191286-004	120180	Water	11-DEC-2006	16:10	1.0	0.001887		10			
018	34500001	SAMPLE	191286-007	120180	Water	11-DEC-2006	16:34	1.0	0.001923		10			
019	34500001	SAMPLE	191286-008	120180	Water	11-DEC-2006	16:57	1.0	0.001905		10			
020	34500002	SAMPLE	191286-012	120180	Water	11-DEC-2006	17:21	1.0	0.00198		10			
021	34500002	SAMPLE	191290-001	120180	Water	11-DEC-2006	17:44	1.0	0.001923		10			
022	34500002	MSS	191314-011	120180	Water	11-DEC-2006	18:08	1.0	0.001887		10			
023	34500002	SAMPLE	191314-012	120180	Water	11-DEC-2006	18:32	1.0	0.001887		10			
024	34500002	MS	QC367538	120180	Water	11-DEC-2006	18:55	1.0	0.001887	4	10			
025	34500002	MSD	QC367539	120180	Water	11-DEC-2006	19:19	1.0	0.001887	4	10			
026	34500002	X	IB			11-DEC-2006	19:43	1.0						
027	34500002	CCV	H			11-DEC-2006	20:06	1.0	1.0		10	3		
028	34500002	X	CCV			11-DEC-2006	20:30	1.0				3		
029	34500002	X	IB			11-DEC-2006	20:53	1.0						
030	34500003	SAMPLE	191314-014	120180	Water	11-DEC-2006	21:17	1.0	0.001887		10			
031	34500003	SAMPLE	191314-016	120180	Water	11-DEC-2006	21:40	1.0	0.001887		10			

Std used: 1=S4232 2=S4231 3=S4230

SEQUENCE SUMMARY FOR 191314 HPLC Water Curtis & Tompkins Laboratories

Sequence: 856497390 Instrument: HPLC05 High Pressure Liquid Chromatograph # 5 Begun: 11-DEC-2006
Analytical Method: EPA 8310 SOP Version: 8310_rv7

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stdts	Used	>LR
032	34500003	SAMPLE	191314-017	120180	Water	11-DEC-2006	22:04	1.0	0.001905		10			
033	34500003	SAMPLE	191314-018	120180	Water	11-DEC-2006	22:28	1.0	0.001905		10			
034	34500003	MSS	191314-019	120180	Water	11-DEC-2006	22:51	1.0	0.001887		10			
035	34500003	MS	QC367540	120180	Water	11-DEC-2006	23:15	1.0	0.001887	14	10			
036	34500003	MSD	QC367541	120180	Water	11-DEC-2006	23:38	1.0	0.001887	12	10			
037	34500003	X	IB			12-DEC-2006	00:02	1.0						
038	34500003	SAMPLE	191286-013	120180	Water	12-DEC-2006	00:26	1.0	0.002	6	10			6:FLA=20962.4
039	34500003	X	IB			12-DEC-2006	00:49	1.0						
040	34500004	X	IB			12-DEC-2006	01:13	1.0						
041	34500004	CCV	M			12-DEC-2006	01:36	1.0	1.0		10	2		
042	34500004	X	CCV			12-DEC-2006	02:00	1.0				2		
043	34500004	X	IB			12-DEC-2006	02:24	1.0						

Stdts used: 1=S4232 2=S4231 3=S4230

REPORTING SUMMARY FOR 191314 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
191314-011	Naphthalene	HPLC05	1	12/11/06 18:08
191314-011	Acenaphthylene	HPLC05	1	12/11/06 18:08
191314-011	Acenaphthene	HPLC05	1	12/11/06 18:08
191314-011	Fluorene	HPLC05	1	12/11/06 18:08
191314-011	Phenanthrene	HPLC05	3	12/11/06 18:08
191314-011	Anthracene	HPLC05	3	12/11/06 18:08
191314-011	Fluoranthene	HPLC05	3	12/11/06 18:08
191314-011	Pyrene	HPLC05	3	12/11/06 18:08
191314-011	Benzo(a)anthracene	HPLC05	3	12/11/06 18:08
191314-011	Chrysene	HPLC05	3	12/11/06 18:08
191314-011	Benzo(b)fluoranthene	HPLC05	3	12/11/06 18:08
191314-011	Benzo(k)fluoranthene	HPLC05	3	12/11/06 18:08
191314-011	Benzo(a)pyrene	HPLC05	3	12/11/06 18:08
191314-011	Dibenz(a,h)anthracene	HPLC05	3	12/11/06 18:08
191314-011	Benzo(g,h,i)perylene	HPLC05	3	12/11/06 18:08
191314-011	Indeno(1,2,3-cd)pyrene	HPLC05	3	12/11/06 18:08
191314-011	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 18:08
191314-011	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 18:08
191314-012	Naphthalene	HPLC05	1	12/11/06 18:32
191314-012	Acenaphthylene	HPLC05	1	12/11/06 18:32
191314-012	Acenaphthene	HPLC05	1	12/11/06 18:32
191314-012	Fluorene	HPLC05	1	12/11/06 18:32
191314-012	Phenanthrene	HPLC05	3	12/11/06 18:32
191314-012	Anthracene	HPLC05	3	12/11/06 18:32
191314-012	Fluoranthene	HPLC05	3	12/11/06 18:32
191314-012	Pyrene	HPLC05	3	12/11/06 18:32
191314-012	Benzo(a)anthracene	HPLC05	3	12/11/06 18:32
191314-012	Chrysene	HPLC05	3	12/11/06 18:32
191314-012	Benzo(b)fluoranthene	HPLC05	3	12/11/06 18:32
191314-012	Benzo(k)fluoranthene	HPLC05	3	12/11/06 18:32
191314-012	Benzo(a)pyrene	HPLC05	3	12/11/06 18:32
191314-012	Dibenz(a,h)anthracene	HPLC05	3	12/11/06 18:32
191314-012	Benzo(g,h,i)perylene	HPLC05	3	12/11/06 18:32
191314-012	Indeno(1,2,3-cd)pyrene	HPLC05	3	12/11/06 18:32
191314-012	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 18:32
191314-012	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 18:32
191314-014	Naphthalene	HPLC05	1	12/11/06 21:17
191314-014	Acenaphthylene	HPLC05	1	12/11/06 21:17
191314-014	Acenaphthene	HPLC05	1	12/11/06 21:17
191314-014	Fluorene	HPLC05	1	12/11/06 21:17
191314-014	Phenanthrene	HPLC05	3	12/11/06 21:17
191314-014	Anthracene	HPLC05	3	12/11/06 21:17
191314-014	Fluoranthene	HPLC05	3	12/11/06 21:17
191314-014	Pyrene	HPLC05	3	12/11/06 21:17
191314-014	Benzo(a)anthracene	HPLC05	3	12/11/06 21:17
191314-014	Chrysene	HPLC05	3	12/11/06 21:17
191314-014	Benzo(b)fluoranthene	HPLC05	3	12/11/06 21:17
191314-014	Benzo(k)fluoranthene	HPLC05	3	12/11/06 21:17
191314-014	Benzo(a)pyrene	HPLC05	3	12/11/06 21:17
191314-014	Dibenz(a,h)anthracene	HPLC05	3	12/11/06 21:17
191314-014	Benzo(g,h,i)perylene	HPLC05	3	12/11/06 21:17
191314-014	Indeno(1,2,3-cd)pyrene	HPLC05	3	12/11/06 21:17

REPORTING SUMMARY FOR 191314 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
191314-014	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 21:17
191314-014	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 21:17
191314-016	Naphthalene	HPLC05	1	12/11/06 21:40
191314-016	Acenaphthylene	HPLC05	1	12/11/06 21:40
191314-016	Acenaphthene	HPLC05	1	12/11/06 21:40
191314-016	Fluorene	HPLC05	1	12/11/06 21:40
191314-016	Phenanthrene	HPLC05	3	12/11/06 21:40
191314-016	Anthracene	HPLC05	3	12/11/06 21:40
191314-016	Fluoranthene	HPLC05	3	12/11/06 21:40
191314-016	Pyrene	HPLC05	3	12/11/06 21:40
191314-016	Benzo(a)anthracene	HPLC05	3	12/11/06 21:40
191314-016	Chrysene	HPLC05	3	12/11/06 21:40
191314-016	Benzo(b)fluoranthene	HPLC05	3	12/11/06 21:40
191314-016	Benzo(k)fluoranthene	HPLC05	3	12/11/06 21:40
191314-016	Benzo(a)pyrene	HPLC05	3	12/11/06 21:40
191314-016	Dibenz(a,h)anthracene	HPLC05	3	12/11/06 21:40
191314-016	Benzo(g,h,i)perylene	HPLC05	3	12/11/06 21:40
191314-016	Indeno(1,2,3-cd)pyrene	HPLC05	3	12/11/06 21:40
191314-016	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 21:40
191314-016	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 21:40
191314-017	Naphthalene	HPLC05	1	12/11/06 22:04
191314-017	Acenaphthylene	HPLC05	1	12/11/06 22:04
191314-017	Acenaphthene	HPLC05	1	12/11/06 22:04
191314-017	Fluorene	HPLC05	1	12/11/06 22:04
191314-017	Phenanthrene	HPLC05	3	12/11/06 22:04
191314-017	Anthracene	HPLC05	3	12/11/06 22:04
191314-017	Fluoranthene	HPLC05	3	12/11/06 22:04
191314-017	Pyrene	HPLC05	3	12/11/06 22:04
191314-017	Benzo(a)anthracene	HPLC05	3	12/11/06 22:04
191314-017	Chrysene	HPLC05	3	12/11/06 22:04
191314-017	Benzo(b)fluoranthene	HPLC05	3	12/11/06 22:04
191314-017	Benzo(k)fluoranthene	HPLC05	3	12/11/06 22:04
191314-017	Benzo(a)pyrene	HPLC05	3	12/11/06 22:04
191314-017	Dibenz(a,h)anthracene	HPLC05	3	12/11/06 22:04
191314-017	Benzo(g,h,i)perylene	HPLC05	3	12/11/06 22:04
191314-017	Indeno(1,2,3-cd)pyrene	HPLC05	3	12/11/06 22:04
191314-017	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 22:04
191314-017	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 22:04
191314-018	Naphthalene	HPLC05	1	12/11/06 22:28
191314-018	Acenaphthylene	HPLC05	1	12/11/06 22:28
191314-018	Acenaphthene	HPLC05	1	12/11/06 22:28
191314-018	Fluorene	HPLC05	1	12/11/06 22:28
191314-018	Phenanthrene	HPLC05	3	12/11/06 22:28
191314-018	Anthracene	HPLC05	3	12/11/06 22:28
191314-018	Fluoranthene	HPLC05	3	12/11/06 22:28
191314-018	Pyrene	HPLC05	3	12/11/06 22:28
191314-018	Benzo(a)anthracene	HPLC05	3	12/11/06 22:28
191314-018	Chrysene	HPLC05	3	12/11/06 22:28
191314-018	Benzo(b)fluoranthene	HPLC05	3	12/11/06 22:28
191314-018	Benzo(k)fluoranthene	HPLC05	3	12/11/06 22:28
191314-018	Benzo(a)pyrene	HPLC05	3	12/11/06 22:28

REPORTING SUMMARY FOR 191314 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
191314-018	Dibenz(a,h)anthracene	HPLC05	3	12/11/06 22:28
191314-018	Benzo(g,h,i)perylene	HPLC05	3	12/11/06 22:28
191314-018	Indeno(1,2,3-cd)pyrene	HPLC05	3	12/11/06 22:28
191314-018	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 22:28
191314-018	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 22:28
191314-019	Naphthalene	HPLC05	1	12/11/06 22:51
191314-019	Acenaphthylene	HPLC05	1	12/11/06 22:51
191314-019	Acenaphthene	HPLC05	1	12/11/06 22:51
191314-019	Fluorene	HPLC05	1	12/11/06 22:51
191314-019	Phenanthrene	HPLC05	3	12/11/06 22:51
191314-019	Anthracene	HPLC05	3	12/11/06 22:51
191314-019	Fluoranthene	HPLC05	3	12/11/06 22:51
191314-019	Pyrene	HPLC05	3	12/11/06 22:51
191314-019	Benzo(a)anthracene	HPLC05	3	12/11/06 22:51
191314-019	Chrysene	HPLC05	3	12/11/06 22:51
191314-019	Benzo(b)fluoranthene	HPLC05	3	12/11/06 22:51
191314-019	Benzo(k)fluoranthene	HPLC05	3	12/11/06 22:51
191314-019	Benzo(a)pyrene	HPLC05	3	12/11/06 22:51
191314-019	Dibenz(a,h)anthracene	HPLC05	3	12/11/06 22:51
191314-019	Benzo(g,h,i)perylene	HPLC05	3	12/11/06 22:51
191314-019	Indeno(1,2,3-cd)pyrene	HPLC05	3	12/11/06 22:51
191314-019	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 22:51
191314-019	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 22:51
QC367536	Naphthalene	HPLC05	1	12/11/06 11:25
QC367536	Acenaphthylene	HPLC05	1	12/11/06 11:25
QC367536	Acenaphthene	HPLC05	1	12/11/06 11:25
QC367536	Fluorene	HPLC05	1	12/11/06 11:25
QC367536	Phenanthrene	HPLC05	3	12/11/06 11:25
QC367536	Anthracene	HPLC05	3	12/11/06 11:25
QC367536	Fluoranthene	HPLC05	3	12/11/06 11:25
QC367536	Pyrene	HPLC05	3	12/11/06 11:25
QC367536	Benzo(a)anthracene	HPLC05	3	12/11/06 11:25
QC367536	Chrysene	HPLC05	3	12/11/06 11:25
QC367536	Benzo(b)fluoranthene	HPLC05	3	12/11/06 11:25
QC367536	Benzo(k)fluoranthene	HPLC05	3	12/11/06 11:25
QC367536	Benzo(a)pyrene	HPLC05	3	12/11/06 11:25
QC367536	Dibenz(a,h)anthracene	HPLC05	3	12/11/06 11:25
QC367536	Benzo(g,h,i)perylene	HPLC05	3	12/11/06 11:25
QC367536	Indeno(1,2,3-cd)pyrene	HPLC05	3	12/11/06 11:25
QC367536	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 11:25
QC367536	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 11:25
QC367537	Naphthalene	HPLC05	1	12/11/06 11:48
QC367537	Fluorene	HPLC05	1	12/11/06 11:48
QC367537	Pyrene	HPLC05	3	12/11/06 11:48
QC367537	Benzo(a)pyrene	HPLC05	3	12/11/06 11:48
QC367537	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 11:48
QC367537	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 11:48
QC367538	Naphthalene	HPLC05	1	12/11/06 18:55
QC367538	Fluorene	HPLC05	1	12/11/06 18:55
QC367538	Pyrene	HPLC05	3	12/11/06 18:55

REPORTING SUMMARY FOR 191314 HPLC Water

Sample ID	Analyte	Inst ID	Ch	Date & Time
QC367538	Benzo(a)pyrene	HPLC05	3	12/11/06 18:55
QC367538	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 18:55
QC367538	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 18:55
QC367539	Naphthalene	HPLC05	1	12/11/06 19:19
QC367539	Fluorene	HPLC05	1	12/11/06 19:19
QC367539	Pyrene	HPLC05	3	12/11/06 19:19
QC367539	Benzo(a)pyrene	HPLC05	3	12/11/06 19:19
QC367539	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 19:19
QC367539	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 19:19
QC367540	Naphthalene	HPLC05	1	12/11/06 23:15
QC367540	Fluorene	HPLC05	1	12/11/06 23:15
QC367540	Pyrene	HPLC05	3	12/11/06 23:15
QC367540	Benzo(a)pyrene	HPLC05	3	12/11/06 23:15
QC367540	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 23:15
QC367540	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 23:15
QC367541	Naphthalene	HPLC05	1	12/11/06 23:38
QC367541	Fluorene	HPLC05	1	12/11/06 23:38
QC367541	Pyrene	HPLC05	3	12/11/06 23:38
QC367541	Benzo(a)pyrene	HPLC05	3	12/11/06 23:38
QC367541	1-Methylnaphthalene (UV)	HPLC05	1	12/11/06 23:38
QC367541	1-Methylnaphthalene (F)	HPLC05	3	12/11/06 23:38

Curtis & Tompkins Laboratories

Sample Preparation Summary

11-DEC-2006 14:09

Batch Number : 120180
Date Extracted: 08-DEC-2006
Extracted by : Stephen Wanta
Prep Method : 3520C

Analysis : 8310
Bgroup : N/A
Units : mL
Clean-up :

Spike #1 ID : S4962G
Spike #2 ID : S4289B
Spike #3 ID :
SOP Version : 8310w rv6

Sample	Type	Client	Matrix	Init W/V	Units	Final Prep Vol	D.F.	Clean pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
191286-001		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	1	0	8310		
191286-004		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	1	0	8310		
191286-007		Treadwell & Rollo	Water	1040	mL	2	0.001923	1	7	1	0	8310		
191286-008		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	1	0	8310		
191286-012		Treadwell & Rollo	Water	1010	mL	2	0.001980	1	7	1	0	8310		
191286-013		Treadwell & Rollo	Water	1000	mL	2	0.002000	1	7	1	0	8310		
191290-001		Treadwell & Rollo	Water	1040	mL	2	0.001923	1	7	1	0	8310		
191314-011		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	1	0	8310		
191314-012		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	1	0	8310		
191314-014		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	1	0	8310		
191314-016		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	1	0	8310		
191314-017		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	1	0	8310		
191314-018		Treadwell & Rollo	Water	1050	mL	2	0.001905	1	7	1	0	8310		
191314-019		Treadwell & Rollo	Water	1060	mL	2	0.001887	1	7	1	0	8310		
191317-001		Strategic Engineering & Scienc	Water	1060	mL	2	0.001887	1	7	1	0	8310		
191329-001		Strategic Engineering & Scienc	Water	1060	mL	2	0.001887	1	7	1	0	8310		
191331-001		Strategic Engineering & Scienc	Water	1060	mL	2	0.001887	1	7	1	0	8310		
QC367536	BLANK		Water	1000	mL	2	0.002000	1	7	1	0	8310		
QC367537	LCS		Water	1000	mL	2	0.002000	1	7	1	0	8310		
QC367538	MS		Water	1060	mL	2	0.001887	1	7	1	1	8310		
QC367539	MSD	of 191314-011	Water	1060	mL	2	0.001887	1	7	1	1	8310		
QC367540	MS	of 191314-019	Water	1060	mL	2	0.001887	1	7	1	1	8310		
QC367541	MSD	of 191314-019	Water	1060	mL	2	0.001887	1	7	1	1	8310		

00101

JOM for SNW

Prep Chemist:

Reviewed By: [Signature] Date: 12/11/06Relinquished By: [Signature]Received By: [Signature] Date: 11 DEC 2006

LIMS Batch No: 120180
 LIMS Analysis: 8310
 Extracted by: JDC SMW
 Date Extracted: 12/8/06

Extraction Method:

☐ EPA 3510c sep. funnel☒ EPA 3520c cont. L/L☐

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Cleanup Method (if needed):

☐ EPA 3640a GPC☐ EPA 3630c Silica Gel

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
191280-001 B	1060	7	20		
004 E	↓				
007 D	1040				
008 E	1050				
012 AG	1010				
013 M	1000				
191290-001 J	1040				
191314-011 U	1060				NSS
012 S	↓				
014 L	↓				
016 P	↓				
017 G	1050				
018 F	↓				
019 O	1060				NSS
191317-001 E	↓				NSS due 12/8/06
191329-001 G	↓				
191331-001 L	↓	↓			
UB QC36753	1000	NA			
LCS 37	↓	NA			
MS 38	1060	7			191314-011 NO-ETJIS-SAL
MSD 39	↓				↓
MS 40	↓				191314-019 NO-ETJIS-SAL
MSD 41	↓	↓			↓

0.1 mL of surrogate solution was added to all samples
1.0 mL of matrix spiking solution was added to all spikes
☒ Samples continuously extracted with about 450 mL of CH₂Cl₂

Extraction Start Time:

Extraction End Time:

☐ Samples were extracted 3 times with 60 mL of CH₂Cl₂Extracts filtered through baked, CH₂Cl₂-rinsed powdered Na₂SO₄

Exchanged 2x with Acetonitrile

Concentrated: ☒ to volumes as noted above ☐ to clean-up volumeClean-up (if necessary): ☐ GPC (see GPC run log) ☐ Silica Gel

Extracts filtered with 0.45 um PTFE syringe filter

Mfg & Lot# / LIMS # / Time Date/ Initials

549626M	12/8/06	
542870		
EM46805		
1310		
0810	12/9/06	142
N/A	8/12/06	
EM4611028		
EM46059		
N/A		
N/A		
N/A		

Extraction Chemist 12/8/06 Date

Continued from Page

Continued on Page

Reviewed by 00195 Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8310 Water 3520C
As of 01/05/07

Analyte	Units	HPLC02 1	HPLC02 2	HPLC02 3	HPLC04 1	HPLC04 2	HPLC04 3	HPLC05 1	HPLC05 2	HPLC05 3
Naphthalene	ug/L	0.16		0.069	0.094		0.035	0.044		0.036
Acenaphthylene	ug/L	0.37	0.29		0.094	0.072		0.077	0.084	
2-Methylnaphthalene	ug/L				0.094		0.073	0.089		0.077
Acenaphthene	ug/L	0.36		0.098	0.12		0.038	0.080		0.036
Fluorene	ug/L	0.051		0.054	0.0097		0.0080	0.0076		0.0069
Phenanthrene	ug/L	0.030		0.0086	0.0045		0.0042	0.0035		0.0034
Anthracene	ug/L	0.021		0.0077	0.019		0.019	0.018		0.018
Fluoranthene	ug/L	0.13		0.011	0.016		0.0052	0.016		0.0085
Pyrene	ug/L	0.066		0.0048	0.036	0.029	0.0039		0.0062	0.0042
Benzo (a) anthracene	ug/L	0.044		0.0046	0.0093		0.011	0.010		0.010
Chrysene	ug/L	0.036		0.0059	0.0059		0.0032	0.0050		0.0043
Benzo (b) fluoranthene	ug/L	0.032		0.0081	0.011		0.0071	0.0087		0.0074
Benzo (k) fluoranthene	ug/L	0.037		0.0044	0.015		0.0033	0.0059		0.0039
Benzo (a) pyrene	ug/L	0.055		0.0045	0.014		0.015	0.019		0.018
Dibenz (a, h) anthracene	ug/L	0.12		0.026	0.026		0.013	0.030		0.0080
Benzo (g, h, i) perylene	ug/L	0.066		0.014	0.032		0.012	0.020		0.0079
Indeno (1, 2, 3-cd) pyrene	ug/L	0.065		0.011	0.0064		0.0062	0.013		0.0052
1-Methylnaphthalene (UV)	ug/L	1.2	1.9		1.7	1.8		1.7	1.8	
1-Methylnaphthalene (F)	ug/L			0.72			1.7			1.8

METALS

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**Dissolved Target Analyte List Metals**

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF10GW02	Batch#:	120323
Lab ID:	191314-001	Sampled:	12/06/06
Matrix:	Filtrate	Received:	12/07/06
Units:	ug/L	Prepared:	12/13/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	12/14/06
Antimony	ND	1.0	1.000	12/14/06
Arsenic	ND	5.0	1.000	12/14/06
Barium	73	10	1.000	12/14/06
Beryllium	ND	2.0	1.000	12/14/06
Cadmium	ND	1.0	1.000	12/14/06
Calcium	84,000	500	10.00	12/15/06
Chromium	ND	10	1.000	12/14/06
Cobalt	ND	10	1.000	12/14/06
Copper	ND	1.0	1.000	12/14/06
Iron	1,800	100	1.000	12/14/06
Lead	ND	3.0	1.000	12/14/06
Magnesium	46,000	500	10.00	12/15/06
Manganese	770	10	10.00	12/15/06
Nickel	ND	20	1.000	12/14/06
Potassium	4,500	500	1.000	12/14/06
Selenium	ND	5.0	1.000	12/14/06
Silver	ND	1.0	1.000	12/14/06
Sodium	32,000	500	10.00	12/15/06
Thallium	ND	1.0	1.000	12/14/06
Vanadium	ND	10	1.000	12/14/06
Zinc	ND	20	1.000	12/14/06

ND= Not Detected

RL= Reporting Limit



Target Analyte List Metals

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF10SP01	Batch#:	120324
Lab ID:	191314-003	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Prepared:	12/13/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	12/13/06
Antimony	ND	1.0	1.000	12/13/06
Arsenic	9.6	5.0	1.000	12/13/06
Barium	60	10	1.000	12/13/06
Beryllium	ND	2.0	1.000	12/13/06
Cadmium	ND	1.0	1.000	12/13/06
Calcium	39,000	500	10.00	12/14/06
Chromium	ND	10	1.000	12/13/06
Cobalt	ND	10	1.000	12/13/06
Copper	3.1	1.0	1.000	12/13/06
Iron	22,000	250	10.00	12/14/06
Lead	4.8	3.0	1.000	12/13/06
Magnesium	39,000	500	10.00	12/14/06
Manganese	360	10	10.00	12/14/06
Nickel	ND	20	1.000	12/13/06
Potassium	4,300	500	1.000	12/13/06
Selenium	ND	5.0	1.000	12/13/06
Silver	ND	1.0	1.000	12/13/06
Sodium	50,000	500	10.00	12/14/06
Thallium	ND	1.0	1.000	12/13/06
Vanadium	13	10	1.000	12/13/06
Zinc	ND	20	1.000	12/13/06

ND= Not Detected

RL= Reporting Limit

**Dissolved Target Analyte List Metals**

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF10SP01	Sampled:	12/06/06
Lab ID:	191314-003	Received:	12/07/06
Matrix:	Filtrate	Prepared:	12/13/06
Units:	ug/L	Analyzed:	12/14/06
Batch#:	120323		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	1.000
Antimony	ND	1.0	1.000
Arsenic	ND	5.0	1.000
Barium	15	10	1.000
Beryllium	ND	2.0	1.000
Cadmium	ND	1.0	1.000
Calcium	33,000	500	10.00
Chromium	ND	10	1.000
Cobalt	ND	10	1.000
Copper	ND	1.0	1.000
Iron	670	100	1.000
Lead	ND	3.0	1.000
Magnesium	37,000	500	10.00
Manganese	150	10	1.000
Nickel	ND	20	1.000
Potassium	4,400	500	1.000
Selenium	ND	5.0	1.000
Silver	ND	1.0	1.000
Sodium	48,000	500	10.00
Thallium	ND	1.0	1.000
Vanadium	ND	10	1.000
Zinc	ND	20	1.000

ND= Not Detected

RL= Reporting Limit

Dissolved Target Analyte List Metals

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1221GW104	Batch#:	120323
Lab ID:	191314-004	Sampled:	12/06/06
Matrix:	Filtrate	Received:	12/07/06
Units:	ug/L	Prepared:	12/13/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	12/14/06
Antimony	ND	1.0	1.000	12/14/06
Arsenic	ND	5.0	1.000	12/14/06
Barium	ND	10	1.000	12/14/06
Beryllium	ND	2.0	1.000	12/14/06
Cadmium	ND	1.0	1.000	12/14/06
Calcium	47,000	500	10.00	12/15/06
Chromium	ND	10	1.000	12/14/06
Cobalt	ND	10	1.000	12/14/06
Copper	ND	1.0	1.000	12/14/06
Iron	ND	100	1.000	12/14/06
Lead	ND	3.0	1.000	12/14/06
Magnesium	89,000	500	10.00	12/15/06
Manganese	16	10	1.000	12/14/06
Nickel	ND	20	1.000	12/14/06
Potassium	1,800	500	1.000	12/14/06
Selenium	ND	5.0	1.000	12/14/06
Silver	ND	1.0	1.000	12/14/06
Sodium	63,000	500	10.00	12/15/06
Thallium	ND	1.0	1.000	12/14/06
Vanadium	ND	10	1.000	12/14/06
Zinc	ND	20	1.000	12/14/06

**Dissolved Target Analyte List Metals**

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID: *	DUP-1206063A	Batch#:	120323
Lab ID:	191314-005	Sampled:	12/06/06
Matrix:	Filtrate	Received:	12/07/06
Units:	ug/L	Prepared:	12/13/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	12/14/06
Antimony	ND	1.0	1.000	12/14/06
Arsenic	ND	5.0	1.000	12/14/06
Barium	ND	10	1.000	12/14/06
Beryllium	ND	2.0	1.000	12/14/06
Cadmium	ND	1.0	1.000	12/14/06
Calcium	44,000	500	10.00	12/15/06
Chromium	ND	10	1.000	12/14/06
Cobalt	ND	10	1.000	12/14/06
Copper	ND	1.0	1.000	12/14/06
Iron	ND	100	1.000	12/14/06
Lead	ND	3.0	1.000	12/14/06
Magnesium	85,000	500	10.00	12/15/06
Manganese	13	10	1.000	12/14/06
Nickel	ND	20	1.000	12/14/06
Potassium	1,700	500	1.000	12/14/06
Selenium	ND	5.0	1.000	12/14/06
Silver	ND	1.0	1.000	12/14/06
Sodium	60,000	500	10.00	12/15/06
Thallium	ND	1.0	1.000	12/14/06
Vanadium	ND	10	1.000	12/14/06
Zinc	ND	20	1.000	12/14/06

ND= Not Detected

RL= Reporting Limit

Dissolved Target Analyte List Metals

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BB3GW100	Batch#:	120323
Lab ID:	191314-006	Sampled:	12/06/06
Matrix:	Filtrate	Received:	12/07/06
Units:	ug/L	Prepared:	12/13/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	12/14/06
Antimony	ND	1.0	1.000	12/14/06
Arsenic	ND	5.0	1.000	12/14/06
Barium	92	10	1.000	12/14/06
Beryllium	ND	2.0	1.000	12/14/06
Cadmium	ND	1.0	1.000	12/14/06
Calcium	28,000	500	10.00	12/15/06
Chromium	ND	10	1.000	12/14/06
Cobalt	ND	10	1.000	12/14/06
Copper	ND	1.0	1.000	12/14/06
Iron	ND	100	1.000	12/14/06
Lead	ND	3.0	1.000	12/14/06
Magnesium	94,000	500	10.00	12/15/06
Manganese	ND	10	1.000	12/14/06
Nickel	21	20	1.000	12/14/06
Potassium	800	500	1.000	12/14/06
Selenium	ND	5.0	1.000	12/14/06
Silver	ND	1.0	1.000	12/14/06
Sodium	120,000	500	10.00	12/15/06
Thallium	ND	1.0	1.000	12/14/06
Vanadium	ND	10	1.000	12/14/06
Zinc	ND	20	1.000	12/14/06

**Dissolved Metals**

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065MW101	Batch#:	120323
Lab ID:	191314-009	Sampled:	12/06/06
Matrix:	Filtrate	Received:	12/07/06
Units:	ug/L	Prepared:	12/13/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	12/14/06
Antimony	ND	1.0	1.000	12/14/06
Arsenic	28	5.0	1.000	12/14/06
Cadmium	ND	1.0	1.000	12/14/06
Calcium	23,000	500	20.00	12/15/06
Chromium	ND	10	1.000	12/14/06
Copper	ND	1.0	1.000	12/14/06
Iron	19,000	100	1.000	12/14/06
Lead	ND	3.0	1.000	12/14/06
Magnesium	43,000	500	20.00	12/15/06
Manganese	53	10	1.000	12/14/06
Nickel	ND	20	1.000	12/14/06
Potassium	6,600	500	1.000	12/14/06
Sodium	230,000	500	20.00	12/15/06
Vanadium	ND	10	1.000	12/14/06
Zinc	ND	20	1.000	12/14/06

ND= Not Detected

RL= Reporting Limit

**Dissolved Metals**

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065MW102	Batch#:	120323
Lab ID:	191314-010	Sampled:	12/06/06
Matrix:	Filtrate	Received:	12/07/06
Units:	ug/L	Prepared:	12/13/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	12/14/06
Antimony	ND	1.0	1.000	12/14/06
Arsenic	6.3	5.0	1.000	12/14/06
Cadmium	ND	1.0	1.000	12/14/06
Calcium	28,000	500	10.00	12/15/06
Chromium	ND	10	1.000	12/14/06
Copper	ND	1.0	1.000	12/14/06
Iron	1,400	100	1.000	12/14/06
Lead	ND	3.0	1.000	12/14/06
Magnesium	25,000	500	10.00	12/15/06
Manganese	460	10	10.00	12/15/06
Nickel	ND	20	1.000	12/14/06
Potassium	5,800	500	1.000	12/14/06
Sodium	130,000	500	10.00	12/15/06
Vanadium	ND	10	1.000	12/14/06
Zinc	ND	20	1.000	12/14/06

ND= Not Detected

RL= Reporting Limit

Dissolved Metals

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ2A	Sampled:	12/06/06
Lab ID:	191314-011	Received:	12/07/06
Matrix:	Filtrate	Prepared:	12/13/06
Units:	ug/L	Analyzed:	12/14/06
Batch#:	120323		

Analyte	Result	RL	Diln Fac
Aluminum	ND	100	1.000
Antimony	ND	1.0	1.000
Arsenic	14	5.0	1.000
Cadmium	ND	1.0	1.000
Calcium	25,000	500	10.00
Chromium	ND	10	1.000
Copper	ND	1.0	1.000
Iron	13,000	100	1.000
Lead	ND	3.0	1.000
Magnesium	48,000	500	10.00
Manganese	1,500	10	10.00
Nickel	ND	20	1.000
Potassium	840	500	1.000
Sodium	65,000	500	10.00
Vanadium	ND	10	1.000
Zinc	ND	20	1.000

ND= Not Detected
 RL= Reporting Limit

Dissolved Metals

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ4A	Batch#:	120323
Lab ID:	191314-012	Sampled:	12/06/06
Matrix:	Filtrate	Received:	12/07/06
Units:	ug/L	Prepared:	12/13/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	12/14/06
Antimony	ND	1.0	1.000	12/14/06
Arsenic	14	5.0	1.000	12/14/06
Cadmium	ND	1.0	1.000	12/14/06
Calcium	60,000	500	10.00	12/15/06
Chromium	ND	10	1.000	12/14/06
Copper	ND	1.0	1.000	12/14/06
Iron	30,000	250	10.00	12/15/06
Lead	ND	3.0	1.000	12/14/06
Magnesium	77,000	500	10.00	12/15/06
Manganese	2,000	10	10.00	12/15/06
Nickel	ND	20	1.000	12/14/06
Potassium	7,700	500	1.000	12/14/06
Sodium	120,000	500	10.00	12/15/06
Vanadium	ND	10	1.000	12/14/06
Zinc	ND	20	1.000	12/14/06

**Dissolved Target Analyte List Metals**

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF6GW104	Batch#:	120323
Lab ID:	191314-014	Sampled:	12/06/06
Matrix:	Filtrate	Received:	12/07/06
Units:	ug/L	Prepared:	12/13/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	12/14/06
Antimony	ND	1.0	1.000	12/14/06
Arsenic	ND	5.0	1.000	12/14/06
Barium	40	10	1.000	12/14/06
Beryllium	ND	2.0	1.000	12/14/06
Cadmium	ND	1.0	1.000	12/14/06
Calcium	34,000	500	10.00	12/15/06
Chromium	13	10	1.000	12/14/06
Cobalt	ND	10	1.000	12/14/06
Copper	ND	1.0	1.000	12/14/06
Iron	ND	100	1.000	12/14/06
Lead	ND	3.0	1.000	12/14/06
Magnesium	59,000	500	10.00	12/15/06
Manganese	ND	10	1.000	12/14/06
Nickel	ND	20	1.000	12/14/06
Potassium	ND	500	1.000	12/14/06
Selenium	ND	5.0	1.000	12/14/06
Silver	ND	1.0	1.000	12/14/06
Sodium	60,000	500	10.00	12/15/06
Thallium	ND	1.0	1.000	12/14/06
Vanadium	ND	10	1.000	12/14/06
Zinc	ND	20	1.000	12/14/06

ND= Not Detected
RL= Reporting Limit

**Dissolved Target Analyte List Metals**

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF6GW105	Batch#:	120323
Lab ID:	191314-015	Sampled:	12/06/06
Matrix:	Filtrate	Received:	12/07/06
Units:	ug/L	Prepared:	12/13/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	12/14/06
Antimony	ND	1.0	1.000	12/14/06
Arsenic	ND	5.0	1.000	12/14/06
Barium	57	10	1.000	12/14/06
Beryllium	ND	2.0	1.000	12/14/06
Cadmium	ND	1.0	1.000	12/14/06
Calcium	39,000	500	10.00	12/15/06
Chromium	31	10	1.000	12/14/06
Cobalt	ND	10	1.000	12/14/06
Copper	ND	1.0	1.000	12/14/06
Iron	ND	100	1.000	12/14/06
Lead	ND	3.0	1.000	12/14/06
Magnesium	64,000	500	10.00	12/15/06
Manganese	17	10	1.000	12/14/06
Nickel	ND	20	1.000	12/14/06
Potassium	540	500	1.000	12/14/06
Selenium	ND	5.0	1.000	12/14/06
Silver	ND	1.0	1.000	12/14/06
Sodium	79,000	500	10.00	12/15/06
Thallium	ND	1.0	1.000	12/14/06
Vanadium	ND	10	1.000	12/14/06
Zinc	ND	20	1.000	12/14/06

ND= Not Detected

RL= Reporting Limit

**Dissolved Target Analyte List Metals**

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF6GW106	Batch#:	120323
Lab ID:	191314-016	Sampled:	12/06/06
Matrix:	Filtrate	Received:	12/07/06
Units:	ug/L	Prepared:	12/13/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	12/14/06
Antimony	ND	1.0	1.000	12/14/06
Arsenic	ND	5.0	1.000	12/14/06
Barium	42	10	1.000	12/14/06
Beryllium	ND	2.0	1.000	12/14/06
Cadmium	ND	1.0	1.000	12/14/06
Calcium	36,000	500	10.00	12/15/06
Chromium	22	10	1.000	12/14/06
Cobalt	ND	10	1.000	12/14/06
Copper	ND	1.0	1.000	12/14/06
Iron	ND	100	1.000	12/14/06
Lead	ND	3.0	1.000	12/14/06
Magnesium	64,000	500	10.00	12/15/06
Manganese	ND	10	1.000	12/14/06
Nickel	ND	20	1.000	12/14/06
Potassium	ND	500	1.000	12/14/06
Selenium	ND	5.0	1.000	12/14/06
Silver	ND	1.0	1.000	12/14/06
Sodium	93,000	500	10.00	12/15/06
Thallium	ND	1.0	1.000	12/14/06
Vanadium	ND	10	1.000	12/14/06
Zinc	ND	20	1.000	12/14/06

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC368128	Batch#:	120323
Matrix:	Filtrate	Prepared:	12/13/06
Units:	ug/L	Analyzed:	12/14/06

Analyte	Result	RL
Aluminum	ND	100
Antimony	ND	1.0
Arsenic	ND	5.0
Barium	ND	10
Beryllium	ND	2.0
Cadmium	ND	1.0
Calcium	ND	500
Chromium	ND	10
Cobalt	ND	10
Copper	ND	1.0
Iron	ND	100
Lead	ND	3.0
Magnesium	ND	500
Manganese	ND	10
Nickel	ND	20
Potassium	ND	500
Selenium	ND	5.0
Silver	ND	1.0
Sodium	ND	500
Thallium	ND	1.0
Vanadium	ND	10
Zinc	ND	20

ND= Not Detected

RL= Reporting Limit

Batch QC Report
Target Analyte List Metals

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC368135	Batch#:	120324
Matrix:	Water	Prepared:	12/13/06
Units:	ug/L		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	12/14/06
Antimony	ND	1.0	12/13/06
Arsenic	ND	5.0	12/13/06
Barium	ND	10	12/13/06
Beryllium	ND	2.0	12/13/06
Cadmium	ND	1.0	12/13/06
Calcium	ND	500	12/13/06
Chromium	ND	10	12/13/06
Cobalt	ND	10	12/13/06
Copper	ND	1.0	12/14/06
Iron	ND	100	12/13/06
Lead	ND	3.0	12/13/06
Magnesium	ND	500	12/14/06
Manganese	ND	10	12/13/06
Nickel	ND	20	12/13/06
Potassium	ND	500	12/13/06
Selenium	ND	5.0	12/13/06
Silver	ND	1.0	12/13/06
Sodium	ND	500	12/14/06
Thallium	ND	1.0	12/13/06
Vanadium	ND	10	12/13/06
Zinc	ND	20	12/13/06

ND= Not Detected

RL= Reporting Limit



Curtis & Tompkins, Ltd.

Mercury by Cold Vapor AA

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	120185
Field ID:	LF10SP01	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Prepared:	12/08/06
Diln Fac:	1.000	Analyzed:	12/08/06

Type	Lab ID	Result	RL
SAMPLE	191314-003	ND	0.20
BLANK	QC367568	ND	0.20

ND= Not Detected
RL= Reporting Limit

**Dissolved Mercury by Cold Vapor AA**

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Sampled:	12/06/06
Units:	ug/L	Received:	12/07/06
Diln Fac:	1.000	Prepared:	12/12/06
Batch#:	120309	Analyzed:	12/13/06

Field ID	Type	Lab ID	Matrix	Result	RL
LF10GW02	SAMPLE	191314-001	Filtrate	ND	0.20
LF10SP01	SAMPLE	191314-003	Filtrate	ND	0.20
LF6GW104	SAMPLE	191314-014	Filtrate	ND	0.20
LF6GW105	SAMPLE	191314-015	Filtrate	ND	0.20
LF6GW106	SAMPLE	191314-016	Filtrate	ND	0.20
	BLANK	QC368076	Water	ND	0.20

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Filtrate	Batch#:	120323
Units:	ug/L	Prepared:	12/13/06
Diln Fac:	1.000	Analyzed:	12/14/06

Type: BS Lab ID: QC368129

Analyte	Spiked	Result	%REC	Limits
Aluminum	10,000	10,750	108	80-120
Antimony	100.0	103.0	103	80-120
Arsenic	100.0	100.3	100	80-120
Barium	100.0	102.0	102	80-120
Beryllium	100.0	99.11	99	80-120
Cadmium	100.0	108.3	108	80-120
Calcium	10,000	11,150	112	80-120
Chromium	100.0	97.14	97	80-120
Cobalt	100.0	105.9	106	80-120
Copper	100.0	103.5	104	80-120
Iron	10,000	10,430	104	80-120
Lead	100.0	105.2	105	80-120
Magnesium	10,000	10,790	108	80-120
Manganese	100.0	102.1	102	80-120
Nickel	100.0	102.0	102	80-120
Potassium	10,000	11,560	116	80-120
Selenium	100.0	98.63	99	80-120
Silver	100.0	110.5	111	80-120
Sodium	10,000	11,590	116	80-120
Thallium	50.00	47.85	96	80-120
Vanadium	100.0	101.8	102	80-120
Zinc	100.0	99.60	100	80-120

Type: BSD Lab ID: QC368130

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Aluminum	10,000	10,670	107	80-120	1	20
Antimony	100.0	105.0	105	80-120	2	20
Arsenic	100.0	100.2	100	80-120	0	20
Barium	100.0	100.8	101	80-120	1	20
Beryllium	100.0	97.66	98	80-120	1	20
Cadmium	100.0	106.8	107	80-120	1	20
Calcium	10,000	11,110	111	80-120	0	20
Chromium	100.0	96.08	96	80-120	1	20
Cobalt	100.0	104.2	104	80-120	2	20
Copper	100.0	102.6	103	80-120	1	20
Iron	10,000	10,440	104	80-120	0	20
Lead	100.0	106.1	106	80-120	1	20
Magnesium	10,000	10,670	107	80-120	1	20
Manganese	100.0	100.9	101	80-120	1	20
Nickel	100.0	101.0	101	80-120	1	20
Potassium	10,000	11,430	114	80-120	1	20
Selenium	100.0	99.57	100	80-120	1	20
Silver	100.0	109.8	110	80-120	1	20
Sodium	10,000	11,390	114	80-120	2	20
Thallium	50.00	48.04	96	80-120	0	20
Vanadium	100.0	101.4	101	80-120	0	20
Zinc	100.0	98.65	99	80-120	1	20

RPD= Relative Percent Difference



Batch QC Report

Target Analyte List Metals

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Water	Batch#:	120324
Units:	ug/L	Prepared:	12/13/06
Diln Fac:	1.000		

Type: BS Lab ID: QC368136

Analyte	Spiked	Result	%REC	Limits	Analyzed
Aluminum	10,000	10,470	105	80-120	12/14/06
Antimony	100.0	101.5	102	80-120	12/13/06
Arsenic	100.0	97.62	98	80-120	12/13/06
Barium	100.0	101.6	102	80-120	12/13/06
Beryllium	100.0	98.15	98	80-120	12/13/06
Cadmium	100.0	102.4	102	80-120	12/13/06
Calcium	10,000	10,670	107	80-120	12/13/06
Chromium	100.0	99.44	99	80-120	12/13/06
Cobalt	100.0	103.1	103	80-120	12/13/06
Copper	100.0	102.0	102	80-120	12/13/06
Iron	10,000	10,320	103	80-120	12/13/06
Lead	100.0	103.8	104	80-120	12/13/06
Magnesium	10,000	10,470	105	80-120	12/14/06
Manganese	100.0	100.9	101	80-120	12/13/06
Nickel	100.0	100.2	100	80-120	12/13/06
Potassium	10,000	10,870	109	80-120	12/13/06
Selenium	100.0	94.35	94	80-120	12/13/06
Silver	100.0	106.1	106	80-120	12/13/06
Sodium	10,000	10,400	104	80-120	12/14/06
Thallium	50.00	48.88	98	80-120	12/13/06
Vanadium	100.0	101.3	101	80-120	12/13/06
Zinc	100.0	98.96	99	80-120	12/13/06

Type: BSD Lab ID: QC368137

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
Aluminum	10,000	10,540	105	80-120	1	20	12/14/06
Antimony	100.0	105.0	105	80-120	3	20	12/13/06
Arsenic	100.0	99.17	99	80-120	2	20	12/13/06
Barium	100.0	102.9	103	80-120	1	20	12/13/06
Beryllium	100.0	101.0	101	80-120	3	20	12/13/06
Cadmium	100.0	103.2	103	80-120	1	20	12/13/06
Calcium	10,000	10,850	109	80-120	2	20	12/13/06
Chromium	100.0	103.5	104	80-120	4	20	12/13/06
Cobalt	100.0	106.2	106	80-120	3	20	12/13/06
Copper	100.0	104.6	105	80-120	3	20	12/13/06
Iron	10,000	10,530	105	80-120	2	20	12/13/06
Lead	100.0	105.6	106	80-120	2	20	12/13/06
Magnesium	10,000	10,610	106	80-120	1	20	12/14/06
Manganese	100.0	103.5	104	80-120	3	20	12/13/06
Nickel	100.0	103.2	103	80-120	3	20	12/13/06
Potassium	10,000	10,980	110	80-120	1	20	12/13/06
Selenium	100.0	95.78	96	80-120	2	20	12/13/06
Silver	100.0	107.6	108	80-120	1	20	12/13/06
Sodium	10,000	10,670	107	80-120	3	20	12/14/06
Thallium	50.00	50.35	101	80-120	3	20	12/13/06
Vanadium	100.0	105.0	105	80-120	4	20	12/13/06
Zinc	100.0	100.4	100	80-120	1	20	12/13/06

RPD= Relative Percent Difference

Batch QC Report

Mercury by Cold Vapor AA

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	120185
Field ID:	LF10SP01	Sampled:	12/06/06
MSS Lab ID:	191314-003	Received:	12/07/06
Matrix:	Water	Prepared:	12/08/06
Units:	ug/L	Analyzed:	12/08/06
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC367569		5.000	5.070	101	80-120		
BSD	QC367570		5.000	4.980	100	80-120	2	20
MS	QC367572	<0.05753	5.000	5.230	105	75-125		
MSD	QC367573		5.000	5.200	104	75-125	1	20

RPD= Relative Percent Difference



Batch QC Report

Dissolved Mercury by Cold Vapor AA

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	120309
Field ID:	LF10SP01	Sampled:	12/06/06
MSS Lab ID:	191314-003	Received:	12/07/06
Units:	ug/L	Prepared:	12/12/06
Diln Fac:	1.000	Analyzed:	12/13/06

Type	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC368077	Water		5.000	4.810	96	80-120		
BSD	QC368078	Water		5.000	4.690	94	80-120	3	20
MS	QC368080	Filtrate	<0.02083	5.000	5.570	111	75-125		
MSD	QC368081	Filtrate		5.000	5.530	111	75-125	1	20

Batch QC Report
Dissolved Target Analyte List Metals

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF10SP01	Sampled:	12/06/06
MSS Lab ID:	191314-003	Received:	12/07/06
Matrix:	Filtrate	Prepared:	12/13/06
Units:	ug/L	Analyzed:	12/14/06
Batch#:	120323		

Type: MS Lab ID: QC368131

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln	Fac
Aluminum	21.52	10,000	10,530	105	75-125	1.000	
Antimony	0.6318	100.0	104.5	104	75-125	1.000	
Arsenic	0.9786	100.0	98.70	98	75-125	1.000	
Barium	15.42	100.0	116.5	101	75-125	1.000	
Beryllium	<0.1228	100.0	96.85	97	75-125	1.000	
Cadmium	<0.1659	100.0	102.4	102	75-125	1.000	
Calcium	33,340	10,000	44,420	111	75-125	10.00	
Chromium	<0.1821	100.0	94.09	94	75-125	1.000	
Cobalt	0.9155	100.0	101.5	101	75-125	1.000	
Copper	0.3894	100.0	96.68	96	75-125	1.000	
Iron	673.5	10,000	10,690	100	75-125	1.000	
Lead	0.1245	100.0	104.2	104	75-125	1.000	
Magnesium	37,070	10,000	48,100	110	75-125	10.00	
Manganese	146.2	100.0	232.8	87	75-125	10.00	
Nickel	5.030	100.0	99.04	94	75-125	1.000	
Potassium	4,354	10,000	15,500	111	75-125	1.000	
Selenium	<0.3462	100.0	93.24	93	75-125	1.000	
Silver	<0.06797	100.0	104.3	104	75-125	1.000	
Sodium	48,300	10,000	58,490 >LR	102 NM	75-125	1.000	
Thallium	0.07887	50.00	49.22	98	75-125	1.000	
Vanadium	0.7543	100.0	102.3	102	75-125	1.000	
Zinc	3.532	100.0	97.38	94	75-125	1.000	

NC= Not Calculated

NM= Not Meaningful: Sample concentration > 4X spike concentration

>LR= Response exceeds instrument's linear range

RPD= Relative Percent Difference



Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF10SP01	Sampled:	12/06/06
MSS Lab ID:	191314-003	Received:	12/07/06
Matrix:	Filtrate	Prepared:	12/13/06
Units:	ug/L	Analyzed:	12/14/06
Batch#:	120323		

Type: MSD Lab ID: QC368132

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Pac
Aluminum	10,000	10,530	105	75-125	0	20	1.000	
Antimony	100.0	106.8	106	75-125	2	20	1.000	
Arsenic	100.0	100.5	100	75-125	2	20	1.000	
Barium	100.0	119.3	104	75-125	2	20	1.000	
Beryllium	100.0	97.76	98	75-125	1	20	1.000	
Cadmium	100.0	103.0	103	75-125	1	20	1.000	
Calcium	10,000	44,120	108	75-125	1	20	10.00	
Chromium	100.0	96.25	96	75-125	2	20	1.000	
Cobalt	100.0	103.4	102	75-125	2	20	1.000	
Copper	100.0	99.73	99	75-125	3	20	1.000	
Iron	10,000	10,950	103	75-125	2	20	1.000	
Lead	100.0	105.8	106	75-125	2	20	1.000	
Magnesium	10,000	47,000	99	75-125	2	20	10.00	
Manganese	100.0	229.1	83	75-125	2	20	10.00	
Nickel	100.0	102.3	97	75-125	3	20	1.000	
Potassium	10,000	15,640	113	75-125	1	20	1.000	
Selenium	100.0	94.90	95	75-125	2	20	1.000	
Silver	100.0	105.7	106	75-125	1	20	1.000	
Sodium	10,000	58,400 >LR	101 NM	75-125	NC	20	1.000	
Thallium	50.00	48.91	98	75-125	1	20	1.000	
Vanadium	100.0	104.9	104	75-125	3	20	1.000	
Zinc	100.0	95.74	92	75-125	2	20	1.000	

NC= Not Calculated

NM= Not Meaningful: Sample concentration > 4X spike concentration

>LR= Response exceeds instrument's linear range

RPD= Relative Percent Difference

Batch QC Report

Target Analyte List Metals			
Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF10SP01	Batch#:	120324
MSS Lab ID:	191314-003	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Prepared:	12/13/06

Type: MS Lab ID: QC368138

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln	Fac	Analyzed
Aluminum	90.35	10,000	10,190	101	75-125	1.000		12/14/06
Antimony	0.8661	100.0	107.4	107	75-125	1.000		12/13/06
Arsenic	9.596	100.0	104.7	95	75-125	1.000		12/13/06
Barium	59.90	100.0	162.6	103	75-125	1.000		12/13/06
Beryllium	<0.1228	100.0	97.83	98	75-125	1.000		12/13/06
Cadmium	<0.1659	100.0	97.32	97	75-125	1.000		12/13/06
Calcium	38,800	10,000	45,580	68 *	75-125	10.00		12/14/06
Chromium	1.077	100.0	99.69	99	75-125	1.000		12/13/06
Cobalt	2.988	100.0	104.5	102	75-125	1.000		12/13/06
Copper	3.122	100.0	100.1	97	75-125	1.000		12/13/06
Iron	22,300	10,000	30,390	81	75-125	10.00		12/14/06
Lead	4.778	100.0	108.2	103	75-125	1.000		12/13/06
Magnesium	38,610	10,000	46,750	81	75-125	10.00		12/14/06
Manganese	360.9	100.0	431.2	70 *	75-125	10.00		12/14/06
Nickel	11.26	100.0	106.8	96	75-125	1.000		12/13/06
Potassium	4,339	10,000	14,790	105	75-125	1.000		12/13/06
Selenium	<0.3462	100.0	89.90	90	75-125	1.000		12/13/06
Silver	<0.06797	100.0	101.1	101	75-125	1.000		12/13/06
Sodium	50,270	10,000	59,030 >LR	88 NM	75-125	1.000		12/14/06
Thallium	0.03547	50.00	49.33	99	75-125	1.000		12/13/06
Vanadium	13.30	100.0	114.5	101	75-125	1.000		12/13/06
Zinc	14.57	100.0	106.8	92	75-125	1.000		12/13/06

*= Value outside of QC limits; see narrative

NC= Not Calculated

NM= Not Meaningful: Sample concentration > 4X spike concentration

>LR= Response exceeds instrument's linear range

RPD= Relative Percent Difference

Batch QC Report
Target Analyte List Metals

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF10SP01	Batch#:	120324
MSS Lab ID:	191314-003	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Prepared:	12/13/06

Type: MSD Lab ID: QC368139

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Analyzed
Aluminum	10,000	10,210	101	75-125	0	20	1.000		12/14/06
Antimony	100.0	107.1	106	75-125	0	20	1.000		12/13/06
Arsenic	100.0	106.1	97	75-125	1	20	1.000		12/13/06
Barium	100.0	161.7	102	75-125	1	20	1.000		12/13/06
Beryllium	100.0	97.71	98	75-125	0	20	1.000		12/13/06
Cadmium	100.0	99.53	100	75-125	2	20	1.000		12/13/06
Calcium	10,000	47,370	86	75-125	4	20	10.00		12/14/06
Chromium	100.0	98.31	97	75-125	1	20	1.000		12/13/06
Cobalt	100.0	105.6	103	75-125	1	20	1.000		12/13/06
Copper	100.0	100.9	98	75-125	1	20	1.000		12/13/06
Iron	10,000	31,640	93	75-125	4	20	10.00		12/14/06
Lead	100.0	110.9	106	75-125	2	20	1.000		12/13/06
Magnesium	10,000	47,810	92	75-125	2	20	10.00		12/14/06
Manganese	100.0	444.9	84	75-125	3	20	10.00		12/14/06
Nickel	100.0	107.6	96	75-125	1	20	1.000		12/13/06
Potassium	10,000	15,000	107	75-125	1	20	1.000		12/13/06
Selenium	100.0	90.89	91	75-125	1	20	1.000		12/13/06
Silver	100.0	103.3	103	75-125	2	20	1.000		12/13/06
Sodium	10,000	57,900 >LR	76 NM	75-125	NC	20	1.000		12/14/06
Thallium	50.00	50.57	101	75-125	2	20	1.000		12/13/06
Vanadium	100.0	115.1	102	75-125	1	20	1.000		12/13/06
Zinc	100.0	106.7	92	75-125	0	20	1.000		12/13/06

*= Value outside of QC limits; see narrative

NC= Not Calculated

NM= Not Meaningful: Sample concentration > 4X spike concentration

>LR= Response exceeds instrument's linear range

RPD= Relative Percent Difference

Batch QC Report

Target Analyte List Metals

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF10SP01	Units:	ug/L
Type:	Serial Dilution	Batch#:	120324
MSS Lab ID:	191314-003	Sampled:	12/06/06
Lab ID:	QC368140	Received:	12/07/06
Matrix:	Water		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln	Fac	Analyzed
Aluminum	ND	100.0	164.9	125.0	NC	10	5.000		12/14/06
Antimony	ND	1.000	1.550	1.250	NC	10	5.000		12/13/06
Arsenic	9.596	5.000	10.13	5.000	NC	10	5.000		12/13/06
Barium	59.90	10.00	59.83	10.00	0	10	5.000		12/13/06
Beryllium	ND	2.000	ND	2.000	NC	10	5.000		12/13/06
Cadmium	ND	1.000	ND	1.250	NC	10	5.000		12/13/06
Calcium	38,800	500.0	42,610	1,250	10	10	50.00		12/14/06
Chromium	ND	10.00	ND	10.00	NC	10	5.000		12/13/06
Cobalt	ND	10.00	3.145 J	10.00	NC	10	5.000		12/13/06
Copper	3.122	1.000	3.168	1.250	NC	10	5.000		12/13/06
Iron	22,300	250.0	21,620	1,250	3	10	50.00		12/14/06
Lead	4.778	3.000	4.916	3.000	3	10	5.000		12/13/06
Magnesium	38,610	500.0	40,100	1,250	4	10	50.00		12/14/06
Manganese	360.9	10.00	355.4	12.50	2	10	50.00		12/14/06
Nickel	ND	20.00	11.80 J	20.00	5	10	5.000		12/13/06
Potassium	4,339	500.0	4,621	500.0	6	10	5.000		12/13/06
Selenium	ND	5.000	ND	5.000	NC	10	5.000		12/13/06
Silver	ND	1.000	ND	1.250	NC	10	5.000		12/13/06
Sodium	50,270	500.0	44,050	1,250	12 *	10	50.00		12/14/06
Thallium	ND	1.000	ND	1.000	NC	10	5.000		12/13/06
Vanadium	13.30	10.00	13.22	10.00	1	10	5.000		12/13/06
Zinc	ND	20.00	15.84 J	20.00	9	10	5.000		12/13/06

*= Value outside of QC limits; see narrative

J= Estimated value

NC= Not Calculated

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ2A	Batch#:	120323
MSS Lab ID:	191314-011	Sampled:	12/06/06
Matrix:	Filtrate	Received:	12/07/06
Units:	ug/L	Prepared:	12/13/06

Type: MS Analyzed: 12/14/06
Lab ID: QC368217

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln	Fac
Aluminum	<9.556	10,000	10,450	105	75-125	1.000	
Antimony	0.1127	100.0	105.2	105	75-125	1.000	
Arsenic	13.58	100.0	112.5	99	75-125	1.000	
Barium	75.43	100.0	176.0	101	75-125	1.000	
Beryllium	<0.1228	100.0	97.14	97	75-125	1.000	
Cadmium	<0.1659	100.0	105.6	106	75-125	1.000	
Calcium	25,420	10,000	35,830	104	75-125	10.00	
Chromium	0.8240	100.0	95.25	94	75-125	10.00	
Cobalt	1.361	100.0	102.3	101	75-125	1.000	
Copper	0.4994	100.0	97.65	97	75-125	1.000	
Iron	13,210	10,000	23,640	104	75-125	10.00	
Lead	<0.08794	100.0	102.3	102	75-125	1.000	
Magnesium	47,600	10,000	55,480 >LR	79 NM	75-125	1.000	
Manganese	1,525	100.0	1,595 >LR	70 NM	75-125	1.000	
Nickel	1.739	100.0	97.55	96	75-125	1.000	
Potassium	841.0	10,000	11,920	111	75-125	1.000	
Selenium	<0.3462	100.0	94.89	95	75-125	1.000	
Silver	<0.06797	100.0	106.2	106	75-125	1.000	
Sodium	65,340	10,000	73,100 >LR	78 NM	75-125	1.000	
Thallium	<0.03044	50.00	48.95	98	75-125	1.000	
Vanadium	0.2495	100.0	103.7	103	75-125	1.000	
Zinc	3.332	100.0	96.08	93	75-125	1.000	

NC= Not Calculated

NM= Not Meaningful: Sample concentration > 4X spike concentration

>LR= Response exceeds instrument's linear range

RPD= Relative Percent Difference

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ2A	Batch#:	120323
MSS Lab ID:	191314-011	Sampled:	12/06/06
Matrix:	Filtrate	Received:	12/07/06
Units:	ug/L	Prepared:	12/13/06

Type: MSD Lab ID: QC368218

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Analyzed
Aluminum	10,000	10,380	104	75-125	1	20	1.000		12/14/06
Antimony	100.0	104.0	104	75-125	1	20	1.000		12/14/06
Arsenic	100.0	113.2	100	75-125	1	20	1.000		12/14/06
Barium	100.0	183.9	108	75-125	4	20	1.000		12/14/06
Beryllium	100.0	97.27	97	75-125	0	20	1.000		12/14/06
Cadmium	100.0	104.5	105	75-125	1	20	1.000		12/14/06
Calcium	10,000	37,220	118	75-125	4	20	10.00		12/15/06
Chromium	100.0	91.72	91	75-125	4	20	10.00		12/15/06
Cobalt	100.0	103.5	102	75-125	1	20	1.000		12/14/06
Copper	100.0	97.98	97	75-125	0	20	1.000		12/14/06
Iron	10,000	24,190	110	75-125	2	20	10.00		12/15/06
Lead	100.0	103.1	103	75-125	1	20	1.000		12/14/06
Magnesium	10,000	58,490 >LR	109 NM	75-125	NC	20	1.000		12/14/06
Manganese	100.0	1,679 >LR	154 NM	75-125	NC	20	1.000		12/14/06
Nickel	100.0	98.07	96	75-125	1	20	1.000		12/14/06
Potassium	10,000	12,070	112	75-125	1	20	1.000		12/14/06
Selenium	100.0	94.51	95	75-125	0	20	1.000		12/14/06
Silver	100.0	105.3	105	75-125	1	20	1.000		12/14/06
Sodium	10,000	78,760 >LR	134 NM	75-125	NC	20	1.000		12/14/06
Thallium	50.00	47.88	96	75-125	2	20	1.000		12/14/06
Vanadium	100.0	104.0	104	75-125	0	20	1.000		12/14/06
Zinc	100.0	95.40	92	75-125	1	20	1.000		12/14/06

NC= Not Calculated

NM= Not Meaningful: Sample concentration > 4X spike concentration

>LR= Response exceeds instrument's linear range

RPD= Relative Percent Difference

Batch QC Report

Dissolved Target Analyte List Metals

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF10SP01	Units:	ug/L
Type:	Serial Dilution	Batch#:	120323
MSS Lab ID:	191314-003	Sampled:	12/06/06
Lab ID:	QC368133	Received:	12/07/06
Matrix:	Filtrate	Analyzed:	12/14/06

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln	Pac
Aluminum	ND	100.0	68.15 J	125.0	NC	10	5.000	
Antimony	ND	1.000	1.293	1.250	NC	10	5.000	
Arsenic	ND	5.000	3.643 J	5.000	NC	10	5.000	
Barium	15.42	10.00	15.50	10.00	1	10	5.000	
Beryllium	ND	2.000	ND	2.000	NC	10	5.000	
Cadmium	ND	1.000	ND	1.250	NC	10	5.000	
Calcium	33,340	500.0	37,440	1,250	12 *	10	50.00	
Chromium	ND	10.00	ND	10.00	NC	10	5.000	
Cobalt	ND	10.00	0.9868 J	10.00	NC	10	5.000	
Copper	ND	1.000	ND	1.250	NC	10	5.000	
Iron	673.5	100.0	753.9	125.0	NC	10	5.000	
Lead	ND	3.000	ND	3.000	NC	10	5.000	
Magnesium	37,070	500.0	40,870	1,250	10	10	50.00	
Manganese	146.2	10.00	145.9	10.00	0	10	5.000	
Nickel	ND	20.00	5.413 J	20.00	NC	10	5.000	
Potassium	4,354	500.0	4,706	500.0	8	10	5.000	
Selenium	ND	5.000	ND	5.000	NC	10	5.000	
Silver	ND	1.000	ND	1.250	NC	10	5.000	
Sodium	48,300	500.0	42,510	1,250	12 *	10	50.00	
Thallium	ND	1.000	0.1769 J	1.000	NC	10	5.000	
Vanadium	ND	10.00	ND	10.00	NC	10	5.000	
Zinc	ND	20.00	2.935 J	20.00	NC	10	5.000	

*= Value outside of QC limits; see narrative

J= Estimated value

NC= Not Calculated

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Mercury by Cold Vapor AA			
Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	LF10SP01	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	120185
MSS Lab ID:	191314-003	Sampled:	12/06/06
Lab ID:	QC367571	Received:	12/07/06
Matrix:	Water	Analyzed:	12/08/06

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
 ND= Not Detected
 RL= Reporting Limit



Batch QC Report

Dissolved Mercury by Cold Vapor AA

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	LF10SP01	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	120309
MSS Lab ID:	191314-003	Sampled:	12/06/06
Lab ID:	QC368079	Received:	12/07/06
Matrix:	Filtrate	Analyzed:	12/13/06

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
 Inst : MET05
 Seqnum: 56500483085
 File : 11313085
 IDF : 1.0
 Lab ID: 191314-003
 Matrix: Water
 Batch : 120324
 Time : 13-DEC-2006 21:20
 Cal : 56500483001
 Units : ug/L

Type : PDS
 Inst : MET05
 Seqnum: 56500483089
 File : 11313089
 IDF : 1.0
 Lab ID: QC368141
 Matrix: Water
 Batch : 120324
 Time : 13-DEC-2006 21:42
 Cal : 56500483001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S4326 (100X), S4327 (100X), S4635

Analyte	MSS	Spiked	PDS	%Rec	Limits	Flags
Aluminum	90.35	10000	10700	106	75-125	>c+ b*
Antimony	0.8661	100.0	102.0	101	75-125	u
Arsenic	9.596	100.0	100.1	91	75-125	u
Barium	59.90	100.0	157.0	97	75-125	u
Beryllium	ND	100.0	91.01	91	75-125	u
Cadmium	ND	100.0	92.59	93	75-125	u
Chromium	1.077	100.0	92.74	92	75-125	u
Cobalt	2.988	100.0	100.6	98	75-125	u
Copper	3.122	100.0	96.33	93	75-125	u
Lead	4.778	100.0	101.7	97	75-125	u
Molybdenum	0.3996	100.0	98.16	98	75-125	u
Nickel	11.26	100.0	102.2	91	75-125	u
Potassium	4339	10000	14400	101	75-125	u
Selenium	ND	100.0	85.12	85	75-125	u
Silver	ND	100.0	95.97	96	75-125	u
Thallium	0.03547	50.00	47.84	96	75-125	u
Vanadium	13.30	100.0	109.4	96	75-125	u
Zinc	14.57	100.0	101.8	87	75-125	u

ISTD (ICALBLK 11313004)	ICALBLK Abund	PDS Abund	%Drift
Lithium	831127	665734	-19.90
Scandium	642644	481497	-25.08
Germanium	147548	111905	-24.16
Indium	875996	642230	-26.69
Bismuth	993101	749920	-24.49

MISSING READINGS: CA FE MG MN NA

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
 Inst : MET05
 Seqnum: 56500483133
 File : 11313133
 IDF : 1.0
 Lab ID: 191314-003
 Matrix: Filtrate
 Batch : 120323
 Time : 14-DEC-2006 01:48
 Cal : 56500483001
 Units : ug/L

Type : PDS
 Inst : MET05
 Seqnum: 56500483146
 File : 11313146
 IDF : 1.0
 Lab ID: QC368134
 Matrix: Filtrate
 Batch : 120323
 Time : 14-DEC-2006 03:00
 Cal : 56500483001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S4326 (100X), S4327 (100X), S4635

Analyte	MSS	Spiked	PDS	%Rec	Limits	Flags
Aluminum	27.24	10000	10840	108	75-125	>c+ b*
Antimony	0.6318	100.0	102.9	102	75-125	u
Arsenic	0.9786	100.0	94.51	94	75-125	u
Barium	15.42	100.0	109.3	94	75-125	u
Beryllium	ND	100.0	88.39	88	75-125	u
Cadmium	ND	100.0	98.12	98	75-125	u
Chromium	ND	100.0	88.10	88	75-125	>c- b*
Cobalt	0.9155	100.0	94.93	94	75-125	u
Copper	0.3894	100.0	91.02	91	75-125	u
Iron	673.5	10000	10070	94	75-125	u
Lead	0.1245	100.0	95.76	96	75-125	u
Manganese	146.2	100.0	235.0 >LR	89	75-125	>LR b*
Molybdenum	0.5792	100.0	99.93	99	75-125	u
Nickel	5.030	100.0	94.11	89	75-125	u
Potassium	4354	10000	14820	105	75-125	u
Selenium	ND	100.0	90.93	91	75-125	u
Silver	ND	100.0	98.55	99	75-125	u
Vanadium	0.7543	100.0	97.17	96	75-125	u
Zinc	3.532	100.0	90.11	87	75-125	u

ISTD (ICALBLK 11313004)	ICALBLK Abund	PDS Abund	%Drift
Lithium	831127	682806	-17.85
Scandium	642644	481362	-25.10
Germanium	147548	109024	-26.11
Indium	875996	658019	-24.88
Bismuth	993101	759134	-23.56

MISSING READINGS: CA MG NA TL

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
 Inst : MET05
 Seqnum: 56500483085
 File : 11313085
 IDF : 1.0
 Lab ID: 191314-003
 Matrix: Water
 Batch : 120324
 Time : 13-DEC-2006 21:20
 Cal : 56500483001
 Units : ug/L

Type : PDS
 Inst : MET05
 Seqnum: 56501744046
 File : 11410046
 IDF : 1.0
 Lab ID: QC368141
 Matrix: Water
 Batch : 120324
 Time : 14-DEC-2006 14:35
 Cal : 56501744001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S4326 (100X), S4327 (100X), S4635

Analyte	MSS	Spiked	PDS	%Rec	Limits	Flags
Aluminum	90.35	10000	9596	95	75-125	u
Antimony	0.8661	100.0	94.56	94	75-125	
Arsenic	9.596	100.0	96.61	87	75-125	
Barium	59.90	100.0	149.0	89	75-125	
Beryllium	ND	100.0	91.35	91	75-125	
Cadmium	ND	100.0	90.24	90	75-125	
Chromium	1.077	100.0	92.84	92	75-125	
Cobalt	2.988	100.0	91.94	89	75-125	
Copper	3.122	100.0	94.89	92	75-125	
Lead	4.778	100.0	97.30	93	75-125	
Molybdenum	0.3996	100.0	95.77	95	75-125	u
Nickel	11.26	100.0	102.6	91	75-125	
Potassium	4339	10000	13240	89	75-125	
Selenium	ND	100.0	80.83	81	75-125	
Silver	ND	100.0	92.66	93	75-125	
Thallium	0.03547	50.00	45.64	91	75-125	
Vanadium	13.30	100.0	110.9	98	75-125	
Zinc	14.57	100.0	98.20	84	75-125	

ISTD (ICALBLK 11410004)	ICALBLK Abund	PDS Abund	%Drift
Lithium	739106	553847	-25.07
Scandium	529417	404034	-23.68
Germanium	119842	87110	-27.31
Indium	758188	567582	-25.14
Bismuth	901811	672543	-25.42

MISSING READINGS: CA FE MG MN NA

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
 Inst : MET05
 Seqnum: 56501744050
 File : 11410050
 IDF : 10.0
 Lab ID: 191314-003
 Matrix: Water
 Batch : 120324
 Time : 14-DEC-2006 14:57
 Cal : 56501744001
 Units : ug/L

Type : PDS
 Inst : MET05
 Seqnum: 56501744082
 File : 11410082
 IDF : 10.0
 Lab ID: QC368141
 Matrix: Water
 Batch : 120324
 Time : 14-DEC-2006 17:56
 Cal : 56501744001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S4326 (100X), S4327 (100X), S4635

Analyte	MSS	Spiked	PDS	%Rec	Limits	Flags
Aluminum	20.13	10000	9782	98	75-125	
Antimony	ND	100.0	87.77	88	75-125	
Arsenic	1.185	100.0	93.02	92	75-125	
Barium	5.217	100.0	97.06	92	75-125	
Beryllium	ND	100.0	92.89	93	75-125	
Cadmium	ND	100.0	93.02	93	75-125	
Calcium	3880	10000	13380	95	75-125	u
Chromium	ND	100.0	89.09	89	75-125	
Cobalt	0.3310	100.0	93.62	93	75-125	
Copper	0.3401	100.0	93.52	93	75-125	
Iron	2230	10000	11740	95	75-125	u
Lead	0.4720	100.0	91.25	91	75-125	
Magnesium	3861	10000	13480	96	75-125	u
Manganese	36.09	100.0	131.0	95	75-125	u
Molybdenum	ND	100.0	90.78	91	75-125	u
Nickel	1.208	100.0	94.24	93	75-125	
Potassium	388.9	10000	9921	95	75-125	
Selenium	0.3837	100.0	92.92	93	75-125	
Silver	ND	100.0	91.54	92	75-125	
Sodium	5027	10000	14650	96	75-125	u
Thallium	ND	50.00	44.27	89	75-125	<c- b*
Vanadium	1.340	100.0	92.45	91	75-125	
Zinc	50.39	100.0	106.1	56*	75-125	

ISTD (ICALBLK 11410004)	ICALBLK Abund	PDS Abund	%Drift
Lithium	739106	623953	-15.58
Scandium	529417	453740	-14.29
Germanium	119842	101999	-14.89
Indium	758188	655544	-13.54
Bismuth	901811	813082	-9.84

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : PDS
 Inst : MET05
 Seqnum: 56501744112
 File : 11410112
 IDF : 1.0
 Lab ID: QC368134
 Matrix: Filtrate
 Batch : 120323
 Time : 14-DEC-2006 20:43
 Cal : 56501744001
 MSS : 191314-003
 Units : ug/L

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S4326 (100X), S4327 (100X), S4635

Analyte	MSS Seqnum	Result	Spiked	PDS	%Rec	Limits	Flags
Aluminum	56500483133	27.24	10000	9572	95	75-125	u
Antimony	56500483133	0.6318	100.0	95.31	95	75-125	
Arsenic	56500483133	0.9786	100.0	91.42	90	75-125	
Barium	56500483133	15.42	100.0	106.6	91	75-125	
Beryllium	56500483133	ND	100.0	90.75	91	75-125	
Cadmium	56500483133	ND	100.0	95.46	95	75-125	
Chromium	56500483133	ND	100.0	91.36	91	75-125	u
Cobalt	56500483133	0.9155	100.0	89.53	89	75-125	
Copper	56500483133	0.3894	100.0	91.53	91	75-125	
Iron	56500483133	673.5	10000	10380	97	75-125	
Lead	56500483133	0.1245	100.0	91.56	91	75-125	
Manganese	56500483133	146.2	100.0	246.9 >LR	101	75-125	>LR b*
Molybdenum	56501744099	0.5679	100.0	96.68	96	75-125	u
Nickel	56500483133	5.030	100.0	95.92	91	75-125	
Potassium	56500483133	4354	10000	13410	91	75-125	
Selenium	56500483133	ND	100.0	87.28	87	75-125	
Silver	56500483133	ND	100.0	95.63	96	75-125	
Thallium	56501744099	0.07887	50.00	45.68	91	75-125	u
Vanadium	56500483133	0.7543	100.0	100.0	99	75-125	
Zinc	56500483133	3.532	100.0	89.20	86	75-125	

ISTD (ICALBLK 11410004)	ICALBLK Abund	PDS Abund	%Drift
Lithium	739106	545626	-26.18
Scandium	529417	398039	-24.82
Germanium	119842	83820	-30.06
Indium	758188	574699	-24.20
Bismuth	901811	676181	-25.02

MISSING READINGS: CA MG NA

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
 Inst : MET05
 Seqnum: 56501744136
 File : 11410136
 IDF : 10.0
 Lab ID: 191314-003
 Matrix: Filtrate
 Batch : 120323
 Time : 14-DEC-2006 22:58
 Cal : 56501744001
 Units : ug/L

Type : PDS
 Inst : MET05
 Seqnum: 56501744140
 File : 11410140
 IDF : 10.0
 Lab ID: QC368134
 Matrix: Filtrate
 Batch : 120323
 Time : 14-DEC-2006 23:21
 Cal : 56501744001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S4326 (100X), S4327 (100X), S4635

Analyte	MSS	Spiked	PDS	%Rec	Limits	Flags
Aluminum	ND	10000	9482	95	75-125	
Antimony	ND	100.0	84.28	84	75-125	
Arsenic	0.6915	100.0	89.39	89	75-125	
Barium	1.322	100.0	87.55	86	75-125	
Beryllium	ND	100.0	87.99	88	75-125	
Cadmium	ND	100.0	95.48	95	75-125	
Calcium	3334	10000	12720	94	75-125	u
Chromium	ND	100.0	85.67	86	75-125	
Cobalt	0.07906	100.0	85.78	86	75-125	
Copper	ND	100.0	89.41	89	75-125	
Iron	63.01	10000	9371	93	75-125	
Lead	ND	100.0	85.82	86	75-125	
Magnesium	3707	10000	12860	92	75-125	u
Manganese	13.82	100.0	104.3	90	75-125	u
Molybdenum	ND	100.0	88.52	89	75-125	u
Nickel	0.5219	100.0	89.98	89	75-125	
Potassium	377.6	10000	9664	93	75-125	
Selenium	0.5111	100.0	91.10	91	75-125	
Silver	ND	100.0	92.55	93	75-125	
Sodium	4830	10000	13980	92	75-125	u
Thallium	ND	50.00	42.33	85	75-125	
Vanadium	ND	100.0	92.49	92	75-125	
Zinc	0.5658	100.0	91.79	91	75-125	

ISTD (ICALBLK 11410004)	ICALBLK Abund	PDS Abund	%Drift
Lithium	739106	552347	-25.27
Scandium	529417	390994	-26.15
Germanium	119842	86059	-28.19
Indium	758188	594908	-21.54
Bismuth	901811	731831	-18.85

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET05
 Calnum : 56500483001
 Units : ug/L

Date : 13-DEC-2006 13:40
 X Axis : R

Reviewer: ---

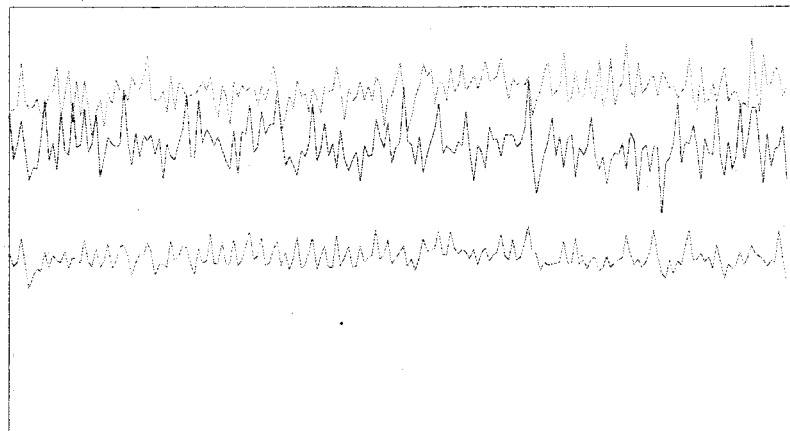
Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	11313005	56500483005	CS1	13-DEC-2006 13:45	S4978
L2	11313006	56500483006	CS2	13-DEC-2006 13:51	S4979
L3	11313007	56500483007	CS3	13-DEC-2006 13:56	S4980
L4	11313008	56500483008	CS4	13-DEC-2006 14:02	S4981
L5	11313009	56500483009	CS5	13-DEC-2006 14:07	S4975
L6	11313010	56500483010	CS6	13-DEC-2006 14:13	S4976

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ²	#RSD	MHR ²	Flg
Aluminum	0.8439	0.7931	0.7370	0.6572	0.6875	0.6698	BLNK	-4.0605	1.48558		0.7314	1.000	0.995		
Antimony	0.2929	0.2700	0.2599	0.2516	0.2584	0.2593	BLNK	-0.0500	3.86061		0.2654	1.000	0.995		
Arsenic		0.6673	0.5360	0.4995	0.4910	0.4915	BLNK	-0.1111	2.03644		0.5371	1.000	0.995		
Barium	0.1386	0.1060	0.1087	0.0954	0.0998	0.0985	BLNK	-0.0757	10.1286		0.1079	1.000	0.995		
Beryllium	0.2007	0.1806	0.1862	0.1832	0.1850	0.1805	BLNK	-0.0167	5.51350		0.1860	1.000	0.995		
Cadmium	0.6286	0.5834	0.5602	0.5192	0.5119	0.5064	BLNK	-0.0601	1.97108		0.5516	1.000	0.995		
Calcium	0.0486	0.0333	0.0270	0.0197	0.0192	0.0185	BLNK	-36.789	53.7210		0.0277	1.000	0.995		
Chromium	38.243	20.657	12.308	4.5456	3.7648	3.6210	BLNK	-2.3134	0.27778		13.856	1.000	0.995		
Cobalt	4.9262	4.6353	4.7866	4.4483	4.6206	4.4073	BLNK	-0.0341	0.22477		4.6374	0.999	0.995		
Copper	3.6986	2.3862	1.9167	1.3043	1.2239	1.2026	BLNK	-0.4731	0.83090		1.9554	1.000	0.995		
Iron	0.1591	0.1258	0.1134	0.0992	0.0933	0.0890	BLNK	-18.445	11.1415		0.1133	0.999	0.995		
Lead	1.2795	1.2005	1.1323	1.0663	1.1519	1.1428	BLNK	-0.0484	0.87405		1.1622	1.000	0.995		
Magnesium	0.1074	0.1028	0.1050	0.0950	0.0939	0.0909	BLNK	-2.1506	10.9336		0.0992	1.000	0.995		
Manganese		5.4323	5.0067	4.6409	4.6495	4.4973	BLNK	-0.1104	0.22100		4.8453	1.000	0.995		
Molybdenum	1.2183	1.1155	1.0711	1.0131	1.0281	1.0418	BLNK	-0.0743	0.96290		1.0813	1.000	0.995		
Nickel	3.0783	1.8442	1.5410	1.0588	1.0090	0.9810	BLNK	-0.4183	1.01605		1.5854	1.000	0.995		
Potassium	2.1120	1.3307	0.9707	0.6035	0.5936	0.5723	BLNK	-64.535	1.74116		1.0305	1.000	0.995		
Selenium		0.0406	0.0206	0.0406	0.0405	0.0397	BLNK	0.22065	25.0627		0.0364	1.000	0.995		
Silver	2.8712	2.7544	2.6725	2.5803	2.5566	2.4987	BLNK	-0.0327	0.39842		2.6556	1.000	0.995		
Sodium		1.6895	1.3486	0.9434	0.9218	0.8708	BLNK	-43.976	1.13801		1.1548	0.999	0.995		
Thallium	1.1786	0.9822	0.8682	0.8002	0.8857	0.8902	BLNK	-0.0572	1.12546		0.9342	1.000	0.995		
Vanadium	6.9311	5.8096	4.8252	3.7658	3.5861	3.5378	BLNK	-0.2505	0.28229		4.7426	1.000	0.995		
Zinc	6.9161	3.3562	2.2408	0.8125	0.6458	0.6199	BLNK	-2.4135	1.62263		2.4319	1.000	0.995		

Instrument amount = a0 + response * a1 + response² * a2; BLNK=Y=aX+ [blank]

Tune Report

Tune File : Autotune.u



m/z:	7	89	205
Range:	20,000	50,000	20,000
Count:	11,962	17,852	16,248
Mean:	13511.1	20854.4	16083.8
RSD%:	7.49	6.43	4.94
n:	200		

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec

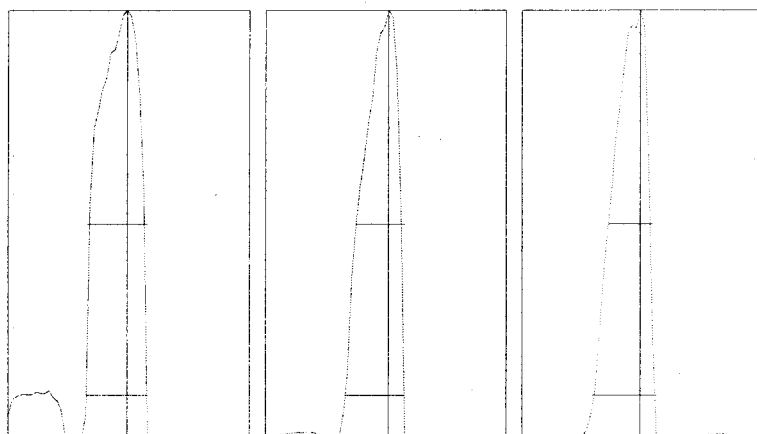
Oxide: 156/140 0.25%
Doubly Charged: 70/140 2.60%

Background:

m/z:	7	89	205
Cps:	23.3	16.0	18.0

m/z:	7	89	205
Height:	13,423	21,406	16,057
Axis:	7.00	89.05	205.00
W-50%:	0.75	0.60	0.55
W-10%:	0.7500	0.7500	0.800

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec



Y axis : Linear

Tuning Parameters

===Plasma Condition===

RF Power: 1270 W
RF Matching: 1.78 V
Smpl Depth: 7.1 mm
Torch-H: -1.3 mm
Torch-V: 0.5 mm
Carrier Gas: 1.09 L/min
Makeup Gas: 0 L/min
Optional Gas: --- %
PeriPump1: 0.1 rps
PeriPump2: --- rps
S/C Temp: 2 degC

===Ion Lenses===

Extract 1: -200 V
Extract 2: -40 V
Einzel 1,3: -100 V
Einzel 2: -7 V
Omega Bias: -45 V
Omega (+): 4 V
Omega (-): -4 V
QP Focus: 9 V
Plate Bias: 0 V

===Q-Pole Parameters===

AMU Gain: 130
AMU Offset: 125
Axis Gain: 0.9989
Axis Offset: -0.01
QP Bias: 1.6 V

===Detector Parameters===

Discriminator: 9.3 mV
Analog HV: 1810 V
Pulse HV: 1160 V

Temp.p\$\$

P/A Factor Tuning Report

Acquired: Dec 13 2006 01:01 pm

Mass[amu]	Element	P/A Factor
6	Li	0.072792
9	Be	0.082569
23	Na	Sensitivity too high
25	Mg	0.087047
26	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
43	Ca	Sensitivity too low
44	Ca	0.098672
45	Sc	0.099804
51	V	0.094987
52	Cr	0.105159
53	Cr	Sensitivity too low
54	Fe	0.103806
55	Mn	0.107495
57	Fe	0.102488
59	Co	0.109923
60	Ni	0.107444
63	Cu	0.110946
65	Cu	0.109191
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
77	(As)	Sensitivity too low
82	Se	Sensitivity too low
83	(As)	Sensitivity too low
88	(Ca)	Sensitivity too low
89	Y	0.107935
95	Mo	0.105471
98	Mo	0.106155
99	(Mo)	Sensitivity too low
106	(Cd)	Sensitivity too low
108	(Cd)	Sensitivity too low
109	Ag	0.112992
111	Cd	Sensitivity too low
114	Cd	0.111513
115	In	0.113259
118	(In)	Sensitivity too low
121	Sb	0.112173
135	Ba	Sensitivity too low
137	Ba	Sensitivity too low
159	Tb	0.118125
166	Er	Sensitivity too low

Temp.p\$\$

205	Tl	0.120191
206	(Pb)	0.118606
207	(Pb)	0.117997
208	Pb	0.120964
209	Bi	0.120339

===Detector Parameters===

Discriminator: 9.3 mV

Analog HV: 1810 V

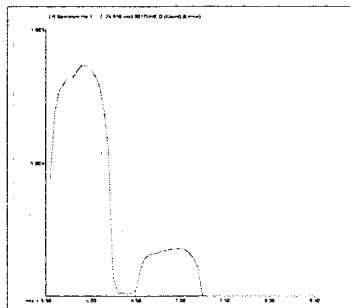
Pulse HV: 1160 V

6020 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\06L1313a.B\001TUNE.D
Date Acquired: Dec 13 2006 01:23 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s4974
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	1.78	5.00	
59 Co	2.36	5.00	
115 In	1.69	5.00	
205 Tl	1.93	5.00	



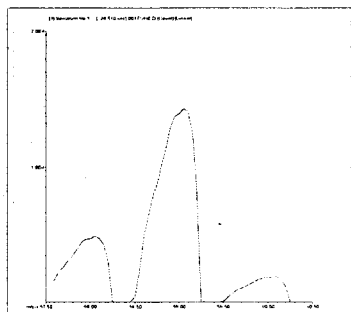
7 Li

Mass Calib.

Actual: 7.00
Required: 6.90 - 7.10
Flag:

Peak Width

Actual: 0.65
Required: 0.90
Flag:



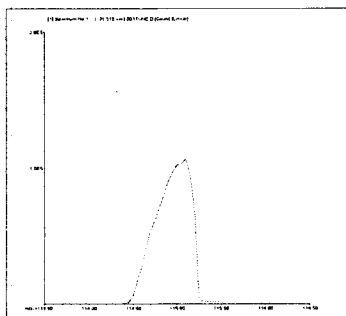
59 Co

Mass Calib.

Actual: 59.05
Required: 58.90 - 59.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



115 In

Mass Calib.

Actual: 115.10

Required: 114.90 - 115.10

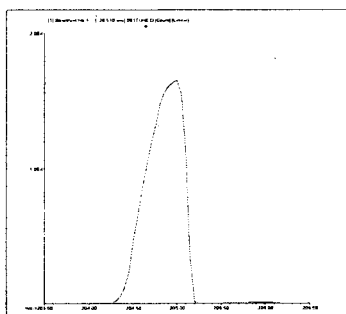
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



205 Tl

Mass Calib.

Actual: 205.00

Required: 204.90 - 205.10

Flag:

Peak Width

Actual: 0.55

Required: 0.90

Flag:

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06L1313a.B\004CAL
Date Acquired: Dec 13 2006 01:40 pm
Operator:
Sample Name: std-blank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Dec 11 2006 08:39 am
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	831126.81 A	25460.00	3.06
9 Be	50.00 P	17.64	35.28
23 Na	496555.59 P	4007.00	0.81
26 Mg	2525.56 P	240.00	9.50
27 Al	35101.11 P	2338.00	6.66
39 K	476298.91 P	934.20	0.20
44 Ca	8799.30 P	114.70	1.30
45 Sc	642644.38 P	10210.00	1.59
51 V	2643.72 P	2158.00	81.63
52 Cr	24572.22 P	357.90	1.46
55 Mn	1473.33 P	44.10	2.99
57 Fe	4884.44 P	68.66	1.41
59 Co	447.78 P	48.57	10.85
60 Ni	1215.56 P	81.94	6.74
65 Cu	1679.99 P	48.07	2.86
66 Zn	4387.78 P	73.81	1.68
72 Ge	147547.59 P	2661.00	1.80
75 As	161.99 P	125.80	77.66
82 Se	-26.22 P	23.00	87.71
95 Mo	227.78 P	25.24	11.08
109 Ag	242.22 P	16.44	6.79
111 Cd	90.15 P	16.36	18.15
115 In	875996.19 M	14520.00	1.66
121 Sb	226.67 P	6.67	2.94
137 Ba	131.11 P	24.11	18.39
205 Tl	1008.89 P	28.35	2.81
208 Pb	1100.00 P	47.26	4.30
209 Bi	993101.31 A	4383.00	0.44

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1313a.B\005CALI.D\005CALI.D#
 Date Acquired: Dec 13 2006 01:45 pm
 Operator:
 Sample Name: cs1,s4978
 Misc Info:
 Vial Number: 1102
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 13 2006 01:41 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	805747.50 A	38820.00	4.82
9 Be	808.89 P	59.75	7.39
23 Na	783565.19 A	3360.00	0.43
26 Mg	33493.33 P	492.40	1.47
27 Al	263134.41 P	2583.00	0.98
39 K	658561.13 P	5152.00	0.78
44 Ca	15166.65 P	209.40	1.38
45 Sc	623650.00 P	1492.00	0.24
51 V	5053.85 P	1926.00	38.11
52 Cr	27867.78 P	369.60	1.33
55 Mn	4741.11 P	92.64	1.95
57 Fe	11596.67 P	209.50	1.81
59 Co	3590.00 P	97.01	2.70
60 Ni	2243.33 P	78.81	3.51
65 Cu	2695.41 P	107.50	3.99
66 Zn	5040.00 P	195.50	3.88
72 Ge	145744.20 P	430.60	0.30
75 As	217.96 P	200.60	92.04
82 Se	-52.44 P	50.00	95.34
95 Mo	887.78 P	70.11	7.90
109 Ag	2092.22 P	67.36	3.22
111 Cd	458.14 P	51.93	11.34
115 In	853568.63 M	7122.00	0.83
121 Sb	1250.00 P	8.82	0.71
137 Ba	591.11 P	71.83	12.15
205 Tl	2806.67 P	89.69	3.20
208 Pb	6094.44 P	157.50	2.58
209 Bi	952568.00 A	11480.00	1.21

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	805747.44	4.82	831126.81	96.9	80 - 120	

C:\ICPCHEM\1\DATA\06L1313a.B\005CALI.D\005CALI.D#

45	Sc	623650.00	0.24	642644.38	97.0	80 -	120
72	Ge	145744.22	0.30	147547.55	98.8	80 -	120
115	In	853568.56	0.83	875996.19	97.4	80 -	120
209	Bi	952568.00	1.21	993101.31	95.9	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1313a.B\004CALB.D\004CALB.D#

--- :Element Failures	--- :Max. Number of Failures Allowed
0 :ISTD Failures	0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes:	Pass
ISTD:	Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1313a.B\006CALI.D\006CALI.D#
 Date Acquired: Dec 13 2006 01:51 pm
 Operator:
 Sample Name: cs2,s4979
 Misc Info:
 Vial Number: 1103
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 13 2006 01:47 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	827416.00 A	14190.00	1.72
9 Be	1493.33 P	80.00	5.36
23 Na	1069157.00 A	13730.00	1.28
26 Mg	65051.11 P	2571.00	3.95
27 Al	501824.41 P	21820.00	4.35
39 K	842108.13 A	9847.00	1.17
44 Ca	21093.14 P	225.20	1.07
45 Sc	632901.13 P	5609.00	0.89
51 V	8588.98 P	3004.00	34.98
52 Cr	30554.44 P	191.80	0.63
55 Mn	8035.56 P	248.90	3.10
57 Fe	18602.22 P	420.60	2.26
59 Co	6856.67 P	144.40	2.11
60 Ni	2727.78 P	140.10	5.14
65 Cu	3529.72 P	40.41	1.14
66 Zn	4964.44 P	45.99	0.93
72 Ge	147917.59 P	338.50	0.23
75 As	986.73 P	314.40	31.86
82 Se	60.00 P	86.28	143.80
95 Mo	1650.00 P	128.10	7.76
109 Ag	4074.44 P	170.20	4.18
111 Cd	862.93 P	52.44	6.08
115 In	868735.50 P	10780.00	1.24
121 Sb	2344.44 P	138.90	5.92
137 Ba	920.00 P	123.40	13.41
205 Tl	4680.00 P	144.20	3.08
208 Pb	11440.00 P	465.20	4.07
209 Bi	952798.88 A	9824.00	1.03

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	827415.94	1.72	831126.81	99.6	80 - 120	

C:\ICPCHEM\1\DATA\06L1313a.B\006CALI.D\006CALI.D#

45	Sc	632901.06	0.89	642644.38	98.5	80 -	120
72	Ge	147917.55	0.23	147547.55	100.3	80 -	120
115	In	868735.50	1.24	875996.19	99.2	80 -	120
209	Bi	952798.94	1.03	993101.31	95.9	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1313a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1313a.B\007CALI.D\007CALI.D#
 Date Acquired: Dec 13 2006 01:56 pm
 Operator:
 Sample Name: cs3,s4980
 Misc Info:
 Vial Number: 1104
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 13 2006 01:52 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	829040.00 A	20330.00	2.45
9 Be	3085.56 P	37.17	1.20
23 Na	1714821.00 A	16020.00	0.93
26 Mg	133452.20 P	1428.00	1.07
27 Al	936894.31 A	15090.00	1.61
39 K	1234495.00 A	21170.00	1.71
44 Ca	34362.42 P	223.30	0.65
45 Sc	636028.88 P	17230.00	2.71
51 V	14375.83 P	881.80	6.13
52 Cr	36655.56 P	310.10	0.85
55 Mn	14908.89 P	130.00	0.87
57 Fe	33778.89 P	301.90	0.89
59 Co	14254.44 P	50.15	0.35
60 Ni	4588.89 P	105.20	2.29
65 Cu	5707.21 P	109.10	1.91
66 Zn	6674.44 P	120.80	1.81
72 Ge	148945.80 P	3038.00	2.04
75 As	1595.33 P	160.80	10.08
82 Se	61.33 P	21.95	35.79
95 Mo	3188.89 P	73.36	2.30
109 Ag	7958.89 P	53.16	0.67
111 Cd	1669.45 P	81.59	4.89
115 In	878062.88 M	9208.00	1.05
121 Sb	4563.33 P	87.37	1.91
137 Ba	1908.89 P	49.14	2.57
205 Tl	8577.78 P	244.10	2.85
208 Pb	22368.89 P	481.20	2.15
209 Bi	987991.81 A	27410.00	2.77

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	829040.00	2.45	831126.81	99.7	80 - 120	

C:\ICPCHEM\1\DATA\06L1313a.B\007CALI.D\007CALI.D#

45	Sc	636028.88	2.71	642644.38	99.0	80 -	120
72	Ge	148945.78	2.04	147547.55	100.9	80 -	120
115	In	878062.88	1.05	875996.19	100.2	80 -	120
209	Bi	987991.81	2.77	993101.31	99.5	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1313a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1313a.B\008CALI.D\008CALI.D#
 Date Acquired: Dec 13 2006 02:02 pm
 Operator:
 Sample Name: cs4,s4981
 Misc Info:
 Vial Number: 1105
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 13 2006 01:58 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	808657.50 A	13110.00	1.62
9 Be	29626.67 P	525.40	1.77
23 Na	11988870.00 A	300700.00	2.51
26 Mg	1207465.00 A	49370.00	4.09
27 Al	8353126.00 A	315700.00	3.78
39 K	7668820.00 A	262700.00	3.43
44 Ca	250280.09 P	5688.00	2.27
45 Sc	635326.63 P	10200.00	1.61
51 V	111134.00 P	2471.00	2.22
52 Cr	134147.80 P	1468.00	1.09
55 Mn	136960.00 P	1398.00	1.02
57 Fe	292875.50 P	6062.00	2.07
59 Co	131275.59 P	849.90	0.65
60 Ni	31246.67 P	418.70	1.34
65 Cu	38492.52 P	706.20	1.83
66 Zn	23980.00 P	449.50	1.87
72 Ge	147556.20 P	611.10	0.41
75 As	14741.66 P	527.80	3.58
82 Se	1198.44 P	43.36	3.62
95 Mo	29896.67 P	508.60	1.70
109 Ag	76153.33 P	1839.00	2.41
111 Cd	15321.11 P	49.11	0.32
115 In	875422.50 M	9835.00	1.12
121 Sb	44043.33 P	483.60	1.10
137 Ba	16708.89 P	276.00	1.65
205 Tl	77848.88 P	1402.00	1.80
208 Pb	207473.30 P	3129.00	1.51
209 Bi	972898.19 A	2821.00	0.29

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	808657.50	1.62	831126.81	97.3	80 - 120	

C:\ICPCHEM\1\DATA\06L1313a.B\008CALI.D\008CALI.D#

45	Sc	635326.63	1.61	642644.38	98.9	80 -	120
72	Ge	147556.22	0.41	147547.55	100.0	80 -	120
115	In	875422.44	1.12	875996.19	99.9	80 -	120
209	Bi	972898.19	0.29	993101.31	98.0	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1313a.B\004CALB.D\004CALB.D#

--- :Element Failures	--- :Max. Number of Failures Allowed
0 :ISTD Failures	0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass

ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1313a.B\009CALI.D\009CALI.D#
 Date Acquired: Dec 13 2006 02:07 pm
 Operator:
 Sample Name: cs5,s4975
 Misc Info:
 Vial Number: 1106
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 13 2006 02:03 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	776673.38 A	18410.00	2.37
9 Be	287275.50 P	785.30	0.27
23 Na	112712500.00 A	347800.00	0.31
26 Mg	11483460.00 A	390700.00	3.40
27 Al	84064632.00 A	1946000.00	2.31
39 K	72579032.00 A	2172000.00	2.99
44 Ca	2343959.00 A	15140.00	0.65
45 Sc	611393.31 P	6139.00	1.00
51 V	1028426.00 A	29250.00	2.84
52 Cr	1079645.00 A	27840.00	2.58
55 Mn	1333207.00 A	36510.00	2.74
57 Fe	2675137.00 A	56650.00	2.12
59 Co	1324873.00 A	12480.00	0.94
60 Ni	289323.31 P	3739.00	1.29
65 Cu	350920.41 P	2293.00	0.65
66 Zn	185157.80 P	2727.00	1.47
72 Ge	143371.30 P	1982.00	1.38
75 As	140806.50 P	3127.00	2.22
82 Se	11600.44 P	274.70	2.37
95 Mo	294824.41 P	6762.00	2.29
109 Ag	733124.38 P	14720.00	2.01
111 Cd	146781.41 P	3880.00	2.64
115 In	815014.63 A	5906.00	0.72
121 Sb	421242.19 P	4660.00	1.11
137 Ba	162701.09 P	5436.00	3.34
205 Tl	755403.31 P	6873.00	0.91
208 Pb	1964741.00 A	34830.00	1.77
209 Bi	852964.31 M	8859.00	1.04

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	776673.38	2.37	831126.81	93.4	80 - 120	

C:\ICPCHEM\1\DATA\06L1313a.B\009CALI.D\009CALI.D#

45	Sc	611393.31	1.00	642644.38	95.1	80 -	120
72	Ge	143371.33	1.38	147547.55	97.2	80 -	120
115	In	815014.56	0.72	875996.19	93.0	80 -	120
209	Bi	852964.31	1.04	993101.31	85.9	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1313a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1313a.B\010CALI.D\010CALI.D#
 Date Acquired: Dec 13 2006 02:13 pm
 Operator:
 Sample Name: cs6,s4976
 Misc Info:
 Vial Number: 1107
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 13 2006 02:09 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	771036.69 A	8795.00	1.14
9 Be	556655.63 P	18700.00	3.36
23 Na	219169100.00 A	7872000.00	3.59
26 Mg	22871480.00 A	303000.00	1.32
27 Al	168640300.00 A	1145000.00	0.68
39 K	144088500.00 A	1153000.00	0.80
44 Ca	4665029.00 A	76100.00	1.63
45 Sc	629501.13 P	8282.00	1.32
51 V	2014791.00 A	27040.00	1.34
52 Cr	2062189.00 A	33660.00	1.63
55 Mn	2561211.00 A	19560.00	0.76
57 Fe	5067042.00 A	20180.00	0.40
59 Co	2509873.00 A	32170.00	1.28
60 Ni	558660.00 P	4872.00	0.87
65 Cu	684910.50 P	18560.00	2.71
66 Zn	353075.50 P	7578.00	2.15
72 Ge	142375.30 P	681.00	0.48
75 As	279884.91 P	416.30	0.15
82 Se	22604.67 P	320.80	1.42
95 Mo	593301.13 P	3224.00	0.54
109 Ag	1422942.00 A	19310.00	1.36
111 Cd	288390.41 P	404.90	0.14
115 In	791431.63 A	10180.00	1.29
121 Sb	820827.69 P	8759.00	1.07
137 Ba	311883.31 P	2488.00	0.80
205 Tl	1460892.00 A	19250.00	1.32
208 Pb	3751318.00 A	58340.00	1.56
209 Bi	820716.63 P	16330.00	1.99

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	771036.69	1.14	831126.81	92.8	80 - 120	

C:\ICPCHEM\1\DATA\06L1313a.B\010CALI.D\010CALI.D#

45	Sc	629501.06	1.32	642644.38	98.0	80 -	120
72	Ge	142375.33	0.48	147547.55	96.5	80 -	120
115	In	791431.56	1.29	875996.19	90.3	80 -	120
209	Bi	820716.63	1.99	993101.31	82.6	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1313a.B\004CALB.D\004CALB.D#

--- :Element Failures	--- :Max. Number of Failures Allowed
0 :ISTD Failures	0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass

ISTD: Pass

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET05
 Seqnum : 56500483012
 Cal : 56500483001
 Standards: S4982

File : 11313012
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 14:24

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	0.7314	0.6807	10000	10110	ug/L	1	10	
Antimony	0.2654	0.2568	100.0	99.08	ug/L	-1	10	
Arsenic	0.5371	0.4879	100.0	99.25	ug/L	-1	10	
Barium	0.1079	0.0998	100.0	101.0	ug/L	1	10	
Beryllium	0.1860	0.1799	100.0	99.14	ug/L	-1	10	
Cadmium	0.5516	0.5106	100.0	100.6	ug/L	1	10	
Calcium	0.0277	0.0186	10000	9929	ug/L	-1	10	
Chromium	13.856	3.7576	100.0	102.1	ug/L	2	10	
Cobalt	4.6374	4.5633	100.0	102.5	ug/L	3	10	
Copper	1.9554	1.2406	100.0	102.6	ug/L	3	10	
Iron	0.1133	0.0930	10000	10340	ug/L	3	10	
Lead	1.1622	1.1134	100.0	97.27	ug/L	-3	10	
Magnesium	0.0992	0.0933	10000	10200	ug/L	2	10	
Manganese	4.8453	4.6816	100.0	103.4	ug/L	3	10	
Molybdenum	1.0813	1.0343	100.0	99.52	ug/L	0	10	
Nickel	1.5854	1.0030	100.0	101.5	ug/L	2	10	
Potassium	1.0305	0.5831	10000	10090	ug/L	1	10	
Selenium	0.0364	0.0408	100.0	102.6	ug/L	3	10	
Silver	2.6556	2.6079	100.0	103.9	ug/L	4	10	
Sodium	1.1548	0.9078	10000	10290	ug/L	3	10	
Thallium	0.9342	0.8383	50.00	47.11	ug/L	-6	10	
Vanadium	4.7426	3.6200	100.0	101.9	ug/L	2	10	
Zinc	2.4319	0.6567	100.0	104.1	ug/L	4	10	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	816474	-1.76
Scandium	642644	650250	1.18
Germanium	147548	148536	0.67
Indium	875996	844361	-3.61
Bismuth	993101	925412	-6.82

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56500483042
 Cal : 56500483001
 Standards: S4983, S4635

File : 11313042
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 17:11

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.7314	0.7202	10000	10700	ug/L	7	10	
Antimony	0.2654	0.2608	100.0	100.6	ug/L	1	10	
Arsenic	0.5371	0.4852	100.0	98.70	ug/L	-1	10	
Barium	0.1079	0.1019	100.0	103.2	ug/L	3	10	
Beryllium	0.1860	0.1809	100.0	99.73	ug/L	0	10	
Cadmium	0.5516	0.5130	100.0	101.1	ug/L	1	10	
Calcium	0.0277	0.0195	10000	10450	ug/L	5	10	
Chromium	13.856	3.6775	100.0	99.84	ug/L	0	10	
Cobalt	4.6374	4.5743	100.0	102.8	ug/L	3	10	
Copper	1.9554	1.2340	100.0	102.1	ug/L	2	10	
Iron	0.1133	0.0923	10000	10270	ug/L	3	10	
Lead	1.1622	1.1531	100.0	100.7	ug/L	1	10	
Magnesium	0.0992	0.1001	10000	10940	ug/L	9	10	
Manganese	4.8453	4.6205	100.0	102.0	ug/L	2	10	
Molybdenum	1.0813	1.0301	100.0	99.12	ug/L	-1	10	
Nickel	1.5854	0.9910	100.0	100.3	ug/L	0	10	
Potassium	1.0305	0.5990	10000	10360	ug/L	4	10	
Selenium	0.0364	0.0406	100.0	102.1	ug/L	2	10	
Silver	2.6556	2.5586	100.0	101.9	ug/L	2	10	
Sodium	1.1548	0.9793	10000	11100	ug/L	11	10	c+ ***
Thallium	0.9342	0.8688	50.00	48.83	ug/L	-2	10	
Vanadium	4.7426	3.5786	100.0	100.8	ug/L	1	10	
Zinc	2.4319	0.6623	100.0	105.1	ug/L	5	10	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	811120	-2.41
Scandium	642644	598711	-6.84
Germanium	147548	143932	-2.45
Indium	875996	819929	-6.40
Bismuth	993101	957921	-3.54

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56500483063
 Cal : 56500483001
 Standards: S4983, S4635

File : 11313063
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 19:19

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.7314	0.7259	10000	10780	ug/L	8	10	
Antimony	0.2654	0.2572	100.0	99.23	ug/L	-1	10	
Arsenic	0.5371	0.4822	100.0	98.09	ug/L	-2	10	
Barium	0.1079	0.0997	100.0	101.0	ug/L	1	10	
Beryllium	0.1860	0.1771	100.0	97.65	ug/L	-2	10	
Cadmium	0.5516	0.5090	100.0	100.3	ug/L	0	10	
Calcium	0.0277	0.0191	10000	10220	ug/L	2	10	
Chromium	13.856	3.6086	100.0	97.93	ug/L	-2	10	
Cobalt	4.6374	4.4952	100.0	101.0	ug/L	1	10	
Copper	1.9554	1.2023	100.0	99.43	ug/L	-1	10	
Iron	0.1133	0.0914	10000	10170	ug/L	2	10	
Lead	1.1622	1.1619	100.0	101.5	ug/L	2	10	
Magnesium	0.0992	0.1000	10000	10930	ug/L	9	10	
Manganese	4.8453	4.5278	100.0	99.96	ug/L	0	10	
Molybdenum	1.0813	1.0196	100.0	98.10	ug/L	-2	10	
Nickel	1.5854	0.9711	100.0	98.25	ug/L	-2	10	
Potassium	1.0305	0.5979	10000	10350	ug/L	4	10	
Selenium	0.0364	0.0401	100.0	100.8	ug/L	1	10	
Silver	2.6556	2.5360	100.0	101.0	ug/L	1	10	
Sodium	1.1548	0.9965	10000	11300	ug/L	13	10	c+ ***
Thallium	0.9342	0.8652	50.00	48.63	ug/L	-3	10	
Vanadium	4.7426	3.5437	100.0	99.79	ug/L	0	10	
Zinc	2.4319	0.6427	100.0	101.9	ug/L	2	10	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	782051	-5.90
Scandium	642644	575392	-10.46
Germanium	147548	137481	-6.82
Indium	875996	792053	-9.58
Bismuth	993101	942186	-5.13

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56500483072
 Cal : 56500483001
 Standards: S4983, S4635

File : 11313072
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 20:09

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.7314	0.7309	10000	10850	ug/L	8	10	
Antimony	0.2654	0.2732	100.0	105.4	ug/L	5	10	
Arsenic	0.5371	0.4882	100.0	99.31	ug/L	-1	10	
Barium	0.1079	0.0986	100.0	99.75	ug/L	0	10	
Beryllium	0.1860	0.1788	100.0	98.55	ug/L	-1	10	
Cadmium	0.5516	0.5120	100.0	100.9	ug/L	1	10	
Calcium	0.0277	0.0191	10000	10210	ug/L	2	10	
Chromium	13.856	3.5770	100.0	97.05	ug/L	-3	10	
Cobalt	4.6374	4.4289	100.0	99.51	ug/L	0	10	
Copper	1.9554	1.1784	100.0	97.44	ug/L	-3	10	
Iron	0.1133	0.0910	10000	10120	ug/L	1	10	
Lead	1.1622	1.1565	100.0	101.0	ug/L	1	10	
Magnesium	0.0992	0.1010	10000	11040	ug/L	10	10	
Manganese	4.8453	4.4678	100.0	98.63	ug/L	-1	10	
Molybdenum	1.0813	1.0109	100.0	97.26	ug/L	-3	10	
Nickel	1.5854	0.9537	100.0	96.48	ug/L	-4	10	
Potassium	1.0305	0.5947	10000	10290	ug/L	3	10	
Selenium	0.0364	0.0401	100.0	100.8	ug/L	1	10	
Silver	2.6556	2.5597	100.0	102.0	ug/L	2	10	
Sodium	1.1548	0.9783	10000	11090	ug/L	11	10	C+ ***
Thallium	0.9342	0.8299	50.00	46.64	ug/L	-7	10	
Vanadium	4.7426	3.5015	100.0	98.59	ug/L	-1	10	
Zinc	2.4319	0.6363	100.0	100.8	ug/L	1	10	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	754397	-9.23
Scandium	642644	547796	-14.76
Germanium	147548	131874	-10.62
Indium	875996	756761	-13.61
Bismuth	993101	915119	-7.85

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56500483093
 Cal : 56500483001
 Standards: S4983, S4635

File : 11313093
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 22:04

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.7314	0.7461	10000	11080	ug/L	11	10	c+ ***
Antimony	0.2654	0.2739	100.0	105.7	ug/L	6	10	
Arsenic	0.5371	0.4876	100.0	99.19	ug/L	-1	10	
Barium	0.1079	0.0995	100.0	100.7	ug/L	1	10	
Beryllium	0.1860	0.1749	100.0	96.44	ug/L	-4	10	
Cadmium	0.5516	0.5060	100.0	99.68	ug/L	0	10	
Calcium	0.0277	0.0192	10000	10280	ug/L	3	10	
Chromium	13.856	3.6231	100.0	98.33	ug/L	-2	10	
Cobalt	4.6374	4.5007	100.0	101.1	ug/L	1	10	
Copper	1.9554	1.1853	100.0	98.01	ug/L	-2	10	
Iron	0.1133	0.0916	10000	10190	ug/L	2	10	
Lead	1.1622	1.1563	100.0	101.0	ug/L	1	10	
Magnesium	0.0992	0.1016	10000	11100	ug/L	11	10	c+ ***
Manganese	4.8453	4.5502	100.0	100.4	ug/L	0	10	
Molybdenum	1.0813	1.0064	100.0	96.83	ug/L	-3	10	
Nickel	1.5854	0.9656	100.0	97.69	ug/L	-2	10	
Potassium	1.0305	0.5978	10000	10340	ug/L	3	10	
Selenium	0.0364	0.0395	100.0	99.24	ug/L	-1	10	
Silver	2.6556	2.5509	100.0	101.6	ug/L	2	10	
Sodium	1.1548	0.9796	10000	11100	ug/L	11	10	c+ ***
Thallium	0.9342	0.8330	50.00	46.82	ug/L	-6	10	
Vanadium	4.7426	3.5022	100.0	98.61	ug/L	-1	10	
Zinc	2.4319	0.6466	100.0	102.5	ug/L	3	10	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	776821	-6.53
Scandium	642644	563240	-12.36
Germanium	147548	136072	-7.78
Indium	875996	783060	-10.61
Bismuth	993101	958980	-3.44

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56500483110
 Cal : 56500483001
 Standards: S4983, S4635

File : 11313110
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 23:39

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.7314	0.7548	10000	11210	ug/L	12	10	c+ ***
Antimony	0.2654	0.2678	100.0	103.3	ug/L	3	10	
Arsenic	0.5371	0.4866	100.0	98.99	ug/L	-1	10	
Barium	0.1079	0.0960	100.0	97.20	ug/L	-3	10	
Beryllium	0.1860	0.1724	100.0	95.06	ug/L	-5	10	
Cadmium	0.5516	0.5120	100.0	100.9	ug/L	1	10	
Calcium	0.0277	0.0192	10000	10270	ug/L	3	10	
Chromium	13.856	3.5124	100.0	95.25	ug/L	-5	10	
Cobalt	4.6374	4.3907	100.0	98.65	ug/L	-1	10	
Copper	1.9554	1.1651	100.0	96.33	ug/L	-4	10	
Iron	0.1133	0.0885	10000	9844	ug/L	-2	10	
Lead	1.1622	1.1461	100.0	100.1	ug/L	0	10	
Magnesium	0.0992	0.1024	10000	11200	ug/L	12	10	c+ ***
Manganese	4.8453	4.3524	100.0	96.08	ug/L	-4	10	
Molybdenum	1.0813	1.0108	100.0	97.25	ug/L	-3	10	
Nickel	1.5854	0.9453	100.0	95.63	ug/L	-4	10	
Potassium	1.0305	0.6083	10000	10530	ug/L	5	10	
Selenium	0.0364	0.0399	100.0	100.2	ug/L	0	10	
Silver	2.6556	2.5594	100.0	101.9	ug/L	2	10	
Sodium	1.1548	0.9710	10000	11010	ug/L	10	10	
Thallium	0.9342	0.8203	50.00	46.10	ug/L	-8	10	
Vanadium	4.7426	3.4396	100.0	96.85	ug/L	-3	10	
Zinc	2.4319	0.6267	100.0	99.27	ug/L	-1	10	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	769811	-7.38
Scandium	642644	541174	-15.79
Germanium	147548	129631	-12.14
Indium	875996	756372	-13.66
Bismuth	993101	926582	-6.70

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56500483118
 Cal : 56500483001
 Standards: S4983, S4635

File : 11313118
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 00:23

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.7314	0.7505	10000	11140	ug/L	11	10	c+ ***
Antimony	0.2654	0.2665	100.0	102.8	ug/L	3	10	
Arsenic	0.5371	0.4921	100.0	100.1	ug/L	0	10	
Barium	0.1079	0.0954	100.0	96.56	ug/L	-3	10	
Beryllium	0.1860	0.1700	100.0	93.71	ug/L	-6	10	
Cadmium	0.5516	0.5166	100.0	101.8	ug/L	2	10	
Calcium	0.0277	0.0193	10000	10320	ug/L	3	10	
Chromium	13.856	3.5537	100.0	96.40	ug/L	-4	10	
Cobalt	4.6374	4.3800	100.0	98.41	ug/L	-2	10	
Copper	1.9554	1.1642	100.0	96.26	ug/L	-4	10	
Iron	0.1133	0.0885	10000	9839	ug/L	-2	10	
Lead	1.1622	1.1391	100.0	99.51	ug/L	0	10	
Magnesium	0.0992	0.1020	10000	11150	ug/L	12	10	c+ ***
Manganese	4.8453	4.3325	100.0	95.64	ug/L	-4	10	
Molybdenum	1.0813	1.0120	100.0	97.38	ug/L	-3	10	
Nickel	1.5854	0.9451	100.0	95.61	ug/L	-4	10	
Potassium	1.0305	0.6109	10000	10570	ug/L	6	10	
Selenium	0.0364	0.0405	100.0	101.8	ug/L	2	10	
Silver	2.6556	2.5622	100.0	102.1	ug/L	2	10	
Sodium	1.1548	0.9557	10000	10830	ug/L	8	10	
Thallium	0.9342	0.8159	50.00	45.86	ug/L	-8	10	
Vanadium	4.7426	3.4863	100.0	98.17	ug/L	-2	10	
Zinc	2.4319	0.6261	100.0	99.17	ug/L	-1	10	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	769160	-7.46
Scandium	642644	538532	-16.20
Germanium	147548	126691	-14.14
Indium	875996	741380	-15.37
Bismuth	993101	891243	-10.26

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56500483141
 Cal : 56500483001
 Standards: S4983, S4635

File : 11313141
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 02:32

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.7314	0.7379	10000	10960	ug/L	10	10	
Antimony	0.2654	0.2604	100.0	100.5	ug/L	1	10	
Arsenic	0.5371	0.4732	100.0	96.26	ug/L	-4	10	
Barium	0.1079	0.0922	100.0	93.34	ug/L	-7	10	
Beryllium	0.1860	0.1683	100.0	92.78	ug/L	-7	10	
Cadmium	0.5516	0.5019	100.0	98.87	ug/L	-1	10	
Calcium	0.0277	0.0186	10000	9966	ug/L	0	10	
Chromium	13.856	3.4085	100.0	92.37	ug/L	-8	10	
Cobalt	4.6374	4.2397	100.0	95.26	ug/L	-5	10	
Copper	1.9554	1.1213	100.0	92.69	ug/L	-7	10	
Iron	0.1133	0.0860	10000	9561	ug/L	-4	10	
Lead	1.1622	1.1021	100.0	96.28	ug/L	-4	10	
Magnesium	0.0992	0.1005	10000	10990	ug/L	10	10	
Manganese	4.8453	4.2003	100.0	92.72	ug/L	-7	10	
Molybdenum	1.0813	0.9793	100.0	94.22	ug/L	-6	10	
Nickel	1.5854	0.9011	100.0	91.14	ug/L	-9	10	
Potassium	1.0305	0.5982	10000	10350	ug/L	4	10	
Selenium	0.0364	0.0387	100.0	97.29	ug/L	-3	10	
Silver	2.6556	2.5058	100.0	99.80	ug/L	0	10	
Sodium	1.1548	0.9462	10000	10720	ug/L	7	10	
Thallium	0.9342	0.7826	50.00	43.98	ug/L	-12	10	c- ***
Vanadium	4.7426	3.3656	100.0	94.76	ug/L	-5	10	
Zinc	2.4319	0.6049	100.0	95.74	ug/L	-4	10	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	752959	-9.41
Scandium	642644	529730	-17.57
Germanium	147548	126881	-14.01
Indium	875996	750196	-14.36
Bismuth	993101	951158	-4.22

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Segnum : 56500483158
 Cal : 56500483001
 Standards: S4983, S4635

File : 11313158
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 04:07

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.7314	0.7629	10000	11330	ug/L	13	10	c+ ***
Antimony	0.2654	0.2622	100.0	101.2	ug/L	1	10	
Arsenic	0.5371	0.4784	100.0	97.31	ug/L	-3	10	
Barium	0.1079	0.0928	100.0	93.93	ug/L	-6	10	
Beryllium	0.1860	0.1669	100.0	92.02	ug/L	-8	10	
Cadmium	0.5516	0.5150	100.0	101.5	ug/L	2	10	
Calcium	0.0277	0.0191	10000	10200	ug/L	2	10	
Chromium	13.856	3.2705	100.0	88.53	ug/L	-11	10	c- ***
Cobalt	4.6374	4.2872	100.0	96.33	ug/L	-4	10	
Copper	1.9554	1.1379	100.0	94.07	ug/L	-6	10	
Iron	0.1133	0.0862	10000	9588	ug/L	-4	10	
Lead	1.1622	1.1453	100.0	100.1	ug/L	0	10	
Magnesium	0.0992	0.1034	10000	11310	ug/L	13	10	c+ ***
Manganese	4.8453	4.2369	100.0	93.53	ug/L	-6	10	
Molybdenum	1.0813	1.0004	100.0	96.25	ug/L	-4	10	
Nickel	1.5854	0.9166	100.0	92.71	ug/L	-7	10	
Potassium	1.0305	0.6163	10000	10670	ug/L	7	10	
Selenium	0.0364	0.0388	100.0	97.49	ug/L	-3	10	
Silver	2.6556	2.5624	100.0	102.1	ug/L	2	10	
Sodium	1.1548	0.9698	10000	10990	ug/L	10	10	
Thallium	0.9342	0.8057	50.00	45.28	ug/L	-9	10	
Vanadium	4.7426	3.3021	100.0	92.97	ug/L	-7	10	
Zinc	2.4319	0.6103	100.0	96.61	ug/L	-3	10	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	726576	-12.58
Scandium	642644	497529	-22.58
Germanium	147548	120034	-18.65
Indium	875996	720267	-17.78
Bismuth	993101	904616	-8.91

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56500483168
 Cal : 56500483001
 Standards: S4983, S4635

File : 11313168
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 05:03

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.7314	0.7812	10000	11600	ug/L	16	10	c+ ***
Antimony	0.2654	0.2667	100.0	102.9	ug/L	3	10	
Arsenic	0.5371	0.4768	100.0	96.98	ug/L	-3	10	
Barium	0.1079	0.0940	100.0	95.12	ug/L	-5	10	
Beryllium	0.1860	0.1692	100.0	93.25	ug/L	-7	10	
Cadmium	0.5516	0.5129	100.0	101.0	ug/L	1	10	
Calcium	0.0277	0.0194	10000	10390	ug/L	4	10	
Chromium	13.856	3.2650	100.0	88.38	ug/L	-12	10	c- ***
Cobalt	4.6374	4.3434	100.0	97.59	ug/L	-2	10	
Copper	1.9554	1.1385	100.0	94.13	ug/L	-6	10	
Iron	0.1133	0.0887	10000	9864	ug/L	-1	10	
Lead	1.1622	1.1582	100.0	101.2	ug/L	1	10	
Magnesium	0.0992	0.1055	10000	11530	ug/L	15	10	c+ ***
Manganese	4.8453	4.3126	100.0	95.20	ug/L	-5	10	
Molybdenum	1.0813	0.9868	100.0	94.95	ug/L	-5	10	
Nickel	1.5854	0.9177	100.0	92.83	ug/L	-7	10	
Potassium	1.0305	0.6240	10000	10800	ug/L	8	10	
Selenium	0.0364	0.0389	100.0	97.66	ug/L	-2	10	
Silver	2.6556	2.5597	100.0	102.0	ug/L	2	10	
Sodium	1.1548	0.9916	10000	11240	ug/L	12	10	c+ ***
Thallium	0.9342	0.8154	50.00	45.83	ug/L	-8	10	
Vanadium	4.7426	3.3227	100.0	93.55	ug/L	-6	10	
Zinc	2.4319	0.6170	100.0	97.70	ug/L	-2	10	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	708830	-14.71
Scandium	642644	478772	-25.50
Germanium	147548	116775	-20.86
Indium	875996	687660	-21.50
Bismuth	993101	873618	-12.03

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56500483020
 Cal : 56500483001

File : 11313020
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 15:08

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[9.699]	25.00	2.752	ug/L	!ib
Antimony	[0.02094]	0.2500	0.005910	ug/L	!ib
Arsenic	ND	0.5000	0.1120	ug/L	
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	ND	0.2500	0.002016	ug/L	
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	[23.33]	25.00	6.782	ug/L	!ib
Chromium	[0.08424]	0.2500	0.01315	ug/L	!ib
Cobalt	ND	0.2500	0.003116	ug/L	
Copper	[0.04094]	0.2500	0.02110	ug/L	!ib
Iron	[19.51]	25.00	3.223	ug/L	!ib
Lead	ND	0.2500	0.002523	ug/L	
Magnesium	[9.910]	25.00	1.907	ug/L	!ib
Manganese	ND	0.5000	0.03082	ug/L	
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	[11.91]	25.00	3.213	ug/L	!ib
Selenium	ND	0.5000	0.6002	ug/L	
Silver	ND	0.2500	0.005272	ug/L	
Sodium	[33.34]	50.00	3.640	ug/L	!ib
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	785416	-5.50
Scandium	642644	631072	-1.80
Germanium	147548	152041	3.05
Indium	875996	874114	-0.21
Bismuth	993101	997556	0.45

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56500483044
 Cal : 56500483001

File : 11313044
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 17:22

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[8.398]	25.00	2.752	ug/L	!ib
Antimony	[0.05793]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.2877]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.03391]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.2500	0.01315	ug/L	
Cobalt	[0.02865]	0.2500	0.003116	ug/L	!ib
Copper	[0.04982]	0.2500	0.02110	ug/L	!ib
Iron	[10.58]	25.00	3.223	ug/L	!ib
Lead	[0.02264]	0.2500	0.002523	ug/L	!ib
Magnesium	[7.469]	25.00	1.907	ug/L	!ib
Manganese	[0.05483]	0.5000	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	[0.04886]	0.2500	0.01875	ug/L	!ib
Potassium	[6.110]	25.00	3.213	ug/L	!ib
Selenium	ND	0.5000	0.6002	ug/L	
Silver	[0.02216]	0.2500	0.005272	ug/L	!ib
Sodium	[29.70]	50.00	3.640	ug/L	!ib
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	853735	2.72
Scandium	642644	616274	-4.10
Germanium	147548	148386	0.57
Indium	875996	862856	-1.50
Bismuth	993101	1049773	5.71

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56500483065
 Cal : 56500483001

File : 11313065
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 19:30

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[3.924]	25.00	2.752	ug/L	!ib
Antimony	[0.05674]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.3377]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.01849]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.2500	0.01315	ug/L	
Cobalt	[0.01943]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	ND	25.00	3.223	ug/L	
Lead	[0.01365]	0.2500	0.002523	ug/L	!ib
Magnesium	[4.363]	25.00	1.907	ug/L	!ib
Manganese	[0.08007]	0.5000	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	[0.05017]	0.2500	0.01875	ug/L	!ib
Potassium	[12.83]	25.00	3.213	ug/L	!ib
Selenium	ND	0.5000	0.6002	ug/L	
Silver	[0.01267]	0.2500	0.005272	ug/L	!ib
Sodium	246.1	50.00	3.640	ug/L	ib ***
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	819168	-1.44
Scandium	642644	589799	-8.22
Germanium	147548	143777	-2.56
Indium	875996	842268	-3.85
Bismuth	993101	1061467	6.88

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56500483075
 Cal : 56500483001

File : 11313075
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 20:25

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[3.873]	25.00	2.752	ug/L	!ib
Antimony	[0.01001]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.2168]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.01113]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.2500	0.01315	ug/L	
Cobalt	[0.007155]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	ND	25.00	3.223	ug/L	
Lead	[0.006912]	0.2500	0.002523	ug/L	!ib
Magnesium	[4.831]	25.00	1.907	ug/L	!ib
Manganese	[0.05509]	0.5000	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	[8.879]	25.00	3.213	ug/L	!ib
Selenium	ND	0.5000	0.6002	ug/L	
Silver	[0.008666]	0.2500	0.005272	ug/L	!ib
Sodium	111.8	50.00	3.640	ug/L	ib ***
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	792141	-4.69
Scandium	642644	583984	-9.13
Germanium	147548	140764	-4.60
Indium	875996	822893	-6.06
Bismuth	993101	1035332	4.25

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56500483096
 Cal : 56500483001

File : 11313096
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 22:21

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[8.976]	25.00	2.752	ug/L	!ib
Antimony	[0.06041]	0.2500	0.005910	ug/L	!ib
Arsenic	ND	0.5000	0.1120	ug/L	
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.01726]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	[7.172]	25.00	6.782	ug/L	!ib
Chromium	ND	0.2500	0.01315	ug/L	
Cobalt	[0.01569]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	[8.971]	25.00	3.223	ug/L	!ib
Lead	[0.01189]	0.2500	0.002523	ug/L	!ib
Magnesium	[11.58]	25.00	1.907	ug/L	!ib
Manganese	[0.05993]	0.5000	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	[0.03661]	0.2500	0.01875	ug/L	!ib
Potassium	[9.955]	25.00	3.213	ug/L	!ib
Selenium	ND	0.5000	0.6002	ug/L	
Silver	[0.01339]	0.2500	0.005272	ug/L	!ib
Sodium	69.18	50.00	3.640	ug/L	ib ***
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	792073	-4.70
Scandium	642644	559939	-12.87
Germanium	147548	136379	-7.57
Indium	875996	794696	-9.28
Bismuth	993101	1007855	1.49

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Segnum : 56500483112
 Cal : 56500483001

File : 11313112
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 23:50

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[5.821]	25.00	2.752	ug/L	!ib
Antimony	[0.04278]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.2248]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.03268]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.2500	0.01315	ug/L	
Cobalt	[0.03306]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	ND	25.00	3.223	ug/L	
Lead	[0.02356]	0.2500	0.002523	ug/L	!ib
Magnesium	[10.32]	25.00	1.907	ug/L	!ib
Manganese	[0.08468]	0.5000	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	[0.03657]	0.2500	0.01875	ug/L	!ib
Potassium	[6.309]	25.00	3.213	ug/L	!ib
Selenium	ND	0.5000	0.6002	ug/L	
Silver	[0.02248]	0.2500	0.005272	ug/L	!ib
Sodium	69.90	50.00	3.640	ug/L	ib ***
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	804900	-3.16
Scandium	642644	557219	-13.29
Germanium	147548	135140	-8.41
Indium	875996	795441	-9.20
Bismuth	993101	1019026	2.61

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56500483121
 Cal : 56500483001

File : 11313121
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 00:40

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[11.88]	25.00	2.752	ug/L	!ib
Antimony	[0.01184]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.2837]	0.5000	0.1120	ug/L	!ib
Barium	[0.05396]	0.2500	0.03444	ug/L	!ib
Beryllium	[0.01444]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.2500	0.01315	ug/L	
Cobalt	[0.01675]	0.2500	0.003116	ug/L	!ib
Copper	[0.03788]	0.2500	0.02110	ug/L	!ib
Iron	[7.975]	25.00	3.223	ug/L	!ib
Lead	[0.01595]	0.2500	0.002523	ug/L	!ib
Magnesium	[17.35]	25.00	1.907	ug/L	!ib
Manganese	[0.3000]	0.5000	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	[0.08363]	0.2500	0.01875	ug/L	!ib
Potassium	[7.151]	25.00	3.213	ug/L	!ib
Selenium	ND	0.5000	0.6002	ug/L	
Silver	[0.006181]	0.2500	0.005272	ug/L	!ib
Sodium	[47.66]	50.00	3.640	ug/L	!ib
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	806147	-3.01
Scandium	642644	550274	-14.37
Germanium	147548	130874	-11.30
Indium	875996	777358	-11.26
Bismuth	993101	942328	-5.11

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56500483144
 Cal : 56500483001

File : 11313144
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 02:49

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[6.030]	25.00	2.752	ug/L	!ib
Antimony	[0.1102]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.1791]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.01066]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.2500	0.01315	ug/L	
Cobalt	[0.01114]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	ND	25.00	3.223	ug/L	
Lead	[0.01488]	0.2500	0.002523	ug/L	!ib
Magnesium	[8.227]	25.00	1.907	ug/L	!ib
Manganese	[0.07313]	0.5000	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	[8.956]	25.00	3.213	ug/L	!ib
Selenium	ND	0.5000	0.6002	ug/L	
Silver	[0.01122]	0.2500	0.005272	ug/L	!ib
Sodium	[36.35]	50.00	3.640	ug/L	!ib
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	761280	-8.40
Scandium	642644	518329	-19.34
Germanium	147548	124943	-15.32
Indium	875996	756497	-13.64
Bismuth	993101	937707	-5.58

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56500483161
 Cal : 56500483001

File : 11313161
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 04:24

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[4.749]	25.00	2.752	ug/L	!ib
Antimony	[0.04003]	0.2500	0.005910	ug/L	!ib
Arsenic	ND	0.5000	0.1120	ug/L	
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.004416]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.2500	0.01315	ug/L	
Cobalt	ND	0.2500	0.003116	ug/L	
Copper	ND	0.2500	0.02110	ug/L	
Iron	ND	25.00	3.223	ug/L	
Lead	[0.008369]	0.2500	0.002523	ug/L	!ib
Magnesium	[7.414]	25.00	1.907	ug/L	!ib
Manganese	[0.06410]	0.5000	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	[6.843]	25.00	3.213	ug/L	!ib
Selenium	ND	0.5000	0.6002	ug/L	
Silver	[0.005873]	0.2500	0.005272	ug/L	!ib
Sodium	[46.49]	50.00	3.640	ug/L	!ib
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	726998	-12.53
Scandium	642644	491571	-23.51
Germanium	147548	118857	-19.44
Indium	875996	726574	-17.06
Bismuth	993101	911809	-8.19

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Inst      : MET05                                IDF      : 1.0
Seqnum    : 56500483170                          File     : l1313170
Cal       : 56500483001                          Caldate  : 13-DEC-2006
Time      : 14-DEC-2006 05:14

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Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[6.843]	25.00	2.752	ug/L	!ib
Antimony	[0.06887]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.4952]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.02956]	0.2500	0.002016	ug/L	!ib
Cadmium	[0.06854]	0.2500	0.05722	ug/L	!ib
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.2500	0.01315	ug/L	
Cobalt	[0.03180]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	ND	25.00	3.223	ug/L	
Lead	[0.03233]	0.2500	0.002523	ug/L	!ib
Magnesium	[13.42]	25.00	1.907	ug/L	!ib
Manganese	[0.05917]	0.5000	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	[0.05226]	0.2500	0.01875	ug/L	!ib
Potassium	[6.039]	25.00	3.213	ug/L	!ib
Selenium	ND	0.5000	0.6002	ug/L	
Silver	[0.02761]	0.2500	0.005272	ug/L	!ib
Sodium	[46.69]	50.00	3.640	ug/L	!ib
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK l1313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	747567	-10.05
Scandium	642644	498617	-22.41
Germanium	147548	122056	-17.28
Indium	875996	734458	-16.16
Bismuth	993101	935956	-5.75

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05		IDF : 1.0
Seqnum : 56500483021	File : 11313021	Time : 13-DEC-2006 15:14
Cal : 56500483001	Caldate: 13-DEC-2006	
Standards: S4984, S4635		

Analyte	Quant	RL	Units	Flags
Antimony	2.539	0.2500	ug/L	
Arsenic	[0]	0.5000	ug/L	
Barium	1.412	0.2500	ug/L	
Beryllium	[0.01508]	0.2500	ug/L	
Cadmium	[0.08214]	0.2500	ug/L	
Chromium	3.648	0.2500	ug/L	
Cobalt	2.910	0.2500	ug/L	
Copper	2.451	0.2500	ug/L	
Lead	1.585	0.2500	ug/L	
Manganese	1.415	0.5000	ug/L	
Nickel	5.307	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1627]	0.2500	ug/L	
Thallium	[0.009351]	0.1250	ug/L	
Vanadium	[0.03716]	0.2500	ug/L	
Zinc	3.605	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	106600	ug/L	107
Calcium	300000	336800	ug/L	112
Iron	250000	255600	ug/L	102
Magnesium	100000	107700	ug/L	108
Molybdenum	2000	2057	ug/L	103
Potassium	100000	110000	ug/L	110
Sodium	250000	241700	ug/L	97

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	636953	-23.36
Scandium	642644	563826	-12.26
Germanium	147548	128561	-12.87
Indium	875996	686727	-21.61
Bismuth	993101	610786	-38.50

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56500483024
 Cal : 56500483001
 Standards: S4985, S4635

File : 11313024
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 15:30

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	97220	ug/L	-3		
Arsenic	100.0	94.72	ug/L	-5	20	
Cadmium	100.0	86.70	ug/L	-13	20	
Calcium	300000	300500	ug/L	0		
Chromium	200.0	197.3	ug/L	-1	20	
Cobalt	200.0	186.0	ug/L	-7	20	
Copper	200.0	174.4	ug/L	-13	20	
Iron	250000	226800	ug/L	-9		
Magnesium	100000	98160	ug/L	-2		
Manganese	200.0	189.0	ug/L	-6	20	
Molybdenum	2000	1881	ug/L	-6		
Nickel	200.0	178.8	ug/L	-11	20	
Potassium	100000	98500	ug/L	-2		
Selenium	100.0	81.01	ug/L	-19	20	
Silver	50.00	43.70	ug/L	-13	20	
Sodium	250000	223400	ug/L	-11		
Vanadium	200.0	203.3	ug/L	2	20	
Zinc	100.0	80.12	ug/L	-20	20	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Scandium	642644	588161	-8.48
Germanium	147548	134513	-8.83

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56500483076 File : 11313076
 Cal : 56500483001 Caldate: 13-DEC-2006
 Standards: S4984, S4635

IDF : 1.0
 Time : 13-DEC-2006 20:31

Analyte	Quant	RL	Units	Flags
Antimony	2.500	0.2500	ug/L	
Arsenic	[0]	0.5000	ug/L	
Barium	1.392	0.2500	ug/L	
Beryllium	[0.01204]	0.2500	ug/L	
Cadmium	[0.1941]	0.2500	ug/L	
Chromium	2.495	0.2500	ug/L	
Cobalt	2.783	0.2500	ug/L	
Copper	2.346	0.2500	ug/L	
Lead	1.564	0.2500	ug/L	
Manganese	1.395	0.5000	ug/L	
Nickel	5.043	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1812]	0.2500	ug/L	
Thallium	[0.008073]	0.1250	ug/L	
Vanadium	[0.1217]	0.2500	ug/L	
Zinc	3.613	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	116900	ug/L	117
Calcium	300000	345000	ug/L	115
Iron	250000	250900	ug/L	100
Magnesium	100000	117600	ug/L	118
Molybdenum	2000	2129	ug/L	106
Potassium	100000	114800	ug/L	115
Sodium	250000	264500	ug/L	106

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	661151	-20.45
Scandium	642644	512600	-20.24
Germanium	147548	120235	-18.51
Indium	875996	660917	-24.55
Bismuth	993101	666688	-32.87

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56500483077
 Cal : 56500483001
 Standards: S4985, S4635

File : 11313077
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 20:36

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	105300	ug/L	5		
Arsenic	100.0	98.39	ug/L	-2	20	
Cadmium	100.0	92.54	ug/L	-7	20	
Calcium	300000	316000	ug/L	5		
Chromium	200.0	201.1	ug/L	1	20	
Cobalt	200.0	190.9	ug/L	-5	20	
Copper	200.0	177.5	ug/L	-11	20	
Iron	250000	230300	ug/L	-8		
Magnesium	100000	105000	ug/L	5		
Manganese	200.0	195.3	ug/L	-2	20	
Molybdenum	2000	2011	ug/L	1		
Nickel	200.0	179.8	ug/L	-10	20	
Potassium	100000	105200	ug/L	5		
Selenium	100.0	86.36	ug/L	-14	20	
Silver	50.00	45.95	ug/L	-8	20	
Sodium	250000	235300	ug/L	-6		
Vanadium	200.0	211.8	ug/L	6	20	
Zinc	100.0	85.90	ug/L	-14	20	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Scandium	642644	530802	-17.40
Germanium	147548	119967	-18.69

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56500483122
 Cal : 56500483001
 Standards: S4984, S4635

File : 11313122
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 00:46

Analyte	Quant	RL	Units	Flags
Antimony	2.491	0.2500	ug/L	
Arsenic	[0]	0.5000	ug/L	
Barium	1.425	0.2500	ug/L	
Beryllium	[0.01450]	0.2500	ug/L	
Cadmium	[0.2001]	0.2500	ug/L	
Chromium	2.371	0.2500	ug/L	
Cobalt	2.733	0.2500	ug/L	
Copper	2.347	0.2500	ug/L	
Lead	1.531	0.2500	ug/L	
Manganese	1.510	0.5000	ug/L	
Nickel	5.115	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1835]	0.2500	ug/L	
Thallium	[0.008879]	0.1250	ug/L	
Vanadium	[0.01699]	0.2500	ug/L	
Zinc	3.629	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	118000	ug/L	118
Calcium	300000	346900	ug/L	116
Iron	250000	247000	ug/L	99
Magnesium	100000	118600	ug/L	119
Molybdenum	2000	2163	ug/L	108
Potassium	100000	115800	ug/L	116
Sodium	250000	262900	ug/L	105

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	648968	-21.92
Scandium	642644	496781	-22.70
Germanium	147548	114510	-22.39
Indium	875996	649419	-25.87
Bismuth	993101	658021	-33.74

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56500483123
 Cal : 56500483001
 Standards: S4985, S4635

File : 11313123
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 00:51

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	107400	ug/L	7		
Arsenic	100.0	98.17	ug/L	-2	20	
Cadmium	100.0	95.06	ug/L	-5	20	
Calcium	300000	320100	ug/L	7		
Chromium	200.0	200.6	ug/L	0	20	
Cobalt	200.0	189.5	ug/L	-5	20	
Copper	200.0	175.3	ug/L	-12	20	
Iron	250000	227500	ug/L	-9		
Magnesium	100000	106100	ug/L	6		
Manganese	200.0	194.6	ug/L	-3	20	
Molybdenum	2000	2070	ug/L	4		
Nickel	200.0	177.2	ug/L	-11	20	
Potassium	100000	107400	ug/L	7		
Selenium	100.0	86.50	ug/L	-14	20	
Silver	50.00	47.53	ug/L	-5	20	
Sodium	250000	233100	ug/L	-7		
Vanadium	200.0	211.1	ug/L	6	20	
Zinc	100.0	84.71	ug/L	-15	20	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Scandium	642644	501214	-22.01
Germanium	147548	112776	-23.57

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
Seqnum : 56500483172 File : 11313172
Cal : 56500483001 Caldate: 13-DEC-2006
Standards: S4984, S4635

```
IDF      : 1.0
Time     : 14-DEC-2006 05:25
```

Analyte	Quant	RL	Units	Flags
Antimony	2.465	0.2500	ug/L	
Arsenic	[0]	0.5000	ug/L	
Barium	1.344	0.2500	ug/L	
Beryllium	[0.008847]	0.2500	ug/L	
Cadmium	[0.1680]	0.2500	ug/L	
Chromium	2.202	0.2500	ug/L	
Cobalt	2.694	0.2500	ug/L	
Copper	2.379	0.2500	ug/L	
Lead	1.514	0.2500	ug/L	
Manganese	1.374	0.5000	ug/L	
Nickel	4.990	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1813]	0.2500	ug/L	
Thallium	[0.007062]	0.1250	ug/L	
Vanadium	[0.1704]	0.2500	ug/L	
Zinc	3.363	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	119900	ug/L	120
Calcium	300000	343800	ug/L	115
Iron	250000	245700	ug/L	98
Magnesium	100000	119500	ug/L	120
Molybdenum	2000	2214	ug/L	111
Potassium	100000	116700	ug/L	117
Sodium	250000	267700	ug/L	107

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	587259	-29.34
Scandium	642644	454801	-29.23
Germanium	147548	104774	-28.99
Indium	875996	617333	-29.53
Bismuth	993101	656091	-33.94

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56500483173
 Cal : 56500483001
 Standards: S4985, S4635

File : 11313173
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 05:30

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	107600	ug/L	8		
Arsenic	100.0	95.85	ug/L	-4	20	
Cadmium	100.0	97.77	ug/L	-2	20	
Calcium	300000	316600	ug/L	6		
Chromium	200.0	199.9	ug/L	0	20	
Cobalt	200.0	187.8	ug/L	-6	20	
Copper	200.0	171.7	ug/L	-14	20	
Iron	250000	223700	ug/L	-11		
Magnesium	100000	105800	ug/L	6		
Manganese	200.0	188.3	ug/L	-6	20	
Molybdenum	2000	2101	ug/L	5		
Nickel	200.0	174.6	ug/L	-13	20	
Potassium	100000	106900	ug/L	7		
Selenium	100.0	84.54	ug/L	-15	20	
Silver	50.00	48.33	ug/L	-3	20	
Sodium	250000	233800	ug/L	-6		
Vanadium	200.0	211.6	ug/L	6	20	
Zinc	100.0	81.81	ug/L	-18	20	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Scandium	642644	464552	-27.71
Germanium	147548	103535	-29.83

Sequence Date: 13-DEC-2006
Sequence: 56500483
Instrument ID: MET05

(11313)

ICALBLK Filename: 11313004
Date Analyzed: 13-DEC-2006
Time Analyzed: 13:40

Instrument ID: MET05

[illegible]

* = Outside QC Limits

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 13-DEC-2006
Sequence: 56500483
Instrument ID: MET05

(11313)

ICALBLK Filename: 11313004
Date Analyzed: 13-DEC-2006
Time Analyzed: 13:40

TYPE	SAMPLE	#							
CCB		075	792141	583984	140764	822893	1035332	1436419	
ICSA		076	661151	512600	120235	660917	666688	1138486	
BLANK	QC368135	081	678053	477284	114671	680587	815870	1135733	
BS	QC368136	082	706894	517472	123046	721011	856600	1231375	
BSD	QC368137	083	701070	502602	118874	688863	816113	1191306	
MSS	191314-003	085	685469	490774	115728	667554	783554	1188340	
SER	QC368140	086	745273	527457	127902	750366	912826	1314127	
MS	QC368138	087	662894	482997	113576	644010	762567	1161858	
MSD	QC368139	088	672160	491459	113976	657309	762438	1160746	
PDS	QC368141	089	665734	481497	111905	642230	749920	1149879	
CCV		093	776821	563240	136072	783060	958980	1407005	
CCB		096	792073	559939	136379	794696	1007855	1393611	
SAMPLE	191290-001	097	717285	485939	119025	689580	845436	1180598	
SAMPLE	191358-001	098	755276	534532	122027	689169	765752	1218209	
SAMPLE	191358-002	099	760169	550439	121971	664734	706926	1210864	
SAMPLE	191358-003	100	782504	545750	123073	693673	754456	1232648	
SAMPLE	191358-004	101	790520	568952	125898	706747	734950	1254358	
SAMPLE	191358-005	102	725850	519842	116656	647108	703662	1163454	
SAMPLE	191358-006	103	767818	508473	120338	700438	847314	1207347	
SAMPLE	191358-007	104	737447	514956	118080	661951	748373	1188066	
SAMPLE	191358-009	105	745987	512300	120702	670797	780069	1209958	
SAMPLE	191358-011	106	673694	483818	109894	642839	732316	1125604	
CCV		110	769811	541174	129631	756372	926582	1312240	
CCB		112	804900	557219	135140	795441	1019026	1374578	
SAMPLE	191358-013	114	701838	832648*	109645	613933	683484	1077256	
CCV		118	769160	538532	126691	741380	891243	1288333	
CCB		121	806147	550274	130874	777358	942328	1315607	
ICSA		122	648968	496781	114510	649419	658021	1096183	
BLANK	QC368128	129	659377	448444	108156	635771	765586	1052918	
BS	QC368129	130	657192	458493	108103	648226	777459	1091987	
BSD	QC368130	131	677752	472160	110676	663529	785837	1117416	
MSS	191314-003	133	744463	512578	120457	700524	821693	1235090	

* = Outside QC Limits

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 13-DEC-2006
Sequence: 56500483
Instrument ID: MET05

(11313)

ICALBLK Filename: 11313004
Date Analyzed: 13-DEC-2006
Time Analyzed: 13:40

TYPE	SAMPLE	#							
SER	QC368133	134	777148	518777	124798	735476	895029	1275102	
MS	QC368131	135	669239	467580	108346	641102	751187	1103733	
MSD	QC368132	136	666205	465952	107764	632753	741976	1108453	
MS	QC368217	137	662697	479967	107472	656764	752433	1119981	
CCV		141	752959	529730	126881	750196	951158	1305790	
CCB		144	761280	518329	124943	756497	937707	1283688	
MSD	QC368218	145	652736	462037	105540	631277	738779	1094369	
PDS	QC368134	146	682806	481362	109024	658019	759134	1125194	
SAMPLE	191314-001	147	692105	467913	110312	644370	756794	1103496	
SAMPLE	191314-004	148	760707	504640	115867	676405	781873	1181394	
SAMPLE	191314-005	149	731801	502664	114961	671113	795320	1192776	
SAMPLE	191314-006	150	819629	563097	125156	731105	810634	1275637	
SAMPLE	191314-009	151	657365	472793	103194	633859	699812	1073835	
SAMPLE	191314-010	152	708900	507402	111571	699542	762156	1142954	
MSS	191314-011	153	631193	431869	98518	589467	684873	923638	
SAMPLE	191314-012	154	600039	438099	97225	591996	679702	1011982	
CCV		158	726576	497529	120034	720267	904616	1253533	
CCB		161	726998	491571	118857	726574	911809	1213639	
SAMPLE	191314-014	162	654408	445356	102641	622253	733711	1051485	
SAMPLE	191314-015	163	685672	471074	108847	638174	754191	1123907	
SAMPLE	191314-016	164	724233	512671	115944	688899	799156	1213342	
CCV		168	708830	478772	116775	687660	873618	1202157	
CCB		170	747567	498617	122056	734458	935956	1250985	
ICSA		172	587259	454801	104774	617333	656091	1026463	

* = Outside QC Limits

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56500483 Instrument: MET05
Analytical Method: EPA 6020

Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 13-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds Used	>LR
001	11313001	TUN				13-DEC-2006	13:23	1.0				1	
002	11313002	X	RINSE			13-DEC-2006	13:29	1.0				2	
003	11313003	X	RINSE			13-DEC-2006	13:34	1.0				2	
004	11313004	ICALBLK	STD-BLANK			13-DEC-2006	13:40	1.0				2	
005	11313005	ICAL	CS1			13-DEC-2006	13:45	1.0				3	
006	11313006	ICAL	CS2			13-DEC-2006	13:51	1.0				4	
007	11313007	ICAL	CS3			13-DEC-2006	13:56	1.0				5	
008	11313008	ICAL	CS4			13-DEC-2006	14:02	1.0				6	
009	11313009	ICAL	CS5			13-DEC-2006	14:07	1.0				7	
010	11313010	ICAL	CS6			13-DEC-2006	14:13	1.0				8	
011	11313011	X	RINSE			13-DEC-2006	14:18	1.0				2	
012	11313012	ICV				13-DEC-2006	14:24	1.0			1	9	
013	11313013	X	RINSE			13-DEC-2006	14:29	1.0				2	
014	11313014	X				13-DEC-2006	14:35	1.0				2	
015	11313015	X				13-DEC-2006	14:40	1.0				2	
016	11313016	X				13-DEC-2006	14:46	1.0				10 2	
017	11313017	X	RINSE			13-DEC-2006	14:51	1.0				2	
018	11313018	X				13-DEC-2006	14:57	1.0				2	
019	11313019	X				13-DEC-2006	15:02	1.0				2	
020	11313020	ICB				13-DEC-2006	15:08	1.0			1	2	
021	11313021	ICSA				13-DEC-2006	15:14	1.0			1	10 2	7:CA=336800
022	11313022	X				13-DEC-2006	15:19	1.0				11 2	
023	11313023	X	RINSE			13-DEC-2006	15:24	1.0				2	
024	11313024	ICSAB				13-DEC-2006	15:30	1.0			1	11 2	8:CA=300500
025	11313025	X	RINSE			13-DEC-2006	15:35	1.0				2	
026	11313026	X	RINSE			13-DEC-2006	15:41	1.0				2	
027	11313027	X	RINSE			13-DEC-2006	15:46	1.0				2	
028	11313028	BLANK	QC367960	120280	Filtira	13-DEC-2006	15:52	1.0			1	2	
029	11313029	X	RINSE			13-DEC-2006	15:58	1.0				2	
030	11313030	BLANK	QC367981	120288	Water	13-DEC-2006	16:03	1.0			1	2	

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327
Flags used: spk=5% spike rule

Analyst:  Date: 12/14/06

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56500483 Instrument: MET05
Analytical Method: EPA 6020

Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 13-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
031	11313031	BS	QC367982	120288	Water	13-DEC-2006 16:09	1.0	1.0	1	1	1	2		
032	11313032	BSD	QC367983	120288	Water	13-DEC-2006 16:14	1.0	1.0	1	1	1	2		
033	11313033	X	RINSE			13-DEC-2006 16:20	1.0					2		
034	11313034	MSS	191351-001	120288	Water	13-DEC-2006 16:27	1.0	1.0	3	1	1	2	2:CA=21790.0	
035	11313035	X	RINSE			13-DEC-2006 16:32	1.0					2		
036	11313036	X	RINSE			13-DEC-2006 16:38	1.0					2		
037	11313037	BLANK	QC367981	120288	Water	13-DEC-2006 16:43	1.0	1.0	1	1	1	2		
038	11313038	BS	QC367982	120288	Water	13-DEC-2006 16:49	1.0	1.0	1	1	1	2		
039	11313039	X	RINSE			13-DEC-2006 16:54	1.0					2		
040	11313040	X	RINSE			13-DEC-2006 17:00	1.0					2		
041	11313041	X	RINSE			13-DEC-2006 17:05	1.0					2		
042	11313042	CCV				13-DEC-2006 17:11	1.0	1.0	1	1	1	12 2		
043	11313043	X	RINSE			13-DEC-2006 17:16	1.0					2		
044	11313044	CCB				13-DEC-2006 17:22	1.0	1.0			1	2		
045	11313045	X				13-DEC-2006 17:28	1.0					2		
046	11313046	BSD	QC367983	120288	Water	13-DEC-2006 17:33	1.0	1.0	1	1	1	2		
047	11313047	X	RINSE			13-DEC-2006 17:39	1.0					2		
048	11313048	MSS	191351-001	120288	Water	13-DEC-2006 17:44	1.0	1.0	3	1	1	2	2:CA=21830.0	
049	11313049	SER	QC367986	120288	Water	13-DEC-2006 17:50	5.0	1.0				2	2:NA=80500.0	
050	11313050	MS	QC367984	120288	Water	13-DEC-2006 17:55	1.0	1.0				2	2:CA=29750.0	
051	11313051	MSD	QC367985	120288	Water	13-DEC-2006 18:01	1.0	1.0	1	1	1	2	3:CA=31180.0	
052	11313052	PDS	QC367987	120288	Water	13-DEC-2006 18:06	1.0	1.0	1	1	1	13 14 2	3:CA=30920.0	
053	11313053	X	RINSE			13-DEC-2006 18:11	1.0					2		
054	11313054	SAMPLE	191351-003	120288	Water	13-DEC-2006 18:17	1.0	1.0			1	2	3:MG=65590.0	
055	11313055	SAMPLE	191351-005	120288	Water	13-DEC-2006 18:23	1.0	1.0			1	2	3:CA=67180.0	
056	11313056	X	RINSE			13-DEC-2006 18:28	1.0					2		
057	11313057	X	RINSE			13-DEC-2006 18:41	1.0					2		
058	11313058	BLANK	QC367981	120288	Water	13-DEC-2006 18:46	1.0	1.0	1	1	1	2		
059	11313059	SAMPLE	191351-006	120288	Water	13-DEC-2006 18:52	1.0	1.0	1	1	1	2	3:V=670.300	
060	11313060	X	RINSE			13-DEC-2006 19:02	1.0					2		

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327
Flags used: SPK=5% spike rule

Analyst:

Date:

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56500483 Instrument: MET05 Agilent ICP-MS
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 13-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds Used	>LR
061	11313061	X	RINSE			13-DEC-2006	19:07	1.0				2	
062	11313062	X	RINSE			13-DEC-2006	19:13	1.0				2	
063	11313063	CCV				13-DEC-2006	19:19	1.0				12.2	
064	11313064	X	RINSE			13-DEC-2006	19:24	1.0				2	
065	11313065	CCB				13-DEC-2006	19:30	1.0				2	
066	11313066	X				13-DEC-2006	19:35	1.0				2	
067	11313067	SAMPLE	191351-008	120288	Water	13-DEC-2006	19:41	1.0				2	
068	11313068	SAMPLE	191364-002	120288	Water	13-DEC-2006	19:46	1.0				2	3:NA=224500
069	11313069	X	RINSE			13-DEC-2006	19:52	1.0				2	
070	11313070	X	RINSE			13-DEC-2006	19:57	1.0				2	
071	11313071	X	RINSE			13-DEC-2006	20:03	1.0				2	
072	11313072	CCV				13-DEC-2006	20:09	1.0				12.2	
073	11313073	X	RINSE			13-DEC-2006	20:14	1.0				2	
074	11313074	X				13-DEC-2006	20:20	1.0				2	
075	11313075	CCB				13-DEC-2006	20:25	1.0				2	
076	11313076	ICSA				13-DEC-2006	20:31	1.0				10.2	7:CA=345000
077	11313077	ICSAB				13-DEC-2006	20:36	1.0				11.2	9:CA=316000
078	11313078	X	RINSE			13-DEC-2006	20:42	1.0				2	
079	11313079	X	RINSE			13-DEC-2006	20:47	1.0				2	
080	11313080	X	RINSE			13-DEC-2006	20:53	1.0				2	
081	11313081	BLANK	QC368135	120324	Water	13-DEC-2006	20:58	1.0				2	
082	11313082	BS	QC368136	120324	Water	13-DEC-2006	21:04	1.0				2	
083	11313083	BSD	QC368137	120324	Water	13-DEC-2006	21:09	1.0				2	
084	11313084	X	RINSE			13-DEC-2006	21:15	1.0				2	
085	11313085	MSS	191314-003	120324	Water	13-DEC-2006	21:20	1.0				2	5:NA=54670.0
086	11313086	SER	QC368140	120324	Water	13-DEC-2006	21:26	5.0				2	
087	11313087	MS	QC368138	120324	Water	13-DEC-2006	21:31	1.0				2	5:NA=63590.0
088	11313088	MSD	QC368139	120324	Water	13-DEC-2006	21:37	1.0				2	5:NA=62190.0
089	11313089	PDS	QC368141	120324	Water	13-DEC-2006	21:42	1.0				13.14.2	5:NA=63800.0
090	11313090	X	RINSE			13-DEC-2006	21:48	1.0				2	

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327
Flags used: RPK=5% spike rule

Analyst:

Date:

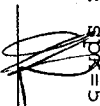
SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56500483 Instrument: MET05 Agilent ICP-MS
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 13-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds Used	>LR
091	11313091	X	RINSE			13-DEC-2006	21:53	1.0				2	
092	11313092	X	RINSE			13-DEC-2006	21:59	1.0				2	
093	11313093	CCV				13-DEC-2006	22:04	1.0				12 2	
094	11313094	X	RINSE			13-DEC-2006	22:10	1.0				2	
095	11313095	X				13-DEC-2006	22:15	1.0				2	
096	11313096	CCB				13-DEC-2006	22:21	1.0				2	
097	11313097	SAMPLE	191290-001	120324	Filtra	13-DEC-2006	22:27	1.0				2	
098	11313098	SAMPLE	191358-001	120324	Water	13-DEC-2006	22:32	1.0				2	2:NA=134000
099	11313099	SAMPLE	191358-002	120324	Water	13-DEC-2006	22:38	1.0				2	3:NA=280600
100	11313100	SAMPLE	191358-003	120324	Water	13-DEC-2006	22:43	1.0				2	2:NA=213800
101	11313101	SAMPLE	191358-004	120324	Water	13-DEC-2006	22:49	1.0				2	2:NA=231400
102	11313102	SAMPLE	191358-005	120324	Water	13-DEC-2006	22:55	1.0				2	4:NA=215300
103	11313103	SAMPLE	191358-006	120324	Water	13-DEC-2006	23:00	1.0				2	
104	11313104	SAMPLE	191358-007	120324	Water	13-DEC-2006	23:06	1.0				2	2:NA=136100
105	11313105	SAMPLE	191358-009	120324	Filtra	13-DEC-2006	23:11	1.0				2	3:NA=60130.0
106	11313106	SAMPLE	191358-011	120324	Filtra	13-DEC-2006	23:17	1.0				2	6:NA=93090.0
107	11313107	X	RINSE			13-DEC-2006	23:22	1.0				2	
108	11313108	X	RINSE			13-DEC-2006	23:28	1.0				2	
109	11313109	X	RINSE			13-DEC-2006	23:34	1.0				2	
110	11313110	CCV				13-DEC-2006	23:39	1.0				12 2	
111	11313111	X	RINSE			13-DEC-2006	23:45	1.0				2	
112	11313112	CCB				13-DEC-2006	23:50	1.0				2	
113	11313113	X				13-DEC-2006	23:56	1.0				2	
114	11313114	SAMPLE	191358-013	120324	Water	14-DEC-2006	00:01	1.0				2	12:FE=139300
115	11313115	X	RINSE			14-DEC-2006	00:07	1.0				2	
116	11313116	X	RINSE			14-DEC-2006	00:12	1.0				2	
117	11313117	X	RINSE			14-DEC-2006	00:18	1.0				2	
118	11313118	CCV				14-DEC-2006	00:23	1.0				12 2	
119	11313119	X	RINSE			14-DEC-2006	00:29	1.0				2	
120	11313120	X				14-DEC-2006	00:34	1.0				2	

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327
Flags used: spk=5% spike rule

Analyst:  Date: 12/14/06

SEQUENCE SUMMARY
Curtis & Tompkins Laboratories

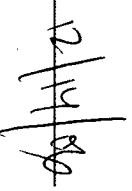
Sequence: 56500483 Instrument: MET05
Analytical Method: EPA 6020

Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 13-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
121	11313121	CCB				14-DEC-2006	00:40	1.0	1.0		1	2		
122	11313122	ICSA				14-DEC-2006	00:46	1.0	1.0		1	10	2	7:CA=346900
123	11313123	ICSAB				14-DEC-2006	00:51	1.0	1.0		1	11	2	9:CA=320100
124	11313124	X	RINSE			14-DEC-2006	00:56	1.0				2		
125	11313125	X	RINSE			14-DEC-2006	01:02	1.0				2		
126	11313126	X	RINSE			14-DEC-2006	01:08	1.0				2		
127	11313127	TUN				14-DEC-2006	01:14	1.0				1		
128	11313128	X	RINSE			14-DEC-2006	01:20	1.0				2		
129	11313129	BLANK	QC368128			14-DEC-2006	01:25	1.0			1	2		
130	11313130	BS	QC368129			14-DEC-2006	01:31	1.0			1	2		
131	11313131	BSD	QC368130			14-DEC-2006	01:36	1.0			1	2		
132	11313132	X	RINSE			14-DEC-2006	01:42	1.0				2		
133	11313133	MSS	191314-003			14-DEC-2006	01:48	1.0			1	2		3:NA=53570.0
134	11313134	SER	QC368133			14-DEC-2006	01:54	5.0			1	2		
135	11313135	MS	QC368131			14-DEC-2006	01:59	1.0			1	2		4:NA=62550.0
136	11313136	MSD	QC368132			14-DEC-2006	02:05	1.0			1	2		4:NA=63150.0
137	11313137	MS	QC368217			14-DEC-2006	02:10	1.0			1	2		5:NA=77940.0
138	11313138	X	RINSE			14-DEC-2006	02:15	1.0				2		
139	11313139	X	RINSE			14-DEC-2006	02:21	1.0				2		
140	11313140	X	RINSE			14-DEC-2006	02:27	1.0				2		
141	11313141	CCV				14-DEC-2006	02:32	1.0				12	2	
142	11313142	X	RINSE			14-DEC-2006	02:38	1.0			1	2		
143	11313143	X				14-DEC-2006	02:43	1.0			1	2		
144	11313144	CCB	QC368218			14-DEC-2006	02:49	1.0			1	2		
145	11313145	MSD	QC368134			120323	Filtetra	14-DEC-2006	02:55	1.0		2		5:NA=85040.0
146	11313146	PDS	QC368134			120323	Filtetra	14-DEC-2006	03:00	1.0		3		4:NA=60820.0
147	11313147	SAMPLE	191314-001			120323	Filtetra	14-DEC-2006	03:06	1.0		6		4:CA=85090.0
148	11313148	SAMPLE	191314-004			120323	Filtetra	14-DEC-2006	03:11	1.0		5		3:MG=95260.0
149	11313149	SAMPLE	191314-005			120323	Filtetra	14-DEC-2006	03:17	1.0		5		3:MG=91930.0
150	11313150	SAMPLE	191314-006			120323	Filtetra	14-DEC-2006	03:22	1.0		5		3:NA=119000

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327
Flags used: spk=5% spike rule

Analyst:  Date: 

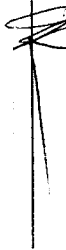
SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56500483 Instrument: MET05 Agilent ICP-MS
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 13-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
151	11313151	SAMPLE	191314-009	120323	Filtera	14-DEC-2006 03:28	1.0	1.0	4	1	1	2	SPK	3:NA=217500
152	11313152	SAMPLE	191314-010	120323	Filtera	14-DEC-2006 03:33	1.0	1.0	5	1	1	2	SPK	4:NA=129300
153	11313153	MSS	191314-011	120323	Filtera	14-DEC-2006 03:39	1.0	1.0	6	1	1	2	SPK	4:NA=69800.0
154	11313154	SAMPLE	191314-012	120323	Filtera	14-DEC-2006 03:44	1.0	1.0	6	1	1	2	SPK	6:NA=118200
155	11313155	X	RINSE			14-DEC-2006 03:50	1.0					2		
156	11313156	X	RINSE			14-DEC-2006 03:56	1.0					2		
157	11313157	X	RINSE			14-DEC-2006 04:01	1.0					2		
158	11313158	CCV	RINSE			14-DEC-2006 04:07	1.0		3	1	1	12	2	
159	11313159	X	RINSE			14-DEC-2006 04:12	1.0					2		
160	11313160	X				14-DEC-2006 04:18	1.0		1	1	1	2		
161	11313161	CCB				14-DEC-2006 04:24	1.0					2		
162	11313162	SAMPLE	191314-014	120323	Filtera	14-DEC-2006 04:29	1.0	1.0	4	1	1	2		3:NA=64740.0
163	11313163	SAMPLE	191314-015	120323	Filtera	14-DEC-2006 04:35	1.0	1.0	4	1	1	2		3:NA=84550.0
164	11313164	SAMPLE	191314-016	120323	Filtera	14-DEC-2006 04:40	1.0	1.0	4	1	1	2		3:NA=97070.0
165	11313165	X	RINSE			14-DEC-2006 04:46	1.0					2		
166	11313166	X	RINSE			14-DEC-2006 04:51	1.0					2		
167	11313167	X	RINSE			14-DEC-2006 04:57	1.0					2		
168	11313168	CCV				14-DEC-2006 05:03	1.0		4	1	1	12	2	
169	11313169	X	RINSE			14-DEC-2006 05:08	1.0					2		
170	11313170	CCB				14-DEC-2006 05:14	1.0				1	2		
171	11313171	X				14-DEC-2006 05:19	1.0				1	2		
172	11313172	ICSA				14-DEC-2006 05:25	1.0				1	10	2	7:CA=343800
173	11313173	ICSAB				14-DEC-2006 05:30	1.0				1	11	2	8:CA=316600

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327
Flags used: spk=5% spike rule

Analyst:  Date: 12/14/06

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET05

Calnum : 56501744001

Units : ug/L

Date : 14-DEC-2006 10:41

X Axis : R

Reviewer: ---

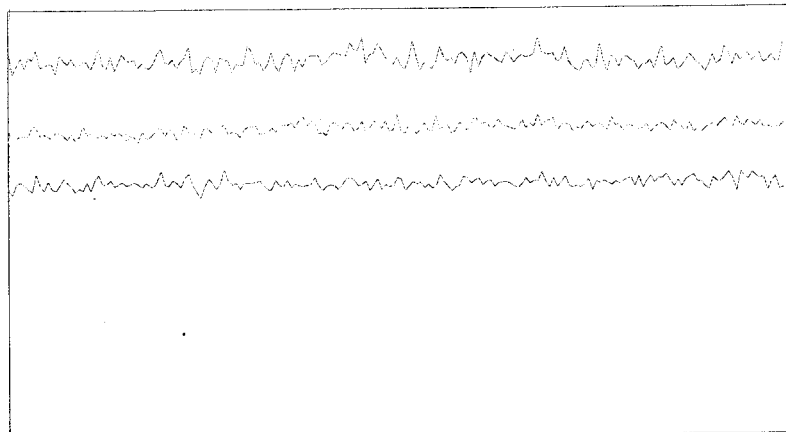
Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	11410005	56501744005	CS1	14-DEC-2006 10:47	S4978
L2	11410006	56501744006	CS2	14-DEC-2006 10:52	S4979
L3	11410007	56501744007	CS3	14-DEC-2006 10:58	S4980
L4	11410008	56501744008	CS4	14-DEC-2006 11:04	S4981
L5	11410009	56501744009	CS5	14-DEC-2006 11:09	S4975
L6	11410010	56501744010	CS6	14-DEC-2006 11:15	S4976

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ²	MIR ²	Flg
Aluminum	1.0212	0.9285	0.8303	0.7417	0.7436	0.7126	BLNK	-5.3227	1.39160		0.8297	1.000	0.995	
Antimony	0.3098	0.3034	0.2862	0.2627	0.2727	0.2722	BLNK	-0.0291	3.67315		0.2845	1.000	0.995	
Arsenic		0.6666	0.6823	0.5088	0.5229	0.5174	BLNK	0.04996	1.92806		0.5796	1.000	0.995	
Barium	0.1308	0.1268	0.1076	0.0968	0.0995	0.0985	BLNK	-0.0661	10.1337		0.1100	1.000	0.995	
Beryllium	0.1873	0.1956	0.1907	0.1790	0.1811	0.1765	BLNK	-0.0170	5.63797		0.1850	1.000	0.995	
Cadmium	0.7697	0.6790	0.5930	0.5733	0.5812	0.5803	BLNK	-0.0672	1.72352		0.6294	1.000	0.995	
Calcium	0.0473	0.0331	0.0273	0.0207	0.0201	0.0195	BLNK	-29.506	51.0755		0.0280	1.000	0.995	
Chromium		12.470	8.8968	4.0131	3.7183	3.6925	BLNK	-1.1192	0.27227		6.5580	1.000	0.995	
Cobalt	5.1599	4.6814	4.8599	4.3535	4.5608	4.4562	BLNK	-0.0323	0.22341		4.6786	1.000	0.995	
Copper	4.5288	2.6837	2.2634	1.2891	1.2348	1.1982	BLNK	-0.5738	0.83232		2.1997	1.000	0.995	
Iron	0.1545	0.1248	0.1124	0.0948	0.0926	0.0893	BLNK	-14.617	11.1219		0.1114	1.000	0.995	
Lead	1.3904	1.2363	1.2193	1.1280	1.2053	1.1919	BLNK	-0.0589	0.83753		1.2285	1.000	0.995	
Magnesium	0.1227	0.1166	0.1167	0.1038	0.1001	0.0956	BLNK	-1.8766	10.3624		0.1092	0.999	0.995	
Manganese	6.4833	5.5169	5.1529	4.3698	4.5725	4.4995	BLNK	-0.1093	0.22169		5.0991	1.000	0.995	
Molybdenum	1.2400	1.1242	1.1918	1.0814	1.1441	1.1717	BLNK	-0.0195	0.85771		1.1589	1.000	0.995	
Nickel	3.2778	1.9776	1.5387	1.0575	0.9967	0.9748	BLNK	-0.4964	1.02457		1.6372	1.000	0.995	
Potassium	2.8176	1.6729	1.1599	0.6582	0.6306	0.6160	BLNK	-89.257	1.62435		1.2592	1.000	0.995	
Selenium			0.0284	0.0438	0.0451	0.0439	BLNK	0.53471	22.5895		0.0403	1.000	0.995	
Silver	3.1454	3.0301	2.8843	2.7676	2.8629	2.9170	BLNK	-0.0350	0.34421		2.9345	1.000	0.995	
Sodium	8.5808	4.4830	2.5904	1.0800	0.9288	0.8735	BLNK	-238.86	1.14670		3.0894	0.999	0.995	
Thallium	1.0409	0.8859	0.8800	0.8220	0.8845	0.9254	BLNK	-0.0259	1.09078		0.9065	0.999	0.995	
Vanadium		3.6840	4.1596	3.7944	3.6966	3.7307	BLNK	-0.0627	0.26863		3.8131	1.000	0.995	
Zinc	8.1185	4.0807	2.5701	0.8393	0.6422	0.6066	BLNK	-2.8051	1.65644		2.8095	0.999	0.995	

instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=AX+(blank)

Tune Report

Tune File : ATUNE.U



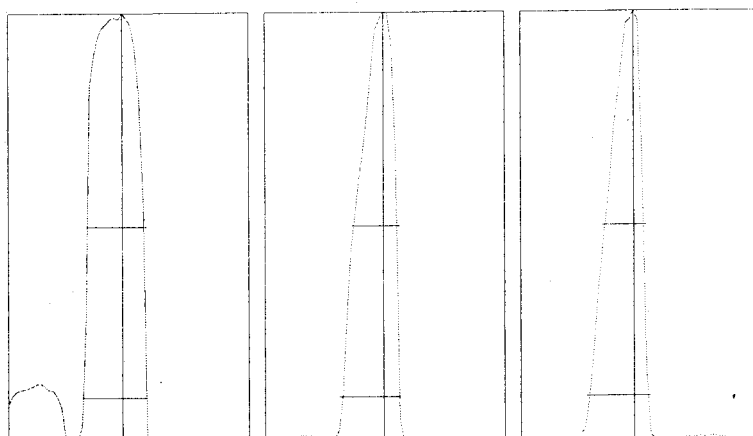
m/z:	7	89	205
Range:	20,000	20,000	20,000
Count:	11,515	18,323	14,512
Mean:	11833.4	17571.3	14371.8
RSD%:	1.86	1.95	1.64
n:	200		

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec

Oxide: 156/140 0.29%
Doubly Charged: 70/140 2.45%

Background:

m/z:	7	89	205
Cps:	11.1	7.8	17.5



m/z:	7	89	205
Height:	12,067	17,533	14,961
Axis:	6.95	89.00	204.95
W-50%:	0.75	0.60	0.55
W-10%:	0.800	0.7500	0.800

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec

Y axis : Linear

Tuning Parameters

===Plasma Condition===

RF Power: 1270 W
RF Matching: 1.78 V
Smpl Depth: 7.1 mm
Torch-H: -1.3 mm
Torch-V: 0.5 mm
Carrier Gas: 1.09 L/min
Makeup Gas: 0 L/min
Optional Gas: --- %
PeriPump1: 0.1 rps
PeriPump2: --- rps
S/C Temp: 2 degC

===Ion Lenses===

Extract 1: -180 V
Extract 2: -40 V
Einzel 1,3: -100 V
Einzel 2: -7 V
Omega Bias: -45 V
Omega (+): 4 V
Omega (-): -4 V
QP Focus: 9 V
Plate Bias: 0 V

===Q-Pole Parameters===

AMU Gain: 130
AMU Offset: 125
Axis Gain: 0.9989
Axis Offset: -0.01
QP Bias: 1.6 V

===Detector Parameters===

Discriminator: 9.3 mV
Analog HV: 1810 V
Pulse HV: 1160 V

Temp.p\$\$

P/A Factor Tuning Report

Acquired:Dec 14 2006 08:28 am

Mass[amu]	Element	P/A Factor
6	Li	0.067486
9	Be	0.078769
23	Na	Sensitivity too high
25	Mg	0.080212
26	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
43	Ca	Sensitivity too low
44	Ca	0.094064
45	Sc	0.095860
51	V	0.090944
52	Cr	0.101230
53	Cr	Sensitivity too low
54	Fe	0.099039
55	Mn	0.103526
57	Fe	0.099164
59	Co	0.106008
60	Ni	0.103422
63	Cu	0.107261
65	Cu	0.105338
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
77	(As)	Sensitivity too low
82	Se	Sensitivity too low
83	(As)	Sensitivity too low
88	(Ca)	Sensitivity too low
89	Y	0.104101
95	Mo	0.102493
98	Mo	0.102839
99	(Mo)	Sensitivity too low
106	(Cd)	Sensitivity too low
108	(Cd)	Sensitivity too low
109	Ag	0.108868
111	Cd	Sensitivity too low
114	Cd	0.109143
115	In	0.109115
118	(In)	0.111286
121	Sb	0.107556
135	Ba	Sensitivity too low
137	Ba	Sensitivity too low
159	Tb	0.114108
166	Er	Sensitivity too low

Temp.p\$\$

205	Tl	0.116104
206	(Pb)	0.114784
207	(Pb)	0.113651
208	Pb	0.116865
209	Bi	0.116435

===Detector Parameters===

Discriminator: 9.3 mV

Analog HV: 1810 V

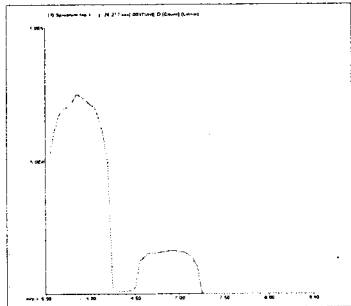
Pulse HV: 1160 V

6020 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\001TUNE.D
Date Acquired: Dec 14 2006 10:24 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s4974
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	0.48	5.00	
59 Co	1.33	5.00	
115 In	1.64	5.00	
205 Tl	2.43	5.00	



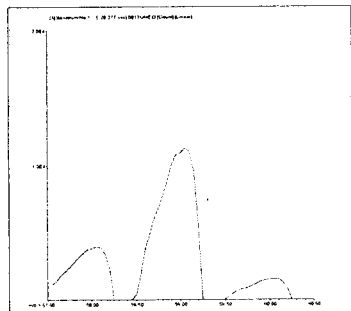
7 Li

Mass Calib.

Actual: 6.90
Required: 6.90 - 7.10
Flag:

Peak Width

Actual: 0.65
Required: 0.90
Flag:



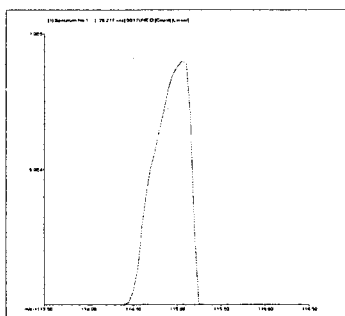
59 Co

Mass Calib.

Actual: 59.05
Required: 58.90 - 59.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



115 In

Mass Calib.

Actual: 115.05

Required: 114.90 - 115.10

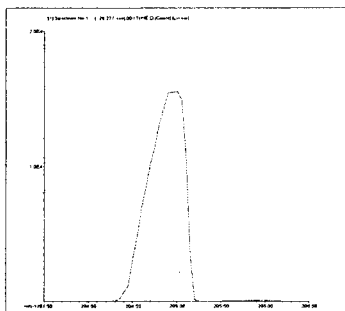
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



205 Tl

Mass Calib.

Actual: 205.00

Required: 204.90 - 205.10

Flag:

Peak Width

Actual: 0.55

Required: 0.90

Flag:

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\004CAL
Date Acquired: Dec 14 2006 10:41 am
Operator:
Sample Name: std-blank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Dec 13 2006 02:14 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	739106.00 A	10570.00	1.43
9 Be	44.44 P	9.62	21.65
23 Na	2205423.00 A	1917.00	0.09
26 Mg	1916.67 P	138.70	7.24
27 Al	40493.33 P	751.70	1.86
39 K	581835.50 P	7785.00	1.34
44 Ca	6115.73 P	161.00	2.63
45 Sc	529416.63 P	4367.00	0.82
51 V	552.89 P	1975.00	357.22
52 Cr	9853.33 P	179.00	1.82
55 Mn	1181.11 P	131.40	11.13
57 Fe	3150.00 P	35.28	1.12
59 Co	346.67 P	63.33	18.27
60 Ni	1161.11 P	86.94	7.49
65 Cu	1653.33 P	127.70	7.72
66 Zn	4058.89 P	77.27	1.90
72 Ge	119842.20 P	1453.00	1.21
75 As	-60.56 P	225.80	372.85
82 Se	-56.44 P	39.40	69.80
95 Mo	54.44 P	18.36	33.72
109 Ag	243.33 P	17.64	7.25
111 Cd	93.33 P	15.73	16.85
115 In	758188.31 P	5430.00	0.72
121 Sb	120.00 P	14.53	12.11
137 Ba	98.89 P	24.57	24.85
205 Tl	428.89 P	44.39	10.35
208 Pb	1268.89 P	70.26	5.54
209 Bi	901811.13 P	8006.00	0.89

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\005CALI.D\005CALI.D#
 Date Acquired: Dec 14 2006 10:47 am
 Operator:
 Sample Name: cs1,s4978
 Misc Info:
 Vial Number: 1102
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 14 2006 10:43 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	725171.38 A	22140.00	3.05
9 Be	678.89 P	5.09	0.75
23 Na	2236721.00 A	10910.00	0.49
26 Mg	31993.33 P	617.10	1.93
27 Al	266313.31 P	3479.00	1.31
39 K	734229.31 M	11770.00	1.60
44 Ca	12330.80 P	58.41	0.47
45 Sc	522124.41 P	24720.00	4.73
51 V	4710.59 P	489.00	10.38
52 Cr	12556.67 P	207.90	1.66
55 Mn	3841.11 P	168.40	4.38
57 Fe	9150.00 P	144.70	1.58
59 Co	3056.67 P	78.81	2.58
60 Ni	1943.33 P	92.80	4.78
65 Cu	2683.20 P	77.68	2.90
66 Zn	4812.22 P	186.90	3.88
72 Ge	118539.30 P	4110.00	3.47
75 As	504.54 P	141.50	28.05
82 Se	-54.44 P	9.71	17.84
95 Mo	733.33 P	58.12	7.93
109 Ag	1863.33 P	26.46	1.42
111 Cd	457.21 P	59.42	13.00
115 In	748254.31 M	24450.00	3.27
121 Sb	1158.89 P	30.97	2.67
137 Ba	490.00 P	41.77	8.52
205 Tl	2338.89 P	100.00	4.28
208 Pb	6244.44 P	93.35	1.49
209 Bi	898780.38 M	22420.00	2.49

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	725171.38	3.05	739106.00	98.1	80 - 120	

C:\ICPCHEM\1\DATA\06L1410a.B\005CALI.D\005CALI.D#

45	Sc	522124.41	4.73	529416.63	98.6	80 -	120
72	Ge	118539.34	3.47	119842.22	98.9	80 -	120
115	In	748254.31	3.27	758188.25	98.7	80 -	120
209	Bi	898780.38	2.49	901811.13	99.7	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1410a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\006CALI.D\006CALI.D#
 Date Acquired: Dec 14 2006 10:52 am
 Operator:
 Sample Name: cs2,s4979
 Misc Info:
 Vial Number: 1103
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 14 2006 10:49 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	740799.88 A	5088.00	0.69
9 Be	1448.89 P	20.09	1.39
23 Na	2343897.00 A	15370.00	0.66
26 Mg	60961.11 P	550.40	0.90
27 Al	485480.00 P	3421.00	0.70
39 K	874661.19 A	2094.00	0.24
44 Ca	17330.37 P	261.40	1.51
45 Sc	522843.31 P	473.50	0.09
51 V	4340.48 P	727.40	16.76
52 Cr	14691.11 P	527.50	3.59
55 Mn	6500.00 P	258.30	3.97
57 Fe	14698.89 P	120.50	0.82
59 Co	5515.56 P	157.20	2.85
60 Ni	2330.00 P	39.30	1.69
65 Cu	3161.96 P	119.70	3.79
66 Zn	4807.78 P	139.90	2.91
72 Ge	117817.60 P	111.70	0.09
75 As	785.40 P	157.50	20.05
82 Se	40.89 P	33.69	82.39
95 Mo	1324.44 P	37.17	2.81
109 Ag	3570.00 P	52.39	1.47
111 Cd	799.97 P	31.18	3.90
115 In	747619.81 P	2343.00	0.31
121 Sb	2267.78 P	328.90	14.50
137 Ba	947.78 P	22.19	2.34
205 Tl	4037.78 P	56.21	1.39
208 Pb	11268.89 P	303.80	2.70
209 Bi	911937.88 M	25010.00	2.74

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	740799.88	0.69	739106.00	100.2	80 - 120	

C:\ICPCHEM\1\DATA\06L1410a.B\006CALI.D\006CALI.D#

45	Sc	522843.31	0.09	529416.63	98.8	80 -	120
72	Ge	117817.55	0.09	119842.22	98.3	80 -	120
115	In	747619.75	0.31	758188.25	98.6	80 -	120
209	Bi	911937.88	2.74	901811.13	101.1	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1410a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**

ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\007CALI.D\007CALI.D#
 Date Acquired: Dec 14 2006 10:58 am
 Operator:
 Sample Name: cs3,s4980
 Misc Info:
 Vial Number: 1104
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 14 2006 10:54 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	741745.88 A	6443.00	0.87
9 Be	2828.89 P	29.12	1.03
23 Na	2730964.00 A	8049.00	0.29
26 Mg	122986.70 P	420.30	0.34
27 Al	875403.50 A	4159.00	0.48
39 K	1222875.00 A	7833.00	0.64
44 Ca	28832.69 P	134.60	0.47
45 Sc	527152.19 P	2395.00	0.45
51 V	9823.88 P	2617.00	26.64
52 Cr	21067.78 P	248.20	1.18
55 Mn	12203.33 P	233.30	1.91
57 Fe	26622.22 P	452.70	1.70
59 Co	11508.89 P	310.40	2.70
60 Ni	3643.33 P	160.20	4.40
65 Cu	5359.48 P	138.70	2.59
66 Zn	6087.78 P	360.60	5.92
72 Ge	118410.70 P	1854.00	1.57
75 As	1615.74 P	20.93	1.30
82 Se	67.78 P	62.03	91.52
95 Mo	2823.33 P	165.00	5.84
109 Ag	6830.00 P	109.30	1.60
111 Cd	1403.48 P	56.32	4.01
115 In	748089.69 P	6998.00	0.94
121 Sb	4283.33 P	147.50	3.44
137 Ba	1610.00 P	100.40	6.24
205 Tl	7924.44 P	191.20	2.41
208 Pb	21957.78 P	638.20	2.91
209 Bi	900418.81 P	10540.00	1.17

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	741745.88	0.87	739106.00	100.4	80 - 120	

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45 Sc	527152.19	0.45	529416.63	99.6	80 -	120
72 Ge	118410.66	1.57	119842.22	98.8	80 -	120
115 In	748089.69	0.94	758188.25	98.7	80 -	120
209 Bi	900418.81	1.17	901811.13	99.8	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1410a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\008CALI.D\008CALI.D#
 Date Acquired: Dec 14 2006 11:04 am
 Operator:
 Sample Name: cs4,s4981
 Misc Info:
 Vial Number: 1105
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 14 2006 11:00 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	735267.38 A	10940.00	1.49
9 Be	26318.89 P	127.60	0.48
23 Na	11286800.00 A	76620.00	0.68
26 Mg	1084335.00 A	15380.00	1.42
27 Al	7751801.00 A	100100.00	1.29
39 K	6878376.00 A	33180.00	0.48
44 Ca	216538.80 P	1922.00	0.89
45 Sc	522523.31 P	3965.00	0.76
51 V	89858.41 P	1167.00	1.30
52 Cr	95053.33 P	1390.00	1.46
55 Mn	103498.90 P	1334.00	1.29
57 Fe	224456.70 P	3155.00	1.41
59 Co	103125.50 P	2532.00	2.46
60 Ni	25051.11 P	655.20	2.62
65 Cu	30534.28 P	554.20	1.82
66 Zn	19874.44 P	171.10	0.86
72 Ge	118429.10 P	1603.00	1.35
75 As	12052.93 P	391.20	3.25
82 Se	1036.89 P	37.53	3.62
95 Mo	25613.33 P	307.50	1.20
109 Ag	65557.78 P	1532.00	2.34
111 Cd	13580.38 P	297.80	2.19
115 In	742957.69 P	5289.00	0.71
121 Sb	39033.33 P	902.90	2.31
137 Ba	14381.11 P	447.50	3.11
205 Tl	73850.00 P	1683.00	2.28
208 Pb	202676.70 P	2905.00	1.43
209 Bi	898382.13 P	9491.00	1.06

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	735267.44	1.49	739106.00	99.5	80 - 120	

C:\ICPCHEM\1\DATA\06L1410a.B\008CALI.D\008CALI.D#

45	Sc	522523.31	0.76	529416.63	98.7	80 -	120
72	Ge	118429.12	1.35	119842.22	98.8	80 -	120
115	In	742957.75	0.71	758188.25	98.0	80 -	120
209	Bi	898382.13	1.06	901811.13	99.6	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1410a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\009CALI.D\009CALI.D#
 Date Acquired: Dec 14 2006 11:09 am
 Operator:
 Sample Name: cs5,s4975
 Misc Info:
 Vial Number: 1106
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 14 2006 11:05 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	705935.69 A	2814.00	0.40
9 Be	255710.00 P	1947.00	0.76
23 Na	95061648.00 A	475200.00	0.50
26 Mg	10242410.00 A	62510.00	0.61
27 Al	76104400.00 A	747200.00	0.98
39 K	64541328.00 A	253600.00	0.39
44 Ca	2057707.00 A	11350.00	0.55
45 Sc	511724.41 P	252.90	0.05
51 V	841037.38 A	7753.00	0.92
52 Cr	845983.13 M	19810.00	2.34
55 Mn	1040305.00 A	4060.00	0.39
57 Fe	2107112.00 A	15480.00	0.73
59 Co	1037667.00 A	8874.00	0.86
60 Ni	226768.91 P	789.60	0.35
65 Cu	280942.19 P	3622.00	1.29
66 Zn	146108.91 P	447.40	0.31
72 Ge	113757.60 P	233.90	0.21
75 As	118979.90 P	1342.00	1.13
82 Se	10265.78 P	117.00	1.14
95 Mo	260288.91 P	2920.00	1.12
109 Ag	651342.19 P	1868.00	0.29
111 Cd	132243.80 P	1991.00	1.51
115 In	712890.13 P	6254.00	0.88
121 Sb	388875.50 P	5851.00	1.50
137 Ba	141873.30 P	2205.00	1.55
205 Tl	744495.50 P	9659.00	1.30
208 Pb	2028821.00 A	13030.00	0.64
209 Bi	841657.69 P	7872.00	0.94

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	705935.69	0.40	739106.00	95.5	80 - 120	

C:\ICPCHEM\1\DATA\06L1410a.B\009CALI.D\009CALI.D#

45 Sc	511724.41	0.05	529416.63	96.7	80 -	120
72 Ge	113757.55	0.21	119842.22	94.9	80 -	120
115 In	712890.13	0.88	758188.25	94.0	80 -	120
209 Bi	841657.75	0.94	901811.13	93.3	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1410a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\010CALI.D\010CALI.D#
 Date Acquired: Dec 14 2006 11:15 am
 Operator:
 Sample Name: cs6,s4976
 Misc Info:
 Vial Number: 1107
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 14 2006 11:11 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	673193.38 A	6480.00	0.96
9 Be	475100.00 P	2662.00	0.56
23 Na	175948000.00 A	296600.00	0.17
26 Mg	19256600.00 A	90460.00	0.47
27 Al	143526590.00 A	942000.00	0.66
39 K	124084800.00 A	284500.00	0.23
44 Ca	3925580.00 A	5695.00	0.15
45 Sc	503576.59 P	3537.00	0.70
51 V	1621244.00 A	1869.00	0.12
52 Cr	1604677.00 A	4401.00	0.27
55 Mn	1955333.00 A	1977.00	0.10
57 Fe	3881919.00 A	12280.00	0.32
59 Co	1936672.00 A	19000.00	0.98
60 Ni	423634.41 P	4694.00	1.11
65 Cu	520732.50 P	2498.00	0.48
66 Zn	263632.19 P	2626.00	1.00
72 Ge	108651.10 P	1163.00	1.07
75 As	224854.80 P	1313.00	0.58
82 Se	19066.67 P	195.60	1.03
95 Mo	509218.91 P	2112.00	0.41
109 Ag	1267609.00 A	4775.00	0.38
111 Cd	252177.00 P	2915.00	1.16
115 In	691983.50 P	6194.00	0.90
121 Sb	753438.88 P	5747.00	0.76
137 Ba	272721.09 P	1468.00	0.54
205 Tl	1480971.00 A	12980.00	0.88
208 Pb	3814654.00 A	15530.00	0.41
209 Bi	800187.69 P	9742.00	1.22

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	673193.44	0.96	739106.00	91.1	80 - 120	

C:\ICPCHEM\1\DATA\06L1410a.B\010CALI.D\010CALI.D#

45	Sc	503576.66	0.70	529416.63	95.1	80 -	120
72	Ge	108651.12	1.07	119842.22	90.7	80 -	120
115	In	691983.50	0.90	758188.25	91.3	80 -	120
209	Bi	800187.75	1.22	901811.13	88.7	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1410a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass
ISTD: Pass

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET05
 Seqnum : 56501744012
 Cal : 56501744001
 Standards: S4982

File : 11410012
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 11:25

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	0.8297	0.7315	10000	10170	ug/L	2	10	
Antimony	0.2845	0.2684	100.0	98.54	ug/L	-1	10	
Arsenic	0.5796	0.5151	100.0	99.37	ug/L	-1	10	
Barium	0.1100	0.0948	100.0	95.98	ug/L	-4	10	
Beryllium	0.1850	0.1765	100.0	99.48	ug/L	-1	10	
Cadmium	0.6294	0.5721	100.0	98.53	ug/L	-1	10	
Calcium	0.0280	0.0195	10000	9953	ug/L	0	10	
Chromium	6.5580	3.6481	100.0	98.21	ug/L	-2	10	
Cobalt	4.6786	4.3951	100.0	98.16	ug/L	-2	10	
Copper	2.1997	1.1762	100.0	97.32	ug/L	-3	10	
Iron	0.1114	0.0904	10000	10040	ug/L	0	10	
Lead	1.2285	1.1707	100.0	97.99	ug/L	-2	10	
Magnesium	0.1092	0.0967	10000	10020	ug/L	0	10	
Manganese	5.0991	4.4347	100.0	98.20	ug/L	-2	10	
Molybdenum	1.1589	1.1253	100.0	96.50	ug/L	-4	10	
Nickel	1.6372	0.9632	100.0	98.16	ug/L	-2	10	
Potassium	1.2592	0.6128	10000	9865	ug/L	-1	10	
Selenium	0.0403	0.0437	100.0	99.34	ug/L	-1	10	
Silver	2.9345	2.8686	100.0	98.70	ug/L	-1	10	
Sodium	3.0894	0.8824	10000	9880	ug/L	-1	10	
Thallium	0.9065	0.8230	50.00	44.86	ug/L	-10	10	
Vanadium	3.8131	3.6248	100.0	97.31	ug/L	-3	10	
Zinc	2.8095	0.6149	100.0	99.06	ug/L	-1	10	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	711588	-3.72
Scandium	529417	520783	-1.63
Germanium	119842	114412	-4.53
Indium	758188	733068	-3.31
Bismuth	901811	863080	-4.29

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56501744029
 Cal : 56501744001
 Standards: S4983, S4635

File : 11410029
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 13:00

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.8297	0.7399	10000	10290	ug/L	3	10	
Antimony	0.2845	0.2702	100.0	99.23	ug/L	-1	10	
Arsenic	0.5796	0.5110	100.0	98.58	ug/L	-1	10	
Barium	0.1100	0.0959	100.0	97.16	ug/L	-3	10	
Beryllium	0.1850	0.1784	100.0	100.6	ug/L	1	10	
Cadmium	0.6294	0.5648	100.0	97.27	ug/L	-3	10	
Calcium	0.0280	0.0195	10000	9953	ug/L	0	10	
Chromium	6.5580	3.5524	100.0	95.60	ug/L	-4	10	
Cobalt	4.6786	4.4669	100.0	99.76	ug/L	0	10	
Copper	2.1997	1.1983	100.0	99.16	ug/L	-1	10	
Iron	0.1114	0.0921	10000	10230	ug/L	2	10	
Lead	1.2285	1.1659	100.0	97.59	ug/L	-2	10	
Magnesium	0.1092	0.0984	10000	10200	ug/L	2	10	
Manganese	5.0991	4.4584	100.0	98.73	ug/L	-1	10	
Molybdenum	1.1589	1.1013	100.0	94.44	ug/L	-6	10	
Nickel	1.6372	0.9661	100.0	98.46	ug/L	-2	10	
Potassium	1.2592	0.6093	10000	9808	ug/L	-2	10	
Selenium	0.0403	0.0437	100.0	99.32	ug/L	-1	10	
Silver	2.9345	2.8276	100.0	97.29	ug/L	-3	10	
Sodium	3.0894	0.9156	10000	10260	ug/L	3	10	
Thallium	0.9065	0.8214	50.00	44.77	ug/L	-10	10	
Vanadium	3.8131	3.5784	100.0	96.06	ug/L	-4	10	
Zinc	2.8095	0.6324	100.0	101.9	ug/L	2	10	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	639701	-13.45
Scandium	529417	463074	-12.53
Germanium	119842	104479	-12.82
Indium	758188	659273	-13.05
Bismuth	901811	829843	-7.98

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56501744058 File : 11410058
 Cal : 56501744001 Caldate: 14-DEC-2006
 Standards: S4983, S4635

IDF : 1.0
 Time : 14-DEC-2006 15:42

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.8297	0.7666	10000	10660	ug/L	7	10	
Antimony	0.2845	0.2775	100.0	101.9	ug/L	2	10	
Arsenic	0.5796	0.5304	100.0	102.3	ug/L	2	10	
Barium	0.1100	0.0968	100.0	98.03	ug/L	-2	10	
Beryllium	0.1850	0.1829	100.0	103.1	ug/L	3	10	
Cadmium	0.6294	0.6032	100.0	103.9	ug/L	4	10	
Calcium	0.0280	0.0203	10000	10340	ug/L	3	10	
Chromium	6.5580	3.6402	100.0	97.99	ug/L	-2	10	
Cobalt	4.6786	4.5045	100.0	100.6	ug/L	1	10	
Copper	2.1997	1.2109	100.0	100.2	ug/L	0	10	
Iron	0.1114	0.0922	10000	10240	ug/L	2	10	
Lead	1.2285	1.2027	100.0	100.7	ug/L	1	10	
Magnesium	0.1092	0.1019	10000	10560	ug/L	6	10	
Manganese	5.0991	4.5159	100.0	100.0	ug/L	0	10	
Molybdenum	1.1589	1.1603	100.0	99.50	ug/L	-1	10	
Nickel	1.6372	0.9793	100.0	99.81	ug/L	0	10	
Potassium	1.2592	0.6392	10000	10290	ug/L	3	10	
Selenium	0.0403	0.0455	100.0	103.2	ug/L	3	10	
Silver	2.9345	2.9840	100.0	102.7	ug/L	3	10	
Sodium	3.0894	0.9247	10000	10360	ug/L	4	10	
Thallium	0.9065	0.8548	50.00	46.59	ug/L	-7	10	
Vanadium	3.8131	3.6946	100.0	99.19	ug/L	-1	10	
Zinc	2.8095	0.6283	100.0	101.3	ug/L	1	10	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	618953	-16.26
Scandium	529417	449338	-15.13
Germanium	119842	100094	-16.48
Indium	758188	655982	-13.48
Bismuth	901811	801836	-11.09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56501744075
 Cal : 56501744001
 Standards: S4983, S4635

File : 11410075
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 17:17

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.8297	0.7318	10000	10180	ug/L	2	10	
Antimony	0.2845	0.2632	100.0	96.66	ug/L	-3	10	
Arsenic	0.5796	0.5000	100.0	96.45	ug/L	-4	10	
Barium	0.1100	0.0933	100.0	94.44	ug/L	-6	10	
Beryllium	0.1850	0.1733	100.0	97.69	ug/L	-2	10	
Cadmium	0.6294	0.5590	100.0	96.27	ug/L	-4	10	
Calcium	0.0280	0.0191	10000	9726	ug/L	-3	10	
Chromium	6.5580	3.4462	100.0	92.71	ug/L	-7	10	
Cobalt	4.6786	4.4328	100.0	99.00	ug/L	-1	10	
Copper	2.1997	1.1651	100.0	96.40	ug/L	-4	10	
Iron	0.1114	0.0892	10000	9910	ug/L	-1	10	
Lead	1.2285	1.1592	100.0	97.03	ug/L	-3	10	
Magnesium	0.1092	0.0977	10000	10120	ug/L	1	10	
Manganese	5.0991	4.4033	100.0	97.51	ug/L	-2	10	
Molybdenum	1.1589	1.0807	100.0	92.67	ug/L	-7	10	
Nickel	1.6372	0.9494	100.0	96.75	ug/L	-3	10	
Potassium	1.2592	0.6080	10000	9786	ug/L	-2	10	
Selenium	0.0403	0.0421	100.0	95.72	ug/L	-4	10	
Silver	2.9345	2.7773	100.0	95.56	ug/L	-4	10	
Sodium	3.0894	0.9027	10000	10110	ug/L	1	10	
Thallium	0.9065	0.8184	50.00	44.61	ug/L	-11	10	c- ***
Vanadium	3.8131	3.4858	100.0	93.58	ug/L	-6	10	
Zinc	2.8095	0.6223	100.0	100.3	ug/L	0	10	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	666358	-9.84
Scandium	529417	485169	-8.36
Germanium	119842	108833	-9.19
Indium	758188	696031	-8.20
Bismuth	901811	883136	-2.07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56501744086 File : 11410086
 Cal : 56501744001 Caldate: 14-DEC-2006
 Standards: S4983, S4635

IDF : 1.0
 Time : 14-DEC-2006 18:19

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.8297	0.7315	10000	10170	ug/L	2	10	
Antimony	0.2845	0.2758	100.0	101.3	ug/L	1	10	
Arsenic	0.5796	0.5309	100.0	102.4	ug/L	2	10	
Barium	0.1100	0.0971	100.0	98.33	ug/L	-2	10	
Beryllium	0.1850	0.1787	100.0	100.7	ug/L	1	10	
Cadmium	0.6294	0.5951	100.0	102.5	ug/L	3	10	
Calcium	0.0280	0.0203	10000	10350	ug/L	4	10	
Chromium	6.5580	3.6402	100.0	97.99	ug/L	-2	10	
Cobalt	4.6786	4.6078	100.0	102.9	ug/L	3	10	
Copper	2.1997	1.2171	100.0	100.7	ug/L	1	10	
Iron	0.1114	0.0946	10000	10500	ug/L	5	10	
Lead	1.2285	1.2128	100.0	101.5	ug/L	2	10	
Magnesium	0.1092	0.1018	10000	10550	ug/L	6	10	
Manganese	5.0991	4.6394	100.0	102.7	ug/L	3	10	
Molybdenum	1.1589	1.1628	100.0	99.72	ug/L	0	10	
Nickel	1.6372	0.9939	100.0	101.3	ug/L	1	10	
Potassium	1.2592	0.6403	10000	10310	ug/L	3	10	
Selenium	0.0403	0.0453	100.0	102.9	ug/L	3	10	
Silver	2.9345	2.9685	100.0	102.1	ug/L	2	10	
Sodium	3.0894	0.9224	10000	10340	ug/L	3	10	
Thallium	0.9065	0.8539	50.00	46.55	ug/L	-7	10	
Vanadium	3.8131	3.7486	100.0	100.6	ug/L	1	10	
Zinc	2.8095	0.6363	100.0	102.6	ug/L	3	10	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	656022	-11.24
Scandium	529417	473580	-10.55
Germanium	119842	104619	-12.70
Indium	758188	683901	-9.80
Bismuth	901811	846276	-6.16

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56501744107
 Cal : 56501744001
 Standards: S4983, S4635

File : 11410107
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 20:15

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.8297	0.7352	10000	10230	ug/L	2	10	
Antimony	0.2845	0.2748	100.0	100.9	ug/L	1	10	
Arsenic	0.5796	0.5267	100.0	101.6	ug/L	2	10	
Barium	0.1100	0.0963	100.0	97.56	ug/L	-2	10	
Beryllium	0.1850	0.1805	100.0	101.7	ug/L	2	10	
Cadmium	0.6294	0.6006	100.0	103.5	ug/L	4	10	
Calcium	0.0280	0.0205	10000	10450	ug/L	5	10	
Chromium	6.5580	3.6095	100.0	97.16	ug/L	-3	10	
Cobalt	4.6786	4.6363	100.0	103.5	ug/L	4	10	
Copper	2.1997	1.2244	100.0	101.3	ug/L	1	10	
Iron	0.1114	0.0946	10000	10500	ug/L	5	10	
Lead	1.2285	1.2211	100.0	102.2	ug/L	2	10	
Magnesium	0.1092	0.1025	10000	10620	ug/L	6	10	
Manganese	5.0991	4.5936	100.0	101.7	ug/L	2	10	
Molybdenum	1.1589	1.1508	100.0	98.69	ug/L	-1	10	
Nickel	1.6372	0.9927	100.0	101.2	ug/L	1	10	
Potassium	1.2592	0.6421	10000	10340	ug/L	3	10	
Selenium	0.0403	0.0448	100.0	101.7	ug/L	2	10	
Silver	2.9345	2.9727	100.0	102.3	ug/L	2	10	
Sodium	3.0894	0.9437	10000	10580	ug/L	6	10	
Thallium	0.9065	0.8584	50.00	46.79	ug/L	-6	10	
Vanadium	3.8131	3.6579	100.0	98.20	ug/L	-2	10	
Zinc	2.8095	0.6498	100.0	104.8	ug/L	5	10	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	609315	-17.56
Scandium	529417	436763	-17.50
Germanium	119842	98119	-18.13
Indium	758188	650290	-14.23
Bismuth	901811	815668	-9.55

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56501744124
 Cal : 56501744001
 Standards: S4983, S4635

File : 11410124
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 21:50

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.8297	0.7318	10000	10180	ug/L	2	10	
Antimony	0.2845	0.2737	100.0	100.5	ug/L	1	10	
Arsenic	0.5796	0.5275	100.0	101.8	ug/L	2	10	
Barium	0.1100	0.0956	100.0	96.83	ug/L	-3	10	
Beryllium	0.1850	0.1788	100.0	100.8	ug/L	1	10	
Cadmium	0.6294	0.6063	100.0	104.4	ug/L	4	10	
Calcium	0.0280	0.0204	10000	10380	ug/L	4	10	
Chromium	6.5580	3.5524	100.0	95.60	ug/L	-4	10	
Cobalt	4.6786	4.6664	100.0	104.2	ug/L	4	10	
Copper	2.1997	1.1945	100.0	98.85	ug/L	-1	10	
Iron	0.1114	0.0943	10000	10480	ug/L	5	10	
Lead	1.2285	1.2190	100.0	102.0	ug/L	2	10	
Magnesium	0.1092	0.1019	10000	10560	ug/L	6	10	
Manganese	5.0991	4.6022	100.0	101.9	ug/L	2	10	
Molybdenum	1.1589	1.1482	100.0	98.46	ug/L	-2	10	
Nickel	1.6372	0.9887	100.0	100.8	ug/L	1	10	
Potassium	1.2592	0.6471	10000	10420	ug/L	4	10	
Selenium	0.0403	0.0457	100.0	103.7	ug/L	4	10	
Silver	2.9345	2.9842	100.0	102.7	ug/L	3	10	
Sodium	3.0894	0.9433	10000	10580	ug/L	6	10	
Thallium	0.9065	0.8492	50.00	46.29	ug/L	-7	10	
Vanadium	3.8131	3.7439	100.0	100.5	ug/L	1	10	
Zinc	2.8095	0.6455	100.0	104.1	ug/L	4	10	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	590489	-20.11
Scandium	529417	420941	-20.49
Germanium	119842	94163	-21.43
Indium	758188	630459	-16.85
Bismuth	901811	795613	-11.78

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56501744146
 Cal : 56501744001
 Standards: S4983, S4635

File : 11410146
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 23:55

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.8297	0.7493	10000	10420	ug/L	4	10	
Antimony	0.2845	0.2780	100.0	102.1	ug/L	2	10	
Arsenic	0.5796	0.5299	100.0	102.2	ug/L	2	10	
Barium	0.1100	0.0968	100.0	98.02	ug/L	-2	10	
Beryllium	0.1850	0.1792	100.0	101.0	ug/L	1	10	
Cadmium	0.6294	0.6274	100.0	108.1	ug/L	8	10	
Calcium	0.0280	0.0208	10000	10610	ug/L	6	10	
Chromium	6.5580	3.6195	100.0	97.43	ug/L	-3	10	
Cobalt	4.6786	4.3164	100.0	96.40	ug/L	-4	10	
Copper	2.1997	1.2141	100.0	100.5	ug/L	1	10	
Iron	0.1114	0.0949	10000	10540	ug/L	5	10	
Lead	1.2285	1.2118	100.0	101.4	ug/L	1	10	
Magnesium	0.1092	0.1036	10000	10740	ug/L	7	10	
Manganese	5.0991	4.5290	100.0	100.3	ug/L	0	10	
Molybdenum	1.1589	1.1758	100.0	100.8	ug/L	1	10	
Nickel	1.6372	0.9838	100.0	100.3	ug/L	0	10	
Potassium	1.2592	0.6600	10000	10630	ug/L	6	10	
Selenium	0.0403	0.0457	100.0	103.8	ug/L	4	10	
Silver	2.9345	3.0924	100.0	106.4	ug/L	6	10	
Sodium	3.0894	0.9426	10000	10570	ug/L	6	10	
Thallium	0.9065	0.8574	50.00	46.73	ug/L	-7	10	
Vanadium	3.8131	3.8489	100.0	103.3	ug/L	3	10	
Zinc	2.8095	0.6457	100.0	104.2	ug/L	4	10	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	569156	-22.99
Scandium	529417	397684	-24.88
Germanium	119842	88443	-26.20
Indium	758188	607113	-19.93
Bismuth	901811	756180	-16.15

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

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Inst      : MET05                                IDF      : 1.0
Seqnum    : 56501744163                          File     : 11410163
Cal       : 56501744001                          Time     : 15-DEC-2006 01:30
Standards: S4983, S4635

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Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.8297	0.7424	10000	10330	ug/L	3	10	
Antimony	0.2845	0.2747	100.0	100.9	ug/L	1	10	
Arsenic	0.5796	0.5264	100.0	101.5	ug/L	2	10	
Barium	0.1100	0.0957	100.0	96.89	ug/L	-3	10	
Beryllium	0.1850	0.1781	100.0	100.4	ug/L	0	10	
Cadmium	0.6294	0.6146	100.0	105.9	ug/L	6	10	
Calcium	0.0280	0.0205	10000	10440	ug/L	4	10	
Chromium	6.5580	3.5652	100.0	95.95	ug/L	-4	10	
Cobalt	4.6786	4.3173	100.0	96.42	ug/L	-4	10	
Copper	2.1997	1.2120	100.0	100.3	ug/L	0	10	
Iron	0.1114	0.0951	10000	10560	ug/L	6	10	
Lead	1.2285	1.2154	100.0	101.7	ug/L	2	10	
Magnesium	0.1092	0.1031	10000	10680	ug/L	7	10	
Manganese	5.0991	4.5558	100.0	100.9	ug/L	1	10	
Molybdenum	1.1589	1.1513	100.0	98.73	ug/L	-1	10	
Nickel	1.6372	0.9836	100.0	100.3	ug/L	0	10	
Potassium	1.2592	0.6466	10000	10410	ug/L	4	10	
Selenium	0.0403	0.0450	100.0	102.2	ug/L	2	10	
Silver	2.9345	2.9980	100.0	103.2	ug/L	3	10	
Sodium	3.0894	0.9541	10000	10700	ug/L	7	10	
Thallium	0.9065	0.8471	50.00	46.17	ug/L	-8	10	
Vanadium	3.8131	3.8182	100.0	102.5	ug/L	3	10	
Zinc	2.8095	0.6476	100.0	104.5	ug/L	5	10	

ISTD (ICALBLK l1410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	573724	-22.38
Scandium	529417	401176	-24.22
Germanium	119842	89418	-25.39
Indium	758188	604264	-20.30
Bismuth	901811	769319	-14.69

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
Seqnum : 56501744171
Cal : 56501744001
Standards: S4983, S4635

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IDF      : 1.0
Time     : 15-DEC-2006 02:15
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Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.8297	0.7428	10000	10330	ug/L	3	10	
Antimony	0.2845	0.2770	100.0	101.7	ug/L	2	10	
Arsenic	0.5796	0.5324	100.0	102.7	ug/L	3	10	
Barium	0.1100	0.0954	100.0	96.64	ug/L	-3	10	
Beryllium	0.1850	0.1776	100.0	100.1	ug/L	0	10	
Cadmium	0.6294	0.6380	100.0	109.9	ug/L	10	10	
Calcium	0.0280	0.0208	10000	10600	ug/L	6	10	
Chromium	6.5580	3.6311	100.0	97.74	ug/L	-2	10	
Cobalt	4.6786	4.3358	100.0	96.84	ug/L	-3	10	
Copper	2.1997	1.2075	100.0	99.93	ug/L	0	10	
Iron	0.1114	0.0951	10000	10560	ug/L	6	10	
Lead	1.2285	1.1776	100.0	98.57	ug/L	-1	10	
Magnesium	0.1092	0.1029	10000	10660	ug/L	7	10	
Manganese	5.0991	4.4044	100.0	97.53	ug/L	-2	10	
Molybdenum	1.1589	1.1836	100.0	101.5	ug/L	2	10	
Nickel	1.6372	0.9841	100.0	100.3	ug/L	0	10	
Potassium	1.2592	0.6544	10000	10540	ug/L	5	10	
Selenium	0.0403	0.0464	100.0	105.4	ug/L	5	10	
Silver	2.9345	3.1033	100.0	106.8	ug/L	7	10	
Sodium	3.0894	0.9264	10000	10380	ug/L	4	10	
Thallium	0.9065	0.8464	50.00	46.14	ug/L	-8	10	
Vanadium	3.8131	3.8545	100.0	103.5	ug/L	4	10	
Zinc	2.8095	0.6447	100.0	104.0	ug/L	4	10	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	544557	-26.32
Scandium	529417	380127	-28.20
Germanium	119842	83429	-30.38
Indium	758188	584035	-22.97
Bismuth	901811	720631	-20.09

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56501744014
 Cal : 56501744001

File : 11410014
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 11:36

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[7.423]	25.00	2.752	ug/L	!ib
Antimony	[0.1363]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.3444]	0.5000	0.1120	ug/L	!ib
Barium	[0.05971]	0.2500	0.03444	ug/L	!ib
Beryllium	[0.06614]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	[0.3517]	0.5000	0.01315	ug/L	!ib
Cobalt	[0.06440]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	[6.987]	25.00	3.223	ug/L	!ib
Lead	[0.06012]	0.2500	0.002523	ug/L	!ib
Magnesium	[7.093]	25.00	1.907	ug/L	!ib
Manganese	[0.05107]	0.2500	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	[0.04355]	0.2500	0.01875	ug/L	!ib
Potassium	ND	25.00	3.213	ug/L	
Selenium	ND	1.000	0.6002	ug/L	
Silver	[0.05596]	0.2500	0.005272	ug/L	!ib
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.3832]	0.5000	0.06366	ug/L	!ib
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	760785	2.93
Scandium	529417	538000	1.62
Germanium	119842	119331	-0.43
Indium	758188	765110	0.91
Bismuth	901811	912624	1.20

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56501744033 File : 11410033
 Cal : 56501744001 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 13:22

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[4.743]	25.00	2.752	ug/L	!ib
Antimony	[0.006279]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.2005]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	ND	0.2500	0.002016	ug/L	
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	[6.814]	25.00	6.782	ug/L	!ib
Chromium	ND	0.5000	0.01315	ug/L	
Cobalt	[0.008891]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	[7.652]	25.00	3.223	ug/L	!ib
Lead	[0.04719]	0.2500	0.002523	ug/L	!ib
Magnesium	[4.771]	25.00	1.907	ug/L	!ib
Manganese	ND	0.2500	0.03082	ug/L	
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	ND	25.00	3.213	ug/L	
Selenium	ND	1.000	0.6002	ug/L	
Silver	ND	0.2500	0.005272	ug/L	
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.5000	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	710787	-3.83
Scandium	529417	502160	-5.15
Germanium	119842	113800	-5.04
Indium	758188	737562	-2.72
Bismuth	901811	917724	1.76

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56501744060
 Cal : 56501744001

File : 11410060
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 15:53

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[4.936]	25.00	2.752	ug/L	!ib
Antimony	[0.05490]	0.2500	0.005910	ug/L	!ib
Arsenic	ND	0.5000	0.1120	ug/L	
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.03543]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	[0.2143]	0.5000	0.01315	ug/L	!ib
Cobalt	[0.03813]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	[5.108]	25.00	3.223	ug/L	!ib
Lead	[0.03492]	0.2500	0.002523	ug/L	!ib
Magnesium	[4.972]	25.00	1.907	ug/L	!ib
Manganese	[0.03339]	0.2500	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	ND	25.00	3.213	ug/L	
Selenium	ND	1.000	0.6002	ug/L	
Silver	[0.03444]	0.2500	0.005272	ug/L	!ib
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.1003]	0.5000	0.06366	ug/L	!ib
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	693681	-6.15
Scandium	529417	488398	-7.75
Germanium	119842	108716	-9.28
Indium	758188	717096	-5.42
Bismuth	901811	881470	-2.26

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56501744078
 Cal : 56501744001

File : 11410078
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 17:34

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	25.00	2.752	ug/L	
Antimony	[0.01143]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.2346]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.004656]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.5000	0.01315	ug/L	
Cobalt	[0.01014]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	ND	25.00	3.223	ug/L	
Lead	[0.05049]	0.2500	0.002523	ug/L	!ib
Magnesium	ND	25.00	1.907	ug/L	
Manganese	ND	0.2500	0.03082	ug/L	
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	ND	25.00	3.213	ug/L	
Selenium	ND	1.000	0.6002	ug/L	
Silver	ND	0.2500	0.005272	ug/L	
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.5000	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	694076	-6.09
Scandium	529417	484300	-8.52
Germanium	119842	110242	-8.01
Indium	758188	712188	-6.07
Bismuth	901811	897887	-0.44

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56501744088
 Cal : 56501744001

File : 11410088
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 18:30

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[6.153]	25.00	2.752	ug/L	!ib
Antimony	[0.07345]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.2428]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.04132]	0.2500	0.002016	ug/L	!ib
Cadmium	[0.08623]	0.2500	0.05722	ug/L	!ib
Calcium	ND	25.00	6.782	ug/L	
Chromium	[0.07947]	0.5000	0.01315	ug/L	!ib
Cobalt	[0.05237]	0.2500	0.003116	ug/L	!ib
Copper	[0.02443]	0.2500	0.02110	ug/L	!ib
Iron	[4.785]	25.00	3.223	ug/L	!ib
Lead	[0.09071]	0.2500	0.002523	ug/L	!ib
Magnesium	[6.691]	25.00	1.907	ug/L	!ib
Manganese	[0.04755]	0.2500	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	ND	25.00	3.213	ug/L	
Selenium	ND	1.000	0.6002	ug/L	
Silver	[0.03599]	0.2500	0.005272	ug/L	!ib
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.5000	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	709742	-3.97
Scandium	529417	498153	-5.91
Germanium	119842	113590	-5.22
Indium	758188	727823	-4.00
Bismuth	901811	969919	7.55

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56501744109
 Cal : 56501744001

File : 11410109
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 20:26

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[7.392]	25.00	2.752	ug/L	!ib
Antimony	[0.09076]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.1997]	0.5000	0.1120	ug/L	!ib
Barium	[0.03875]	0.2500	0.03444	ug/L	!ib
Beryllium	[0.04028]	0.2500	0.002016	ug/L	!ib
Cadmium	[0.05926]	0.2500	0.05722	ug/L	!ib
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.5000	0.01315	ug/L	
Cobalt	[0.05384]	0.2500	0.003116	ug/L	!ib
Copper	[0.02572]	0.2500	0.02110	ug/L	!ib
Iron	[7.388]	25.00	3.223	ug/L	!ib
Lead	[0.04641]	0.2500	0.002523	ug/L	!ib
Magnesium	[12.19]	25.00	1.907	ug/L	!ib
Manganese	[0.1083]	0.2500	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	[0.02156]	0.2500	0.01875	ug/L	!ib
Potassium	ND	25.00	3.213	ug/L	
Selenium	ND	1.000	0.6002	ug/L	
Silver	[0.03876]	0.2500	0.005272	ug/L	!ib
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.2765]	0.5000	0.06366	ug/L	!ib
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	617799	-16.41
Scandium	529417	433413	-18.13
Germanium	119842	97372	-18.75
Indium	758188	666582	-12.08
Bismuth	901811	835820	-7.32

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05 IDF : 1.0
 Seqnum : 56501744126 File : 11410126 Time : 14-DEC-2006 22:01
 Cal : 56501744001 Caldate: 14-DEC-2006

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[6.298]	25.00	2.752	ug/L	!ib
Antimony	[0.08438]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.1560]	0.5000	0.1120	ug/L	!ib
Barium	[0.03463]	0.2500	0.03444	ug/L	!ib
Beryllium	[0.04215]	0.2500	0.002016	ug/L	!ib
Cadmium	[0.07770]	0.2500	0.05722	ug/L	!ib
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.5000	0.01315	ug/L	
Cobalt	[0.05104]	0.2500	0.003116	ug/L	!ib
Copper	[0.02630]	0.2500	0.02110	ug/L	!ib
Iron	[5.885]	25.00	3.223	ug/L	!ib
Lead	[0.04572]	0.2500	0.002523	ug/L	!ib
Magnesium	[12.37]	25.00	1.907	ug/L	!ib
Manganese	[0.1249]	0.2500	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	ND	25.00	3.213	ug/L	
Selenium	[0.6497]	1.000	0.6002	ug/L	!ib
Silver	[0.04897]	0.2500	0.005272	ug/L	!ib
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.5000	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	582705	-21.16
Scandium	529417	406942	-23.13
Germanium	119842	91432	-23.71
Indium	758188	636473	-16.05
Bismuth	901811	792047	-12.17

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56501744148
 Cal : 56501744001

File : 11410148
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 15-DEC-2006 00:06

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[4.708]	25.00	2.752	ug/L	!ib
Antimony	[0.08574]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.4793]	0.5000	0.1120	ug/L	!ib
Barium	[0.03540]	0.2500	0.03444	ug/L	!ib
Beryllium	[0.03793]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	[0.03479]	0.5000	0.01315	ug/L	!ib
Cobalt	[0.03474]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	ND	25.00	3.223	ug/L	
Lead	[0.03989]	0.2500	0.002523	ug/L	!ib
Magnesium	[6.023]	25.00	1.907	ug/L	!ib
Manganese	[0.04088]	0.2500	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	[0.04748]	0.2500	0.01875	ug/L	!ib
Potassium	ND	25.00	3.213	ug/L	
Selenium	ND	1.000	0.6002	ug/L	
Silver	[0.03235]	0.2500	0.005272	ug/L	!ib
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.1803]	0.5000	0.06366	ug/L	!ib
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	582032	-21.25
Scandium	529417	397367	-24.94
Germanium	119842	89796	-25.07
Indium	758188	622339	-17.92
Bismuth	901811	782570	-13.22

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56501744165
 Cal : 56501744001

File : 11410165
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 15-DEC-2006 01:42

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[7.327]	25.00	2.752	ug/L	!ib
Antimony	[0.09109]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.1690]	0.5000	0.1120	ug/L	!ib
Barium	[0.03738]	0.2500	0.03444	ug/L	!ib
Beryllium	[0.05170]	0.2500	0.002016	ug/L	!ib
Cadmium	[0.07969]	0.2500	0.05722	ug/L	!ib
Calcium	ND	25.00	6.782	ug/L	
Chromium	[0.02920]	0.5000	0.01315	ug/L	!ib
Cobalt	[0.05706]	0.2500	0.003116	ug/L	!ib
Copper	[0.03636]	0.2500	0.02110	ug/L	!ib
Iron	[5.296]	25.00	3.223	ug/L	!ib
Lead	[0.05752]	0.2500	0.002523	ug/L	!ib
Magnesium	[8.755]	25.00	1.907	ug/L	!ib
Manganese	[0.05664]	0.2500	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	[0.02076]	0.2500	0.01875	ug/L	!ib
Potassium	ND	25.00	3.213	ug/L	
Selenium	[0.6112]	1.000	0.6002	ug/L	!ib
Silver	[0.04173]	0.2500	0.005272	ug/L	!ib
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.5000	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	577982	-21.80
Scandium	529417	385526	-27.18
Germanium	119842	88084	-26.50
Indium	758188	609554	-19.60
Bismuth	901811	769438	-14.68

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56501744174
 Cal : 56501744001

File : 11410174
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 15-DEC-2006 02:32

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	25.00	2.752	ug/L	
Antimony	[0.03126]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.2370]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.005599]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	[0.03375]	0.5000	0.01315	ug/L	!ib
Cobalt	[0.01580]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	ND	25.00	3.223	ug/L	
Lead	[0.01511]	0.2500	0.002523	ug/L	!ib
Magnesium	[3.123]	25.00	1.907	ug/L	!ib
Manganese	ND	0.2500	0.03082	ug/L	
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	ND	25.00	3.213	ug/L	
Selenium	ND	1.000	0.6002	ug/L	
Silver	ND	0.2500	0.005272	ug/L	
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.07955]	0.5000	0.06366	ug/L	!ib
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	583350	-21.07
Scandium	529417	389118	-26.50
Germanium	119842	87467	-27.01
Indium	758188	612337	-19.24
Bismuth	901811	769060	-14.72

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56501744017
 Cal : 56501744001
 Standards: S4984, S4635

File : 11410017
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 11:53

Analyte	Quant	RL	Units	Flags
Antimony	2.420	0.2500	ug/L	
Arsenic	[0]	0.5000	ug/L	
Barium	1.451	0.2500	ug/L	
Beryllium	[0.01179]	0.2500	ug/L	
Cadmium	[0.1442]	0.2500	ug/L	
Chromium	3.495	0.5000	ug/L	
Cobalt	2.796	0.2500	ug/L	
Copper	2.458	0.2500	ug/L	
Lead	1.502	0.2500	ug/L	
Manganese	1.444	0.2500	ug/L	
Nickel	5.315	0.2500	ug/L	
Selenium	[0]	1.000	ug/L	
Silver	[0.1776]	0.2500	ug/L	
Thallium	[0.05492]	0.1250	ug/L	
Vanadium	[0.2756]	0.5000	ug/L	
Zinc	3.724	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	107100	ug/L	107
Calcium	300000	335400	ug/L	112
Iron	250000	250100	ug/L	100
Magnesium	100000	106500	ug/L	107
Molybdenum	2000	2092	ug/L	105
Potassium	100000	109400	ug/L	109
Sodium	250000	250400	ug/L	100

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	588660	-20.36
Scandium	529417	462832	-12.58
Germanium	119842	103404	-13.72
Indium	758188	623223	-17.80
Bismuth	901811	640011	-29.03

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Segnum : 56501744018
 Cal : 56501744001
 Standards: S4985, S4635

File : 11410018
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 11:59

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	98180	ug/L	-2		
Arsenic	100.0	96.26	ug/L	-4	20	
Cadmium	100.0	90.40	ug/L	-10	20	
Calcium	300000	310100	ug/L	3		
Chromium	200.0	205.7	ug/L	3	20	
Cobalt	200.0	191.4	ug/L	-4	20	
Copper	200.0	177.4	ug/L	-11	20	
Iron	250000	231600	ug/L	-7		
Magnesium	100000	96620	ug/L	-3		
Manganese	200.0	199.3	ug/L	0	20	
Molybdenum	2000	1974	ug/L	-1		
Nickel	200.0	183.0	ug/L	-9	20	
Potassium	100000	101000	ug/L	1		
Selenium	100.0	83.07	ug/L	-17	20	
Silver	50.00	44.67	ug/L	-11	20	
Sodium	250000	223400	ug/L	-11		
Vanadium	200.0	209.5	ug/L	5	20	
Zinc	100.0	84.84	ug/L	-15	20	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Scandium	529417	467368	-11.72
Germanium	119842	102866	-14.17

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56501744034 File : 11410034
 Cal : 56501744001 Caldate: 14-DEC-2006
 Standards: S4984, S4635

IDF : 1.0
 Time : 14-DEC-2006 13:28

Analyte	Quant	RL	Units	Flags
Antimony	2.336	0.2500	ug/L	
Arsenic	[0]	0.5000	ug/L	
Barium	1.379	0.2500	ug/L	
Beryllium	[0.008427]	0.2500	ug/L	
Cadmium	[0.1298]	0.2500	ug/L	
Chromium	3.268	0.5000	ug/L	
Cobalt	2.720	0.2500	ug/L	
Copper	2.366	0.2500	ug/L	
Lead	1.465	0.2500	ug/L	
Manganese	1.400	0.2500	ug/L	
Nickel	5.081	0.2500	ug/L	
Selenium	[0]	1.000	ug/L	
Silver	[0.1606]	0.2500	ug/L	
Thallium	[0.04368]	0.1250	ug/L	
Vanadium	[0.2795]	0.5000	ug/L	
Zinc	3.505	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	103600	ug/L	104
Calcium	300000	321700	ug/L	107
Iron	250000	244300	ug/L	98
Magnesium	100000	102700	ug/L	103
Molybdenum	2000	2043	ug/L	102
Potassium	100000	105600	ug/L	106
Sodium	250000	242000	ug/L	97

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	580974	-21.40
Scandium	529417	466222	-11.94
Germanium	119842	103041	-14.02
Indium	758188	632944	-16.52
Bismuth	901811	662727	-26.51

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56501744035
 Cal : 56501744001
 Standards: S4985, S4635

File : 11410035
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 13:34

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	94430	ug/L	-6		
Arsenic	100.0	94.08	ug/L	-6	20	
Cadmium	100.0	88.79	ug/L	-11	20	
Calcium	300000	299700	ug/L	0		
Chromium	200.0	201.6	ug/L	1	20	
Cobalt	200.0	187.9	ug/L	-6	20	
Copper	200.0	173.0	ug/L	-14	20	
Iron	250000	229000	ug/L	-8		
Magnesium	100000	93070	ug/L	-7		
Manganese	200.0	195.5	ug/L	-2	20	
Molybdenum	2000	1971	ug/L	-1		
Nickel	200.0	179.5	ug/L	-10	20	
Potassium	100000	98190	ug/L	-2		
Selenium	100.0	82.13	ug/L	-18	20	
Silver	50.00	44.30	ug/L	-11	20	
Sodium	250000	216900	ug/L	-13		
Vanadium	200.0	205.1	ug/L	3	20	
Zinc	100.0	82.20	ug/L	-18	20	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Scandium	529417	467067	-11.78
Germanium	119842	100756	-15.93

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56501744090
 Cal : 56501744001
 Standards: S4984, S4635

File : 11410090
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 18:41

Analyte	Quant	RL	Units	Flags
Antimony	2.312	0.2500	ug/L	
Arsenic	[0.1553]	0.5000	ug/L	
Barium	1.369	0.2500	ug/L	
Beryllium	[0.01073]	0.2500	ug/L	
Cadmium	[0.1632]	0.2500	ug/L	
Chromium	3.309	0.5000	ug/L	
Cobalt	2.702	0.2500	ug/L	
Copper	2.340	0.2500	ug/L	
Lead	1.483	0.2500	ug/L	
Manganese	1.381	0.2500	ug/L	
Nickel	5.082	0.2500	ug/L	
Selenium	[0]	1.000	ug/L	
Silver	[0.1574]	0.2500	ug/L	
Thallium	[0.04155]	0.1250	ug/L	
Vanadium	[0.2934]	0.5000	ug/L	
Zinc	3.588	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	105900	ug/L	106
Calcium	300000	328000	ug/L	109
Iron	250000	248400	ug/L	99
Magnesium	100000	105300	ug/L	105
Molybdenum	2000	2071	ug/L	104
Potassium	100000	107500	ug/L	108
Sodium	250000	250800	ug/L	100

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	554975	-24.91
Scandium	529417	436343	-17.58
Germanium	119842	97215	-18.88
Indium	758188	601658	-20.65
Bismuth	901811	646522	-28.31

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Segnum : 56501744091
 Cal : 56501744001
 Standards: S4985, S4635

File : 11410091
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 18:46

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	98280	ug/L	-2		
Arsenic	100.0	94.81	ug/L	-5	20	
Cadmium	100.0	92.58	ug/L	-7	20	
Calcium	300000	310300	ug/L	3		
Chromium	200.0	207.1	ug/L	4	20	
Cobalt	200.0	194.6	ug/L	-3	20	
Copper	200.0	174.8	ug/L	-13	20	
Iron	250000	237500	ug/L	-5		
Magnesium	100000	96600	ug/L	-3		
Manganese	200.0	202.6	ug/L	1	20	
Molybdenum	2000	2051	ug/L	3		
Nickel	200.0	182.2	ug/L	-9	20	
Potassium	100000	102500	ug/L	3		
Selenium	100.0	83.65	ug/L	-16	20	
Silver	50.00	45.53	ug/L	-9	20	
Sodium	250000	227600	ug/L	-9		
Vanadium	200.0	212.5	ug/L	6	20	
Zinc	100.0	82.77	ug/L	-17	20	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Scandium	529417	426654	-19.41
Germanium	119842	92305	-22.98

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Segnum : 56501744175 File : 11410175
 Cal : 56501744001 Caldate: 14-DEC-2006
 Standards: S4984, S4635

IDF : 1.0
 Time : 15-DEC-2006 02:38

Analyte	Quant	RL	Units	Flags
Antimony	2.391	0.2500	ug/L	
Arsenic	[0]	0.5000	ug/L	
Barium	1.387	0.2500	ug/L	
Beryllium	[0.004444]	0.2500	ug/L	
Cadmium	[0.1030]	0.2500	ug/L	
Chromium	3.329	0.5000	ug/L	
Cobalt	2.804	0.2500	ug/L	
Copper	2.430	0.2500	ug/L	
Lead	1.495	0.2500	ug/L	
Manganese	1.418	0.2500	ug/L	
Nickel	5.190	0.2500	ug/L	
Selenium	[0]	1.000	ug/L	
Silver	[0.1685]	0.2500	ug/L	
Thallium	[0.03074]	0.1250	ug/L	
Vanadium	[0.2111]	0.5000	ug/L	
Zinc	3.661	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	111200	ug/L	111
Calcium	300000	343800	ug/L	115
Iron	250000	253100	ug/L	101
Magnesium	100000	108800	ug/L	109
Molybdenum	2000	2237	ug/L	112
Potassium	100000	112200	ug/L	112
Sodium	250000	257400	ug/L	103

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	467189	-36.79
Scandium	529417	357359	-32.50
Germanium	119842	79760	-33.45
Indium	758188	523485	-30.96
Bismuth	901811	568040	-37.01

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56501744176
 Cal : 56501744001
 Standards: S4985, S4635

File : 11410176
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 15-DEC-2006 02:43

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	99380	ug/L	-1		
Arsenic	100.0	93.07	ug/L	-7	20	
Cadmium	100.0	95.07	ug/L	-5	20	
Calcium	300000	314200	ug/L	5		
Chromium	200.0	207.5	ug/L	4	20	
Cobalt	200.0	192.7	ug/L	-4	20	
Copper	200.0	171.9	ug/L	-14	20	
Iron	250000	235800	ug/L	-6		
Magnesium	100000	96450	ug/L	-4		
Manganese	200.0	202.7	ug/L	1	20	
Molybdenum	2000	2093	ug/L	5		
Nickel	200.0	179.0	ug/L	-11	20	
Potassium	100000	102900	ug/L	3		
Selenium	100.0	81.50	ug/L	-19	20	
Silver	50.00	46.17	ug/L	-8	20	
Sodium	250000	229800	ug/L	-8		
Vanadium	200.0	214.0	ug/L	7	20	
Zinc	100.0	80.87	ug/L	-19	20	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Scandium	529417	375499	-29.07
Germanium	119842	82331	-31.30

INTERNAL STANDARD SUMMARY Curtis & Tompkins Laboratories

Sequence Date: 14-DEC-2006
Sequence: 56501744
Instrument ID: MET05

(11410)

ICALBLK Filename: 11410004
Date Analyzed: 14-DEC-2006
Time Analyzed: 10:41

IS1 (LI READING	IS2 (SC READING	IS3 (GE READING	IS4 (IN READING	IS5 (BI READING	IS6 (TB READING
ICALBLK STD 739106	529417	119842	758188	901811	1227860
LOWER LIMIT 221732	158825	35953	227456	270543	368358
UPPER LIMIT 886927	635300	143811	909826	1082173	1473432

TYPE	SAMPLE	#	IS1 (LI READING	IS2 (SC READING	IS3 (GE READING	IS4 (IN READING	IS5 (BI READING	IS6 (TB READING
ICB		014	760785	538000	119331	765110	912624	1235705
ICSA		017	588660	462832	103404	623223	640011	1025722
BLANK	QC367981	022	560416	398147	94842	570719	706182	875004
SAMPLE	191351-008	023	589467	423113	97799	609924	764612	991226
SAMPLE	191351-006	024	677372	554200	118372	721189	737564	1202708
CCV		029	639701	463074	104479	659273	829843	1106073
CCB		033	710787	502160	113800	737562	917724	1175519
ICSA		034	580974	466222	103041	632944	662727	1058629
BLANK	QC368135	039	567501	400311	89855	605457	736036	893527
BS	QC368136	040	588362	431634	95684	632097	767076	1011286
BSD	QC368137	041	586134	426268	93466	611563	743233	972497
SER	QC368140	043	644610	468968	105566	686731	855874	1135233
MS	QC368138	044	558544	406754	89301	569981	682702	904722
MSD	QC368139	045	562038	415803	89805	583897	695706	926120
PDS	QC368141	046	553847	404034	87110	567582	672543	897853
MSS	191314-003	050	649452	472606	108094	704387	895172	1155797
CCV		058	618953	449338	100094	655982	801836	1054895
CCB		060	693681	488398	108716	717096	881470	1151266
SAMPLE	191358-001	062	699875	488946	109715	717087	878017	1149936
SAMPLE	191358-002	063	708354	494800	111300	718553	873329	1146935
SAMPLE	191358-003	064	719961	500208	111250	731372	884359	1154608
SAMPLE	191358-004	065	726250	503430	111151	732866	886281	1161686
SAMPLE	191358-005	066	698762	482261	108129	696780	878322	1129679
SAMPLE	191358-006	067	636097	423916	94437	614493	767112	978579
SAMPLE	191358-007	068	707589	488449	109304	714913	884959	1145963
SAMPLE	191358-009	069	676856	456313	103269	667021	835756	1079689
SAMPLE	191358-011	070	658371	459122	102552	671123	839882	1091259
SAMPLE	191358-013	071	645916	467937	102449	667898	844802	1098112

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 14-DEC-2006
Sequence: 56501744
Instrument ID: MET05

(11410)

ICALBLK Filename: 11410004
Date Analyzed: 14-DEC-2006
Time Analyzed: 10:41

TYPE	SAMPLE	#							
CCV		075	666358	485169	108833	696031	883136	1164154	
CCB		078	694076	484300	110242	712188	897887	1163618	
SER	QC368140	079	671974	465281	107092	685146	873592	1117868	
MS	QC368138	080	636987	453691	103204	667781	838670	1087516	
MSD	QC368139	081	637371	452368	102211	667621	837642	1093329	
PDS	QC368141	082	623953	453740	101999	655544	813082	1073291	
CCV		086	656022	473580	104619	683901	846276	1121003	
CCB		088	709742	498153	113590	727823	969919	1197689	
ICSA		090	554975	436343	97215	601658	646522	1013362	
BLANK	QC368128	095	540053	375879	86590	557219	699677	848522	
BS	QC368129	096	557918	394421	88138	574157	718477	932736	
BSD	QC368130	097	576166	415072	92190	601336	741542	984717	
MSS	191314-003	099	616378	441276	97559	628284	745469	1026053	
SER	QC368133	100	645378	444230	100288	662612	815950	1059214	
MS	QC368131	101	553556	393768	85079	566601	673303	872134	
MSD	QC368132	102	538091	382101	82316	551846	653474	825590	
MS	QC368217	103	551701	403464	85711	581992	680914	918834	
CCV		107	609315	436763	98119	650290	815668	1059464	
CCB		109	617799	433413	97372	666582	835820	1051741	
MSD	QC368218	111	538887	388543	82637	558854	664413	886599	
PDS	QC368134	112	545626	398039	83820	574699	676181	877240	
SAMPLE	191314-001	113	552048	380498	81965	556520	654901	818244	
SAMPLE	191314-004	114	602878	414210	88783	587173	680202	940114	
SAMPLE	191314-005	115	576302	402469	86051	568560	678263	913636	
SAMPLE	191314-006	116	671780	467993	98008	647175	724984	1060316	
SAMPLE	191314-009	117	536236	396896	80376	562678	624656	818700	
SAMPLE	191314-010	118	578321	416199	86491	610734	672694	862603	
MSS	191314-011	119	517206	365884	78354	527233	622153	781307	
SAMPLE	191314-012	120	502573	360118	75213	522754	599333	768282	
CCV		124	590489	420941	94163	630459	795613	1013761	
CCB		126	582705	406942	91432	636473	792047	985147	
SAMPLE	191314-014	130	525604	369542	77989	539072	631213	791068	
SAMPLE	191314-015	131	543651	388333	82535	555926	652692	835229	
SAMPLE	191314-016	132	575949	416664	87451	599056	690589	935377	

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 14-DEC-2006
Sequence: 56501744
Instrument ID: MET05

(11410)

ICALBLK Filename: 11410004
Date Analyzed: 14-DEC-2006
Time Analyzed: 10:41

TYPE	SAMPLE	#							
MS	191314-003	136	631118	427596	96065	653632	816844	1027064	
SER	QC368133	137	604197	406838	91116	627441	783242	977194	
MS	QC368131	138	584625	401930	90062	618502	765022	959398	
MSD	QC368132	139	579681	398040	88655	616197	757369	934639	
PDS	QC368134	140	552347	390994	86059	594908	731831	893387	
MSS	191314-011	141	565337	391956	87100	608928	746758	892236	
MS	QC368217	142	575942	406690	88184	636008	769307	946915	
CCV		146	569156	397684	88443	607113	756180	956018	
CCB		148	582032	397367	89796	622339	782570	965958	
MSD	QC368218	150	574468	392424	87262	612041	750159	919159	
SAMPLE	191314-001	151	574792	395467	89036	614779	758987	925124	
SAMPLE	191314-004	152	610023	413134	92750	633134	772819	979468	
SAMPLE	191314-005	153	630296	425478	94069	650202	793338	1015738	
SAMPLE	191314-006	154	651794	443977	96423	670474	796771	1032945	
SAMPLE	191314-009	155	602454	402771	88638	620018	759873	925468	
SAMPLE	191314-010	156	593847	407349	90469	631900	768572	981913	
SAMPLE	191314-012	157	586271	400188	88024	618148	757018	963582	
SAMPLE	191314-014	158	596766	408930	90982	632988	773981	959096	
SAMPLE	191314-015	159	605683	411580	90983	629444	769953	977552	
CCV		163	573724	401176	89418	604264	769319	986225	
CCB		165	577982	385526	88084	609554	769438	957041	
SAMPLE	191314-016	167	578515	394830	89294	609746	753128	923559	
CCV		171	544557	380127	83429	584035	720631	878148	
CCB		174	583350	389118	87467	612337	769060	901389	
ICSA		175	467189	357359	79760	523485	568040	775269	
BLANK	QC368373	180	471772	327859	71559	525276	619362	706082	
BS	QC368374	181	470203	327451	70683	504483	608943	721302	
BSD	QC368375	182	472652	319274	69812	482904	589669	707318	
MSS	191286-008	184	467646	365781	73128	481603	556982	726629	
SER	QC368378	185	539220	386383	82856	580605	682134	840829	
MS	QC368376	186	442642	330228	67712	440622	513853	669962	
MSD	QC368377	187	426000	320331	66062	423183	484356	629798	
PDS	QC368379	188	442779	343822	67030	454637	525220	677940	
CCV		199	525793	366987	81213	574973	717407	879459	

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 14-DEC-2006
Sequence: 56501744
Instrument ID: MET05

(11410)
ICALBLK Filename: 11410004
Date Analyzed: 14-DEC-2006
Time Analyzed: 10:41

TYPE	SAMPLE	#					
CCB		201	541339	367469	82059	596051	742222
ICSA		203	431246	334818	73495	510422	546377
							830771
							734981

114000

SEQUENCE SUMMARY

Curtis & Tompkins Laboratories

Sequence: 56501744 Instrument: MET05
 Analytical Method: EPA 6020 Agilent ICP-MS
 SOP Version: 6020_rv2

Begun: 14-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
001	11410001	TUN				14-DEC-2006 10:24	1.0	1.0				1		
002	11410002	X	RINSE			14-DEC-2006 10:30	1.0					2		
003	11410003	X	RINSE			14-DEC-2006 10:36	1.0					2		
004	11410004	ICALBLK	STD-BLANK			14-DEC-2006 10:41	1.0	1.0				2		
005	11410005	ICAL	CS1			14-DEC-2006 10:47	1.0	1.0				3		
006	11410006	ICAL	CS2			14-DEC-2006 10:52	1.0	1.0				4		
007	11410007	ICAL	CS3			14-DEC-2006 10:58	1.0	1.0				5		
008	11410008	ICAL	CS4			14-DEC-2006 11:04	1.0	1.0				6		
009	11410009	ICAL	CS5			14-DEC-2006 11:09	1.0	1.0				7		
010	11410010	ICAL	CS6			14-DEC-2006 11:15	1.0	1.0				8		
011	11410011	X	RINSE			14-DEC-2006 11:20	1.0					2		
012	11410012	ICV				14-DEC-2006 11:25	1.0	1.0				9		
013	11410013	X	RINSE			14-DEC-2006 11:31	1.0					2		
014	11410014	ICB				14-DEC-2006 11:36	1.0	1.0				2		
015	11410015	X				14-DEC-2006 11:42	1.0	1.0				2		
016	11410016	X				14-DEC-2006 11:48	1.0					2		
017	11410017	ICSA				14-DEC-2006 11:53	1.0	1.0				10	2	7:CA=335400
018	11410018	ICSAB				14-DEC-2006 11:59	1.0	1.0				11	2	9:CA=310100
019	11410019	X	RINSE			14-DEC-2006 12:04	1.0					2		
020	11410020	X	RINSE			14-DEC-2006 12:10	1.0					2		
021	11410021	X	RINSE			14-DEC-2006 12:15	1.0					2		
022	11410022	BLANK	QC367981			14-DEC-2006 12:21	1.0	1.0				2		
023	11410023	SAMPLE	191351-008			14-DEC-2006 12:27	1.0	1.0				2		
024	11410024	SAMPLE	191351-006			14-DEC-2006 12:32	5.0	1.0				2		
025	11410025	X	RINSE			14-DEC-2006 12:38	1.0					2		
026	11410026	X	RINSE			14-DEC-2006 12:43	1.0					2		
027	11410027	X	RINSE			14-DEC-2006 12:49	1.0					2		
028	11410028	X	RINSE			14-DEC-2006 12:55	1.0					2		
029	11410029	CCV				14-DEC-2006 13:00	1.0	1.0				12	2	
030	11410030	X	RINSE			14-DEC-2006 13:06	1.0					2		
031	11410031	X				14-DEC-2006 13:11	1.0					2		

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst:

Date:

SEQUENCE SUMMARY

Curtis & Tompkins Laboratories

Sequence: 56501744 Instrument: MET05
 Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 14-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
032	11410032	X				14-DEC-2006 13:17	1.0					2		
033	11410033	CCB				14-DEC-2006 13:22	1.0	1.0			1	2		
034	11410034	ICSA				14-DEC-2006 13:28	1.0	1.0			1	10 2	7:CA=321700	
035	11410035	ICSAB				14-DEC-2006 13:34	1.0	1.0			1	11 2	9:CA=299700	
036	11410036	X	RINSE			14-DEC-2006 13:39	1.0					2		
037	11410037	X	RINSE			14-DEC-2006 13:45	1.0					2		
038	11410038	X	RINSE			14-DEC-2006 13:50	1.0					2		
039	11410039	BLANK	QC368135			14-DEC-2006 13:56	1.0	1.0			1	2		
040	11410040	BS	QC368136			14-DEC-2006 14:01	1.0	1.0			1	2		
041	11410041	BSD	QC368137			14-DEC-2006 14:07	1.0	1.0			1	2		
042	11410042	X	RINSE			14-DEC-2006 14:12	1.0					2		
043	11410043	SER	QC368140			14-DEC-2006 14:18	5.0	1.0			1	2		
044	11410044	MS	QC368138			14-DEC-2006 14:24	1.0	1.0			1	2	5:NA=59030.0	
045	11410045	MSD	QC368139			14-DEC-2006 14:29	1.0	1.0			1	2	5:NA=57900.0	
046	11410046	PDS	QC368141			14-DEC-2006 14:35	1.0	1.0			1	13 14 2	5:NA=58030.0	
047	11410047	X	RINSE			14-DEC-2006 14:40	1.0					2		
048	11410048	X	RINSE			14-DEC-2006 14:46	1.0					2		
049	11410049	X	RINSE			14-DEC-2006 14:51	1.0					2		
050	11410050	MSS	191314-003			14-DEC-2006 14:57	10.0	1.0			1	2		
051	11410051	X	RINSE			14-DEC-2006 15:02	1.0					2		
052	11410052	X	RINSE			14-DEC-2006 15:08	1.0					2		
053	11410053	X	RINSE			14-DEC-2006 15:14	1.0					2		
054	11410054	X				14-DEC-2006 15:19	1.0					12 2		
055	11410055	X	RINSE			14-DEC-2006 15:25	1.0					2		
056	11410056	X				14-DEC-2006 15:30	1.0					2		
057	11410057	X				14-DEC-2006 15:36	1.0					2		
058	11410058	CCV				14-DEC-2006 15:42	1.0	1.0			1	12 2		
059	11410059	X	RINSE			14-DEC-2006 15:48	1.0					2		
060	11410060	CCB				14-DEC-2006 15:53	1.0	1.0			1	2		
061	11410061	X				14-DEC-2006 15:59	1.0					2		
062	11410062	SAMPLE	191358-001			14-DEC-2006 16:05	20.0	1.0			1	2		

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst: MP Date: 12/15/09

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56501744 Instrument: MET05 Agilent ICP-MS
Analytical Method: EPA 6020 SOP Version: 6020_rv2
Begun: 14-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
063	11410063	SAMPLE	191358-002	120324	Water	14-DEC-2006 16:10	50.0	1.0	1	1	1	2		
064	11410064	SAMPLE	191358-003	120324	Water	14-DEC-2006 16:16	20.0	1.0	2	1	1	2		
065	11410065	SAMPLE	191358-004	120324	Water	14-DEC-2006 16:21	20.0	1.0	1	1	1	2		
066	11410066	SAMPLE	191358-005	120324	Water	14-DEC-2006 16:27	20.0	1.0	1	1	1	2		
067	11410067	SAMPLE	191358-006	120324	Water	14-DEC-2006 16:33	1.0	1.0	1	1	1	2		
068	11410068	SAMPLE	191358-007	120324	Water	14-DEC-2006 16:38	20.0	1.0	2	1	1	2		
069	11410069	SAMPLE	191358-009	120324	Filtr	14-DEC-2006 16:44	10.0	1.0		1	1	2		
070	11410070	SAMPLE	191358-011	120324	Filtr	14-DEC-2006 16:49	10.0	1.0		1	1	2		
071	11410071	SAMPLE	191358-013	120324	Water	14-DEC-2006 16:55	20.0	1.0		1	1	2	1:MN=230.350	
072	11410072	X	RINSE			14-DEC-2006 17:00	1.0					2		
073	11410073	X	RINSE			14-DEC-2006 17:06	1.0					2		
074	11410074	X	RINSE			14-DEC-2006 17:12	1.0					2		
075	11410075	CCV	RINSE			14-DEC-2006 17:17	1.0	1.0	1	1	1	12 2		
076	11410076	X	RINSE			14-DEC-2006 17:23	1.0					2		
077	11410077	X				14-DEC-2006 17:28	1.0					2		
078	11410078	CCB				14-DEC-2006 17:34	1.0	1.0		1	1	2		
079	11410079	SER	QC368140	120324	Water	14-DEC-2006 17:40	50.0	1.0	1	2	1	2		
080	11410080	MS	QC368138	120324	Water	14-DEC-2006 17:45	10.0	1.0	1	1	1	2		
081	11410081	MSD	QC368139	120324	Water	14-DEC-2006 17:51	10.0	1.0	1	1	1	2		
082	11410082	PDS	QC368141	120324	Water	14-DEC-2006 17:56	10.0	1.0	1	1	1	13 14 2		
083	11410083	X	RINSE			14-DEC-2006 18:02	1.0					2		
084	11410084	X	RINSE			14-DEC-2006 18:08	1.0					2		
085	11410085	X	RINSE			14-DEC-2006 18:13	1.0					2		
086	11410086	CCV	RINSE			14-DEC-2006 18:19	1.0	1.0		1	1	12 2		
087	11410087	X	RINSE			14-DEC-2006 18:24	1.0					2		
088	11410088	CCB				14-DEC-2006 18:30	1.0	1.0		1	1	2		
089	11410089	X				14-DEC-2006 18:35	1.0	1.0		1	1	2		
090	11410090	ICSA				14-DEC-2006 18:41	1.0	1.0		1	1	10 2	7:CA=328000	
091	11410091	ICSAB				14-DEC-2006 18:46	1.0	1.0		1	1	11 2	10:CA=310300	
092	11410092	X	RINSE			14-DEC-2006 18:52	1.0					2		
093	11410093	X	RINSE			14-DEC-2006 18:57	1.0					2		

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst:  Date: 12/15/06

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56501744 Instrument: MET05
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 14-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
094	11410094	X	RINSE			14-DEC-2006 19:03	1.0					2		
095	11410095	BLANK	QC368128	120323	Filter	14-DEC-2006 19:09	1.0	1.0			1	2		
096	11410096	BS	QC368129	120323	Filter	14-DEC-2006 19:14	1.0	1.0			1	2		
097	11410097	BSD	QC368130	120323	Filter	14-DEC-2006 19:20	1.0	1.0			1	2		
098	11410098	X	RINSE			14-DEC-2006 19:25	1.0					2		
099	11410099	MSS	191314-003	120323	Filter	14-DEC-2006 19:31	1.0	1.0			1	2		3:NA=49780.0
100	11410100	SER	QC368133	120323	Filter	14-DEC-2006 19:36	5.0	1.0			1	2		
101	11410101	MS	QC368131	120323	Filter	14-DEC-2006 19:42	1.0	1.0			1	2		4:NA=58490.0
102	11410102	MSD	QC368132	120323	Filter	14-DEC-2006 19:48	1.0	1.0			1	2		4:NA=58400.0
103	11410103	MS	QC368217	120323	Filter	14-DEC-2006 19:53	1.0	1.0			1	2		5:NA=73100.0
104	11410104	X	RINSE			14-DEC-2006 19:59	1.0					2		
105	11410105	X	RINSE			14-DEC-2006 20:04	1.0					2		
106	11410106	X	RINSE			14-DEC-2006 20:10	1.0					2		
107	11410107	CCV				14-DEC-2006 20:15	1.0	1.0			1	12	2	
108	11410108	X	RINSE			14-DEC-2006 20:21	1.0					2		
109	11410109	CCB				14-DEC-2006 20:26	1.0	1.0			1	2		
110	11410110	X				14-DEC-2006 20:32	1.0	1.0			1	2		
111	11410111	MSD	QC368218	120323	Filter	14-DEC-2006 20:38	1.0	1.0			1	2		5:NA=78760.0
112	11410112	PDS	QC368134	120323	Filter	14-DEC-2006 20:43	1.0	1.0			1	13	14	2
113	11410113	SAMPLE	191314-001	120323	Filter	14-DEC-2006 20:49	1.0	1.0			1	2		4:CA=80560.0
114	11410114	SAMPLE	191314-004	120323	Filter	14-DEC-2006 20:54	1.0	1.0			1	2		3:MG=84750.0
115	11410115	SAMPLE	191314-005	120323	Filter	14-DEC-2006 21:00	1.0	1.0			1	2		3:MG=83520.0
116	11410116	SAMPLE	191314-006	120323	Filter	14-DEC-2006 21:06	1.0	1.0			1	2		3:NA=113400
117	11410117	SAMPLE	191314-009	120323	Filter	14-DEC-2006 21:11	1.0	1.0			1	2		3:NA=200200
118	11410118	SAMPLE	191314-010	120323	Filter	14-DEC-2006 21:17	1.0	1.0			1	2		4:NA=123600
119	11410119	MSS	191314-011	120323	Filter	14-DEC-2006 21:22	1.0	1.0			1	2		4:NA=65670.0
120	11410120	SAMPLE	191314-012	120323	Filter	14-DEC-2006 21:28	1.0	1.0			1	2		6:NA=111500
121	11410121	X	RINSE			14-DEC-2006 21:33	1.0					2		
122	11410122	X	RINSE			14-DEC-2006 21:39	1.0					2		
123	11410123	X	RINSE			14-DEC-2006 21:45	1.0					2		
124	11410124	CCV				14-DEC-2006 21:50	1.0	1.0			1	12	2	

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst: Date: 12/15/06

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56501744 Instrument: MET05
Analytical Method: EPA 6020 Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 14-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds	Used	>LR
125	11410125	X	RINSE			14-DEC-2006 21:56	1.0					2		
126	11410126	CCB				14-DEC-2006 22:01	1.0	1.0			1	2		
127	11410127	X				14-DEC-2006 22:07	1.0	1.0	1		1	2		
128	11410128	TUN				14-DEC-2006 22:13	1.0	1.0				1		
129	11410129	X	RINSE			14-DEC-2006 22:19	1.0					2		
130	11410130	SAMPLE	191314-014	120323	Filtera	14-DEC-2006 22:25	1.0	1.0	3		1	2	3:NA=58960.0	
131	11410131	SAMPLE	191314-015	120323	Filtera	14-DEC-2006 22:30	1.0	1.0	3		1	2	3:NA=77960.0	
132	11410132	SAMPLE	191314-016	120323	Filtera	14-DEC-2006 22:36	1.0	1.0	3		1	2	3:NA=88540.0	
133	11410133	X	RINSE			14-DEC-2006 22:41	1.0					2		
134	11410134	X	RINSE			14-DEC-2006 22:47	1.0					2		
135	11410135	X	RINSE			14-DEC-2006 22:53	1.0					2		
136	11410136	MSS	191314-003	120323	Filtera	14-DEC-2006 22:58	10.0	1.0			1	2		
137	11410137	SER	QC368133	120323	Filtera	14-DEC-2006 23:04	50.0	1.0	2		1	2		
138	11410138	MS	QC368131	120323	Filtera	14-DEC-2006 23:10	10.0	1.0			1	2		
139	11410139	MSD	QC368132	120323	Filtera	14-DEC-2006 23:16	10.0	1.0			1	2		
140	11410140	PDS	QC368134	120323	Filtera	14-DEC-2006 23:21	10.0	1.0			1	13 14 2		
141	11410141	MSS	191314-011	120323	Filtera	14-DEC-2006 23:27	10.0	1.0			1	2		
142	11410142	MS	QC368217	120323	Filtera	14-DEC-2006 23:32	10.0	1.0			1	2		
143	11410143	X	RINSE			14-DEC-2006 23:38	1.0					2		
144	11410144	X	RINSE			14-DEC-2006 23:44	1.0					2		
145	11410145	X	RINSE			14-DEC-2006 23:49	1.0					2		
146	11410146	CCV				14-DEC-2006 23:55	1.0	1.0			1	12 2		
147	11410147	X	RINSE			15-DEC-2006 00:00	1.0					2		
148	11410148	CCB				15-DEC-2006 00:06	1.0	1.0			1	2		
149	11410149	X				15-DEC-2006 00:12	1.0	1.0			1	2		
150	11410150	MSD	QC368218	120323	Filtera	15-DEC-2006 00:17	10.0	1.0			1	2		
151	11410151	SAMPLE	191314-001	120323	Filtera	15-DEC-2006 00:23	10.0	1.0			1	2		
152	11410152	SAMPLE	191314-004	120323	Filtera	15-DEC-2006 00:29	10.0	1.0			1	2		
153	11410153	SAMPLE	191314-005	120323	Filtera	15-DEC-2006 00:34	10.0	1.0	1		1	2		
154	11410154	SAMPLE	191314-006	120323	Filtera	15-DEC-2006 00:40	10.0	1.0			1	2		
155	11410155	SAMPLE	191314-009	120323	Filtera	15-DEC-2006 00:45	20.0	1.0	2		1	2		

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst:  Date: 12/15/06

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56501744 Instrument: MET05
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 14-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
156	11410156	SAMPLE	191314-010	120323	Filtera	15-DEC-2006 00:51	10.0	1.0			1	2		
157	11410157	SAMPLE	191314-012	120323	Filtera	15-DEC-2006 00:57	10.0	1.0			1	2		
158	11410158	SAMPLE	191314-014	120323	Filtera	15-DEC-2006 01:02	10.0	1.0			1	2		
159	11410159	SAMPLE	191314-015	120323	Filtera	15-DEC-2006 01:08	10.0	1.0			1	2		
160	11410160	X	RINSE			15-DEC-2006 01:13	1.0					2		
161	11410161	X	RINSE			15-DEC-2006 01:19	1.0					2		
162	11410162	X	RINSE			15-DEC-2006 01:25	1.0					2		
163	11410163	CCV	RINSE			15-DEC-2006 01:30	1.0	1.0			1	12	2	
164	11410164	X	RINSE			15-DEC-2006 01:36	1.0					2		
165	11410165	CCB	RINSE			15-DEC-2006 01:42	1.0	1.0			1	2		
166	11410166	X				15-DEC-2006 01:47	1.0	1.0			1	2		
167	11410167	SAMPLE	191314-016	120323	Filtera	15-DEC-2006 01:53	10.0	1.0			1	2		
168	11410168	X	RINSE			15-DEC-2006 01:58	1.0					2		
169	11410169	X	RINSE			15-DEC-2006 02:04	1.0					2		
170	11410170	X	RINSE			15-DEC-2006 02:10	1.0					2		
171	11410171	CCV	RINSE			15-DEC-2006 02:15	1.0	1.0			1	12	2	
172	11410172	X				15-DEC-2006 02:21	1.0					2		
173	11410173	X				15-DEC-2006 02:26	1.0	1.0			1	2		
174	11410174	CCB				15-DEC-2006 02:32	1.0	1.0			1	2		
175	11410175	ICSA				15-DEC-2006 02:38	1.0	1.0			1	10	2	7:CA=343800
176	11410176	ICSA				15-DEC-2006 02:43	1.0	1.0			1	11	2	10:CA=314200
177	11410177	X	RINSE			15-DEC-2006 02:49	1.0					2		
178	11410178	X	RINSE			15-DEC-2006 02:54	1.0					2		
179	11410179	X	RINSE			15-DEC-2006 03:00	1.0					2		
180	11410180	BLANK	QC368373	120383	Filtera	15-DEC-2006 03:05	1.0	1.0			1	2		
181	11410181	BS	QC368374	120383	Filtera	15-DEC-2006 03:11	1.0	1.0			1	2		
182	11410182	BSD	QC368375	120383	Filtera	15-DEC-2006 03:17	1.0	1.0			1	2		
183	11410183	X	RINSE			15-DEC-2006 03:22	1.0					2		
184	11410184	MSS	191286-008	120383	Filtera	15-DEC-2006 03:28	1.0	1.0			4	2		4:NA=176200
185	11410185	SER	QC368378	120383	Filtera	15-DEC-2006 03:33	5.0	1.0			3	2		3:NA=37860.0
186	11410186	MS	QC368376	120383	Filtera	15-DEC-2006 03:39	1.0	1.0			1	2		5:NA=185300

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst:  Date: 12/15/06

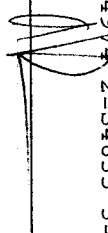
SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56501744 Instrument: MET05 Agilent ICP-MS
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 14-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
187	11410187	MSD	QC368377	120383	Filtera	15-DEC-2006 03:44	1.0	1.0	2	3	1	2		6:NA=191100
188	11410188	PDS	QC368379	120383	Filtera	15-DEC-2006 03:50	1.0	1.0	2		1	13 14 2		6:NA=17730C
189	11410189	X	RINSE			15-DEC-2006 03:55	1.0					2		
190	11410190	X	RINSE			15-DEC-2006 04:01	1.0					2		
191	11410191	X	RINSE			15-DEC-2006 04:07	1.0					2		
192	11410192	X	RINSE			15-DEC-2006 04:12	1.0					12 2		
193	11410193	X	RINSE			15-DEC-2006 04:18	1.0	1.0			1			
194	11410194	X				15-DEC-2006 04:23	1.0	1.0	2		1	2		
195	11410195	X				15-DEC-2006 04:29	1.0	1.0	2		1	2		
196	11410196	X	RINSE			15-DEC-2006 04:34	1.0					2		
197	11410197	X	RINSE			15-DEC-2006 04:40	1.0					2		
198	11410198	X	RINSE			15-DEC-2006 04:46	1.0					2		
199	11410199	CCV				15-DEC-2006 04:51	1.0	1.0			1	12 2		
200	11410200	X	RINSE			15-DEC-2006 04:57	1.0					2		
201	11410201	CCB				15-DEC-2006 05:02	1.0	1.0			1	2		
202	11410202	X				15-DEC-2006 05:08	1.0	1.0	1		1	2		
203	11410203	ICSA				15-DEC-2006 05:14	1.0	1.0			1	10 2		7:CA=339900
204	11410204	ICSAB				15-DEC-2006 05:19	1.0	1.0			1	11 2		10:CA=315400

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst: 

Date: 12/15/06

Curtis & Tompkins Laboratories Sample Preparation Summary 13-DEC-2006 10:14

Batch Number : 120324
 Date Extracted: 13-DEC-2006
 Extracted by : Kevin Gaines
 Prep Method : 200.8

Analysis : N/A
 Bgroup : ICAP
 Units : mL
 Clean-up :
 Spike #1 ID : S4326
 Spike #2 ID : S4327
 Spike #3 ID :
 SOP Version :

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
91290-001		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
91314-003		Treadwell & Rollo	Water	50	mL	50	1.000000	1				TAL/ICP		
91358-001		Treadwell & Rollo	Water	50	mL	50	1.000000	1				TAL/ICP		
91358-002		Treadwell & Rollo	Water	50	mL	50	1.000000	1				TAL/ICP		
91358-003		Treadwell & Rollo	Water	50	mL	50	1.000000	1				TAL/ICP		
91358-004		Treadwell & Rollo	Water	50	mL	50	1.000000	1				TAL/ICP		
91358-005		Treadwell & Rollo	Water	50	mL	50	1.000000	1				TAL/ICP		
91358-006		Treadwell & Rollo	Water	50	mL	50	1.000000	1				TAL/ICP		
91358-007		Treadwell & Rollo	Water	50	mL	50	1.000000	1				TAL/ICP		
91358-009		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
91358-011		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
91358-013		Treadwell & Rollo	Water	50	mL	50	1.000000	1				AG, AS, CD, (more)		
91358-015	BLANK		Water	50	mL	50	1.000000	1				ICAP		
91358-016	BS		Water	50	mL	50	1.000000	1	.5	.5		ICAP		
91358-017	BSD		Water	50	mL	50	1.000000	1	.5	.5		ICAP		
91358-018	MS		Water	50	mL	50	1.000000	1	.5	.5		ICAP		
91358-019	MSD		Water	50	mL	50	1.000000	1	.5	.5		ICAP		
91358-020	SER		Water	50	mL	50	1.000000	1	.5	.5		ICAP		
91358-021	PDS		Water	50	mL	50	1.000000	1				ICAP		
91358-022			Water	50	mL	50	1.000000	1				ICAP		

Prep Chemist: [Signature] Date: 12/14/06
 Relinquished By: [Signature] Date: 12/14/06
 Reviewed By: [Signature]
 Received By: [Signature]

BK BK 2378
Page 12

Continued From: _____
Continued On: _____

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
B1K	50	50	N	
B5				
B5D				
M3-03N				
M3D-031				
B13/4-03				
358-01A				
02				
03				
04				
05B				
06A				
07				
09D				
011				
358-013M				
240-01H				

Reagent ID or LIMS #	Initials / Date
95	SLA 12/12
34324	↓
34327	
024024	
038068	
N/A	
Backup	✓

Reviewer Signature / Date 12/12/06

Curtis & Tompkins Laboratories

Sample Preparation Summary

13-DEC-2006 18:59

Batch Number : 120323
Date Extracted : 13-DEC-2006
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bgroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S4326
Spike #2 ID : S4327
Spike #3 ID :
SOP Version :

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	Prep D.F.	Clean pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
191314-001		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
191314-003		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
191314-004		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
191314-005		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
191314-006		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
191314-009		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
191314-010		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
191314-011		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
191314-012		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				15MET		
191314-014		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
191314-015		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
191314-016		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				TAL/ICP		
QC368128	BLANK		Filtrate	50	mL	50	1.000000	1				ICAP		
QC368129	BS		Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC368130	BSD		Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC368131	MS	of 191314-003	Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC368132	MSD	of 191314-003	Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC368133	SER	of 191314-003	Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC368134	PDS	of 191314-003	Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC368217	MS	of 191314-011	Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		
QC368218	MSD	of 191314-011	Filtrate	50	mL	50	1.000000	1	.5	.5		ICAP		

000051

Prep Chemist: [Signature] 12/14/06 Reviewed By: [Signature] Date: 12/14/06

Relinquished By: [Signature] 12/14/06 Received By: [Signature] Date: 12/14/06

Water Digestion for ICP-MS

Curtis & Tompkins, Ltd.

LIMS Batch #: 120323
 Date Digested: 12/13/06
 Digested by: [Signature]

Digestion Method
☒ EPA 200.8 for ICP-MS
☐ _____

BK BK 2378

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Continued From: _____
 Continued On: _____

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
B11C	50	370		
125				
135D				
145-03K				Final Filtered
155D-03				
161314-03				
314-145-11				
1-155D-11				
1-0-11				
01-D				
-04-A				
-05-A				
-06-A				
-09-A				
-10				
-12-K				
-14 A				
-15				
-16				

digestion temperature (90-95 degrees C)
5 mL of spike solution was added to all spikes

concentrated HCl
 concentrated HNO₃

☐ filtered thru' Whatman # 541

Reagent ID or LIMS # Initials / Date

95	[Signature] 12/13/06
34324	
34327	
026024	
035068	
N/A	

[Signature] 12/13/06
 Prep Chemist Signature / Date

[Signature] 12/13/06
 Reviewer Signature / Date

REPORTING SUMMARY FOR 191314 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	A	S	A	B	B	C	C	C	C	F	P	M	M	H	N	K	S	A	N	T	V	Z
				L	B	S	A	E	D	A	R	O	U	E	B	G	N	G	I	E	G	A	L	N	
191314-003	MET04	12/08/06 14:24	1.0														+								
191314-003	MET05	12/13/06 21:20	1.0	+	+	+	+	+	+	+	+	+	+	+				+	+	+	+		+	+	+
191314-003	MET05	12/14/06 14:57	10.0						+				+		+	+						+			
QC367568	MET04	12/08/06 14:17	1.0														+								
QC367569	MET04	12/08/06 14:19	1.0														+								
QC367570	MET04	12/08/06 14:21	1.0														+								
QC367571	MET04	12/08/06 14:26	5.0														+								
QC367572	MET04	12/08/06 14:28	1.0														+								
QC367573	MET04	12/08/06 14:31	1.0														+								
QC368135	MET05	12/13/06 20:58	1.0		+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+
QC368135	MET05	12/14/06 13:56	1.0	+									+			+						+			
QC368136	MET05	12/13/06 21:04	1.0		+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+
QC368136	MET05	12/14/06 14:01	1.0	+											+							+			
QC368137	MET05	12/13/06 21:09	1.0		+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+		+	+	+
QC368137	MET05	12/14/06 14:07	1.0	+												+						+			
QC368138	MET05	12/13/06 21:31	1.0		+	+	+	+	+		+	+	+	+				+	+	+	+		+	+	+
QC368138	MET05	12/14/06 14:24	1.0	+																		+			
QC368138	MET05	12/14/06 17:45	10.0						+				+		+	+									
QC368139	MET05	12/13/06 21:37	1.0		+	+	+	+	+		+	+	+	+				+	+	+	+		+	+	+
QC368139	MET05	12/14/06 14:29	1.0	+																		+			
QC368139	MET05	12/14/06 17:51	10.0						+				+		+	+									
QC368140	MET05	12/13/06 21:26	5.0		+	+	+	+	+		+	+	+	+				+	+	+	+		+	+	+
QC368140	MET05	12/14/06 14:18	5.0	+																					
QC368140	MET05	12/14/06 17:40	50.0						+				+		+	+						+			
QC368141	MET05	12/13/06 21:42	1.0		+	+	+	+	+		+	+	+	+				+	+	+	+		+	+	+
QC368141	MET05	12/14/06 14:35	1.0	+																					
QC368141	MET05	12/14/06 17:56	10.0						+				+		+	+						+			

REPORTING SUMMARY FOR 191314 METALS Filtrate

Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	A	S	A	B	B	C	C	C	C	F	P	M	M	H	N	K	S	A	N	T	V	Z
				L	B	S	A	E	D	A	R	O	U	E	B	G	N	G	I	E	G	A	L	N	
191314-001	MET14	12/13/06 13:26	1.0															+							
191314-001	MET05	12/14/06 03:06	1.0		+	+	+	+	+			+	+	+	+			+	+	+	+			+	+
191314-001	MET05	12/14/06 20:49	1.0	+						+													+		
191314-001	MET05	12/15/06 00:23	10.0						+							+	+					+			
191314-003	MET14	12/13/06 13:16	1.0															+							
191314-003	MET05	12/14/06 01:48	1.0		+	+	+	+	+			+	+	+	+	+		+	+	+	+			+	+
191314-003	MET05	12/14/06 19:31	1.0	+																			+		
191314-003	MET05	12/14/06 22:58	10.0						+							+						+			
191314-004	MET05	12/14/06 03:11	1.0		+	+	+	+	+			+	+	+	+		+	+	+	+	+			+	+
191314-004	MET05	12/14/06 20:54	1.0	+							+												+		
191314-004	MET05	12/15/06 00:29	10.0						+							+						+			
191314-005	MET05	12/14/06 03:17	1.0		+	+	+	+	+			+	+	+	+		+	+	+	+	+			+	+
191314-005	MET05	12/14/06 21:00	1.0	+							+												+		
191314-005	MET05	12/15/06 00:34	10.0						+							+						+			
191314-006	MET05	12/14/06 03:22	1.0		+	+	+	+	+			+	+	+	+		+	+	+	+	+			+	+
191314-006	MET05	12/14/06 21:06	1.0	+							+												+		
191314-006	MET05	12/15/06 00:40	10.0						+							+						+			
191314-009	MET05	12/14/06 03:28	1.0		+	+			+			+	+	+		+	+	+						+	+
191314-009	MET05	12/14/06 21:11	1.0	+							+														
191314-009	MET05	12/15/06 00:45	20.0						+							+						+			
191314-010	MET05	12/14/06 03:33	1.0		+	+			+			+	+	+				+	+					+	+
191314-010	MET05	12/14/06 21:17	1.0	+							+														
191314-010	MET05	12/15/06 00:51	10.0						+							+	+					+			
191314-011	MET05	12/14/06 03:39	1.0		+	+	+	+	+			+	+	+	+			+	+	+	+			+	+
191314-011	MET05	12/14/06 21:22	1.0	+							+												+		
191314-011	MET05	12/14/06 23:27	10.0						+							+	+					+			
191314-012	MET05	12/14/06 03:44	1.0		+	+			+			+		+				+	+					+	+
191314-012	MET05	12/14/06 21:28	1.0	+							+														
191314-012	MET05	12/15/06 00:57	10.0						+				+		+	+						+			
191314-014	MET14	12/13/06 13:28	1.0															+							
191314-014	MET05	12/14/06 04:29	1.0		+	+	+	+	+			+	+	+	+		+	+	+	+	+		+	+	+
191314-014	MET05	12/14/06 22:25	1.0	+							+														
191314-014	MET05	12/15/06 01:02	10.0						+							+						+			
191314-015	MET14	12/13/06 13:30	1.0															+							
191314-015	MET05	12/14/06 04:35	1.0		+	+	+	+	+			+	+	+	+		+	+	+	+	+		+	+	+
191314-015	MET05	12/14/06 22:30	1.0	+							+														
191314-015	MET05	12/15/06 01:08	10.0						+							+						+			



Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 191314 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S G	A A	N L	T A	V L	Z N
191314-016	MET14	12/13/06 13:37	1.0														+									
191314-016	MET05	12/14/06 04:40	1.0		+	+	+	+	+			+	+	+	+		+		+	+	+	+		+	+	+
191314-016	MET05	12/14/06 22:36	1.0	+							+															
191314-016	MET05	12/15/06 01:53	10.0							+						+							+			
QC368076	MET14	12/13/06 13:10	1.0														+									
QC368077	MET14	12/13/06 13:12	1.0														+									
QC368078	MET14	12/13/06 13:14	1.0														+									
QC368079	MET14	12/13/06 13:19	5.0														+									
QC368080	MET14	12/13/06 13:21	1.0														+									
QC368081	MET14	12/13/06 13:23	1.0														+									
QC368128	MET05	12/14/06 01:25	1.0		+		+	+	+	+	+	+	+	+	+		+		+	+	+	+	+	+	+	+
QC368128	MET05	12/14/06 19:09	1.0	+		+										+								+		
QC368129	MET05	12/14/06 01:31	1.0		+	+	+	+	+	+	+	+	+	+	+		+		+	+	+	+	+	+	+	+
QC368129	MET05	12/14/06 19:14	1.0	+												+								+		
QC368130	MET05	12/14/06 01:36	1.0		+	+	+	+	+	+	+	+	+	+	+		+		+	+	+	+	+	+	+	+
QC368130	MET05	12/14/06 19:20	1.0	+												+								+		
QC368131	MET05	12/14/06 01:59	1.0		+	+	+	+	+		+	+	+	+	+				+	+	+	+		+	+	+
QC368131	MET05	12/14/06 19:42	1.0	+																			+	+		
QC368131	MET05	12/14/06 23:10	10.0						+							+	+									
QC368132	MET05	12/14/06 02:05	1.0		+	+	+	+	+		+	+	+	+	+				+	+	+	+		+	+	+
QC368132	MET05	12/14/06 19:48	1.0	+																			+	+		
QC368132	MET05	12/14/06 23:16	10.0						+							+	+									
QC368133	MET05	12/14/06 01:54	5.0		+	+	+	+	+		+	+	+	+	+		+		+	+	+	+		+	+	+
QC368133	MET05	12/14/06 19:36	5.0	+																			+			
QC368133	MET05	12/14/06 23:04	50.0						+							+							+			
QC368134	MET05	12/14/06 03:00	1.0		+	+	+	+	+		+	+	+	+					+	+	+	+		+	+	+
QC368134	MET05	12/14/06 20:43	1.0	+						+													+			
QC368134	MET05	12/14/06 23:21	10.0						+							+	+						+			
QC368217	MET05	12/14/06 02:10	1.0		+	+	+	+	+		+	+		+					+	+	+	+		+	+	+
QC368217	MET05	12/14/06 19:53	1.0	+												+	+						+	+		
QC368217	MET05	12/14/06 23:32	10.0						+	+			+													
QC368218	MET05	12/14/06 02:55	1.0		+	+	+	+	+		+	+		+					+	+	+	+		+	+	+
QC368218	MET05	12/14/06 20:38	1.0	+												+	+						+	+		

REPORTING SUMMARY FOR 191314 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	A	S	A	B	B	C	C	C	C	C	F	P	M	M	H	N	K	S	A	N	T	V	Z
				L	B	S	A	E	D	A	R	O	U	E	B	G	N	G	I	E	G	A	L		N	
QC368218	MET05	12/15/06 00:17 10.0								+	+			+												

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 7470A

Inst : MET04
 Calnum : 46493309001
 Units : ug/L

Date : 08-DEC-2006 13:49
 X Axis : R

Reviewer: ---
 Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	120185	46493309002	STD02REP1	08-DEC-2006 13:52	S5057 (500X)
L2	120185	46493309003	STD03REP1	08-DEC-2006 13:54	S5057 (200X)
L3	120185	46493309004	STD04REP1	08-DEC-2006 13:56	S5057 (50X)
L4	120185	46493309005	STD05REP1	08-DEC-2006 13:58	S5057 (20X)
L5	120185	46493309006	STD06REP1	08-DEC-2006 14:01	S5057 (10X)

Analyte	I1	I2	I3	I4	I5	Type	a0	a1	a2	Avg	r ²	MR ²	Flg
Mercury	3425.0	2734.0	2523.0	2420.8	2351.3	LINEAR	-0.1299	4.29E-4	2690.8	1.000	.99		

00357

Instrument amount = a0 + response * a1 + response^2 * a2; LINEAR=Linear regression

WinHg Database 1.5

File Utility Help

RN > RN > ?

Protocol hgppb

BUSY Dataset/Proto 120806 /hgppb

Protocol Line info Cal Curve Report Ctrl Chart Viewer

Reset

Calib Coeffs

New Cal

Update Coeffs

Spike Coeffs

A

B

C

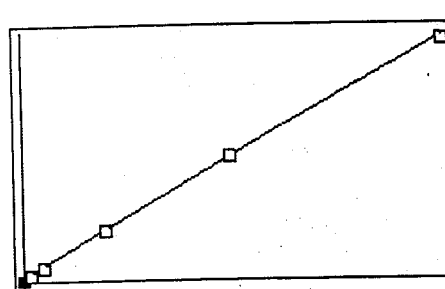
Rho

Type

 μ Abs.
23513

Accepted

New



Include S1

Rep 1 ☒

08-Dec-06 14:11

Conc.

10.0

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3
01	0.0000	.016	.016	341	0	340		
02	.20000	.164	-.036	685	0%	685		
03	.50000	.457	-.043	1368	0%	1367		
04	2.0000	2.04	.036	5047	0%	5046		
05	5.0000	5.07	.065	12105	0%	12104		
06	10.000	9.96	-.038	23514	0%	23513		

NUM SCRL

Ready

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 1 Rep: 1				Seq: 1		13:49:39 08 Dec 06		HG
Hg	.000	ppb	340					
		Bkgd 1	17011809					
*** Standard: 2 Rep: 1				Seq: 2		13:52:03 08 Dec 06		HG
Hg	.200	ppb	685					
		Bkgd 1	17002278					
*** Standard: 3 Rep: 1				Seq: 3		13:54:07 08 Dec 06		HG
Hg	.500	ppb	1367					
		Bkgd 1	16998306					
*** Standard: 4 Rep: 1				Seq: 4		13:56:16 08 Dec 06		HG
Hg	2.00	ppb	5046					
		Bkgd 1	16999206					
*** Standard: 5 Rep: 1				Seq: 5		13:58:50 08 Dec 06		HG
Hg	5.00	ppb	12104					
		Bkgd 1	16990322					
*** Standard: 6 Rep: 1				Seq: 6		14:01:10 08 Dec 06		HG
Hg	10.0	ppb	23513					
		Bkgd 1	16982541					
*** Check Standard: 2			Ck2S5059	Seq: 7		14:12:43 08 Dec 06		HG
Line Flag			Intensities					
Hg			11920					
		Bkgd 1	16974816					
*** Check Standard: 1			Ck1ICB	Seq: 8		14:14:48 08 Dec 06		HG
Line Flag			Intensities					
Hg			105					
		Bkgd 1	16969663					
*** Sample ID: qc367568				Seq: 9		14:17:04 08 Dec 06		HG
			120185,1					
Hg	-.045	ppb	197					
		Bkgd 1	16969492					

=====

SEQUENCE SUMMARY

Curtis & Tompkins Laboratories

Begun: 08-DEC-2006

Sequence: 46493309 Instrument: MET04 HydrAAA HG Analyzer
 Analytical Method: EPA 7470A SOP Version: HG_water_rv7
 Analyte: Mercury

#	Filename	Type	Sample	Subj	Batch	Matrix	Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	*Rec	RPD	Flags
001	120185	ICALBLK	STD01REP1				08-DEC-2006 13:49	1.0	1.0									
002	120185	ICAL	STD02REP1				08-DEC-2006 13:52	1.0	1.0									
003	120185	ICAL	STD03REP1				08-DEC-2006 13:54	1.0	1.0									
004	120185	ICAL	STD04REP1				08-DEC-2006 13:56	1.0	1.0									
005	120185	ICAL	STD05REP1				08-DEC-2006 13:58	1.0	1.0									
006	120185	ICAL	STD06REP1				08-DEC-2006 14:01	1.0	1.0									
007	120185	ICV					08-DEC-2006 14:12	1.0	1.0	2	5.000	46493309001	4.990		ug/L	100		
008	120185	ICB					08-DEC-2006 14:14	1.0	1.0			46493309001	ND	0.20	ug/L			
009	120185	BLANK	QC367568		120185	Water	08-DEC-2006 14:17	1.0	1.0			46493309001	ND	0.20	ug/L			
010	120185	BS	QC367569		120185	Water	08-DEC-2006 14:19	1.0	1.0			46493309001	ND	0.20	ug/L			
011	120185	BSD	QC367570		120185	Water	08-DEC-2006 14:21	1.0	1.0		5.000	46493309001	5.070	0.20	ug/L	101		
012	120185	MSS	191314-003		120185	Water	08-DEC-2006 14:24	1.0	1.0		5.000	46493309001	4.980	0.20	ug/L	100	2	
013	120185	SER	QC367571		191314-003	120185	Water	08-DEC-2006 14:26	5.0	1.0		46493309001	ND	1.0	ug/L	--		
014	120185	MS	QC367572		191314-003	120185	Water	08-DEC-2006 14:28	1.0	1.0		46493309001	5.230	0.20	ug/L	105		
015	120185	MSD	QC367573		191314-003	120185	Water	08-DEC-2006 14:31	1.0	1.0		46493309001	5.200	0.20	ug/L	104	1	
016	120185	SAMPLE	191297-001		120185	Filtra	08-DEC-2006 14:33	1.0	1.0			46493309001	ND	0.20	ug/L			
017	120185	SAMPLE	191297-002		120185	Filtra	08-DEC-2006 14:35	1.0	1.0			46493309001	ND	0.20	ug/L			
018	120185	SAMPLE	191297-003		120185	Filtra	08-DEC-2006 14:38	1.0	1.0			46493309001	ND	0.20	ug/L			
019	120185	CCV					08-DEC-2006 14:40	1.0	1.0	3	2.500	46493309001	2.590		ug/L	104		
020	120185	CCB					08-DEC-2006 14:42	1.0	1.0			46493309001	ND	0.20	ug/L			
021	120185	SAMPLE	191297-004		120185	Filtra	08-DEC-2006 14:45	1.0	1.0			46493309001	ND	0.20	ug/L			
022	120185	SAMPLE	191297-005		120185	Filtra	08-DEC-2006 14:47	1.0	1.0			46493309001	ND	0.20	ug/L			
023	120185	SAMPLE	191297-006		120185	Filtra	08-DEC-2006 14:50	1.0	1.0			46493309001	ND	0.20	ug/L			
024	120185	SAMPLE	191297-007		120185	Filtra	08-DEC-2006 14:52	1.0	1.0			46493309001	ND	0.20	ug/L			
025	120185	SAMPLE	191297-008		120185	Filtra	08-DEC-2006 14:54	1.0	1.0			46493309001	ND	0.20	ug/L			
026	120185	SAMPLE	191297-009		120185	Filtra	08-DEC-2006 14:56	1.0	1.0			46493309001	ND	0.20	ug/L			
027	120185	SAMPLE	191297-010		120185	Filtra	08-DEC-2006 14:59	1.0	1.0			46493309001	ND	0.20	ug/L			
028	120185	SAMPLE	191302-001		120185	Filtra	08-DEC-2006 15:02	1.0	1.0			46493309001	ND	0.20	ug/L			
029	120185	SAMPLE	191302-002		120185	Filtra	08-DEC-2006 15:04	1.0	1.0			46493309001	ND	0.20	ug/L			
030	120185	SAMPLE	191302-003		120185	Filtra	08-DEC-2006 15:06	1.0	1.0			46493309001	ND	0.20	ug/L			
031	120185	CCV					08-DEC-2006 15:09	1.0	1.0	4	5.000	46493309001	5.040		ug/L	101		
032	120185	CCB					08-DEC-2006 15:13	1.0	1.0			46493309001	ND	0.20	ug/L			
033	120185	SAMPLE	191302-004		120185	Filtra	08-DEC-2006 15:15	1.0	1.0			46493309001	ND	0.20	ug/L			
034	120185	SAMPLE	191302-005		120185	Filtra	08-DEC-2006 15:18	1.0	1.0			46493309001	ND	0.20	ug/L			
035	120185	SAMPLE	191302-006		120185	Filtra	08-DEC-2006 15:21	1.0	1.0			46493309001	ND	0.20	ug/L			
036	120185	SAMPLE	191302-007		120185	Filtra	08-DEC-2006 15:23	1.0	1.0			46493309001	ND	0.20	ug/L			
037	120185	SAMPLE	191309-002		120185	Water	08-DEC-2006 15:25	1.0	1.0			46493309001	ND	0.20	ug/L			
038	120185	SAMPLE	191312-001		120185	Water	08-DEC-2006 15:27	1.0	1.0			46493309001	ND	0.20	ug/L			
039	120185	CCV					08-DEC-2006 15:30	1.0	1.0	5	7.500	46493309001	7.590		ug/L	101		
040	120185	CCB					08-DEC-2006 15:32	1.0	1.0			46493309001	ND	0.20	ug/L			

StdS used: 1=S5057 2=S5059 3=S5060 4=S5061 5=S5062

Flags used: u=use

Analyst: [Signature] Date: 12/08/06

08-DEC-2006 11:56

Curtis & Tompkins Laboratories Sample Preparation Summary

Batch Number : 120185 Analysis : N/A Spike #1 ID : S5057
Date Extracted: 08-DEC-2006 Bgroup : HG Spike #2 ID :
Extracted by : Zachary Abbott Units : mL Spike #3 ID :
Prep Method : METHOD Clean-up : SOP Version :

Sample	Type	Client	Matrix	Init W/V	Units	Final Vol	D.F.	Clean pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Analyses	Clean Method	Comments
191297-001		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1				T26/HG		
191297-002		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1				T26/HG		
191297-003		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1				T26/HG		
191297-004		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1				T26/HG		
191297-005		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1				T26/HG		
191297-006		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1				T26/HG		
191297-007		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1				T26/HG		
191297-008		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1				T26/HG		
191297-009		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1				T26/HG		
191297-010		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1				T26/HG		
191302-001		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1				T26/HG		
191302-002		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1				T26/HG		
191302-003		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1				T26/HG		
191302-004		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1				T26/HG		
191302-005		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1				T26/HG		
191302-006		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1				T26/HG		
191302-007		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1				T26/HG		
191309-002		Pacific Energy	Water	50	mL	50	1.000000	1				HG		
191312-001		Blasland, Bouck & Lee	Water	50	mL	50	1.000000	1				PP13/HG		
191314-003		Treadwell & Rollo	Water	50	mL	50	1.000000	1				HG		
QC367568	BLANK		Water	50	mL	50	1.000000	1				HG		
QC367569	BS		Water	50	mL	50	1.000000	1				HG		
QC367570	BSD		Water	50	mL	50	1.000000	1				HG		
QC367571	SER	of 191314-003	Water	50	mL	50	1.000000	1				HG		
QC367572	MS	of 191314-003	Water	50	mL	50	1.000000	1				HG		
QC367573	MSD	of 191314-003	Water	50	mL	50	1.000000	1				HG		
QC367574	PDS	of 191314-003	Water	50	mL	50	1.000000	1				HG		

Prep Chemist: [Signature] 12/8/06 Reviewed By: [Signature] Date: 12/8/06
Relinquished By: [Signature] 12/8/06 Received By: [Signature] Date: 12/8/06

Water Digestion for Mercury

Curtis & Tompkins, Ltd.

LIMS Batch #: 120185
 Date Digested: 12/8/06
 Digested by: JA

Digestion Method

BK 1929

☒ EPA 7470A/ EPA 245.1
☐

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Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
191297-001 G	50	50	N	Filtrate (F.F.)
002				
003				
004				
005				
006				
007				
008				
009				
010				
191302-001				
002				
003				
004				
005				
006				
007				
191309-002 A				water
191312-001 G				
191314-003 MSS M				
Blank				
BS				
BSD				
MS 191314-003 M				
MSD				

2.5 mL of spike solution was added to all spikes

Reagent ID/ LIMS# / Time Initials / Date

Digestion of Samples & Standards:

Time ON / Temperature ON

Time OFF/ Temperature OFF

concentrated H₂SO₄

concentrated HNO₃

5% KMnO₄

5% K₂S₂O₈

NaCl.hydroxylamine hydrochloride

Stannous Chloride

☐ filtered thru' 0.45 um syringe filter

55057	JA 12/8/06
55057	
95059/60/61/62	
11:40 / 95°C	
1:40 / 95°C	
B41041	
C30060	
K120406	
K2110906	
H4111706	
Gmch2 120506	
William R. 3832	

26600 12/8/06
 Prep Chemist / Date

Continued from page

Continued on page

JA 12/8/06
 Reviewed by / Date

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 7470A

Inst : MET14
 Calnum : 846500440001
 Units : ug/L
 Date : 13-DEC-2006 12:40
 X Axis : R
 Reviewer: ---
 Type : WATER

Level	File	Seqnum	Sample ID	Analyzed	Std
1.1	120309	846500440002	STD02REP1	13-DEC-2006 12:42	S5086 (500X)
1.2	120309	846500440003	STD03REP1	13-DEC-2006 12:45	S5086 (200X)
1.3	120309	846500440004	STD04REP1	13-DEC-2006 12:47	S5086 (50X)
1.4	120309	846500440005	STD05REP1	13-DEC-2006 12:49	S5086 (20X)
1.5	120309	846500440006	STD06REP1	13-DEC-2006 12:51	S5086 (10X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	%RSD	r^2	Flg
Mercury	4350.0	3606.0	3003.0	2726.2	2785.1	LINR	-0.1152	3.65E-4	-	3294.1	1.000	.99	

Instrument amount = a0 + response * a1 + response^2 * a2; LINR=Linear regression
 Page 1 of 1

846500440001



RN↓

RN↑



Protocol hgppb

Dataset/Proto 121306a /hgppb

Protocol | Line info | Cal Curve | Report | Ctrl Chart | Viewer

Reset

Calib Coeffs

New Cal

Update Coeffs

Spike Coeffs

A

B

C

Rho

Type

Linear

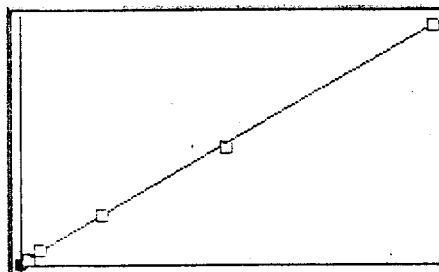
☒ Calibrated☒ Accepted

Accept

 μ Abs.
27851

Accepted

New

Include S1 Rep 1 ☒ ☐ ☐ ☐ ☐ 13-Dec-06 12:51 Conc. 10.0

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3
01	.00000	-.031	-.031	231	0	230		
02	.20000	.202	.002	870	0%	870		
03	.50000	.543	.043	1803	0%	1803		
04	2.0000	2.08	.077	6007	0%	6006		
05	5.0000	4.86	-.140	13631	0%	13631		
06	10.000	10.0	.050	27851	0%	27851		

Ready

NUM SCRL //

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1								
				Seq: 1	12:40:50	13	Dec 06	HG
Hg	.000	ppb	230					
		Bkgd 1	15882552					
*** Standard: 2 Rep: 1								
				Seq: 2	12:42:54	13	Dec 06	HG
Hg	.200	ppb	870					
		Bkgd 1	15882138					
*** Standard: 3 Rep: 1								
				Seq: 3	12:45:02	13	Dec 06	HG
Hg	.500	ppb	1803					
		Bkgd 1	15878212					
*** Standard: 4 Rep: 1								
				Seq: 4	12:47:06	13	Dec 06	HG
Hg	2.00	ppb	6006					
		Bkgd 1	15866939					
*** Standard: 5 Rep: 1								
				Seq: 5	12:49:12	13	Dec 06	HG
Hg	5.00	ppb	13631					
		Bkgd 1	15855383					
*** Standard: 6 Rep: 1								
				Seq: 6	12:51:26	13	Dec 06	HG
Hg	10.0	ppb	27851					
		Bkgd 1	15858226					
*** Check Standard: 2								
Line	Flag		Ck2S5097	Seq: 7	12:59:23	13	Dec 06	HG
			Intensities					
Hg			15752					
		Bkgd 1	15836155					
*** Check Standard: 1								
Line	Flag		Ck1ICB	Seq: 8	13:01:58	13	Dec 06	HG
			Intensities					
Hg			244					
		Bkgd 1	15836533					
*** Check Standard: 2								
Line	Flag		Ck2S5097	Seq: 9	13:06:01	13	Dec 06	HG
			Intensities					
Hg			14250					
		Bkgd 1	15833175					

SEQUENCE SUMMARY

Curtis & Tompkins Laboratories

Begun: 13-DEC-2006

Sequence: 846500440 Instrument: MET14
 Analytical Method: EPA 7470A
 Analyte: Mercury

HydraAA HG Analyzer MET14
 SOP Version: HG_water_rv7

#	Filename Type	Sample Num	Subj Samp	Batch	Matrix Analyzed	IDF	PDF	Stds	Spiked	Calnum	Result	RL	Units	Rec	RPD	Flags
001	120309	ICALBLK STD01REP1			13-DEC-2006 12:40	1.0	1.0									
002	120309	ICAL STD02REP1			13-DEC-2006 12:42	1.0	1.0									
003	120309	ICAL STD03REP1			13-DEC-2006 12:45	1.0	1.0									
004	120309	ICAL STD04REP1			13-DEC-2006 12:47	1.0	1.0									
005	120309	ICAL STD05REP1			13-DEC-2006 12:49	1.0	1.0									
006	120309	ICAL STD06REP1			13-DEC-2006 12:51	1.0	1.0									
007	120309	X			13-DEC-2006 12:59	1.0										
008	120309	X			13-DEC-2006 13:01	1.0										
009	120309	ICV			13-DEC-2006 13:06	1.0	1.0	2	5.000	846500440001	5.090		ug/L	102		
010	120309	ICR			13-DEC-2006 13:08	1.0	1.0			846500440001	ND		ug/L			
011	120309	BLANK QC368076			120309 Water	13-DEC-2006 13:10	1.0	1.0		846500440001	ND		ug/L	0.20		
012	120309	BS QC368077			120309 Water	13-DEC-2006 13:12	1.0	1.0		846500440001	4.810		ug/L	0.20		u
013	120309	BSD QC368078			120309 Water	13-DEC-2006 13:14	1.0	1.0		846500440001	4.690		ug/L	0.20		u
014	120309	MSS 191314-003			120309 Filtra	13-DEC-2006 13:16	1.0	1.0		846500440001	ND		ug/L	0.20		u
015	120309	SR QC368079			191314-003 120309 Filtra	13-DEC-2006 13:19	5.0	1.0		846500440001	ND		ug/L	1.0		u
016	120309	MS QC368080			191314-003 120309 Filtra	13-DEC-2006 13:21	1.0	1.0		846500440001	5.570		ug/L	0.20		u
017	120309	MSD QC368081			191314-003 120309 Filtra	13-DEC-2006 13:23	1.0	1.0		846500440001	5.530		ug/L	0.20		u
018	120309	SAMPLE 191314-001			120309 Filtra	13-DEC-2006 13:26	1.0	1.0		846500440001	ND		ug/L	0.20		u
019	120309	SAMPLE 191314-014			120309 Filtra	13-DEC-2006 13:28	1.0	1.0		846500440001	ND		ug/L	0.20		u
020	120309	SAMPLE 191314-015			120309 Filtra	13-DEC-2006 13:30	1.0	1.0		846500440001	ND		ug/L	0.20		u
021	120309	CCV			13-DEC-2006 13:33	1.0	1.0	3	2.500	846500440001	2.740		ug/L	0.20		ib
022	120309	CCB			13-DEC-2006 13:35	1.0	1.0			846500440001	[0.03500]		ug/L	0.20		u
023	120309	SAMPLE 191314-016			120309 Filtra	13-DEC-2006 13:37	1.0	1.0		846500440001	ND		ug/L	0.20		u
024	120309	SAMPLE 191366-001			120309 Water	13-DEC-2006 13:40	1.0	1.0		846500440001	ND		ug/L	0.20		u
025	120309	SAMPLE 191372-001			120309 Filtra	13-DEC-2006 13:42	1.0	1.0		846500440001	ND		ug/L	0.20		u
026	120309	SAMPLE 191372-002			120309 Filtra	13-DEC-2006 13:44	1.0	1.0		846500440001	ND		ug/L	0.20		u
027	120309	SAMPLE 191372-003			120309 Filtra	13-DEC-2006 13:47	1.0	1.0		846500440001	ND		ug/L	0.20		u
028	120309	SAMPLE 191372-004			120309 Filtra	13-DEC-2006 13:49	1.0	1.0		846500440001	ND		ug/L	0.20		u
029	120309	SAMPLE 191372-005			120309 Filtra	13-DEC-2006 13:51	1.0	1.0		846500440001	0.044 J		ug/L	0.20		u
030	120309	SAMPLE 191381-001			120309 Water	13-DEC-2006 13:53	1.0	1.0		846500440001	0.29		ug/L	0.20		u
031	120309	SAMPLE 191389-001			120309 Filtra	13-DEC-2006 13:56	1.0	1.0		846500440001	ND		ug/L	0.20		u
032	120309	SAMPLE 191389-002			120309 Filtra	13-DEC-2006 13:58	1.0	1.0		846500440001	ND		ug/L	0.20		u
033	120309	CCV			13-DEC-2006 14:01	1.0	1.0	4	5.000	846500440001	5.050		ug/L	0.20		101
034	120309	CCB			13-DEC-2006 14:03	1.0	1.0			846500440001	ND		ug/L	0.20		u
035	120309	SAMPLE 191389-003			120309 Filtra	13-DEC-2006 14:05	1.0	1.0		846500440001	0.029 J		ug/L	0.20		u
036	120309	SAMPLE 191389-004			120309 Filtra	13-DEC-2006 14:07	1.0	1.0		846500440001	0.038 J		ug/L	0.20		u
037	120309	SAMPLE 191412-002			120309 Water	13-DEC-2006 14:10	1.0	1.0		846500440001	ND		ug/L	0.20		u
038	120309	SAMPLE 191430-001			120309 Filtra	13-DEC-2006 14:12	1.0	1.0		846500440001	ND		ug/L	0.20		u
039	120309	SAMPLE 191436-001			120309 Water	13-DEC-2006 14:15	1.0	1.0		846500440001	2.3		ug/L	0.20		u
040	120309	SAMPLE 191436-002			120309 Water	13-DEC-2006 14:18	1.0	1.0		846500440001	ND		ug/L	0.20		u
041	120309	CCV			13-DEC-2006 14:20	1.0	1.0	5	7.500	846500440001	7.680		ug/L	0.20		102
042	120309	CCB			13-DEC-2006 14:22	1.0	1.0			846500440001	ND		ug/L	0.20		u

Warnings used: 1=S5086 2=S5097 3=S5098 4=S5099 5=S5100

Flags used: !=warning B=method blank contamination

ib=instrument blank u=use

Analyst: *[Signature]*

Date: 12/13/06

Curtis & Tompkins Laboratories

Sample Preparation Summary

12-DEC-2006 18:36

Batch Number : 120309
Date Extracted by : 12-DEC-2006
Extracted by : Zachary Abbott
Prep Method : METHOD

Analysis : N/A
Bgroup : HG
Units : mL
Clean-up :

Spike #1 ID : S5086
Spike #2 ID :
Spike #3 ID :
SOP Version :

Sample	Type	Client	Matrix	Init w/v	Units	Final Prep Vol	D.F.	Clean pH	Sp 1	Sp 2	Sp 3	Analyses	Clean Method	Comments
191314-001		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				HG		
191314-003		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				HG		
191314-014		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				HG		
191314-015		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				HG		
191314-016		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1				HG		
191366-001		Bay Ship & Yacht Co.	Water	50	mL	50	1.000000	1				HG		
191372-001		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1				T26/HG		
191372-002		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1				T26/HG		
191372-003		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1				T26/HG		
191372-004		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1				T26/HG		
191372-005		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1				T26/HG		
191381-001		Strategic Engineering & Scienc	Water	50	mL	50	1.000000	1				T26/HG		
191389-001		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1				T26/HG		
191389-002		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1				T26/HG		
191389-003		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1				T26/HG		
191389-004		Blasland, Bouck & Lee	Filtrate	50	mL	50	1.000000	1				T26/HG		
191412-002		Kinder Morgan	Water	50	mL	50	1.000000	1				HG		
191430-001		Montezuma Wetlands LLC	Filtrate	50	mL	50	1.000000	1				HG		
191436-001		Iris Environmental	Water	50	mL	50	1.000000	1				T26/HG		
191436-002		Iris Environmental	Water	50	mL	50	1.000000	1				T26/HG		
QC368076	BLANK		Water	50	mL	50	1.000000	1				HG		
QC368077	BS		Water	50	mL	50	1.000000	1				HG		
QC368078	BSD		Water	50	mL	50	1.000000	1				HG		
QC368079	SER		Water	50	mL	50	1.000000	1				HG		
of 191314-003			Filtrate	50	mL	50	1.000000	1				HG		
QC368080	MS		Filtrate	50	mL	50	1.000000	1				HG		
of 191314-003			Filtrate	50	mL	50	1.000000	1				HG		
QC368081	MSD		Filtrate	50	mL	50	1.000000	1				HG		
of 191314-003			Filtrate	50	mL	50	1.000000	1				HG		
QC368082	PDS		Filtrate	50	mL	50	1.000000	1				HG		

Prep Chemist:

Reviewed By:

Date:

12/13/06

Relinquished By:

Received By:

Date:

12/12/06

000007

Water Digestion for Mercury

Curtis & Tompkins, Ltd.

LIMS Batch #: 1203009
 Date Digested: 12/12/06
 Digested by: ZA

Digestion Method
☒ EPA 7470A/ EPA 245.1
☐

BK 1929
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Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
191314-001 D	50	50		Filtrate (F.F.)
↓ -003 MSS J				
↓ -014 A				
↓ -015				
↓ -016				
191366-001 A				Water
191372-001 G				Filtrate (F.F.)
↓ -002				
↓ -003				
↓ -004				
↓ -005				
191381-001 A				Water
191389-001 G				Filtrate (F.F.)
↓ -002				
↓ -003				
↓ -004				
191412-002 A				Water
191430-001				Filtrate (Comp. 4 bottles) (I-L)
191436-001 A				Water
↓ -002				
Blank				Water
BS				
BSD				
MS 191314-003 J				Filtrate (F.F.)
M9D ↓				

2.5 mL of spike solution was added to all spikes

Reagent ID/ LIMS# / Time Initials / Date

Digestion of Samples & Standards: Time ON / Temperature ON

Time OFF/ Temperature OFF

concentrated H₂SO₄

concentrated HNO₃

5% KMnO₄

5% K₂S₂O₈

NaCl.hydroxylamine hydrochloride

Stannous Chloride

☐ filtered thru' 0.45 um syringe filter

S5086	ZA 12/12/06
ICAL Source WS# S5086	
ICV / CCV WS# S5088/99/90/91	
6:00 / 95°C	
8:00 / 95°C	
B41041	
C38065	
K120406	
K2120806	
H4111906	
G4121206	
W4121206	

Prep Chemist / Date

Continued from page

Continued on page

Reviewed by / Date



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories
MDL Summary for EPA 6020 Water 200.8
As of 01/05/07

Analyte	Units	MET06 A	MET06 E	MET06 H	MET05
Aluminum	ug/L	0.40			9.6
Antimony	ug/L	0.0093			0.062
Arsenic	ug/L		0.034		0.34
Barium	ug/L	0.023			0.13
Beryllium	ug/L	0.017			0.12
Cadmium	ug/L	0.0058			0.17
Calcium	ug/L	5.6			15
Chromium	ug/L		0.038		0.18
Cobalt	ug/L		0.0072		0.069
Copper	ug/L		0.028		0.24
Iron	ug/L			1.9	16
Lead	ug/L	0.013			0.088
Magnesium	ug/L	0.73			11
Manganese	ug/L		0.011		0.050
Molybdenum	ug/L	0.0063			0.24
Nickel	ug/L		0.029		0.21
Potassium	ug/L	5.3			8.7
Selenium	ug/L			0.027	0.35
Silver	ug/L	0.0079			0.068
Sodium	ug/L		2.7		14
Thallium	ug/L	0.030			0.030
Vanadium	ug/L		0.026		0.24
Zinc	ug/L		0.062		0.23

Curtis & Tompkins Laboratories
MDL Summary for EPA 7470A Water
As of 01/05/07

Analyte	Units	MET04	MET14
Mercury	ug/L	0.058	0.021

Anions by IC



Curtis & Tompkins, Ltd.

Chloride

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Batch#:	120186
Matrix:	Water	Received:	12/07/06
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln Fac	Sampled	Analyzed
LF10GW02	SAMPLE	191314-001	47	2.0	10.00	12/06/06 13:50	12/07/06 21:08
LF10SP01	SAMPLE	191314-003	75	2.0	10.00	12/06/06 14:05	12/07/06 21:25
1221GW104	SAMPLE	191314-004	58	5.0	25.00	12/06/06 11:20	12/07/06 21:42
DUP-1206063A	SAMPLE	191314-005	57	2.0	10.00	12/06/06 11:30	12/07/06 23:10
BB3GW100	SAMPLE	191314-006	250	5.0	25.00	12/06/06 12:55	12/07/06 23:27
1065MW101	SAMPLE	191314-009	45	5.0	25.00	12/06/06 09:20	12/07/06 23:44
1065MW102	SAMPLE	191314-010	42	2.0	10.00	12/06/06 09:58	12/08/06 00:02
1065PZ2A	SAMPLE	191314-011	57	2.0	10.00	12/06/06 10:40	12/08/06 00:19
1065PZ4A	SAMPLE	191314-012	65	5.0	25.00	12/06/06 11:42	12/08/06 00:37
LF6GW104	SAMPLE	191314-014	31	2.0	10.00	12/06/06 09:05	12/08/06 00:54
LF6GW105	SAMPLE	191314-015	86	2.0	10.00	12/06/06 09:32	12/08/06 01:11
LF6GW106	SAMPLE	191314-016	91	2.0	10.00	12/06/06 10:23	12/08/06 01:29
	BLANK	QC367578	ND	0.20	1.000		12/07/06 12:29

ND= Not Detected

RL= Reporting Limit

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: 00372



Curtis & Tompkins, Ltd.

Fluoride			
Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Diln Fac:	1.000
Matrix:	Water	Batch#:	120186
Units:	mg/L	Received:	12/07/06

Field ID	Type	Lab ID	Result	RL	Sampled	Analized
LF10GW02	SAMPLE	191314-001	0.12	0.10	12/06/06 13:50	12/07/06 17:21
LF10SP01	SAMPLE	191314-003	ND	0.10	12/06/06 14:05	12/07/06 16:46
1221GW104	SAMPLE	191314-004	ND	0.10	12/06/06 11:20	12/07/06 17:39
DUP-1206063A	SAMPLE	191314-005	ND	0.10	12/06/06 11:30	12/07/06 17:56
BB3GW100	SAMPLE	191314-006	ND	0.10	12/06/06 12:55	12/07/06 18:48
1065MW101	SAMPLE	191314-009	0.25	0.10	12/06/06 09:20	12/07/06 19:06
1065MW102	SAMPLE	191314-010	0.22	0.10	12/06/06 09:58	12/07/06 19:23
1065PZ2A	SAMPLE	191314-011	0.26	0.10	12/06/06 10:40	12/07/06 17:04
1065PZ4A	SAMPLE	191314-012	ND	0.10	12/06/06 11:42	12/07/06 19:41
LF6GW104	SAMPLE	191314-014	ND	0.10	12/06/06 09:05	12/07/06 19:58
LF6GW105	SAMPLE	191314-015	ND	0.10	12/06/06 09:32	12/07/06 20:15
LF6GW106	SAMPLE	191314-016	ND	0.10	12/06/06 10:23	12/07/06 20:33
	BLANK	QC367578	ND	0.10		12/07/06 12:29

ND= Not Detected

RL= Reporting Limit

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: 00373

Nitrate Nitrogen			
Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Batch#:	120186
Matrix:	Water	Received:	12/07/06
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln Fac	Sampled	Analyzed
LF10GW02	SAMPLE	191314-001	ND	0.05	1.000	12/06/06 13:50	12/07/06 17:21
LF10SP01	SAMPLE	191314-003	0.42	0.05	1.000	12/06/06 14:05	12/07/06 16:46
1221GW104	SAMPLE	191314-004	0.05	0.05	1.000	12/06/06 11:20	12/07/06 17:39
DUP-1206063A	SAMPLE	191314-005	0.06	0.05	1.000	12/06/06 11:30	12/07/06 17:56
BB3GW100	SAMPLE	191314-006	4.9	0.05	1.000	12/06/06 12:55	12/07/06 18:48
1065MW101	SAMPLE	191314-009	ND	0.05	1.000	12/06/06 09:20	12/07/06 19:06
1065MW102	SAMPLE	191314-010	ND	0.05	1.000	12/06/06 09:58	12/07/06 19:23
1065PZ2A	SAMPLE	191314-011	ND	0.05	1.000	12/06/06 10:40	12/07/06 17:04
1065PZ4A	SAMPLE	191314-012	ND	0.05	1.000	12/06/06 11:42	12/07/06 19:41
LF6GW104	SAMPLE	191314-014	5.5	0.50	10.00	12/06/06 09:05	12/08/06 00:54
LF6GW105	SAMPLE	191314-015	4.7	0.05	1.000	12/06/06 09:32	12/07/06 20:15
LF6GW106	SAMPLE	191314-016	7.6	0.50	10.00	12/06/06 10:23	12/08/06 01:29
	BLANK	QC367578	ND	0.05	1.000		12/07/06 12:29

ND= Not Detected
 RL= Reporting Limit

**Nitrite Nitrogen**

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Diln Fac:	1.000
Matrix:	Water	Batch#:	120186
Units:	mg/L	Received:	12/07/06

Field ID	Type	Lab ID	Result	RL	Sampled	Analyzed
LF10GW02	SAMPLE	191314-001	ND	0.05	12/06/06 13:50	12/07/06 17:21
LF10SP01	SAMPLE	191314-003	ND	0.05	12/06/06 14:05	12/07/06 16:46
1221GW104	SAMPLE	191314-004	ND	0.05	12/06/06 11:20	12/07/06 17:39
DUP-1206063A	SAMPLE	191314-005	ND	0.05	12/06/06 11:30	12/07/06 17:56
BB3GW100	SAMPLE	191314-006	ND	0.05	12/06/06 12:55	12/07/06 18:48
1065MW101	SAMPLE	191314-009	ND	0.05	12/06/06 09:20	12/07/06 19:06
1065MW102	SAMPLE	191314-010	ND	0.05	12/06/06 09:58	12/07/06 19:23
1065PZ2A	SAMPLE	191314-011	ND	0.05	12/06/06 10:40	12/07/06 17:04
1065PZ4A	SAMPLE	191314-012	ND	0.05	12/06/06 11:42	12/07/06 19:41
LF6GW104	SAMPLE	191314-014	ND	0.05	12/06/06 09:05	12/07/06 19:58
LF6GW105	SAMPLE	191314-015	ND	0.05	12/06/06 09:32	12/07/06 20:15
LF6GW106	SAMPLE	191314-016	ND	0.05	12/06/06 10:23	12/07/06 20:33
	BLANK	QC367578	ND	0.05		12/07/06 12:29

ND= Not Detected

RL= Reporting Limit

Sulfate			
Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Batch#:	120186
Matrix:	Water	Received:	12/07/06
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln Fac	Sampled	Analyzed
LF10GW02	SAMPLE	191314-001	50	0.50	1.000	12/06/06 13:50	12/07/06 17:21
LF10SP01	SAMPLE	191314-003	36	0.50	1.000	12/06/06 14:05	12/07/06 16:46
1221GW104	SAMPLE	191314-004	66	13	25.00	12/06/06 11:20	12/07/06 21:42
DUP-1206063A	SAMPLE	191314-005	66	5.0	10.00	12/06/06 11:30	12/07/06 23:10
BB3GW100	SAMPLE	191314-006	66	13	25.00	12/06/06 12:55	12/07/06 23:27
1065MW101	SAMPLE	191314-009	ND	0.50	1.000	12/06/06 09:20	12/07/06 19:06
1065MW102	SAMPLE	191314-010	37	0.50	1.000	12/06/06 09:58	12/07/06 19:23
1065PZ2A	SAMPLE	191314-011	2.4	0.50	1.000	12/06/06 10:40	12/07/06 17:04
1065PZ4A	SAMPLE	191314-012	ND	0.50	1.000	12/06/06 11:42	12/07/06 19:41
LF6GW104	SAMPLE	191314-014	200	5.0	10.00	12/06/06 09:05	12/08/06 00:54
LF6GW105	SAMPLE	191314-015	110	5.0	10.00	12/06/06 09:32	12/08/06 01:11
LF6GW106	SAMPLE	191314-016	140	5.0	10.00	12/06/06 10:23	12/08/06 01:29
	BLANK	QC367578	ND	0.50	1.000		12/07/06 12:29

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Chloride

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Batch#:	120186
Matrix:	Water	Received:	12/07/06
Units:	mg/L		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC Limits	RPD	Lim	Diln	Fac	Sampled	Analyzed
BS			QC367579		4.000	3.839	96	80-120		1.000			12/07/06 12:47
BSD			QC367580		4.000	3.839	96	80-120	0	20	1.000		12/07/06 13:04
LF10SP01	MS	191314-003	QC367581	74.58	20.00	94.41	99	80-120		10.00		12/06/06 14:05	12/08/06 01:46
LF10SP01	MSD	191314-003	QC367582		20.00	94.57	100	80-120	0	25	10.00	12/06/06 14:05	12/08/06 03:13
1065PZ2A	MS	191314-011	QC367583	56.89	20.00	76.20	97	80-120		10.00		12/06/06 10:40	12/08/06 03:31
1065PZ2A	MSD	191314-011	QC367584		20.00	76.50	98	80-120	0	25	10.00	12/06/06 10:40	12/08/06 03:48

RPD= Relative Percent Difference

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Curtis & Tompkins, Ltd.

00077

Batch QC Report

Fluoride

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Batch#:	120186
Matrix:	Water	Received:	12/07/06
Units:	mg/L		

Field ID	Type	MSS	Lab ID	Lab ID	MSS	Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Sampled	Analyzed
BS			QC367579			2.020	2.000	101	80-120			20	1.000		12/07/06 12:47	
BSD			QC367580			1.979	2.000	99	80-120	2		20	1.000		12/07/06 13:04	
LF10SP01	MS	191314-003	QC367581		0.08454	9.879	10.00	98	77-120				10.00		12/06/06 14:05	12/08/06 01:46
LF10SP01	MSD	191314-003	QC367582			10.02	10.00	99	77-120	1		20	10.00		12/06/06 14:05	12/08/06 03:13
1065PZ2A	MS	191314-011	QC367583		0.2617	10.57	10.00	103	77-120				10.00		12/06/06 10:40	12/08/06 03:31
1065PZ2A	MSD	191314-011	QC367584			10.42	10.00	102	77-120	1		20	10.00		12/06/06 10:40	12/08/06 03:48

RPD= Relative Percent Difference

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Curtis & Tompkins, Ltd.

00378

Batch QC Report

Nitrate Nitrogen

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Batch#:	120186
Matrix:	Water	Received:	12/07/06
Units:	mg/L		

Field ID	Type	MSS	Lab ID	Lab ID	MSS	Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Sampled	Analyzed
BS				QC367579			1.000	0.9863	99	80-120			1.000		12/07/06	12:47
BSD				QC367580			1.000	0.9923	99	80-120	1	20	1.000		12/07/06	13:04
LF10SP01	MS	191314-003	QC367581		0.4222		5.000	5.206	96	80-120			10.00		12/06/06	14:05
LF10SP01	MSD	191314-003	QC367582				5.000	5.413	100	80-120	4	25	10.00		12/06/06	14:05
1065PZ2A	MS	191314-011	QC367583		<0.008826		5.000	5.018	100	80-120			10.00		12/06/06	10:40
1065PZ2A	MSD	191314-011	QC367584				5.000	5.217	104	80-120	4	25	10.00		12/06/06	10:40
															12/08/06	03:48

RPD= Relative Percent Difference

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Curtis & Tompkins, Ltd.

000070

Batch QC Report

Nitrite Nitrogen

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Batch#:	120186
Matrix:	Water	Received:	12/07/06
Units:	mg/L		

Field ID	Type	MSS	Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Sampled	Analyzed
BS				QC367579		1.000	0.9588	96	80-120			1.000			12/07/06 12:47
BSD				QC367580		1.000	0.9571	96	80-120	0	20	1.000			12/07/06 13:04
LF10SP01	MS		191314-003	QC367581	0.02257	5.000	5.131	102	80-120			10.00		12/06/06 14:05	12/08/06 01:46
LF10SP01	MSD		191314-003	QC367582		5.000	5.138	102	80-120	0	25	10.00		12/06/06 14:05	12/08/06 03:13
1065PZ2A	MS		191314-011	QC367583	<0.01206	5.000	5.014	100	80-120			10.00		12/06/06 10:40	12/08/06 03:31
1065PZ2A	MSD		191314-011	QC367584		5.000	5.060	101	80-120	1	25	10.00		12/06/06 10:40	12/08/06 03:48

RPD= Relative Percent Difference

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81.0



Curtis & Tompkins, Ltd.

000000

Batch QC Report

Sulfate

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Batch#:	120186
Matrix:	Water	Received:	12/07/06
Units:	mg/L		

Field ID	Type	MSS	Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Sampled	Analyzed
BS				QC367579		10.00	9.817	98	80-120			1.000		12/07/06	12:47
BSD				QC367580		10.00	9.870	99	80-120	1	20	1.000		12/07/06	13:04
LF10SP01	MS	191314-003	QC367581		35.56	50.00	86.16	101	80-120			10.00		12/06/06	14:05
LF10SP01	MSD	191314-003	QC367582			50.00	86.51	102	80-120	0	25	10.00		12/06/06	14:05
1065PZ2A	MS	191314-011	QC367583		2.374	50.00	53.36	102	80-120			10.00		12/06/06	10:40
1065PZ2A	MSD	191314-011	QC367584			50.00	53.54	102	80-120	0	25	10.00		12/06/06	10:40
														12/08/06	03:31
														12/08/06	03:48

RPD= Relative Percent Difference

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83.0



Curtis & Tompkins, Ltd.

00361

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191314 IC Water: EPA 300.0

Inst : IC03

Calnum : 626477375001

Units : mg/L

Reviewer: RH

Date : 27-NOV-2006 12:32

X Axis : A

Inj Vol : 25 uL

Level	File	Seqnum	Sample ID	Analyzed	stds
L1	331_2.000	626477375002	L1	27-NOV-2006 12:32	S4740 (500X)
L2	331_3.000	626477375003	L2	27-NOV-2006 12:50	S4740 (100X)
L3	331_4.000	626477375004	L3	27-NOV-2006 13:07	S4740 (25X)
L4	331_5.000	626477375005	L4	27-NOV-2006 13:25	S4740 (10X)
L5	331_6.000	626477375006	L5	27-NOV-2006 13:42	S4740 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ²	MnR ²	Fig
Fluoride	0.1400	0.1738	0.1846	0.1987	0.2080	QORG		0.18572	0.002247	0.1810	1.000	0.990	
Chloride	0.1664	0.1430	0.1558	0.1641	0.1771	QORG		0.15066	0.001325	0.1613	1.000	0.990	
Nitrogen, Nitrite	0.2857	0.2851	0.3166	0.3213	0.3308	QORG		0.31146	0.003864	0.3079	1.000	0.990	
Nitrogen, Nitrate	0.4014	0.3589	0.3747	0.3707	0.3897	QORG		0.35756	0.006385	0.3791	1.000	0.990	
Sulfate	0.0891	0.1008	0.1092	0.1131	0.1206	QORG		0.10562	2.999E-4	0.1066	1.000	0.990	

66330

Instrument response = a0 + amount * a1 + amount² * a2 (invert equation before quantitating); QORG=Quadratic regression forced through origin

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191314 IC Water
EPA 300.0

Inst : IC03
Calnum : 626477375001

Cal Date: 27-NOV-2006

ICV 626477375007 (331_7.000 27-NOV-2006) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.1810	0.1712	1.000	0.9120	mg/L	-9	10	
Chloride	0.1613	0.1427	2.000	1.864	mg/L	-7	10	
Nitrogen, Nitrite	0.3079	0.3053	0.5000	0.4871	mg/L	-3	10	
Nitrogen, Nitrate	0.3791	0.3435	0.5000	0.4763	mg/L	-5	10	
Sulfate	0.1066	0.1016	5.000	4.744	mg/L	-5	10	

Sequence: 331
Operator: ic_analyst

Page 1 of 2
Printed: 11/28/2006 4:47:28 PM

Title: Anions
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006
Timebase: IC3_DX120
#Samples: 39

Created: 8/1/2003 11:03:14 AM by ic_analyst
Last Update: 11/28/2006 4:33:43 PM by ic_analyst

No.	*Batch	Name	Comment	Dil. Factor	Program	Status	Inj. Date/Time
1	CAL-331	IB		1.0000	IC03-7AN	Finished	11/27/2006 12:15:25 PM
2	CAL-331	ICAL, L1,S4740,500		1.0000	IC03-7AN	Finished	11/27/2006 12:32:50 PM
3	CAL-331	ICAL, L2,S4740,100		1.0000	IC03-7AN	Finished	11/27/2006 12:50:15 PM
4	CAL-331	ICAL, L3,S4740,25		1.0000	IC03-7AN	Finished	11/27/2006 1:07:39 PM
5	CAL-331	ICAL, L4,S4740,10		1.0000	IC03-7AN	Finished	11/27/2006 1:25:04 PM
6	CAL-331	ICAL, L5,S4740,5		1.0000	IC03-7AN	Finished	11/27/2006 1:42:29 PM
7	CAL-331	ICV,S3859,5		1.0000	IC03-7AN	Finished	11/27/2006 1:59:54 PM
8	CAL-331	ICB		1.0000	IC03-7AN	Finished	11/27/2006 2:17:19 PM
9	119854	CCV,L,S4740,100		1.0000	IC03-7AN	Finished	11/27/2006 2:34:43 PM
10	119854	CCB/MB,QC366232		1.0000	IC03-7AN	Finished	11/27/2006 2:52:08 PM
11	119854	BS,QC366233,S4740,25		1.0000	IC03-7AN	Finished	11/27/2006 3:09:32 PM
12	119854	BSD,QC366234,S4740,25		1.0000	IC03-7AN	Finished	11/27/2006 3:26:57 PM
13	119854	190995-001	A	1.0000	IC03-7AN	Finished	11/27/2006 3:54:42 PM
14	119854	BLK		1.0000	IC03-7AN	Finished	11/27/2006 4:27:28 PM
15	119854	MSS,190995-002	A	10.0000	IC03-7AN	Finished	11/27/2006 4:44:53 PM
16	119854	190995-003	A	10.0000	IC03-7AN	Finished	11/27/2006 5:02:18 PM
17	119854	190995-004	A	10.0000	IC03-7AN	Finished	11/27/2006 5:19:42 PM
18	119854	190995-005	A	10.0000	IC03-7AN	Finished	11/27/2006 5:37:07 PM
19	119854	190995-006	A	10.0000	IC03-7AN	Finished	11/27/2006 5:54:32 PM
20	119854	190995-007	A	10.0000	IC03-7AN	Finished	11/27/2006 6:11:57 PM
21	119854	CCV,M,S4740,25		1.0000	IC03-7AN	Finished	11/27/2006 6:29:22 PM
22	119854	CCB		1.0000	IC03-7AN	Finished	11/27/2006 6:46:47 PM
23	119854	X,CCV,M,S4740,25		1.0000	IC03-7AN	Finished	11/27/2006 7:04:12 PM
24	119854	X,CCB		1.0000	IC03-7AN	Finished	11/27/2006 7:21:37 PM
25	119854	MS,QC366235,S4740,50	A	10.0000	IC03-7AN	Finished	11/27/2006 7:39:04 PM
26	119854	MSD,QC366236,S4740,50	A	10.0000	IC03-7AN	Finished	11/27/2006 7:56:34 PM
27	119854	190995-001	A	10.0000	IC03-7AN	Finished	11/27/2006 8:13:59 PM
28	119854	190995-008	A	10.0000	IC03-7AN	Finished	11/27/2006 8:31:36 PM
29	119854	190995-009	A	10.0000	IC03-7AN	Finished	11/27/2006 8:49:12 PM
30	119854	190995-010	A	10.0000	IC03-7AN	Finished	11/27/2006 9:06:41 PM
31	119854	190995-011	A	10.0000	IC03-7AN	Finished	11/27/2006 9:24:10 PM
32	119854	190995-012	A	10.0000	IC03-7AN	Finished	11/27/2006 9:41:37 PM
33	119854	190995-013	A	10.0000	IC03-7AN	Finished	11/27/2006 9:59:02 PM
34	119854	190995-014	A	10.0000	IC03-7AN	Finished	11/27/2006 10:16:27 PM
35	119854	CCV,H,S4740,10		1.0000	IC03-7AN	Finished	11/27/2006 10:33:51 PM
36	119854	CCB		1.0000	IC03-7AN	Finished	11/27/2006 10:51:16 PM
37	119854	X,CCV,H,S4740,10		1.0000	IC03-7AN	Finished	11/27/2006 11:08:40 PM
38	119854	X,CCB		1.0000	IC03-7AN	Finished	11/27/2006 11:26:05 PM
39	119854	SHUTDOWN		1.0000	IC03-7AN_OFF	Finished	11/27/2006 11:43:29 PM

Sequence: 331
Operator: ic_analyst

Page 2 of 2
Printed: 11/28/2006 4:47:29 PM

Title: Anions
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006
Timebase: IC3_DX120
#Samples: 39

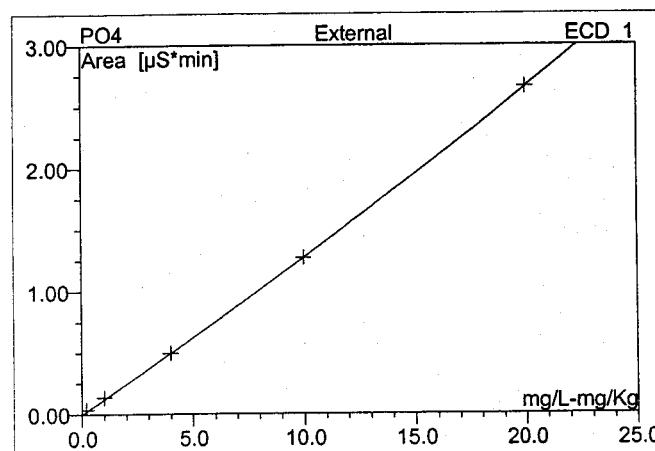
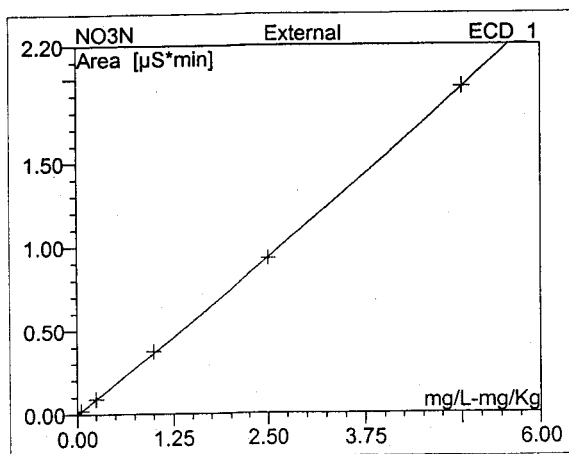
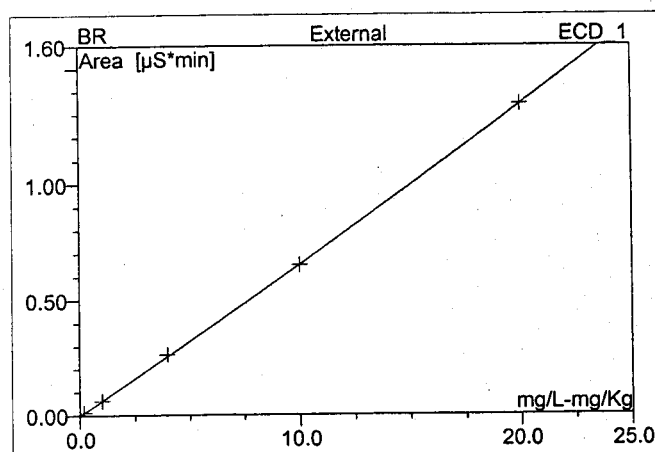
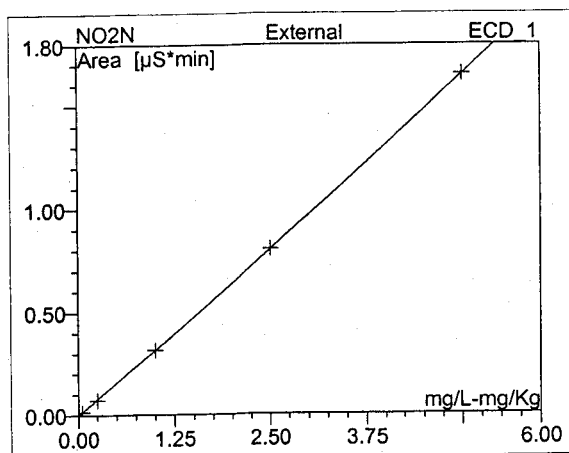
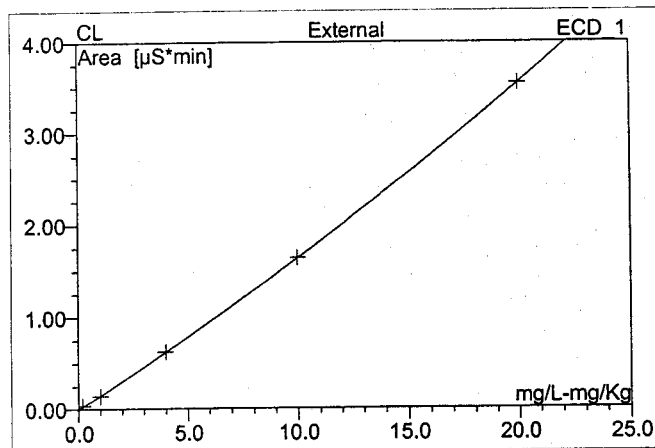
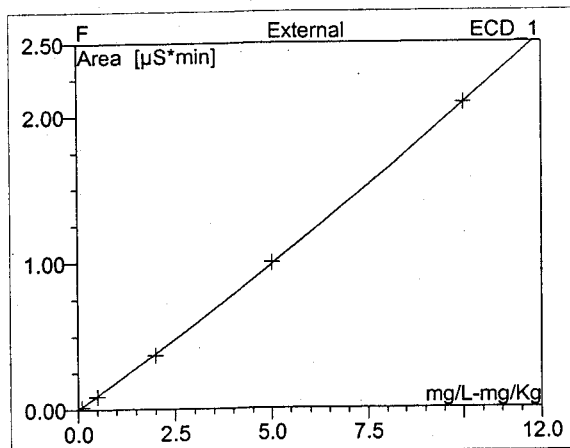
Created: 8/1/2003 11:03:14 AM by ic_analyst
Last Update: 11/28/2006 4:33:43 PM by ic_analyst

No.	*Batch	Name	Comment	Method	Type	Inj. Vol.	*operator	*PDF
1	CAL-331	IB		IC03-7AN_CAL	Unknown	25.0 MRS	1	
2	CAL-331	ICAL, L1,S4740,500		IC03-7AN_CAL	Standard	25.0 MRS	1	
3	CAL-331	ICAL, L2,S4740,100		IC03-7AN_CAL	Standard	25.0 MRS	1	
4	CAL-331	ICAL, L3,S4740,25		IC03-7AN_CAL	Standard	25.0 MRS	1	
5	CAL-331	ICAL, L4,S4740,10		IC03-7AN_CAL	Standard	25.0 MRS	1	
6	CAL-331	ICAL, L5,S4740,5		IC03-7AN_CAL	Standard	25.0 MRS	1	
7	CAL-331	ICV,S3859,5		IC03-7AN_CAL	Unknown	25.0 MRS	1	
8	CAL-331	ICB		IC03-7AN_CAL	Unknown	25.0 MRS	1	
9	119854	CCV,L,S4740,100		IC03-7AN_CAL	Unknown	25.0 MRS	1	
10	119854	CCB/MB,QC366232		IC03-7AN_CAL	Unknown	25.0 MRS	1	
11	119854	BS,QC366233,S4740,25		IC03-7AN_CAL	Unknown	25.0 MRS	1	
12	119854	BSD,QC366234,S4740,25		IC03-7AN_CAL	Unknown	25.0 MRS	1	
13	119854	190995-001	A	IC03-7AN_CAL	Unknown	25.0 MRS	1	
14	119854	BLK		IC03-7AN_CAL	Unknown	25.0 MRS	1	
15	119854	MSS,190995-002	A	IC03-7AN_CAL	Unknown	25.0 MRS	1	
16	119854	190995-003	A	IC03-7AN_CAL	Unknown	25.0 MRS	1	
17	119854	190995-004	A	IC03-7AN_CAL	Unknown	25.0 MRS	1	
18	119854	190995-005	A	IC03-7AN_CAL	Unknown	25.0 MRS	1	
19	119854	190995-006	A	IC03-7AN_CAL	Unknown	25.0 MRS	1	
20	119854	190995-007	A	IC03-7AN_CAL	Unknown	25.0 MRS	1	
21	119854	CCV,M,S4740,25		IC03-7AN_CAL	Unknown	25.0 MRS	1	
22	119854	CCB		IC03-7AN_CAL	Unknown	25.0 MRS	1	
23	119854	X,CCV,M,S4740,25		IC03-7AN_CAL	Unknown	25.0 MRS	1	
24	119854	X,CCB		IC03-7AN_CAL	Unknown	25.0 MRS	1	
25	119854	MS,QC366235,S4740,50	A	IC03-7AN_CAL	Unknown	25.0 MRS	1	
26	119854	MSD,QC366236,S4740,50	A	IC03-7AN_CAL	Unknown	25.0 MRS	1	
27	119854	190995-001	A	IC03-7AN_CAL	Unknown	25.0 MRS	1	
28	119854	190995-008	A	IC03-7AN_CAL	Unknown	25.0 MRS	1	
29	119854	190995-009	A	IC03-7AN_CAL	Unknown	25.0 MRS	1	
30	119854	190995-010	A	IC03-7AN_CAL	Unknown	25.0 MRS	1	
31	119854	190995-011	A	IC03-7AN_CAL	Unknown	25.0 MRS	1	
32	119854	190995-012	A	IC03-7AN_CAL	Unknown	25.0 MRS	1	
33	119854	190995-013	A	IC03-7AN_CAL	Unknown	25.0 MRS	1	
34	119854	190995-014	A	IC03-7AN_CAL	Unknown	25.0 MRS	1	
35	119854	CCV,H,S4740,10		IC03-7AN_CAL	Unknown	25.0 MRS	1	
36	119854	CCB		IC03-7AN_CAL	Unknown	25.0 MRS	1	
37	119854	X,CCV,H,S4740,10		IC03-7AN_CAL	Unknown	25.0 MRS	1	
38	119854	X,CCB		IC03-7AN_CAL	Unknown	25.0 MRS	1	
39	119854	SHUTDOWN		IC03-7AN_CAL	Unknown	25.0 MRS	1	

IC03 Calibration Batch Report

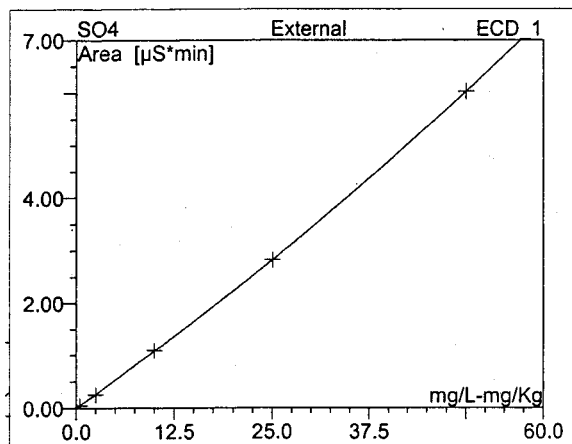
Sequence: 331
Program: IC03-7AN
Ini. Date/Time: 11/27/06 13:07

Inj. Vol.: 25.0
Operator: PC_NEWIC
Run Time: 15.01



Sequence: 331
 Program: IC03-7AN
 Ini. Date/Time: 11/27/06 13:07

Inj. Vol.: 25.0
 Operator: n.a.
 Run Time: 15.01



No.	Ret. Time min	Peak Name	Cal. Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr. Coeff. %
1	2.947	F	Quad	5	0.000000	0.185717	0.002247	99.968280
3	4.370	CL	Quad	5	0.000000	0.150660	0.001325	99.925219
4	5.190	NO2N	Quad	5	0.000000	0.311463	0.003864	99.990563
5	6.663	BR	Quad	5	0.000000	0.063257	0.000196	99.985565
6	7.500	NO3N	Quad	5	0.000000	0.357561	0.006384	99.969306
7	9.540	PO4	Quad	5	0.000000	0.121887	0.000555	99.964829
8	11.527	SO4	Quad	5	0.000000	0.105616	0.000300	99.951392
AVERAGE:					0.000000	0.185166	0.002125	99.965022

No.	Name	Area $\mu\text{S} \cdot \text{min}$ F ECD 1	Area $\mu\text{S} \cdot \text{min}$ CL ECD 1	Area $\mu\text{S} \cdot \text{min}$ NO2N ECD 1	Area $\mu\text{S} \cdot \text{min}$ BR ECD 1	Area $\mu\text{S} \cdot \text{min}$ NO3N ECD 1	Area $\mu\text{S} \cdot \text{min}$ PO4 ECD 1	Area $\mu\text{S} \cdot \text{min}$ SO4 ECD 1
2	ICAL, L1,S474	0.014001	0.033277	0.014285	0.012236	0.020070	0.035727	0.044567
3	ICAL, L2,S474	0.086913	0.142967	0.071273	0.062250	0.089719	0.134894	0.251908
4	ICAL, L3,S474	0.369133	0.623323	0.316571	0.261785	0.374732	0.495623	1.091655
5	ICAL, L4,S474	0.993403	1.640986	0.803364	0.648843	0.926829	1.272087	2.827284
6	ICAL, L5,S474	2.080176	3.542624	1.653755	1.344237	1.948730	2.660379	6.030414

No.	Name	Height μS F ECD 1	Height μS CL ECD 1	Height μS NO2N ECD 1	Height μS BR ECD 1	Height μS NO3N ECD 1	Height μS PO4 ECD 1	Height μS SO4 ECD 1
2	ICAL, L1,S474	0.109270	0.266758	0.082908	0.057646	0.081418	0.104802	0.151678
3	ICAL, L2,S474	0.584488	1.147464	0.454120	0.322522	0.381722	0.404404	0.791894
4	ICAL, L3,S474	2.698538	5.038912	1.964562	1.374302	1.647552	1.592196	3.464522
5	ICAL, L4,S474	7.375572	13.304908	4.960162	3.463314	4.199376	4.117156	9.031506
6	ICAL, L5,S474	16.615428	29.041484	10.376214	7.323652	9.001146	9.082872	19.866438

No.	Name	Amount mg/L-mg/Kg F ECD 1	Amount mg/L-mg/Kg CL ECD 1	Amount mg/L-mg/Kg NO2N ECD 1	Amount mg/L-mg/Kg BR ECD 1	Amount mg/L-mg/Kg NO3N ECD 1	Amount mg/L-mg/Kg PO4 ECD 1	Amount mg/L-mg/Kg SO4 ECD 1
2	ICAL, L1,S474	0.075318	0.220446	0.045837	0.193310	0.056075	0.292722	0.421466
3	ICAL, L2,S474	0.465366	0.941150	0.228186	0.981084	0.249805	1.101194	2.369187
4	ICAL, L3,S474	1.941982	3.996822	1.003896	4.086616	1.029113	3.993610	10.049335
5	ICAL, L4,S474	5.041498	10.010831	2.501675	9.950142	2.482083	9.982720	24.995573
6	ICAL, L5,S474	9.992662	19.997854	4.999511	20.008658	5.003115	20.003987	49.999624

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 1 of 6
Printed: 12/11/2006 1:01:14 PM

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006\341.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON
Last Update: 12/7/2006 2:12:03 PM by ic_analyst

Blank Run Subtraction: No Blank Run Subtraction

Detection Table:

No.	Ret. Time [min]	Param. Name	Param. Value	Channel
1	0.000	Inhibit Integration	On	ECD_1
2	2.250	Sensitivity	0.001 "[Signal]"	ECD_1
3	2.250	Minimum Area	0.001 "[Signal]*min"	ECD_1
4	2.250	Peak Slice	0.50 s	ECD_1
5	2.500	Inhibit Integration	Off	ECD_1

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 2 of 6
Printed: 12/11/2006 1:01:14 PM

Title: IC03-7AN_CAL

Datasource: DGLD4X01_local

Location: IC3_DX120\IC03-ANIONS-2006\341.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON

Last Update: 12/7/2006 2:12:03 PM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off

Dead time:

Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Window	Standard	Int.Type	Cal.Type	Peak Type	Group	Amount	
									ICAL, L1,S4740,500	ICAL, L2,S4740,100
1	F	2.910 min	5.000 RG	External	Area	Quad	Auto		0.100000	0.500000
2	CL	4.287 min	5.000 RG	External	Area	Quad	Auto		0.200000	1.000000
3	NO2N	5.077 min	5.000 RG	External	Area	Quad	Auto		0.050000	0.250000
4	BR	6.477 min	5.000 RG	External	Area	Quad	Auto		0.200000	1.000000
5	NO3N	7.293 min	10.000 RG	External	Area	Quad	Auto		0.050000	0.250000
6	PO4	9.427 min	10.000 RG	External	Area	Quad	Auto		0.200000	1.000000
7	SO4	11.360 min	10.000 RG	External	Area	Quad	Auto		0.500000	2.500000

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 3 of 6
Printed: 12/11/2006 1:01:14 PM

Title: IC03-7AN_CAL

Datasource: DGLD4X01_local

Location: IC3_DX120\IC03-ANIONS-2006\341.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON

Last Update: 12/7/2006 2:12:03 PM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off

Dead time:

Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Amount	Amount	Amount	Comment
			ICAL, L3,S4740,25	ICAL, L4,S4740,10	ICAL, L5,S4740,5	
1	F	2.910 min	2.000000	5.000000	10.000000	
2	CL	4.287 min	4.000000	10.000000	20.000000	
3	NO2N	5.077 min	1.000000	2.500000	5.000000	
4	BR	6.477 min	4.000000	10.000000	20.000000	
5	NO3N	7.293 min	1.000000	2.500000	5.000000	
6	PO4	9.427 min	4.000000	10.000000	20.000000	
7	SO4	11.360 min	10.000000	25.000000	50.000000	

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 4 of 6
Printed: 12/11/2006 1:01:15 PM

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006\341.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON
Last Update: 12/7/2006 2:12:03 PM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg
Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Resp.Fact.	Amount	Amount	Amount	Amount
				ICAL, L1,S4740,500	ICAL, L2,S4740,100	ICAL, L3,S4740,25	ICAL, L4,S4740,10
1	F	2.910 min	1.000000	0.100000	0.500000	2.000000	5.000000
2	CL	4.287 min	1.000000	0.200000	1.000000	4.000000	10.000000
3	NO2N	5.077 min	1.000000	0.050000	0.250000	1.000000	2.500000
4	BR	6.477 min	1.000000	0.200000	1.000000	4.000000	10.000000
5	NO3N	7.293 min	1.000000	0.050000	0.250000	1.000000	2.500000
6	PO4	9.427 min	1.000000	0.200000	1.000000	4.000000	10.000000
7	SO4	11.360 min	1.000000	0.500000	2.500000	10.000000	25.000000

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 5 of 6
Printed: 12/11/2006 1:01:15 PM

Title: IC03-7AN_CAL

Datasource: DGLD4X01_local

Location: IC3_DX120\IC03-ANIONS-2006\341.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON

Last Update: 12/7/2006 2:12:03 PM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg

Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Amount	Comment
			ICAL, L5,S4740,5	
1	F	2.910 min	10.000000	
2	CL	4.287 min	20.000000	
3	NO2N	5.077 min	5.000000	
4	BR	6.477 min	20.000000	
5	NO3N	7.293 min	5.000000	
6	PO4	9.427 min	20.000000	
7	SO4	11.360 min	50.000000	

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 6 of 6
Printed: 12/11/2006 1:01:15 PM

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006\341.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON
Last Update: 12/7/2006 2:12:03 PM by ic_analyst

Calibration:

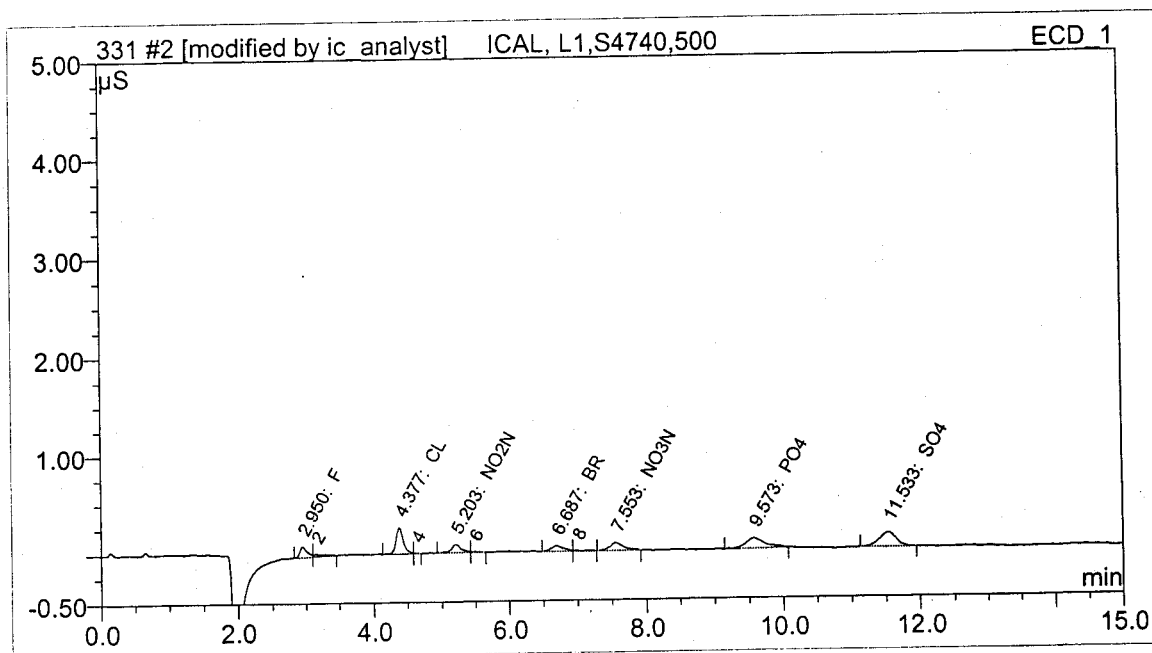
Calibration Mode: Total
Auto Recalibrate: On

No.	Enabled	Name	Smp.No.	Pos.	Inj. Vol.	Weight	ISTD Amount	Dil. Factor	Inj. Date/Time	Calib. Comment
1	☒	ICAL, L1,S4740,500	2	210	25.0	1.0000	1.0000	1.0000	11/27/2006 12:32:50 PM	Ok
2	☒	ICAL, L2,S4740,100	3	211	25.0	1.0000	1.0000	1.0000	11/27/2006 12:50:15 PM	Ok
3	☒	ICAL, L3,S4740,25	4	212	25.0	1.0000	1.0000	1.0000	11/27/2006 1:07:39 PM	Ok
4	☒	ICAL, L4,S4740,10	5	213	25.0	1.0000	1.0000	1.0000	11/27/2006 1:25:04 PM	Ok
5	☒	ICAL, L5,S4740,5	6	214	25.0	1.0000	1.0000	1.0000	11/27/2006 1:42:29 PM	Ok

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L1,S4740,500	Sample No.:	2
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 12:32 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.950	0.014001	0.0753	0.0753	
3	CL	4.377	0.033277	0.2204	0.2204	
5	NO2N	5.203	0.014285	0.0458	0.0458	
7	BR	6.687	0.012236	0.1933	0.1933	
9	NO3N	7.553	0.020070	0.0561	0.0561	
10	PO4	9.573	0.035727	0.2927	0.2927	
11	SO4	11.533	0.044567	0.4215	0.4215	



ANALYZED BY:

REVIEWED BY:

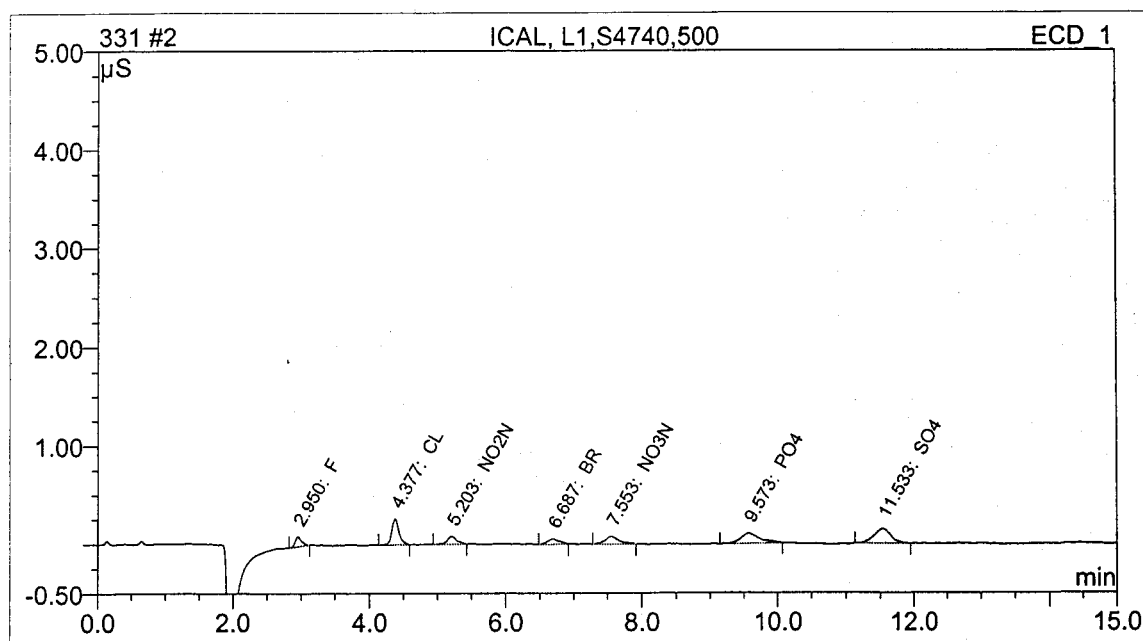
Curtis & Tompkins, Ltd.

00395

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L1,S4740,500	Sample No.:	2
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 12:32 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.950	0.011269	0.0606	0.0606	
2	CL	4.377	0.032932	0.2182	0.2182	
3	NO2N	5.203	0.013070	0.0419	0.0419	
4	BR	6.687	0.011075	0.1750	0.1750	
5	NO3N	7.553	0.020070	0.0561	0.0561	
6	PO4	9.573	0.035727	0.2927	0.2927	
7	SO4	11.533	0.044567	0.4215	0.4215	



ANALYZED BY:

REVIEWED BY:

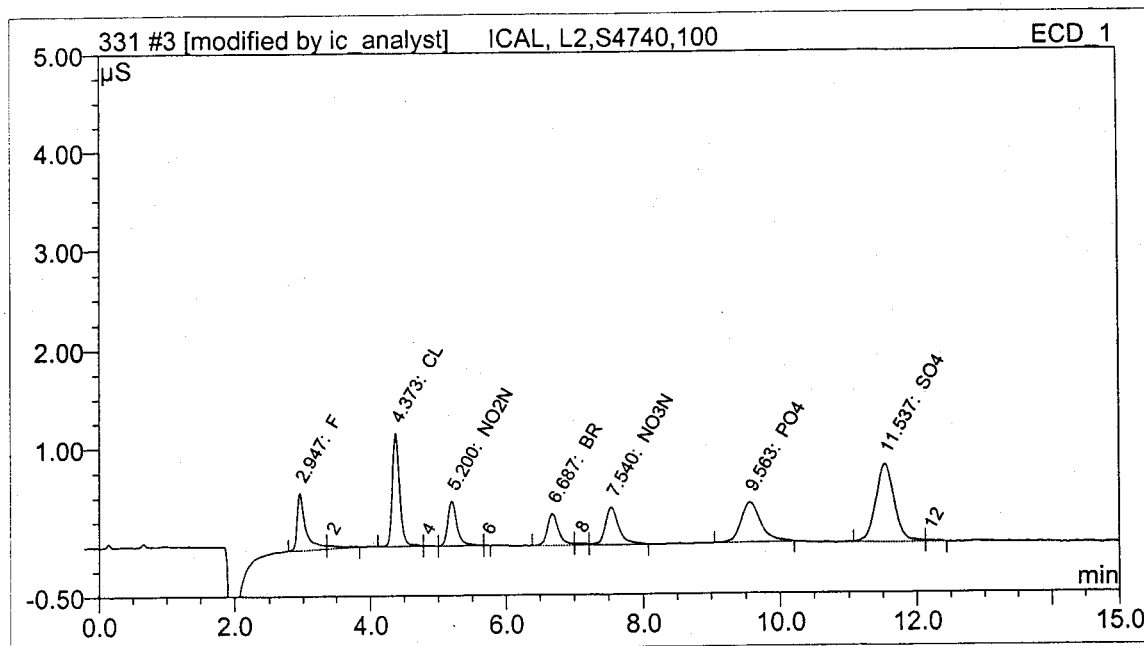
Curtis & Tompkins, Ltd.

00396

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L2,S4740,100	Sample No.:	3
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 12:50 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S}\cdot\text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	0.086913	0.4654	0.4654	
3	CL	4.373	0.142967	0.9412	0.9412	
5	NO2N	5.200	0.071273	0.2282	0.2282	
7	BR	6.687	0.062250	0.9811	0.9811	
9	NO3N	7.540	0.089719	0.2498	0.2498	
10	PO4	9.563	0.134894	1.1012	1.1012	
11	SO4	11.537	0.251908	2.3692	2.3692	



ANALYZED BY:

REVIEWED BY:

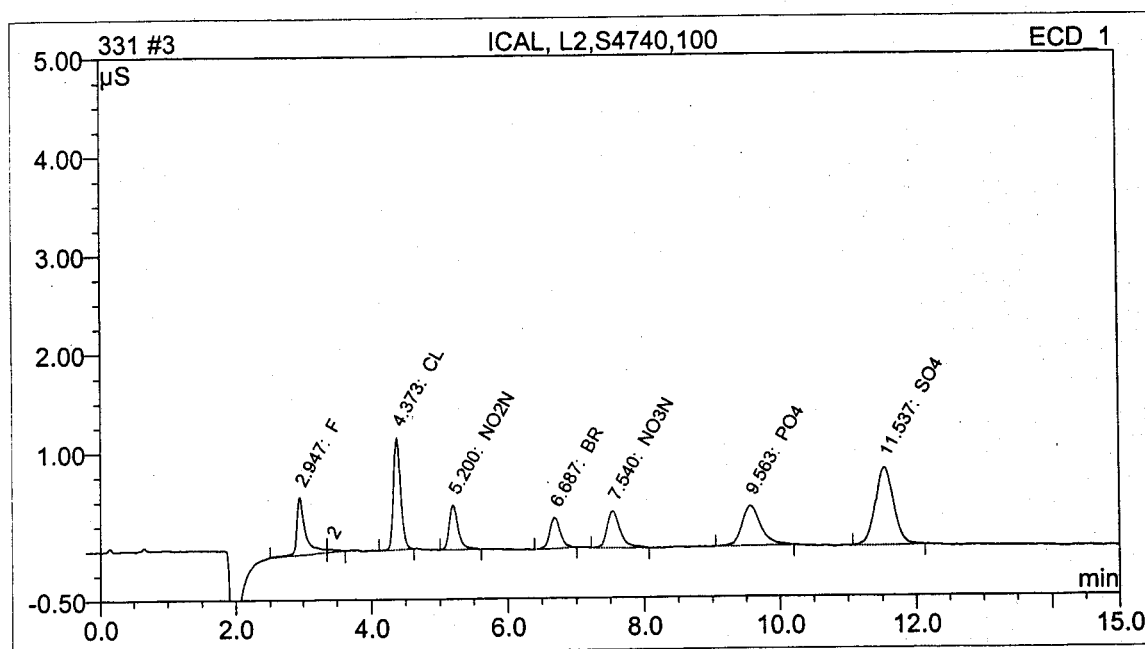
Curtis & Tompkins, Ltd.

00337

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L2,S4740,100	Sample No.:	3
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 12:50 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	0.091459	0.4889	0.4889	
3	CL	4.373	0.137235	0.9046	0.9046	
4	NO2N	5.200	0.070082	0.2245	0.2245	
5	BR	6.687	0.056692	0.8958	0.8958	
6	NO3N	7.540	0.085131	0.2374	0.2374	
7	PO4	9.563	0.134894	1.1012	1.1012	
8	SO4	11.537	0.246264	2.3177	2.3177	



ANALYZED BY:

REVIEWED BY:

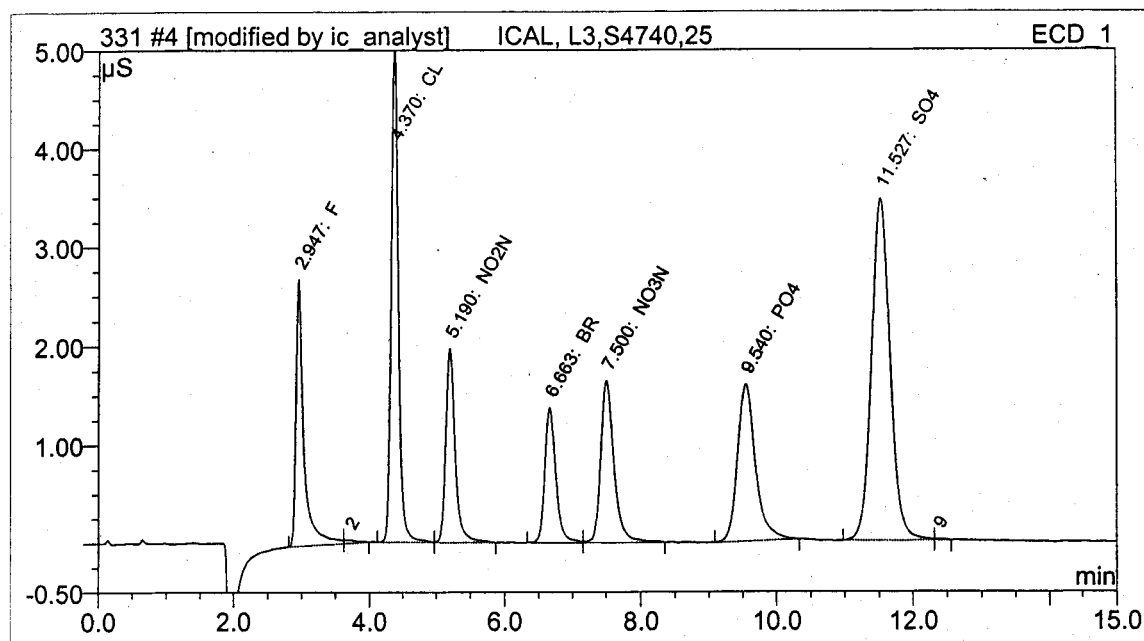
Curtis & Tompkins, Ltd.

: 00398

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L3,S4740,25	Sample No.:	4
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:07 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	0.369133	1.9420	1.9420	
3	CL	4.370	0.623323	3.9968	3.9968	
4	NO2N	5.190	0.316571	1.0039	1.0039	
5	BR	6.663	0.261785	4.0866	4.0866	
6	NO3N	7.500	0.374732	1.0291	1.0291	
7	PO4	9.540	0.495623	3.9936	3.9936	
8	SO4	11.527	1.091655	10.0493	10.0493	



ANALYZED BY:

REVIEWED BY:

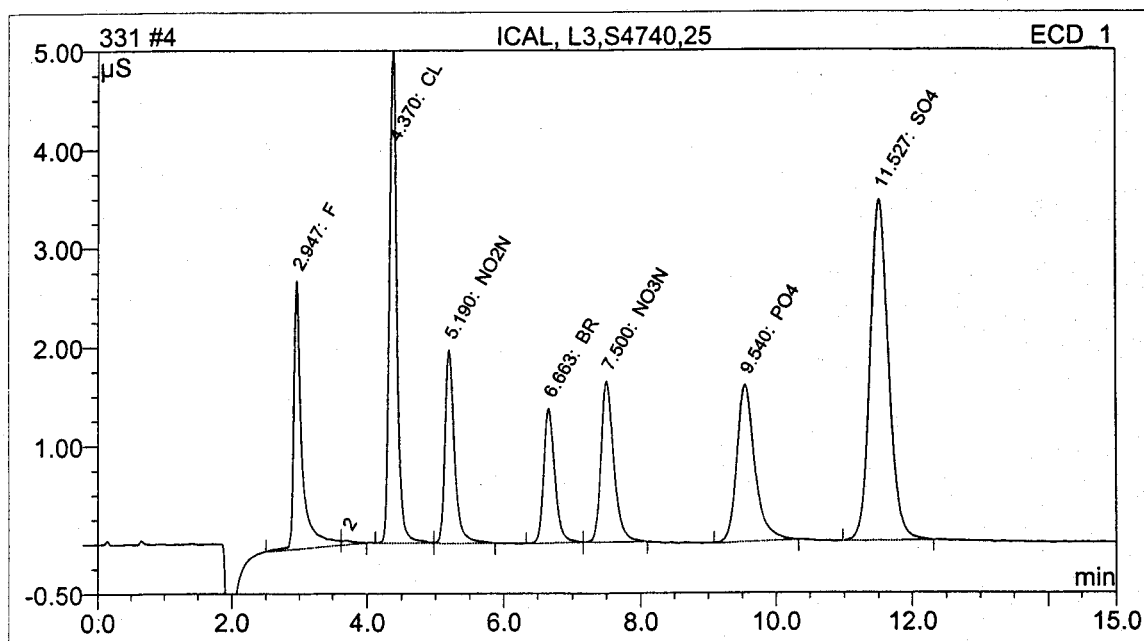
Curtis & Tompkins, Ltd.

: 00333

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L3,S4740,25	Sample No.:	4
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:07 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	0.386242	2.0044	2.0044	
3	CL	4.370	0.623323	3.9968	3.9968	
4	NO2N	5.190	0.316571	1.0039	1.0039	
5	BR	6.663	0.256924	4.0335	4.0335	
6	NO3N	7.500	0.360167	1.0012	1.0012	
7	PO4	9.540	0.495623	3.9936	3.9936	
8	SO4	11.527	1.086097	10.0140	10.0140	



ANALYZED BY:

REVIEWED BY:

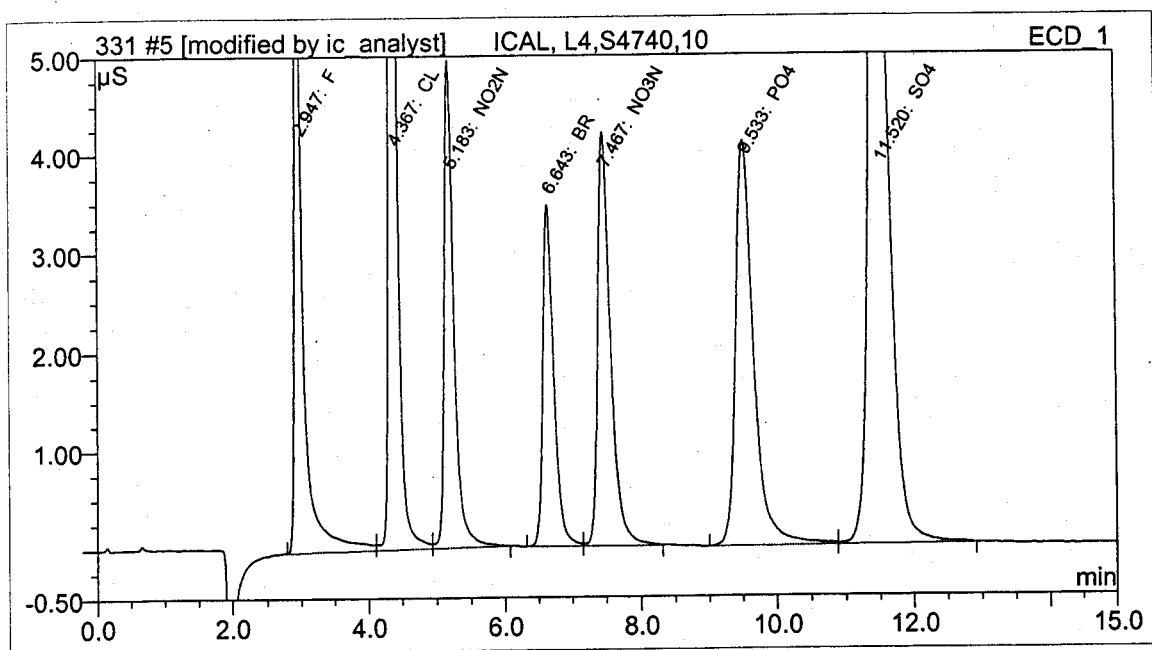
Curtis & Tompkins, Ltd.

00400

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L4,S4740,10	Sample No.:	5
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:25 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S}\cdot\text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	0.993403	5.0415	5.0415	
2	CL	4.367	1.640986	10.0108	10.0108	
3	NO2N	5.183	0.803364	2.5017	2.5017	
4	BR	6.643	0.648843	9.9501	9.9501	
5	NO3N	7.467	0.926829	2.4821	2.4821	
6	PO4	9.533	1.272087	9.9827	9.9827	
7	SO4	11.520	2.827284	24.9956	24.9956	



ANALYZED BY:

REVIEWED BY:

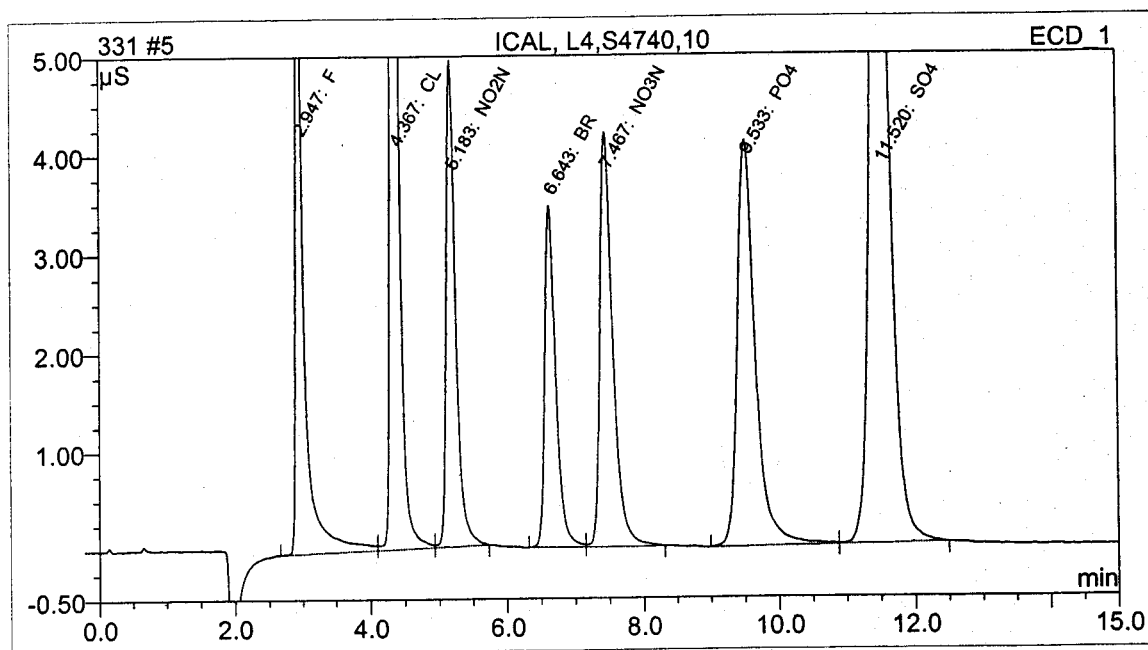
Curtis & Tompkins, Ltd.

: 00401

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L4,S4740,10	Sample No.:	5
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:25 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S}\cdot\text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	0.994388	5.0429	5.0429	
2	CL	4.367	1.629703	9.9914	9.9914	
3	NO2N	5.183	0.779627	2.4797	2.4797	
4	BR	6.643	0.648843	9.9501	9.9501	
5	NO3N	7.467	0.926829	2.4821	2.4821	
6	PO4	9.533	1.261117	9.9575	9.9575	
7	SO4	11.520	2.793931	24.9110	24.9110	



ANALYZED BY:

REVIEWED BY:

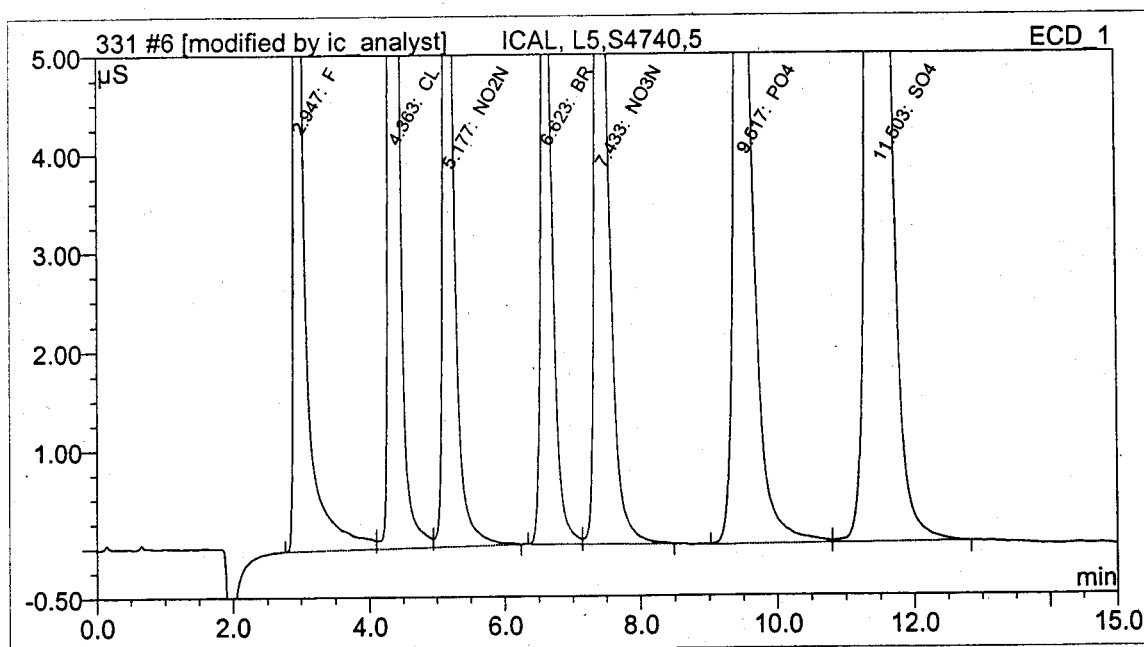
Curtis & Tompkins, Ltd.

00402

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L5,S4740,5	Sample No.:	6
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:42 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	2.080176	9.9927	9.9927	
2	CL	4.363	3.542624	19.9979	19.9979	
3	NO2N	5.177	1.653755	4.9995	4.9995	
4	BR	6.623	1.344237	20.0087	20.0087	
5	NO3N	7.433	1.948730	5.0031	5.0031	
6	PO4	9.517	2.660379	20.0040	20.0040	
7	SO4	11.503	6.030414	49.9996	49.9996	



ANALYZED BY:

REVIEWED BY:

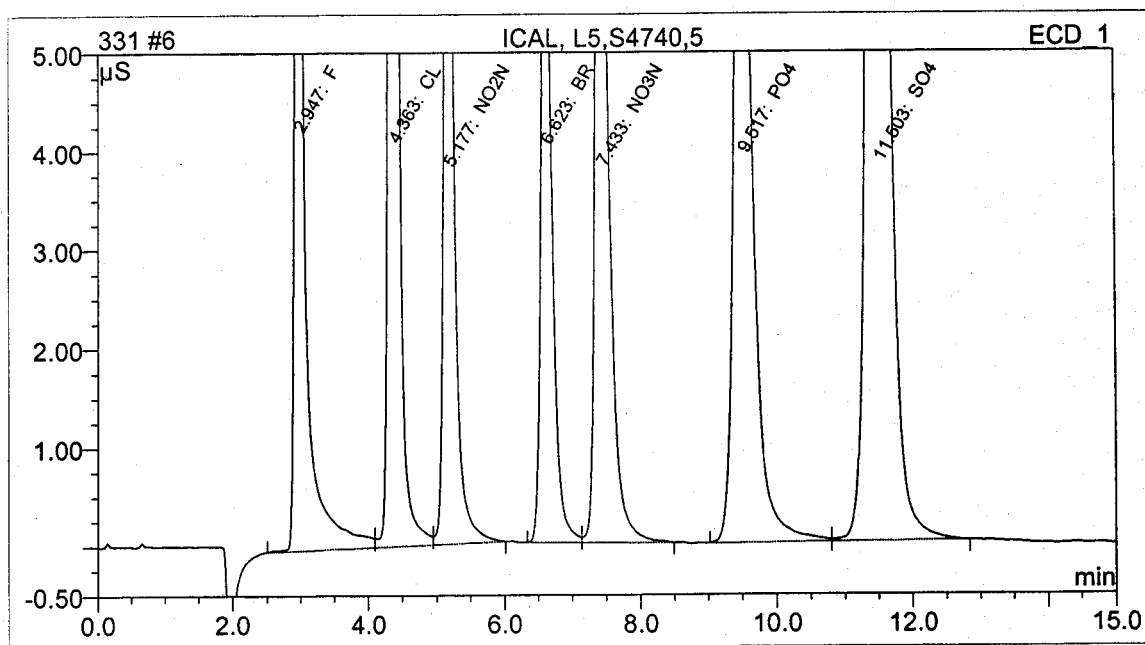
Curtis & Tompkins, Ltd.

00403

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L5,S4740,5	Sample No.:	6
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:42 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	2.098829	9.9937	9.9937	
2	CL	4.363	3.543045	19.9979	19.9979	
3	NO2N	5.177	1.641721	4.9991	4.9991	
4	BR	6.623	1.344237	20.0087	20.0087	
5	NO3N	7.433	1.948730	5.0031	5.0031	
6	PO4	9.517	2.660379	20.0040	20.0040	
7	SO4	11.503	6.030414	49.9996	49.9996	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

: 00404

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 300.0

Inst : IC03
 Seqnum : 626477375007
 Cal : 626477375001
 Standards: S3859 (5X)

File : 331_7.000
 Caldate: 27-NOV-2006

IDF : 1.0
 Time : 27-NOV-2006 13:59

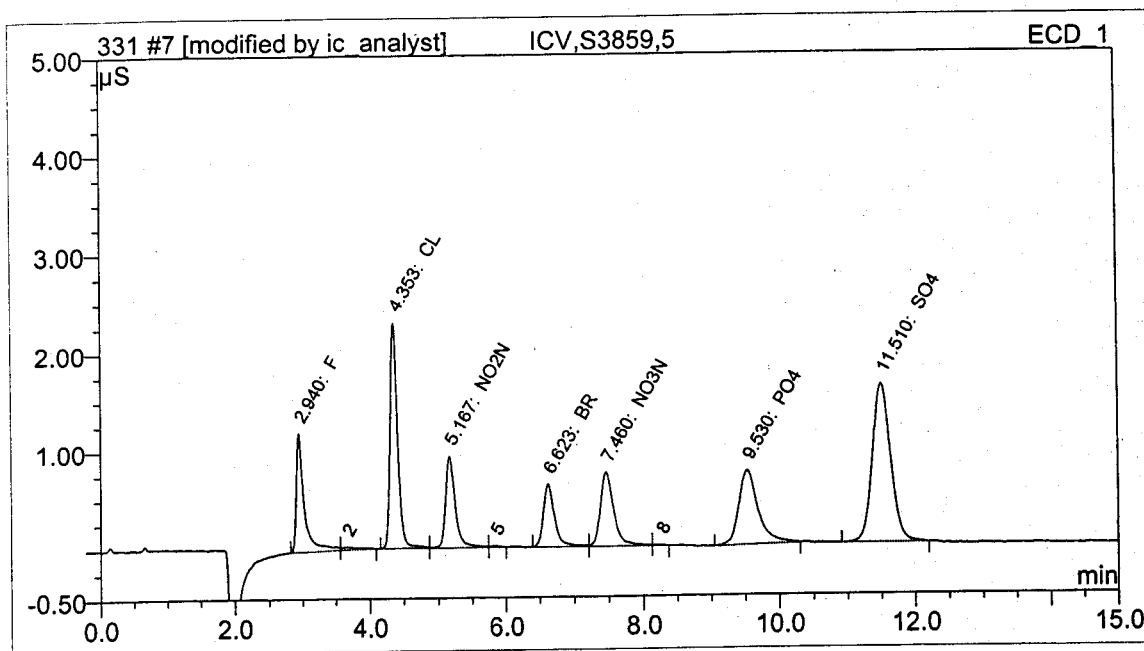
Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.1810	0.1712	1.000	0.9120	mg/L	-9	10	
Chloride	0.1613	0.1427	2.000	1.864	mg/L	-7	10	
Nitrogen, Nitrite	0.3079	0.3053	0.5000	0.4871	mg/L	-3	10	
Bromide	0.0642	0.0613	2.000	1.925	mg/L	-4	10	
Nitrogen, Nitrate	0.3791	0.3435	0.5000	0.4763	mg/L	-5	10	
Orthophosphate (as P)	0.1395	0.1230	2.000	2.001	mg/L	0	10	
Sulfate	0.1066	0.1016	5.000	4.744	mg/L	-5	10	

ms 11/28/06

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICV,S3859,5	Sample No.:	7
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:59 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S}\cdot\text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.940	0.171238	0.9120	0.9120	
3	CL	4.353	0.285357	1.8635	1.8635	
4	NO2N	5.167	0.152642	0.4871	0.4871	
6	BR	6.623	0.122509	1.9252	1.9252	
7	NO3N	7.460	0.171748	0.4763	0.4763	
9	PO4	9.530	0.246093	2.0008	2.0008	
10	SO4	11.510	0.507753	4.7436	4.7436	



ANALYZED BY:

REVIEWED BY:

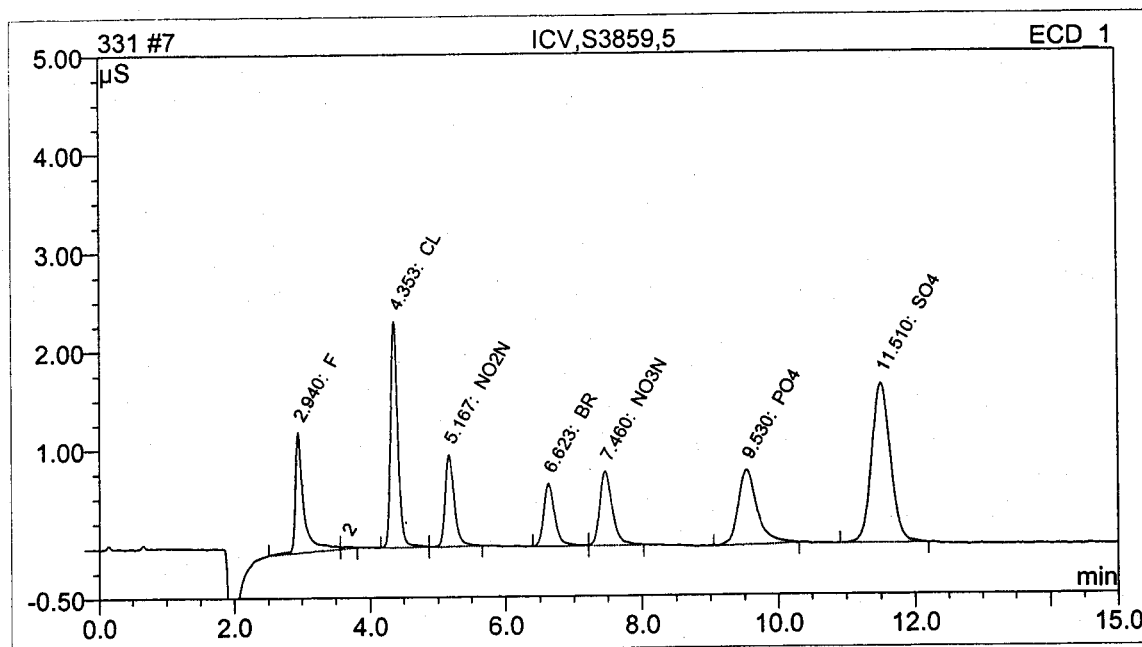
Curtis & Tompkins, Ltd.

00406

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICV,S3859,5	Sample No.:	7
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:59 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.940	0.180935	0.9630	0.9630	
3	CL	4.353	0.283683	1.8528	1.8528	
4	NO2N	5.167	0.146171	0.4666	0.4666	
5	BR	6.623	0.120324	1.8910	1.8910	
6	NO3N	7.460	0.164100	0.4552	0.4552	
7	PO4	9.530	0.246093	2.0008	2.0008	
8	SO4	11.510	0.507753	4.7436	4.7436	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

: 00407

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC03
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Cal : 626477375001

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Caldate: 27-NOV-2006

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Time : 27-NOV-2006 14:17

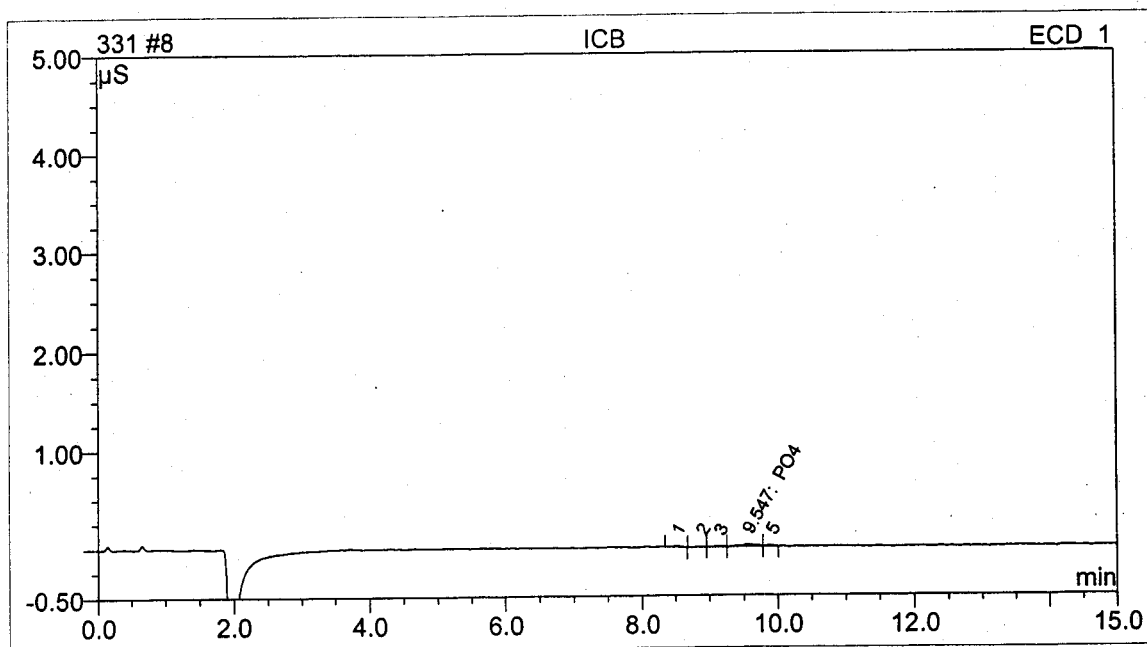
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Bromide	ND	0.2000	0.02767	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Orthophosphate (as P)	[0.05090]	0.2000	0.03686	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

MRS 11/28/06

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICB	Sample No.:	8
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 2:17 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
n.a.	CL	n.a.	n.a.	n.a.	n.a.	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
4	PO4	9.547	0.006205	0.0509	0.0509	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

: 00409

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC03
Seqnum : 626477375001
Cal : 626450011001

File : 331_1.000
Caldate: 08-NOV-2006

IDF : 1.0
Time : 27-NOV-2006 12:15

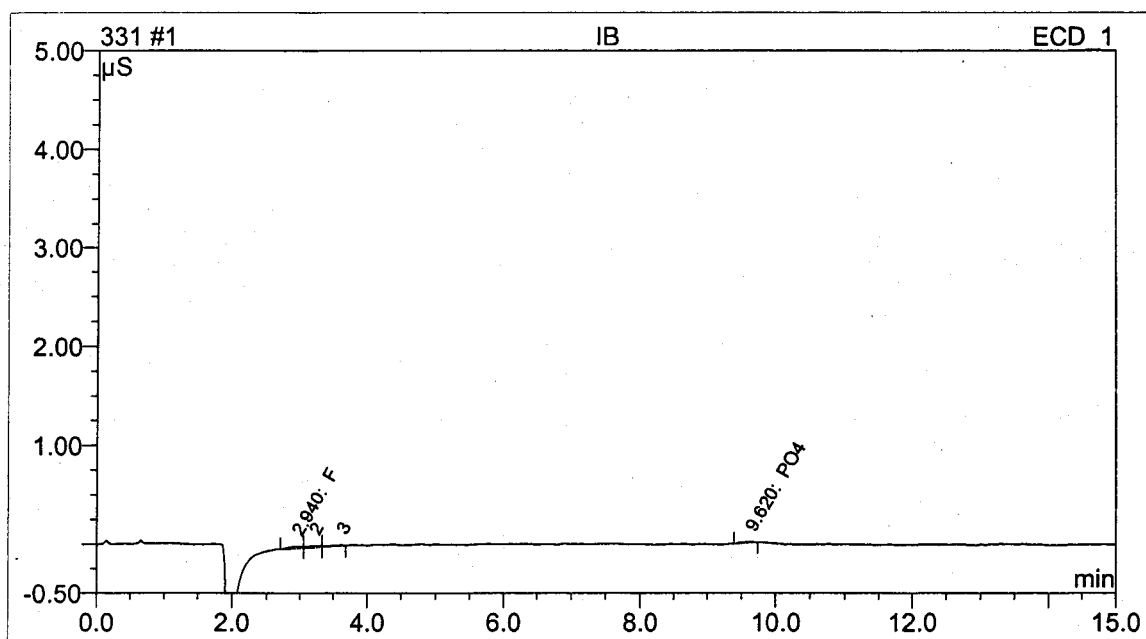
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Bromide	ND	0.2000	0.02767	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Orthophosphate (as P)	ND	0.2000	0.03686	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

MMS 11/28/06

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	IB	Sample No.:	1
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 12:15 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.940	0.004714	0.0254	0.0254	
n.a.	CL	n.a.	n.a.	n.a.	n.a.	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
4	PO4	9.620	0.002007	0.0165	0.0165	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

CONTINUING CALIBRATION SUMMARY FOR 191314 IC Water
Curtis & Tompkins Laboratories

Analyte: Fluoride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D Flags
						RF/CF	RF/CF					
IC03	P	626491824007	07-DEC-2006 12:12	626477375001	27-NOV-2006	0.1810	0.1929	0.5000	0.5161	mg/L	3	10
IC03	P	626491824019	07-DEC-2006 18:14	626477375001	27-NOV-2006	0.1810	0.1947	2.0000	2.0458	mg/L	2	10
IC03	P	626491824032	07-DEC-2006 22:00	626477375001	27-NOV-2006	0.1810	0.2099	5.0000	5.3099	mg/L	6	10
IC03	P	626491824046	08-DEC-2006 02:04	626477375001	27-NOV-2006	0.1810	0.1925	2.0000	2.0235	mg/L	1	10
IC03	P	626491824057	08-DEC-2006 05:15	626477375001	27-NOV-2006	0.1810	0.2119	5.0000	5.3580	mg/L	7	10

CONTINUING CALIBRATION SUMMARY FOR 191314 IC Water
Curtis & Tompkins Laboratories

Analyte: Chloride

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D Flags
						RF/CF	RF/CF					
IC03	P	626491824007	07-DEC-2006 12:12	626477375001	27-NOV-2006	0.1613	0.1435	1.0000	0.9446	mg/L	-6 10	
IC03	P	626491824019	07-DEC-2006 18:14	626477375001	27-NOV-2006	0.1613	0.1511	4.0000	3.8797	mg/L	-3 10	
IC03	P	626491824032	07-DEC-2006 22:00	626477375001	27-NOV-2006	0.1613	0.1603	10.000	9.7953	mg/L	-2 10	
IC03	P	626491824046	08-DEC-2006 02:04	626477375001	27-NOV-2006	0.1613	0.1518	4.0000	3.8979	mg/L	-3 10	
IC03	P	626491824057	08-DEC-2006 05:15	626477375001	27-NOV-2006	0.1613	0.1623	10.000	9.9095	mg/L	-1 10	

CONTINUING CALIBRATION SUMMARY FOR 191314 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrite

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D	Max	%D	Flags
						RF/CF	RF/CF							
IC03	P	626491824007	07-DEC-2006 12:12	626477375001	27-NOV-2006	0.3079	0.2883	0.2500	0.2307	mg/L	-8	10		
IC03	P	626491824019	07-DEC-2006 18:14	626477375001	27-NOV-2006	0.3079	0.3057	1.0000	0.9697	mg/L	-3	10		
IC03	P	626491824032	07-DEC-2006 22:00	626477375001	27-NOV-2006	0.3079	0.3130	2.5000	2.4383	mg/L	-2	10		
IC03	P	626491824046	08-DEC-2006 02:04	626477375001	27-NOV-2006	0.3079	0.3039	1.0000	0.9643	mg/L	-4	10		
IC03	P	626491824057	08-DEC-2006 05:15	626477375001	27-NOV-2006	0.3079	0.3236	2.5000	2.5190	mg/L	1	10		

CONTINUING CALIBRATION SUMMARY FOR 191314 IC Water
Curtis & Tompkins Laboratories

Analyte: Nitrogen, Nitrate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D	Flags
						RF/CF	RF/CF						
IC03	P	626491824007	07-DEC-2006 12:12	626477375001	27-NOV-2006	0.3791	0.3504	0.2500	0.2439	mg/L	-2	10	
IC03	P	626491824019	07-DEC-2006 18:14	626477375001	27-NOV-2006	0.3791	0.3652	1.0000	1.0035	mg/L	0	10	
IC03	P	626491824032	07-DEC-2006 22:00	626477375001	27-NOV-2006	0.3791	0.3688	2.5000	2.4694	mg/L	-1	10	
IC03	P	626491824046	08-DEC-2006 02:04	626477375001	27-NOV-2006	0.3791	0.3694	1.0000	1.0148	mg/L	1	10	
IC03	P	626491824057	08-DEC-2006 05:15	626477375001	27-NOV-2006	0.3791	0.3799	2.5000	2.5406	mg/L	2	10	

CONTINUING CALIBRATION SUMMARY FOR 191314 IC Water
Curtis & Tompkins Laboratories

Analyte: Sulfate

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D	Flags
						RF/CF	RF/CF						
IC03	P	626491824007	07-DEC-2006 12:12	626477375001	27-NOV-2006	0.1066	0.1032	2.5000	2.4254	mg/L	-3	10	
IC03	P	626491824019	07-DEC-2006 18:14	626477375001	27-NOV-2006	0.1066	0.1088	10.000	10.020	mg/L	0	10	
IC03	P	626491824032	07-DEC-2006 22:00	626477375001	27-NOV-2006	0.1066	0.1128	25.000	24.927	mg/L	0	10	
IC03	P	626491824046	08-DEC-2006 02:04	626477375001	27-NOV-2006	0.1066	0.1093	10.000	10.062	mg/L	1	10	
IC03	P	626491824057	08-DEC-2006 05:15	626477375001	27-NOV-2006	0.1066	0.1141	25.000	25.213	mg/L	1	10	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 191314 IC Water
EPA 300.0

Inst : IC03
Seqnum : 626491824020
Cal : 626477375001
File : 341_20.000
Caldate: 27-NOV-2006
IDF : 1.0
Time : 07-DEC-2006 18:31

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 191314 IC Water
EPA 300.0

Inst : IC03
Seqnum : 626491824033
Cal : 626477375001

File : 341_33.000
Caldate: 27-NOV-2006

IDF : 1.0
Time : 07-DEC-2006 22:17

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 191314 IC Water
EPA 300.0

Inst : IC03
Seqnum : 626491824047
Cal : 626477375001

File : 341_47.000
Caldate: 27-NOV-2006

IDF : 1.0
Time : 08-DEC-2006 02:21

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 191314 IC Water
EPA 300.0

Inst : IC03
Segnum : 626491824058
Cal : 626477375001
IDF : 1.0
File : 341_58.000
Time : 08-DEC-2006 05:33
Caldate: 27-NOV-2006

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

SEQUENCE SUMMARY FOR 191314 IC Water
Curtis & Tompkins Laboratories

Sequence: 626477375 Instrument: IC03 Ion Chromatograph Begun: 27-NOV-2006
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Std	Used	>LR
001	331_1.00	IB				27-NOV-2006	12:15	1.0		25					
002	331_2.00	ICAL	L1			27-NOV-2006	12:32	1.0				1			
003	331_3.00	ICAL	L2			27-NOV-2006	12:50	1.0				1			
004	331_4.00	ICAL	L3			27-NOV-2006	13:07	1.0				1			
005	331_5.00	ICAL	L4			27-NOV-2006	13:25	1.0				1			
006	331_6.00	ICAL	L5			27-NOV-2006	13:42	1.0				1			
007	331_7.00	ICV				27-NOV-2006	13:59	1.0		25					
008	331_8.00	ICB				27-NOV-2006	14:17	1.0		25					
009	331_9.00	CCV	L	119854		27-NOV-2006	14:34	1.0	1	25			1		
010	331_10.0	CCB/MB	QC366232	119854	Water	27-NOV-2006	14:52	1.0		25					
011	331_11.0	BS	QC366233	119854	Water	27-NOV-2006	15:09	1.0	1	25			1		
012	331_12.0	BSD	QC366234	119854	Water	27-NOV-2006	15:26	1.0	1	25			1		
013	331_13.0	SAMPLE	190995-001	119854	Water	27-NOV-2006	15:54	1.0	1	25				2:SO4=96.1268	
014	331_14.0	X	BLK	119854		27-NOV-2006	16:27	1.0							
015	331_15.0	MSS	190995-002	119854	Water	27-NOV-2006	16:44	10.0		25					
016	331_16.0	SAMPLE	190995-003	119854	Water	27-NOV-2006	17:02	10.0		25					
017	331_17.0	SAMPLE	190995-004	119854	Water	27-NOV-2006	17:19	10.0		25					
018	331_18.0	SAMPLE	190995-005	119854	Water	27-NOV-2006	17:37	10.0		25					
019	331_19.0	SAMPLE	190995-006	119854	Water	27-NOV-2006	17:54	10.0		25					
020	331_20.0	SAMPLE	190995-007	119854	Water	27-NOV-2006	18:11	10.0		25					
021	331_21.0	CCV	M	119854		27-NOV-2006	18:29	1.0		25			1		
022	331_22.0	CCB		119854		27-NOV-2006	18:46	1.0		25					
023	331_23.0	X	CCV	119854		27-NOV-2006	19:04	1.0				1			
024	331_24.0	X	CCB	119854		27-NOV-2006	19:21	1.0							
025	331_25.0	MS	QC366235	119854	Water	27-NOV-2006	19:39	10.0	1	25			1		
026	331_26.0	MSD	QC366236	119854	Water	27-NOV-2006	19:56	10.0	1	25			1		
027	331_27.0	SAMPLE	190995-001	119854	Water	27-NOV-2006	20:13	10.0		25					
028	331_28.0	SAMPLE	190995-008	119854	Water	27-NOV-2006	20:31	10.0		25					
029	331_29.0	SAMPLE	190995-009	119854	Water	27-NOV-2006	20:49	10.0		25					
030	331_30.0	SAMPLE	190995-010	119854	Water	27-NOV-2006	21:06	10.0		25					
031	331_31.0	SAMPLE	190995-011	119854	Water	27-NOV-2006	21:24	10.0		25					

Std used: 1=S4740 2=S3859

SEQUENCE SUMMARY FOR 191314 IC Water
Curtis & Tompkins Laboratories

Sequence: 626477375 Instrument: IC03 Ion Chromatograph Begun: 27-NOV-2006
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Std	Used	>LR
032	331_32.0	SAMPLE	190995-012	119854	Water	27-NOV-2006	21:41	10.0		25					
033	331_33.0	SAMPLE	190995-013	119854	Water	27-NOV-2006	21:59	10.0		25					
034	331_34.0	SAMPLE	190995-014	119854	Water	27-NOV-2006	22:16	10.0		25					
035	331_35.0	CCV	H	119854		27-NOV-2006	22:33	1.0		25			1		
036	331_36.0	CCB		119854		27-NOV-2006	22:51	1.0		25					
037	331_37.0	X	CCV	119854		27-NOV-2006	23:08	1.0					1		
038	331_38.0	X	CCB	119854		27-NOV-2006	23:26	1.0							
039	331_39.0	X	SHUTDOWN	119854		27-NOV-2006	23:43	1.0							

Std used: 1=S4740 2=S3859

SEQUENCE SUMMARY FOR 191314 IC Water
Curtis & Tompkins Laboratories

Sequence: 626491824 Instrument: IC03 Ion Chromatograph
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

Begun: 07-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stdts	Used	>LR
007	341_7.00	CCV	L	120186		07-DEC-2006	12:12	1.0	1	25			1		
008	341_8.00	CCB/MB	QC367578	120186	Water	07-DEC-2006	12:29	1.0		25					
009	341_9.00	BS	QC367579	120186	Water	07-DEC-2006	12:47	1.0		25			1		
010	341_10.0	BSD	QC367580	120186	Water	07-DEC-2006	13:04	1.0	1	25			1		
011	341_11.0	SAMPLE	191287-003	120186	Water	07-DEC-2006	15:03	100.0		25					
012	341_12.0	SAMPLE	191287-003	120186	Water	07-DEC-2006	15:26	10.0	1	25				1: NO3N=29.6410	
013	341_13.0	X	BLK	120186		07-DEC-2006	15:43	1.0							
014	341_14.0	MSS	191314-003	120186	Water	07-DEC-2006	16:46	1.0	1	25				1: CL=66.5765	
015	341_15.0	MSS	191314-011	120186	Water	07-DEC-2006	17:04	1.0	1	25				1: CL=53.4144	
016	341_16.0	SAMPLE	191314-001	120186	Water	07-DEC-2006	17:21	1.0	1	25				1: CL=44.4005	
017	341_17.0	SAMPLE	191314-004	120186	Water	07-DEC-2006	17:39	1.0	2	25				2: SO4=66.0030	
018	341_18.0	SAMPLE	191314-005	120186	Water	07-DEC-2006	17:56	1.0	2	25				2: SO4=66.3285	
019	341_19.0	CCV	M	120186		07-DEC-2006	18:14	1.0		25			1		
020	341_20.0	CCB		120186		07-DEC-2006	18:31	1.0		25					
021	341_21.0	SAMPLE	191314-006	120186	Water	07-DEC-2006	18:48	1.0	2	25				2: CL=155.507	
022	341_22.0	SAMPLE	191314-009	120186	Water	07-DEC-2006	19:06	1.0	1	25				1: CL=43.4699	
023	341_23.0	SAMPLE	191314-010	120186	Water	07-DEC-2006	19:23	1.0	1	25				1: CL=39.7311	
024	341_24.0	SAMPLE	191314-012	120186	Water	07-DEC-2006	19:41	1.0	1	25				1: CL=61.0812	
025	341_25.0	SAMPLE	191314-014	120186	Water	07-DEC-2006	19:58	1.0	3	25				3: SO4=181.389	
026	341_26.0	SAMPLE	191314-015	120186	Water	07-DEC-2006	20:15	1.0	2	25				2: SO4=102.513	
027	341_27.0	SAMPLE	191314-016	120186	Water	07-DEC-2006	20:33	1.0	3	25				3: SO4=134.914	
028	341_28.0	X	BLK	120186		07-DEC-2006	20:50	1.0							
029	341_29.0	SAMPLE	191314-001	120186	Water	07-DEC-2006	21:08	10.0		25					
030	341_30.0	MSS	191314-003	120186	Water	07-DEC-2006	21:25	10.0		25					
031	341_31.0	SAMPLE	191314-004	120186	Water	07-DEC-2006	21:42	25.0		25					
032	341_32.0	CCV	H	120186		07-DEC-2006	22:00	1.0		25			1		
033	341_33.0	CCB		120186		07-DEC-2006	22:17	1.0		25					
034	341_34.0	X	CCV	120186		07-DEC-2006	22:35	1.0					1		
035	341_35.0	X	CCB	120186		07-DEC-2006	22:52	1.0							
036	341_36.0	SAMPLE	191314-005	120186	Water	07-DEC-2006	23:10	10.0		25					
037	341_37.0	SAMPLE	191314-006	120186	Water	07-DEC-2006	23:27	25.0		25					

Stdts used: 1=S4740

SEQUENCE SUMMARY FOR 191314 IC Water
Curtis & Tompkins Laboratories

Sequence: 626491824 Instrument: IC03 Ion Chromatograph
Analytical Method: EPA 300.0 SOP Version: ANIONS_300_rv6

Begun: 07-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Std	Used	>LR
038	341_38.0	SAMPLE	191314-009	120186	Water	07-DEC-2006	23:44	25.0		25					
039	341_39.0	SAMPLE	191314-010	120186	Water	08-DEC-2006	00:02	10.0		25					
040	341_40.0	MSS	191314-011	120186	Water	08-DEC-2006	00:19	10.0		25					
041	341_41.0	SAMPLE	191314-012	120186	Water	08-DEC-2006	00:37	25.0		25					
042	341_42.0	SAMPLE	191314-014	120186	Water	08-DEC-2006	00:54	10.0		25					
043	341_43.0	SAMPLE	191314-015	120186	Water	08-DEC-2006	01:11	10.0		25					
044	341_44.0	SAMPLE	191314-016	120186	Water	08-DEC-2006	01:29	10.0		25					
045	341_45.0	MS	QC367581	120186	Water	08-DEC-2006	01:46	10.0		25			1		
046	341_46.0	CCV	M	120186		08-DEC-2006	02:04	1.0		25			1		
047	341_47.0	CCB		120186		08-DEC-2006	02:21	1.0		25					
048	341_48.0	X	CCV	120186		08-DEC-2006	02:38	1.0					1		
049	341_49.0	X	CCB	120186		08-DEC-2006	02:56	1.0							
050	341_50.0	MSD	QC367582	120186	Water	08-DEC-2006	03:13	10.0		25			1		
051	341_51.0	MS	QC367583	120186	Water	08-DEC-2006	03:31	10.0		25			1		
052	341_52.0	MSD	QC367584	120186	Water	08-DEC-2006	03:48	10.0		25			1		
053	341_53.0	X	BLK	120186		08-DEC-2006	04:06	1.0							
054	341_54.0	SAMPLE	191329-001	120186	Water	08-DEC-2006	04:23	1.0		25					
055	341_55.0	SAMPLE	191317-001	120186	Water	08-DEC-2006	04:40	1000		25					
056	341_56.0	SAMPLE	191295-002	120186	Water	08-DEC-2006	04:58	1.0		25				2:SO4=126.154	
057	341_57.0	CCV	H	120186		08-DEC-2006	05:15	1.0		25			1		
058	341_58.0	CCB		120186		08-DEC-2006	05:33	1.0		25					
059	341_59.0	X	CCV	120186		08-DEC-2006	05:50	1.0					1		
060	341_60.0	X	CCB	120186		08-DEC-2006	06:07	1.0							
061	341_61.0	X	SHUTDOWN	120186		08-DEC-2006	06:25	1.0							

Std used: 1=S4740

REPORTING SUMMARY FOR 191314 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analzyed	IDF	F	C L	N 2 N	N 3 N	S O 4
191314-001	IC03	12/07/06 17:21	1.0	+		+	+	+
191314-001	IC03	12/07/06 21:08	10.0		+			
191314-003	IC03	12/07/06 16:46	1.0	+		+	+	+
191314-003	IC03	12/07/06 21:25	10.0		+			
191314-004	IC03	12/07/06 17:39	1.0	+		+	+	
191314-004	IC03	12/07/06 21:42	25.0		+			+
191314-005	IC03	12/07/06 17:56	1.0	+		+	+	
191314-005	IC03	12/07/06 23:10	10.0		+			+
191314-006	IC03	12/07/06 18:48	1.0	+		+	+	
191314-006	IC03	12/07/06 23:27	25.0		+			+
191314-009	IC03	12/07/06 19:06	1.0	+		+	+	+
191314-009	IC03	12/07/06 23:44	25.0		+			
191314-010	IC03	12/07/06 19:23	1.0	+		+	+	+
191314-010	IC03	12/08/06 00:02	10.0		+			
191314-011	IC03	12/07/06 17:04	1.0	+		+	+	+
191314-011	IC03	12/08/06 00:19	10.0		+			
191314-012	IC03	12/07/06 19:41	1.0	+		+	+	+
191314-012	IC03	12/08/06 00:37	25.0		+			
191314-014	IC03	12/07/06 19:58	1.0	+		+		
191314-014	IC03	12/08/06 00:54	10.0		+		+	+
191314-015	IC03	12/07/06 20:15	1.0	+		+	+	
191314-015	IC03	12/08/06 01:11	10.0		+			+
191314-016	IC03	12/07/06 20:33	1.0	+		+		
191314-016	IC03	12/08/06 01:29	10.0		+		+	+
QC367578	IC03	12/07/06 12:29	1.0	+	+	+	+	+
QC367579	IC03	12/07/06 12:47	1.0	+	+	+	+	+
QC367580	IC03	12/07/06 13:04	1.0	+	+	+	+	+
QC367581	IC03	12/08/06 01:46	10.0	+	+	+	+	+
QC367582	IC03	12/08/06 03:13	10.0	+	+	+	+	+
QC367583	IC03	12/08/06 03:31	10.0	+	+	+	+	+
QC367584	IC03	12/08/06 03:48	10.0	+	+	+	+	+

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO₄) EPA 314
☐ Cr6+ EPA 7199

Batch#: 120186
 Date Started: 12/7/06
 Prep Chemist: MRS

BK 2431
 Page 7

	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	191287-003 E-H	N/A	100x 10x	P, Ag, Na, S	Comp. 1ml of each bottle -003E, -003F, -003G, -003H
2	191295-002 A	0.55	1x	S	
3	191314-001 E	0.84	1x 10x	S	
4	-003 Q	0.68	10x		MSS
5	-004 B	1.00	25x		
6	-005 B	0.99	10x		
7	-006 B	1.28	25x		
8	-009 I	1.18	25x		
9	-010 I	0.58	10x		
10	-011 P	0.75	10x		MSS
11	-012 F	1.29	25x		
12	-014 B	0.81	10x		
13	-015 B	0.98	10x		
14	↓ -016 B	0.99	↓ 10x	↓	
15	191317-001 N	31.5	1000x	S	
16	191329-001 F	0.06	1x	S	
17	Blank QC367578	N/A	1x	N/A	
18	BS QC367579		↓	↓	
19	BSD QC367580		↓	↓	
20	MS QC367581 Q		10x	S	MS of 191314-003 Q
	MSD QC367582 Q				MSD of 191314-003 Q
	MS QC367583 P				MS of 191314-011 P
	MSD QC367584 P				MSD of 191314-011 P
	MRS dm		12/7/06		

	Eluent Reagent ID	Mfg & Lot # / Time / Program	Initials / Date
BS/BSD Spiked with	0.2 mL of :	100x MRS 8/10/06	MRS 12/7/06
MS/MSD Spiked with	0.1 mL of :	54740	
Filters Used:	Ag: OnGuard II Ag	54740	
	Na: OnGuard II Na	MRS 12/7/06 050622-1-Ag	
	P: OnGuard II P	050412-1-Na	
	RP: OnGuard II RP	050425-1-P	
	S: 0.20um/0.45um	N/A	
		Acrodisc lot # A10646466	↓

Extraction Chemist / Date

Continued from page
 Continued on page

Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 120186
 Date Started: 07-DEC-2006
 Batched by : Micah Smith

Analysis : N/A
 Bgroup : IC
 Department : GC Organics

Sample	Type	Client	Matrix	Analyses	Due Date
191287-003		Acme Fill Corp.	Water	NITRATE, NITRITE	18-DEC-2006
191295-002		Union Sanitary Dis	Water	FLUORIDE	13-DEC-2006
191314-001		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-DEC-2006
191314-003		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-DEC-2006
191314-004		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-DEC-2006
191314-005		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-DEC-2006
191314-006		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-DEC-2006
191314-009		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-DEC-2006
191314-010		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-DEC-2006
191314-011		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-DEC-2006
191314-012		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-DEC-2006
191314-014		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-DEC-2006
191314-015		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-DEC-2006
191314-016		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	19-DEC-2006
191317-001		Strategic Engineer	Water	CHLORIDE	11-DEC-2006
191329-001		Strategic Engineer	Water	CHLORIDE	12-DEC-2006
QC367578	BLANK		Water		
QC367579	BS		Water		
QC367580	BSD		Water		
QC367581	MS	of 191314-003	Water		
QC367582	MSD	of 191314-003	Water		
QC367583	MS	of 191314-011	Water		
QC367584	MSD	of 191314-011	Water		



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories
MDL Summary for EPA 300.0 Water
As of 01/05/07

Analyte	Units	IC03	IC01
Fluoride	mg/L	0.023	0.0092
Chloride	mg/L	0.032	0.0061
Nitrogen, Nitrite	mg/L	0.012	0.0081
Bromide	mg/L	0.028	0.036
Nitrogen, Nitrate	mg/L	0.0088	0.0080
Orthophosphate (as P)	mg/L	0.037	0.045
Sulfate	mg/L	0.079	0.047

ALKALINITY



Curtis & Tompkins, Ltd.

Alkalinity			
Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	12/06/06
Units:	mg/L	Received:	12/07/06
Diln Fac:	1.000	Analyzed:	12/19/06
Batch#:	120495		

Field ID: LF10GW02
Type: SAMPLE

Lab ID: 191314-001

Analyte	Result	RL
Alkalinity, Bicarbonate	380	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	380	6.7

Field ID: LF10SP01
Type: SAMPLE

Lab ID: 191314-003

Analyte	Result	RL
Alkalinity, Bicarbonate	250	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	250	6.7

Field ID: 1221GW104
Type: SAMPLE

Lab ID: 191314-004

Analyte	Result	RL
Alkalinity, Bicarbonate	470	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	470	6.7

Field ID: DUP-1206063A
Type: SAMPLE

Lab ID: 191314-005

Analyte	Result	RL
Alkalinity, Bicarbonate	470	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	470	6.7

Field ID: BB3GW100
Type: SAMPLE

Lab ID: 191314-006

Analyte	Result	RL
Alkalinity, Bicarbonate	280	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	280	6.7

ND= Not Detected
RL= Reporting Limit
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84.0

00430

**Alkalinity**

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	12/06/06
Units:	mg/L	Received:	12/07/06
Diln Fac:	1.000	Analyzed:	12/19/06
Batch#:	120495		

Field ID: 1065MW101
Type: SAMPLE

Lab ID: 191314-009

Analyte	Result	RL
Alkalinity, Bicarbonate	670	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	670	6.7

Field ID: 1065MW102
Type: SAMPLE

Lab ID: 191314-010

Analyte	Result	RL
Alkalinity, Bicarbonate	220	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	220	6.7

Field ID: 1065PZ2A
Type: SAMPLE

Lab ID: 191314-011

Analyte	Result	RL
Alkalinity, Bicarbonate	340	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	340	6.7

Field ID: 1065PZ4A
Type: SAMPLE

Lab ID: 191314-012

Analyte	Result	RL
Alkalinity, Bicarbonate	680	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	680	6.7

Field ID: LF6GW104
Type: SAMPLE

Lab ID: 191314-014

Analyte	Result	RL
Alkalinity, Bicarbonate	220	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	220	6.7



Curtis & Tompkins, Ltd.

Alkalinity			
Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	12/06/06
Units:	mg/L	Received:	12/07/06
Diln Fac:	1.000	Analyzed:	12/19/06
Batch#:	120495		

Field ID: LF6GW105
Type: SAMPLE

Lab ID: 191314-015

Analyte	Result	RL
Alkalinity, Bicarbonate	290	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	290	6.7

Field ID: LF6GW106
Type: SAMPLE

Lab ID: 191314-016

Analyte	Result	RL
Alkalinity, Bicarbonate	230	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	230	6.7

Type: BLANK

Lab ID: QC368834

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO ₃	ND	1.0



Batch QC Report

Alkalinity			
Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO ₃	Units:	mg/L
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC368835	Batch#:	120495
Matrix:	Water	Analyzed:	12/19/06

Spiked	Result	%REC	Limits
200.0	188.0	94	90-110



Batch QC Report

Alkalinity			
Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO ₃	Diln Fac:	1.000
Field ID:	LF10SP01	Batch#:	120495
MSS Lab ID:	191314-003	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	mg/L	Analyzed:	12/19/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC368837	248.0	333.0	564.0	95	69-112		
MSD	QC368838		333.0	563.0	95	69-112	0	25



Batch QC Report

Alkalinity			
Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	1.000
Field ID:	1065PZ2A	Batch#:	120495
MSS Lab ID:	191314-011	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	mg/L	Analyzed:	12/19/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC368839	341.3	333.0	664.0	97	69-112		
MSD	QC368840		333.0	666.7	98	69-112	0	25

RPD= Relative Percent Difference

Analysis: Alkalinity
Method: EPA 310.1 / SMWW 2320B
SOP#: Alkalinity_v 7.doc

Analysis Date: 12/19/06
Batch No: 120495

H₂SO₄ Normality = 0.02
conc. (mg/L) Na₂CO₃ for QC = 200
Analyst: SJ

QC DATA	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	Alkalinity as CaCO ₃ (mg/L)	Low Alk Vol (mL)	Low Alk as CaCO ₃ (mg/L)	RL (mg/L)	% Rec.	% RPD
MB	5.00	100	0.00	0.00	ND			1.0		
LCS	10.00	25	2.10	4.70	188.00			4.0	94	
191314-003	7.00	15	0.00	3.72	248.00	n/a		6.7		
MS	9.60	15	1.62	8.46	564.00			6.7	95	
MSD	9.50	15	1.63	8.45	563.33			6.7	95	0
191314-011	7.30	15	0.00	5.12	341.33	n/a		6.7		
MS	9.30	15	1.28	9.96	664.00			6.7	97	
MSD	9.40	15	1.30	10.00	666.67			6.7	98	0

SAMPLE	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	Alkalinity as CaCO ₃ (mg/L)	Low Alkalinity Volume (4.5-4.2) (mL)	Low Alkalinity as CaCO ₃ (mg/L)	Reporting Limit (mg/L)
191314-001	6.80	15	0.00	5.70	380.00		n/a	6.7
191314-003	7.00	15	0.00	3.72	248.00		n/a	6.7
191314-004	7.20	15	0.00	7.10	473.33		n/a	6.7
191314-005	7.30	15	0.00	7.08	472.00		n/a	6.7
191314-006	7.80	15	0.00	4.25	283.33		n/a	6.7
191314-009	7.30	15	0.00	10.00	666.67		n/a	6.7
191314-010	7.20	15	0.00	3.32	221.33		n/a	6.7
191314-011	7.30	15	0.00	5.12	341.33		n/a	6.7
191314-012	7.30	15	0.00	10.23	682.00		n/a	6.7
191314-014	7.30	15	0.00	3.33	222.00		n/a	6.7
191314-015	7.20	15	0.00	4.36	290.67		n/a	6.7
191314-016	7.20	15	0.00	3.52	234.67		n/a	6.7

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Reviewed by/ Date:

 12/19/06

QC Limits		RPD	Recovery
LCS/BS/ BSD	MS/ MSD		
20	25		90 - 110
			80 - 120

Analysis: Alkalinity
Method: EPA 310.1

Analysis Date: 12/19/06
Batch No: 120495

H₂SO₄ Normality = 0.02
Analyst: SJ

SAMPLE	(P)	(T-P)	Total Alkalinity as CaCO ₃ (mg/L)	Bicarbonate Alkalinity	Carbonate Alkalinity	Hydroxide Alkalinity
191314-001	0.0	380.0	380	380.000	0.000	0.000
191314-003	0.0	248.00	248.000	248.000	0.000	0.000
191314-004	0.0	473.33	473.333	473.333	0.000	0.000
191314-005	0.0	472.00	472.000	472.000	0.000	0.000
191314-006	0.0	283.33	283.333	283.333	0.000	0.000
191314-009	0.0	666.67	666.667	666.667	0.000	0.000
191314-010	0.0	221.33	221.333	221.333	0.000	0.000
191314-011	0.0	341.33	341.333	341.333	0.000	0.000
191314-012	0.0	682.00	682.000	682.000	0.000	0.000
191314-014	0.0	222.00	222.000	222.000	0.000	0.000
191314-015	0.0	290.67	290.667	290.667	0.000	0.000
191314-016	0.0	234.67	234.667	234.667	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

P: Phenolphthalein Alkalinity (using volume to pH 8.3)
T-P: Total Alkalinity minus Phenolphthalein Alkalinity

Carbonate Alkalinity = 2x the smaller of P or (T-P)
Bicarbonate Alkalinity = (T-2P) when P < (T-P)
Hydroxide Alkalinity = (2P-T) when (T-P) < P

Analysis: Alkalinity
Method: EPA 310.1

Analysis Date: 12/19/06
Batch No: 120495

H₂SO₄ Normality = 0.02
Analyst: SJ

SAMPLE	Total Alkalinity as CaCO ₃ (mg/L)	Bicarbonate Alkalinity as HCO ₃ ⁻ (mg/L)	Carbonate Alkalinity as CO ₃ ²⁻ (mg/L)	Hydroxide Alkalinity as OH ⁻ (mg/L)
191314-001	380.000	463.314	0.000	0.000
191314-003	248.000	302.373	0.000	0.000
191314-004	473.333	577.110	0.000	0.000
191314-005	472.000	575.485	0.000	0.000
191314-006	283.333	345.453	0.000	0.000
191314-009	666.667	812.831	0.000	0.000
191314-010	221.333	269.860	0.000	0.000
191314-011	341.333	416.170	0.000	0.000
191314-012	682.000	831.526	0.000	0.000
191314-014	222.000	270.673	0.000	0.000
191314-015	290.667	354.394	0.000	0.000
191314-016	234.667	286.117	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

00400

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H₂SO₄ Reagent ID: VWR VW3229-41/lot 6248
Exp. 21-Aug-07

ow Alkali || Acid Vol to 4.5 is $< 2.0\text{mL}$, redo using 100mL sample volume. If still $< 2.0\text{mL}$, go on to Low Alkalinity.

Reviewed by / Date 12/19/08

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 120495
Date Started: 19-DEC-2006
Batched by : Stephanie Jim

Analysis : ALKALINITY
Bgroup : N/A
Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
191314-001		Treadwell & Rollo	Water	ALKALINITY	19-DEC-2006
191314-003		Treadwell & Rollo	Water	ALKALINITY	19-DEC-2006
191314-004		Treadwell & Rollo	Water	ALKALINITY	19-DEC-2006
191314-005		Treadwell & Rollo	Water	ALKALINITY	19-DEC-2006
191314-006		Treadwell & Rollo	Water	ALKALINITY	19-DEC-2006
191314-009		Treadwell & Rollo	Water	ALKALINITY	19-DEC-2006
191314-010		Treadwell & Rollo	Water	ALKALINITY	19-DEC-2006
191314-011		Treadwell & Rollo	Water	ALKALINITY	19-DEC-2006
191314-012		Treadwell & Rollo	Water	ALKALINITY	19-DEC-2006
191314-014		Treadwell & Rollo	Water	ALKALINITY	19-DEC-2006
191314-015		Treadwell & Rollo	Water	ALKALINITY	19-DEC-2006
191314-016		Treadwell & Rollo	Water	ALKALINITY	19-DEC-2006
QC368834	BLANK		Water	ALKALINITY	
QC368835	BS		Water	ALKALINITY	
QC368836	BSD		Water	ALKALINITY	
QC368837	MS	of 191314-003	Water	ALKALINITY	
QC368838	MSD	of 191314-003	Water	ALKALINITY	
QC368839	MS	of 191314-011	Water	ALKALINITY	
QC368840	MSD	of 191314-011	Water	ALKALINITY	

Sulfide

**Sulfide**

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Batch#:	120322
Matrix:	Water	Sampled:	12/06/06
Units:	mg/L	Received:	12/07/06
Diln Fac:	1.000	Analyzed:	12/13/06

Field ID	Type	Lab ID	Result	RL
1065MW101	SAMPLE	191314-009	ND	0.04
1065MW102	SAMPLE	191314-010	ND	0.04
1065PZ2A	SAMPLE	191314-011	ND	0.04
1065PZ4A	SAMPLE	191314-012	ND	0.04
	BLANK	QC368124	ND	0.04

Batch QC Report

Sulfide			
Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Diln Fac:	1.000
Field ID:	1065PZ2A	Batch#:	120322
MSS Lab ID:	191314-011	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	mg/L	Analyzed:	12/13/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC368125	<0.04000	0.3068	0.1783	58 *	75-125		
MSD	QC368126		0.3068	0.1797	59 *	75-125	1	20
LCS	QC368127		0.3068	0.2979	97	75-125		

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Analysis: **SULFIDE**
 Method: EPA 376.2
 Instrument: HP UV-VIS Spectrometer
 Wavelength: 626 nm
 SOP#: sulfide_376_nv 4.doc

Matrix: Water
 Batch: 120322
 Prep Date: 12/13/2006
 Analysis Date: 12/13/2006
 Analyst: DMC

INITIAL CALIBRATION DATA

Conc (mg/L)	Absorb	RF			
0.000	0.0000				
0.027	0.0172	0.6370			
0.055	0.0341	0.6200			
0.218	0.1374	0.6303			
0.437	0.2718	0.6220			
0.873	0.5511	0.6313			
1.529	0.8947	0.5852			
			Correlation Coefficient (r):	0.9990	
			Avg Rf:	0.6210	
			%RSD:	3.0	

Note: Average Rf used to calculate sample results.

CONTINUING CALIBRATION DATA

	Absorb Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.1850	0.2979	97%	90 - 110%
ICB	0.0001	0.0002		
CCV	0.1799	0.2897	94%	90 - 110%
CCB	0.0006	0.0010		
CCV	0.1809	0.2913	95%	90 - 110%
CCB	0.0011	0.0018		

Analysis: **SULFIDE**
 Method: **EPA 376.2**
 Instrument: HP UV-VIS Spectrometer
 Wavelength: 626 nm
 Matrix: Water

Batch: **120322**
 Prep Date: **12/13/2006**
 Analysis Date: **12/13/2006**
 Analyst: DMC

SAMPLE & BATCH QC DATA

Sample ID	Sample Vol (mL)	D.F.	Sample Absorb	Color Blk Absorb	Report mg/L	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	% Rec	% RPD
MB	7.5000	1.0000	0.0001		ND	0.040					
LCS	7.5000	1.0000	0.1850		0.29793	0.040	0.0500	46.0160	0.3068	97	
191314-11	7.5000	1.0000	0.0130		ND	0.040					
191314-11M	7.5000	1.0000	0.1107		0.17827	0.040	0.0500	46.0160	0.3068	58	
191314-11M	7.5000	1.0000	0.1116		0.17972	0.040	0.0500	46.0160	0.3068	59	1
191314-9	7.5000	1.0000	0.0227		ND	0.040					
191314-10	7.5000	1.0000	0.0125		ND	0.040					
191314-12	7.5000	1.0000	0.0069		ND	0.040					
191358-9	7.5000	1.0000	0.0078		ND	0.040					
191358-11	7.5000	1.0000	0.0042		ND	0.040					
191387-1	7.5000	1.0000	0.0022		ND	0.040					

QC Limits		Recovery	
LCS/BS/ BSD	20	90 - 110	
MS/ MSD	20	42 - 121	

Reviewed by/ Date:

 12.18.06

---> Quantitation Results Report <---

Date : 12-13-2006
 Time : 11:12:21
 Operator : DM

File Name : Data not stored yet

Sample Name : sulfide
 Solvent Name : CHL-11-10-06
 Conc Units : mg/L
 Dil. Factor : 1.00
 Analytical Wavelength : 625 nm
 Reference Wavelength : None Selected
 Confirmation Wavelengths : None Selected
 Integration Time : 1 seconds

SAMPLE #	Sample Name	Wavelength	Func. Res.	Concentration
1	ICB/MB	Analytical	+0.0001	2.037E-04
2	ICV/LEE	Analytical	+0.1858	0.30675
3	191314-9	Analytical	+0.0227	0.03792
4	191314-10	Analytical	+0.0125	0.02003
5	191314-11	Analytical	+0.0130	0.02172
6	191314-11ME	Analytical	+0.1107	0.18478
7	191314-11MSD	Analytical	+0.1116	0.18621
8	191314-12	Analytical	+0.0069	0.01146
9	191358-9	Analytical	+0.0078	0.01309
10	191332-11 <i>11:30 PM</i>	Analytical	+0.0042	0.00695
11	ICV	Analytical	+0.1799	0.30029
12	ICB	Analytical	+0.0006	0.00102
13	191287-1	Analytical	+0.0022	0.00372
14	ICV	Analytical	+0.1800	0.30190
15	ICB	Analytical	+0.0011	0.00188

---) Standard Calibration Report (---

Date : ¹²⁻¹³12-23-2006
 Time : 11:12:47
 Operator : DM ¹²⁻¹³⁻⁰⁶ *new*

File Name : C:\MSDCHEM\SS1105.STD

Sample Name : sulfide
 Solvent Name : CBL 11-16-06
 Conc Units : mg/L
 Analytical Wavelength : 626 nm
 Reference Wavelength : None Selected
 Confirmation Wavelengths : None Selected
 Integration Time : 1 seconds

Analytical Function Concentration = $41.6666667 \times$ Absorbance

STD #	Concentration	Absorbance	% Error
1	0.00000	0.0000	*****
2	0.02700	0.0172	-6.090 %
3	0.05500	0.0341	-3.497 %
4	0.08200	0.0511	-4.916 %
5	0.10900	0.0679	-3.670 %
6	0.13600	0.0848	-5.085 %
7	0.16300	0.1017	+2.393 %

---> Standard Calibration Report <---

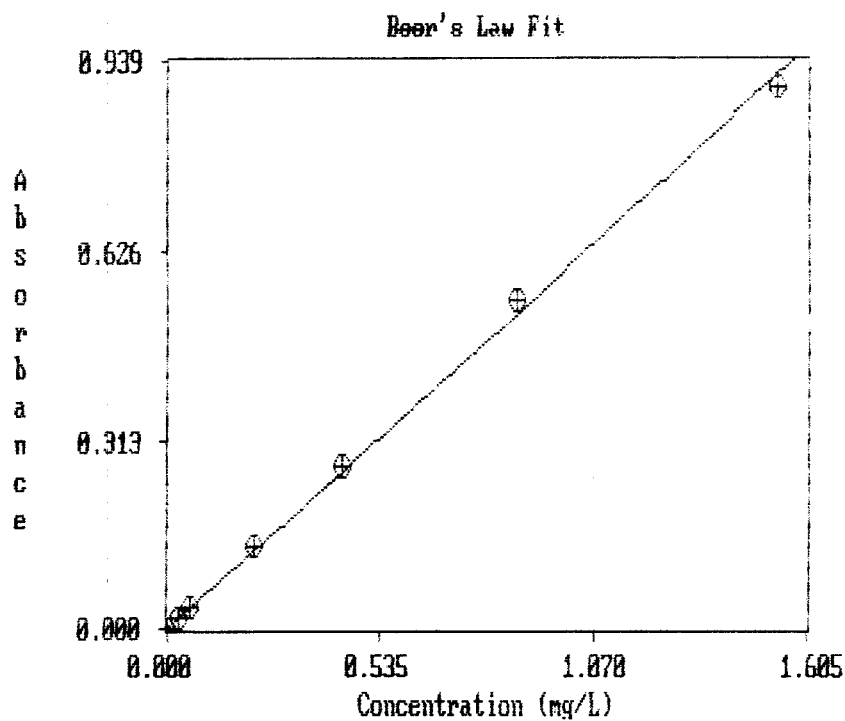
Date : ¹²⁻¹³~~12-03~~-2006
Time : 11:12:48
Operator : DM

¹²⁻¹³⁻⁰⁶
gme

File Name : C:\NUV\DATA\SS1106.STC

Sample Name : sulfide
Solvent Name : CAL 11-16-06
Conc Units : mg/L

Analytical Wavelength : 626 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

A
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Sample Vol (ml) Final Vol (ml) Surface EPA 376.2
435 B 120322

191314-9	7.5	7.5	.0227
-10			.0125
-11			.0130
-1/MS	+0.05 ml (46.016 mg/LCS ² From 0455292)		.1107
-1/MSO	same as MS		.1116
-12			.0069
191355-9			.0078
-11			.0042
191387-1			.0022
ICB/MB			.0001
ICV/LCS	same as MS		.1850
CCV			.1799
CCB			.0006
CCV			.1809
CCB			.0011

TV = 0.3068 mg/L

S = Std

≈ 4.0455292 + 50 ml DI H₂O

1.0 ml S =

5.0 ml I. 0254N

2.85 ml S₂O₃. 02438N

.1270
- .06948

.05752 x 16000 = 920.32 mg/L - 1:20 = 46.016 mg/L

1.0

.05 - 7.5 = .3068 mg/L

Continued on Page

Read and Understood By

DMR

12-13-06

DMR

12/13/06

00445

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 120322
 Date Started: 13-DEC-2006
 Batched by : Dennis McCanna

Analysis : SULFIDE
 Bgroup : N/A
 Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
191314-009		Treadwell & Rollo	Water	SULFIDE	19-DEC-2006
191314-010		Treadwell & Rollo	Water	SULFIDE	19-DEC-2006
191314-011		Treadwell & Rollo	Water	SULFIDE	19-DEC-2006
191314-012		Treadwell & Rollo	Water	SULFIDE	19-DEC-2006
191358-009		Treadwell & Rollo	Water	SULFIDE	20-DEC-2006
191358-011		Treadwell & Rollo	Water	SULFIDE	20-DEC-2006
191387-001		ConocoPhillips Com	Water	SULFIDE	15-DEC-2006
QC368124	BLANK		Water	SULFIDE	
QC368125	MS	of 191314-011	Water	SULFIDE	
QC368126	MSD	of 191314-011	Water	SULFIDE	
QC368127	LCS		Water	SULFIDE	

Analysis: Sulfide
Method: EPA 376.2
Instrument: HP UV/Vis
Wavelength: 626 nm

Analysis Date: 10/10/2006
Analyst: DM

Instrument Calibrated to report sample results in concentration: mg/L

Concentration: 0.098
Units: mg/L

1	0.060
2	0.064
3	0.071
4	0.075
5	0.073
6	0.074
7	0.070

Average: 0.070 ug/L
Std Deviation: 0.0057186
Student T: 3.143

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev: **0.0180** mg/L
Reporting Limit: 0.04 mg/L
Status: PASS >1/3 RL

✓ DM
10/16/06

TOTAL DISSOLVED SOLIDS

**Total Dissolved Solids (TDS)**

Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Batch#:	120355
Matrix:	Water	Sampled:	12/06/06
Units:	mg/L	Received:	12/07/06
Diln Fac:	1.000	Analyzed:	12/18/06

Field ID	Type	Lab ID	Result	RL
LF10GW02	SAMPLE	191314-001	410	10
LF10SP01	SAMPLE	191314-003	350	10
BB3GW100	SAMPLE	191314-006	710	10
1065MW101	SAMPLE	191314-009	690	10
1065MW102	SAMPLE	191314-010	320	10
1065PZ2A	SAMPLE	191314-011	390	10
1065PZ4A	SAMPLE	191314-012	660	10
LF6GW104	SAMPLE	191314-014	540	10
LF6GW105	SAMPLE	191314-015	590	10
LF6GW106	SAMPLE	191314-016	610	10
	BLANK	QC368259	ND	10



Batch QC Report

Total Dissolved Solids (TDS)			
Lab #:	191314	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Batch#:	120355
Matrix:	Water	Sampled:	12/06/06
Units:	mg/L	Received:	12/07/06
Diln Fac:	1.000	Analyzed:	12/18/06

Field ID	Type	MSS	Lab ID	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim
	BS			QC368260		100.0	100.0		100	79-121		
	BSD			QC368261		100.0	92.00		92	79-121	8	20
LF10SP01	SDUP	191314-003		QC368262	352.0		368.0	10.00			4	20
1065PZ2A	SDUP	191314-011		QC368263	390.0		410.0	10.00			5	20

Analysis: **Total Dissolved Solids**
 Method: **CFR 100.1 / 311VVVV 2040C**
 Matrix: **Water**
 SOP#: **tds_rv 9.doc**

Analysis Date: **13-Dec-06**
 Batch #: **120355**
 Analyst: **SJ**

BATCH QC DATA

Sample	Sample Vol (mL) (50/vol)	DF	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	Report (mg/L)	Reporting Limit (mg/L)	Spike Std Conc (mg/L)	Spike Vol. Used (mL)	Spiking Level (mg/L)	Recovery, %	RPD, %
MB	50	1	50.8563	50.8560	-0.0003	ND	10					
BS	50	1	51.8008	51.8058	0.0050	100.0	10	1,000	5	100	100	
BSD	50	1	55.6993	55.7039	0.0046	92.0	10	1,000	5	100	92	8.33
191314-3	50	1	56.7157	56.7333	0.0176	352.0	10					
SDUP	50	1	54.9073	54.9257	0.0184	368.0	10					4.44
191314-11	50		57.8914	57.9109	0.0195	390.0	10					
SDUP	50	1	43.5535	43.5740	0.0205	410.0	10					5.00
QC Limits												
							LCS/BS/ BSD	RPD		Recovery		
								20		79 - 121		
							MS/ MSD	20		69 - 131		

SAMPLE DATA

Sample	Sample Vol (mL) (50/vol)	DF	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	Report (mg/L)	Reporting Limit (mg/L)
191314-1	50	1	56.1298	56.1505	0.0207	414.0	10
191314-6	50	1	56.4349	56.4705	0.0356	712.0	10
191314-9	50	1	56.9263	56.9610	0.0347	694.0	10
191314-10	50	1.00	58.3178	58.3340	0.0162	324.0	10
191314-12	50	1	42.8825	42.9155	0.0330	660.0	10
191314-14	50	1	47.3861	47.4129	0.0268	536.0	10
191314-15	50	1	45.0531	45.0827	0.0296	592.0	10
191314-16	45	1.111	43.6420	43.6693	0.0273	606.7	11

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 120355
 Date Started: 14-DEC-2006
 Batched by : Stephanie Jim

Analysis : TDS
 Bgroup : N/A
 Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
191314-001		Treadwell & Rollo	Water	TDS	19-DEC-2006
191314-003		Treadwell & Rollo	Water	TDS	19-DEC-2006
191314-006		Treadwell & Rollo	Water	TDS	19-DEC-2006
191314-009		Treadwell & Rollo	Water	TDS	19-DEC-2006
191314-010		Treadwell & Rollo	Water	TDS	19-DEC-2006
191314-011		Treadwell & Rollo	Water	TDS	19-DEC-2006
191314-012		Treadwell & Rollo	Water	TDS	19-DEC-2006
191314-014		Treadwell & Rollo	Water	TDS	19-DEC-2006
191314-015		Treadwell & Rollo	Water	TDS	19-DEC-2006
191314-016		Treadwell & Rollo	Water	TDS	19-DEC-2006
QC368259	BLANK		Water	TDS	
QC368260	BS		Water	TDS	
QC368261	BSD		Water	TDS	
QC368262	SDUP	of 191314-003	Water	TDS	
QC368263	SDUP	of 191314-011	Water	TDS	



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

Laboratory Number 191358

Treadwell & Rollo
555 Montgomery Street
San Francisco, CA 94111

Project#: 2893.04.51
Location: Presidio

<u>Sample ID</u>	<u>Lab ID</u>
BHWGW04	191358-001
HWGW100	191358-002
HWGW101	191358-003
BHWGW01	191358-004
BHWGW05	191358-005
BHWGWO4RBHWGW100	191358-006
DUP1207062A	191358-007
1047MW101	191358-008
1065MW9B	191358-009
1047MW101RB1065MW9B	191358-010
1065PZ5AR	191358-011
TB1207061A	191358-012
WT120706	191358-013
TB1207061B	191358-014
TRIP BLANK	191358-015
DW120706A	191358-016

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signatures. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis.

Signature: [Signature] Date: 1/5/07
Operations Manager

Signature: [Signature] Date: 1-3-07
Project Manager

CASE NARRATIVE

Laboratory number: 191358
Client: Treadwell & Rollo
Project: 2893.04.51
Location: Presidio
Request Date: 12/08/06
Samples Received: 12/08/06

This hardcopy data package contains sample and QC results for fourteen water samples, requested for the above referenced project on 12/08/06. The samples were received cold and intact.

TPH-Purgeables and/or BTXE by GC (EPA 8015B and EPA 8021B):

High responses were observed for benzene and ethylbenzene in the ICV analyzed 11/16/06 00:02; these analytes were not detected at or above the RL in the associated samples. No other analytical problems were encountered.

TPH-Extractables by GC (EPA 8015B):

No analytical problems were encountered.

Volatile Organics by GC/MS (EPA 8260B):

High surrogate recoveries were observed for 1,2-dichloroethane-d4 in 1047MW101 (lab # 191358-008) and 1047MW101RB1065MW9B (lab # 191358-010); no target analytes were detected in these samples. Methylene chloride was detected above the RL in TB1207061A (lab # 191358-012); this analyte is a common laboratory contaminant. No other analytical problems were encountered.

Metals (EPA 6020 and EPA 7470A) Water:

Low recoveries were observed for calcium and manganese in the MS of LF10SP01 (lab # 191314-003); the BS/BSD were within limits, and the associated RPDs were within limits. Responses exceeding the instrument's linear range were observed for sodium in the MS/MSD of LF10SP01 (lab # 191314-003). High % difference was observed for sodium in the serial dilution of LF10SP01 (lab # 191314-003). No other analytical problems were encountered.

Metals (EPA 6020) Filtrate:

High responses were observed for aluminum and magnesium in the CCV analyzed 12/13/06 22:04 and the CCV analyzed 12/13/06 23:39; these analytes were not detected at or above the RL in the associated samples. Low recoveries were observed for calcium and manganese in the MS of LF10SP01 (lab # 191314-003); the BS/BSD were within limits, and the associated RPDs were within limits. Responses exceeding the instrument's linear range were observed for sodium in the MS/MSD of LF10SP01 (lab # 191314-003). High % difference was observed for sodium in the serial dilution of LF10SP01 (lab # 191314-003). No other analytical problems were encountered.

Ion Chromatography (EPA 300.0):

No analytical problems were encountered.

CASE NARRATIVE

Laboratory number: 191358
Client: Treadwell & Rollo
Project: 2893.04.51
Location: Presidio
Request Date: 12/08/06
Samples Received: 12/08/06

Total Cyanide (EPA 335.2):

No analytical problems were encountered.

Total Oil & Grease (HEM) (EPA 1664A):

Matrix spikes were not performed for this analysis due to insufficient sample volume. No analytical problems were encountered.

Phenolic Compounds (EPA 420.1):

No analytical problems were encountered.

Alkalinity (EPA 310.1):

No analytical problems were encountered.

Sulfide (EPA 376.2):

Low recoveries were observed for sulfide in the MS/MSD of 1065PZ2A (lab # 191314-011); the LCS was within limits, and the associated RPD was within limits. No other analytical problems were encountered.

Dissolved Sulfide (EPA 376.2):

No analytical problems were encountered.

Total Dissolved Solids (TDS) (EPA 160.1):

No analytical problems were encountered.

pH (EPA 9040B):

WT120706 (lab # 191358-013) was analyzed the day after sampling, but four hours outside the 24 hour window. No analytical problems were encountered.

Chain of Custody

Ph: 415.955.9040 FAX: 415.955.9041

19158

PRESIDIO OF SAN FRANCISCO

COC No. 0P 2124

Page: 7 of 7

[illegible]

Treadwell&Rollo

Environmental and Geotechnical Consultants

555 Montgomery St., Suite 1300, San Francisco, CA 94111

Ph: 415.955.9040 FAX: 415.955.9041

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. 0P 2079

Page: of

Project Name: Presidio of San Francisco

Location: Presidio of San Francisco

Sampled By (Firm and Samplers): BTS / B. Summorsett

Recorder (signature required): [Signature]

Sent to Laboratory (Name): Curtis + Tompkins

Number of Containers and Preservation

Matrix

Soil

Water

Other

HCl

H₂SO₄

HNO₃

NaOH

Other

LAB ID

TIME

DATE

IDENTIFICATION

SAMPLE

1047mJ101

1065mJ98

1047mJ101RB1065mJ98

1065PZ5AR

10181207061A

PROJECT MANAGER: Joshua Graber

PROJECT NUMBER: 2893

REQUESTED ANALYSES

(15)

Metals - Dissolved (23, 22, 13, 9, 8, 7, 3, Other)

Metals - Total (23, 22, 13, 9, 8, 7, 3, Other)

OCs (8081)

General Chemistry (23, 22, 13, 9, 8, 7, 3, Other)

VOCs (8260) MTBE

TPHd (8015M)

TPHd (8015M)

TPHd (8015M)

PAHs (8310)

TDS (160.1)

Metals - Total (23, 22, 13, 9, 8, 7, 3, Other)

Metals - Dissolved (23, 22, 13, 9, 8, 7, 3, Other)

OCs (8081)

General Chemistry (23, 22, 13, 9, 8, 7, 3, Other)

VOCs (8260) MTBE

TPHd (8015M)

TPHd (8015M)

TPHd (8015M)

PAHs (8310)

TDS (160.1)

Metals - Total (23, 22, 13, 9, 8, 7, 3, Other)

Metals - Dissolved (23, 22, 13, 9, 8, 7, 3, Other)

OCs (8081)

General Chemistry (23, 22, 13, 9, 8, 7, 3, Other)

VOCs (8260) MTBE

TPHd (8015M)

TPHd (8015M)

TPHd (8015M)

PAHs (8310)

TDS (160.1)

Metals - Total (23, 22, 13, 9, 8, 7, 3, Other)

Metals - Dissolved (23, 22, 13, 9, 8, 7, 3, Other)

OCs (8081)

General Chemistry (23, 22, 13, 9, 8, 7, 3, Other)

VOCs (8260) MTBE

TPHd (8015M)

TPHd (8015M)

TPHd (8015M)

PAHs (8310)

TDS (160.1)

Metals - Total (23, 22, 13, 9, 8, 7, 3, Other)

Metals - Dissolved (23, 22, 13, 9, 8, 7, 3, Other)

OCs (8081)

General Chemistry (23, 22, 13, 9, 8, 7, 3, Other)

VOCs (8260) MTBE

TPHd (8015M)

TPHd (8015M)

TURNAROUND TIME: 10 Days

Project Laboratory to follow
Presidio Quality Assurance Project
Plan
(Tetra Tech, 2001)

COMMENTS / NOTES

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)

3 - Indicate in the metals column (by number) which metals list is requested. Metals Lists (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Ti, V, and Zn)

Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Ti, V, and Zn) (13 - As, Cr, Cd, Cu, Fe, K, Mg, Mn, Ni, Pb, and Zn)

Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (Other -)

(9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)

RELINQUISHED BY: [Signature]

DATE: 12/18/06

PRINT NAME: Pete Cornish

FIRM: BTS

RECEIVED BY: [Signature]

DATE: 12/18/06

PRINT NAME: Aaron Greiner

FIRM: C+T

RECEIVED BY: [Signature]

DATE: 1/30/07

PRINT NAME: [Signature]

FIRM: [Signature]

RECEIVED BY: [Signature]

DATE: [Signature]

PRINT NAME: [Signature]

FIRM: [Signature]

RECEIVED BY: [Signature]

ADDITIONAL REMARKS / LABORATORY NOTES:

Method of Shipment:

White Copy - Original Yellow Copy - Laboratory Pink Copy - Field

[illegible]

SOP Volume: Client Services
Section: 1.1.2
Page: 1 of 1
Effective Date: 10-May-99
Revision: 1 Number 1 of 3
Filename: F:\QC\Forms\QC\Cooler.wpd



COOLER RECEIPT CHECKLIST

Login#: 191358 Date Received: 12-08-06 Number of Coolers: 4
Client: TREADWELL Project: Presidio

A. Preliminary Examination Phase

Date Opened: 12-08-06 By (print): Charles (sign) Charles
1. Did cooler come with a shipping slip (airbill, etc.)? YES ☒ NO ☒
If YES, enter carrier name and airbill number: _____

2. Were custody seals on outside of cooler? YES ☒ NO ☒
How many and where? one over top of cooler Seal date: 12/7/06 Seal name: K

3. Were custody seals unbroken and intact at the date and time of arrival? YES ☒ NO ☒

4. Were custody papers dry and intact when received? YES ☒ NO ☒

5. Were custody papers filled out properly (ink, signed, etc.)? YES ☒ NO ☒

6. Did you sign the custody papers in the appropriate place? YES ☒ NO ☒

7. Was project identifiable from custody papers? YES ☒ NO ☒

If YES, enter project name at the top of this form.

8. If required, was sufficient ice used? Samples should be 2-6 degrees C. YES ☒ NO ☒
Type of ice: wet Temperature: 2.7° 3.1° 1.1°

No Temp Blank in one

B. Login Phase

Date Logged In: 12-08-06 By (print): Charles (sign) Charles

1. Describe type of packing in cooler: Ziploc Bags

2. Did all bottles arrive unbroken? YES ☒ NO ☒

3. Were labels in good condition and complete (ID, date, time, signature, etc.)? YES ☒ NO ☒

4. Did bottle labels agree with custody papers? YES ☒ NO ☒

5. Were appropriate containers used for the tests indicated? YES ☒ NO ☒

6. Were correct preservatives added to samples? YES ☒ NO ☒

7. Was sufficient amount of sample sent for tests indicated? YES ☒ NO ☒

8. Were bubbles absent in VOA samples? If NO, list sample IDs below. YES ☒ NO ☒

9. Was the client contacted concerning this sample delivery? YES ☒ NO ☒

If YES, give details below.

Who was called? _____ By whom? _____ Date: _____

Additional Comments:

4) sample -15 and -16 not on COC: logged in on HOLD

MBTXE / TVH

Water



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1047MW101	Batch#:	120205
Lab ID:	191358-008	Sampled:	12/07/06
Matrix:	Water	Received:	12/08/06
Units:	ug/L	Analyzed:	12/08/06
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Stoddard Solvent C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	106	65-135
Bromofluorobenzene (FID)	115	65-135

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065MW9B	Batch#:	120205
Lab ID:	191358-009	Sampled:	12/07/06
Matrix:	Water	Received:	12/08/06
Units:	ug/L	Analyzed:	12/08/06
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
Stoddard Solvent C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	0.61	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	0.60 C	0.50	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	97	65-135	EPA 8015B
Bromofluorobenzene (FID)	104	65-135	EPA 8015B
Trifluorotoluene (PID)	101	65-135	EPA 8021B
Bromofluorobenzene (PID)	107	65-135	EPA 8021B

C= Presence confirmed, but RPD between columns exceeds 40%

ND= Not Detected

RL= Reporting Limit



Curtis & Tompkins, Ltd.

Curtis & Tompkins Laboratories Analytical Report

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	1047MW101RB1065MW9B	Batch#:	120205
Lab ID:	191358-010	Sampled:	12/07/06
Matrix:	Water	Received:	12/08/06
Units:	ug/L	Analyzed:	12/08/06
Diln Fac:	1.000		

Analyte	Result	RL
Gasoline C7-C12	ND	50
Stoddard Solvent C7-C12	ND	50

Surrogate	%REC	Limits
Trifluorotoluene (FID)	102	65-135
Bromofluorobenzene (FID)	107	65-135

ND= Not Detected
RL= Reporting Limit

**Curtis & Tompkins Laboratories Analytical Report**

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Field ID:	1065PZ5AR	Batch#:	120205
Lab ID:	191358-011	Sampled:	12/07/06
Matrix:	Water	Received:	12/08/06
Units:	ug/L	Analyzed:	12/08/06
Diln Fac:	1.000		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
Stoddard Solvent C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	104	65-135	EPA 8015B
Bromofluorobenzene (FID)	109	65-135	EPA 8015B
Trifluorotoluene (PID)	108	65-135	EPA 8021B
Bromofluorobenzene (PID)	113	65-135	EPA 8021B

ND= Not Detected
RL= Reporting Limit



Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC367676	Batch#:	120205
Matrix:	Water	Analyzed:	12/08/06
Units:	ug/L		

Analyte	Result	RL	Analysis
Gasoline C7-C12	ND	50	EPA 8015B
Stoddard Solvent C7-C12	ND	50	EPA 8015B
MTBE	ND	2.0	EPA 8021B
Benzene	ND	0.50	EPA 8021B
Toluene	ND	0.50	EPA 8021B
Ethylbenzene	ND	0.50	EPA 8021B
Xylene (total)	ND	1.0	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	100	65-135	EPA 8015B
Bromofluorobenzene (FID)	100	65-135	EPA 8015B
Trifluorotoluene (PID)	100	65-135	EPA 8021B
Bromofluorobenzene (PID)	104	65-135	EPA 8021B

ND= Not Detected

RL= Reporting Limit



Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51		
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC367677	Batch#:	120205
Matrix:	Water	Analyzed:	12/08/06
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits	Analysis
MTBE	20.00	19.57	98	65-135	EPA 8021B
Benzene	20.00	21.80	109	65-135	EPA 8021B
Toluene	20.00	20.04	100	65-135	EPA 8021B
Ethylbenzene	20.00	21.41	107	65-135	EPA 8021B

Surrogate	%REC	Limits	Analysis
Trifluorotoluene (FID)	95	65-135	EPA 8015B
Bromofluorobenzene (FID)	96	65-135	EPA 8015B
Trifluorotoluene (PID)	108	65-135	EPA 8021B
Bromofluorobenzene (PID)	107	65-135	EPA 8021B

Batch QC Report

Curtis & Tompkins Laboratories Analytical Report			
Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC367678	Batch#:	120205
Matrix:	Water	Analyzed:	12/08/06
Units:	ug/L		

Analyte	Spiked	Result	%REC	Limits
Gasoline C7-C12	2,000	1,793	90	75-125

Surrogate	%REC	Limits
Trifluorotoluene (FID)	101	65-135
Bromofluorobenzene (FID)	105	65-135



Batch QC Report

Curtis & Tompkins Laboratories Analytical Report

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	120205
MSS Lab ID:	191362-005	Sampled:	12/08/06
Matrix:	Water	Received:	12/08/06
Units:	ug/L	Analyzed:	12/08/06
Diln Fac:	1.000		

Type: MS Lab ID: QC367679

Analyte	MSS Result	Spiked	Result	%REC	Limits
Gasoline C7-C12	13.73	2,000	1,818	90	65-135

Surrogate	%REC	Limits
Trifluorotoluene (FID)	114	65-135
Bromofluorobenzene (FID)	111	65-135

Type: MSD Lab ID: QC367680

Analyte	Spiked	Result	%REC	Limits	RPD Lim
Gasoline C7-C12	2,000	1,828	91	65-135	1 35

Surrogate	%REC	Limits
Trifluorotoluene (FID)	122	65-135
Bromofluorobenzene (FID)	118	65-135

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191358 GCVOA water: EPA 8015B

Inst : GC04
Calnum : 306458803001
Units : ng

Name : gc04gas318
Date : 14-NOV-2006 15:20
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Std
L1	318_005	306458803005	TVH 001	14-NOV-2006 15:20	S4091 (1000X), S4579 (5000X)
L2	318_006	306458803006	TVH 002	14-NOV-2006 15:56	S4090 (1000X), S4579 (5000X)
L3	318_007	306458803007	TVH 003	14-NOV-2006 16:33	S4089 (1000X), S4579 (5000X)
L4	318_008	306458803008	TVH 004	14-NOV-2006 17:10	S4088 (2000X), S4579 (5000X)
L5	318_009	306458803009	TVH 005	14-NOV-2006 17:46	S4088 (1000X), S4579 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ²	MnR ²	MxRSD	Flg
Gasoline C7-C12	A	3674.4	2738.2	2739.2	2697.6	2628.0	AVRG		3.45E-4						
											2895.5	15	0.995	20	

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor
Page 1 of 1

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191358 GCVOA Water
EPA 8015B

Inst : GC04
Calnum : 306458803001

Name : gc04gas318
Cal Date: 14-NOV-2006

ICV 306458803011 (318_011 14-NOV-2006) stds: S4693 (1000X), S4579 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Flags
Gasoline C7-C12	A	2895.5	2775.8	10000	9587	ng	-4	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191358 GCVOA Water: EPA 8021B

Inst : GC04
 Calnum : 306458803003
 Units : ng

Name : gc04mbtxe318
 Date : 14-NOV-2006 22:39
 X Axis : R

Reviewer: MCH

Level	File	Segment	Sample ID	Analyzed	Std
L1	318_017	306458803017	MBTE 1	14-NOV-2006 22:39	S4340 (1250X), S4579 (5000X)
L2	318_018	306458803018	BTXE 2	14-NOV-2006 23:16	S4340 (500X), S4579 (5000X)
L3	318_019	306458803019	BTXE 3	14-NOV-2006 23:53	S4340 (125X), S4579 (5000X)
L4	318_020	306458803020	BTXE 4	15-NOV-2006 00:29	S4339 (1000X), S4579 (5000X)
L5	318_021	306458803021	BTXE 5	15-NOV-2006 01:06	S4339 (500X), S4579 (5000X)
L6	318_022	306458803022	BTXE 6	15-NOV-2006 01:42	S4339 (250X), S4579 (5000X)
L7	318_023	306458803023	MBTE 7	15-NOV-2006 02:19	S3732 (500X), S4579 (5000X)
L8	318_035	306458803035	BTXE 1	15-NOV-2006 19:24	S4341 (1000X), S4579 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	L6	L7	L8	Type	a0	a1	a2	Avg	r ²	MNR ²	MXRSD	Fig
MTBE	B	261.90	232.60	202.71	160.56	164.86	172.00	172.59		AVRG	0.00512			195.32	20	0.995	20	
Benzene	B		1148.0	955.25	1120.7	1094.5	1068.4		1249.6	AVRG	9.04E-4			1106.1	9	0.995	20	
Toluene	B		956.20	874.06	1056.5	1071.7	1019.7		1221.2	AVRG	9.68E-4			1033.2	11	0.995	20	
Ethylbenzene	B		903.12	784.41	929.68	930.61	897.15		761.60	AVRG	0.00115			867.76	9	0.995	20	
m,p-Xylenes	B		1259.9	1109.5	1271.7	1265.3	1217.9		1576.4	AVRG	7.79E-4			1283.5	12	0.995	20	
o-Xylene	B		861.00	797.76	957.26	929.00	903.81		1110.0	AVRG	0.00108			926.47	11	0.995	20	
MTBE	C	172.50	204.04	249.98	254.97	277.59	296.87	302.02		AVRG	0.00398			251.14	19	0.995	20	
Benzene	C		1428.8	1438.3	1918.3	1895.7	1790.3		1644.0	AVRG	5.93E-4			1685.9	13	0.995	20	
Toluene	C		1397.0	1406.2	1808.6	1800.8	1713.5		2102.0	AVRG	5.87E-4			1704.7	16	0.995	20	
Ethylbenzene	C		1161.3	1256.2	1634.1	1638.5	1546.5		1258.8	AVRG	7.06E-4			1415.9	15	0.995	20	
m,p-Xylenes	C		1606.8	1710.1	2152.1	2154.7	2024.2		1891.6	AVRG	5.20E-4			1923.3	12	0.995	20	
o-Xylene	C		1194.1	1283.0	1634.1	1632.9	1537.5		1480.0	AVRG	6.85E-4			1460.2	13	0.995	20	

MJM 11/16/06 : Benzene & Ethylbenzene fail hi confirm in icv. These analytes reportable only from channel B.

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191358 GCVOA Water
EPA 8021B

Inst : GC04
Calnum : 306458803003

Name : gc04mbtxe318
Cal Date: 14-NOV-2006

ICV 306458803038 (318_038 16-NOV-2006) stds: S4311 (1000X), S4579 (5000X)

Analyte	Ch	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
MTBE	B	195.32	187.53	100.0	96.01	ng	-4	15	
Benzene	B	1106.1	1269.0	100.0	114.7	ng	15	15	
Toluene	B	1033.2	1152.1	100.0	111.5	ng	12	15	
Ethylbenzene	B	867.76	975.28	100.0	112.4	ng	12	15	
m,p-Xylenes	B	1283.5	1232.4	200.0	192.0	ng	-4	15	
o-Xylene	B	926.47	973.12	100.0	105.0	ng	5	15	
MTBE	C	251.14	250.41	100.0	99.71	ng	0	15	
Benzene	C	1685.9	2089.6	100.0	123.9	ng	24	15	
Toluene	C	1704.7	1939.5	100.0	113.8	ng	14	15	
Ethylbenzene	C	1415.9	1695.3	100.0	119.7	ng	20	15	
m,p-Xylenes	C	1923.3	2024.5	200.0	210.5	ng	5	15	
o-Xylene	C	1460.2	1645.3	100.0	112.7	ng	13	15	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191358 GCVOA Water: EPA 8015B / EPA 8021B

Inst : GC04
Calnum: 306458803002
Units : ng

Name : gc04surrogates318
Date : 15-NOV-2006 12:26
X Axis: R

Level	File	Segment	Sample ID	Analyzed	Stds
L1	318_029	306458803029	TFT/BFB 1	15-NOV-2006 12:26	S4684 (5000X)
L2	318_030	306458803030	TFT/BFB 2	15-NOV-2006 13:28	S4685 (5000X)
L3	318_031	306458803031	TFT/BFB 3	15-NOV-2006 14:15	S4686 (5000X)
L4	318_032	306458803032	TFT/BFB 4	15-NOV-2006 15:01	S4687 (5000X)
L5	318_033	306458803033	TFT/BFB 5	15-NOV-2006 15:55	S4688 (5000X)

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ²	MNR ²	MXRSD	Flg
Trifluorotoluene (FID)	A	2645.0	2756.6	2584.9	2522.0	2420.1	AVRG		3.87E-4		2585.7	5	0.995	20	
Bromofluorobenzene (FID)	A	1590.9	1608.7	1484.7	1429.3	1372.6	AVRG		6.68E-4		1497.2	7	0.995	20	
Trifluorotoluene (PID)	B	333.83	348.73	313.53	316.32	283.02	AVRG		0.00313		319.09	8	0.995	20	
Bromofluorobenzene (PID)	B	657.90	663.12	616.52	581.05	552.68	AVRG		0.00163		614.26	8	0.995	20	
Trifluorotoluene (PID)	C	443.39	481.87	472.35	485.01	494.54	AVRG		0.00210		475.43	4	0.995	20	
Bromofluorobenzene (PID)	C	849.11	913.71	908.12	902.44	915.84	AVRG		0.00111		897.84	3	0.995	20	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191358 GCVOA Water: EPA 8015B

Inst : GC04
 Calnum : 306488767001
 Units : ng

Name : GC04STODDARD339
 Date : 05-DEC-2006 14:04
 X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	339_006	306488767006	STODD	05-DEC-2006 14:04	S4942 (1000X), S4579 (5000X)

Analyte	Ch	L1	Type	a0	a1	a2	Avg	r ²	%RSD	MnR ²	MxRSD	Flg
Stoddard Solvent C7-C12	A	4371.2	AVRG		2.29E-4		4371.2	0	0.995		20	

JCP 12/06/06 [Stoddard Solvent C7-C12 A]: 43711960 / 10000 = 4371.2

CURTIS & TOMPKINS SPIKE USER REPORT FOR 191358 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC04 Run Name: QC367677 IDF : 1.0
Seqnum : 306493060002.3 File : 342_002 Time : 08-DEC-2006 10:17
Standards: S4963 (1000X), S5029 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
MTBE	C	306458803003	14-NOV-2006	245.74	100.0	97.85	ng	-2	15	u
MTBE	B	306458803003	14-NOV-2006	195.85	100.0	100.3	ng	0	15	
Benzene	C	306458803003	14-NOV-2006	1837.8	100.0	109.0	ng	9	15	u v+
Benzene	B	306458803003	14-NOV-2006	1002.8	100.0	90.66	ng	-9	15	
Toluene	C	306458803003	14-NOV-2006	1708.3	100.0	100.2	ng	0	15	u
Toluene	B	306458803003	14-NOV-2006	884.36	100.0	85.59	ng	-14	15	
Ethylbenzene	C	306458803003	14-NOV-2006	1516.0	100.0	107.1	ng	7	15	u v+
Ethylbenzene	B	306458803003	14-NOV-2006	753.41	100.0	86.82	ng	-13	15	
m,p-Xylenes	C	306458803003	14-NOV-2006	2069.1	100.0	107.6	ng	8	15	u
m,p-Xylenes	B	306458803003	14-NOV-2006	1095.7	100.0	85.37	ng	-15	15	
o-Xylene	C	306458803003	14-NOV-2006	1506.6	100.0	103.2	ng	3	15	u
o-Xylene	B	306458803003	14-NOV-2006	796.68	100.0	85.99	ng	-14	15	
Trifluorotoluene (FID)	A	306458803002	15-NOV-2006	2459.0	450.0	428.0	ng	-5	15	u
Bromofluorobenzene (FID)	A	306458803002	15-NOV-2006	1444.0	450.0	434.0	ng	-4	15	u
Trifluorotoluene (PID)	C	306458803002	15-NOV-2006	512.29	450.0	484.9	ng	8	15	u
Trifluorotoluene (PID)	B	306458803002	15-NOV-2006	245.52	450.0	346.2	ng	-23	15	c-
Bromofluorobenzene (PID)	C	306458803002	15-NOV-2006	958.62	450.0	480.5	ng	7	15	u
Bromofluorobenzene (PID)	B	306458803002	15-NOV-2006	481.16	450.0	352.5	ng	-22	15	c-

MJM 12/19/06 [Bromofluorobenzene (PID) C]: Fails in-house lo on channel B, reporting bracket's PID analytes/surr. from channel C [general version]

MJM 12/09/06 [Trifluorotoluene (PID) B]: Passes control limits. [general version]

CURTIS & TOMPKINS SPIKE USER REPORT FOR 191358 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC04 Run Name: QC367678 IDF : 1.0
 Seqnum : 306493060003.3 File : 342_003 Time : 08-DEC-2006 11:11
 Standards: S4953 (1000X), S5029 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	306458803001	14-NOV-2006	2595.3	10000	8963	ng	-10	15	u
Trifluorotoluene (FID)	A	306458803002	15-NOV-2006	2609.9	450.0	454.2	ng	1	15	u
Bromofluorobenzene (FID)	A	306458803002	15-NOV-2006	1568.0	450.0	471.3	ng	5	15	u
Trifluorotoluene (PID)	B	306458803002	15-NOV-2006	297.06	450.0	418.9	ng	-7	15	
Trifluorotoluene (PID)	C	306458803002	15-NOV-2006	684.27	450.0	647.7	ng	44	15	c+
Bromofluorobenzene (PID)	C	306458803002	15-NOV-2006	1070.7	450.0	536.6	ng	19	15	c+
Bromofluorobenzene (PID)	B	306458803002	15-NOV-2006	491.13	450.0	359.8	ng	-20	15	c-

MJM 12/09/06 : PID surrogates are not applicable. [general version]

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191358 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC04 Run Name: STODD IDF : 1.0
Seqnum : 306493060005 File : 342_005 Time : 08-DEC-2006 17:26
Standards: S4942 (1000X), S5029 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Stoddard Solvent C7-C12	A	306488767001	05-DEC-2006	4508.9	10000	10310	ng	3	15	
Trifluorotoluene (FID)	A	306458803002	15-NOV-2006	2451.5	450.0	426.6	ng	-5	15	
Bromofluorobenzene (FID)	A	306458803002	15-NOV-2006	2257.3	450.0	678.4	ng	51	15	c+
Trifluorotoluene (PID)	B	306458803002	15-NOV-2006	243.68	450.0	343.7	ng	-24	15	c-
Bromofluorobenzene (PID)	B	306458803002	15-NOV-2006	434.97	450.0	318.7	ng	-29	15	c-
Trifluorotoluene (PID)	C	306458803002	15-NOV-2006	400.14	450.0	378.7	ng	-16	15	c-
Bromofluorobenzene (PID)	C	306458803002	15-NOV-2006	1457.2	450.0	730.4	ng	62	15	c+

MJM 12/09/06 : PID surrogates are not applicable.

MJM 12/09/06 [Bromofluorobenzene (FID) A]: Fails high due to coelution with standard.

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191358 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC04 Run Name: MBTXE IDF : 1.0
Segnum : 306493060015.1 File : 342_015 Time : 09-DEC-2006 00:07
Standards: S4963 (666.7X), S5029 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Trifluorotoluene (FID)	A	306458803002	15-NOV-2006	2525.2	450.0	439.5	ng	-2	15	
Bromofluorobenzene (FID)	A	306458803002	15-NOV-2006	1505.1	450.0	452.4	ng	1	15	
MTBE	B	306458803003	14-NOV-2006	216.73	150.0	166.4	ng	11	15	
Benzene	B	306458803003	14-NOV-2006	1038.9	150.0	140.9	ng	-6	15	
Toluene	B	306458803003	14-NOV-2006	959.14	150.0	139.2	ng	-7	15	
Ethylbenzene	B	306458803003	14-NOV-2006	807.39	150.0	139.6	ng	-7	15	
m,p-Xylenes	B	306458803003	14-NOV-2006	1117.9	150.0	130.7	ng	-13	15	
o-Xylene	B	306458803003	14-NOV-2006	825.19	150.0	133.6	ng	-11	15	
Trifluorotoluene (PID)	B	306458803002	15-NOV-2006	256.37	450.0	361.6	ng	-20	15	c-
Bromofluorobenzene (PID)	B	306458803002	15-NOV-2006	503.60	450.0	368.9	ng	-18	15	c-
MTBE	C	306458803003	14-NOV-2006	269.79	150.0	161.1	ng	7	15	
Benzene	C	306458803003	14-NOV-2006	1946.3	150.0	173.2	ng	15	15	
Toluene	C	306458803003	14-NOV-2006	1789.0	150.0	157.4	ng	5	15	
Ethylbenzene	C	306458803003	14-NOV-2006	1598.7	150.0	169.4	ng	13	15	
m,p-Xylenes	C	306458803003	14-NOV-2006	2143.6	150.0	167.2	ng	11	15	
o-Xylene	C	306458803003	14-NOV-2006	1600.1	150.0	164.4	ng	10	15	
Trifluorotoluene (PID)	C	306458803002	15-NOV-2006	492.51	450.0	466.2	ng	4	15	
Bromofluorobenzene (PID)	C	306458803002	15-NOV-2006	969.30	450.0	485.8	ng	8	15	

MJM 12/09/06 [Trifluorotoluene (PID) B]: Passes control limits.

MJM 12/09/06 : BFB(PID) channel B passes control limits.

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191358 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC04 Run Name: TVH IDF : 1.0
Seqnum : 306493060017 File : 342_017 Time : 09-DEC-2006 01:21
Standards: S4953 (666.7X), S5029 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Gasoline C7-C12	A	306458803001	14-NOV-2006	2584.7	15000	13390	ng	-11	15	
Trifluorotoluene (FID)	A	306458803002	15-NOV-2006	3093.1	450.0	538.3	ng	20	15	c+
Bromofluorobenzene (FID)	A	306458803002	15-NOV-2006	1699.0	450.0	510.6	ng	13	15	
Trifluorotoluene (PID)	B	306458803002	15-NOV-2006	312.69	450.0	441.0	ng	-2	15	
Bromofluorobenzene (PID)	B	306458803002	15-NOV-2006	516.53	450.0	378.4	ng	-16	15	c-
Trifluorotoluene (PID)	C	306458803002	15-NOV-2006	782.50	450.0	740.6	ng	65	15	c+
Bromofluorobenzene (PID)	C	306458803002	15-NOV-2006	1127.3	450.0	565.0	ng	26	15	c+

MJM 12/09/06 : PID surrogates are not applicable.

MJM 12/09/06 [Trifluorotoluene (FID) A]: Passes control limits.

CW 12/14/06 [Trifluorotoluene (FID) A]: Limits 69-137%

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191358 GCVOA Water
EPA 8015B / EPA 8021B

Inst : GC04 Run Name: STODD IDF : 1.0
Seqnum : 306493060019 File : 342_019 Time : 09-DEC-2006 02:34
Standards: S4942 (1000X), S5029 (5000X)

Analyte	Ch	Cal	Caldate	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Stoddard Solvent C7-C12	A	306488767001	05-DEC-2006	4525.9	10000	10350	ng	4	15	
Trifluorotoluene (FID)	A	306458803002	15-NOV-2006	2602.9	450.0	453.0	ng	1	15	
Bromofluorobenzene (FID)	A	306458803002	15-NOV-2006	2456.4	450.0	738.3	ng	64	15	c+
Trifluorotoluene (PID)	B	306458803002	15-NOV-2006	258.92	450.0	365.1	ng	-19	15	c-
Bromofluorobenzene (PID)	B	306458803002	15-NOV-2006	586.66	450.0	429.8	ng	-4	15	
Trifluorotoluene (PID)	C	306458803002	15-NOV-2006	496.67	450.0	470.1	ng	4	15	
Bromofluorobenzene (PID)	C	306458803002	15-NOV-2006	1730.1	450.0	867.1	ng	93	15	c+

MJM 12/09/06 [Bromofluorobenzene (FID) A]: Fails high due to coelution with standard.

MJM 12/09/06 : PID surrogates are not applicable.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 306458803

Instrument : GC04 Begun : 11/14/06 14:43
 Method : EPA 8015B, EPA 8021B SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
004	318_004	X	IB			11/14/06 14:43	1.0	1	
005	318_005	ICAL	TVH 001			11/14/06 15:20	1.0	2 1	
006	318_006	ICAL	TVH 002			11/14/06 15:56	1.0	3 1	
007	318_007	ICAL	TVH 003			11/14/06 16:33	1.0	4 1	
008	318_008	ICAL	TVH 004			11/14/06 17:10	1.0	5 1	
009	318_009	ICAL	TVH 005			11/14/06 17:46	1.0	5 1	
010	318_010	X	IB			11/14/06 18:23	1.0	1	
011	318_011	ICV	TVH			11/14/06 19:00	1.0	6 1	
013	318_013	X	IB			11/14/06 20:13	1.0	1	
014	318_014	X	CARBMARK			11/14/06 20:50	1.0	7 8 1	
015	318_015	X	IB			11/14/06 21:26	1.0	1	
016	318_016	X	ICAL			11/14/06 22:03	1.0	9 1	
017	318_017	ICAL	MBTE 1			11/14/06 22:39	1.0	10 1	
018	318_018	ICAL	BTXE 2			11/14/06 23:16	1.0	10 1	
019	318_019	ICAL	BTXE 3			11/14/06 23:53	1.0	10 1	
020	318_020	ICAL	BTXE 4			11/15/06 00:29	1.0	11 1	
021	318_021	ICAL	BTXE 5			11/15/06 01:06	1.0	11 1	
022	318_022	ICAL	BTXE 6			11/15/06 01:42	1.0	11 1	
023	318_023	ICAL	MBTE 7			11/15/06 02:19	1.0	12 1	
024	318_024	X	IB			11/15/06 02:56	1.0	1	
025	318_025	X	ICV			11/15/06 03:32	1.0	13 1	
026	318_026	X	ICV			11/15/06 04:09	1.0	13 1	
027	318_027	X	IB			11/15/06 10:56	1.0	1	
028	318_028	X	IB			11/15/06 11:33	1.0	1	
029	318_029	ICAL	TFT/BFB 1			11/15/06 12:26	1.0	14	
030	318_030	ICAL	TFT/BFB 2			11/15/06 13:28	1.0	15	
031	318_031	ICAL	TFT/BFB 3			11/15/06 14:15	1.0	16	
032	318_032	ICAL	TFT/BFB 4			11/15/06 15:01	1.0	17	
033	318_033	ICAL	TFT/BFB 5			11/15/06 15:55	1.0	18	
034	318_034	X	IB			11/15/06 18:47	1.0	1	
035	318_035	ICAL	BTXE 1			11/15/06 19:24	1.0	9 1	
036	318_036	X	IB			11/15/06 22:49	1.0	1	
037	318_037	X	ICV			11/15/06 23:25	1.0	13 1	
038	318_038	ICV	MBTXE			11/16/06 00:02	1.0	13 1	

Analyst: MJM Date: 11/16/06 Reviewer: MCH Date: 11/17/06

Standards used: 1=S4579 2=S4091 3=S4090 4=S4089 5=S4088 6=S4693 7=S1645 8=S1646 9=S4341 10=S4340 11=S4339 12=S3732

13=S4311 14=S4684 15=S4685 16=S4686 17=S4687 18=S4688

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 306488767

Instrument : GC04

Method : EPA 8015B, EPA 8021B

Begun : 12/05/06 10:07

SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	339_001	X	IB			12/05/06 10:07	1.0	1	
002	339_002	X	MBTXE			12/05/06 10:44	1.0	2 1	
003	339_003	CCV/LCS	QC367125	Soil	120075	12/05/06 11:20	1.0	3 1	
004	339_004	X	MBTXE			12/05/06 12:38	1.0	2 1	
005	339_005	X	IB			12/05/06 13:15	1.0	1	
006	339_006	ICAL	STODD		120075	12/05/06 14:04	1.0	4 1	
007	339_007	BLANK	QC367124	Soil	120075	12/05/06 14:41	1.0	1	
008	339_008	SAMPLE	191241-005	Soil	120075	12/05/06 16:02	10.0	1	
009	339_009	MS	QC367130	Soil	120075	12/05/06 19:19	1.0	3 1	
010	339_010	MSD	QC367131	Soil	120075	12/05/06 19:55	1.0	3 1	
011	339_011	MSS	191252-001	Soil	120075	12/05/06 20:32	1.0	1	
012	339_012	SAMPLE	191252-002	Soil	120075	12/05/06 21:09	1.0	1	
013	339_013	SAMPLE	191252-003	Soil	120075	12/05/06 21:45	1.0	1	
014	339_014	SAMPLE	191252-004	Soil	120075	12/05/06 22:22	1.0	1	
015	339_015	SAMPLE	191252-005	Soil	120075	12/05/06 22:59	1.0	1	
016	339_016	X	MEOHMB		120075	12/05/06 23:35	5.0	1	
017	339_017	CCV	TVH		120075	12/06/06 00:12	1.0	3 1	
018	339_018	CCV	TVH		120075	12/06/06 00:48	1.0	3 1	
019	339_019	CCV	STODD		120065	12/06/06 01:25	1.0	4 1	
020	339_020	CCV	STODD		120065	12/06/06 02:02	1.0	4 1	
021	339_021	SAMPLE	191252-006	Soil	120075	12/06/06 02:38	1.0	1	
022	339_022	SAMPLE	191252-007	Soil	120075	12/06/06 03:15	1.0	1	
023	339_023	SAMPLE	191252-008	Soil	120075	12/06/06 03:52	1.0	1	
024	339_024	CCV	TVH		120075	12/06/06 04:28	1.0	3 1	
025	339_025	CCV	TVH		120075	12/06/06 05:05	1.0	3 1	

JCP 12/06/06 : Sand used in QC: Lot EM128974-M104164

Analyst: JCP

Date: 12/06/06

Reviewer:

Date:

Standards used: 1=S4579 2=S4576 3=S4953 4=S4942

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 306493060

Instrument : GC04

Begun : 12/08/06 09:40

Method : EPA 8015B, EPA 8021B

SOP Version: TVH_BTXE_rv11, TVH_BTXE_rv13

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	342_001	X	TVH			12/08/06 09:40	1.0	1 2	
002	342_002	CCV/LCS	QC367677	Water	120205	12/08/06 10:17	1.0	3 2	
003	342_003	CCV/LCS	QC367678	Water	120205	12/08/06 11:11	1.0	1 2	
004	342_004	X	IB			12/08/06 12:15	1.0	2	
005	342_005	CCV	STODD		120205	12/08/06 17:26	1.0	4 2	
006	342_006	X	IB			12/08/06 18:03	1.0	2	
007	342_007	BLANK	QC367676	Water	120205	12/08/06 19:14	1.0	2	
008	342_008	MS	QC367679	Water	120205	12/08/06 19:51	1.0	1 2	
009	342_009	MSD	QC367680	Water	120205	12/08/06 20:27	1.0	1 2	
010	342_010	SAMPLE	191358-008	Water	120205	12/08/06 21:04	1.0	2	
011	342_011	SAMPLE	191358-009	Water	120205	12/08/06 21:41	1.0	2	
012	342_012	SAMPLE	191358-010	Water	120205	12/08/06 22:17	1.0	2	
013	342_013	SAMPLE	191358-011	Water	120205	12/08/06 22:54	1.0	2	
014	342_014	SAMPLE	191362-001	Water	120205	12/08/06 23:31	1.0	2	
015	342_015	CCV	MBTXE		120205	12/09/06 00:07	1.0	3 2	
016	342_016	CCV	MBTXE		120205	12/09/06 00:44	1.0	3 2	
017	342_017	CCV	TVH		120205	12/09/06 01:21	1.0	1 2	
018	342_018	CCV	TVH		120205	12/09/06 01:57	1.0	1 2	
019	342_019	CCV	STODD		120205	12/09/06 02:34	1.0	4 2	
020	342_020	CCV	STODD		120205	12/09/06 03:10	1.0	4 2	
021	342_021	SAMPLE	191362-002	Water	120205	12/09/06 03:47	1.0	2	pH > 2
022	342_022	SAMPLE	191362-003	Water	120205	12/09/06 04:24	1.0	2	
023	342_023	SAMPLE	191362-004	Water	120205	12/09/06 05:00	1.0	2	
024	342_024	MSS	191362-005	Water	120205	12/09/06 05:37	1.0	2	
025	342_025	SAMPLE	191362-006	Water	120205	12/09/06 06:13	1.0	2	
026	342_026	CCV	TVH		120205	12/09/06 06:50	1.0	1 2	
027	342_027	CCV	TVH		120205	12/09/06 07:27	1.0	1 2	

Analyst: MJM

Date: 12/09/06

Reviewer:

Date:

Standards used: 1=S4953 2=S5029 3=S4963 4=S4942



Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 191358 TVH Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	ID Analyzed	IDF	G A S : D	S T O D Z	F 3 B Z F	B R 4 F
191358-008	GC04	12/08/06 21:04	1.0	+	+	+	+
191358-009	GC04	12/08/06 21:41	1.0	+	+	+	+
191358-010	GC04	12/08/06 22:17	1.0	+	+	+	+
191358-011	GC04	12/08/06 22:54	1.0	+	+	+	+
QC367676	GC04	12/08/06 19:14	1.0	+	+	+	+
QC367677	GC04	12/08/06 10:17	1.0			+	+
QC367678	GC04	12/08/06 11:11	1.0	+		+	+
QC367679	GC04	12/08/06 19:51	1.0	+		+	+
QC367680	GC04	12/08/06 20:27	1.0	+		+	+

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 01/05/07

Analyte	Units	GC19 A	GC19 X	GC04 A	GC04 J	GC05 A	GC05 G	GC07 A
Gasoline C6-C10	ug/L	12	21	6.7	6.2	14	14	13
Gasoline C6-C12	ug/L	8.9	21	5.5	6.8	11	11	11
Gasoline C7-C12	ug/L	3.3	27	4.8	7.2	7.4	7.4	14
JP-4 C7-C12	ug/L	4.6	4.6	12	12			19
Gasoline C6-C8	ug/L							7.0
Gasoline C8-C10	ug/L							12
Trifluorotoluene (FID)	ug/L			3.9				9.8
Bromofluorobenzene (FID)	ug/L			5.2				7.5

Curtis & Tompkins Laboratories
MDL Summary for EPA 8021B Water
As of 01/05/07

Analyte	Units	GC19 B	GC19 C	GC19 Y	GC19 Z	GC04 B	GC04 C	GC04 K	GC04 L	GC05 B	GC05 C	GC05 H	GC05 I
MTBE	ug/L	0.84	0.85	0.49	0.18	0.48	0.26	0.45	0.83	0.30	0.62	0.73	0.74
Benzene	ug/L	0.24	0.21	0.073	0.033	0.15	0.032	0.094	0.16	0.034	0.057	0.028	0.25
Toluene	ug/L	0.15	0.14	0.13	0.025	0.11	0.098	0.14	0.11	0.048	0.15	0.074	0.20
Ethylbenzene	ug/L	0.12	0.11	0.14	0.024	0.087	0.061	0.038	0.12	0.036	0.17	0.024	0.22
m,p-Xylenes	ug/L	0.11	0.10	0.13	0.039	0.15	0.11	0.10	0.21	0.030	0.17	0.069	0.21
o-Xylene	ug/L	0.19	0.20	0.15	0.015	0.19	0.10	0.12	0.10	0.083	0.19	0.14	0.13

000035

**Total
Extractable
Hydrocarbons**

WATER

Total Extractable Hydrocarbons

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Matrix:	Water	Sampled:	12/07/06
Units:	ug/L	Received:	12/08/06
Diln Fac:	1.000	Prepared:	12/17/06
Batch#:	120442		

Field ID:	1065MW9B	Analyzed:	12/19/06
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	191358-009		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	90	65-135

Field ID:	1065PZ5AR	Analyzed:	12/19/06
Type:	SAMPLE	Cleanup Method:	EPA 3630C
Lab ID:	191358-011		

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	97	65-135

Type:	BLANK	Analyzed:	12/18/06
Lab ID:	QC368609	Cleanup Method:	EPA 3630C

Analyte	Result	RL
Diesel C12-C24	ND	50
Motor Oil C24-C36	ND	300

Surrogate	%REC	Limits
Hexacosane	99	65-135

Batch QC Report

Total Extractable Hydrocarbons			
Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC368610	Batch#:	120442
Matrix:	Water	Prepared:	12/17/06
Units:	ug/L	Analyzed:	12/18/06

Cleanup Method: EPA 3630C

Analyte	Spiked	Result	%REC	Limits
Diesel C12-C24	2,500	2,230	89	65-135

Surrogate	%REC	Limits
Hexacosane	95	65-135

Batch QC Report

Total Extractable Hydrocarbons

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 3520C
Project#:	2893.04.51	Analysis:	EPA 8015B
Field ID:	ZZZZZZZZZZ	Batch#:	120442
MSS Lab ID:	191351-001	Sampled:	12/07/06
Matrix:	Water	Received:	12/08/06
Units:	ug/L	Prepared:	12/17/06
Diln Fac:	1.000	Analyzed:	12/18/06

Type: MS Cleanup Method: EPA 3630C
Lab ID: QC368611

Analyte	MSS Result	Spiked	Result	%REC	Limits
Diesel C12-C24	<20.34	2,500	1,950	78	65-135

Surrogate	%REC	Limits
Hexacosane	86	65-135

Type: MSD Cleanup Method: EPA 3630C
Lab ID: QC368612

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
Diesel C12-C24	2,500	1,896	76	65-135	3	35

Surrogate	%REC	Limits
Hexacosane	79	65-135

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191358 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 166428475001
Units : mg/L

Name : diesel
Date : 24-OCT-2006 17:58
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Std
L1	297b010	166428475010	DSL_10	24-OCT-2006 17:58	S4539
L2	297b011	166428475011	DSL_100	24-OCT-2006 18:26	S4540
L3	297b012	166428475012	DSL_250	24-OCT-2006 18:53	S4541
L4	297b013	166428475013	DSL_500	24-OCT-2006 19:21	S4542
L5	297b014	166428475014	DSL_1000	24-OCT-2006 19:48	S4543
L6	297b015	166428475015	DSL_2500	24-OCT-2006 20:15	S4544
L7	297b016	166428475016	DSL_5000	24-OCT-2006 20:43	S4538

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	AVG	r ²	%RSD	MGR ²	MGRSD	Fig
Diesel C12-C24	48331	47665	48162	48149	47529	49750	48832	AVRG		2.07E-5		48345	2		0.995	20	

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor
Page 1 of 1

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191358 GCSV Water
EPA 8015B

Inst : GC15B
Calnum : 166428475001

Name : diesel
Cal Date: 24-OCT-2006

ICV 166428475017 (297b017 24-OCT-2006) stds: S4615 (10X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Flags
Diesel C12-C24	48345	48592	500.0	502.5	mg/L	1	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191358 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 166500697001
Units : mg/L

Name : MO
Date : 13-DEC-2006 17:24
X Axis : R

Reviewer: CW

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	347B002	166500697002	MO_50	13-DEC-2006 17:24	\$4754
L2	347B003	166500697003	MO_250	13-DEC-2006 17:52	\$4755
L3	347B004	166500697004	MO_500	13-DEC-2006 18:20	\$4756
L4	347B005	166500697005	MO_1000	13-DEC-2006 18:48	\$4758
L5	347B006	166500697006	MO_5000	13-DEC-2006 19:15	\$4753

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ²	MbR ²	MbRSD	Fig
Motor Oil C24-C36	30972	36587	37358	37030	30403	AVRG		2.90E-5		34470	10	0.995	20	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191358 GCSV Water: EPA 8015B

Inst : GC15B
Calnum : 166428475003
Units : mg/L

Name : hexacosane
Date : 25-OCT-2006 01:54
X Axis : R

Reviewer: MCH

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	297b027	166428475027	HEX_5	25-OCT-2006 01:54	S4639
L2	297b028	166428475028	HEX_10	25-OCT-2006 02:21	S4640
L3	297b029	166428475029	HEX_25	25-OCT-2006 02:48	S4641
L4	297b030	166428475030	HEX_50	25-OCT-2006 03:15	S4642
L5	297b031	166428475031	HEX_75	25-OCT-2006 03:43	S4643
L6	297b032	166428475032	HEX_100	25-OCT-2006 04:10	S4644
L7	297b033	166428475033	HEX_200	25-OCT-2006 04:37	S4645

Analyte	L1	L2	L3	L4	L5	L6	L7	Type	a0	a1	a2	Avg	r ²	MnR ²	MxRSD	Fig
Hexacosane	56505	55011	56380	56689	57299	58362	58005	AVRG		1.76E-5		56893	2	0.995	20	

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor
Page 1 of 1

CONTINUING CALIBRATION SUMMARY FOR 191358 GCSV Water
Curtis & Tompkins Laboratories

Analyte: Diesel C12-C24

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	OntAmt	Units	%D Max	%D Flags
						RF/CF	RF/CF					
GC15B	B	166507394018	18-DEC-2006 18:17	166428475001	24-OCT-2006	48345	48227	250.00	249.39	mg/L	0	15
GC15B	B	166507394032	19-DEC-2006 00:46	166428475001	24-OCT-2006	48345	50547	500.00	522.77	mg/L	5	15
GC15B	B	166507394048	19-DEC-2006 08:07	166428475001	24-OCT-2006	48345	53273	1000.0	1101.9	mg/L	10	15

CONTINUING CALIBRATION SUMMARY FOR 191358 GCSV Water
Curtis & Tompkins Laboratories

Analyte: Motor Oil C24-C36

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D Max	%D	Flags
						RF/CF	RF/CF						
GC15B	B	166507394019	18-DEC-2006 18:45	166500697001	13-DEC-2006	34470	35874	500.00	520.37	mg/L	4	15	
GC15B	B	166507394033	19-DEC-2006 01:14	166500697001	13-DEC-2006	34470	35149	500.00	509.85	mg/L	2	15	
GC15B	B	166507394049	19-DEC-2006 08:35	166500697001	13-DEC-2006	34470	36126	500.00	524.03	mg/L	5	15	

CONTINUING CALIBRATION SUMMARY FOR 191358 GCSV Water
Curtis & Tompkins Laboratories

Analyte: Hexacosane

Instid	Ch	Seqnum	Injected	Calnum	Caldate	Avg		SpkAmt	QntAmt	Units	%D	Max	%D	Flags
						RF/CF	RF/CF							
GC15B	B	166507394018	18-DEC-2006 18:17	166428475003	25-OCT-2006	56893	57303	50.000	50.360	mg/L	1	15		
GC15B	B	166507394032	19-DEC-2006 00:46	166428475003	25-OCT-2006	56893	58858	50.000	51.727	mg/L	3	15		
GC15B	B	166507394048	19-DEC-2006 08:07	166428475003	25-OCT-2006	56893	62715	50.000	55.117	mg/L	10	15		

SEQUENCE SUMMARY FOR 191358 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 166428475 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 24-OCT-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
001	297b001	X	IB			24-OCT-2006	13:15	1.0							
002	297b002	X	IB			24-OCT-2006	13:44	1.0							
003	297b003	X	IB			24-OCT-2006	14:12	1.0							
004	297b004	X	IB			24-OCT-2006	14:39	1.0							
005	297b005	X	CM			24-OCT-2006	15:38	1.0							
006	297b006	CCV	DSL_250			24-OCT-2006	16:05	1.0	7	3			1		
007	297b007	CCV	MO_500			24-OCT-2006	16:33	1.0	2	3			2		
008	297b008	CCV	JET_250			24-OCT-2006	17:00	1.0	1	3			3		
009	297b009	X	IB			24-OCT-2006	17:31	1.0					4		
010	297b010	ICAL	DSL_10			24-OCT-2006	17:58	1.0					5		
011	297b011	ICAL	DSL_100			24-OCT-2006	18:26	1.0					6		
012	297b012	ICAL	DSL_250			24-OCT-2006	18:53	1.0					7		
013	297b013	ICAL	DSL_500			24-OCT-2006	19:21	1.0					8		
014	297b014	ICAL	DSL_1000			24-OCT-2006	19:48	1.0					9		
015	297b015	ICAL	DSL_2500			24-OCT-2006	20:15	1.0					10		
016	297b016	ICAL	DSL_5000			24-OCT-2006	20:43	1.0					11		
017	297b017	ICV	DSL_500			24-OCT-2006	21:15	10.0					12		
018	297b018	CCV	MO_500			24-OCT-2006	21:43	1.0	6	3			3		
019	297b019	X	IB			24-OCT-2006	22:13	1.0					3		
020	297b020	ICAL	MO_50			24-OCT-2006	22:40	1.0					13		
021	297b021	ICAL	MOL_250			24-OCT-2006	23:08	1.0					14		
022	297b022	ICAL	MO_500			24-OCT-2006	23:35	1.0					15		
023	297b023	ICAL	MO_1000			25-OCT-2006	00:03	1.0					16		
024	297b024	ICAL	MO_2500			25-OCT-2006	00:30	1.0					17		
025	297b025	ICAL	MO_5000			25-OCT-2006	00:58	1.0					18		
026	297b026	X	IB			25-OCT-2006	01:26	1.0							
027	297b027	ICAL	HEX_5			25-OCT-2006	01:54	1.0					19		
028	297b028	ICAL	HEX_10			25-OCT-2006	02:21	1.0					20		
029	297b029	ICAL	HEX_25			25-OCT-2006	02:48	1.0					21		
030	297b030	ICAL	HEX_50			25-OCT-2006	03:15	1.0					22		

Stds used: 1=S4049 2=S4386 3=S4408 4=S4560 5=S4539 6=S4540 7=S4541 8=S4542 9=S4543 10=S4544 11=S4538 12=S4615 13=S3326 14=S3327 15=S3328 16=S3329 17=S3330 18=S3325 19=S4639
20=S4640 21=S4641 22=S4642 23=S4643 24=S4644 25=S4645 26=S3614 27=S3615 28=S3616 29=S3617 30=S3618 31=S3619 32=S3526

SEQUENCE SUMMARY FOR 191358 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 166428475 Instrument: GC15B
Analytical Method: EPA 8015B

Gas Chromatograph #15 (Channel B) TEH
SOP Version: TEH_rv12

Begun: 24-OCT-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	stds	Used	>LR
031	297b031	ICAL	HEX_75			25-OCT-2006	03:43 1.0						23		
032	297b032	ICAL	HEX_100			25-OCT-2006	04:10 1.0						24		
033	297b033	ICAL	HEX_200			25-OCT-2006	04:37 1.0						25		
034	297b034	X	IB			25-OCT-2006	05:05 1.0								
035	297b035	ICAL	JET_10			25-OCT-2006	05:33 1.0						26		
036	297b036	ICAL	JET_100			25-OCT-2006	06:00 1.0						27		
037	297b037	ICAL	JET_500			25-OCT-2006	06:28 1.0						28		
038	297b038	ICAL	JET_1000			25-OCT-2006	06:55 1.0						29		
039	297b039	ICAL	JET_2000			25-OCT-2006	07:23 1.0						30		
040	297b040	ICAL	JET_3000			25-OCT-2006	07:50 1.0						31		
041	297b041	ICAL	JET_5000			25-OCT-2006	08:18 1.0						32		
042	297b042	X	IB			25-OCT-2006	08:45 1.0								

StdS used: 1=S4049 2=S4386 3=S4408 4=S4560 5=S4539 6=S4540 7=S4541 8=S4542 9=S4543 10=S4544 11=S4538 12=S4615 13=S3326 14=S3327 15=S3328 16=S3329 17=S3330 18=S3325 19=S4639
20=S4640 21=S4641 22=S4642 23=S4643 24=S4644 25=S4645 26=S3614 27=S3615 28=S3616 29=S3617 30=S3618 31=S3619 32=S3526

SEQUENCE SUMMARY FOR 191358 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 166500697 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 13-DEC-2006
 Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	lenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used
001	347b001	X	IB				13-DEC-2006 16:57	1.0						
002	347b002	ICAL	MO_50				13-DEC-2006 17:24	1.0	1.0				1	
003	347b003	ICAL	MO_250				13-DEC-2006 17:52	1.0	1.0				2	
004	347b004	ICAL	MO_500				13-DEC-2006 18:20	1.0	1.0				3	
005	347b005	ICAL	MO_1000				13-DEC-2006 18:48	1.0	1.0				4	
006	347b006	ICAL	MO_5000				13-DEC-2006 19:15	1.0	1.0				5	
007	347b007	CCV	MO_500				13-DEC-2006 19:57	1.0	1.0				6	
008	347b008	CCV	DSL_500				13-DEC-2006 20:24	1.0	1.0	2			7	
009	347b009	BLANK	QC367007	S	120048	Soil	13-DEC-2006 20:52	1.0	0.09982				8	
010	347b010	LCS	QC367008	S	120048	Soil	13-DEC-2006 21:20	1.0	0.09982	9			9	
011	347b011	SAMPLE	191106-005	S	120048	Soil	13-DEC-2006 21:47	1.0	0.09974				10	
012	347b012	SAMPLE	191106-006	S	120048	Soil	13-DEC-2006 22:15	1.0	0.0998				11	
013	347b013	SAMPLE	191106-007	S	120048	Soil	13-DEC-2006 22:42	1.0	0.09994				12	
014	347b014	SAMPLE	191106-004	S	120048	Soil	13-DEC-2006 23:10	1.0	0.09996				13	
015	347b015	SAMPLE	191106-002	S	120048	Soil	13-DEC-2006 23:38	1.0	0.09998				14	
016	347b016	SAMPLE	191106-003	S	120048	Soil	14-DEC-2006 00:05	1.0	0.09994				15	
017	347b017	X	IB				14-DEC-2006 00:33	1.0					16	
018	347b018	MS	QC368074		120310	Soil	14-DEC-2006 01:00	1.0	0.998				17	
019	347b019	MSD	QC368075		120310	Soil	14-DEC-2006 01:28	1.0	1.016				18	
020	347b020	CCV	DSL_1000				14-DEC-2006 01:56	1.0	1.0				19	
021	347b021	CCV	MO_500				14-DEC-2006 02:23	1.0	1.0				20	
022	347b022	X	CCV				14-DEC-2006 02:50	1.0					21	
023	347b023	X	CCV				14-DEC-2006 03:18	1.0					22	
024	347b024	SAMPLE	191333-007	S	120188	Soil	14-DEC-2006 03:45	1.0	0.09998				23	
025	347b025	SAMPLE	191333-008	S	120188	Soil	14-DEC-2006 04:13	1.0	0.09976				24	
026	347b026	SAMPLE	191327-001	S	120297	Water	14-DEC-2006 04:40	1.0	0.005				25	
027	347b027	SAMPLE	191327-002	S	120297	Water	14-DEC-2006 05:08	1.0	0.005				26	
028	347b028	SAMPLE	191372-001	S	120297	Water	14-DEC-2006 05:36	1.0	0.005				27	
029	347b029	X	IB				14-DEC-2006 06:04	1.0					28	
030	347b030	SAMPLE	191372-002	S	120297	Water	14-DEC-2006 06:31	1.0	0.005				29	
031	347b031	SAMPLE	191372-003	S	120297	Water	14-DEC-2006 06:59	1.0	0.005				30	

Stds used: 1=S4754 2=S4755 3=S4756 4=S4758 5=S4753 6=S4887 7=S4558 8=S4559 9=S4556

>LR...

2:BUNKC:=5622.16

SEQUENCE SUMMARY FOR 191358 GCSV Water Curtis & Tompkins Laboratories

Sequence: 166500697 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 13-DEC-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used
032	347b032	SAMPLE	191372-004	S	120297	Water	14-DEC-2006	07:26	1.0	0.005	3	
033	347b033	SAMPLE	191372-005	S	120297	Water	14-DEC-2006	07:54	1.0	0.005	3	
034	347b034	CCV	DSL_250				14-DEC-2006	08:22	1.0	1.0	3	9
035	347b035	CCV	MO_500				14-DEC-2006	08:49	1.0	1.0	3	6

Stds used: 1=S4754 2=S4755 3=S4756 4=S4758 5=S4753 6=S4887 7=S4558 8=S4559 9=S4556

SEQUENCE SUMMARY FOR 191358 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 166507394 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 18-DEC-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used	>LR
001	352b001	X	PRIMER			18-DEC-2006	08:34	1.0					
002	352b002	X	IB			18-DEC-2006	09:02	1.0					
003	352b003	CCV	DSL_500			18-DEC-2006	09:30	1.0				1	
004	352b004	CCV	MO_500			18-DEC-2006	09:57	1.0				2	
005	352b005	SAMPLE	191526-001	120400	Miscel	18-DEC-2006	12:04	50.0					
006	352b006	X	IB			18-DEC-2006	12:32	1.0					
007	352b007	SAMPLE	191526-001	120400	Miscel	18-DEC-2006	13:10	100.0					
008	352b008	SAMPLE	191388-061	S 120306	Soil	18-DEC-2006	13:38	1.0					
009	352b009	SAMPLE	191388-062	S 120306	Soil	18-DEC-2006	14:06	1.0					
010	352b010	SAMPLE	191388-060	S 120306	Soil	18-DEC-2006	14:33	1.0					
011	352b011	X	IB			18-DEC-2006	15:01	1.0					
012	352b012	SAMPLE	191314-018	S 120405	Water	18-DEC-2006	15:29	1.0					
013	352b013	SAMPLE	191388-046	S 120306	Soil	18-DEC-2006	15:57	1.0					
014	352b014	SAMPLE	191388-056	S 120306	Soil	18-DEC-2006	16:25	1.0					
015	352b015	SAMPLE	191388-045	S 120306	Soil	18-DEC-2006	16:53	5.0					
016	352b016	SAMPLE	191388-044	S 120306	Soil	18-DEC-2006	17:21	5.0					
017	352b017	X	IB			18-DEC-2006	17:49	1.0					
018	352b018	CCV	DSL_250			18-DEC-2006	18:17	1.0					
019	352b019	CCV	MO_500			18-DEC-2006	18:45	1.0					
020	352b020	BLANK	QC368609	S 120442	Water	18-DEC-2006	19:14	1.0					
021	352b021	BLANK	QC368609	S 120442	Water	18-DEC-2006	19:42	1.0					
022	352b022	LCS	QC368610	S 120442	Water	18-DEC-2006	20:09	1.0					
023	352b023	MSS	191351-001	S 120442	Water	18-DEC-2006	20:37	1.0					
024	352b024	MS	QC368611	S 120442	Water	18-DEC-2006	21:05	1.0					
025	352b025	MSD	QC368612	S 120442	Water	18-DEC-2006	21:33	1.0					
026	352b026	X	IB			18-DEC-2006	22:00	1.0					
027	352b027	SAMPLE	191315-006	S 120442	Water	18-DEC-2006	22:28	1.0					
028	352b028	SAMPLE	191315-007	S 120442	Water	18-DEC-2006	22:56	1.0					
029	352b029	SAMPLE	191315-008	S 120442	Water	18-DEC-2006	23:23	1.0					
030	352b030	SAMPLE	191351-003	S 120442	Water	18-DEC-2006	23:51	1.0					
031	352b031	X	IB			19-DEC-2006	00:19	1.0					

Stds used: 1=S4558 2=S4887 3=S4556 4=S4559 5=S4560 6=S4452

SEQUENCE SUMMARY FOR 191358 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 166507394 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 18-DEC-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
032	352b032	CCV	DSL_500			19-DEC-2006 00:46	1.0	1.0			3	1		
033	352b033	CCV	MO_500			19-DEC-2006 01:14	1.0	1.0			3	2		
034	352b034	X	CCV			19-DEC-2006 01:41	1.0					1		
035	352b035	X	CCV			19-DEC-2006 02:09	1.0					2		
036	352b036	SAMPLE	191351-004	S	120442	Water	19-DEC-2006 02:37	1.0	0.005		3			
037	352b037	SAMPLE	191351-005	S	120442	Water	19-DEC-2006 03:04	1.0	0.005		3			
038	352b038	SAMPLE	191351-006	S	120442	Water	19-DEC-2006 03:32	1.0	0.005		3			
039	352b039	SAMPLE	191351-008	S	120442	Water	19-DEC-2006 04:00	1.0	0.005		3			
040	352b040	SAMPLE	191351-009	S	120442	Water	19-DEC-2006 04:27	1.0	0.005		3			
041	352b041	X	IB			19-DEC-2006 04:55	1.0							
042	352b042	SAMPLE	191364-001	S	120442	Water	19-DEC-2006 05:22	1.0	0.005	2	1		17:BUNKC:=33338.3	
043	352b043	SAMPLE	191364-002	S	120442	Water	19-DEC-2006 05:50	1.0	0.005		3			
044	352b044	SAMPLE	191358-009	S	120442	Water	19-DEC-2006 06:17	1.0	0.005		3			
045	352b045	SAMPLE	191358-011	S	120442	Water	19-DEC-2006 06:45	1.0	0.005		3			
046	352b046	SAMPLE	191518-003		120442	Water	19-DEC-2006 07:12	1.0	0.005		3			
047	352b047	X	IB			19-DEC-2006 07:40	1.0							
048	352b048	CCV	DSL_1000			19-DEC-2006 08:07	1.0	1.0			3	4		
049	352b049	CCV	MO_500			19-DEC-2006 08:35	1.0	1.0			3	2		
050	352b050	SAMPLE	191388-047	S	120306	Soil	19-DEC-2006 09:29	2.0	0.09984		3		4:BUNKC:=7767.48	
051	352b051	SAMPLE	191388-045	S	120306	Soil	19-DEC-2006 09:57	10.0	0.0997		3		2:BUNKC:=5197.01	
052	352b052	SAMPLE	191388-044	S	120306	Soil	19-DEC-2006 10:24	10.0	0.09992		3		2:BUNKC:=6762.31	
053	352b053	SAMPLE	191388-059	S	120306	Soil	19-DEC-2006 10:52	5.0	0.09972		3			
054	352b054	X	IB			19-DEC-2006 11:20	1.0							
055	352b055	CCV	JET_250			19-DEC-2006 11:47	1.0	1.0			3	5		
056	352b056	CCV	KERO_250			19-DEC-2006 12:15	1.0	1.0			3	6		
057	352b057	BLANK	QC368724	S	120470	Miscel	19-DEC-2006 12:45	1.0	0.09984	6	3			
058	352b058	SAMPLE	191388-027	S	120331	Water	19-DEC-2006 15:13	1.0	0.005		3			
059	352b059	SAMPLE	191388-112	S	120342	Soil	19-DEC-2006 15:41	2.0	0.09986		3			
060	352b060	SAMPLE	191388-093	S	120342	Soil	19-DEC-2006 16:09	100.0	0.2000		3			
061	352b061	X	IB			19-DEC-2006 16:37	1.0							
062	352b062	SAMPLE	191388-063	S	120342	Soil	19-DEC-2006 17:05	5.0	0.09992		3			

Stds used: 1=S4558 2=S4887 3=S4556 4=S4559 5=S4560 6=S4452

SEQUENCE SUMMARY FOR 191358 GCSV Water
Curtis & Tompkins Laboratories

Sequence: 166507394 Instrument: GC15B Gas Chromatograph #15 (Channel B) TEH Begun: 18-DEC-2006
Analytical Method: EPA 8015B SOP Version: TEH_rv12

#	Filename	Type	Samplerum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used	>LR
063	352b063	SAMPLE	191388-103	S	120342	Soil	19-DEC-2006 17:33 5.0	0.09974			3		
064	352b064	X	IB				19-DEC-2006 18:01 1.0						
065	352b065	CCV	DSL_250				19-DEC-2006 18:32 1.0	1.0			3		
066	352b066	CCV	MO_500				19-DEC-2006 19:00 1.0	1.0			3		
067	352b067	CCV	JET_250				19-DEC-2006 19:28 1.0	1.0			3		
068	352b068	CCV	KERO_250				19-DEC-2006 19:56 1.0	1.0			3		
069	352b069	X	CCV				19-DEC-2006 20:23 1.0						
070	352b070	X	CCV				19-DEC-2006 20:51 1.0						
071	352b071	X	CCV				19-DEC-2006 21:19 1.0						
072	352b072	X	CCV				19-DEC-2006 21:46 1.0						
073	352b073	SAMPLE	191513-001	S	120470	Miscel	19-DEC-2006 22:14 1.0	0.09996			3		
074	352b074	SAMPLE	191513-002	S	120470	Miscel	19-DEC-2006 22:42 1.0	0.09994			3		
075	352b075	SAMPLE	191549-001	S	120470	Miscel	19-DEC-2006 23:09 1.0	0.09972			3		
076	352b076	SAMPLE	191549-002	S	120470	Miscel	19-DEC-2006 23:37 1.0	0.09982			3		
077	352b077	SAMPLE	191549-003	S	120470	Miscel	20-DEC-2006 00:05 1.0	0.0998			3		
078	352b078	X	IB				20-DEC-2006 00:33 1.0						
079	352b079	SAMPLE	191549-005	S	120470	Miscel	20-DEC-2006 01:00 1.0	0.09972			3		
080	352b080	SAMPLE	191549-004	S	120470	Miscel	20-DEC-2006 01:28 1.0	0.0998			3		
081	352b081	SAMPLE	191549-006	S	120470	Miscel	20-DEC-2006 01:56 1.0	0.09996			3		
082	352b082	X	IB				20-DEC-2006 02:23 1.0						
083	352b083	SAMPLE	191528-012	S	120472	Water	20-DEC-2006 02:51 1.0	0.005			3		
084	352b084	SAMPLE	191528-013	S	120472	Water	20-DEC-2006 03:18 1.0	0.005			3		
085	352b085	CCV	DSL_500				20-DEC-2006 03:46 1.0	1.0			3		
086	352b086	CCV	MO_500				20-DEC-2006 04:14 1.0	1.0			3		
087	352b087	CCV	JET_250				20-DEC-2006 04:41 1.0	1.0			3		
088	352b088	CCV	KERO_250				20-DEC-2006 05:09 1.0	1.0			3		

Stds used: 1=S4558 2=S4887 3=S4556 4=S4559 5=S4560 6=S4452



Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 191358 TEH Water
Curtis & Tompkins Laboratories

					D S L :	H X C S	
Lab ID	Inst ID	Analyzed		IDF			
191358-009	GC15B	12/19/06	06:17	1.0	+	+	
191358-011	GC15B	12/19/06	06:45	1.0	+	+	
QC368609	GC15B	12/18/06	19:14	1.0	+	+	
QC368609	GC15B	12/18/06	19:42	1.0			
QC368610	GC15B	12/18/06	20:09	1.0	+	+	
QC368611	GC15B	12/18/06	21:05	1.0	+	+	
QC368612	GC15B	12/18/06	21:33	1.0	+	+	

Curtis & Tompkins Laboratories

Sample Preparation Summary

18-DEC-2006 12:35

Batch Number : 120442
Date Extracted: 17-DEC-2006
Extracted by : Robert F Wellbrock
Prep Method : 3520C

Analysis : N/A
Bggroup : TEH
Units : mL
Clean-up :

Spike #1 ID : S5034A
Spike #2 ID : S5112C
Spike #3 ID :
SOP Version : TEH50LL rv10

Sample	Type	Client	Matrix	Init	Units	Final	Prep	Clean	pH	Sp 1	Sp 2	Sp 3	Analyses	Clean	Comments
191315-006		Blasland, Bouck & Lee	Water	500	mL	2.5	0.005000	1	9	.5	0		TEHM	3630C	
191315-007		Blasland, Bouck & Lee	Water	500	mL	2.5	0.005000	1	7	.5	0		TEHM	3630C	
191315-008		Blasland, Bouck & Lee	Water	500	mL	2.5	0.005000	1	7	.5	0		TEHM	3630C	
191351-001		Blasland, Bouck & Lee	Water	500	mL	2.5	0.005000	1	6	.5	0		TEHM	3630C	MSS
191351-003		Blasland, Bouck & Lee	Water	500	mL	2.5	0.005000	1	7	.5	0		TEHM	3630C	
191351-004		Blasland, Bouck & Lee	Water	500	mL	2.5	0.005000	1	8	.5	0		TEHM	3630C	
191351-005		Blasland, Bouck & Lee	Water	500	mL	2.5	0.005000	1	7	.5	0		TEHM	3630C	
191351-006		Blasland, Bouck & Lee	Water	500	mL	2.5	0.005000	1	8	.5	0		TEHM	3630C	
191351-008		Blasland, Bouck & Lee	Water	500	mL	2.5	0.005000	1	5	.5	0		TEHM	3630C	
191351-009		Blasland, Bouck & Lee	Water	500	mL	2.5	0.005000	1	8	.5	0		TEHM	3630C	
191358-009		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	6	.5	0		TEHM	3630C	
191358-011		Treadwell & Rollo	Water	500	mL	2.5	0.005000	1	7	.5	0		TEHM	3630C	
191364-001		Blasland, Bouck & Lee	Water	500	mL	2.5	0.005000	1	10	.5	0		TEHM	3630C	
191364-002		Blasland, Bouck & Lee	Water	500	mL	2.5	0.005000	1	7	.5	0		TEHM	3630C	
191518-003		Stellar Environmental Solution	Water	500	mL	2.5	0.005000	1	7	.5	0		TEH		
191518-004		Stellar Environmental Solution	Water	500	mL	2.5	0.005000	1	7	.5	0		TEH		
191518-005		Stellar Environmental Solution	Water	500	mL	2.5	0.005000	1	7	.5	0		TEH		
191518-006		Stellar Environmental Solution	Water	500	mL	2.5	0.005000	1	7	.5	0		TEH		
191518-007		Stellar Environmental Solution	Water	500	mL	2.5	0.005000	1	7	.5	0		TEH		
191518-008		Stellar Environmental Solution	Water	500	mL	2.5	0.005000	1	7	.5	0		TEH		
QC368609	BLANK		Water	500	mL	2.5	0.005000	1		.5	0		TEH	3630C	
QC368610	LCS		Water	500	mL	2.5	0.005000	1		.5	.5		TEH	3630C	
QC368611	MS	of 191351-001	Water	500	mL	2.5	0.005000	1	6	.5	.5		TEH	3630C	
QC368612	MSD	of 191351-001	Water	500	mL	2.5	0.005000	1	6	.5	.5		TEH	3630C	

Prep Chemist:

JMM for RFW

Reviewed By:

JMM

Date:

12/18/06

Relinquished By:

JMM

Received By:

JMM

Date:

12/18/06

LIMS Batch No: 120442
 LIMS Analysis: TEH/m
 Extracted by: RPW
 Date Extracted: 12/17/06

Extraction Method:
☐ mod. EPA 3510 sep. funnel
☒ mod. EPA 3520 cont. L/L
☐ _____

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 Cleanup Method (if needed):
☒ EPA 3630 Silica Gel
☐ Other _____

Sample # & letter	Volume of Sample (mL)	Sample pH	Final Volume (mL)	Cleanup (x if needed)	Comments
191315-006F	500	9	2.5	X	
↓ 007E		7			
↓ 008G		7			
191351-001G		6			MSS
5 ↓ -003E		7			
↓ -004F		8			
↓ -005E		7			
↓ -006G		8			
↓ -008G		5			
10 ↓ -009F		8			
191358-009G		6			
↓ -011G		7			
191364-001E		10			
↓ 002F		7		↓	
15 191578-003D					
↓ -004					
↓ -005					
↓ -006					
↓ -007					
20 ↓ -008					
MB QX368609		NA		X	
LCS ↓ 10		↓		↓	
MS ↓ 11		6			191351-001E
MSD ↓ 12		↓		↓	↓

RPW
12/17/06
 0.5 mL of TEH_SURR was added to all samples
 0.5 mL of TEH_SP was added to all spikes
 pH of all samples adjusted to pH ≤ 2 with H₂SO₄
☒ Samples were continually extracted about 450 mL of CH₂Cl₂
 Extraction Start Time: _____
 Extraction End Time: _____
☐ Samples were extracted 3 times with 60 mL of CH₂Cl₂
 Extracts filtered through baked, CH₂Cl₂-rinsed granular Na₂SO₄
 Concentrated to volumes as noted above

Mfg & Lot# / LIMS # / Time	Date / Initials
35034A	RPW 12/17/06
35112C	
P3054522	
EM46305	
1515	↓
1000	QFL 12/18/06
N/A	
EM 40111628	↓

12/17/06
 Extraction Chemist _____ Date _____

Continued from Page _____
 Continued on Page _____

12/18/06
 Reviewed by: _____ Date _____

Prep Chemist: SFL
 Cleanup Date: 12/18/06

 Benchbook # **BK 2423**
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Sample #	Batch#	Initial Volume (mL)	Final Volume (mL)	Comments
191315-006	120442	1.0	1.0	
↓ 007				
↓ 008				
191351-001				NSS
↓ 003				
↓ 004				
↓ 005				
↓ 006				
↓ 008				
↓ 009				
19304-001				
↓ 002				
191358-009				
↓ 011				
15 MB QC 3006009				
UCS ↓ 10				
MS ↓ 11				
MSD ↓ 12	✓	✓	✓	
20				
25				
30				

☐ Extracts were cleaned up using C&T assembled _____ g columns

☒ Extracts were cleaned up using 1.0 g cartridges

 Extracts were eluted with 4.0 mL CH₂Cl₂

Concentrated to volumes as noted above

Mfg & Lot # / Time / Program

Initials / Date

N/A	SFL 12/18/06
GP7953	
EM 46205	
	↓

Extraction Chemist / Date

 Continued from page _____
 Continued on page _____

Reviewed by / Date

Curtis & Tompkins Laboratories
MDL Summary for EPA 8015B Water
As of 01/05/07

Analyte	Units	GC11A	GC13B B	GC15B	GC17A	GC14B B
JP-5 C10-C16	ug/L	17	16	7.9	5.4	
Jet Fuel A C10-C16	ug/L	14	30	24	33	
Diesel C10-C28	ug/L	18	11	22	37	30
Diesel C10-C24	ug/L	21	15	18	33	26
Diesel C12-C22	ug/L	19	17	20	25	22
Diesel C12-C24	ug/L	20	13	20	33	23
Diesel C12-C28	ug/L		31			
Diesel C12-C32	ug/L	22	14	25	23	36
Diesel C12-C36	ug/L	13	17			
Diesel C10-C20	ug/L		16	13	19	29
Diesel C10-C22	ug/L	21	18	19	27	26
Motor Oil C22-C36	ug/L	120	110	120	140	84
Motor Oil C28-C40	ug/L	67	68	63	78	59
Motor Oil C28-C36	ug/L	64	74	64	69	53
Motor Oil C24-C36	ug/L	150	140	140	170	110
Motor Oil C20-C36	ug/L	120	99	110	130	75
Motor Oil C22-C32	ug/L	140	130	21	160	94
Hexacosane	ug/L	4.5	16	13	3.1	17

**VOLATILE ORGANIC
COMPOUNDS**

WATER



Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1047MW101	Batch#:	120427
Lab ID:	191358-008	Sampled:	12/07/06
Matrix:	Water	Received:	12/08/06
Units:	ug/L	Analyzed:	12/15/06
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	112	80-120
1,2-Dichloroethane-d4	122 *	76-114
Toluene-d8	103	88-110
Bromofluorobenzene	108	86-115

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

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Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	1047MW101RB1065MW9B	Batch#:	120427
Lab ID:	191358-010	Sampled:	12/07/06
Matrix:	Water	Received:	12/08/06
Units:	ug/L	Analyzed:	12/16/06
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	110	80-120
1,2-Dichloroethane-d4	126 *	76-114
Toluene-d8	105	88-110
Bromofluorobenzene	107	86-115

*= Value outside of QC limits; see narrative

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

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: 000061



Curtis & Tompkins, Ltd.

Purgeable Organics by GC/MS

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	TB1207061A	Batch#:	120427
Lab ID:	191358-012	Sampled:	12/07/06
Matrix:	Water	Received:	12/08/06
Units:	ug/L	Analyzed:	12/15/06
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	22	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	5.4	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	97	80-120
1,2-Dichloroethane-d4	101	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	104	86-115

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

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: 00062

Purgeable Organics by GC/MS

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Field ID:	TB1207061B	Batch#:	120427
Lab ID:	191358-014	Sampled:	12/07/06
Matrix:	Water	Received:	12/08/06
Units:	ug/L	Analyzed:	12/15/06
Diln Fac:	1.000		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	0.5	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	99	80-120
1,2-Dichloroethane-d4	105	76-114
Toluene-d8	101	88-110
Bromofluorobenzene	105	86-115

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC368556	Batch#:	120427
Matrix:	Water	Analyzed:	12/15/06
Units:	ug/L		

Analyte	Result	RL	MDL
Chloromethane	ND	1.0	
Vinyl Chloride	ND	0.5	
Bromomethane	ND	1.0	
Chloroethane	ND	1.0	
Acetone	ND	10	
1,1-Dichloroethene	ND	0.5	
Methylene Chloride	ND	4.0	
Carbon Disulfide	ND	0.5	
MTBE	ND	0.5	
trans-1,2-Dichloroethene	ND	0.5	
Vinyl Acetate	ND	10	
1,1-Dichloroethane	ND	0.5	
2-Butanone	ND	10	
cis-1,2-Dichloroethene	ND	0.5	
Chloroform	ND	0.5	
1,1,1-Trichloroethane	ND	0.5	
Carbon Tetrachloride	ND	0.5	
1,2-Dichloroethane	ND	0.5	
Benzene	ND	0.5	0.1
Trichloroethene	ND	0.5	
1,2-Dichloropropane	ND	0.5	
Bromodichloromethane	ND	0.5	
4-Methyl-2-Pentanone	ND	10	
cis-1,3-Dichloropropene	ND	0.5	
Toluene	ND	0.5	
trans-1,3-Dichloropropene	ND	0.5	
1,1,2-Trichloroethane	ND	0.5	
2-Hexanone	ND	10	
Tetrachloroethene	ND	0.5	
Dibromochloromethane	ND	0.5	
Chlorobenzene	ND	0.5	
Ethylbenzene	ND	0.5	
Styrene	ND	0.5	
Bromoform	ND	1.0	
1,1,2,2-Tetrachloroethane	ND	0.5	
Xylene (total)	ND	1.0	

Surrogate	%REC	Limits
Dibromofluoromethane	96	80-120
1,2-Dichloroethane-d4	92	76-114
Toluene-d8	100	88-110
Bromofluorobenzene	100	86-115

ND= Not Detected

RL= Reporting Limit

MDL= Method Detection Limit

Batch QC Report

Purgeable Organics by GC/MS			
Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	EPA 5030B
Project#:	2893.04.51	Analysis:	EPA 8260B
Matrix:	Water	Batch#:	120427
Units:	ug/L	Analyzed:	12/15/06
Diln Fac:	1.000		

Type: BS Lab ID: QC368554

Analyte	Spiked	Result	%REC	Limits
1,1-Dichloroethene	25.00	25.48	102	65-135
Benzene	25.00	23.65	95	65-135
Trichloroethene	25.00	25.50	102	65-135
Toluene	25.00	26.02	104	65-135
Chlorobenzene	25.00	25.08	100	65-135

Surrogate	%REC	Limits
Dibromofluoromethane	88	80-120
1,2-Dichloroethane-d4	87	76-114
Toluene-d8	98	88-110
Bromofluorobenzene	95	86-115

Type: BSD Lab ID: QC368555

Analyte	Spiked	Result	%REC	Limits	RPD	Lim
1,1-Dichloroethene	25.00	26.38	106	65-135	3	35
Benzene	25.00	23.81	95	65-135	1	35
Trichloroethene	25.00	25.16	101	65-135	1	35
Toluene	25.00	25.33	101	65-135	3	35
Chlorobenzene	25.00	24.86	99	65-135	1	35

Surrogate	%REC	Limits
Dibromofluoromethane	92	80-120
1,2-Dichloroethane-d4	91	76-114
Toluene-d8	97	88-110
Bromofluorobenzene	99	86-115

RPD= Relative Percent Difference

CURTIS & TOMPKINS BFB TUNE FOR 191358 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name: BFB IDF : 1.0
Seqnum : 486501602010 File : ile10 Time : 14-DEC-2006 13:42

Standards: S3716

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	30720	17.03	
75	30.00% - 60.00% of mass 95	75613	41.92	
95		180368		
96	5.00% - 9.00% of mass 95	11812	6.55	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	136488	75.67	
175	5.00% - 9.00% of mass 174	10117	7.41	
176	> 95.00% and < 101.00% of mass 174	131957	96.68	
177	5.00% - 9.00% of mass 176	8853	6.71	

Analyst: ACM Date: 12/15/06 Reviewer: LW Date: 12/18/06

CURTIS & TOMPKINS BFB TUNE FOR 191358 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name: BFB IDF : 1.0
Seqnum : 486503339002 File : ilf02 Time : 15-DEC-2006 13:29

Standards: S3716

Mass	Ion Abundance Criteria	Abundance	% Relative Abundance	Q
50	15.00% - 40.00% of mass 95	31370	17.84	
75	30.00% - 60.00% of mass 95	75018	42.65	
95		175877		
96	5.00% - 9.00% of mass 95	11687	6.64	
173	< 2.00% of mass 174	0	0.00	
174	> 50.00% and < 100.00% of mass 95	127069	72.25	
175	5.00% - 9.00% of mass 174	9090	7.15	
176	> 95.00% and < 101.00% of mass 174	124922	98.31	
177	5.00% - 9.00% of mass 176	8187	6.55	

Analyst: ACM Date: 12/18/06 Reviewer: LW Date: 12/18/06

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191358 MSVOA Water: EPA 8260B

Inst : MSVOA09
 Calnum: 486501602009
 Units : ug/L

Name : 826G0X9W
 Date : 14-DEC-2006 15:11
 X Axis: R

Type : WATER

Level	File	Segment	Sample ID	Analyzed	Std's
L1	11e13	486501602013	0.25/0.5PPB	14-DEC-2006 15:11	S5064 (2000000X), S4931 (1000000X), S4172 (2000000X), S4739 (1000X)
L2	11e14	486501602014	0.5/1PPB	14-DEC-2006 15:46	S5064 (1000000X), S4931 (500000X), S4172 (1000000X), S4739 (1000X)
L3	11e15	486501602015	2PPB	14-DEC-2006 16:21	S5064 (2500000X), S4931 (2500000X), S4172 (500000X), S4739 (1000X)
L4	11e16	486501602016	5PPB	14-DEC-2006 16:56	S5064 (1000000X), S4931 (1000000X), S4172 (200000X), S4739 (1000X)
L5	11e17	486501602017	10PPB	14-DEC-2006 17:32	S5064 (500000X), S4931 (500000X), S4172 (100000X), S4739 (1000X)
L6	11e18	486501602018	20PPB	14-DEC-2006 18:06	S5064 (250000X), S4931 (250000X), S4172 (500000X), S4739 (1000X)
L7	11e19	486501602019	50PPB	14-DEC-2006 18:41	S5064 (100000X), S4931 (100000X), S4172 (200000X), S4739 (1000X)
L8	11e20	486501602020	75PPB	14-DEC-2006 19:16	S5064 (6667X), S4931 (6667X), S4172 (13330X), S4739 (1000X)
L9	11e21	486501602021	100PPB	14-DEC-2006 19:51	S5064 (5000X), S4931 (5000X), S4172 (10000X), S4739 (1000X)

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	Avg	r ²	Max	Min	r ²	F1g
Chloromethane		2.8336m	2.3375	2.8939	2.8457	2.8585	2.8736	2.7494	2.6561	AVRG		0.36284		2.7560	7	15	0.10	0.99	
Vinyl Chloride	1.3255	1.9735	1.8323	2.2813	2.1388	2.1891	2.3012	2.1701	2.1503	AVRG		0.48855		2.0469	15	15	0.050	0.99	
Bromomethane		0.7490	0.7369m	1.0679	0.9924	1.2149	1.2646	1.3254		QUAD	0.77807	0.83321	-0.00086	1.0502	1.000	15	0.050	0.99	
Chloroethane		1.1769	0.9670m	1.1907	1.1740	1.1451	1.2041	1.1348	1.1266	AVRG		0.87727		1.1399	7	15	0.050	0.99	
Acetone				0.4450	0.4680	0.4903	0.4716	0.4420	0.4447	AVRG		2.17262		0.4603	4	15	0.050	0.99	
1,1-Dichloroethene		0.9917	1.0627	1.3179	1.2415	1.3041	1.3445	1.2188	1.2861	AVRG		0.81906		1.2209	10	15	0.050	0.99	
Methylene Chloride			2.2452	2.1198	1.9283	1.9326	1.8757	1.7201	1.7622	AVRG		0.51532		1.9406	10	15	0.050	0.99	
Carbon Disulfide			5.6887	5.7687	6.7283	6.4175	6.8483	6.6365	5.9476	6.2287	AVRG		0.15916	6.2830	7	15	0.050	0.99	
MIBK			3.7919	3.2711	4.1131	4.1504	4.4908	4.4980	4.2340	4.2762	AVRG		0.24371	4.1032	10	15	0.050	0.99	
trans-1,2-Dichloroethene		1.4678	1.3853	1.6111	1.5174	1.6349	1.6224	1.4859	1.5484	AVRG		0.65183		1.5341	6	15	0.050	0.99	
Vinyl Acetate		2.8438	2.9579	3.7228m	3.7541	3.9604	3.9775	3.7849	3.8665	AVRG		0.27713		3.6085	12	15	0.050	0.99	
1,1-Dichloroethane		3.1213	2.4468	2.9924	2.9392	2.9788	2.9682	2.6797	2.7281	AVRG		0.35004		2.8568	8	15	0.10	0.99	
2-Butanone				0.6504	0.6726	0.7102	0.7300	0.6698	0.6839	AVRG		1.45741		0.6861	4	15	0.050	0.99	
cis-1,2-Dichloroethene		1.8196	1.4723	1.6901	1.6722	1.7870	1.7817	1.6587	1.6906	AVRG		0.58944		1.6965	6	15	0.050	0.99	
Chloroform		2.6458	2.4874	2.9913	2.8056	2.9401	2.9054	2.6730	2.7013	AVRG		0.36118		2.7687	6	15	0.050	0.99	
1,1,1-Trichloroethane		1.7482	1.6487	1.8989	1.8003	2.0809	2.0812	1.8162	1.8977	AVRG		0.53433		1.8715	8	15	0.050	0.99	
Carbon Tetrachloride		0.6038	0.6905	0.8032	0.8125	0.9274	0.9249	0.7877	0.8442	AVRG		1.25114		0.7993	14	15	0.050	0.99	
1,2-Dichloroethane		1.0406	0.9043	1.0800	1.0994	1.1399	1.1076	1.0334	1.0234	AVRG		0.94914		1.0536	7	15	0.050	0.99	
Benzene		5.2437	3.1682	3.3007	3.1552	3.2565	3.2260	2.9978	3.0408	QUAD	-0.1465	0.30791	7.755E-5	3.4236	0.999	15	0.050	0.99	
Trichloroethene		0.8054	0.6900	0.7916	0.7184	0.8101	0.8147	0.7479	0.7859	AVRG		1.29787		0.7705	6	15	0.050	0.99	
1,2-Dichloropropane		0.7548	0.8067	0.9150	0.8872	0.9354	0.9118	0.8603	0.8694	AVRG		1.15265		0.8676	7	15	0.050	0.99	
Bromodichloromethane		1.0157	0.9435	1.1357	1.1386	1.1764	1.1753	1.1052	1.1165	AVRG		0.90837		1.1009	7	15	0.050	0.99	
4-Methyl-2-Pentanone				0.7845m	0.8232m	0.8393m	0.8485m	0.8070m	0.8156m	AVRG		1.21997		0.8197	3	15	0.050	0.99	
cis-1,3-Dichloropropene		1.2041	1.1555	1.3412	1.3219	1.3675	1.3660	1.3086	1.3147	AVRG		0.77076		1.2974	6	15	0.050	0.99	

Analyte	L1	L2	L3	L4	L5	L6	L7	L8	L9	Type	a0	a1	a2	AVG	r ²	Max	Min	Fig
Toluene		2.0121	1.7477	1.8605	1.7177	1.8880	1.8436	1.6872	1.7556	AVRG		0.55126		1.8140	6	15	0.050	0.99
trans-1,3-Dichloropropene		1.0876	0.9420	1.1545	1.1505	1.2509	1.2390	1.1855	1.1794	AVRG		0.87057		1.1487	9	15	0.050	0.99
1,1,2-Trichloroethane		0.3664	0.3604	0.4130	0.4239	0.4441	0.4385	0.4087	0.4154	AVRG		2.44622		0.4088	7	15	0.050	0.99
2-Hexanone				0.4278	0.5075m	0.5404	0.5451	0.5187	0.5389	AVRG		1.94911		0.5131	9	15	0.050	0.99
Tetrachloroethene		0.6509	0.5415	0.6125	0.5829	0.6743	0.6612	0.5721	0.6499	AVRG		1.61769		0.6182	8	15	0.050	0.99
Dibromochloromethane		0.6618	0.6870	0.7858	0.8174	0.8553	0.8613	0.8178	0.8493	AVRG		1.26265		0.7920	10	15	0.050	0.99
Chlorobenzene		2.1802	1.8243	2.0544	1.9291	2.0824	2.0202	1.8680	1.9571	AVRG		0.50264		1.9895	6	15	0.30	0.99
Ethylbenzene		3.1714	2.8313	3.1066	3.0105	3.3796	3.2544	2.8978	3.0700	AVRG		0.32360		3.0902	6	15	0.050	0.99
m,p-Xylenes	1.3252	1.2645	1.0612	1.1588	1.1139	1.2453	1.2030	1.0715	1.1624	AVRG		0.84860		1.1784	8	15	0.050	0.99
o-Xylene		1.1897	1.0082	1.1099	1.1385	1.2150	1.2267	1.1076	1.1948	AVRG		0.87048		1.1486	6	15	0.050	0.99
Styrene		1.8312	1.6015	2.0156	2.0210	2.2274	2.1898	2.0232	2.1606	AVRG		0.49781		2.0086	10	15	0.050	0.99
Bromoform		0.4333	0.4436	0.5174	0.5432	0.5817	0.5885	0.5556	0.5940	AVRG		1.87911		0.5322	12	15	0.10	0.99
1,1,2,2-Tetrachloroethane		1.8178	1.6436	1.8944	1.8642	2.0255	1.8531	1.7615	1.7674	AVRG		0.54692		1.8284	6	15	0.30	0.99
Dibromofluoromethane		0.6797	0.6964	0.7173	0.7445	0.7230	0.7547	0.7364	0.7329	AVRG		1.37574		0.7269	4	15	0.050	0.99
1,2-Dichloroethane-d4	0.3473	0.3470	0.3721	0.3889	0.3834	0.3959	0.3970	0.3798	0.3591	AVRG		2.67017		0.3745	5	15	0.050	0.99
Toluene-d8	1.2689	1.2740	1.2644	1.2904	1.2794	1.2541	1.2772	1.2579	1.2431	AVRG		0.78883		1.2677	1	15	0.050	0.99
Bromofluorobenzene	1.1396	1.1679	1.1447	1.1777	1.1500	1.1534	1.1089	1.1277	1.0856	AVRG		0.87758		1.1395	3	15	0.050	0.99

Analyst: ACM

Date: 12/18/06

Reviewer: LW

Date: 12/18/06

m=manual integration

Instrument amount = a0 + response * a1 + response^2 * a2; AVRG=Average response factor; QUAD=Quadratic regression

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191358 MSVOA Water
EPA 8260B

Inst : MSVOA09
Calnum : 486501602009

Name : 826GOX9W
Cal Date: 14-DEC-2006

Type : WATER

ICV 486501602022 (ile22 14-DEC-2006) stds: S5074 (10000X), S4739 (1000X)
ICV 486501602023 (ile23 14-DEC-2006) stds: S5052 (10000X), S4922 (10000X),
S4739 (1000X)

Analyte	ICV Seqnum	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Chloromethane	486501602022	2.7560	2.2464	25.00	20.38	ug/L	-18	30	
Vinyl Chloride	486501602022	2.0469	1.7799	25.00	21.74	ug/L	-13	20	
Bromomethane	486501602022	1.0502	1.1612	25.00	24.21	ug/L	-3	30	
Chloroethane	486501602022	1.1399	1.0945	25.00	24.00	ug/L	-4	30	
Acetone	486501602023	0.4603	0.4424	25.00	24.03	ug/L	-4	40	
1,1-Dichloroethene	486501602023	1.2209	1.4057	25.00	28.78	ug/L	15	20	
Methylene Chloride	486501602023	1.9406	1.9704	25.00	25.38	ug/L	2	30	
Carbon Disulfide	486501602023	6.2830	5.2052	25.00	20.71	ug/L	-17	30	
MTBE	486501602023	4.1032	3.7838	25.00	23.05	ug/L	-8	30	
trans-1,2-Dichloroethene	486501602023	1.5341	1.6314	25.00	26.59	ug/L	6	30	
Vinyl Acetate	486501602023	3.6085	2.6481	25.00	18.35	ug/L	-27	40	
1,1-Dichloroethane	486501602023	2.8568	3.0024	25.00	26.27	ug/L	5	30	
2-Butanone	486501602023	0.6861	0.6648	25.00	24.22	ug/L	-3	40	
cis-1,2-Dichloroethene	486501602023	1.6965	1.8707	25.00	27.57	ug/L	10	30	
Chloroform	486501602023	2.7687	2.9146	25.00	26.32	ug/L	5	20	
1,1,1-Trichloroethane	486501602023	1.8715	2.1061	25.00	28.13	ug/L	13	30	
Carbon Tetrachloride	486501602023	0.7993	0.9705	25.00	30.36	ug/L	21	30	!v+
1,2-Dichloroethane	486501602023	1.0536	1.0497	25.00	24.91	ug/L	0	30	
Benzene	486501602023	3.4236	3.3364	25.00	26.08	ug/L	4	30	
Trichloroethene	486501602023	0.7705	0.8332	25.00	27.03	ug/L	8	30	
1,2-Dichloropropane	486501602023	0.8676	0.8882	25.00	25.60	ug/L	2	20	
Bromodichloromethane	486501602023	1.1009	1.2276	25.00	27.88	ug/L	12	30	
4-Methyl-2-Pentanone	486501602023	0.8197	0.8120	25.00	24.77	ug/L	-1	40	
cis-1,3-Dichloropropene	486501602023	1.2974	1.3437	25.00	25.89	ug/L	4	30	
Toluene	486501602023	1.8140	1.9666	25.00	27.10	ug/L	8	20	
trans-1,3-Dichloropropene	486501602023	1.1487	1.0978	25.00	23.89	ug/L	-4	30	
1,1,2-Trichloroethane	486501602023	0.4088	0.4317	25.00	26.40	ug/L	6	30	
2-Hexanone	486501602023	0.5131	0.5306	25.00	25.86	ug/L	3	40	
Tetrachloroethene	486501602023	0.6182	0.7475	25.00	30.23	ug/L	21	30	!v+
Dibromochloromethane	486501602023	0.7920	0.8675	25.00	27.38	ug/L	10	30	
Chlorobenzene	486501602023	1.9895	2.1467	25.00	26.98	ug/L	8	30	
Ethylbenzene	486501602023	3.0902	3.5921	25.00	29.06	ug/L	16	20	
m,p-Xylenes	486501602023	1.1784	1.3262	50.00	56.27	ug/L	13	30	
o-Xylene	486501602023	1.1488	1.3259	25.00	28.85	ug/L	15	30	
Styrene	486501602023	2.0088	2.3638	25.00	29.42	ug/L	18	30	
Bromoform	486501602023	0.5322	0.5934	25.00	27.88	ug/L	12	30	
1,1,2,2-Tetrachloroethane	486501602023	1.8284	1.8512	25.00	25.31	ug/L	1	30	

Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\121406.b\ILE13.D
 Report Date: 15-Dec-2006 08:58

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA09.i\121406.b\ILE13.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 14-DEC-2006 15:11 MS Autotune Date: 01-NOV-2006 17:17
 Operator : VOC Inst ID: MSVOA09.i
 Smp Info : ICAL,S5064,0.0005/1000,S4931,0.001/1000
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 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA09.i\121406.b\826GOX9W.m
 Meth Date : 15-Dec-2006 08:58 target Quant Type: ISTD
 Cal Date : 14-DEC-2006 19:51 Cal File: ILE21.D
 Als bottle: 13 Calibration Sample, Level: 9
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.031	4.031	(0.364)	2174	0.50000	0.3289(a)
2 Chloromethane	50	4.464	4.464	(0.403)	3147	0.50000	0.3266(a)
3 Vinyl Chloride	62	4.681	4.681	(0.423)	2317	0.50000	0.3237(a)
4 Bromomethane	94	5.410	5.410	(0.488)	691	0.50000	0.1825(a)
5 Chloroethane	64	5.608	5.608	(0.506)	1053	0.50000	0.2642(a)
6 Trichlorofluoromethane	101	6.061	6.061	(0.547)	2974	0.50000	0.3653(a)
7 Ethanol	45	6.495	6.495	(0.586)	707	25.0000	9.9836
9 1,1-Dichloroethene	96	7.096	7.096	(0.641)	848	0.25000	0.1986(a)
10 Acetone	43	7.263	7.263	(0.656)	753	0.25000	0.4679(a)
11 Isopropanol	45	7.441	7.441	(0.672)	186	2.50000	0.5773
12 Carbon Disulfide	76	7.529	7.529	(0.680)	5259	0.25000	0.2394(a)
13 Methylene Chloride	84	8.061	8.061	(0.728)	2393	0.25000	0.3527(a)
14 tert-Butyl Alcohol (TBA)	59	8.140	8.140	(0.735)	494	2.50000	1.2960
15 MTBE	73	8.406	8.406	(0.759)	2518	0.25000	0.1755(a)
16 trans-1,2-Dichloroethene	96	8.466	8.466	(0.764)	1214	0.25000	0.2263(a)
17 Isopropyl Ether (DIPE)	45	9.205	9.205	(0.831)	6054	0.25000	0.2403(a)

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
18 1,1-Dichloroethane	63	9.274	9.274	(0.837)	2502	0.25000	0.2505(a)
19 Vinyl Acetate	43	9.284	9.284	(0.838)	2687	0.25000	0.2129(a)
20 Ethyl tert-Butyl Ether (ETBE)	59	9.826	9.826	(0.887)	2796	0.25000	0.1884(a)
21 2,2-Dichloropropane	77	10.239	10.239	(0.924)	1081	0.25000	0.1794(a)
22 cis-1,2-Dichloroethene	96	10.259	10.259	(0.926)	1295	0.25000	0.2183(a)
23 2-Butanone	43	10.289	10.289	(0.929)	322	0.25000	0.1342(a)
24 Bromochloromethane	128	10.693	10.693	(0.965)	873	0.25000	0.2945(a)
25 Tetrahydrofuran	42	10.693	10.693	(0.965)	5466	2.50000	3.5262
26 Chloroform	83	10.762	10.762	(0.972)	2599	0.25000	0.2684(a)
27 Dibromofluoromethane	113	11.048	11.048	(0.997)	118816	50.0000	46.7552
28 1,1,1-Trichloroethane	97	11.048	11.048	(0.997)	1401	0.25000	0.2141(a)
* 29 Pentafluorobenzene	168	11.077	11.077	(1.000)	174804	50.0000	
30 Carbon Tetrachloride	117	11.294	11.294	(0.917)	842	0.25000	0.1654(a)
31 1,1-Dichloropropene	75	11.324	11.324	(0.919)	1475	0.25000	0.2457(a)
32 1,2-Dichloroethane-d4	65	11.678	11.678	(0.948)	110582	50.0000	46.3619
33 Benzene	78	11.678	11.678	(0.948)	6195	0.25000	0.2841(a)
34 Methyl tert-Amyl Ether (TAME)	73	11.757	11.757	(0.954)	2859	0.25000	0.2171(a)
35 1,2-Dichloroethane	62	11.806	11.806	(0.958)	1235	0.25000	0.1840(a)
* 36 1,4-Difluorobenzene	114	12.319	12.319	(1.000)	318443	50.0000	
37 Trichloroethene	95	12.743	12.743	(1.034)	1106	0.25000	0.2253(a)
38 1,2-Dichloropropane	63	13.196	13.196	(1.071)	1152	0.25000	0.2084(a)
39 Trifluorotoluene	146	13.216	13.216	(1.073)	940	0.25000	0.1521(a)
40 Dibromomethane	93	13.413	13.413	(1.089)	616	0.25000	0.1606(a)
41 Bromodichloromethane	83	13.620	13.620	(1.106)	1330	0.25000	0.1896(a)
43 Tetramethyl THF	43	14.349	14.349	(1.165)	1973	0.25000	0.2161(a)
44 cis-1,3-Dichloropropene	75	14.379	14.379	(1.167)	1629	0.25000	0.1971(a)
45 4-Methyl-2-Pentanone	43	14.586	14.586	(1.184)	366	0.25000	0.0701(a)
46 Toluene-d8	98	14.753	14.753	(1.198)	404068	50.0000	50.0466
47 Toluene	92	14.862	14.862	(1.206)	3149	0.25000	0.2725(a)
48 trans-1,3-Dichloropropene	75	15.266	15.266	(1.239)	1157	0.25000	0.1581(a)
49 1,1,2-Trichloroethane	85	15.542	15.542	(1.262)	358	0.25000	0.1375(a)
50 Tetrachloroethene	166	15.670	15.670	(0.927)	1151	0.25000	0.2761(a)
51 1,3-Dichloropropane	76	15.818	15.818	(0.936)	1431	0.25000	0.1802(a)
53 Dibromochloromethane	129	16.113	16.113	(0.953)	1092	0.25000	0.2044(a)
54 1,2-Dibromoethane	107	16.320	16.320	(1.325)	464	0.25000	0.0931(a)
* 55 Chlorobenzene-d5	117	16.902	16.902	(1.000)	337155	50.0000	
56 Chlorobenzene	112	16.941	16.941	(1.002)	3757	0.25000	0.2800(a)
57 Ethylbenzene	91	17.030	17.030	(1.008)	5462	0.25000	0.2621(a)
58 1,1,1,2-Tetrachloroethane	131	17.040	17.040	(1.008)	874	0.25000	0.1909(a)
59 m,p-Xylenes	106	17.187	17.187	(1.017)	4468	0.50000	0.5622
60 o-Xylene	106	17.710	17.710	(1.048)	2142	0.25000	0.2765(a)
61 Styrene	104	17.739	17.739	(1.050)	2722	0.25000	0.2009(a)
62 Bromoform	173	18.035	18.035	(1.067)	833	0.25000	0.2321(a)
63 Isopropylbenzene	105	18.133	18.133	(0.919)	4749	0.25000	0.2803(a)
64 Cyclohexanone	55	18.380	18.380	(0.932)	1988	2.50000	4.1868
65 Bromofluorobenzene	95	18.400	18.400	(0.933)	201116	50.0000	50.0039
66 1,1,2,2-Tetrachloroethane	83	18.557	18.557	(0.941)	1749	0.25000	0.2710(a)

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
						(ug/L)	(ug/L)
=====	=====	==	=====	=====	=====	=====	=====
67 Bromobenzene	156	18.597	18.597	(0.943)	1487	0.25000	0.2732 (a)
68 Propylbenzene	91	18.626	18.626	(0.944)	5882	0.25000	0.2647 (a)
70 2-Chlorotoluene	91	18.794	18.794	(0.953)	4742	0.25000	0.2914 (a)
71 1,3,5-Trimethylbenzene	105	18.833	18.833	(0.955)	3729	0.25000	0.2524 (a)
72 4-Chlorotoluene	91	18.932	18.932	(0.960)	3565	0.25000	0.2305 (a)
73 tert-Butylbenzene	119	19.208	19.208	(0.974)	2852	0.25000	0.2508 (a)
74 1,2,4-Trimethylbenzene	105	19.267	19.267	(0.977)	3782	0.25000	0.2468 (a)
75 sec-Butylbenzene	105	19.454	19.454	(0.986)	4800	0.25000	0.2803 (a)
76 para-Isopropyl Toluene	119	19.592	19.592	(0.993)	3717	0.25000	0.2784 (a)
77 1,3-Dichlorobenzene	146	19.661	19.661	(0.997)	2529	0.25000	0.2569 (a)
* 78 1,4-Dichlorobenzene-d4	152	19.730	19.730	(1.000)	176481	50.0000	
79 1,4-Dichlorobenzene	146	19.760	19.760	(1.001)	2852	0.25000	0.2751 (a)
80 n-Butylbenzene	91	20.055	20.055	(1.016)	2972	0.25000	0.2477 (a)
81 1,2-Dichlorobenzene	146	20.203	20.203	(1.024)	2302	0.25000	0.2396 (a)
83 1,2,4-Trichlorobenzene	180	22.145	22.145	(1.122)	1027	0.25000	0.2384 (a)
85 Naphthalene	128	22.509	22.509	(1.141)	1867	0.25000	0.1934 (a)
86 1,2,3-Trichlorobenzene	180	22.854	22.854	(1.158)	719	0.25000	0.1905 (a)

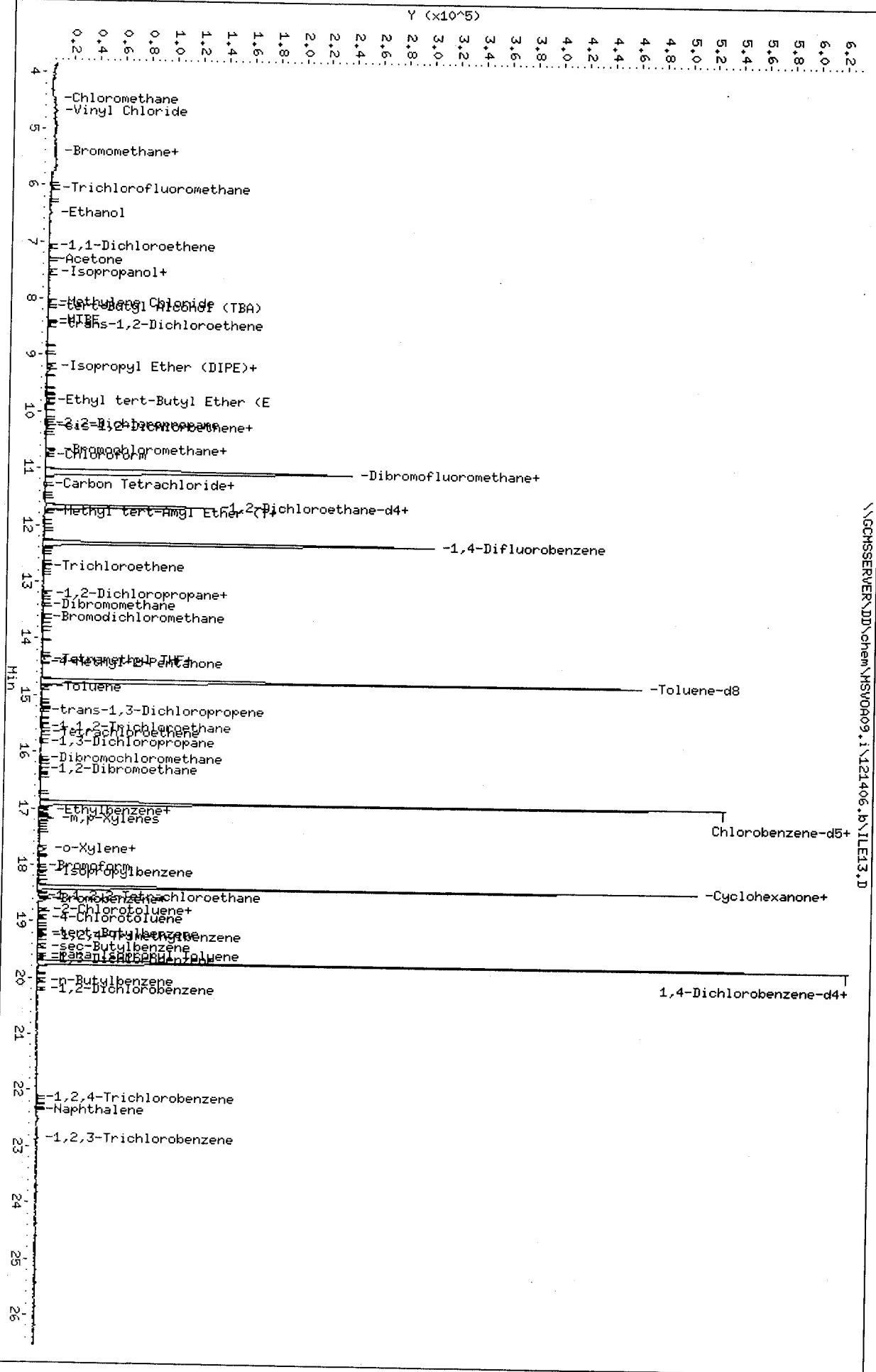
QC Flag Legend

a - Target compound detected but, quantitated amount
 Below Limit Of Quantitation(BLOQ).

Data File: \\GCHSSERVER\JD\chem\MSV0409.i\121406.b\11E13.D
 Date : 14-DEC-2006 15:11
 Client ID: DYNA P&T

Sample Info: ICAL,SS064,0.0005/1000,S4931,0.001/1000
 Purge Volume: 5.0
 Column phase: RTX Volatiles

Instrument: MSV0409.i
 Operator: VOC
 Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\121406.b\ILE14.D
 Report Date: 15-Dec-2006 08:59

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA09.i\121406.b\ILE14.D
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 Inj Date : 14-DEC-2006 15:46 MS Autotune Date: 01-NOV-2006 17:17
 Operator : VOC Inst ID: MSVOA09.i
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 Misc Info : S4172,0.001/1000,0.5/1PPB
 Comment :
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 Meth Date : 15-Dec-2006 08:59 target Quant Type: ISTD
 Cal Date : 14-DEC-2006 19:51 Cal File: ILE21.D
 Als bottle: 14 Calibration Sample, Level: 1
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.030	4.030	(0.364)	4434	1.00000	0.6809 (M)
2 Chloromethane	50	4.463	4.463	(0.403)	9761	1.00000	1.0281 (M)
3 Vinyl Chloride	62	4.690	4.690	(0.423)	6798	1.00000	0.9641
4 Bromomethane	94	5.419	5.419	(0.489)	2580	1.00000	0.6917
5 Chloroethane	64	5.626	5.626	(0.508)	4054	1.00000	1.0324
6 Trichlorofluoromethane	101	6.060	6.060	(0.547)	5867	1.00000	0.7315
7 Ethanol	45	6.484	6.484	(0.585)	3413	50.00000	48.9139 (M)
8 Freon 113	101	7.006	7.006	(0.633)	1020	0.50000	0.2472 (a)
9 1,1-Dichloroethene	96	7.095	7.095	(0.641)	1708	0.50000	0.4061 (a)
10 Acetone	43	7.262	7.262	(0.656)	1433	0.50000	0.9038
11 Isopropanol	45	7.440	7.440	(0.672)	1307	5.00000	4.1177 (M)
12 Carbon Disulfide	76	7.518	7.518	(0.679)	9798	0.50000	0.4527 (a)
13 Methylene Chloride	84	8.070	8.070	(0.729)	7105	0.50000	1.0628
14 tert-Butyl Alcohol (TBA)	59	8.159	8.159	(0.737)	1550	5.00000	4.1273
15 MTBE	73	8.396	8.396	(0.758)	6531	0.50000	0.4620 (a)
16 trans-1,2-Dichloroethene	96	8.474	8.474	(0.765)	2528	0.50000	0.4783 (a)

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
17 Isopropyl Ether (DIPE)	45	9.204	9.204	(0.831)	12503	0.50000	0.5037
18 1,1-Dichloroethane	63	9.273	9.273	(0.837)	5376	0.50000	0.5462
19 Vinyl Acetate	43	9.282	9.282	(0.838)	4898	0.50000	0.3940(a)
20 Ethyl tert-Butyl Ether (ETBE)	59	9.815	9.815	(0.886)	6900	0.50000	0.4721(a)
21 2,2-Dichloropropane	77	10.219	10.219	(0.923)	2389	0.50000	0.4024(a)
22 cis-1,2-Dichloroethene	96	10.278	10.278	(0.928)	3134	0.50000	0.5362
23 2-Butanone	43	10.298	10.298	(0.930)	891	0.50000	0.3769(a)
24 Bromochloromethane	128	10.692	10.692	(0.965)	1420	0.50000	0.4862(a)
25 Tetrahydrofuran	42	10.702	10.702	(0.966)	9696	5.00000	6.3483
26 Chloroform	83	10.771	10.771	(0.972)	4557	0.50000	0.4777(a)
27 Dibromofluoromethane	113	11.047	11.047	(0.997)	119946	50.0000	47.9036
28 1,1,1-Trichloroethane	97	11.056	11.056	(0.998)	3011	0.50000	0.4670(a)
* 29 Pentafluorobenzene	168	11.076	11.076	(1.000)	172236	50.0000	
30 Carbon Tetrachloride	117	11.283	11.283	(0.916)	1872	0.50000	0.3777(a)
31 1,1-Dichloropropene	75	11.332	11.332	(0.920)	2625	0.50000	0.4492(a)
32 1,2-Dichloroethane-d4	65	11.677	11.677	(0.948)	107584	50.0000	46.3294
33 Benzene	78	11.677	11.677	(0.948)	16257	0.50000	0.7658
34 Methyl tert-Amyl Ether (TAME)	73	11.756	11.756	(0.954)	5536	0.50000	0.4319(a)
35 1,2-Dichloroethane	62	11.805	11.805	(0.958)	3226	0.50000	0.4938(a)
* 36 1,4-Difluorobenzene	114	12.318	12.318	(1.000)	310027	50.0000	
37 Trichloroethene	95	12.742	12.742	(1.034)	2497	0.50000	0.5226
38 1,2-Dichloropropane	63	13.195	13.195	(1.071)	2340	0.50000	0.4349(a)
39 Trifluorotoluene	146	13.215	13.215	(1.073)	2606	0.50000	0.4331(a)
40 Dibromomethane	93	13.412	13.412	(1.089)	1739	0.50000	0.4659(a)
41 Bromodichloromethane	83	13.619	13.619	(1.106)	3149	0.50000	0.4613(a)
43 Tetramethyl THF	43	14.348	14.348	(1.165)	4344	0.50000	0.4889(a)
44 cis-1,3-Dichloropropene	75	14.378	14.378	(1.167)	3733	0.50000	0.4640(a)
45 4-Methyl-2-Pentanone	43	14.594	14.594	(1.185)	1716	0.50000	0.3376(aM)
46 Toluene-d8	98	14.752	14.752	(1.198)	394987	50.0000	50.2499
47 Toluene	92	14.851	14.851	(1.206)	6238	0.50000	0.5545
48 trans-1,3-Dichloropropene	75	15.265	15.265	(1.239)	3372	0.50000	0.4734(a)
49 1,1,2-Trichloroethane	85	15.550	15.550	(1.262)	1136	0.50000	0.4481(a)
50 Tetrachloroethene	166	15.659	15.659	(0.927)	2154	0.50000	0.5264
51 1,3-Dichloropropane	76	15.816	15.816	(0.936)	3660	0.50000	0.4696(a)
52 2-Hexanone	43	15.856	15.856	(0.938)	849	0.50000	0.2500(aM)
53 Dibromochloromethane	129	16.102	16.102	(0.953)	2190	0.50000	0.4177(a)
54 1,2-Dibromoethane	107	16.319	16.319	(1.325)	2339	0.50000	0.4824(a)
* 55 Chlorobenzene-d5	117	16.901	16.901	(1.000)	330928	50.0000	
56 Chlorobenzene	112	16.940	16.940	(1.002)	7215	0.50000	0.5479
57 Ethylbenzene	91	17.029	17.029	(1.008)	10495	0.50000	0.5131
58 1,1,1,2-Tetrachloroethane	131	17.038	17.038	(1.008)	2103	0.50000	0.4680(a)
59 m,p-Xylenes	106	17.176	17.176	(1.016)	8369	1.00000	1.0730
60 o-Xylene	106	17.709	17.709	(1.048)	3937	0.50000	0.5177
61 Styrene	104	17.738	17.738	(1.050)	6060	0.50000	0.4558(a)
62 Bromoform	173	18.024	18.024	(1.066)	1434	0.50000	0.4071(a)
63 Isopropylbenzene	105	18.132	18.132	(0.919)	8302	0.50000	0.5053
64 Cyclohexanone	55	18.389	18.389	(0.932)	1657	5.00000	3.5986

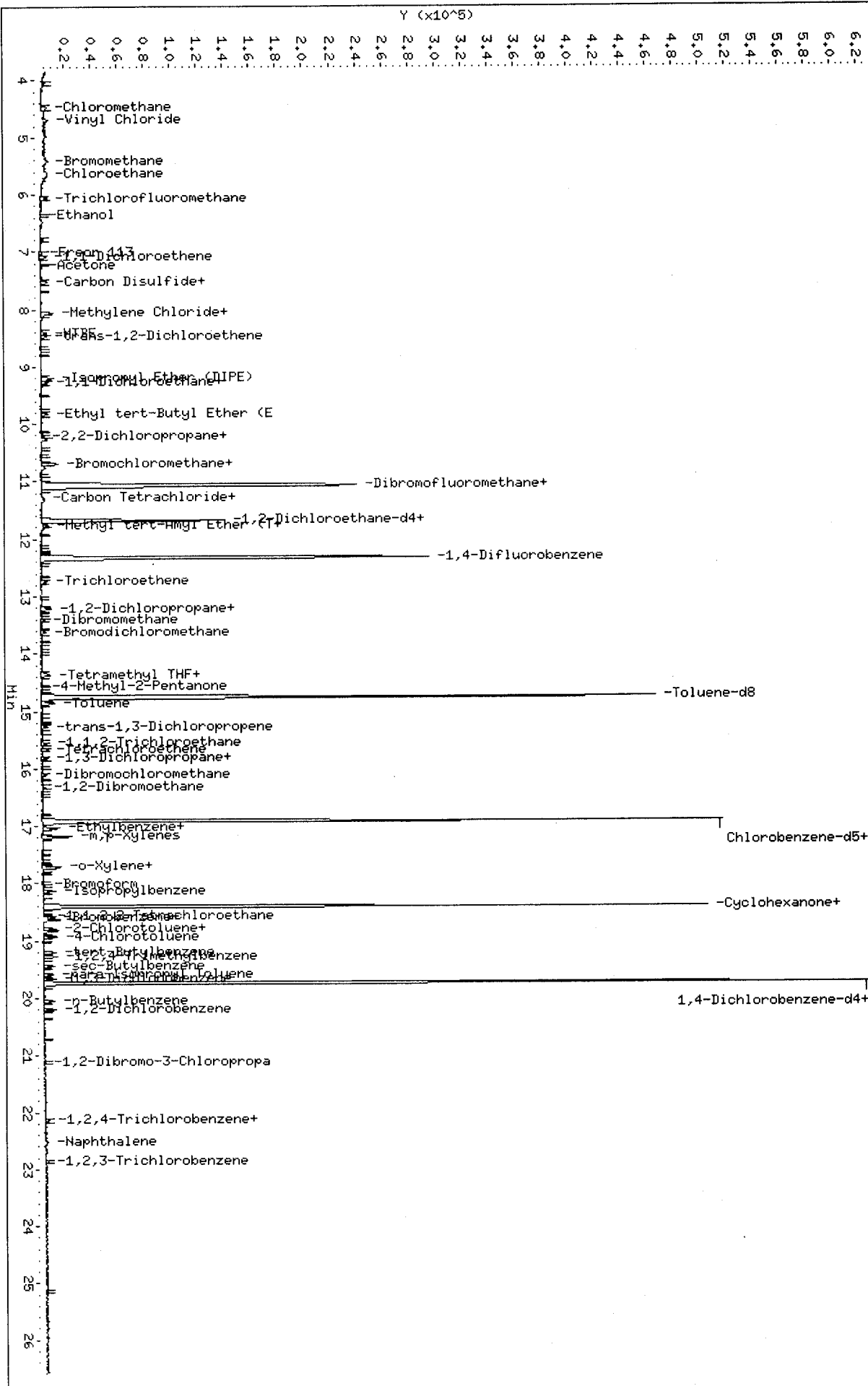
Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
65 Bromofluorobenzene	95	18.399	18.399	(0.933)	199869	50.0000	51.2445
66 1,1,2,2-Tetrachloroethane	83	18.566	18.566	(0.941)	3111	0.50000	0.4970(a)
67 Bromobenzene	156	18.605	18.605	(0.943)	2698	0.50000	0.5113
68 Propylbenzene	91	18.635	18.635	(0.945)	11389	0.50000	0.5285
69 1,2,3-Trichloropropane	110	18.645	18.645	(0.945)	564	0.50000	0.3797(a)
70 2-Chlorotoluene	91	18.793	18.793	(0.953)	8434	0.50000	0.5345
71 1,3,5-Trimethylbenzene	105	18.832	18.832	(0.955)	7710	0.50000	0.5381
72 4-Chlorotoluene	91	18.931	18.931	(0.960)	8023	0.50000	0.5350
73 tert-Butylbenzene	119	19.207	19.207	(0.974)	5823	0.50000	0.5280
74 1,2,4-Trimethylbenzene	105	19.276	19.276	(0.977)	7956	0.50000	0.5354
75 sec-Butylbenzene	105	19.443	19.443	(0.986)	8264	0.50000	0.4977(a)
76 para-Isopropyl Toluene	119	19.591	19.591	(0.993)	6158	0.50000	0.4756(a)
77 1,3-Dichlorobenzene	146	19.660	19.660	(0.997)	5089	0.50000	0.5332
* 78 1,4-Dichlorobenzene-d4	152	19.729	19.729	(1.000)	171141	50.0000	
79 1,4-Dichlorobenzene	146	19.759	19.759	(1.001)	5923	0.50000	0.5893
80 n-Butylbenzene	91	20.054	20.054	(1.016)	5569	0.50000	0.4787(a)
81 1,2-Dichlorobenzene	146	20.202	20.202	(1.024)	5178	0.50000	0.5558
82 1,2-Dibromo-3-Chloropropane	75	21.119	21.119	(1.070)	379	0.50000	0.4140(a)
83 1,2,4-Trichlorobenzene	180	22.134	22.134	(1.122)	2072	0.50000	0.4961(a)
84 Hexachlorobutadiene	225	22.252	22.252	(1.128)	502	0.50000	0.3651(a)
85 Naphthalene	128	22.518	22.518	(1.141)	3572	0.50000	0.3817(a)
86 1,2,3-Trichlorobenzene	180	22.853	22.853	(1.158)	1258	0.50000	0.3437(a)

QC Flag Legend

- a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
- M - Compound response manually integrated.

Data File: \\GCHSERVER\JD\chem\MSV0A09.1\121406.b\11E14.D
 Date: 14-DEC-2006 15:46
 Client ID: DYNA P&T
 Sample Info: ICAL.S5064.0.001/1000.S4931.0.002/1000
 Purge Volume: 5.0
 Column phase: RTX Volatiles

Instrument: MSV0A09.1
 Operator: WDC
 Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\121406.b\ILE15.D
Report Date: 15-Dec-2006 09:00

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA09.i\121406.b\ILE15.D
Lab Smp Id: Client Smp ID: DYNA P&T
Inj Date : 14-DEC-2006 16:21 MS Autotune Date: 01-NOV-2006 17:17
Operator : VOC Inst ID: MSVOA09.i
Smp Info : ICAL,S5064,0.002/500,S4931,0.002/500
Misc Info : S4172,0.001/500,2PPB
Comment :
Method : \\GCMSSERVER\DD\chem\MSVOA09.i\121406.b\826GOX9W.m
Meth Date : 15-Dec-2006 09:00 target Quant Type: ISTD
Cal Date : 14-DEC-2006 19:51 Cal File: ILE21.D
Als bottle: 15 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.034	4.034	(0.364)	9372	2.00000	1.4910 (M)
2 Chloromethane	50	4.468	4.468	(0.403)	15546	2.00000	1.6962
3 Vinyl Chloride	62	4.685	4.685	(0.423)	12186	2.00000	1.7902
4 Bromomethane	94	5.414	5.414	(0.489)	4901	2.00000	1.3613 (M)
5 Chloroethane	64	5.611	5.611	(0.506)	6431	2.00000	1.6965 (M)
6 Trichlorofluoromethane	101	6.055	6.055	(0.546)	12492	2.00000	1.6134
7 Ethanol	45	6.478	6.478	(0.585)	12399	200.000	184.0754 (M)
8 Freon 113	101	7.001	7.001	(0.632)	7301	2.00000	1.8335
9 1,1-Dichloroethene	96	7.089	7.089	(0.640)	7068	2.00000	1.7408
10 Acetone	43	7.277	7.277	(0.657)	3288	2.00000	2.1481
11 Isopropanol	45	7.444	7.444	(0.672)	5969	20.0000	19.4806
12 Carbon Disulfide	76	7.523	7.523	(0.679)	38366	2.00000	1.8362
13 Methylene Chloride	84	8.065	8.065	(0.728)	14932	2.00000	2.3139
14 tert-Butyl Alcohol (TBA)	59	8.164	8.164	(0.737)	6239	20.0000	17.2093 (M)
15 MTBE	73	8.410	8.410	(0.759)	21755	2.00000	1.5944
16 trans-1,2-Dichloroethene	96	8.469	8.469	(0.764)	9213	2.00000	1.8059

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
17 Isopropyl Ether (DIPE)	45	9.208	9.208	(0.831)	40455	2.00000	1.6883
18 1,1-Dichloroethane	63	9.277	9.277	(0.837)	16273	2.00000	1.7129
19 Vinyl Acetate	43	9.287	9.287	(0.838)	19672	2.00000	1.6393
20 Ethyl tert-Butyl Ether (ETBE)	59	9.819	9.819	(0.886)	23880	2.00000	1.6925
21 2,2-Dichloropropane	77	10.243	10.243	(0.924)	11154	2.00000	1.9466
22 cis-1,2-Dichloroethene	96	10.273	10.273	(0.927)	9792	2.00000	1.7356
23 2-Butanone	43	10.282	10.282	(0.928)	4019	2.00000	1.7614
24 Bromochloromethane	128	10.687	10.687	(0.964)	4684	2.00000	1.6613
25 Tetrahydrofuran	42	10.696	10.696	(0.965)	28214	20.0000	19.1357
26 Chloroform	83	10.765	10.765	(0.972)	16543	2.00000	1.7967
27 Dibromofluoromethane	113	11.051	11.051	(0.997)	119265	50.0000	49.3410
28 1,1,1-Trichloroethane	97	11.061	11.061	(0.998)	10965	2.00000	1.7618
* 29 Pentafluorobenzene	168	11.081	11.081	(1.000)	166269	50.0000	
30 Carbon Tetrachloride	117	11.288	11.288	(0.916)	8315	2.00000	1.7277
31 1,1-Dichloropropene	75	11.327	11.327	(0.919)	9998	2.00000	1.7621
32 1,2-Dichloroethane-d4	65	11.672	11.672	(0.947)	112038	50.0000	49.6827
33 Benzene	78	11.682	11.682	(0.948)	38154	2.00000	1.8507
34 Methyl tert-Amyl Ether (TAME)	73	11.751	11.751	(0.954)	21060	2.00000	1.6921
35 1,2-Dichloroethane	62	11.810	11.810	(0.958)	10890	2.00000	1.7165
* 36 1,4-Difluorobenzene	114	12.323	12.323	(1.000)	301071	50.0000	
37 Trichloroethene	95	12.736	12.736	(1.034)	8309	2.00000	1.7909
38 1,2-Dichloropropane	63	13.200	13.200	(1.071)	9715	2.00000	1.8596
39 Trifluorotoluene	146	13.219	13.219	(1.073)	10308	2.00000	1.7642
40 Dibromomethane	93	13.407	13.407	(1.088)	6129	2.00000	1.6911
41 Bromodichloromethane	83	13.623	13.623	(1.106)	11362	2.00000	1.7140
43 Tetramethyl THF	43	14.353	14.353	(1.165)	15319	2.00000	1.7754
44 cis-1,3-Dichloropropene	75	14.372	14.372	(1.166)	13915	2.00000	1.7811
45 4-Methyl-2-Pentanone	43	14.579	14.579	(1.183)	7415	2.00000	1.5023 (H)
46 Toluene d8	98	14.747	14.747	(1.197)	380687	50.0000	49.8714
47 Toluene	92	14.855	14.855	(1.206)	21047	2.00000	1.9268
48 trans-1,3-Dichloropropene	75	15.259	15.259	(1.238)	11344	2.00000	1.6401
49 1,1,2-Trichloroethane	85	15.545	15.545	(1.262)	4340	2.00000	1.7631
50 Tetrachloroethene	166	15.663	15.663	(0.927)	7010	2.00000	1.7519
51 1,3-Dichloropropane	76	15.821	15.821	(0.936)	12904	2.00000	1.6932
52 2-Hexanone	43	15.851	15.851	(0.938)	4170	2.00000	1.2556
53 Dibromochloromethane	129	16.107	16.107	(0.953)	8894	2.00000	1.7349
54 1,2-Dibromoethane	107	16.314	16.314	(1.324)	8108	2.00000	1.7221
* 55 Chlorobenzene-d5	117	16.905	16.905	(1.000)	323640	50.0000	
56 Chlorobenzene	112	16.945	16.945	(1.002)	23617	2.00000	1.8339
57 Ethylbenzene	91	17.023	17.023	(1.007)	36653	2.00000	1.8324
58 1,1,1,2-Tetrachloroethane	131	17.043	17.043	(1.008)	8005	2.00000	1.8216
59 m,p-Xylenes	106	17.181	17.181	(1.016)	27475	4.00000	3.6020
60 o-Xylene	106	17.703	17.703	(1.047)	13052	2.00000	1.7552
61 Styrene	104	17.733	17.733	(1.049)	20733	2.00000	1.5945
62 Bromoform	173	18.029	18.029	(1.066)	5743	2.00000	1.6672
63 Isopropylbenzene	105	18.137	18.137	(0.919)	28502	2.00000	1.7283
64 Cyclohexanone	55	18.374	18.374	(0.931)	6736	20.0000	14.5730

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	====	==	=====	=====	=====	=====	=====
65 Bromofluorobenzene	95	18.393	18.393	(0.932)	196662	50.0000	50.2294
66 1,1,2,2-Tetrachloroethane	83	18.561	18.561	(0.941)	11295	2.00000	1.7978
67 Bromobenzene	156	18.600	18.600	(0.943)	9426	2.00000	1.7796
68 Propylbenzene	91	18.630	18.630	(0.944)	38519	2.00000	1.7808
69 1,2,3-Trichloropropane	110	18.650	18.650	(0.945)	2509	2.00000	1.6828
70 2-Chlorotoluene	91	18.797	18.797	(0.953)	27318	2.00000	1.7247
71 1,3,5-Trimethylbenzene	105	18.827	18.827	(0.954)	24455	2.00000	1.7004
72 4-Chlorotoluene	91	18.925	18.925	(0.959)	27240	2.00000	1.8096
73 tert-Butylbenzene	119	19.201	19.201	(0.973)	19127	2.00000	1.7279
74 1,2,4-Trimethylbenzene	105	19.270	19.270	(0.977)	26355	2.00000	1.7670
75 sec-Butylbenzene	105	19.448	19.448	(0.986)	28832	2.00000	1.7300
76 para-Isopropyl Toluene	119	19.596	19.596	(0.993)	22026	2.00000	1.6948
77 1,3-Dichlorobenzene	146	19.655	19.655	(0.996)	17060	2.00000	1.7808
* 78 1,4-Dichlorobenzene-d4	152	19.734	19.734	(1.000)	171798	50.0000	
79 1,4-Dichlorobenzene	146	19.763	19.763	(1.001)	17266	2.00000	1.7114
80 n-Butylbenzene	91	20.049	20.049	(1.016)	20178	2.00000	1.7280
81 1,2-Dichlorobenzene	146	20.207	20.207	(1.024)	15071	2.00000	1.6117
82 1,2-Dibromo-3-Chloropropane	75	21.123	21.123	(1.070)	1437	2.00000	1.5638
83 1,2,4-Trichlorobenzene	180	22.138	22.138	(1.122)	6709	2.00000	1.6003
84 Hexachlorobutadiene	225	22.257	22.257	(1.128)	2571	2.00000	1.8631
85 Naphthalene	128	22.523	22.523	(1.141)	14330	2.00000	1.5254
86 1,2,3-Trichlorobenzene	180	22.858	22.858	(1.158)	5782	2.00000	1.5739

QC Flag Legend

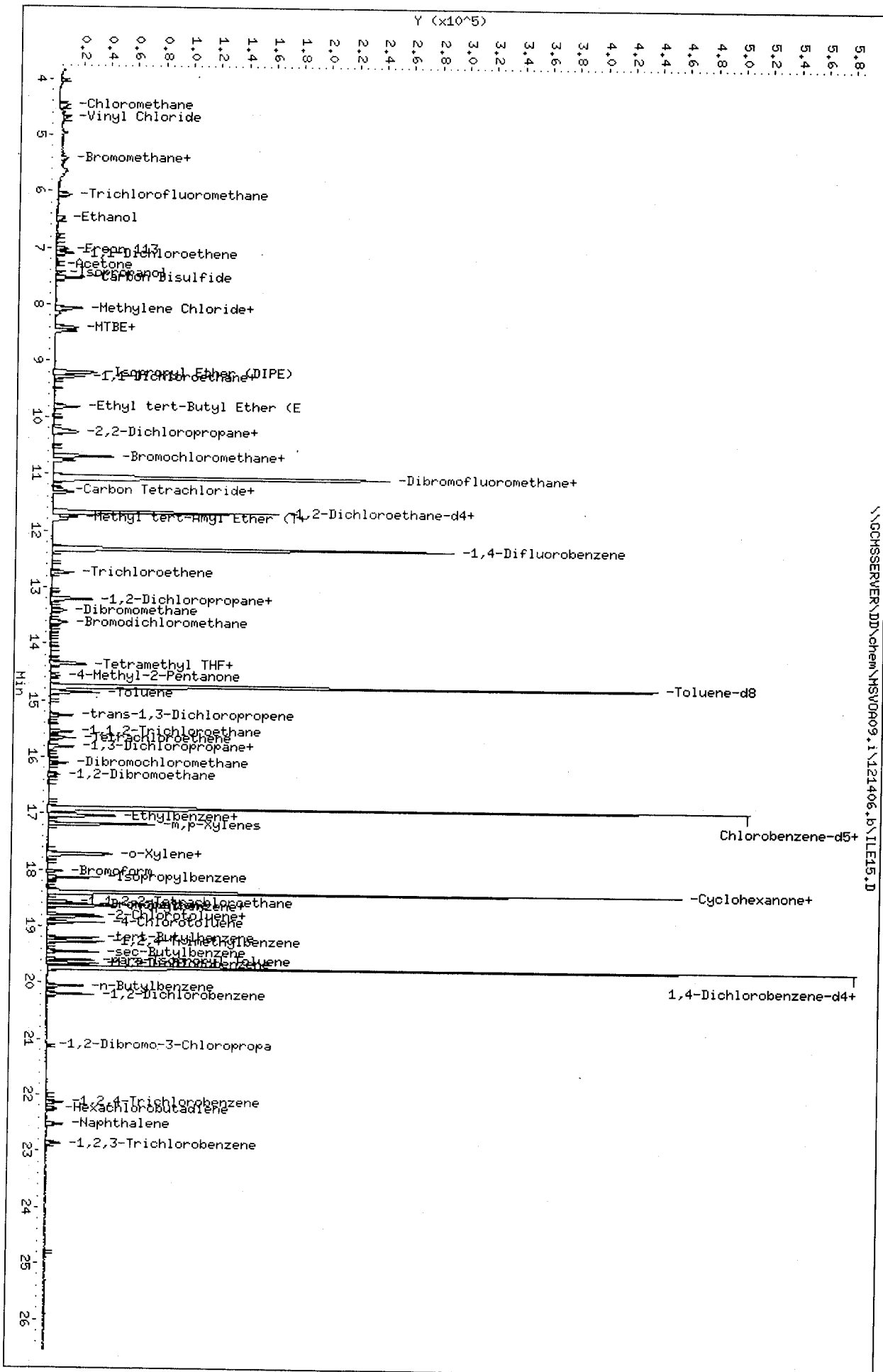
M - Compound response manually integrated.
 H - Operator selected an alternate compound hit.

Data File: \\GCHSERVER\DD\chem\MSV0909.i\121406.b\1LE15.D
 Date: 14-DEC-2006 16:21
 Client ID: DYNA P&T

Sample Info: ICAL,SE064,0.002/500,S4931,0.002/500
 Purge Volume: 5.0
 Column phase: RTX Volatiles

Instrument: MSV0909.i

Operator: VDC
 Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\121406.b\ILE16.D
 Report Date: 15-Dec-2006 09:01

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA09.i\121406.b\ILE16.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 14-DEC-2006 16:56 MS Autotune Date: 01-NOV-2006 17:17
 Operator : VOC Inst ID: MSVOA09.i
 Smp Info : ICAL,S5064,0.005/500,S4931,0.005/500
 Misc Info : S4172,0.0025/500,5PPB
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA09.i\121406.b\826GOX9W.m
 Meth Date : 15-Dec-2006 09:01 target Quant Type: ISTD
 Cal Date : 14-DEC-2006 19:51 Cal File: ILE21.D
 Als bottle: 16 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.044	4.044	(0.365)	35089	5.00000	5.6268
2 Chloromethane	50	4.477	4.477	(0.404)	47736	5.00000	5.2500
3 Vinyl Chloride	62	4.694	4.694	(0.424)	37631	5.00000	5.5725
4 Bromomethane	94	5.413	5.413	(0.489)	17616	5.00000	4.9319
5 Chloroethane	64	5.620	5.620	(0.507)	19641	5.00000	5.2227
6 Trichlorofluoromethane	101	6.064	6.064	(0.547)	40811	5.00000	5.3128
7 Ethanol	45	6.488	6.488	(0.586)	30455	500.000	455.7335 (M)
8 Freon 113	101	7.020	7.020	(0.634)	20008	5.00000	5.0648
9 1,1-Dichloroethene	96	7.099	7.099	(0.641)	21739	5.00000	5.3970
10 Acetone	43	7.276	7.276	(0.657)	7341	5.00000	4.8343
11 Isopropanol	45	7.453	7.453	(0.673)	13691	50.0000	45.0380 (M)
12 Carbon Disulfide	76	7.522	7.522	(0.679)	110987	5.00000	5.3543
13 Methylene Chloride	84	8.065	8.065	(0.728)	34967	5.00000	5.4617
14 tert-Butyl Alcohol (TBA)	59	8.153	8.153	(0.736)	17403	50.0000	48.3857
15 MTBE	73	8.409	8.409	(0.759)	67848	5.00000	5.0120
16 trans-1,2-Dichloroethene	96	8.469	8.469	(0.764)	26576	5.00000	5.2508

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	=====	=====	=====	=====	=====	=====
17 Isopropyl Ether (DIPE)	45	9.198	9.198	(0.830)	123932	5.00000	5.2134
18 1,1-Dichloroethane	63	9.277	9.277	(0.837)	49362	5.00000	5.2373
19 Vinyl Acetate	43	9.277	9.277	(0.837)	61410	5.00000	5.1584 (M)
20 Ethyl tert-Butyl Ether (ETBE)	59	9.819	9.819	(0.886)	70274	5.00000	5.0204
21 2,2-Dichloropropane	77	10.233	10.233	(0.924)	29894	5.00000	5.2587
22 cis-1,2-Dichloroethene	96	10.272	10.272	(0.927)	27879	5.00000	4.9810
23 2-Butanone	43	10.292	10.292	(0.929)	10728	5.00000	4.7391
24 Bromochloromethane	128	10.686	10.686	(0.964)	14361	5.00000	5.1343
25 Tetrahydrofuran	42	10.696	10.696	(0.965)	74043	50.0000	50.6183
26 Chloroform	83	10.765	10.765	(0.972)	49344	5.00000	5.4020
27 Dibromofluoromethane	113	11.051	11.051	(0.997)	122817	50.0000	51.2149
28 1,1,1-Trichloroethane	97	11.060	11.060	(0.998)	31323	5.00000	5.0731
* 29 Pentafluorobenzene	168	11.080	11.080	(1.000)	164956	50.0000	
30 Carbon Tetrachloride	117	11.287	11.287	(0.916)	24449	5.00000	5.0246
31 1,1-Dichloropropene	75	11.327	11.327	(0.919)	28301	5.00000	4.9335
32 1,2-Dichloroethane-d4	65	11.672	11.672	(0.947)	118391	50.0000	51.9268
33 Benzene	78	11.681	11.681	(0.948)	100472	5.00000	4.8205
34 Methyl tert-Amyl Ether (TAME)	73	11.750	11.750	(0.954)	65120	5.00000	5.1751
35 1,2-Dichloroethane	62	11.800	11.800	(0.958)	32875	5.00000	5.1254
* 36 1,4-Difluorobenzene	114	12.322	12.322	(1.000)	304394	50.0000	
37 Trichloroethene	95	12.736	12.736	(1.034)	24096	5.00000	5.1369
38 1,2-Dichloropropane	63	13.199	13.199	(1.071)	27851	5.00000	5.2731
39 Trifluorotoluene	146	13.209	13.209	(1.072)	29448	5.00000	4.9851
40 Dibromomethane	93	13.406	13.406	(1.088)	19366	5.00000	5.2851
41 Bromodichloromethane	83	13.623	13.623	(1.106)	34570	5.00000	5.1581
43 Tetramethyl THF	43	14.352	14.352	(1.165)	45214	5.00000	5.1830
44 cis-1,3-Dichloropropene	75	14.372	14.372	(1.166)	40825	5.00000	5.1686
45 4-Methyl-2-Pentanone	43	14.579	14.579	(1.183)	23880	5.00000	4.7853 (H)
46 Toluene-d8	98	14.746	14.746	(1.197)	392779	50.0000	50.8937
47 Toluene	92	14.855	14.855	(1.206)	56632	5.00000	5.1280
48 trans-1,3-Dichloropropene	75	15.259	15.259	(1.238)	35142	5.00000	5.0253
49 1,1,2-Trichloroethane	85	15.545	15.545	(1.262)	12571	5.00000	5.0512
50 Tetrachloroethene	166	15.663	15.663	(0.927)	19668	5.00000	4.9542
51 1,3-Dichloropropane	76	15.811	15.811	(0.935)	38546	5.00000	5.0980
52 2-Hexanone	43	15.840	15.840	(0.937)	13737	5.00000	4.1691
53 Dibromochloromethane	129	16.106	16.106	(0.953)	25234	5.00000	4.9612
54 1,2-Dibromoethane	107	16.313	16.313	(1.324)	23435	5.00000	4.9232
* 55 Chlorobenzene-d5	117	16.905	16.905	(1.000)	321105	50.0000	
56 Chlorobenzene	112	16.944	16.944	(1.002)	65967	5.00000	5.1630
57 Ethylbenzene	91	17.023	17.023	(1.007)	99756	5.00000	5.0266
58 1,1,1,2-Tetrachloroethane	131	17.043	17.043	(1.008)	22949	5.00000	5.2634
59 m,p-Xylenes	106	17.181	17.181	(1.016)	74419	10.0000	9.8335
60 o-Xylene	106	17.703	17.703	(1.047)	35641	5.00000	4.8309
61 Styrene	104	17.732	17.732	(1.049)	64722	5.00000	5.0169
62 Bromoform	173	18.028	18.028	(1.066)	16615	5.00000	4.8615
63 Isopropylbenzene	105	18.137	18.137	(0.919)	82765	5.00000	5.0897
64 Cyclohexanone	55	18.373	18.373	(0.931)	16975	50.0000	37.2436

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
	=====	==	=====	=====	=====	=====	=====
65 Bromofluorobenzene	95	18.393	18.393	(0.932)	199509	50.0000	51.6766
66 1,1,2,2-Tetrachloroethane	83	18.560	18.560	(0.941)	32092	5.00000	5.1803
67 Bromobenzene	156	18.600	18.600	(0.943)	27015	5.00000	5.1725
68 Propylbenzene	91	18.629	18.629	(0.944)	109298	5.00000	5.1246
69 1,2,3-Trichloropropane	110	18.649	18.649	(0.945)	7764	5.00000	5.2812
70 2-Chlorotoluene	91	18.797	18.797	(0.953)	82328	5.00000	5.2712
71 1,3,5-Trimethylbenzene	105	18.826	18.826	(0.954)	71247	5.00000	5.0240
72 4-Chlorotoluene	91	18.925	18.925	(0.959)	74205	5.00000	4.9994
73 tert-Butylbenzene	119	19.201	19.201	(0.973)	53997	5.00000	4.9469
74 1,2,4-Trimethylbenzene	105	19.270	19.270	(0.977)	73385	5.00000	4.9899
75 sec-Butylbenzene	105	19.447	19.447	(0.986)	81855	5.00000	4.9811
76 para-Isopropyl Toluene	119	19.585	19.585	(0.993)	64258	5.00000	5.0143
77 1,3-Dichlorobenzene	146	19.654	19.654	(0.996)	47313	5.00000	5.0086
* 78 1,4-Dichlorobenzene-d4	152	19.733	19.733	(1.000)	169404	50.0000	
79 1,4-Dichlorobenzene	146	19.753	19.753	(1.001)	48392	5.00000	4.8644
80 n-Butylbenzene	91	20.048	20.048	(1.016)	56422	5.00000	4.9002
81 1,2-Dichlorobenzene	146	20.196	20.196	(1.023)	46324	5.00000	5.0242
82 1,2-Dibromo-3-Chloropropane	75	21.123	21.123	(1.070)	5177	5.00000	5.7136
83 1,2,4-Trichlorobenzene	180	22.128	22.128	(1.121)	18990	5.00000	4.5939
84 Hexachlorobutadiene	225	22.246	22.246	(1.127)	6917	5.00000	5.0834
85 Naphthalene	128	22.512	22.512	(1.141)	41197	5.00000	4.4475
86 1,2,3-Trichlorobenzene	180	22.857	22.857	(1.158)	17502	5.00000	4.8317

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: \\GCHSERVER\JD\chem\MSV0A09.1\121406.b\1LE16.D

Date : 14-DEC-2006 16:56

Client ID: DYNA P&T

Sample Info: ICAL, S5064, 0.005/500, S4931, 0.005/500

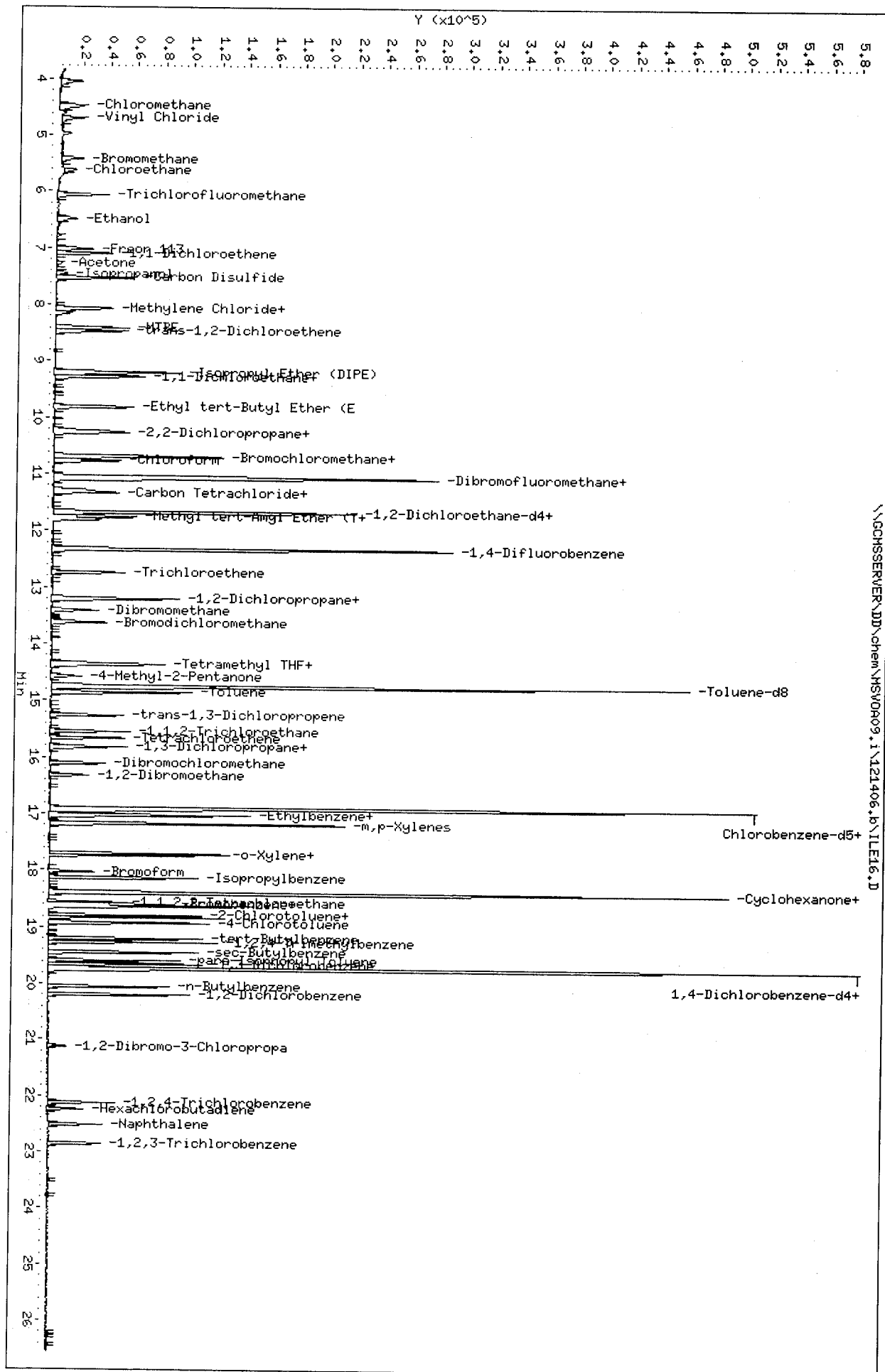
Purge Volume: 5.0

Column phase: RTX Volatiles

Instrument: MSV0A09.i

Operator: VOC

Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\121406.b\ILE17.D
 Report Date: 15-Dec-2006 09:02

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA09.i\121406.b\ILE17.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 14-DEC-2006 17:32 MS Autotune Date: 01-NOV-2006 17:17
 Operator : VOC Inst ID: MSVOA09.i
 Smp Info : ICAL,S5064,0.002/100,S4931,0.002/100
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 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA09.i\121406.b\826GOX9W.m
 Meth Date : 15-Dec-2006 09:02 target Quant Type: ISTD
 Cal Date : 14-DEC-2006 19:51 Cal File: ILE21.D
 Als bottle: 17 Calibration Sample, Level: 4
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	----	==	=====	=====	=====	=====	=====
1 Freon 12	85	4.046	4.046	(0.365)	67684	10.0000	10.8146
2 Chloromethane	50	4.470	4.470	(0.404)	94221	10.0000	10.3252
3 Vinyl Chloride	62	4.696	4.696	(0.424)	72802	10.0000	10.7419
4 Bromomethane	94	5.416	5.416	(0.489)	32858	10.0000	9.1661
5 Chloroethane	64	5.623	5.623	(0.508)	38871	10.0000	10.2990
6 Trichlorofluoromethane	101	6.066	6.066	(0.548)	84634	10.0000	10.9782
7 Ethanol	45	6.490	6.490	(0.586)	70166	1000.00	1046.1955 (M)
8 Freon 113	101	7.012	7.012	(0.633)	39563	10.0000	9.9790
9 1,1-Dichloroethene	96	7.101	7.101	(0.641)	41107	10.0000	10.1687
10 Acetone	43	7.268	7.268	(0.656)	15496	10.0000	10.1680
11 Isopropanol	45	7.456	7.456	(0.673)	29951	100.000	98.1724 (M)
12 Carbon Disulfide	76	7.525	7.525	(0.680)	212485	10.0000	10.2139
13 Methylene Chloride	84	8.067	8.067	(0.729)	63848	10.0000	9.9370
14 tert-Butyl Alcohol (TBA)	59	8.155	8.155	(0.737)	35795	100.000	99.1630
15 MTBE	73	8.402	8.402	(0.759)	137421	10.0000	10.1150
16 trans-1,2-Dichloroethene	96	8.471	8.471	(0.765)	50242	10.0000	9.8909

Compounds	QUANT SIG			AMOUNTS			
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
17 Isopropyl Ether (DIPE)	45	9.200	9.200	(0.831)	244499	10.0000	10.2482
18 1,1-Dichloroethane	63	9.279	9.279	(0.838)	97319	10.0000	10.2884
19 Vinyl Acetate	43	9.279	9.279	(0.838)	124300	10.0000	10.4035
20 Ethyl tert-Butyl Ether (ETBE)	59	9.821	9.821	(0.887)	138612	10.0000	9.8669
21 2,2-Dichloropropane	77	10.235	10.235	(0.924)	56509	10.0000	9.9049
22 cis-1,2-Dichloroethene	96	10.274	10.274	(0.928)	55366	10.0000	9.8564
23 2-Butanone	43	10.284	10.284	(0.929)	22270	10.0000	9.8025
24 Bromochloromethane	128	10.688	10.688	(0.965)	28638	10.0000	10.2017
25 Tetrahydrofuran	42	10.688	10.688	(0.965)	151420	100.0000	103.1432
26 Chloroform	83	10.767	10.767	(0.972)	92896	10.0000	10.1333
27 Dibromofluoromethane	113	11.053	11.053	(0.998)	119694	50.0000	49.7329
28 1,1,1-Trichloroethane	97	11.063	11.063	(0.999)	59609	10.0000	9.6196
* 29 Pentafluorobenzene	168	11.072	11.072	(1.000)	165552	50.0000	
30 Carbon Tetrachloride	117	11.289	11.289	(0.916)	48338	10.0000	10.1650
31 1,1-Dichloropropene	75	11.329	11.329	(0.919)	54494	10.0000	9.7205
32 1,2-Dichloroethane-d4	65	11.674	11.674	(0.947)	114065	50.0000	51.1925
33 Benzene	78	11.674	11.674	(0.947)	187719	10.0000	9.2159
34 Methyl tert-Amyl Ether (TAME)	73	11.752	11.752	(0.954)	128756	10.0000	10.4702
35 1,2-Dichloroethane	62	11.802	11.802	(0.958)	65409	10.0000	10.4347
* 36 1,4-Difluorobenzene	114	12.324	12.324	(1.000)	297478	50.0000	
37 Trichloroethene	95	12.738	12.738	(1.034)	42741	10.0000	9.3237
38 1,2-Dichloropropane	63	13.201	13.201	(1.071)	52787	10.0000	10.2268
39 Trifluorotoluene	146	13.211	13.211	(1.072)	56513	10.0000	9.7893
40 Dibromomethane	93	13.408	13.408	(1.088)	37372	10.0000	10.4363
41 Bromodichloromethane	83	13.625	13.625	(1.106)	67743	10.0000	10.3428
43 Tetramethyl THF	43	14.354	14.354	(1.165)	87824	10.0000	10.3016
44 cis-1,3-Dichloropropene	75	14.374	14.374	(1.166)	78647	10.0000	10.1886
45 4-Methyl-2-Pentanone	43	14.571	14.571	(1.182)	48976	10.0000	10.0426 (H)
46 Toluene-d8	98	14.748	14.748	(1.197)	380589	50.0000	50.4607
47 Toluene	92	14.857	14.857	(1.206)	102193	10.0000	9.4687
48 trans-1,3-Dichloropropene	75	15.261	15.261	(1.238)	68450	10.0000	10.0159
49 1,1,2-Trichloroethane	85	15.547	15.547	(1.261)	25219	10.0000	10.3690
50 Tetrachloroethene	166	15.665	15.665	(0.927)	36479	10.0000	9.4297
51 1,3-Dichloropropane	76	15.813	15.813	(0.935)	75212	10.0000	10.2081
52 2-Hexanone	43	15.842	15.842	(0.937)	31757	10.0000	9.8909 (M)
53 Dibromochloromethane	129	16.108	16.108	(0.953)	51156	10.0000	10.3214
54 1,2-Dibromoethane	107	16.315	16.315	(1.324)	47129	10.0000	10.1310
* 55 Chlorobenzene-d5	117	16.907	16.907	(1.000)	312901	50.0000	
56 Chlorobenzene	112	16.946	16.946	(1.002)	120724	10.0000	9.6965
57 Ethylbenzene	91	17.025	17.025	(1.007)	188399	10.0000	9.7421
58 1,1,1,2-Tetrachloroethane	131	17.045	17.045	(1.008)	42369	10.0000	9.9722
59 m,p-Xylenes	106	17.173	17.173	(1.016)	139419	20.0000	18.9055
60 o-Xylene	106	17.705	17.705	(1.047)	71247	10.0000	9.9103
61 Styrene	104	17.735	17.735	(1.049)	126473	10.0000	10.0606
62 Bromoform	173	18.030	18.030	(1.066)	33993	10.0000	10.2071
63 Isopropylbenzene	105	18.139	18.139	(0.920)	155010	10.0000	9.4635
64 Cyclohexanone	55	18.365	18.365	(0.931)	45523	100.0000	99.1553

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
	=====	====	==	=====	=====	(ug/L)	(ug/L)
65 Bromofluorobenzene	95	18.395	18.395	(0.933)	196244	50.0000	50.4628
66 1,1,2,2-Tetrachloroethane	83	18.562	18.562	(0.941)	63620	10.0000	10.1953
67 Bromobenzene	156	18.602	18.602	(0.943)	51577	10.0000	9.8037
68 Propylbenzene	91	18.631	18.631	(0.945)	206534	10.0000	9.6136
69 1,2,3-Trichloropropane	110	18.641	18.641	(0.945)	15472	10.0000	10.4481
70 2-Chlorotoluene	91	18.789	18.789	(0.953)	150945	10.0000	9.5945
71 1,3,5-Trimethylbenzene	105	18.828	18.828	(0.955)	136152	10.0000	9.5312
72 4-Chlorotoluene	91	18.927	18.927	(0.960)	148280	10.0000	9.9177
73 tert-Butylbenzene	119	19.203	19.203	(0.974)	100901	10.0000	9.1771
74 1,2,4-Trimethylbenzene	105	19.272	19.272	(0.977)	141286	10.0000	9.5373
75 sec-Butylbenzene	105	19.449	19.449	(0.986)	153884	10.0000	9.2964
76 para-Isopropyl Toluene	119	19.587	19.587	(0.993)	120480	10.0000	9.3334
77 1,3-Dichlorobenzene	146	19.656	19.656	(0.997)	92309	10.0000	9.7012
* 78 1,4-Dichlorobenzene-d4	152	19.725	19.725	(1.000)	170640	50.0000	
79 1,4-Dichlorobenzene	146	19.755	19.755	(1.001)	97760	10.0000	9.7558
80 n-Butylbenzene	91	20.051	20.051	(1.016)	105543	10.0000	9.1000
81 1,2-Dichlorobenzene	146	20.198	20.198	(1.024)	93357	10.0000	10.0519
82 1,2-Dibromo-3-Chloropropane	75	21.115	21.115	(1.070)	8918	10.0000	9.7711
83 1,2,4-Trichlorobenzene	180	22.130	22.130	(1.122)	38584	10.0000	9.2663
84 Hexachlorobutadiene	225	22.248	22.248	(1.128)	12304	10.0000	8.9768
85 Naphthalene	128	22.514	22.514	(1.141)	90006	10.0000	9.6465
86 1,2,3-Trichlorobenzene	180	22.859	22.859	(1.159)	36765	10.0000	10.0761

QC Flag Legend

M - Compound response manually integrated.
 H - Operator selected an alternate compound hit.

Data File: \\GCHSERVER\JD\chem\MSV0009.i\121406.b\1LE17.D

Date : 14-DEC-2006 17:32

Client ID: DYNA P&T

Sample Info: ICAL,SS064,0.002/100,S4931,0.002/100

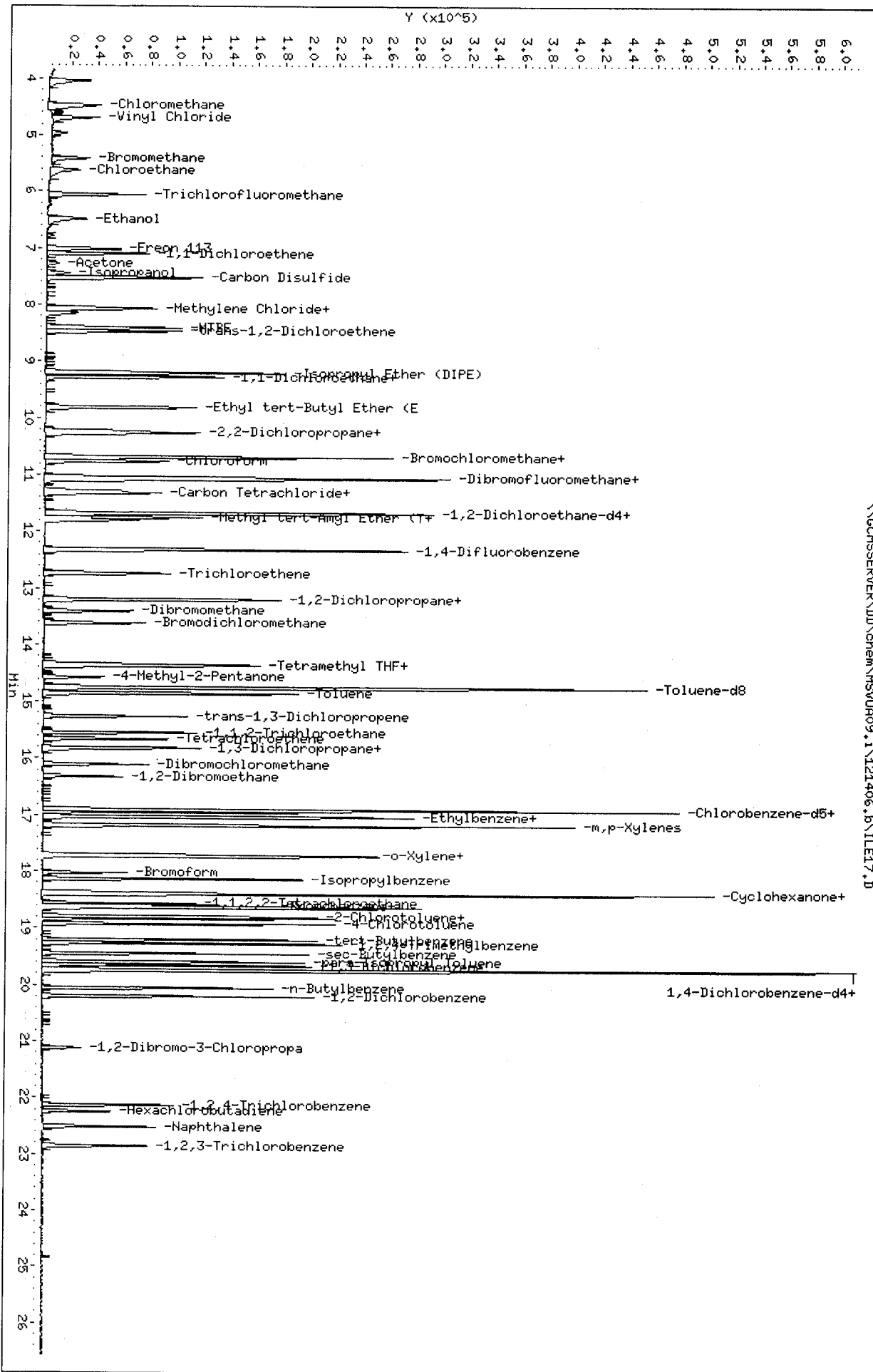
Purge Volume: 5.0

Column phase: RTX Volatiles

Instrument: MSV0009.i

Operator: VOC

Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\121406.b\ILE18.D
 Report Date: 15-Dec-2006 09:03

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Data file : \\GCMSSERVER\DD\chem\MSVOA09.i\121406.b\ILE18.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 14-DEC-2006 18:06 MS Autotune Date: 01-NOV-2006 17:17
 Operator : VOC Inst ID: MSVOA09.i
 Smp Info : ICAL,S5064,0.004/100,S4931,0.004/100
 Misc Info : S4172,0.002/100,20PPB
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA09.i\121406.b\826GOX9W.m
 Meth Date : 15-Dec-2006 09:03 target Quant Type: ISTD
 Cal Date : 14-DEC-2006 19:51 Cal File: ILE21.D
 Als bottle: 18 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.040	4.040	(0.365)	127390	20.0000	20.3592
2 Chloromethane	50	4.474	4.474	(0.404)	189247	20.0000	20.7434
3 Vinyl Chloride	62	4.690	4.690	(0.423)	144929	20.0000	21.3892
4 Bromomethane	94	5.420	5.420	(0.489)	80436	20.0000	22.4437
5 Chloroethane	64	5.627	5.627	(0.508)	75811	20.0000	20.0910
6 Trichlorofluoromethane	101	6.070	6.070	(0.548)	163621	20.0000	21.2288
7 Ethanol	45	6.484	6.484	(0.585)	143813	2000.00	2144.7860 (M)
8 Freon 113	101	7.016	7.016	(0.633)	97002	20.0000	24.4725
9 1,1-Dichloroethene	96	7.095	7.095	(0.641)	86338	20.0000	21.3625
10 Acetone	43	7.273	7.273	(0.657)	32462	20.0000	21.3056
11 Isopropanol	45	7.450	7.450	(0.673)	64759	200.000	212.3136 (M)
12 Carbon Disulfide	76	7.529	7.529	(0.680)	453394	20.0000	21.7993
13 Methylene Chloride	84	8.061	8.061	(0.728)	127950	20.0000	19.9181
14 tert-Butyl Alcohol (TBA)	59	8.150	8.150	(0.736)	79548	200.000	220.4227
15 MTBE	73	8.406	8.406	(0.759)	297318	20.0000	21.8895
16 trans-1,2-Dichloroethene	96	8.475	8.475	(0.765)	108241	20.0000	21.3138

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
17 Isopropyl Ether (DIPE)	45	9.204	9.204	(0.831)	503643	20.0000	21.1152
18 1,1-Dichloroethane	63	9.273	9.273	(0.837)	197212	20.0000	20.8537
19 Vinyl Acetate	43	9.283	9.283	(0.838)	262201	20.0000	21.9505
20 Ethyl tert-Butyl Ether (ETBE)	59	9.815	9.815	(0.886)	300415	20.0000	21.3897
21 2,2-Dichloropropane	77	10.229	10.229	(0.923)	127914	20.0000	22.4259
22 cis-1,2-Dichloroethene	96	10.268	10.268	(0.927)	118307	20.0000	21.0662
23 2-Butanone	43	10.278	10.278	(0.928)	47020	20.0000	20.7014
24 Bromochloromethane	128	10.692	10.692	(0.965)	59226	20.0000	21.1029
25 Tetrahydrofuran	42	10.692	10.692	(0.965)	310059	200.000	211.2523
26 Chloroform	83	10.771	10.771	(0.972)	194650	20.0000	21.2377
27 Dibromofluoromethane	113	11.047	11.047	(0.997)	125288	50.0000	52.0692
28 1,1,1-Trichloroethane	97	11.057	11.057	(0.998)	137768	20.0000	22.2378
* 29 Pentafluorobenzene	168	11.077	11.077	(1.000)	165514	50.0000	
30 Carbon Tetrachloride	117	11.284	11.284	(0.916)	114332	20.0000	23.2066
31 1,1-Dichloropropene	75	11.323	11.323	(0.919)	127291	20.0000	21.9160
32 1,2-Dichloroethane-d4	65	11.678	11.678	(0.948)	122024	50.0000	52.8593
33 Benzene	78	11.678	11.678	(0.948)	401463	20.0000	19.0238
34 Methyl tert-Amyl Ether (TAME)	73	11.757	11.757	(0.954)	270782	20.0000	21.2535
35 1,2-Dichloroethane	62	11.806	11.806	(0.958)	140533	20.0000	21.6394
* 36 1,4-Difluorobenzene	114	12.318	12.318	(1.000)	308200	50.0000	
37 Trichloroethene	95	12.732	12.732	(1.034)	99870	20.0000	21.0282
38 1,2-Dichloropropane	63	13.195	13.195	(1.071)	115319	20.0000	21.5643
39 Trifluorotoluene	146	13.215	13.215	(1.073)	136420	20.0000	22.8090
40 Dibromomethane	93	13.412	13.412	(1.089)	79362	20.0000	21.3912
41 Bromodichloromethane	83	13.619	13.619	(1.106)	145031	20.0000	21.3726
43 Tetramethyl THF	43	14.349	14.349	(1.165)	189240	20.0000	21.4254
44 cis-1,3-Dichloropropene	75	14.368	14.368	(1.166)	168585	20.0000	21.0801
45 4-Methyl-2-Pentanone	43	14.575	14.575	(1.183)	103468	20.0000	20.4781 (H)
46 Toluene-d8	98	14.753	14.753	(1.198)	386507	50.0000	49.4626
47 Toluene	92	14.851	14.851	(1.206)	232754	20.0000	20.8155
48 trans-1,3-Dichloropropene	75	15.255	15.255	(1.238)	154213	20.0000	21.7802
49 1,1,2-Trichloroethane	85	15.541	15.541	(1.262)	54745	20.0000	21.7259
50 Tetrachloroethene	166	15.659	15.659	(0.927)	87637	20.0000	21.8170
51 1,3-Dichloropropane	76	15.817	15.817	(0.936)	164833	20.0000	21.5454
52 2-Hexanone	43	15.837	15.837	(0.937)	70228	20.0000	21.0649
53 Dibromochloromethane	129	16.103	16.103	(0.953)	111162	20.0000	21.5999
54 1,2-Dibromoethane	107	16.310	16.310	(1.324)	100680	20.0000	20.8897
* 55 Chlorobenzene-d5	117	16.901	16.901	(1.000)	324905	50.0000	
56 Chlorobenzene	112	16.940	16.940	(1.002)	270633	20.0000	20.9341
57 Ethylbenzene	91	17.019	17.019	(1.007)	439214	20.0000	21.8727
58 1,1,1,2-Tetrachloroethane	131	17.039	17.039	(1.008)	93532	20.0000	21.2010
59 m,p-Xylenes	106	17.177	17.177	(1.016)	323683	40.0000	42.2704
60 o-Xylene	106	17.709	17.709	(1.048)	157902	20.0000	21.1523
61 Styrene	104	17.729	17.729	(1.049)	289478	20.0000	22.1765
62 Bromoform	173	18.025	18.025	(1.066)	75594	20.0000	21.8601
63 Isopropylbenzene	105	18.133	18.133	(0.919)	379433	20.0000	22.6747
64 Cyclohexanone	55	18.369	18.369	(0.931)	95677	200.000	203.9888

Compounds	QUANT SIG					AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
65 Bromofluorobenzene	95	18.399	18.399	(0.933)	201066	50.0000	50.6089
66 1,1,2,2-Tetrachloroethane	83	18.557	18.557	(0.941)	141239	20.0000	22.1552
67 Bromobenzene	156	18.596	18.596	(0.943)	115334	20.0000	21.4589
68 Propylbenzene	91	18.626	18.626	(0.944)	495174	20.0000	22.5614
69 1,2,3-Trichloropropane	110	18.645	18.645	(0.945)	35235	20.0000	23.2905
70 2-Chlorotoluene	91	18.793	18.793	(0.953)	358048	20.0000	22.2771
71 1,3,5-Trimethylbenzene	105	18.823	18.823	(0.954)	327525	20.0000	22.4431
72 4-Chlorotoluene	91	18.921	18.921	(0.959)	338010	20.0000	22.1295
73 tert-Butylbenzene	119	19.197	19.197	(0.973)	251282	20.0000	22.3711
74 1,2,4-Trimethylbenzene	105	19.266	19.266	(0.977)	332548	20.0000	21.9733
75 sec-Butylbenzene	105	19.444	19.444	(0.986)	389478	20.0000	23.0313
76 para-Isopropyl Toluene	119	19.591	19.591	(0.993)	305952	20.0000	23.2002
77 1,3-Dichlorobenzene	146	19.651	19.651	(0.996)	212417	20.0000	21.8517
* 78 1,4-Dichlorobenzene-d4	152	19.729	19.729	(1.000)	174328	50.0000	
79 1,4-Dichlorobenzene	146	19.759	19.759	(1.001)	218321	20.0000	21.3261
80 n-Butylbenzene	91	20.055	20.055	(1.016)	274367	20.0000	23.1557
81 1,2-Dichlorobenzene	146	20.193	20.193	(1.023)	208643	20.0000	21.9898
82 1,2-Dibromo-3-Chloropropane	75	21.119	21.119	(1.070)	21310	20.0000	22.8547
83 1,2,4-Trichlorobenzene	180	22.124	22.124	(1.121)	95257	20.0000	22.3929
84 Hexachlorobutadiene	225	22.243	22.243	(1.127)	33799	20.0000	24.1377
85 Naphthalene	128	22.518	22.518	(1.141)	223533	20.0000	23.4506
86 1,2,3-Trichlorobenzene	180	22.854	22.854	(1.158)	86558	20.0000	23.2210

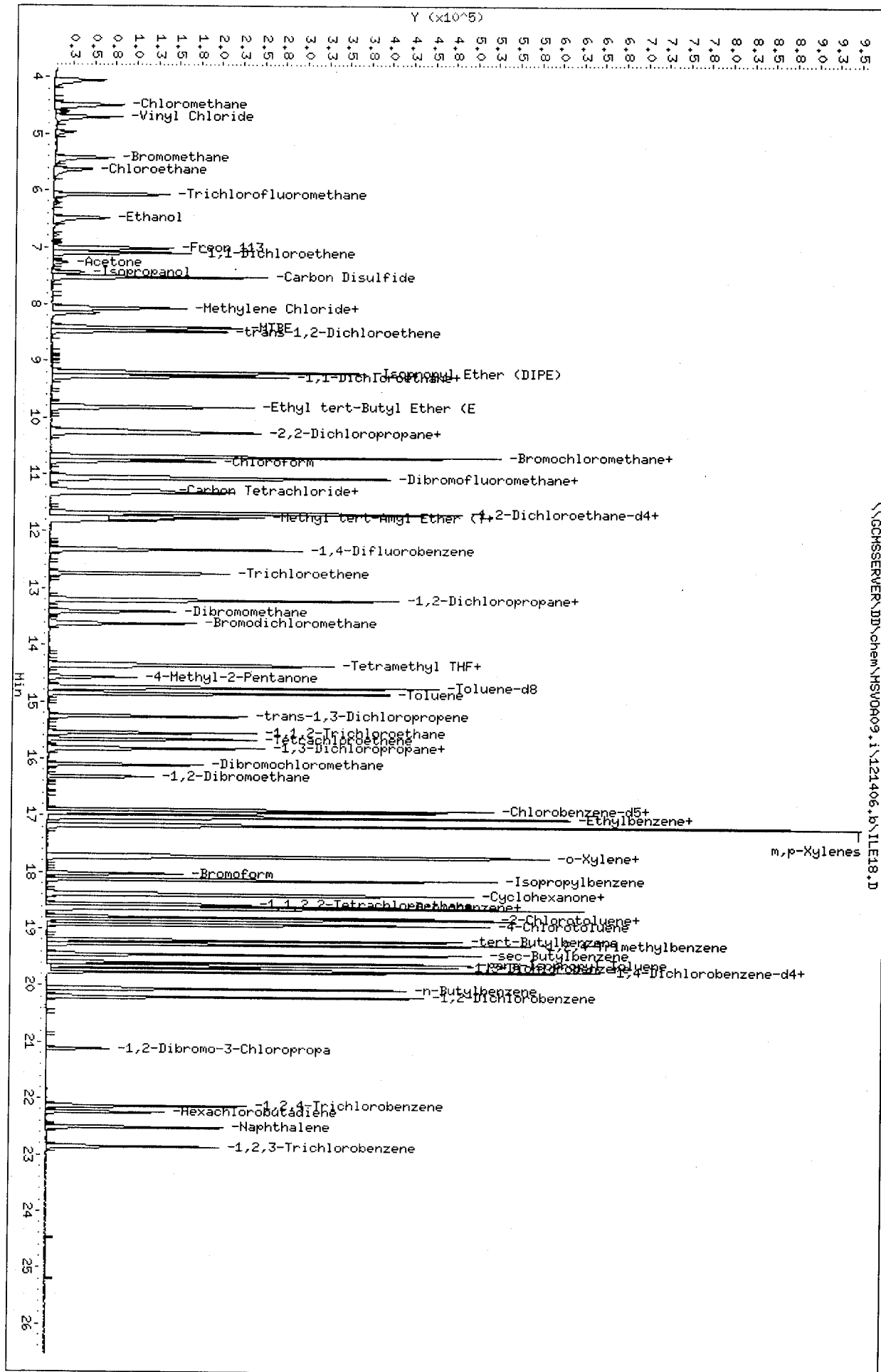
QC Flag Legend

M - Compound response manually integrated.
 H - Operator selected an alternate compound hit.

Data File: \\GCHSERVER\DY\chem\MSV0A09.i\121406.b\1LE18.D
 Date : 14-DEC-2006 18:06
 Client ID: DYNA P&T

Sample Info: ICAL,SS064,0.004/100,S4931,0.004/100
 Purge Volume: 5.0
 Column phase: RTX Volatiles

Instrument: MSV0A09.i
 Operator: VDC
 Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\121406.b\ILE19.D
 Report Date: 15-Dec-2006 09:04

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA09.i\121406.b\ILE19.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 14-DEC-2006 18:41 MS Autotune Date: 01-NOV-2006 17:17
 Operator : VOC Inst ID: MSVOA09.i
 Smp Info : ICAL,S5064,0.01/100,S4931,0.01/100
 Misc Info : S4172,0.005/100,50PPB
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA09.i\121406.b\826GOX9W.m
 Meth Date : 15-Dec-2006 09:04 target Quant Type: ISTD
 Cal Date : 14-DEC-2006 19:51 Cal File: ILE21.D
 Als bottle: 19 Calibration Sample, Level: 6
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG				RESPONSE	AMOUNTS	
	MASS	RT	EXP RT	REL RT		CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.040	4.040	(0.365)	377806	50.0000	60.2333
2 Chloromethane	50	4.473	4.473	(0.404)	476777	50.0000	52.1325
3 Vinyl Chloride	62	4.690	4.690	(0.423)	381811	50.0000	56.2121
4 Bromomethane	94	5.419	5.419	(0.489)	209825	50.0000	58.4042
5 Chloroethane	64	5.616	5.616	(0.507)	199783	50.0000	52.8164
6 Trichlorofluoromethane	101	6.070	6.070	(0.548)	439323	50.0000	56.8607
7 Ethanol	45	6.484	6.484	(0.585)	344337	5000.00	5122.8394
8 Freon 113	101	7.016	7.016	(0.633)	247856	50.0000	62.3790
9 1,1-Dichloroethene	96	7.105	7.105	(0.641)	223074	50.0000	55.0606
10 Acetone	43	7.272	7.272	(0.657)	78244	50.0000	51.2284
11 Isopropanol	45	7.440	7.440	(0.672)	161513	500.000	528.2342
12 Carbon Disulfide	76	7.528	7.528	(0.680)	1101110	50.0000	52.8128
13 Methylene Chloride	84	8.070	8.070	(0.729)	311219	50.0000	48.3298
14 tert-Butyl Alcohol (TBA)	59	8.149	8.149	(0.736)	201266	500.000	556.3380
15 MTBE	73	8.405	8.405	(0.759)	746291	50.0000	54.8106
16 trans-1,2-Dichloroethene	96	8.474	8.474	(0.765)	269182	50.0000	52.8757

Compounds	QUANT SIG			AMOUNTS			
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
17 Isopropyl Ether (DIPE)	45	9.204	9.204	(0.831)	1259546	50.0000	52.6778
18 1,1-Dichloroethane	63	9.273	9.273	(0.837)	492485	50.0000	51.9500
19 Vinyl Acetate	43	9.283	9.283	(0.838)	659946	50.0000	55.1138
20 Ethyl tert-Butyl Ether (ETBE)	59	9.815	9.815	(0.886)	768971	50.0000	54.6179
21 2,2-Dichloropropane	77	10.239	10.239	(0.924)	312765	50.0000	54.7007
22 cis-1,2-Dichloroethene	96	10.268	10.268	(0.927)	295621	50.0000	52.5113
23 2-Butanone	43	10.278	10.278	(0.928)	121119	50.0000	53.1951
24 Bromochloromethane	128	10.692	10.692	(0.965)	149734	50.0000	53.2220
25 Tetrahydrofuran	42	10.692	10.692	(0.965)	767443	500.000	521.6084
26 Chloroform	83	10.771	10.771	(0.972)	482054	50.0000	52.4676
27 Dibromofluoromethane	113	11.047	11.047	(0.997)	125219	50.0000	51.9138
28 1,1,1-Trichloroethane	97	11.066	11.066	(0.999)	345314	50.0000	55.6033
* 29 Pentafluorobenzene	168	11.076	11.076	(1.000)	165918	50.0000	
30 Carbon Tetrachloride	117	11.283	11.283	(0.916)	286487	50.0000	57.8593
31 1,1-Dichloropropene	75	11.332	11.332	(0.920)	328185	50.0000	56.2221
32 1,2-Dichloroethane-d4	65	11.677	11.677	(0.948)	122958	50.0000	52.9977
33 Benzene	78	11.677	11.677	(0.948)	999251	50.0000	47.1141
34 Methyl tert-Amyl Ether (TAME)	73	11.756	11.756	(0.954)	691794	50.0000	54.0271
35 1,2-Dichloroethane	62	11.806	11.806	(0.958)	343088	50.0000	52.5651
* 36 1,4-Difluorobenzene	114	12.318	12.318	(1.000)	309748	50.0000	
37 Trichloroethene	95	12.742	12.742	(1.034)	252359	50.0000	52.8701
38 1,2-Dichloropropane	63	13.195	13.195	(1.071)	282417	50.0000	52.5472
39 Trifluorotoluene	146	13.215	13.215	(1.073)	332934	50.0000	55.3875
40 Dibromomethane	93	13.412	13.412	(1.089)	196830	50.0000	52.7883
41 Bromodichloromethane	83	13.619	13.619	(1.106)	364059	50.0000	53.3818
43 Tetramethyl THF	43	14.348	14.348	(1.165)	457249	50.0000	51.5103
44 cis-1,3-Dichloropropene	75	14.378	14.378	(1.167)	423123	50.0000	52.6436
45 4-Methyl-2-Pentanone	43	14.575	14.575	(1.183)	262818	50.0000	51.7564 (H)
46 Toluene-d8	98	14.752	14.752	(1.198)	395595	50.0000	50.3726
47 Toluene	92	14.861	14.861	(1.206)	571058	50.0000	50.8154
48 trans-1,3-Dichloropropene	75	15.265	15.265	(1.239)	383763	50.0000	53.9297
49 1,1,2-Trichloroethane	85	15.550	15.550	(1.262)	135838	50.0000	53.6387
50 Tetrachloroethene	166	15.659	15.659	(0.927)	215145	50.0000	53.4778
51 1,3-Dichloropropane	76	15.817	15.817	(0.936)	406542	50.0000	53.0582
52 2-Hexanone	43	15.836	15.836	(0.937)	177376	50.0000	53.1226
53 Dibromochloromethane	129	16.112	16.112	(0.953)	280283	50.0000	54.3786
54 1,2-Dibromoethane	107	16.319	16.319	(1.325)	258015	50.0000	53.2670
* 55 Chlorobenzene-d5	117	16.901	16.901	(1.000)	325403	50.0000	
56 Chlorobenzene	112	16.940	16.940	(1.002)	657388	50.0000	50.7727
57 Ethylbenzene	91	17.019	17.019	(1.007)	1058998	50.0000	52.6571
58 1,1,1,2-Tetrachloroethane	131	17.039	17.039	(1.008)	230502	50.0000	52.1683
59 m,p-Xylenes	106	17.177	17.177	(1.016)	782906	100.000	102.0849
60 o-Xylene	106	17.709	17.709	(1.048)	399170	50.0000	53.3905
61 Styrene	104	17.728	17.728	(1.049)	712567	50.0000	54.5054
62 Bromoform	173	18.024	18.024	(1.066)	191488	50.0000	55.2893
63 Isopropylbenzene	105	18.133	18.133	(0.919)	942202	50.0000	53.9086
64 Cyclohexanone	55	18.369	18.369	(0.931)	241112	500.000	492.1812

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
=====	====	==	=====	=====	=====	=====	=====
65 Bromofluorobenzene	95	18.399	18.399	(0.933)	201909	50.0000	48.6577
66 1,1,2,2-Tetrachloroethane	83	18.556	18.556	(0.941)	337413	50.0000	50.6747
67 Bromobenzene	156	18.596	18.596	(0.943)	286601	50.0000	51.0548
68 Propylbenzene	91	18.625	18.625	(0.944)	1204618	50.0000	52.5491
69 1,2,3-Trichloropropane	110	18.645	18.645	(0.945)	84323	50.0000	53.3653
70 2-Chlorotoluene	91	18.793	18.793	(0.953)	877174	50.0000	52.2530
71 1,3,5-Trimethylbenzene	105	18.822	18.822	(0.954)	804346	50.0000	52.7704
72 4-Chlorotoluene	91	18.921	18.921	(0.959)	816628	50.0000	51.1886
73 tert-Butylbenzene	119	19.207	19.207	(0.974)	639457	50.0000	54.5060
74 1,2,4-Trimethylbenzene	105	19.266	19.266	(0.977)	826640	50.0000	52.2957
75 sec-Butylbenzene	105	19.443	19.443	(0.986)	964471	50.0000	54.6051
76 para-Isopropyl Toluene	119	19.591	19.591	(0.993)	759058	50.0000	55.1089
77 1,3-Dichlorobenzene	146	19.650	19.650	(0.996)	521051	50.0000	51.3197
* 78 1,4-Dichlorobenzene-d4	152	19.729	19.729	(1.000)	182079	50.0000	
79 1,4-Dichlorobenzene	146	19.759	19.759	(1.001)	544604	50.0000	50.9337
80 n-Butylbenzene	91	20.054	20.054	(1.016)	683577	50.0000	55.2358
81 1,2-Dichlorobenzene	146	20.202	20.202	(1.024)	503736	50.0000	50.8310
82 1,2-Dibromo-3-Chloropropane	75	21.119	21.119	(1.070)	52646	50.0000	54.0587
83 1,2,4-Trichlorobenzene	180	22.134	22.134	(1.122)	241277	50.0000	54.3046
84 Hexachlorobutadiene	225	22.242	22.242	(1.127)	82364	50.0000	56.3168
85 Naphthalene	128	22.508	22.508	(1.141)	579010	50.0000	58.1576
86 1,2,3-Trichlorobenzene	180	22.853	22.853	(1.158)	218621	50.0000	56.1531

QC Flag Legend

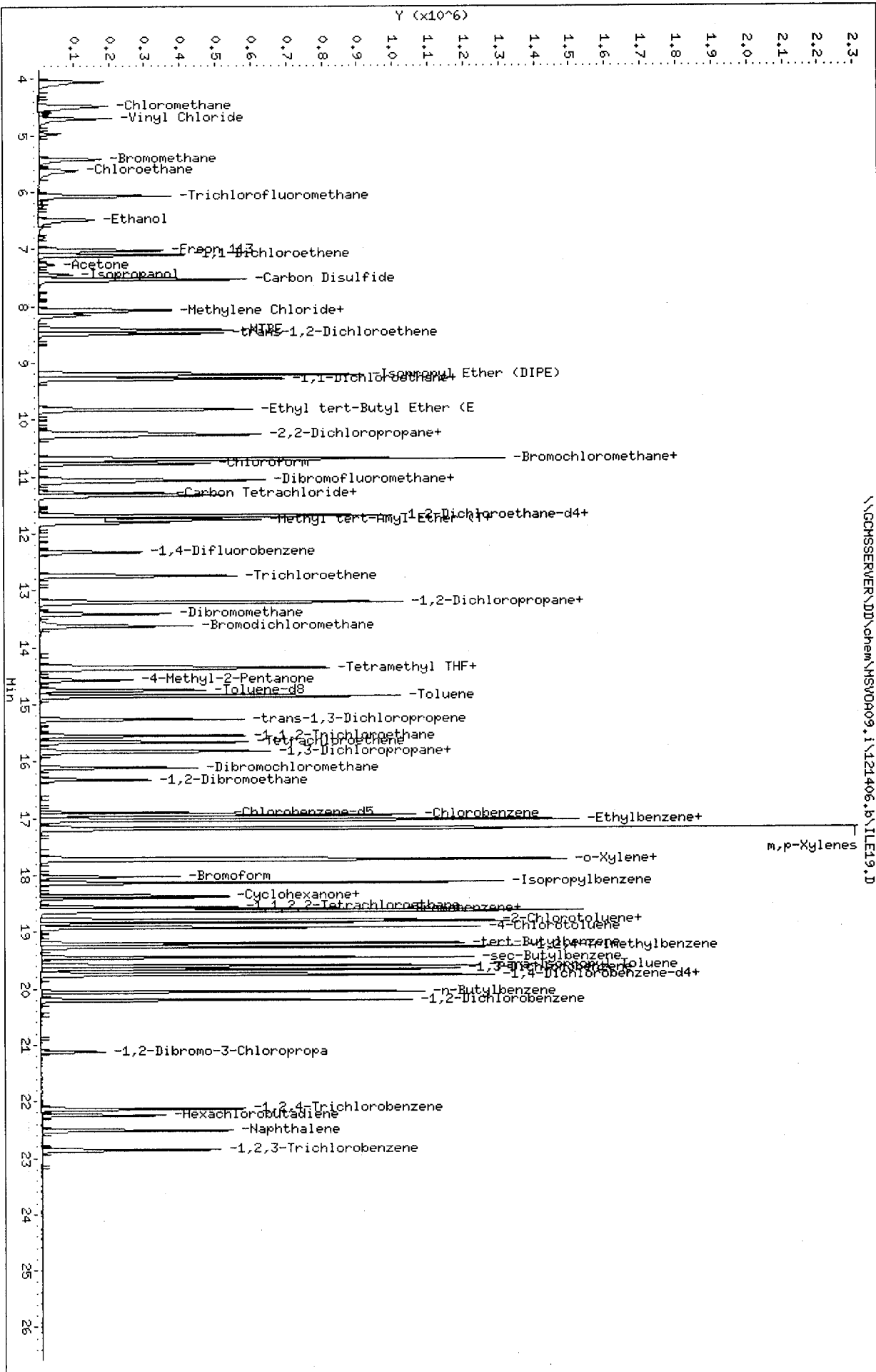
H - Operator selected an alternate compound hit.

Data File: \GCHSSERVER\JD\chem\MSV0909.i\121406.b\11E19.D
 Date : 14-DEC-2006 18:41
 Client ID: DYNA P&T

Sample Info: ICAL, S5064, 0.01/100, S4931, 0.01/100
 Purge Volume: 5.0
 Column phase: RTX Volatiles

Instrument: MSV0909.i

Operator: VDC
 Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\121406.b\ILE20.D
 Report Date: 15-Dec-2006 09:05

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA09.i\121406.b\ILE20.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 14-DEC-2006 19:16 MS Autotune Date: 01-NOV-2006 17:17
 Operator : VOC Inst ID: MSVOA09.i
 Smp Info : ICAL,S5064,0.015/100,S4931,0.015/100
 Misc Info : S4172,0.0075/100,75PPB
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA09.i\121406.b\826GOX9W.m
 Meth Date : 15-Dec-2006 09:05 target Quant Type: ISTD
 Cal Date : 14-DEC-2006 19:51 Cal File: ILE21.D
 Als bottle: 20 Calibration Sample, Level: 7
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG				AMOUNTS		
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.047	4.047	(0.365)	529283	75.0000	79.9217
2 Chloromethane	50	4.481	4.481	(0.404)	722451	75.0000	74.8189
3 Vinyl Chloride	62	4.697	4.697	(0.424)	570250	75.0000	79.5163
4 Bromomethane	94	5.417	5.417	(0.489)	348274	75.0000	91.8157
5 Chloroethane	64	5.624	5.624	(0.507)	298202	75.0000	74.6673
6 Trichlorofluoromethane	101	6.067	6.067	(0.547)	639854	75.0000	78.4366
7 Ethanol	45	6.481	6.481	(0.585)	502184	7500.00	7076.1806
8 Freon 113	101	7.023	7.023	(0.634)	303809	75.0000	72.4184
9 1,1-Dichloroethene	96	7.102	7.102	(0.641)	320264	75.0000	74.8703
10 Acetone	43	7.270	7.270	(0.656)	116156	75.0000	72.0295
11 Isopropanol	45	7.447	7.447	(0.672)	235870	750.000	730.6355
12 Carbon Disulfide	76	7.536	7.536	(0.680)	1562848	75.0000	70.9960
13 Methylene Chloride	84	8.068	8.068	(0.728)	451988	75.0000	66.4791
14 tert-Butyl Alcohol (TBA)	59	8.157	8.157	(0.736)	296727	750.000	776.8449
15 MTBE	73	8.413	8.413	(0.759)	1112571	75.0000	77.3915
16 trans-1,2-Dichloroethene	96	8.472	8.472	(0.764)	390451	75.0000	72.6417

: 00000

Compounds	QUANT SIG							AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)	ON-COL (ug/L)		
=====	=====	==	=====	=====	=====	=====	=====		
17 Isopropyl Ether (DIPE)	45	9.201	9.201	(0.830)	1859503	75.0000	73.6579		
18 1,1-Dichloroethane	63	9.280	9.280	(0.837)	704141	75.0000	70.3495		
19 Vinyl Acetate	43	9.280	9.280	(0.837)	994555	75.0000	78.6665		
20 Ethyl tert-Butyl Ether (ETBE)	59	9.822	9.822	(0.886)	1141142	75.0000	76.7668		
21 2,2-Dichloropropane	77	10.236	10.236	(0.924)	438721	75.0000	72.6728		
22 cis-1,2-Dichloroethene	96	10.275	10.275	(0.927)	435849	75.0000	73.3268		
23 2-Butanone	43	10.275	10.275	(0.927)	175997	75.0000	73.2105		
24 Bromochloromethane	128	10.689	10.689	(0.964)	224445	75.0000	75.5597		
25 Tetrahydrofuran	42	10.689	10.689	(0.964)	1098257	750.000	706.9870		
26 Chloroform	83	10.768	10.768	(0.972)	702378	75.0000	72.4061		
27 Dibromofluoromethane	113	11.054	11.054	(0.997)	128995	50.0000	50.6517		
28 1,1,1-Trichloroethane	97	11.064	11.064	(0.998)	477231	75.0000	72.7820		
* 29 Pentafluorobenzene	168	11.084	11.084	(1.000)	175180	50.0000			
30 Carbon Tetrachloride	117	11.291	11.291	(0.916)	381847	75.0000	73.9111		
31 1,1-Dichloropropene	75	11.330	11.330	(0.919)	444349	75.0000	72.9567		
32 1,2-Dichloroethane-d4	65	11.675	11.675	(0.947)	122758	50.0000	50.7110		
33 Benzene	78	11.685	11.685	(0.948)	1453266	75.0000	65.6710		
34 Methyl tert-Amyl Ether (TAME)	73	11.754	11.754	(0.954)	1029148	75.0000	77.0308		
35 1,2-Dichloroethane	62	11.803	11.803	(0.958)	500976	75.0000	73.5633		
* 36 1,4-Difluorobenzene	114	12.325	12.325	(1.000)	323189	50.0000			
37 Trichloroethene	95	12.739	12.739	(1.034)	362565	75.0000	72.7996		
38 1,2-Dichloropropane	63	13.202	13.202	(1.071)	417048	75.0000	74.3699		
39 Trifluorotoluene	146	13.212	13.212	(1.072)	449768	75.0000	71.7123		
40 Dibromomethane	93	13.409	13.409	(1.088)	290853	75.0000	74.7605		
41 Bromodichloromethane	83	13.626	13.626	(1.106)	535787	75.0000	75.2949		
43 Tetramethyl THF	43	14.346	14.346	(1.164)	682071	75.0000	73.6416		
44 cis-1,3-Dichloropropene	75	14.375	14.375	(1.166)	634379	75.0000	75.6449		
45 4-Methyl-2-Pentanone	43	14.572	14.572	(1.182)	391242	75.0000	73.8426 (H)		
46 Toluene-d8	98	14.750	14.750	(1.197)	406529	50.0000	49.6120		
47 Toluene	92	14.858	14.858	(1.205)	817906	75.0000	69.7543		
48 trans-1,3-Dichloropropene	75	15.262	15.262	(1.238)	574690	75.0000	77.4018		
49 1,1,2-Trichloroethane	85	15.548	15.548	(1.261)	198139	75.0000	74.9859		
50 Tetrachloroethene	166	15.666	15.666	(0.927)	293426	75.0000	69.4098		
51 1,3-Dichloropropane	76	15.814	15.814	(0.935)	603949	75.0000	75.0112		
52 2-Hexanone	43	15.834	15.834	(0.936)	266044	75.0000	75.8259		
53 Dibromochloromethane	129	16.110	16.110	(0.953)	419462	75.0000	77.4467		
54 1,2-Dibromoethane	107	16.317	16.317	(1.324)	385724	75.0000	76.3207		
* 55 Chlorobenzene-d5	117	16.908	16.908	(1.000)	341934	50.0000			
56 Chlorobenzene	112	16.947	16.947	(1.002)	958123	75.0000	70.4222		
57 Ethylbenzene	91	17.026	17.026	(1.007)	1486286	75.0000	70.3304		
58 1,1,1,2-Tetrachloroethane	131	17.046	17.046	(1.008)	339242	75.0000	73.0670		
59 m,p-Xylenes	106	17.174	17.174	(1.016)	1099128	150.000	136.3890		
60 o-Xylene	106	17.706	17.706	(1.047)	568071	75.0000	72.3083		
61 Styrene	104	17.736	17.736	(1.049)	1037701	75.0000	75.5380		
62 Bromoform	173	18.022	18.022	(1.066)	284969	75.0000	78.3026		
63 Isopropylbenzene	105	18.130	18.130	(0.919)	1255905	75.0000	69.9623		
64 Cyclohexanone	55	18.367	18.367	(0.931)	375157	750.000	745.6105		

Compounds	QUANT SIG						AMOUNTS	
	MASS	RT	EXP RT	REL RT	RESPONSE		CAL-AMT (ug/L)	ON-COL (ug/L)
=====	====	==	=====	=====	=====		=====	=====
65 Bromofluorobenzene	95	18.396	18.396	(0.933)	210883		50.0000	49.4800
66 1,1,2,2-Tetrachloroethane	83	18.564	18.564	(0.941)	494118		75.0000	72.2526
67 Bromobenzene	156	18.603	18.603	(0.943)	419049		75.0000	72.6803
68 Propylbenzene	91	18.633	18.633	(0.945)	1625763		75.0000	69.0504
69 1,2,3-Trichloropropane	110	18.652	18.652	(0.946)	127170		75.0000	78.3593
70 2-Chlorotoluene	91	18.790	18.790	(0.953)	1211343		75.0000	70.2564
71 1,3,5-Trimethylbenzene	105	18.830	18.830	(0.955)	1102479		75.0000	70.4223
72 4-Chlorotoluene	91	18.928	18.928	(0.960)	1148400		75.0000	70.0866
73 tert-Butylbenzene	119	19.204	19.204	(0.974)	853021		75.0000	70.7923
74 1,2,4-Trimethylbenzene	105	19.273	19.273	(0.977)	1161410		75.0000	71.5366
75 sec-Butylbenzene	105	19.451	19.451	(0.986)	1279471		75.0000	70.5289
76 para-Isopropyl Toluene	119	19.589	19.589	(0.993)	1016584		75.0000	71.8593
77 1,3-Dichlorobenzene	146	19.658	19.658	(0.997)	748050		75.0000	71.7344
* 78 1,4-Dichlorobenzene-d4	152	19.727	19.727	(1.000)	187011		50.0000	
79 1,4-Dichlorobenzene	146	19.756	19.756	(1.001)	777700		75.0000	70.8156
80 n-Butylbenzene	91	20.052	20.052	(1.016)	924847		75.0000	72.7606
81 1,2-Dichlorobenzene	146	20.200	20.200	(1.024)	738229		75.0000	72.5286
82 1,2-Dibromo-3-Chloropropane	75	21.116	21.116	(1.070)	76883		75.0000	76.8641
83 1,2,4-Trichlorobenzene	180	22.131	22.131	(1.122)	360227		75.0000	78.9387
84 Hexachlorobutadiene	225	22.250	22.250	(1.128)	110571		75.0000	73.6096
85 Naphthalene	128	22.516	22.516	(1.141)	845156		75.0000	82.6514
86 1,2,3-Trichlorobenzene	180	22.861	22.861	(1.159)	328578		75.0000	82.1700

QC Flag Legend

H - Operator selected an alternate compound hit.

Data File: \\GCHSERVER\JD\chem\MSV0A09.i\121406.b\1LE20.D
Date : 14-DEC-2006 19:16

Client ID: DYNA P&T

Sample Info: ICAL,55064,0.015/100,S4931,0.015/100

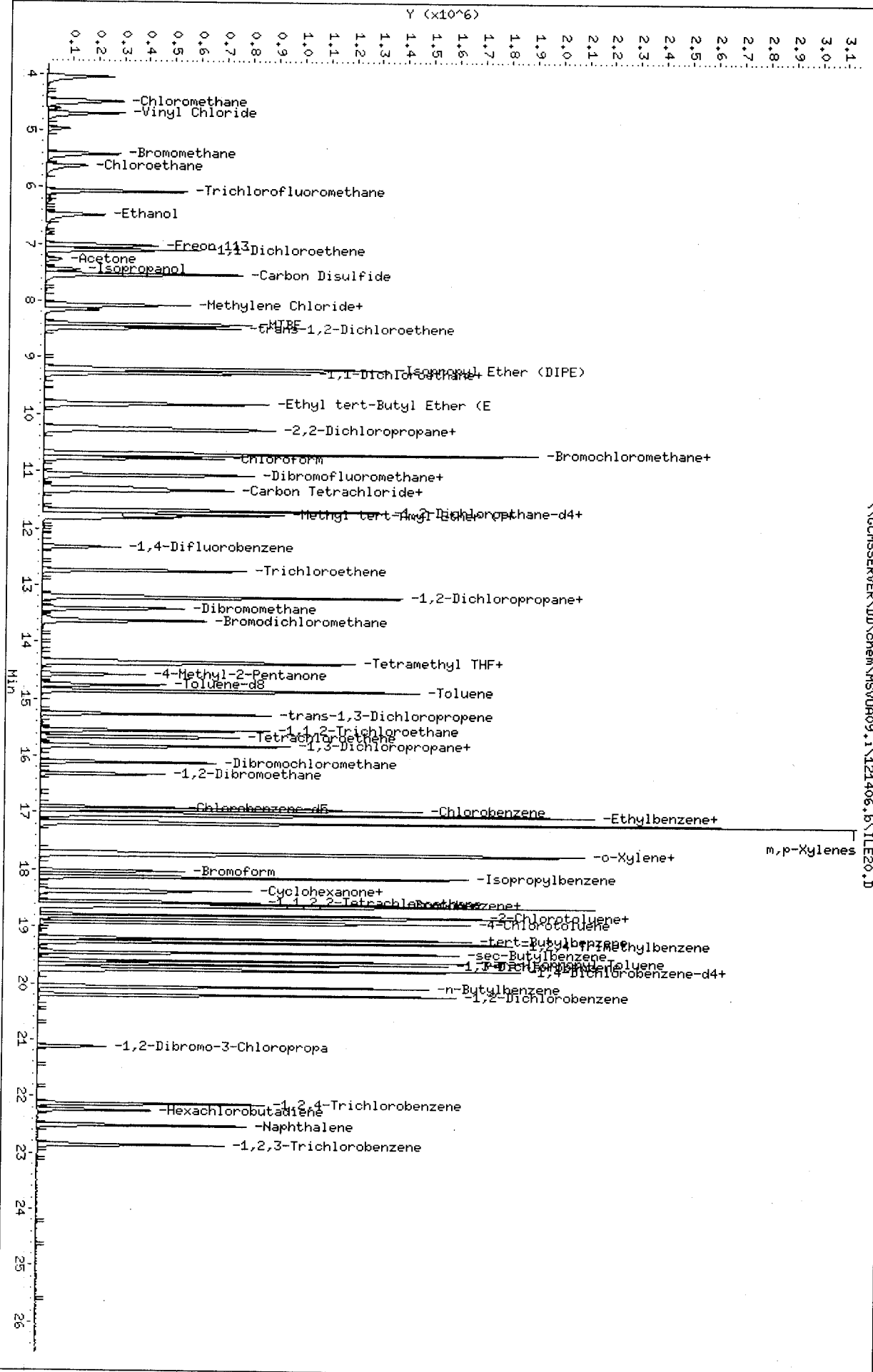
Purge Volume: 5.0

Column phase: RTX Volatiles

Instrument: MSV0A09.i

Operator: VOC

Column diameter: 0.25



Data File: \\GCMSSERVER\DD\chem\MSVOA09.i\121406.b\ILE21.D
 Report Date: 15-Dec-2006 09:06

Curtis & Tompkins

Data file : \\GCMSSERVER\DD\chem\MSVOA09.i\121406.b\ILE21.D
 Lab Smp Id: Client Smp ID: DYNA P&T
 Inj Date : 14-DEC-2006 19:51 MS Autotune Date: 01-NOV-2006 17:17
 Operator : VOC Inst ID: MSVOA09.i
 Smp Info : ICAL,S5064,0.02/100,S4931,0.02/100
 Misc Info : S4172,0.01/100,100PPB
 Comment :
 Method : \\GCMSSERVER\DD\chem\MSVOA09.i\121406.b\826GOX9W.m
 Meth Date : 15-Dec-2006 09:06 target Quant Type: ISTD
 Cal Date : 14-DEC-2006 19:51 Cal File: ILE21.D
 Als bottle: 21 Calibration Sample, Level: 8
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PC_MSVOA07

Concentration Formula: Amt * DF * Uf/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	Sample Volume purged (mL)
Uf	5.000	ng unit correction factor

Compounds	QUANT SIG	RT	EXP RT	REL RT	RESPONSE	AMOUNTS	
						CAL-AMT (ug/L)	ON-COL (ug/L)
1 Freon 12	85	4.045	4.045	(0.365)	725668	100.000	107.8428
2 Chloromethane	50	4.469	4.469	(0.403)	945561	100.000	96.3760
3 Vinyl Chloride	62	4.696	4.696	(0.424)	765497	100.000	105.0536(A)
4 Bromomethane	94	5.415	5.415	(0.489)	466375	100.000	121.0063
5 Chloroethane	64	5.622	5.622	(0.507)	401075	100.000	98.8376
6 Trichlorofluoromethane	101	6.065	6.065	(0.547)	876042	100.000	105.6913
7 Ethanol	45	6.479	6.479	(0.585)	722446	10000.0	10018.8563(M)
8 Freon 113	101	7.021	7.021	(0.634)	486344	100.000	114.0955
9 1,1-Dichloroethene	96	7.100	7.100	(0.641)	457850	100.000	105.3420
10 Acetone	43	7.268	7.268	(0.656)	158294	100.000	96.6073
11 Isopropanol	45	7.445	7.445	(0.672)	336314	1000.00	1025.2971
12 Carbon Disulfide	76	7.534	7.534	(0.680)	2217340	100.000	99.1348
13 Methylene Chloride	84	8.066	8.066	(0.728)	627323	100.000	90.8085
14 tert-Butyl Alcohol (TBA)	59	8.155	8.155	(0.736)	428517	1000.00	1104.1347
15 MTBE	73	8.411	8.411	(0.759)	1522271	100.000	104.2159
16 trans-1,2-Dichloroethene	96	8.470	8.470	(0.764)	551223	100.000	100.9308

Compounds	QUANT SIG	AMOUNTS						
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT	ON-COL
							(ug/L)	(ug/L)
=====	=====	==	=====	=====	=====	=====	=====	
17 Isopropyl Ether (DIPE)	45	9.199	9.199	(0.830)	2537951	100.000	98.9424	
18 1,1-Dichloroethane	63	9.278	9.278	(0.837)	971192	100.000	95.4956	
19 Vinyl Acetate	43	9.278	9.278	(0.837)	1376418	100.000	107.1490	
20 Ethyl tert-Butyl Ether (ETBE)	59	9.820	9.820	(0.886)	1560695	100.000	103.3305	
21 2,2-Dichloropropane	77	10.234	10.234	(0.924)	610420	100.000	99.5151	
22 cis-1,2-Dichloroethene	96	10.274	10.274	(0.927)	601842	100.000	99.6520	
23 2-Butanone	43	10.274	10.274	(0.927)	243478	100.000	99.6792	
24 Bromochloromethane	128	10.688	10.688	(0.964)	308695	100.000	102.2790	
25 Tetrahydrofuran	42	10.688	10.688	(0.964)	1510974	1000.00	957.2849	
26 Chloroform	83	10.766	10.766	(0.972)	961620	100.000	97.5629	
27 Dibromofluoromethane	113	11.052	11.052	(0.997)	130461	50.0000	50.4172	
28 1,1,1-Trichloroethane	97	11.062	11.062	(0.998)	675547	100.000	101.3976	
* 29 Pentafluorobenzene	168	11.082	11.082	(1.000)	177995	50.0000		
30 Carbon Tetrachloride	117	11.289	11.289	(0.916)	559622	100.000	105.6250	
31 1,1-Dichloropropene	75	11.328	11.328	(0.919)	667436	100.000	106.8568	
32 1,2-Dichloroethane-d4	65	11.673	11.673	(0.947)	119008	50.0000	47.9380	
33 Benzene	78	11.683	11.683	(0.948)	2015677	100.000	88.8180	
34 Methyl tert-Amyl Ether (TAME)	73	11.752	11.752	(0.954)	1421754	100.000	103.7678	
35 1,2-Dichloroethane	62	11.801	11.801	(0.958)	678422	100.000	97.1395	
* 36 1,4-Difluorobenzene	114	12.324	12.324	(1.000)	331440	50.0000		
37 Trichloroethene	95	12.737	12.737	(1.034)	520944	100.000	101.9966	
38 1,2-Dichloropropane	63	13.201	13.201	(1.071)	576292	100.000	100.2086	
39 Trifluorotoluene	146	13.210	13.210	(1.072)	689000	100.000	107.1214	
40 Dibromomethane	93	13.408	13.408	(1.088)	398859	100.000	99.9700	
41 Bromodichloromethane	83	13.624	13.624	(1.106)	740133	100.000	101.4227	
43 Tetramethyl THF	43	14.344	14.344	(1.164)	934903	100.000	98.4265	
44 cis-1,3-Dichloropropene	75	14.373	14.373	(1.166)	871467	100.000	101.3289	
45 4-Methyl-2-Pentanone	43	14.570	14.570	(1.182)	540672	100.000	99.5055 (H)	
46 Toluene-d8	98	14.748	14.748	(1.197)	412017	50.0000	49.0300	
47 Toluene	92	14.856	14.856	(1.206)	1163746	100.000	96.7782	
48 trans-1,3-Dichloropropene	75	15.260	15.260	(1.238)	781824	100.000	102.6781	
49 1,1,2-Trichloroethane	85	15.546	15.546	(1.261)	275328	100.000	101.6042	
50 Tetrachloroethene	166	15.664	15.664	(0.927)	446509	100.000	105.1381	
51 1,3-Dichloropropane	76	15.812	15.812	(0.935)	837118	100.000	103.4953	
52 2-Hexanone	43	15.832	15.832	(0.936)	370221	100.000	105.0348	
53 Dibromochloromethane	129	16.108	16.108	(0.953)	583463	100.000	107.2338	
54 1,2-Dibromoethane	107	16.315	16.315	(1.324)	543613	100.000	104.8835	
* 55 Chlorobenzene-d5	117	16.906	16.906	(1.000)	343506	50.0000		
56 Chlorobenzene	112	16.946	16.946	(1.002)	1344561	100.000	98.3732	
57 Ethylbenzene	91	17.024	17.024	(1.007)	2109095	100.000	99.3448	
58 1,1,1,2-Tetrachloroethane	131	17.044	17.044	(1.008)	478365	100.000	102.5602	
59 m,p-Xylenes	106	17.172	17.172	(1.016)	1597112	200.000	197.2761	
60 o-Xylene	106	17.704	17.704	(1.047)	820814	100.000	104.0012	
61 Styrene	104	17.734	17.734	(1.049)	1484337	100.000	107.5558	
62 Bromoform	173	18.030	18.030	(1.066)	408112	100.000	111.6262	
63 Isopropylbenzene	105	18.138	18.138	(0.919)	1891609	100.000	101.6052	
64 Cyclohexanone	55	18.365	18.365	(0.931)	595931	1000.00	1142.0163	

Compounds	QUANT SIG	AMOUNTS					
		MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/L)
=====	=====	==	=====	=====	=====	=====	=====
65 Bromofluorobenzene	95	18.394	18.394	(0.932)	210556	50.0000	47.6358
66 1,1,2,2-Tetrachloroethane	83	18.562	18.562	(0.941)	685589	100.000	96.6638
67 Bromobenzene	156	18.601	18.601	(0.943)	603648	100.000	100.9515
68 Propylbenzene	91	18.631	18.631	(0.944)	2359751	100.000	96.6390
69 1,2,3-Trichloropropane	110	18.651	18.651	(0.945)	171908	100.000	102.1362
70 2-Chlorotoluene	91	18.789	18.789	(0.952)	1715251	100.000	95.9232
71 1,3,5-Trimethylbenzene	105	18.828	18.828	(0.954)	1622017	100.000	99.9017
72 4-Chlorotoluene	91	18.926	18.926	(0.959)	1646121	100.000	96.8682
73 tert-Butylbenzene	119	19.202	19.202	(0.973)	1274954	100.000	102.0230
74 1,2,4-Trimethylbenzene	105	19.271	19.271	(0.977)	1675939	100.000	99.5356
75 sec-Butylbenzene	105	19.449	19.449	(0.986)	1936887	100.000	102.9481
76 para-Isopropyl Toluene	119	19.587	19.587	(0.993)	1532845	100.000	104.4757
77 1,3-Dichlorobenzene	146	19.656	19.656	(0.996)	1076902	100.000	99.5751
* 78 1,4-Dichlorobenzene-d4	152	19.735	19.735	(1.000)	193950	50.0000	
79 1,4-Dichlorobenzene	146	19.754	19.754	(1.001)	1125197	100.000	98.7923
80 n-Butylbenzene	91	20.050	20.050	(1.016)	1391754	100.000	105.5763
81 1,2-Dichlorobenzene	146	20.198	20.198	(1.023)	1044109	100.000	98.9104
82 1,2-Dibromo-3-Chloropropane	75	21.114	21.114	(1.070)	105952	100.000	102.1362
83 1,2,4-Trichlorobenzene	180	22.129	22.129	(1.121)	522413	100.000	110.3837
84 Hexachlorobutadiene	225	22.248	22.248	(1.127)	172768	100.000	110.9006
85 Naphthalene	128	22.514	22.514	(1.141)	1253454	100.000	118.1951
86 1,2,3-Trichlorobenzene	180	22.859	22.859	(1.158)	485950	100.000	117.1774

QC Flag Legend

- A - Target compound detected but, quantitated amount exceeded maximum amount.
- M - Compound response manually integrated.
- H - Operator selected an alternate compound hit.

Data File: \GCHSERVER\DD\chem\MSV0A09.i\121406.b\1LE21.D

Date : 14-DEC-2006 19:51

Client ID: DYNA P&I

Sample Info: ICAL, S5064, 0.02/100, S4931, 0.02/100

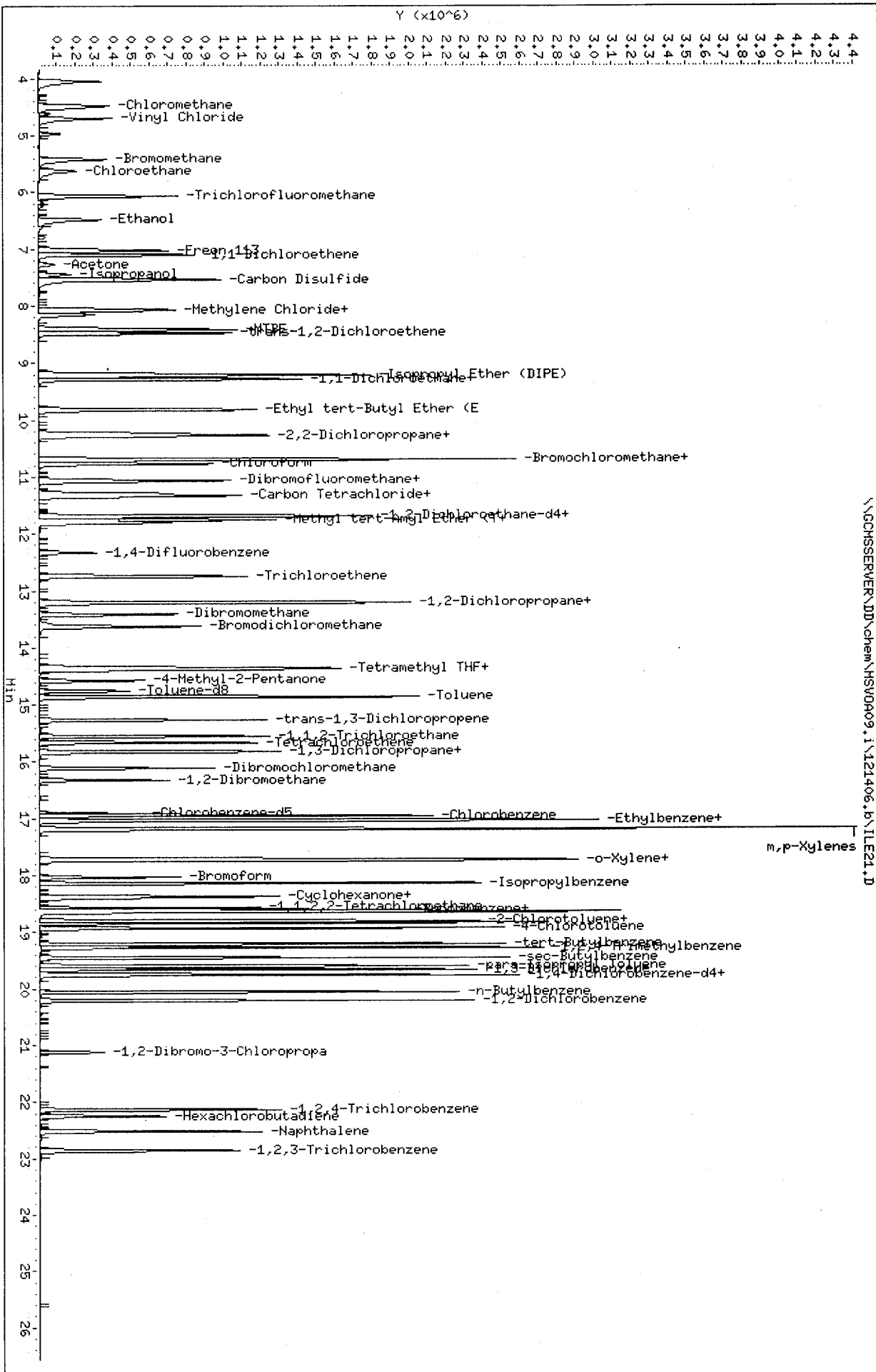
Purge Volume: 5.0

Column phase: RTX Volatiles

Instrument: MSV0A09.i

Operator: WOC

Column diameter: 0.25



CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191358 MSVOA Water
EPA 8260B

Inst : MSVOA09 Run Name: 25PPB IDF : 1.0
Seqnum : 486503339003 File : ilf03 Time : 15-DEC-2006 13:47
Cal : 486501602009 Caldate : 14-DEC-2006 Caltype : WATER
Standards: S4780 (20000X), S4931 (20000X), S4739 (1000X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Min RF	Flags
Chloromethane	2.7560	2.4083	25.00	21.85	ug/L	-13	30	0.1000	
Vinyl Chloride	2.0469	1.9523	25.00	23.84	ug/L	-5	20	0.0500	
Bromomethane	1.0502	1.0090	25.00	21.22	ug/L	-15	30	0.0500	
Chloroethane	1.1399	1.0706	25.00	23.48	ug/L	-6	30	0.0500	
Acetone	0.4603	0.3927	25.00	21.33	ug/L	-15	40	0.0500	
1,1-Dichloroethene	1.2209	1.1370	25.00	23.28	ug/L	-7	20	0.0500	
Methylene Chloride	1.9406	1.6485	25.00	21.24	ug/L	-15	30	0.0500	
Carbon Disulfide	6.2830	5.5560	25.00	22.11	ug/L	-12	30	0.0500	
MTBE	4.1032	3.7461	25.00	22.82	ug/L	-9	30	0.0500	
trans-1,2-Dichloroethene	1.5341	1.4131	25.00	23.03	ug/L	-8	30	0.0500	
Vinyl Acetate	3.6085	3.3117	25.00	22.94	ug/L	-8	40	0.0500	
1,1-Dichloroethane	2.8568	2.4815	25.00	21.72	ug/L	-13	30	0.1000	
2-Butanone	0.6861	0.6146	25.00	22.39	ug/L	-10	40	0.0500	
cis-1,2-Dichloroethene	1.6965	1.5513	25.00	22.86	ug/L	-9	30	0.0500	
Chloroform	2.7687	2.3872	25.00	21.56	ug/L	-14	20	0.0500	
1,1,1-Trichloroethane	1.8715	1.6064	25.00	21.46	ug/L	-14	30	0.0500	
Carbon Tetrachloride	0.7993	0.7127	25.00	22.29	ug/L	-11	30	0.0500	
1,2-Dichloroethane	1.0536	0.8672	25.00	20.58	ug/L	-18	30	0.0500	
Benzene	3.4236	2.9003	25.00	22.59	ug/L	-10	30	0.0500	
Trichloroethene	0.7705	0.7167	25.00	23.25	ug/L	-7	30	0.0500	
1,2-Dichloropropane	0.8676	0.8312	25.00	23.95	ug/L	-4	20	0.0500	
Bromodichloromethane	1.1009	0.9766	25.00	22.18	ug/L	-11	30	0.0500	
4-Methyl-2-Pentanone	0.8197	0.7248	25.00	22.10	ug/L	-12	40	0.0500	
cis-1,3-Dichloropropene	1.2974	1.2144	25.00	23.40	ug/L	-6	30	0.0500	
Toluene	1.8140	1.6846	25.00	23.22	ug/L	-7	20	0.0500	
trans-1,3-Dichloropropene	1.1487	1.0647	25.00	23.17	ug/L	-7	30	0.0500	
1,1,2-Trichloroethane	0.4088	0.3865	25.00	23.64	ug/L	-5	30	0.0500	
2-Hexanone	0.5131	0.4578	25.00	22.31	ug/L	-11	40	0.0500	
Tetrachloroethene	0.6182	0.6123	25.00	24.76	ug/L	-1	30	0.0500	
Dibromochloromethane	0.7920	0.7411	25.00	23.39	ug/L	-6	30	0.0500	
Chlorobenzene	1.9895	1.8424	25.00	23.15	ug/L	-7	30	0.3000	
Ethylbenzene	3.0902	2.9418	25.00	23.80	ug/L	-5	20	0.0500	
m,p-Xylenes	1.1784	1.0965	50.00	46.52	ug/L	-7	30	0.0500	
o-Xylene	1.1488	1.1157	25.00	24.28	ug/L	-3	30	0.0500	
Styrene	2.0088	1.9932	25.00	24.81	ug/L	-1	30	0.0500	
Bromoform	0.5322	0.5168	25.00	24.28	ug/L	-3	30	0.1000	
1,1,2,2-Tetrachloroethane	1.8284	1.6941	25.00	23.16	ug/L	-7	30	0.3000	
Dibromofluoromethane	0.7269	0.6629	50.00	45.60	ug/L	-9	30	0.0500	
1,2-Dichloroethane-d4	0.3745	0.3157	50.00	42.15	ug/L	-16	30	0.0500	
Toluene-d8	1.2677	1.2513	50.00	49.35	ug/L	-1	30	0.0500	
Bromofluorobenzene	1.1395	1.0912	50.00	47.88	ug/L	-4	30	0.0500	

ISTD (ICAL ile19)	ICAL Area	Area	%Drift	ICAL RT	RT	Drift
Pentafluorobenzene	165918	218419	31.64	11.08	11.09	0.01
1,4-Difluorobenzene	309748	398626	28.69	12.32	12.33	0.01
Chlorobenzene-d5	325403	421168	29.43	16.90	16.91	0.01
1,4-Dichlorobenzene-d4	182079	226921	24.63	19.73	19.74	0.01

Analyst: ACM

Date: 12/18/06

Reviewer: LW

Date: 12/18/06

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 486503339

Date : 12/15/06
Sequence : MSVOA09 ilf

ICAL Filename: ile19
ICAL Analyzed: 12/14/06 18:41

#	Type	Sample ID	PFLBZ	RT	14DFB	RT	CLBZD5	RT	DCBZ14D4	RT
		ICAL STD	165918	11.08	309748	12.32	325403	16.90	182079	19.73
		LOWER LIMIT	82959	10.58	154874	11.82	162702	16.40	91040	19.23
		UPPER LIMIT	331836	11.58	619496	12.82	650806	17.40	364158	20.23
003	CCV	25PPB	218419	11.09	398626	12.33	421168	16.91	226921	19.74
004	BS	QC368554	222361	11.08	392590	12.33	411212	16.91	225908	19.73
005	BSD	QC368555	214759	11.09	388391	12.33	404134	16.91	213067	19.74
007	BLANK	QC368556	198219	11.09	366205	12.33	387757	16.91	201308	19.74
008	SAMPLE	191372-006	190444	11.09	356672	12.33	368270	16.92	192578	19.74
009	SAMPLE	191358-012	178587	11.09	326475	12.34	347945	16.91	178958	19.74
010	SAMPLE	191358-014	171198	11.09	315507	12.33	333162	16.91	171599	19.74
011	SAMPLE	191367-025	160486	11.09	298625	12.33	321169	16.92	163021	19.74
012	SAMPLE	191367-026	166837	11.09	312890	12.34	321145	16.92	162872	19.74
013	SAMPLE	191367-027	157728	11.09	288837	12.33	317356	16.92	163145	19.74
014	SAMPLE	191367-028	150947	11.09	282562	12.33	304308	16.92	153857	19.74
015	SAMPLE	191367-029	143462	11.09	266240	12.34	282842	16.91	145155	19.74
016	SAMPLE	191367-030	145972	11.10	277177	12.34	292552	16.91	148891	19.74
017	SAMPLE	191367-031	146580	11.09	284338	12.33	301885	16.92	152877	19.74
018	SAMPLE	191367-033	145188	11.09	280737	12.34	296493	16.92	150118	19.75
019	SAMPLE	191358-008	138476	11.10	266142	12.34	281711	16.92	147187	19.74
020	SAMPLE	191358-010	140092	11.10	260726	12.34	285188	16.92	146967	19.75
021	SAMPLE	191541-001	140597	11.10	271428	12.34	293309	16.92	155774	19.74
022	SAMPLE	191367-034	150879	11.11	279343	12.35	296087	16.92	152196	19.75

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 486501602

Instrument : MSVOA09
Method : EPA 8260B

Begun : 12/14/06 08:02
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	ile01	X	IB			12/14/06 08:02	1.0	1	
002	ile02	X	BFB			12/14/06 08:32	1.0	2	
003	ile03	X	30PPB			12/14/06 08:50	1.0	3 4 1	
004	ile04	X	BFB			12/14/06 09:48	1.0	2	
005	ile05	X	BFB			12/14/06 10:02	1.0	2	
006	ile06	X	30PPB			12/14/06 10:19	1.0	3 4 1	
007	ile07	X	QC368300	Water	120369	12/14/06 11:04	1.0	5 6 7 1	
008	ile08	X	IB			12/14/06 12:38	1.0	1	
009	ile09	X	LP			12/14/06 13:12	1.0	1	
010	ile10	TUN	BFB			12/14/06 13:42	1.0	2	
011	ile11	X	IB			12/14/06 14:00	1.0	1	
012	ile12	IB	CALIB			12/14/06 14:36	1.0	1	
013	ile13	ICAL	0.25/0.5PPB			12/14/06 15:11	1.0	8 4 9 1	
014	ile14	ICAL	0.5/1PPB			12/14/06 15:46	1.0	8 4 9 1	
015	ile15	ICAL	2PPB			12/14/06 16:21	1.0	8 4 9 1	
016	ile16	ICAL	5PPB			12/14/06 16:56	1.0	8 4 9 1	
017	ile17	ICAL	10PPB			12/14/06 17:32	1.0	8 4 9 1	
018	ile18	ICAL	20PPB			12/14/06 18:06	1.0	8 4 9 1	
019	ile19	ICAL	50PPB			12/14/06 18:41	1.0	8 4 9 1	
020	ile20	ICAL	75PPB			12/14/06 19:16	1.0	8 4 9 1	
021	ile21	ICAL	100PPB			12/14/06 19:51	1.0	8 4 9 1	
022	ile22	ICV	ICVGAS25PPB			12/14/06 20:26	1.0	7 1	
023	ile23	ICV	ICV25PPB			12/14/06 21:01	1.0	6 5 1	
024	ile24	X	IB			12/14/06 21:36	1.0	1	
025	ile25	X	IB			12/14/06 22:11	1.0	1	
026	ile26	X	IB			12/14/06 22:47	1.0	1	

Analyst: ACM Date: 12/15/06 Reviewer: LW

Date: 12/18/06

Standards used: 1=S4739 2=S3716 3=S4780 4=S4931 5=S4922 6=S5052 7=S5074 8=S5064 9=S4172

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 486503339

Instrument : MSVOA09
Method : EPA 8260B

Begun : 12/15/06 12:59
SOP Version: 8260B_rv5

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	Annotations
001	ilf01	X	IB			12/15/06 12:59	1.0	1	
002	ilf02	TUN	BFB			12/15/06 13:29	1.0	2	
003	ilf03	CCV	25PPB			12/15/06 13:47	1.0	3 4 1	
004	ilf04	BS	QC368554	Water	120427	12/15/06 14:42	1.0	5 6 7 1	
005	ilf05	BSD	QC368555	Water	120427	12/15/06 15:17	1.0	5 6 7 1	
006	ilf06	X	IB			12/15/06 15:52	1.0	1	
007	ilf07	BLANK	QC368556	Water	120427	12/15/06 16:27	1.0	1	
008	ilf08	SAMPLE	191372-006	Water	120427	12/15/06 17:02	1.0	1	
009	ilf09	SAMPLE	191358-012	Water	120427	12/15/06 17:37	1.0	1	
010	ilf10	SAMPLE	191358-014	Water	120427	12/15/06 18:11	1.0	1	
011	ilf11	SAMPLE	191367-025	Water	120427	12/15/06 18:47	1.0	1	
012	ilf12	SAMPLE	191367-026	Water	120427	12/15/06 19:22	1.0	1	
013	ilf13	SAMPLE	191367-027	Water	120427	12/15/06 19:57	1.0	1	
014	ilf14	SAMPLE	191367-028	Water	120427	12/15/06 20:32	1.0	1	
015	ilf15	SAMPLE	191367-029	Water	120427	12/15/06 21:07	1.0	1	
016	ilf16	SAMPLE	191367-030	Water	120427	12/15/06 21:43	1.0	1	
017	ilf17	SAMPLE	191367-031	Water	120427	12/15/06 22:19	1.0	1	
018	ilf18	SAMPLE	191367-033	Water	120427	12/15/06 22:53	1.0	1	
019	ilf19	SAMPLE	191358-008	Water	120427	12/15/06 23:29	1.0	1	
020	ilf20	SAMPLE	191358-010	Water	120427	12/16/06 00:05	1.0	1	
021	ilf21	SAMPLE	191541-001	Water	120427	12/16/06 00:40	6.25	1	
022	ilf22	SAMPLE	191367-034	Water	120427	12/16/06 01:15	6.25	1	
023	ilf23	X	IB			12/16/06 01:51	1.0	1	
024	ilf24	X	IB			12/16/06 02:27	1.0	1	
025	ilf25	X	IB			12/16/06 03:02	1.0	1	

Analyst: ACM Date: 12/18/06 Reviewer: LW Date: 12/18/06

Standards used: 1=S4739 2=S3716 3=S4780 4=S4931 5=S4922 6=S5052 7=S5074



REPORTING SUMMARY FOR 191358 8260 Water
Curtis & Tompkins Laboratories

[illegible]

GC/MS VOA SAMPLE PREP LOG SHEET

CURTIS & TOMPKINS, LTD.

DATE: 12-15-06
PREPPED BY.

WATER
(15)

120427

	SAMPLE NUM	AMT g/mL	VIAL	pH	Head Space	SHELF	INST	COMMENTS	TRANSFER
1	191541 - 1		E	L2			910	5X 6.25X	Rush 12-18
2	191371 - 5		B	L2				IX	
3	191367 - 25								
4	26								
5	27								
6	28								
7	29								
8	30								
9	31								
0	32								
1	33		B	L2				IX	
2	34			L2				6.25X	
3	191358 - 8		C	L2				IX	
4	10							IX	
5	12		A					TB	
6	14		B					TB	
7	191372 - 6						✓	TB	
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Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 01/05/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
Ethanol	ug/L	55	22	23	50	11	22	36	10
1,1-Dichloroethene	ug/L	0.27	0.22	0.062	0.17	0.10	0.17	0.089	0.11
Benzene	ug/L	0.11	0.041	0.060	0.061	0.12	0.10	0.027	0.084
Trichloroethene	ug/L	0.21	0.076	0.18	0.17	0.11	0.13	0.087	0.086
Toluene	ug/L	0.083	0.083	0.12	0.092	0.062	0.085	0.053	0.14
Chlorobenzene	ug/L	0.10	0.090	0.11	0.16	0.16	0.098	0.050	0.075
Freon 12	ug/L	0.18	0.099	0.22	0.062	0.15	0.47	0.18	0.20
Chloromethane	ug/L	0.12	0.16	0.12	0.18	0.13	0.34	0.089	0.20
Vinyl Chloride	ug/L	0.19	0.23	0.10	0.066	0.10	0.097	0.16	0.039
Bromomethane	ug/L	0.29	0.30	0.31	0.13	0.31	0.34	0.20	0.23
Chloroethane	ug/L	0.33	0.33	0.15	0.16	0.13	0.45	0.12	0.18
Trichlorofluoromethane	ug/L	0.16	0.057	0.17	0.10	0.080	0.46	0.10	0.19
Acetone	ug/L	0.39	0.87	0.21	0.85	0.16	0.20	0.49	0.15
Freon 113	ug/L	0.062	0.12	0.13	0.25	0.071	0.19	0.091	0.16
Methylene Chloride	ug/L	0.15	0.21	0.11	0.12	0.16	0.29	0.22	0.086
MTBE	ug/L	0.069	0.074	0.065	0.045	0.040	0.15	0.052	0.068
Carbon Disulfide	ug/L	0.039	0.031	0.086	0.076	0.11	0.14	0.037	0.066
trans-1,2-Dichloroethene	ug/L	0.37	0.13	0.18	0.051	0.064	0.15	0.093	0.094
Vinyl Acetate	ug/L	0.076	0.36	0.084	0.99	0.40	0.13	0.10	0.13
1,1-Dichloroethane	ug/L	0.088	0.061	0.048	0.090	0.11	0.14	0.063	0.10
2-Butanone	ug/L	0.16	0.17	0.20	0.50	0.099	0.23	0.26	0.081
cis-1,2-Dichloroethene	ug/L	0.26	0.18	0.083	0.12	0.042	0.12	0.11	0.16
2,2-Dichloropropane	ug/L	0.093	0.17	0.077	0.12	0.066	0.15	0.083	0.14
Chloroform	ug/L	0.082	0.055	0.086	0.060	0.11	0.16	0.044	0.084
Bromochloromethane	ug/L	0.091	0.090	0.10	0.18	0.11	0.18	0.15	0.11
1,1,1-Trichloroethane	ug/L	0.084	0.066	0.14	0.11	0.061	0.12	0.041	0.096
1,1-Dichloropropene	ug/L	0.12	0.11	0.081	0.16	0.16	0.11	0.055	0.084
Carbon Tetrachloride	ug/L	0.089	0.11	0.098	0.17	0.15	0.14	0.056	0.14
1,2-Dichloroethane	ug/L	0.090	0.088	0.099	0.096	0.12	0.18	0.056	0.094
1,2-Dichloropropane	ug/L	0.093	0.060	0.079	0.071	0.14	0.16	0.12	0.086
Bromodichloromethane	ug/L	0.086	0.039	0.067	0.074	0.10	0.14	0.069	0.094
Dibromomethane	ug/L	0.16	0.061	0.092	0.16	0.11	0.18	0.13	0.089
4-Methyl-2-Pentanone	ug/L	0.044	0.076	0.057	0.20	0.13	0.14	0.25	0.067
cis-1,3-Dichloropropene	ug/L	0.068	0.065	0.056	0.20	0.16	0.094	0.044	0.080
trans-1,3-Dichloropropene	ug/L	0.074	0.074	0.044	0.073	0.14	0.13	0.060	0.059
1,1,2-Trichloroethane	ug/L	0.12	0.12	0.14	0.19	0.15	0.21	0.058	0.12
2-Hexanone	ug/L	0.043	0.31	0.047	0.34	0.11	0.13	0.14	0.097
1,3-Dichloropropane	ug/L	0.064	0.067	0.061	0.063	0.10	0.14	0.068	0.049
Tetrachloroethene	ug/L	0.13	0.14	0.12	0.22	0.14	0.092	0.093	0.089
Dibromochloromethane	ug/L	0.099	0.054	0.10	0.085	0.056	0.15	0.063	0.094
1,2-Dibromoethane	ug/L	0.16	0.061	0.10	0.073	0.11	0.13	0.070	0.088
2-Chloroethylvinylether	ug/L	0.093	0.18	0.24	0.17	0.14	0.19	0.23	0.14
1,1,1,2-Tetrachloroethane	ug/L	0.11	0.087	0.10	0.11	0.14	0.10	0.088	0.16
Ethylbenzene	ug/L	0.059	0.076	0.075	0.17	0.041	0.11	0.11	0.069
m,p-Xylenes	ug/L	0.24	0.22	0.14	0.27	0.17	0.19	0.20	0.14
o-Xylene	ug/L	0.10	0.058	0.092	0.11	0.16	0.087	0.13	0.078
Styrene	ug/L	0.12	0.092	0.098	0.085	0.16	0.11	0.061	0.055
Bromoform	ug/L	0.12	0.088	0.11	0.18	0.094	0.12	0.15	0.10
Isopropylbenzene	ug/L	0.12	0.059	0.090	0.18	0.059	0.11	0.10	0.089
1,1,2,2-Tetrachloroethane	ug/L	0.13	0.096	0.086	0.047	0.13	0.20	0.055	0.11

Curtis & Tompkins Laboratories
MDL Summary for EPA 8260B Water
As of 01/05/07

Analyte	Units	MSVOA04	MSVOA05	MSVOA06	MSVOA07	MSVOA08	MSVOA09	MSVOA10	MSVOA11
1,2,3-Trichloropropane	ug/L	0.31	0.28	0.074	0.11	0.17	0.19	0.16	0.072
Propylbenzene	ug/L	0.075	0.10	0.063	0.21	0.023	0.12	0.11	0.088
Bromobenzene	ug/L	0.12	0.12	0.10	0.19	0.12	0.17	0.085	0.088
1,3,5-Trimethylbenzene	ug/L	0.060	0.095	0.047	0.14	0.057	0.13	0.13	0.069
2-Chlorotoluene	ug/L	0.12	0.11	0.068	0.15	0.025	0.10	0.12	0.080
4-Chlorotoluene	ug/L	0.079	0.069	0.043	0.14	0.037	0.14	0.069	0.078
tert-Butylbenzene	ug/L	0.11	0.15	0.075	0.19	0.038	0.13	0.079	0.082
1,2,4-Trimethylbenzene	ug/L	0.091	0.088	0.066	0.12	0.069	0.082	0.10	0.099
sec-Butylbenzene	ug/L	0.11	0.12	0.062	0.17	0.088	0.088	0.076	0.097
para-Isopropyl Toluene	ug/L	0.058	0.12	0.12	0.14	0.056	0.071	0.045	0.075
1,3-Dichlorobenzene	ug/L	0.080	0.16	0.097	0.18	0.060	0.13	0.10	0.094
1,4-Dichlorobenzene	ug/L	0.068	0.14	0.095	0.18	0.038	0.10	0.17	0.072
n-Butylbenzene	ug/L	0.12	0.15	0.11	0.18	0.21	0.11	0.12	0.073
1,2-Dichlorobenzene	ug/L	0.072	0.14	0.080	0.14	0.16	0.16	0.061	0.081
1,2-Dibromo-3-Chloropropane	ug/L	0.39	0.25	0.21	0.22	0.13	0.17	0.098	0.18
1,2,4-Trichlorobenzene	ug/L	0.12	0.17	0.14	0.16	0.10	0.12	0.17	0.061
Hexachlorobutadiene	ug/L	0.19	0.19	0.29	0.21	0.11	0.065	0.25	0.17
Naphthalene	ug/L	0.12	0.13	0.060	0.10	0.091	0.11	0.16	0.052
1,2,3-Trichlorobenzene	ug/L	0.063	0.17	0.10	0.20	0.095	0.10	0.29	0.15
tert-Butyl Alcohol (TBA)	ug/L	1.3	1.6	0.83	2.5	1.3	1.1	1.3	1.3
Isopropyl Ether (DIPE)	ug/L	0.068	0.070	0.063	0.027	0.030	0.14	0.027	0.089
Ethyl tert-Butyl Ether (ETBE)	ug/L	0.089	0.045	0.024	0.20	0.033	0.13	0.034	0.079
Methyl tert-Amyl Ether (TAME)	ug/L	0.094	0.13	0.055	0.054	0.048	0.10	0.057	0.17
Isopropanol	ug/L	4.6	2.7	1.6	6.6	1.5	1.4	1.1	1.3
Hexane	ug/L				0.33		0.15		
Cyclohexanone	ug/L	3.8	2.4	0.21	1.6	1.6	1.3		1.0
Tetrahydrofuran	ug/L	0.64	1.2	1.1	0.79	1.4	2.1	3.5	0.70
Tetramethyl THF	ug/L	0.067	0.061	0.062	0.20	0.10	0.13	0.078	0.079
Gasoline C6-C10	ug/L		15		4.8	15	8.5		11
Gasoline C7-C12	ug/L		18		2.4	13	7.7		11
Dibromofluoromethane	ug/L	3.1		1.8	2.4	1.5	1.1	3.2	1.1
1,2-Dichloroethane-d4	ug/L	3.0			2.4	1.2	1.7	3.0	1.0
Toluene-d8	ug/L	1.7			1.1	1.0	1.5	1.1	0.96
Bromofluorobenzene	ug/L	2.5			1.2	1.2	2.5	1.5	0.62
Trifluorotoluene	ug/L	0.12		0.065	0.21	0.13		0.14	

Metals

**Dissolved Target Analyte List Metals**

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BHWGW04	Batch#:	120324
Lab ID:	191358-001	Sampled:	12/07/06
Matrix:	Filtrate	Received:	12/08/06
Units:	ug/L	Prepared:	12/13/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	12/13/06
Antimony	ND	1.0	1.000	12/13/06
Arsenic	ND	5.0	1.000	12/13/06
Barium	40	10	1.000	12/13/06
Beryllium	ND	2.0	1.000	12/13/06
Cadmium	ND	1.0	1.000	12/13/06
Calcium	17,000	500	1.000	12/13/06
Chromium	ND	10	1.000	12/13/06
Cobalt	ND	10	1.000	12/13/06
Copper	ND	1.0	1.000	12/13/06
Iron	ND	100	1.000	12/13/06
Lead	ND	3.0	1.000	12/13/06
Magnesium	47,000	500	20.00	12/14/06
Manganese	ND	10	1.000	12/13/06
Nickel	ND	20	1.000	12/13/06
Potassium	ND	500	1.000	12/13/06
Selenium	ND	5.0	1.000	12/13/06
Silver	ND	1.0	1.000	12/13/06
Sodium	130,000	500	20.00	12/14/06
Thallium	ND	1.0	1.000	12/13/06
Vanadium	ND	10	1.000	12/13/06
Zinc	ND	20	1.000	12/13/06

ND= Not Detected

RL= Reporting Limit

Dissolved Target Analyte List Metals

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	HWGW100	Batch#:	120324
Lab ID:	191358-002	Sampled:	12/07/06
Matrix:	Filtrate	Received:	12/08/06
Units:	ug/L	Prepared:	12/13/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	12/13/06
Antimony	ND	1.0	1.000	12/13/06
Arsenic	5.7	5.0	1.000	12/13/06
Barium	12	10	1.000	12/13/06
Beryllium	ND	2.0	1.000	12/13/06
Cadmium	ND	1.0	1.000	12/13/06
Calcium	30,000	1,300	50.00	12/14/06
Chromium	13	10	1.000	12/13/06
Cobalt	ND	10	1.000	12/13/06
Copper	ND	1.0	1.000	12/13/06
Iron	ND	100	1.000	12/13/06
Lead	ND	3.0	1.000	12/13/06
Magnesium	140,000	1,300	50.00	12/14/06
Manganese	60	10	1.000	12/13/06
Nickel	ND	20	1.000	12/13/06
Potassium	1,700	500	1.000	12/13/06
Selenium	ND	5.0	1.000	12/13/06
Silver	ND	1.0	1.000	12/13/06
Sodium	290,000	1,300	50.00	12/14/06
Thallium	ND	1.0	1.000	12/13/06
Vanadium	ND	10	1.000	12/13/06
Zinc	ND	20	1.000	12/13/06

ND= Not Detected

RL= Reporting Limit

Dissolved Target Analyte List Metals

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	HWGW101	Batch#:	120324
Lab ID:	191358-003	Sampled:	12/07/06
Matrix:	Filtrate	Received:	12/08/06
Units:	ug/L	Prepared:	12/13/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	12/13/06
Antimony	ND	1.0	1.000	12/13/06
Arsenic	ND	5.0	1.000	12/13/06
Barium	ND	10	1.000	12/13/06
Beryllium	ND	2.0	1.000	12/13/06
Cadmium	ND	1.0	1.000	12/13/06
Calcium	12,000	500	1.000	12/13/06
Chromium	15	10	1.000	12/13/06
Cobalt	ND	10	1.000	12/13/06
Copper	ND	1.0	1.000	12/13/06
Iron	ND	100	1.000	12/13/06
Lead	ND	3.0	1.000	12/13/06
Magnesium	25,000	500	20.00	12/14/06
Manganese	ND	10	1.000	12/13/06
Nickel	ND	20	1.000	12/13/06
Potassium	780	500	1.000	12/13/06
Selenium	ND	5.0	1.000	12/13/06
Silver	ND	1.0	1.000	12/13/06
Sodium	210,000	500	20.00	12/14/06
Thallium	ND	1.0	1.000	12/13/06
Vanadium	ND	10	1.000	12/13/06
Zinc	ND	20	1.000	12/13/06

ND= Not Detected

RL= Reporting Limit

**Dissolved Target Analyte List Metals**

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BHWGW01	Batch#:	120324
Lab ID:	191358-004	Sampled:	12/07/06
Matrix:	Filtrate	Received:	12/08/06
Units:	ug/L	Prepared:	12/13/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	12/13/06
Antimony	ND	1.0	1.000	12/13/06
Arsenic	ND	5.0	1.000	12/13/06
Barium	48	10	1.000	12/13/06
Beryllium	ND	2.0	1.000	12/13/06
Cadmium	ND	1.0	1.000	12/13/06
Calcium	18,000	500	1.000	12/13/06
Chromium	120	10	1.000	12/13/06
Cobalt	ND	10	1.000	12/13/06
Copper	ND	1.0	1.000	12/13/06
Iron	ND	100	1.000	12/13/06
Lead	ND	3.0	1.000	12/13/06
Magnesium	86,000	500	20.00	12/14/06
Manganese	ND	10	1.000	12/13/06
Nickel	ND	20	1.000	12/13/06
Potassium	ND	500	1.000	12/13/06
Selenium	ND	5.0	1.000	12/13/06
Silver	ND	1.0	1.000	12/13/06
Sodium	230,000	500	20.00	12/14/06
Thallium	ND	1.0	1.000	12/13/06
Vanadium	ND	10	1.000	12/13/06
Zinc	25	20	1.000	12/13/06

ND= Not Detected

RL= Reporting Limit

**Dissolved Target Analyte List Metals**

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BHWGW05	Batch#:	120324
Lab ID:	191358-005	Sampled:	12/07/06
Matrix:	Filtrate	Received:	12/08/06
Units:	ug/L	Prepared:	12/13/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	12/13/06
Antimony	ND	1.0	1.000	12/13/06
Arsenic	ND	5.0	1.000	12/13/06
Barium	77	10	1.000	12/13/06
Beryllium	ND	2.0	1.000	12/13/06
Cadmium	ND	1.0	1.000	12/13/06
Calcium	65,000	500	20.00	12/14/06
Chromium	ND	10	1.000	12/13/06
Cobalt	ND	10	1.000	12/13/06
Copper	ND	1.0	1.000	12/13/06
Iron	ND	100	1.000	12/13/06
Lead	ND	3.0	1.000	12/13/06
Magnesium	80,000	500	20.00	12/14/06
Manganese	380	10	20.00	12/14/06
Nickel	26	20	1.000	12/13/06
Potassium	3,000	500	1.000	12/13/06
Selenium	ND	5.0	1.000	12/13/06
Silver	ND	1.0	1.000	12/13/06
Sodium	220,000	500	20.00	12/14/06
Thallium	ND	1.0	1.000	12/13/06
Vanadium	ND	10	1.000	12/13/06
Zinc	ND	20	1.000	12/13/06

ND= Not Detected

RL= Reporting Limit

**Dissolved Target Analyte List Metals**

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	BHWGWO4RBHWGW100	Batch#:	120324
Lab ID:	191358-006	Sampled:	12/07/06
Matrix:	Filtrate	Received:	12/08/06
Units:	ug/L	Prepared:	12/13/06
Diln Fac:	1.000		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	12/13/06
Antimony	ND	1.0	12/13/06
Arsenic	ND	5.0	12/13/06
Barium	ND	10	12/13/06
Beryllium	ND	2.0	12/13/06
Cadmium	ND	1.0	12/13/06
Calcium	ND	500	12/13/06
Chromium	ND	10	12/13/06
Cobalt	ND	10	12/13/06
Copper	ND	1.0	12/13/06
Iron	ND	100	12/13/06
Lead	ND	3.0	12/13/06
Magnesium	ND	500	12/13/06
Manganese	ND	10	12/13/06
Nickel	ND	20	12/13/06
Potassium	ND	500	12/13/06
Selenium	ND	5.0	12/13/06
Silver	ND	1.0	12/13/06
Sodium	ND	500	12/14/06
Thallium	ND	1.0	12/13/06
Vanadium	ND	10	12/13/06
Zinc	ND	20	12/13/06

ND= Not Detected

RL= Reporting Limit

Dissolved Target Analyte List Metals

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	DUP1207062A	Batch#:	120324
Lab ID:	191358-007	Sampled:	12/07/06
Matrix:	Filtrate	Received:	12/08/06
Units:	ug/L	Prepared:	12/13/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	12/13/06
Antimony	ND	1.0	1.000	12/13/06
Arsenic	ND	5.0	1.000	12/13/06
Barium	40	10	1.000	12/13/06
Beryllium	ND	2.0	1.000	12/13/06
Cadmium	ND	1.0	1.000	12/13/06
Calcium	17,000	500	1.000	12/13/06
Chromium	ND	10	1.000	12/13/06
Cobalt	ND	10	1.000	12/13/06
Copper	ND	1.0	1.000	12/13/06
Iron	ND	100	1.000	12/13/06
Lead	ND	3.0	1.000	12/13/06
Magnesium	47,000	500	20.00	12/14/06
Manganese	ND	10	1.000	12/13/06
Nickel	ND	20	1.000	12/13/06
Potassium	ND	500	1.000	12/13/06
Selenium	ND	5.0	1.000	12/13/06
Silver	ND	1.0	1.000	12/13/06
Sodium	130,000	500	20.00	12/14/06
Thallium	ND	1.0	1.000	12/13/06
Vanadium	ND	10	1.000	12/13/06
Zinc	ND	20	1.000	12/13/06

ND= Not Detected
RL= Reporting Limit



Curtis & Tompkins, Ltd.

Dissolved Metals

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065MW9B	Batch#:	120324
Lab ID:	191358-009	Sampled:	12/07/06
Matrix:	Filtrate	Received:	12/08/06
Units:	ug/L	Prepared:	12/13/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	12/13/06
Antimony	ND	1.0	1.000	12/13/06
Arsenic	ND	5.0	1.000	12/13/06
Cadmium	ND	1.0	1.000	12/13/06
Calcium	38,000	500	10.00	12/14/06
Chromium	36	10	1.000	12/13/06
Copper	ND	1.0	1.000	12/13/06
Iron	ND	100	1.000	12/13/06
Lead	ND	3.0	1.000	12/13/06
Magnesium	54,000	500	10.00	12/14/06
Manganese	ND	10	1.000	12/13/06
Nickel	ND	20	1.000	12/13/06
Potassium	780	500	1.000	12/13/06
Sodium	55,000	500	10.00	12/14/06
Vanadium	11	10	1.000	12/13/06
Zinc	ND	20	1.000	12/13/06

ND= Not Detected

RL= Reporting Limit

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Dissolved Metals

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	1065PZ5AR	Batch#:	120324
Lab ID:	191358-011	Sampled:	12/07/06
Matrix:	Filtrate	Received:	12/08/06
Units:	ug/L	Prepared:	12/13/06

Analyte	Result	RL	Diln Fac	Analyzed
Aluminum	ND	100	1.000	12/13/06
Antimony	ND	1.0	1.000	12/13/06
Arsenic	32	5.0	1.000	12/13/06
Cadmium	ND	1.0	1.000	12/13/06
Calcium	79,000	500	10.00	12/14/06
Chromium	ND	10	1.000	12/13/06
Copper	ND	1.0	1.000	12/13/06
Iron	26,000	250	10.00	12/14/06
Lead	ND	3.0	1.000	12/13/06
Magnesium	81,000	500	10.00	12/14/06
Manganese	2,000	10	10.00	12/14/06
Nickel	ND	20	1.000	12/13/06
Potassium	6,700	500	1.000	12/13/06
Sodium	87,000	500	10.00	12/14/06
Vanadium	ND	10	1.000	12/13/06
Zinc	ND	20	1.000	12/13/06



Curtis & Tompkins, Ltd.

Metals Analytical Report

Lab #:	191358	Project#:	2893.04.51
Client:	Treadwell & Rollo	Location:	Presidio
Field ID:	WT120706	Units:	ug/L
Lab ID:	191358-013	Sampled:	12/07/06
Matrix:	Water	Received:	12/08/06

Analyte	Result	RL	Diln	Fac	Batch#	Prepared	Analyzed	Prep	Analysis
Arsenic	47	5.0	1.000		120324	12/13/06	12/14/06	200.8	EPA 6020
Cadmium	15	1.0	1.000		120324	12/13/06	12/14/06	200.8	EPA 6020
Chromium	1,100	10	20.00		120324	12/13/06	12/14/06	200.8	EPA 6020
Copper	290	5.0	20.00		120324	12/13/06	12/14/06	200.8	EPA 6020
Lead	83	3.0	1.000		120324	12/13/06	12/14/06	200.8	EPA 6020
Mercury	0.38	0.20	1.000		120247	12/11/06	12/11/06	METHOD	EPA 7470A
Nickel	990	20	20.00		120324	12/13/06	12/14/06	200.8	EPA 6020
Silver	ND	1.0	1.000		120324	12/13/06	12/14/06	200.8	EPA 6020
Zinc	2,900	20	20.00		120324	12/13/06	12/14/06	200.8	EPA 6020

ND= Not Detected

RL= Reporting Limit

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Batch QC Report
Target Analyte List Metals

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Type:	BLANK	Diln Fac:	1.000
Lab ID:	QC368135	Batch#:	120324
Matrix:	Water	Prepared:	12/13/06
Units:	ug/L		

Analyte	Result	RL	Analyzed
Aluminum	ND	100	12/14/06
Antimony	ND	1.0	12/13/06
Arsenic	ND	5.0	12/13/06
Barium	ND	10	12/13/06
Beryllium	ND	2.0	12/13/06
Cadmium	ND	1.0	12/13/06
Calcium	ND	500	12/13/06
Chromium	ND	10	12/13/06
Cobalt	ND	10	12/13/06
Copper	ND	1.0	12/14/06
Iron	ND	100	12/13/06
Lead	ND	3.0	12/13/06
Magnesium	ND	500	12/14/06
Manganese	ND	10	12/13/06
Nickel	ND	20	12/13/06
Potassium	ND	500	12/13/06
Selenium	ND	5.0	12/13/06
Silver	ND	1.0	12/13/06
Sodium	ND	500	12/14/06
Thallium	ND	1.0	12/13/06
Vanadium	ND	10	12/13/06
Zinc	ND	20	12/13/06

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Metals Analytical Report			
Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Diln Fac:	1.000
Type:	BLANK	Batch#:	120247
Lab ID:	QC367844	Prepared:	12/11/06
Matrix:	Water	Analyzed:	12/11/06
Units:	ug/L		

Result	RL
ND	0.20



Curtis & Tompkins, Ltd.

Batch QC Report

Target Analyte List Metals			
Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Matrix:	Water	Batch#:	120324
Units:	ug/L	Prepared:	12/13/06
Diln Fac:	1.000		

Type: BS Lab ID: QC368136

Analyte	Spiked	Result	%REC	Limits	Analyzed
Aluminum	10,000	10,470	105	80-120	12/14/06
Antimony	100.0	101.5	102	80-120	12/13/06
Arsenic	100.0	97.62	98	80-120	12/13/06
Barium	100.0	101.6	102	80-120	12/13/06
Beryllium	100.0	98.15	98	80-120	12/13/06
Cadmium	100.0	102.4	102	80-120	12/13/06
Calcium	10,000	10,670	107	80-120	12/13/06
Chromium	100.0	99.44	99	80-120	12/13/06
Cobalt	100.0	103.1	103	80-120	12/13/06
Copper	100.0	102.0	102	80-120	12/13/06
Iron	10,000	10,320	103	80-120	12/13/06
Lead	100.0	103.8	104	80-120	12/13/06
Magnesium	10,000	10,470	105	80-120	12/14/06
Manganese	100.0	100.9	101	80-120	12/13/06
Nickel	100.0	100.2	100	80-120	12/13/06
Potassium	10,000	10,870	109	80-120	12/13/06
Selenium	100.0	94.35	94	80-120	12/13/06
Silver	100.0	106.1	106	80-120	12/13/06
Sodium	10,000	10,400	104	80-120	12/14/06
Thallium	50.00	48.88	98	80-120	12/13/06
Vanadium	100.0	101.3	101	80-120	12/13/06
Zinc	100.0	98.96	99	80-120	12/13/06

Type: BSD Lab ID: QC368137

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Analyzed
Aluminum	10,000	10,540	105	80-120	1	20	12/14/06
Antimony	100.0	105.0	105	80-120	3	20	12/13/06
Arsenic	100.0	99.17	99	80-120	2	20	12/13/06
Barium	100.0	102.9	103	80-120	1	20	12/13/06
Beryllium	100.0	101.0	101	80-120	3	20	12/13/06
Cadmium	100.0	103.2	103	80-120	1	20	12/13/06
Calcium	10,000	10,850	109	80-120	2	20	12/13/06
Chromium	100.0	103.5	104	80-120	4	20	12/13/06
Cobalt	100.0	106.2	106	80-120	3	20	12/13/06
Copper	100.0	104.6	105	80-120	3	20	12/13/06
Iron	10,000	10,530	105	80-120	2	20	12/13/06
Lead	100.0	105.6	106	80-120	2	20	12/13/06
Magnesium	10,000	10,610	106	80-120	1	20	12/14/06
Manganese	100.0	103.5	104	80-120	3	20	12/13/06
Nickel	100.0	103.2	103	80-120	3	20	12/13/06
Potassium	10,000	10,980	110	80-120	1	20	12/13/06
Selenium	100.0	95.78	96	80-120	2	20	12/13/06
Silver	100.0	107.6	108	80-120	1	20	12/13/06
Sodium	10,000	10,670	107	80-120	3	20	12/14/06
Thallium	50.00	50.35	101	80-120	3	20	12/13/06
Vanadium	100.0	105.0	105	80-120	4	20	12/13/06
Zinc	100.0	100.4	100	80-120	1	20	12/13/06

RPD= Relative Percent Difference

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Batch QC Report

Metals Analytical Report			
Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	120247
Matrix:	Water	Prepared:	12/11/06
Units:	ug/L	Analyzed:	12/11/06
Diln Fac:	1.000		

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC367845	5.000	5.150	103	80-120		
BSD	QC367846	5.000	5.090	102	80-120	1	20

RPD= Relative Percent Difference

Batch QC Report

Target Analyte List Metals

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF10SP01	Batch#:	120324
MSS Lab ID:	191314-003	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Prepared:	12/13/06

Type: MS Lab ID: QC368138

Analyte	MSS Result	Spiked	Result	%REC	Limits	Diln	Fac	Analyzed
Aluminum	90.35	10,000	10,190	101	75-125	1.000		12/14/06
Antimony	0.8661	100.0	107.4	107	75-125	1.000		12/13/06
Arsenic	9.596	100.0	104.7	95	75-125	1.000		12/13/06
Barium	59.90	100.0	162.6	103	75-125	1.000		12/13/06
Beryllium	<0.1228	100.0	97.83	98	75-125	1.000		12/13/06
Cadmium	<0.1659	100.0	97.32	97	75-125	1.000		12/13/06
Calcium	38,800	10,000	45,580	68 *	75-125	10.00		12/14/06
Chromium	1.077	100.0	99.69	99	75-125	1.000		12/13/06
Cobalt	2.988	100.0	104.5	102	75-125	1.000		12/13/06
Copper	3.122	100.0	100.1	97	75-125	1.000		12/13/06
Iron	22,300	10,000	30,390	81	75-125	10.00		12/14/06
Lead	4.778	100.0	108.2	103	75-125	1.000		12/13/06
Magnesium	38,610	10,000	46,750	81	75-125	10.00		12/14/06
Manganese	360.9	100.0	431.2	70 *	75-125	10.00		12/14/06
Nickel	11.26	100.0	106.8	96	75-125	1.000		12/13/06
Potassium	4,339	10,000	14,790	105	75-125	1.000		12/13/06
Selenium	<0.3462	100.0	89.90	90	75-125	1.000		12/13/06
Silver	<0.06797	100.0	101.1	101	75-125	1.000		12/13/06
Sodium	50,270	10,000	59,030 >LR	88 NM	75-125	1.000		12/14/06
Thallium	0.03547	50.00	49.33	99	75-125	1.000		12/13/06
Vanadium	13.30	100.0	114.5	101	75-125	1.000		12/13/06
Zinc	14.57	100.0	106.8	92	75-125	1.000		12/13/06

*= Value outside of QC limits; see narrative

NC= Not Calculated

NM= Not Meaningful: Sample concentration > 4X spike concentration

>LR= Response exceeds instrument's linear range

RPD= Relative Percent Difference



Batch QC Report

Target Analyte List Metals

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF10SP01	Batch#:	120324
MSS Lab ID:	191314-003	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	ug/L	Prepared:	12/13/06

Type: MSD Lab ID: QC368139

Analyte	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Analyzed
Aluminum	10,000	10,210	101	75-125	0	20	1.000		12/14/06
Antimony	100.0	107.1	106	75-125	0	20	1.000		12/13/06
Arsenic	100.0	106.1	97	75-125	1	20	1.000		12/13/06
Barium	100.0	161.7	102	75-125	1	20	1.000		12/13/06
Beryllium	100.0	97.71	98	75-125	0	20	1.000		12/13/06
Cadmium	100.0	99.53	100	75-125	2	20	1.000		12/13/06
Calcium	10,000	47,370	86	75-125	4	20	10.00		12/14/06
Chromium	100.0	98.31	97	75-125	1	20	1.000		12/13/06
Cobalt	100.0	105.6	103	75-125	1	20	1.000		12/13/06
Copper	100.0	100.9	98	75-125	1	20	1.000		12/13/06
Iron	10,000	31,640	93	75-125	4	20	10.00		12/14/06
Lead	100.0	110.9	106	75-125	2	20	1.000		12/13/06
Magnesium	10,000	47,810	92	75-125	2	20	10.00		12/14/06
Manganese	100.0	444.9	84	75-125	3	20	10.00		12/14/06
Nickel	100.0	107.6	96	75-125	1	20	1.000		12/13/06
Potassium	10,000	15,000	107	75-125	1	20	1.000		12/13/06
Selenium	100.0	90.89	91	75-125	1	20	1.000		12/13/06
Silver	100.0	103.3	103	75-125	2	20	1.000		12/13/06
Sodium	10,000	57,900 >LR	76 NM	75-125	NC	20	1.000		12/14/06
Thallium	50.00	50.57	101	75-125	2	20	1.000		12/13/06
Vanadium	100.0	115.1	102	75-125	1	20	1.000		12/13/06
Zinc	100.0	106.7	92	75-125	0	20	1.000		12/13/06

*= Value outside of QC limits; see narrative

NC= Not Calculated

NM= Not Meaningful: Sample concentration > 4X spike concentration

>LR= Response exceeds instrument's linear range

RPD= Relative Percent Difference

Batch QC Report

Metals Analytical Report			
Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Batch#:	120247
Field ID:	ZZZZZZZZZZ	Sampled:	12/08/06
MSS Lab ID:	191364-002	Received:	12/08/06
Matrix:	Water	Prepared:	12/11/06
Units:	ug/L	Analyzed:	12/11/06
Diln Fac:	1.000		

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC367848	<0.05753	5.000	5.040	101	75-125		
MSD	QC367849		5.000	5.160	103	75-125	2	20

RPD= Relative Percent Difference

Batch QC Report

Target Analyte List Metals

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	200.8
Project#:	2893.04.51	Analysis:	EPA 6020
Field ID:	LF10SP01	Units:	ug/L
Type:	Serial Dilution	Batch#:	120324
MSS Lab ID:	191314-003	Sampled:	12/06/06
Lab ID:	QC368140	Received:	12/07/06
Matrix:	Water		

Analyte	MSS Result	MSS RL	Result	RL	% Diff	Lim	Diln	Fac	Analyzed
Aluminum	ND	100.0	164.9	125.0	NC	10	5.000		12/14/06
Antimony	ND	1.000	1.550	1.250	NC	10	5.000		12/13/06
Arsenic	9.596	5.000	10.13	5.000	NC	10	5.000		12/13/06
Barium	59.90	10.00	59.83	10.00	0	10	5.000		12/13/06
Beryllium	ND	2.000	ND	2.000	NC	10	5.000		12/13/06
Cadmium	ND	1.000	ND	1.250	NC	10	5.000		12/13/06
Calcium	38,800	500.0	42,610	1,250	10	10	50.00		12/14/06
Chromium	ND	10.00	ND	10.00	NC	10	5.000		12/13/06
Cobalt	ND	10.00	3.145 J	10.00	NC	10	5.000		12/13/06
Copper	3.122	1.000	3.168	1.250	NC	10	5.000		12/13/06
Iron	22,300	250.0	21,620	1,250	3	10	50.00		12/14/06
Lead	4.778	3.000	4.916	3.000	3	10	5.000		12/13/06
Magnesium	38,610	500.0	40,100	1,250	4	10	50.00		12/14/06
Manganese	360.9	10.00	355.4	12.50	2	10	50.00		12/14/06
Nickel	ND	20.00	11.80 J	20.00	5	10	5.000		12/13/06
Potassium	4,339	500.0	4,621	500.0	6	10	5.000		12/13/06
Selenium	ND	5.000	ND	5.000	NC	10	5.000		12/13/06
Silver	ND	1.000	ND	1.250	NC	10	5.000		12/13/06
Sodium	50,270	500.0	44,050	1,250	12 *	10	50.00		12/14/06
Thallium	ND	1.000	ND	1.000	NC	10	5.000		12/13/06
Vanadium	13.30	10.00	13.22	10.00	1	10	5.000		12/13/06
Zinc	ND	20.00	15.84 J	20.00	9	10	5.000		12/13/06

*= Value outside of QC limits; see narrative

J= Estimated value

NC= Not Calculated

ND= Not Detected

RL= Reporting Limit

Batch QC Report

Metals Analytical Report

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 7470A
Analyte:	Mercury	Units:	ug/L
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	120247
MSS Lab ID:	191364-002	Sampled:	12/08/06
Lab ID:	QC367847	Received:	12/08/06
Matrix:	Water	Analyzed:	12/11/06

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.2000	ND	1.000	NC	10

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
 Inst : MET05
 Seqnum: 56500483085
 File : 11313085
 IDF : 1.0
 Lab ID: 191314-003
 Matrix: Water
 Batch : 120324
 Time : 13-DEC-2006 21:20
 Cal : 56500483001
 Units : ug/L

Type : PDS
 Inst : MET05
 Seqnum: 56500483089
 File : 11313089
 IDF : 1.0
 Lab ID: QC368141
 Matrix: Water
 Batch : 120324
 Time : 13-DEC-2006 21:42
 Cal : 56500483001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S4326 (100X), S4327 (100X), S4635

Analyte	MSS	Spiked	PDS	%Rec	Limits	Flags
Aluminum	90.35	10000	10700	106	75-125	>c+ b*
Antimony	0.8661	100.0	102.0	101	75-125	u
Arsenic	9.596	100.0	100.1	91	75-125	u
Barium	59.90	100.0	157.0	97	75-125	u
Beryllium	ND	100.0	91.01	91	75-125	u
Cadmium	ND	100.0	92.59	93	75-125	u
Chromium	1.077	100.0	92.74	92	75-125	u
Cobalt	2.988	100.0	100.6	98	75-125	u
Copper	3.122	100.0	96.33	93	75-125	u
Lead	4.778	100.0	101.7	97	75-125	u
Molybdenum	0.3996	100.0	98.16	98	75-125	u
Nickel	11.26	100.0	102.2	91	75-125	u
Potassium	4339	10000	14400	101	75-125	u
Selenium	ND	100.0	85.12	85	75-125	u
Silver	ND	100.0	95.97	96	75-125	u
Thallium	0.03547	50.00	47.84	96	75-125	u
Vanadium	13.30	100.0	109.4	96	75-125	u
Zinc	14.57	100.0	101.8	87	75-125	u

ISTD (ICALBLK 11313004)	ICALBLK Abund	PDS Abund	%Drift
Lithium	831127	665734	-19.90
Scandium	642644	481497	-25.08
Germanium	147548	111905	-24.16
Indium	875996	642230	-26.69
Bismuth	993101	749920	-24.49

MISSING READINGS: CA FE MG MN NA

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
 Inst : MET05
 Seqnum: 56500483085
 File : 11313085
 IDF : 1.0
 Lab ID: 191314-003
 Matrix: Water
 Batch : 120324
 Time : 13-DEC-2006 21:20
 Cal : 56500483001
 Units : ug/L

Type : PDS
 Inst : MET05
 Seqnum: 56501744046
 File : 11410046
 IDF : 1.0
 Lab ID: QC368141
 Matrix: Water
 Batch : 120324
 Time : 14-DEC-2006 14:35
 Cal : 56501744001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS standards: S4326 (100X), S4327 (100X), S4635

Analyte	MSS	Spiked	PDS	%Rec	Limits	Flags
Aluminum	90.35	10000	9596	95	75-125	u
Antimony	0.8661	100.0	94.56	94	75-125	
Arsenic	9.596	100.0	96.61	87	75-125	
Barium	59.90	100.0	149.0	89	75-125	
Beryllium	ND	100.0	91.35	91	75-125	
Cadmium	ND	100.0	90.24	90	75-125	
Chromium	1.077	100.0	92.84	92	75-125	
Cobalt	2.988	100.0	91.94	89	75-125	
Copper	3.122	100.0	94.89	92	75-125	
Lead	4.778	100.0	97.30	93	75-125	
Molybdenum	0.3996	100.0	95.77	95	75-125	u
Nickel	11.26	100.0	102.6	91	75-125	
Potassium	4339	10000	13240	89	75-125	
Selenium	ND	100.0	80.83	81	75-125	
Silver	ND	100.0	92.66	93	75-125	
Thallium	0.03547	50.00	45.64	91	75-125	
Vanadium	13.30	100.0	110.9	98	75-125	
Zinc	14.57	100.0	98.20	84	75-125	

ISTD (ICALBLK 11410004)	ICALBLK Abund	PDS Abund	%Drift
Lithium	739106	553847	-25.07
Scandium	529417	404034	-23.68
Germanium	119842	87110	-27.31
Indium	758188	567582	-25.14
Bismuth	901811	672543	-25.42

MISSING READINGS: CA FE MG MN NA

CURTIS & TOMPKINS POST DIGEST SPIKE USER REPORT FOR EPA 6020

Type : MSS
 Inst : MET05
 Seqnum: 56501744050
 File : 11410050
 IDF : 10.0
 Lab ID: 191314-003
 Matrix: Water
 Batch : 120324
 Time : 14-DEC-2006 14:57
 Cal : 56501744001
 Units : ug/L

Type : PDS
 Inst : MET05
 Seqnum: 56501744082
 File : 11410082
 IDF : 10.0
 Lab ID: QC368141
 Matrix: Water
 Batch : 120324
 Time : 14-DEC-2006 17:56
 Cal : 56501744001

MSS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

PDS: 50.00 mL --> 50.0 ml = 1.0 ml/ml PDF

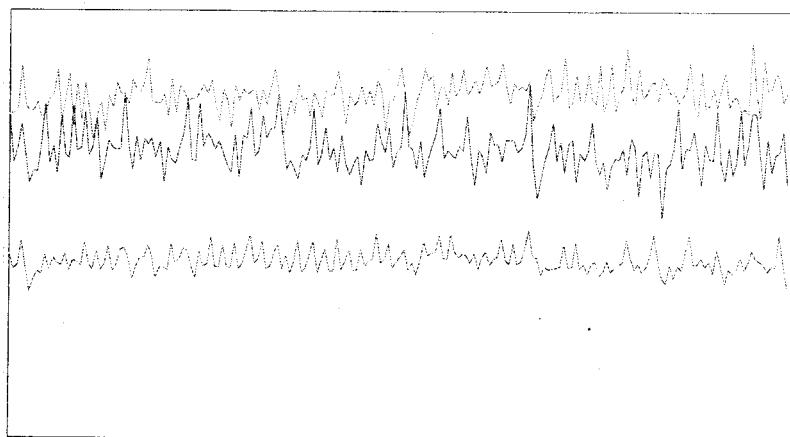
PDS standards: S4326 (100X), S4327 (100X), S4635

Analyte	MSS	Spiked	PDS	%Rec	Limits	Flags
Aluminum	20.13	10000	9782	98	75-125	
Antimony	ND	100.0	87.77	88	75-125	
Arsenic	1.185	100.0	93.02	92	75-125	
Barium	5.217	100.0	97.06	92	75-125	
Beryllium	ND	100.0	92.89	93	75-125	
Cadmium	ND	100.0	93.02	93	75-125	
Calcium	3880	10000	13380	95	75-125	u
Chromium	ND	100.0	89.09	89	75-125	
Cobalt	0.3310	100.0	93.62	93	75-125	
Copper	0.3401	100.0	93.52	93	75-125	
Iron	2230	10000	11740	95	75-125	u
Lead	0.4720	100.0	91.25	91	75-125	
Magnesium	3861	10000	13480	96	75-125	u
Manganese	36.09	100.0	131.0	95	75-125	u
Molybdenum	ND	100.0	90.78	91	75-125	u
Nickel	1.208	100.0	94.24	93	75-125	
Potassium	388.9	10000	9921	95	75-125	
Selenium	0.3837	100.0	92.92	93	75-125	
Silver	ND	100.0	91.54	92	75-125	
Sodium	5027	10000	14650	96	75-125	u
Thallium	ND	50.00	44.27	89	75-125	<c- b*
Vanadium	1.340	100.0	92.45	91	75-125	
Zinc	50.39	100.0	106.1	56*	75-125	

ISTD (ICALBLK 11410004)	ICALBLK Abund	PDS Abund	%Drift
Lithium	739106	623953	-15.58
Scandium	529417	453740	-14.29
Germanium	119842	101999	-14.89
Indium	758188	655544	-13.54
Bismuth	901811	813082	-9.84

Tune Report

Tune File : Autotune.u



m/z:	7	89	205
Range:	20,000	50,000	20,000
Count:	11,962	17,852	16,248
Mean:	13511.1	20854.4	16083.8
RSD%:	7.49	6.43	4.94
n:	200		

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec

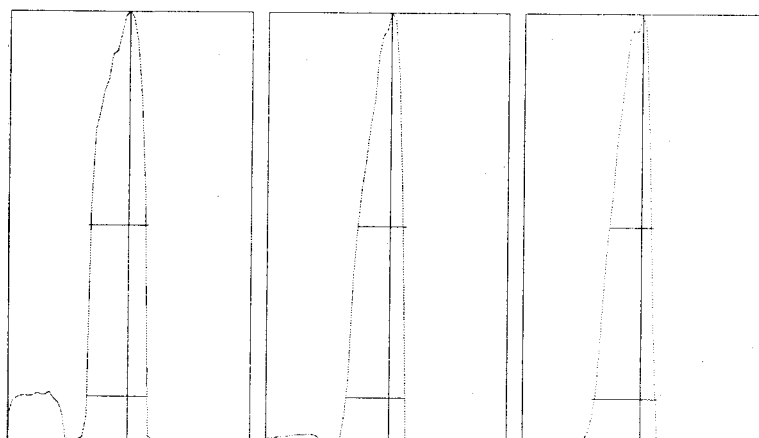
Oxide: 156/140 0.25%
Doubly Charged: 70/140 2.60%

Background:

m/z:	7	89	205
Cps:	23.3	16.0	18.0

m/z:	7	89	205
Height:	13,423	21,406	16,057
Axis:	7.00	89.05	205.00
W-50%:	0.75	0.60	0.55
W-10%:	0.7500	0.7500	0.800

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec



Y axis : Linear

Tuning Parameters

===Plasma Condition===

RF Power: 1270 W
RF Matching: 1.78 V
Smpl Depth: 7.1 mm
Torch-H: -1.3 mm
Torch-V: 0.5 mm
Carrier Gas: 1.09 L/min
Makeup Gas: 0 L/min
Optional Gas: --- %
PeriPump1: 0.1 rps
PeriPump2: --- rps
S/C Temp: 2 degC

===Ion Lenses===

Extract 1: -200 V
Extract 2: -40 V
Einzel 1,3: -100 V
Einzel 2: -7 V
Omega Bias: -45 V
Omega (+): 4 V
Omega (-): -4 V
QP Focus: 9 V
Plate Bias: 0 V

===Q-Pole Parameters===

AMU Gain: 130
AMU Offset: 125
Axis Gain: 0.9989
Axis Offset: -0.01
QP Bias: 1.6 V

===Detector Parameters===

Discriminator: 9.3 mV
Analog HV: 1810 V
Pulse HV: 1160 V

Temp.p\$\$

P/A Factor Tuning Report

Acquired: Dec 13 2006 01:01 pm

Mass[amu]	Element	P/A Factor
6	Li	0.072792
9	Be	0.082569
23	Na	Sensitivity too high
25	Mg	0.087047
26	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
43	Ca	Sensitivity too low
44	Ca	0.098672
45	Sc	0.099804
51	V	0.094987
52	Cr	0.105159
53	Cr	Sensitivity too low
54	Fe	0.103806
55	Mn	0.107495
57	Fe	0.102488
59	Co	0.109923
60	Ni	0.107444
63	Cu	0.110946
65	Cu	0.109191
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
77	(As)	Sensitivity too low
82	Se	Sensitivity too low
83	(As)	Sensitivity too low
88	(Ca)	Sensitivity too low
89	Y	0.107935
95	Mo	0.105471
98	Mo	0.106155
99	(Mo)	Sensitivity too low
106	(Cd)	Sensitivity too low
108	(Cd)	Sensitivity too low
109	Ag	0.112992
111	Cd	Sensitivity too low
114	Cd	0.111513
115	In	0.113259
118	(In)	Sensitivity too low
121	Sb	0.112173
135	Ba	Sensitivity too low
137	Ba	Sensitivity too low
159	Tb	0.118125
166	Er	Sensitivity too low

Temp.p\$\$

205	Tl	0.120191
206	(Pb)	0.118606
207	(Pb)	0.117997
208	Pb	0.120964
209	Bi	0.120339

===Detector Parameters===

Discriminator: 9.3 mV

Analog HV: 1810 V

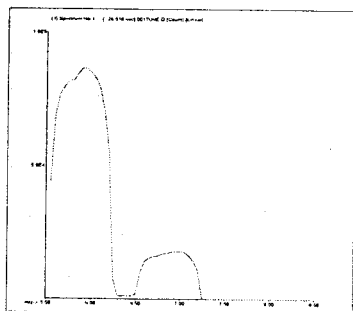
Pulse HV: 1160 V

6020 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\06L1313a.B\001TUNE.D
Date Acquired: Dec 13 2006 01:23 pm
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s4974
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	1.78	5.00	
59 Co	2.36	5.00	
115 In	1.69	5.00	
205 Tl	1.93	5.00	



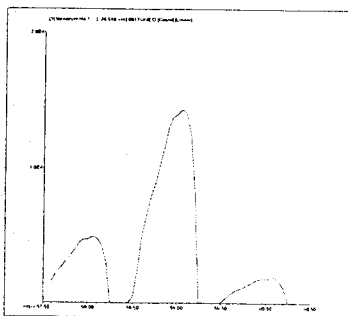
7 Li

Mass Calib.

Actual: 7.00
Required: 6.90 - 7.10
Flag:

Peak Width

Actual: 0.65
Required: 0.90
Flag:



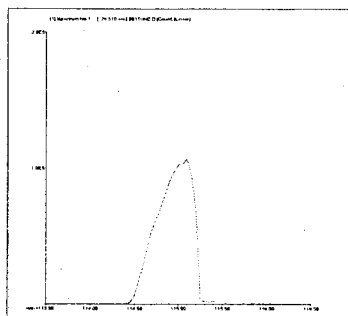
59 Co

Mass Calib.

Actual: 59.05
Required: 58.90 - 59.10
Flag:

Peak Width

Actual: 0.60
Required: 0.90
Flag:



115 In

Mass Calib.

Actual: 115.10

Required: 114.90 - 115.10

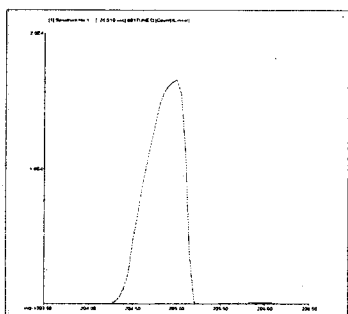
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



205 T1

Mass Calib.

Actual: 205.00

Required: 204.90 - 205.10

Flag:

Peak Width

Actual: 0.55

Required: 0.90

Flag:

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET05
 Calnum : 56500483001
 Units : ug/L

Date : 13-DEC-2006 13:40
 X Axis : R

Reviewer: ---

Level	File	Segment	Sample ID	Analyzed	Std's
L1	11313005	56500483005	CS1	13-DEC-2006 13:45	S4978
L2	11313006	56500483006	CS2	13-DEC-2006 13:51	S4979
L3	11313007	56500483007	CS3	13-DEC-2006 13:56	S4980
L4	11313008	56500483008	CS4	13-DEC-2006 14:02	S4981
L5	11313009	56500483009	CS5	13-DEC-2006 14:07	S4975
L6	11313010	56500483010	CS6	13-DEC-2006 14:13	S4976

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ²	%RSD	MWR ²	Fig
Aluminum	0.8439	0.7931	0.7370	0.6572	0.6875	0.6698	BLNK	-4.0605	1.48558		0.7314	1.000	0.995		
Antimony	0.2929	0.2700	0.2599	0.2516	0.2584	0.2593	BLNK	-0.0500	3.86061		0.2654	1.000	0.995		
Arsenic	0.6673	0.5360	0.4995	0.4910	0.4915	BLNK	-0.1111	2.03644			0.5371	1.000	0.995		
Barium	0.1386	0.1060	0.1087	0.0954	0.0998	0.0985	BLNK	-0.0757	10.1286		0.1079	1.000	0.995		
Beryllium	0.2007	0.1806	0.1862	0.1832	0.1850	0.1805	BLNK	-0.0167	5.51350		0.1860	1.000	0.995		
Cadmium	0.6286	0.5834	0.5602	0.5192	0.5119	0.5064	BLNK	-0.0601	1.97108		0.5516	1.000	0.995		
Calcium	0.0486	0.0333	0.0270	0.0197	0.0192	0.0185	BLNK	-36.789	53.7210		0.0277	1.000	0.995		
Chromium	38.243	20.657	12.308	4.5456	3.7648	3.6210	BLNK	-2.3134	0.27778		13.856	1.000	0.995		
Cobalt	4.9262	4.6353	4.7866	4.4483	4.6206	4.4073	BLNK	-0.0341	0.22477		4.6374	0.999	0.995		
Copper	3.6986	2.3862	1.9167	1.3043	1.2239	1.2026	BLNK	-0.4731	0.83090		1.9554	1.000	0.995		
Iron	0.1591	0.1258	0.1134	0.0992	0.0933	0.0890	BLNK	-18.445	11.1415		0.1133	0.999	0.995		
Lead	1.2795	1.2005	1.1323	1.0663	1.1519	1.1428	BLNK	-0.0484	0.87405		1.1622	1.000	0.995		
Magnesium	0.1074	0.1028	0.1050	0.0950	0.0939	0.0909	BLNK	-2.1506	10.9336		0.0992	1.000	0.995		
Manganese		5.4323	5.0067	4.6409	4.6495	4.4973	BLNK	-0.1104	0.22100		4.8453	1.000	0.995		
Molybdenum	1.2183	1.1155	1.0711	1.0131	1.0281	1.0418	BLNK	-0.0743	0.96290		1.0813	1.000	0.995		
Nickel	3.0783	1.8442	1.5410	1.0588	1.0090	0.9810	BLNK	-0.4183	1.01605		1.5854	1.000	0.995		
Potassium	2.1120	1.3307	0.9707	0.6035	0.5936	0.5723	BLNK	-64.535	1.74116		1.0305	1.000	0.995		
Selenium		0.0406	0.0206	0.0406	0.0405	0.0397	BLNK	0.22065	25.0627		0.0364	1.000	0.995		
Silver	2.8712	2.7544	2.6725	2.5803	2.5566	2.4987	BLNK	-0.0327	0.39842		2.6556	1.000	0.995		
Sodium		1.6895	1.3486	0.9434	0.9218	0.8708	BLNK	-43.976	1.13801		1.1548	0.999	0.995		
Thallium	1.1786	0.9822	0.8682	0.8002	0.8857	0.8902	BLNK	-0.0572	1.12546		0.9342	1.000	0.995		
Vanadium	6.9311	5.8096	4.8252	3.7658	3.5861	3.5378	BLNK	-0.2505	0.28229		4.7426	1.000	0.995		
Zinc	6.9161	3.3562	2.2408	0.8125	0.6458	0.6199	BLNK	-2.4135	1.62263		2.4319	1.000	0.995		

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+|blank|

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06L1313a.B\004CAL
Date Acquired: Dec 13 2006 01:40 pm
Operator:
Sample Name: std-blank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Dec 11 2006 08:39 am
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	831126.81 A	25460.00	3.06
9 Be	50.00 P	17.64	35.28
23 Na	496555.59 P	4007.00	0.81
26 Mg	2525.56 P	240.00	9.50
27 Al	35101.11 P	2338.00	6.66
39 K	476298.91 P	934.20	0.20
44 Ca	8799.30 P	114.70	1.30
45 Sc	642644.38 P	10210.00	1.59
51 V	2643.72 P	2158.00	81.63
52 Cr	24572.22 P	357.90	1.46
55 Mn	1473.33 P	44.10	2.99
57 Fe	4884.44 P	68.66	1.41
59 Co	447.78 P	48.57	10.85
60 Ni	1215.56 P	81.94	6.74
65 Cu	1679.99 P	48.07	2.86
66 Zn	4387.78 P	73.81	1.68
72 Ge	147547.59 P	2661.00	1.80
75 As	161.99 P	125.80	77.66
82 Se	-26.22 P	23.00	87.71
95 Mo	227.78 P	25.24	11.08
109 Ag	242.22 P	16.44	6.79
111 Cd	90.15 P	16.36	18.15
115 In	875996.19 M	14520.00	1.66
121 Sb	226.67 P	6.67	2.94
137 Ba	131.11 P	24.11	18.39
205 Tl	1008.89 P	28.35	2.81
208 Pb	1100.00 P	47.26	4.30
209 Bi	993101.31 A	4383.00	0.44

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1313a.B\005CALI.D\005CALI.D#
 Date Acquired: Dec 13 2006 01:45 pm
 Operator:
 Sample Name: cs1,s4978
 Misc Info:
 Vial Number: 1102
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 13 2006 01:41 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	805747.50 A	38820.00	4.82
9 Be	808.89 P	59.75	7.39
23 Na	783565.19 A	3360.00	0.43
26 Mg	33493.33 P	492.40	1.47
27 Al	263134.41 P	2583.00	0.98
39 K	658561.13 P	5152.00	0.78
44 Ca	15166.65 P	209.40	1.38
45 Sc	623650.00 P	1492.00	0.24
51 V	5053.85 P	1926.00	38.11
52 Cr	27867.78 P	369.60	1.33
55 Mn	4741.11 P	92.64	1.95
57 Fe	11596.67 P	209.50	1.81
59 Co	3590.00 P	97.01	2.70
60 Ni	2243.33 P	78.81	3.51
65 Cu	2695.41 P	107.50	3.99
66 Zn	5040.00 P	195.50	3.88
72 Ge	145744.20 P	430.60	0.30
75 As	217.96 P	200.60	92.04
82 Se	-52.44 P	50.00	95.34
95 Mo	887.78 P	70.11	7.90
109 Ag	2092.22 P	67.36	3.22
111 Cd	458.14 P	51.93	11.34
115 In	853568.63 M	7122.00	0.83
121 Sb	1250.00 P	8.82	0.71
137 Ba	591.11 P	71.83	12.15
205 Tl	2806.67 P	89.69	3.20
208 Pb	6094.44 P	157.50	2.58
209 Bi	952568.00 A	11480.00	1.21

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	805747.44	4.82	831126.81	96.9	80 - 120	

C:\ICPCHEM\1\DATA\06L1313a.B\005CALI.D\005CALI.D#

45	Sc	623650.00	0.24	642644.38	97.0	80 -	120
72	Ge	145744.22	0.30	147547.55	98.8	80 -	120
115	In	853568.56	0.83	875996.19	97.4	80 -	120
209	Bi	952568.00	1.21	993101.31	95.9	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1313a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1313a.B\006CALI.D\006CALI.D#
 Date Acquired: Dec 13 2006 01:51 pm
 Operator:
 Sample Name: cs2,s4979
 Misc Info:
 Vial Number: 1103
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 13 2006 01:47 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	827416.00 A	14190.00	1.72
9 Be	1493.33 P	80.00	5.36
23 Na	1069157.00 A	13730.00	1.28
26 Mg	65051.11 P	2571.00	3.95
27 Al	501824.41 P	21820.00	4.35
39 K	842108.13 A	9847.00	1.17
44 Ca	21093.14 P	225.20	1.07
45 Sc	632901.13 P	5609.00	0.89
51 V	8588.98 P	3004.00	34.98
52 Cr	30554.44 P	191.80	0.63
55 Mn	8035.56 P	248.90	3.10
57 Fe	18602.22 P	420.60	2.26
59 Co	6856.67 P	144.40	2.11
60 Ni	2727.78 P	140.10	5.14
65 Cu	3529.72 P	40.41	1.14
66 Zn	4964.44 P	45.99	0.93
72 Ge	147917.59 P	338.50	0.23
75 As	986.73 P	314.40	31.86
82 Se	60.00 P	86.28	143.80
95 Mo	1650.00 P	128.10	7.76
109 Ag	4074.44 P	170.20	4.18
111 Cd	862.93 P	52.44	6.08
115 In	868735.50 P	10780.00	1.24
121 Sb	2344.44 P	138.90	5.92
137 Ba	920.00 P	123.40	13.41
205 Tl	4680.00 P	144.20	3.08
208 Pb	11440.00 P	465.20	4.07
209 Bi	952798.88 A	9824.00	1.03

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	827415.94	1.72	831126.81	99.6	80 - 120	

C:\ICPCHEM\1\DATA\06L1313a.B\006CALI.D\006CALI.D#

45	Sc	632901.06	0.89	642644.38	98.5	80 -	120
72	Ge	147917.55	0.23	147547.55	100.3	80 -	120
115	In	868735.50	1.24	875996.19	99.2	80 -	120
209	Bi	952798.94	1.03	993101.31	95.9	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1313a.B\004CALB.D\004CALB.D#

--- :Element Failures	--- :Max. Number of Failures Allowed
0 :ISTD Failures	0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass

ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1313a.B\007CALI.D\007CALI.D#
 Date Acquired: Dec 13 2006 01:56 pm
 Operator:
 Sample Name: cs3,s4980
 Misc Info:
 Vial Number: 1104
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 13 2006 01:52 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	829040.00 A	20330.00	2.45
9 Be	3085.56 P	37.17	1.20
23 Na	1714821.00 A	16020.00	0.93
26 Mg	133452.20 P	1428.00	1.07
27 Al	936894.31 A	15090.00	1.61
39 K	1234495.00 A	21170.00	1.71
44 Ca	34362.42 P	223.30	0.65
45 Sc	636028.88 P	17230.00	2.71
51 V	14375.83 P	881.80	6.13
52 Cr	36655.56 P	310.10	0.85
55 Mn	14908.89 P	130.00	0.87
57 Fe	33778.89 P	301.90	0.89
59 Co	14254.44 P	50.15	0.35
60 Ni	4588.89 P	105.20	2.29
65 Cu	5707.21 P	109.10	1.91
66 Zn	6674.44 P	120.80	1.81
72 Ge	148945.80 P	3038.00	2.04
75 As	1595.33 P	160.80	10.08
82 Se	61.33 P	21.95	35.79
95 Mo	3188.89 P	73.36	2.30
109 Ag	7958.89 P	53.16	0.67
111 Cd	1669.45 P	81.59	4.89
115 In	878062.88 M	9208.00	1.05
121 Sb	4563.33 P	87.37	1.91
137 Ba	1908.89 P	49.14	2.57
205 Tl	8577.78 P	244.10	2.85
208 Pb	22368.89 P	481.20	2.15
209 Bi	987991.81 A	27410.00	2.77

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	829040.00	2.45	831126.81	99.7	80 - 120	

C:\ICPCHEM\1\DATA\06L1313a.B\007CALI.D\007CALI.D#

45	Sc	636028.88	2.71	642644.38	99.0	80 -	120
72	Ge	148945.78	2.04	147547.55	100.9	80 -	120
115	In	878062.88	1.05	875996.19	100.2	80 -	120
209	Bi	987991.81	2.77	993101.31	99.5	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1313a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1313a.B\008CALI.D\008CALI.D#
 Date Acquired: Dec 13 2006 02:02 pm
 Operator:
 Sample Name: cs4,s4981
 Misc Info:
 Vial Number: 1105
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 13 2006 01:58 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	808657.50 A	13110.00	1.62
9 Be	29626.67 P	525.40	1.77
23 Na	11988870.00 A	300700.00	2.51
26 Mg	1207465.00 A	49370.00	4.09
27 Al	8353126.00 A	315700.00	3.78
39 K	7668820.00 A	262700.00	3.43
44 Ca	250280.09 P	5688.00	2.27
45 Sc	635326.63 P	10200.00	1.61
51 V	111134.00 P	2471.00	2.22
52 Cr	134147.80 P	1468.00	1.09
55 Mn	136960.00 P	1398.00	1.02
57 Fe	292875.50 P	6062.00	2.07
59 Co	131275.59 P	849.90	0.65
60 Ni	31246.67 P	418.70	1.34
65 Cu	38492.52 P	706.20	1.83
66 Zn	23980.00 P	449.50	1.87
72 Ge	147556.20 P	611.10	0.41
75 As	14741.66 P	527.80	3.58
82 Se	1198.44 P	43.36	3.62
95 Mo	29896.67 P	508.60	1.70
109 Ag	76153.33 P	1839.00	2.41
111 Cd	15321.11 P	49.11	0.32
115 In	875422.50 M	9835.00	1.12
121 Sb	44043.33 P	483.60	1.10
137 Ba	16708.89 P	276.00	1.65
205 Tl	77848.88 P	1402.00	1.80
208 Pb	207473.30 P	3129.00	1.51
209 Bi	972898.19 A	2821.00	0.29

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	808657.50	1.62	831126.81	97.3	80 - 120	

C:\ICPCHEM\1\DATA\06L1313a.B\008CALI.D\008CALI.D#

45	Sc	635326.63	1.61	642644.38	98.9	80 -	120
72	Ge	147556.22	0.41	147547.55	100.0	80 -	120
115	In	875422.44	1.12	875996.19	99.9	80 -	120
209	Bi	972898.19	0.29	993101.31	98.0	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1313a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1313a.B\009CALI.D\009CALI.D#
 Date Acquired: Dec 13 2006 02:07 pm
 Operator:
 Sample Name: cs5,s4975
 Misc Info:
 Vial Number: 1106
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 13 2006 02:03 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	776673.38 A	18410.00	2.37
9 Be	287275.50 P	785.30	0.27
23 Na	112712500.00 A	347800.00	0.31
26 Mg	11483460.00 A	390700.00	3.40
27 Al	84064632.00 A	1946000.00	2.31
39 K	72579032.00 A	2172000.00	2.99
44 Ca	2343959.00 A	15140.00	0.65
45 Sc	611393.31 P	6139.00	1.00
51 V	1028426.00 A	29250.00	2.84
52 Cr	1079645.00 A	27840.00	2.58
55 Mn	1333207.00 A	36510.00	2.74
57 Fe	2675137.00 A	56650.00	2.12
59 Co	1324873.00 A	12480.00	0.94
60 Ni	289323.31 P	3739.00	1.29
65 Cu	350920.41 P	2293.00	0.65
66 Zn	185157.80 P	2727.00	1.47
72 Ge	143371.30 P	1982.00	1.38
75 As	140806.50 P	3127.00	2.22
82 Se	11600.44 P	274.70	2.37
95 Mo	294824.41 P	6762.00	2.29
109 Ag	733124.38 P	14720.00	2.01
111 Cd	146781.41 P	3880.00	2.64
115 In	815014.63 A	5906.00	0.72
121 Sb	421242.19 P	4660.00	1.11
137 Ba	162701.09 P	5436.00	3.34
205 Tl	755403.31 P	6873.00	0.91
208 Pb	1964741.00 A	34830.00	1.77
209 Bi	852964.31 M	8859.00	1.04

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	776673.38	2.37	831126.81	93.4	80 - 120	

C:\ICPCHEM\1\DATA\06L1313a.B\009CALI.D\009CALI.D#

45	Sc	611393.31	1.00	642644.38	95.1	80 -	120
72	Ge	143371.33	1.38	147547.55	97.2	80 -	120
115	In	815014.56	0.72	875996.19	93.0	80 -	120
209	Bi	852964.31	1.04	993101.31	85.9	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1313a.B\004CALB.D\004CALB.D#

--- :Element Failures	--- :Max. Number of Failures Allowed
0 :ISTD Failures	0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: Pass

ISTD: Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1313a.B\010CALI.D\010CALI.D#
 Date Acquired: Dec 13 2006 02:13 pm
 Operator:
 Sample Name: cs6,s4976
 Misc Info:
 Vial Number: 1107
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 13 2006 02:09 pm
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	771036.69 A	8795.00	1.14
9 Be	556655.63 P	18700.00	3.36
23 Na	219169100.00 A	7872000.00	3.59
26 Mg	22871480.00 A	303000.00	1.32
27 Al	168640300.00 A	1145000.00	0.68
39 K	144088500.00 A	1153000.00	0.80
44 Ca	4665029.00 A	76100.00	1.63
45 Sc	629501.13 P	8282.00	1.32
51 V	2014791.00 A	27040.00	1.34
52 Cr	2062189.00 A	33660.00	1.63
55 Mn	2561211.00 A	19560.00	0.76
57 Fe	5067042.00 A	20180.00	0.40
59 Co	2509873.00 A	32170.00	1.28
60 Ni	558660.00 P	4872.00	0.87
65 Cu	684910.50 P	18560.00	2.71
66 Zn	353075.50 P	7578.00	2.15
72 Ge	142375.30 P	681.00	0.48
75 As	279884.91 P	416.30	0.15
82 Se	22604.67 P	320.80	1.42
95 Mo	593301.13 P	3224.00	0.54
109 Ag	1422942.00 A	19310.00	1.36
111 Cd	288390.41 P	404.90	0.14
115 In	791431.63 A	10180.00	1.29
121 Sb	820827.69 P	8759.00	1.07
137 Ba	311883.31 P	2488.00	0.80
205 Tl	1460892.00 A	19250.00	1.32
208 Pb	3751318.00 A	58340.00	1.56
209 Bi	820716.63 P	16330.00	1.99

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	771036.69	1.14	831126.81	92.8	80 - 120	

C:\ICPCHEM\1\DATA\06L1313a.B\010CALI.D\010CALI.D#

45	Sc	629501.06	1.32	642644.38	98.0	80 -	120
72	Ge	142375.33	0.48	147547.55	96.5	80 -	120
115	In	791431.56	1.29	875996.19	90.3	80 -	120
209	Bi	820716.63	1.99	993101.31	82.6	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1313a.B\004CALB.D\004CALB.D#

---	:Element Failures	---	:Max. Number of Failures Allowed
0	:ISTD Failures	0	:Max. Number of ISTD Failures Allowed

Data Results:

Analytes:	Pass
ISTD:	Pass

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET05
 Seqnum : 56500483012
 Cal : 56500483001
 Standards: S4982

File : 11313012
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 14:24

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	0.7314	0.6807	10000	10110	ug/L	1	10	
Antimony	0.2654	0.2568	100.0	99.08	ug/L	-1	10	
Arsenic	0.5371	0.4879	100.0	99.25	ug/L	-1	10	
Barium	0.1079	0.0998	100.0	101.0	ug/L	1	10	
Beryllium	0.1860	0.1799	100.0	99.14	ug/L	-1	10	
Cadmium	0.5516	0.5106	100.0	100.6	ug/L	1	10	
Calcium	0.0277	0.0186	10000	9929	ug/L	-1	10	
Chromium	13.856	3.7576	100.0	102.1	ug/L	2	10	
Cobalt	4.6374	4.5633	100.0	102.5	ug/L	3	10	
Copper	1.9554	1.2406	100.0	102.6	ug/L	3	10	
Iron	0.1133	0.0930	10000	10340	ug/L	3	10	
Lead	1.1622	1.1134	100.0	97.27	ug/L	-3	10	
Magnesium	0.0992	0.0933	10000	10200	ug/L	2	10	
Manganese	4.8453	4.6816	100.0	103.4	ug/L	3	10	
Molybdenum	1.0813	1.0343	100.0	99.52	ug/L	0	10	
Nickel	1.5854	1.0030	100.0	101.5	ug/L	2	10	
Potassium	1.0305	0.5831	10000	10090	ug/L	1	10	
Selenium	0.0364	0.0408	100.0	102.6	ug/L	3	10	
Silver	2.6556	2.6079	100.0	103.9	ug/L	4	10	
Sodium	1.1548	0.9078	10000	10290	ug/L	3	10	
Thallium	0.9342	0.8383	50.00	47.11	ug/L	-6	10	
Vanadium	4.7426	3.6200	100.0	101.9	ug/L	2	10	
Zinc	2.4319	0.6567	100.0	104.1	ug/L	4	10	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	816474	-1.76
Scandium	642644	650250	1.18
Germanium	147548	148536	0.67
Indium	875996	844361	-3.61
Bismuth	993101	925412	-6.82

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56500483042
 Cal : 56500483001
 Standards: S4983, S4635

File : 11313042
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 17:11

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.7314	0.7202	10000	10700	ug/L	7	10	
Antimony	0.2654	0.2608	100.0	100.6	ug/L	1	10	
Arsenic	0.5371	0.4852	100.0	98.70	ug/L	-1	10	
Barium	0.1079	0.1019	100.0	103.2	ug/L	3	10	
Beryllium	0.1860	0.1809	100.0	99.73	ug/L	0	10	
Cadmium	0.5516	0.5130	100.0	101.1	ug/L	1	10	
Calcium	0.0277	0.0195	10000	10450	ug/L	5	10	
Chromium	13.856	3.6775	100.0	99.84	ug/L	0	10	
Cobalt	4.6374	4.5743	100.0	102.8	ug/L	3	10	
Copper	1.9554	1.2340	100.0	102.1	ug/L	2	10	
Iron	0.1133	0.0923	10000	10270	ug/L	3	10	
Lead	1.1622	1.1531	100.0	100.7	ug/L	1	10	
Magnesium	0.0992	0.1001	10000	10940	ug/L	9	10	
Manganese	4.8453	4.6205	100.0	102.0	ug/L	2	10	
Molybdenum	1.0813	1.0301	100.0	99.12	ug/L	-1	10	
Nickel	1.5854	0.9910	100.0	100.3	ug/L	0	10	
Potassium	1.0305	0.5990	10000	10360	ug/L	4	10	
Selenium	0.0364	0.0406	100.0	102.1	ug/L	2	10	
Silver	2.6556	2.5586	100.0	101.9	ug/L	2	10	
Sodium	1.1548	0.9793	10000	11100	ug/L	11	10	c+ ***
Thallium	0.9342	0.8688	50.00	48.83	ug/L	-2	10	
Vanadium	4.7426	3.5786	100.0	100.8	ug/L	1	10	
Zinc	2.4319	0.6623	100.0	105.1	ug/L	5	10	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	811120	-2.41
Scandium	642644	598711	-6.84
Germanium	147548	143932	-2.45
Indium	875996	819929	-6.40
Bismuth	993101	957921	-3.54

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56500483063
 Cal : 56500483001
 Standards: S4983, S4635

File : 11313063
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 19:19

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.7314	0.7259	10000	10780	ug/L	8	10	
Antimony	0.2654	0.2572	100.0	99.23	ug/L	-1	10	
Arsenic	0.5371	0.4822	100.0	98.09	ug/L	-2	10	
Barium	0.1079	0.0997	100.0	101.0	ug/L	1	10	
Beryllium	0.1860	0.1771	100.0	97.65	ug/L	-2	10	
Cadmium	0.5516	0.5090	100.0	100.3	ug/L	0	10	
Calcium	0.0277	0.0191	10000	10220	ug/L	2	10	
Chromium	13.856	3.6086	100.0	97.93	ug/L	-2	10	
Cobalt	4.6374	4.4952	100.0	101.0	ug/L	1	10	
Copper	1.9554	1.2023	100.0	99.43	ug/L	-1	10	
Iron	0.1133	0.0914	10000	10170	ug/L	2	10	
Lead	1.1622	1.1619	100.0	101.5	ug/L	2	10	
Magnesium	0.0992	0.1000	10000	10930	ug/L	9	10	
Manganese	4.8453	4.5278	100.0	99.96	ug/L	0	10	
Molybdenum	1.0813	1.0196	100.0	98.10	ug/L	-2	10	
Nickel	1.5854	0.9711	100.0	98.25	ug/L	-2	10	
Potassium	1.0305	0.5979	10000	10350	ug/L	4	10	
Selenium	0.0364	0.0401	100.0	100.8	ug/L	1	10	
Silver	2.6556	2.5360	100.0	101.0	ug/L	1	10	
Sodium	1.1548	0.9965	10000	11300	ug/L	13	10	c+ ***
Thallium	0.9342	0.8652	50.00	48.63	ug/L	-3	10	
Vanadium	4.7426	3.5437	100.0	99.79	ug/L	0	10	
Zinc	2.4319	0.6427	100.0	101.9	ug/L	2	10	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	782051	-5.90
Scandium	642644	575392	-10.46
Germanium	147548	137481	-6.82
Indium	875996	792053	-9.58
Bismuth	993101	942186	-5.13

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56500483072 File : 11313072
 Cal : 56500483001 Caldate: 13-DEC-2006
 Standards: S4983, S4635

IDF : 1.0
 Time : 13-DEC-2006 20:09

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.7314	0.7309	10000	10850	ug/L	8	10	
Antimony	0.2654	0.2732	100.0	105.4	ug/L	5	10	
Arsenic	0.5371	0.4882	100.0	99.31	ug/L	-1	10	
Barium	0.1079	0.0986	100.0	99.75	ug/L	0	10	
Beryllium	0.1860	0.1788	100.0	98.55	ug/L	-1	10	
Cadmium	0.5516	0.5120	100.0	100.9	ug/L	1	10	
Calcium	0.0277	0.0191	10000	10210	ug/L	2	10	
Chromium	13.856	3.5770	100.0	97.05	ug/L	-3	10	
Cobalt	4.6374	4.4289	100.0	99.51	ug/L	0	10	
Copper	1.9554	1.1784	100.0	97.44	ug/L	-3	10	
Iron	0.1133	0.0910	10000	10120	ug/L	1	10	
Lead	1.1622	1.1565	100.0	101.0	ug/L	1	10	
Magnesium	0.0992	0.1010	10000	11040	ug/L	10	10	
Manganese	4.8453	4.4678	100.0	98.63	ug/L	-1	10	
Molybdenum	1.0813	1.0109	100.0	97.26	ug/L	-3	10	
Nickel	1.5854	0.9537	100.0	96.48	ug/L	-4	10	
Potassium	1.0305	0.5947	10000	10290	ug/L	3	10	
Selenium	0.0364	0.0401	100.0	100.8	ug/L	1	10	
Silver	2.6556	2.5597	100.0	102.0	ug/L	2	10	
Sodium	1.1548	0.9783	10000	11090	ug/L	11	10	c+ ***
Thallium	0.9342	0.8299	50.00	46.64	ug/L	-7	10	
Vanadium	4.7426	3.5015	100.0	98.59	ug/L	-1	10	
Zinc	2.4319	0.6363	100.0	100.8	ug/L	1	10	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	754397	-9.23
Scandium	642644	547796	-14.76
Germanium	147548	131874	-10.62
Indium	875996	756761	-13.61
Bismuth	993101	915119	-7.85

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56500483093
 Cal : 56500483001
 Standards: S4983, S4635

File : 11313093
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 22:04

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.7314	0.7461	10000	11080	ug/L	11	10	c+ ***
Antimony	0.2654	0.2739	100.0	105.7	ug/L	6	10	
Arsenic	0.5371	0.4876	100.0	99.19	ug/L	-1	10	
Barium	0.1079	0.0995	100.0	100.7	ug/L	1	10	
Beryllium	0.1860	0.1749	100.0	96.44	ug/L	-4	10	
Cadmium	0.5516	0.5060	100.0	99.68	ug/L	0	10	
Calcium	0.0277	0.0192	10000	10280	ug/L	3	10	
Chromium	13.856	3.6231	100.0	98.33	ug/L	-2	10	
Cobalt	4.6374	4.5007	100.0	101.1	ug/L	1	10	
Copper	1.9554	1.1853	100.0	98.01	ug/L	-2	10	
Iron	0.1133	0.0916	10000	10190	ug/L	2	10	
Lead	1.1622	1.1563	100.0	101.0	ug/L	1	10	
Magnesium	0.0992	0.1016	10000	11100	ug/L	11	10	c+ ***
Manganese	4.8453	4.5502	100.0	100.4	ug/L	0	10	
Molybdenum	1.0813	1.0064	100.0	96.83	ug/L	-3	10	
Nickel	1.5854	0.9656	100.0	97.69	ug/L	-2	10	
Potassium	1.0305	0.5978	10000	10340	ug/L	3	10	
Selenium	0.0364	0.0395	100.0	99.24	ug/L	-1	10	
Silver	2.6556	2.5509	100.0	101.6	ug/L	2	10	
Sodium	1.1548	0.9796	10000	11100	ug/L	11	10	c+ ***
Thallium	0.9342	0.8330	50.00	46.82	ug/L	-6	10	
Vanadium	4.7426	3.5022	100.0	98.61	ug/L	-1	10	
Zinc	2.4319	0.6466	100.0	102.5	ug/L	3	10	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	776821	-6.53
Scandium	642644	563240	-12.36
Germanium	147548	136072	-7.78
Indium	875996	783060	-10.61
Bismuth	993101	958980	-3.44

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56500483110
 Cal : 56500483001
 Standards: S4983, S4635

File : 11313110
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 23:39

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.7314	0.7548	10000	11210	ug/L	12	10	c+ ***
Antimony	0.2654	0.2678	100.0	103.3	ug/L	3	10	
Arsenic	0.5371	0.4866	100.0	98.99	ug/L	-1	10	
Barium	0.1079	0.0960	100.0	97.20	ug/L	-3	10	
Beryllium	0.1860	0.1724	100.0	95.06	ug/L	-5	10	
Cadmium	0.5516	0.5120	100.0	100.9	ug/L	1	10	
Calcium	0.0277	0.0192	10000	10270	ug/L	3	10	
Chromium	13.856	3.5124	100.0	95.25	ug/L	-5	10	
Cobalt	4.6374	4.3907	100.0	98.65	ug/L	-1	10	
Copper	1.9554	1.1651	100.0	96.33	ug/L	-4	10	
Iron	0.1133	0.0885	10000	9844	ug/L	-2	10	
Lead	1.1622	1.1461	100.0	100.1	ug/L	0	10	
Magnesium	0.0992	0.1024	10000	11200	ug/L	12	10	c+ ***
Manganese	4.8453	4.3524	100.0	96.08	ug/L	-4	10	
Molybdenum	1.0813	1.0108	100.0	97.25	ug/L	-3	10	
Nickel	1.5854	0.9453	100.0	95.63	ug/L	-4	10	
Potassium	1.0305	0.6083	10000	10530	ug/L	5	10	
Selenium	0.0364	0.0399	100.0	100.2	ug/L	0	10	
Silver	2.6556	2.5594	100.0	101.9	ug/L	2	10	
Sodium	1.1548	0.9710	10000	11010	ug/L	10	10	
Thallium	0.9342	0.8203	50.00	46.10	ug/L	-8	10	
Vanadium	4.7426	3.4396	100.0	96.85	ug/L	-3	10	
Zinc	2.4319	0.6267	100.0	99.27	ug/L	-1	10	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	769811	-7.38
Scandium	642644	541174	-15.79
Germanium	147548	129631	-12.14
Indium	875996	756372	-13.66
Bismuth	993101	926582	-6.70

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56500483118
 Cal : 56500483001
 Standards: S4983, S4635

File : 11313118
 Caldate: 13-DEC-2006
 IDF : 1.0
 Time : 14-DEC-2006 00:23

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.7314	0.7505	10000	11140	ug/L	11	10	c+ ***
Antimony	0.2654	0.2665	100.0	102.8	ug/L	3	10	
Arsenic	0.5371	0.4921	100.0	100.1	ug/L	0	10	
Barium	0.1079	0.0954	100.0	96.56	ug/L	-3	10	
Beryllium	0.1860	0.1700	100.0	93.71	ug/L	-6	10	
Cadmium	0.5516	0.5166	100.0	101.8	ug/L	2	10	
Calcium	0.0277	0.0193	10000	10320	ug/L	3	10	
Chromium	13.856	3.5537	100.0	96.40	ug/L	-4	10	
Cobalt	4.6374	4.3800	100.0	98.41	ug/L	-2	10	
Copper	1.9554	1.1642	100.0	96.26	ug/L	-4	10	
Iron	0.1133	0.0885	10000	9839	ug/L	-2	10	
Lead	1.1622	1.1391	100.0	99.51	ug/L	0	10	
Magnesium	0.0992	0.1020	10000	11150	ug/L	12	10	c+ ***
Manganese	4.8453	4.3325	100.0	95.64	ug/L	-4	10	
Molybdenum	1.0813	1.0120	100.0	97.38	ug/L	-3	10	
Nickel	1.5854	0.9451	100.0	95.61	ug/L	-4	10	
Potassium	1.0305	0.6109	10000	10570	ug/L	6	10	
Selenium	0.0364	0.0405	100.0	101.8	ug/L	2	10	
Silver	2.6556	2.5622	100.0	102.1	ug/L	2	10	
Sodium	1.1548	0.9557	10000	10830	ug/L	8	10	
Thallium	0.9342	0.8159	50.00	45.86	ug/L	-8	10	
Vanadium	4.7426	3.4863	100.0	98.17	ug/L	-2	10	
Zinc	2.4319	0.6261	100.0	99.17	ug/L	-1	10	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	769160	-7.46
Scandium	642644	538532	-16.20
Germanium	147548	126691	-14.14
Indium	875996	741380	-15.37
Bismuth	993101	891243	-10.26

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56500483141
 Cal : 56500483001
 Standards: S4983, S4635

File : 11313141
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 02:32

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.7314	0.7379	10000	10960	ug/L	10	10	
Antimony	0.2654	0.2604	100.0	100.5	ug/L	1	10	
Arsenic	0.5371	0.4732	100.0	96.26	ug/L	-4	10	
Barium	0.1079	0.0922	100.0	93.34	ug/L	-7	10	
Beryllium	0.1860	0.1683	100.0	92.78	ug/L	-7	10	
Cadmium	0.5516	0.5019	100.0	98.87	ug/L	-1	10	
Calcium	0.0277	0.0186	10000	9966	ug/L	0	10	
Chromium	13.856	3.4085	100.0	92.37	ug/L	-8	10	
Cobalt	4.6374	4.2397	100.0	95.26	ug/L	-5	10	
Copper	1.9554	1.1213	100.0	92.69	ug/L	-7	10	
Iron	0.1133	0.0860	10000	9561	ug/L	-4	10	
Lead	1.1622	1.1021	100.0	96.28	ug/L	-4	10	
Magnesium	0.0992	0.1005	10000	10990	ug/L	10	10	
Manganese	4.8453	4.2003	100.0	92.72	ug/L	-7	10	
Molybdenum	1.0813	0.9793	100.0	94.22	ug/L	-6	10	
Nickel	1.5854	0.9011	100.0	91.14	ug/L	-9	10	
Potassium	1.0305	0.5982	10000	10350	ug/L	4	10	
Selenium	0.0364	0.0387	100.0	97.29	ug/L	-3	10	
Silver	2.6556	2.5058	100.0	99.80	ug/L	0	10	
Sodium	1.1548	0.9462	10000	10720	ug/L	7	10	
Thallium	0.9342	0.7826	50.00	43.98	ug/L	-12	10	c- ***
Vanadium	4.7426	3.3656	100.0	94.76	ug/L	-5	10	
Zinc	2.4319	0.6049	100.0	95.74	ug/L	-4	10	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	752959	-9.41
Scandium	642644	529730	-17.57
Germanium	147548	126881	-14.01
Indium	875996	750196	-14.36
Bismuth	993101	951158	-4.22

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
Seqnum : 56500483168
Cal : 56500483001
Standards: S4983, S4635

File : 11313168
Caldate: 13-DEC-2006

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IDF      : 1.0
Time     : 14-DEC-2006 05:03
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Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.7314	0.7812	10000	11600	ug/L	16	10	C+ ***
Antimony	0.2654	0.2667	100.0	102.9	ug/L	3	10	
Arsenic	0.5371	0.4768	100.0	96.98	ug/L	-3	10	
Barium	0.1079	0.0940	100.0	95.12	ug/L	-5	10	
Beryllium	0.1860	0.1692	100.0	93.25	ug/L	-7	10	
Cadmium	0.5516	0.5129	100.0	101.0	ug/L	1	10	
Calcium	0.0277	0.0194	10000	10390	ug/L	4	10	
Chromium	13.856	3.2650	100.0	88.38	ug/L	-12	10	
Cobalt	4.6374	4.3434	100.0	97.59	ug/L	-2	10	
Copper	1.9554	1.1385	100.0	94.13	ug/L	-6	10	
Iron	0.1133	0.0887	10000	9864	ug/L	-1	10	
Lead	1.1622	1.1582	100.0	101.2	ug/L	1	10	
Magnesium	0.0992	0.1055	10000	11530	ug/L	15	10	C+ ***
Manganese	4.8453	4.3126	100.0	95.20	ug/L	-5	10	
Molybdenum	1.0813	0.9868	100.0	94.95	ug/L	-5	10	
Nickel	1.5854	0.9177	100.0	92.83	ug/L	-7	10	
Potassium	1.0305	0.6240	10000	10800	ug/L	8	10	
Selenium	0.0364	0.0389	100.0	97.66	ug/L	-2	10	
Silver	2.6556	2.5597	100.0	102.0	ug/L	2	10	
Sodium	1.1548	0.9916	10000	11240	ug/L	12	10	
Thallium	0.9342	0.8154	50.00	45.83	ug/L	-8	10	
Vanadium	4.7426	3.3227	100.0	93.55	ug/L	-6	10	
Zinc	2.4319	0.6170	100.0	97.70	ug/L	-2	10	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	708830	-14.71
Scandium	642644	478772	-25.50
Germanium	147548	116775	-20.86
Indium	875996	687660	-21.50
Bismuth	993101	873618	-12.03

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56500483020
 Cal : 56500483001

File : 11313020
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 15:08

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[9.699]	25.00	2.752	ug/L	!ib
Antimony	[0.02094]	0.2500	0.005910	ug/L	!ib
Arsenic	ND	0.5000	0.1120	ug/L	
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	ND	0.2500	0.002016	ug/L	
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	[23.33]	25.00	6.782	ug/L	!ib
Chromium	[0.08424]	0.2500	0.01315	ug/L	!ib
Cobalt	ND	0.2500	0.003116	ug/L	
Copper	[0.04094]	0.2500	0.02110	ug/L	!ib
Iron	[19.51]	25.00	3.223	ug/L	!ib
Lead	ND	0.2500	0.002523	ug/L	
Magnesium	[9.910]	25.00	1.907	ug/L	!ib
Manganese	ND	0.5000	0.03082	ug/L	
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	[11.91]	25.00	3.213	ug/L	!ib
Selenium	ND	0.5000	0.6002	ug/L	
Silver	ND	0.2500	0.005272	ug/L	
Sodium	[33.34]	50.00	3.640	ug/L	!ib
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	785416	-5.50
Scandium	642644	631072	-1.80
Germanium	147548	152041	3.05
Indium	875996	874114	-0.21
Bismuth	993101	997556	0.45

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56500483044
 Cal : 56500483001

File : 11313044
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 17:22

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[8.398]	25.00	2.752	ug/L	!ib
Antimony	[0.05793]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.2877]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.03391]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.2500	0.01315	ug/L	
Cobalt	[0.02865]	0.2500	0.003116	ug/L	!ib
Copper	[0.04982]	0.2500	0.02110	ug/L	!ib
Iron	[10.58]	25.00	3.223	ug/L	!ib
Lead	[0.02264]	0.2500	0.002523	ug/L	!ib
Magnesium	[7.469]	25.00	1.907	ug/L	!ib
Manganese	[0.05483]	0.5000	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	[0.04886]	0.2500	0.01875	ug/L	!ib
Potassium	[6.110]	25.00	3.213	ug/L	!ib
Selenium	ND	0.5000	0.6002	ug/L	
Silver	[0.02216]	0.2500	0.005272	ug/L	!ib
Sodium	[29.70]	50.00	3.640	ug/L	!ib
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	853735	2.72
Scandium	642644	616274	-4.10
Germanium	147548	148386	0.57
Indium	875996	862856	-1.50
Bismuth	993101	1049773	5.71

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56500483075
 Cal : 56500483001

File : 11313075
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 20:25

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[3.873]	25.00	2.752	ug/L	!ib
Antimony	[0.01001]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.2168]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.01113]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.2500	0.01315	ug/L	
Cobalt	[0.007155]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	ND	25.00	3.223	ug/L	
Lead	[0.006912]	0.2500	0.002523	ug/L	!ib
Magnesium	[4.831]	25.00	1.907	ug/L	!ib
Manganese	[0.05509]	0.5000	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	[8.879]	25.00	3.213	ug/L	!ib
Selenium	ND	0.5000	0.6002	ug/L	
Silver	[0.008666]	0.2500	0.005272	ug/L	!ib
Sodium	111.8	50.00	3.640	ug/L	ib ***
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	792141	-4.69
Scandium	642644	583984	-9.13
Germanium	147548	140764	-4.60
Indium	875996	822893	-6.06
Bismuth	993101	1035332	4.25

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56500483096
 Cal : 56500483001

File : 11313096
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 22:21

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[8.976]	25.00	2.752	ug/L	!ib
Antimony	[0.06041]	0.2500	0.005910	ug/L	!ib
Arsenic	ND	0.5000	0.1120	ug/L	
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.01726]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	[7.172]	25.00	6.782	ug/L	!ib
Chromium	ND	0.2500	0.01315	ug/L	
Cobalt	[0.01569]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	[8.971]	25.00	3.223	ug/L	!ib
Lead	[0.01189]	0.2500	0.002523	ug/L	!ib
Magnesium	[11.58]	25.00	1.907	ug/L	!ib
Manganese	[0.05993]	0.5000	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	[0.03661]	0.2500	0.01875	ug/L	!ib
Potassium	[9.955]	25.00	3.213	ug/L	!ib
Selenium	ND	0.5000	0.6002	ug/L	
Silver	[0.01339]	0.2500	0.005272	ug/L	!ib
Sodium	69.18	50.00	3.640	ug/L	ib ***
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	792073	-4.70
Scandium	642644	559939	-12.87
Germanium	147548	136379	-7.57
Indium	875996	794696	-9.28
Bismuth	993101	1007855	1.49

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56500483112
 Cal : 56500483001

File : 11313112
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 23:50

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[5.821]	25.00	2.752	ug/L	!ib
Antimony	[0.04278]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.2248]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.03268]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.2500	0.01315	ug/L	
Cobalt	[0.03306]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	ND	25.00	3.223	ug/L	
Lead	[0.02356]	0.2500	0.002523	ug/L	!ib
Magnesium	[10.32]	25.00	1.907	ug/L	!ib
Manganese	[0.08468]	0.5000	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	[0.03657]	0.2500	0.01875	ug/L	!ib
Potassium	[6.309]	25.00	3.213	ug/L	!ib
Selenium	ND	0.5000	0.6002	ug/L	
Silver	[0.02248]	0.2500	0.005272	ug/L	!ib
Sodium	69.90	50.00	3.640	ug/L	ib ***
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	804900	-3.16
Scandium	642644	557219	-13.29
Germanium	147548	135140	-8.41
Indium	875996	795441	-9.20
Bismuth	993101	1019026	2.61

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56500483121
 Cal : 56500483001

File : 11313121
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 00:40

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[11.88]	25.00	2.752	ug/L	!ib
Antimony	[0.01184]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.2837]	0.5000	0.1120	ug/L	!ib
Barium	[0.05396]	0.2500	0.03444	ug/L	!ib
Beryllium	[0.01444]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.2500	0.01315	ug/L	
Cobalt	[0.01675]	0.2500	0.003116	ug/L	!ib
Copper	[0.03788]	0.2500	0.02110	ug/L	!ib
Iron	[7.975]	25.00	3.223	ug/L	!ib
Lead	[0.01595]	0.2500	0.002523	ug/L	!ib
Magnesium	[17.35]	25.00	1.907	ug/L	!ib
Manganese	[0.3000]	0.5000	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	[0.08363]	0.2500	0.01875	ug/L	!ib
Potassium	[7.151]	25.00	3.213	ug/L	!ib
Selenium	ND	0.5000	0.6002	ug/L	
Silver	[0.006181]	0.2500	0.005272	ug/L	!ib
Sodium	[47.66]	50.00	3.640	ug/L	!ib
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	806147	-3.01
Scandium	642644	550274	-14.37
Germanium	147548	130874	-11.30
Indium	875996	777358	-11.26
Bismuth	993101	942328	-5.11

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56500483144
 Cal : 56500483001

File : 11313144
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 02:49

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[6.030]	25.00	2.752	ug/L	!ib
Antimony	[0.1102]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.1791]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.01066]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.2500	0.01315	ug/L	
Cobalt	[0.01114]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	ND	25.00	3.223	ug/L	
Lead	[0.01488]	0.2500	0.002523	ug/L	!ib
Magnesium	[8.227]	25.00	1.907	ug/L	!ib
Manganese	[0.07313]	0.5000	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	[8.956]	25.00	3.213	ug/L	!ib
Selenium	ND	0.5000	0.6002	ug/L	
Silver	[0.01122]	0.2500	0.005272	ug/L	!ib
Sodium	[36.35]	50.00	3.640	ug/L	!ib
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	761280	-8.40
Scandium	642644	518329	-19.34
Germanium	147548	124943	-15.32
Indium	875996	756497	-13.64
Bismuth	993101	937707	-5.58

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56500483161
 Cal : 56500483001

File : 11313161
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 04:24

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[4.749]	25.00	2.752	ug/L	!ib
Antimony	[0.04003]	0.2500	0.005910	ug/L	!ib
Arsenic	ND	0.5000	0.1120	ug/L	
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.004416]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.2500	0.01315	ug/L	
Cobalt	ND	0.2500	0.003116	ug/L	
Copper	ND	0.2500	0.02110	ug/L	
Iron	ND	25.00	3.223	ug/L	
Lead	[0.008369]	0.2500	0.002523	ug/L	!ib
Magnesium	[7.414]	25.00	1.907	ug/L	!ib
Manganese	[0.06410]	0.5000	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	[6.843]	25.00	3.213	ug/L	!ib
Selenium	ND	0.5000	0.6002	ug/L	
Silver	[0.005873]	0.2500	0.005272	ug/L	!ib
Sodium	[46.49]	50.00	3.640	ug/L	!ib
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	726998	-12.53
Scandium	642644	491571	-23.51
Germanium	147548	118857	-19.44
Indium	875996	726574	-17.06
Bismuth	993101	911809	-8.19

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56500483170
 Cal : 56500483001

File : 11313170
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 05:14

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[6.843]	25.00	2.752	ug/L	!ib
Antimony	[0.06887]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.4952]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.02956]	0.2500	0.002016	ug/L	!ib
Cadmium	[0.06854]	0.2500	0.05722	ug/L	!ib
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.2500	0.01315	ug/L	
Cobalt	[0.03180]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	ND	25.00	3.223	ug/L	
Lead	[0.03233]	0.2500	0.002523	ug/L	!ib
Magnesium	[13.42]	25.00	1.907	ug/L	!ib
Manganese	[0.05917]	0.5000	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	[0.05226]	0.2500	0.01875	ug/L	!ib
Potassium	[6.039]	25.00	3.213	ug/L	!ib
Selenium	ND	0.5000	0.6002	ug/L	
Silver	[0.02761]	0.2500	0.005272	ug/L	!ib
Sodium	[46.69]	50.00	3.640	ug/L	!ib
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	747567	-10.05
Scandium	642644	498617	-22.41
Germanium	147548	122056	-17.28
Indium	875996	734458	-16.16
Bismuth	993101	935956	-5.75

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56500483021
 Cal : 56500483001
 Standards: S4984, S4635

File : 11313021
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 15:14

Analyte	Quant	RL	Units	Flags
Antimony	2.539	0.2500	ug/L	
Arsenic	[0]	0.5000	ug/L	
Barium	1.412	0.2500	ug/L	
Beryllium	[0.01508]	0.2500	ug/L	
Cadmium	[0.08214]	0.2500	ug/L	
Chromium	3.648	0.2500	ug/L	
Cobalt	2.910	0.2500	ug/L	
Copper	2.451	0.2500	ug/L	
Lead	1.585	0.2500	ug/L	
Manganese	1.415	0.5000	ug/L	
Nickel	5.307	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1627]	0.2500	ug/L	
Thallium	[0.009351]	0.1250	ug/L	
Vanadium	[0.03716]	0.2500	ug/L	
Zinc	3.605	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	106600	ug/L	107
Calcium	300000	336800	ug/L	112
Iron	250000	255600	ug/L	102
Magnesium	100000	107700	ug/L	108
Molybdenum	2000	2057	ug/L	103
Potassium	100000	110000	ug/L	110
Sodium	250000	241700	ug/L	97

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	636953	-23.36
Scandium	642644	563826	-12.26
Germanium	147548	128561	-12.87
Indium	875996	686727	-21.61
Bismuth	993101	610786	-38.50

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56500483024
 Cal : 56500483001
 Standards: S4985, S4635

File : 11313024
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 15:30

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	97220	ug/L	-3		
Arsenic	100.0	94.72	ug/L	-5	20	
Cadmium	100.0	86.70	ug/L	-13	20	
Calcium	300000	300500	ug/L	0		
Chromium	200.0	197.3	ug/L	-1	20	
Cobalt	200.0	186.0	ug/L	-7	20	
Copper	200.0	174.4	ug/L	-13	20	
Iron	250000	226800	ug/L	-9		
Magnesium	100000	98160	ug/L	-2		
Manganese	200.0	189.0	ug/L	-6	20	
Molybdenum	2000	1881	ug/L	-6		
Nickel	200.0	178.8	ug/L	-11	20	
Potassium	100000	98500	ug/L	-2		
Selenium	100.0	81.01	ug/L	-19	20	
Silver	50.00	43.70	ug/L	-13	20	
Sodium	250000	223400	ug/L	-11		
Vanadium	200.0	203.3	ug/L	2	20	
Zinc	100.0	80.12	ug/L	-20	20	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Scandium	642644	588161	-8.48
Germanium	147548	134513	-8.83

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56500483065
 Cal : 56500483001

File : 11313065
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 19:30

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[3.924]	25.00	2.752	ug/L	!ib
Antimony	[0.05674]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.3377]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.01849]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.2500	0.01315	ug/L	
Cobalt	[0.01943]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	ND	25.00	3.223	ug/L	
Lead	[0.01365]	0.2500	0.002523	ug/L	!ib
Magnesium	[4.363]	25.00	1.907	ug/L	!ib
Manganese	[0.08007]	0.5000	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	[0.05017]	0.2500	0.01875	ug/L	!ib
Potassium	[12.83]	25.00	3.213	ug/L	!ib
Selenium	ND	0.5000	0.6002	ug/L	
Silver	[0.01267]	0.2500	0.005272	ug/L	!ib
Sodium	246.1	50.00	3.640	ug/L	ib ***
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.2500	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	819168	-1.44
Scandium	642644	589799	-8.22
Germanium	147548	143777	-2.56
Indium	875996	842268	-3.85
Bismuth	993101	1061467	6.88

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56500483076
 Cal : 56500483001
 Standards: S4984, S4635

File : 11313076
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 20:31

Analyte	Quant	RL	Units	Flags
Antimony	2.500	0.2500	ug/L	
Arsenic	[0]	0.5000	ug/L	
Barium	1.392	0.2500	ug/L	
Beryllium	[0.01204]	0.2500	ug/L	
Cadmium	[0.1941]	0.2500	ug/L	
Chromium	2.495	0.2500	ug/L	
Cobalt	2.783	0.2500	ug/L	
Copper	2.346	0.2500	ug/L	
Lead	1.564	0.2500	ug/L	
Manganese	1.395	0.5000	ug/L	
Nickel	5.043	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1812]	0.2500	ug/L	
Thallium	[0.008073]	0.1250	ug/L	
Vanadium	[0.1217]	0.2500	ug/L	
Zinc	3.613	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	116900	ug/L	117
Calcium	300000	345000	ug/L	115
Iron	250000	250900	ug/L	100
Magnesium	100000	117600	ug/L	118
Molybdenum	2000	2129	ug/L	106
Potassium	100000	114800	ug/L	115
Sodium	250000	264500	ug/L	106

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	661151	-20.45
Scandium	642644	512600	-20.24
Germanium	147548	120235	-18.51
Indium	875996	660917	-24.55
Bismuth	993101	666688	-32.87

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56500483077
 Cal : 56500483001
 Standards: S4985, S4635

File : 11313077
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 13-DEC-2006 20:36

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	105300	ug/L	5		
Arsenic	100.0	98.39	ug/L	-2	20	
Cadmium	100.0	92.54	ug/L	-7	20	
Calcium	300000	316000	ug/L	5		
Chromium	200.0	201.1	ug/L	1	20	
Cobalt	200.0	190.9	ug/L	-5	20	
Copper	200.0	177.5	ug/L	-11	20	
Iron	250000	230300	ug/L	-8		
Magnesium	100000	105000	ug/L	5		
Manganese	200.0	195.3	ug/L	-2	20	
Molybdenum	2000	2011	ug/L	1		
Nickel	200.0	179.8	ug/L	-10	20	
Potassium	100000	105200	ug/L	5		
Selenium	100.0	86.36	ug/L	-14	20	
Silver	50.00	45.95	ug/L	-8	20	
Sodium	250000	235300	ug/L	-6		
Vanadium	200.0	211.8	ug/L	6	20	
Zinc	100.0	85.90	ug/L	-14	20	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Scandium	642644	530802	-17.40
Germanium	147548	119967	-18.69

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05	File : 11313122	IDF : 1.0
Seqnum : 56500483122	Caldate: 13-DEC-2006	Time : 14-DEC-2006 00:46
Cal : 56500483001		
Standards: S4984, S4635		

Analyte	Quant	RL	Units	Flags
Antimony	2.491	0.2500	ug/L	
Arsenic	[0]	0.5000	ug/L	
Barium	1.425	0.2500	ug/L	
Beryllium	[0.01450]	0.2500	ug/L	
Cadmium	[0.2001]	0.2500	ug/L	
Chromium	2.371	0.2500	ug/L	
Cobalt	2.733	0.2500	ug/L	
Copper	2.347	0.2500	ug/L	
Lead	1.531	0.2500	ug/L	
Manganese	1.510	0.5000	ug/L	
Nickel	5.115	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1835]	0.2500	ug/L	
Thallium	[0.008879]	0.1250	ug/L	
Vanadium	[0.01699]	0.2500	ug/L	
Zinc	3.629	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	118000	ug/L	118
Calcium	300000	346900	ug/L	116
Iron	250000	247000	ug/L	99
Magnesium	100000	118600	ug/L	119
Molybdenum	2000	2163	ug/L	108
Potassium	100000	115800	ug/L	116
Sodium	250000	262900	ug/L	105

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	648968	-21.92
Scandium	642644	496781	-22.70
Germanium	147548	114510	-22.39
Indium	875996	649419	-25.87
Bismuth	993101	658021	-33.74

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56500483123
 Cal : 56500483001
 Standards: S4985, S4635

File : 11313123
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 00:51

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	107400	ug/L	7		
Arsenic	100.0	98.17	ug/L	-2	20	
Cadmium	100.0	95.06	ug/L	-5	20	
Calcium	300000	320100	ug/L	7		
Chromium	200.0	200.6	ug/L	0	20	
Cobalt	200.0	189.5	ug/L	-5	20	
Copper	200.0	175.3	ug/L	-12	20	
Iron	250000	227500	ug/L	-9		
Magnesium	100000	106100	ug/L	6		
Manganese	200.0	194.6	ug/L	-3	20	
Molybdenum	2000	2070	ug/L	4		
Nickel	200.0	177.2	ug/L	-11	20	
Potassium	100000	107400	ug/L	7		
Selenium	100.0	86.50	ug/L	-14	20	
Silver	50.00	47.53	ug/L	-5	20	
Sodium	250000	233100	ug/L	-7		
Vanadium	200.0	211.1	ug/L	6	20	
Zinc	100.0	84.71	ug/L	-15	20	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Scandium	642644	501214	-22.01
Germanium	147548	112776	-23.57

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56500483158
 Cal : 56500483001
 Standards: S4983, S4635

File : 11313158
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 04:07

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.7314	0.7629	10000	11330	ug/L	13	10	c+ ***
Antimony	0.2654	0.2622	100.0	101.2	ug/L	1	10	
Arsenic	0.5371	0.4784	100.0	97.31	ug/L	-3	10	
Barium	0.1079	0.0928	100.0	93.93	ug/L	-6	10	
Beryllium	0.1860	0.1669	100.0	92.02	ug/L	-8	10	
Cadmium	0.5516	0.5150	100.0	101.5	ug/L	2	10	
Calcium	0.0277	0.0191	10000	10200	ug/L	2	10	
Chromium	13.856	3.2705	100.0	88.53	ug/L	-11	10	c- ***
Cobalt	4.6374	4.2872	100.0	96.33	ug/L	-4	10	
Copper	1.9554	1.1379	100.0	94.07	ug/L	-6	10	
Iron	0.1133	0.0862	10000	9588	ug/L	-4	10	
Lead	1.1622	1.1453	100.0	100.1	ug/L	0	10	
Magnesium	0.0992	0.1034	10000	11310	ug/L	13	10	c+ ***
Manganese	4.8453	4.2369	100.0	93.53	ug/L	-6	10	
Molybdenum	1.0813	1.0004	100.0	96.25	ug/L	-4	10	
Nickel	1.5854	0.9166	100.0	92.71	ug/L	-7	10	
Potassium	1.0305	0.6163	10000	10670	ug/L	7	10	
Selenium	0.0364	0.0388	100.0	97.49	ug/L	-3	10	
Silver	2.6556	2.5624	100.0	102.1	ug/L	2	10	
Sodium	1.1548	0.9698	10000	10990	ug/L	10	10	
Thallium	0.9342	0.8057	50.00	45.28	ug/L	-9	10	
Vanadium	4.7426	3.3021	100.0	92.97	ug/L	-7	10	
Zinc	2.4319	0.6103	100.0	96.61	ug/L	-3	10	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	726576	-12.58
Scandium	642644	497529	-22.58
Germanium	147548	120034	-18.65
Indium	875996	720267	-17.78
Bismuth	993101	904616	-8.91

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56500483172
 Cal : 56500483001
 Standards: S4984, S4635

File : 11313172
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 05:25

Analyte	Quant	RL	Units	Flags
Antimony	2.465	0.2500	ug/L	
Arsenic	[0]	0.5000	ug/L	
Barium	1.344	0.2500	ug/L	
Beryllium	[0.008847]	0.2500	ug/L	
Cadmium	[0.1680]	0.2500	ug/L	
Chromium	2.202	0.2500	ug/L	
Cobalt	2.694	0.2500	ug/L	
Copper	2.379	0.2500	ug/L	
Lead	1.514	0.2500	ug/L	
Manganese	1.374	0.5000	ug/L	
Nickel	4.990	0.2500	ug/L	
Selenium	[0]	0.5000	ug/L	
Silver	[0.1813]	0.2500	ug/L	
Thallium	[0.007062]	0.1250	ug/L	
Vanadium	[0.1704]	0.2500	ug/L	
Zinc	3.363	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	119900	ug/L	120
Calcium	300000	343800	ug/L	115
Iron	250000	245700	ug/L	98
Magnesium	100000	119500	ug/L	120
Molybdenum	2000	2214	ug/L	111
Potassium	100000	116700	ug/L	117
Sodium	250000	267700	ug/L	107

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Lithium	831127	587259	-29.34
Scandium	642644	454801	-29.23
Germanium	147548	104774	-28.99
Indium	875996	617333	-29.53
Bismuth	993101	656091	-33.94

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56500483173
 Cal : 56500483001
 Standards: S4985, S4635

File : 11313173
 Caldate: 13-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 05:30

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	107600	ug/L	8		
Arsenic	100.0	95.85	ug/L	-4	20	
Cadmium	100.0	97.77	ug/L	-2	20	
Calcium	300000	316600	ug/L	6		
Chromium	200.0	199.9	ug/L	0	20	
Cobalt	200.0	187.8	ug/L	-6	20	
Copper	200.0	171.7	ug/L	-14	20	
Iron	250000	223700	ug/L	-11		
Magnesium	100000	105800	ug/L	6		
Manganese	200.0	188.3	ug/L	-6	20	
Molybdenum	2000	2101	ug/L	5		
Nickel	200.0	174.6	ug/L	-13	20	
Potassium	100000	106900	ug/L	7		
Selenium	100.0	84.54	ug/L	-15	20	
Silver	50.00	48.33	ug/L	-3	20	
Sodium	250000	233800	ug/L	-6		
Vanadium	200.0	211.6	ug/L	6	20	
Zinc	100.0	81.81	ug/L	-18	20	

ISTD (ICALBLK 11313004)	ICALBLK Abund	Abund	%Drift
Scandium	642644	464552	-27.71
Germanium	147548	103535	-29.83

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 13-DEC-2006
Sequence: 56500483
Instrument ID: MET05
(11313)
ICALBLK Filename: 11313004
Date Analyzed: 13-DEC-2006
Time Analyzed: 13:40

	IS1 (LI READING	IS2 (SC READING	IS3 (GE READING	IS4 (IN READING	IS5 (BI READING	IS6 (TB READING
ICALBLK STD	831127	642644	147548	875996	993101	1415596
LOWER LIMIT	249338	192793	44264	262799	297930	424679
UPPER LIMIT	997352	771173	177057	1051195	1191722	1698715

TYPE	SAMPLE	#							
ICB		020	785416	631072	152041	874114	997556	1442605	
ICSA		021	636953	563826	128561	686727	610786	1094314	
BLANK	QC367960	028	668963	487433	131161	651500	746174	1101192	
BLANK	QC367981	030	704355	506656	128534	682885	789287	1151008	
BS	QC367982	031	703791	538567	127428	728541	838234	1283554	
BSD	QC367983	032	734527	561617	131443	757438	854306	1304312	
MSS	191351-001	034	797747	574076	127368	710998	703332	1206772	
BLANK	QC367981	037	725767	499354	123304	667335	772226	1144617	
BS	QC367982	038	743760	540719	126246	718254	816256	1256423	
CCV		042	811120	598711	143932	819929	957921	1434147	
CCB		044	853735	616274	148386	862856	1049773	1489701	
BSD	QC367983	046	744776	540218	125878	723576	823951	1242929	
MSS	191351-001	048	837640	585698	129488	715395	731151	1223758	
SER	QC367986	049	857824	622439	143900	822900	904027	1425450	
MS	QC367984	050	814236	607752	132345	739405	762483	1315411	
MSD	QC367985	051	776840	557304	122133	679156	707493	1193408	
PDS	QC367987	052	768761	538886	120274	659795	701844	1169663	
SAMPLE	191351-003	054	708344	529141	115558	647856	671489	1145265	
SAMPLE	191351-005	055	686813	524016	113079	639766	647179	1126038	
BLANK	QC367981	058	702991	468986	120657	631834	739198	1071909	
SAMPLE	191351-006	059	608499	461646	99146	534490	460179	842829	
CCV		063	782051	575392	137481	792053	942186	1423029	
CCB		065	819168	589799	143777	842268	1061467	1452454	
SAMPLE	191351-008	067	738089	511772	124865	704515	821708	1201608	
SAMPLE	191364-002	068	710629	519059	118406	647708	707817	1180020	
CCV		072	754397	547796	131874	756761	915119	1354630	

* = Outside QC Limits

00107

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 13-DEC-2006
Sequence: 56500483
Instrument ID: MET05

(113133)
ICALBLK Filename: 11313004
Date Analyzed: 13-DEC-2006
Time Analyzed: 13:40

TYPE	SAMPLE	#							
SER	QC368133	134	777148	518777	124798	735476	895029	1275102	
MS	QC368131	135	669239	467580	108346	641102	751187	1103733	
MSD	QC368132	136	666205	465952	107764	632753	741976	1108453	
MS	QC368217	137	662697	479967	107472	656764	752433	1119981	
CCV		141	752959	529730	126881	750196	951158	1305790	
CCB		144	761280	518329	124943	756497	937707	1283688	
MSD	QC368218	145	652736	462037	105540	631277	738779	1094369	
PDS	QC368134	146	682806	481362	109024	658019	759134	1125194	
SAMPLE	191314-001	147	692105	467913	110312	644370	756794	1103496	
SAMPLE	191314-004	148	760707	504640	115867	676405	781873	1181394	
SAMPLE	191314-005	149	731801	502664	114961	671113	795320	1192776	
SAMPLE	191314-006	150	819629	563097	125156	731105	810634	1275637	
SAMPLE	191314-009	151	657365	472793	103194	633859	699812	1073835	
SAMPLE	191314-010	152	708900	507402	111571	699542	762156	1142954	
MSS	191314-011	153	631193	431869	98518	589467	684873	923638	
SAMPLE	191314-012	154	600039	438099	97225	591996	679702	1011982	
CCV		158	726576	497529	120034	720267	904616	1253533	
CCB		161	726998	491571	118857	726574	911809	1213639	
SAMPLE	191314-014	162	654408	445356	102641	622253	733711	1051485	
SAMPLE	191314-015	163	685672	471074	108847	638174	754191	1123907	
SAMPLE	191314-016	164	724233	512671	115944	688899	799156	1213342	
CCV		168	708830	478772	116775	687660	873618	1202157	
CCB		170	747567	498617	122056	734458	935956	1250985	
ICSA		172	587259	454801	104774	617333	656091	1026463	

* = Outside QC Limits

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56500483 Instrument: MET05
Analytical Method: EPA 6020 Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 13-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds Used	>LR
001	11313001	TUN				13-DEC-2006	13:23	1.0				1	
002	11313002	X	RINSE			13-DEC-2006	13:29	1.0				2	
003	11313003	X	RINSE			13-DEC-2006	13:34	1.0				2	
004	11313004	ICALBLK	STD-BLANK			13-DEC-2006	13:40	1.0				2	
005	11313005	ICAL	CS1			13-DEC-2006	13:45	1.0				3	
006	11313006	ICAL	CS2			13-DEC-2006	13:51	1.0				4	
007	11313007	ICAL	CS3			13-DEC-2006	13:56	1.0				5	
008	11313008	ICAL	CS4			13-DEC-2006	14:02	1.0				6	
009	11313009	ICAL	CS5			13-DEC-2006	14:07	1.0				7	
010	11313010	ICAL	CS6			13-DEC-2006	14:13	1.0				8	
011	11313011	X	RINSE			13-DEC-2006	14:18	1.0				2	
012	11313012	ICV				13-DEC-2006	14:24	1.0			1	9	
013	11313013	X	RINSE			13-DEC-2006	14:29	1.0				2	
014	11313014	X				13-DEC-2006	14:35	1.0				2	
015	11313015	X				13-DEC-2006	14:40	1.0				2	
016	11313016	X				13-DEC-2006	14:46	1.0				10	2
017	11313017	X	RINSE			13-DEC-2006	14:51	1.0				2	
018	11313018	X				13-DEC-2006	14:57	1.0				2	
019	11313019	X				13-DEC-2006	15:02	1.0				2	
020	11313020	ICB				13-DEC-2006	15:08	1.0			1	2	
021	11313021	ICSA				13-DEC-2006	15:14	1.0			1	10	2
022	11313022	X				13-DEC-2006	15:19	1.0				11	2
023	11313023	X	RINSE			13-DEC-2006	15:24	1.0				2	
024	11313024	ICSAB				13-DEC-2006	15:30	1.0			1	11	2
025	11313025	X	RINSE			13-DEC-2006	15:35	1.0				2	8:CA=300500
026	11313026	X	RINSE			13-DEC-2006	15:41	1.0				2	
027	11313027	X	RINSE			13-DEC-2006	15:46	1.0				2	
028	11313028	BLANK	QC367960			120280 Filtra	13-DEC-2006	15:52	1.0		1	2	
029	11313029	X	RINSE			13-DEC-2006	15:58	1.0				2	
030	11313030	BLANK	QC367981			120288 Water	13-DEC-2006	16:03	1.0		1	2	

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327
Flags used: SPK=5% spike rule

Analyst:

Date:

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56500483 Instrument: MET05
Analytical Method: EPA 6020

Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 13-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
031	11313031	BS	QC367982	120288	Water	13-DEC-2006 16:09	1.0	1.0	1	1	1	2		
032	11313032	BSD	QC367983	120288	Water	13-DEC-2006 16:14	1.0	1.0	1	1	1	2		
033	11313033	X	RINSE			13-DEC-2006 16:20	1.0					2		
034	11313034	MSS	191351-001	120288	Water	13-DEC-2006 16:27	1.0					2		
035	11313035	X	RINSE			13-DEC-2006 16:32	1.0	1.0	3	1	1	2		2:CA=21790.0
036	11313036	X	RINSE			13-DEC-2006 16:38	1.0					2		
037	11313037	BLANK	QC367981	120288	Water	13-DEC-2006 16:43	1.0	1.0	1	1	1	2		
038	11313038	BS	QC367982	120288	Water	13-DEC-2006 16:49	1.0	1.0	1	1	1	2		
039	11313039	X	RINSE			13-DEC-2006 16:54	1.0					2		
040	11313040	X	RINSE			13-DEC-2006 17:00	1.0					2		
041	11313041	X	RINSE			13-DEC-2006 17:05	1.0					2		
042	11313042	CCV				13-DEC-2006 17:11	1.0					2		
043	11313043	X	RINSE			13-DEC-2006 17:16	1.0	1.0	1	1	1	12	2	
044	11313044	CCB				13-DEC-2006 17:22	1.0	1.0				2		
045	11313045	X				13-DEC-2006 17:28	1.0					2		
046	11313046	BSD	QC367983	120288	Water	13-DEC-2006 17:33	1.0	1.0	1	1	1	2		
047	11313047	X	RINSE			13-DEC-2006 17:39	1.0					2		
048	11313048	MSS	191351-001	120288	Water	13-DEC-2006 17:44	1.0	1.0	3	1	1	2		2:CA=21830.0
049	11313049	SER	QC367986	120288	Water	13-DEC-2006 17:50	5.0	1.0				2		2:NA=80500.0
050	11313050	MS	QC367984	120288	Water	13-DEC-2006 17:55	1.0	1.0				2		2:CA=29750.0
051	11313051	MSD	QC367985	120288	Water	13-DEC-2006 18:01	1.0	1.0	1	1	1	2		3:CA=31180.0
052	11313052	PDS	QC367987	120288	Water	13-DEC-2006 18:06	1.0	1.0	1	1	1	13	14	2
053	11313053	X	RINSE			13-DEC-2006 18:11	1.0					2		3:CA=30920.0
054	11313054	SAMPLE	191351-003	120288	Water	13-DEC-2006 18:17	1.0	1.0				2		3:MG=65590.0
055	11313055	SAMPLE	191351-005	120288	Water	13-DEC-2006 18:23	1.0	1.0				2		3:CA=67180.0
056	11313056	X	RINSE			13-DEC-2006 18:28	1.0					2		
057	11313057	X	RINSE			13-DEC-2006 18:41	1.0					2		
058	11313058	BLANK	QC367981	120288	Water	13-DEC-2006 18:46	1.0	1.0	1	1	1	2		
059	11313059	SAMPLE	191351-006	120288	Water	13-DEC-2006 18:52	1.0	1.0	1	1	1	2		3:V=670.300
060	11313060	X	RINSE			13-DEC-2006 19:02	1.0					2		

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327
Flags used: SPK=5% spike rule

Analyst:  Date: 12/14/06

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56500483 Instrument: MET05
Analytical Method: EPA 6020 Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 13-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Std's	Used	>LR
061	11313061	X	RINSE			13-DEC-2006 19:07	1.0					2		
062	11313062	X	RINSE			13-DEC-2006 19:13	1.0					2		
063	11313063	CCV				13-DEC-2006 19:19	1.0	1.0	1		1	12	2	
064	11313064	X	RINSE			13-DEC-2006 19:24	1.0					2		
065	11313065	CCB				13-DEC-2006 19:30	1.0	1.0	1		1	2		
066	11313066	X				13-DEC-2006 19:35	1.0	1.0	1		1	2		
067	11313067	SAMPLE	191351-008	120288	Water	13-DEC-2006 19:41	1.0	1.0	1		1	2		
068	11313068	SAMPLE	191364-002	120288	Water	13-DEC-2006 19:46	1.0	1.0			1	2		3:NA=224500
069	11313069	X	RINSE			13-DEC-2006 19:52	1.0					2		
070	11313070	X	RINSE			13-DEC-2006 19:57	1.0					2		
071	11313071	X	RINSE			13-DEC-2006 20:03	1.0					2		
072	11313072	CCV				13-DEC-2006 20:09	1.0	1.0	1		1	12	2	
073	11313073	X	RINSE			13-DEC-2006 20:14	1.0					2		
074	11313074	X				13-DEC-2006 20:20	1.0	1.0	2		1	2		
075	11313075	CCB				13-DEC-2006 20:25	1.0	1.0	1		1	2		
076	11313076	ICSA				13-DEC-2006 20:31	1.0	1.0			1	10	2	7:CA=345000
077	11313077	ICSA				13-DEC-2006 20:36	1.0	1.0			1	11	2	9:CA=316000
078	11313078	X	RINSE			13-DEC-2006 20:42	1.0					2		
079	11313079	X	RINSE			13-DEC-2006 20:47	1.0					2		
080	11313080	X	RINSE			13-DEC-2006 20:53	1.0					2		
081	11313081	BLANK	QC368135	120324	Water	13-DEC-2006 20:58	1.0	1.0	1		1	2		
082	11313082	BS	QC368136	120324	Water	13-DEC-2006 21:04	1.0	1.0	3		1	2		
083	11313083	BSD	QC368137	120324	Water	13-DEC-2006 21:09	1.0	1.0	3		1	2		
084	11313084	X	RINSE			13-DEC-2006 21:15	1.0					2		
085	11313085	MSS	191314-003	120324	Water	13-DEC-2006 21:20	1.0	1.0	5		1	2		5:NA=54670.0
086	11313086	SER	QC368140	120324	Water	13-DEC-2006 21:26	5.0	1.0	1		1	2		
087	11313087	MS	QC368138	120324	Water	13-DEC-2006 21:31	1.0	1.0	1		1	2		5:NA=63590.0
088	11313088	MSD	QC368139	120324	Water	13-DEC-2006 21:37	1.0	1.0	1		1	2		5:NA=62190.0
089	11313089	PDS	QC368141	120324	Water	13-DEC-2006 21:42	1.0	1.0	1		1	13	14	2
090	11313090	X	RINSE			13-DEC-2006 21:48	1.0					2		

Std's used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327
Flags used: RPK=5% spike rule

Analyst:  Date: 12/14/06

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56500483 Instrument: MET05
Analytical Method: EPA 6020 Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 13-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
091	11313091	X	RINSE			13-DEC-2006 21:53	1.0					2		
092	11313092	X	RINSE			13-DEC-2006 21:59	1.0					2		
093	11313093	CCV				13-DEC-2006 22:04	1.0	1.0	3		1	12	2	
094	11313094	X	RINSE			13-DEC-2006 22:10	1.0					2		
095	11313095	X				13-DEC-2006 22:15	1.0	1.0	1		1	2		
096	11313096	CCB				13-DEC-2006 22:21	1.0	1.0	1		1	2		
097	11313097	SAMPLE	191290-001	120324	Filtra	13-DEC-2006 22:27	1.0	1.0			1	2		
098	11313098	SAMPLE	191358-001	120324	Water	13-DEC-2006 22:32	1.0	1.0	2		1	2		2:NA=134000
099	11313099	SAMPLE	191358-002	120324	Water	13-DEC-2006 22:38	1.0	1.0	3		1	2		3:NA=280600
100	11313100	SAMPLE	191358-003	120324	Water	13-DEC-2006 22:43	1.0	1.0	2		1	2		2:NA=213800
101	11313101	SAMPLE	191358-004	120324	Water	13-DEC-2006 22:49	1.0	1.0	2		1	2		2:NA=231400
102	11313102	SAMPLE	191358-005	120324	Water	13-DEC-2006 22:55	1.0	1.0	4		1	2		4:NA=215300
103	11313103	SAMPLE	191358-006	120324	Water	13-DEC-2006 23:00	1.0	1.0	1		1	2		2:NA=136100
104	11313104	SAMPLE	191358-007	120324	Water	13-DEC-2006 23:06	1.0	1.0	2		1	2		3:NA=60130.0
105	11313105	SAMPLE	191358-009	120324	Filtra	13-DEC-2006 23:11	1.0	1.0	3		1	2		6:NA=93090.0
106	11313106	SAMPLE	191358-011	120324	Filtra	13-DEC-2006 23:17	1.0	1.0	5		1	2		
107	11313107	X	RINSE			13-DEC-2006 23:22	1.0					2		
108	11313108	X	RINSE			13-DEC-2006 23:28	1.0					2		
109	11313109	X	RINSE			13-DEC-2006 23:34	1.0					2		
110	11313110	CCV				13-DEC-2006 23:39	1.0		2		1	12	2	
111	11313111	X	RINSE			13-DEC-2006 23:45	1.0					2		
112	11313112	CCB				13-DEC-2006 23:50	1.0	1.0	1		1	2		
113	11313113	X				13-DEC-2006 23:56	1.0	1.0				2		
114	11313114	SAMPLE	191358-013	120324	Water	14-DEC-2006 00:01	1.0	1.0	4		1	2		12:FE=139300
115	11313115	X	RINSE			14-DEC-2006 00:07	1.0					2		
116	11313116	X	RINSE			14-DEC-2006 00:12	1.0					2		
117	11313117	X	RINSE			14-DEC-2006 00:18	1.0					2		
118	11313118	CCV				14-DEC-2006 00:23	1.0	1.0	2		1	12	2	
119	11313119	X	RINSE			14-DEC-2006 00:29	1.0					2		
120	11313120	X				14-DEC-2006 00:34	1.0	1.0			1	2		

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327
Flags used: spk=5% spike rule

Analyst:  Date: 12/14/09

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

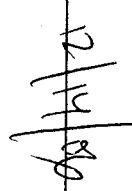
Sequence: 56500483 Instrument: MET05
Analytical Method: EPA 6020 Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 13-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
121	11313121	CCB				14-DEC-2006 00:40	1.0	1.0			1	2		
122	11313122	ICSA				14-DEC-2006 00:46	1.0	1.0			1	10 2	7:CA=346900	
123	11313123	ICGAB				14-DEC-2006 00:51	1.0	1.0			1	11 2	9:CA=320100	
124	11313124	X	RINSE			14-DEC-2006 00:56	1.0					2		
125	11313125	X	RINSE			14-DEC-2006 01:02	1.0					2		
126	11313126	X	RINSE			14-DEC-2006 01:08	1.0					2		
127	11313127	TUN				14-DEC-2006 01:14	1.0					2		
128	11313128	X	RINSE			14-DEC-2006 01:20	1.0	1.0				1		
129	11313129	BLANK				14-DEC-2006 01:25	1.0					2		
130	11313130	BS	QC368128			14-DEC-2006 01:31	1.0	1.0			1	2		
131	11313131	BSD	QC368129			14-DEC-2006 01:36	1.0	1.0			1	2		
132	11313132	X	RINSE			14-DEC-2006 01:42	1.0					2		
133	11313133	MSS	191314-003			14-DEC-2006 01:48	1.0	1.0			1	2	3:NA=53570.0	
134	11313134	SER	QC368133			14-DEC-2006 01:54	5.0	1.0			1	2		
135	11313135	MS	QC368131			14-DEC-2006 01:59	1.0	1.0			1	2	4:NA=62550.0	
136	11313136	MSD	QC368132			14-DEC-2006 02:05	1.0	1.0			1	2	4:NA=63150.0	
137	11313137	MS	QC368217			14-DEC-2006 02:10	1.0	1.0			1	2	5:NA=77940.0	
138	11313138	X	RINSE			14-DEC-2006 02:15	1.0					2		
139	11313139	X	RINSE			14-DEC-2006 02:21	1.0					2		
140	11313140	X	RINSE			14-DEC-2006 02:27	1.0					2		
141	11313141	CCV				14-DEC-2006 02:32	1.0					2		
142	11313142	X	RINSE			14-DEC-2006 02:38	1.0	1.0			1	12 2		
143	11313143	X				14-DEC-2006 02:43	1.0					2		
144	11313144	CCB				14-DEC-2006 02:49	1.0	1.0			1	2		
145	11313145	MSD	QC368218			14-DEC-2006 02:55	1.0	1.0			1	2	5:NA=85040.0	
146	11313146	PDS	QC368134			14-DEC-2006 03:00	1.0	1.0			1	13 14 2	4:NA=60820.0	
147	11313147	SAMPLE	191314-001			14-DEC-2006 03:06	1.0	1.0			1	2	4:CA=85090.0	
148	11313148	SAMPLE	191314-004			14-DEC-2006 03:11	1.0	1.0			1	2	3:MG=95260.0	
149	11313149	SAMPLE	191314-005			14-DEC-2006 03:17	1.0	1.0			1	2	3:MG=91930.0	
150	11313150	SAMPLE	191314-006			14-DEC-2006 03:22	1.0	1.0			1	2	3:NA=119000	

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327
Flags used: spk=5% spike rule

Analyst: 

Date: 

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56500483 Instrument: MET05
Analytical Method: EPA 6020

Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 13-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Std's	Used	>LR
151	11313151	SAMPLE	191314-009	120323	Filtira	14-DEC-2006 03:28	1.0	1.0	4	1	1	2	SPK	3:NA=217500
152	11313152	SAMPLE	191314-010	120323	Filtira	14-DEC-2006 03:33	1.0	1.0	5	1	1	2	SPK	4:NA=129300
153	11313153	MSS	191314-011	120323	Filtira	14-DEC-2006 03:39	1.0	1.0	6	1	1	2	SPK	4:NA=69800.0
154	11313154	SAMPLE	191314-012	120323	Filtira	14-DEC-2006 03:44	1.0	1.0	6	1	1	2	SPK	6:NA=118200
155	11313155	X	RINSE			14-DEC-2006 03:50	1.0					2		
156	11313156	X	RINSE			14-DEC-2006 03:56	1.0					2		
157	11313157	X	RINSE			14-DEC-2006 04:01	1.0					2		
158	11313158	CCV				14-DEC-2006 04:07	1.0		3	1	1	12	2	
159	11313159	X	RINSE			14-DEC-2006 04:12	1.0					2		
160	11313160	X				14-DEC-2006 04:18	1.0		1	1	1	2		
161	11313161	CCB				14-DEC-2006 04:24	1.0					2		
162	11313162	SAMPLE	191314-014	120323	Filtira	14-DEC-2006 04:29	1.0	1.0	4	1	1	2		3:NA=64740.0
163	11313163	SAMPLE	191314-015	120323	Filtira	14-DEC-2006 04:35	1.0	1.0	4	1	1	2		3:NA=84550.0
164	11313164	SAMPLE	191314-016	120323	Filtira	14-DEC-2006 04:40	1.0	1.0	4	1	1	2		3:NA=97070.0
165	11313165	X	RINSE			14-DEC-2006 04:46	1.0					2		
166	11313166	X	RINSE			14-DEC-2006 04:51	1.0					2		
167	11313167	X	RINSE			14-DEC-2006 04:57	1.0					2		
168	11313168	CCV				14-DEC-2006 05:03	1.0		4	1	1	12	2	
169	11313169	X	RINSE			14-DEC-2006 05:08	1.0					2		
170	11313170	CCB				14-DEC-2006 05:14	1.0					2		
171	11313171	X				14-DEC-2006 05:19	1.0					2		
172	11313172	ICSA				14-DEC-2006 05:25	1.0					10	2	7:CA=343800
173	11313173	ICSAB				14-DEC-2006 05:30	1.0					11	2	8:CA=316600

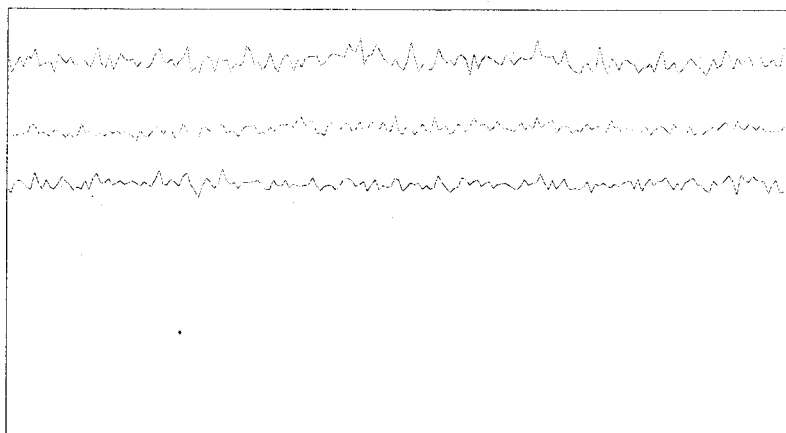
Std's used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327
Flags used: spk=5% spike rule

Analyst:

Date:

Tune Report

Tune File : ATUNE.U



m/z:	7	89	205
Range:	20,000	20,000	20,000
Count:	11,515	18,323	14,512
Mean:	11833.4	17571.3	14371.8
RSD%:	1.86	1.95	1.64
n:	200		

Integration Time: 0.1000 sec
Sampling Period: 0.3100 sec

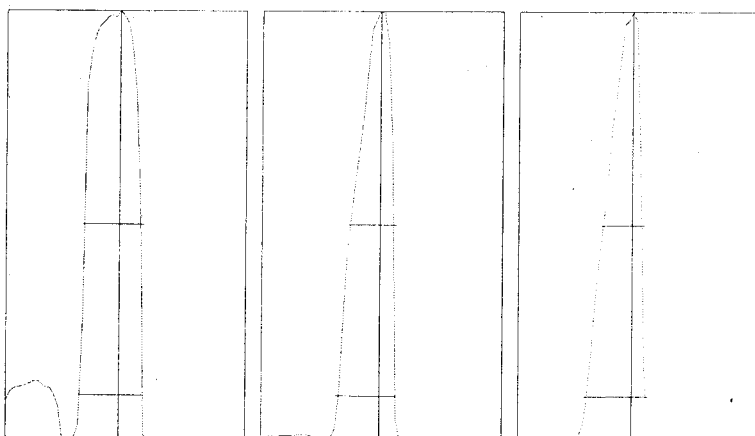
Oxide: 156/140 0.29%
Doubly Charged: 70/140 2.45%

Background:

m/z:	7	89	205
Cps:	11.1	7.8	17.5

m/z:	7	89	205
Height:	12,067	17,533	14,961
Axis:	6.95	89.00	204.95
W-50%:	0.75	0.60	0.55
W-10%:	0.800	0.7500	0.800

Integration Time: 0.1000 sec
Acquisition Time: 22.7600 sec



Y axis : Linear

Tuning Parameters

===Plasma Condition===

RF Power: 1270 W
RF Matching: 1.78 V
Smpl Depth: 7.1 mm
Torch-H: -1.3 mm
Torch-V: 0.5 mm
Carrier Gas: 1.09 L/min
Makeup Gas: 0 L/min
Optional Gas: --- %
PeriPump1: 0.1 rps
PeriPump2: --- rps
S/C Temp: 2 degC

===Ion Lenses===

Extract 1: -180 V
Extract 2: -40 V
Einzel 1,3: -100 V
Einzel 2: -7 V
Omega Bias: -45 V
Omega (+): 4 V
Omega (-): -4 V
QP Focus: 9 V
Plate Bias: 0 V

===Q-Pole Parameters===

AMU Gain: 130
AMU Offset: 125
Axis Gain: 0.9989
Axis Offset: -0.01
QP Bias: 1.6 V

===Detector Parameters===

Discriminator: 9.3 mV
Analog HV: 1810 V
Pulse HV: 1160 V

Temp.p\$\$

P/A Factor Tuning Report

Acquired: Dec 14 2006 08:28 am

Mass[amu]	Element	P/A Factor
6	Li	0.067486
9	Be	0.078769
23	Na	Sensitivity too high
25	Mg	0.080212
26	Mg	Sensitivity too high
27	Al	Sensitivity too high
39	K	Sensitivity too high
43	Ca	Sensitivity too low
44	Ca	0.094064
45	Sc	0.095860
51	V	0.090944
52	Cr	0.101230
53	Cr	Sensitivity too low
54	Fe	0.099039
55	Mn	0.103526
57	Fe	0.099164
59	Co	0.106008
60	Ni	0.103422
63	Cu	0.107261
65	Cu	0.105338
66	Zn	Sensitivity too low
72	Ge	Sensitivity too low
75	As	Sensitivity too low
77	(As)	Sensitivity too low
82	Se	Sensitivity too low
83	(As)	Sensitivity too low
88	(Ca)	Sensitivity too low
89	Y	0.104101
95	Mo	0.102493
98	Mo	0.102839
99	(Mo)	Sensitivity too low
106	(Cd)	Sensitivity too low
108	(Cd)	Sensitivity too low
109	Ag	0.108868
111	Cd	Sensitivity too low
114	Cd	0.109143
115	In	0.109115
118	(In)	0.111286
121	Sb	0.107556
135	Ba	Sensitivity too low
137	Ba	Sensitivity too low
159	Tb	0.114108
166	Er	Sensitivity too low

Temp.p\$\$

205	Tl	0.116104
206	(Pb)	0.114784
207	(Pb)	0.113651
208	Pb	0.116865
209	Bi	0.116435

===Detector Parameters===

Discriminator: 9.3 mV

Analog HV: 1810 V

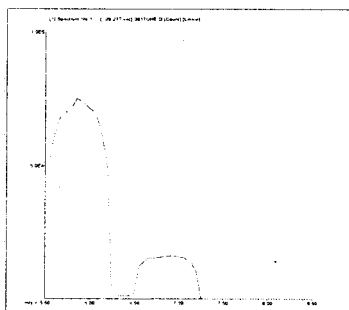
Pulse HV: 1160 V

6020 QC Tune Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\001TUNE.D
Date Acquired: Dec 14 2006 10:24 am
Acq. Method: TN6020.M
Operator:
Sample Name: tun,s4974
Misc Info:
Vial Number: 1307
Current Method: C:\ICPCHEM\1\METHODS\TN6020.M

RSD (%)

Element	Actual	Required	Flag
7 Li	0.48	5.00	
59 Co	1.33	5.00	
115 In	1.64	5.00	
205 Tl	2.43	5.00	



7 Li

Mass Calib.

Actual: 6.90

Required: 6.90 - 7.10

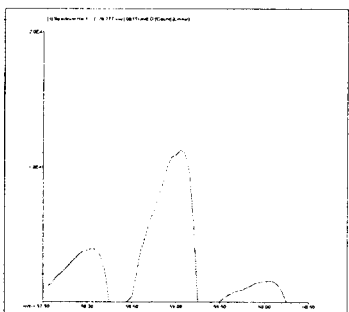
Flag:

Peak Width

Actual: 0.65

Required: 0.90

Flag:



59 Co

Mass Calib.

Actual: 59.05

Required: 58.90 - 59.10

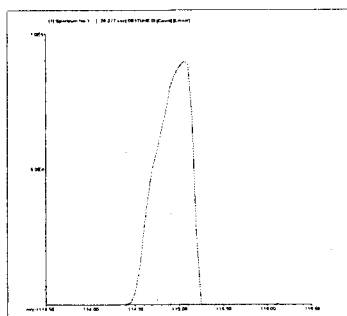
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



115 In

Mass Calib.

Actual: 115.05

Required: 114.90 - 115.10

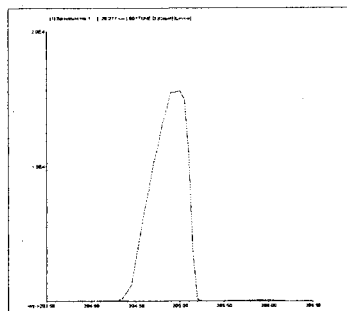
Flag:

Peak Width

Actual: 0.60

Required: 0.90

Flag:



205 Tl

Mass Calib.

Actual: 205.00

Required: 204.90 - 205.10

Flag:

Peak Width

Actual: 0.55

Required: 0.90

Flag:

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 6020

Inst : MET05
Calnum : 56501744001
Units : ug/L

Date : 14-DEC-2006 10:41
X Axis : R

Reviewer: ---

Level	File	Seqnum	Sample ID	Analyzed	Std
L1	11410005	56501744005	CS1	14-DEC-2006 10:47	S4978
L2	11410006	56501744006	CS2	14-DEC-2006 10:52	S4979
L3	11410007	56501744007	CS3	14-DEC-2006 10:58	S4980
L4	11410008	56501744008	CS4	14-DEC-2006 11:04	S4981
L5	11410009	56501744009	CS5	14-DEC-2006 11:09	S4975
L6	11410010	56501744010	CS6	14-DEC-2006 11:15	S4976

Analyte	L1	L2	L3	L4	L5	L6	Type	a0	a1	a2	Avg	r ²	%RSD	MR ²	Fig
Aluminum	1.0212	0.9285	0.8303	0.7417	0.7436	0.7126	BLNK	-5.3227	1.39160		0.8297	1.000	0.995		
Antimony	0.3098	0.3034	0.2862	0.2627	0.2727	0.2722	BLNK	-0.0291	3.67315		0.2845	1.000	0.995		
Arsenic		0.6666	0.6823	0.5088	0.5229	0.5174	BLNK	0.04996	1.92806		0.5796	1.000	0.995		
Barium	0.1308	0.1268	0.1076	0.0968	0.0995	0.0985	BLNK	-0.0661	10.1337		0.1100	1.000	0.995		
Beryllium	0.1873	0.1956	0.1907	0.1790	0.1811	0.1765	BLNK	-0.0170	5.63797		0.1850	1.000	0.995		
Cadmium	0.7697	0.6790	0.5930	0.5733	0.5812	0.5803	BLNK	-0.0672	1.72352		0.6294	1.000	0.995		
Calcium	0.0473	0.0331	0.0273	0.0207	0.0201	0.0195	BLNK	-29.506	51.0755		0.0280	1.000	0.995		
Chromium		12.470	8.8968	4.0131	3.7183	3.6925	BLNK	-1.1192	0.27227		6.5580	1.000	0.995		
Cobalt	5.1599	4.6814	4.8599	4.3535	4.5608	4.4562	BLNK	-0.0323	0.22341		4.6786	1.000	0.995		
Copper	4.5288	2.6837	2.2634	1.2891	1.2348	1.1982	BLNK	-0.5738	0.83232		2.1997	1.000	0.995		
Iron	0.1545	0.1248	0.1124	0.0948	0.0926	0.0893	BLNK	-14.617	11.1219		0.1114	1.000	0.995		
Lead	1.3904	1.2363	1.2193	1.1280	1.2053	1.1919	BLNK	-0.0589	0.83753		1.2285	1.000	0.995		
Magnesium	0.1227	0.1166	0.1167	0.1038	0.1001	0.0956	BLNK	-1.8766	10.3624		0.1092	0.999	0.995		
Manganese	6.4833	5.5169	5.1529	4.3698	4.5725	4.4995	BLNK	-0.1093	0.22169		5.0591	1.000	0.995		
Molybdenum	1.2400	1.1242	1.1918	1.0814	1.1441	1.1717	BLNK	-0.0195	0.85771		1.1589	1.000	0.995		
Nickel	3.2778	1.9776	1.5387	1.0575	0.9967	0.9748	BLNK	-0.4964	1.02427		1.6372	1.000	0.995		
Potassium	2.8176	1.6729	1.1599	0.6582	0.6306	0.6160	BLNK	-89.257	1.62435		1.2592	1.000	0.995		
Selenium			0.0284	0.0438	0.0451	0.0439	BLNK	0.53471	22.5895		0.0403	1.000	0.995		
Silver	3.1454	3.0301	2.8843	2.7676	2.8629	2.9170	BLNK	-0.0350	0.34421		2.9345	1.000	0.995		
Sodium	8.5808	4.4830	2.5904	1.0800	0.9288	0.8735	BLNK	-238.86	1.14670		3.0894	0.999	0.995		
Thallium	1.0409	0.8859	0.8800	0.8220	0.8845	0.9254	BLNK	-0.0259	1.09078		0.9065	0.999	0.995		
Vanadium		3.6840	4.1596	3.7944	3.6966	3.7307	BLNK	-0.0627	0.26863		3.8131	1.000	0.995		
Zinc	8.1185	4.0807	2.5701	0.8393	0.6422	0.6066	BLNK	-2.8051	1.65644		2.8095	0.999	0.995		

Instrument amount = a0 + response * a1 + response^2 * a2; BLNK=Y=aX+[blank]

Calibration Blank QC Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\004CAL
Date Acquired: Dec 14 2006 10:41 am
Operator:
Sample Name: std-blank
Misc Info:
Vial Number: 1101
Current Method: C:\ICPCHEM\1\METHODS\60200111.M
Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
Last Cal Update: Dec 13 2006 02:14 pm
Sample Type: CalBlk
Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	739106.00 A	10570.00	1.43
9 Be	44.44 P	9.62	21.65
23 Na	2205423.00 A	1917.00	0.09
26 Mg	1916.67 P	138.70	7.24
27 Al	40493.33 P	751.70	1.86
39 K	581835.50 P	7785.00	1.34
44 Ca	6115.73 P	161.00	2.63
45 Sc	529416.63 P	4367.00	0.82
51 V	552.89 P	1975.00	357.22
52 Cr	9853.33 P	179.00	1.82
55 Mn	1181.11 P	131.40	11.13
57 Fe	3150.00 P	35.28	1.12
59 Co	346.67 P	63.33	18.27
60 Ni	1161.11 P	86.94	7.49
65 Cu	1653.33 P	127.70	7.72
66 Zn	4058.89 P	77.27	1.90
72 Ge	119842.20 P	1453.00	1.21
75 As	-60.56 P	225.80	372.85
82 Se	-56.44 P	39.40	69.80
95 Mo	54.44 P	18.36	33.72
109 Ag	243.33 P	17.64	7.25
111 Cd	93.33 P	15.73	16.85
115 In	758188.31 P	5430.00	0.72
121 Sb	120.00 P	14.53	12.11
137 Ba	98.89 P	24.57	24.85
205 Tl	428.89 P	44.39	10.35
208 Pb	1268.89 P	70.26	5.54
209 Bi	901811.13 P	8006.00	0.89

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\005CALI.D\005CALI.D#
 Date Acquired: Dec 14 2006 10:47 am
 Operator:
 Sample Name: cs1,s4978
 Misc Info:
 Vial Number: 1102
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 14 2006 10:43 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	725171.38 A	22140.00	3.05
9 Be	678.89 P	5.09	0.75
23 Na	2236721.00 A	10910.00	0.49
26 Mg	31993.33 P	617.10	1.93
27 Al	266313.31 P	3479.00	1.31
39 K	734229.31 M	11770.00	1.60
44 Ca	12330.80 P	58.41	0.47
45 Sc	522124.41 P	24720.00	4.73
51 V	4710.59 P	489.00	10.38
52 Cr	12556.67 P	207.90	1.66
55 Mn	3841.11 P	168.40	4.38
57 Fe	9150.00 P	144.70	1.58
59 Co	3056.67 P	78.81	2.58
60 Ni	1943.33 P	92.80	4.78
65 Cu	2683.20 P	77.68	2.90
66 Zn	4812.22 P	186.90	3.88
72 Ge	118539.30 P	4110.00	3.47
75 As	504.54 P	141.50	28.05
82 Se	-54.44 P	9.71	17.84
95 Mo	733.33 P	58.12	7.93
109 Ag	1863.33 P	26.46	1.42
111 Cd	457.21 P	59.42	13.00
115 In	748254.31 M	24450.00	3.27
121 Sb	1158.89 P	30.97	2.67
137 Ba	490.00 P	41.77	8.52
205 Tl	2338.89 P	100.00	4.28
208 Pb	6244.44 P	93.35	1.49
209 Bi	898780.38 M	22420.00	2.49

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	725171.38	3.05	739106.00	98.1	80 - 120	

45	Sc	522124.41	4.73	529416.63	98.6	80 -	120
72	Ge	118539.34	3.47	119842.22	98.9	80 -	120
115	In	748254.31	3.27	758188.25	98.7	80 -	120
209	Bi	898780.38	2.49	901811.13	99.7	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1410a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
 0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\006CALI.D\006CALI.D#
 Date Acquired: Dec 14 2006 10:52 am
 Operator:
 Sample Name: cs2,s4979
 Misc Info:
 Vial Number: 1103
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 14 2006 10:49 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	740799.88 A	5088.00	0.69
9 Be	1448.89 P	20.09	1.39
23 Na	2343897.00 A	15370.00	0.66
26 Mg	60961.11 P	550.40	0.90
27 Al	485480.00 P	3421.00	0.70
39 K	874661.19 A	2094.00	0.24
44 Ca	17330.37 P	261.40	1.51
45 Sc	522843.31 P	473.50	0.09
51 V	4340.48 P	727.40	16.76
52 Cr	14691.11 P	527.50	3.59
55 Mn	6500.00 P	258.30	3.97
57 Fe	14698.89 P	120.50	0.82
59 Co	5515.56 P	157.20	2.85
60 Ni	2330.00 P	39.30	1.69
65 Cu	3161.96 P	119.70	3.79
66 Zn	4807.78 P	139.90	2.91
72 Ge	117817.60 P	111.70	0.09
75 As	785.40 P	157.50	20.05
82 Se	40.89 P	33.69	82.39
95 Mo	1324.44 P	37.17	2.81
109 Ag	3570.00 P	52.39	1.47
111 Cd	799.97 P	31.18	3.90
115 In	747619.81 P	2343.00	0.31
121 Sb	2267.78 P	328.90	14.50
137 Ba	947.78 P	22.19	2.34
205 Tl	4037.78 P	56.21	1.39
208 Pb	11268.89 P	303.80	2.70
209 Bi	911937.88 M	25010.00	2.74

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	740799.88	0.69	739106.00	100.2	80 - 120	

C:\ICPCHEM\1\DATA\06L1410a.B\006CALI.D\006CALI.D#

45	Sc	522843.31	0.09	529416.63	98.8	80 -	120
72	Ge	117817.55	0.09	119842.22	98.3	80 -	120
115	In	747619.75	0.31	758188.25	98.6	80 -	120
209	Bi	911937.88	2.74	901811.13	101.1	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1410a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\007CALI.D\007CALI.D#
 Date Acquired: Dec 14 2006 10:58 am
 Operator:
 Sample Name: cs3,s4980
 Misc Info:
 Vial Number: 1104
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 14 2006 10:54 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	741745.88 A	6443.00	0.87
9 Be	2828.89 P	29.12	1.03
23 Na	2730964.00 A	8049.00	0.29
26 Mg	122986.70 P	420.30	0.34
27 Al	875403.50 A	4159.00	0.48
39 K	1222875.00 A	7833.00	0.64
44 Ca	28832.69 P	134.60	0.47
45 Sc	527152.19 P	2395.00	0.45
51 V	9823.88 P	2617.00	26.64
52 Cr	21067.78 P	248.20	1.18
55 Mn	12203.33 P	233.30	1.91
57 Fe	26622.22 P	452.70	1.70
59 Co	11508.89 P	310.40	2.70
60 Ni	3643.33 P	160.20	4.40
65 Cu	5359.48 P	138.70	2.59
66 Zn	6087.78 P	360.60	5.92
72 Ge	118410.70 P	1854.00	1.57
75 As	1615.74 P	20.93	1.30
82 Se	67.78 P	62.03	91.52
95 Mo	2823.33 P	165.00	5.84
109 Ag	6830.00 P	109.30	1.60
111 Cd	1403.48 P	56.32	4.01
115 In	748089.69 P	6998.00	0.94
121 Sb	4283.33 P	147.50	3.44
137 Ba	1610.00 P	100.40	6.24
205 Tl	7924.44 P	191.20	2.41
208 Pb	21957.78 P	638.20	2.91
209 Bi	900418.81 P	10540.00	1.17

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	741745.88	0.87	739106.00	100.4	80 - 120	

C:\ICPCHEM\1\DATA\06L1410a.B\007CALI.D\007CALI.D#

45	Sc	527152.19	0.45	529416.63	99.6	80 -	120
72	Ge	118410.66	1.57	119842.22	98.8	80 -	120
115	In	748089.69	0.94	758188.25	98.7	80 -	120
209	Bi	900418.81	1.17	901811.13	99.8	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1410a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**
ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\008CALI.D\008CALI.D#
 Date Acquired: Dec 14 2006 11:04 am
 Operator:
 Sample Name: cs4,s4981
 Misc Info:
 Vial Number: 1105
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 14 2006 11:00 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	735267.38 A	10940.00	1.49
9 Be	26318.89 P	127.60	0.48
23 Na	11286800.00 A	76620.00	0.68
26 Mg	1084335.00 A	15380.00	1.42
27 Al	7751801.00 A	100100.00	1.29
39 K	6878376.00 A	33180.00	0.48
44 Ca	216538.80 P	1922.00	0.89
45 Sc	522523.31 P	3965.00	0.76
51 V	89858.41 P	1167.00	1.30
52 Cr	95053.33 P	1390.00	1.46
55 Mn	103498.90 P	1334.00	1.29
57 Fe	224456.70 P	3155.00	1.41
59 Co	103125.50 P	2532.00	2.46
60 Ni	25051.11 P	655.20	2.62
65 Cu	30534.28 P	554.20	1.82
66 Zn	19874.44 P	171.10	0.86
72 Ge	118429.10 P	1603.00	1.35
75 As	12052.93 P	391.20	3.25
82 Se	1036.89 P	37.53	3.62
95 Mo	25613.33 P	307.50	1.20
109 Ag	65557.78 P	1532.00	2.34
111 Cd	13580.38 P	297.80	2.19
115 In	742957.69 P	5289.00	0.71
121 Sb	39033.33 P	902.90	2.31
137 Ba	14381.11 P	447.50	3.11
205 Tl	73850.00 P	1683.00	2.28
208 Pb	202676.70 P	2905.00	1.43
209 Bi	898382.13 P	9491.00	1.06

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	735267.44	1.49	739106.00	99.5	80 - 120	

C:\ICPCHEM\1\DATA\06L1410a.B\008CALI.D\008CALI.D#

45 Sc	522523.31	0.76	529416.63	98.7	80 -	120
72 Ge	118429.12	1.35	119842.22	98.8	80 -	120
115 In	742957.75	0.71	758188.25	98.0	80 -	120
209 Bi	898382.13	1.06	901811.13	99.6	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1410a.B\004CALB.D\004CALB.D#

--- :Element Failures --- :Max. Number of Failures Allowed
0 :ISTD Failures 0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes: **Pass**

ISTD: **Pass**

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\009CALI.D\009CALI.D#
 Date Acquired: Dec 14 2006 11:09 am
 Operator:
 Sample Name: cs5,s4975
 Misc Info:
 Vial Number: 1106
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 14 2006 11:05 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	705935.69 A	2814.00	0.40
9 Be	255710.00 P	1947.00	0.76
23 Na	95061648.00 A	475200.00	0.50
26 Mg	10242410.00 A	62510.00	0.61
27 Al	76104400.00 A	747200.00	0.98
39 K	64541328.00 A	253600.00	0.39
44 Ca	2057707.00 A	11350.00	0.55
45 Sc	511724.41 P	252.90	0.05
51 V	841037.38 A	7753.00	0.92
52 Cr	845983.13 M	19810.00	2.34
55 Mn	1040305.00 A	4060.00	0.39
57 Fe	2107112.00 A	15480.00	0.73
59 Co	1037667.00 A	8874.00	0.86
60 Ni	226768.91 P	789.60	0.35
65 Cu	280942.19 P	3622.00	1.29
66 Zn	146108.91 P	447.40	0.31
72 Ge	113757.60 P	233.90	0.21
75 As	118979.90 P	1342.00	1.13
82 Se	10265.78 P	117.00	1.14
95 Mo	260288.91 P	2920.00	1.12
109 Ag	651342.19 P	1868.00	0.29
111 Cd	132243.80 P	1991.00	1.51
115 In	712890.13 P	6254.00	0.88
121 Sb	388875.50 P	5851.00	1.50
137 Ba	141873.30 P	2205.00	1.55
205 Tl	744495.50 P	9659.00	1.30
208 Pb	2028821.00 A	13030.00	0.64
209 Bi	841657.69 P	7872.00	0.94

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	705935.69	0.40	739106.00	95.5	80 - 120	

C:\ICPCHEM\1\DATA\06L1410a.B\009CALI.D\009CALI.D#

45	Sc	511724.41	0.05	529416.63	96.7	80 -	120
72	Ge	113757.55	0.21	119842.22	94.9	80 -	120
115	In	712890.13	0.88	758188.25	94.0	80 -	120
209	Bi	841657.75	0.94	901811.13	93.3	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1410a.B\004CALB.D\004CALB.D#

---	:Element Failures	---	:Max. Number of Failures Allowed
0	:ISTD Failures	0	:Max. Number of ISTD Failures Allowed

Data Results:

Analytes:	Pass
ISTD:	Pass

Calibration Standard QC Report

Data File: C:\ICPCHEM\1\DATA\06L1410a.B\010CALI.D\010CALI.D#
 Date Acquired: Dec 14 2006 11:15 am
 Operator:
 Sample Name: cs6,s4976
 Misc Info:
 Vial Number: 1107
 Current Method: C:\ICPCHEM\1\METHODS\60200111.M
 Calibration File: C:\ICPCHEM\1\CALIB\60200111.C
 Last Cal Update: Dec 14 2006 11:11 am
 Sample Type: CalStd
 Total Dil Factor: 1.00

QC&ISTD Elements

Element	CPS Mean	SD	RSD(%)
6 Li	673193.38 A	6480.00	0.96
9 Be	475100.00 P	2662.00	0.56
23 Na	175948000.00 A	296600.00	0.17
26 Mg	19256600.00 A	90460.00	0.47
27 Al	143526590.00 A	942000.00	0.66
39 K	124084800.00 A	284500.00	0.23
44 Ca	3925580.00 A	5695.00	0.15
45 Sc	503576.59 P	3537.00	0.70
51 V	1621244.00 A	1869.00	0.12
52 Cr	1604677.00 A	4401.00	0.27
55 Mn	1955333.00 A	1977.00	0.10
57 Fe	3881919.00 A	12280.00	0.32
59 Co	1936672.00 A	19000.00	0.98
60 Ni	423634.41 P	4694.00	1.11
65 Cu	520732.50 P	2498.00	0.48
66 Zn	263632.19 P	2626.00	1.00
72 Ge	108651.10 P	1163.00	1.07
75 As	224854.80 P	1313.00	0.58
82 Se	19066.67 P	195.60	1.03
95 Mo	509218.91 P	2112.00	0.41
109 Ag	1267609.00 A	4775.00	0.38
111 Cd	252177.00 P	2915.00	1.16
115 In	691983.50 P	6194.00	0.90
121 Sb	753438.88 P	5747.00	0.76
137 Ba	272721.09 P	1468.00	0.54
205 Tl	1480971.00 A	12980.00	0.88
208 Pb	3814654.00 A	15530.00	0.41
209 Bi	800187.69 P	9742.00	1.22

ISTD Elements

Element	CPS Mean	RSD(%)	Ref Value	Rec(%)	QC Range(%)	Flag
6 Li	673193.44	0.96	739106.00	91.1	80 - 120	

C:\ICPCHEM\1\DATA\06L1410a.B\010CALI.D\010CALI.D#

45	Sc	503576.66	0.70	529416.63	95.1	80 -	120
72	Ge	108651.12	1.07	119842.22	90.7	80 -	120
115	In	691983.50	0.90	758188.25	91.3	80 -	120
209	Bi	800187.75	1.22	901811.13	88.7	80 -	120

ISTD Ref File : C:\ICPCHEM\1\DATA\06L1410a.B\004CALB.D\004CALB.D#

--- :Element Failures	--- :Max. Number of Failures Allowed
0 :ISTD Failures	0 :Max. Number of ISTD Failures Allowed

Data Results:

Analytes:	Pass
ISTD:	Pass

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 6020

Inst : MET05
 Seqnum : 56501744012
 Cal : 56501744001
 Standards: S4982

File : 11410012
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 11:25

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Aluminum	0.8297	0.7315	10000	10170	ug/L	2	10	
Antimony	0.2845	0.2684	100.0	98.54	ug/L	-1	10	
Arsenic	0.5796	0.5151	100.0	99.37	ug/L	-1	10	
Barium	0.1100	0.0948	100.0	95.98	ug/L	-4	10	
Beryllium	0.1850	0.1765	100.0	99.48	ug/L	-1	10	
Cadmium	0.6294	0.5721	100.0	98.53	ug/L	-1	10	
Calcium	0.0280	0.0195	10000	9953	ug/L	0	10	
Chromium	6.5580	3.6481	100.0	98.21	ug/L	-2	10	
Cobalt	4.6786	4.3951	100.0	98.16	ug/L	-2	10	
Copper	2.1997	1.1762	100.0	97.32	ug/L	-3	10	
Iron	0.1114	0.0904	10000	10040	ug/L	0	10	
Lead	1.2285	1.1707	100.0	97.99	ug/L	-2	10	
Magnesium	0.1092	0.0967	10000	10020	ug/L	0	10	
Manganese	5.0991	4.4347	100.0	98.20	ug/L	-2	10	
Molybdenum	1.1589	1.1253	100.0	96.50	ug/L	-4	10	
Nickel	1.6372	0.9632	100.0	98.16	ug/L	-2	10	
Potassium	1.2592	0.6128	10000	9865	ug/L	-1	10	
Selenium	0.0403	0.0437	100.0	99.34	ug/L	-1	10	
Silver	2.9345	2.8686	100.0	98.70	ug/L	-1	10	
Sodium	3.0894	0.8824	10000	9880	ug/L	-1	10	
Thallium	0.9065	0.8230	50.00	44.86	ug/L	-10	10	
Vanadium	3.8131	3.6248	100.0	97.31	ug/L	-3	10	
Zinc	2.8095	0.6149	100.0	99.06	ug/L	-1	10	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	711588	-3.72
Scandium	529417	520783	-1.63
Germanium	119842	114412	-4.53
Indium	758188	733068	-3.31
Bismuth	901811	863080	-4.29

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Seqnum : 56501744029 File : 11410029
 Cal : 56501744001 Caldate: 14-DEC-2006
 Standards: S4983, S4635

IDF : 1.0
 Time : 14-DEC-2006 13:00

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.8297	0.7399	10000	10290	ug/L	3	10	
Antimony	0.2845	0.2702	100.0	99.23	ug/L	-1	10	
Arsenic	0.5796	0.5110	100.0	98.58	ug/L	-1	10	
Barium	0.1100	0.0959	100.0	97.16	ug/L	-3	10	
Beryllium	0.1850	0.1784	100.0	100.6	ug/L	1	10	
Cadmium	0.6294	0.5648	100.0	97.27	ug/L	-3	10	
Calcium	0.0280	0.0195	10000	9953	ug/L	0	10	
Chromium	6.5580	3.5524	100.0	95.60	ug/L	-4	10	
Cobalt	4.6786	4.4669	100.0	99.76	ug/L	0	10	
Copper	2.1997	1.1983	100.0	99.16	ug/L	-1	10	
Iron	0.1114	0.0921	10000	10230	ug/L	2	10	
Lead	1.2285	1.1659	100.0	97.59	ug/L	-2	10	
Magnesium	0.1092	0.0984	10000	10200	ug/L	2	10	
Manganese	5.0991	4.4584	100.0	98.73	ug/L	-1	10	
Molybdenum	1.1589	1.1013	100.0	94.44	ug/L	-6	10	
Nickel	1.6372	0.9661	100.0	98.46	ug/L	-2	10	
Potassium	1.2592	0.6093	10000	9808	ug/L	-2	10	
Selenium	0.0403	0.0437	100.0	99.32	ug/L	-1	10	
Silver	2.9345	2.8276	100.0	97.29	ug/L	-3	10	
Sodium	3.0894	0.9156	10000	10260	ug/L	3	10	
Thallium	0.9065	0.8214	50.00	44.77	ug/L	-10	10	
Vanadium	3.8131	3.5784	100.0	96.06	ug/L	-4	10	
Zinc	2.8095	0.6324	100.0	101.9	ug/L	2	10	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	639701	-13.45
Scandium	529417	463074	-12.53
Germanium	119842	104479	-12.82
Indium	758188	659273	-13.05
Bismuth	901811	829843	-7.98

Inst : MET05
Seqnum : 56501744058 File : 11410058
Cal : 56501744001 Caldate: 14-DEC-2006
Standards: S4983, S4635

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.8297	0.7666	10000	10660	ug/L	7	10	
Antimony	0.2845	0.2775	100.0	101.9	ug/L	2	10	
Arsenic	0.5796	0.5304	100.0	102.3	ug/L	2	10	
Barium	0.1100	0.0968	100.0	98.03	ug/L	-2	10	
Beryllium	0.1850	0.1829	100.0	103.1	ug/L	3	10	
Cadmium	0.6294	0.6032	100.0	103.9	ug/L	4	10	
Calcium	0.0280	0.0203	10000	10340	ug/L	3	10	
Chromium	6.5580	3.6402	100.0	97.99	ug/L	-2	10	
Cobalt	4.6786	4.5045	100.0	100.6	ug/L	1	10	
Copper	2.1997	1.2109	100.0	100.2	ug/L	0	10	
Iron	0.1114	0.0922	10000	10240	ug/L	2	10	
Lead	1.2285	1.2027	100.0	100.7	ug/L	1	10	
Magnesium	0.1092	0.1019	10000	10560	ug/L	6	10	
Manganese	5.0991	4.5159	100.0	100.0	ug/L	0	10	
Molybdenum	1.1589	1.1603	100.0	99.50	ug/L	-1	10	
Nickel	1.6372	0.9793	100.0	99.81	ug/L	0	10	
Potassium	1.2592	0.6392	10000	10290	ug/L	3	10	
Selenium	0.0403	0.0455	100.0	103.2	ug/L	3	10	
Silver	2.9345	2.9840	100.0	102.7	ug/L	3	10	
Sodium	3.0894	0.9247	10000	10360	ug/L	4	10	
Thallium	0.9065	0.8548	50.00	46.59	ug/L	-7	10	
Vanadium	3.8131	3.6946	100.0	99.19	ug/L	-1	10	
Zinc	2.8095	0.6283	100.0	101.3	ug/L	1	10	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	618953	-16.26
Scandium	529417	449338	-15.13
Germanium	119842	100094	-16.48
Indium	758188	655982	-13.48
Bismuth	901811	801836	-11.09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
 Segnum : 56501744075
 Cal : 56501744001
 Standards: S4983, S4635

File : 11410075
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 17:17

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.8297	0.7318	10000	10180	ug/L	2	10	
Antimony	0.2845	0.2632	100.0	96.66	ug/L	-3	10	
Arsenic	0.5796	0.5000	100.0	96.45	ug/L	-4	10	
Barium	0.1100	0.0933	100.0	94.44	ug/L	-6	10	
Beryllium	0.1850	0.1733	100.0	97.69	ug/L	-2	10	
Cadmium	0.6294	0.5590	100.0	96.27	ug/L	-4	10	
Calcium	0.0280	0.0191	10000	9726	ug/L	-3	10	
Chromium	6.5580	3.4462	100.0	92.71	ug/L	-7	10	
Cobalt	4.6786	4.4328	100.0	99.00	ug/L	-1	10	
Copper	2.1997	1.1651	100.0	96.40	ug/L	-4	10	
Iron	0.1114	0.0892	10000	9910	ug/L	-1	10	
Lead	1.2285	1.1592	100.0	97.03	ug/L	-3	10	
Magnesium	0.1092	0.0977	10000	10120	ug/L	1	10	
Manganese	5.0991	4.4033	100.0	97.51	ug/L	-2	10	
Molybdenum	1.1589	1.0807	100.0	92.67	ug/L	-7	10	
Nickel	1.6372	0.9494	100.0	96.75	ug/L	-3	10	
Potassium	1.2592	0.6080	10000	9786	ug/L	-2	10	
Selenium	0.0403	0.0421	100.0	95.72	ug/L	-4	10	
Silver	2.9345	2.7773	100.0	95.56	ug/L	-4	10	
Sodium	3.0894	0.9027	10000	10110	ug/L	1	10	
Thallium	0.9065	0.8184	50.00	44.61	ug/L	-11	10	c- ***
Vanadium	3.8131	3.4858	100.0	93.58	ug/L	-6	10	
Zinc	2.8095	0.6223	100.0	100.3	ug/L	0	10	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	666358	-9.84
Scandium	529417	485169	-8.36
Germanium	119842	108833	-9.19
Indium	758188	696031	-8.20
Bismuth	901811	883136	-2.07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR EPA 6020

Inst : MET05
Seqnum : 56501744086
Cal : 56501744001
Standards: S4983, S4635

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IDF      : 1.0
Time     : 14-DEC-2006 18:19
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Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	0.8297	0.7315	10000	10170	ug/L	2	10	
Antimony	0.2845	0.2758	100.0	101.3	ug/L	1	10	
Arsenic	0.5796	0.5309	100.0	102.4	ug/L	2	10	
Barium	0.1100	0.0971	100.0	98.33	ug/L	-2	10	
Beryllium	0.1850	0.1787	100.0	100.7	ug/L	1	10	
Cadmium	0.6294	0.5951	100.0	102.5	ug/L	3	10	
Calcium	0.0280	0.0203	10000	10350	ug/L	4	10	
Chromium	6.5580	3.6402	100.0	97.99	ug/L	-2	10	
Cobalt	4.6786	4.6078	100.0	102.9	ug/L	3	10	
Copper	2.1997	1.2171	100.0	100.7	ug/L	1	10	
Iron	0.1114	0.0946	10000	10500	ug/L	5	10	
Lead	1.2285	1.2128	100.0	101.5	ug/L	2	10	
Magnesium	0.1092	0.1018	10000	10550	ug/L	6	10	
Manganese	5.0991	4.6394	100.0	102.7	ug/L	3	10	
Molybdenum	1.1589	1.1628	100.0	99.72	ug/L	0	10	
Nickel	1.6372	0.9939	100.0	101.3	ug/L	1	10	
Potassium	1.2592	0.6403	10000	10310	ug/L	3	10	
Selenium	0.0403	0.0453	100.0	102.9	ug/L	3	10	
Silver	2.9345	2.9685	100.0	102.1	ug/L	2	10	
Sodium	3.0894	0.9224	10000	10340	ug/L	3	10	
Thallium	0.9065	0.8539	50.00	46.55	ug/L	-7	10	
Vanadium	3.8131	3.7486	100.0	100.6	ug/L	1	10	
Zinc	2.8095	0.6363	100.0	102.6	ug/L	3	10	

ISTD (ICALBLK l1410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	656022	-11.24
Scandium	529417	473580	-10.55
Germanium	119842	104619	-12.70
Indium	758188	683901	-9.80
Bismuth	901811	846276	-6.16

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56501744014
 Cal : 56501744001

File : 11410014
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 11:36

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[7.423]	25.00	2.752	ug/L	!ib
Antimony	[0.1363]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.3444]	0.5000	0.1120	ug/L	!ib
Barium	[0.05971]	0.2500	0.03444	ug/L	!ib
Beryllium	[0.06614]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	[0.3517]	0.5000	0.01315	ug/L	!ib
Cobalt	[0.06440]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	[6.987]	25.00	3.223	ug/L	!ib
Lead	[0.06012]	0.2500	0.002523	ug/L	!ib
Magnesium	[7.093]	25.00	1.907	ug/L	!ib
Manganese	[0.05107]	0.2500	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	[0.04355]	0.2500	0.01875	ug/L	!ib
Potassium	ND	25.00	3.213	ug/L	
Selenium	ND	1.000	0.6002	ug/L	
Silver	[0.05596]	0.2500	0.005272	ug/L	!ib
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.3832]	0.5000	0.06366	ug/L	!ib
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	760785	2.93
Scandium	529417	538000	1.62
Germanium	119842	119331	-0.43
Indium	758188	765110	0.91
Bismuth	901811	912624	1.20

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56501744033
 Cal : 56501744001

IDF : 1.0
 Time : 14-DEC-2006 13:22

File : 11410033
 Caldate: 14-DEC-2006

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[4.743]	25.00	2.752	ug/L	!ib
Antimony	[0.006279]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.2005]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	ND	0.2500	0.002016	ug/L	
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	[6.814]	25.00	6.782	ug/L	!ib
Chromium	ND	0.5000	0.01315	ug/L	
Cobalt	[0.008891]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	[7.652]	25.00	3.223	ug/L	!ib
Lead	[0.04719]	0.2500	0.002523	ug/L	!ib
Magnesium	[4.771]	25.00	1.907	ug/L	!ib
Manganese	ND	0.2500	0.03082	ug/L	
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	ND	25.00	3.213	ug/L	
Selenium	ND	1.000	0.6002	ug/L	
Silver	ND	0.2500	0.005272	ug/L	
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.5000	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	710787	-3.83
Scandium	529417	502160	-5.15
Germanium	119842	113800	-5.04
Indium	758188	737562	-2.72
Bismuth	901811	917724	1.76

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56501744060
 Cal : 56501744001

File : 11410060
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 15:53

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[4.936]	25.00	2.752	ug/L	!ib
Antimony	[0.05490]	0.2500	0.005910	ug/L	!ib
Arsenic	ND	0.5000	0.1120	ug/L	
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.03543]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	[0.2143]	0.5000	0.01315	ug/L	!ib
Cobalt	[0.03813]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	[5.108]	25.00	3.223	ug/L	!ib
Lead	[0.03492]	0.2500	0.002523	ug/L	!ib
Magnesium	[4.972]	25.00	1.907	ug/L	!ib
Manganese	[0.03339]	0.2500	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	ND	25.00	3.213	ug/L	
Selenium	ND	1.000	0.6002	ug/L	
Silver	[0.03444]	0.2500	0.005272	ug/L	!ib
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	[0.1003]	0.5000	0.06366	ug/L	!ib
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	693681	-6.15
Scandium	529417	488398	-7.75
Germanium	119842	108716	-9.28
Indium	758188	717096	-5.42
Bismuth	901811	881470	-2.26

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56501744078
 Cal : 56501744001

File : 11410078
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 17:34

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	ND	25.00	2.752	ug/L	
Antimony	[0.01143]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.2346]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.004656]	0.2500	0.002016	ug/L	!ib
Cadmium	ND	0.2500	0.05722	ug/L	
Calcium	ND	25.00	6.782	ug/L	
Chromium	ND	0.5000	0.01315	ug/L	
Cobalt	[0.01014]	0.2500	0.003116	ug/L	!ib
Copper	ND	0.2500	0.02110	ug/L	
Iron	ND	25.00	3.223	ug/L	
Lead	[0.05049]	0.2500	0.002523	ug/L	!ib
Magnesium	ND	25.00	1.907	ug/L	
Manganese	ND	0.2500	0.03082	ug/L	
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	ND	25.00	3.213	ug/L	
Selenium	ND	1.000	0.6002	ug/L	
Silver	ND	0.2500	0.005272	ug/L	
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.5000	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	694076	-6.09
Scandium	529417	484300	-8.52
Germanium	119842	110242	-8.01
Indium	758188	712188	-6.07
Bismuth	901811	897887	-0.44

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 6020

Inst : MET05
 Seqnum : 56501744088
 Cal : 56501744001

File : 11410088
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 18:30

Analyte	Quant	RL	3X IDL	Units	Flags
Aluminum	[6.153]	25.00	2.752	ug/L	!ib
Antimony	[0.07345]	0.2500	0.005910	ug/L	!ib
Arsenic	[0.2428]	0.5000	0.1120	ug/L	!ib
Barium	ND	0.2500	0.03444	ug/L	
Beryllium	[0.04132]	0.2500	0.002016	ug/L	!ib
Cadmium	[0.08623]	0.2500	0.05722	ug/L	!ib
Calcium	ND	25.00	6.782	ug/L	
Chromium	[0.07947]	0.5000	0.01315	ug/L	!ib
Cobalt	[0.05237]	0.2500	0.003116	ug/L	!ib
Copper	[0.02443]	0.2500	0.02110	ug/L	!ib
Iron	[4.785]	25.00	3.223	ug/L	!ib
Lead	[0.09071]	0.2500	0.002523	ug/L	!ib
Magnesium	[6.691]	25.00	1.907	ug/L	!ib
Manganese	[0.04755]	0.2500	0.03082	ug/L	!ib
Molybdenum	ND	0.2500	0.4072	ug/L	
Nickel	ND	0.2500	0.01875	ug/L	
Potassium	ND	25.00	3.213	ug/L	
Selenium	ND	1.000	0.6002	ug/L	
Silver	[0.03599]	0.2500	0.005272	ug/L	!ib
Sodium	ND	25.00	3.640	ug/L	
Thallium	ND	0.1250	0	ug/L	
Vanadium	ND	0.5000	0.06366	ug/L	
Zinc	ND	0.2500	0.2784	ug/L	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	709742	-3.97
Scandium	529417	498153	-5.91
Germanium	119842	113590	-5.22
Indium	758188	727823	-4.00
Bismuth	901811	969919	7.55

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56501744017
 Cal : 56501744001
 Standards: S4984, S4635

File : 11410017
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 11:53

Analyte	Quant	RL	Units	Flags
Antimony	2.420	0.2500	ug/L	
Arsenic	[0]	0.5000	ug/L	
Barium	1.451	0.2500	ug/L	
Beryllium	[0.01179]	0.2500	ug/L	
Cadmium	[0.1442]	0.2500	ug/L	
Chromium	3.495	0.5000	ug/L	
Cobalt	2.796	0.2500	ug/L	
Copper	2.458	0.2500	ug/L	
Lead	1.502	0.2500	ug/L	
Manganese	1.444	0.2500	ug/L	
Nickel	5.315	0.2500	ug/L	
Selenium	[0]	1.000	ug/L	
Silver	[0.1776]	0.2500	ug/L	
Thallium	[0.05492]	0.1250	ug/L	
Vanadium	[0.2756]	0.5000	ug/L	
Zinc	3.724	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	107100	ug/L	107
Calcium	300000	335400	ug/L	112
Iron	250000	250100	ug/L	100
Magnesium	100000	106500	ug/L	107
Molybdenum	2000	2092	ug/L	105
Potassium	100000	109400	ug/L	109
Sodium	250000	250400	ug/L	100

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	588660	-20.36
Scandium	529417	462832	-12.58
Germanium	119842	103404	-13.72
Indium	758188	623223	-17.80
Bismuth	901811	640011	-29.03

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56501744018
 Cal : 56501744001
 Standards: S4985, S4635

File : 11410018
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 11:59

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	98180	ug/L	-2		
Arsenic	100.0	96.26	ug/L	-4	20	
Cadmium	100.0	90.40	ug/L	-10	20	
Calcium	300000	310100	ug/L	3		
Chromium	200.0	205.7	ug/L	3	20	
Cobalt	200.0	191.4	ug/L	-4	20	
Copper	200.0	177.4	ug/L	-11	20	
Iron	250000	231600	ug/L	-7		
Magnesium	100000	96620	ug/L	-3		
Manganese	200.0	199.3	ug/L	0	20	
Molybdenum	2000	1974	ug/L	-1		
Nickel	200.0	183.0	ug/L	-9	20	
Potassium	100000	101000	ug/L	1		
Selenium	100.0	83.07	ug/L	-17	20	
Silver	50.00	44.67	ug/L	-11	20	
Sodium	250000	223400	ug/L	-11		
Vanadium	200.0	209.5	ug/L	5	20	
Zinc	100.0	84.84	ug/L	-15	20	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Scandium	529417	467368	-11.72
Germanium	119842	102866	-14.17

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56501744034 File : 11410034
 Cal : 56501744001 Caldate: 14-DEC-2006
 Standards: S4984, S4635

IDF : 1.0
 Time : 14-DEC-2006 13:28

Analyte	Quant	RL	Units	Flags
Antimony	2.336	0.2500	ug/L	
Arsenic	[0]	0.5000	ug/L	
Barium	1.379	0.2500	ug/L	
Beryllium	[0.008427]	0.2500	ug/L	
Cadmium	[0.1298]	0.2500	ug/L	
Chromium	3.268	0.5000	ug/L	
Cobalt	2.720	0.2500	ug/L	
Copper	2.366	0.2500	ug/L	
Lead	1.465	0.2500	ug/L	
Manganese	1.400	0.2500	ug/L	
Nickel	5.081	0.2500	ug/L	
Selenium	[0]	1.000	ug/L	
Silver	[0.1606]	0.2500	ug/L	
Thallium	[0.04368]	0.1250	ug/L	
Vanadium	[0.2795]	0.5000	ug/L	
Zinc	3.505	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	103600	ug/L	104
Calcium	300000	321700	ug/L	107
Iron	250000	244300	ug/L	98
Magnesium	100000	102700	ug/L	103
Molybdenum	2000	2043	ug/L	102
Potassium	100000	105600	ug/L	106
Sodium	250000	242000	ug/L	97

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	580974	-21.40
Scandium	529417	466222	-11.94
Germanium	119842	103041	-14.02
Indium	758188	632944	-16.52
Bismuth	901811	662727	-26.51

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56501744035
 Cal : 56501744001
 Standards: S4985, S4635

File : 11410035
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 13:34

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	94430	ug/L	-6		
Arsenic	100.0	94.08	ug/L	-6	20	
Cadmium	100.0	88.79	ug/L	-11	20	
Calcium	300000	299700	ug/L	0		
Chromium	200.0	201.6	ug/L	1	20	
Cobalt	200.0	187.9	ug/L	-6	20	
Copper	200.0	173.0	ug/L	-14	20	
Iron	250000	229000	ug/L	-8		
Magnesium	100000	93070	ug/L	-7		
Manganese	200.0	195.5	ug/L	-2	20	
Molybdenum	2000	1971	ug/L	-1		
Nickel	200.0	179.5	ug/L	-10	20	
Potassium	100000	98190	ug/L	-2		
Selenium	100.0	82.13	ug/L	-18	20	
Silver	50.00	44.30	ug/L	-11	20	
Sodium	250000	216900	ug/L	-13		
Vanadium	200.0	205.1	ug/L	3	20	
Zinc	100.0	82.20	ug/L	-18	20	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Scandium	529417	467067	-11.78
Germanium	119842	100756	-15.93

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR EPA 6020

Inst : MET05
 Seqnum : 56501744090 File : 11410090
 Cal : 56501744001 Caldate: 14-DEC-2006
 Standards: S4984, S4635

IDF : 1.0
 Time : 14-DEC-2006 18:41

Analyte	Quant	RL	Units	Flags
Antimony	2.312	0.2500	ug/L	
Arsenic	[0.1553]	0.5000	ug/L	
Barium	1.369	0.2500	ug/L	
Beryllium	[0.01073]	0.2500	ug/L	
Cadmium	[0.1632]	0.2500	ug/L	
Chromium	3.309	0.5000	ug/L	
Cobalt	2.702	0.2500	ug/L	
Copper	2.340	0.2500	ug/L	
Lead	1.483	0.2500	ug/L	
Manganese	1.381	0.2500	ug/L	
Nickel	5.082	0.2500	ug/L	
Selenium	[0]	1.000	ug/L	
Silver	[0.1574]	0.2500	ug/L	
Thallium	[0.04155]	0.1250	ug/L	
Vanadium	[0.2934]	0.5000	ug/L	
Zinc	3.588	0.2500	ug/L	

Interferent	Spiked	Quant	Units	%Rec
Aluminum	100000	105900	ug/L	106
Calcium	300000	328000	ug/L	109
Iron	250000	248400	ug/L	99
Magnesium	100000	105300	ug/L	105
Molybdenum	2000	2071	ug/L	104
Potassium	100000	107500	ug/L	108
Sodium	250000	250800	ug/L	100

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Lithium	739106	554975	-24.91
Scandium	529417	436343	-17.58
Germanium	119842	97215	-18.88
Indium	758188	601658	-20.65
Bismuth	901811	646522	-28.31

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR EPA 6020

Inst : MET05
 Seqnum : 56501744091
 Cal : 56501744001
 Standards: S4985, S4635

File : 11410091
 Caldate: 14-DEC-2006

IDF : 1.0
 Time : 14-DEC-2006 18:46

Analyte	Spiked	Quant	Units	%D	Max %D	Flags
Aluminum	100000	98280	ug/L	-2		
Arsenic	100.0	94.81	ug/L	-5	20	
Cadmium	100.0	92.58	ug/L	-7	20	
Calcium	300000	310300	ug/L	3		
Chromium	200.0	207.1	ug/L	4	20	
Cobalt	200.0	194.6	ug/L	-3	20	
Copper	200.0	174.8	ug/L	-13	20	
Iron	250000	237500	ug/L	-5		
Magnesium	100000	96600	ug/L	-3		
Manganese	200.0	202.6	ug/L	1	20	
Molybdenum	2000	2051	ug/L	3		
Nickel	200.0	182.2	ug/L	-9	20	
Potassium	100000	102500	ug/L	3		
Selenium	100.0	83.65	ug/L	-16	20	
Silver	50.00	45.53	ug/L	-9	20	
Sodium	250000	227600	ug/L	-9		
Vanadium	200.0	212.5	ug/L	6	20	
Zinc	100.0	82.77	ug/L	-17	20	

ISTD (ICALBLK 11410004)	ICALBLK Abund	Abund	%Drift
Scandium	529417	426654	-19.41
Germanium	119842	92305	-22.98

INTERNAL STANDARD SUMMARY Curtis & Tompkins Laboratories

Sequence Date: 14-DEC-2006
Sequence: 56501744
Instrument ID: MET05

ICALBLK Filename: 11410004
Date Analyzed: 14-DEC-2006
Time Analyzed: 10:41

ICALBLK STD	IS1 (LI READING	IS2 (SC READING	IS3 (GE READING	IS4 (IN READING	IS5 (BI READING	IS6 (TB READING
739106	529417	119842	758188	901811	1227860	
LOWER LIMIT	221732	158825	35953	227456	270543	368358
UPPER LIMIT	886927	635300	143811	909826	1082173	1473432

TYPE	SAMPLE	#	IS1 (LI READING	IS2 (SC READING	IS3 (GE READING	IS4 (IN READING	IS5 (BI READING	IS6 (TB READING
ICB		014	760785	538000	119331	765110	912624	1235705
ICSA		017	588660	462832	103404	623223	640011	1025722
BLANK	QC367981	022	560416	398147	94842	570719	706182	875004
SAMPLE	191351-008	023	589467	423113	97799	609924	764612	991226
SAMPLE	191351-006	024	677372	554200	118372	721189	737564	1202708
CCV		029	639701	463074	104479	659273	829843	1106073
CCB		033	710787	502160	113800	737562	917724	1175519
ICSA		034	580974	466222	103041	632944	662727	1058629
BLANK	QC368135	039	567501	400311	89855	605457	736036	893527
BS	QC368136	040	588362	431634	95684	632097	767076	1011286
BSD	QC368137	041	586134	426268	93466	611563	743233	972497
SER	QC368140	043	644610	468968	105566	686731	855874	1135233
MS	QC368138	044	558544	406754	89301	569981	682702	904722
MSD	QC368139	045	562038	415803	89805	583897	695706	926120
PDS	QC368141	046	553847	404034	87110	567582	672543	897853
MSS	191314-003	050	649452	472606	108094	704387	895172	1155797
CCV		058	618953	449338	100094	655982	801836	1054895
CCB		060	693681	488398	108716	717096	881470	1151266
SAMPLE	191358-001	062	699875	488946	109715	717087	878017	1149936
SAMPLE	191358-002	063	708354	494800	111300	718553	873329	1146935
SAMPLE	191358-003	064	719961	500208	111250	731372	884359	1154608
SAMPLE	191358-004	065	726250	503430	111151	732866	886281	1161686
SAMPLE	191358-005	066	698762	482261	108129	696780	878322	1129679
SAMPLE	191358-006	067	636097	423916	94437	614493	767112	978579
SAMPLE	191358-007	068	707589	488449	109304	714913	884959	1145963
SAMPLE	191358-009	069	676856	456313	103269	667021	835756	1079689
SAMPLE	191358-011	070	658371	459122	102552	671123	839882	1091259
SAMPLE	191358-013	071	645916	467937	102449	667898	844802	1098112

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 14-DEC-2006
Sequence: 56501744
Instrument ID: MET05

(11410) ICALBLK Filename: 11410004
Date Analyzed: 14-DEC-2006
Time Analyzed: 10:41

TYPE	SAMPLE	#							
CCV		075	666358	485169	108833	696031	883136	1164154	
CCB		078	694076	484300	110242	712188	897887	1163618	
SER	QC368140	079	671974	465281	107092	685146	873592	1117868	
MS	QC368138	080	636987	453691	103204	667781	838670	1087516	
MSD	QC368139	081	637371	452368	102211	667621	837642	1093329	
PDS	QC368141	082	623953	453740	101999	655544	813082	1073291	
CCV		086	656022	473580	104619	683901	846276	1121003	
CCB		088	709742	498153	113590	727823	969919	1197689	
ICSA		090	554975	436343	97215	601658	646522	1013362	
BLANK	QC368128	095	540053	375879	86590	557219	699677	848522	
BS	QC368129	096	557918	394421	88138	574157	718477	932736	
BSD	QC368130	097	576166	415072	92190	601336	741542	984717	
MSS	191314-003	099	616378	441276	97559	628284	745469	1026053	
SER	QC368133	100	645378	444230	100288	662612	815950	1059214	
MS	QC368131	101	553556	393768	85079	566601	673303	872134	
MSD	QC368132	102	538091	382101	82316	551846	653474	825590	
MS	QC368217	103	551701	403464	85711	581992	680914	918834	
CCV		107	609315	436763	98119	650290	815668	1059464	
CCB		109	617799	433413	97372	666582	835820	1051741	
MSD	QC368218	111	538887	388543	82637	558854	664413	886599	
PDS	QC368134	112	545626	398039	83820	574699	676181	877240	
SAMPLE	191314-001	113	552048	380498	81965	556520	654901	818244	
SAMPLE	191314-004	114	602878	414210	88783	587173	680202	940114	
SAMPLE	191314-005	115	576302	402469	86051	568560	678263	913636	
SAMPLE	191314-006	116	671780	467993	98008	647175	724984	1060316	
SAMPLE	191314-009	117	536236	396896	80376	562678	624656	818700	
SAMPLE	191314-010	118	578321	416199	86491	610734	672694	862603	
MSS	191314-011	119	517206	365884	78354	527233	622153	781307	
SAMPLE	191314-012	120	502573	360118	75213	522754	599333	768282	
CCV		124	590489	420941	94163	630459	795613	1013761	
CCB		126	582705	406942	91432	636473	792047	985147	
SAMPLE	191314-014	130	525604	369542	77989	539072	631213	791068	
SAMPLE	191314-015	131	543651	388333	82535	555926	652692	835229	
SAMPLE	191314-016	132	575949	416664	87451	599056	690589	935377	

Sequence Date: 14-DEC-2006
Sequence: 56501744
Instrument ID: MET05

(11410)

ICALBLK Filename: 11410004
Date Analyzed: 14-DEC-2006
Time Analyzed: 10:41

[illegible]

INTERNAL STANDARD SUMMARY
Curtis & Tompkins Laboratories

Sequence Date: 14-DEC-2006
Sequence: 56501744
Instrument ID: MET05

(11410)
ICALBLK Filename: 11410004
Date Analyzed: 14-DEC-2006
Time Analyzed: 10:41

TYPE	SAMPLE	#					
CCB		201	541339	367469	82059	596051	742222
ICSA		203	431246	334818	73495	510422	546377
							830771
							734981

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56501744 Instrument: MET05
Analytical Method: EPA 6020

Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 14-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	UL	Stds	Used	>LR
001	11410001	TUN				14-DEC-2006 10:24	1.0	1.0				1		
002	11410002	X	RINSE			14-DEC-2006 10:30	1.0					2		
003	11410003	X	RINSE			14-DEC-2006 10:36	1.0					2		
004	11410004	ICALBLK	STD-BLANK			14-DEC-2006 10:41	1.0	1.0				2		
005	11410005	ICAL	CS1			14-DEC-2006 10:47	1.0	1.0				3		
006	11410006	ICAL	CS2			14-DEC-2006 10:52	1.0	1.0				4		
007	11410007	ICAL	CS3			14-DEC-2006 10:58	1.0	1.0				5		
008	11410008	ICAL	CS4			14-DEC-2006 11:04	1.0	1.0				6		
009	11410009	ICAL	CS5			14-DEC-2006 11:09	1.0	1.0				7		
010	11410010	ICAL	CS6			14-DEC-2006 11:15	1.0	1.0				8		
011	11410011	X	RINSE			14-DEC-2006 11:20	1.0					2		
012	11410012	ICV				14-DEC-2006 11:25	1.0	1.0				9		
013	11410013	X	RINSE			14-DEC-2006 11:31	1.0					2		
014	11410014	ICB				14-DEC-2006 11:36	1.0	1.0				2		
015	11410015	X				14-DEC-2006 11:42	1.0	1.0	3			2		
016	11410016	X				14-DEC-2006 11:48	1.0					2		
017	11410017	ICSA				14-DEC-2006 11:53	1.0	1.0				10	2	7:CA=335400
018	11410018	ICSAB				14-DEC-2006 11:59	1.0	1.0				11	2	9:CA=310100
019	11410019	X	RINSE			14-DEC-2006 12:04	1.0					2		
020	11410020	X	RINSE			14-DEC-2006 12:10	1.0					2		
021	11410021	X	RINSE			14-DEC-2006 12:15	1.0					2		
022	11410022	BLANK	QC367981			14-DEC-2006 12:21	1.0	1.0				2		
023	11410023	SAMPLE	191351-008			14-DEC-2006 12:27	1.0	1.0				2		
024	11410024	SAMPLE	191351-006			14-DEC-2006 12:32	5.0	1.0				2		
025	11410025	X	RINSE			14-DEC-2006 12:38	1.0					2		
026	11410026	X	RINSE			14-DEC-2006 12:43	1.0					2		
027	11410027	X	RINSE			14-DEC-2006 12:49	1.0					2		
028	11410028	X	RINSE			14-DEC-2006 12:55	1.0					2		
029	11410029	CCV				14-DEC-2006 13:00	1.0	1.0				12	2	
030	11410030	X	RINSE			14-DEC-2006 13:06	1.0					2		
031	11410031	X				14-DEC-2006 13:11	1.0					2		

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst:

Date:

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56501744 Instrument: MET05 Agilent ICP-MS Begun: 14-DEC-2006
Analytical Method: EPA 6020 SOP Version: 6020_rv2

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
032	11410032	X				14-DEC-2006 13:17	1.0					2		
033	11410033	CCB				14-DEC-2006 13:22	1.0	1.0			1	2		
034	11410034	ICSA				14-DEC-2006 13:28	1.0	1.0			1	10 2	7:CA=321700	
035	11410035	ICSAB				14-DEC-2006 13:34	1.0	1.0			1	11 2	9:CA=299700	
036	11410036	X	RINSE			14-DEC-2006 13:39	1.0					2		
037	11410037	X	RINSE			14-DEC-2006 13:45	1.0					2		
038	11410038	X	RINSE			14-DEC-2006 13:50	1.0					2		
039	11410039	BLANK	QC368135	120324	Water	14-DEC-2006 13:56	1.0	1.0			1	2		
040	11410040	BS	QC368136	120324	Water	14-DEC-2006 14:01	1.0	1.0			1	2		
041	11410041	BSD	QC368137	120324	Water	14-DEC-2006 14:07	1.0	1.0			1	2		
042	11410042	X	RINSE			14-DEC-2006 14:12	1.0					2		
043	11410043	SER	QC368140	120324	Water	14-DEC-2006 14:18	5.0	1.0		1	1	2		
044	11410044	MS	QC368138	120324	Water	14-DEC-2006 14:24	1.0	1.0		4	1	2	5:NA=59030.0	
045	11410045	MSD	QC368139	120324	Water	14-DEC-2006 14:29	1.0	1.0		4	1	2	5:NA=57900.0	
046	11410046	PDS	QC368141	120324	Water	14-DEC-2006 14:35	1.0	1.0			1	13 14 2	5:NA=58030.0	
047	11410047	X	RINSE			14-DEC-2006 14:40	1.0					2		
048	11410048	X	RINSE			14-DEC-2006 14:46	1.0					2		
049	11410049	X	RINSE			14-DEC-2006 14:51	1.0					2		
050	11410050	MSS	191314-003	120324	Water	14-DEC-2006 14:57	10.0	1.0			1	2		
051	11410051	X	RINSE			14-DEC-2006 15:02	1.0					2		
052	11410052	X	RINSE			14-DEC-2006 15:08	1.0					2		
053	11410053	X	RINSE			14-DEC-2006 15:14	1.0					2		
054	11410054	X				14-DEC-2006 15:19	1.0					12 2		
055	11410055	X	RINSE			14-DEC-2006 15:25	1.0					2		
056	11410056	X				14-DEC-2006 15:30	1.0					2		
057	11410057	X				14-DEC-2006 15:36	1.0					2		
058	11410058	CCV				14-DEC-2006 15:42	1.0	1.0			1	12 2		
059	11410059	X	RINSE			14-DEC-2006 15:48	1.0					2		
060	11410060	CCB				14-DEC-2006 15:53	1.0	1.0			1	2		
061	11410061	X				14-DEC-2006 15:59	1.0					2		
062	11410062	SAMPLE	191358-001	120324	Water	14-DEC-2006 16:05	20.0	1.0		1	1	2		

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst: MP Date: 12/15/09

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56501744 Instrument: MET05
Analytical Method: EPA 6020 Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 14-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
063	11410063	SAMPLE	191358-002	120324	Water	14-DEC-2006	16:10 50.0	1.0	1	1	1	2		
064	11410064	SAMPLE	191358-003	120324	Water	14-DEC-2006	16:16 20.0	1.0	2	1	1	2		
065	11410065	SAMPLE	191358-004	120324	Water	14-DEC-2006	16:21 20.0	1.0	1	1	1	2		
066	11410066	SAMPLE	191358-005	120324	Water	14-DEC-2006	16:27 20.0	1.0	1	1	1	2		
067	11410067	SAMPLE	191358-006	120324	Water	14-DEC-2006	16:33 1.0	1.0	1	1	1	2		
068	11410068	SAMPLE	191358-007	120324	Water	14-DEC-2006	16:38 20.0	1.0	2	1	1	2		
069	11410069	SAMPLE	191358-009	120324	Filtera	14-DEC-2006	16:44 10.0	1.0		1	1	2		
070	11410070	SAMPLE	191358-011	120324	Filtera	14-DEC-2006	16:49 10.0	1.0		1	1	2		
071	11410071	SAMPLE	191358-013	120324	Water	14-DEC-2006	16:55 20.0	1.0		1	1	2		1:MN=230.350
072	11410072	X	RINSE			14-DEC-2006	17:00 1.0					2		
073	11410073	X	RINSE			14-DEC-2006	17:06 1.0					2		
074	11410074	X	RINSE			14-DEC-2006	17:12 1.0					2		
075	11410075	CCV	RINSE			14-DEC-2006	17:17 1.0	1.0	1	1	1	12	2	
076	11410076	X	RINSE			14-DEC-2006	17:23 1.0					2		
077	11410077	X				14-DEC-2006	17:28 1.0					2		
078	11410078	CCB				14-DEC-2006	17:34 1.0	1.0		1	1	2		
079	11410079	SER	QC368140	120324	Water	14-DEC-2006	17:40 50.0	1.0	1	2	1	2		
080	11410080	MS	QC368138	120324	Water	14-DEC-2006	17:45 10.0	1.0	1	1	1	2		
081	11410081	MSD	QC368139	120324	Water	14-DEC-2006	17:51 10.0	1.0	1	1	1	2		
082	11410082	PDS	QC368141	120324	Water	14-DEC-2006	17:56 10.0	1.0	1	1	1	13	14	2
083	11410083	X	RINSE			14-DEC-2006	18:02 1.0					2		
084	11410084	X	RINSE			14-DEC-2006	18:08 1.0					2		
085	11410085	X	RINSE			14-DEC-2006	18:13 1.0					2		
086	11410086	CCV				14-DEC-2006	18:19 1.0	1.0		1	1	12	2	
087	11410087	X	RINSE			14-DEC-2006	18:24 1.0					2		
088	11410088	CCB				14-DEC-2006	18:30 1.0	1.0		1	1	2		
089	11410089	X				14-DEC-2006	18:35 1.0	1.0		1	1	2		
090	11410090	ICSA				14-DEC-2006	18:41 1.0	1.0		1	1	10	2	7:CA=328000
091	11410091	ICSAB				14-DEC-2006	18:46 1.0	1.0		1	1	11	2	10:CA=310300
092	11410092	X	RINSE			14-DEC-2006	18:52 1.0					2		
093	11410093	X	RINSE			14-DEC-2006	18:57 1.0					2		

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst:

Date:

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56501744 Instrument: MET05
Analytical Method: EPA 6020

Agilent ICP-MS
SOP Version: 6020_rv2

Begun: 14-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
094	11410094	X	RINSE			14-DEC-2006 19:03	1.0					2		
095	11410095	BLANK	QC368128	120323	Filter	14-DEC-2006 19:09	1.0	1.0			1	2		
096	11410096	BS	QC368129	120323	Filter	14-DEC-2006 19:14	1.0	1.0			1	2		
097	11410097	BSD	QC368130	120323	Filter	14-DEC-2006 19:20	1.0	1.0			1	2		
098	11410098	X	RINSE			14-DEC-2006 19:25	1.0					2		
099	11410099	MSS	191314-003	120323	Filter	14-DEC-2006 19:31	1.0	1.0	3		1	2		3:NA=49780.0
100	11410100	SER	QC368133	120323	Filter	14-DEC-2006 19:36	5.0	1.0	1		1	2		
101	11410101	MS	QC368131	120323	Filter	14-DEC-2006 19:42	1.0	1.0	3		1	2		4:NA=58490.0
102	11410102	MSD	QC368132	120323	Filter	14-DEC-2006 19:48	1.0	1.0	3		1	2		4:NA=58400.0
103	11410103	MS	QC368217	120323	Filter	14-DEC-2006 19:53	1.0	1.0	2		1	2		5:NA=73100.0
104	11410104	X	RINSE			14-DEC-2006 19:59	1.0					2		
105	11410105	X	RINSE			14-DEC-2006 20:04	1.0					2		
106	11410106	X	RINSE			14-DEC-2006 20:10	1.0					2		
107	11410107	CCV				14-DEC-2006 20:15	1.0	1.0			1	12	2	
108	11410108	X	RINSE			14-DEC-2006 20:21	1.0					2		
109	11410109	CCB				14-DEC-2006 20:26	1.0	1.0			1	2		
110	11410110	X				14-DEC-2006 20:32	1.0	1.0			1	2		
111	11410111	MSD	QC368218	120323	Filter	14-DEC-2006 20:38	1.0	1.0	2		1	2		5:NA=78760.0
112	11410112	PDS	QC368134	120323	Filter	14-DEC-2006 20:43	1.0	1.0	1		1	13	14	2
113	11410113	SAMPLE	191314-001	120323	Filter	14-DEC-2006 20:49	1.0	1.0	4		1	2		4:NA=56410.0
114	11410114	SAMPLE	191314-004	120323	Filter	14-DEC-2006 20:54	1.0	1.0	3		1	2		3:MG=84750.0
115	11410115	SAMPLE	191314-005	120323	Filter	14-DEC-2006 21:00	1.0	1.0	3		1	2		3:MG=83520.0
116	11410116	SAMPLE	191314-006	120323	Filter	14-DEC-2006 21:06	1.0	1.0	3		1	2		3:NA=113400
117	11410117	SAMPLE	191314-009	120323	Filter	14-DEC-2006 21:11	1.0	1.0	3		1	2		3:NA=200200
118	11410118	SAMPLE	191314-010	120323	Filter	14-DEC-2006 21:17	1.0	1.0	4		1	2		4:NA=123600
119	11410119	MSS	191314-011	120323	Filter	14-DEC-2006 21:22	1.0	1.0	4		1	2		4:NA=65670.0
120	11410120	SAMPLE	191314-012	120323	Filter	14-DEC-2006 21:28	1.0	1.0	5		1	2		6:NA=111500
121	11410121	X	RINSE			14-DEC-2006 21:33	1.0					2		
122	11410122	X	RINSE			14-DEC-2006 21:39	1.0					2		
123	11410123	X	RINSE			14-DEC-2006 21:45	1.0					2		
124	11410124	CCV				14-DEC-2006 21:50	1.0	1.0			1	12	2	

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst: Date: 12/15/06

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56501744 Instrument: MET05 Agilent ICP-MS
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 14-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IQC	SPK	uL	Stds	Used	>LR
125	11410125	X	RINSE			14-DEC-2006 21:56	1.0					2		
126	11410126	CCB				14-DEC-2006 22:01	1.0	1.0			1	2		
127	11410127	X				14-DEC-2006 22:07	1.0	1.0	1		1	2		
128	11410128	TUN				14-DEC-2006 22:13	1.0	1.0				1		
129	11410129	X	RINSE			14-DEC-2006 22:19	1.0					2		
130	11410130	SAMPLE	191314-014	120323	Filtera	14-DEC-2006 22:25	1.0	1.0	3		1	2	3:NA=58960.0	
131	11410131	SAMPLE	191314-015	120323	Filtera	14-DEC-2006 22:30	1.0	1.0	3		1	2	3:NA=77960.0	
132	11410132	SAMPLE	191314-016	120323	Filtera	14-DEC-2006 22:36	1.0	1.0	3		1	2	3:NA=88540.0	
133	11410133	X	RINSE			14-DEC-2006 22:41	1.0					2		
134	11410134	X	RINSE			14-DEC-2006 22:47	1.0					2		
135	11410135	X	RINSE			14-DEC-2006 22:53	1.0					2		
136	11410136	MSS	191314-003	120323	Filtera	14-DEC-2006 22:58	10.0	1.0			1	2		
137	11410137	SER	QC368133	120323	Filtera	14-DEC-2006 23:04	50.0	1.0	2		1	2		
138	11410138	MS	QC368131	120323	Filtera	14-DEC-2006 23:10	10.0	1.0			1	2		
139	11410139	MSD	QC368132	120323	Filtera	14-DEC-2006 23:16	10.0	1.0			1	2		
140	11410140	PDS	QC368134	120323	Filtera	14-DEC-2006 23:21	10.0	1.0			1	13 14 2		
141	11410141	MSS	191314-011	120323	Filtera	14-DEC-2006 23:27	10.0	1.0			1	2		
142	11410142	MS	QC368217	120323	Filtera	14-DEC-2006 23:32	10.0	1.0			1	2		
143	11410143	X	RINSE			14-DEC-2006 23:38	1.0					2		
144	11410144	X	RINSE			14-DEC-2006 23:44	1.0					2		
145	11410145	X	RINSE			14-DEC-2006 23:49	1.0					2		
146	11410146	CCV				14-DEC-2006 23:55	1.0	1.0			1	12 2		
147	11410147	X	RINSE			15-DEC-2006 00:00	1.0					2		
148	11410148	CCB				15-DEC-2006 00:06	1.0	1.0			1	2		
149	11410149	X				15-DEC-2006 00:12	1.0	1.0			1	2		
150	11410150	MSD	QC368218	120323	Filtera	15-DEC-2006 00:17	10.0	1.0			1	2		
151	11410151	SAMPLE	191314-001	120323	Filtera	15-DEC-2006 00:23	10.0	1.0			1	2		
152	11410152	SAMPLE	191314-004	120323	Filtera	15-DEC-2006 00:29	10.0	1.0			1	2		
153	11410153	SAMPLE	191314-005	120323	Filtera	15-DEC-2006 00:34	10.0	1.0	1		1	2		
154	11410154	SAMPLE	191314-006	120323	Filtera	15-DEC-2006 00:40	10.0	1.0			1	2		
155	11410155	SAMPLE	191314-009	120323	Filtera	15-DEC-2006 00:45	20.0	1.0	2		1	2		

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst: Date: 12/15/06

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56501744 Instrument: MET05 Agilent ICP-MS
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 14-DEC-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
156	11410156	SAMPLE	191314-010	120323	Filtr	15-DEC-2006 00:51	10.0	1.0	1	1	1	2		
157	11410157	SAMPLE	191314-012	120323	Filtr	15-DEC-2006 00:57	10.0	1.0	1	1	1	2		
158	11410158	SAMPLE	191314-014	120323	Filtr	15-DEC-2006 01:02	10.0	1.0	1	1	1	2		
159	11410159	SAMPLE	191314-015	120323	Filtr	15-DEC-2006 01:08	10.0	1.0	1	1	1	2		
160	11410160	X				15-DEC-2006 01:13	1.0					2		
161	11410161	X				15-DEC-2006 01:19	1.0					2		
162	11410162	X				15-DEC-2006 01:25	1.0					2		
163	11410163	CCV				15-DEC-2006 01:30	1.0				1	12	2	
164	11410164	X				15-DEC-2006 01:36	1.0					2		
165	11410165	CCB				15-DEC-2006 01:42	1.0				1	2		
166	11410166	X				15-DEC-2006 01:47	1.0				1	2		
167	11410167	SAMPLE	191314-016	120323	Filtr	15-DEC-2006 01:53	10.0	1.0		1	1	2		
168	11410168	X				15-DEC-2006 01:58	1.0					2		
169	11410169	X				15-DEC-2006 02:04	1.0					2		
170	11410170	X				15-DEC-2006 02:10	1.0					2		
171	11410171	CCV				15-DEC-2006 02:15	1.0				1	12	2	
172	11410172	X				15-DEC-2006 02:21	1.0					2		
173	11410173	X				15-DEC-2006 02:26	1.0			1	1	2		
174	11410174	CCB				15-DEC-2006 02:32	1.0				1	2		
175	11410175	ICSA				15-DEC-2006 02:38	1.0				1	10	2	
176	11410176	ICSAB				15-DEC-2006 02:43	1.0				1	11	2	
177	11410177	X				15-DEC-2006 02:49	1.0					2		
178	11410178	X				15-DEC-2006 02:54	1.0					2		
179	11410179	X				15-DEC-2006 03:00	1.0					2		
180	11410180	BLANK				15-DEC-2006 03:05	1.0				1	2		
181	11410181	BS				15-DEC-2006 03:11	1.0				1	2		
182	11410182	BSD				15-DEC-2006 03:17	1.0				1	2		
183	11410183	X				15-DEC-2006 03:22	1.0					2		
184	11410184	MSS				15-DEC-2006 03:28	1.0			4	1	2		
185	11410185	SER				15-DEC-2006 03:33	5.0			3	1	2		
186	11410186	MS				15-DEC-2006 03:39	1.0			1	4	2		

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst: Date: 12/15/06

SEQUENCE SUMMARY Curtis & Tompkins Laboratories

Sequence: 56501744 Instrument: MET05 Agilent ICP-MS
Analytical Method: EPA 6020 SOP Version: 6020_rv2

Begun: 14-DEC-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	PDF	IOC	SPK	uL	Stds	Used	>LR
187	11410187	MSD	QC368377	120383	Filtra	15-DEC-2006 03:44	1.0	1.0	2	3	1	2		6:NA=191100
188	11410188	PDS	QC368379	120383	Filtra	15-DEC-2006 03:50	1.0	1.0	2		1	13 14 2		6:NA=177300
189	11410189	X	RINSE			15-DEC-2006 03:55	1.0					2		
190	11410190	X	RINSE			15-DEC-2006 04:01	1.0					2		
191	11410191	X	RINSE			15-DEC-2006 04:07	1.0					2		
192	11410192	X	RINSE			15-DEC-2006 04:12	1.0					12 2		
193	11410193	X	RINSE			15-DEC-2006 04:18	1.0					2		
194	11410194	X				15-DEC-2006 04:23	1.0	1.0		2	1	2		
195	11410195	X				15-DEC-2006 04:29	1.0	1.0		2		2		
196	11410196	X	RINSE			15-DEC-2006 04:34	1.0					2		
197	11410197	X	RINSE			15-DEC-2006 04:40	1.0					2		
198	11410198	X	RINSE			15-DEC-2006 04:46	1.0					2		
199	11410199	CCV				15-DEC-2006 04:51	1.0					12 2		
200	11410200	X	RINSE			15-DEC-2006 04:57	1.0	1.0			1	2		
201	11410201	CCB				15-DEC-2006 05:02	1.0	1.0			1	2		
202	11410202	X				15-DEC-2006 05:08	1.0	1.0		1		2		
203	11410203	ICSA				15-DEC-2006 05:14	1.0	1.0			1	10 2		7:CA=339900
204	11410204	ICSAB				15-DEC-2006 05:19	1.0	1.0			1	11 2		10:CA=315400

Stds used: 1=S4974 2=S4635 3=S4978 4=S4979 5=S4980 6=S4981 7=S4975 8=S4976 9=S4982 10=S4984 11=S4985 12=S4983 13=S4326 14=S4327

Analyst:  Date: 12/15/06

REPORTING SUMMARY FOR 191358 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	A	S	A	B	B	C	C	C	C	F	P	M	M	H	N	K	S	A	N	T	V	Z
				L	B	S	A	E	D	A	R	O	U	E	B	G	N	G	I	E	G	A	L	N	
191358-001	MET05	12/13/06 22:32	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
191358-001	MET05	12/14/06 16:05	20.0													+							+		
191358-002	MET05	12/13/06 22:38	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
191358-002	MET05	12/14/06 16:10	50.0						+							+							+		
191358-003	MET05	12/13/06 22:43	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
191358-003	MET05	12/14/06 16:16	20.0													+							+		
191358-004	MET05	12/13/06 22:49	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
191358-004	MET05	12/14/06 16:21	20.0													+							+		
191358-005	MET05	12/13/06 22:55	1.0	+	+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	
191358-005	MET05	12/14/06 16:27	20.0						+							+	+						+		
191358-006	MET05	12/13/06 23:00	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
191358-006	MET05	12/14/06 16:33	1.0																				+		
191358-007	MET05	12/13/06 23:06	1.0	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
191358-007	MET05	12/14/06 16:38	20.0													+							+		
191358-013	MET04	12/11/06 15:08	1.0															+							
191358-013	MET05	12/14/06 00:01	1.0			+			+						+						+				
191358-013	MET05	12/14/06 16:55	20.0								+		+						+						+
QC367844	MET04	12/11/06 14:30	1.0															+							
QC367845	MET04	12/11/06 14:32	1.0															+							
QC367846	MET04	12/11/06 14:34	1.0															+							
QC367847	MET04	12/11/06 14:38	5.0															+							
QC367848	MET04	12/11/06 14:41	1.0															+							
QC367849	MET04	12/11/06 14:43	1.0															+							
QC368135	MET05	12/13/06 20:58	1.0		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
QC368135	MET05	12/14/06 13:56	1.0	+									+			+							+		
QC368136	MET05	12/13/06 21:04	1.0		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
QC368136	MET05	12/14/06 14:01	1.0	+												+							+		
QC368137	MET05	12/13/06 21:09	1.0		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
QC368137	MET05	12/14/06 14:07	1.0	+												+							+		
QC368138	MET05	12/13/06 21:31	1.0		+	+	+	+	+	+	+	+	+	+	+			+	+	+	+	+	+	+	
QC368138	MET05	12/14/06 14:24	1.0	+																			+		



Curtis & Tompkins, Ltd.

REPORTING SUMMARY FOR 191358 METALS Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	A	S	A	B	B	C	C	C	C	F	P	M	M	H	N	K	S	A	N	T	V	Z
				L	B	S	A	E	D	A	R	O	U	E	B	G	N	G	I	E	G	A	L	N	
QC368138	MET05	12/14/06 17:45	10.0							+				+		+	+								
QC368139	MET05	12/13/06 21:37	1.0		+	+	+	+	+		+	+	+		+			+	+	+	+		+	+	+
QC368139	MET05	12/14/06 14:29	1.0	+																		+			
QC368139	MET05	12/14/06 17:51	10.0							+				+		+	+								
QC368140	MET05	12/13/06 21:26	5.0		+	+	+	+	+		+	+	+		+			+	+	+	+		+	+	+
QC368140	MET05	12/14/06 14:18	5.0	+																					
QC368140	MET05	12/14/06 17:40	50.0							+				+		+	+					+			
QC368141	MET05	12/13/06 21:42	1.0		+	+	+	+	+		+	+	+		+			+	+	+	+		+	+	+
QC368141	MET05	12/14/06 14:35	1.0	+																					
QC368141	MET05	12/14/06 17:56	10.0							+				+		+	+					+			

REPORTING SUMMARY FOR 191358 METALS Filtrate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	A L	S B	A S	C D	C A	C R	C U	F E	P B	M G	M N	N I	K	N A	V	Z	
191358-009	MET05	12/13/06 23:11	1.0	+	+	+	+		+	+	+	+		+	+	+		+	+	
191358-009	MET05	12/14/06 16:44	10.0					+					+				+			
191358-011	MET05	12/13/06 23:17	1.0	+	+	+	+		+	+		+			+	+		+	+	
191358-011	MET05	12/14/06 16:49	10.0					+			+		+	+			+			
QC368135	MET05	12/13/06 20:58	1.0			+	+	+	+		+	+		+	+	+		+	+	
QC368135	MET05	12/14/06 13:56	1.0	+							+		+				+			
QC368136	MET05	12/13/06 21:04	1.0			+	+	+	+	+	+	+		+	+	+		+	+	
QC368136	MET05	12/14/06 14:01	1.0	+									+				+			
QC368137	MET05	12/13/06 21:09	1.0			+	+	+	+	+	+	+		+	+	+		+	+	
QC368137	MET05	12/14/06 14:07	1.0	+									+				+			
QC368138	MET05	12/13/06 21:31	1.0			+	+	+		+	+				+	+		+	+	
QC368138	MET05	12/14/06 14:24	1.0	+													+			
QC368138	MET05	12/14/06 17:45	10.0					+			+		+	+						
QC368139	MET05	12/13/06 21:37	1.0			+	+	+		+	+				+	+		+	+	
QC368139	MET05	12/14/06 14:29	1.0	+													+			
QC368139	MET05	12/14/06 17:51	10.0					+			+		+	+						
QC368140	MET05	12/13/06 21:26	5.0			+	+	+		+	+				+	+		+	+	
QC368140	MET05	12/14/06 14:18	5.0	+																
QC368140	MET05	12/14/06 17:40	50.0					+			+		+	+			+			
QC368141	MET05	12/13/06 21:42	1.0			+	+	+		+	+				+	+		+	+	
QC368141	MET05	12/14/06 14:35	1.0	+																
QC368141	MET05	12/14/06 17:56	10.0					+			+		+	+			+			

Curtis & Tompkins Laboratories

Sample Preparation Summary

13-DEC-2006 10:14

Batch Number : 120324
Date Extracted : 13-DEC-2006
Extracted by : Kevin Gaines
Prep Method : 200.8

Analysis : N/A
Bggroup : ICAP
Units : mL
Clean-up :

Spike #1 ID : S4326
Spike #2 ID : S4327
Spike #3 ID :
SOP Version :

Sample	Type	Client	Matrix	Int'l	Units	Final	Prep	Clean	pH	Sp 1	Sp 2	Sp 3	Analyses	Clean	Comments
				W/V		Vol	D.F.	D.F.		Vol	Vol	Vol		Method	
191290-001		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					TAL/ICP		
191314-003		Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
191358-001		Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
191358-002		Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
191358-003		Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
191358-004		Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
191358-005		Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
191358-006		Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
191358-007		Treadwell & Rollo	Water	50	mL	50	1.000000	1					TAL/ICP		
191358-009		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					15MET		
191358-011		Treadwell & Rollo	Filtrate	50	mL	50	1.000000	1					15MET		
191358-013		Treadwell & Rollo	Water	50	mL	50	1.000000	1					15MET		
QC368135	BLANK		Water	50	mL	50	1.000000	1					AG, AS, CD, (more)		
QC368136	BS		Water	50	mL	50	1.000000	1					ICAP		
QC368137	BSD		Water	50	mL	50	1.000000	1	.5				ICAP		
QC368138	MS	of 191314-003	Water	50	mL	50	1.000000	1	.5				ICAP		
QC368139	MSD	of 191314-003	Water	50	mL	50	1.000000	1	.5				ICAP		
QC368140	SER	of 191314-003	Water	50	mL	50	1.000000	1	.5				ICAP		
QC368141	PDS	of 191314-003	Water	50	mL	50	1.000000	1					ICAP		

Prep Chemist:

Reviewed By:

Date:

12/14/06

Relinquished By:

Received By:

Date:

12/14/06

Curtis & Tompkins, Ltd.

BK BK 2378
Page 12

Continued From: _____
Continued On: _____

Sample # and letter	Volume Sample (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
B1K	50	50	N	
B5				
B5D				
M3-03N				
M3D-03				
B13/4-03				
358-01A				
02				
03				
04				
05 B				
06 A				
07				
09 D				
011				
358-013M				
290-01H				

☐ filtered thru' Whatman # 541

Reagent ID or LIMS #	Initials / Date
95	per 12/13
34324	↓
34327	
024024	
038068	
0/1	
	Backup
	✓

Reviewer Signature / Date 12/12/06

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Curtis & Tompkins Laboratories
MDL Summary for EPA 6020 Water 200.8
As of 01/05/07

Analyte	Units	MET06 A	MET06 E	MET06 H	MET05
Aluminum	ug/L	0.40			9.6
Antimony	ug/L	0.0093			0.062
Arsenic	ug/L		0.034		0.34
Barium	ug/L	0.023			0.13
Beryllium	ug/L	0.017			0.12
Cadmium	ug/L	0.0058			0.17
Calcium	ug/L	5.6			15
Chromium	ug/L		0.038		0.18
Cobalt	ug/L		0.0072		0.069
Copper	ug/L		0.028		0.24
Iron	ug/L			1.9	16
Lead	ug/L	0.013			0.088
Magnesium	ug/L	0.73			11
Manganese	ug/L		0.011		0.050
Molybdenum	ug/L	0.0063			0.24
Nickel	ug/L		0.029		0.21
Potassium	ug/L	5.3			8.7
Selenium	ug/L			0.027	0.35
Silver	ug/L	0.0079			0.068
Sodium	ug/L		2.7		14
Thallium	ug/L	0.030			0.030
Vanadium	ug/L		0.026		0.24
Zinc	ug/L		0.062		0.23

Curtis & Tompkins Laboratories
MDL Summary for EPA 7470A Water
As of 01/05/07

Analyte	Units	MET04	MET14
Mercury	ug/L	0.058	0.021

GENERAL CHEMISTRY

**Chloride**

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Batch#:	120238
Matrix:	Water	Received:	12/08/06
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln	Fac	Sampled	Analyzed
BHWGW04	SAMPLE	191358-001	85	2.0	10.00		12/07/06 09:10	12/08/06 18:15
HWGW100	SAMPLE	191358-002	140	10	50.00		12/07/06 10:15	12/08/06 17:29
HWGW101	SAMPLE	191358-003	55	5.0	25.00		12/07/06 11:11	12/08/06 18:32
BHWGW01	SAMPLE	191358-004	200	5.0	25.00		12/07/06 12:00	12/08/06 18:50
BHWGW05	SAMPLE	191358-005	100	5.0	25.00		12/07/06 12:45	12/08/06 19:07
BHWGWO4RBHWGW100	SAMPLE	191358-006	ND	0.20	1.000		12/07/06 09:30	12/08/06 20:52
DUP1207062A	SAMPLE	191358-007	85	2.0	10.00		12/07/06 09:20	12/08/06 19:24
1065MW9B	SAMPLE	191358-009	53	2.0	10.00		12/07/06 11:50	12/08/06 17:47
1065PZ5AR	SAMPLE	191358-011	66	5.0	25.00		12/07/06 10:12	12/08/06 21:44
	BLANK	QC367795	ND	0.20	1.000			12/08/06 13:10

ND= Not Detected

RL= Reporting Limit



Fluoride

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Diln Fac:	1.000
Matrix:	Water	Batch#:	120238
Units:	mg/L	Received:	12/08/06

Field ID	Type	Lab ID	Result	RL	Sampled	Analyzed
BHWGW04	SAMPLE	191358-001	ND	0.10	12/07/06 09:10	12/08/06 22:02
HWGW100	SAMPLE	191358-002	ND	0.10	12/07/06 10:15	12/08/06 22:36
HWGW101	SAMPLE	191358-003	ND	0.10	12/07/06 11:11	12/08/06 23:11
BHWGW01	SAMPLE	191358-004	ND	0.10	12/07/06 12:00	12/08/06 23:46
BHWGW05	SAMPLE	191358-005	0.12	0.10	12/07/06 12:45	12/09/06 00:21
BHWGWO4RBHWGW100	SAMPLE	191358-006	ND	0.10	12/07/06 09:30	12/08/06 20:52
DUP1207062A	SAMPLE	191358-007	ND	0.10	12/07/06 09:20	12/09/06 00:56
1065MW9B	SAMPLE	191358-009	ND	0.10	12/07/06 11:50	12/09/06 02:40
1065PZ5AR	SAMPLE	191358-011	0.23	0.10	12/07/06 10:12	12/09/06 03:15
	BLANK	QC367795	ND	0.10		12/08/06 13:10

ND= Not Detected
RL= Reporting Limit



Nitrate Nitrogen

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Batch#:	120238
Matrix:	Water	Received:	12/08/06
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln Fac	Sampled	Analyzed
BHWGW04	SAMPLE	191358-001	4.7	0.05	1.000	12/07/06 09:10	12/08/06 22:02
HWGW100	SAMPLE	191358-002	0.11	0.05	1.000	12/07/06 10:15	12/08/06 22:36
HWGW101	SAMPLE	191358-003	1.5	0.05	1.000	12/07/06 11:11	12/08/06 23:11
BHWGW01	SAMPLE	191358-004	5.9	1.3	25.00	12/07/06 12:00	12/08/06 18:50
BHWGW05	SAMPLE	191358-005	ND	0.05	1.000	12/07/06 12:45	12/09/06 00:21
BHWGWO4RBHWGW100	SAMPLE	191358-006	ND	0.05	1.000	12/07/06 09:30	12/08/06 20:52
DUP1207062A	SAMPLE	191358-007	4.7	0.05	1.000	12/07/06 09:20	12/09/06 00:56
1065MW9B	SAMPLE	191358-009	6.1	0.50	10.00	12/07/06 11:50	12/08/06 17:47
1065PZ5AR	SAMPLE	191358-011	ND	0.05	1.000	12/07/06 10:12	12/09/06 03:15
	BLANK	QC367795	ND	0.05	1.000		12/08/06 13:10

ND= Not Detected
RL= Reporting Limit

Nitrite Nitrogen

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Diln Fac:	1.000
Matrix:	Water	Batch#:	120238
Units:	mg/L	Received:	12/08/06

Field ID	Type	Lab ID	Result	RL	Sampled	Analyzed
BHWGW04	SAMPLE	191358-001	ND	0.05	12/07/06 09:10	12/08/06 22:02
HWGW100	SAMPLE	191358-002	ND	0.05	12/07/06 10:15	12/08/06 22:36
HWGW101	SAMPLE	191358-003	ND	0.05	12/07/06 11:11	12/08/06 23:11
BHWGW01	SAMPLE	191358-004	ND	0.05	12/07/06 12:00	12/08/06 23:46
BHWGW05	SAMPLE	191358-005	ND	0.05	12/07/06 12:45	12/09/06 00:21
BHWGWO4RBHWGW100	SAMPLE	191358-006	ND	0.05	12/07/06 09:30	12/08/06 20:52
DUP1207062A	SAMPLE	191358-007	ND	0.05	12/07/06 09:20	12/09/06 00:56
1065MW9B	SAMPLE	191358-009	ND	0.05	12/07/06 11:50	12/09/06 02:40
1065PZ5AR	SAMPLE	191358-011	ND	0.05	12/07/06 10:12	12/09/06 03:15
	BLANK	QC367795	ND	0.05		12/08/06 13:10

ND= Not Detected
 RL= Reporting Limit



Sulfate

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Batch#:	120238
Matrix:	Water	Received:	12/08/06
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Diln Fac	Sampled	Analyzed
BHWGW04	SAMPLE	191358-001	59	5.0	10.00	12/07/06 09:10	12/08/06 18:15
HWGW100	SAMPLE	191358-002	180	25	50.00	12/07/06 10:15	12/08/06 17:29
HWGW101	SAMPLE	191358-003	60	13	25.00	12/07/06 11:11	12/08/06 18:32
BHWGW01	SAMPLE	191358-004	65	13	25.00	12/07/06 12:00	12/08/06 18:50
BHWGW05	SAMPLE	191358-005	110	13	25.00	12/07/06 12:45	12/08/06 19:07
BHWGWO4RBHWGW100	SAMPLE	191358-006	ND	0.50	1.000	12/07/06 09:30	12/08/06 20:52
DUP1207062A	SAMPLE	191358-007	59	5.0	10.00	12/07/06 09:20	12/08/06 19:24
1065MW9B	SAMPLE	191358-009	76	5.0	10.00	12/07/06 11:50	12/08/06 17:47
1065PZ5AR	SAMPLE	191358-011	ND	0.50	1.000	12/07/06 10:12	12/09/06 03:15
	BLANK	QC367795	ND	0.50	1.000		12/08/06 13:10

ND= Not Detected

RL= Reporting Limit



Batch QC Report

Chloride			
Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Chloride	Units:	mg/L
Field ID:	1065MW9B	Batch#:	120238
MSS Lab ID:	191358-009	Sampled:	12/07/06 11:50
Matrix:	Water	Received:	12/08/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Analyzed
BS	QC367796		4.000	3.875	97	80-120			1.000		12/08/06 13:27
BSD	QC367797		4.000	4.026	101	80-120	4	20	1.000		12/08/06 13:45
MS	QC367798	52.53	20.00	71.47	95	80-120			10.00		12/08/06 21:09
MSD	QC367799		20.00	71.56	95	80-120	0	25	10.00		12/08/06 21:27



Batch QC Report

Fluoride			
Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Fluoride	Units:	mg/L
Field ID:	1065MW9B	Batch#:	120238
MSS Lab ID:	191358-009	Sampled:	12/07/06 11:50
Matrix:	Water	Received:	12/08/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Analyzed
BS	QC367796		2.000	2.007	100	80-120			1.000		12/08/06 13:27
BSD	QC367797		2.000	2.130	106	80-120	6	20	1.000		12/08/06 13:45
MS	QC367798	0.02598	10.00	9.888	99	77-120			10.00		12/08/06 21:09
MSD	QC367799		10.00	10.50	105	77-120	6	20	10.00		12/08/06 21:27

RPD= Relative Percent Difference



Batch QC Report

Nitrate Nitrogen

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrate	Units:	mg/L
Field ID:	1065MW9B	Batch#:	120238
MSS Lab ID:	191358-009	Sampled:	12/07/06 11:50
Matrix:	Water	Received:	12/08/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Analyzed
BS	QC367796		1.000	0.9896	99	80-120			1.000		12/08/06 13:27
BSD	QC367797		1.000	1.042	104	80-120	5	20	1.000		12/08/06 13:45
MS	QC367798	6.059	5.000	11.04	100	80-120			10.00		12/08/06 21:09
MSD	QC367799		5.000	11.12	101	80-120	1	25	10.00		12/08/06 21:27

RPD= Relative Percent Difference



Batch QC Report

Nitrite Nitrogen

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Nitrogen, Nitrite	Units:	mg/L
Field ID:	1065MW9B	Batch#:	120238
MSS Lab ID:	191358-009	Sampled:	12/07/06 11:50
Matrix:	Water	Received:	12/08/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Analyzed
BS	QC367796		1.000	0.9685	97	80-120			1.000		12/08/06 13:27
BSD	QC367797		1.000	1.006	101	80-120	4	20	1.000		12/08/06 13:45
MS	QC367798	<0.01206	5.000	4.936	99	80-120			10.00		12/08/06 21:09
MSD	QC367799		5.000	4.997	100	80-120	1	25	10.00		12/08/06 21:27

RPD= Relative Percent Difference



Curtis & Tompkins, Ltd.

Batch QC Report

Sulfate

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 300.0
Analyte:	Sulfate	Units:	mg/L
Field ID:	1065MW9B	Batch#:	120238
MSS Lab ID:	191358-009	Sampled:	12/07/06 11:50
Matrix:	Water	Received:	12/08/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Diln	Fac	Analyzed
BS	QC367796		10.00	9.728	97	80-120				1.000	12/08/06 13:27
BSD	QC367797		10.00	10.25	102	80-120	5	20		1.000	12/08/06 13:45
MS	QC367798	75.84	50.00	125.4	99	80-120				10.00	12/08/06 21:09
MSD	QC367799		50.00	125.8	100	80-120	0	25		10.00	12/08/06 21:27

RPD= Relative Percent Difference

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 191358 IC Water: EPA 300.0

Inst : IC03
 Calnum : 626477375001
 Units : mg/L

Date : 27-NOV-2006 12:32
 X Axis : A

Reviewer: RH
 Inj Vol : 25 uL

Level	File	Segment	Sample ID	Analyzed	Stds
L1	331_2.000	626477375002	L1	27-NOV-2006 12:32	S4740 (500X)
L2	331_3.000	626477375003	L2	27-NOV-2006 12:50	S4740 (100X)
L3	331_4.000	626477375004	L3	27-NOV-2006 13:07	S4740 (25X)
L4	331_5.000	626477375005	L4	27-NOV-2006 13:25	S4740 (10X)
L5	331_6.000	626477375006	L5	27-NOV-2006 13:42	S4740 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ² #RSD	MnR ²	F1g
Fluoride	0.1400	0.1738	0.1846	0.1987	0.2080	QORG		0.18572	0.002247	0.1810	1.000	0.990	
Chloride	0.1664	0.1430	0.1558	0.1641	0.1771	QORG		0.15066	0.001325	0.1613	1.000	0.990	
Nitrogen, Nitrite	0.2857	0.2851	0.3166	0.3213	0.3308	QORG		0.31146	0.003864	0.3079	1.000	0.990	
Nitrogen, Nitrate	0.4014	0.3589	0.3747	0.3707	0.3897	QORG		0.35756	0.006385	0.3791	1.000	0.990	
Sulfate	0.0891	0.1008	0.1092	0.1131	0.1206	QORG		0.10562	2.999E-4	0.1066	1.000	0.990	

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 191358 IC Water
EPA 300.0

Inst : IC03
Calnum : 626477375001

Cal Date: 27-NOV-2006

ICV 626477375007 (331_7.000 27-NOV-2006) stds: S3859 (5X)

Analyte	Average RF	RF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.1810	0.1712	1.000	0.9120	mg/L	-9	10	
Chloride	0.1613	0.1427	2.000	1.864	mg/L	-7	10	
Nitrogen, Nitrite	0.3079	0.3053	0.5000	0.4871	mg/L	-3	10	
Nitrogen, Nitrate	0.3791	0.3435	0.5000	0.4763	mg/L	-5	10	
Sulfate	0.1066	0.1016	5.000	4.744	mg/L	-5	10	

CURTIS & TOMPKINS INITIAL CALIBRATION FOR EPA 300.0

Inst : IC03
Calnum : 626477375001
Units : mg/L

Date : 27-NOV-2006 12:32
X Axis : A

Inj Vol: 25 uL

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	331_2.000	626477375002	L1	27-NOV-2006 12:32	S4740 (500X)
L2	331_3.000	626477375003	L2	27-NOV-2006 12:50	S4740 (100X)
L3	331_4.000	626477375004	L3	27-NOV-2006 13:07	S4740 (25X)
L4	331_5.000	626477375005	L4	27-NOV-2006 13:25	S4740 (10X)
L5	331_6.000	626477375006	L5	27-NOV-2006 13:42	S4740 (5X)

Analyte	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r ²	MNR ²	Fig
Fluoride	0.1400	0.1738	0.1846	0.1987	0.2080	QORG	0.18572	0.002247	0.1810	1.000	0.990		
Chloride	0.1664	0.1430	0.1558	0.1641	0.1771	QORG	0.15066	0.001325	0.1613	1.000	0.990		
Nitrogen, Nitrite	0.2857	0.2851	0.3166	0.3213	0.3308	QORG	0.31146	0.003864	0.3079	1.000	0.990		
Bromide	0.0612	0.0623	0.0654	0.0649	0.0672	QORG	0.06326	1.962E-4	0.0642	1.000	0.990		
Nitrogen, Nitrate	0.4014	0.3589	0.3747	0.3707	0.3897	QORG	0.35756	0.006385	0.3791	1.000	0.990		
Orthophosphate (as P)	0.1786	0.1349	0.1239	0.1272	0.1330	QORG	0.12189	5.552E-4	0.1395	1.000	0.990		
Sulfate	0.0891	0.1008	0.1092	0.1131	0.1206	QORG	0.10562	2.999E-4	0.1066	1.000	0.990		

LIMS STATUS UPDATED

RF 11/28/06

MCS 11/28/06

Sequence: 331
Operator: ic_analyst

Page 1 of 2
Printed: 11/28/2006 4:47:28 PM

Title: Anions
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006
Timebase: IC3_DX120
#Samples: 39

Created: 8/1/2003 11:03:14 AM by ic_analyst
Last Update: 11/28/2006 4:33:43 PM by ic_analyst

No.	*Batch	Name	Comment	Dil. Factor	Program	Status	Inj. Date/Time
1	CAL-331	IB		1.0000	IC03-7AN	Finished	11/27/2006 12:15:25 PM
2	CAL-331	ICAL, L1,S4740,500		1.0000	IC03-7AN	Finished	11/27/2006 12:32:50 PM
3	CAL-331	ICAL, L2,S4740,100		1.0000	IC03-7AN	Finished	11/27/2006 12:50:15 PM
4	CAL-331	ICAL, L3,S4740,25		1.0000	IC03-7AN	Finished	11/27/2006 1:07:39 PM
5	CAL-331	ICAL, L4,S4740,10		1.0000	IC03-7AN	Finished	11/27/2006 1:25:04 PM
6	CAL-331	ICAL, L5,S4740,5		1.0000	IC03-7AN	Finished	11/27/2006 1:42:29 PM
7	CAL-331	ICV,S3859,5		1.0000	IC03-7AN	Finished	11/27/2006 1:59:54 PM
8	CAL-331	ICB		1.0000	IC03-7AN	Finished	11/27/2006 2:17:19 PM
9	119854	CCV,L,S4740,100		1.0000	IC03-7AN	Finished	11/27/2006 2:34:43 PM
10	119854	CCB/MB,QC366232		1.0000	IC03-7AN	Finished	11/27/2006 2:52:08 PM
11	119854	BS,QC366233,S4740,25		1.0000	IC03-7AN	Finished	11/27/2006 3:09:32 PM
12	119854	BSD,QC366234,S4740,25		1.0000	IC03-7AN	Finished	11/27/2006 3:26:57 PM
13	119854	190995-001	A	1.0000	IC03-7AN	Finished	11/27/2006 3:54:42 PM
14	119854	BLK		1.0000	IC03-7AN	Finished	11/27/2006 4:27:28 PM
15	119854	MSS,190995-002	A	10.0000	IC03-7AN	Finished	11/27/2006 4:44:53 PM
16	119854	190995-003	A	10.0000	IC03-7AN	Finished	11/27/2006 5:02:18 PM
17	119854	190995-004	A	10.0000	IC03-7AN	Finished	11/27/2006 5:19:42 PM
18	119854	190995-005	A	10.0000	IC03-7AN	Finished	11/27/2006 5:37:07 PM
19	119854	190995-006	A	10.0000	IC03-7AN	Finished	11/27/2006 5:54:32 PM
20	119854	190995-007	A	10.0000	IC03-7AN	Finished	11/27/2006 6:11:57 PM
21	119854	CCV,M,S4740,25		1.0000	IC03-7AN	Finished	11/27/2006 6:29:22 PM
22	119854	CCB		1.0000	IC03-7AN	Finished	11/27/2006 6:46:47 PM
23	119854	X,CCV,M,S4740,25		1.0000	IC03-7AN	Finished	11/27/2006 7:04:12 PM
24	119854	X,CCB		1.0000	IC03-7AN	Finished	11/27/2006 7:21:37 PM
25	119854	MS,QC366235,S4740,50	A	10.0000	IC03-7AN	Finished	11/27/2006 7:39:04 PM
26	119854	MSD,QC366236,S4740,50	A	10.0000	IC03-7AN	Finished	11/27/2006 7:56:34 PM
27	119854	190995-001	A	10.0000	IC03-7AN	Finished	11/27/2006 8:13:59 PM
28	119854	190995-008	A	10.0000	IC03-7AN	Finished	11/27/2006 8:31:36 PM
29	119854	190995-009	A	10.0000	IC03-7AN	Finished	11/27/2006 8:49:12 PM
30	119854	190995-010	A	10.0000	IC03-7AN	Finished	11/27/2006 9:06:41 PM
31	119854	190995-011	A	10.0000	IC03-7AN	Finished	11/27/2006 9:24:10 PM
32	119854	190995-012	A	10.0000	IC03-7AN	Finished	11/27/2006 9:41:37 PM
33	119854	190995-013	A	10.0000	IC03-7AN	Finished	11/27/2006 9:59:02 PM
34	119854	190995-014	A	10.0000	IC03-7AN	Finished	11/27/2006 10:16:27 PM
35	119854	CCV,H,S4740,10		1.0000	IC03-7AN	Finished	11/27/2006 10:33:51 PM
36	119854	CCB		1.0000	IC03-7AN	Finished	11/27/2006 10:51:16 PM
37	119854	X,CCV,H,S4740,10		1.0000	IC03-7AN	Finished	11/27/2006 11:08:40 PM
38	119854	X,CCB		1.0000	IC03-7AN	Finished	11/27/2006 11:26:05 PM
39	119854	SHUTDOWN		1.0000	IC03-7AN_OFF	Finished	11/27/2006 11:43:29 PM

Sequence: 331
Operator: ic_analyst

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Printed: 11/28/2006 4:47:29 PM

Title: Anions
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006
Timebase: IC3_DX120
#Samples: 39

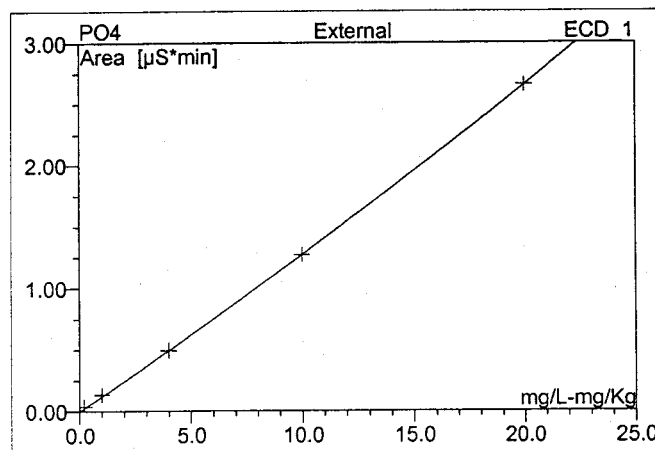
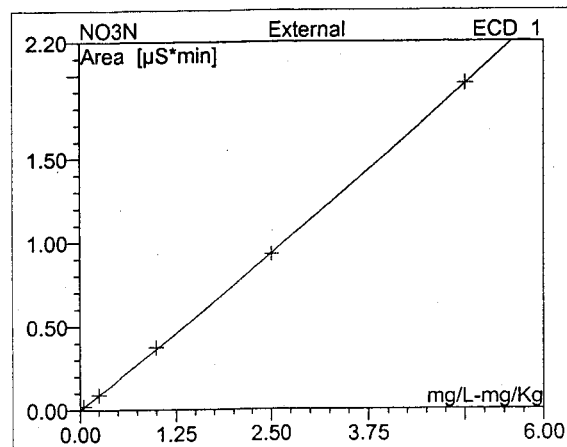
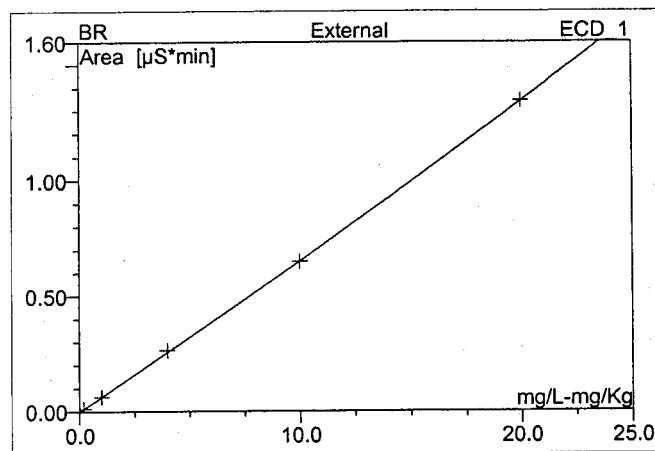
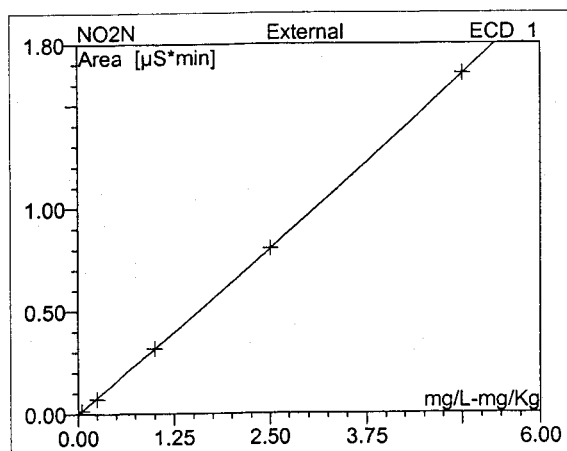
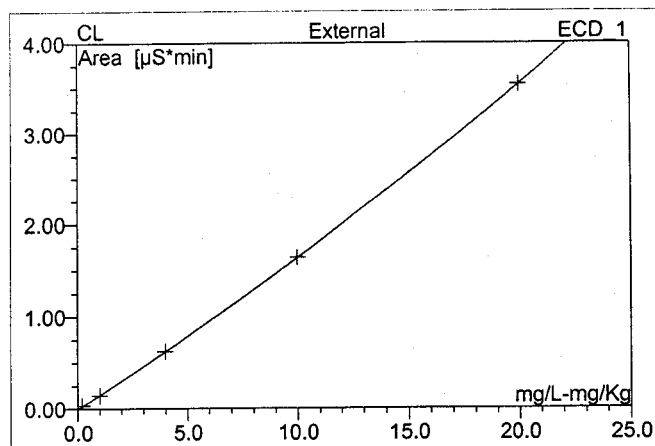
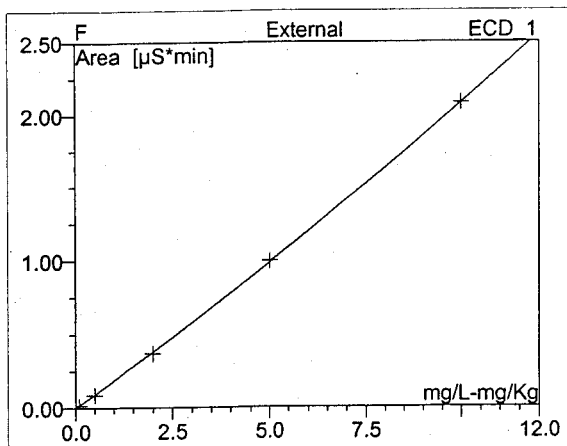
Created: 8/1/2003 11:03:14 AM by ic_analyst
Last Update: 11/28/2006 4:33:43 PM by ic_analyst

No.	*Batch	Name	Comment	Method	Type	Inj. Vol.	*operator	*PDF
1	CAL-331	IB		IC03-7AN_CAL	Unknown	25.0 MRS		1
2	CAL-331	ICAL, L1,S4740,500		IC03-7AN_CAL	Standard	25.0 MRS		1
3	CAL-331	ICAL, L2,S4740,100		IC03-7AN_CAL	Standard	25.0 MRS		1
4	CAL-331	ICAL, L3,S4740,25		IC03-7AN_CAL	Standard	25.0 MRS		1
5	CAL-331	ICAL, L4,S4740,10		IC03-7AN_CAL	Standard	25.0 MRS		1
6	CAL-331	ICAL, L5,S4740,5		IC03-7AN_CAL	Standard	25.0 MRS		1
7	CAL-331	ICV,S3859,5		IC03-7AN_CAL	Unknown	25.0 MRS		1
8	CAL-331	ICB		IC03-7AN_CAL	Unknown	25.0 MRS		1
9	119854	CCV,L,S4740,100		IC03-7AN_CAL	Unknown	25.0 MRS		1
10	119854	CCB/MB,QC366232		IC03-7AN_CAL	Unknown	25.0 MRS		1
11	119854	BS,QC366233,S4740,25		IC03-7AN_CAL	Unknown	25.0 MRS		1
12	119854	BSD,QC366234,S4740,25		IC03-7AN_CAL	Unknown	25.0 MRS		1
13	119854	190995-001	A	IC03-7AN_CAL	Unknown	25.0 MRS		1
14	119854	BLK		IC03-7AN_CAL	Unknown	25.0 MRS		1
15	119854	MSS,190995-002	A	IC03-7AN_CAL	Unknown	25.0 MRS		1
16	119854	190995-003	A	IC03-7AN_CAL	Unknown	25.0 MRS		1
17	119854	190995-004	A	IC03-7AN_CAL	Unknown	25.0 MRS		1
18	119854	190995-005	A	IC03-7AN_CAL	Unknown	25.0 MRS		1
19	119854	190995-006	A	IC03-7AN_CAL	Unknown	25.0 MRS		1
20	119854	190995-007	A	IC03-7AN_CAL	Unknown	25.0 MRS		1
21	119854	CCV,M,S4740,25		IC03-7AN_CAL	Unknown	25.0 MRS		1
22	119854	CCB		IC03-7AN_CAL	Unknown	25.0 MRS		1
23	119854	X,CCV,M,S4740,25		IC03-7AN_CAL	Unknown	25.0 MRS		1
24	119854	X,CCB		IC03-7AN_CAL	Unknown	25.0 MRS		1
25	119854	MS,QC366235,S4740,50	A	IC03-7AN_CAL	Unknown	25.0 MRS		1
26	119854	MSD,QC366236,S4740,50	A	IC03-7AN_CAL	Unknown	25.0 MRS		1
27	119854	190995-001	A	IC03-7AN_CAL	Unknown	25.0 MRS		1
28	119854	190995-008	A	IC03-7AN_CAL	Unknown	25.0 MRS		1
29	119854	190995-009	A	IC03-7AN_CAL	Unknown	25.0 MRS		1
30	119854	190995-010	A	IC03-7AN_CAL	Unknown	25.0 MRS		1
31	119854	190995-011	A	IC03-7AN_CAL	Unknown	25.0 MRS		1
32	119854	190995-012	A	IC03-7AN_CAL	Unknown	25.0 MRS		1
33	119854	190995-013	A	IC03-7AN_CAL	Unknown	25.0 MRS		1
34	119854	190995-014	A	IC03-7AN_CAL	Unknown	25.0 MRS		1
35	119854	CCV,H,S4740,10		IC03-7AN_CAL	Unknown	25.0 MRS		1
36	119854	CCB		IC03-7AN_CAL	Unknown	25.0 MRS		1
37	119854	X,CCV,H,S4740,10		IC03-7AN_CAL	Unknown	25.0 MRS		1
38	119854	X,CCB		IC03-7AN_CAL	Unknown	25.0 MRS		1
39	119854	SHUTDOWN		IC03-7AN_CAL	Unknown	25.0 MRS		1

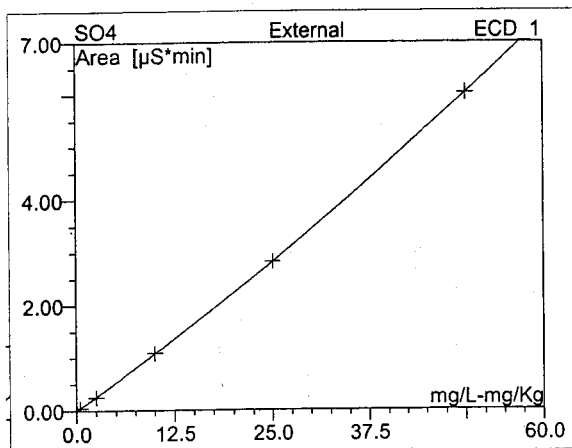
IC03 Calibration Batch Report

Sequence: 331
Program: IC03-7AN
Inj. Date/Time: 11/27/06 13:07

Inj. Vol.: 25.0
Operator: PC_NEWIC
Run Time: 15.01



Sequence:	331	Inj. Vol.:	25.0
Program:	IC03-7AN	Operator:	n.a.
Ini. Date/Time:	11/27/06 13:07	Run Time:	15.01



No.	Ret. Time min	Peak Name	Cal. Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr. Coeff. %
1	2.947	F	Quad	5	0.000000	0.185717	0.002247	99.968280
3	4.370	CL	Quad	5	0.000000	0.150660	0.001325	99.925219
4	5.190	NO2N	Quad	5	0.000000	0.311463	0.003864	99.990563
5	6.663	BR	Quad	5	0.000000	0.063257	0.000196	99.985565
6	7.500	NO3N	Quad	5	0.000000	0.357561	0.006384	99.969306
7	9.540	PO4	Quad	5	0.000000	0.121887	0.000555	99.964829
8	11.527	SO4	Quad	5	0.000000	0.105616	0.000300	99.951392
AVERAGE:					0.000000	0.185166	0.002125	99.965022

No.	Name	Area $\mu\text{S} \cdot \text{min}$ F ECD 1	Area $\mu\text{S} \cdot \text{min}$ CL ECD 1	Area $\mu\text{S} \cdot \text{min}$ NO2N ECD 1	Area $\mu\text{S} \cdot \text{min}$ BR ECD 1	Area $\mu\text{S} \cdot \text{min}$ NO3N ECD 1	Area $\mu\text{S} \cdot \text{min}$ PO4 ECD 1	Area $\mu\text{S} \cdot \text{min}$ SO4 ECD 1
2	ICAL, L1,S474	0.014001	0.033277	0.014285	0.012236	0.020070	0.035727	0.044567
3	ICAL, L2,S474	0.086913	0.142967	0.071273	0.062250	0.089719	0.134894	0.251908
4	ICAL, L3,S474	0.369133	0.623323	0.316571	0.261785	0.374732	0.495623	1.091655
5	ICAL, L4,S474	0.993403	1.640986	0.803364	0.648843	0.926829	1.272087	2.827284
6	ICAL, L5,S474	2.080176	3.542624	1.653755	1.344237	1.948730	2.660379	6.030414

No.	Name	Height μS F ECD 1	Height μS CL ECD 1	Height μS NO2N ECD 1	Height μS BR ECD 1	Height μS NO3N ECD 1	Height μS PO4 ECD 1	Height μS SO4 ECD 1
2	ICAL, L1,S474	0.109270	0.266758	0.082908	0.057646	0.081418	0.104802	0.151678
3	ICAL, L2,S474	0.584488	1.147464	0.454120	0.322522	0.381722	0.404404	0.791894
4	ICAL, L3,S474	2.698538	5.038912	1.964562	1.374302	1.647552	1.592196	3.464522
5	ICAL, L4,S474	7.375572	13.304908	4.960162	3.463314	4.199376	4.117156	9.031506
6	ICAL, L5,S474	16.615428	29.041484	10.376214	7.323652	9.001146	9.082872	19.866438

No.	Name	Amount mg/L-mg/Kg F ECD 1	Amount mg/L-mg/Kg CL ECD 1	Amount mg/L-mg/Kg NO2N ECD 1	Amount mg/L-mg/Kg BR ECD 1	Amount mg/L-mg/Kg NO3N ECD 1	Amount mg/L-mg/Kg PO4 ECD 1	Amount mg/L-mg/Kg SO4 ECD 1
2	ICAL, L1,S474	0.075318	0.220446	0.045837	0.193310	0.056075	0.292722	0.421466
3	ICAL, L2,S474	0.465366	0.941150	0.228186	0.981084	0.249805	1.101194	2.369187
4	ICAL, L3,S474	1.941982	3.996822	1.003896	4.086616	1.029113	3.993610	10.049335
5	ICAL, L4,S474	5.041498	10.010831	2.501675	9.950142	2.482083	9.982720	24.995573
6	ICAL, L5,S474	9.992662	19.997854	4.999511	20.008658	5.003115	20.003987	49.999624

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 1 of 6
Printed: 12/11/2006 1:01:14 PM

Title: IC03-7AN_CAL

Datasource: DGLD4X01_local

Location: IC3_DX120\IC03-ANIONS-2006\341.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON

Last Update: 12/7/2006 2:12:03 PM by ic_analyst

Blank Run Subtraction: No Blank Run Subtraction

Detection Table:

No.	Ret. Time [min]	Param. Name	Param. Value	Channel
1	0.000	Inhibit Integration	On	ECD_1
2	2.250	Sensitivity	0.001 "[Signal]"	ECD_1
3	2.250	Minimum Area	0.001 "[Signal]*min"	ECD_1
4	2.250	Peak Slice	0.50 s	ECD_1
5	2.500	Inhibit Integration	Off	ECD_1

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 2 of 6
Printed: 12/11/2006 1:01:14 PM

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006\341.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON
Last Update: 12/7/2006 2:12:03 PM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off

Dead time:

Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Window	Standard	Int.Type	Cal.Type	Peak Type	Group	Amount	
									ICAL, L1,S4740,500	ICAL, L2,S4740,100
1	F	2.910 min	5.000 RG	External	Area	Quad	Auto		0.100000	0.500000
2	CL	4.287 min	5.000 RG	External	Area	Quad	Auto		0.200000	1.000000
3	NO2N	5.077 min	5.000 RG	External	Area	Quad	Auto		0.050000	0.250000
4	BR	6.477 min	5.000 RG	External	Area	Quad	Auto		0.200000	1.000000
5	NO3N	7.293 min	10.000 RG	External	Area	Quad	Auto		0.050000	0.250000
6	PO4	9.427 min	10.000 RG	External	Area	Quad	Auto		0.200000	1.000000
7	SO4	11.360 min	10.000 RG	External	Area	Quad	Auto		0.500000	2.500000

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 3 of 6
Printed: 12/11/2006 1:01:14 PM

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006\341.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON
Last Update: 12/7/2006 2:12:03 PM by ic_analyst

Peak Table:

Use Recently Detected Ret. Times: Off
Dead time:
Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Amount	Amount	Amount	Comment
			ICAL, L3,S4740,25	ICAL, L4,S4740,10	ICAL, L5,S4740,5	
1	F	2.910 min	2.000000	5.000000	10.000000	
2	CL	4.287 min	4.000000	10.000000	20.000000	
3	NO2N	5.077 min	1.000000	2.500000	5.000000	
4	BR	6.477 min	4.000000	10.000000	20.000000	
5	NO3N	7.293 min	1.000000	2.500000	5.000000	
6	PO4	9.427 min	4.000000	10.000000	20.000000	
7	SO4	11.360 min	10.000000	25.000000	50.000000	

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 4 of 6
Printed: 12/11/2006 1:01:15 PM

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006\341.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON
Last Update: 12/7/2006 2:12:03 PM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg
Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Resp.Fact.	Amount	Amount	Amount	Amount
				ICAL, L1,S4740,500	ICAL, L2,S4740,100	ICAL, L3,S4740,25	ICAL, L4,S4740,10
1	F	2.910 min	1.000000	0.100000	0.500000	2.000000	5.000000
2	CL	4.287 min	1.000000	0.200000	1.000000	4.000000	10.000000
3	NO2N	5.077 min	1.000000	0.050000	0.250000	1.000000	2.500000
4	BR	6.477 min	1.000000	0.200000	1.000000	4.000000	10.000000
5	NO3N	7.293 min	1.000000	0.050000	0.250000	1.000000	2.500000
6	PO4	9.427 min	1.000000	0.200000	1.000000	4.000000	10.000000
7	SO4	11.360 min	1.000000	0.500000	2.500000	10.000000	25.000000

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 5 of 6
Printed: 12/11/2006 1:01:15 PM

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006\341.SEQ

Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON
Last Update: 12/7/2006 2:12:03 PM by ic_analyst

Amount Table:

Dimension of Amounts: mg/L-mg/Kg

Reference Volume for Amounts: Fixed: 25.0 µl

No.	Peak Name	Ret.Time	Amount	Comment
			ICAL, L5,S4740,5	
1	F	2.910 min	10.000000	
2	CL	4.287 min	20.000000	
3	NO2N	5.077 min	5.000000	
4	BR	6.477 min	20.000000	
5	NO3N	7.293 min	5.000000	
6	PO4	9.427 min	20.000000	
7	SO4	11.360 min	50.000000	

Method File: IC03-7AN_CAL
Operator: ic_analyst

Page 6 of 6
Printed: 12/11/2006 1:01:15 PM

Title: IC03-7AN_CAL
Datasource: DGLD4X01_local
Location: IC3_DX120\IC03-ANIONS-2006\341.SEQ
Created: 10/22/2001 2:51:50 PM by CURTIS & THOMPSON
Last Update: 12/7/2006 2:12:03 PM by ic_analyst

Calibration:

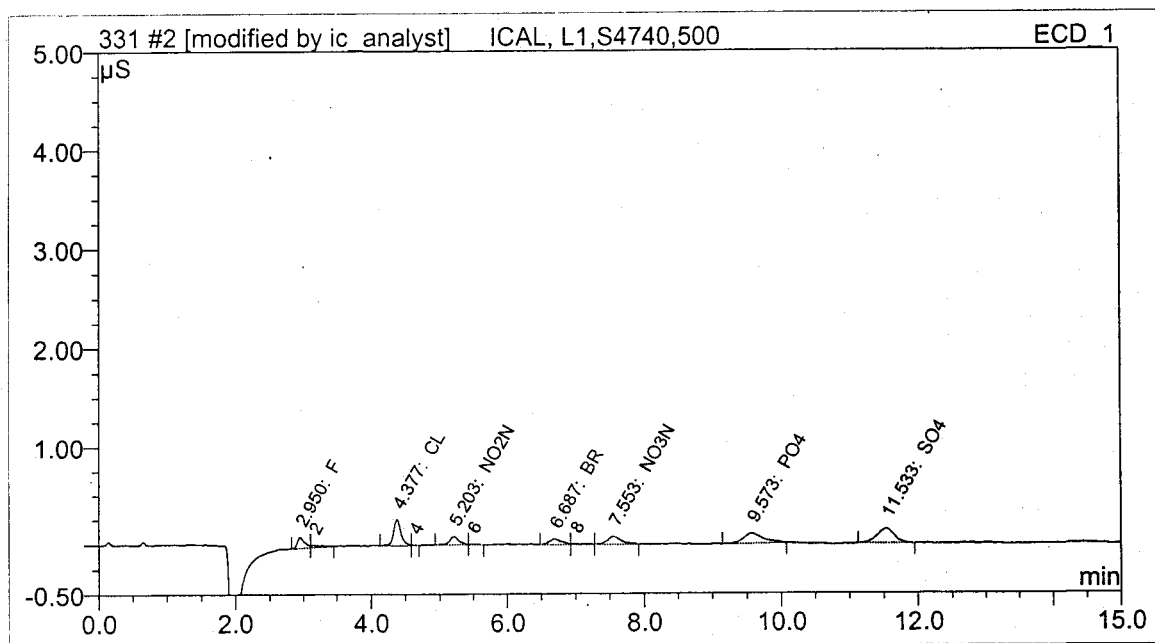
Calibration Mode: Total
Auto Recalibrate: On

No.	Enabled	Name	Smp.No.	Pos.	Inj. Vol.	Weight	ISTD Amount	Dil. Factor	Inj. Date/Time	Calib. Comment
1	☒	ICAL, L1,S4740,500	2	210	25.0	1.0000	1.0000	1.0000	11/27/2006 12:32:50 PM	Ok
2	☒	ICAL, L2,S4740,100	3	211	25.0	1.0000	1.0000	1.0000	11/27/2006 12:50:15 PM	Ok
3	☒	ICAL, L3,S4740,25	4	212	25.0	1.0000	1.0000	1.0000	11/27/2006 1:07:39 PM	Ok
4	☒	ICAL, L4,S4740,10	5	213	25.0	1.0000	1.0000	1.0000	11/27/2006 1:25:04 PM	Ok
5	☒	ICAL, L5,S4740,5	6	214	25.0	1.0000	1.0000	1.0000	11/27/2006 1:42:29 PM	Ok

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L1,S4740,500	Sample No.:	2
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 12:32 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S}\cdot\text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.950	0.014001	0.0753	0.0753	
3	CL	4.377	0.033277	0.2204	0.2204	
5	NO2N	5.203	0.014285	0.0458	0.0458	
7	BR	6.687	0.012236	0.1933	0.1933	
9	NO3N	7.553	0.020070	0.0561	0.0561	
10	PO4	9.573	0.035727	0.2927	0.2927	
11	SO4	11.533	0.044567	0.4215	0.4215	



ANALYZED BY:

REVIEWED BY:

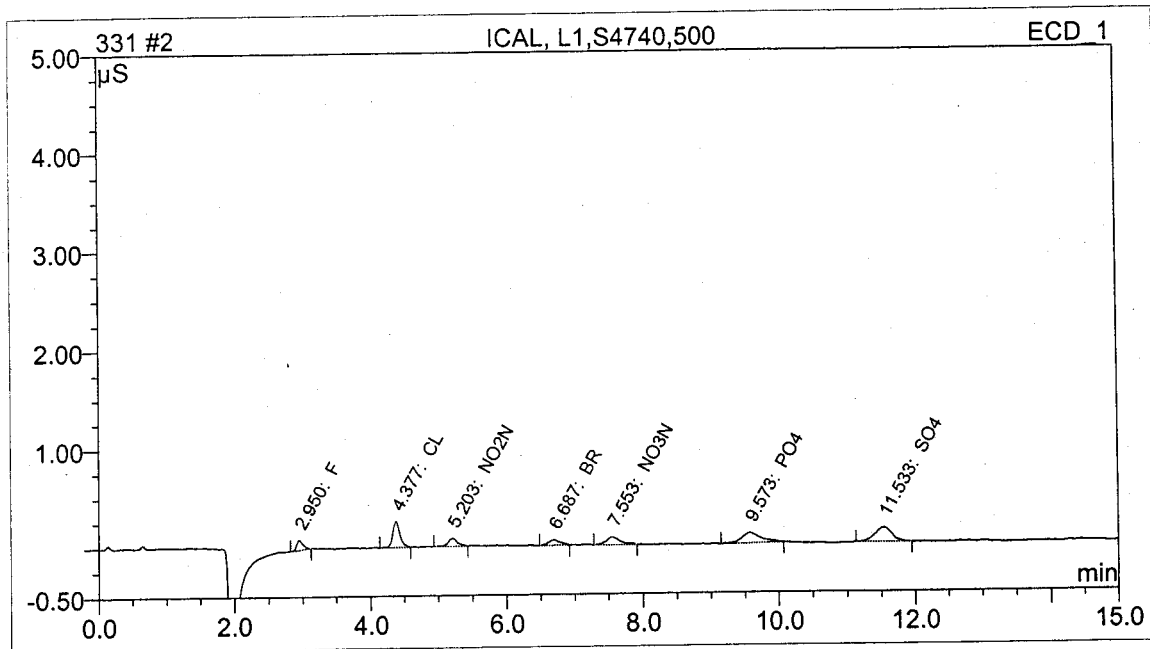
Curtis & Tompkins, Ltd.

: 00273

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L1,S4740,500	Sample No.:	2
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 12:32 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.950	0.011269	0.0606	0.0606	
2	CL	4.377	0.032932	0.2182	0.2182	
3	NO2N	5.203	0.013070	0.0419	0.0419	
4	BR	6.687	0.011075	0.1750	0.1750	
5	NO3N	7.553	0.020070	0.0561	0.0561	
6	PO4	9.573	0.035727	0.2927	0.2927	
7	SO4	11.533	0.044567	0.4215	0.4215	



ANALYZED BY:

REVIEWED BY:

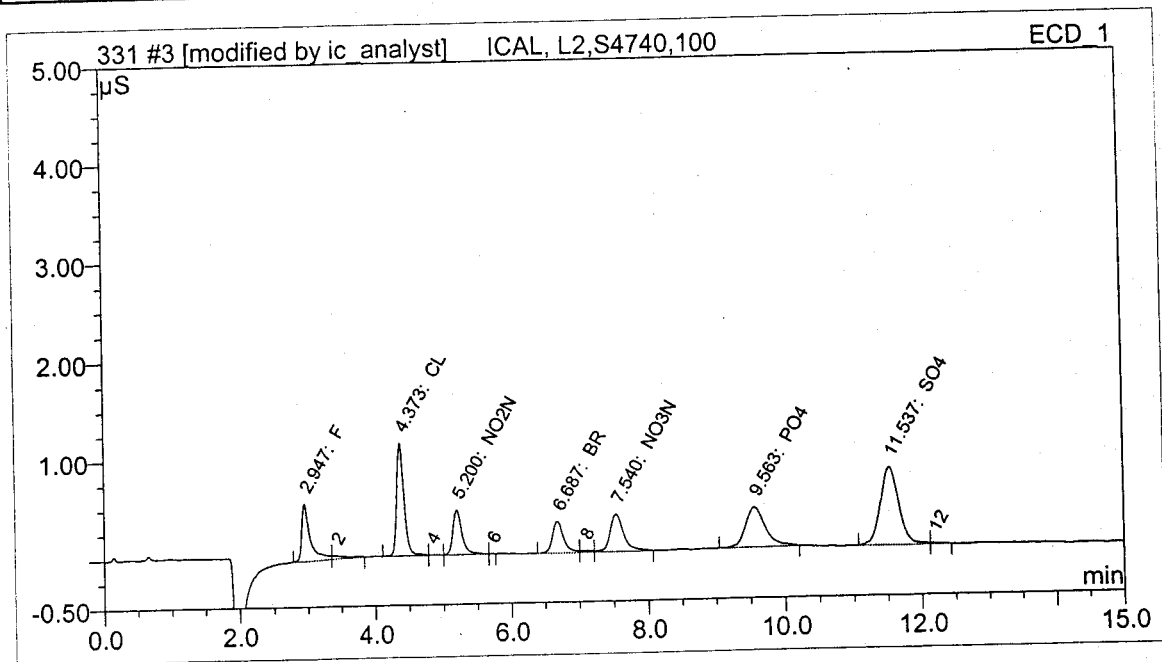
Curtis & Tompkins, Ltd.

00274

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L2,S4740,100	Sample No.:	3
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 12:50 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S}\cdot\text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	0.086913	0.4654	0.4654	
3	CL	4.373	0.142967	0.9412	0.9412	
5	NO2N	5.200	0.071273	0.2282	0.2282	
7	BR	6.687	0.062250	0.9811	0.9811	
9	NO3N	7.540	0.089719	0.2498	0.2498	
10	PO4	9.563	0.134894	1.1012	1.1012	
11	SO4	11.537	0.251908	2.3692	2.3692	



ANALYZED BY:

REVIEWED BY:

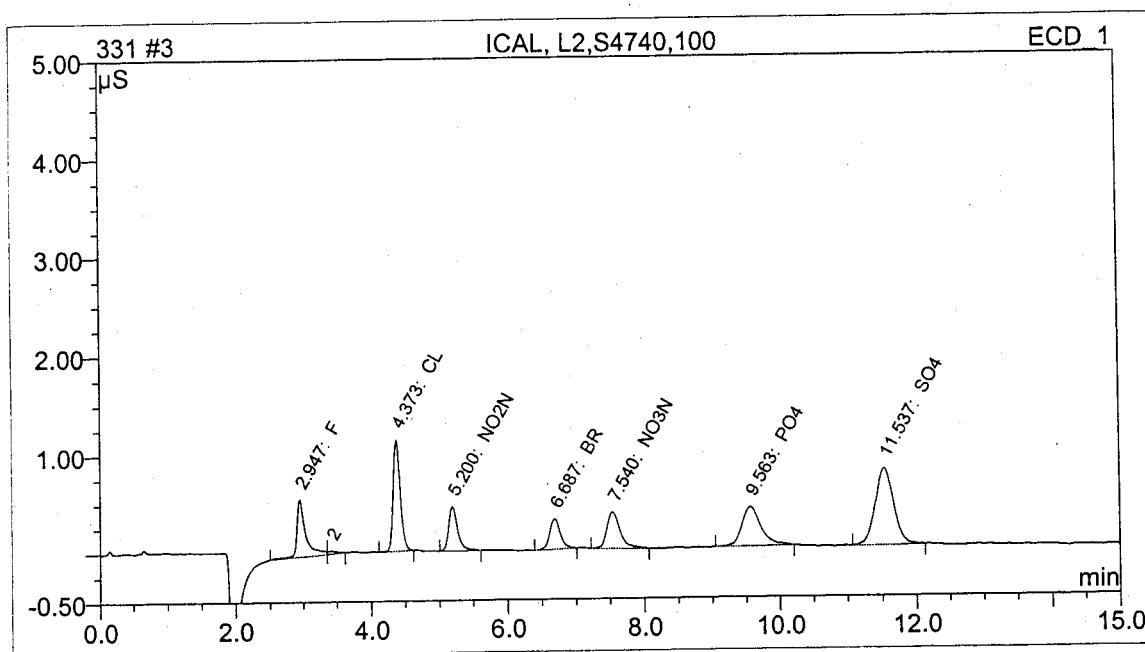
Curtis & Tompkins, Ltd.

: 00275

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L2,S4740,100	Sample No.:	3
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 12:50 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	0.091459	0.4889	0.4889	
3	CL	4.373	0.137235	0.9046	0.9046	
4	NO2N	5.200	0.070082	0.2245	0.2245	
5	BR	6.687	0.056692	0.8958	0.8958	
6	NO3N	7.540	0.085131	0.2374	0.2374	
7	PO4	9.563	0.134894	1.1012	1.1012	
8	SO4	11.537	0.246264	2.3177	2.3177	



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REVIEWED BY:

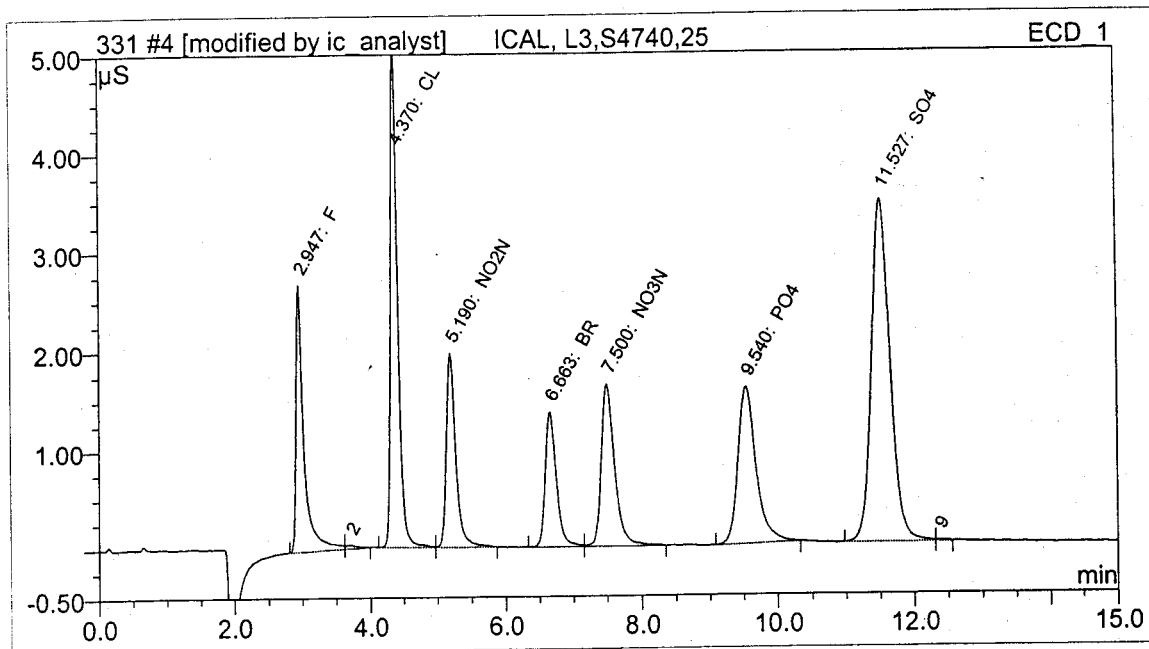
Curtis & Tompkins, Ltd.

: 00276

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L3,S4740,25	Sample No.:	4
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:07 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	0.369133	1.9420	1.9420	
3	CL	4.370	0.623323	3.9968	3.9968	
4	NO2N	5.190	0.316571	1.0039	1.0039	
5	BR	6.663	0.261785	4.0866	4.0866	
6	NO3N	7.500	0.374732	1.0291	1.0291	
7	PO4	9.540	0.495623	3.9936	3.9936	
8	SO4	11.527	1.091655	10.0493	10.0493	



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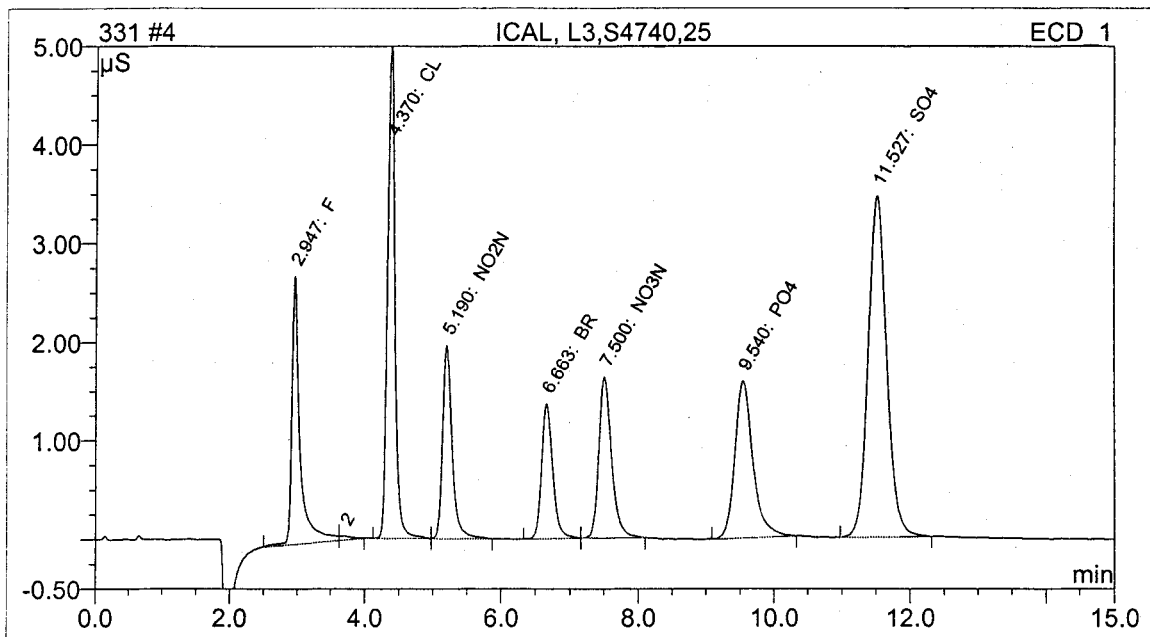
Curtis & Tompkins, Ltd.

00277

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L3,S4740,25	Sample No.:	4
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:07 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	0.386242	2.0044	2.0044	
3	CL	4.370	0.623323	3.9968	3.9968	
4	NO2N	5.190	0.316571	1.0039	1.0039	
5	BR	6.663	0.256924	4.0335	4.0335	
6	NO3N	7.500	0.360167	1.0012	1.0012	
7	PO4	9.540	0.495623	3.9936	3.9936	
8	SO4	11.527	1.086097	10.0140	10.0140	



ANALYZED BY:

REVIEWED BY:

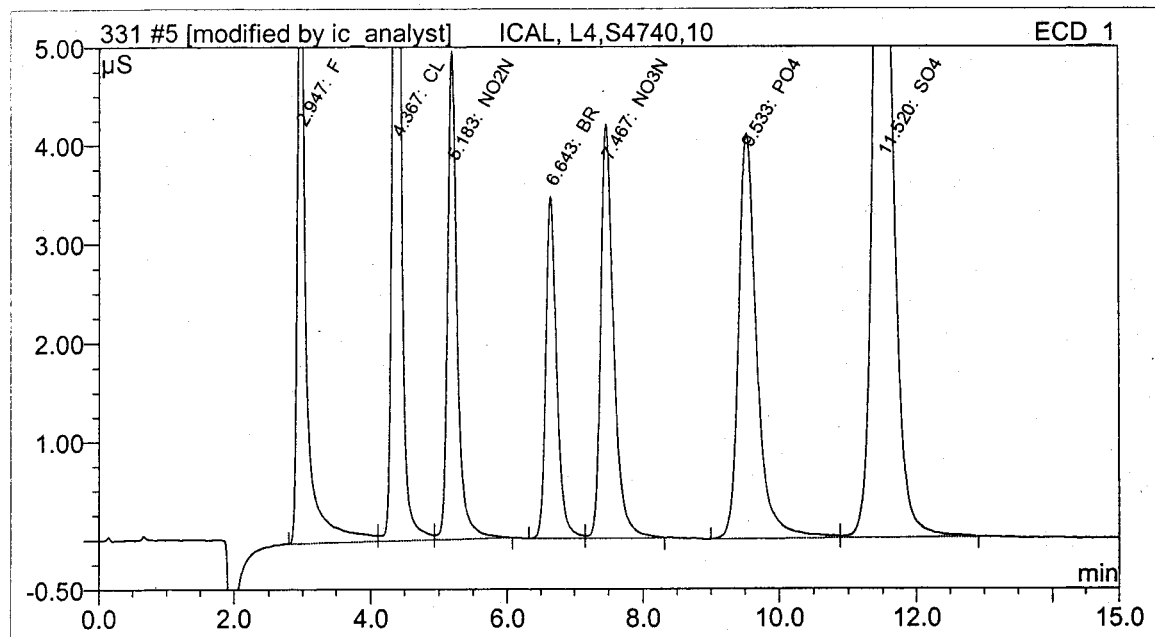
Curtis & Tompkins, Ltd.

: 00278

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L4,S4740,10	Sample No.:	5
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:25 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	0.993403	5.0415	5.0415	
2	CL	4.367	1.640986	10.0108	10.0108	
3	NO2N	5.183	0.803364	2.5017	2.5017	
4	BR	6.643	0.648843	9.9501	9.9501	
5	NO3N	7.467	0.926829	2.4821	2.4821	
6	PO4	9.533	1.272087	9.9827	9.9827	
7	SO4	11.520	2.827284	24.9956	24.9956	



ANALYZED BY:

REVIEWED BY:

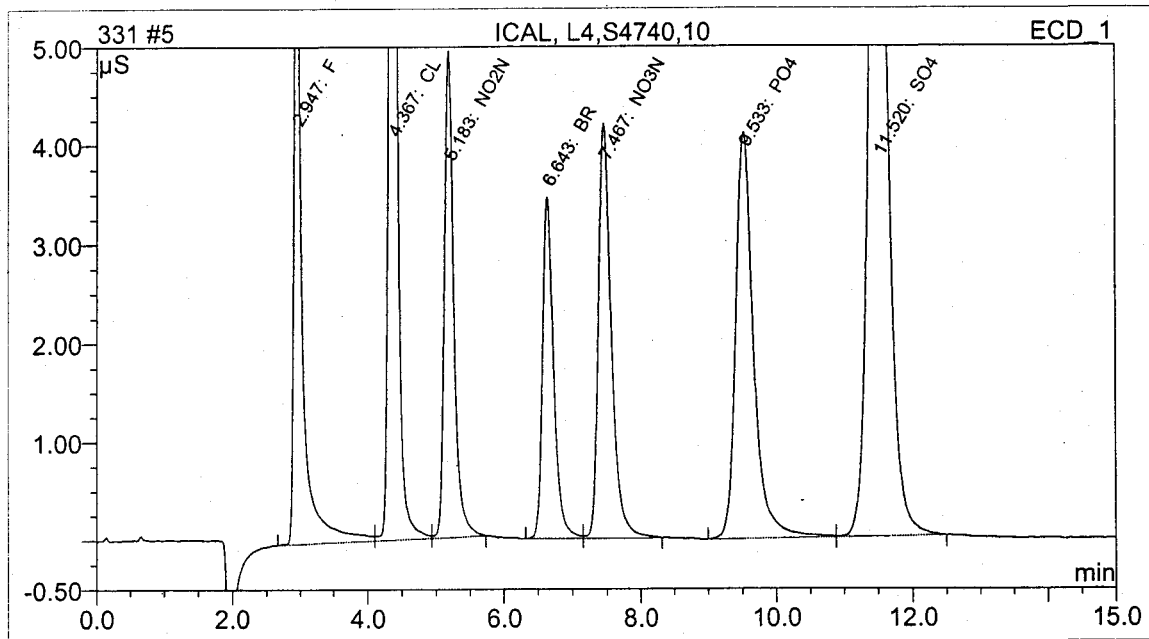
Curtis & Tompkins, Ltd.

00279

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L4,S4740,10	Sample No.:	5
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:25 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	0.994388	5.0429	5.0429	
2	CL	4.367	1.629703	9.9914	9.9914	
3	NO2N	5.183	0.779627	2.4797	2.4797	
4	BR	6.643	0.648843	9.9501	9.9501	
5	NO3N	7.467	0.926829	2.4821	2.4821	
6	PO4	9.533	1.261117	9.9575	9.9575	
7	SO4	11.520	2.793931	24.9110	24.9110	



ANALYZED BY:

REVIEWED BY:

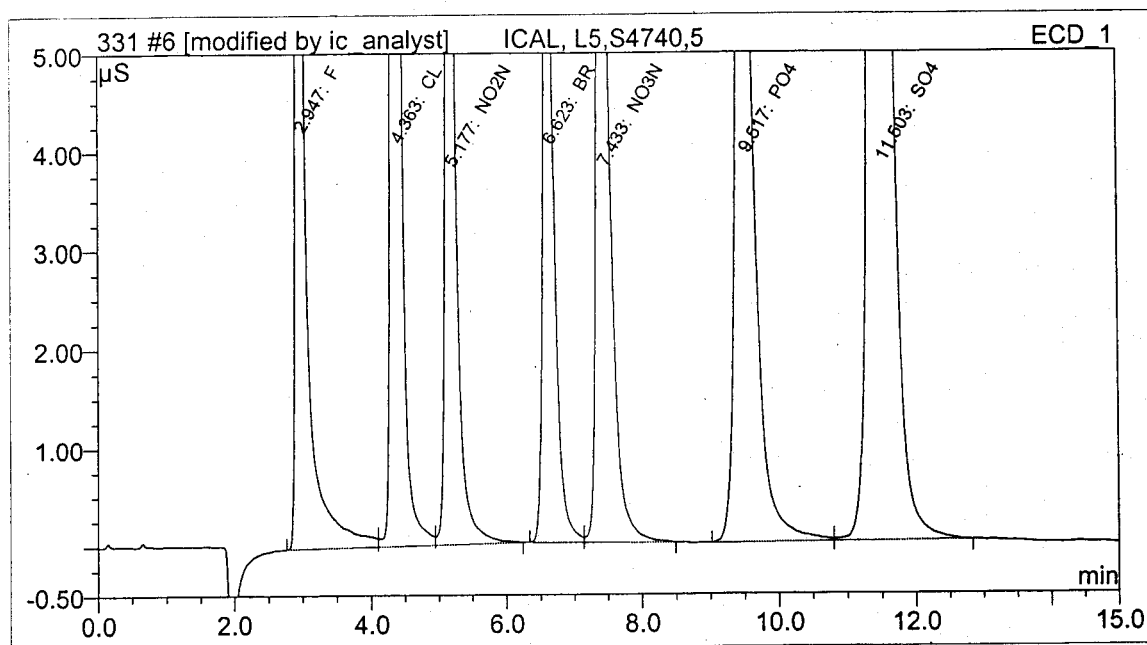
Curtis & Tompkins, Ltd.

00280

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L5,S4740,5	Sample No.:	6
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:42 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	2.080176	9.9927	9.9927	
2	CL	4.363	3.542624	19.9979	19.9979	
3	NO2N	5.177	1.653755	4.9995	4.9995	
4	BR	6.623	1.344237	20.0087	20.0087	
5	NO3N	7.433	1.948730	5.0031	5.0031	
6	PO4	9.517	2.660379	20.0040	20.0040	
7	SO4	11.503	6.030414	49.9996	49.9996	



ANALYZED BY:

REVIEWED BY:

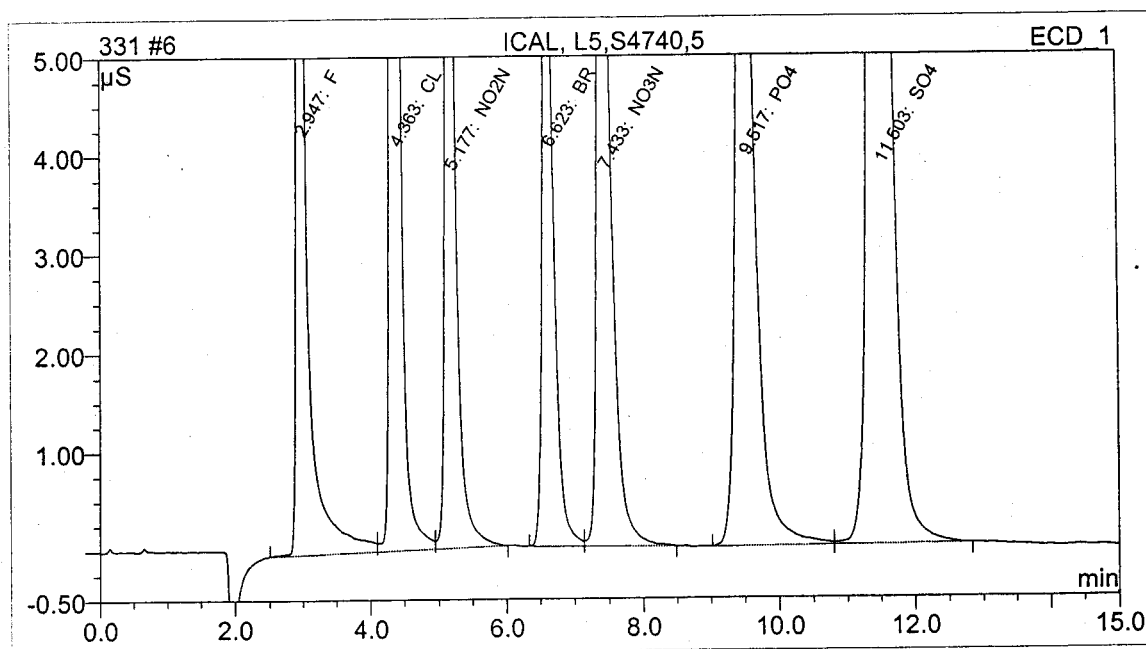
Curtis & Tompkins, Ltd.

00281

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICAL, L5,S4740,5	Sample No.:	6
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:42 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.947	2.098829	9.9937	9.9937	
2	CL	4.363	3.543045	19.9979	19.9979	
3	NO2N	5.177	1.641721	4.9991	4.9991	
4	BR	6.623	1.344237	20.0087	20.0087	
5	NO3N	7.433	1.948730	5.0031	5.0031	
6	PO4	9.517	2.660379	20.0040	20.0040	
7	SO4	11.503	6.030414	49.9996	49.9996	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

: 00262

CURTIS & TOMPKINS SECOND SOURCE CALIBRATION VERIFICATION FOR EPA 300.0

Inst : IC03
Seqnum : 626477375007
Cal : 626477375001
Standards: S3859 (5X)

File : 331_7.000
Caldate: 27-NOV-2006

IDF : 1.0
Time : 27-NOV-2006 13:59

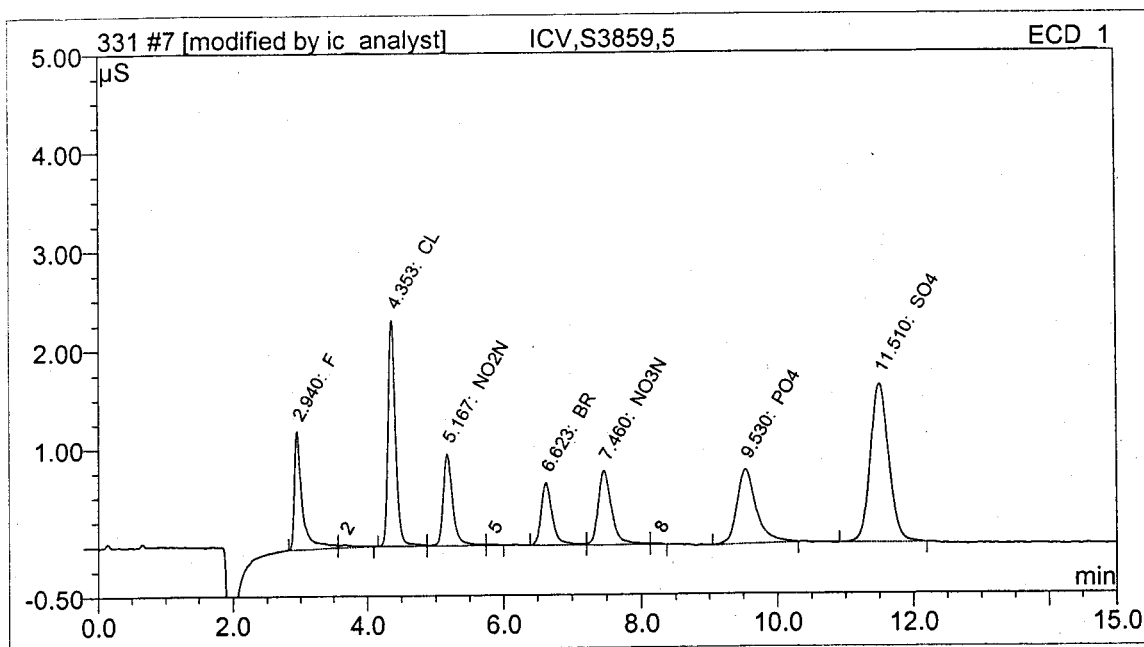
Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max	Flags
Fluoride	0.1810	0.1712	1.000	0.9120	mg/L	-9	10	
Chloride	0.1613	0.1427	2.000	1.864	mg/L	-7	10	
Nitrogen, Nitrite	0.3079	0.3053	0.5000	0.4871	mg/L	-3	10	
Bromide	0.0642	0.0613	2.000	1.925	mg/L	-4	10	
Nitrogen, Nitrate	0.3791	0.3435	0.5000	0.4763	mg/L	-5	10	
Orthophosphate (as P)	0.1395	0.1230	2.000	2.001	mg/L	0	10	
Sulfate	0.1066	0.1016	5.000	4.744	mg/L	-5	10	

ms 11/28/06

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICV,S3859,5	Sample No.:	7
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:59 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.940	0.171238	0.9120	0.9120	
3	CL	4.353	0.285357	1.8635	1.8635	
4	NO2N	5.167	0.152642	0.4871	0.4871	
6	BR	6.623	0.122509	1.9252	1.9252	
7	NO3N	7.460	0.171748	0.4763	0.4763	
9	PO4	9.530	0.246093	2.0008	2.0008	
10	SO4	11.510	0.507753	4.7436	4.7436	



ANALYZED BY:

REVIEWED BY:

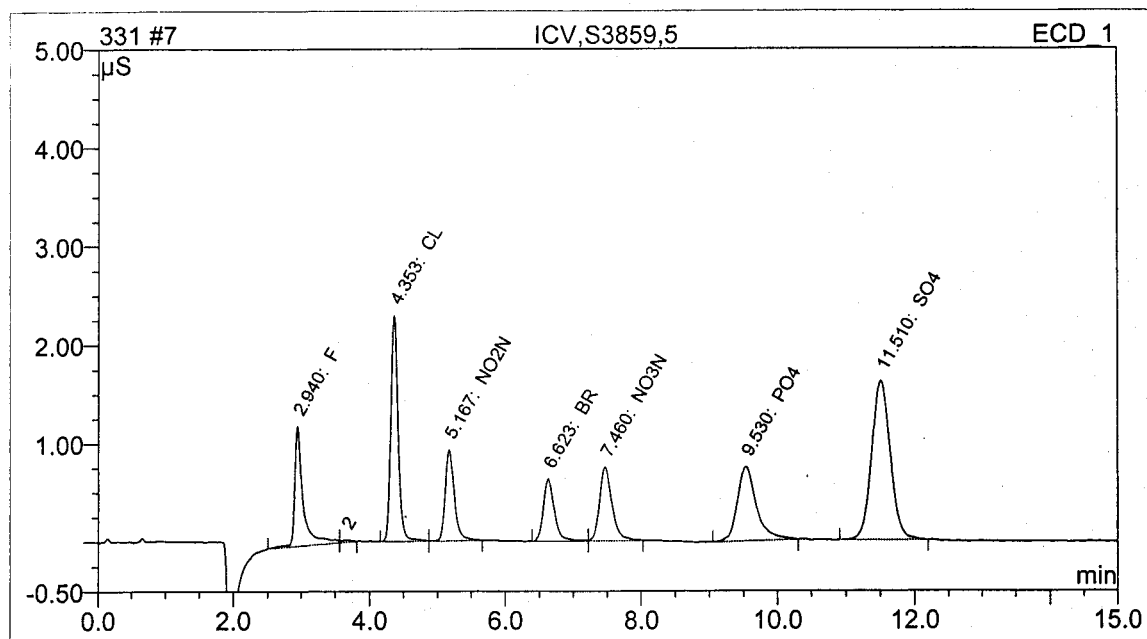
Curtis & Tompkins, Ltd.

00284

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICV,S3859,5	Sample No.:	7
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 1:59 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.940	0.180935	0.9630	0.9630	
3	CL	4.353	0.283683	1.8528	1.8528	
4	NO2N	5.167	0.146171	0.4666	0.4666	
5	BR	6.623	0.120324	1.8910	1.8910	
6	NO3N	7.460	0.164100	0.4552	0.4552	
7	PO4	9.530	0.246093	2.0008	2.0008	
8	SO4	11.510	0.507753	4.7436	4.7436	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

: 00265

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC03 IDF : 1.0
Seqnum : 626477375008 File : 331_8.000 Time : 27-NOV-2006 14:17
Cal : 626477375001 Caldate: 27-NOV-2006

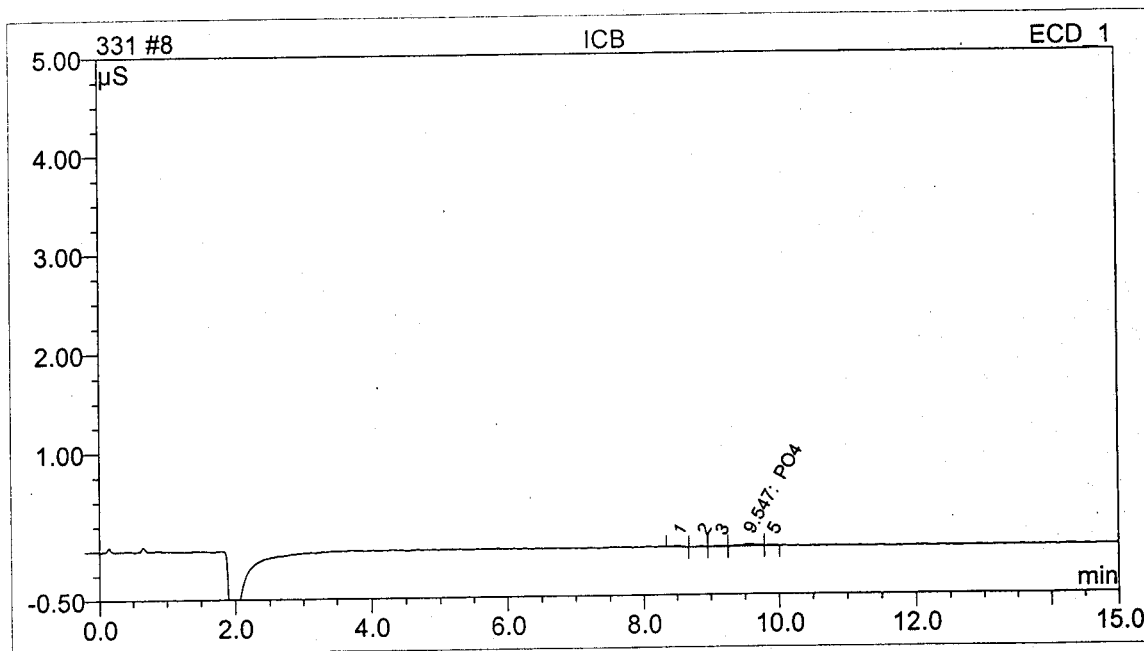
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Bromide	ND	0.2000	0.02767	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Orthophosphate (as P)	[0.05090]	0.2000	0.03686	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

ms 11/28/06

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	ICB	Sample No.:	8
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 2:17 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
n.a.	F	n.a.	n.a.	n.a.	n.a.	
n.a.	CL	n.a.	n.a.	n.a.	n.a.	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
4	PO4	9.547	0.006205	0.0509	0.0509	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

00207

CURTIS & TOMPKINS INSTRUMENT BLANK FOR EPA 300.0

Inst : IC03
Seqnum : 626477375001
Cal : 626450011001

File : 331_1.000
Caldate: 08-NOV-2006

IDF : 1.0
Time : 27-NOV-2006 12:15

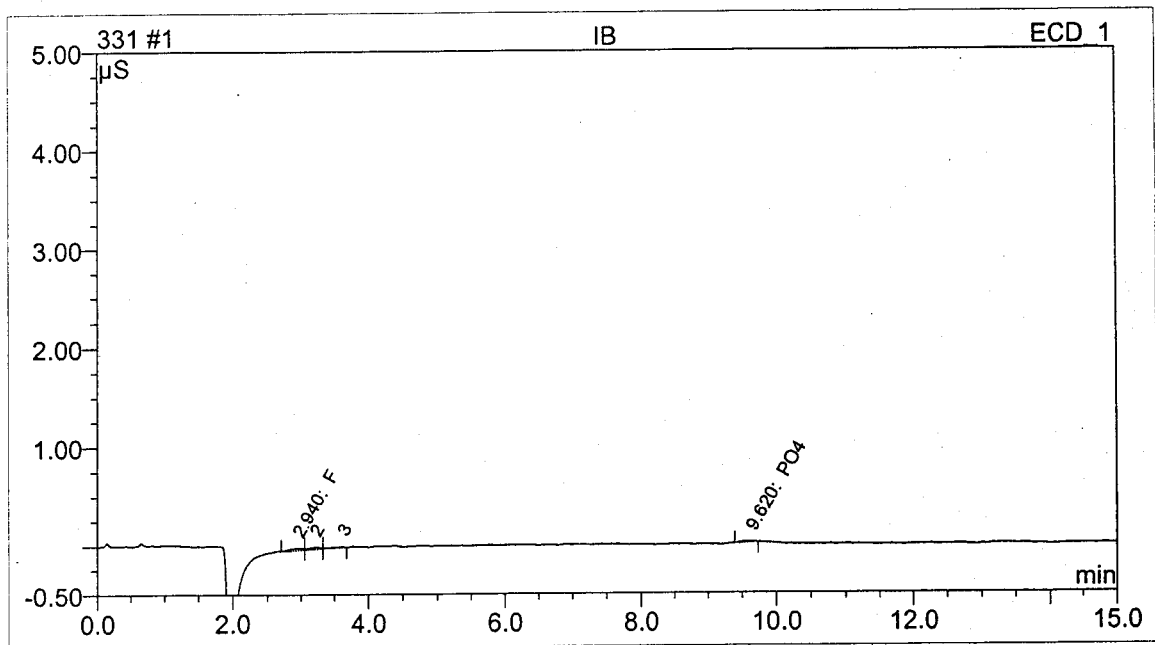
Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Bromide	ND	0.2000	0.02767	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Orthophosphate (as P)	ND	0.2000	0.03686	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

MS 11/28/06

ANIONS ANALYSIS REPORT DX120 - IC03

Sample Name:	IB	Sample No.:	1
Sequence Name:	331	Batch #:	CAL-331
Program Method:	IC03-7AN	Injection vol.:	25.0
Quantitation Method:	IC03-7AN_CAL	Dilution Factor:	1.0000
Quant. Method Title:	IC03-7AN_CAL	Sample Wt.:	1.0000
Date Time Collected:	11/27/2006 12:15 PM	PDF:	1.0000
System Operator:	MRS		

Peak No.	Component Name	Ret. Time min	Area $\mu\text{S} \cdot \text{min}$	Raw Amount mg/L-mg/Kg	Amount mg/L-mg/Kg	Comment
1	F	2.940	0.004714	0.0254	0.0254	
n.a.	CL	n.a.	n.a.	n.a.	n.a.	
n.a.	NO2N	n.a.	n.a.	n.a.	n.a.	
n.a.	BR	n.a.	n.a.	n.a.	n.a.	
n.a.	NO3N	n.a.	n.a.	n.a.	n.a.	
4	PO4	9.620	0.002007	0.0165	0.0165	
n.a.	SO4	n.a.	n.a.	n.a.	n.a.	



ANALYZED BY:

REVIEWED BY:

Curtis & Tompkins, Ltd.

: 00285

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191358 IC Water
EPA 300.0

Inst : IC03	Run Name: L	IDF : 1.0	
Seqnum : 626493305007	File : 342_7.000	Time : 08-DEC-2006 12:52	
Cal : 626477375001	Caldate : 27-NOV-2006		
Standards: S4740 (100X)			

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.1810	0.1834	0.5000	0.4908	mg/L	-2	10	
Chloride	0.1613	0.1486	1.000	0.9776	mg/L	-2	10	
Nitrogen, Nitrite	0.3079	0.3050	0.2500	0.2441	mg/L	-2	10	
Nitrogen, Nitrate	0.3791	0.3631	0.2500	0.2527	mg/L	1	10	
Sulfate	0.1066	0.1082	2.500	2.543	mg/L	2	10	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191358 IC Water
EPA 300.0

Inst : IC03	Run Name: M	IDF : 1.0	
Seqnum : 626493305018	File : 342_18.000	Time : 08-DEC-2006 19:42	
Cal : 626477375001	Caldate : 27-NOV-2006		

Standards: S4740 (25X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.1810	0.1968	2.000	2.068	mg/L	3	10	
Chloride	0.1613	0.1491	4.000	3.830	mg/L	-4	10	
Nitrogen, Nitrite	0.3079	0.3036	1.000	0.9631	mg/L	-4	10	
Nitrogen, Nitrate	0.3791	0.3654	1.000	1.004	mg/L	0	10	
Sulfate	0.1066	0.1063	10.00	9.794	mg/L	-2	10	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191358 IC Water
EPA 300.0

Inst : IC03	Run Name: H	IDF : 1.0
Seqnum : 626493305038	File : 342_38.000	Time : 09-DEC-2006 01:31
Cal : 626477375001	Caldate : 27-NOV-2006	
Standards: S4740 (10X)		

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.1810	0.2113	5.000	5.344	mg/L	7	10	
Chloride	0.1613	0.1617	10.00	9.876	mg/L	-1	10	
Nitrogen, Nitrite	0.3079	0.3154	2.500	2.457	mg/L	-2	10	
Nitrogen, Nitrate	0.3791	0.3692	2.500	2.472	mg/L	-1	10	
Sulfate	0.1066	0.1125	25.00	24.88	mg/L	0	10	

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 191358 IC Water
EPA 300.0

Inst : IC03 Run Name: M IDF : 1.0
 Seqnum : 626493305046 File : 342_46.000 Time : 09-DEC-2006 03:50
 Cal : 626477375001 Caldate : 27-NOV-2006
 Standards: S4740 (25X)

Analyte	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Fluoride	0.1810	0.2016	2.000	2.116	mg/L	6	10	
Chloride	0.1613	0.1509	4.000	3.875	mg/L	-3	10	
Nitrogen, Nitrite	0.3079	0.3058	1.000	0.9700	mg/L	-3	10	
Nitrogen, Nitrate	0.3791	0.3609	1.000	0.9918	mg/L	-1	10	
Sulfate	0.1066	0.1078	10.00	9.929	mg/L	-1	10	

CURTIS & TOMPKINS BLANK USER REPORT FOR 191358 IC Water
EPA 300.0

Inst : IC03 Lab ID : QC367795
Seqnum : 626493305008.1 Matrix : Water
File : 342_8.000 Batch : 120238 Time : 08-DEC-2006 13:10
Cal : 626477375001 Caldate: 27-NOV-2006
IDF : 1.0 Units : mg/L
PDF : 1.0

Analyte	Result	RL	Flags
Fluoride	ND	0.10	u
Chloride	ND	0.20	u
Nitrogen, Nitrite	ND	0.05	u
Nitrogen, Nitrate	ND	0.05	u
Sulfate	ND	0.50	u

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 191358 IC Water
EPA 300.0

Inst : IC03
Seqnum : 626493305019
Cal : 626477375001

File : 342_19.000
Caldate: 27-NOV-2006

IDF : 1.0
Time : 08-DEC-2006 19:59

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 191358 IC Water
EPA 300.0

Inst : IC03
Seqnum : 626493305039
Cal : 626477375001
IDF : 1.0
File : 342_39.000
Time : 09-DEC-2006 01:48
Caldate: 27-NOV-2006

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	ND	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 191358 IC Water
EPA 300.0

Inst : IC03
Seqnum : 626493305047
Cal : 626477375001
File : 342_47.000
Caldate: 27-NOV-2006
IDF : 1.0
Time : 09-DEC-2006 04:07

Analyte	Quant	RL	MDL	Units	Flags
Fluoride	[0.02437]	0.1000	0.02324	mg/L	
Chloride	ND	0.2000	0.03217	mg/L	
Nitrogen, Nitrite	ND	0.05000	0.01206	mg/L	
Nitrogen, Nitrate	ND	0.05000	0.008826	mg/L	
Sulfate	ND	0.5000	0.07889	mg/L	

SEQUENCE SUMMARY FOR 191358 IC Water
Curtis & Tompkins Laboratories

Sequence: 626477375 Instrument: IC03
Analytical Method: EPA 300.0

Ion Chromatograph
SOP Version: ANIONS_300_rv6

Begun: 27-NOV-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IOC	SPK	UL	VL	pH	Stds	Used	>LR
001	331_1.00	IB				27-NOV-2006	12:15	1.0		25					
002	331_2.00	ICAL	L1			27-NOV-2006	12:32	1.0					1		
003	331_3.00	ICAL	L2			27-NOV-2006	12:50	1.0					1		
004	331_4.00	ICAL	L3			27-NOV-2006	13:07	1.0					1		
005	331_5.00	ICAL	L4			27-NOV-2006	13:25	1.0					1		
006	331_6.00	ICAL	L5			27-NOV-2006	13:42	1.0					1		
007	331_7.00	ICV				27-NOV-2006	13:59	1.0		25			2		
008	331_8.00	ICB				27-NOV-2006	14:17	1.0		25					
009	331_9.00	CCV	L			27-NOV-2006	14:34	1.0	1	25			1		
010	331_10.00	CCB/MB	QC366232			27-NOV-2006	14:52	1.0		25					
011	331_11.00	BS	QC366233			27-NOV-2006	15:09	1.0	1	25			1		
012	331_12.00	BSD	QC366234			27-NOV-2006	15:26	1.0	1	25			1		
013	331_13.00	SAMPLE	190995-001			27-NOV-2006	15:54	1.0	1	25					2:504=96.1268
014	331_14.00	X	BLK			27-NOV-2006	16:27	1.0							
015	331_15.00	MSS	190995-002			27-NOV-2006	16:44	10.0		25					
016	331_16.00	SAMPLE	190995-003			27-NOV-2006	17:02	10.0		25					
017	331_17.00	SAMPLE	190995-004			27-NOV-2006	17:19	10.0		25					
018	331_18.00	SAMPLE	190995-005			27-NOV-2006	17:37	10.0		25					
019	331_19.00	SAMPLE	190995-006			27-NOV-2006	17:54	10.0		25					
020	331_20.00	SAMPLE	190995-007			27-NOV-2006	18:11	10.0		25					
021	331_21.00	CCV	M			27-NOV-2006	18:29	1.0		25			1		
022	331_22.00	CCB				27-NOV-2006	18:46	1.0		25					
023	331_23.00	X	CCV			27-NOV-2006	19:04	1.0					1		
024	331_24.00	X	CCB			27-NOV-2006	19:21	1.0							
025	331_25.00	MS	QC366235			27-NOV-2006	19:39	10.0	1	25			1		
026	331_26.00	MSD	QC366236			27-NOV-2006	19:56	10.0	1	25			1		
027	331_27.00	SAMPLE	190995-001			27-NOV-2006	20:13	10.0		25					
028	331_28.00	SAMPLE	190995-008			27-NOV-2006	20:31	10.0		25					
029	331_29.00	SAMPLE	190995-009			27-NOV-2006	20:49	10.0		25					
030	331_30.00	SAMPLE	190995-010			27-NOV-2006	21:06	10.0		25					
031	331_31.00	SAMPLE	190995-011			27-NOV-2006	21:24	10.0		25					

Stds used: 1=S4740 2=S3859

SEQUENCE SUMMARY FOR 191358 IC Water
Curtis & Tompkins Laboratories

Sequence: 626477375 Instrument: IC03
Analytical Method: EPA 300.0

Ion Chromatograph
SOP Version: ANIONS_300_rv6

Begun: 27-NOV-2006

#	Filename	Type	Sample	Batch	Matrix	Analyzed	IDF	IQC	SPK	uL	VL	pH	Stds	Used	>LR
032	331_32.0	SAMPLE	190995-012	119854	Water	27-NOV-2006	21:41	10.0	25						
033	331_33.0	SAMPLE	190995-013	119854	Water	27-NOV-2006	21:59	10.0	25						
034	331_34.0	SAMPLE	190995-014	119854	Water	27-NOV-2006	22:16	10.0	25						
035	331_35.0	CCV	H	119854		27-NOV-2006	22:33	1.0	25				1		
036	331_36.0	CCB		119854		27-NOV-2006	22:51	1.0	25						
037	331_37.0	X	CCV	119854		27-NOV-2006	23:08	1.0					1		
038	331_38.0	X	CCB	119854		27-NOV-2006	23:26	1.0							
039	331_39.0	X	SHUTDOWN	119854		27-NOV-2006	23:43	1.0							

Stds used: 1=54740 2=53859

SEQUENCE SUMMARY FOR 191358 IC Water
Curtis & Tompkins Laboratories

Sequence: 626493305 Instrument: IC03
Analytical Method: EPA 300.0

Ion Chromatograph
SOP Version: ANIONS_300_rv6

Begun: 08-DEC-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds Used	>LR
007	342_7.00	CCV	L	120238	Water	08-DEC-2006 12:52	1.0	1		25			1	
008	342_8.00	CCB/MB	QC367795	120238	Water	08-DEC-2006 13:10	1.0			25				
009	342_9.00	BS	QC367796	120238	Water	08-DEC-2006 13:27	1.0			25			1	
010	342_10.0	BSD	QC367797	120238	Water	08-DEC-2006 13:45	1.0			25			1	
011	342_11.0	SAMPLE	191358-002	120238	Water	08-DEC-2006 17:29	50.0			25				
012	342_12.0	MSS	191358-009	120238	Water	08-DEC-2006 17:47	10.0			25				
013	342_13.0	SAMPLE	191358-001	120238	Water	08-DEC-2006 18:15	10.0			25				
014	342_14.0	SAMPLE	191358-003	120238	Water	08-DEC-2006 18:32	25.0			25				
015	342_15.0	SAMPLE	191358-004	120238	Water	08-DEC-2006 18:50	25.0			25				
016	342_16.0	SAMPLE	191358-005	120238	Water	08-DEC-2006 19:07	25.0			25				
017	342_17.0	SAMPLE	191358-007	120238	Water	08-DEC-2006 19:24	10.0			25				
018	342_18.0	CCV	M	120238		08-DEC-2006 19:42	1.0			25			1	
019	342_19.0	CCB		120238		08-DEC-2006 19:59	1.0			25				
020	342_20.0	X	CCV	120238		08-DEC-2006 20:17	1.0			25			1	
021	342_21.0	X	CCB	120238		08-DEC-2006 20:34	1.0			25				
022	342_22.0	SAMPLE	191358-006	120238	Water	08-DEC-2006 20:52	1.0			25				
023	342_23.0	MS	QC367798	120238	Water	08-DEC-2006 21:09	10.0			25			1	
024	342_24.0	MSD	QC367799	120238	Water	08-DEC-2006 21:27	10.0			25			1	
025	342_25.0	SAMPLE	191358-011	120238	Water	08-DEC-2006 21:44	25.0			25				
026	342_26.0	SAMPLE	191358-001	120238	Water	08-DEC-2006 22:02	1.0	2		25				2:CL=74.8085
027	342_27.0	X	BLK	120238		08-DEC-2006 22:19	1.0							
028	342_28.0	SAMPLE	191358-002	120238	Water	08-DEC-2006 22:36	1.0	2		25				2:SO4=174.615
029	342_29.0	X	BLK	120238		08-DEC-2006 22:54	1.0							
030	342_30.0	SAMPLE	191358-003	120238	Water	08-DEC-2006 23:11	1.0	2		25				2:SO4=58.6588
031	342_31.0	X	BLK	120238		08-DEC-2006 23:29	1.0							
032	342_32.0	SAMPLE	191358-004	120238	Water	08-DEC-2006 23:46	1.0	3		25				3:CL=142.798
033	342_33.0	X	BLK	120238		09-DEC-2006 00:03	1.0							
034	342_34.0	SAMPLE	191358-005	120238	Water	09-DEC-2006 00:21	1.0	2		25				2:SO4=102.921
035	342_35.0	X	BLK	120238		09-DEC-2006 00:38	1.0							
036	342_36.0	SAMPLE	191358-007	120238	Water	09-DEC-2006 00:56	1.0	2		25				2:CL=74.2480
037	342_37.0	X	BLK	120238		09-DEC-2006 01:13	1.0							

Stds used: 1=S4740

SEQUENCE SUMMARY FOR 191358 IC Water
Curtis & Tompkins Laboratories

Sequence: 626493305 Instrument: IC03
Analytical Method: EPA 300.0

Ion Chromatograph
SOP Version: ANIONS_300_rv6

Begun: 08-DEC-2006

#	Filename	Type	Samplenum	Batch	Matrix	Analyzed	IDF	IOC	SPK	uL	VL	pH	Stds	Used	>LR
038	342_38.0	CCV	H	120238		09-DEC-2006 01:31	1.0		25				1		
039	342_39.0	CCB		120238		09-DEC-2006 01:48	1.0		25						
040	342_40.0	X	CCV	120238		09-DEC-2006 02:05	1.0						1		
041	342_41.0	X	CCB	120238		09-DEC-2006 02:23	1.0								
042	342_42.0	MSS	191358-009	120238	Water	09-DEC-2006 02:40	1.0	3	25						3:SO4=75.0288
043	342_43.0	X	BLK	120238		09-DEC-2006 02:58	1.0								
044	342_44.0	SAMPLE	191358-011	120238	Water	09-DEC-2006 03:15	1.0	1	25						1:CL=62.4555
045	342_45.0	X	BLK	120238		09-DEC-2006 03:32	1.0								
046	342_46.0	CCV	M	120238		09-DEC-2006 03:50	1.0		25				1		
047	342_47.0	CCB		120238		09-DEC-2006 04:07	1.0								
048	342_48.0	X	CCV	120238		09-DEC-2006 04:25	1.0						1		
049	342_49.0	X	CCB	120238		09-DEC-2006 04:42	1.0								
050	342_50.0	X	SHUTDOWN	120238		09-DEC-2006 04:59	1.0								

Stds used: 1=S4740

REPORTING SUMMARY FOR 191358 IC Water
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	F	C	N	N	S
					L	O	O	O
						2	3	4
						N	N	
191358-001	IC03	12/08/06 18:15	10.0		+			+
191358-001	IC03	12/08/06 22:02	1.0	+		+	+	
191358-002	IC03	12/08/06 17:29	50.0		+			+
191358-002	IC03	12/08/06 22:36	1.0	+		+	+	
191358-003	IC03	12/08/06 18:32	25.0		+			+
191358-003	IC03	12/08/06 23:11	1.0	+		+	+	
191358-004	IC03	12/08/06 18:50	25.0		+		+	+
191358-004	IC03	12/08/06 23:46	1.0	+		+		
191358-005	IC03	12/08/06 19:07	25.0		+			+
191358-005	IC03	12/09/06 00:21	1.0	+		+	+	
191358-006	IC03	12/08/06 20:52	1.0	+	+	+	+	+
191358-007	IC03	12/08/06 19:24	10.0		+			+
191358-007	IC03	12/09/06 00:56	1.0	+		+	+	
191358-009	IC03	12/08/06 17:47	10.0		+		+	+
191358-009	IC03	12/09/06 02:40	1.0	+		+		
191358-011	IC03	12/08/06 21:44	25.0		+			
191358-011	IC03	12/09/06 03:15	1.0	+		+	+	+
QC367795	IC03	12/08/06 13:10	1.0	+	+	+	+	+
QC367796	IC03	12/08/06 13:27	1.0	+	+	+	+	+
QC367797	IC03	12/08/06 13:45	1.0	+	+	+	+	+
QC367798	IC03	12/08/06 21:09	10.0	+	+	+	+	+
QC367799	IC03	12/08/06 21:27	10.0	+	+	+	+	+

Analysis: ☒ Anions EPA 300 / EPA 9056
☐ Perchlorate (ClO₄) EPA 314
☐ Cr6+ EPA 7199

Batch#: 120238
 Date Started: 12/8/06
 Prep Chemist: MRS

BK 2431
 Page 10

	Sample #	Conductivity	Estimated Dilution Factor	Filters Used	Comments
1	191358-001 B	0.94	1x 10x	S	
2	-002	2.07	50x		
3	-003	1.02	25x		
4	-004 ↓	1.64	25x		
5	-005 A	1.61	25x		
6	-006 B	0.02			
7	-007 B	0.95	10x		
8	-009 F	0.79	10x		MSS
9	↓ -011 F	1.42	↓ 25x	↓	
10	Blank QC367795	N/A	1x	N/A	
11	BS QC367796	↓	↓	↓	
12	BSD QC367797	↓	↓	↓	
13	MS QC367798 F	↓	10x	S	
14	MSD QC367799 F	↓	10x	S	
15					
16					
17					
18					
19					
20					

	Eluent Reagent ID	Mfg & Lot # / Time / Program	Initials / Date
BS/BSD Spiked with	0.2 mL of :	100x MRS 12/5/06	MRS 12/8/06
MS/MSD Spiked with	0.1 mL of :	54740	
Filters Used:	Ag: OnGuard II Ag	54740	
	Na: OnGuard II Na	N/A	
	P: OnGuard II P		
	RP: OnGuard II RP		
	S: 0.20um/0.45um	↓	
		Acrosdisc lot #A10646466	↓

MRS 12/8/06
 Extraction Chemist / Date

Continued from page 7
 Continued on page 7

CR 12/11/06
 Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 120238
 Date Started: 08-DEC-2006
 Batched by : Micah Smith

Analysis : N/A
 Bgroup : IC
 Department : GC Organics

Sample	Type	Client	Matrix	Analyses	Due Date
191358-001		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-DEC-2006
191358-002		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-DEC-2006
191358-003		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-DEC-2006
191358-004		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-DEC-2006
191358-005		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-DEC-2006
191358-006		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-DEC-2006
191358-007		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-DEC-2006
191358-009		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-DEC-2006
191358-011		Treadwell & Rollo	Water	CHLORIDE, FLUORIDE, NITRATE, NITRITE, SULFATE	20-DEC-2006
QC367795	BLANK		Water		
QC367796	BS		Water		
QC367797	BSD		Water		
QC367798	MS	of 191358-009	Water		
QC367799	MSD	of 191358-009	Water		

Curtis & Tompkins Laboratories
MDL Summary for EPA 300.0 Water
As of 01/05/07

Analyte	Units	IC03	IC01
Fluoride	mg/L	0.023	0.0092
Chloride	mg/L	0.032	0.0061
Nitrogen, Nitrite	mg/L	0.012	0.0081
Bromide	mg/L	0.028	0.036
Nitrogen, Nitrate	mg/L	0.0088	0.0080
Orthophosphate (as P)	mg/L	0.037	0.045
Sulfate	mg/L	0.079	0.047



Curtis & Tompkins, Ltd.

Total Cyanide

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 335.2
Analyte:	Cyanide	Batch#:	120528
Field ID:	WT120706	Sampled:	12/07/06
Matrix:	Water	Received:	12/08/06
Units:	mg/L	Analyzed:	12/20/06
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	191358-013	0.11	0.01
BLANK	QC368978	ND	0.01

Batch QC Report
Total Cyanide

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 335.2
Analyte:	Cyanide	Diln Fac:	1.000
Field ID:	WT120706	Batch#:	120528
MSS Lab ID:	191358-013	Sampled:	12/07/06
Matrix:	Water	Received:	12/08/06
Units:	mg/L	Analyzed:	12/20/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC368979	0.1080	0.1630	0.2410	81	65-135		
MSD	QC368980		0.1630	0.2404	81	65-135	0	20
LCS	QC368981		0.1630	0.1593	98	75-125		

RPD= Relative Percent Difference

Analysis: **Cyanide**
 Method: **EPA 335.2 / SMWW 4500CN-E**
 Instrument: **HP UV-VIS Spectrometer**
 Wavelength: **578 nm**
 SOP#: **CN_335_rv8.doc**

Matrix: **Water**
 Batch: **120528**
 Prep Date: **12/20/2006**
 Analysis Date: **12/20/2006**
 Analyst: **DMC**

INITIAL CALIBRATION DATA

Conc (mg/L)	ABS	RF	Calibration Date: 7/06/06
0.00000	0.0007	1.431844	Correlation Coefficient (r): 0.9999 Avg Rf: 1.395062 %RSD: 3.7
0.00873	0.0125	1.483391	
0.01746	0.0259	1.366934	
0.05238	0.0716	1.358534	
0.08730	0.1186	1.371707	
0.13968	0.1916	1.357961	Note: Average Rf used to calculate sample results.
0.17460	0.2371		

CONTINUING CALIBRATION DATA

	ABS	Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.1046	0.0750	0.0816	92%	90 - 110%
ICB	0.0002	0.0001	0.0000		
CCV	0.1061	0.0761	0.0816	93%	90 - 110%
CCB	0.0000	0.0000	0.0000		

Analysis: **Cyanide**
 Method: **EPA 335.2 / SMWW 4500CN-E**
 Instrument: **HP UV-VIS Spectrometer**
 Wavelength: **578 nm**

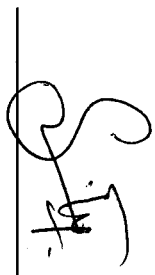
Matrix: **Water**
 Batch: **120528**
 Prep Date: **12/20/2006**
 Analysis Date: **12/20/2006**
 Analyst: **DMC**

SAMPLE & BATCH QC DATA

Sample ID	Vol (mL) Initial	Vol (mL) Distill	Distillate Colored (mL)	Instrument	Dilution	ABS	Report mg/L	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	% Rec	% RPD
MB	50.0	50.0	20.0	1.00	1.00	0.0010	ND	0.010	0.5	16.3	0.163	98	
LCS	50.0	50.0	10.0	1.00	1.00	0.1111	0.1593	0.020	0.5	16.3	0.163	98	
191358-13	50.0	50.0	20.0	1.00	1.00	0.1507	0.1080	0.010	0.5	16.3	0.163	81	0
191358-13m	50.0	50.0	10.0	1.00	1.00	0.1681	0.2410	0.020	0.5	16.3	0.163	81	0
191358-13m	50.0	50.0	10.0	1.00	1.00	0.1677	0.2404	0.020	0.5	16.3	0.163	81	0
191487-1	50.0	50.0	20.0	1.00	1.00	0.0067	ND	0.010					
191487-2	50.0	50.0	20.0	1.00	1.00	0.0039	ND	0.010					
191487-3	50.0	50.0	20.0	1.00	1.00	0.0003	ND	0.010					
191487-4	50.0	50.0	20.0	1.00	1.00	0.2192	0.1571	0.010					
191594-2	50.0	50.0	20.0	1.00	1.00	-0.0003	ND	0.010					

QC Limits		RPD		Recovery	
LCS/BS/BS	20	20	80	-	120
MS/MSD	20	69	-	-	120

Reviewed by/ Date:

 12.20.06

---> Quantitation Results Report <---

Date : 12-20-06
 Time : 13:14:45
 Operator : DM

File Name : Data not stored yet

Sample Name : Cyanide
 Solvent Name : CIL 7/6/06
 Conc Units : ug/L
 Dil. Factor : 1.00
 Analytical Wavelength : 578 nm
 Reference Wavelength : None Selected
 Confirmation Wavelengths : None Selected
 Integration Time : 1 seconds

SAMPLE #	Sample Name	Wavelength	Found. Res.	Concentration
1	ICR	Analytical	+0.0022	1.678E-04
2	ICV	Analytical	+0.1046	0.07667
3	191358-13	Analytical	+0.1507	0.11047
4	191359-13MS	Analytical	+0.1681	0.12324
5	191359-13MSD	Analytical	+0.1677	0.12296
6	191407-1	Analytical	+0.0067	0.00490
7	191407-2	Analytical	+0.0039	0.00293
8	191407-3	Analytical	+0.0003	2.462E-04
9	191407-4	Analytical	+0.2192	0.16072
10	191594-2	Analytical	+0.0002	0.00000
11	LD9	Analytical	+0.1111	0.08150
12	MB	Analytical	+0.0010	7.049E-04
13	CCV	Analytical	+0.1061	0.07778
14	CID	Analytical	+0.0000	2.238E-05

---> Standard Calibration Report <---

Date : ~~12-27-2006~~ ¹²⁻²⁶
 Time : 13:18:02 ^{12-20 26}
 Operator : DM

File Name : C:\DATA\DATA\CN705.SYS

Sample Name : cyanide
 Solvent Name : DCL 7/6/03
 Conc Units : mg/L

Analytical Wavelength : 578 nm
 Reference Wavelength : None Selected
 Compensation Wavelengths : None Selected
 Integration Time : 1 seconds

Analytical Function : Concentration = 47.2100 ml % Absorbance

STD #	Concentration	Absorbance	% Error
1	0.00000	0.0000	*****
2	0.00000	0.0111	-4.622 %
3	0.00746	0.0118	-7.942 %
4	0.01492	0.0111	-7.295 %
5	0.02238	0.1105	+0.385 %
6	0.03984	0.1010	-0.589 %
7	0.07463	0.2031	+0.424 %

---> Standard Calibration Report <---

Date : 12-07-2006
 Time : 13:15:04
 Operator : DM

12-20

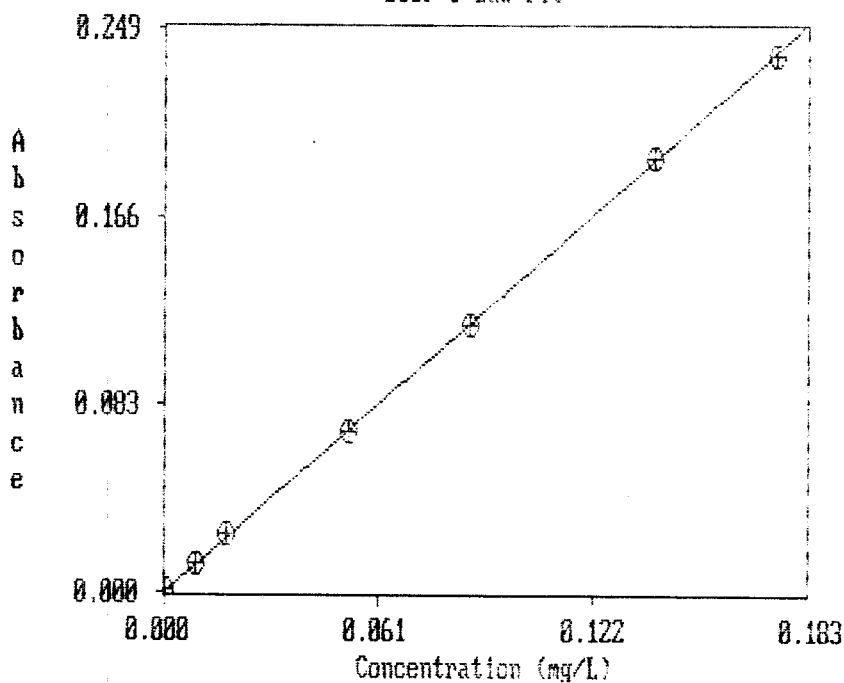
12-20-06
 sm

File Name : C:\NVL\DATA\N706.STD

Sample Name : cyanide
 Solvent Name : DRL 7/6/06
 Conc Units : mg/L

Analytical Wavelength : 578 nm
 Reference Wavelength : None Selected
 Confirmation Wavelengths : None Selected
 Integration Time : 1 seconds

Beer's Law Fit



CN - EPA 335.2M					B120518	
Sample Vol (ml)	Final Vol (ml)	Vol (ml) colored	A35			
191358-13	50	50	20	.1507		
191358-13	50	50	20	.1507		
-13MS	+5ml (16.32ug/ml diln of SS101)	10	.1681			
-13MSD	same as MS	10	.1677			
191487-1		20	.0067			
-2			.0039			
-3			.0003			
-4			.2192			
191594-2			.0003			
LCS	same as MS	10	.1111			
MSB		20	.0010			
ICB			.0002			
ICV + 5ml (16.32ug/ml diln of SS101)	50	10	.1046			
CCV			.1061			
CCB			.0006			

TU = .0816 ug/L

test for Cl⁻ & S²⁻ negative

pH all > 12

Sulfuric acid added to all samples.

Continued on Page

Read and Understood By

Signed

12-2006

Date

Signed

Date

12/26/06

00313

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 120528
 Date Started: 20-DEC-2006
 Batched by : Dennis McCanna

Analysis : CYANIDE
 Bgroup : N/A
 Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
191358-013		Treadwell & Rollo	Water	CYANIDE	20-DEC-2006
191487-001		Union Sanitary Dis	Water	CYANIDE	20-DEC-2006
191487-002		Union Sanitary Dis	Water	CYANIDE	20-DEC-2006
191487-003		Union Sanitary Dis	Water	CYANIDE	20-DEC-2006
191487-004		Union Sanitary Dis	Water	CYANIDE	20-DEC-2006
191594-002		TRC Environmental	Water	CYANIDE	22-DEC-2006
QC368978	BLANK		Water	CYANIDE	
QC368979	MS	of 191358-013	Water	CYANIDE	
QC368980	MSD	of 191358-013	Water	CYANIDE	
QC368981	LCS		Water	CYANIDE	

Method Detection Limit Study

Analysis: **Cyanide**
Method: EPA 335.2 mod*
Instrument: HP UV/VIS Spectrometer
* using the midi-distillation apparatus

Matrix: **Water**
Analysis Date: 8/31/2006
Analyst: DMc

Concentration: 0.0359 mg/L

1	0.0271
2	0.0285
3	0.0292
4	0.0306
5	0.0271
6	0.0282
7	0.0270
8	

Average	0.0282
STDEVP	0.001236
Student's t	3.143

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev:	0.0039 mg/L
Reporting Limit:	0.0100 mg/L
Status:	PASS >1/3 RL



Curtis & Tompkins, Ltd.

Total Oil & Grease (HEM)

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 1664A
Analyte:	Oil & Grease (HEM)	Batch#:	120500
Field ID:	WT120706	Sampled:	12/07/06
Matrix:	Water	Received:	12/08/06
Units:	mg/L	Analyzed:	12/19/06

Type	Lab ID	Result	RL	Diln Fac
SAMPLE	191358-013	ND	4.90	0.9800
BLANK	QC368862	ND	5.00	1.000

Batch QC Report

Total Oil & Grease (HEM)			
Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 1664A
Analyte:	Oil & Grease (HEM)	Diln Fac:	1.000
Matrix:	Water	Batch#:	120500
Units:	mg/L	Analyzed:	12/19/06

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC368863	40.00	33.00	82	78-114		
BSD	QC368864	40.00	32.30	81	78-114	2	18

Analysis: Hexane Extractable Material (Total)
 Method: EPA 1664A
 Matrix: Water
 Silica Gel: No
 SOP#: 1664_rv3.doc

Prep Date: 19-Dec-06
 Analysis Date: 19-Dec-06
 Batch #: 120500
 Analyst: CCH

BATCH QC DATA

Sample	Sample Vol (mL)	Dil'n Factor (1000/vol)	Beaker Mass (g)	Total Mass (g)	Residue Mass (g)	Report (mg/L)	Reporting Limit (mg/L)	Spike Used (g)	Recovery, %	RPD, %
MB	1000	1.00	2.4947	2.4954	0.0007	ND	5.00			
BS	1000	1.00	2.5053	2.5383	0.0330	33.000	5.00	0.0400	82	
BSD	1000	1.00	2.4920	2.5243	0.0323	32.300	5.00	0.0400	81	2

SAMPLE DATA

Sample	Sample Vol (mL)	Dil'n Factor (1000/vol)	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	Report (mg/L)	Reporting Limit (mg/L)	IDF (1000/Vs)
191358-013	1020	0.98	2.5150	2.5166	0.0016	ND	4.90	0.980
191479-001	1040	0.96	2.5157	2.5167	0.0010	ND	4.81	0.962
191479-002	1040	0.96	2.5180	2.5201	0.0021	ND	4.81	0.962
191479-003	1040	0.96	2.5200	2.5244	0.0044	ND	4.81	0.962
191479-004	1040	0.96	2.5474	2.5516	0.0042	ND	4.81	0.962
191479-005	1030	0.97	2.5460	2.5503	0.0043	ND	4.85	0.971
191479-006	1030	0.97	2.5221	2.5249	0.0028	ND	4.85	0.971
191479-007	1050	0.95	2.5414	2.5429	0.0015	ND	4.76	0.952
191479-008	1040	0.96	2.5081	2.5081	0.0000	ND	4.81	0.962

Note: RPD calculation includes correction for different spiking levels.

Reviewed by/ Date:

S.T.F. 12/20/06

QC Limits	RPD	Recovery
LCS/ BS/ BSD	18	78 - 114
MS/ MSD	28	68 - 124

Benchbook#: **BK2436**
Page: **3**

Hexane Manufacturer & Lot# Huker C40255
Extraction Disc Lot#: Empore 450317
Silica Gel Cleanup Used (Y / N): N
Silica Gel Manufacturer & Lot# N/A

* Constant weight must be within $\pm 0.0005\text{g}$ from previous reading.

Dmp 12/19/06
Reviewed by/Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 120500
 Date Started: 19-DEC-2006
 Batched by : Charles Howse

Analysis : 1664T
 Bgroup : N/A
 Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
191358-013		Treadwell & Rollo	Water	1664T	20-DEC-2006
191479-001		Burns & McDonnell	Water	1664T	19-DEC-2006
191479-002		Burns & McDonnell	Water	1664T	19-DEC-2006
191479-003		Burns & McDonnell	Water	1664T	19-DEC-2006
191479-004		Burns & McDonnell	Water	1664T	19-DEC-2006
191479-005		Burns & McDonnell	Water	1664T	19-DEC-2006
191479-006		Burns & McDonnell	Water	1664T	19-DEC-2006
191479-007		Burns & McDonnell	Water	1664T	19-DEC-2006
191479-008		Burns & McDonnell	Water	1664T	19-DEC-2006
QC368862	BLANK		Water	1664T	
QC368863	BS		Water	1664T	
QC368864	BSD		Water	1664T	

Hexane Extractable Material
EPA 1664
Method Detection Limit Study

Method Detection Limit Study

Analysis: Oil & Grease
Method: **EPA 1664** w/o silica gel
Matrix: Water

Prep Date: 9-Jun-06
Analysis Date: 6/9/2006
Analyst: REB

Conc. (mg/L) 2.0

1	1.6
2	1.9
3	1.7
4	1.9
5	2.2
6	2.2
7	2.3

STDEVP 0.24908
Student-T value 3.14

(Student-T value for 7 replicates = 3.143)

MDL (mg/L)	0.8
RL (mg/L)	5.0
Status	PASS

from 6/9/06



Curtis & Tompkins, Ltd.

Phenolic Compounds

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Analysis:	EPA 420.1
Project#:	2893.04.51		
Analyte:	Phenolic Compounds	Batch#:	120320
Field ID:	WT120706	Sampled:	12/07/06
Matrix:	Water	Received:	12/08/06
Units:	mg/L	Analyzed:	12/13/06
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	191358-013	ND	0.050
BLANK	QC368117	ND	0.050

Batch QC Report

Phenolic Compounds			
Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Analysis:	EPA 420.1
Project#:	2893.04.51		
Analyte:	Phenolic Compounds	Diln Fac:	1.000
Matrix:	Water	Batch#:	120320
Units:	mg/L	Analyzed:	12/13/06

Type	Lab ID	Spiked	Result	%REC	Limits	RPD	Lim
BS	QC368118	0.1000	0.09903	99	80-120		
BSD	QC368119	0.1000	0.09307	93	80-120	6	20

RPD= Relative Percent Difference

Analysis: **Phenolic Compounds**
 Method: **EPA 420.1**
 Instrument: **HP UV-VIS Spectrometer**
 Wavelength: **510 nm**
 SOP#: **phenols_rv 7.doc**

Matrix: **Water**
 Batch: **120320**
 Prep Date: **12/13/2006**
 Analysis Date: **12/13/2006**
 Analyst: **DMC**

INITIAL CALIBRATION DATA

Calibration Date: 6/02/06

Conc (mg/L)	ABS	RF	Correlation Coefficient (r):	Avg Rf:	%RSD:
0.0000	0.0000	0.1200	0.9999	0.1343	4.8
0.0500	0.0060	0.1370			
0.1000	0.0137	0.1380			
0.2000	0.0276	0.1366			
0.5000	0.0683	0.1373			
0.8000	0.1098	0.1369			
1.0000	0.1369	0.1344			
1.5000	0.2016				

Note: Average Rf used to calculate sample results.

CONTINUING CALIBRATION DATA

	ABS	Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.0655	0.4877	0.5000	98%	90 - 110%
ICB	0.0004	0.0030	0.0000		
CCV	0.0662	0.4929	0.5000	99%	90 - 110%
CCB	0.0014	0.0104	0.0000		

Analysis: Phenolic Compounds
 Method: EPA 420.1
 Instrument: HP UV-VIS Spectrometer
 Wavelength: 510 nm

Matrix: Water
 Batch: 120320
 Prep Date: 12/13/2006
 Analysis Date: 12/13/2006
 Analyst: DMC

SAMPLE & BATCH QC DATA

Sample ID	Initial Volume (mL)	Distillate to (mL)	Colored (mL)	IDF	Sample ABS	Color Blk Abs	Report mg/L	Reporting Vol (mL)	Spike Added (mL)	Std. Conc. (mg/L)	Spiked @ (mg/L)	% Rec	% RPD
MB	200	200	50.0	1.0	0.0002		ND	0.050					
BS	200	200	50.0	1.0	0.0133		0.09903	0.050	2.0	10.0	0.1000	99	
BSD	200	200	50.0	1.0	0.0125		0.09307	0.050	2.0	10.0	0.1000	93	6

191322-4	200	200	50.0	1.0	0.0063		ND	0.050					
191358-13	200	200	50.0	1.0	0.0060		ND	0.050					
QC Limits													
LCS/BS/BSD													
MS/MSD													
RPD													
Recovery													
20 80 - 120													
30 70 - 130													

Reviewed by/ Date:

Signature
 12.18.06

---> Quantitation Results Report <---

Date : ¹²⁻¹³12-03-2006
 Time : 14:02:17
 Operator : DM ¹²⁻¹³⁻⁰⁶ *DM*

File Name : Data not stored yet

Sample Name : phenols Analytical Wavelength : 510 nm
 Solvent Name : CAL 6/2/06 Reference Wavelength : None Selected
 Conc Units : ug/l Confirmation Wavelengths : None Selected
 Dil. Factor : 1.00 Integration Time : 1 seconds

SAMPLE #	Sample Name	Wavelength	Func. Res.	Concentration
1	ICB	Analytical	+0.0004	2.81310
2	ICV	Analytical	+0.0655	483.17734
3	191322-4	Analytical	+0.0063	46.80991
4	191358-13 ¹²⁻¹³⁻⁰⁶ <i>DM</i>	Analytical	+0.0060	44.44692
5	BS	Analytical	+0.0133	98.00826
6	BSD	Analytical	+0.0125	92.26954
7	MB	Analytical	+0.0002	1.68786
8	CCV	Analytical	+0.0662	487.90332
9	CCB	Analytical	+0.0014	10.01462

---> Standard Calibration Report <---

Date : 12-13-2006
Time : 14:02:29
Operator : DM

12-13-06
JW

File Name : C:\UV\DATA\PHEN606.STD

Sample Name : phenols
Solvent Name : CAL 6/2/06
Conc Units : ug/l

Analytical Wavelength : 510 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

Analytical Function Concentration = +7.374E+03 * Absorbance

STD #	Concentration	Absorbance	% Error
1	0.00000	0.0000	*****
2	50.00000	0.0060	+13.355 %
3	100.00000	0.0137	-0.925 %
4	200.00000	0.0276	-1.584 %
5	500.00000	0.0683	-0.682 %
6	800.00000	0.1098	-1.173 %
7	1000.00000	0.1369	-0.969 %
8	1500.00000	0.2016	+0.897 %

Date : ~~12-03-2006~~

Time : 14:02:31

Operator : DM

-2006
:31
12-13-06 *am*

Sample Name : phenols

Solvent Name : CAL 6/2/06

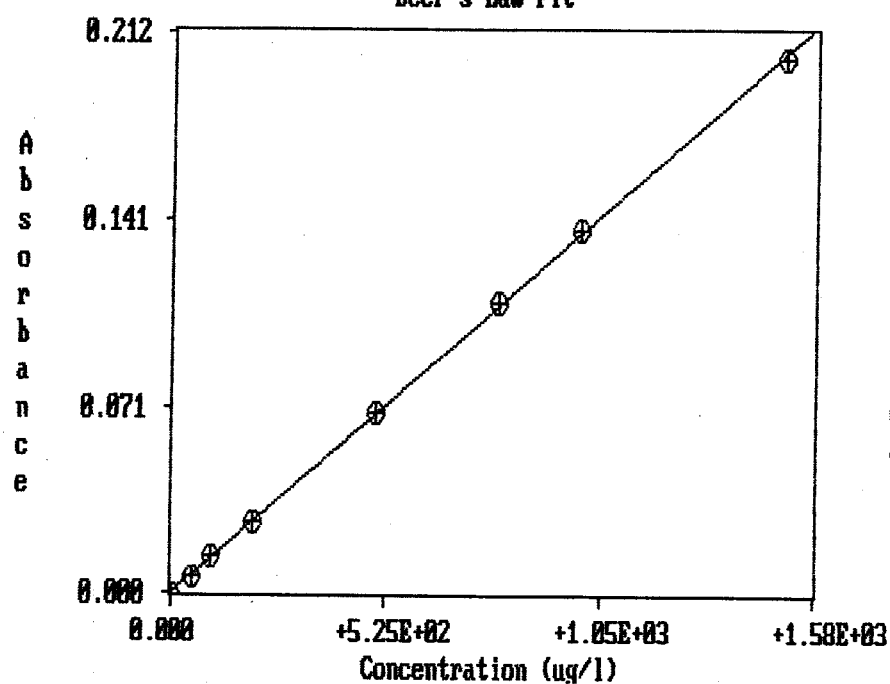
Conc Units : ug/l

Analytical Wavelength : 510 nm

Reference Wavelength : None Selected

Confirmation Wavelengths : None Selected

Integration Time : 1 seconds



Phenols EPA 420.1

B120320

Sample Vol (ml)	Final Vol (ml)	Vol (ml) colorim	ABS
191322-4	200	50	.0063
191358-13			.0060
BS + 2 ml (100 µg/ml diln of S4812, 1 ml = 100 µg)			.0133
BSO same as BS			.0125
HLB			.0002
ICB			.0004
ICV 5 ml (10 µg/ml diln of S4812) - 100		50	.0655
CCV			.0662
CCB			.0514

TV = 50 µg/L

Cl & S²⁻ tests negative.
pH all < 2.

Continued on Page

Read and Understood By

Signed

Dmr

Date

12-13-06

Signed

Dmr

: 00320

12/13/06

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 120320
 Date Started: 13-DEC-2006
 Batched by : Dennis McCanna

Analysis : PHENOL/WET
 Bgroup : N/A
 Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
191322-004		ACC Environmental	Water	PHENOL/WET	13-DEC-2006
191358-013		Treadwell & Rollo	Water	PHENOL/WET	20-DEC-2006
QC368117	BLANK		Water	PHENOL/WET	
QC368118	BS		Water	PHENOL/WET	
QC368119	BSD		Water	PHENOL/WET	

Analysis: PHENOLIC COMPOUNDS Analysis Date: 3/24/2005
Method: EPA 420.1 Analyst: DM
Instrument: HP UV/Vis
Wavelength: 510 nm

Instrument Calibrated to report sample results in concentration ug/L

Concentration: 0.200
Units: mg/L

1	0.202
2	0.200
3	0.205
4	0.203
5	0.201
6	0.189
7	0.184
8	

Average: 0.198 ug/L
Std Deviation: 0.0079522
Student T: 2.998

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev: 0.0238 mg/L
Reporting Limit: 0.05 mg/L
Status: PASS

Alkalinity			
Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	12/07/06
Units:	mg/L	Received:	12/08/06
Diln Fac:	1.000	Analyzed:	12/20/06
Batch#:	120527		

Field ID: BHWGW04 Lab ID: 191358-001
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	310	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	310	6.7

Field ID: HWGW100 Lab ID: 191358-002
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	900	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	900	6.7

Field ID: HWGW101 Lab ID: 191358-003
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	410	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	410	6.7

Field ID: BHWGW01 Lab ID: 191358-004
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	530	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	530	6.7

Field ID: BHWGW05 Lab ID: 191358-005
Type: SAMPLE

Analyte	Result	RL
Alkalinity, Bicarbonate	730	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO3	730	6.7

Alkalinity			
Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Matrix:	Water	Sampled:	12/07/06
Units:	mg/L	Received:	12/08/06
Diln Fac:	1.000	Analyzed:	12/20/06
Batch#:	120527		

Field ID: BHWGWO4RBHWGW100
Type: SAMPLE

Lab ID: 191358-006

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO ₃	1.1	1.0

Field ID: DUP1207062A
Type: SAMPLE

Lab ID: 191358-007

Analyte	Result	RL
Alkalinity, Bicarbonate	310	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	310	6.7

Field ID: 1065MW9B
Type: SAMPLE

Lab ID: 191358-009

Analyte	Result	RL
Alkalinity, Bicarbonate	260	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	260	6.7

Field ID: 1065PZ5AR
Type: SAMPLE

Lab ID: 191358-011

Analyte	Result	RL
Alkalinity, Bicarbonate	720	6.7
Alkalinity, Carbonate	ND	6.7
Alkalinity, Hydroxide	ND	6.7
Alkalinity, Total as CaCO ₃	720	6.7

Type: BLANK

Lab ID: QC368974

Analyte	Result	RL
Alkalinity, Bicarbonate	ND	1.0
Alkalinity, Carbonate	ND	1.0
Alkalinity, Hydroxide	ND	1.0
Alkalinity, Total as CaCO ₃	ND	1.0

Batch QC Report

Alkalinity			
Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO ₃	Units:	mg/L
Type:	LCS	Diln Fac:	1.000
Lab ID:	QC368975	Batch#:	120527
Matrix:	Water	Analyzed:	12/20/06

Spiked	Result	%REC	Limits
200.0	195.6	98	90-110



Curtis & Tompkins, Ltd.

Batch QC Report

Alkalinity			
Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 310.1
Analyte:	Alkalinity, Total as CaCO3	Diln Fac:	1.000
Field ID:	BHWGW04	Batch#:	120527
MSS Lab ID:	191358-001	Sampled:	12/07/06
Matrix:	Water	Received:	12/08/06
Units:	mg/L	Analyzed:	12/20/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC368976	309.3	333.0	638.7	99	69-112		
MSD	QC368977		333.0	635.3	98	69-112	1	25

RPD= Relative Percent Difference

200335

Analysis: Alkalinity
 Method: EPA 310.1 / SMWW 2320B
 SOP#: Alkalinity_rv 7.doc

Analysis Date: 12/20/06
 Batch No: 120527

H₂SO₄ Normality = 0.02
 conc.(mg/L) Na₂CO₃ for QC = 200

Analyst: SJ

QC DATA

Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	Alkalinity as CaCO ₃ (mg/L)	Low Alk Vol (mL)	Low Alk as CaCO ₃ (mg/L)	RL (mg/L)	% Rec.	% RPD
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MB	4.70	100	0.00	0.00	ND		1.0		
LCS	10.00	25	2.10	4.89	195.60		4.0	98	

191358-001	7.30	15	0.00	4.64	309.33	n/a	6.7		
MS	9.30	15	1.83	9.58	638.67		6.7	99	
MSD	9.30	15	1.89	9.53	635.33		6.7	98	1

SAMPLE	Initial pH	Sample Volume (mL)	Vol. Acid to pH 8.3 (mL)	Vol. Acid to pH 4.5 (mL)	Alkalinity as CaCO ₃ (mg/L)	Low Alkalinity Volume (4.5-4.2) (mL)	Low Alkalinity as CaCO ₃ (mg/L)	Reporting Limit (mg/L)
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191358-001	7.30	15	0.00	4.64	309.33		n/a	6.7
191358-002	7.50	15	0.00	13.43	895.33		n/a	6.7
191358-003	7.50	15	0.00	6.17	411.33		n/a	6.7
191358-004	7.70	15	0.00	7.95	530.00		n/a	6.7
191358-005	7.20	15	0.00	10.89	726.00		n/a	6.7
191358-006	5.50	100	0.00	0.19	rpt low alk	0.27	1.100	1.0
191358-007	7.30	15	0.00	4.70	313.33		n/a	6.7
191358-009	7.10	15	0.00	3.86	257.33		n/a	6.7
191358-011	7.10	15	0.00	10.74	716.00		n/a	6.7

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J'-flagged' if < 2mL titrant used)

Reviewed by/ Date:

SJ
 12.20.06

QC Limits	RPD	Recovery
LCS/BS/BSD	20	90 - 110
MS/MSD	25	80 - 120

Analysis: Alkalinity
Method: EPA 310.1

Analysis Date: 12/20/06
Batch No: 120527

H₂SO₄ Normality = 0.02
Analyst: SJ

SAMPLE	(P)	(T-P)	Total Alkalinity as CaCO ₃ (mg/L)	Bicarbonate Alkalinity as CaCO ₃ (mg/L)			Hydroxide Alkalinity	
				Bicarbonate Alkalinity	Carbonate Alkalinity	not applicable	Hydroxide Alkalinity	not applicable
191358-001	0.0	309.3	309.3333333	309.333	0.000	not applicable	0.000	not applicable
191358-002	0.0	895.33	895.333	895.333	0.000	not applicable	0.000	not applicable
191358-003	0.0	411.33	411.333	411.333	0.000	not applicable	0.000	not applicable
191358-004	0.0	530.00	530.000	530.000	0.000	not applicable	0.000	not applicable
191358-005	0.0	726.00	726.000	726.000	0.000	not applicable	0.000	not applicable
191358-006	0.0	#VALUE!	1.100	not applicable	not applicable	not applicable	not applicable	not applicable
191358-007	0.0	313.33	313.333	313.333	0.000	not applicable	0.000	not applicable
191358-009	0.0	257.33	257.333	257.333	0.000	not applicable	0.000	not applicable
191358-011	0.0	716.00	716.000	716.000	0.000	not applicable	0.000	not applicable

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

P: Phenolphthalein Alkalinity (using volume to pH 8.3)
T-P: Total Alkalinity minus Phenolphthalein Alkalinity

Carbonate Alkalinity = 2x the smaller of P or (T-P)
Bicarbonate Alkalinity = (T-2P) when P < (T-P)
Hydroxide Alkalinity = (2P-T) when (T-P) < P

Analysis: Alkalinity
Method: EPA 310.1

Analysis Date: 12/20/06
Batch No: 120527

H₂SO₄ Normality = 0.02
Analyst: SJ

SAMPLE	Total Alkalinity as CaCO ₃ (mg/L)	Bicarbonate		Carbonate		Hydroxide	
		Alkalinity as HCO ₃ ⁻ (mg/L)	Alkalinity as CO ₃ ²⁻ (mg/L)	Alkalinity as CO ₃ ²⁻ (mg/L)	Alkalinity as OH ⁻ (mg/L)	Alkalinity as OH ⁻ (mg/L)	Alkalinity as OH ⁻ (mg/L)
191358-001	309.333	377.154	0.000	0.000	0.000	0.000	0.000
191358-002	895.333	1091.633	0.000	0.000	0.000	0.000	0.000
191358-003	411.333	501.517	0.000	0.000	0.000	0.000	0.000
191358-004	530.000	646.201	0.000	0.000	0.000	0.000	0.000
191358-005	726.000	885.173	0.000	0.000	0.000	0.000	0.000
191358-006	1.100	not applicable	not applicable	not applicable	not applicable	not applicable	not applicable
191358-007	313.333	382.031	0.000	0.000	0.000	0.000	0.000
191358-009	257.333	313.753	0.000	0.000	0.000	0.000	0.000
191358-011	716.000	872.981	0.000	0.000	0.000	0.000	0.000

LIMITED VOLUME SAMPLES (results should be regarded as estimated and 'J-flagged' if < 2mL titrant used)

Benchbook#: **BK2384**
Page: **48**

NaCO₃ Vol (mgL) Spiked: 5
NaCO₃ Conc (mg/L): 1000
NaCO₃ WS#: 34565
H₂SO₄ Normality: 0.02
H₂SO₄ Reagent ID: VWR VW3229
Exp. 31-Aug-06

* If Acid Vol to 4.5 is < 2.0mL, redo using 100mL sample volume. If still < 2.0mL, go on to Low Alkali

14/20/06

Reviewed By/ Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 120527
 Date Started: 20-DEC-2006
 Batched by : Stephanie Jim

Analysis : ALKALINITY
 Bgroup : N/A
 Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
191358-001		Treadwell & Rollo	Water	ALKALINITY	20-DEC-2006
191358-002		Treadwell & Rollo	Water	ALKALINITY	20-DEC-2006
191358-003		Treadwell & Rollo	Water	ALKALINITY	20-DEC-2006
191358-004		Treadwell & Rollo	Water	ALKALINITY	20-DEC-2006
191358-005		Treadwell & Rollo	Water	ALKALINITY	20-DEC-2006
191358-006		Treadwell & Rollo	Water	ALKALINITY	20-DEC-2006
191358-007		Treadwell & Rollo	Water	ALKALINITY	20-DEC-2006
191358-009		Treadwell & Rollo	Water	ALKALINITY	20-DEC-2006
191358-011		Treadwell & Rollo	Water	ALKALINITY	20-DEC-2006
QC368974	BLANK		Water	ALKALINITY	
QC368975	LCS		Water	ALKALINITY	
QC368976	MS	of 191358-001	Water	ALKALINITY	
QC368977	MSD	of 191358-001	Water	ALKALINITY	

**Sulfide**

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Batch#:	120322
Matrix:	Water	Sampled:	12/07/06
Units:	mg/L	Received:	12/08/06
Diln Fac:	1.000	Analyzed:	12/13/06

Field ID	Type	Lab ID	Result	RL
1065MW9B	SAMPLE	191358-009	ND	0.04
1065PZ5AR	SAMPLE	191358-011	ND	0.04
	BLANK	QC368124	ND	0.04

ND= Not Detected
RL= Reporting Limit



Batch QC Report

Sulfide			
Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 376.2
Analyte:	Sulfide	Diln Fac:	1.000
Field ID:	1065PZ2A	Batch#:	120322
MSS Lab ID:	191314-011	Sampled:	12/06/06
Matrix:	Water	Received:	12/07/06
Units:	mg/L	Analyzed:	12/13/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
MS	QC368125	<0.04000	0.3068	0.1783	58 *	75-125		
MSD	QC368126		0.3068	0.1797	59 *	75-125	1	20
LCS	QC368127		0.3068	0.2979	97	75-125		

*= Value outside of QC limits; see narrative

RPD= Relative Percent Difference

Analysis: **SULFIDE**
 Method: EPA 376.2
 Instrument: HP UV-VIS Spectrometer
 Wavelength: 626 nm
 SOP#: sulfide_376_rv 4.doc

Matrix: Water
 Batch: 120322
 Prep Date: 12/13/2006
 Analysis Date: 12/13/2006
 Analyst: DMC

INITIAL CALIBRATION DATA

Calibration Date: 11/16/06

Conc (mg/L)	Absorb	RF
0.000	0.0000	
0.027	0.0172	0.6370
0.055	0.0341	0.6200
0.218	0.1374	0.6303
0.437	0.2718	0.6220
0.873	0.5511	0.6313
1.529	0.8947	0.5852

Correlation Coefficient (r): 0.9990
 Avg Rf: 0.6210
 %RSD: 3.0

Note: Average Rf used to calculate sample results.

CONTINUING CALIBRATION DATA

	Absorb Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.1850	0.2979	97%	90 - 110%
ICB	0.0001	0.0002		
CCV	0.1799	0.2897	94%	90 - 110%
CCB	0.0006	0.0010		
CCV	0.1809	0.2913	95%	90 - 110%
CCB	0.0011	0.0018		

Analysis: **SULFIDE**
 Method: **EPA 376.2**
 Instrument: **HP UV-VIS Spectrometer**
 Wavelength: **626 nm**
 Matrix: **Water**

Batch: **120322**
 Prep Date: **12/13/2006**
 Analysis Date: **12/13/2006**
 Analyst: **DMC**

SAMPLE & BATCH QC DATA

Sample ID	Sample Vol (mL)	D.F.	Sample Absorb	Color Blk Absorb	Report mg/L	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	% Rec	% RPD
MB	7.5000	1.0000	0.0001		ND	0.040					
LCS	7.5000	1.0000	0.1850		0.29793	0.040	0.0500	46.0160	0.3068	97	
191314-11	7.5000	1.0000	0.0130		ND	0.040					
191314-11M	7.5000	1.0000	0.1107		0.17827	0.040	0.0500	46.0160	0.3068	58	
191314-11M	7.5000	1.0000	0.1116		0.17972	0.040	0.0500	46.0160	0.3068	59	1
191314-9	7.5000	1.0000	0.0227		ND	0.040					
191314-10	7.5000	1.0000	0.0125		ND	0.040					
191314-12	7.5000	1.0000	0.0069		ND	0.040					
191358-9	7.5000	1.0000	0.0078		ND	0.040					
191358-11	7.5000	1.0000	0.0042		ND	0.040					
191387-1	7.5000	1.0000	0.0022		ND	0.040					

QC Limits		RPD		Recovery	
LCS/BS/BSD	20	20		90 - 110	
MS/MSD	20			42 - 121	

Reviewed by/ Date:

S.H.
 12.18.06

----) Quantitation Results Report (----

Date : 12-13-2006
 Time : 11:10:21
 Operator : DM
 12-13-06 *DM*

File Name : Data not stored yet

Sample Name : sulfide
 Solvent Name : CBL 11-16-06
 Conc Units : mg/L
 Dil. Factor : 1.00
 Analytical Wavelength : 525 nm
 Reference Wavelength : None Selected
 Confirmation Wavelengths : None Selected
 Integration Time : 1 seconds

SAMPLE #	Sample Name	Wavelength	Func. Res.	Concentration
1	ICB/MB	Analytical	+0.0001	2.037E-04
2	ICV/LCS	Analytical	+0.1850	0.30875
3	191314-9	Analytical	+0.0227	0.03792
4	191314-10	Analytical	+0.0125	0.02083
5	191314-11	Analytical	+0.0130	0.02172
6	191314-11MS	Analytical	+0.1107	0.18478
7	191314-11MSD	Analytical	+0.1115	0.18521
8	191314-12	Analytical	+0.0069	0.01146
9	191358-9	Analytical	+0.0078	0.01309
10	191358-11 <i>11-16-06</i>	Analytical	+0.0042	0.00695
11	CCV	Analytical	+0.1799	0.30029
12	CCB	Analytical	+0.0006	0.00102
13	191387-1	Analytical	+0.0022	2.00372
14	CCV	Analytical	+0.1803	0.30198
15	CCB	Analytical	+0.0011	0.00185

---) Standard Calibration Report (---

Date : ~~12-03-2006~~ ¹²⁻¹³
Time : 11:12:47
Operator : DM ^{12-13-06 *per*}

File Name : C:\NUV\DATA\SS1105.STD

Sample Name : sulfide
Solvent Name : CAL 11-16-06
Conc Units : mg/L

Analytical Wavelength : 625 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

Analytical Function Concentration = +1.669E+00 * Absorbance

STD #	Concentration	Absorbance	% Error
1	0.00000	-0.0000	*****
2	0.02700	0.0172	-6.090 %
3	0.05500	0.0341	-3.497 %
4	0.21800	0.1374	-4.916 %
5	0.43700	0.2718	-3.670 %
6	0.87300	0.5511	-5.089 %
7	1.52900	0.8947	+2.393 %

----> Standard Calibration Report <----

Date : ~~12-03-2006~~
Time : 11:12:46
Operator : DM

12-13

12-13-06 gml

File Name : C:\UV\DATA\SS1106.STD

Sample Name : sulfide

Solvent Name : CAL 11-15-06

Conc Units : mg/L

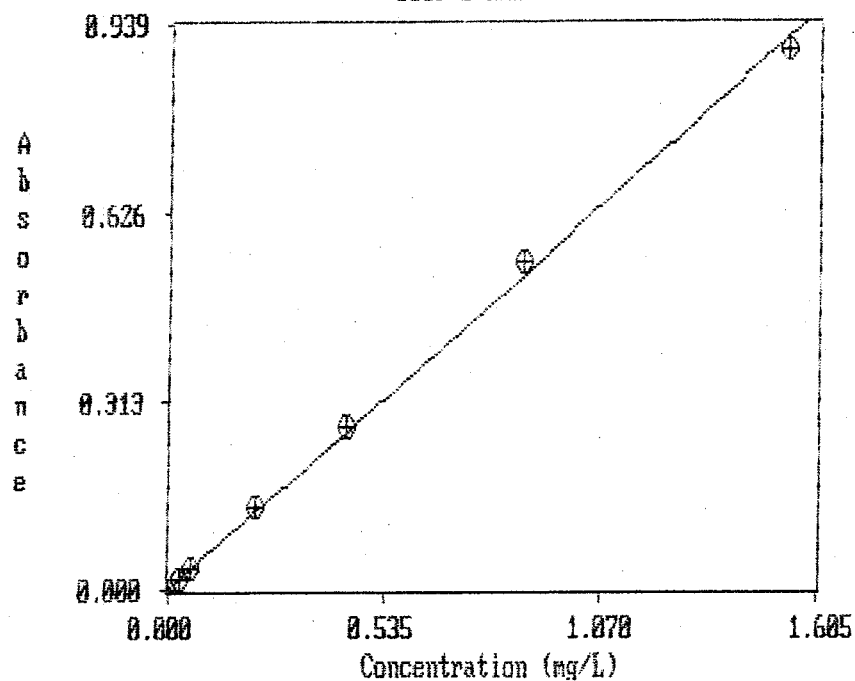
Analytical Wavelength : 526 nm

Reference Wavelength : None Selected

Confirmation Wavelengths : None Selected

Integration Time : 1 seconds

Beer's Law Fit

A
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TACO 01332
 Tuesday 0131- 01355

HL2425

Sample Vol (ml) Initial Vol (ml) Final Vol (ml) ABS

B'20322

191314-9	7.5	7.5	.0222
-10			.0125
-11			.0130
-1/MS	+0.05 ml (46.016 mg/L S ²⁻)		.1167
	From 0455292		
-1/MSD	same as MS		.1116
-12			.0069
191355-9			.0078
-4			.0042
191387-1			.0022
ICB/MB			.0001
ICV/LCS	same as MS		.1350
CCV			.1799
CCB			.0006
CCV			.1809
CCB			.0011

TV = 0.3068 mg/L

S = Std

≈ 4. 0455292 → 50 ml DI H₂O

1.0 ml S =

5.0 ml I. 0254 N

2.85 ml S₂O₃ 02438 N

.1270
 = .06948

.05252 x 16000 = 920.32 mg/L - 1.20 = 46.016 mg/L

1.0

.05 - 7.5 = .3068 mg/L

Cur

2-17-06

00348

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 120322
 Date Started: 13-DEC-2006
 Batched by : Dennis McCanna

Analysis : SULFIDE
 Bgroup : N/A
 Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
191314-009		Treadwell & Rollo	Water	SULFIDE	19-DEC-2006
191314-010		Treadwell & Rollo	Water	SULFIDE	19-DEC-2006
191314-011		Treadwell & Rollo	Water	SULFIDE	19-DEC-2006
191314-012		Treadwell & Rollo	Water	SULFIDE	19-DEC-2006
191358-009		Treadwell & Rollo	Water	SULFIDE	20-DEC-2006
191358-011		Treadwell & Rollo	Water	SULFIDE	20-DEC-2006
191387-001		ConocoPhillips Com	Water	SULFIDE	15-DEC-2006
QC368124	BLANK		Water	SULFIDE	
QC368125	MS	of 191314-011	Water	SULFIDE	
QC368126	MSD	of 191314-011	Water	SULFIDE	
QC368127	LCS		Water	SULFIDE	

Analysis: Sulfide
Method: EPA 376.2
Instrument: HP UV/Vis
Wavelength: 626 nm

Analysis Date: 10/10/2006
Analyst: DM

Instrument Calibrated to report sample results in concentration: mg/L

Concentration: 0.098
Units: mg/L

1	0.060
2	0.064
3	0.071
4	0.075
5	0.073
6	0.074
7	0.070

Average: 0.070 ug/L
Std Deviation: 0.0057186
Student T: 3.143

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev: 0.0180 mg/L
Reporting Limit: 0.04 mg/L
Status: PASS >1/3 RL

✓ DM
10/16/06



Curtis & Tompkins, Ltd.

Dissolved Sulfide

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Analysis:	EPA 376.2
Project#:	2893.04.51		
Analyte:	Dissolved Sulfide	Batch#:	120273
Field ID:	WT120706	Sampled:	12/07/06
Matrix:	Water	Received:	12/08/06
Units:	mg/L	Analyzed:	12/12/06
Diln Fac:	1.000		

Type	Lab ID	Result	RL
SAMPLE	191358-013	0.04	0.04
BLANK	QC367942	ND	0.04

Batch QC Report

Dissolved Sulfide			
Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Analysis:	EPA 376.2
Project#:	2893.04.51		
Analyte:	Dissolved Sulfide	Diln Fac:	1.000
Field ID:	DUP1205061A	Batch#:	120273
MSS Lab ID:	191286-011	Sampled:	12/05/06
Matrix:	Water	Received:	12/06/06
Units:	mg/L	Analyzed:	12/12/06

Type	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim
LCS	QC367945		0.3262	0.3049	93	90-110		
MS	QC368037	<0.04000	0.3262	0.2453	75	42-123		
MSD	QC368038		0.3262	0.2456	75	42-123	0	20

Analysis: **SULFIDE**
 Method: EPA 376.2
 Instrument: **HP UV-VIS Spectrometer**
 Wavelength: 626 nm
 SOP#: sulfide_376_iv 4.doc

Matrix: Water
 Batch: **120273**
 Prep Date: **12/12/2006**
 Analysis Date: **12/12/2006**
 Analyst: DMC

INITIAL CALIBRATION DATA

Conc (mg/L)	Absorb	RF	Calibration Date: 11/16/06
0.000	0.0000		
0.027	0.0172	0.6370	
0.055	0.0341	0.6200	
0.218	0.1374	0.6303	
0.437	0.2718	0.6220	
0.873	0.5511	0.6313	
1.529	0.8947	0.5852	

Note: Average Rf used to calculate sample results.

Correlation Coefficient (r): 0.9990
 Avg Rf: 0.6210
 %RSD: 3.0

CONTINUING CALIBRATION DATA

	Absorb	Conc (mg/L)	True (mg/L)	Recovery	CV Limits
ICV	0.1893	0.3049	0.3262	93%	90 - 110%
ICB	-0.0002	-0.0003	0.0000		
CCV	0.1925	0.3100	0.3262	95%	90 - 110%
CCB	0.0010	0.0016	0.0000		
CCV	0.1954	0.3147	0.3262	96%	90 - 110%
CCB	0.0011	0.0018	0.0000		

Analysis: **SULFIDE**
 Method: **EPA 376.2**
 Instrument: **HP UV-VIS Spectrometer**
 Wavelength: **626 nm**
 Matrix: **Water**

Batch: **120273**
 Prep Date: **12/12/2006**
 Analysis Date: **12/12/2006**
 Analyst: **DMC**

SAMPLE & BATCH QC DATA

Sample ID	Sample Vol (mL)	D.F.	Sample Absorb	Color Bik Absorb	Report mg/L	Reporting Limit (mg/L)	Vol Spike Added (mL)	Std Conc. (mg/L)	Spiked @ (mg/L)	% Rec	% RPD
MB	7.5000	1.0000	-0.0002		ND	0.040	0.0500	48.9360	0.3262	93	
LCS	7.5000	1.0000	0.1893		0.30486	0.040					
191286-11	7.5000	1.0000	0.0098		ND	0.040	0.0500	48.9360	0.3262	75	
191286-11M	7.5000	1.0000	0.1523		0.24527	0.040	0.0500	48.9360	0.3262	75	
191286-11M	7.5000	1.0000	0.1525		0.24559	0.040	0.0500	48.9360	0.3262	75	0
191286-2	7.5000	1.0000	0.0188		ND	0.040					
191286-3	7.5000	1.0000	0.0241		ND	0.040					
191286-5	7.5000	1.0000	0.0146		ND	0.040					
191286-6	7.5000	1.0000	0.0151		ND	0.040					
191286-9	7.5000	1.0000	0.0153		ND	0.040					
191286-10	7.5000	1.0000	0.0098		ND	0.040					
191287-3	7.5000	1.0000	0.0050		ND	0.040					
191290-1	7.5000	1.0000	0.0046		ND	0.040					
191322-5	7.5000	1.0000	0.0037		ND	0.040					
191329-1	7.5000	1.0000	0.0037		ND	0.040					
191331-1	7.5000	1.0000	0.0042		ND	0.040					
191358-13	7.5000	1.0000	0.0252		0.04058	0.040					
191381-1	7.5000	1.0000	0.7803		1.25662	0.040					

QC Limits		RPD		Recovery	
LCS/BS/BS	20	20	90 - 110		
MS/MSD	20	42	123		

DMC 12/18/06

Reviewed by/ Date:

S. H. 12.18.06

---> Quantitation Results Report <---

Date : 12-12-2006
 Time : 13:14:14
 Operator : DM

File Name : Data not stored yet

Sample Name : sulfide Analytical Wavelength : 626 nm
 Solvent Name : CAL 11-16-06 Reference Wavelength : None Selected
 Conc Units : mg/L Confirmation Wavelengths : None Selected
 Dil. Factor : 1.00 Integration Time : 1 seconds

SAMPLE #	Sample Name	Wavelength	Func. Res.	Concentration
1	ICB/MB	Analytical	-0.0002	0.00000
2	ICV/LCS	Analytical	+0.1893	0.31593
3	191286-2	Analytical	+0.0188	0.03137
4	191286-3	Analytical	+0.0241	0.04019
5	191286-5	Analytical	+0.0146	0.02432
6	191286-6	Analytical	+0.0151	0.02521
7	191286-9	Analytical	+0.0153	0.02559
8	191286-10	Analytical	+0.0093	0.01559
9	191286-11	Analytical	+0.0098	0.01635
10	191286-11MS	Analytical	+0.1523	0.25425
11	CCV	Analytical	+0.1925	0.32130
12	CCB	Analytical	+0.0010	0.00171
13	191286-11MSD	Analytical	+0.1525	0.25453
14	191287-3	Analytical	+0.0050	0.00830
15	191290-1	Analytical	+0.0046	0.00761
16	191322-5	Analytical	+0.0037	0.00616
17	191329-1	Analytical	+0.0037	0.00616
18	191331-1	Analytical	+0.0042	0.00700
19	191358-13	Analytical	+0.0252	0.04210
20	191381-1	Analytical	+0.7803	1.30228
21	CCV	Analytical	+0.1954	0.32612

00255
 0.32612

---> Standard Calibration Report <---

Date : 12-12-2006
Time : 13:14:40
Operator : DM

File Name : C:\UV\DATA\SS1106.STD

Sample Name : sulfide
Solvent Name : CAL 11-16-06
Conc Units : mg/L

Analytical Wavelength : 626 nm
Reference Wavelength : None Selected
Confirmation Wavelengths : None Selected
Integration Time : 1 seconds

Analytical Function Concentration = +1.669E+00 * Absorbance

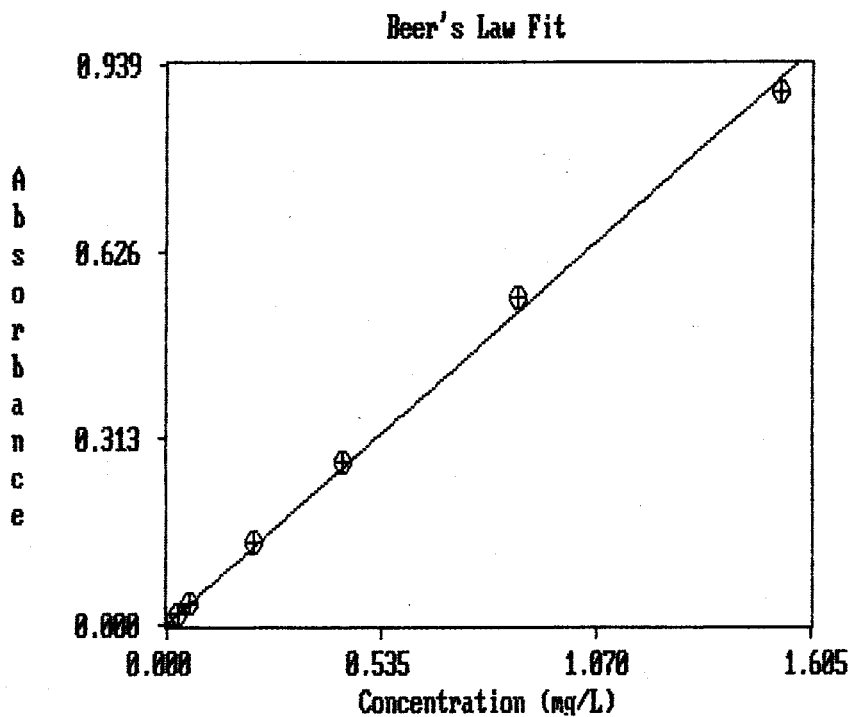
STD #	Concentration	Absorbance	% Error
1	0.00000	-0.0000	*****
2	0.02700	0.0172	-6.090 %
3	0.05500	0.0341	-3.497 %
4	0.21800	0.1374	-4.916 %
5	0.43700	0.2718	-3.670 %
6	0.87300	0.5511	-5.089 %
7	1.52900	0.8947	+2.393 %

---> Standard Calibration Report <---

Date : ~~12-02-2006~~ 12-12-06
Time : 13:14:41
Operator : DM

File Name : C:\UV\DATA\SS1106.STD

Sample Name : sulfide	Analytical Wavelength : 626 nm
Solvent Name : CAL 11-16-06	Reference Wavelength : None Selected
Conc Units : mg/L	Confirmation Wavelengths : None Selected
	Integration Time : 1 seconds



A n a l y t i c a l

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 120273
 Date Started: 12-DEC-2006
 Batched by : Dennis McCanna

Analysis : DISS SULFIDE
 Bgroup : N/A
 Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
191286-002		Treadwell & Rollo	Water	SULFIDE	18-DEC-2006
191286-003		Treadwell & Rollo	Water	SULFIDE	18-DEC-2006
191286-005		Treadwell & Rollo	Water	SULFIDE	18-DEC-2006
191286-006		Treadwell & Rollo	Water	SULFIDE	18-DEC-2006
191286-009		Treadwell & Rollo	Water	SULFIDE	18-DEC-2006
191286-010		Treadwell & Rollo	Water	SULFIDE	18-DEC-2006
191286-011		Treadwell & Rollo	Water	SULFIDE	18-DEC-2006
191287-003		Acme Fill Corp.	Water	SULFIDE	18-DEC-2006
191290-001		Treadwell & Rollo	Water	SULFIDE	18-DEC-2006
191322-005		ACC Environmental	Water	SULFIDE	13-DEC-2006
191329-001		Strategic Engineer	Water	DISS SULFIDE	12-DEC-2006
191331-001		Strategic Engineer	Water	DISS SULFIDE	13-DEC-2006
191358-013		Treadwell & Rollo	Water	DISS SULFIDE	20-DEC-2006
191381-001		Strategic Engineer	Water	DISS SULFIDE	13-DEC-2006
QC367942	BLANK		Water	SULFIDE	
QC367945	LCS		Water	SULFIDE	
QC368037	MS	of 191286-011	Water	DISS SULFIDE	
QC368038	MSD	of 191286-011	Water	DISS SULFIDE	

Analysis: Sulfide
Method: EPA 376.2
Instrument: HP UV/Vis
Wavelength: 626 nm

Analysis Date: 10/10/2006
Analyst: DM

Instrument Calibrated to report sample results in concentration: mg/L

Concentration: 0.098
Units: mg/L

1	0.060
2	0.064
3	0.071
4	0.075
5	0.073
6	0.074
7	0.070

Average: 0.070 ug/L
Std Deviation: 0.0057186
Student T: 3.143

(Student-T value for 7 replicates = 3.143, for 8 replicates = 2.998)

MDL = Student T * StdDev: 0.0180 mg/L
Reporting Limit: 0.04 mg/L
Status: PASS >1/3 RL

✓
10/16/06



Curtis & Tompkins, Ltd.

Total Dissolved Solids (TDS)

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Batch#:	120386
Matrix:	Water	Sampled:	12/07/06
Units:	mg/L	Received:	12/08/06
Diln Fac:	1.000	Analyzed:	12/14/06

Field ID	Type	Lab ID	Result	RL
1065MW9B	SAMPLE	191358-009	500	10
1065PZ5AR	SAMPLE	191358-011	730	10
	BLANK	QC368392	ND	10

ND= Not Detected
RL= Reporting Limit



Batch QC Report

Total Dissolved Solids (TDS)

Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 160.1
Analyte:	Total Dissolved Solids	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	120386
MSS Lab ID:	191332-001	Sampled:	12/07/06
Matrix:	Water	Received:	12/07/06
Units:	mg/L	Analyzed:	12/14/06

Type	Lab ID	MSS Result	Spiked	Result	RL	%REC	Limits	RPD	Lim
BS	QC368393		100.0	96.00		96	79-121		
BSD	QC368394		100.0	96.00		96	79-121	0	20
SDUP	QC368395	356.0		392.0	10.00			10	20

RL= Reporting Limit

RPD= Relative Percent Difference

Analysis: **Total Dissolved Solids**
 Method: **CFR 150.1 / 21WVVV 234UC**
 Matrix: **Water**
 SOP#: **tds_rv 9.doc**

Analysis Date: **14-Dec-06**
 Batch #: **120386**
 Analyst: **SJ**

BATCH QC DATA

Sample	Vol (mL) (50/vol)	DF	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	Report (mg/L)	Reporting Limit (mg/L)	Spike Std Conc (mg/L)	Spike Vol. Used (mL)	Spiking Level (mg/L)	Recovery, %	RPD, %
MB	50	1	55.7418	55.7414	-0.0004	ND	10					
BS	50	1	55.8918	55.8966	0.0048	96.0	10	1,000	5	100	96	
BSD	50	1	58.9690	58.9738	0.0048	96.0	10	1,000	5	100	96	0.00
191332-1	50	1	55.3443	55.3621	0.0178	356.0	10					
SDUP	50	1	58.3510	58.3706	0.0196	392.0	10					9.63

SAMPLE DATA

Sample	Vol (mL) (50/vol)	DF	Initial Mass (g)	Constant Mass (g)	Residue Mass (g)	Report (mg/L)	Reporting Limit (mg/L)
191332-2	50	1	57.3153	57.3494	0.0341	682.0	10
191332-3	50	1	55.8963	55.9088	0.0125	250.0	10
191332-4	50	1	56.7252	56.7541	0.0289	578.0	10
191332-5	50	1	57.2216	57.2410	0.0194	388.0	10
191332-6	50	1	51.6902	51.7169	0.0267	534.0	10
191358-9	50	1	51.7222	51.7470	0.0248	496.0	10
191358-11	50	1	49.2949	49.3316	0.0367	734.0	10

QC Limits	RPD	Recovery
LCS/BS/BSD	20	79 - 121
MS/MSD	20	69 - 131

NOTE: Because the regulatory holding time is based on the prep date, the analysis date referenced above is the prep date.

Reviewed by/ Date:

 12/20/06

Curtis & Tompkins, Ltd.

LIMS Batch #: 120386

Prep Date: 12/14/06

Benchbook#: **BK 2420**

Prep Time: 12:00

Page: 28

Filter Mfg/ Lot#: Env-Exp. 655614

Spike WS Conc (mg/L): 1000

Spike WS#: S3831

Spike Vol Added (mL): 5

	In	Out	In-2	Out-2	In-3	Out-3
Date:	12/14/06	12/15/06	12/15/06	12/15/06	12/20/06	
Time:	15:15	9:00	11:00	13:00	11:00	
Temp (C):	90	180	180	180	180	

[illegible]

* Constant weight must be within 0.0005 from previous reading.

Analyst / DateReviewed by: Date:

Curtis & Tompkins, Ltd.

Benchbook#: **BK 2420**
Page: **29**

Spike WS Conc (mg/L): _____
Spike Vol Added (mL): _____

	In	Out	In-2	Out-2	In-3	Out-3
Date:						
Time:						
Temp (C):						

[illegible]

* Constant weight must be within 0.0005 from previous reading.

12/19/06
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 120386
 Date Started: 14-DEC-2006
 Batched by : Stephanie Jim

Analysis : TDS
 Bgroup : N/A
 Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
191332-001		ERS Corp.	Water	TDS	20-DEC-2006
191332-002		ERS Corp.	Water	TDS	20-DEC-2006
191332-003		ERS Corp.	Water	TDS	20-DEC-2006
191332-004		ERS Corp.	Water	TDS	20-DEC-2006
191332-005		ERS Corp.	Water	TDS	20-DEC-2006
191332-006		ERS Corp.	Water	TDS	20-DEC-2006
191358-009		Treadwell & Rollo	Water	TDS	20-DEC-2006
191358-011		Treadwell & Rollo	Water	TDS	20-DEC-2006
QC368392	BLANK		Water	TDS	
QC368393	BS		Water	TDS	
QC368394	BSD		Water	TDS	
QC368395	SDUP	of 191332-001	Water	TDS	

pH			
Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 9040B
Analyte:	pH	Diln Fac:	1.000
Field ID:	WT120706	Batch#:	120206
Lab ID:	191358-013	Sampled:	12/07/06 15:00
Matrix:	Water	Received:	12/08/06
Units:	SU	Analyzed:	12/08/06 19:30

Result	RL
7.7	1.0

Batch QC Report

pH			
Lab #:	191358	Location:	Presidio
Client:	Treadwell & Rollo	Prep:	METHOD
Project#:	2893.04.51	Analysis:	EPA 9040B
Analyte:	pH	Units:	SU
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
Type:	SDUP	Batch#:	120206
MSS Lab ID:	191351-001	Sampled:	12/07/06 12:15
Lab ID:	QC367681	Received:	12/08/06
Matrix:	Water	Analyzed:	12/08/06 19:30

MSS Result	Result	RL	RPD	Lim
5.700	5.620	1.000	1	20

pH Analysis Benchbook

Curtis & Tompkins, Ltd.

LIMS Batch #: 120206
Matrix: WaterDate: 12/8/06
Time: 19:30Benchbook#: **BK 2412**
Page: **69**

Method (check one):

☒ Water (EPA 9040b/ 150.1)☐ Soil (EPA 9045c)Cal Std-1 ph: 4
Cal Std-2 ph: 7
Cal Std-3 ph: 10SS#: 5749
SS#: 5177
SS#: 53822Slope: 100.2
(slope limits: 92 - 102)

Run	Sample # / Letter	pH (S.U.)	2nd Reading* (water only)	Soil Prep Wt(g)/Vol(mL)	Comments
1	ICV	7.01	—		ICV/CCV = 7.53273
	191351-001G	5.70	5.70		
	SDUP-001G	5.62	5.63		RPD = 7.4137.
	—002E	5.56	5.59		Releted per TLR 12/12/0
5	-003E	7.16	7.18		
	-004E	7.86	7.86		
	-005G	7.31	7.30		
	-006E	8.30	8.33		
	-008G	3.93	3.95		
10	-009E	8.26	8.20		
	CCV	7.05	—		
	191358-0130	7.70	7.72		
	191364-001E	9.55	9.56		
	-002E	7.16	7.20		
15	CCV	7.05	—		
20					
25					

* 2nd aliquot must be within 0.1 SU

DMS 12/8/06
Analyst / Date12/11/06
Reviewed by / Date

Curtis & Tompkins Laboratories Sample Batch Report

Batch Number: 120206
 Date Started: 08-DEC-2006
 Batched by : David Bowden

Analysis : PH
 Bgroup : N/A
 Department : Wet Chemistry

Sample	Type	Client	Matrix	Analyses	Due Date
191351-001		Blasland, Bouck &	Water	PH	20-DEC-2006
191351-002		Blasland, Bouck &	Water	PH	20-DEC-2006
191351-003		Blasland, Bouck &	Water	PH	20-DEC-2006
191351-004		Blasland, Bouck &	Water	PH	20-DEC-2006
191351-005		Blasland, Bouck &	Water	PH	20-DEC-2006
191351-006		Blasland, Bouck &	Water	PH	20-DEC-2006
191351-008		Blasland, Bouck &	Water	PH	20-DEC-2006
191351-009		Blasland, Bouck &	Water	PH	20-DEC-2006
191358-013		Treadwell & Rollo	Water	PH	20-DEC-2006
191364-001		Blasland, Bouck &	Water	PH	20-DEC-2006
191364-002		Blasland, Bouck &	Water	PH	20-DEC-2006
QC367681	SDUP	of 191351-001	Water	PH	

APPENDIX F
CAS Analytical Data Reports

Third Quarter 2006

Table F-2
Columbia Analytical Services
Sample Delivery Group Index List
Third Quarter 2006
Presidio-wide Groundwater Monitoring Project
Presidio of San Francisco, California

Location ID	Sample Date	SDG Number
1065MW9BCL	8/16/2006	D0601136
1213GW101CL	8/16/2006	D0601136
LF6GW103CL	8/16/2006	D0601136
TB081606A	8/16/2006	D0601136

October 13, 2006

Service Request No: D0601136

Josh Graber
Treadwell and Rollo
555 Montgomery St.
San Francisco, CA 94111

RECEIVED**OCT 17 2006****TREADWELL & ROLLO****RE: Presidio**

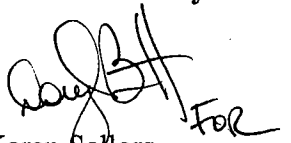
Dear Josh:

Enclosed are the results of the sample(s) submitted to our laboratory on August 17, 2006. For your reference, these analyses have been assigned our service request number D0601136.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 104. You may also contact me via email at KSellers@redding.caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

Karen Sellers
Project Chemist

CC: Donna Breaux

Page 1 of 350

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CAS Service Request: D0601136

CAS Tier Level: III

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117	METALS
154	GC TPH DIESEL/MOTOR OIL
176	GC TPH DIESEL
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Current CAS Redding Accreditation Programs

Federal and National Programs

- U.S Air Force, Air Force Center for Environmental Excellence (AFCEE)
Approved laboratory for Wastewater and Hazardous Waste
- U.S. Army Corps of Engineers – MRD, HTRW Mandatory Center of Expertise
Validated for Wastewater and Hazardous Waste
- Department of the Navy, Naval Facilities Engineering Service Center (NFESC)
Approved laboratory for Wastewater and Hazardous Waste

State and Local Programs

- State of Alaska, Department of Environmental Conservation
Approved Laboratory for Contaminated Sites
Lab ID UST-001
- State of Arizona, Department of Health Services, Office of Laboratory Licensure
Approved Laboratory for Drinking Water, Wastewater, and Hazardous Waste
Lab ID AZ0604
- State of California, Department of Health Services, National Environmental Laboratory Accreditation Program (NELAP)
Approved Laboratory for Drinking Water, Wastewater and Hazardous Waste
Lab ID 01105CA
 - Los Angeles County Sanitation District
Approved Laboratory for Wastewater
Lab ID 10243
- State of California, Department of Health Services, Environmental Laboratory Accreditation Program (ELAP)
Approved Laboratory for Microbiology of Drinking Water and Wastewater
Lab ID 2635
- State of Florida, Department of Health, Bureau of Laboratories (NELAP)
Approved Environmental Testing Laboratory for Wastewater and Hazardous Waste
Lab ID E87203
- State of Kansas, Department of Health and Environment (NELAP)
Approved Laboratory for Hazardous Waste
Lab ID E-10323
- State of Massachusetts, Department of Environmental Protection
Approved laboratory for Drinking Water and Wastewater
Lab ID M-CA025
- State of Oklahoma, Department of Environmental Quality
Approved Laboratory for General Water Quality/Sludge Testing
Lab ID 9952
- State of Oregon, Environmental Laboratory Accreditation Program (ORELAP)
Approved Laboratory for Drinking Water, Wastewater, and Hazardous Waste
Lab ID CA200004
- State of Utah, Department of Health, Bureau of Laboratory Improvement (NELAP)
Approved Laboratory for Wastewater and Hazardous Waste
Lab ID QUAL1
- State of Washington, Department of Ecology
Approved Laboratory for Wastewater and Hazardous Waste
Lab ID C1234
- State of Wisconsin, Department of Natural Resources
Approved Laboratory for Wastewater and Hazardous Waste
Lab ID 999767340

Data Qualifiers for Organic Analyses

- A -- This qualifier indicates that a Tentatively Identified Compound (TIC) is a suspected aldol-condensation product.
- B -- This qualifier is used when the analyte is found in the associated blank as well as the sample, indicating possible blank contamination. The data user should carefully evaluate the qualified analyte and the reported concentrations.
- C -- This qualifier indicates the presence of this compound has been confirmed by the GC/MS analysis.
- D -- This qualifier is used for all the analytes identified in an analysis at a secondary dilution factor. "D" qualifiers are used only for the samples reported at more than one dilution factor.
- E -- This qualifier indicates that the value reported exceeds the linear calibration range for that analyte. Therefore, the sample should be reanalyzed at the appropriate dilution. The "E" qualified amount is an estimated concentration, and the results of the dilution will be reported on a separate Form I.
- J -- Indicates an estimated value. This qualifier is used when the data indicates the presence of a target analyte below the reporting limit or the presence of a Tentatively Identified Compound (TIC).
- N -- This qualifier indicates presumptive evidence of an analyte. This flag is only used for Tentatively Identified Compounds (TIC) where the identification is based on a mass spectral library research. It is applied to all TIC results. For generic characterization of a TIC, such as a chlorinated hydrocarbon, the "N" qualifier is not used.
- P -- This qualifier is used for target analytes when there is a greater than 40% difference for detected concentrations between the two columns or detectors. The concentration value is reported on Form I and flagged with a "P".
- U -- Indicates the compound was analyzed for but not detected. The number adjacent to the "U" qualifier indicates the reporting limit for that compound. The reporting limit can vary from sample to sample depending on dilution factors or percent moisture adjustments when indicated.
- DL -- Diluted reanalysis. "DL" indicates that the results were determined in an analysis of a secondary dilution of a sample or extract. A digit to indicate multiple dilutions of the sample or extract may follow the "DL" suffix. The results of more than one diluted reanalysis may be reported.
- MS -- Matrix spike (may be followed by a digit to indicate multiple matrix spikes within a sample set).
- MSD -- Matrix spike duplicate (may be followed by a digit to indicate multiple matrix spikes within a sample set).
- R -- Reanalysis. The extract was reanalyzed without re-extraction. The "R" is not used if the sample was also re-extracted. It may be followed by a digit to indicate multiple reanalysis of the sample at the same dilution.
- RE -- Re-extraction and reanalysis. The sample was re-extracted and reanalyzed. It may be followed by a digit to indicate multiple re-extracted analysis of the same sample at the same dilution.

Data Qualifiers for Metals and Wet Chemistry Analyses

- B or J**-- The reported value obtained was less than the MRL/CRDL, but greater than or equal to the MDL/IDL.
- U** -- The value was less than the MDL/IDL or was not detected.
- E** -- The reported value is estimate because of interference.
- N** -- Spiked sample recovery not within control limits.
- ND** -- Not detected at or above the MRL/CRDL.
- *** -- Duplicate analysis not within control limits.

Client: Treadwell and Rollo
Project: Presidio

Service Request: D0601136

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
D0601136-001	NKGW04CL	08/16/06	12:35
D0601136-002	LF6GW103CL	08/16/06	10:40
D0601136-003	1065MW9BCL	08/16/06	11:15
D0601136-004	1213GW101CL	08/16/06	10:50
D0601136-005	TB081606A	08/16/06	00:00

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Aqueous

Service Request No.: D0601136
Date Received: 08/17/06

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III data deliverables.

Sample Receipt

Five aqueous samples were received for analysis at Columbia Analytical Services on 08/17/06.

No discrepancies were noted upon initial sample inspection. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

General Chemistry Parameters (160.1, 300.0, 310.1)

Holding Time Exceptions:

The holding times on samples LF6GW103CL, 1065MW9BCL and for Nitrate by method E300.0 were exceeded. The IC autosampler was unable to load and inject sample into instrument ICS2000 due to high system backpressure resulting from a clog in the injection valve. Instrument was down from 08/16/06 to 08/18/06. Efforts were made to analyze the samples as soon as possible after the analytical system was back on line. However, the analysis of the samples was performed from 3.0 hours to 4.0 hours past the recommended holding time.

Elevated Method Reporting Limits:

The following samples required analysis on dilution due to the presence of elevated target analyte or matrix interferences:

- Samples LF6GW103CL and 1065MW9BCL for Chloride and Fluoride due to matrix interferences.
- Sample LF6GW103CL for Sulfate due to elevated levels of target analyte.
- Sample 1065MW9BCL for Total Dissolved Solids due to elevated levels of target analyte.
- Sample 1213GW101CL for Chloride, Fluoride and Sulfate due to elevated levels of target analyte.
- Sample 1213GW101CL for Nitrate due to matrix interferences.
- Sample 1213GW101CL for Chloride, Fluoride and Sulfate due to elevated levels of target analyte.

Dissolved Metals (6010B/6020/7470)

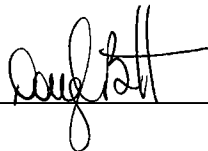
No anomalies associated with the analysis of these samples by the above-mentioned method were observed.

Diesel Range Organics by EPA Method 8015B

Surrogate Exceptions:

The upper control criterion was exceeded for the following surrogates in samples DWB10821, DWB10821LCSD, LF6GW103CL and Continuing Calibration Verification F0907019: Triacotane and Octacosane. No target analytes were detected in the sample. The error associated with an elevated recovery equates to a high bias. The quality of the sample data is not significantly affected. No further corrective action was appropriate.

Approved by: _____



Date: _____

10-13-06

COLUMBIA ANALYTICAL SERVICES, INC.

Matrix Spike Recovery Exceptions:

Insufficient sample volume was received to perform a Matrix Spike/Matrix Spike Duplicate (MS/MSD). A Laboratory Control Sample/Duplicate Laboratory Control Sample (LCS/DLCS) was analyzed in order to report precision data.

Lab Control Sample Exceptions:

The upper control criterion was exceeded for the following analyte in Laboratory Control Samples DWB10821LCS and DWB10821LCSD: TPH-Diesel. The analyte in question was not detected in the associated field samples. The error associated with elevated recovery equates to a high bias. The sample data is not significantly affected. No further corrective action was appropriate.

Sample Notes and Discussion

Silica gel clean up was performed prior to instrumental analysis.

Gasoline Range Organics by EPA Method 8015B and Purgeable Aromatics Method 8021A

The primary evaluation criterion was exceeded for the following analytes in Continuing Calibration Verification (CCVs) NP083001 and NP083006: Benzene and tert-Butyl Methyl Ether. In accordance with CAS standard operating procedures, the alternative evaluation specified in the EPA method was performed using the average percent recovery of all analytes in the verification standard. The standard meets the alternative evaluation criteria

Organochlorine Pesticides by EPA Method 8081A

The primary evaluation criterion was exceeded for the following analytes in Continuing Calibration Verification (CCV) D0830019: Endosulfan sulfate. In accordance with CAS standard operating procedures, the alternative evaluation specified in the EPA method was performed using the average percent recovery of all analytes in the verification standard. The standard meets the alternative evaluation criteria.

Decachlorobiphenyl surrogate recoveries were below the project specific requirement in all samples but within the statistical control criteria. However, Tetrachloro-m-xylene as additional surrogate for this analysis, were within the acceptance limit. Since the spike recoveries in Sample PWB10821LCS were within control criteria; the quality of the sample data is not affected.

PCB Aroclors by EPA Method 8082

The upper control criterion was exceeded for the following surrogate in Continuing Calibration Verification (CCV) C0824020: Tetrachloro-m-xylene. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was required.

Decachlorobiphenyl surrogate recoveries were below the project specific requirement in all samples but within the statistical control criteria. However, Tetrachloro-m-xylene as additional surrogate for this analysis, were within the acceptance limit; with the exception in sample PWB10821LCSD. It appeared that low recoveries for surrogate and target analytes were caused by an error during the sample preparation step. Since the spike recoveries in Sample PWB10821LCS were within control criteria; the quality of the sample data is not affected.

The control criteria were exceeded for Decachlorobiphenyl surrogates in sample LF6GW103CL. All samples were reanalyzed for confirmation. A reextraction of sample LF6GW103CL was not performed because insufficient sample was available. No further corrective action was possible.

Approved by: _____



Date: 10-13-06

COLUMBIA ANALYTICAL SERVICES, INC.

Volatile Organic Compounds by EPA Method 8260B

No anomalies associated with the analysis of these samples by the above-mentioned method were observed.

Polynuclear Aromatic Hydrocarbons by EPA Method 8310

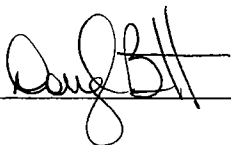
Surrogate Exceptions:

The lower control criterion was exceeded for the following surrogate in sample LF6GW103CL: Terphenyl-d14. No target analytes were detected in the sample. Although the surrogate recovery was below the project specific control limit of 65–135%, the surrogate recovery was within the laboratory's control limit of 44–116%. A similar situation (low surrogate recovery) was noticed in the previous service request on this project (D0600543). The data has been qualified on the report.

Subcontracted Analyses (376.2, 1625)

See Appendix

Approved by: _____



Date: _____

10/3/06

Project Name: Presidio of San Francisco

Location: Presidio of San Francisco

PROJECT MANAGER: Joshua Graber

PROJECT NUMBER: 2893

Sampled By (Firm and Samplers): BTS Plomishy, W. Crow, D. Raynes

Recorder (signature required):

Sent to Laboratory (Name): *Columbia*

[illegible]

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)

3 - Indicate in the metals column (by number) which metals list is requested. Metals Lists (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Ag, Na, Se, Ti, V, and Zn)

(9 - As, Cr, Cd, Cu, Fe, Mn, Pb, Ni and Zn) (8 - As, Cr, Cd, Cu, Fe, Pb, Ni and Zn)

RELINQUISHED BY: Puttija

PRINT NAME: P. Cornish

RELINQUISHED BY:

RELINQUISHED BY: D. BROWN
DATE: 8/10/96 RECEIVED BY: J. McVine
PRINT NAME:
FIRM: CAS VIA GSO TIME: 1840 PRINT NAME:
ETIM:

PRINT NAME:

ADDITIONAL REMARKS / LABORATORY NOTES:

Method of Shipment:

White Copy - Original Yellow Copy - Laboratory Pink Copy - Field

5260221

Treadwell & Rollo

Environmental and Geotechnical Consultants

555 Montgomery St., Suite 1300, San Francisco, CA 94111

Ph: 415.955.9040 FAX: 415.955.9041

Project Name: Presidio of San Francisco

Location: Presidio of San Francisco

Sampled By (Firm and Samplers): BTJ P. Lomishy, W. Gray, D. Reynard

Recorder (signature required): P. Lomishy

Sent to Laboratory (Name): Colymbia

PROJECT MANAGER: Joshua Graber

PROJECT NUMBER: 2893

REQUESTED ANALYSES

Recorder (signature required): <u>RAH</u>										Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)
 3 - Indicate in the metals column (by number) which metals list is requested. Metals Lists (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Ti, V, and Zn)
 Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Ti, V, and Zn) (13 - As, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn)
 Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (Other -)

RELINQUISHED BY: P. Lomishy
 PRINT NAME: P. Lomishy
 FIRM: BTJ
 DATE: 8/16/06
 TIME: 1330
 RECEIVED BY: J. Lomishy
 PRINT NAME: J. Lomishy
 FIRM: CAS Redding
 DATE: 8/17/06
 TIME: 1000

ADDITIONAL REMARKS / LABORATORY NOTES:
 SULFIDE ONLY SUBMITTED TO: CAS/KELSO, WA
 AND
 NDMA

Method of Shipment:
 White Copy - Original Yellow Copy - Laboratory Pink Copy - Field

COC No. OP 2145

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COOLER RECEIPT FORM

Project/Client: _____ Batch No.: _____

1. Cooler(s)/Sample(s) received on: 8/17/06 Shipped via: ASO
Shipping Bill # (s): 13171596720 # of Coolers/Packages 1

2. Radiological Screening by: _____ Acceptable Rejected
YES NO N/A

3. Custody seals on outside of cooler: _____
If yes, where? Front ✓ Rear _____ Lt Side _____ Rt Side _____
Seals intact: YES NO

COOLER/SAMPLE PROCESSING

4. Sample Processing/Tagging by: KM

5. Cooler(s)/Sample(s) Temp's: 4.0°C
(or)
Temp. Blank (if included): _____

6. Type of packing material (circle): Ice Blue Ice Bubble Wrap Bubble Bags Zip Locks Webbing
Other: _____

7. Custody papers properly filled out (ink, signed, dated, released, etc.)? YES NO

8. Containers arrived in good condition (not broken, leaking, etc.)? YES NO

9. Samples received with adequate holding time remaining to conduct analysis? YES NO

10. Container labels complete (i.e. analysis, preservation, date/time, etc.)? YES NO

11. Container labels and tags agree with custody papers? YES NO

12. Correct types of containers used for the tests indicated?
a.) Adequate sample received? If not, note on Exception Report. YES NO

13. Containers supplied by: CAS Other KM

14. Preserved containers received with the appropriate preservative?
pH: _____ (or) See pH log. YES NO N/A

15. VOA vials free of air bubbles? YES NO N/A

16. Trip Blank preparation date: _____ CAS Other N/A

17. Volatile Soil samples: Encores or Plugs in Vials
Freezer or GC/MS Date: _____ Time: N/A

See Exception Report for discrepancies.

GENERAL CHEMISTRY

COLUMBIA ANALYTICAL SERVICES, INC.**Analytical Report**

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : NA
Sample Matrix : WATER

Service Request : D0601136
Date Collected : 08/16/06
Date Received : 08/17/06

Inorganic Parameters

Sample Name : LF6GW103CL
Lab Code : D0601136-002
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	PQL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Alkalinity as CaCO ₃ , Bicarbonate	mg/L	310.1	10	1	08/22/06 09:30	317	
Alkalinity as CaCO ₃ , Carbonate	mg/L	310.1	10	1	08/22/06 09:30	10	U
Alkalinity as CaCO ₃ , Total	mg/L	310.1	10	1	08/22/06 09:30	317	
Chloride	mg/L	300.0	2	2	09/02/06 22:27	35	
Fluoride	mg/L	300.0	2	2	09/02/06 22:27	2	U
Nitrate as Nitrogen	mg/L	300.0	0.1	1	08/18/06 14:07	3.8	
Nitrite as Nitrogen	mg/L	354.1	0.02	1	08/18/06 09:00	0.02	U
Solids, Total Dissolved	mg/L	160.1	20	1	08/22/06 16:00	590	
Sulfate	mg/L	300.0	2	2	09/02/06 22:27	106	

COLUMBIA ANALYTICAL SERVICES, INC.**Analytical Report**

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : NA
Sample Matrix : WATER

Service Request : D0601136
Date Collected : 08/16/06
Date Received : 08/17/06

Inorganic Parameters

Sample Name : 1065MW9BCL
Lab Code : D0601136-003
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	PQL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Alkalinity as CaCO ₃ , Bicarbonate	mg/L	310.1	10	1	08/22/06 09:30	253	
Alkalinity as CaCO ₃ , Carbonate	mg/L	310.1	10	1	08/22/06 09:30	10	U
Alkalinity as CaCO ₃ , Total	mg/L	310.1	10	1	08/22/06 09:30	253	
Chloride	mg/L	300.0	2	2	09/02/06 22:43	53	
Fluoride	mg/L	300.0	2	2	09/02/06 22:43	2	U
Nitrate as Nitrogen	mg/L	300.0	0.1	1	08/18/06 14:22	6.0	
Nitrite as Nitrogen	mg/L	354.1	0.02	1	08/18/06 09:00	0.02	U
Solids, Total Dissolved	mg/L	160.1	100	5	08/22/06 16:00	505	
Sulfate	mg/L	300.0	1	1	08/18/06 14:22	76	

COLUMBIA ANALYTICAL SERVICES, INC.**Analytical Report**

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : NA
Sample Matrix : WATER

Service Request : D0601136
Date Collected : 08/16/06
Date Received : 08/17/06

Inorganic Parameters

Sample Name : 1213GW101CL
Lab Code : D0601136-004
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	PQL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Alkalinity as CaCO ₃ , Bicarbonate	mg/L	310.1	10	1	08/22/06 09:30	435	
Alkalinity as CaCO ₃ , Carbonate	mg/L	310.1	10	1	08/22/06 09:30	10	U
Alkalinity as CaCO ₃ , Total	mg/L	310.1	10	1	08/22/06 09:30	435	
Chloride	mg/L	300.0	50	50	08/22/06 01:43	288	
Fluoride	mg/L	300.0	50	50	08/23/06 01:43	50	U
Nitrate as Nitrogen	mg/L	300.0	1	10	08/18/06 14:36	7.1	
Nitrite as Nitrogen	mg/L	354.1	0.02	1	08/18/06 09:00	0.02	U
Sulfate	mg/L	300.0	10	10	08/18/06 14:36	1050	

QC Summary

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Service Request: D0601136
Client : Treadwell and Rollo, Inc.
Project : Presidio

**Initial and Continuing Calibration Verification
Form II**

Analyte	Analysis Method	Date Analyzed	Units	Initial Calibration			Continuing Calibration							
								#1		#2		#3		
				True	Result	%R	True	Result	%R	Result	%R	Result	%R	
Alkalinity, Total	310.1	08/22/06	units	7.00	6.99	100	7.00	7.04	101		-		-	
Chloride	300.0	08/22/06	mg/L	5.00	4.87	97	8.00	7.84	98	7.77	97		-	
Chloride	300.0	09/02/06	mg/L	5.00	4.87	97	8.00	7.93	99		-		-	
Fluoride	300.0	08/22/06	mg/L	2.50	2.50	100	2.00	2.01	101	1.99	100		-	
Fluoride	300.0	09/02/06	mg/L	2.50	2.60	104	1.00	1.00	100		-		-	
Nitrate	300.0	08/18/06	mg/L	1.25	1.17	94	1.00	1.02	102		-		-	
Nitrite	354.1	08/18/06	mg/L	0.500	0.147	29	0.100	0.105	105		-		-	
Solids, Tot. Diss.	160.1	08/22/06	mg/L											
Sulfate	300.0	08/18/06	mg/L	10.00	9.15	92	8.00	8.26	103		-		-	
Sulfate	300.0	09/22/06	mg/L	10.00	9.79	98	8.00	7.79	97		-		-	

Control Limits are 90-110% unless noted.

Remarks

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Service Request: D0601136
Client : Treadwell and Rollo, Inc.
Project : Presidio

**Initial and Continuing Calibration Blanks
Form III**

Analyte	Analysis Method	Date Analyzed	Units	Initial		Continuing Calibration						Method Blank	
				Calibration		#1		#2		#3		units	mg/L
				Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
Alkalinity, Total	310.1	08/22/06	mg/L									10	U
Chloride	300.0	08/22/06	mg/L	1	U	1	U	1	U			1	U
Chloride	300.0	09/02/06	mg/L	1	U	1	U					1	U
Fluoride	300.0	08/22/06	mg/L	0.1	U	0.1	U					0.1	U
Fluoride	300.0	09/02/06	mg/L	1	U	1	U	1	U			1	U
Nitrate	300.0	08/18/06	mg/L	0.1	U	0.1	U					0.1	U
Nitrite	354.1	08/18/06	mg/L									0.2	U
Solids, Tot. Diss.	160.1	08/22/06	mg/L									20	U
Sulfate	300.0	08/18/06	mg/L	1	U	1	U					1	U
Sulfate	300.0	09/22/06	mg/L	1	U	1	U					1	U

Remarks

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Service Request: D0601136
Client : Treadwell and Rollo, Inc.
Project : Presidio

Laboratory Control Sample Form VII

Lab No.	LCS			Client Sample ID:		LCS							
Analyte	Analysis Method	Date Analyzed	Units		LCS TV		LCS Result	%R	LCSD Result	% R	Control Limit	RPD	Control Limit
Alkalinity, Total	310.1	08/22/06	mg/L		2,500		2,500	100	2,500	100	95-106	0.0	20
Chloride	300.0	08/22/06	mg/L		5.00		4.87	97	4.80	96	90-110	1.4	20
Chloride	300.0	09/02/06	mg/L		5.00		4.87	97	4.97	99	90-110	2.0	20
Fluoride	300.0	08/22/06	mg/L		2.50		2.50	100	2.48	99	90-110	0.8	20
Fluoride	300.0	09/02/06	mg/L		2.50		2.60	104	2.61	104	90-110	0.4	20
Nitrate	300.0	08/18/06	mg/L		1.25		1.17	94	1.23	98	90-110	5.0	20
Nitrite	354.1	08/18/06	mg/L		0.150		0.147	98	0.150	100	78-118	2.0	20
Solids, Tot. Diss.	160.1	08/22/06	mg/L		575		566	98	564	98	92-106	0.4	20
Sulfate	300.0	08/18/06	mg/L		10.00		9.15	92	9.33	93	90-110	1.9	20
Sulfate	300.0	09/22/06	mg/L		10.00		9.79	98	9.72	97	90-110	0.7	20
Remarks													

Support Documentation

MDL STUDY REPORT FORM

Lab Name: Columbia Analytical Services/Redding Analytical Method: E160.1 Matrix: Water

Instrument ID: _____

Concentration Units (ug/L or mg/kg): MG/L[illegible]

MDL STUDY REPORT FORM

Lab Name: Columbia Analytical Services/Redding Analytical Method: E310.1 Matrix: Water

Instrument ID: _____

Concentration Units (ug/L or mg/kg): MG/L[illegible]

MDL FORM Method E310.1

MDL STUDY REPORT FORM

Lab Name: Columbia Analytical Services/Redding Analytical Method: E354.1 Matrix: Water

Instrument ID: _____

Concentration Units (ug/L or mg/kg): MG/L[illegible]

MDL STUDY REPORT FORM

Lab Name: Columbia Analytical Services/Redding Analytical Method: E300 Matrix: Water

Instrument ID: ICS2000

Concentration Units (ug/L or mg/kg): MG/L

[illegible]

Analyst: mmAnalysis Date: 8-22-06N H₂SO₄: 0.02

Method: EPA 310.1 / SM2320

Test Codes: ALK, ALKB, ALKC, ALKP, HCO₃, CO₃

Reporting Limit: 10 mg/L

Detection Limit: 2 mg/L ³ CAS 9-11-06

Sample Reference No.	mls spl.	pH	mls H2SO4 to pH 8.3			mls H2SO4 to pH 4.5			AlkC CO3	AlkB HCO3	Alk Total		True	%RPD
			Initial	Final	Vol.	Initial	Final	Vol.	mg/L	mg/L	mg/L	units	Value	%R
CS1 pH 4.00		4.01										4.01	4.00	
CS2 pH 10.00		10.01										10.01	10.00	
ICVS pH 7.00		6.99										6.99	7.00	
MB	100	5.21				10.0	10.1	0.1			<3.0	mg/L		
LCS Na2CO3	5.0	10.23				0	12.5	12.5			2500	mg/L	2500	100.0
LCS Na2CO3	5.0	10.25				12.5	25.0	12.5			2500		2500	100.0
DO601158-1	100	7.84				0	12.6	12.6			126			
DO601136-2	100	7.21				0	31.7	31.7	<10	317	317			
3	100	7.18				0	25.3	25.3	<10	253	253			
4	100	8.22				0	43.5	43.5	<10	435	435			
DO601140-1	100	7.86				0	39.0	39.0	<3.0	390	390			
2	50	7.63				0	18.9	18.9	<3.0	378	378			
MS-2	50	9.48				0	31.3	31.3	<3.0	626	626		250 126	99.2
MSD-2	50	9.49				0	31.3	31.3	<3.0	626	626		250 126	99.2
3	100	7.72				0	38.1	38.1	<3.0	381	381			
DO601150-1	100	7.37				0	30.0	30.0	<3.0	300	300			
CCV pH 7.00		7.04										7.04	7.00	
DO601150-2	50 100	7.89				0	27.3	27.3	<3.0	546	546			
DO601115-1	100	8.22				0	39.3	39.3	<3.0	393	393	393		
								</						

62738-1136

Columbia Analytical Services - Redding, CA														Work Group #: NO2 060818				
Nitrite Nitrogen in Water														Analyst: AM				
EPA 354.1														Analysis Date & Time: 8/18/2006 @ 0900				
Test Codes: NO2														Analyst Review: QM 8/25/06				
Reporting Limit: 0.02 mg/L														Supervisor Review: BQS 8/29/06				
Detection Limit: 0.002 mg/L																		
Spike Information																		
Spike ID: G39795																		
Conc: 1.00																		
Spk mL: 1.00																		
Sx mL: 10.0																		
No.	Reference Number	Sx Type	HT met	mLs color.	Blank Sx Abs.	Sx/Reag Abs.	Initial mg/L	Dil. Factor	Final mg/L	Qual	MDL mg/L	RL mg/L	QC Value mg/L	True Value	%R	%RPD	Linear Regression Data	
CB	DI	C		10		0.000								0.000			r:	0.9990
CS1	G39795	C		10		0.024								0.010			m:	0.373
CS2	G39795	C		10		0.048								0.020			b:	0.0022
CS3	G39795	C		10		0.245								0.100				
CS4	G39795	C		10		0.538								0.200			Sx Remarks	
ICV	G39796	QC		10		0.389	0.147	1	0.147		0.002	0.020	0.1473	0.150	98.2			
ICB	ICB	QC		10		0.003	0.003	1	0.003	J	0.002	0.020	0.0034	0.000				
MB	MB	QC		10		0.001	0.003	1	0.003	J	0.002	0.020	0.0026	0.000				
LCS	G39796	QC		10		0.396	0.150	1	0.150		0.002	0.020	0.1499	0.150	99.9			
SX	D1136-2	Sx		10	0.074	0.090	0.008	1	0.008	J	0.002	0.020						
SX	D1136-3	Sx		10	0.001	0.008	0.005	1	0.005	J	0.002	0.020						
SX	D1136-4	Sx		10	0.164	NA	-0.06	1	0.002	U	0.002	0.020						
QC	CCVS	QC		10	0.000	0.276	0.11	1	0.105		0.002	0.020	0.1052	0.100	105.2	0.1		
QC	CCB	QC		10	0.000	0.006	0.004	1	0.004	J	0.002	0.020	0.0045					
SX	D1136-4(FILTER)	Sx		10	0.006	0.017	0.006	1	0.006	J	0.002	0.020						
QC	CCVS	QC		10	0.000	0.247	0.094	1	0.094		0.002	0.020	0.0943	0.100	94.3	0.1		
QC	CCB	QC		10	0.000	0.000	0.002	1	0.002	J	0.002	0.020	0.0022					
SX	D1140-2	Sx		10	0.009	0.188	0.069	1	0.069		0.002	0.020						
SX	D1140-3	Sx		10		0.044	0.019	1	0.019	J	0.002	0.020						
SX	D1140-1	Sx		10	0.001	0.047	0.019	1	0.019	J	0.002	0.020						
QC	CCVS	QC		10	0.000	0.262	0.100	1	0.100		0.002	0.020	0.0999	0.100	99.9			
QC	CCB	QC		10	0.000	0.003	0.003	1	0.003	J	0.002	0.020	0.0034					
QC	D1140-2 (AS ABC)	QC		10	0.009	0.188	0.069	1	0.069		0.002	0.020	0.0690				Sample listed for excel	
MS	D1140-2 MS	MS		11	0.009	0.266	0.098	1	0.098		0.002	0.020	0.0981	0.100	29.1		purposes only	
MSD	D1140-2 MSD	MSD		11	0.009	0.269	0.099	1	0.099		0.002	0.020	0.0992	0.100	30.2		run 8/25/06	
SX								1										
QC	CCVS	QC		10	0.000	0.261	0.100	1	0.100		0.002	0.020	0.0996	0.100	99.6			
QC	CCB	QC		10	0.000	0.000	0.002	1	0.002	J	0.002	0.020	0.0022					

534

Method: EPA 354.1

Test Code: NO2

$$@ N \times 3.29 = @ NO_2$$

Reporting Limit: 0.02 mg/L

Detection Limit: 0.002 mg/L

No.	Reference Number	H.T. Met	mls olorize	Abs.	Dil. Factor	Initial mg/L @ N	Final @ N	Unit	True Value	%RPD or % R
CB	0 mg/L		10	0.000	1			mg/L		
CS1	0.01 mg/L		10	0.024	1			mg/L	0.01	
CS2	0.02 mg/L		10	0.048	1			mg/L	0.02	
CS3	0.10 mg/L		10	0.245	1			mg/L	0.10	
CS4	0.20 mg/L		10	0.538	1			mg/L	0.20	
ICVS/LCS	0.15 mg/L		10	0.389	1			mg/L	0.15	
ICB			10	0.003	1			mg/L		
MB			10	0.001	1					
LCSD	0.15 mg/L		10	0.396	1			mg/L	0.15	
	D1136-2			0.090						
	2ms			0.157						
	2mg			0.167						
	-3			0.008						
	-4									
	D1127-1			0.033						
	-2			0.017						
	D1118-1			0.045						
	-2			0.038						
	-3			0.555						
CCVS	0.10 mg/L		10	0.276	1			mg/L	0.10	
CCB			10	0.006	1			mg/L		
	D1118-4			0.063						
	-5			0.006						
	-6			0.008						
	-7			0.727						
	-8			0.085						
	-9			0.563						
	-10			0.010						
	CCVS			0.260						
	CCB			0.001						
	D1136-4			0.017						
	D1118-3			0.271						
	-7			0.557						
	-9			0.228						
CCVS	0.10 mg/L		10		1			mg/L	0.10	
CCB	-7		10	0.312	2			mg/L		
	CCVS			0.247						
	CCB			0.000						

SPIKE (ID, Conc., Vol.):

Updated 05/2003

Columbia Analytical Services - Redding, CA										Work Group #:										TDS 060822	
Total Dissolved Solids in Water										Analyst:										MO	
Gravimetric, 180C										Analysis Date:										8/24/06 @ 1600	
EPA 160.1										Analyst Review:										MO 8/25/06	
Test Codes: TDS										Supervisor Review:										EJS 8/29/06	
Sx	Reference	Cup	Sample	Initial Wt.	Final Wt.	Final Wt.	Wt	Dilution	Final	Qual	MDL	RL	QC Value	True	%R	%RPD	Remarks				
Type	Number	No.	Vol. mL	Gram	#1 g	#2 g	Verified	Factor	mg/L		mg/L	mg/L	mg/L	Value							
	VERIFICATION	1		99.9979	99.9980	99.9980															
QC	MB	2	100	114.7642	114.7643	114.7642	pass	1	16	U	16	20	0								
QC	LCS	3	100	103.7213	103.7779	103.7769	pass	1	566		16	20	566	575	98.4						
LCSD	LCS DUP	4	100	99.9075	99.9639	99.9638	pass	1	564		16	20	564	575	98.1	0.4					
QC	D0905-8	5	50	100.2984	100.3232	100.3229	pass	2	496		32	40	496								
dup	D0905-8 DUP	6	50	104.0045	104.0305	104.0296	pass	2	520		32	40	520			4.7					
QC	D0944-3	7	100	101.3535	101.3811	101.3807	pass	1	276		16	20	276								
dup	D0944-3	8	100	104.4771	104.5035	104.5027	pass	1	264		16	20	264			4.4					
Sx	D1115-1	9	100	113.5814	113.6551	113.6547	pass	1	737		16	20									
Sx	D1127-1	10	100	104.1520	104.2428	104.2423	pass	1	908		16	20									
Sx	D1127-2	11	100	107.3023	107.3921	107.3918	pass	1	898		16	20									
Sx	D1136-2	12	20	110.6664	110.6782	110.6782	pass	5	590		80	100									
Sx	D1136-3	13	20	107.3238	107.3339	107.3334	pass	5	505		80	100									
sx	D1140-1	14	100	81.6351	81.7255	81.7255	pass	1	904		16	20									
Sx	D1140-2	15	100	82.2518	82.3344	82.3340	pass	1	826		16	20									
Sx	D1140-2 DUP	16	100	73.5596	73.6422	73.6418	pass	1	826		16	20									
Sx	D1140-3	17	100	81.8103	81.8934	81.8930	pass	1	831		16	20									

Total and Volatile Dissolved Solids

Page:

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Analyst: MDAnalysis Date: 8/22/06 C 16:00Method: EPA 160.1

Test Codes: TDS/VDS

Reporting Limit: 20 mg/L

Detection Limit: 11 mg/L

TDS @ 180°C VDS @ 550°C

Line Number	Ref. Number	E.C.	Dish Number	mls sample	Dil. Factor	TDS mg/L	VDS mg/L	True Value	%RPD or % R
001	verification							100.0000g	
002	am 8/22/06 D094-mB		104	100 ml					
003	LCS		B						
004	LCS		13						
005	D0905-B		16	50 ml					
006	-8Dup		7						
007	D0944-3		118	100 ml					
008	-3Dup		14						
009	D1115-1		17						
010	D1127-1		129						
011	-2		52						
012	D1136-2		23	20					
013	-3		35	20					
014	-4		11						
015	D1140-1		7476	100 ml					
016	-2		MOON						
017	am 8/22/06 -3 -2Dup		29						
018	-3		STAR						
019									
020									
021									
022									
023									

24-Aug-2006 16:20
 007: + 101.3807 g
 013: + 107.3334 g

24-Aug-2006 15:51:43

001: + 99.9979 g
 002: + 114.7642 g
 003: + 103.7769 g
 004: + 99.9075 g
 005: + 100.2984 g
 006: + 104.0045 g
 007: + 101.3535 g
 008: + 104.4771 g
 009: + 113.5814 g
 010: + 104.1520 g
 011: + 107.3023 g
 012: + 110.6664 g
 013: + 107.3238 g
 014: + 76.2338 g
 015: + 81.6351 g
 016: + 82.2518 g
 017: + 73.5596 g
 018: + 81.8103 g

22-Aug-2006 15:18:02

24-Aug-2006 7:57:46

24-Aug-2006 12:49:16

001: + 99.9979 g
 002: + 114.7642 g
 003: + 103.7213 g
 004: + 99.9075 g
 005: + 100.2984 g
 006: + 104.0045 g
 007: + 101.3535 g
 008: + 104.4771 g
 009: + 113.5814 g
 010: + 104.1520 g
 011: + 107.3023 g
 012: + 110.6664 g
 013: + 107.3238 g
 014: + 76.2338 g
 015: + 81.6351 g
 016: + 82.2518 g
 017: + 73.5596 g
 018: + 81.8103 g

001: + 99.9980 g
 002: + 114.7650 g
 003: + 103.7779 g
 004: + 99.9639 g
 005: + 100.3250 g
 006: + 104.0305 g
 007: + 101.3536 g
 008: + 104.5065 g
 009: + 113.6531 g
 010: + 104.2428 g
 011: + 107.3921 g
 012: + 110.6782 g
 013: + 107.3342 g
 014: + 76.3483 g
 015: + 81.7255 g
 016: + 82.3344 g
 017: + 73.6422 g
 018: + 81.8934 g

001: + 99.9980 g
 002: + 114.7643 g
 003: + 103.7769 g
 004: + 99.9638 g
 005: + 100.3232 g
 006: + 104.0296 g
 007: + 101.3811 g
 008: + 104.5035 g
 009: + 113.6547 g
 010: + 104.2423 g
 011: + 107.3918 g
 012: + 110.6782 g
 013: + 107.3339 g
 015: + 81.7255 g
 016: + 82.3340 g
 017: + 73.6418 g
 018: + 81.8930 g

Updated 5/04

Title: Anions_Program

Datasource: RDD-ACQU-WC-6_local

Location: ICS-2000\Anions\ANIONS 081906\ANIONS 081906 Created: 8/18/2005 5:57:57 PM by RDDACQUWC6

Timebase: ICS-2000

Changed: 9/22/2005 11:59:56 AM by RDDACQUWC6

;Anions Program / EPA 300.0, 300.1 / Bob Coleman 8-18-2005

```
Pressure.LowerLimit = 200
Pressure.UpperLimit = 3000
%A.Equate = "Water"
CR_TC = On
LoadPosition
Data_Collection_Rate = 5.0
CellTemperature = 30.0
ColumnTemperature = 30.0
Suppressor_Type = ASRS_4mm
; Hydroxide = 30.0
; Recommended Current = 75
Suppressor_Current = 75
Concentration = 30.00
Curve = 5
Flow = 1.00
```

```
-2.500 Pump_ECD_Relay_1.Closed Duration=6
```

```
0.000 Pump_ECD.Autozero
```

```
ECD_1.AcqOn
```

```
Pump_InjectValve.InjectPosition Duration=600
```

```
5.000 Log Pump_ECD_Relay_1.State
```

```
Pump_ECD_Relay_1.Open ;make sure relay is open
```

```
12.000 ECD_1.AcqOff
```

```
End
```

Program File: Anions_Program
Operator: RDDACQUWC8

Post-acquisition steps, Page 1 of 1
Printed: 8/20/2006 9:17:17 AM

Title: Anions_Program
Datasource: RDD-ACQU-WC-6_local
Location: ICS-2000\Anions\ANIONS 081906\ANIONS 081906.SEQ
Timebase: ICS-2000

Created: 8/18/2005 5:57:57 PM by RDDACQUWC6
Changed: 9/22/2005 11:59:56 AM by RDDACQUWC6

No. Channel Operation Parameters

Title: End of Run

Datasource: RDD-ACQU-WC-6_local

Location: ICS-2000\Anions\ANIONS 081906\ANIONS 081Created: 6/21/2005 11:20:54 AM by reddingadmin

Timebase: ICS-2000

Changed: 7/7/2005 3:33:24 PM by reddingadmin

;End program for shutting down the ICS-2000 pumps / BLC, 6-22-2005

```
Pressure.LowerLimit =      200
Pressure.UpperLimit =      3000
%A.Equate =              "Water"
CR_TC =                   On
LoadPosition
Data_Collection_Rate =      5.0
CellTemperature =          30.0
ColumnTemperature =         30.0
Suppressor_Type =          ASRS_4mm
; Carbonate =               0.0
; Bicarbonate =             0.0
; Hydroxide =               65.0
; Tetraborate =             0.0
; Other eluent =            0.0
; Recommended Current =     193
Suppressor_Current =       200
ECD_Total.Step =           0.50
ECD_Total.Average =        Off
Channel_Pressure.Step =     0.50
Channel_Pressure.Average =  Off
Concentration =            65.00
Curve =                    5
Flow =                     1.20

-0.100 Pump_ECD_Relay_1.Closed      Duration=1

0.000 Pump_ECD.Autozero
ECD_1.AcqOn
ECD_Total.AcqOn
Channel_Pressure.AcqOn
Pump_InjectValve.InjectPosition      Duration=0.1
Pump_ECD_Relay_1.Open                ;make sure relay is open
0.1000 ECD_1.AcqOff
ECD_Total.AcqOff
Channel_Pressure.AcqOff
Suppressor_Current =              0
Off
End
```

Program File: Pump Shutdown
Operator: RDDACQUWC8

Post-acquisition steps, Page 1 of 1
Printed: 8/20/2006 9:17:18 AM

Title: End of Run
Datasource: RDD-ACQU-WC-6_local
Location: ICS-2000\Anions\ANIONS 081906\ANIONS 081906.SEQ
Timebase: ICS-2000

Created: 6/21/2005 11:20:54 AM by reddingadmin
Changed: 7/7/2005 3:33:24 PM by reddingadmin

No. Channel Operation Parameters

Method File: Anions_Method
Operator: RDDACQUWC8

Page 1 of 9
Printed: 8/20/2006 9:17:20 AM

Title: Anions AS18 / EPA 300.0, 300.1 Method

Datasource: RDD-ACQU-WC-6_local

Location: ICS-2000\Anions\ANIONS 081906\ANIONS 081906.SEQ

Created: 8/9/2005 4:45:31 PM by RDDACQUWC6

Last Update: 8/11/2006 10:42:45 AM by RDDACQUWC8

Blank Run Subtraction: No Blank Run Subtraction

Detection Table:

No.	Ret. Time [min]	Param. Name	Param. Value	Channel
1	0.000	Minimum Area	0.025 "[Signal]*min"	All Channels
2	0.000	Inhibit Integration	On	All Channels
3	1.000	Void Volume Treatment	On	All Channels
4	2.800	Inhibit Integration	On	All Channels
5	2.800	Void Volume Treatment	Off	All Channels
6	3.000	Inhibit Integration	Off	All Channels
7	3.000	Inhibit Integration	Off	All Channels

Method File: Anions_Method
Operator: RDDACQUWC8

Page 2 of 9
Printed: 8/20/2006 9:17:20 AM

Title: Anions AS18 / EPA 300.0, 300.1 Method

Datasource: RDD-ACQU-WC-6_local

Created: 8/9/2005 4:45:31 PM by RDDACQUWC6

Location: ICS-2000\Anions\ANIONS 081906\ANIONS 081906.SEQ

Last Update:

8/11/2006 10:42:45 AM by RDDACQUWC8

Peak Table:

Use Recently Detected Ret. Times: Average of last 4 standards

Dead time:

Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Window	Standard	Int.Type	Cal.Type	Peak Type	Group	Resp.Fact.	Comment
1	Fluoride	3.147 min	5.000 RG	External	Area	0LOff	B-M-B		1.000000	Autogenerated
2	Chloride	4.600 min	5.000 RG	External	Area	0LOff	B-M-B		1.000000	Autogenerated
3	Sulfate	7.083 min	5.000 RG	External	Area	0LOff	B-M-B		1.000000	Autogenerated
4	Bromide	7.953 min	5.000 RG	External	Area	0LOff	B-M-B		1.000000	Autogenerated
5	Nitrate	9.517 min	5.000 RG	External	Area	0LOff	B-M-B		1.000000	Autogenerated

Method File: Anions_Method
Operator: RDDACQUWC8

Page 3 of 9
Printed: 8/20/2006 9:17:20 AM

Title: Anions AS18 / EPA 300.0, 300.1 Method

Datasource: RDD-ACQU-WC-6_local

Location: ICS-2000\Anions\ANIONS 081906\ANIONS 081906.SEQ

Created:

8/9/2005 4:45:31 PM by RDDACQUWC6

Last Update:

8/11/2006 10:42:45 AM by RDDACQUWC8

Peak Table:

Use Recently Detected Ret. Times: Average of last 4 standards

Dead time:

Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Amount CS1	Amount CS2	Amount CS3	Amount CS4	Amount CS5	Amount CS6	Amount CS7	Amount CS8	Amount CS9
1	Fluoride	3.147 min	0.000000	0.200000	1.000000	2.000000	6.000000	10.000000	20.000000		
2	Chloride	4.600 min	0.000000	0.800000	4.000000	8.000000	24.000000	40.000000	80.000000		
3	Sulfate	7.083 min	0.000000	0.800000	4.000000	8.000000	24.000000	40.000000	80.000000		
4	Bromide	7.953 min	0.000000	0.500000	2.500000	5.000000	15.000000	25.000000	50.000000		
5	Nitrate	9.517 min	0.000000	0.100000	0.500000	1.000000	3.000000	5.000000	10.000000		

Method File: Anions_Method
Operator: RDDACQUWC8

Page 4 of 9
Printed: 8/20/2006 9:17:20 AM

Title: Anions AS18 / EPA 300.0, 300.1 Method
Datasource: RDD-ACQU-WC-6_local Created: 8/9/2005 4:45:31 PM by RDDACQUWC8
Location: ICS-2000\Anions\ANIONS 081906\ANIONS 081906.SEQ Last Update: 8/11/2006 10:42:45 AM by RDDACQUWC8

Amount Table:

Dimension of Amounts: mg/L

Reference Volume for Amounts: Use inject volume of first standard

No.	Peak Name	Ret.Time	Window	Standard	Int.Type	Cal.Type	Peak Type	Left Limit	Right Limit Group
1	Fluoride	3.147 min	5.000 RG	External	Area	0LOff	B-M-B	0.000	0.000
2	Chloride	4.600 min	5.000 RG	External	Area	0LOff	B-M-B	0.000	0.000
3	Sulfate	7.083 min	5.000 RG	External	Area	0LOff	B-M-B	0.000	0.000
4	Bromide	7.953 min	5.000 RG	External	Area	0LOff	B-M-B	0.000	0.000
5	Nitrate	9.517 min	5.000 RG	External	Area	0LOff	B-M-B	0.000	0.000

Method File: Anions_Method
Operator: RDDACQUWC8

Page 5 of 9
Printed: 8/20/2006 9:17:20 AM

Title: Anions AS18 / EPA 300.0, 300.1 Method

Datasource: RDD-ACQU-WC-6_local

Location: ICS-2000\Anions\ANIONS 081906\ANIONS 081906.SEQ

Created: 8/9/2005 4:45:31 PM by RDDACQUWC8

Last Update: 8/11/2006 10:42:45 AM by RDDACQUWC8

Amount Table:

Dimension of Amounts: mg/L

Reference Volume for Amounts: Use inject volume of first standard

No.	Peak Name	Ret.Time	Resp.Fact.	Comment
1	Fluoride	3.147 min	1.000000	Autogenerated
2	<u>Chloride</u>	<u>4.600 min</u>	<u>1.000000</u>	<u>Autogenerated</u>
3	Sulfate	7.083 min	1.000000	Autogenerated
4	Bromide	7.953 min	1.000000	Autogenerated
5	Nitrate	9.517 min	1.000000	Autogenerated

Method File: Anions_Method
Operator: RDDACQUWC8

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Printed: 8/20/2006 9:17:20 AM

Title: Anions AS18 / EPA 300.0, 300.1 Method

Datasource: RDD-ACQU-WC-6_local

Location: ICS-2000\Anions\ANIONS 081906\ANIONS 081906.SEQ

Created: 8/9/2005 4:45:31 PM by RDDACQUWC6

Last Update: 8/11/2006 10:42:45 AM by RDDACQUWC8

Calibration:

Calibration Mode: Total

Auto Recalibrate: On

No.	Enabled	Name	Smp.No.	Pos.	Inj. Vol.	Weight	ISTD Amount	Dil. Factor	Inj. Date/Time	Sample Comment
1	☒	 CS1	2	3	25.0	1.0000	1.0000	1.0000	8/9/2006 12:32:	
2	☒	 CS2	3	52	25.0	1.0000	1.0000	1.0000	8/9/2006 12:47:	
3	☒	 CS3	4	5	25.0	1.0000	1.0000	1.0000	8/9/2006 1:01:5	
4	☒	 CS4	5	5	25.0	1.0000	1.0000	1.0000	8/9/2006 1:16:3	
5	☒	 CS5	6	7	25.0	1.0000	1.0000	1.0000	8/9/2006 1:31:1	
6	☒	 CS6	7	6	25.0	1.0000	1.0000	1.0000	8/9/2006 1:45:4	
7	☒	 CS7	8	8	25.0	1.0000	1.0000	1.0000	8/9/2006 2:00:2	

Method File: Anions_Method
Operator: RDDACQUWC8

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Printed: 8/20/2006 9:17:20 AM

Title: Anions AS18 / EPA 300.0, 300.1 Method

Datasource: RDD-ACQU-WC-6_local

Location: ICS-2000\Anions\ANIONS 081906\ANIONS 081906.SEQ

Created:

8/9/2005 4:45:31 PM by RDDACQUWC6

Last Update:

8/11/2006 10:42:45 AM by RDDACQUWC8

Calibration:

Calibration Mode: Total

Auto Recalibrate: On

No.	Enabled	Name	Calib. Comment
1	☒	 CS1	Couldn't find the peak in the chromatogram.
2	☒	 CS2	Ok
3	☒	 CS3	Ok
4	☒	 CS4	Ok
5	☒	 CS5	Ok
6	☒	 CS6	Ok
7	☒	 CS7	Ok

Method File: Anions_Method
Operator: RDDACQUWC8

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Printed: 8/20/2006 9:17:20 AM

Title: Anions AS18 / EPA 300.0, 300.1 Method

Datasource: RDD-ACQU-WC-6_local

Created: 8/9/2005 4:45:31 PM by RDDACQUWC6

Location: ICS-2000\Anions\ANIONS 081906\ANIONS 081906.SEQ

Last Update: 8/11/2006 10:42:45 AM by RDDACQUWC8

System Suitability Test:

No.	Name	Sample Condition	Test Condition	Aggregate	Operator	Value	Channel	Peak	N.A.
1									

Method File: Anions_Method
Operator: RDDACQUWC8

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Printed: 8/20/2006 9:17:20 AM

Title: Anions AS18 / EPA 300.0, 300.1 Method

Datasource: RDD-ACQU-WC-6_local

Location: ICS-2000\Anions\ANIONS 081906\ANIONS 081906.SEQ

Created:

8/9/2005 4:45:31 PM by RDDACQUWC8

Last Update:

8/11/2006 10:42:45 AM by RDDACQUWC8

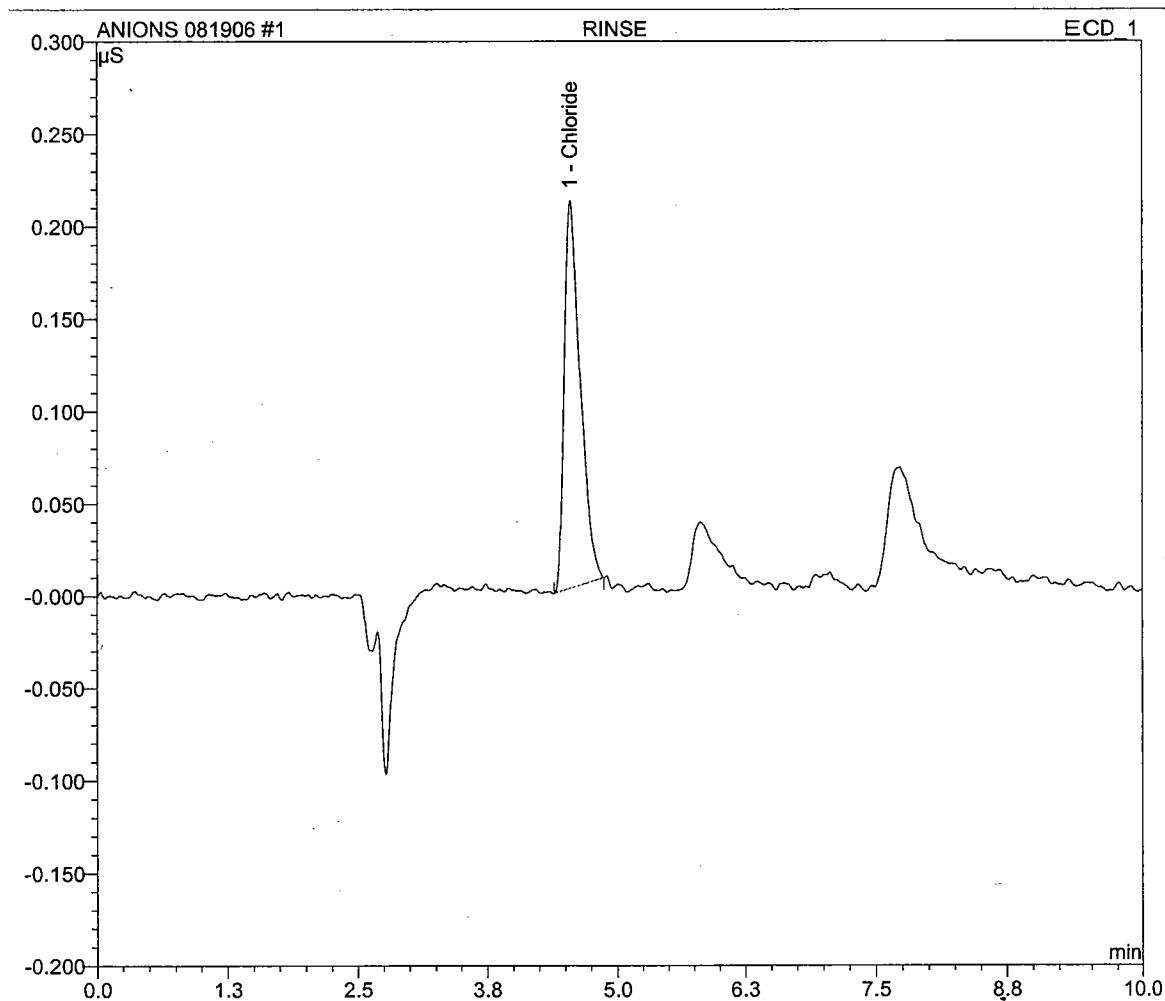
System Suitability Test:

No.	Name	Fail-Action	Result	SST Message
-----	------	-------------	--------	-------------

1				
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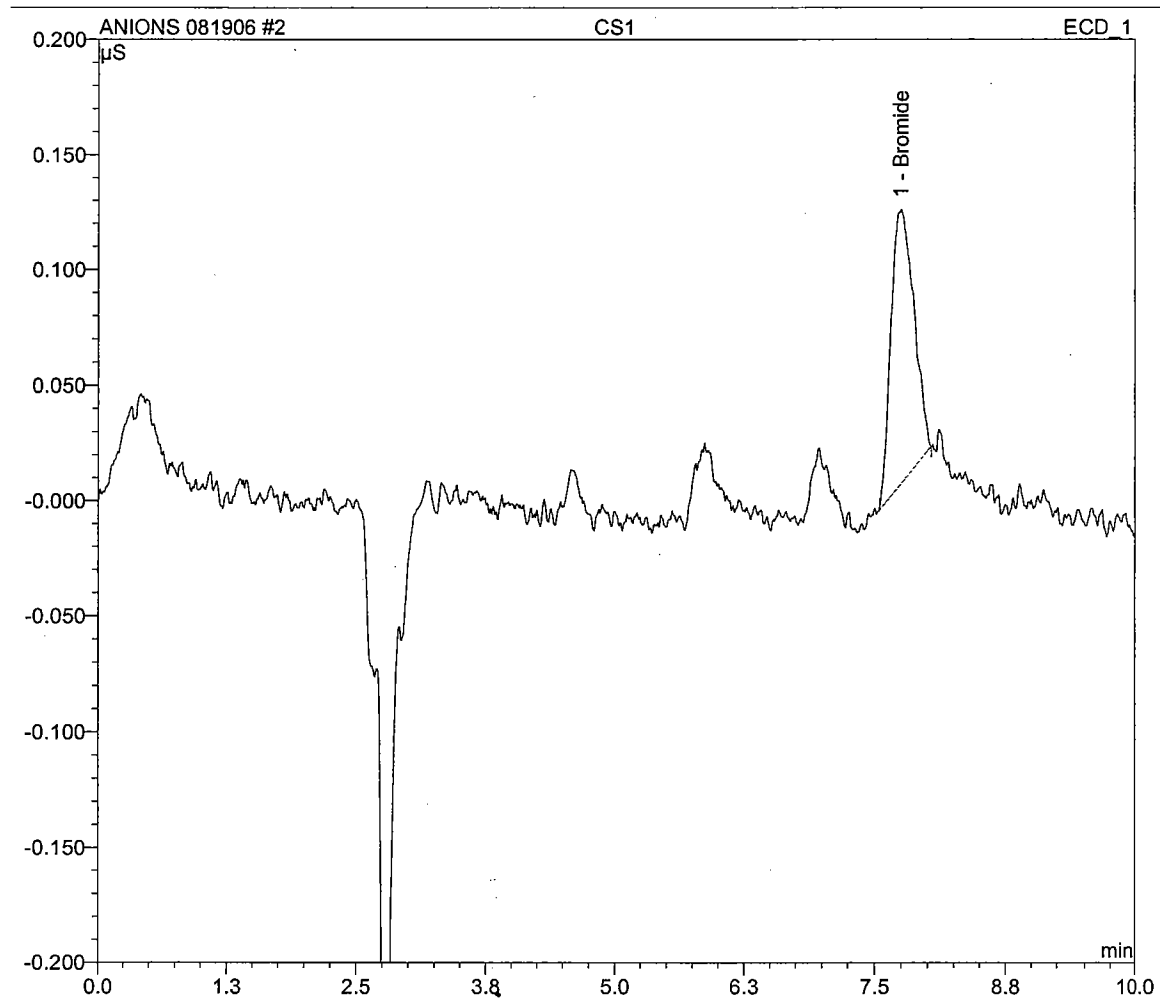
Sample Name:	RINSE	Inj. Vol.:	25.0
Sample Type:	unknown	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	19.08.06 13:55	Run Time:	12.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	4.55	Chloride	BMB	0.037	0.210	0.1732
TOTAL:				0.04	0.21	0.17



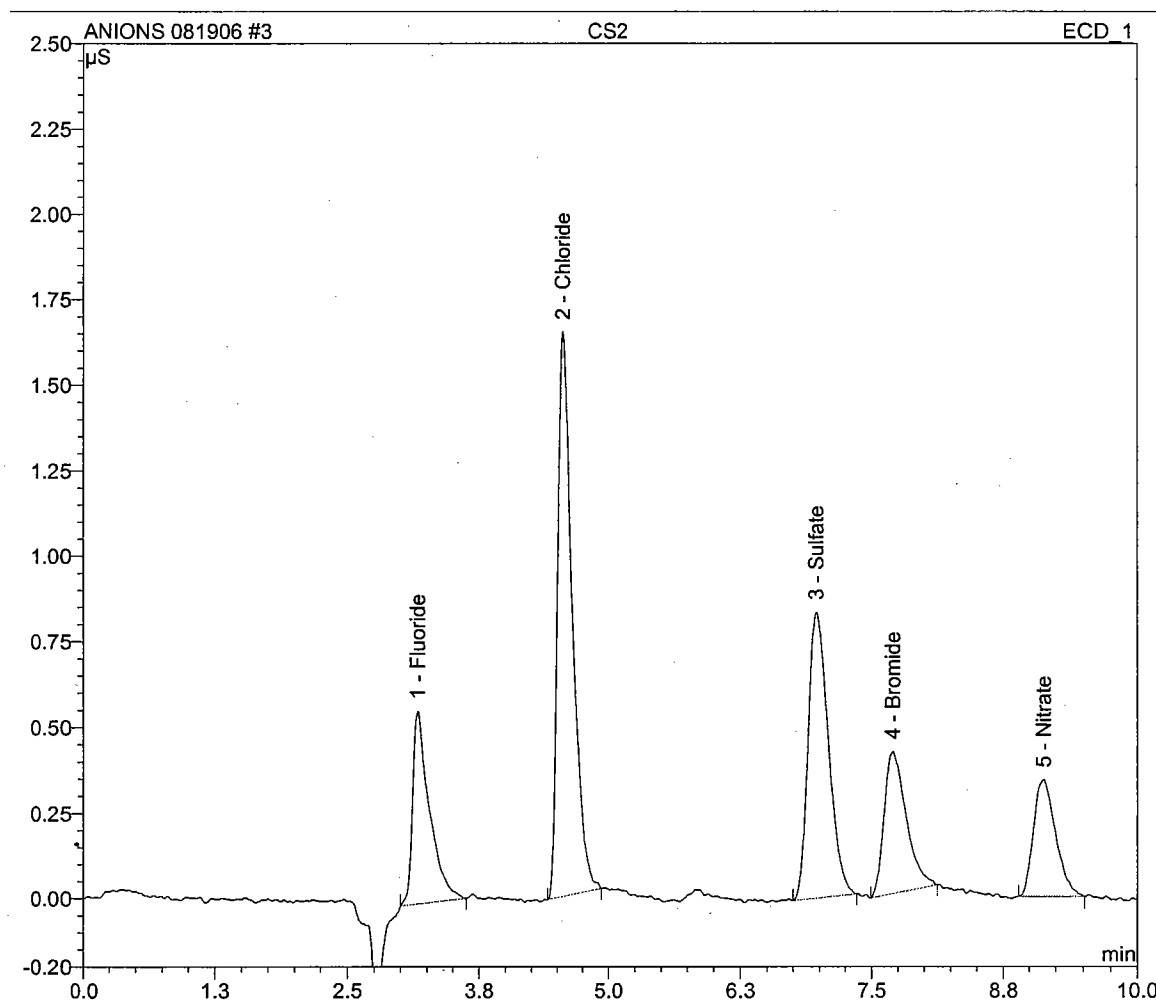
Sample Name:	CS1	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	09:08:06 12:32	Run Time:	12.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	7.75	Bromide	BMB	0.030	0.119	-0.0207
TOTAL:				0.03	0.12	-0.02



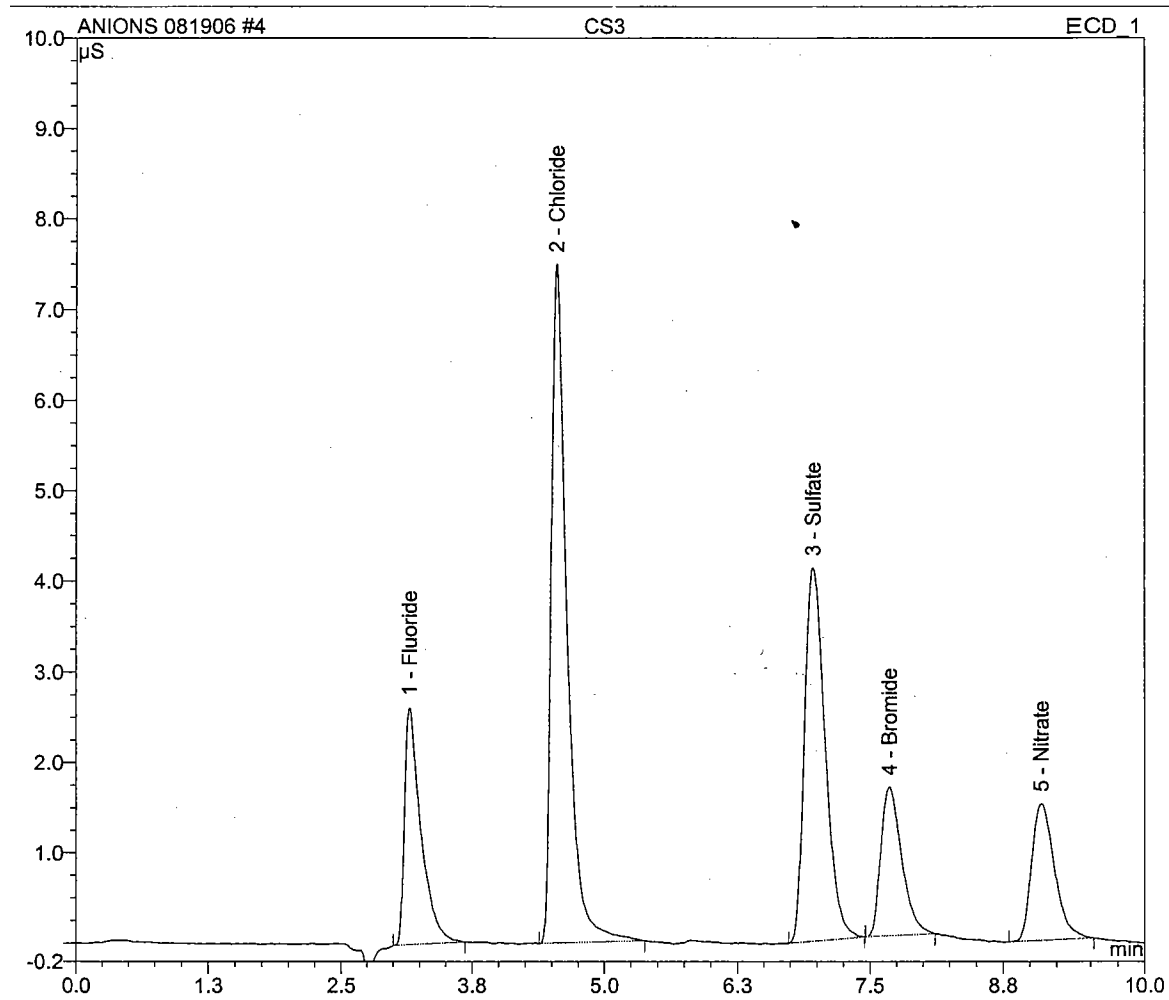
Sample Name:	CS2	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	09.08.06 12:47	Run Time:	12.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	3.16	Fluoride	BMB	0.105	0.563	0.0292
2	4.56	Chloride	BMB	0.277	1.650	0.9199
3	6.97	Sulfate	BMB	0.189	0.836	0.9862
4	7.71	Bromide	BMB	0.100	0.416	0.5128
5	9.14	Nitrate	BMB	0.083	0.343	0.1400
TOTAL:				0.75	3.81	2.59



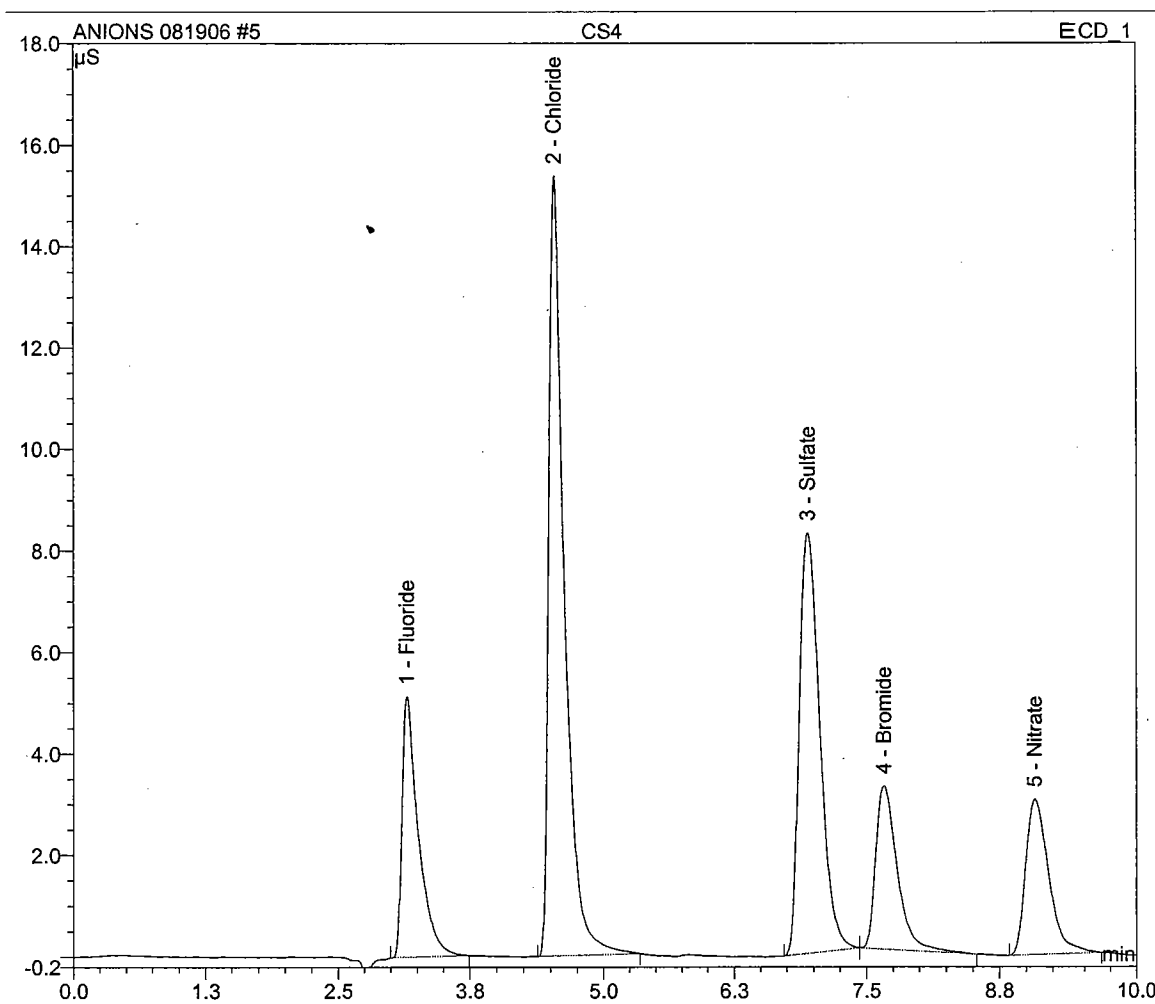
Sample Name:	CS3	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	09.08.06 13:01	Run Time:	12.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	3.16	Fluoride	BMB	0.468	2.621	0.9567
2	4.54	Chloride	BMB	1.292	7.497	4.0809
3	6.96	Sulfate	BMB	0.918	4.122	4.1614
4	7.68	Bromide	BMB	0.372	1.647	2.5561
5	9.11	Nitrate	BMB	0.372	1.513	0.5016
TOTAL:				3.42	17.40	12.26



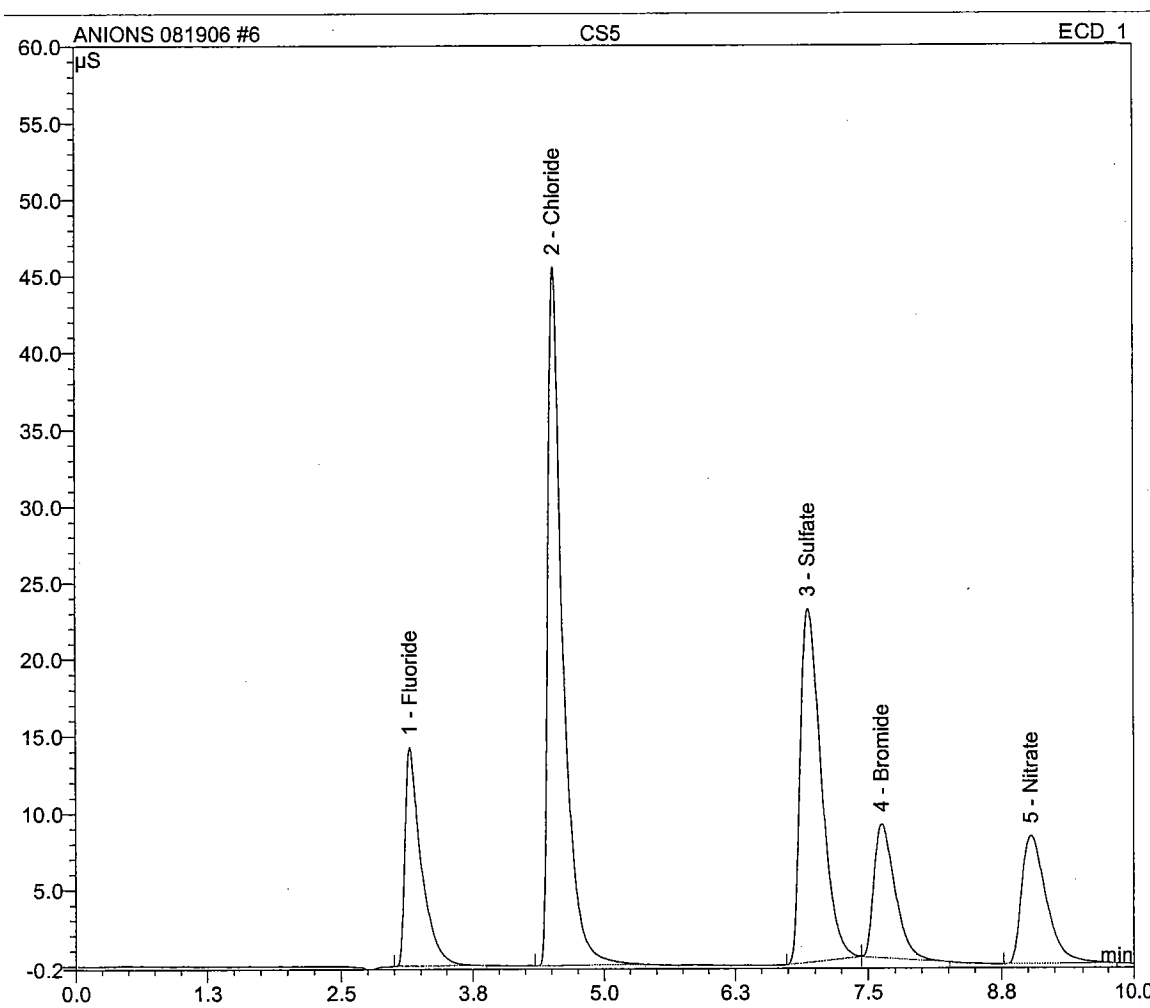
Sample Name:	CS4	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	09:08.06 13:16	Run Time:	12.00

No.	Time min	Peak Name	Type	Area $\mu\text{S} \cdot \text{min}$	Height μS	Amount mg/L
1	3.15	Fluoride	BMB	0.917	5.137	2.1035
2	4.54	Chloride	BMB	2.597	15.376	8.1433
3	6.95	Sulfate	BMB	1.834	8.288	8.1491
4	7.67	Bromide	bMB	0.758	3.224	5.4638
5	9.08	Nitrate	BMB	0.776	3.064	1.0076
TOTAL:				6.88	35.09	24.87



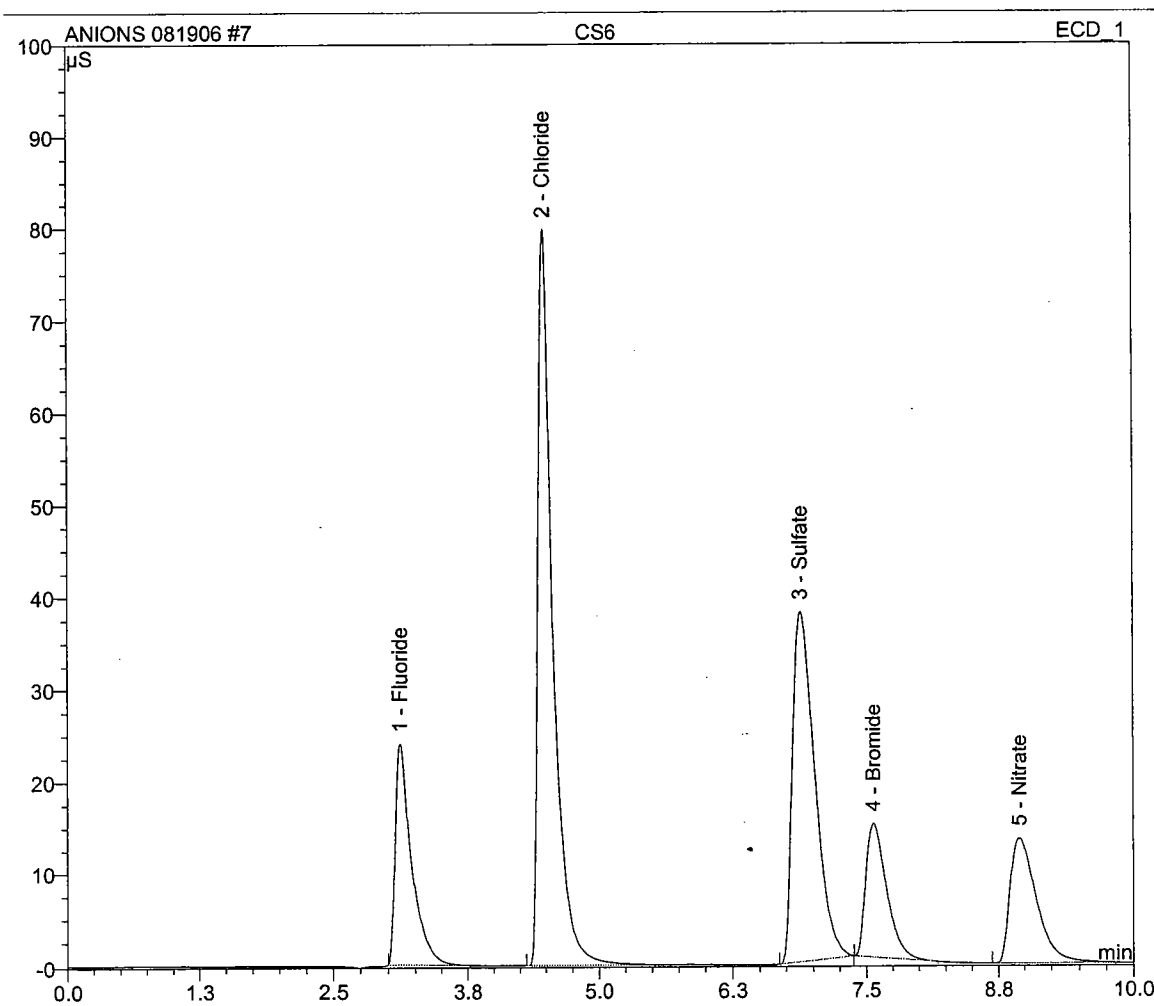
Sample Name:	CS5	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	09.08.06 13:31	Run Time:	12.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	3.15	Fluoride	BMB	2.527	14.265	6.2131
2	4.53	Chloride	BMB	7.491	45.530	23.3821
3	6.94	Sulfate	BMB	5.279	23.052	23.1405
4	7.63	Bromide	bMB	1.976	8.765	14.6441
5	9.03	Nitrate	BMB	2.283	8.388	2.8944
TOTAL:				19.56	100.00	70.27



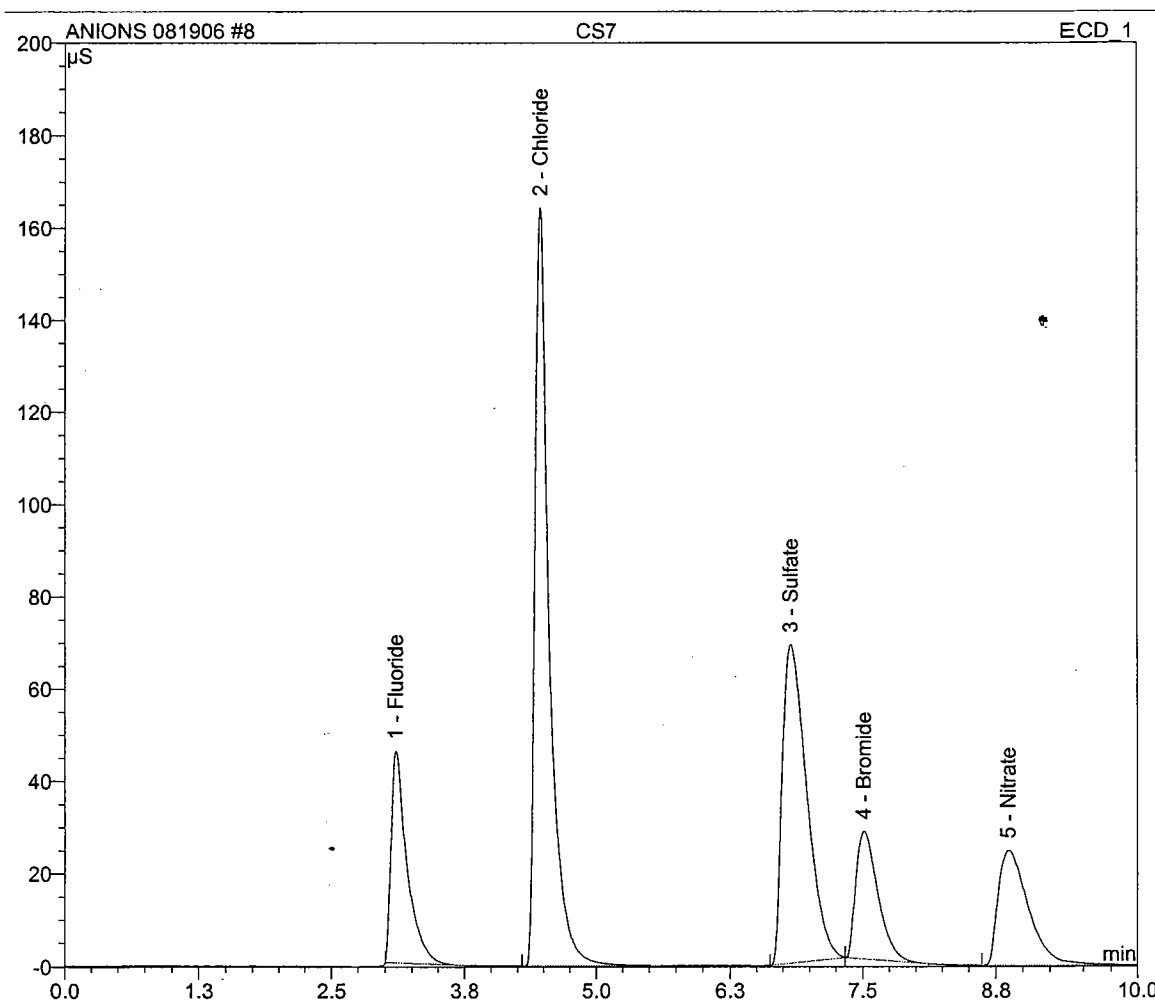
Sample Name:	CS6	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	09.08.06 13:45	Run Time:	12.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	3.11	Fluoride	BMB	4.171	24.008	10.4118
2	4.48	Chloride	BMB	12.861	79.811	40.1025
3	6.89	Sulfate	BMB	9.136	38.020	39.9282
4	7.57	Bromide	BMB	3.359	14.626	25.0609
5	8.95	Nitrate	BMB	3.949	13.627	4.9807
TOTAL:				33.48	170.09	120.48



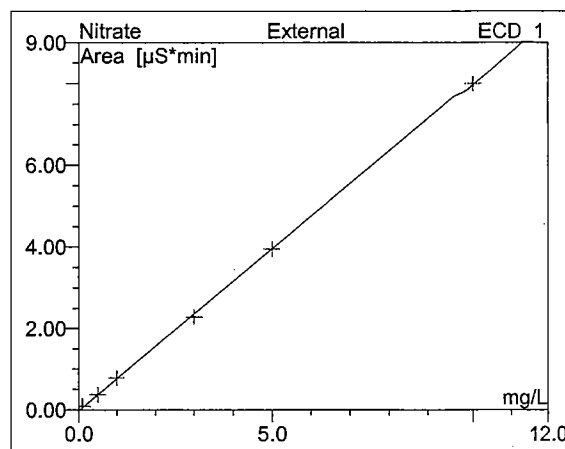
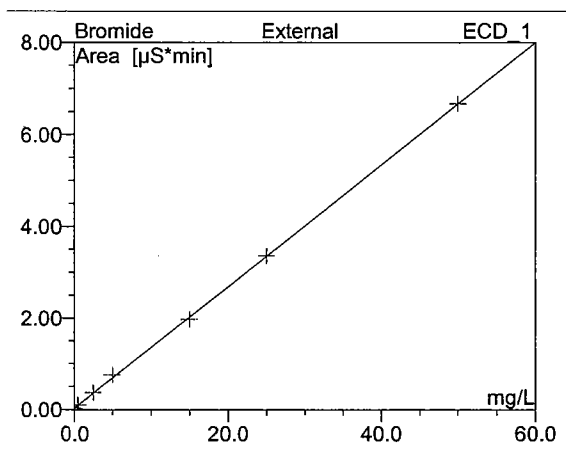
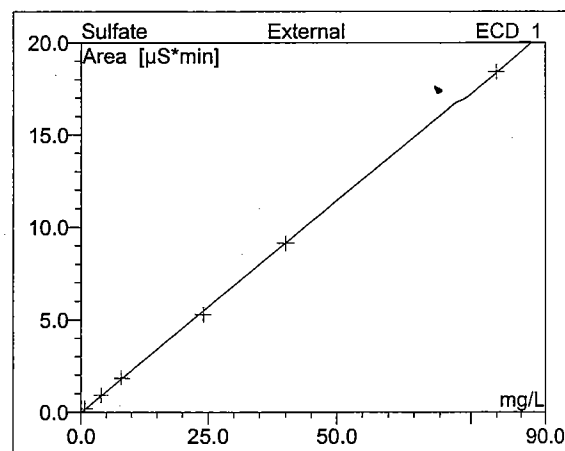
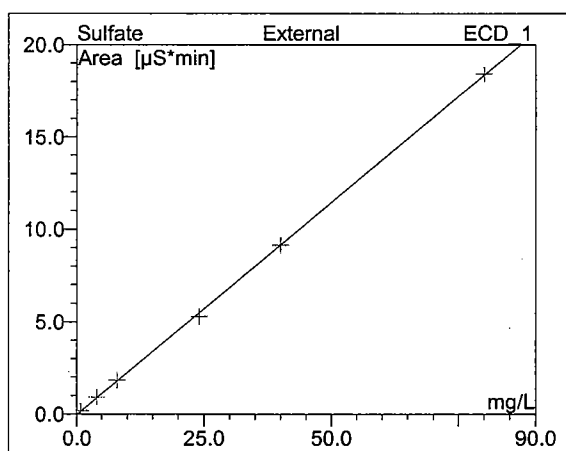
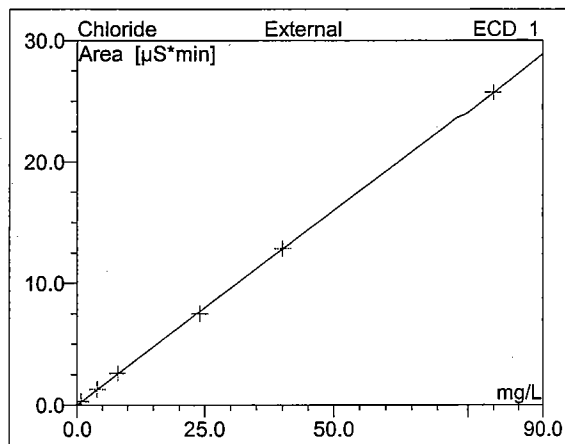
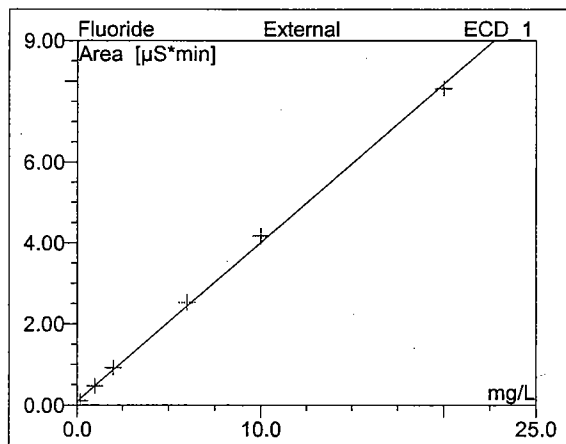
Sample Name:	CS7	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	09.08.06 14:00	Run Time:	12.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	3.10	Fluoride	BMB	7.818	45.811	19.7237
2	4.46	Chloride	BMB	25.711	164.282	80.1145
3	6.82	Sulfate	BMB	18.404	69.039	80.2689
4	7.51	Bromide	bMB	6.673	27.691	50.0270
5	8.86	Nitrate	BMB	7.989	24.887	10.0401
TOTAL:				66.60	331.71	240.17



Calibration Batch Report

Sequence:	ANIONS 081906	Inj. Vol.:	25.0
Program:	Anions_Program	Operator:	RDD-ACQU-WC-8
Ini. Date/Time:	08/09/06 14:00	Run Time:	12.00



Sequence:	ANIONS 081906	Inj. Vol.:	25.0
Program:	Anions_Program	Operator:	n.a.
Ini. Date/Time:	08/09/06 14:00	Run Time:	12.00

No.	Ret.Time min	Peak Name	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr.Coeff. %
1	2.96	Fluoride	0LOff	5	0.005	0.465	0.000	99.999
2	4.01	Chloride	0LOff	8	-0.061	0.290	0.000	99.991
3	4.72	Nitrite	0LOff	7	0.008	0.665	0.000	99.992
4	5.48	Sulfate	0LOff	8	-0.082	0.218	0.000	99.995
5	6.43	Bromide	0LOff	7	-0.026	0.125	0.000	99.954
6	7.35	Nitrate	0LOff	6	-0.041	0.713	0.000	99.978
AVERAGE:					-0.0329	0.4126	0.0000	99.9846

No.	Ret.Time min	Peak Name	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr.Coeff. %
1	3.10333333	Fluoride	0LOff	6	0.093186	0.391656	0	99.94412968
2	4.46333333	Chloride	0LOff	6	-0.018207	0.321157	0	99.99511351
3	6.82	Sulfate	0LOff	6	-0.038069	0.229755	0	99.99025413
4	7.51	Bromide	0LOff	7	0.032384	0.13275	0	99.99162058
5	8.86333333	Nitrate	0LOff	6	-0.028377	0.798573	0	99.98994259



Sequence: ANIONS 081806
Operator: RDDACQUWC8

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Printed: 8/20/2006 1:42:09 PM

Title: Anions Calibration 092205
Datasource: RDD-ACQU-WC-6_local
Location: ICS-2000\Anions\ANIONS 081806
Timebase: ICS-2000
#Samples: 60

Created: 8/17/2006 1:21:00 PM by RDDACQUWC8
Last Update: 8/20/2006 1:41:44 PM by RDDACQUWC8

No.	Name	Type	Pos.	Program	Method	Status	Inj. Date/Time
1	RINSE	Unknown	69	Anions_Program	Anions_Method	Finished	8/18/2006 12:10:54 PM
2	CS1	Standard	3	Anions_Program	Anions_Method	Finished	8/9/2006 12:32:44 PM
3	CS2	Standard	52	Anions_Program	Anions_Method	Finished	8/9/2006 12:47:21 PM
4	CS3	Standard	5	Anions_Program	Anions_Method	Finished	8/9/2006 1:01:57 PM
5	CS4	Standard	5	Anions_Program	Anions_Method	Finished	8/9/2006 1:16:34 PM
6	CS5	Standard	7	Anions_Program	Anions_Method	Finished	8/9/2006 1:31:10 PM
7	CS6	Standard	6	Anions_Program	Anions_Method	Finished	8/9/2006 1:45:46 PM
8	CS7	Standard	8	Anions_Program	Anions_Method	Finished	8/9/2006 2:00:22 PM
9	ICVS/LCS	Unknown	14	Anions_Program	Anions_Method	Finished	8/18/2006 12:25:31 PM
10	ICB	Unknown	14	Anions_Program	Anions_Method	Finished	8/18/2006 12:40:07 PM
11	MB	Unknown	14	Anions_Program	Anions_Method	Finished	8/18/2006 12:54:44 PM
12	LCSD	Unknown	15	Anions_Program	Anions_Method	Finished	8/18/2006 1:09:20 PM
13	RLS	Unknown	16	Anions_Program	Anions_Method	Finished	8/18/2006 1:23:56 PM
14	D0601127-001.01	Unknown	65	Anions_Program	Anions_Method	Finished	8/18/2006 1:38:32 PM
15	D0601127-002.01	Unknown	66	Anions_Program	Anions_Method	Finished	8/18/2006 1:53:09 PM
16	D0601136-002.01	Unknown	68	Anions_Program	Anions_Method	Finished	8/18/2006 2:07:45 PM
17	D0601136-003.01	Unknown	68	Anions_Program	Anions_Method	Finished	8/18/2006 2:22:22 PM
18	D0601136-004.01	Unknown	3	Anions_Program	Anions_Method	Finished	8/18/2006 2:36:59 PM
19	D0601132-001.01	Unknown	65	Anions_Program	Anions_Method	Finished	8/18/2006 2:51:34 PM
20	D0601132-002.01	Unknown	69	Anions_Program	Anions_Method	Finished	8/18/2006 3:06:11 PM
21	D0601132-003.01	Unknown	66	Anions_Program	Anions_Method	Finished	8/18/2006 3:20:47 PM
22	D0601132-004.01	Unknown	65	Anions_Program	Anions_Method	Finished	8/18/2006 3:35:23 PM
23	D0601132-005.01	Unknown	66	Anions_Program	Anions_Method	Finished	8/18/2006 3:50:00 PM
24	CCVS1	Unknown	68	Anions_Program	Anions_Method	Finished	8/18/2006 4:04:36 PM
25	CCB1	Unknown	3	Anions_Program	Anions_Method	Finished	8/18/2006 4:19:13 PM
26	D0601132-006.01	Unknown	65	Anions_Program	Anions_Method	Finished	8/18/2006 4:33:49 PM
27	D0601132-007.01	Unknown	69	Anions_Program	Anions_Method	Finished	8/18/2006 4:48:26 PM
28	D0601132-008.01	Unknown	66	Anions_Program	Anions_Method	Finished	8/18/2006 5:03:02 PM
29	D0601132-009.01	Unknown	65	Anions_Program	Anions_Method	Finished	8/18/2006 5:17:39 PM
30	D0601132-010.01	Unknown	66	Anions_Program	Anions_Method	Finished	8/18/2006 5:32:15 PM
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32	D0601132-010.01MSD	Unknown	69	Anions_Program	Anions_Method	Finished	8/18/2006 6:01:32 PM
33	D0601118-001.01	Unknown	66	Anions_Program	Anions_Method	Finished	8/18/2006 6:16:08 PM
34	D0601118-002.01	Unknown	65	Anions_Program	Anions_Method	Finished	8/18/2006 6:30:44 PM
35	D0601118-003.01	Unknown	66	Anions_Program	Anions_Method	Finished	8/18/2006 6:45:20 PM
36	LCSD1	Unknown	67	Anions_Program	Anions_Method	Finished	8/18/2006 6:59:56 PM
37	MB1	Unknown	67	Anions_Program	Anions_Method	Finished	8/18/2006 7:14:33 PM
38	CCVS2	Unknown	68	Anions_Program	Anions_Method	Finished	8/18/2006 7:29:09 PM
39	CCB2	Unknown	3	Anions_Program	Anions_Method	Finished	8/18/2006 7:43:46 PM
40	D0601118-004.01	Unknown	65	Anions_Program	Anions_Method	Finished	8/18/2006 7:58:22 PM
41	D0601118-005.01	Unknown	3	Anions_Program	Anions_Method	Finished	8/18/2006 8:12:59 PM
42	D0601118-006.01	Unknown	65	Anions_Program	Anions_Method	Finished	8/18/2006 8:27:35 PM

Sequence: ANIONS 081806
Operator: RDDACQUWC8

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Printed: 8/20/2006 1:42:09 PM

Title: Anions Calibration 092205

Datasource: RDD-ACQU-WC-6_local

Location: ICS-2000\Anions\ANIONS 081806

Timebase: ICS-2000

#Samples: 60

Created: 8/17/2006 1:21:00 PM by RDDACQUWC8

Last Update: 8/20/2006 1:41:44 PM by RDDACQUWC8

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21	20.0000
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36	1.0000
37	1.0000
38	1.0000
39	1.0000
40	10.0000
41	10.0000
42	20.0000

Sequence: ANIONS 082206
Operator: RDDACQUWC8

Page 1 of 2
Printed: 8/23/2006 10:39:12 AM

Title: Anions Calibration 092205
Datasource: RDD-ACQU-WC-6_local
Location: ICS-2000\Anions\ANIONS 082206
Timebase: ICS-2000
#Samples: 38

Created: 8/22/2006 5:54:35 PM by RDDACQUWC8
Last Update: 8/23/2006 9:37:23 AM by RDDACQUWC8

No.	Name	Type	Pos.	Program	Method	Status	Inj. Date/Time
1	RINSE	Unknown	69	Anions_Program	Anions_Method	Finished	8/22/2006 6:10:14 PM
2	CS1	Standard	3	Anions_Program	Anions_Method	Finished	8/22/2006 6:24:50 PM
3	CS2	Standard	52	Anions_Program	Anions_Method	Finished	8/22/2006 6:39:26 PM
4	CS3	Standard	5	Anions_Program	Anions_Method	Finished	8/22/2006 6:54:02 PM
5	CS4	Standard	5	Anions_Program	Anions_Method	Finished	8/22/2006 7:08:38 PM
6	CS5	Standard	7	Anions_Program	Anions_Method	Finished	8/22/2006 7:23:15 PM
7	CS6	Standard	6	Anions_Program	Anions_Method	Finished	8/22/2006 7:37:50 PM
8	CS7	Standard	8	Anions_Program	Anions_Method	Finished	8/22/2006 7:52:27 PM
9	ICVS/LCS	Unknown	14	Anions_Program	Anions_Method	Finished	8/22/2006 8:07:03 PM
10	ICB	Unknown	14	Anions_Program	Anions_Method	Finished	8/22/2006 8:21:40 PM
11	MB	Unknown	14	Anions_Program	Anions_Method	Finished	8/22/2006 8:36:16 PM
12	LCSD	Unknown	15	Anions_Program	Anions_Method	Finished	8/22/2006 8:50:53 PM
13	RLS	Unknown	3	Anions_Program	Anions_Method	Finished	8/22/2006 9:05:30 PM
14	D0600944-004.01	Unknown	65	Anions_Program	Anions_Method	Finished	8/22/2006 9:20:07 PM
15	D0600944-004.01	Unknown	65	Anions_Program	Anions_Method	Finished	8/22/2006 9:34:43 PM
16	D0600905-006.01	Unknown	68	Anions_Program	Anions_Method	Finished	8/22/2006 9:49:20 PM
17	D0600905-006.01	Unknown	68	Anions_Program	Anions_Method	Finished	8/22/2006 10:03:56 PM
18	D0601162-002.01	Unknown	3	Anions_Program	Anions_Method	Finished	8/22/2006 10:18:34 PM
19	D0601162-002.01MS	Unknown	67	Anions_Program	Anions_Method	Finished	8/22/2006 10:33:10 PM
20	D0601162-002.01MSD	Unknown	67	Anions_Program	Anions_Method	Finished	8/22/2006 10:47:46 PM
21	D0601162-003.01	Unknown	65	Anions_Program	Anions_Method	Finished	8/22/2006 11:02:27 PM
22	D0600942-001.01	Unknown	3	Anions_Program	Anions_Method	Finished	8/22/2006 11:17:03 PM
23	D0600942-002.01	Unknown	65	Anions_Program	Anions_Method	Finished	8/22/2006 11:31:40 PM
24	CCVS1	Unknown	67	Anions_Program	Anions_Method	Finished	8/22/2006 11:46:16 PM
25	CCB1	Unknown	67	Anions_Program	Anions_Method	Finished	8/23/2006 12:00:53 AM
26	D0600942-003.01	Unknown	65	Anions_Program	Anions_Method	Finished	8/23/2006 12:15:29 AM
27	D0600942-004.01	Unknown	66	Anions_Program	Anions_Method	Finished	8/23/2006 12:30:06 AM
28	D0600942-005.01	Unknown	65	Anions_Program	Anions_Method	Finished	8/23/2006 12:44:42 AM
29	D0600942-006.01	Unknown	66	Anions_Program	Anions_Method	Finished	8/23/2006 12:59:19 AM
30	D0600942-007.01	Unknown	67	Anions_Program	Anions_Method	Finished	8/23/2006 1:13:55 AM
31	D0600908-002.01	Unknown	67	Anions_Program	Anions_Method	Finished	8/23/2006 1:28:32 AM
32	D0601136-004.01	Unknown	68	Anions_Program	Anions_Method	Finished	8/23/2006 1:43:08 AM
33	LCSD1	Unknown	68	Anions_Program	Anions_Method	Finished	8/23/2006 1:57:45 AM
34	MB1	Unknown	67	Anions_Program	Anions_Method	Finished	8/23/2006 2:12:21 AM
35	CCVS2	Unknown	67	Anions_Program	Anions_Method	Finished	8/23/2006 2:26:57 AM
36	CCB2	Unknown	67	Anions_Program	Anions_Method	Finished	8/23/2006 2:41:33 AM
37	NO SAMPLE	Unknown	67	Anions_Program	Anions_Method	Finished	8/23/2006 2:56:09 AM
38	END	Unknown	14	Pump Shutdown	Anions_Method	Finished	8/23/2006 3:10:46 AM

Sequence: ANIONS 082206
Operator: RDDACQUWC8

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Printed: 8/23/2006 10:39:12 AM

Title: Anions Calibration 092205
Datasource: RDD-ACQU-WC-6_local
Location: ICS-2000\Anions\ANIONS 082206
Timebase: ICS-2000
#Samples: 38

Created: 8/22/2006 5:54:35 PM by RDDACQUWC8
Last Update: 8/23/2006 9:37:23 AM by RDDACQUWC8

No.	Dil. Factor
1	1.0000
2	1.0000
3	1.0000
4	1.0000
5	1.0000
6	1.0000
7	1.0000
8	1.0000
9	1.0000
10	1.0000
11	1.0000
12	1.0000
13	1.0000
14	1.0000
15	2.0000
16	1.0000
17	2.0000
18	10.0000
19	10.0000
20	10.0000
21	10.0000
22	10.0000
23	10.0000
24	1.0000
25	1.0000
26	10.0000
27	10.0000
28	10.0000
29	10.0000
30	10.0000
31	2.0000
32	50.0000
33	1.0000
34	1.0000
35	1.0000
36	1.0000
37	1.0000
38	1.0000

Title: Anions_Program

Datasource: RDD-ACQU-WC-6_local

Location: ICS-2000\Anions\ANIONS 082206\ANIONS 082206 Created: 8/18/2005 5:57:57 PM by RDDACQUWC6

Timebase: ICS-2000

Changed: 9/22/2005 11:59:56 AM by RDDACQUWC6

;Anions Program / EPA 300.0, 300.1 / Bob Coleman 8-18-2005

Pressure.LowerLimit = 200
Pressure.UpperLimit = 3000
%A.Equate = "Water"
CR_TC = On
LoadPosition
Data_Collection_Rate = 5.0
CellTemperature = 30.0
ColumnTemperature = 30.0
Suppressor_Type = ASRS_4mm
; Hydroxide = 30.0
; Recommended Current = 75
Suppressor_Current = 75
Concentration = 30.00
Curve = 5
Flow = 1.00

-2.500 Pump_ECD_Relay_1.Closed Duration=6

0.000 Pump_ECD.Autozero

ECD_1.AcqOn

Pump_InjectValve.InjectPosition Duration=600

5.000 Log Pump_ECD_Relay_1.State

Pump_ECD_Relay_1.Open ;make sure relay is open

12.000 ECD_1.AcqOff

End

Program File: Anions_Program
Operator: RDDACQUWC8

Post-acquisition steps, Page 1 of 1
Printed: 8/23/2006 10:39:14 AM

Title: Anions_Program
Datasource: RDD-ACQU-WC-6_local
Location: ICS-2000\Anions\ANIONS 082206\ANIONS 082206.SEQ
Timebase: ICS-2000

Created: 8/18/2005 5:57:57 PM by RDDACQUWC6
Changed: 9/22/2005 11:59:56 AM by RDDACQUWC6

No. Channel Operation Parameters

Program File: Pump Shutdown
Operator: RDDACQUWC8

Commands, Page 1 of 1
Printed: 8/23/2006 10:39:14 AM

Title: End of Run
Datasource: RDD-ACQU-WC-6_local
Location: ICS-2000\Anions\ANIONS 082206\ANIONS 082206 Created: 6/21/2005 11:20:54 AM by reddingadmin
Timebase: ICS-2000 Changed: 7/7/2005 3:33:24 PM by reddingadmin

;End program for shutting down the ICS-2000 pumps / BLC, 6-22-2005

Pressure.LowerLimit = 200
Pressure.UpperLimit = 3000
%A.Equate = "Water"
CR_TC = On
LoadPosition
Data_Collection_Rate = 5.0
CellTemperature = 30.0
ColumnTemperature = 30.0
Suppressor_Type = ASRS_4mm
; Carbonate = 0.0
; Bicarbonate = 0.0
; Hydroxide = 65.0
; Tetraborate = 0.0
; Other eluent = 0.0
; Recommended Current = 193
Suppressor_Current = 200
ECD_Total.Step = 0.50
ECD_Total.Average = Off
Channel_Pressure.Step = 0.50
Channel_Pressure.Average = Off
Concentration = 65.00
Curve = 5
Flow = 1.20

-0.100 Pump_ECD_Relay_1.Closed Duration=1

0.000 Pump_ECD.Autozero
ECD_1.AcqOn
ECD_Total.AcqOn
Channel_Pressure.AcqOn
Pump_InjectValve.InjectPosition Duration=0.1
Pump_ECD_Relay_1.Open ;make sure relay is open
0.1000 ECD_1.AcqOff
ECD_Total.AcqOff
Channel_Pressure.AcqOff
Suppressor_Current = 0
Off
End

Program File: Pump Shutdown
Operator: RDDACQUWC8

Post-acquisition steps, Page 1 of 1
Printed: 8/23/2006 10:39:15 AM

Title: End of Run
Datasource: RDD-ACQU-WC-6_local
Location: ICS-2000\Anions\ANIONS 082206\ANIONS 082206.SEQ
Timebase: ICS-2000

Created: 6/21/2005 11:20:54 AM by reddingadmin
Changed: 7/7/2005 3:33:24 PM by reddingadmin

No. Channel Operation Parameters

Method File: Anions_Method
Operator: RDDACQUWC8

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Printed: 8/23/2006 10:39:17 AM

Title: Anions AS18 / EPA 300.0, 300.1 Method

Datasource: RDD-ACQU-WC-6_local

Created: 8/9/2005 4:4-5:31 PM by RDDACQUWC6

Location: ICS-2000\Anions\ANIONS 082206\ANIONS 082206.SEQ

Last Update:

8/23/2006 9: 56:20 AM by RDDACQUWC8

Blank Run Subtraction: No Blank Run Subtraction

Detection Table:

No.	Ret. Time [min]	Param. Name	Param. Value	Channel
1	0.000	Minimum Area	0.025 "[Signal]*min"	All Channels
2	0.000	Inhibit Integration	On	All Channels
3	1.000	Void Volume Treatment	On	All Channels
4	2.800	Inhibit Integration	Off	All Channels
5	2.800	Void Volume Treatment	Off	All Channels
6	3.000	Inhibit Integration	Off	All Channels
7	3.000	Inhibit Integration	Off	All Channels

Method File: Anions_Method
Operator: RDDACQUWC8

Page 2 of 9
Printed: 8/23/2006 10:39:17 AM

Title: Anions AS18 / EPA 300.0, 300.1 Method

Datasource: RDD-ACQU-WC-6_local

Location: ICS-2000\Anions\ANIONS 082206\ANIONS 082206.SEQ

Created: 8/9/2005 4:45:31 PM by RDDACQUWC6

Last Update: 8/23/2006 9:56:20 AM by RDDACQUWC8

Peak Table:

Use Recently Detected Ret. Times: Average of last 4 standards

Dead time:

Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Window	Standard	Int.Type	Cal.Type	Peak Type	Group	Resp.Fact.	Comment
1	Fluoride	3.147 min	5.000 RG	External	Area	0LOff	B-M-B		1.000000	Autogenerated
2	Chloride	4.600 min	5.000 RG	External	Area	0LOff	B-M-B		1.000000	Autogenerated
3	Sulfate	7.083 min	5.000 RG	External	Area	0LOff	B-M-B		1.000000	Autogenerated
4	Bromide	7.953 min	5.000 RG	External	Area	0LOff	B-M-B		1.000000	Autogenerated
5	Nitrate	9.517 min	5.000 RG	External	Area	0LOff	B-M-B		1.000000	Autogenerated

Method File: Anions_Method
Operator: RDDACQUWC8

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Printed: 8/23/2006 10:39:17 AM

Title: Anions AS18 / EPA 300.0, 300.1 Method

Datasource: RDD-ACQU-WC-6_local

Location: ICS-2000\Anions\ANIONS 082206\ANIONS 082206.SEQ

Created: 8/9/2005 4:45:31 PM by RDDACQUWC6

Last Update: 8/23/2006 9:56:20 AM by RDDACQUWC8

Peak Table:

Use Recently Detected Ret. Times: Average of last 4 standards

Dead time:

Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Amount CS1	Amount CS2	Amount CS3	Amount CS4	Amount CS5	Amount CS6	Amount CS7	Amount CS8	Amount CS9
1	Fluoride	3.147 min	0.000000	0.200000	1.000000	2.000000	6.000000	10.000000	20.000000		
2	Chloride	4.600 min	0.000000	0.800000	4.000000	8.000000	24.000000	40.000000	80.000000		
3	Sulfate	7.083 min	0.000000	0.800000	4.000000	8.000000	24.000000	40.000000	80.000000		
4	Bromide	7.953 min	0.000000	0.500000	2.500000	5.000000	15.000000	25.000000	50.000000		
5	Nitrate	9.517 min	0.000000	0.100000	0.500000	1.000000	3.000000	5.000000	10.000000		

Method File: Anions_Method
Operator: RDDACQUWC8

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Printed: 8/23/2006 10:39:17 AM

Title: Anions AS18 / EPA 300.0, 300.1 Method

Datasource: RDD-ACQU-WC-6_local

Created: 8/9/2005 4:45:31 PM by RDDACQUWC6

Location: ICS-2000\Anions\ANIONS 082206\ANIONS 082206.SEQ

Last Update: 8/23/2006 9:56:20 AM by RDDACQUWC8

Amount Table:

Dimension of Amounts: mg/L

Reference Volume for Amounts: Use inject volume of first standard

No.	Peak Name	Ret.Time	Window	Standard	Int.Type	Cal.Type	Peak Type	Left Limit	Right Limit	Group
1	Fluoride	3.147 min	5.000 RG	External	Area	0LOff	B-M-B	0.000	0.000	
2	<i>Chloride</i>	<i>4.600 min</i>	<i>5.000 RG</i>	<i>External</i>	<i>Area</i>	<i>0LOff</i>	<i>B-M-B</i>	<i>0.000</i>	<i>0.000</i>	
3	Sulfate	7.083 min	5.000 RG	External	Area	0LOff	B-M-B	0.000	0.000	
4	Bromide	7.953 min	5.000 RG	External	Area	0LOff	B-M-B	0.000	0.000	
5	Nitrate	9.517 min	5.000 RG	External	Area	0LOff	B-M-B	0.000	0.000	

Method File: Anions_Method
Operator: RDDACQUWC8

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Printed: 8/23/2006 10:39:17 AM

Title: Anions AS18 / EPA 300.0, 300.1 Method

Datasource: RDD-ACQU-WC-6_local

Created: 8/9/2005 4:4 5:31 PM by RDDACQUWC6

Location: ICS-2000\Anions\ANIONS 082206\ANIONS 082206.SEQ

Last Update: 8/23/2006 9: 56:20 AM by RDDACQUWC8

Amount Table:

Dimension of Amounts: mg/L

Reference Volume for Amounts: Use inject volume of first standard

No.	Peak Name	Ret.Time	Resp.Fact.	Comment
1	Fluoride	3.147 min	1.000000	Autogenerated
2	<u>Chloride</u>	<u>4.600 min</u>	<u>1.000000</u>	<u>Autogenerated</u>
3	Sulfate	7.083 min	1.000000	Autogenerated
4	Bromide	7.953 min	1.000000	Autogenerated
5	Nitrate	9.517 min	1.000000	Autogenerated

Method File: Anions_Method
Operator: RDDACQUWC8

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Printed: 8/23/2006 10:39:17 AM

Title: Anions AS18 / EPA 300.0, 300.1 Method

Datasource: RDD-ACQU-WC-6_local

Location: ICS-2000\Anions\ANIONS 082206\ANIONS 082206.SEQ

Created: 8/9/2005 4:45:31 PM by RDDACQUWC6

Last Update: 8/23/2006 9:56:20 AM by RDDACQUWC8

Calibration:

Calibration Mode: Total

Auto Recalibrate: On

No.	Enabled	Name	Smp.No.	Pos.	Inj. Vol.	Weight	ISTD Amount	Dil. Factor	Inj. Date/Time	Sample Comment
1	☒	 CS1	2	3	25.0	1.0000	1.0000	1.0000	8/22/2006 6:24:	
2	☒	 CS2	3	52	25.0	1.0000	1.0000	1.0000	8/22/2006 6:39:	
3	☒	 CS3	4	5	25.0	1.0000	1.0000	1.0000	8/22/2006 6:54:	
4	☒	 CS4	5	5	25.0	1.0000	1.0000	1.0000	8/22/2006 7:08:	
5	☒	 CS5	6	7	25.0	1.0000	1.0000	1.0000	8/22/2006 7:23:	
6	☒	 CS6	7	6	25.0	1.0000	1.0000	1.0000	8/22/2006 7:37:	
7	☒	 CS7	8	8	25.0	1.0000	1.0000	1.0000	8/22/2006 7:52:	

Method File: Anions_Method
Operator: RDDACQUWC8

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Printed: 8/23/2006 10:39:17 AM

Title: Anions AS18 / EPA 300.0, 300.1 Method

Datasource: RDD-ACQU-WC-6_local

Created: 8/9/2005 4:45:31 PM by RDDACQUWC6

Location: ICS-2000\Anions\ANIONS 082206\ANIONS 082206.SEQ

Last Update:

8/23/2006 9:56:20 AM by RDDACQUWC8

Calibration:

Calibration Mode: Total

Auto Recalibrate: On

No.	Enabled	Name	Calib.	Comment
1	☒	 CS1	Ok	
2	☒	 CS2	Ok	
3	☒	 CS3	Ok	
4	☒	 CS4	Ok	
5	☒	 CS5	Ok	
6	☒	 CS6	Ok	
7	☒	 CS7	Ok	

Method File: Anions_Method
Operator: RDDACQUWC8

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Printed: 8/23/2006 10:39:17 AM

Title: Anions AS18 / EPA 300.0, 300.1 Method

Datasource: RDD-ACQU-WC-6_local

Location: ICS-2000\Anions\ANIONS 082206\ANIONS 082206.SEQ

Created: 8/9/2005 4:45:31 PM by RDDACQUWC6

Last Update: 8/23/2006 9:56:20 AM by RDDACQUWC8

System Suitability Test:

No.	Name	Sample Condition	Test Condition	Aggregate	Operator	Value	Channel	Peak	N.A.
1									

Method File: Anions_Method
Operator: RDDACQUWC8

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Printed: 8/23/2006 10:39:17 AM

Title: Anions AS18 / EPA 300.0, 300.1 Method

Datasource: RDD-ACQU-WC-6_local

Location: ICS-2000\Anions\ANIONS 082206\ANIONS 082206.SEQ

Created: 8/9/2005 4:45:31 PM by RDDACQUWC6

Last Update: 8/23/2006 9:56:20 AM by RDDACQUWC8

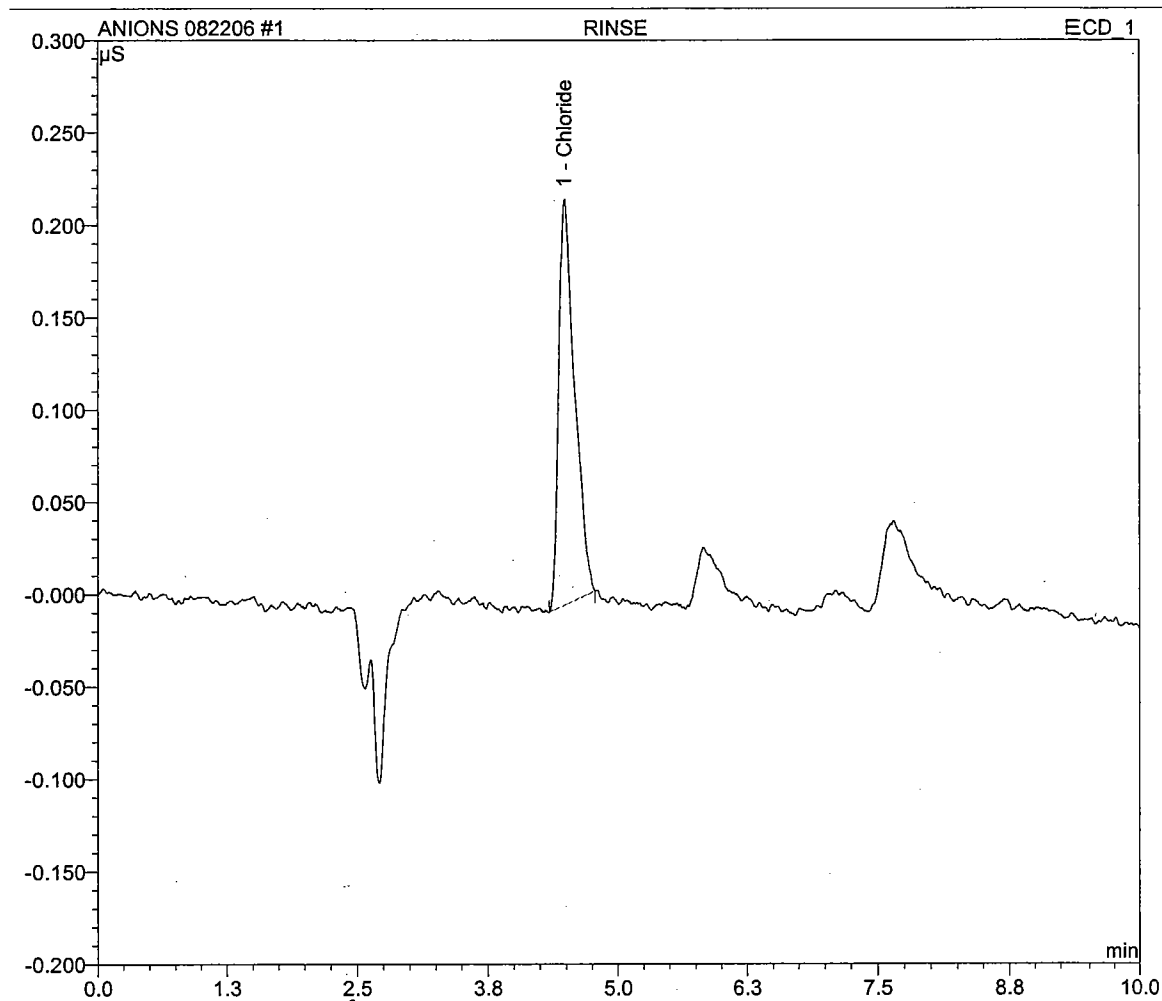
System Suitability Test:

No.	Name	Fail-Action	Result	SST Message
-----	------	-------------	--------	-------------

1				
---	--	--	--	--

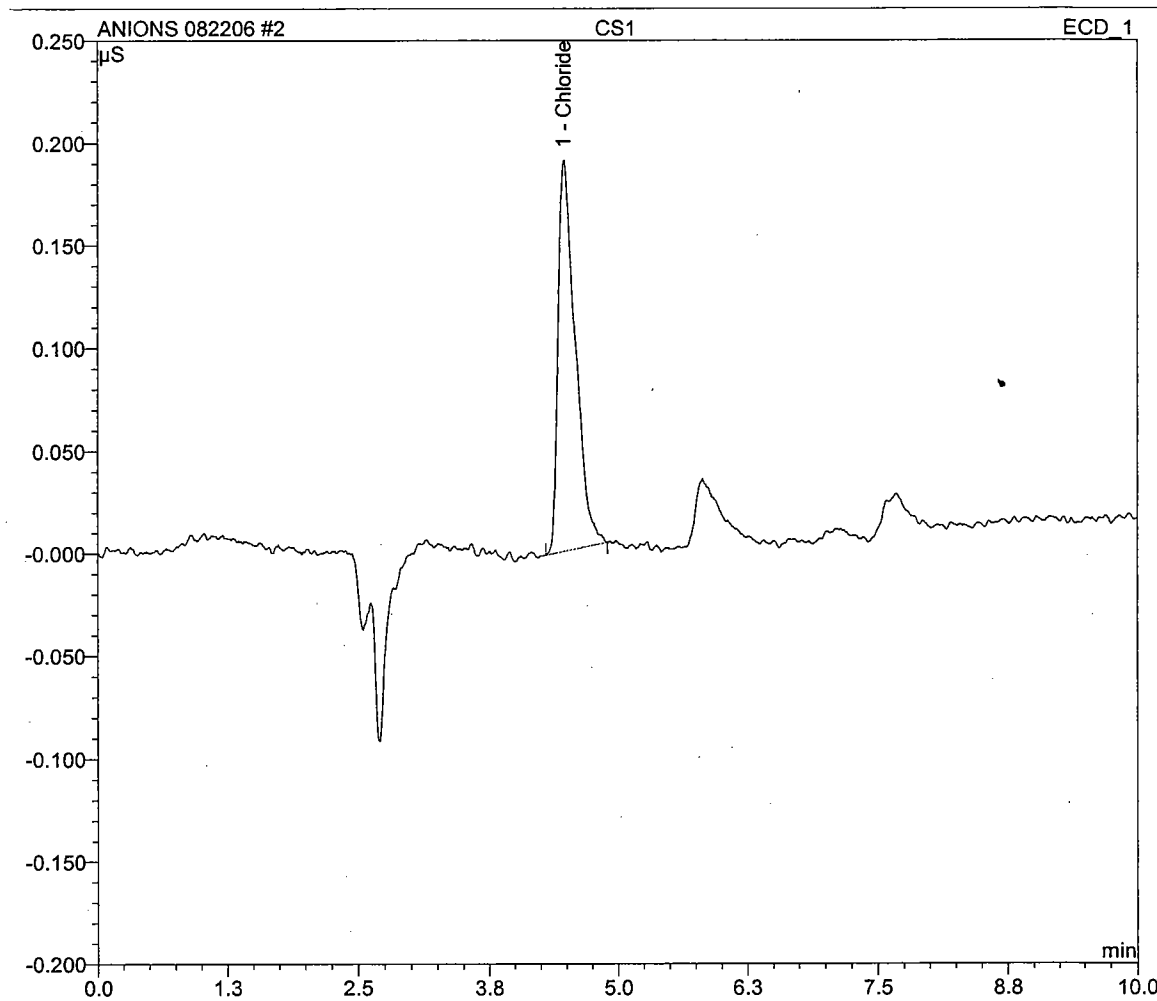
Sample Name:	RINSE	Inj. Vol.:	25.0
Sample Type:	unknown	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	22.08.06 18:10	Run Time:	12.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	4.49	Chloride	BMB	0.039	0.220	0.0695
TOTAL:				0.04	0.22	0.07



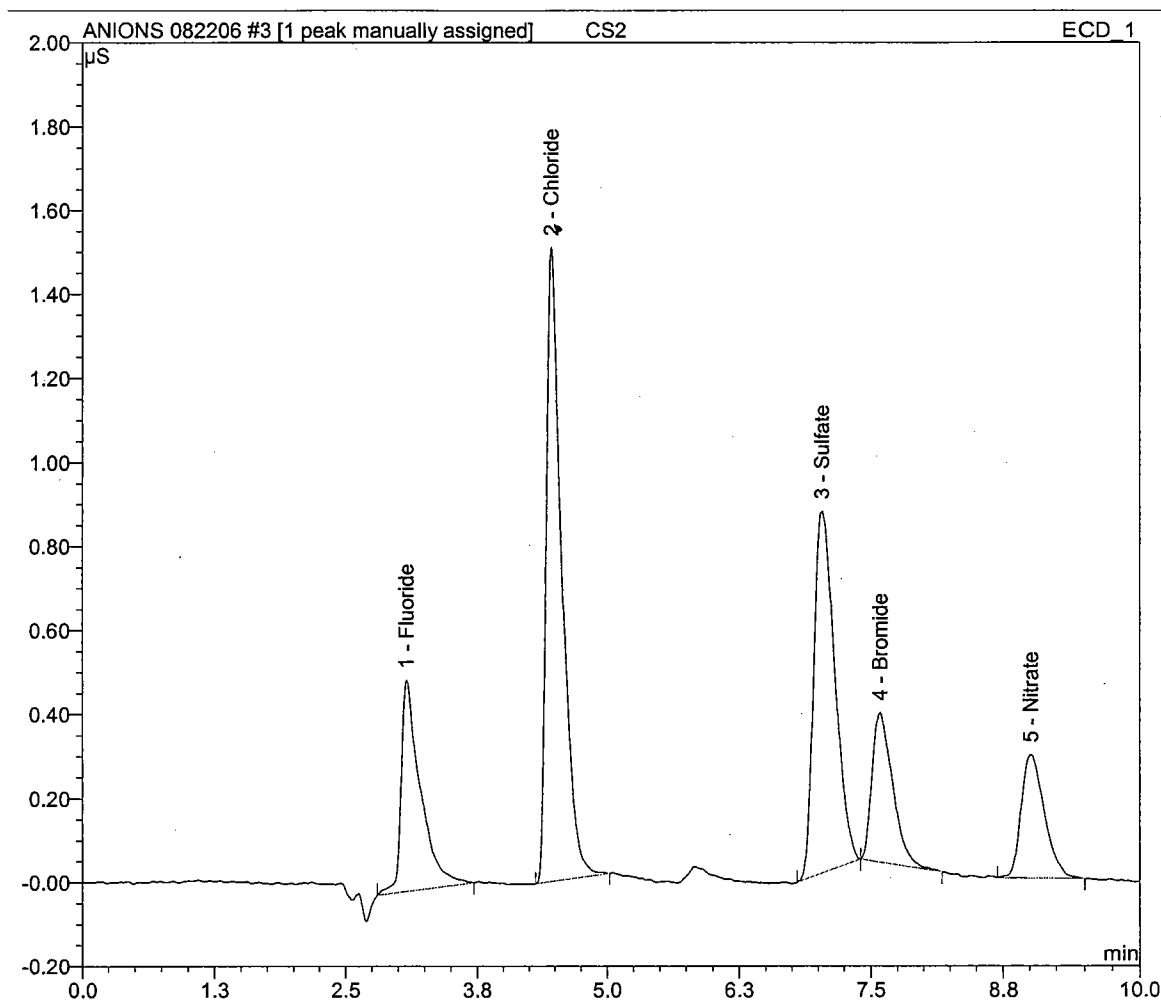
Sample Name:	CS1	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	22.08.06 18:24	Run Time:	12:00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	4.48	Chloride	BMB	0.037	0.191	0.0622
TOTAL:				0.04	0.19	0.06



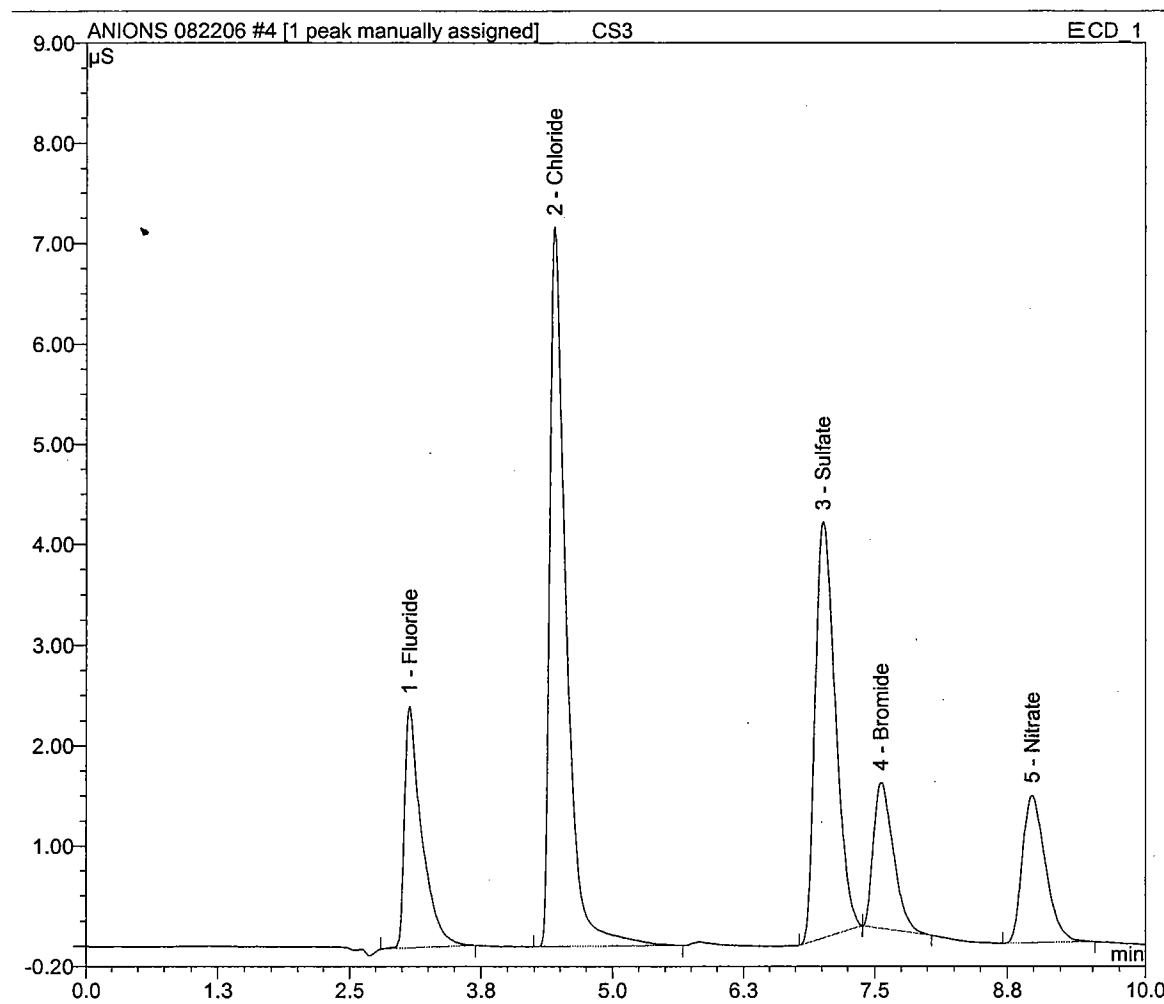
Sample Name:	CS2	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	22.08.06 18:39	Run Time:	12.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	3.08	Fluoride	BMB	0.107	0.502	0.0765
2	4.47	Chloride	BMB	0.263	1.509	0.7664
3	7.04	Sulfate	BMB	0.204	0.861	0.7609
4	7.59	Bromide	BMB	0.081	0.357	0.4814
5	9.01	Nitrate	BMB^	0.076	0.294	0.1125
TOTAL:				0.73	3.52	2.20



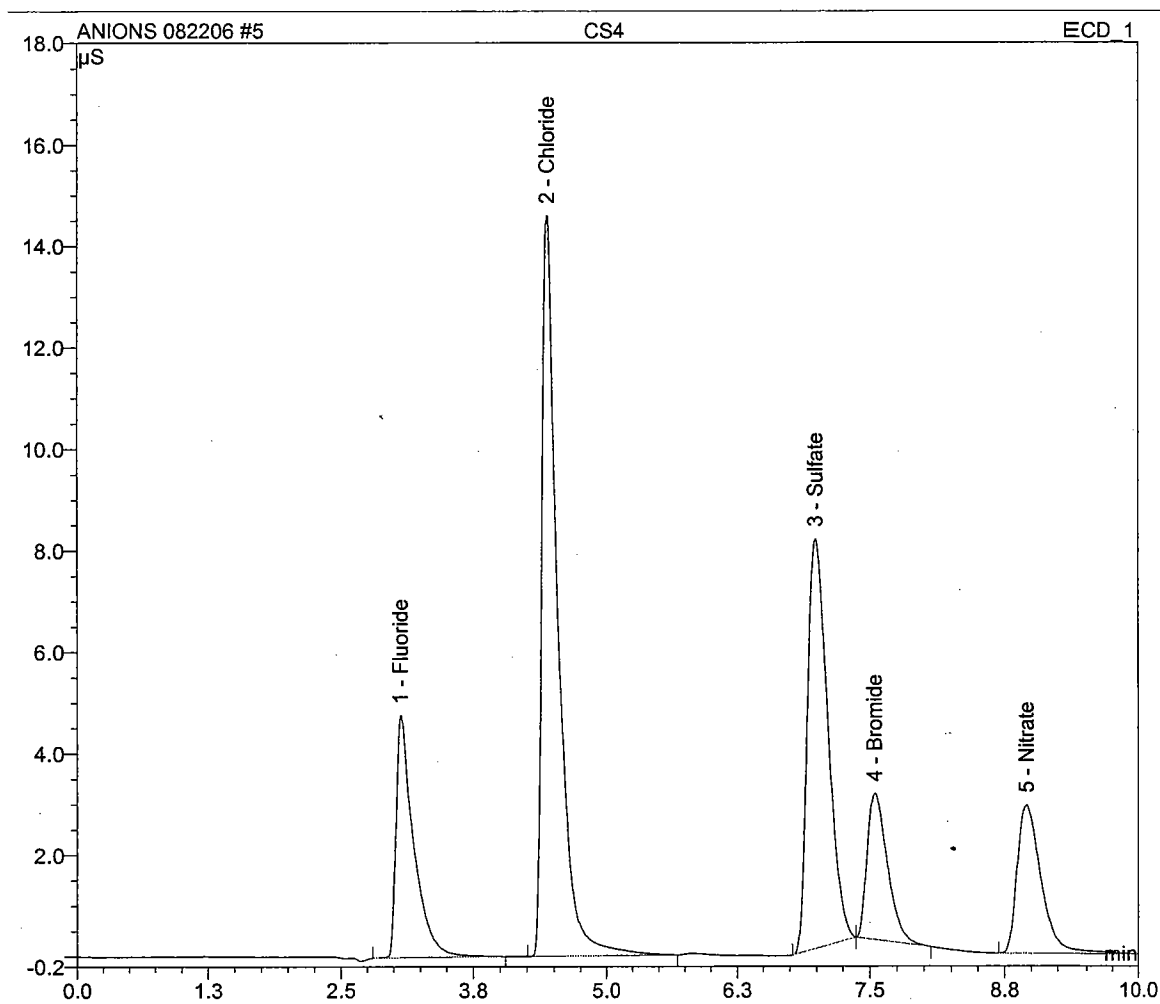
Sample Name:	CS3	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	22.08.06 18:54	Run Time:	12.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	3.07	Fluoride	BMB	0.457	2.409	0.9352
2	4.45	Chloride	BMB	1.286	7.165	3.9443
3	7.01	Sulfate	BMB	0.931	4.138	4.1043
4	7.56	Bromide	bMB	0.320	1.457	2.4602
5	8.99	Nitrate	BMB^	0.372	1.472	0.4833
TOTAL:				3.37	16.64	11.93



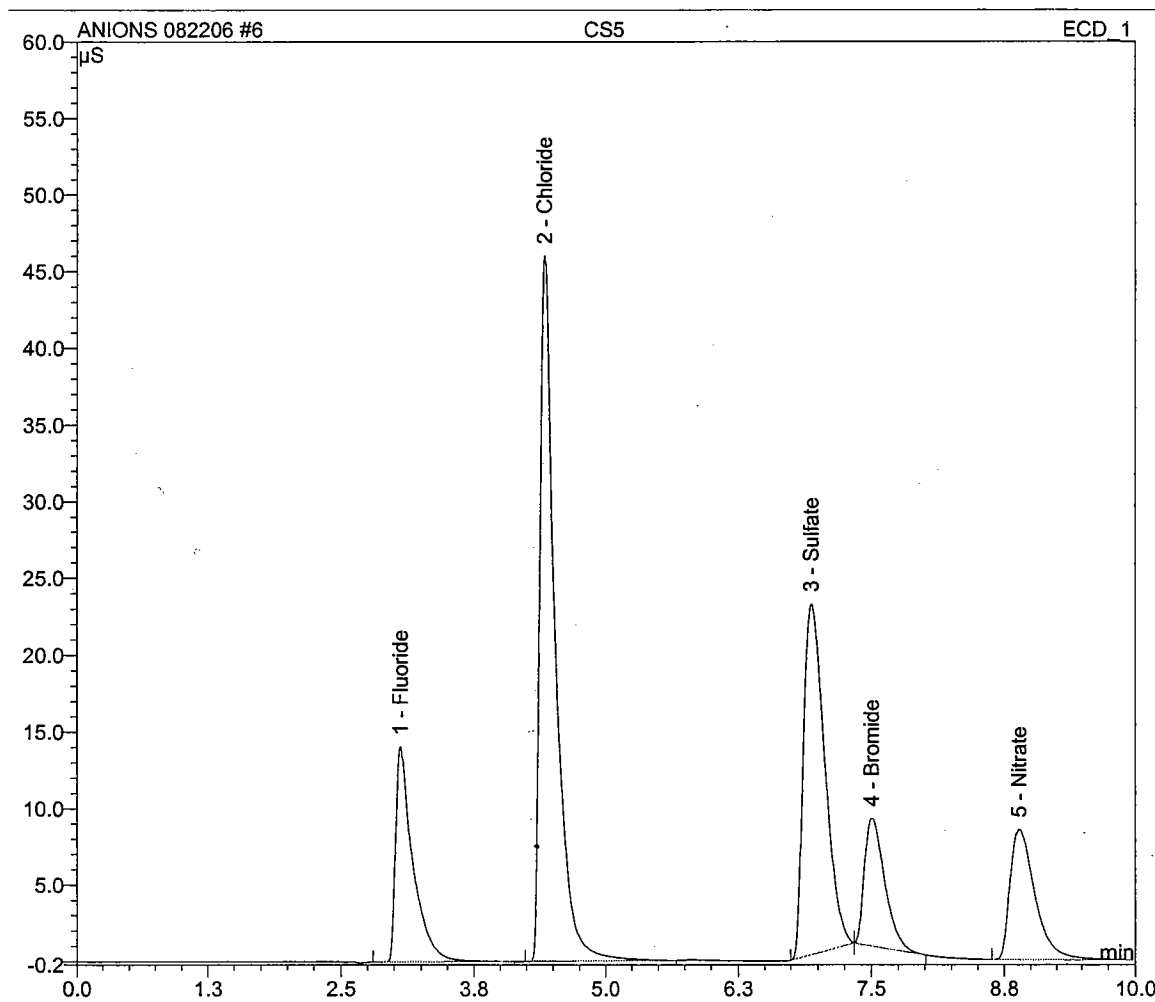
Sample Name:	CS4	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	22.08.06 19:08	Run Time:	12.00

No.	Time min	Peak Name	Type	Area $\mu\text{S} \cdot \text{min}$	Height μS	Amount mg/L
1	3.07	Fluoride	BMB	0.921	4.776	2.0756
2	4.44	Chloride	BMB	2.556	14.599	7.8912
3	7.00	Sulfate	BMB	1.793	8.069	8.0690
4	7.55	Bromide	bMB	0.631	2.886	5.0317
5	8.96	Nitrate	BMB	0.776	2.931	0.9884
TOTAL:				6.68	33.26	24.06



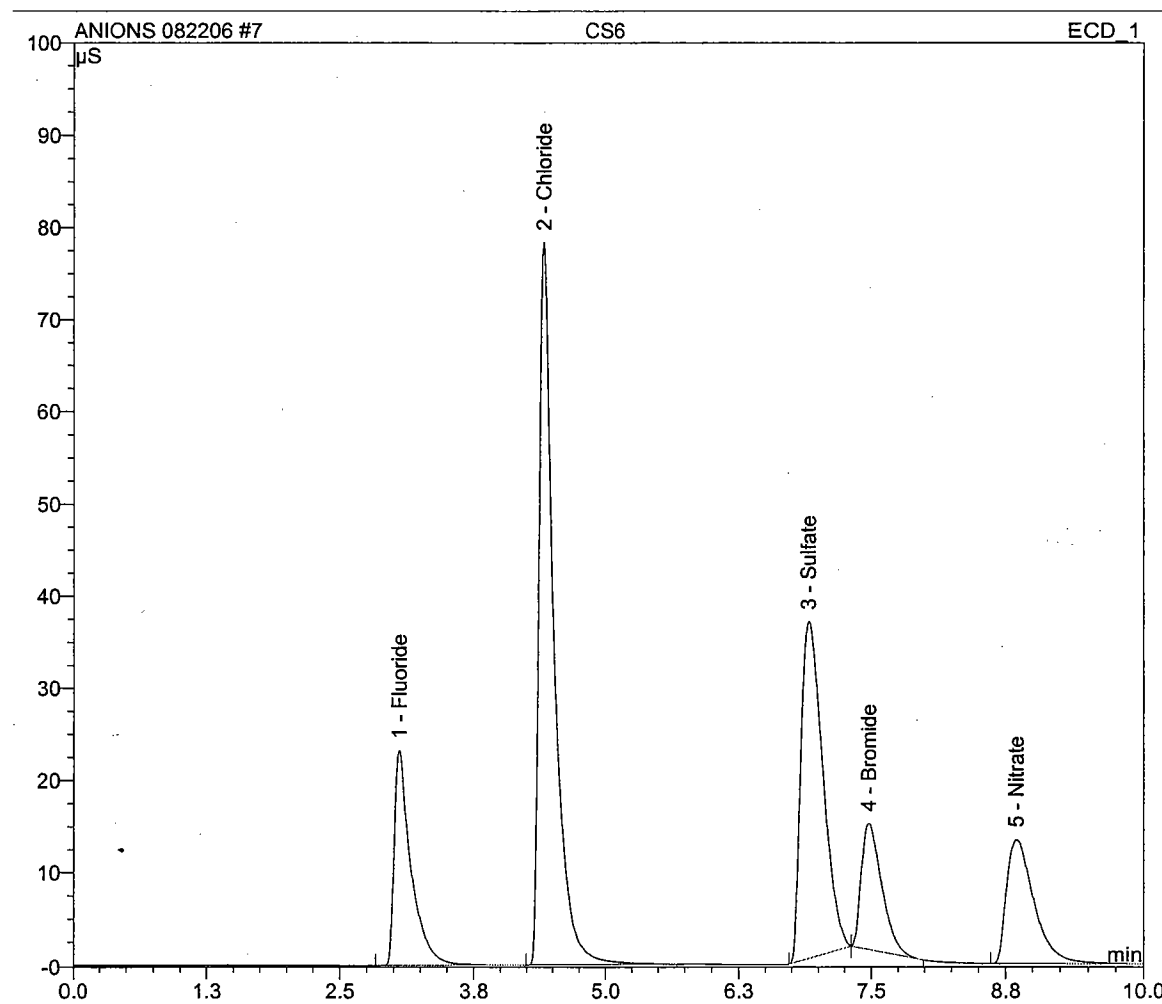
Sample Name:	CS5	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	22.08.06 19:23	Run Time:	12.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	3.06	Fluoride	BMB	2.625	14.044	6.2583
2	4.43	Chloride	BMB	7.778	45.987	24.1216
3	6.94	Sulfate	BMB	5.246	22.874	23.9404
4	7.51	Bromide	bMB	1.850	8.360	15.1069
5	8.89	Nitrate	BMB	2.383	8.498	2.9965
TOTAL:				19.88	99.76	72.42



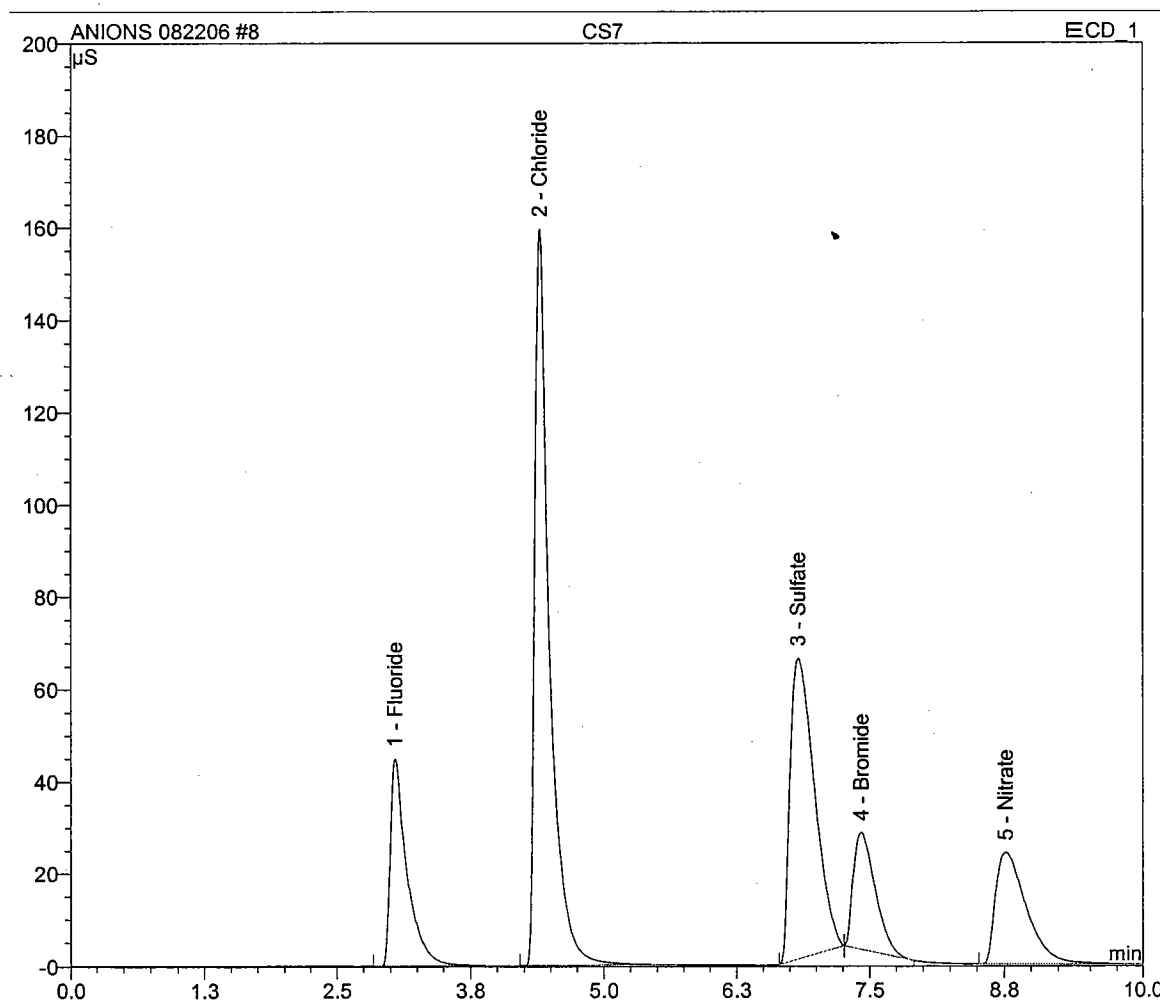
Sample Name:	CS6	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	22.08.06 19:37	Run Time:	12.00

No.	Time min	Peak Name	Type	Area $\mu\text{S} \cdot \text{min}$	Height μS	Amount mg/L
1	3.05	Fluoride	BMB	4.248	23.250	10.2443
2	4.42	Chloride	BMB	12.945	78.367	40.1785
3	6.91	Sulfate	BMB	8.781	36.503	40.1882
4	7.48	Bromide	bMB	3.080	13.678	25.2792
5	8.85	Nitrate	BMB	3.984	13.461	4.9970
TOTAL:				33.04	165.26	120.89



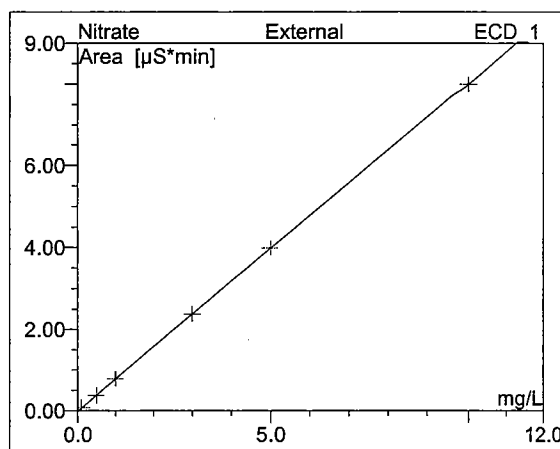
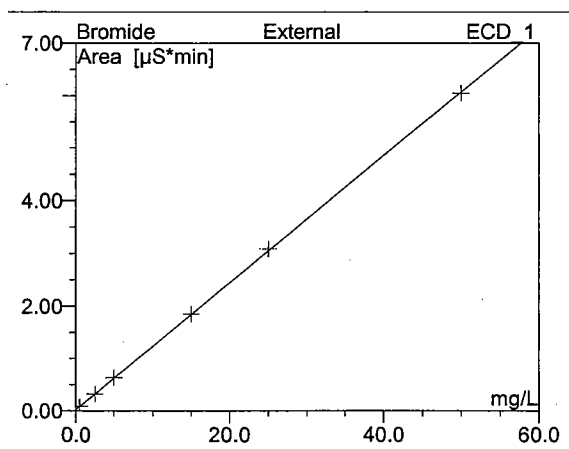
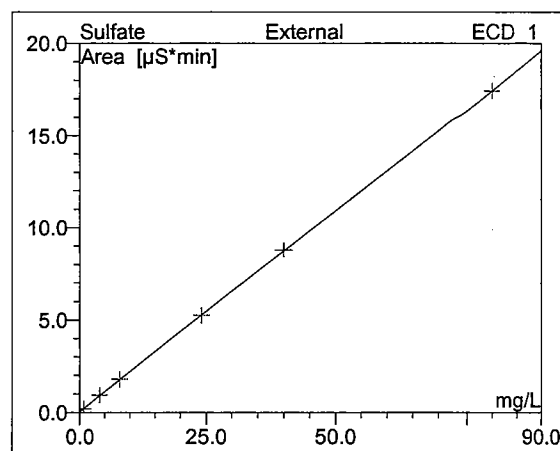
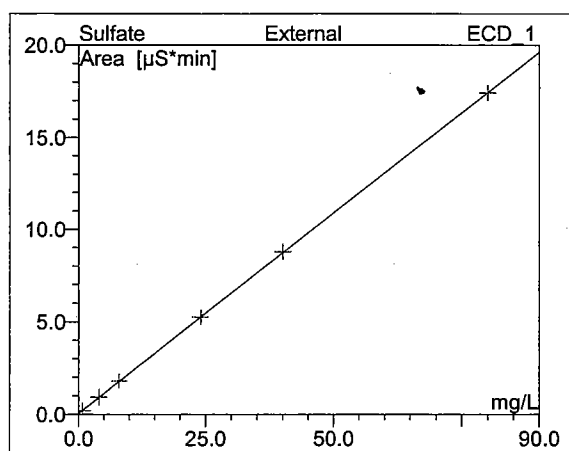
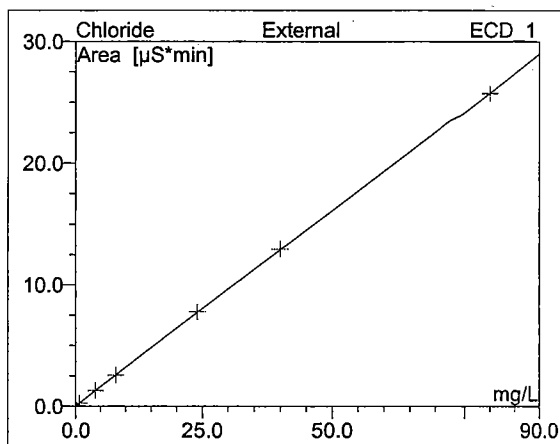
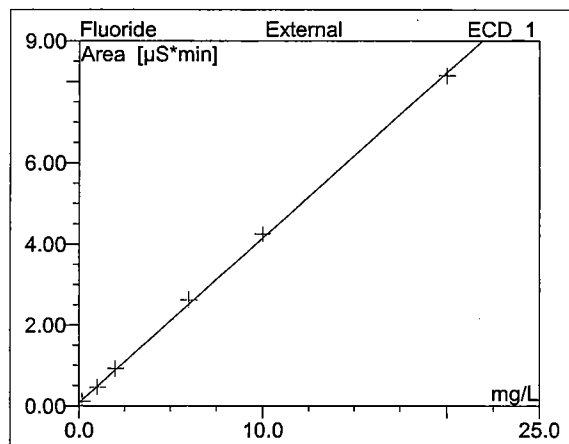
Sample Name:	CS7	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	22.08.06 19:52	Run Time:	12.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	3.05	Fluoride	BMB	8.138	45.004	19.7973
2	4.40	Chloride	BMB	25.721	159.684	79.8882
3	6.83	Sulfate	BMB	17.423	65.259	79.9120
4	7.42	Bromide	bMB	6.049	25.468	49.8274
5	8.76	Nitrate	BMB	7.991	24.295	10.0044
TOTAL:				65.32	319.71	239.43



Calibration Batch Report

Sequence:	ANIONS 082206	Inj. Vol.:	25.0
Program:	Anions_Program	Operator:	RDD-ACQU-WC-8
Ini. Date/Time:	08/22/06 19:52	Run Time:	12.00



Sequence:	ANIONS 082206	Inj. Vol.:	25.0
Program:	Anions_Program	Operator:	n.a.
Ini. Date/Time:	08/22/06 19:52	Run Time:	12.00

No.	Ret.Time min	Peak Name	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr.Coeff. %
1	2.96	Fluoride	0LOff	5	0.005	0.465	0.000	99.999
2	4.01	Chloride	0LOff	8	-0.061	0.290	0.000	99.991
3	4.72	Nitrite	0LOff	7	0.008	0.665	0.000	99.992
4	5.48	Sulfate	0LOff	8	-0.082	0.218	0.000	99.995
5	6.43	Bromide	0LOff	7	-0.026	0.125	0.000	99.954
6	7.35	Nitrate	0LOff	6	-0.041	0.713	0.000	99.978
AVERAGE:					-0.0329	0.4126	0.0000	99.9846

No.	Ret.Time min	Peak Name	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr.Coeff. %
1	3.046666667	Fluoride	0LOff	6	0.076203	0.407207	0	99.96787649
2	4.4	Chloride	0LOff	7	0.016883	0.321757	0	99.99923745
3	6.833333333	Sulfate	0LOff	6	0.038047	0.217547	0	99.99940419
4	7.423333333	Bromide	0LOff	6	0.022579	0.120941	0	99.99687072
5	8.763333333	Nitrate	0LOff	6	-0.01438	0.800145	0	99.99964279



Sequence: ANIONS 090206
Operator: RDDACQUWC8

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Printed: 9/5/2006 9:51:10 AM

Title: Anions Calibration 092205
Datasource: RDD-ACQU-WC-6_local
Location: ICS-2000\Anions\September 2006\ANIONS 090206
Timebase: ICS-2000
#Samples: 49

Created: 9/2/2006 3:21:10 PM by RDDACQUWC8
Last Update: 9/5/2006 9:48:36 AM by RDDACQUWC8

No.	Name	Type	Pos.	Program	Method	Status	Inj. Date/Time
1	RINSE	Unknown	75	Anions_Program	Anions_Method	Finished	9/2/2006 3:26:39 PM
2	CCVS_test	Unknown	74	Anions_Program	Anions_Method	Finished	9/2/2006 3:41:15 PM
3	CCVS_test	Unknown	75	Anions_Program	Anions_Method	Finished	9/2/2006 4:09:22 PM
4	CCVS_test	Unknown	75	Anions_Program	Anions_Method	Finished	9/2/2006 4:36:43 PM
5	CCVS_test	Unknown	76	Anions_Program	Anions_Method	Finished	9/2/2006 4:58:07 PM
6	CCB	Unknown	73	Anions_Program	Anions_Method	Finished	9/2/2006 5:13:43 PM
7	CS1	Standard	3	Anions_Program	Anions_Method	Finished	9/2/2006 5:29:19 PM
8	CS2	Standard	52	Anions_Program	Anions_Method	Finished	9/2/2006 5:44:56 PM
9	CS3	Standard	5	Anions_Program	Anions_Method	Finished	9/2/2006 6:00:32 PM
10	CS4	Standard	5	Anions_Program	Anions_Method	Finished	9/2/2006 6:16:08 PM
11	CS5	Standard	7	Anions_Program	Anions_Method	Finished	9/2/2006 6:33:23 PM
12	CS6	Standard	8	Anions_Program	Anions_Method	Finished	9/2/2006 6:48:59 PM
13	CS7	Standard	9	Anions_Program	Anions_Method	Finished	9/2/2006 7:04:36 PM
14	CS8	Standard	14	Anions_Program	Anions_Method	Finished	9/2/2006 7:20:12 PM
15	Rinse	Unknown	15	Anions_Program	Anions_Method	Finished	9/2/2006 7:35:48 PM
16	ICVS/LCS	Unknown	16	Anions_Program	Anions_Method	Finished	9/2/2006 7:51:25 PM
17	ICB	Unknown	14	Anions_Program	Anions_Method	Finished	9/2/2006 8:07:01 PM
18	MB	Unknown	14	Anions_Program	Anions_Method	Finished	9/2/2006 8:22:38 PM
19	LCSD	Unknown	15	Anions_Program	Anions_Method	Finished	9/2/2006 8:38:15 PM
20	RLS/MDL 1	Unknown	3	Anions_Program	Anions_Method	Finished	9/2/2006 8:53:51 PM
21	MDL2	Unknown	4	Anions_Program	Anions_Method	Finished	9/2/2006 9:09:28 PM
22	MDL3	Unknown	4	Anions_Program	Anions_Method	Finished	9/2/2006 9:25:04 PM
23	D0601053-001	Unknown	4	Anions_Program	Anions_Method	Finished	9/2/2006 9:40:40 PM
24	D0601115-001	Unknown	5	Anions_Program	Anions_Method	Finished	9/2/2006 9:56:17 PM
25	D0601150-001	Unknown	5	Anions_Program	Anions_Method	Finished	9/2/2006 10:11:54 PM
26	D0601136-002	Unknown	5	Anions_Program	Anions_Method	Finished	9/2/2006 10:27:30 PM
27	D0601136-003	Unknown	5	Anions_Program	Anions_Method	Finished	9/2/2006 10:43:06 PM
28	D0601137-001	Unknown	5	Anions_Program	Anions_Method	Finished	9/2/2006 10:58:43 PM
29	D0601137-002	Unknown	5	Anions_Program	Anions_Method	Finished	9/2/2006 11:14:20 PM
30	CCVS	Unknown	74	Anions_Program	Anions_Method	Finished	9/2/2006 11:29:56 PM
31	CCB	Unknown	73	Anions_Program	Anions_Method	Finished	9/2/2006 11:45:32 PM
32	MDL4	Unknown	3	Anions_Program	Anions_Method	Finished	9/3/2006 12:01:09 AM
33	D0601137-003	Unknown	5	Anions_Program	Anions_Method	Finished	9/3/2006 12:16:45 AM
34	D0601137-004	Unknown	5	Anions_Program	Anions_Method	Finished	9/3/2006 12:32:21 AM
35	D0601137-005	Unknown	5	Anions_Program	Anions_Method	Finished	9/3/2006 12:47:58 AM
36	D0601137-006	Unknown	5	Anions_Program	Anions_Method	Finished	9/3/2006 1:03:34 AM
37	D0601137-007	Unknown	5	Anions_Program	Anions_Method	Finished	9/3/2006 1:19:11 AM
38	D0601137-008	Unknown	5	Anions_Program	Anions_Method	Finished	9/3/2006 1:34:47 AM
39	D0601137-008 MS	Unknown	5	Anions_Program	Anions_Method	Finished	9/3/2006 1:50:24 AM
40	D0601137-008 MSD	Unknown	5	Anions_Program	Anions_Method	Finished	9/3/2006 2:06:00 AM
41	D0601137-009	Unknown	5	Anions_Program	Anions_Method	Finished	9/3/2006 2:21:36 AM
42	RINSE	Unknown	74	Anions_Program	Anions_Method	Finished	9/3/2006 2:37:13 AM

Sequence: ANIONS 090206
Operator: RDDACQUWC8

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Printed: 9/5/2006 9:51:10 AM

Title: Anions Calibration 092205
Datasource: RDD-ACQU-WC-6_local
Location: ICS-2000\Anions\September 2006\ANIONS 090206
Timebase: ICS-2000
#Samples: 49

Created: 9/2/2006 3:21:10 PM by RDDACQUWC8
Last Update: 9/5/2006 9:48:36 AM by RDDACQUWC8

No.	Dil. Factor
1	1.0000
2	1.0000
3	1.0000
4	1.0000
5	1.0000
6	1.0000
7	1.0000
8	1.0000
9	1.0000
10	1.0000
11	1.0000
12	1.0000
13	1.0000
14	1.0000
15	1.0000
16	1.0000
17	1.0000
18	1.0000
19	1.0000
20	1.0000
21	1.0000
22	1.0000
23	2.0000
24	5.0000
25	2.0000
26	2.0000
27	2.0000
28	1.0000
29	2.0000
30	1.0000
31	1.0000
32	1.0000
33	1.0000
34	1.0000
35	1.0000
36	1.0000
37	1.0000
38	1.0000
39	1.1000
40	1.1000
41	10.0000
42	1.0000

Sequence: ANIONS 090206
Operator: RDDACQUWC8

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Printed: 9/5/2006 9:51:10 AM

Title: Anions Calibration 092205

Datasource: RDD-ACQU-WC-6_local

Location: ICS-2000\Anions\September 2006\ANIONS 090206

Timebase: ICS-2000

#Samples: 49

Created: 9/2/2006 3:21:10 PM by RDDACQUWC8

Last Update: 9/5/2006 9:48:36 AM by RDDACQUWC8

No.	Name	Type	Pos.	Program	Method	Status	Inj. Date/Time
43	 CCVS	Unknown	73	Anions_Program	Anions_Method	Finished	9/3/2006 2:52:49 AM
44	 CCB	Unknown	3	Anions_Program	Anions_Method	Finished	9/3/2006 3:08:26 AM
45	 MDL5	Unknown	4	Anions_Program	Anions_Method	Finished	9/3/2006 3:24:02 AM
46	 MDL6	Unknown	4	Anions_Program	Anions_Method	Finished	9/3/2006 3:39:39 AM
47	 MDL7	Unknown	74	Anions_Program	Anions_Method	Finished	9/3/2006 3:55:15 AM
48	 CCVS	Unknown	73	Anions_Program	Anions_Method	Finished	9/3/2006 4:10:51 AM
49	 END	Unknown	14	Pump Shutdown	Anions_Method	Finished	9/3/2006 4:26:28 AM

Sequence: ANIONS 090206
Operator: RDDACQUWC8

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Printed: 9/5/2006 9:51:10 AM

Title: Anions Calibration 092205
Datasource: RDD-ACQU-WC-6_local
Location: ICS-2000\Anions\September 2006\ANIONS 090206
Timebase: ICS-2000
#Samples: 49

Created: 9/2/2006 3:21:10 PM by RDDACQUWC8
Last Update: 9/5/2006 9:48:36 AM by RDDACQUWC8

No.	Dil. Factor
43	1.0000
44	1.0000
45	1.0000
46	1.0000
47	1.0000
48	1.0000
49	1.0000

Program File: Anions_Program
Operator: RDDACQUWC8

Commands, Page 1 of 1
Printed: 9/5/2006 9:51:11 AM

Title: Anions_Program
Datasource: RDD-ACQU-WC-6_local
Location: ICS-2000\Anions\September 2006\ANIONS 0902(Created: 8/18/2005 5:57:57 PM by RDDACQUWC6
Timebase: ICS-2000 Changed: 9/2/2006 4:57:39 PM by RDDACQUWC8

;Anions Program / EPA 300.0, 300.1 / 9/2/06

Pressure.LowerLimit = 200
Pressure.UpperLimit = 3000
%A.Equate = "Water"
CR_TC = On
LoadPosition
Data_Collection_Rate = 5.0
CellTemperature = 30.0
ColumnTemperature = 30.0
Suppressor_Type = ASRS_4mm
; Hydroxide = 34.0
; Recommended Current = 85
Suppressor_Current = 85
Concentration = 34.00
Curve = 5
Flow = 1.00

-2.500 Pump_ECD_Relay_1.Closed Duration=6

0.000 Pump_ECD.Autozero

ECD_1.AcqOn

Pump_InjectValve.InjectPosition Duration=600

5.000 Log Pump_ECD_Relay_1.State

Pump_ECD_Relay_1.Open ;make sure relay is open

13.000 ECD_1.AcqOff

End

Program File: Anions_Program
Operator: RDDACQUWC8

Post-acquisition steps, Page 1 of 1
Printed: 9/5/2006 9:51:12 AM

Title: Anions_Program
Datasource: RDD-ACQU-WC-6_local
Location: ICS-2000\Anions\September 2006\ANIONS 090206\ANIONS 090206.SI
Timebase: ICS-2000

Created: 8/18/2005 5:57:57 PM by RDDACQUWC6
Changed: 9/2/2006 4:57:39 PM by RDDACQUWC8

No. Channel Operation Parameters

Program File: Pump Shutdown
Operator: RDDACQUWC8

Commands, Page 1 of 1
Printed: 9/5/2006 9:51:12 AM

Title: End of Run
Datasource: RDD-ACQU-WC-6_local
Location: ICS-2000\Anions\September 2006\ANIONS 05
Timebase: ICS-2000
Created: 6/21/2005 11:20:54 AM by reddingadmin
Changed: 7/7/2005 3:33:24 PM by reddingadmin

;End program for shutting down the ICS-2000 pumps / BLC, 6-22-2005

```
Pressure.LowerLimit = 200
Pressure.UpperLimit = 3000
%A.Equate = "Water"
CR_TC = On
LoadPosition
Data_Collection_Rate = 5.0
CellTemperature = 30.0
ColumnTemperature = 30.0
Suppressor_Type = ASRS_4mm
; Carbonate = 0.0
; Bicarbonate = 0.0
; Hydroxide = 65.0
; Tetraborate = 0.0
; Other eluent = 0.0
; Recommended Current = 193
Suppressor_Current = 200
ECD_Total.Step = 0.50
ECD_Total.Average = Off
Channel_Pressure.Step = 0.50
Channel_Pressure.Average = Off
Concentration = 65.00
Curve = 5
Flow = 1.20

-0.100 Pump_ECD_Relay_1.Closed Duration=1

0.000 Pump_ECD.Autozero
ECD_1.AcqOn
ECD_Total.AcqOn
Channel_Pressure.AcqOn
Pump_InjectValve.InjectPosition Duration=0.1
Pump_ECD_Relay_1.Open ;make sure relay is open

0.1000 ECD_1.AcqOff
ECD_Total.AcqOff
Channel_Pressure.AcqOff
Suppressor_Current = 0
Off
End
```

Program File: Pump Shutdown
Operator: RDDACQUWC8

Post-acquisition steps, Page 1 of 1
Printed: 9/5/2006 9:51:13 AM

Title: End of Run
Datasource: RDD-ACQU-WC-6_local
Location: ICS-2000\Anions\September 2006\ANIONS 090206\ANIONS 090206.SEC
Timebase: ICS-2000
Created: 6/21/2005 11:20:54 AM by reddingadmin
Changed: 7/7/2005 3:33:24 PM by reddingadmin

No. Channel Operation Parameters

Method File: Anions_Method
Operator: RDDACQUWC8

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Printed: 9/5/2006 9:51:15 AM

Title: Anions AS18 / EPA 300.0, 300.1 Method

Datasource: RDD-ACQU-WC-6_local

Created: 8/9/2005 4:45:31 PM by RDDACQUWC6

Location: ICS-2000\Anions\September 2006\ANIONS 090206\ANIONS (Last Update:

9/2/2006 8:36:07 PM by RDDACQUWC8

Blank Run Subtraction: No Blank Run Subtraction

Detection Table:

No.	Ret. Time [min]	Param. Name	Param. Value	Channel
1	0.000	Minimum Area	0.025 "[Signal]*min"	All Channels
2	0.000	Inhibit Integration	On	All Channels
3	1.000	Void Volume Treatment	On	All Channels
4	2.800	Inhibit Integration	Off	All Channels
5	3.100	Void Volume Treatment	Off	All Channels
6	3.100	Inhibit Integration	Off	All Channels
7	3.100	Inhibit Integration	Off	All Channels

Method File: Anions_Method
Operator: RDDACQUWC8

Page 2 of 9
Printed: 9/5/2006 9:51:15 AM

Title: Anions AS18 / EPA 300.0, 300.1 Method

Datasource: RDD-ACQU-WC-6_local

Created: 8/9/2005 4:45:31 PM by RDDACQUWC6

Location: ICS-2000\Anions\September 2006\ANIONS 090206\ANIONS (Last Update:

9/2/2006 8:36:07 PM by RDDACQUWC8

Peak Table:

Use Recently Detected Ret. Times: Average of last 4 standards

Dead time:

Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Window	Standard	Int.Type	Cal.Type	Peak Type	Group	Resp.Fact.	Comment
1	Fluoride	3.000 min	5.000 RG	External	Area	0LOff	B-M-B		1.000000	Autogenerated
2	Chloride	4.200 min	5.000 RG	External	Area	0LOff	B-M-B		1.000000	Autogenerated
3	Nitrite	5.050 min	5.000 RG	External	Area	0LOff	B-M-B		1.000000	Autogenerated
4	Sulfate	5.900 min	5.000 RG	External	Area	0LOff	B-M-B		1.000000	Autogenerated
5	Bromide	6.900 min	5.000 RG	External	Area	0LOff	B-M-B		1.000000	Autogenerated
6	<i>Nitrate</i>	<i>8.100 min</i>	<i>5.000 RG</i>	<i>External</i>	<i>Area</i>	<i>0LOff</i>	<i>B-M-B</i>		<i>1.000000</i>	<i>Autogenerated</i>
7	Phosphate	11.100 min	5.000 RG	External	Area	0LOff	B-M-B		1.000000	Autogenerated

Method File: Anions_Method
Operator: RDDACQUWC8

Page 3 of 9
Printed: 9/5/2006 9:51:15 AM

Title: Anions AS18 / EPA 300.0, 300.1 Method

Datasource: RDD-ACQU-WC-6_local

Created:

8/9/2005 4:45:31 PM by RDDACQUWC6

Location: ICS-2000\Anions\September 2006\ANIONS 090206\ANIONS (Last Update:

9/2/2006 8:36:07 PM by RDDACQUWC8

Peak Table:

Use Recently Detected Ret. Times: Average of last 4 standards

Dead time:

Delay time of 2nd detector: <None>

No.	Peak Name	Ret.Time	Amount CS1	Amount CS2	Amount CS3	Amount CS4	Amount CS5	Amount CS6	Amount CS7	Amount CS8	Amount CS9
1	Fluoride	3.000 min	0.000000	0.100000	0.500000	1.000000	3.000000	5.000000	10.000000		
2	Chloride	4.200 min	0.000000	0.800000	4.000000	8.000000	24.000000	40.000000	80.000000		
3	Nitrite	5.050 min	0.000000	0.100000	0.500000	1.000000	3.000000	5.000000	10.000000		
4	Sulfate	5.900 min	0.000000	0.800000	4.000000	8.000000	24.000000	40.000000	80.000000		
5	Bromide	6.900 min	0.000000	0.500000	2.500000	5.000000	15.000000	25.000000	50.000000		
6	Nitrate	8.100 min	0.000000	0.100000	0.500000	1.000000	3.000000	5.000000	10.000000	20.000000	
7	Phosphate	11.100 min	0.000000	0.500000	2.500000	5.000000	15.000000	25.000000	50.000000		

Method File: Anions_Method
Operator: RDDACQUWC8

Page 4 of 9
Printed: 9/5/2006 9:51:15 AM

Title: Anions AS18 / EPA 300.0, 300.1 Method

Datasource: RDD-ACQU-WC-6_local

Created: 8/9/2005 4:45:31 PM by RDDACQUWC6

Location: ICS-2000\Anions\September 2006\ANIONS 090206\ANIONS (Last Update:

9/2/2006 8:36:07 PM by RDDACQUWC8

Amount Table:

Dimension of Amounts: mg/L

Reference Volume for Amounts: Use inject volume of first standard

No.	Peak Name	Ret.Time	Window	Standard	Int.Type	Cal.Type	Peak Type	Left Limit	Right Limit	Group
1	Fluoride	3.000 min	5.000 RG	External	Area	0LOff	B-M-B	0.000	0.000	
2	Chloride	4.200 min	5.000 RG	External	Area	0LOff	B-M-B	0.000	0.000	
3	Nitrite	5.050 min	5.000 RG	External	Area	0LOff	B-M-B	0.000	0.000	
4	Sulfate	5.900 min	5.000 RG	External	Area	0LOff	B-M-B	0.000	0.000	
5	Bromide	6.900 min	5.000 RG	External	Area	0LOff	B-M-B	0.000	0.000	
6	Nitrate	8.100 min	5.000 RG	External	Area	0LOff	B-M-B	0.000	0.000	
7	Phosphate	11.100 min	5.000 RG	External	Area	0LOff	B-M-B	0.000	0.000	

Method File: Anions_Method
Operator: RDDACQUWC8

Page 5 of 9
Printed: 9/5/2006 9:51:15 AM

Title: Anions AS18 / EPA 300.0, 300.1 Method

Datasource: RDD-ACQU-WC-6_local

Created:

8/9/2005 4:45:31 PM by RDDACQUWC6

Location: ICS-2000\Anions\September 2006\ANIONS 090206\ANIONS (Last Update:

9/2/2006 8:36:07 PM by RDDACQUWC8

Amount Table:

Dimension of Amounts: mg/L

Reference Volume for Amounts: Use inject volume of first standard

No.	Peak Name	Ret.Time	Resp.Fact.	Comment
1	Fluoride	3.000 min	1.000000	Autogenerated
2	Chloride	4.200 min	1.000000	Autogenerated
3	Nitrite	5.050 min	1.000000	Autogenerated
4	Sulfate	5.900 min	1.000000	Autogenerated
5	Bromide	6.900 min	1.000000	Autogenerated
6	<u>Nitrate</u>	<u>8.100 min</u>	<u>1.000000</u>	<u>Autogenerated</u>
7	Phosphate	11.100 min	1.000000	Autogenerated

Method File: Anions_Method
Operator: RDDACQUWC8

Page 6 of 9
Printed: 9/5/2006 9:51:15 AM

Title: Anions AS18 / EPA 300.0, 300.1 Method

Datasource: RDD-ACQU-WC-6_local

Created: 8/9/2005 4:45:31 PM by RDDACQUWC6

Location: ICS-2000\Anions\September 2006\ANIONS 090206\ANIONS (Last Update:

9/2/2006 8:36:07 PM by RDDACQUWC8

Calibration:

Calibration Mode: Total

Auto Recalibrate: On

No.	Enabled	Name	Smp.No.	Pos.	Inj. Vol.	Weight	ISTD Amount	Dil. Factor	Inj. Date/Time	Sample Comment
1	☒	 CS1	7	3	25.0	1.0000	1.0000	1.0000	9/2/2006 5:29:1	
2	☒	 CS2	8	52	25.0	1.0000	1.0000	1.0000	9/2/2006 5:44:5	
3	☒	 CS3	9	5	25.0	1.0000	1.0000	1.0000	9/2/2006 6:00:3	
4	☒	 CS4	10	5	25.0	1.0000	1.0000	1.0000	9/2/2006 6:16:0	
5	☒	 CS5	11	7	25.0	1.0000	1.0000	1.0000	9/2/2006 6:33:2	
6	☒	 CS6	12	8	25.0	1.0000	1.0000	1.0000	9/2/2006 6:48:5	
7	☒	 CS7	13	9	25.0	1.0000	1.0000	1.0000	9/2/2006 7:04:3	
8	☒	 CS8	14	14	25.0	1.0000	1.0000	1.0000	9/2/2006 7:20:1	

Method File: Anions_Method
Operator: RDDACQUWC8

Page 7 of 9
Printed: 9/5/2006 9:51:15 AM

Title: Anions AS18 / EPA 300.0, 300.1 Method

Datasource: RDD-ACQU-WC-6_local

Created:

8/9/2005 4:45:31 PM by RDDACQUWC6

Location: ICS-2000\Anions\September 2006\ANIONS 090206\ANIONS (Last Update:

9/2/2006 8:36:07 PM by RDDACQUWC8

Calibration:

Calibration Mode: Total
Auto Recalibrate: On

No.	Enabled	Name	Calib. Comment
1	☒	 CS1	Couldn't find the peak in the chromatogram.
2	☒	 CS2	Ok
3	☒	 CS3	Ok
4	☒	 CS4	Ok
5	☒	 CS5	Ok
6	☒	 CS6	Ok
7	☒	 CS7	Ok
8	☒	 CS8	Ok

Method File: Anions_Method
Operator: RDDACQUWC8

Page 8 of 9
Printed: 9/5/2006 9:51:15 AM

Title: Anions AS18 / EPA 300.0, 300.1 Method

Datasource: RDD-ACQU-WC-6_local

Created: 8/9/2005 4:45:31 PM by RDDACQUWC6

Location: ICS-2000\Anions\September 2006\ANIONS 090206\ANIONS (Last Update:

9/2/2006 8:36:07 PM by RDDACQUWC8

System Suitability Test:

No.	Name	Sample Condition	Test Condition	Aggregate	Operator	Value	Channel	Peak	N.A.
1									

Method File: Anions_Method
Operator: RDDACQUWC8

Page 9 of 9
Printed: 9/5/2006 9:51:15 AM

Title: Anions AS18 / EPA 300.0, 300.1 Method

Datasource: RDD-ACQU-WC-6_local

Created:

8/9/2005 4:45:31 PM by RDDACQUWC6

Location: ICS-2000\Anions\September 2006\ANIONS 090206\ANIONS (Last Update:

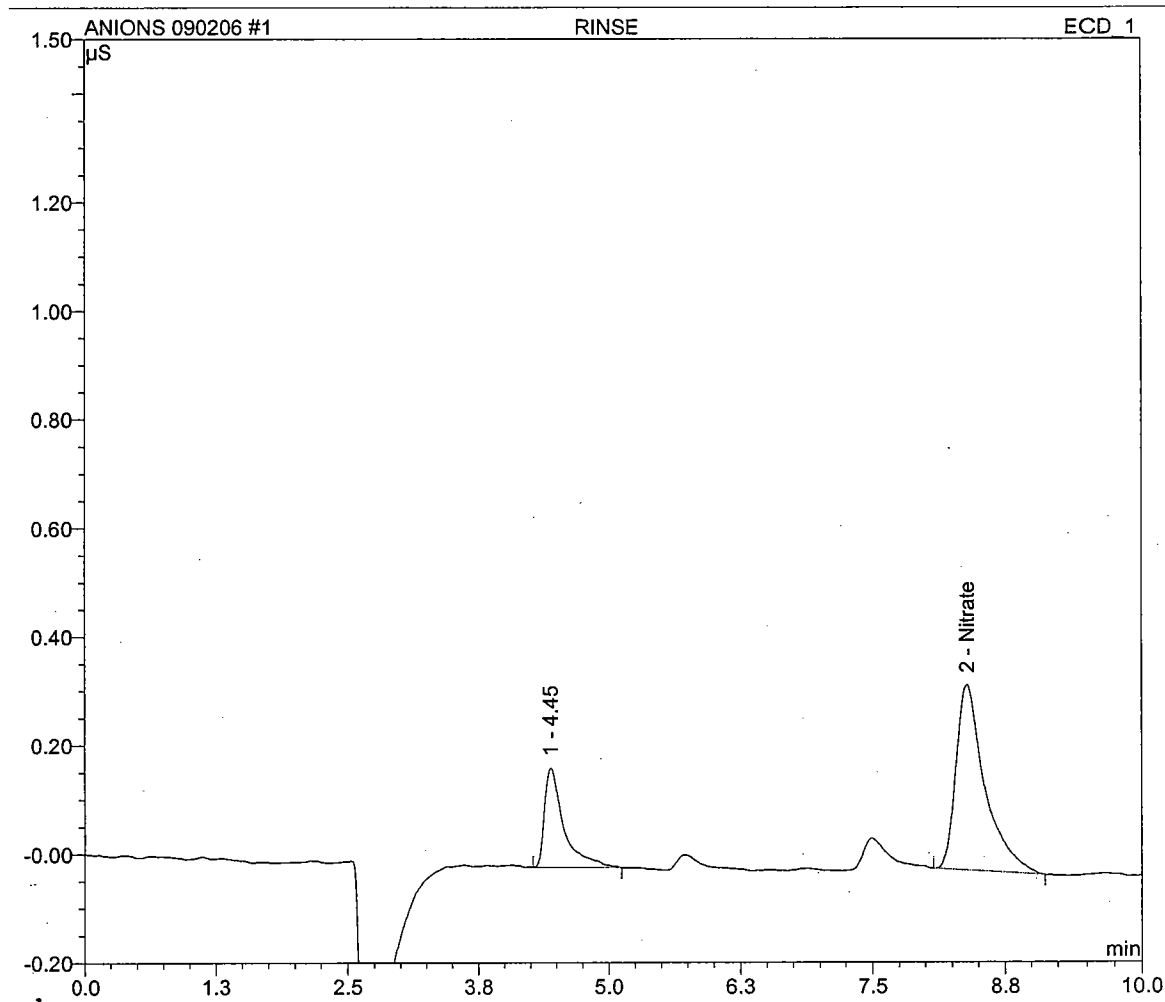
9/2/2006 8:36:07 PM by RDDACQUWC8

System Suitability Test:

No.	Name	Fail-Action	Result	SST Message
1				

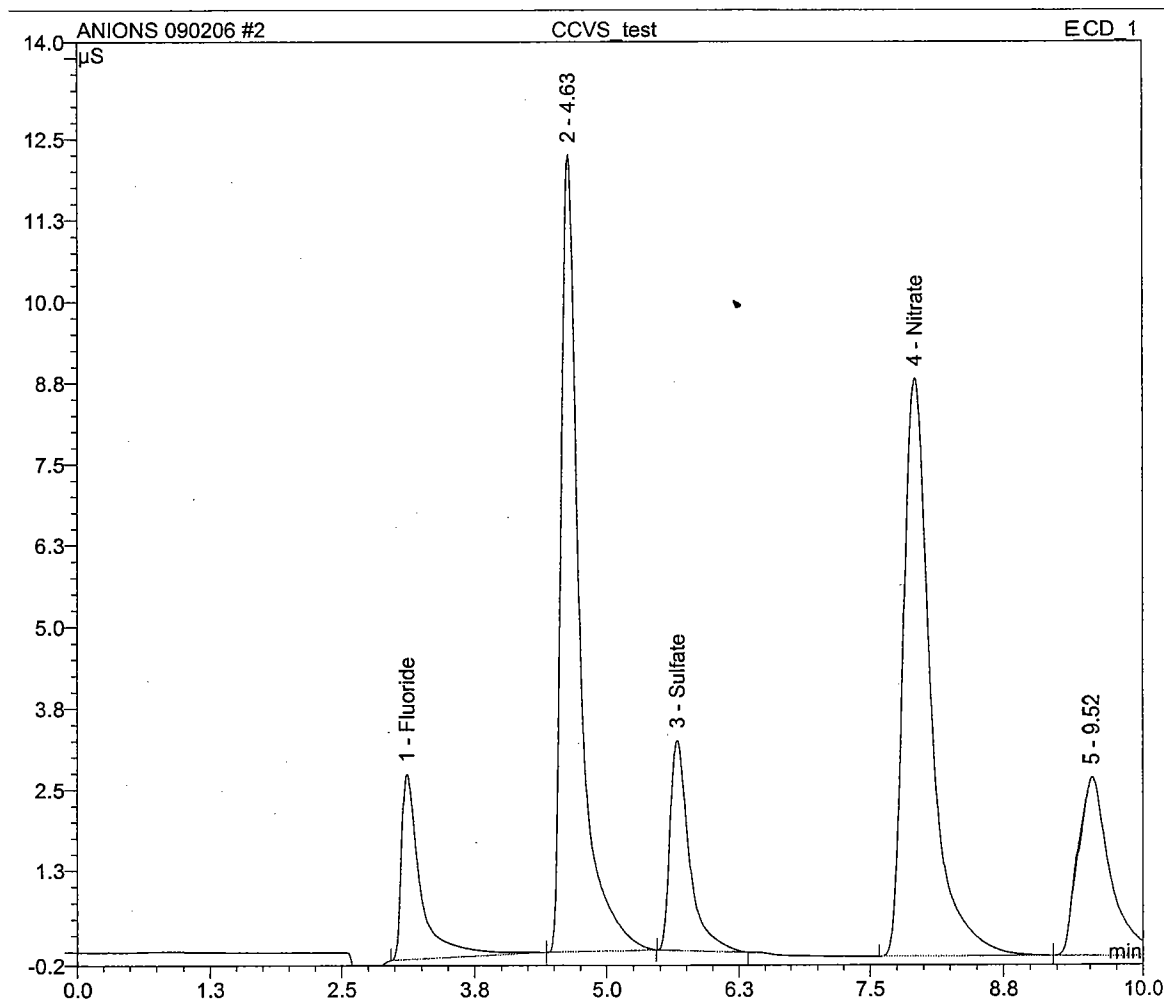
Sample Name:	RINSE	Inj. Vol.:	25.0
Sample Type:	unknown	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	02.09.06 15:26	Run Time:	12.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
2	8.39	Nitrate	BMB	0.109	0.342	0.1763
TOTAL:				0.11	0.34	0.18



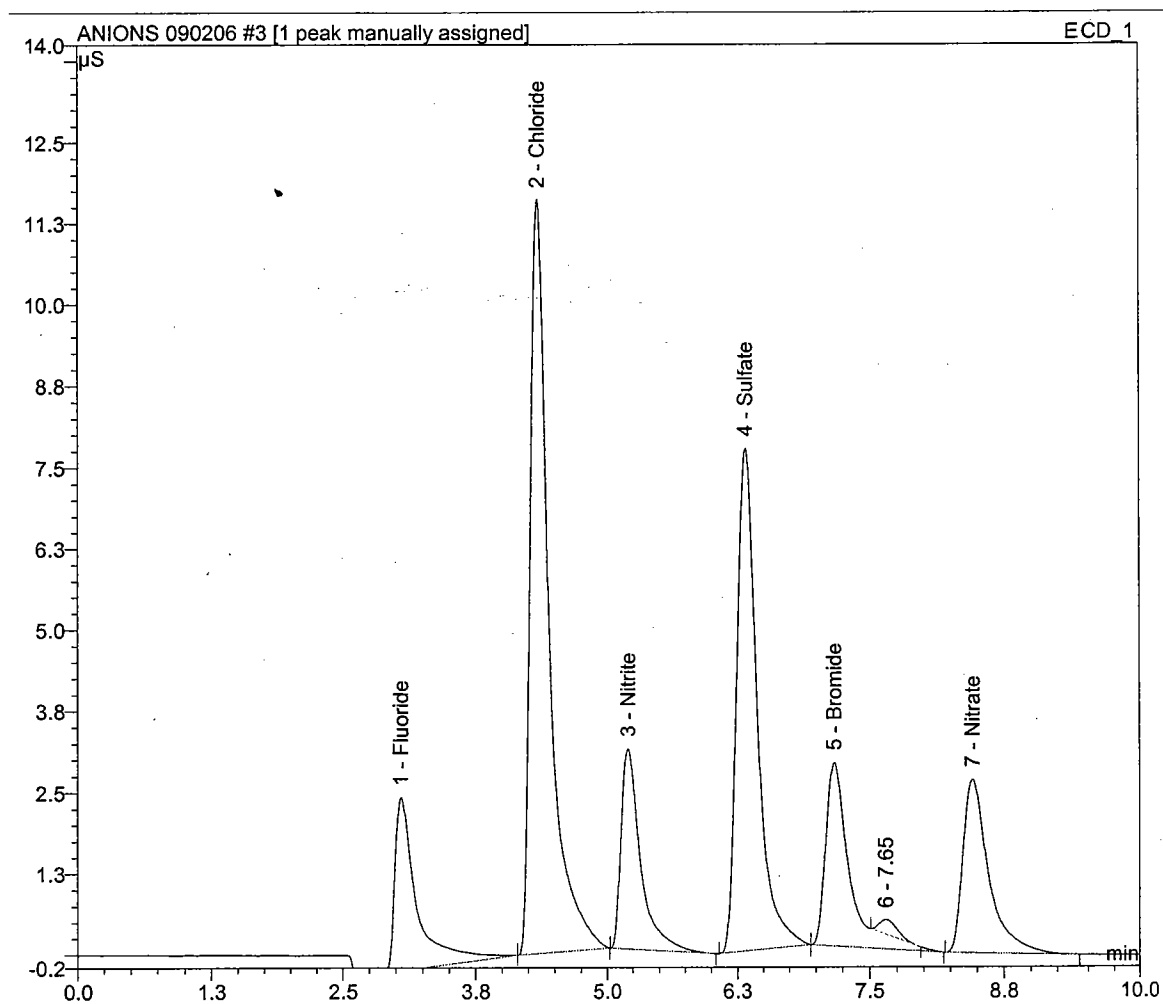
Sample Name:	CCVS_test	Inj. Vol.:	25.0
Sample Type:	unknown	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	02.09.06 15:41	Run Time:	12.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	3.11	Fluoride	BMB	0.599	2.854	0.9614
3	5.66	Sulfate	BMB	0.683	3.235	2.9933
4	7.91	Nitrate	BMB	2.631	8.890	3.4825
TOTAL:				3.91	14.98	7.44



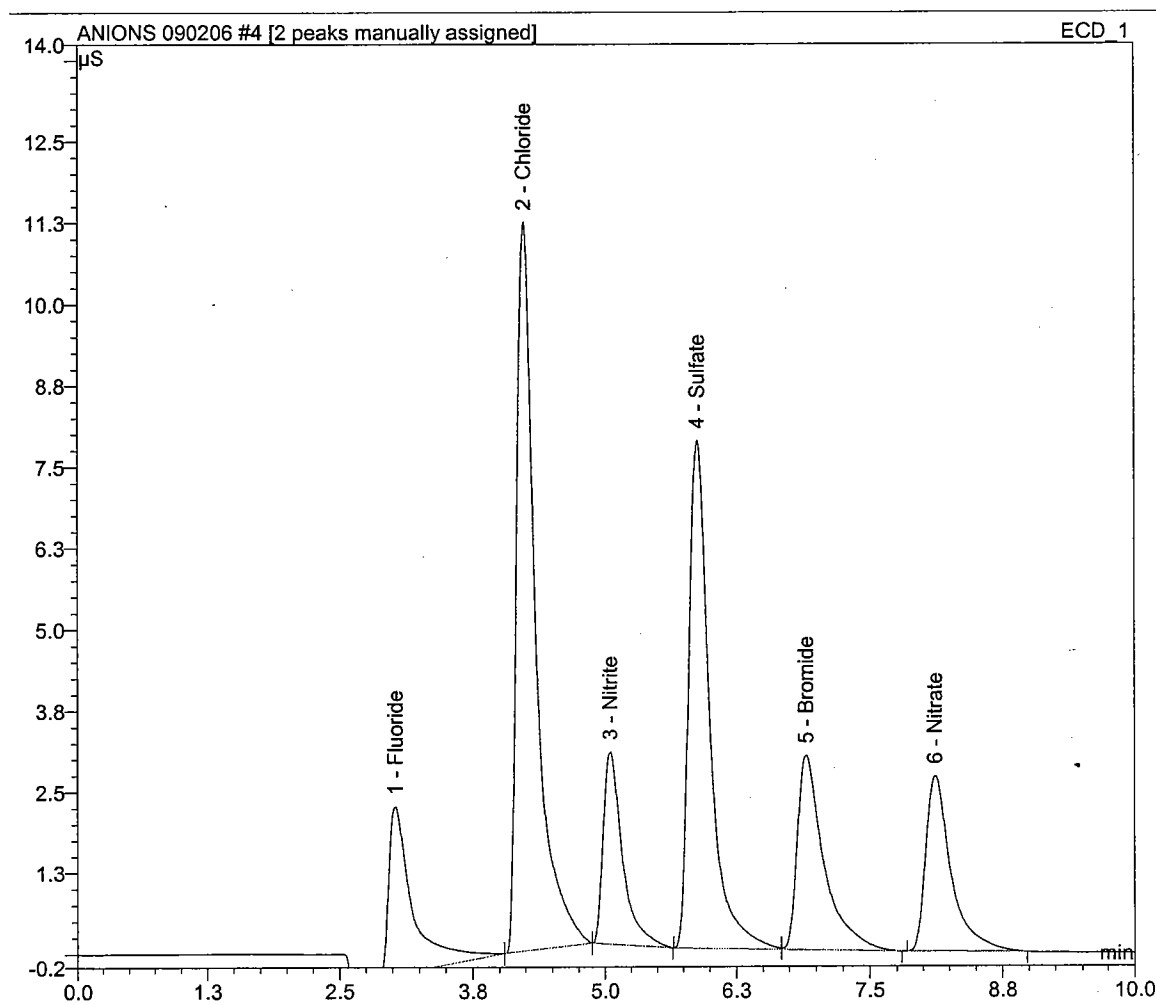
Sample Name:	CCVS_test	Inj. Vol.:	25.0
Sample Type:	unknown	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	02.09.06 16:09	Run Time:	12.00

No.	Time min	Peak Name	Type	Area $\mu\text{S} \cdot \text{min}$	Height μS	Amount mg/L
1	3.05	Fluoride	BMB	0.644	2.674	1.0528
2	4.33	Chloride	bMB	2.410	11.601	8.0650
3	5.20	Nitrite	BMB	0.675	3.083	1.0774
4	6.32	Sulfate	BMB^	1.764	7.734	7.9398
5	7.17	Bromide	bMB	0.742	2.826	4.6328
7	8.46	Nitrate	BMB	0.749	2.680	1.0156
TOTAL:				6.98	30.60	23.78



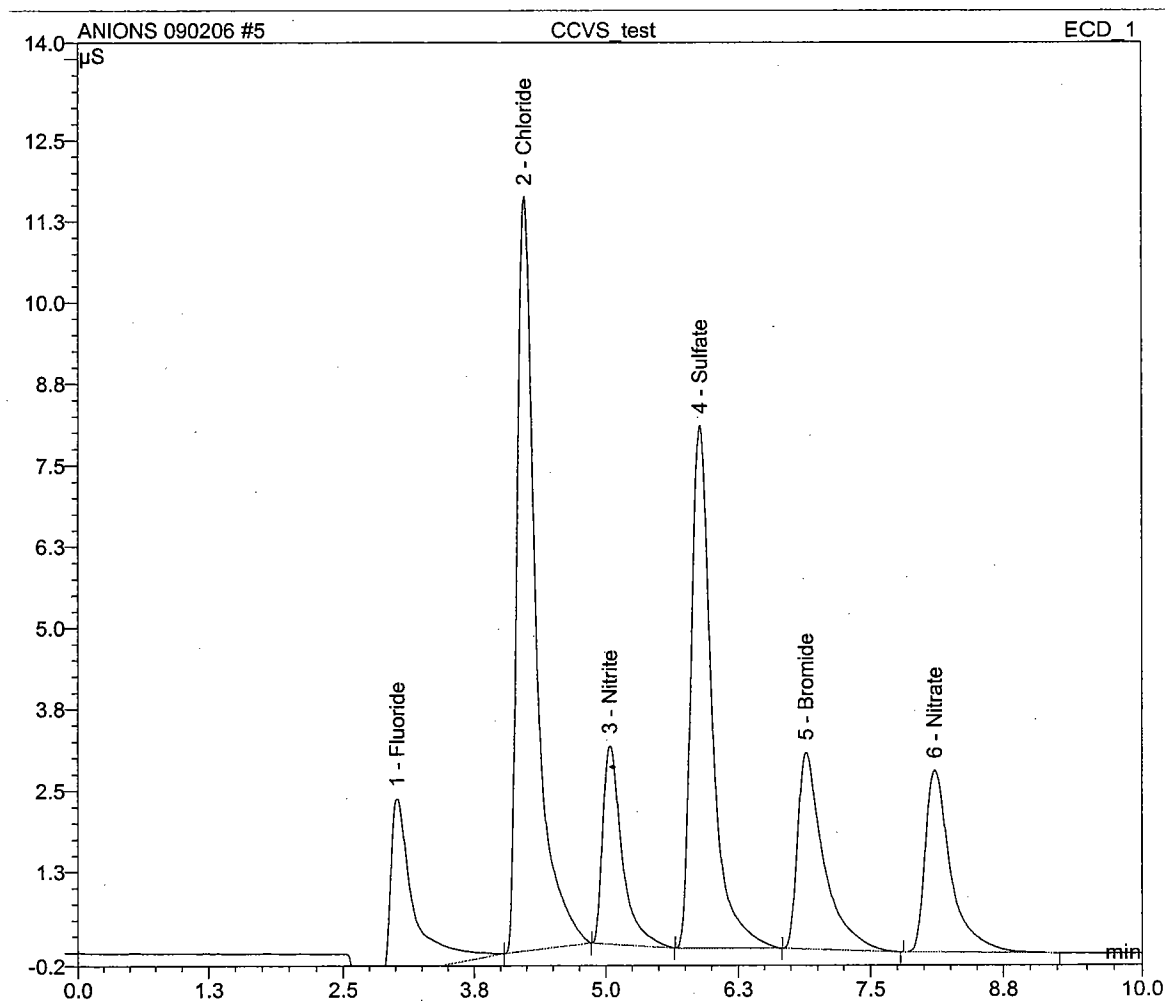
Sample Name:	CCVS_test	Inj. Vol.:	25.0
Sample Type:	unknown	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	02.09.06 16:36	Run Time:	12.00

No.	Time min	Peak Name	Type	Area $\mu\text{S} \cdot \text{min}$	Height μS	Amount mg/L
1	3.03	Fluoride	BMB	0.670	2.583	1.1061
2	4.23	Chloride	bMB	2.362	11.214	7.9069
3	5.05	Nitrite	BMB	0.638	2.966	1.0160
4	5.88	Sulfate	BM ^	1.792	7.819	8.0680
5	6.91	Bromide	MB^	0.860	3.002	5.5564
6	8.11	Nitrate	BMB	0.756	2.713	1.0250
7	11.08	Phosphate	BMB	0.494	1.338	4.9625
TOTAL:				7.57	31.63	29.64



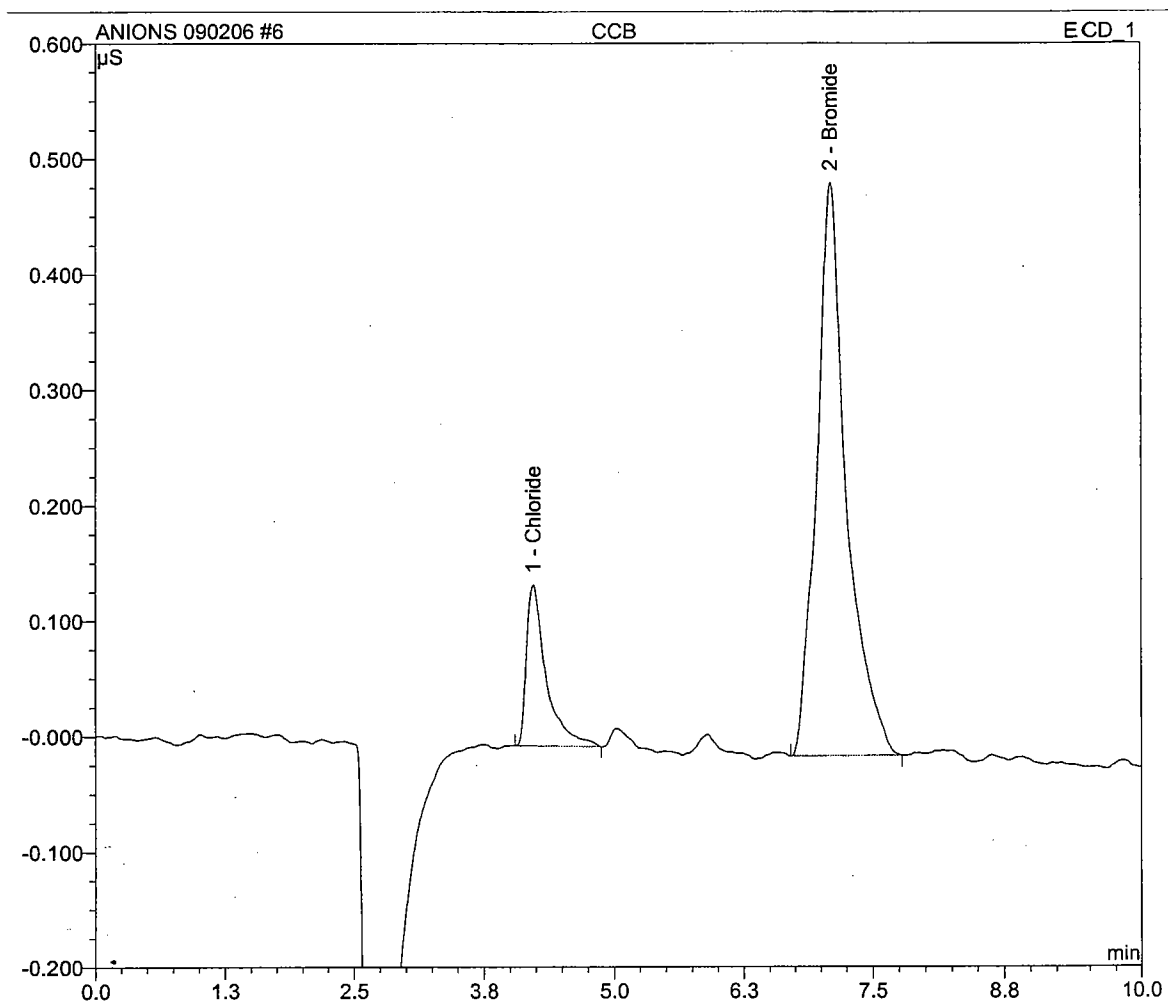
Sample Name:	CCVS_test	Inj. Vol.:	25.0
Sample Type:	unknown	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	02:09.06 16:58	Run Time:	13.00

No.	Time min	Peak Name	Type	Area $\mu\text{S} \cdot \text{min}$	Height μS	Amount mg/L
1	3.01	Fluoride	BMB	0.691	2.699	1.1489
2	4.22	Chloride	BMB	2.428	11.605	8.1273
3	5.04	Nitrite	BMB	0.652	3.056	1.0405
4	5.89	Sulfate	BMB	1.827	8.039	8.2280
5	6.90	Bromide	BMB	0.861	3.032	5.5604
6	8.10	Nitrate	BMB	0.787	2.809	1.0655
7	11.13	Phosphate	BMB	0.519	1.385	5.2284
TOTAL:				7.77	32.63	30.40



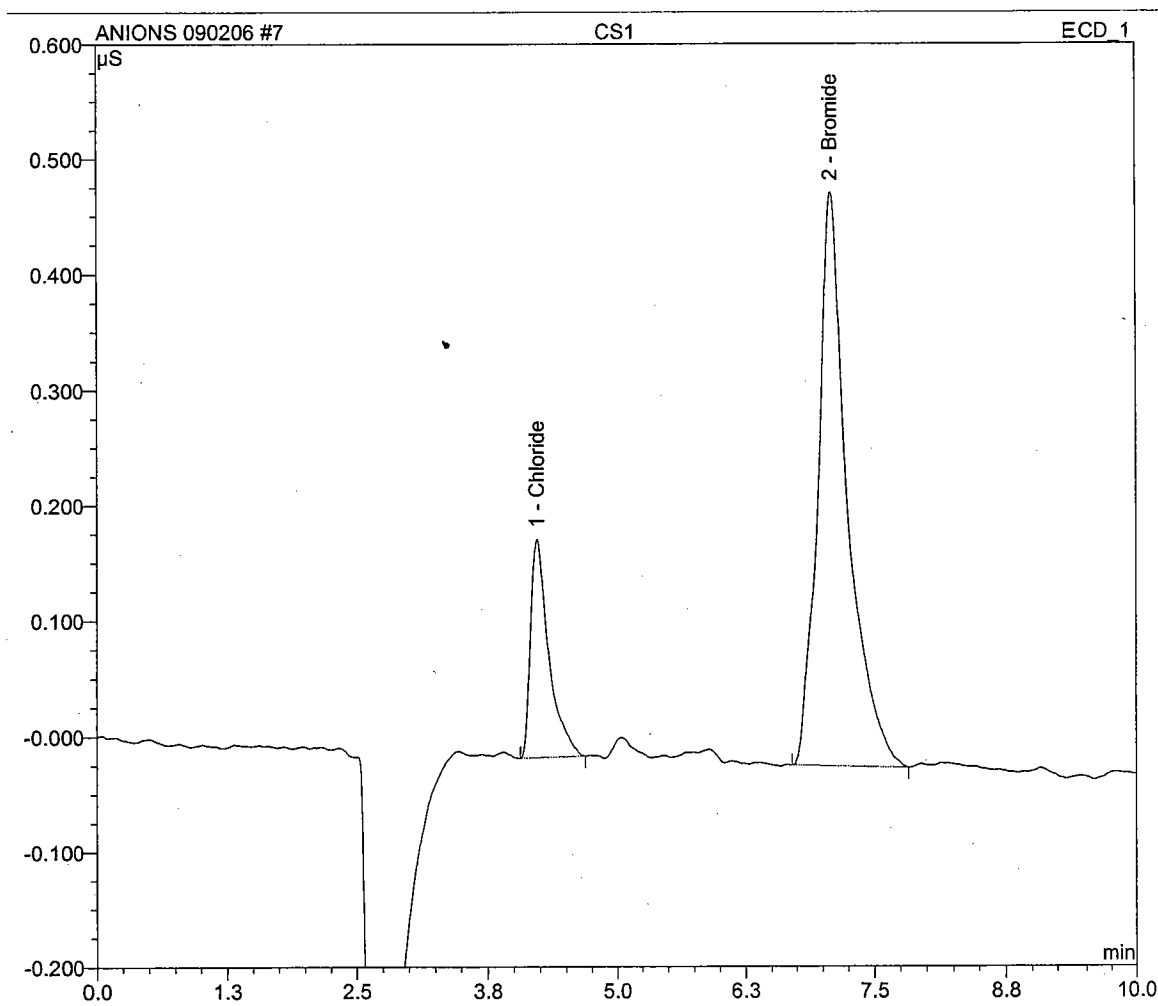
Sample Name:	CCB	Inj. Vol.:	25.0
Sample Type:	unknown	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	02.09.06 17:13	Run Time:	13.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	4.22	Chloride	BMB	0.031	0.139	0.0758
2	7.08	Bromide	BMB	0.166	0.496	0.1139
TOTAL:				0.20	0.64	0.19



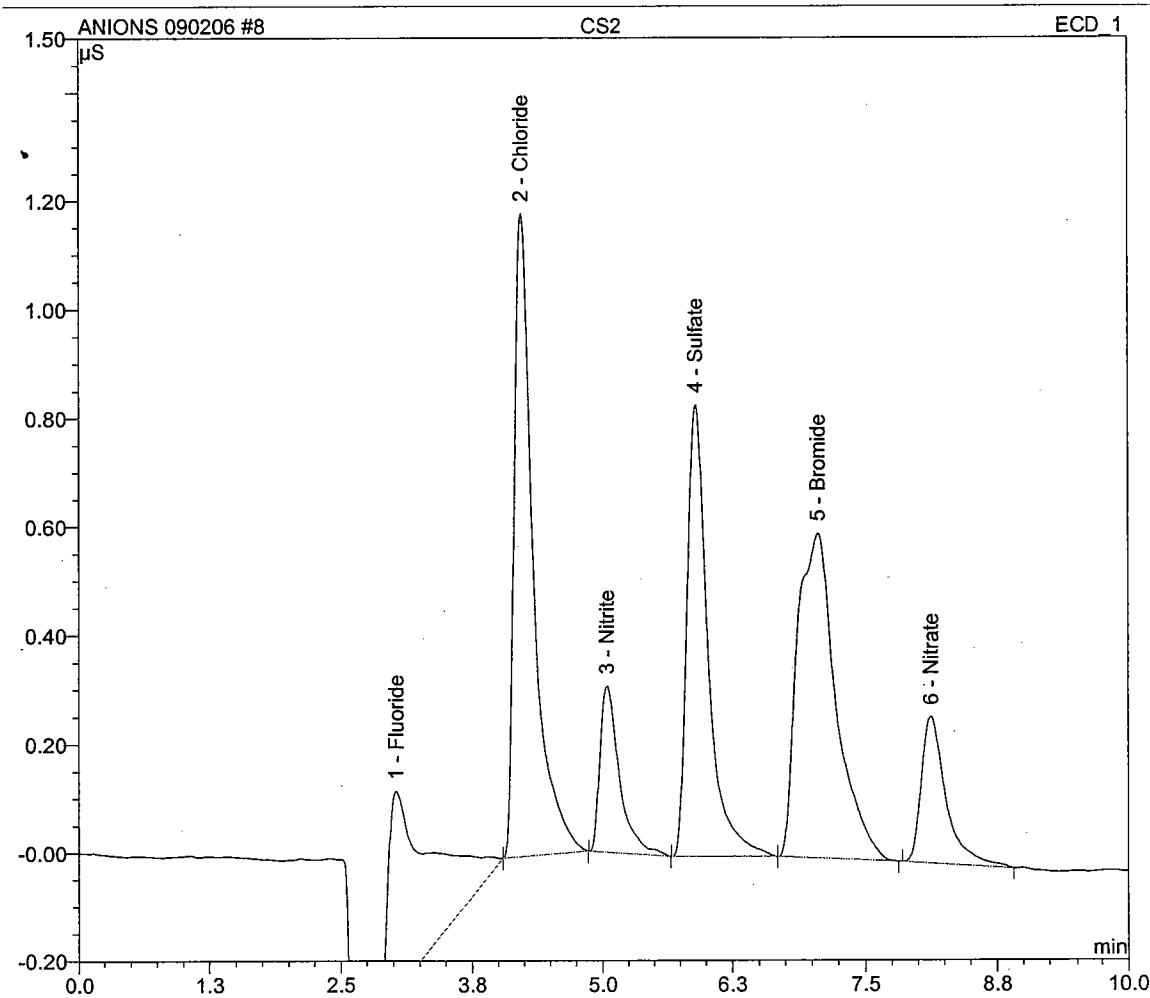
Sample Name:	CS1	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	02.09.06 17:29	Run Time:	13.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	4.22	Chloride	BMB	0.038	0.189	0.1019
2	7.08	Bromide	BMB	0.165	0.496	0.1098
TOTAL:				0.20	0.69	0.21



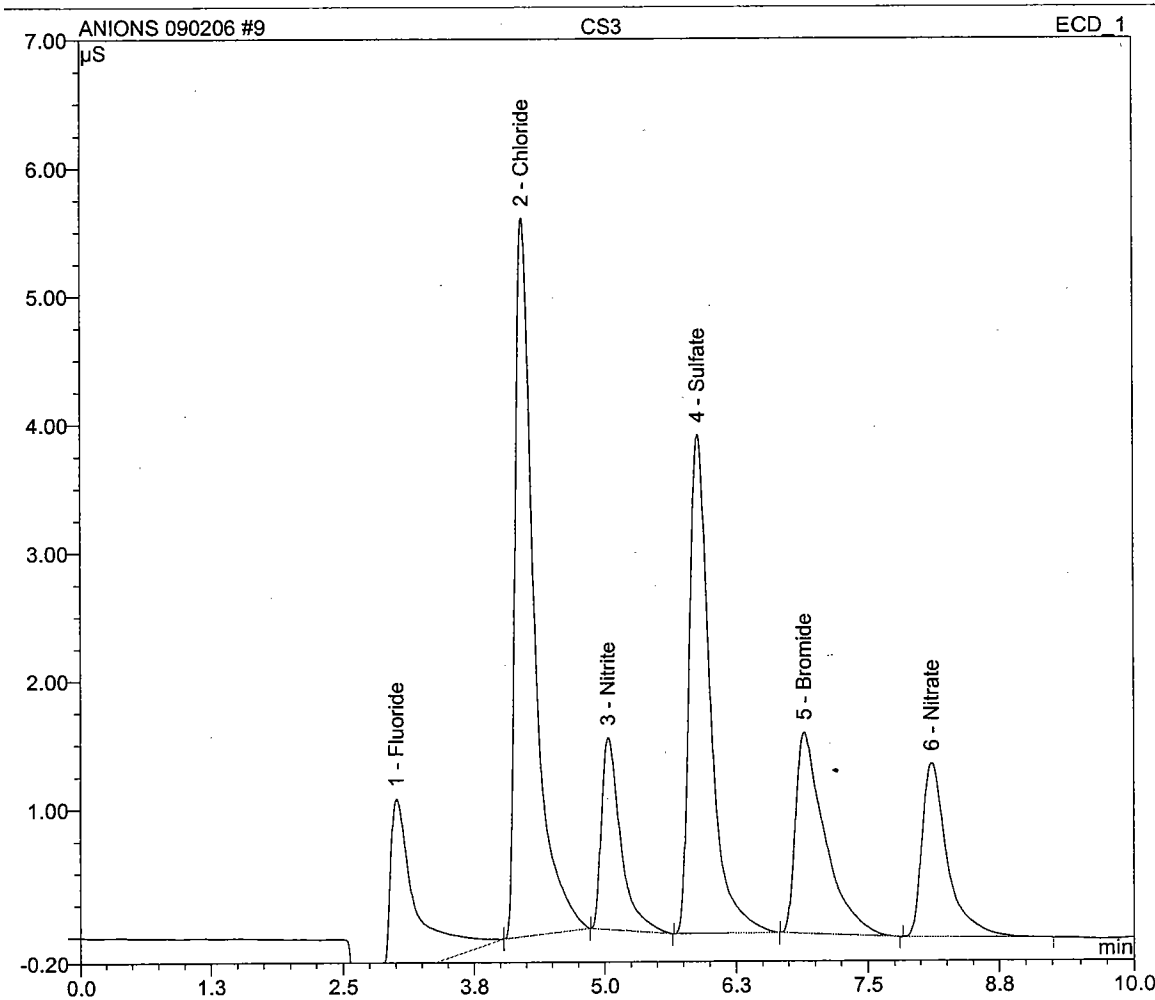
Sample Name:	CS2	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	02:09:06 17:44	Run Time:	13.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	3.03	Fluoride	BMB	0.172	0.367	0.0882
2	4.22	Chloride	bMB	0.253	1.184	0.8223
3	5.04	Nitrite	BMB	0.067	0.306	0.0689
4	5.90	Sulfate	BMB	0.196	0.832	0.7631
5	7.06	Bromide	BMB	0.251	0.597	0.7815
6	8.12	Nitrate	BMB	0.074	0.270	0.1308
7	11.24	Phosphate	BMB	0.060	0.163	0.4544
TOTAL:				1.07	3.72	3.11



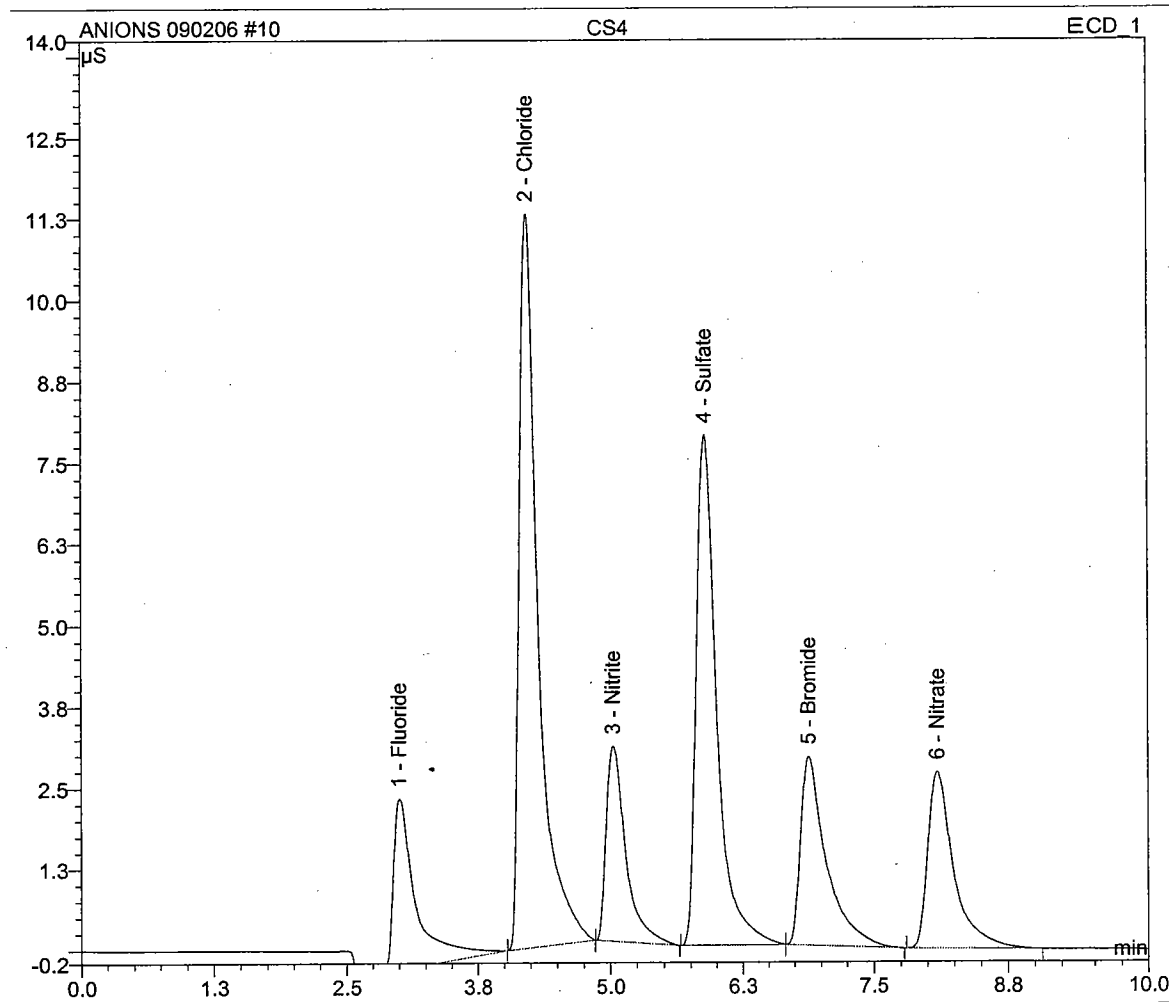
Sample Name:	CS3	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	02.09.06 18:00	Run Time:	13.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	3.01	Fluoride	BMB	0.399	1.382	0.5517
2	4.22	Chloride	bMB	1.184	5.604	3.9483
3	5.04	Nitrite	BMB	0.324	1.499	0.4945
4	5.89	Sulfate	BMB	0.894	3.896	3.9593
5	6.90	Bromide	BMB	0.506	1.573	2.7794
6	8.11	Nitrate	BMB	0.379	1.359	0.5313
7	11.20	Phosphate	BMB	0.249	0.679	2.4188
TOTAL:				3.93	15.99	14.68



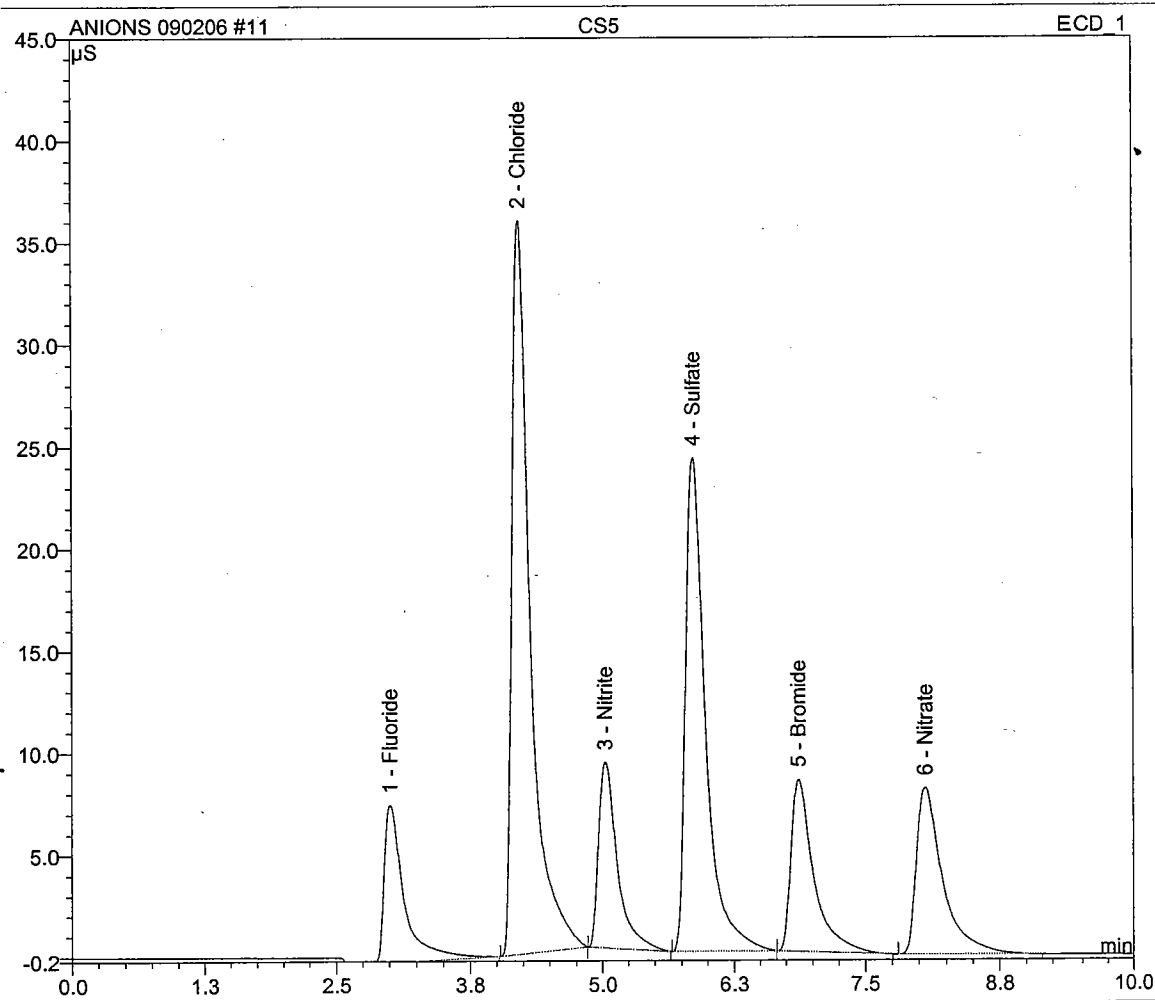
Sample Name:	CS4	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	02.09.06 18:16	Run Time:	13.00

No.	Time min	Peak Name	Type	Area $\mu\text{S} \cdot \text{min}$	Height μS	Amount mg/L
1	3.00	Fluoride	BMB	0.656	2.631	1.0762
2	4.21	Chloride	BMB	2.348	11.302	7.8580
3	5.03	Nitrite	BMB	0.639	3.011	1.0190
4	5.89	Sulfate	BMB	1.775	7.862	7.9938
5	6.89	Bromide	BMB	0.827	2.919	5.2966
6	8.09	Nitrate	BMB	0.758	2.730	1.0279
7	11.17	Phosphate	BMB	0.509	1.337	5.1195
TOTAL:				7.51	31.79	29.39



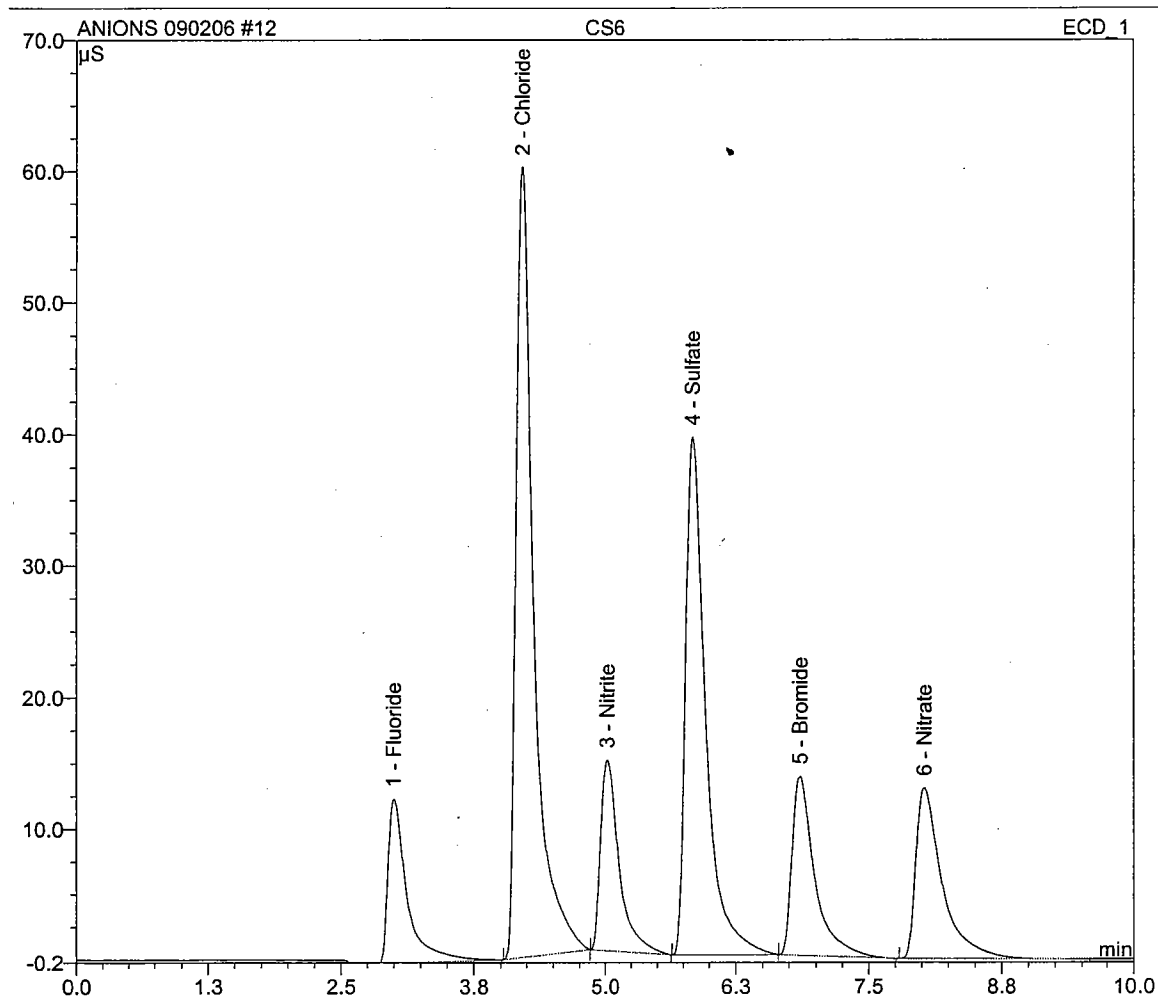
Sample Name:	CS5	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	02.09.06 18:33	Run Time:	13.00

No.	Time min	Peak Name	Type	Area $\mu\text{S} \cdot \text{min}$	Height μS	Amount mg/L
1	3.01	Fluoride	BMB	1.671	7.722	3.1509
2	4.21	Chloride	BMB	7.200	35.952	24.1538
3	5.03	Nitrite	BMB	1.892	9.113	3.0992
4	5.87	Sulfate	BMB	5.334	24.190	24.2803
5	6.87	Bromide	BMB	2.111	8.455	15.3590
6	8.06	Nitrate	BMB	2.280	8.186	3.0232
7	11.02	Phosphate	BMB	1.488	3.625	15.2954
TOTAL:				21.98	97.24	88.36



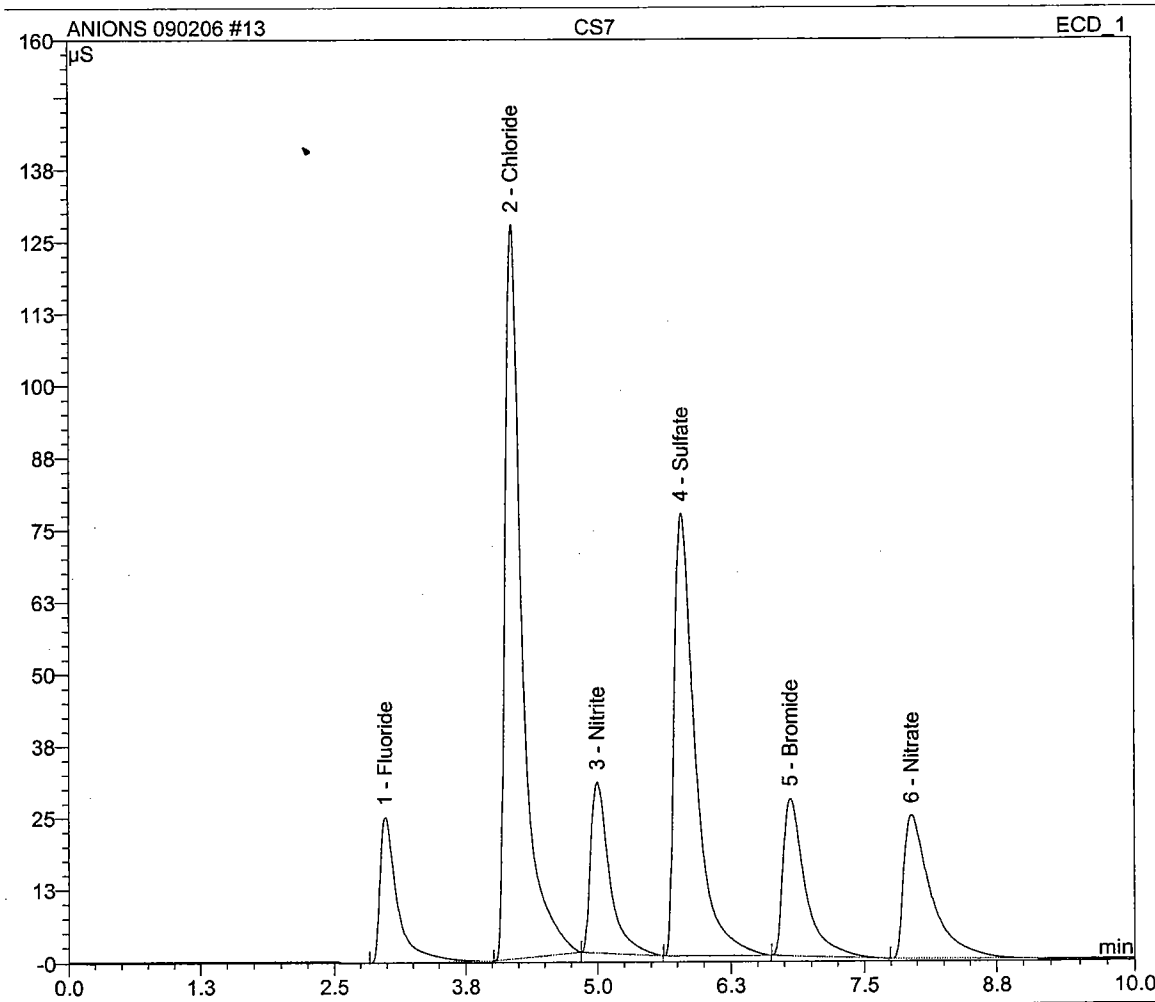
Sample Name:	CS6	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	02.09.06 18:48	Run Time:	13.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	3.00	Fluoride	BMB	2.627	12.534	5.1022
2	4.20	Chloride	BMB	11.902	60.118	39.9453
3	5.02	Nitrite	BMB	3.027	14.579	4.9852
4	5.84	Sulfate	BMB	8.775	39.425	40.0331
5	6.85	Bromide	BMB	3.345	13.684	25.0275
6	8.02	Nitrate	BMB	3.730	13.062	4.9236
7	10.92	Phosphate	BMB	2.417	5.320	24.9541
TOTAL:				35.82	158.72	144.97



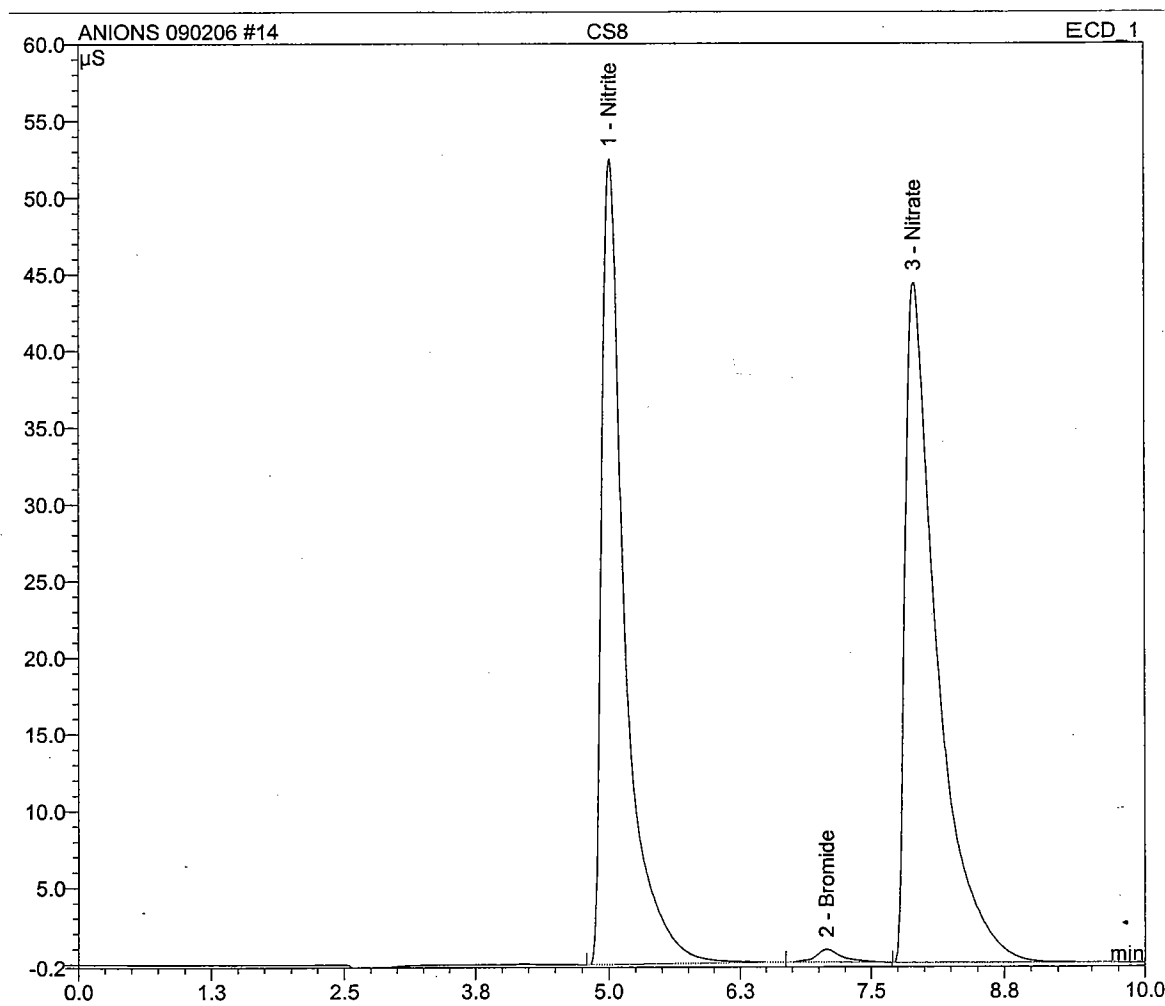
Sample Name:	CS7	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	02:09:06 19:04	Run Time:	13.00

No.	Time min	Peak Name	Type	Area $\mu\text{S} \cdot \text{min}$	Height μS	Amount mg/L
1	2.99	Fluoride	BMB	4.973	25.278	9.8935
2	4.19	Chloride	BMB	23.828	127.567	79.9978
3	5.00	Nitrite	bMB	6.031	29.725	9.9763
4	5.79	Sulfate	BMB	17.486	76.844	79.9024
5	6.81	Bromide	BMB	6.510	27.373	49.8321
6	7.95	Nitrate	BMB	7.475	24.948	9.8323
7	10.71	Phosphate	BMB	4.819	8.770	49.9269
TOTAL:				71.12	320.50	289.36



Sample Name:	CS8	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	02.09.06 19:20	Run Time:	13.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	5.00	Nitrite	BMb	13.177	52.518	21.8478
2	7.08	Bromide	bMB	0.252	0.852	0.7906
3	7.89	Nitrate	BMB	15.305	44.329	20.0971
TOTAL:				28.73	97.70	42.74



Calibration Batch Report

Sequence: ANIONS 090206

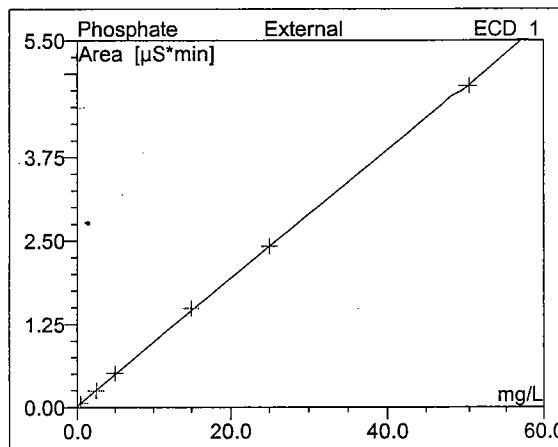
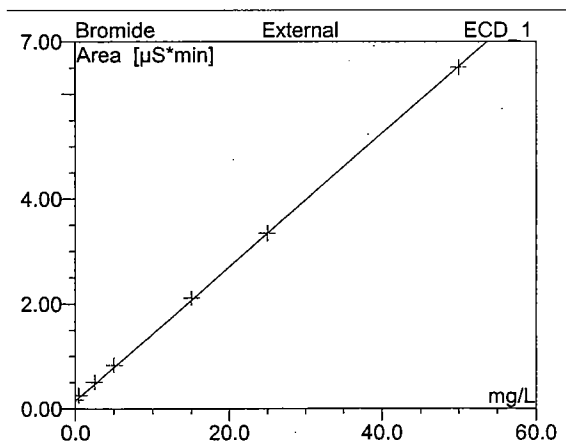
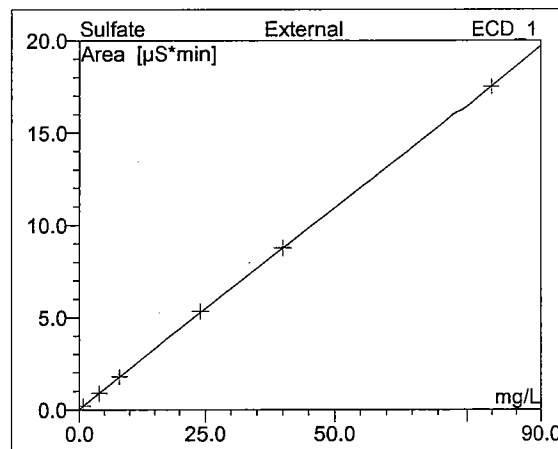
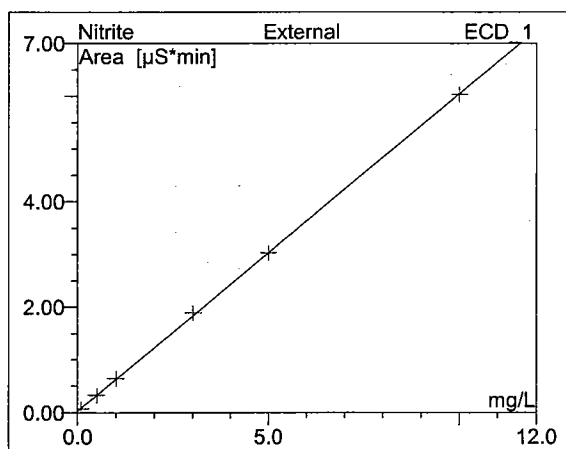
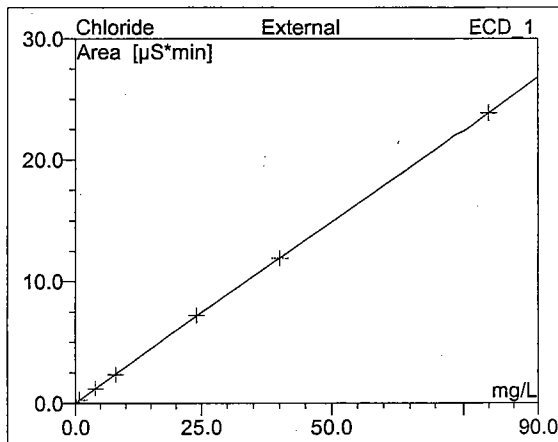
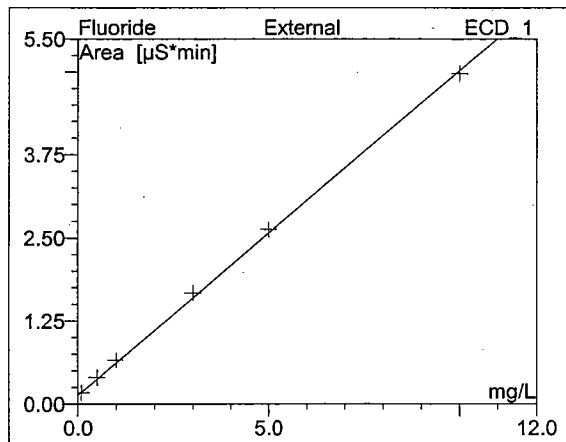
Inj. Vol.: 25.0

Program: Anions_Program

Operator: RDD-ACQU-WC-8

Ini. Date/Time: 09/02/06 19:20

Run Time: 13.00



Sequence:	ANIONS 090206	Inj. Vol.:	25.0
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	09/02/06 19:20	Run Time:	13.00

No.	Ret.Time min	Peak Name	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr.Coeff. %
1	2.96	Fluoride	0LOff	5	0.005	0.465	0.000	99.999
2	4.01	Chloride	0LOff	8	-0.061	0.290	0.000	99.991
3	4.72	Nitrite	0LOff	7	0.008	0.665	0.000	99.992
4	5.48	Sulfate	0LOff	8	-0.082	0.218	0.000	99.995
5	6.43	Bromide	0LOff	7	-0.026	0.125	0.000	99.954
6	7.35	Nitrate	0LOff	6	-0.041	0.713	0.000	99.978
AVERAGE:					-0.0329	0.4126	0.0000	99.9846

No.	Ret.Time min	Peak Name	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr.Coeff. %
1	5.003333333	Nitrite	0LOff	6	0.02598	0.601956	0	99.99197769
2	7.076666667	Bromide	0LOff	7	0.151314	0.127597	0	99.99805032
3	7.893333333	Nitrate	0LOff	7	-0.025795	0.762833	0	99.99256356



Metals

Sample Results

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Collected: 08/16/2006
Date Received: 08/17/2006

Trace Metals

Sample Name: LF6GW103CL
Lab Code: D0601136-002
Test Notes:

Units: ug/L (ppb)
Basis: NA

Analyte	Prep Method	Analysis Method	PQL	Dilution Factor	Date Prepared	Date Analyzed	Result	Result Notes
Aluminum	Dissolved	SW6010	100	1	08/23/2006	10/10/2006	ND	U
Antimony	Dissolved	SW6010	60	1	08/23/2006	10/10/2006	ND	U
Arsenic	Dissolved	SW6010	100	1	08/23/2006	10/10/2006	ND	U
Barium	Dissolved	SW6010	10	1	08/23/2006	10/10/2006	73	
Beryllium	Dissolved	SW6010	2.00	1	08/23/2006	10/10/2006	ND	U
Cadmium	Dissolved	SW6010	5.00	1	08/23/2006	10/10/2006	ND	U
Calcium	Dissolved	SW6010	500	1	08/23/2006	10/10/2006	38400	
Chromium	Dissolved	SW6010	10	1	08/23/2006	10/10/2006	28	
Cobalt	Dissolved	SW6010	10	1	08/23/2006	10/10/2006	ND	U
Copper	Dissolved	SW6010	20	1	08/23/2006	10/10/2006	ND	U
Iron	Dissolved	SW6010	100	1	08/23/2006	10/10/2006	ND	U
Lead	Dissolved	SW6010	50	1	08/23/2006	10/10/2006	ND	U
Magnesium	Dissolved	SW6010	500	1	08/23/2006	10/10/2006	61000	
Manganese	Dissolved	SW6010	10	1	08/23/2006	10/10/2006	ND	U
Mercury	Dissolved	SW7470	0.200	1	08/22/2006	08/23/2006	ND	U
Nickel	Dissolved	SW6010	40	1	08/23/2006	10/10/2006	ND	U
Potassium	Dissolved	SW6010	5000	1	08/23/2006	10/10/2006	ND	U
Selenium	Dissolved	SW6010	200	1	08/23/2006	10/10/2006	ND	U
Silver	Dissolved	SW6010	10	1	08/23/2006	10/10/2006	4.00	B
Sodium	Dissolved	SW6010	5000	1	08/23/2006	10/10/2006	68400	
Thallium	Dissolved	SW6010	2000	1	08/23/2006	10/10/2006	ND	U
Vanadium	Dissolved	SW6010	10	1	08/23/2006	10/10/2006	12	
Zinc	Dissolved	SW6010	20	1	08/23/2006	10/10/2006	7.00	B

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Collected: 08/16/2006
Date Received: 08/17/2006

Trace Metals

Sample Name: 1065MW9BCL
Lab Code: D0601136-003
Test Notes:

Units: ug/L (ppb)

Basis: NA

Analyte	Prep Method	Analysis Method	PQL	Dilution Factor	Date Prepared	Date Analyzed	Result	Result Notes
Aluminum	Dissolved	SW6010	100	1	08/23/2006	10/10/2006	ND	U
Antimony	Dissolved	SW6010	60	1	08/23/2006	10/10/2006	ND	U
Arsenic	Dissolved	SW6010	100	1	08/23/2006	10/10/2006	ND	U
Cadmium	Dissolved	SW6010	5.00	1	08/23/2006	10/10/2006	ND	U
Calcium	Dissolved	SW6010	500	1	08/23/2006	10/10/2006	40100	
Chromium	Dissolved	SW6010	10	1	08/23/2006	10/10/2006	38	
Copper	Dissolved	SW6010	20	1	08/23/2006	10/10/2006	ND	U
Iron	Dissolved	SW6010	100	1	08/23/2006	10/10/2006	ND	U
Lead	Dissolved	SW6010	50	1	08/23/2006	10/10/2006	ND	U
Magnesium	Dissolved	SW6010	500	1	08/23/2006	10/10/2006	57000	
Manganese	Dissolved	SW6010	10	1	08/23/2006	10/10/2006	ND	U
Nickel	Dissolved	SW6010	40	1	08/23/2006	10/10/2006	ND	U
Potassium	Dissolved	SW6010	5000	1	08/23/2006	10/10/2006	1110	B
Sodium	Dissolved	SW6010	5000	1	08/23/2006	10/10/2006	60800	
Zinc	Dissolved	SW6010	20	1	08/23/2006	10/10/2006	9.00	B

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Collected: 08/16/2006
Date Received: 08/17/2006

Trace Metals

Sample Name: 1213GW101CL
Lab Code: D0601136-004
Test Notes:

Units: ug/L (ppb)

Basis: NA

Analyte	Prep Method	Analysis Method	PQL	Dilution Factor	Date Prepared	Date Analyzed	Result	Result Notes
Aluminum	Dissolved	SW6010	100	1	08/23/2006	10/10/2006	56	B
Antimony	Dissolved	SW6010	60	1	08/23/2006	10/10/2006	ND	U
Arsenic	Dissolved	SW6010	100	1	08/23/2006	10/10/2006	ND	U
Barium	Dissolved	SW6010	10	1	08/23/2006	10/10/2006	14	
Beryllium	Dissolved	SW6010	2.00	1	08/23/2006	10/10/2006	ND	U
Cadmium	Dissolved	SW6010	5.00	1	08/23/2006	10/10/2006	ND	U
Calcium	Dissolved	SW6010	500	1	08/23/2006	10/10/2006	19100	
Chromium	Dissolved	SW6010	10	1	08/23/2006	10/10/2006	22	
Cobalt	Dissolved	SW6010	10	1	08/23/2006	10/10/2006	ND	U
Copper	Dissolved	SW6010	20	1	08/23/2006	10/10/2006	ND	U
Iron	Dissolved	SW6010	100	1	08/23/2006	10/10/2006	ND	U
Lead	Dissolved	SW6010	50	1	08/23/2006	10/10/2006	ND	U
Magnesium	Dissolved	SW6010	500	1	08/23/2006	10/10/2006	84200	
Manganese	Dissolved	SW6010	10	1	08/23/2006	10/10/2006	40	
Nickel	Dissolved	SW6010	40	1	08/23/2006	10/10/2006	13	B
Potassium	Dissolved	SW6010	5000	1	08/23/2006	10/10/2006	2070	B
Selenium	Dissolved	SW6010	200	1	08/23/2006	10/10/2006	ND	U
Silver	Dissolved	SW6010	10	1	08/23/2006	10/10/2006	ND	U
Sodium	Dissolved	SW6010	5000	1	08/23/2006	10/10/2006	331000	
Thallium	Dissolved	SW6010	2000	1	08/23/2006	10/10/2006	ND	U
Vanadium	Dissolved	SW6010	10	1	08/23/2006	10/10/2006	5.00	B
Zinc	Dissolved	SW6010	20	1	08/23/2006	10/10/2006	10	B

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QA Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: WATER

Service Request: D0601136
Date Collected: NA
Date Received: NA

Trace Metals

Sample Name: Method Blank
Lab Code: PBW-0822
Test Notes:

Units: ug/L (ppb)
Basis: NA

Analyte	Prep Method	Analysis Method	PQL	Dilution Factor	Date Prepared	Date Analyzed	Result	Result Notes
Mercury	Dissolved	SW7470	0.20	1	08/22/2006	08/23/2006	ND	U

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QA Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: WATER

Service Request: D0601136
Date Collected: NA
Date Received: NA

Trace Metals

Sample Name: Method Blank
Lab Code: PBW-0823
Test Notes:

Units: ug/L (ppb)
Basis: NA

Analyte	Prep Method	Analysis Method	PQL	Dilution Factor	Date Prepared	Date Analyzed	Result	Result Notes
Aluminum	Dissolved	SW6010	100.0	1	08/23/2006	10/10/2006	ND	U
Antimony	Dissolved	SW6010	60.0	1	08/23/2006	10/10/2006	ND	U
Arsenic	Dissolved	SW6010	100.0	1	08/23/2006	10/10/2006	ND	U
Barium	Dissolved	SW6010	10.00	1	08/23/2006	10/10/2006	ND	U
Beryllium	Dissolved	SW6010	2.00	1	08/23/2006	10/10/2006	ND	U
Cadmium	Dissolved	SW6010	5.0	1	08/23/2006	10/10/2006	ND	U
Calcium	Dissolved	SW6010	500.0	1	08/23/2006	10/10/2006	ND	U
Chromium	Dissolved	SW6010	10.0	1	08/23/2006	10/10/2006	ND	U
Cobalt	Dissolved	SW6010	10.0	1	08/23/2006	10/10/2006	ND	U
Copper	Dissolved	SW6010	20.0	1	08/23/2006	10/10/2006	ND	U
Iron	Dissolved	SW6010	100.0	1	08/23/2006	10/10/2006	ND	U
Lead	Dissolved	SW6010	50.0	1	08/23/2006	10/10/2006	ND	U
Magnesium	Dissolved	SW6010	500.0	1	08/23/2006	10/10/2006	177.4	B
Manganese	Dissolved	SW6010	10.0	1	08/23/2006	10/10/2006	ND	U
Nickel	Dissolved	SW6010	40.0	1	08/23/2006	10/10/2006	ND	U
Potassium	Dissolved	SW6010	5000.0	1	08/23/2006	10/10/2006	ND	U
Selenium	Dissolved	SW6010	200.0	1	08/23/2006	10/10/2006	ND	U
Silver	Dissolved	SW6010	10.0	1	08/23/2006	10/10/2006	3.1	B
Sodium	Dissolved	SW6010	5000.0	1	08/23/2006	10/10/2006	ND	U
Thallium	Dissolved	SW6010	2000.0	1	08/23/2006	10/10/2006	43.2	B
Vanadium	Dissolved	SW6010	10.0	1	08/23/2006	10/10/2006	ND	U
Zinc	Dissolved	SW6010	20.0	1	08/23/2006	10/10/2006	ND	U

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: WATER

Service Request: D0601136
Date Collected: NA
Date Received: NA
Date Extracted: 08/22/2006
Date Analyzed: 08/23/2006

Trace Metals

LCS Sample Name: Lab Control Sample
Lab Code: LCSW-0822 / LCSDW-0822
Test Notes:

DLCS Sample **Lab Control Sample Duplicate**
Units: ug/L (ppb)
Basis: NA

Analyte	Prep	Analysis	PQL	Spike Level	Spike Result	Spike Result	Spike % Rec	Spike % Rec	CAS Acceptance	Relative Percent	Result Notes
	Method	Method			LCS	DLCS	LCS	DLCS	Limits	Difference	
Mercury	Dissolved	SW7470	0.20	2.00	2.05	2.05	102	102	80-120	<1	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: WATER

Service Request: D0601136
Date Collected: NA
Date Received: NA
Date Extracted: 08/23/2006
Date Analyzed: 10/10/2006

Trace Metals

LCS Sample Name: Lab Control Sample
 Lab Code: LCSW-0823 / LCSDW-0823
 Test Notes:

DLCS Sample Units: Lab Control Sample Duplicate
 Basis: ug/L (ppb)
 NA

Analyte	Prep	Analysis	Spike		Spike Result	Spike Result	Spike % Rec	Spike % Rec	CAS Acceptance	Relative Percent	Result
	Method	Method	PQL	Level	LCS	DLCS	LCS	DLCS	Limits	Difference	Notes
Aluminum	Dissolved	SW6010	100.0	2000.0	2070.0	2010.0	104	100	80-120	3	
Antimony	Dissolved	SW6010	60.0	1000.0	1010.0	995.0	101	100	80-120	1	
Arsenic	Dissolved	SW6010	100.0	1000.0	992.0	942.0	99	94	80-120	5	
Barium	Dissolved	SW6010	10.0	1000.0	1040.0	1010.0	104	101	80-120	3	
Beryllium	Dissolved	SW6010	2.0	1000.0	1010.0	962.0	101	96	80-120	5	
Cadmium	Dissolved	SW6010	5.0	1000.0	1040.0	1000.0	104	100	80-120	4	
Calcium	Dissolved	SW6010	500.0	1000.0	1050.0	982.0	105	98	80-120	7	
Chromium	Dissolved	SW6010	10.0	500.0	525.0	501.0	105	100	80-120	5	
Cobalt	Dissolved	SW6010	10.0	1000.0	1050.0	994.0	105	99	80-120	5	
Copper	Dissolved	SW6010	20.0	1000.0	1050.0	1010.0	105	101	80-120	4	
Iron	Dissolved	SW6010	100.0	1000.0	995.0	933.0	100	93	80-120	6	
Lead	Dissolved	SW6010	50.0	1000.0	1050.0	989.0	105	99	80-120	6	
Magnesium	Dissolved	SW6010	500.0	1000.0	1180.0	1090.0	118	109	80-120	8	
Manganese	Dissolved	SW6010	10.0	1000.0	1040.0	996.0	104	100	80-120	4	
Nickel	Dissolved	SW6010	40.0	500.0	515.0	488.0	103	98	80-120	5	
Potassium	Dissolved	SW6010	5000.0	10000.0	10300.0	9780.0	103	98	80-120	5	
Selenium	Dissolved	SW6010	200.0	1000.0	993.0	950.0	99	95	80-120	4	
Silver	Dissolved	SW6010	10.0	250.0	270.0	260.0	108	104	80-120	4	
Sodium	Dissolved	SW6010	5000.0	2000.0	2100.0	2050.0	105	102	80-120	2	
Thallium	Dissolved	SW6010	2000.0	1000.0	1060.0	1020.0	106	102	80-120	4	
Vanadium	Dissolved	SW6010	10.0	1000.0	1050.0	1010.0	105	101	80-120	4	
Zinc	Dissolved	SW6010	20.0	1000.0	1030.0	990.0	103	99	80-120	4	

QC Summary

METALS

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Treadwell and Rollo, Inc.

SDG No.: D0601136

Contract: Presidio

Lab Code: RDD

Case No.:

SAS No.:

Initial Calibration Source: CPI

Continuing Calibration Source: CPI

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV1									
	Aluminum	2000	2000	100	90.0 - 110.0	P	10/10/2006	16:05	101006TJA
	Antimony	1050	1000	105	90.0 - 110.0	P	10/10/2006	16:05	101006TJA
	Arsenic	1030	1000	103	90.0 - 110.0	P	10/10/2006	16:05	101006TJA
	Barium	207	200	104	90.0 - 110.0	P	10/10/2006	16:05	101006TJA
	Beryllium	203	200	102	90.0 - 110.0	P	10/10/2006	16:05	101006TJA
	Cadmium	200	200	100	90.0 - 110.0	P	10/10/2006	16:05	101006TJA
	Calcium	3120	3000	104	90.0 - 110.0	P	10/10/2006	16:05	101006TJA
	Chromium	525	500	105	90.0 - 110.0	P	10/10/2006	16:05	101006TJA
	Cobalt	210	200	105	90.0 - 110.0	P	10/10/2006	16:05	101006TJA
	Copper	204	200	102	90.0 - 110.0	P	10/10/2006	16:05	101006TJA
	Iron	3150	3000	105	90.0 - 110.0	P	10/10/2006	16:05	101006TJA
	Lead	1010	1000	101	90.0 - 110.0	P	10/10/2006	16:05	101006TJA
	Magnesium	3090	3000	103	90.0 - 110.0	P	10/10/2006	16:05	101006TJA
	Manganese	206	200	103	90.0 - 110.0	P	10/10/2006	16:05	101006TJA
	Nickel	517	500	103	90.0 - 110.0	P	10/10/2006	16:05	101006TJA
	Potassium	11700	12000	98	90.0 - 110.0	P	10/10/2006	16:05	101006TJA
	Selenium	1050	1000	105	90.0 - 110.0	P	10/10/2006	16:05	101006TJA
	Sodium	4030	4000	101	90.0 - 110.0	P	10/10/2006	16:05	101006TJA
	Thallium	1100	1000	110	90.0 - 110.0	P	10/10/2006	16:05	101006TJA
	Vanadium	213	200	106	90.0 - 110.0	P	10/10/2006	16:05	101006TJA
	Zinc	207	200	104	90.0 - 110.0	P	10/10/2006	16:05	101006TJA
ICV1									
	Silver	526	500	105	90.0 - 110.0	P	10/10/2006	16:25	101006TJA

METALS

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Treadwell and Rollo, Inc.

SDG No.: D0601136

Contract: Presidio

Lab Code: RDD

Case No.:

SAS No.:

Initial Calibration Source: CPI

Continuing Calibration Source: CPI

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV1									
	Aluminum	8120	8000	102	90.0 - 110.0	P	10/10/2006	16:57	101006TJA
	Antimony	2020	2000	101	90.0 - 110.0	P	10/10/2006	16:57	101006TJA
	Arsenic	2060	2000	103	90.0 - 110.0	P	10/10/2006	16:57	101006TJA
	Barium	2040	2000	102	90.0 - 110.0	P	10/10/2006	16:57	101006TJA
	Beryllium	2040	2000	102	90.0 - 110.0	P	10/10/2006	16:57	101006TJA
	Cadmium	2040	2000	102	90.0 - 110.0	P	10/10/2006	16:57	101006TJA
	Calcium	40900	40000	102	90.0 - 110.0	P	10/10/2006	16:57	101006TJA
	Chromium	2050	2000	102	90.0 - 110.0	P	10/10/2006	16:57	101006TJA
	Cobalt	2060	2000	103	90.0 - 110.0	P	10/10/2006	16:57	101006TJA
	Copper	2020	2000	101	90.0 - 110.0	P	10/10/2006	16:57	101006TJA
	Iron	41200	40000	103	90.0 - 110.0	P	10/10/2006	16:57	101006TJA
	Lead	2050	2000	102	90.0 - 110.0	P	10/10/2006	16:57	101006TJA
	Magnesium	40800	40000	102	90.0 - 110.0	P	10/10/2006	16:57	101006TJA
	Manganese	2050	2000	102	90.0 - 110.0	P	10/10/2006	16:57	101006TJA
	Nickel	2060	2000	103	90.0 - 110.0	P	10/10/2006	16:57	101006TJA
	Potassium	20000	20000	100	90.0 - 110.0	P	10/10/2006	16:57	101006TJA
	Selenium	1990	2000	100	90.0 - 110.0	P	10/10/2006	16:57	101006TJA
	Sodium	40200	40000	100	90.0 - 110.0	P	10/10/2006	16:57	101006TJA
	Thallium	2080	2000	104	90.0 - 110.0	P	10/10/2006	16:57	101006TJA
	Vanadium	2050	2000	102	90.0 - 110.0	P	10/10/2006	16:57	101006TJA
	Zinc	2040	2000	102	90.0 - 110.0	P	10/10/2006	16:57	101006TJA
CCV1									
	Silver	811	800	101	90.0 - 110.0	P	10/10/2006	16:59	101006TJA

METALS

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INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Treadwell and Rollo, Inc.

SDG No.: D0601136

Contract: Presidio

Lab Code: RDD

Case No.:

SAS No.:

Initial Calibration Source: CPI

Continuing Calibration Source: CPI

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV2									
	Aluminum	8390	8000	105	90.0 - 110.0	P	10/10/2006	17:52	101006TJA
	Antimony	2000	2000	100	90.0 - 110.0	P	10/10/2006	17:52	101006TJA
	Arsenic	1940	2000	97	90.0 - 110.0	P	10/10/2006	17:52	101006TJA
	Barium	2020	2000	101	90.0 - 110.0	P	10/10/2006	17:52	101006TJA
	Beryllium	1950	2000	98	90.0 - 110.0	P	10/10/2006	17:52	101006TJA
	Cadmium	2020	2000	101	90.0 - 110.0	P	10/10/2006	17:52	101006TJA
	Calcium	39700	40000	99	90.0 - 110.0	P	10/10/2006	17:52	101006TJA
	Chromium	2000	2000	100	90.0 - 110.0	P	10/10/2006	17:52	101006TJA
	Cobalt	1990	2000	100	90.0 - 110.0	P	10/10/2006	17:52	101006TJA
	Copper	2010	2000	100	90.0 - 110.0	P	10/10/2006	17:52	101006TJA
	Iron	40300	40000	101	90.0 - 110.0	P	10/10/2006	17:52	101006TJA
	Lead	1970	2000	98	90.0 - 110.0	P	10/10/2006	17:52	101006TJA
	Magnesium	40700	40000	102	90.0 - 110.0	P	10/10/2006	17:52	101006TJA
	Manganese	2020	2000	101	90.0 - 110.0	P	10/10/2006	17:52	101006TJA
	Nickel	1970	2000	98	90.0 - 110.0	P	10/10/2006	17:52	101006TJA
	Potassium	21300	20000	106	90.0 - 110.0	P	10/10/2006	17:52	101006TJA
	Selenium	1940	2000	97	90.0 - 110.0	P	10/10/2006	17:52	101006TJA
	Sodium	40700	40000	102	90.0 - 110.0	P	10/10/2006	17:52	101006TJA
	Thallium	1910	2000	96	90.0 - 110.0	P	10/10/2006	17:52	101006TJA
	Vanadium	2000	2000	100	90.0 - 110.0	P	10/10/2006	17:52	101006TJA
	Zinc	1990	2000	100	90.0 - 110.0	P	10/10/2006	17:52	101006TJA
CCV2									
	Silver	823	800	103	90.0 - 110.0	P	10/10/2006	17:58	101006TJA
ICV1									
	Mercury	5.3	5.0	106	80.0 - 120.0	CV	8/23/2006	17:01	V060823
CCV1									
	Mercury	4.3	4.0	108	80.0 - 120.0	CV	8/23/2006	17:27	V060823
CCV2									
	Mercury	4.5	4.0	112	80.0 - 120.0	CV	8/23/2006	17:55	V060823

METALS

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CRDL STANDARD FOR AA & ICP

Client: Treadwell and Rollo, Inc.SDG No.: D0601136Contract: Presidio Lab Code: RDD Case No.: _____ SAS No.: _____

AA CRDL Standard Source: _____

ICP CRDL Standard Source: CPI

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Advisory Limits (%R)	M	Analysis Date	Analysis Time	Run Number
RLS									
	Aluminum	72	60	120	50 - 150	P	10/10/200	16:32	101006TJA
	Antimony	52	45	116	50 - 150	P	10/10/200	16:32	101006TJA
	Arsenic	52	45	116	50 - 150	P	10/10/200	16:32	101006TJA
	Beryllium	5	5	100	50 - 150	P	10/10/200	16:32	101006TJA
	Cadmium	4	5	80	50 - 150	P	10/10/200	16:32	101006TJA
	Calcium	520	500	104	50 - 150	P	10/10/200	16:32	101006TJA
	Chromium	10	10	100	50 - 150	P	10/10/200	16:32	101006TJA
	Cobalt	8	15	53	50 - 150	P	10/10/200	16:32	101006TJA
	Copper	11	10	110	50 - 150	P	10/10/200	16:32	101006TJA
	Iron	66	100	66	50 - 150	P	10/10/200	16:32	101006TJA
	Lead	62	50	124	50 - 150	P	10/10/200	16:32	101006TJA
	Magnesium	160	200	80	50 - 150	P	10/10/200	16:32	101006TJA
	Manganese	5	5	100	50 - 150	P	10/10/200	16:32	101006TJA
	Nickel	19	20	95	50 - 150	P	10/10/200	16:32	101006TJA
	Potassium	1100	1000	110	50 - 150	P	10/10/200	16:32	101006TJA
	Selenium	120	100	120	50 - 150	P	10/10/200	16:32	101006TJA
	Silver	12	10	120	50 - 150	P	10/10/200	16:32	101006TJA
	Sodium	500	500	100	50 - 150	P	10/10/200	16:32	101006TJA
	Thallium	78	50	156	50 - 150	P	10/10/200	16:32	101006TJA
	Vanadium	11	10	110	50 - 150	P	10/10/200	16:32	101006TJA
	Zinc	28	20	140	50 - 150	P	10/10/200	16:32	101006TJA

RLS

Barium	25	25	100	50 - 150	P	10/10/200	16:35	101006TJA
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METALS

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Treadwell and Rollo, Inc.

SDG No.: D0601136

Contract: Presidio

Lab Code: RDD

Case No.:

SAS No.:

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	PQL	M	Analysis Date	Analysis Time	Run
ICB1										
	Aluminum	22.0	+/-100.0	U	22.0	100.0	P	10/10/2006	16:28	101006TJA
	Antimony	38.0	+/-60.0	U	38.0	60.0	P	10/10/2006	16:28	101006TJA
	Arsenic	26.0	+/-100.0	U	26.0	100.0	P	10/10/2006	16:28	101006TJA
	Barium	5.0	+/-10.0	U	5.0	10.0	P	10/10/2006	16:28	101006TJA
	Beryllium	1.0	+/-2.0	U	1.0	2.0	P	10/10/2006	16:28	101006TJA
	Cadmium	1.0	+/-5.0	U	1.0	5.0	P	10/10/2006	16:28	101006TJA
	Calcium	49.0	+/-500.0	U	49.0	500.0	P	10/10/2006	16:28	101006TJA
	Chromium	3.0	+/-10.0	U	3.0	10.0	P	10/10/2006	16:28	101006TJA
	Cobalt	-7.3	+/-10.0	B	3.0	10.0	P	10/10/2006	16:28	101006TJA
	Copper	2.0	+/-20.0	U	2.0	20.0	P	10/10/2006	16:28	101006TJA
	Iron	-40.6	+/-100.0	B	14.0	100.0	P	10/10/2006	16:28	101006TJA
	Lead	41.0	+/-50.0	U	41.0	50.0	P	10/10/2006	16:28	101006TJA
	Magnesium	29.0	+/-500.0	U	29.0	500.0	P	10/10/2006	16:28	101006TJA
	Manganese	1.0	+/-10.0	U	1.0	10.0	P	10/10/2006	16:28	101006TJA
	Nickel	12.0	+/-40.0	U	12.0	40.0	P	10/10/2006	16:28	101006TJA
	Potassium	727.0	+/-5000.0	U	727.0	5000.0	P	10/10/2006	16:28	101006TJA
	Selenium	54.0	+/-200.0	U	54.0	200.0	P	10/10/2006	16:28	101006TJA
	Silver	3.1	+/-10.0	B	2.0	10.0	P	10/10/2006	16:28	101006TJA
	Sodium	45.0	+/-5000.0	U	45.0	5000.0	P	10/10/2006	16:28	101006TJA
	Thallium	30.0	+/-2000.0	U	30.0	2000.0	P	10/10/2006	16:28	101006TJA
	Vanadium	3.5	+/-10.0	B	1.0	10.0	P	10/10/2006	16:28	101006TJA
	Zinc	3.0	+/-20.0	U	3.0	20.0	P	10/10/2006	16:28	101006TJA

METALS

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Treadwell and Rollo, Inc.

SDG No.: D0601136

Contract: Presidio

Lab Code: RDD

Case No.:

SAS No.:

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	PQL	M	Analysis Date	Analysis Time	Run
CCB1										
	Aluminum	22.0	+/-100.0	U	22.0	100.0	P	10/10/2006	17:02	101006TJA
	Antimony	38.0	+/-60.0	U	38.0	60.0	P	10/10/2006	17:02	101006TJA
	Arsenic	26.0	+/-100.0	U	26.0	100.0	P	10/10/2006	17:02	101006TJA
	Barium	5.0	+/-10.0	U	5.0	10.0	P	10/10/2006	17:02	101006TJA
	Beryllium	1.0	+/-2.0	U	1.0	2.0	P	10/10/2006	17:02	101006TJA
	Cadmium	1.0	+/-5.0	U	1.0	5.0	P	10/10/2006	17:02	101006TJA
	Calcium	49.0	+/-500.0	U	49.0	500.0	P	10/10/2006	17:02	101006TJA
	Chromium	3.0	+/-10.0	U	3.0	10.0	P	10/10/2006	17:02	101006TJA
	Cobalt	3.2	+/-10.0	B	3.0	10.0	P	10/10/2006	17:02	101006TJA
	Copper	2.0	+/-20.0	U	2.0	20.0	P	10/10/2006	17:02	101006TJA
	Iron	-48.4	+/-100.0	B	14.0	100.0	P	10/10/2006	17:02	101006TJA
	Lead	41.0	+/-50.0	U	41.0	50.0	P	10/10/2006	17:02	101006TJA
	Magnesium	206.4	+/-500.0	B	29.0	500.0	P	10/10/2006	17:02	101006TJA
	Manganese	1.0	+/-10.0	U	1.0	10.0	P	10/10/2006	17:02	101006TJA
	Nickel	12.0	+/-40.0	U	12.0	40.0	P	10/10/2006	17:02	101006TJA
	Potassium	727.0	+/-5000.0	U	727.0	5000.0	P	10/10/2006	17:02	101006TJA
	Selenium	54.0	+/-200.0	U	54.0	200.0	P	10/10/2006	17:02	101006TJA
	Silver	2.0	+/-10.0	B	2.0	10.0	P	10/10/2006	17:02	101006TJA
	Sodium	45.0	+/-5000.0	U	45.0	5000.0	P	10/10/2006	17:02	101006TJA
	Thallium	30.0	+/-2000.0	U	30.0	2000.0	P	10/10/2006	17:02	101006TJA
	Vanadium	1.0	+/-10.0	U	1.0	10.0	P	10/10/2006	17:02	101006TJA
	Zinc	3.0	+/-20.0	U	3.0	20.0	P	10/10/2006	17:02	101006TJA

METALS

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INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Treadwell and Rollo, Inc.

SDG No.: D0601136

Contract: Presidio

Lab Code: RDD

Case No.:

SAS No.:

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	MDL	PQL	M	Analysis Date	Analysis Time	Run
CCB2										
	Aluminum	22.0	+/-100.0	U	22.0	100.0	P	10/10/2006	18:04	101006TJA
	Antimony	38.0	+/-60.0	U	38.0	60.0	P	10/10/2006	18:04	101006TJA
	Arsenic	26.0	+/-100.0	U	26.0	100.0	P	10/10/2006	18:04	101006TJA
	Barium	5.0	+/-10.0	U	5.0	10.0	P	10/10/2006	18:04	101006TJA
	Beryllium	1.0	+/-2.0	U	1.0	2.0	P	10/10/2006	18:04	101006TJA
	Cadmium	1.6	+/-5.0	B	1.0	5.0	P	10/10/2006	18:04	101006TJA
	Calcium	49.0	+/-500.0	U	49.0	500.0	P	10/10/2006	18:04	101006TJA
	Chromium	5.3	+/-10.0	B	3.0	10.0	P	10/10/2006	18:04	101006TJA
	Cobalt	3.0	+/-10.0	U	3.0	10.0	P	10/10/2006	18:04	101006TJA
	Copper	4.1	+/-20.0	B	2.0	20.0	P	10/10/2006	18:04	101006TJA
	Iron	-59.2	+/-100.0	B	14.0	100.0	P	10/10/2006	18:04	101006TJA
	Lead	41.0	+/-50.0	U	41.0	50.0	P	10/10/2006	18:04	101006TJA
	Magnesium	58.1	+/-500.0	B	29.0	500.0	P	10/10/2006	18:04	101006TJA
	Manganese	1.1	+/-10.0	B	1.0	10.0	P	10/10/2006	18:04	101006TJA
	Nickel	12.0	+/-40.0	U	12.0	40.0	P	10/10/2006	18:04	101006TJA
	Potassium	743.0	+/-5000.0	B	727.0	5000.0	P	10/10/2006	18:04	101006TJA
	Selenium	54.0	+/-200.0	U	54.0	200.0	P	10/10/2006	18:04	101006TJA
	Silver	8.6	+/-10.0	B	2.0	10.0	P	10/10/2006	18:04	101006TJA
	Sodium	51.1	+/-5000.0	B	45.0	5000.0	P	10/10/2006	18:04	101006TJA
	Thallium	30.0	+/-2000.0	U	30.0	2000.0	P	10/10/2006	18:04	101006TJA
	Vanadium	6.0	+/-10.0	B	1.0	10.0	P	10/10/2006	18:04	101006TJA
	Zinc	3.6	+/-20.0	B	3.0	20.0	P	10/10/2006	18:04	101006TJA
ICB1										
	Mercury	-0.13	+/-0.20	B	0.10	0.20	CV	8/23/2006	17:03	V060823
CCB1										
	Mercury	0.10	+/-0.20	U	0.10	0.20	CV	8/23/2006	17:30	V060823
CCB2										
	Mercury	-0.11	+/-0.20	B	0.10	0.20	CV	8/23/2006	17:58	V060823

METALS

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INTERFERENCE CHECK SAMPLE

Client: Treadwell and Rollo, Inc.

SDG No.: D0601136

Contract: Presidio

Lab Code: RDD

Case No.:

SAS No.:

ICS Source: CPI

Instrument ID: TJA61

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window	Analysis Date	Analysis Time	Run Number
ICSA								
	Aluminum	515267	500000	103	80 - 120%	10/10/2006	16:38	101006TJA
	Antimony	-31				10/10/2006	16:38	101006TJA
	Arsenic	171				10/10/2006	16:38	101006TJA
	Barium	1				10/10/2006	16:38	101006TJA
	Beryllium	0				10/10/2006	16:38	101006TJA
	Cadmium	-11				10/10/2006	16:38	101006TJA
	Calcium	507192	500000	101	80 - 120%	10/10/2006	16:38	101006TJA
	Chromium	-5				10/10/2006	16:38	101006TJA
	Cobalt	6				10/10/2006	16:38	101006TJA
	Copper	-1				10/10/2006	16:38	101006TJA
	Iron	194068	200000	97	80 - 120%	10/10/2006	16:38	101006TJA
	Lead	254				10/10/2006	16:38	101006TJA
	Magnesium	510899	500000	102	80 - 120%	10/10/2006	16:38	101006TJA
	Manganese	19				10/10/2006	16:38	101006TJA
	Nickel	-6				10/10/2006	16:38	101006TJA
	Potassium	-432				10/10/2006	16:38	101006TJA
	Selenium	-107				10/10/2006	16:38	101006TJA
	Silver	10				10/10/2006	16:38	101006TJA
	Sodium	41				10/10/2006	16:38	101006TJA
	Thallium	77				10/10/2006	16:38	101006TJA
	Vanadium	-9				10/10/2006	16:38	101006TJA
	Zinc	0				10/10/2006	16:38	101006TJA

METALS

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INTERFERENCE CHECK SAMPLE

Client: Treadwell and Rollo, Inc.

SDG No.: D0601136

Contract: Presidio

Lab Code: RDD

Case No.:

SAS No.:

ICS Source: CPI

Instrument ID: TJA61

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window	Analysis Date	Analysis Time	Run Number
ICSAB								
	Aluminum	518046	502000	103	80 - 120%	10/10/2006	16:45	101006TJA
	Antimony	1996	2000	100	80 - 120%	10/10/2006	16:45	101006TJA
	Arsenic	2064	2000	103	80 - 120%	10/10/2006	16:45	101006TJA
	Barium	1004	1000	100	80 - 120%	10/10/2006	16:45	101006TJA
	Beryllium	992	1000	99	80 - 120%	10/10/2006	16:45	101006TJA
	Cadmium	1984	2000	99	80 - 120%	10/10/2006	16:45	101006TJA
	Calcium	502955	500200	101	80 - 120%	10/10/2006	16:45	101006TJA
	Chromium	963	1000	96	80 - 120%	10/10/2006	16:45	101006TJA
	Cobalt	943	1000	94	80 - 120%	10/10/2006	16:45	101006TJA
	Copper	1002	1000	100	80 - 120%	10/10/2006	16:45	101006TJA
	Iron	192863	200200	96	80 - 120%	10/10/2006	16:45	101006TJA
	Lead	2274	2000	114	80 - 120%	10/10/2006	16:45	101006TJA
	Magnesium	511033	500200	102	80 - 120%	10/10/2006	16:45	101006TJA
	Manganese	991	1000	99	80 - 120%	10/10/2006	16:45	101006TJA
	Nickel	1872	2000	94	80 - 120%	10/10/2006	16:45	101006TJA
	Potassium	-366				10/10/2006	16:45	101006TJA
	Selenium	2069	2000	103	80 - 120%	10/10/2006	16:45	101006TJA
	Silver	1965	2000	98	80 - 120%	10/10/2006	16:45	101006TJA
	Sodium	2100	2000	105	80 - 120%	10/10/2006	16:45	101006TJA
	Thallium	2049	2000	102	80 - 120%	10/10/2006	16:45	101006TJA
	Vanadium	987	1000	99	80 - 120%	10/10/2006	16:45	101006TJA
	Zinc	1966	2000	98	80 - 120%	10/10/2006	16:45	101006TJA

METALS**- 13 -****SAMPLE PREPARATION SUMMARY****Client:** Treadwell and Rollo, Inc.**SDG No.:** D0601136**Contract:** Presidio**Lab Code:** RDD**Method:** P**Case No.:****SAS No.:**

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample Size(mL)	Final Sample Volume (mL)	Percent Solids
Batch Number:	ICPW1						
PBW	PBW	MB	WATER	8/23/06	50.0	50.0	
LCSW	LCSW	LCS	WATER	8/23/06	50.0	50.0	
LCSWD	LCSWD	LCSD	WATER	8/23/06	50.0	50.0	
D0601136-002	LF6GW103CL	SAM	WATER	8/23/06	50.0	50.0	
D0601136-003	1065MW9BCL	SAM	WATER	8/23/06	50.0	50.0	
D0601136-004	1213GW101CL	SAM	WATER	8/23/06	50.0	50.0	

METALS**- 13 -****SAMPLE PREPARATION SUMMARY****Client:** Treadwell and Rollo, Inc.**SDG No.:** D0601136**Contract:** Presidio**Lab Code:** RDD**Method:** CV**Case No.:****SAS No.:**

Sample ID	Client ID	Sample Type	Matrix	Prep Date	Initial Sample	Final Sample	Percent Solids
					Size(mL)	Volume (mL)	
Batch Number:	CVAAW1						
PBW	PBW	MB	WATER	8/22/06	20.0	20.0	
LCSW	LCSW	LCS	WATER	8/22/06	20.0	20.0	
LCSWD	LCSWD	LCSD	WATER	8/22/06	20.0	20.0	
D0601136-002	LF6GW103CL	SAM	WATER	8/22/06	20.0	20.0	

METALS
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ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc.Contract: PresidioLab Code: RDD

Case No.: _____

SAS No.: _____

SDG No.: D0601136Instrument ID Number: TJA61Method: PRun Number: 101006TJAStart Date: 10/10/2006End Date: 10/10/2006

EPA Sample No.	D/F	Time	% R	Analytes																							
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S G	A G	N A	T L	V	Z N	C N
CB	1.00	1553		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X		X	X	X	X	
STD	1.00	1557		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X		X	X	X	X	
ICV1	1.00	1605		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X		X	X	X	X	
CB	1.00	1615																				X					
STD 1	1.00	1622																				X					
ICV1	1.00	1625																				X					
ICB1	1.00	1628		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
RLS	1.00	1632		X	X	X		X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
RLS	1.00	1635					X																				
ICSA	1.00	1638		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
ICSAB	1.00	1645		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV1	1.00	1657		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X		X	X	X	X	
CCV1	1.00	1659																				X					
CCB1	1.00	1702		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
PBW	1.00	1704		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
LCSW	1.00	1708		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
LCSWD	1.00	1713		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
LF6GW103CL	1.00	1717		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
1065MW9BCL	1.00	1721		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
1213GW101CL	1.00	1725		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	
CCV2	1.00	1752		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X		X	X	X	X	
CCV2	1.00	1758																				X					
CCB2	1.00	1804		X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	

METALS
14
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc. Contract: Presidio

Lab Code: RDD Case No.: _____ SAS No.: _____ SDG No.: D0601136

Instrument ID Number: PE FIMS Method: CV Run Number: V060823

Start Date: 8/23/2006 End Date: 8/23/2006

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N		
CALIB BLANK	1.00	1640															X												
STANDARD 1	1.00	1642															X												
STANDARD 2	1.00	1645															X												
STANDARD 3	1.00	1647															X												
STANDARD 4	1.00	1650															X												
STANDARD 5	1.00	1652															X												
ICV1	1.00	1701															X												
ICB1	1.00	1703															X												
PBW	1.00	1706															X												
LCSW	1.00	1708															X												
LCSWD	1.00	1710															X												
CCV1	1.00	1727															X												
CCB1	1.00	1730															X												
LF6GW103CL	1.00	1746															X												
CCV2	1.00	1755															X												
CCB2	1.00	1758															X												

Verification of Instrument Parameters

METALS
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METHOD DETECTION LIMITS

Client: Treadwell and Rollo, Inc.SDG No.: D0601136Contract: PresidioLab Code: RDD

Case No.: _____

SAS No.: _____

Analyte	Wave- length (nm)	MDL ug/L	PQL ug/L
PE FIMS			
			Date: 11/5/2005
Mercury	253.70	0.10	0.20
TJA61			
			Date: 8/2/2006
Aluminum	308.22	22	100
Antimony	206.83	38	60
Arsenic	189.04	26	100
Barium	493.41	5.0	10
Beryllium	313.04	1.0	2.0
Cadmium	226.50	1.0	5.0
Calcium	317.93	49	500
Chromium	267.72	3.0	10
Cobalt	228.62	3.0	10
Copper	324.75	2.0	20
Iron	271.44	14	100
Lead	220.35	41	50
Magnesium	279.08	29	500
Manganese	257.61	1.0	10
Nickel	231.60	12	40
Potassium	766.49	727	5000
Selenium	196.02	54	200
Silver	328.07	2.0	10
Sodium	330.23	45	5000
Thallium	190.86	30	2000
Vanadium	292.40	1.0	10
Zinc	213.86	3.0	20

METALS

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ICP INTERELEMENT CORRECTION FACTORS

Client: Treadwell and Rollo, Inc.SDG No.: D0601136Contract: PresidioLab Code: RDD

Case No.: _____

SAS No.: _____

Instrument ID: TJA61Date: 7/24/2006

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		Al	Ca	Fe	Mg	Ag
Aluminum	308.22	0.0000000	0.0000000	-0.0000900	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0001500	0.0000000	0.0000000
Arsenic	189.04	0.0004700	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	-0.0001000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0003200	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000200	-0.0000500	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000200	0.0000000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	-0.0025400	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	-0.0003000	0.0000100	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000300	-0.0000100	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	-0.0006400	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	-0.0000900	0.0000000	0.0000000
Sodium	330.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0013900	0.0000000	0.0002600	-0.0000700	0.0000000
Tin	189.98	0.0000000	0.0000000	0.0002600	0.0003800	0.0000000
Vanadium	292.40	0.0000000	0.0000000	-0.0004500	0.0000000	0.0000000
Zinc	213.85	0.0000000	0.0000000	0.0000000	0.0000300	0.0000000

METALS

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ICP INTERELEMENT CORRECTION FACTORS

Client: Treadwell and Rollo, Inc.SDG No.: D0601136Contract: PresidioLab Code: RDD

Case No.: _____

SAS No.: _____

Instrument ID: TJA61Date: 7/24/2006

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		As	B	Ba	Be	Cd
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0281700	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0001200	0.0001100
Cobalt	228.62	0.0000000	0.0000000	0.0001500	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0001200	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	-0.0001500	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0003700	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	0.0000000	-0.0019700	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000000	0.0000000	0.0000000	0.0011100	0.0000000
Tin	189.98	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.85	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

METALS

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ICP INTERELEMENT CORRECTION FACTORS

Client: Treadwell and Rollo, Inc.SDG No.: D0601136Contract: Presidio Lab Code: RDD

Case No.: _____ SAS No.: _____

Instrument ID: TJA61Date: 7/24/2006

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		Co	Cr	Cu	Mn	Mo
Aluminum	308.22	-0.0011000	0.0000000	0.0000000	0.0015300	0.0142700
Antimony	206.84	-0.0013600	0.0128800	0.0000000	0.0000000	0.0103500
Arsenic	189.04	-0.0008200	0.0067500	0.0000000	0.0000000	0.0036800
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0018200	0.0000000	0.0000000	0.0000000	-0.0004300
Cadmium	226.50	0.0023500	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0113400	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0001700	-0.0013700
Cobalt	228.62	0.0000000	0.0001000	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0005500
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0006100	-0.0016500	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0032300
Manganese	257.61	0.0000000	0.0001000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0002500	0.0002900	0.0000000	0.0000000	-0.0023000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	-0.0037500	0.0000000	0.0000000	0.0000000	-0.0183500
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0001100	-0.0002300
Sodium	330.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0022900
Thallium	190.86	0.0057100	0.0005500	0.0000000	0.0022800	0.0076600
Tin	189.98	0.0000000	0.0000000	0.0000000	-0.0181700	-0.0008200
Vanadium	292.40	0.0000000	0.0003100	0.0000000	0.0000000	-0.0362200
Zinc	213.85	0.0000000	-0.0004900	0.0028300	0.0000000	0.0029800

METALS

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ICP INTERELEMENT CORRECTION FACTORS

Client: Treadwell and Rollo, Inc.SDG No.: D0601136Contract: Presidio Lab Code: RDD

Case No.: _____ SAS No.: _____

Instrument ID: TJA61Date: 7/24/2006

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		Na	Ni	Pb	Sb	Se
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	-0.0052900	0.0000000	0.0000000	0.0000000
Arsenic	189.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0007900	0.0000000	-0.0003800	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.62	0.0000000	0.0002600	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0001300	-0.0009500	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	-0.0001900	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000000	0.0000000	0.0013200	0.0000000	0.0000000
Tin	189.98	0.0000000	0.0000000	0.0000000	-0.0027500	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.85	0.0000000	0.0038100	0.0000000	-0.0005800	0.0000000

METALS

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ICP INTERELEMENT CORRECTION FACTORS

Client: Treadwell and Rollo, Inc.SDG No.: D0601136Contract: Presidio Lab Code: RDD

Case No.: _____ SAS No.: _____

Instrument ID: TJA61Date: 7/24/2006

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		Si	Sn	Sr	Ti	Tl
Aluminum	308.22	0.0000000	0.0009000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0024900	0.0000000	0.0018400	0.0000000
Arsenic	189.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.41	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.68	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.50	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0018300	0.0963000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0000000	0.0001000	0.0000000
Cobalt	228.62	0.0000000	0.0000000	0.0000000	0.0019300	0.0000000
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0001600	0.0000000
Iron	271.44	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.35	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0006000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	330.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.86	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Tin	189.98	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	213.85	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

METALS

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ICP INTERELEMENT CORRECTION FACTORS

Client: Treadwell and Rollo, Inc.SDG No.: D0601136Contract: Presidio Lab Code: RDD

Case No.: _____ SAS No.: _____

Instrument ID: TJA61Date: 7/24/2006

Interelement Correction Factors (apparent ppb analyte/ppm interferent)

Analyte	Wave- Length (nm)	ICP Interelement Correction Factors For:				
		V	Zn	La		
Aluminum	308.22	0.0132500	0.0000000	0.0000000		
Antimony	206.84	0.0000000	-0.0011700	0.0000000		
Arsenic	189.04	0.0000000	0.0000000	0.0000000		
Barium	493.41	0.0000000	0.0000000	0.0000000		
Beryllium	313.04	0.0046300	0.0000000	0.0000000		
Boron	249.68	0.0000000	0.0000000	0.0000000		
Cadmium	226.50	0.0000000	0.0000000	0.0000000		
Calcium	317.93	0.0046400	0.0000000	0.0000000		
Chromium	267.72	0.0001800	0.0000000	0.0000000		
Cobalt	228.62	0.0000000	0.0000000	0.0000000		
Copper	324.75	0.0000000	0.0000000	0.0000000		
Iron	271.44	0.0000000	0.0000000	0.0000000		
Lead	220.35	0.0000000	0.0000000	0.0000000		
Magnesium	279.08	0.0000000	0.0000000	0.0000000		
Manganese	257.61	0.0000000	0.0000000	0.0000000		
Molybdenum	202.03	-0.0002400	0.0000000	0.0000000		
Nickel	231.60	0.0000000	0.0000000	0.0000000		
Potassium	766.49	0.0000000	0.0000000	0.0000000		
Selenium	196.03	0.0000000	0.0000000	0.0000000		
Silver	328.07	0.0000000	0.0000000	0.0000000		
Sodium	330.22	0.0000000	0.0000000	0.0000000		
Thallium	190.86	0.0000000	0.0000000	0.0000000		
Tin	189.98	0.0000000	0.0000000	0.0000000		
Vanadium	292.40	0.0000000	0.0000000	0.0000000		
Zinc	213.85	0.0000000	0.0000000	0.0000000		

METALS
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LINEAR RANGES

Client: Treadwell and Rollo, Inc.SDG No.: D0601136Contract: PresidioLab Code: RDD

Case No.: _____

SAS No.: _____

Instrument ID: TJA61Date: 7/28/2006

Analyte	Integration Time (sec)	LDR ug/L
Aluminum	10.00	700000
Antimony	10.00	100000
Arsenic	10.00	100000
Barium	10.00	100000
Beryllium	10.00	10000
Cadmium	10.00	100000
Calcium	10.00	1000000
Chromium	10.00	100000
Cobalt	10.00	100000
Copper	10.00	100000
Iron	10.00	1000000
Lead	10.00	100000
Magnesium	10.00	1000000
Manganese	10.00	100000
Nickel	10.00	100000
Potassium	10.00	1000000
Selenium	10.00	200000
Silver	10.00	5000
Sodium	10.00	1000000
Thallium	10.00	100000
Vanadium	10.00	10000
Zinc	10.00	200000

Support Documentation

#	Element	CB	CB	STD	STD 1	ICV	CB
1	Al3082	.18999	.1405	34.1475		1.997	
2	Sb2068	.0035	-.0005	1.332		1.047	
3	As1890	.03949	.063	1.992		1.028	
4	Ba4554	.00249	.0025	11.0825		.2074	
5	Be3130	.00949	.00949	11.9825		.2031	
6	Cd2288	-.0005	-.001	11.8345		.1999	
7	Ca3706	-.0005	-.003	10.3755		3.122	
8	Cr2677	.0125	.0195	14.967		.5255	
9	Co2286	-.00449	.01649	11.0785		.2101	
10	Cu3247	.00749	.0085	6.69299		.2044	
11	Fe2599	.509	.4855	242.121		3.153	
12	Pb2203	-.00449	-.0035	2.6965		1.010	
13	Mg3832	.332	.324	88.025		3.087	
14	Mn2576	-.002	-.002	9.84849		.2058	
15	Mo2020	.003	.0035	2.6395		.5086	
16	Ni2316	.00099	.005	8.97599		.5167	
17	K_7664	-.1595	-.22699	2.0275		11.69	
18	Se1960	-.006	-.00549	1.06649		1.050	
19	Ag3280	.003	.008		3.549	.0668	.0035
20	Na5895	.0095	.00399	34.224		4.029	
21	Tl1908	.113	.155	2.057		1.100	
22	V_2924	.00499	.0035	6.61		.2134	
23	Zn2138	.0035	0	6.3715		.2072	
24	B_2496	1.21	.0675	4.279		Q1.772	
25	Si2881	334.358	239.869	272.107		Q9.916	
26	Ti3349	.00249	.004	6.54549		.1909	
27	Sn1899	0	.0015	2.43199		.9959	
28	Sr4215	0	.0005	9.9125		.5100	
29	Li6707	.0015	.00499			Q.1515	
30	HardC	-.0005	-.003	10.3755		24.90	

#	Element	STD 1	Ag ICV	ICB	RLS	Ba RLS	ICSA
1	Al3082		.0134	.0142	.0715	.0148	515.3
2	Sb2068		-.0096	.0077	.0516	.0019	-.0313
3	As1890		.0053	-.0249	.0523	-.0223	.1707
4	Ba4554		.0000	.0005	Q.0045	.0253	.0009
5	Be3130		.0002	.0002	.0052	.0002	.0000
6	Cd2288		.0001	.0005	.0040	.0009	-.0111
7	Ca3706		.0242	.0098	.5178	.0485	507.2
8	Cr2677		-.0005	-.0013	.0097	.0020	-.0051
9	Co2286		-.0068	-.0073	.0081	-.0034	.0059
10	Cu3247		-.0019	.0008	.0108	.0011	-.0005
11	Fe2599		-.0327	-.0406	.0658	-.0383	194.1
12	Pb2203		-.0119	-.0274	.0625	.0046	.2540
13	Mg3832		-.0530	-.0240	.1653	-.0211	510.9
14	Mn2576		.0007	.0002	.0054	.0010	.0185
15	Mo2020		-.0047	-.0019	.0154	-.0000	.0211
16	Ni2316		-.0034	-.0047	.0192	-.0061	-.0061
17	K_7664		-.3327	.1331	1.142	.0111	-.4325
18	Se1960		.0291	-.0203	.1239	.0449	-.1067
19	Ag3280	2.92549	.5260	.0031	.0123	.0024	.0095

#	Element	STD 1	Ag ICV	ICB	RLS	Ba RLS	ICSA
20	Na5895		.0161	.0161	.4983	.0073	.0409
21	Tl1908		.0055	.0217	Q.0780	.0054	.0765
22	V_2924		-.0009	.0035	.0114	.0022	-.0091
23	Zn2138		.0028	.0016	.0275	.0047	-.0003
24	B_2496		.1088	-.0083	Q1.408	-.0737	-.0838
25	Si2881		6.475	5.862	Q20.19	4.557	4.268
26	Ti3349		.0000	-.0011	.0069	.0000	-.0048
27	Sn1899		.0000	.0072	.0287	.0000	.0462
28	Sr4215		.0003	.0000	.0048	.0000	.0164
29	Li6707		-.0020	-.0017	Q.0017	-.0014	-.0011
30	HardC		-.1509	-.0878	2.675	.0750	4083.

#	Element	ICSAB	CCV	Ag CCV	CCB	WSI'BLK2	LCSW
1	Al3082	518.0	8.124	.0307	.0104	.0148	2.072
2	Sb2068	1.996	2.020	.0288	.0135	.0077	1.012
3	As1890	2.064	2.056	-.0144	-.0118	.0210	.9915
4	Ba4554	1.004	2.042	.0007	.0002	.0002	1.044
5	Be3130	.9918	2.042	.0002	.0002	.0000	1.010
6	Cd2288	1.984	2.040	.0015	-.0005	.0005	1.037
7	Ca3706	503.0	40.89	.0290	-.0096	.0097	1.046
8	Cr2677	.9635	2.054	-.0003	-.0012	.0000	.5247
9	Co2286	.9427	2.061	.0066	.0032	-.0023	1.051
10	Cu3247	1.002	2.024	.0030	-.0011	.0000	1.047
11	Fe2599	192.9	41.19	.0004	-.0484	-.0542	.9951
12	Pb2203	2.274	2.053	.0129	.0028	.0229	1.046
13	Mg3832	511.0	40.79	.3507	.2064	.1774	1.184
14	Mn2576	.9905	2.054	.0010	.0007	.0002	1.039
15	Mo2020	1.920	2.044	.0057	-.0019	-.0029	1.013
16	Ni2316	1.872	2.064	.0148	.0025	.0072	.5149
17	K_7664	-.3659	20.04	-.0333	-.4546	-.1996	10.31
18	Se1960	2.069	1.992	.0114	.0022	.0291	.9932
19	Ag3280	1.965	.7720	.8114	.0020	.0031	.2696
20	Na5895	2.100	40.25	.0511	.0132	.0044	2.105
21	Tl1908	2.049	2.078	.0539	.0257	.0432	1.059
22	V_2924	.9866	2.052	.0020	.0003	.0002	1.046
23	Zn2138	1.966	2.044	.0035	.0012	.0027	1.032
24	B_2496	1.656	Q2.488	-.0666	-.0190	-.0701	.8016
25	Si2881	5.636	Q16.09	12.66	12.77	10.66	9.000
26	Ti3349	-.0032	2.043	.0008	-.0008	-.0004	.9719
27	Sn1899	.0050	2.069	.0122	.0020	.0102	2.011
28	Sr4215	.0159	2.039	.0003	-.0003	.0000	1.044
29	Li6707	-.0022	Q1.590	.0022	.0003	-.0003	1.215
30	HardC	4067.	327.8	1.529	.7848	.7407	9.086

#	Element	LCSWD	WSD'-002	WSD'-003	WSD'-004	SOI'BLK1	LCSS
1	Al3082	2.006	.0070	.0179	.0564	.0202	53.56
2	Sb2068	.9949	.0073	.0052	.0093	.0152	.6986
3	As1890	.9419	.0182	.0220	.0247	-.0079	1.548
4	Ba4554	1.009	.0731	.0420	.0144	.0002	3.954
5	Be3130	.9622	-.0001	-.0005	-.0002	-.0002	.6630

Method Name: 10WaterHg
 Method Description: 10WaterHg
 Element: Hg

Date: 08/23/2006
 Technique: FI-MHS
 Calibration Type:
 Hg, Calc. Intercept : Linear
 Wavelength: 253.7 nm
 Sample Info Name: WATERHG.SIF

Results Data Set Name: V060823

Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 08/23/2006
 Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0006	-0.0024	0.0006	04:40:04	No
2			0.0010	0.0057	0.0010	04:40:38	No
Mean:			0.0008				
SD :			0.0003				
%RSD:			33.5173				

Auto-zero performed.

Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 08/23/2006
 Sample ID: Standard 1

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0036	0.0197	0.0045	04:42:23	No
2			0.0043	0.0250	0.0052	04:42:58	No
Mean:			0.0040				
SD :			0.0005				
%RSD:			12.5381				

[Hg] Standard number 1 applied. [0.200]
 Correlation Coefficient: 1.00000 Slope: 0.01996
 Intercept : 0.00000

Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 08/23/2006
 Sample ID: Standard 2

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0148	0.0888	0.0156	04:44:46	No
2			0.0152	0.0905	0.0160	04:45:20	No
Mean:			0.0150				
SD :			0.0003				
%RSD:			2.0076				

[Hg] Standard number 2 applied. [1.000]
 Correlation Coefficient: 0.99758 Slope: 0.01465
 Intercept : 0.00047

Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 08/23/2006
 Sample ID: Standard 3

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0589	0.3259	0.0597	04:47:06	No
2			0.0585	0.3242	0.0593	04:47:40	No
Mean:			0.0587				
SD :			0.0002				
%RSD:			0.4098				

[Hg] Standard number 3 applied. [4.000]

Correlation Coefficient: 0.99986

Slope: 0.01455

Intercept : 0.00051

=====

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 08/23/2006

Sample ID: Standard 4

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0836	0.4645	0.0845	04:49:26	No
2			0.0820	0.4503	0.0828	04:50:00	No
Mean:			0.0828				
SD :			0.0012				
%RSD:			1.4186				

[Hg] Standard number 4 applied. [6.000]

Correlation Coefficient: 0.99927

Slope: 0.01388

Intercept : 0.00101

=====

Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 08/23/2006

Sample ID: Standard 5

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.1360	0.7643	0.1368	04:51:49	No
2			0.1362	0.7501	0.1370	04:52:24	No
Mean:			0.1361				
SD :			0.0001				
%RSD:			0.1038				

[Hg] Standard number 5 applied. [10.00]

Correlation Coefficient: 0.99958

Slope: 0.01357

Intercept : 0.00148

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0008	---	---	---	---
Standard 1	0.0040	0.200	0.185	0.0005	12.5
Standard 2	0.0150	1.000	0.997	0.0003	2.0
Standard 3	0.0587	4.000	4.215	0.0002	0.4
Standard 4	0.0828	6.000	5.993	0.0012	1.4
Standard 5	0.1361	10.000	9.919	0.0001	0.1
Correlation Coefficient: 0.99958		Slope:	0.01357	Intercept:	0.0015

GC TPH DIESEL/MOTOROIL

COLUMBIA ANALYTICAL SERVICES/REDDING

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136

Cover Page - Analysis Data Package
Diesel Range Organics / Motor Oil Range Organics

Sample Name	Lab Code	Date Collected	Date Received
1065MW9BCL	D0601136-003	08/16/2006	08/17/2006
1213GW101CL	D0601136-004	08/16/2006	08/17/2006

I certify this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 
Date: 9/13/06

Name: Jamie Beckett
Title: Chemist

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Collected: 08/16/2006
Date Received: 08/17/2006

Diesel Range Organics / Motor Oil Range Organics

Sample Name: 1065MW9BCL
Lab Code: D0601136-003
Extraction: SW3510
Analysis Method: SW8015

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
TPH-Diesel (C12-C24)	ND	U	50	1	08/21/2006	09/05/2006	DWB10821	
Motor Oil (C24-C36)	ND	U	300	1	08/21/2006	09/05/2006	DWB10821	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Octacosane - SS	124	58-111	09/05/2006	*
Triacontane - SS	127	54-109	09/05/2006	*

Comments: _____

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Collected: 08/16/2006
Date Received: 08/17/2006

Diesel Range Organics / Motor Oil Range Organics

Sample Name: 1213GW101CL
Lab Code: D0601136-004
Extraction: SW3510
Analysis Method: SW8015

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
TPH-Diesel (C12-C24)	ND	U	50	1	08/21/2006	09/05/2006	DWB10821	
Motor Oil (C24-C36)	ND	U	300	1	08/21/2006	09/05/2006	DWB10821	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Octacosane - SS	116	58-111	09/05/2006	*
Triacontane - SS	116	54-109	09/05/2006	*

Comments: _____

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Collected: NA
Date Received: NA

Diesel Range Organics / Motor Oil Range Organics

Sample Name: Method Blank
Lab Code: DWB10821
Extraction: SW3510
Analysis Method: SW8015

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
TPH-Diesel (C12-C24)	ND	U	50	1	08/21/2006	09/05/2006	DWB10821	
Motor Oil (C24-C36)	ND	U	300	1	08/21/2006	09/05/2006	DWB10821	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Octacosane - SS	106	58-111	09/05/2006	
Triacontane - SS	104	54-109	09/05/2006	

Comments: _____

QC Summary

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136

Surrogate Recovery Summary
Diesel Range Organics / Motor Oil Range Organics

Prep Method: SW3510
Analysis Method: SW8015

Units: Percent

<u>Sample Name</u>	<u>Lab Code</u>	<u>Q</u>	<u>S1</u>	<u>S2</u>
Method Blank	DWB10821		106	104
Laboratory Control Sample	DWB10821LCS		105	101
Laboratory Control Sample Duplicate	DWB10821LCSD		106	103
1065MW9BCL	D0601136-003	*	124	127
1213GW101CL	D0601136-004	*	116	116

Surrogate Recovery Control Limits (%)

S1: Octacosane - SS	58-111
S2: Triacontane - SS	54-109

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Collected: NA
Date Received: NA
Date Extracted: 08/21/2006
Date Analyzed: 09/05/2006

Laboratory Control Sample/Duplicate Laboratory Control Sample Summary
Diesel Range Organics / Motor Oil Range Organics

LCS Sample			DLCS Sample			Lab Control Sample Duplicate				
Lab Control Sample			Units:			ug/L (ppb)				
Lab Code:										
Extraction										
Analysis Method:										
SW8015										
Analyte	MRL	Spike	Spike	Spike	Spike	CAS	Relative	Result		
		Level	Result	Result	% Rec	% Rec	Acceptance			
			LCS	LCSD	LCS	LCSD	Limits	Percent	Difference	Notes
TPH-Diesel	50	2500	2830	2780	113	111	64-106	2		*
Motor Oil (C24-C36)	300	2500	3080	3030	123	121	64-118	2		*

COLUMBIA ANALYTICAL SERVICES/REDDING**QA/QC Results**

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Extracted: 08/21/2006
Date Analyzed: 09/05/2006
Time Analyzed: 17:03

Method Blank Summary**Diesel Range Organics / Motor Oil Range Organics**

Extraction Method: SW3510
Analysis Method: SW8015

Extraction Lot: DWB10821

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Laboratory Control Sample	DWB10821LCS	F0905007	09/05/2006	19:16
Laboratory Control Sample Duplicate	DWB10821LCSD	F0905008	09/05/2006	20:00
1065MW9BCL	D0601136-003	F0905010	09/05/2006	21:29
1213GW101CL	D0601136-004	F0905011	09/05/2006	22:13

Standards Data

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
ICAL Date: 05/21/2006

Initial Calibration Summary
Diesel Range Organics / Motor Oil Range Organics

ICAL ID: 05/21/2006GCF
Instrument ID: GCF

Level ID **File ID**
A F0521003
B F0521004
C F0521005
D F0521006
E F0521007

Level ID **File ID**
F F0521002

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF
TPH-DIESEL (C12-C24)	A	0.100	4539	B	0.500	2805	C	1.000	2668	D	2.500	2489	E	4.000	2526
	F	0.050	5997												
Motor Oil (C24-C36)	A	0.100	2195	B	0.500	1458	C	1.000	1447	D	2.500	1352	E	4.000	1335
	F	0.050	3001												
n-Octacosane	A	0.100	2051	B	0.150	2014	C	0.250	2185	D	0.300	1974	E	0.350	2204
	F	0.050	1937												
n-Triacontane	A	0.100	2057	B	0.150	2015	C	0.250	2183	D	0.300	1976	E	0.350	2162
	F	0.050	1953												

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
ICAL Date: 05/21/2006

Initial Calibration Summary
Diesel Range Organics / Motor Oil Range Organics

ICAL ID: 05/21/2006GCF
Instrument ID: GCF
Mean RSD: 39.35

Calibration Evaluation

Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria
TPH-DIESEL (C12-C24)	TRG	Linear	r	1.000		0.995
Motor Oil (C24-C36)	TRG	Linear	r	1.000		0.995
n-Octacosane	SUR	AverageRF	% RSD	5.4		20
n-Triacontane	SUR	AverageRF	% RSD	4.7		20

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 05/21/2006

Second Source Calibration Verification
Diesel Range Organics / Motor Oil Range Organics

ICAL ID: 05/21/2006GCF
Instrument ID: GCF
File ID: F0521008

Column: DB-5

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%	Criteria	Curve Fit	Q
TPH-DIESEL (C12-C24)	1.000	0.920	3504	2445	NA	-8.0	+/- 15.0	Linear	
Motor Oil (C24-C36)	1.000	1.125	1798	1571	NA	12.5	+/- 15.0	Linear	
n-Octacosane	0.250	0.226	2061	1865	-9.5	NA	+/- 15.0	AverageRF	
n-Triacontane	0.250	0.229	2058	1886	-8.3	NA	+/- 15.0	AverageRF	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 09/05/2006

Continuing Calibration Verification Summary
Diesel Range Organics / Motor Oil Range Organics

ICAL ID: 05/21/2006GCF
Instrument ID: GCF
File ID: F0905003

Column: DB-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
TPH-DIESEL (C12-C24)	1.000	1.017	3504	2683	NA	1.7	+/- 15.0	Linear	
Motor Oil (C24-C36)	1.000	1.072	1798	1501	NA	7.2	+/- 15.0	Linear	
Octacosane	0.250	0.264	2061	2172	5.4	NA	+/- 15.0	AverageRF	
triacontane	0.250	0.266	2058	2185	6.2	NA	+/- 15.0	AverageRF	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 09/06/2006

Continuing Calibration Verification Summary
Diesel Range Organics / Motor Oil Range Organics

ICAL ID: 05/21/2006GCF
Instrument ID: GCF
File ID: F0905016

Column: DB-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
TPH-DIESEL (C12-C24)	2.500	2.456	3504	2492	NA	-1.8	+/- 15.0	Linear	
Motor Oil (C24-C36)	2.500	2.799	1798	1508	NA	12.0	+/- 15.0	Linear	
Octacosane	0.300	0.314	2061	2155	4.6	NA	+/- 15.0	AverageRF	
Triacontane	0.300	0.315	2058	2163	5.1	NA	+/- 15.0	AverageRF	

QA/QC Results

Service Request: D0601136

Analysis Method: SW8015

Instrument ID: GCF
Column: DB-5

[illegible]

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Extracted: 08/21/2006

Extraction Prep Log

Diesel Range Organics / Motor Oil Range Organics

Extraction Method: SW3510
Analysis Method: SW8015

Extraction Lot: DWB10821

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
Method Blank	DWB10821	NA	NA	1.000 L	1	NA	
Laboratory Control Sample	DWB10821LCS	NA	NA	1.000 L	1	NA	
Laboratory Control Sample Duplicate	DWB10821LCSD	NA	NA	1.000 L	1	NA	
1065MW9BCL	D0601136-003	08/16/2006	08/17/2006	1.050 L	1	NA	
1213GW101CL	D0601136-004	08/16/2006	08/17/2006	1.050 L	1	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Report

Service Request: D0601136

Analysis Method: SW8015

[illegible]

Comments: _____

SUPPORT DOCUMENTATION

Date	8/2/2006
Time	10:50

Date sampled	
--------------	--

Analytical Method(s)	
☒	TFHD, 8015B
☐	DRO by 3520C
☐	DRAX, AK102.0
☐	Other

Solvent Lots	
DCM	46090-8/2-8/24

Spikes	
Surrogate	14-EXS-16B-2
Amt.	1.0 ml Exp: 10/31/06
Spike	14-EXS-16B
Amt.	1.0 ml Exp: 10/21/06
Spiked by	MMJ
Witness	KH

Comments:

* Spike #2 : 14-exs-17-A
use: 0.25mL
exp: 10/26/06

* DO601135-6: had mud at the bottom of the bottle that would not come out
- sample in the bottle was measured at 1.05
- re-measured after pouring out of bottle at 1.02L

Test Code(s)	Spikes		Amt	Final KD	Relinq
	Surrogate	Spike 1			
8015B			8/24 (1L)	H2O bath temp 83°C	Date 8/23
Sample ID	Surrogate	Spike 1	By: KH	By: KH	Date 8/23
DWB1	X	X	1.0		
DWB2					
DWL1-8015	X	X			
DWL2-8015	X	X			
LCS-3-DMO	X	X			
LCS-4-DMO	X	X			
DO601135-6	X	X	1.05		
-7	X	X			
-8	X	X			
DO601136-3	X	X			
-9	X	X			
-4	X	X			
DO601141-1	X	X	1.0		
-2	X	X	1.05		
KH 8/21					

☐ Completed ms/msd
☒ Sample limited, no ms/msd, duplicate LCS

058

Peer Review By:

Organic Extractions Dept.
CAS-Redding

Columbia Analytical Services, Inc.

HP6890 Injection Log

Instrument ID:	
GCF	
Date(s)	
5/20/06	
Analytical Method(s)	
☒ 8015B(MOD)	☐ 8015AZ
☐ OAZ	☐ TX1005
☐ AK102/103	☐ Other
I-Cal Date(s)	5/20/06
Standard(s)	
A	
B	
C	
Analyst(s)	
CJC	

Target Method(s)	
A	F Dm 060520 vov
B	F Dm 060521 vov
C	F KTR 060521

Target Method	Data Directory	Filename	Sample ID	Matrix	DL Factor	STD	Run OK? Y/N	Rept? Y/N	Comments
A	EG060520	F052018	QC ACT (vov)				No.	No.	22-GC-44F (Re-run)
B	EG060521	F0521001	RT Marker				No.	No.	22-GC-44A (Re-run)
			PSTID 1				No.	No.	22-GC-44B
			2				No.	No.	22-GC-44C
			3				No.	No.	22-GC-44D
			4				No.	No.	22-GC-44E
			5				No.	No.	22-GC-44F
			6				No.	No.	22-GC-44G
			7				No.	No.	22-GC-44H
			8				No.	No.	22-GC-44I
			9				No.	No.	22-GC-44J
			10				No.	No.	22-GC-44K
			11				No.	No.	22-GC-44L
			12				No.	No.	22-GC-44M
			13				No.	No.	22-GC-44N
			14				No.	No.	22-GC-44O
			15				No.	No.	22-GC-44P
			16				No.	No.	22-GC-44Q
			17				No.	No.	22-GC-44R
			18				No.	No.	22-GC-44S
C	EG060522	F0522001	RT Marker				No.	No.	22-GC-50A
			PSTID 2				No.	No.	22-GC-50B
			3				No.	No.	22-GC-50C
			4				No.	No.	22-GC-50D
			5				No.	No.	22-GC-50E
			6				No.	No.	22-GC-50F
			7				No.	No.	22-GC-50G
			8				No.	No.	22-GC-50H
			9				No.	No.	22-GC-50I
			10				No.	No.	22-GC-50J
			11				No.	No.	22-GC-50K
			12				No.	No.	22-GC-50L
			13				No.	No.	22-GC-50M
			14				No.	No.	22-GC-50N
			15				No.	No.	22-GC-50O
			16				No.	No.	22-GC-50P
			17				No.	No.	22-GC-50Q
			18				No.	No.	22-GC-50R
			19				No.	No.	22-GC-50S
			20				No.	No.	22-GC-50T
			21				No.	No.	22-GC-50U
			22				No.	No.	22-GC-50V
			23				No.	No.	22-GC-50W
			24				No.	No.	22-GC-50X
			25				No.	No.	22-GC-50Y
			26				No.	No.	22-GC-50Z
			27				No.	No.	22-GC-50A
			28				No.	No.	22-GC-50B
			29				No.	No.	22-GC-50C
			30				No.	No.	22-GC-50D
			31				No.	No.	22-GC-50E
			32				No.	No.	22-GC-50F
			33				No.	No.	22-GC-50G
			34				No.	No.	22-GC-50H
			35				No.	No.	22-GC-50I
			36				No.	No.	22-GC-50J
			37				No.	No.	22-GC-50K
			38				No.	No.	22-GC-50L
			39				No.	No.	22-GC-50M
			40				No.	No.	22-GC-50N
			41				No.	No.	22-GC-50O
			42				No.	No.	22-GC-50P
			43				No.	No.	22-GC-50Q
			44				No.	No.	22-GC-50R
			45				No.	No.	22-GC-50S
			46				No.	No.	22-GC-50T
			47				No.	No.	22-GC-50U
			48				No.	No.	22-GC-50V
			49				No.	No.	22-GC-50W
			50				No.	No.	22-GC-50X
			51				No.	No.	22-GC-50Y
			52				No.	No.	22-GC-50Z
			53				No.	No.	22-GC-50A
			54				No.	No.	22-GC-50B
			55				No.	No.	22-GC-50C
			56				No.	No.	22-GC-50D
			57				No.	No.	22-GC-50E
			58				No.	No.	22-GC-50F
			59				No.	No.	22-GC-50G
			60				No.	No.	22-GC-50H
			61				No.	No.	22-GC-50I
			62				No.	No.	22-GC-50J
			63				No.	No.	22-GC-50K
			64				No.	No.	22-GC-50L
			65				No.	No.	22-GC-50M
			66				No.	No.	22-GC-50N
			67				No.	No.	22-GC-50O
			68				No.	No.	22-GC-50P
			69				No.	No.	22-GC-50Q
			70				No.	No.	22-GC-50R
			71				No.	No.	22-GC-50S
			72				No.	No.	22-GC-50T
			73				No.	No.	22-GC-50U
			74				No.	No.	22-GC-50V
			75				No.	No.	22-GC-50W
			76				No.	No.	22-GC-50X
			77				No.	No.	22-GC-50Y
			78				No.	No.	22-GC-50Z
			79				No.	No.	22-GC-50A
			80				No.	No.	22-GC-50B
			81				No.	No.	22-GC-50C
			82				No.	No.	22-GC-50D
			83				No.	No.	22-GC-50E
			84				No.	No.	22-GC-50F
			85				No.	No.	22-GC-50G
			86				No.	No.	22-GC-50H
			87				No.	No.	22-GC-50I
			88				No.	No.	22-GC-50J
			89				No.	No.	22-GC-50K
			90				No.	No.	22-GC-50L
			91				No.	No.	22-GC-50M
			92				No.	No.	22-GC-50N
			93				No.	No.	22-GC-50O
			94				No.	No.	22-GC-50P
			95				No.	No.	22-GC-50Q
			96				No.	No.	22-GC-50R
			97				No.	No.	22-GC-50S
			98				No.	No.	22-GC-50T
			99				No.	No.	22-GC-50U
			100				No.	No.	22-GC-50V

Instrument ID:	
GCF	
Date(s)	
a/s/06	

Analytical Method(s)	
☒ 8015B(MOD)	☐ 8015AZ
☐ OA2	☐ TX1005
☐ AK102/103	☐ Other

Standard(s)	
A	
B	
C	

I-Cal Date(s)	5/21/06
Analyst(s)	cyC

Target Method(s)	
A	#pmo 060521600
B	#pSL 060520
C	

Target Method	Data Directory	Filename	Sample ID	Matrix	DL Factor	STD	Run OK? Y/N	Rept? Y/N	Comments
B	FA060905	EQ065001	PT marker						
A		2	OST03 (pSL)						22-6C-60B
		3	(pmo)						22-6C-60B
		4	DWB10821	W	1X				(PT For pmo. Re-run 6C)
		5	CS						3 Diesel CS's; ↑TPH
		6	CS						↑TPH; ↑sum.
		7	CS						↑TPH - Diesel's m.o.;
		8	CS						↓pmo CS's; re-run
B	re-run →	9	D0601136-002				No.	No.	22-6C-60B for report.
A	for	10	-3						
	ps.	11	-4						
		12	120601141-001						
		13	-2						
		14	WASH						
B		15	OST04 (pSL)						22-6C-60B
A		16	(pmo)						22-6C-60B
		17	DWB10828	W	1X				22-6C-60B
		18	CS						↑TPH; ↑sum.
		19	CS						↑sum.
		20	D0601187-001						↑sum.
		21	-3						
		22	-4						
		23	-5						
		24	-6						
		25	WASH						
B		26	OST03						22-6C-60B
		27	D0601187-007						↑sum.

GC TPH DIESEL

COLUMBIA ANALYTICAL SERVICES/REDDING

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136

Cover Page - Analysis Data Package
Diesel Range Organics / Motor Oil Range Organics

Sample Name	Lab Code	Date Collected	Date Received
LF6GW103CL	D0601136-002	08/16/2006	08/17/2006

I certify this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Date: 9/13/2006

Name: Jamie Beckett

Title: Chemist

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Collected: 08/16/2006
Date Received: 08/17/2006

Diesel Range Organics / Motor Oil Range Organics

Sample Name: LF6GW103CL
Lab Code: D0601136-002
Extraction: SW3510
Analysis Method: SW8015

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
TPH-DIESEL (C12-C24)	ND	U	50	1	08/21/2006	09/08/2006	DWB10821	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Octacosane - SS	109	58-111	09/08/2006	
Triacontane - SS	110	54-109	09/08/2006	*

Comments: _____

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Collected: NA
Date Received: NA

Diesel Range Organics / Motor Oil Range Organics

Sample Name: Method Blank
Lab Code: DWB10821
Extraction: SW3510
Analysis Method: SW8015

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
TPH-DIESEL (C12-C24)	ND	U	50	1	08/21/2006	09/08/2006	DWB10821	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Octacosane - SS	110	58-111	09/08/2006	
Triacontane - SS	111	54-109	09/08/2006	*

Comments: _____

QC Summary

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136

**Surrogate Recovery Summary
 Diesel Range Organics / Motor Oil Range Organics**

Prep Method: SW3510
Analysis Method: SW8015

Units: Percent

<u>Sample Name</u>	<u>Lab Code</u>	<u>Q</u>	<u>S1</u>	<u>S2</u>
Laboratory Control Sample	DWB10821LCS		110	108
Laboratory Control Sample Duplicate	DWB10821LCSD	*	117	117
Method Blank	DWB10821	*	110	111
LF6GW103CL	D0601136-002	*	109	110

Surrogate Recovery Control Limits (%)

S1: Octacosane - SS	58-111
S2: Triacontane - SS	54-109

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Collected: NA
Date Received: NA
Date Extracted: 08/21/2006
Date Analyzed: 09/05/2006

Laboratory Control Sample/Duplicate Laboratory Control Sample Summary
Diesel Range Organics / Motor Oil Range Organics

LCS Sample Lab Control Sample
Lab Code: DWB10821LCS / DWB10821LCSD
Extraction SW3510
Analysis Method: SW8015

DLCS Sample Lab Control Sample Duplicate
Units: ug/L (ppb)

Analyte	MRL	Spike Level	Spike	Spike	Spike	Spike	CAS	Relative	Result Notes
			Result LCS	Result LCSD	% Rec LCS	% Rec LCSD	Acceptance Limits	Percent Difference	
TPH-Diesel	50	2500	3090	3040	124	122	64-106	2	*

COLUMBIA ANALYTICAL SERVICES/REDDING**QA/QC Results**

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Extracted: 08/21/2006
Date Analyzed: 09/08/2006
Time Analyzed: 11:04

Method Blank Summary**Diesel Range Organics / Motor Oil Range Organics**

Extraction Method: SW3510
Analysis Method: SW8015

Extraction Lot: DWB10821

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Laboratory Control Sample	DWB10821LCS	F0905005P	09/05/2006	17:47
Laboratory Control Sample Duplicate	DWB10821LCSD	F0905006P	09/05/2006	18:32
LF6GW103CL	D0601136-002	F0907024P	09/08/2006	11:49

Standards Data

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
ICAL Date: 05/20/2006

Initial Calibration Summary
Diesel Range Organics / Motor Oil Range Organics

ICAL ID: 05/20/2006GCF
Instrument ID: GCF

Level ID **File ID**
A F0520003
B F0520004
C F0520005
D F0520006
E F0520007

Level ID **File ID**
F F0520002

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF
TPH-DIESEL (C12-C24)	A	0.100	1892	B	0.500	1777	C	1.000	1817	D	2.500	1932	E	4.000	1851
	F	0.050	2068												
n-Octacosane	A	0.100	2015	B	0.150	1911	C	0.250	2032	D	0.300	2098	E	0.350	1999
	F	0.050	2071												
n-Triacontane	A	0.100	2014	B	0.150	1904	C	0.250	2027	D	0.300	2091	E	0.350	1984
	F	0.050	2056												

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
ICAL Date: 05/20/2006

Initial Calibration Summary
Diesel Range Organics / Motor Oil Range Organics

ICAL ID: 05/20/2006GCF
Instrument ID: GCF
Mean RSD: 5.40

Calibration Evaluation

Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria
TPH-DIESEL (C12-C24)	TRG	Linear	r	1.000		0.995
n-Octacosane	SUR	AverageRF	% RSD	3.2		20
n-Triacontane	SUR	AverageRF	% RSD	3.2		20

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136

Date Analyzed: 05/20/2006

Second Source Calibration Verification
Diesel Range Organics / Motor Oil Range Organics

ICAL ID: 05/20/2006GCF
Instrument ID: GCF
File ID: F0520009

Column: RTX-5

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%	Criteria	Curve Fit	Q
TPH-DIESEL (C12-C24)	1.000	1.002	1890	1871	NA	0.2	+/- 15.0	Linear	
n-Octacosane	0.250	0.258	2021	2085	3.2	NA	+/- 15.0	AverageRF	
n-Triacontane	0.250	0.262	2012	2106	4.6	NA	+/- 15.0	AverageRF	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 09/05/2006

Continuing Calibration Verification Summary
Diesel Range Organics / Motor Oil Range Organics

ICAL ID: 05/20/2006GCF
Instrument ID: GCF
File ID: F0905002

Column: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
TPH-DIESEL (C12-C24)	1.000	1.056	1890	1972	NA	5.6	+/- 15.0	Linear	
Octacosane	0.250	0.260	2021	2103	4.0	NA	+/- 15.0	AverageRF	
Triacontane	0.250	0.263	2012	2119	5.3	NA	+/- 15.0	AverageRF	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 09/06/2006

Continuing Calibration Verification Summary
Diesel Range Organics / Motor Oil Range Organics

ICAL ID: 05/20/2006GCF
Instrument ID: GCF
File ID: F0905015

Column: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
TPH-DIESEL (C12-C24)	2.500	2.748	1890	2057	NA	9.9	+/- 15.0	Linear	
Octacosane	0.300	0.329	2021	2219	9.8	NA	+/- 15.0	AverageRF	
triacontane	0.300	0.333	2012	2231	10.9	NA	+/- 15.0	AverageRF	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136

Date Analyzed: 09/08/2006

Continuing Calibration Verification Summary
Diesel Range Organics / Motor Oil Range Organics

ICAL ID: 05/20/2006GCF
Instrument ID: GCF
File ID: F0907019

Column: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
TPH-DIESEL (C12-C24)	2.500	2.858	1890	2139	NA	14.3	+/- 15.0	Linear	
Octacosane	0.300	0.345	2021	2325	15.0	NA	+/- 15.0	AverageRF	
triacontane	0.300	0.347	2012	2330	15.8	NA	+/- 15.0	AverageRF	*

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 09/08/2006

Continuing Calibration Verification Summary
Diesel Range Organics / Motor Oil Range Organics

ICAL ID: 05/20/2006GCF
Instrument ID: GCF
File ID: F0907025

Column: RTX-5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
TPH-DIESEL (C12-C24)	1.000	1.127	1890	2105	NA	12.7	+/- 15.0	Linear	
Octacosane	0.250	0.282	2021	2279	12.8	NA	+/- 15.0	AverageRF	
Triacontane	0.250	0.283	2012	2279	13.2	NA	+/- 15.0	AverageRF	

QA/QC Results

Service Request: D0601136

Instrument ID: GCF
Column: RTX-5

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COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Extracted: 08/21/2006

Extraction Prep Log

Diesel Range Organics / Motor Oil Range Organics

Extraction Method: SW3510
Analysis Method: SW8015

Extraction Lot: DWB10821

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
Method Blank	DWB10821	NA	NA	1.000 L	1	NA	
Laboratory Control Sample	DWB10821LCS	NA	NA	1.000 L	1	NA	
Laboratory Control Sample Duplicate	DWB10821LCSD	NA	NA	1.000 L	1	NA	
LF6GW103CL	D0601136-002	08/16/2006	08/17/2006	1.050 L	1	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Report

Service Request: D0601136

Analysis Method: SW8015

[illegible]

Comments: _____

SUPPORT DOCUMENTATION

Date	8/2/2006
Time	10:50

Date sampled	
--------------	--

Analytical Method(s)	
☒	TFHD, 8015B
☐	DRO by 3520C
☐	DRAX, AK102.0
☐	Other _____

Solvent Lots	
DCM	46090-8/2-8/21

Spikes	
<u>Surrogate</u>	14 EXS: 16B-2
Amt. 1.0 ml	Exp: 10/31/06
<u>Spike</u>	14 EXS: 16B
Amt. 1.0 ml	Exp: 10/21/06
Spiked by 	Witness 

Comments:

Spike #2: 14-exS-17-A
use: 0.25mL
exp: 10/26/06

- * DO601135-L; had mud at the bottom of the bottle that would not come out
 - sample in the bottle was measured at 1.05
 - re-measured after pouring out of bottle at 1.02L

Batches	D0601135 / 36 / D0601141
Client(s)	IBM / Treadwell / Irvine

Test Code(s)	Spikes	Amt.	Final KD	Reling.
8015B	Spike 1 50/25	8.21 (1L)	H ₂ O bath temp 83 °C	Date 8/23
Sample ID:	X	By: KH	Date & Volume By: KH 8/23	By: KH
DWB1	X	1.0		
DWR2				
DWL1-8D15	X X			
DWL2 -8015	X X			
LCS-3-DMO	X X			
LCS-4-DMO	X X			
DD601135-.6 ^{.05}	X	1.05		
↓ -.7 ^{.05}	X			
↓ -.8 ^{.04}	X			
DD601136-.3 ^{.04}	X			
↓ -.9 ^{.10}	X			
↓ -.4 ^{.07}	X			
DD601141-.1 ^{.03}	X	1.0		
↓ -.2 ^{.02}	X	1.05		
			KH	
			8/21	

☐ Completed ms/msd
☒ Sample limited, no ms/msd, duplicate LCS

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Peer Review By:

Organic Extractions Dept.
CAS-Redding

Columbia Analytical Services, Inc.

HP6890 Injection Log

Instrument ID:		GCF	
Date(s)		S19/06	
Analytical Method(s)		☒ 8015B(MOD) ☐ 8015AZ ☐ OAZ ☐ TX1005 ☐ AK102/103 ☐ Other	
I-Cal Date(s)		4/24/06	
Standard(s)		A 22-GC-49A B 22-GC-49B C 22-GC-43I	
Target Method(s)		A FPM006042400 B FIP006042400 C FPM006052000	
Analyst(s)		D 22-GC-49A CVC	

Target Method	Data Directory	Filename	Sample ID	Matrix	DL Factor	STD	Run OK?	Rept?	Comments
A	FG060510	FG0519010	DSTD 4				/	/	22-GC-5041, 1 sum
B			WASH				/	/	
			DSTD 4			B	/	/	↑ sum.
			22-B10511	W	IX		/	/	
			14				/	/	
			15				/	/	
			16				/	/	↑ sum.
			17				/	/	
			18				/	/	
			19			A	/	/	↑ sum.
C	FG060510	FG0520001	DSTD 3				/	/	
			RT Marker				/	/	
			DSTD 6			C	/	/	Diesel only 1 cat
			3				/	/	22-GC-43C
			4				/	/	22-GC-43D
			5				/	/	22-GC-43E
			6				/	/	22-GC-43F
			7				/	/	22-GC-43G
			8				/	/	22-GC-43H
			9				/	/	22-GC-43I
			10				/	/	
			WASH				/	/	
D			DSTD 4			D	/	/	Pmo 1 cat - re-mi
			12				/	/	22-GC-44A
			13				/	/	22-GC-44B
			14				/	/	22-GC-44C
			15				/	/	22-GC-44D
			16				/	/	22-GC-44E
			17				/	/	22-GC-44G

Instrument ID:	
GCF	
Date(s)	
a/s/06	

Analytical Method(s)	
☒ 8015R(MOD)	☐ 8015AZ
☐ OA2	☐ TX1005
☐ AK102/103	☐ Other _____

I-Cal Date(s)	5/22/06
---------------	---------

Standard(s)	
A	
B	
C	

Analyst(s)	cyC
------------	-----

Target Method(s)	
A	# pmo 060521 (low)
B	# psl 060520
C	

Target Method	Data Directory	Filename	Sample ID	Matrix	DL Factor	STD	Run OK? Y/N	Rept? Y/N	Comments
B	K6060905	K6065001	RT marker						22-GC-60-B
A			DSTD3 (PSL)						22-GC-60-B
			↓ (PNO)						(APT For PNO; Re-run)
			DWB10821	W	1X				↓ Diesel CES's; ↑ TPT
			CS						↑ TPT; ↑ sum.
			CS2D						↑ TPT - Diesel's m.o.i.
			CS1						↓ 300 CES's; removed
B	re-run →		CS2Q						↓ 300 CES's; removed
A	for		D0601136-002						↓ 300 CES's; removed
	PSL		-3						↓ 300 CES's; removed
			-4						↓ 300 CES's; removed
			120606141-001						↓ 300 CES's; removed
			-2						↓ 300 CES's; removed
			WASH						22-GC-60-C
B			DSTD4 (PSL)						22-GC-60-C
A			↓ (PNO)						22-GC-60-C
			DWB10828	W	1X				22-GC-60-C
			CS						22-GC-60-C
			CS2D						22-GC-60-C
			D0601187-001						22-GC-60-C
			-3						22-GC-60-C
			-4						22-GC-60-C
			-5						22-GC-60-C
			-6						22-GC-60-C
B			WASH						22-GC-60-B
			DSTD3						22-GC-60-B
			D0601187-007						22-GC-60-B

Instrument ID:		Analytical Method(s)		Standard(s)		Target Method(s)	
GCF		☒ 8015B(MOD) ☐ 8015AZ ☐ OA2 ☐ TX1005 ☐ AK102/103 ☐ Other		A B C		A B C	
Date(s)		I-Cal Date(s)		Analyst(s)			
11/7/04		5/22/04		MVC			

Target Method	Directory	Filename	Sample ID	Matrix	DL Factor	STD	Run OK? Y/N	Rept? Y/N	Comments
A	EG000907	EG000907	PT marker						
		2	Surv. chrt 0.5 ml						
		3	Surv. chrt 1.0 ml						
		4	OT/C30 Surv. chrt						
		5	One spike chrt						
		6	WASH						
		7	↓						
B		8	PT03						
		9	DWB10907	W	IX				22-GC-66B
		10	LCS						↑ TRT.
		11	LCS						
		12	D0601283-001						
		13	-2						
		14	-3						
		15	4						
		16	-5						
		17	-6						
		18	WASH						
		19	DST04						
A		20	DWB10822	W	IX				22-GC-66C
		21	D0601134-001	W	IX				with below PL.
		22	WASH						
		23	DWB10824	W	IX				
		24	D06001136-002	W	IX				
		25	DST03						22-GC-66B

Method Detection Limit Study

Analysis Method: EPA 8015B Analyst: C. Cushman
 Extraction Method: EPA 3510C Instrument: GCF
 Matrix: WATER Description: GS
 MDL Effective Date: 9/1/2006 Department: GS

#	Compound	CAS No.	Date	MDL	MG/L	1	2	3	4	5	6	7	8	Mean	Std Dev	MDL Check	True Value	%Rec
1	TPH-Diesel	68334-30-5	8/30/2006	0.034	0.10	0.163	0.179	0.185	0.182	0.164	0.151	0.175	0.167	0.171	0.011	0.10	0.05	194

Supervisor Approval: _____ Date: _____ Diesel_3510C-8015B_GCF_Water_MDL_060901.xls

QA Approval: _____ Date: _____

GC ORGANOCHLORINE PESTICIDES

COLUMBIA ANALYTICAL SERVICES/REDDING

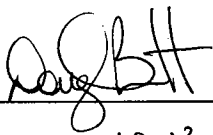
Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136

Cover Page - Analysis Data Package
ORGANOCHLORINE PESTICIDES

Sample Name	Lab Code	Date Collected	Date Received
LF6GW103CL	D0601136-002	08/16/2006	08/17/2006

I certify this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 
Date: 10-13-06

Name: DBurnett
Title: Tech Mgr

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Collected: 08/16/2006
Date Received: 08/17/2006

ORGANOCHLORINE PESTICIDES

Sample Name: LF6GW103CL
Lab Code: D0601136-002
Extraction: SW3520
Analysis Method: SW8081

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Endosulfan I	ND	U	0.050	1	08/21/2006	08/31/2006	PWB10821	
Methoxychlor	ND	U	0.50	1	08/21/2006	08/31/2006	PWB10821	
alpha-BHC	ND	U	0.050	1	08/21/2006	08/31/2006	PWB10821	
beta-BHC	ND	U	0.050	1	08/21/2006	08/31/2006	PWB10821	
gamma-BHC (Lindane)	ND	U	0.050	1	08/21/2006	08/31/2006	PWB10821	
delta-BHC	ND	U	0.050	1	08/21/2006	08/31/2006	PWB10821	
Heptachlor	ND	U	0.050	1	08/21/2006	08/31/2006	PWB10821	
Aldrin	ND	U	0.050	1	08/21/2006	08/31/2006	PWB10821	
Heptachlor Epoxide	ND	U	0.050	1	08/21/2006	08/31/2006	PWB10821	
gamma-Chlordane	ND	U	0.50	1	08/21/2006	08/31/2006	PWB10821	
Toxaphene	ND	U	1.0	1	08/21/2006	08/31/2006	PWB10821	
alpha-Chlordane	ND	U	0.50	1	08/21/2006	08/31/2006	PWB10821	
4,4'-DDE	ND	U	0.10	1	08/21/2006	08/31/2006	PWB10821	
Dieldrin	ND	U	0.10	1	08/21/2006	08/31/2006	PWB10821	
Endrin	ND	U	0.10	1	08/21/2006	08/31/2006	PWB10821	
Endosulfan II	ND	U	0.10	1	08/21/2006	08/31/2006	PWB10821	
4,4'-DDD	ND	U	0.10	1	08/21/2006	08/31/2006	PWB10821	
Endosulfan Sulfate	ND	U	0.10	1	08/21/2006	08/31/2006	PWB10821	
4,4'-DDT	ND	U	0.10	1	08/21/2006	08/31/2006	PWB10821	
Endrin Ketone	ND	U	0.10	1	08/21/2006	08/31/2006	PWB10821	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl - SS	58	65-135	08/31/2006	*
Tetrachloro-m-xylene - SS	83	65-135	08/31/2006	

Comments: _____

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Collected: NA
Date Received: NA

ORGANOCHLORINE PESTICIDES

Sample Name: Method Blank
Lab Code: PWB10821
Extraction: SW3520
Analysis Method: SW8081

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Endosulfan I	ND	U	0.050	1	08/21/2006	08/31/2006	PWB10821	
Methoxychlor	ND	U	0.50	1	08/21/2006	08/31/2006	PWB10821	
alpha-BHC	ND	U	0.050	1	08/21/2006	08/31/2006	PWB10821	
beta-BHC	ND	U	0.050	1	08/21/2006	08/31/2006	PWB10821	
gamma-BHC (Lindane)	ND	U	0.050	1	08/21/2006	08/31/2006	PWB10821	
delta-BHC	ND	U	0.050	1	08/21/2006	08/31/2006	PWB10821	
Heptachlor	ND	U	0.050	1	08/21/2006	08/31/2006	PWB10821	
Aldrin	ND	U	0.050	1	08/21/2006	08/31/2006	PWB10821	
Heptachlor Epoxide	ND	U	0.050	1	08/21/2006	08/31/2006	PWB10821	
gamma-Chlordane	ND	U	0.50	1	08/21/2006	08/31/2006	PWB10821	
Toxaphene	ND	U	1.0	1	08/21/2006	08/31/2006	PWB10821	
alpha-Chlordane	ND	U	0.50	1	08/21/2006	08/31/2006	PWB10821	
4,4'-DDE	ND	U	0.10	1	08/21/2006	08/31/2006	PWB10821	
Dieldrin	ND	U	0.10	1	08/21/2006	08/31/2006	PWB10821	
Endrin	ND	U	0.10	1	08/21/2006	08/31/2006	PWB10821	
Endosulfan II	ND	U	0.10	1	08/21/2006	08/31/2006	PWB10821	
4,4'-DDD	ND	U	0.10	1	08/21/2006	08/31/2006	PWB10821	
Endosulfan Sulfate	ND	U	0.10	1	08/21/2006	08/31/2006	PWB10821	
4,4'-DDT	ND	U	0.10	1	08/21/2006	08/31/2006	PWB10821	
Endrin Ketone	ND	U	0.10	1	08/21/2006	08/31/2006	PWB10821	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl - SS	38	65-135	08/31/2006	*
Tetrachloro-m-xylene - SS	72	65-135	08/31/2006	

Comments: _____

QC Summary

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136

Surrogate Recovery Summary
ORGANOCHLORINE PESTICIDES

Prep Method: SW3520
Analysis Method: SW8081

Units: Percent

<u>Sample Name</u>	<u>Lab Code</u>	<u>Q</u>	<u>S1</u>	<u>S2</u>
Laboratory Control Sample	PWB10821LCS	*	42	91
Laboratory Control Sample Duplicate	PWB10821LCSD	*	37	83
Method Blank	PWB10821	*	38	72
LF6GW103CL	D0601136-002	*	58	83

Surrogate Recovery Control Limits (%)

S1: Decachlorobiphenyl - SS	65-135
S2: Tetrachloro-m-xylene - SS	65-135

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Collected: NA
Date Received: NA
Date Extracted: 08/21/2006
Date Analyzed: 08/31/2006

Laboratory Control Sample/Duplicate Laboratory Control Sample Summary
ORGANOCHLORINE PESTICIDES

LCS Sample		Lab Control Sample		DLCS Sample			Lab Control Sample Duplicate		
Lab Code:		PWB10821LCS / PWB10821LCSD		Units:			ug/L (ppb)		
Extraction		SW3520							
Analysis Method:		SW8081							
Analyte	MRL	Spike	Spike	Spike	Spike	CAS	Relative	Result	
		Level	Result	% Rec	% Rec	Acceptance	Percent		
			LCS	LCSD	LCS	LCSD	Limits	Difference	
Endosulfan I	0.050	0.5000	0.4235	0.3563	85	71	65-135	17	
Endrin Ketone	0.10	0.5000	0.5112	0.4870	102	97	65-135	5	
alpha-BHC	0.050	0.5000	0.5212	0.4840	104	97	65-135	7	
beta-BHC	0.050	0.5000	0.5359	0.4983	107	100	65-135	7	
gamma-BHC (Lindane)	0.050	0.5000	0.5135	0.4774	103	95	65-135	7	
delta-BHC	0.050	0.5000	0.5060	0.4682	101	94	65-135	8	
Heptachlor	0.050	0.5000	0.4760	0.4386	95	88	65-135	8	
Aldrin	0.050	0.5000	0.3962	0.3649	79	73	65-135	8	
Heptachlor Epoxide	0.050	0.5000	0.4582	0.4394	92	88	65-135	4	
gamma-Chlordane	0.50	0.5000	0.5177	0.4603	104	92	65-135	12	
Methoxychlor	0.50	0.5000	0.5071	0.4721	101	94	65-135	7	
alpha-Chlordane	0.50	0.5000	0.5207	0.4556	104	91	65-135	13	
4,4'-DDE	0.10	0.5000	0.5242	0.4825	105	96	65-135	8	
Dieldrin	0.10	0.5000	0.4744	0.4649	95	93	65-135	2	
Endrin	0.10	0.5000	0.4950	0.4564	99	91	65-135	8	
Endosulfan II	0.10	0.5000	0.3987	0.3722	80	74	65-135	7	
4,4'-DDD	0.10	0.5000	0.4716	0.4419	94	88	65-135	6	
Endosulfan Sulfate	0.10	0.5000	0.4998	0.4669	100	93	65-135	7	
4,4'-DDT	0.10	0.5000	0.5341	0.4636	107	93	65-135	14	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Extracted: 08/21/2006
Date Analyzed: 08/31/2006
Time Analyzed: 09:48

Method Blank Summary
ORGANOCHLORINE PESTICIDES

Extraction Method: SW3520
Analysis Method: SW8081

Extraction Lot: PWB10821

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Laboratory Control Sample	PWB10821LCS	D0830022	08/31/2006	08:05
Laboratory Control Sample Duplicate	PWB10821LCSD	D0830023	08/31/2006	08:56
LF6GW103CL	D0601136-002	D0830025	08/31/2006	10:40

Standards data

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
ICAL Date: 08/27/2006

Initial Calibration Summary
ORGANOCHLORINE PESTICIDES

ICAL ID: 08/27/2006GCD
Instrument ID: GCD

Column: DB5

Level ID **File ID**
A D0827013
B D0827014
C D0827015
D D0827016
E D0827017

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF
Endosulfan I	A	0.002	1.600	B	0.015	1.325	C	0.050	1.152	D	0.075	1.099	E	0.100	1.168
Endrin Ketone	A	0.002	1.355	B	0.015	1.169	C	0.050	1.047	D	0.075	1.028	E	0.100	1.069
4,4'-DDT	A	0.002	0.991	B	0.015	0.989	C	0.050	0.911	D	0.075	0.943	E	0.100	0.970
alpha-BHC	A	0.002	2.472	B	0.015	2.144	C	0.050	1.938	D	0.075	1.948	E	0.100	1.961
beta-BHC	A	0.002	0.604	B	0.015	0.597	C	0.050	0.611	D	0.075	0.595	E	0.100	0.596
gamma-BHC (Lindane)	A	0.002	1.915	B	0.015	1.820	C	0.050	1.763	D	0.075	1.776	E	0.100	1.797
delta-BHC	A	0.002	2.226	B	0.015	1.873	C	0.050	1.703	D	0.075	1.746	E	0.100	1.738
Heptachlor	A	0.002	1.918	B	0.015	1.762	C	0.050	1.655	D	0.075	1.664	E	0.100	1.666
Aldrin	A	0.002	1.794	B	0.015	1.698	C	0.050	1.559	D	0.075	1.581	E	0.100	1.601
Heptachlor Epoxide	A	0.002	1.592	B	0.015	1.511	C	0.050	1.390	D	0.075	1.394	E	0.100	1.433
gamma-Chlordane	A	0.002	1.525	B	0.015	1.445	C	0.050	1.355	D	0.075	1.258	E	0.100	1.368
Methoxychlor	A	0.002	0.530	B	0.015	0.485	C	0.050	0.446	D	0.075	0.436	E	0.100	0.438
alpha-Chlordane	A	0.002	1.542	B	0.015	1.423	C	0.050	1.322	D	0.075	1.419	E	0.100	1.417
4,4'-DDE	A	0.002	1.528	B	0.015	1.288	C	0.050	1.146	D	0.075	1.127	E	0.100	1.148
Dieldrin	A	0.002	1.743	B	0.015	1.515	C	0.050	1.456	D	0.075	1.420	E	0.100	1.478
Endrin	A	0.002	1.487	B	0.015	1.368	C	0.050	1.221	D	0.075	1.222	E	0.100	1.224
Endosulfan II	A	0.002	1.325	B	0.015	1.217	C	0.050	1.078	D	0.075	1.124	E	0.100	1.069
4,4'-DDD	A	0.002	1.048	B	0.015	0.962	C	0.050	0.877	D	0.075	0.995	E	0.100	0.878
Endrin Aldehyde	A	0.002	0.902	B	0.015	0.850	C	0.050	0.798	D	0.075	0.829	E	0.100	0.768
Endosulfan Sulfate	A	0.002	1.100	B	0.015	1.047	C	0.050	0.903	D	0.075	0.866	E	0.100	0.887
Tetrachloro-m-xylene	A	0.004	0.875	B	0.030	0.835	C	0.100	0.753	D	0.150	0.752	E	0.200	0.764
Decachlorobiphenyl	A	0.004	0.959	B	0.030	0.895	C	0.100	0.813	D	0.150	0.800	E	0.200	0.828
Toxaphene	A	0.100	0.020	B	0.250	0.023	C	0.500	0.021	D	0.750	0.021	E	1.000	0.023

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
ICAL Date: 08/27/2006

Initial Calibration Summary
ORGANOCHLORINE PESTICIDES

ICAL ID: 08/27/2006GCD
Instrument ID: GCD
Mean RSD: 8.32

Column: DB5

Calibration Evaluation

Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria
Endosulfan I	TRG	Linear	r	0.999		0.995
Endrin Ketone	TRG	AverageRF	% RSD	11.9		20.0
4,4'-DDT	TRG	AverageRF	% RSD	3.5		20.0
alpha-BHC	TRG	Linear	r	1.000		0.995
beta-BHC	TRG	AverageRF	% RSD	1.2		20.0
gamma-BHC (Lindane)	TRG	AverageRF	% RSD	3.3		20.0
delta-BHC	TRG	AverageRF	% RSD	11.6		20.0
Heptachlor	TRG	AverageRF	% RSD	6.5		20.0
Aldrin	TRG	AverageRF	% RSD	5.9		20.0
Heptachlor Epoxide	TRG	AverageRF	% RSD	5.9		20.0
gamma-Chlordane	TRG	AverageRF	% RSD	7.2		20.0
Methoxychlor	TRG	AverageRF	% RSD	8.6		20.0
alpha-Chlordane	TRG	AverageRF	% RSD	5.5		20.0
4,4'-DDE	TRG	Linear	r	1.000		0.995
Dieldrin	TRG	AverageRF	% RSD	8.4		20.0
Endrin	TRG	AverageRF	% RSD	9.2		20.0
Endosulfan II	TRG	AverageRF	% RSD	9.3		20.0
4,4'-DDD	TRG	AverageRF	% RSD	7.8		20.0
Endrin Aldehyde	TRG	AverageRF	% RSD	6.2		20.0
Endosulfan Sulfate	TRG	AverageRF	% RSD	11.0		20.0
Tetrachloro-m-xylene	SUR	AverageRF	% RSD	7.0		20.0
Decachlorobiphenyl	SUR	AverageRF	% RSD	7.8		20.0
Toxaphene	TRG	AverageRF	% RSD	11.2		20.0

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 08/27/2006

Second Source Calibration Verification
ORGANOCHLORINE PESTICIDES

ICAL ID: 08/27/2006GCD
Instrument ID: GCD
File ID: D0827011

Column: DB5

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%	Criteria	Curve Fit	Q
Toxaphene	0.500	0.508	0.000	0.000	1.67	NA	+/- 15.0	AverageRF	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 08/27/2006

Second Source Calibration Verification
ORGANOCHLORINE PESTICIDES

ICAL ID: 08/27/2006GCD
Instrument ID: GCD
File ID: D0827018

Column: DB5

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%	Criteria	Curve Fit	Q
Endosulfan I	0.050	0.053	0.053	0.050	NA	6.3	+/- 15.0	Linear	
Endrin Ketone	0.050	0.055	1.134	1.256	10.80	NA	+/- 15.0	AverageRF	
4,4'-DDT	0.050	0.057	0.961	1.091	13.50	NA	+/- 15.0	AverageRF	
alpha-BHC	0.050	0.054	0.054	0.050	NA	7.7	+/- 15.0	Linear	
beta-BHC	0.050	0.053	0.601	0.637	6.00	NA	+/- 15.0	AverageRF	
gamma-BHC (Lindane)	0.050	0.053	1.814	1.929	6.30	NA	+/- 15.0	AverageRF	
delta-BHC	0.050	0.055	1.857	2.048	10.30	NA	+/- 15.0	AverageRF	
Heptachlor	0.050	0.053	1.733	1.843	6.40	NA	+/- 15.0	AverageRF	
Aldrin	0.050	0.054	1.647	1.769	7.40	NA	+/- 15.0	AverageRF	
Heptachlor Epoxide	0.050	0.053	1.464	1.560	6.50	NA	+/- 15.0	AverageRF	
gamma-Chlordane	0.050	0.054	1.390	1.516	9.00	NA	+/- 15.0	AverageRF	
Methoxychlor	0.050	0.057	0.467	0.530	13.60	NA	+/- 15.0	AverageRF	
alpha-Chlordane	0.050	0.054	1.425	1.528	7.20	NA	+/- 15.0	AverageRF	
4,4'-DDE	0.050	0.056	0.056	0.050	NA	11.1	+/- 15.0	Linear	
Dieldrin	0.050	0.053	1.522	1.609	5.70	NA	+/- 15.0	AverageRF	
Endrin	0.050	0.053	1.304	1.394	6.80	NA	+/- 15.0	AverageRF	
Endosulfan II	0.050	0.053	1.162	1.229	5.70	NA	+/- 15.0	AverageRF	
4,4'-DDD	0.050	0.053	0.952	1.008	5.90	NA	+/- 15.0	AverageRF	
Endrin Aldehyde	0.050	0.055	0.829	0.916	10.40	NA	+/- 15.0	AverageRF	
Endosulfan Sulfate	0.050	0.053	0.961	1.028	6.90	NA	+/- 15.0	AverageRF	
Tetrachloro-m-xylene	0.100	0.100	0.796	0.797	0.20	NA	+/- 15.0	AverageRF	
Decachlorobiphenyl	0.100	0.106	0.859	0.912	6.10	NA	+/- 15.0	AverageRF	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 08/31/2006

Continuing Calibration Verification Summary
ORGANOCHLORINE PESTICIDES

ICAL ID: 08/27/2006GCD
Instrument ID: GCD
File ID: D0830018

Column: DB5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
Toxaphene	0.750	0.792	0.000	0.000	5.67	NA	+/- 15.0	AverageRF	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 08/31/2006

Continuing Calibration Verification Summary
ORGANOCHLORINE PESTICIDES

ICAL ID: 08/27/2006GCD
Instrument ID: GCD
File ID: D0830019

Column: DB5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
Endosulfan I	0.075	0.072	0.072	0.075	NA	-4.2	+/- 15.0	Linear	
Endrin ketone	0.075	0.069	1.134	1.047	-7.60	NA	+/- 15.0	AverageRF	
4,4'-DDT	0.075	0.074	0.961	0.946	-1.50	NA	+/- 15.0	AverageRF	
alpha-BHC	0.075	0.074	0.074	0.075	NA	-0.8	+/- 15.0	Linear	
beta-BHC	0.075	0.074	0.601	0.596	-0.80	NA	+/- 15.0	AverageRF	
gamma-BHC (Lindane)	0.075	0.073	1.814	1.761	-2.90	NA	+/- 15.0	AverageRF	
delta-BHC	0.075	0.069	1.857	1.707	-8.10	NA	+/- 15.0	AverageRF	
Heptachlor	0.075	0.071	1.733	1.632	-5.80	NA	+/- 15.0	AverageRF	
Aldrin	0.075	0.071	1.647	1.557	-5.40	NA	+/- 15.0	AverageRF	
Heptachlor epoxide	0.075	0.068	1.464	1.333	-9.00	NA	+/- 15.0	AverageRF	
gamma-Chlordane	0.075	0.071	1.390	1.313	-5.50	NA	+/- 15.0	AverageRF	
Methoxychlor	0.075	0.070	0.467	0.437	-6.30	NA	+/- 15.0	AverageRF	
alpha-Chlordane	0.075	0.070	1.425	1.329	-6.70	NA	+/- 15.0	AverageRF	
4,4'-DDE	0.075	0.072	0.072	0.075	NA	-3.5	+/- 15.0	Linear	
Dieldrin	0.075	0.070	1.522	1.415	-7.00	NA	+/- 15.0	AverageRF	
Endrin	0.075	0.069	1.304	1.201	-7.90	NA	+/- 15.0	AverageRF	
Endosulfan II	0.075	0.068	1.162	1.058	-9.00	NA	+/- 15.0	AverageRF	
4,4'-DDD	0.075	0.073	0.952	0.926	-2.70	NA	+/- 15.0	AverageRF	
Endrin aldehyde	0.075	0.065	0.829	0.723	-12.80	NA	+/- 15.0	AverageRF	
Endosulfan sulfate	0.075	0.064	0.961	0.816	-15.10	NA	+/- 15.0	AverageRF	
Tetrachloro-m-xylene	0.150	0.142	0.796	0.755	-5.10	NA	+/- 15.0	AverageRF	
Decachlorobiphenyl - SS	0.150	0.139	0.859	0.797	-7.20	NA	+/- 15.0	AverageRF	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 08/31/2006

Continuing Calibration Verification Summary
ORGANOCHLORINE PESTICIDES

ICAL ID: 08/27/2006GCD
Instrument ID: GCD
File ID: D0831003

Column: DB5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
Toxaphene	0.500	0.505	0.000	0.000	1.00	NA	+/- 15.0	AverageRF	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 08/31/2006

**Continuing Calibration Verification Summary
 ORGANOCHLORINE PESTICIDES**

ICAL ID: 08/27/2006GCD
Instrument ID: GCD
File ID: D0831004

Column: DB5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
Endosulfan I	0.050	0.046	0.046	0.050	NA	-7.6	+/- 15.0	Linear	
Endrin ketone	0.050	0.046	1.134	1.035	-8.70	NA	+/- 15.0	AverageRF	
4,4'-DDT	0.050	0.047	0.961	0.900	-6.30	NA	+/- 15.0	AverageRF	
alpha-BHC	0.050	0.049	0.049	0.050	NA	-2.4	+/- 15.0	Linear	
beta-BHC	0.050	0.051	0.601	0.612	1.90	NA	+/- 15.0	AverageRF	
gamma-BHC (Lindane)	0.050	0.048	1.814	1.755	-3.30	NA	+/- 15.0	AverageRF	
delta-BHC	0.050	0.046	1.857	1.698	-8.50	NA	+/- 15.0	AverageRF	
Heptachlor	0.050	0.048	1.733	1.652	-4.70	NA	+/- 15.0	AverageRF	
Aldrin	0.050	0.047	1.647	1.554	-5.60	NA	+/- 15.0	AverageRF	
Heptachlor epoxide	0.050	0.047	1.464	1.371	-6.30	NA	+/- 15.0	AverageRF	
gamma-Chlordane	0.050	0.048	1.390	1.328	-4.50	NA	+/- 15.0	AverageRF	
Methoxychlor	0.050	0.048	0.467	0.452	-3.20	NA	+/- 15.0	AverageRF	
alpha-Chlordane	0.050	0.048	1.425	1.384	-2.80	NA	+/- 15.0	AverageRF	
4,4'-DDE	0.050	0.049	0.049	0.050	NA	-1.8	+/- 15.0	Linear	
Dieldrin	0.050	0.047	1.522	1.424	-6.40	NA	+/- 15.0	AverageRF	
Endrin	0.050	0.047	1.304	1.225	-6.10	NA	+/- 15.0	AverageRF	
Endosulfan II	0.050	0.048	1.162	1.111	-4.50	NA	+/- 15.0	AverageRF	
4,4'-DDD	0.050	0.052	0.952	0.992	4.20	NA	+/- 15.0	AverageRF	
Endrin aldehyde	0.050	0.048	0.829	0.798	-3.80	NA	+/- 15.0	AverageRF	
Endosulfan sulfate	0.050	0.047	0.961	0.901	-6.20	NA	+/- 15.0	AverageRF	
Tetrachloro-m-xylene	0.100	0.096	0.796	0.766	-3.80	NA	+/- 15.0	AverageRF	
Decachlorobiphenyl - SS	0.100	0.096	0.859	0.822	-4.30	NA	+/- 15.0	AverageRF	

QA/QC Results

Service Request: D0601136

Analysis Method: SW8081

Instrument ID: GCD
Column: DB5

[illegible]

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Extracted: 08/21/2006

Extraction Prep Log
ORGANOCHLORINE PESTICIDES

Extraction Method: SW3520
Analysis Method: SW8081

Extraction Lot: PWB10821

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
Method Blank	PWB10821	NA	NA	1.000 L	10	NA	
Laboratory Control Sample	PWB10821LCS	NA	NA	1.000 L	10	NA	
Laboratory Control Sample Duplicate	PWB10821LCSD	NA	NA	1.000 L	10	NA	
LF6GW103CL	D0601136-002	08/16/2006	08/17/2006	1.050 L	10	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Report

Service Request: D0601136

Analysis Method: SW8081

[illegible]

Comments: _____

Support Documentation

7D
PESTICIDE BREAKDOWN

Lab Name: COLUMBIA ANALYTICAL SERVICES Case No.: D0601136 SDG No.: D0601136
GC Column: DB5 ID: 0.53 (mm) Init. Calib. Date(s): 08/27/06 08/27/06
Lab File ID: D0830017
Date Analyzed :08/31/06
Time Analyzed :0346

DDE AREA = 0
DDD AREA = 2064590
DDT AREA = 114139742
Endrin Aldehyde AREA = 0
Endrin Ketone AREA = 2583198
Endrin AREA = 83676678

4,4'-DDT % breakdown (1): 1.78 Endrin % breakdown (1): 2.99

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%
Endrin breakdown must be less than or equal to 15.0%

Method Detection Limit Study

Analysis Method: SW8081
 Extraction Method: SW3520
 Matrix: WATER
 MDL Effective Date: 1/1/2006

Analyst: J. Beckett
 Instrument: GCD
 Description: Combined MDL for Col. 1 and Col. 2
 Department: GS

Columbia Analytical Services
 Redding, CA

#	Compound	CAS No.	Date	MDL	UG/L	1	2	3	4	5	6	7	8	Mean	Std Dev	MDL Check	True Value	% Rec
1	ALPHA-BHC	319-84-6	12/9/2005	0.0025	0.0125	0.0117	0.0116	0.0123	0.0136	0.0126	0.0121	0.0121	0.0123	0.0121	0.0008	0.0037	0.0063	139
2	BETA-BHC	319-85-7	12/9/2005	0.0029	0.0125	0.0100	0.0098	0.0105	0.0106	0.0124	0.0113	0.0093	0.0102	0.0105	0.0010	0.0036	0.0063	58
3	GAMMA-BHC	58-89-9	12/9/2005	0.0034	0.0125	0.0097	0.0098	0.0109	0.0100	0.0127	0.0118	0.0099	0.0116	0.0108	0.0011	0.0035	0.0063	56
4	DELTA-BHC	319-86-8	12/9/2005	0.0022	0.0125	0.0103	0.0098	0.0100	0.0096	0.0088	0.0102	0.0082	0.0094	0.0095	0.0007	0.0039	0.0063	63
5	HEPTACHLOR	76-44-8	12/9/2005	0.0027	0.0125	0.0092	0.0094	0.0099	0.0109	0.0117	0.0110	0.0097	0.0098	0.0102	0.0009	0.0068	0.0063	108
6	ALDRIN	309-00-2	12/9/2005	0.0026	0.0125	0.0075	0.0076	0.0069	0.0074	0.0085	0.0090	0.0062	0.0074	0.0076	0.0009	0.0027	0.0063	43
7	HEPTACHLOR EPOXIDE	1024-57-3	12/9/2005	0.0029	0.0125	0.0107	0.0117	0.0109	0.0119	0.0124	0.0113	0.0093	0.0109	0.0111	0.0010	0.0062	0.0063	99
8	g-CHLORDANE	5566-34-7	12/9/2005	0.0032	0.0125	0.0082	0.0102	0.0101	0.0098	0.0112	0.0115	0.0102	0.0090	0.0100	0.0011	0.0049	0.0063	78
9	ENDOSULFAN I	959-98-8	12/9/2005	0.0032	0.0125	0.0094	0.0109	0.0106	0.0111	0.0130	0.0117	0.0104	0.0104	0.0109	0.0011	0.0038	0.0063	61
10	a-CHLORDANE	5103-71-9	12/9/2005	0.0032	0.0125	0.0096	0.0097	0.0098	0.0099	0.0123	0.0115	0.0100	0.0093	0.0102	0.0011	0.0038	0.0063	61
11	4,4'-DDE	72-55-9	12/9/2005	0.0066	0.0125	0.0042	0.0094	0.0093	0.0100	0.0116	0.0108	0.0088	0.0090	0.0091	0.0022	0.0037	0.0063	59
12	DIELDRIN	60-57-1	12/9/2005	0.0031	0.0125	0.0092	0.0094	0.0096	0.0104	0.0122	0.0101	0.0089	0.0095	0.0099	0.0010	0.0039	0.0063	62
13	ENDRIN	72-20-8	12/9/2005	0.0027	0.0125	0.0099	0.0096	0.0106	0.0100	0.0123	0.0110	0.0097	0.0101	0.0104	0.0009	0.0039	0.0063	63
14	ENDOSULFAN I I	33213-65-9	12/9/2005	0.0024	0.0125	0.0096	0.0079	0.0097	0.0097	0.0094	0.0097	0.0081	0.0083	0.0090	0.0008	0.0048	0.0063	77
15	4,4'-DDD	72-54-8	12/9/2005	0.0025	0.0125	0.0105	0.0094	0.0100	0.0108	0.0107	0.0115	0.0088	0.0101	0.0102	0.0008	0.0042	0.0063	68
16	ENDRIN ALDEHYDE	7421-93-4	12/9/2005	0.013	0.0125	0.0123	0.0173	0.0208	0.0226	0.0210	0.0212	0.0183	0.0264	0.0200	0.0041	0.0032	0.0063	52
17	ENDOSULFAN SULFATE	1031-07-8	12/9/2005	0.0059	0.0125	0.0122	0.0123	0.0134	0.0087	0.0146	0.0145	0.0110	0.0113	0.0122	0.0020	0.0055	0.0063	88
18	4,4'-DDT	50-29-3	12/9/2005	0.0024	0.0125	0.0101	0.0093	0.0089	0.0105	0.0098	0.0108	0.0089	0.0087	0.0096	0.0008	0.0037	0.0063	59
19	ENDRIN KETONE	53494-70-5	12/9/2005	0.0065	0.0125	0.0084	0.0053	0.0092	0.0092	0.0099	0.0039	0.0088	0.0092	0.0080	0.0022	0.0045	0.0063	72
20	METHOXYCHLOR	72-43-5	12/9/2005	0.0097	0.0125	0.0114	0.0150	0.0198	0.0180	0.0182	0.0186	0.0131	0.0126	0.0158	0.0032	0.0046	0.0063	74
21	TOXAPHENE	8001-35-2	12/9/2005	0.066	0.0000	0.1604	0.2064	0.1829	0.2157	0.2067	0.1737	0.1660	0.2080	0.1900	0.0217	0.0892	0.125	71
22	CHLORDANE (TECHNICAL)	57-74-9	12/9/2005	0.053	0.2500	0.2305	0.2355	0.2317	0.2326	0.2624	0.2465	0.1996	0.2390	0.2347	0.0177	0.1125	0.125	90

Supervisor Approval: _____ Date: _____

Pesticides_3520C-8081A_GCD_Water_MDL_060101.xls

QA Approval: _____ Date: _____

GC ORGANOCHLORINE PCBS

COLUMBIA ANALYTICAL SERVICES/REDDING

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136

**Cover Page - Analysis Data Package
 PolyChlorinated Biphenyls (PCBs)**

Sample Name	Lab Code	Date Collected	Date Received
LF6GW103CL	D0601136-002	08/16/2006	08/17/2006

I certify this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Wida Ang
 Date: 9/5/06

Name: WIDA ANG
 Title: Organic Manager

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Collected: 08/16/2006
Date Received: 08/17/2006

PolyChlorinated Biphenyls (PCBs)

Sample Name: LF6GW103CL
Lab Code: D0601136-002
Extraction: SW3520
Analysis Method: SW8082

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	ND	U	1.0	1	08/21/2006	08/24/2006	PWB10821	
Aroclor 1221	ND	U	2.0	1	08/21/2006	08/24/2006	PWB10821	
Aroclor 1232	ND	U	1.0	1	08/21/2006	08/24/2006	PWB10821	
Aroclor 1242	ND	U	1.0	1	08/21/2006	08/24/2006	PWB10821	
Aroclor 1248	ND	U	1.0	1	08/21/2006	08/24/2006	PWB10821	
Aroclor 1254	ND	U	1.0	1	08/21/2006	08/24/2006	PWB10821	
Aroclor 1260	ND	U	1.0	1	08/21/2006	08/24/2006	PWB10821	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl - SS	60	65-135	08/24/2006	*
Tetrachloro-m-xylene - SS	95	65-135	08/24/2006	

Comments: _____

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
 Project: Presidio
 Sample Matrix: Water

Service Request: D0601136
 Date Collected: NA
 Date Received: NA

PolyChlorinated Biphenyls (PCBs)

Sample Name: Method Blank
 Lab Code: PWB10821
 Extraction: SW3520
 Analysis Method: SW8082

Units: ug/L (ppb)

Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	ND	U	1.0	1	08/21/2006	08/24/2006	PWB10821	
Aroclor 1221	ND	U	2.0	1	08/21/2006	08/24/2006	PWB10821	
Aroclor 1232	ND	U	1.0	1	08/21/2006	08/24/2006	PWB10821	
Aroclor 1242	ND	U	1.0	1	08/21/2006	08/24/2006	PWB10821	
Aroclor 1248	ND	U	1.0	1	08/21/2006	08/24/2006	PWB10821	
Aroclor 1254	ND	U	1.0	1	08/21/2006	08/24/2006	PWB10821	
Aroclor 1260	ND	U	1.0	1	08/21/2006	08/24/2006	PWB10821	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl - SS	43	65-135	08/24/2006	*
Tetrachloro-m-xylene - SS	90	65-135	08/24/2006	

Comments: _____

Standards data

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136

Surrogate Recovery Summary
PolyChlorinated Biphenyls (PCBs)

Prep Method: SW3520
Analysis Method: SW8082

Units: Percent

<u>Sample Name</u>	<u>Lab Code</u>	<u>Q</u>	<u>S1</u>	<u>S2</u>
Laboratory Control Sample	PWB10821LCS	*	56	91
Laboratory Control Sample Duplicate	PWB10821LCSD	*	22	40
Method Blank	PWB10821	*	43	90
LF6GW103CL	D0601136-002	*	60	95

Surrogate Recovery Control Limits (%)

S1: Decachlorobiphenyl - SS	65-135
S2: Tetrachloro-m-xylene - SS	65-135

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Collected: NA
Date Received: NA
Date Extracted: 08/21/2006
Date Analyzed: 08/24/2006

Laboratory Control Sample/Duplicate Laboratory Control Sample Summary
PolyChlorinated Biphenyls (PCBs)

LCS Sample Lab Control Sample
Lab Code: PWB10821LCS / PWB10821LCSD
Extraction SW3520
Analysis Method: SW8082

DLCS Sample Lab Control Sample Duplicate
Units: ug/L (ppb)

Analyte	MRL	Spike Level	Spike Result	Spike Result	Spike % Rec	Spike % Rec	CAS Acceptance Limits	Relative Percent Difference	Result Notes
			LCS	LCSD	LCS	LCSD			
Aroclor 1016	1.0	5.000	4.825	2.133	96	43	65-135	77	*
Aroclor 1260	1.0	5.000	4.494	2.027	90	40	65-135	76	*

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Extracted: 08/21/2006
Date Analyzed: 08/24/2006
Time Analyzed: 20:12

Method Blank Summary
PolyChlorinated Biphenyls (PCBs)

Extraction Method: SW3520
Analysis Method: SW8082

Extraction Lot: PWB10821

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Laboratory Control Sample	PWB10821LCS	C0824022	08/24/2006	19:09
Laboratory Control Sample Duplicate	PWB10821LCSD	C0824023	08/24/2006	19:41
LF6GW103CL	D0601136-002	C0824025	08/24/2006	20:43

QC Summary

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
ICAL Date: 08/21/2006

Initial Calibration Summary
PolyChlorinated Biphenyls (PCBs)

ICAL ID: 08/21/2006GCC
Instrument ID: GCC

Column: RTX-CLP2

Level ID **File ID**
A C0821011
B C0821012
C C0821013
D C0821014
E C0821015

Level ID **File ID**
F C0821016

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF
Decachlorobiphenyl	A	0.010	2383	B	0.020	4289	C	0.050	3635	D	0.100	3472	E	0.150	3136
	F	0.200	3140												
Tetrachloro-m-xylene	A	0.010	2407	B	0.020	4791	C	0.050	4281	D	0.100	4191	E	0.150	3846
	F	0.200	3833												
Aroclor 1221										D	0.500	700			
Aroclor 1232										D	0.500	562.9			
Aroclor 1242										D	0.500	1019			
Aroclor 1248										D	0.500	2177			
Aroclor 1254										D	0.500	2442			

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
ICAL Date: 08/21/2006

Initial Calibration Summary
PolyChlorinated Biphenyls (PCBs)

ICAL ID: 08/21/2006GCC
Instrument ID: GCC

Column: RTX-CLP2

Level ID **File ID**
A C0821011
B C0821012
C C0821013
D C0821014
E C0821015

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF
Aroclor 1016	A	0.025	181.2	B	0.100	173.1	C	0.250	149.0	D	0.500	143.4	E	0.750	131.0
	F	1.000	130.0												
Aroclor 1260	A	0.025	237.2	B	0.100	224.1	C	0.250	197.1	D	0.500	190.2	E	0.750	173.2
	F	1.000	174.3												

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
ICAL Date: 08/21/2006

Initial Calibration Summary
PolyChlorinated Biphenyls (PCBs)

ICAL ID: 08/21/2006GCC
Instrument ID: GCC
Mean RSD: 0.00

Column: RTX-CLP2

Calibration Evaluation

Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria
Decachlorobiphenyl	SUR	AverageRF	% RSD	18.9		20.0
Tetrachloro-m-xylene	SUR	Linear	r	0.998		0.995
Aroclor 1221	TRG	AverageRF	% RSD	0.0		20.0
Aroclor 1232	TRG	AverageRF	% RSD	0.0		20.0
Aroclor 1242	TRG	AverageRF	% RSD	0.0		20.0
Aroclor 1248	TRG	AverageRF	% RSD	0.0		20.0
Aroclor 1254	TRG	AverageRF	% RSD	0.0		20.0

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
ICAL Date: 08/21/2006

Initial Calibration Summary
PolyChlorinated Biphenyls (PCBs)

ICAL ID: 08/21/2006GCC
Instrument ID: GCC
Mean RSD: 12.35

Column: RTX-CLP2

Calibration Evaluation

Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria
Aroclor 1016	TRG	AverageRF	% RSD	13.2		20.0
Aroclor 1260	TRG	AverageRF	% RSD	11.5		20.0

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 08/21/2006

Second Source Calibration Verification
PolyChlorinated Biphenyls (PCBs)

ICAL ID: 08/21/2006GCC
Instrument ID: GCC
File ID: C0821017

Column: RTX-CLP2

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%	Criteria	Curve Fit	Q
Decachlorobiphenyl	0.100	0.101	0.101	0.100	1.40	NA	+/- 15.0	AverageRF	
Aroclor 1016	0.500	0.486	0.486	0.500	-2.80	NA	+/- 15.0	AverageRF	
Aroclor 1260	0.500	0.483	0.483	0.500	-3.40	NA	+/- 15.0	AverageRF	
Tetrachloro-m-xylene	0.100	0.104	0.104	0.100	NA	3.7	+/- 15.0	Linear	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 08/24/2006

Continuing Calibration Verification Summary
PolyChlorinated Biphenyls (PCBs)

ICAL ID: 08/21/2006GCC
Instrument ID: GCC
File ID: C0824020

Column: RTX-CLP2

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
Decachlorobiphenyl - SS	0.100	0.100	0.100	0.100	0.30	NA	+/- 15.0	AverageRF	
Aroclor-1016	0.500	0.513	0.513	0.500	2.50	NA	+/- 15.0	AverageRF	
Aroclor-1260	0.500	0.474	0.474	0.500	-5.20	NA	+/- 15.0	AverageRF	
Tetrachloro-m-xylene	0.100	0.115	0.115	0.100	NA	15.2	+/- 15.0	Linear	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 08/25/2006

Continuing Calibration Verification Summary
PolyChlorinated Biphenyls (PCBs)

ICAL ID: 08/21/2006GCC
Instrument ID: GCC
File ID: C0824032

Column: RTX-CLP2

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
Decachlorobiphenyl - SS	0.150	0.157	0.157	0.150	4.40	NA	+/- 15.0	AverageRF	
Aroclor-1016	0.750	0.755	0.755	0.750	0.70	NA	+/- 15.0	AverageRF	
Aroclor-1260	0.750	0.762	0.762	0.750	1.60	NA	+/- 15.0	AverageRF	
Tetrachloro-m-xylene	0.150	0.172	0.172	0.150	NA	14.5	+/- 15.0	Linear	

QA/QC Results

Service Request: D0601136

Analysis Method: SW8082

Instrument ID: GCC
Column: RTX-CLP2

Form 8 - Organic

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Extracted: 08/21/2006

Extraction Prep Log
PolyChlorinated Biphenyls (PCBs)

Extraction Method: SW3520
Analysis Method: SW8082

Extraction Lot: PWB10821

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
Method Blank	PWB10821	NA	NA	1.000 L	10	NA	
Laboratory Control Sample	PWB10821LCS	NA	NA	1.000 L	10	NA	
Laboratory Control Sample Duplicate	PWB10821LCSD	NA	NA	1.000 L	10	NA	
LF6GW103CL	D0601136-002	08/16/2006	08/17/2006	1.050 L	10	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Report

Service Request: D0601136

Analysis Method: SW8082

[illegible]

Comments: _____

Method Detection Limit Study

Columbia Analytical Services
Redding, CA

Analysis Method: SW8082
Extraction Method: SW3520
Matrix: WATER
MDL Effective Date: 10/13/2005

Analyst: J. Beckett
Instrument: GCA
Description: Combined MDL for Col.1 and Col. 2
Department: GS

#	Compound	CAS No.	Date	MDL
1	AROCLOR-1016	12674-11-2	10/13/005	0.21
2	AROCLOR-1221	11104-28-2	10/10/2005	0.25
3	AROCLOR-1232	11141-16-5	10/12/2005	0.22
4	AROCLOR-1242	53469-21-9	10/12/2005	0.16
5	AROCLOR-1248	12672-29-6	10/13/2005	0.13
6	AROCLOR-1254	11097-69-1	10/10/2005	0.044
7	AROCLOR-1260	11096-82-5	10/13/2005	0.11
8	AROCLOR-1268	11100-14-4	10/12/2005	0.032

Aroclor 1016 MDL-3 peak interference.

Aroclor 1248 MDL-3 appears to have been spiked twice.

UG/L	1	2	3	4	5	6	7	8
0.25	0.45	0.45		0.33	0.37	0.48	0.38	0.51
0.50	0.63	0.76	0.73	0.67	0.71	0.71	0.57	0.53
0.25	0.60	0.50	0.49	0.48	0.47	0.44	0.43	0.63
0.25	0.31	0.32	0.32	0.32	0.32	0.31	0.20	0.20
0.25	0.30	0.30		0.35	0.33	0.32	0.42	0.32
0.25	0.30	0.29	0.28	0.29	0.28	0.26	0.27	0.27
0.25	0.29	0.39	0.34	0.31	0.30	0.28	0.31	0.29
0.25	0.30	0.31	0.32	0.31	0.31	0.31	0.30	0.33

Mean	Std Dev
0.42	0.07
0.66	0.08
0.51	0.07
0.29	0.05
0.33	0.04
0.28	0.01
0.31	0.04
0.31	0.01

Method Detection Limit Study

Columbia Analytical Services
Redding, CA

Analysis Method: SW8082 Analyst: J. Beckett
Extraction Method: SW3520 Instrument: GCC
Matrix: WATER Description: Combined MDL for Col.1 and Col. 2
MDL Effective Date: 11/5/2005 Department: GS

#	Compound	CAS No.	Date	MDL
1	AROCLOR-1016	12674-11-2	11/4/2005	0.24
2	AROCLOR-1221	11104-28-2	11/4/2005	0.22
3	AROCLOR-1232	11141-16-5	11/4/2005	0.20
4	AROCLOR-1242	53469-21-9	11/4/2005	0.043
5	AROCLOR-1248	12672-29-6	11/4/2005	0.12
6	AROCLOR-1254	11097-69-1	11/4/2005	0.063
7	AROCLOR-1260	11096-82-5	11/4/2005	0.081
8	AROCLOR-1268	11100-14-4	11/4/2005	0.028

UG/L	1	2	3	4	5	6	7	8
0.25	0.44	0.45	0.45	0.39	0.32	0.41	0.30	0.52
0.50	0.85	0.71	0.65	0.78	0.79	0.63	0.75	0.73
0.25	0.33	0.34	0.35	0.37	0.35	0.34	0.32	0.53
0.25	0.33	0.30	0.31	0.30	0.31	0.29	0.29	0.32
0.25	0.35	0.36	0.33	0.33	0.32	0.36	0.43	0.32
0.25	0.31	0.30	0.28	0.34	0.30	0.29	0.27	0.28
0.25	0.24	0.32	0.25	0.29	0.25	0.27	0.25	0.24
0.25	0.30	0.32	0.32	0.33	0.33	0.32	0.31	0.32

MDL Check	True Value	%Rec.
0.17	0.13	128.00
0.42	0.25	169.60
0.18	0.13	142.00
0.17	0.13	127.69
0.20	0.13	150.62
0.14	0.13	109.08
0.16	0.13	119.31
0.18	0.13	140.00

Mean	Std Dev
0.41	0.0769
0.74	0.0730
0.37	0.0671
0.31	0.0142
0.35	0.0374
0.30	0.0211
0.26	0.0270
0.32	0.0092

The 3rd MDL replicate was not added to the study for Aroclor 1016 and 1248 as they failed the one-sided outlier test

GC/MS VOLATILE ORGANICS

COLUMBIA ANALYTICAL SERVICES/REDDING

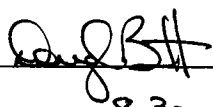
Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136

Cover Page - Analysis Data Package
Volatile Organic Compounds

Sample Name	Lab Code	Date Collected	Date Received
1213GW101CL	D0601136-004	08/16/2006	08/17/2006
TB081606A	D0601136-005	08/16/2006	08/17/2006

I certify this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Date: 8-30-06Name: DBurnettTitle: Tech Mgr

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
 Project: Presidio
 Sample Matrix: Water

Service Request: D0601136
 Date Collected: 08/16/2006
 Date Received: 08/17/2006

Volatile Organic Compounds

Sample Name: 1213GW101CL
 Lab Code: D0601136-004
 Extraction: SW5030
 Analysis Method: SW8260

Units: ug/L (ppb)
 Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	1	08/28/2006	08/28/2006	K0828W01	
Vinyl Chloride	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Bromomethane	ND	U	1.0	1	08/28/2006	08/28/2006	K0828W01	
Chloroethane	ND	U	1.0	1	08/28/2006	08/28/2006	K0828W01	
1,1-Dichloroethene (1,1-DCE)	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Acetone	ND	U	10	1	08/28/2006	08/28/2006	K0828W01	
Carbon Disulfide	ND	U	5.0	1	08/28/2006	08/28/2006	K0828W01	
Dichloromethane (Methylene Chloride)	ND	U	4.5	1	08/28/2006	08/28/2006	K0828W01	
trans-1,2-Dichloroethene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Methyl tert-Butyl Ether	ND	U	2.0	1	08/28/2006	08/28/2006	K0828W01	
1,1-Dichloroethane (1,1-DCA)	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Vinyl Acetate	ND	U	10	1	08/28/2006	08/28/2006	K0828W01	
cis-1,2-Dichloroethene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
1,2-Dichloroethene, Total	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
2-Butanone (MEK)	ND	U	10	1	08/28/2006	08/28/2006	K0828W01	
Chloroform	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Carbon Tetrachloride	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Benzene	29		0.50	1	08/28/2006	08/28/2006	K0828W01	
1,2-Dichloroethane (EDC)	8.2		0.50	1	08/28/2006	08/28/2006	K0828W01	
Trichloroethene (TCE)	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
1,2-Dichloropropane	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Bromodichloromethane	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
cis-1,3-Dichloropropene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	08/28/2006	08/28/2006	K0828W01	
Toluene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
trans-1,3-Dichloropropene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
1,1,2-Trichloroethane	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Tetrachloroethene (PCE)	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
2-Hexanone	ND	U	10	1	08/28/2006	08/28/2006	K0828W01	
Dibromochloromethane	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Chlorobenzene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Ethylbenzene	0.56		0.50	1	08/28/2006	08/28/2006	K0828W01	
Xylenes, Total	ND	U	1.0	1	08/28/2006	08/28/2006	K0828W01	
Styrene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Bromoform	ND	U	1.0	1	08/28/2006	08/28/2006	K0828W01	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
1,3-Dichlorobenzene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	

Comments:

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Collected: 08/16/2006
Date Received: 08/17/2006

Volatile Organic Compounds

Sample Name: 1213GW101CL
Lab Code: D0601136-004
Extraction: SW5030
Analysis Method: SW8260

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,4-Dichlorobenzene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
1,2-Dichlorobenzene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4 - SS	101	76-114	08/28/2006	
4-Bromofluorobenzene - SS	95	86-115	08/28/2006	
Toluene-d8 - SS	93	88-110	08/28/2006	

Comments: _____

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Collected: 08/16/2006
Date Received: 08/17/2006

Volatile Organic Compounds

Sample Name: TB081606A
Lab Code: D0601136-005
Extraction: SW5030
Analysis Method: SW8260

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	1	08/28/2006	08/28/2006	K0828W01	
Vinyl Chloride	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Bromomethane	ND	U	1.0	1	08/28/2006	08/28/2006	K0828W01	
Chloroethane	ND	U	1.0	1	08/28/2006	08/28/2006	K0828W01	
1,1-Dichloroethene (1,1-DCE)	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Acetone	ND	U	10	1	08/28/2006	08/28/2006	K0828W01	
Carbon Disulfide	ND	U	5.0	1	08/28/2006	08/28/2006	K0828W01	
Dichloromethane (Methylene Chloride)	ND	U	4.5	1	08/28/2006	08/28/2006	K0828W01	
trans-1,2-Dichloroethene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Methyl tert-Butyl Ether	ND	U	2.0	1	08/28/2006	08/28/2006	K0828W01	
1,1-Dichloroethane (1,1-DCA)	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Vinyl Acetate	ND	U	10	1	08/28/2006	08/28/2006	K0828W01	
cis-1,2-Dichloroethene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
1,2-Dichloroethene, Total	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
2-Butanone (MEK)	ND	U	10	1	08/28/2006	08/28/2006	K0828W01	
Chloroform	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Carbon Tetrachloride	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Benzene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Trichloroethene (TCE)	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
1,2-Dichloropropane	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Bromodichloromethane	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
cis-1,3-Dichloropropene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	08/28/2006	08/28/2006	K0828W01	
Toluene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
trans-1,3-Dichloropropene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
1,1,2-Trichloroethane	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Tetrachloroethene (PCE)	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
2-Hexanone	ND	U	10	1	08/28/2006	08/28/2006	K0828W01	
Dibromochloromethane	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Chlorobenzene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Ethylbenzene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Xylenes, Total	ND	U	1.0	1	08/28/2006	08/28/2006	K0828W01	
Styrene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Bromoform	ND	U	1.0	1	08/28/2006	08/28/2006	K0828W01	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
1,3-Dichlorobenzene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	

Comments:

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Collected: 08/16/2006
Date Received: 08/17/2006

Volatile Organic Compounds

Sample Name: TB081606A
Lab Code: D0601136-005
Extraction: SW5030
Analysis Method: SW8260

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,4-Dichlorobenzene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
1,2-Dichlorobenzene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4 - SS	105	76-114	08/28/2006	
4-Bromofluorobenzene - SS	102	86-115	08/28/2006	
Toluene-d8 - SS	99	88-110	08/28/2006	

Comments: _____

QC Summary

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
 Project: Presidio
 Sample Matrix: Water

Service Request: D0601136
 Date Collected: NA
 Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
 Lab Code: K0828W01
 Extraction: SW5030
 Analysis Method: SW8260

Units: ug/L (ppb)
 Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	1	08/28/2006	08/28/2006	K0828W01	
Vinyl Chloride	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Bromomethane	ND	U	1.0	1	08/28/2006	08/28/2006	K0828W01	
Chloroethane	ND	U	1.0	1	08/28/2006	08/28/2006	K0828W01	
1,1-Dichloroethene (1,1-DCE)	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Acetone	ND	U	10	1	08/28/2006	08/28/2006	K0828W01	
Carbon Disulfide	ND	U	5.0	1	08/28/2006	08/28/2006	K0828W01	
Dichloromethane (Methylene Chloride)	ND	U	4.5	1	08/28/2006	08/28/2006	K0828W01	
trans-1,2-Dichloroethene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Methyl tert-Butyl Ether	ND	U	2.0	1	08/28/2006	08/28/2006	K0828W01	
1,1-Dichloroethane (1,1-DCA)	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Vinyl Acetate	ND	U	10	1	08/28/2006	08/28/2006	K0828W01	
cis-1,2-Dichloroethene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
1,2-Dichloroethene, Total	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
2-Butanone (MEK)	ND	U	10	1	08/28/2006	08/28/2006	K0828W01	
Chloroform	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Carbon Tetrachloride	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Benzene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Trichloroethene (TCE)	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
1,2-Dichloropropane	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Bromodichloromethane	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
cis-1,3-Dichloropropene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	08/28/2006	08/28/2006	K0828W01	
Toluene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
trans-1,3-Dichloropropene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
1,1,2-Trichloroethane	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Tetrachloroethene (PCE)	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
2-Hexanone	ND	U	10	1	08/28/2006	08/28/2006	K0828W01	
Dibromochloromethane	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Chlorobenzene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Ethylbenzene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Xylenes, Total	ND	U	1.0	1	08/28/2006	08/28/2006	K0828W01	
Styrene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
Bromoform	ND	U	1.0	1	08/28/2006	08/28/2006	K0828W01	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
1,3-Dichlorobenzene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	

Comments:

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: K0828W01
Extraction: SW5030
Analysis Method: SW8260

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,4-Dichlorobenzene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	
1,2-Dichlorobenzene	ND	U	0.50	1	08/28/2006	08/28/2006	K0828W01	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4 - SS	107	76-114	08/28/2006	
4-Bromofluorobenzene - SS	100	86-115	08/28/2006	
Toluene-d8 - SS	104	88-110	08/28/2006	

Comments: _____

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136

Surrogate Recovery Summary
Volatile Organic Compounds

Prep Method: SW5030
Analysis Method: SW8260

Units: Percent

<u>Sample Name</u>	<u>Lab Code</u>	<u>Q</u>	<u>S1</u>	<u>S2</u>	<u>S3</u>
Laboratory Control Sample	K0828W01LCS		94	97	104
Laboratory Control Sample Duplicate	K0828W01LCSD		96	96	105
Method Blank	K0828W01		107	100	104
I213GW101CL	D0601136-004		101	95	93
TB081606A	D0601136-005		105	102	99

Surrogate Recovery Control Limits (%)

S1: 1,2-Dichloroethane-d4 - SS	76-114
S2: 4-Bromofluorobenzene - SS	86-115
S3: Toluene-d8 - SS	88-110

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 08/28/2006
Time Analyzed: 1104

Internal Standard Area and RT Summary
Volatile Organic Compounds

File ID: K066155
Instrument ID: MSK
Analysis Method: SW8260

Analysis Lot: MSK08/28/2006

	Fluorobenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
	<u>Area</u>	<u>RT</u>	<u>Area</u>	<u>RT</u>	<u>Area</u>	<u>RT</u>
Results ==>	640715	9.74	436128	13.09	222349	15.67
Upper Limit ==>	1281430	10.24	872256	13.59	444698	16.17
Lower Limit ==>	320358	9.24	218064	12.59	111175	15.17

Associated Analyses

Laboratory Control Sample	K0828W01LCS	687624	9.74	457448	13.09	232402	15.68
Laboratory Control Sample Duplicate	K0828W01LCSD	673047	9.75	447265	13.09	230187	15.68
Method Blank	K0828W01	604282	9.74	396587	13.09	182167	15.69
1213GW101CL	D0601136-004	762969	9.76	523351	13.10	227659	15.69
TB081606A	D0601136-005	579465	9.76	382746	13.10	162209	15.69

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
 Project: Presidio
 Sample Matrix: Water

Service Request: D0601136
 Date Collected: NA
 Date Received: NA
 Date Extracted: NA
 Date Analyzed: 08/28/2006

Laboratory Control Sample/Duplicate Laboratory Control Sample Summary

Volatile Organic Compounds

LCS Sample			Lab Control Sample			DLCS Sample			Lab Control Sample Duplicate		
Lab Code:			K0828W01LCS / K0828W01LCSD			Units:			ug/L (ppb)		
Extraction			SW5030								
Analysis Method:			SW8260								
Analyte	MRL	Spike	Spike	Spike	Spike	CAS	Relative	Result			
		Level	Result	% Rec	% Rec	Acceptance	Percent				
			LCS	LCSD	LCS	LCSD	Limits	Difference			
1,1-Dichloroethene (1,1-DCE)	0.50	10.0	11.2	11.5	112	115	65-135	3			
Benzene	0.50	10.0	10.1	10.4	101	104	65-135	3			
Trichloroethene (TCE)	0.50	10.0	9.85	10.0	98	100	65-135	2			
Toluene	0.50	10.0	10.3	10.4	103	104	65-135	1			
Chlorobenzene	0.50	10.0	10.3	10.3	103	103	65-135	0			

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Extracted: 08/28/2006
Date Analyzed: 08/28/2006
Time Analyzed: 15:30

Method Blank Summary
Volatile Organic Compounds

Extraction Method: SW5030
Analysis Method: SW8260

Extraction Lot: K0828W01

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Laboratory Control Sample	K0828W01LCS	K066160	08/28/2006	13:17
Laboratory Control Sample Duplicate	K0828W01LCSD	K066161	08/28/2006	13:44
1213GW101CL	D0601136-004	K066172	08/28/2006	18:36
TB081606A	D0601136-005	K066173	08/28/2006	19:03

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 08/28/2006
Time Analyzed: 0823

Tune Summary
Volatile Organic Compounds

File ID: K066149
Instrument ID: MSK
Column: DB-624

Analysis Method: SW8260
Analysis Lot:

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	22.9	91992	PASS
75	95	30	60	51.9	208576	PASS
95	95	100	100	100.0	401664	PASS
96	95	5	9	6.8	27184	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	67.6	271360	PASS
175	174	5	9	7.3	19704	PASS
176	174	95	101	96.7	262528	PASS
177	176	5	9	6.5	17160	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
VSTD00.5	VSTD00.5	K066152	08/28/2006	0945	
VSTD001	VSTD001	K066153	08/28/2006	1011	
VSTD005	VSTD005	K066154	08/28/2006	1038	
VSTD010	VSTD010	K066155	08/28/2006	1104	
VSTD020	VSTD020	K066156	08/28/2006	1131	
VSTD040	VSTD040	K066157	08/28/2006	1157	
VSTD100	VSTD100	K066158	08/28/2006	1224	
QCALTSTD	QCALTSTD	K066159	08/28/2006	1251	
Laboratory Control Sample	K0828W01LCS	K066160	08/28/2006	1317	
Laboratory Control Sample Duplicate	K0828W01LCSD	K066161	08/28/2006	1344	
Method Blank	K0828W01	K066165	08/28/2006	1530	
1213GW101CL	D0601136-004	K066172	08/28/2006	1836	
TB081606A	D0601136-005	K066173	08/28/2006	1903	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

Standards Data

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
ICAL Date: 08/28/2006

Initial Calibration Summary
Volatile Organic Compounds

ICAL ID: 08/28/2006MSK
Instrument ID: MSK

Column: DB-624

Level ID File ID
A K066152
B K066154
C K066155
D K066156
E K066157

Level ID File ID
F K066153
G K066158

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
* Chloromethane	A	0.500	0.357	B	5.000	0.285	C	10.00	0.296	D	20.00	0.286	E	40.00	0.294
	F	1.000	0.346	G	100.0	0.310									
# Vinyl Chloride	A	0.500	0.274	B	5.000	0.262	C	10.00	0.276	D	20.00	0.268	E	40.00	0.274
	F	1.000	0.264	G	100.0	0.273									
Bromomethane	A	0.500	0.158	B	5.000	0.179	C	10.00	0.192	D	20.00	0.186	E	40.00	0.184
	F	1.000	0.183	G	100.0	0.175									
Chloroethane	A	0.500	0.159	B	5.000	0.131	C	10.00	0.136	D	20.00	0.132	E	40.00	0.124
	F	1.000	0.146	G	100.0	0.119									
# 1,1-Dichloroethene (1,1-DCE)	A	0.500	0.209	B	5.000	0.221	C	10.00	0.230	D	20.00	0.228	E	40.00	0.220
	F	1.000	0.248	G	100.0	0.221									
Acetone				B	25.00	0.084	C	50.00	0.083	D	100.0	0.081	E	200.0	0.077
	F	5.000	0.104	G	500.0	0.075									
Carbon Disulfide	A	0.500	0.981	B	5.000	1.034	C	10.00	1.092	D	20.00	1.054	E	40.00	1.039
	F	1.000	1.061	G	100.0	1.051									
Dichloromethane (Methylene Chloride)	A	0.500	0.363	B	5.000	0.337	C	10.00	0.353	D	20.00	0.340	E	40.00	0.337
	F	1.000	0.352	G	100.0	0.336									
trans-1,2-Dichloroethene	A	0.500	0.270	B	5.000	0.283	C	10.00	0.294	D	20.00	0.291	E	40.00	0.280
	F	1.000	0.292	G	100.0	0.275									
Methyl tert-Butyl Ether	A	0.500	0.762	B	5.000	0.736	C	10.00	0.753	D	20.00	0.755	E	40.00	0.730
	F	1.000	0.731	G	100.0	0.735									
* 1,1-Dichloroethane (1,1-DCA)	A	0.500	0.607	B	5.000	0.640	C	10.00	0.669	D	20.00	0.660	E	40.00	0.623
	F	1.000	0.675	G	100.0	0.618									
Vinyl Acetate	A	0.500	1.184	B	5.000	1.254	C	10.00	1.290	D	20.00	1.285	E	40.00	1.228
	F	1.000	1.253	G	100.0	1.224									
cis-1,2-Dichloroethene	A	0.500	0.296	B	5.000	0.308	C	10.00	0.323	D	20.00	0.321	E	40.00	0.311
	F	1.000	0.308	G	100.0	0.303									
1,2-Dichloroethene, Total	A	1.000	0.283	B	10.00	0.295	C	20.00	0.309	D	40.00	0.306	E	80.00	0.296
	F	2.000	0.300	G	200.0	0.289									
2-Butanone (MEK)				B	25.00	0.127	C	50.00	0.132	D	100.0	0.132	E	200.0	0.127
	F	5.000	0.141	G	500.0	0.126									
# Chloroform	A	0.500	1.109	B	5.000	0.702	C	10.00	0.704	D	20.00	0.701	E	40.00	0.664
	F	1.000	0.883	G	100.0	0.656									
1,1,1-Trichloroethane (TCA)	A	0.500	0.450	B	5.000	0.476	C	10.00	0.485	D	20.00	0.479	E	40.00	0.459
	F	1.000	0.470	G	100.0	0.466									

Results flagged with an asterisk (*) indicate values outside control criteria

* SPCC Compound # CCC Compound

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
ICAL Date: 08/28/2006

Initial Calibration Summary
Volatile Organic Compounds

ICAL ID: 08/28/2006MSK
Instrument ID: MSK

Column: DB-624

Level ID File ID
A K066152
B K066154
C K066155
D K066156
E K066157

Level ID File ID
F K066153
G K066158

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Carbon Tetrachloride	A	0.500	0.340	B	5.000	0.373	C	10.00	0.383	D	20.00	0.383	E	40.00	0.368
	F	1.000	0.371	G	100.0	0.374									
Benzene	A	0.500	1.167	B	5.000	1.152	C	10.00	1.224	D	20.00	1.179	E	40.00	1.131
	F	1.000	1.146	G	100.0	1.120									
1,2-Dichloroethane (EDC)	A	0.500	0.488	B	5.000	0.511	C	10.00	0.529	D	20.00	0.530	E	40.00	0.493
	F	1.000	0.507	G	100.0	0.491									
Trichloroethene (TCE)	A	0.500	0.320	B	5.000	0.311	C	10.00	0.320	D	20.00	0.321	E	40.00	0.306
	F	1.000	0.308	G	100.0	0.321									
# 1,2-Dichloropropane	A	0.500	0.329	B	5.000	0.341	C	10.00	0.360	D	20.00	0.362	E	40.00	0.350
	F	1.000	0.338	G	100.0	0.351									
Bromodichloromethane	A	0.500	0.472	B	5.000	0.486	C	10.00	0.512	D	20.00	0.508	E	40.00	0.498
	F	1.000	0.490	G	100.0	0.503									
cis-1,3-Dichloropropene	A	0.500	0.488	B	5.000	0.524	C	10.00	0.544	D	20.00	0.544	E	40.00	0.542
	F	1.000	0.502	G	100.0	0.537									
4-Methyl-2-pentanone (MIBK)				B	25.00	0.278	C	50.00	0.288	D	100.0	0.280	E	200.0	0.278
	F	5.000	0.252	G	500.0	0.270									
# Toluene	A	0.500	0.856	B	5.000	0.902	C	10.00	0.936	D	20.00	0.965	E	40.00	0.932
	F	1.000	0.918	G	100.0	0.935									
trans-1,3-Dichloropropene	A	0.500	0.615	B	5.000	0.682	C	10.00	0.717	D	20.00	0.747	E	40.00	0.715
	F	1.000	0.620	G	100.0	0.692									
1,1,2-Trichloroethane	A	0.500	0.336	B	5.000	0.332	C	10.00	0.345	D	20.00	0.356	E	40.00	0.343
	F	1.000	0.325	G	100.0	0.327									
Tetrachloroethene (PCE)	A	0.500	0.350	B	5.000	0.387	C	10.00	0.404	D	20.00	0.416	E	40.00	0.400
	F	1.000	0.385	G	100.0	0.397									
2-Hexanone				B	25.00	0.270	C	50.00	0.285	D	100.0	0.297	E	200.0	0.277
	F	5.000	0.253	G	500.0	0.247									
Dibromochloromethane	A	0.500	0.413	B	5.000	0.459	C	10.00	0.494	D	20.00	0.507	E	40.00	0.504
	F	1.000	0.455	G	100.0	0.499									
* Chlorobenzene	A	0.500	0.927	B	5.000	0.953	C	10.00	1.013	D	20.00	1.033	E	40.00	0.990
	F	1.000	0.992	G	100.0	0.970									
# Ethylbenzene	A	0.500	1.755	B	5.000	1.734	C	10.00	1.828	D	20.00	1.865	E	40.00	1.811
	F	1.000	1.739	G	100.0	1.715									
Xylenes, Total	A	1.500	0.525	B	15.00	0.546	C	30.00	0.597	D	60.00	0.600	E	120.0	0.576
	F	3.000	0.543	G	300.0	0.551									

Results flagged with an asterisk (*) indicate values outside control criteria

* SPCC Compound # CCC Compound

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
ICAL Date: 08/28/2006

Initial Calibration Summary
Volatile Organic Compounds

ICAL ID: 08/28/2006MSK
Instrument ID: MSK

Column: DB-624

Level ID File ID
A K066152
B K066154
C K066155
D K066156
E K066157

Level ID File ID
F K066153
G K066158

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF
Styrene	A	0.500	0.868	B	5.000	0.946	C	10.00	1.018	D	20.00	1.046	E	40.00	1.037
	F	1.000	0.929	G	100.0	0.970									
* Bromoform	A	0.500	0.237	B	5.000	0.258	C	10.00	0.281	D	20.00	0.294	E	40.00	0.294
	F	1.000	0.247	G	100.0	0.287									
* 1,1,2,2-Tetrachloroethane	A	0.500	1.007	B	5.000	0.999	C	10.00	0.972	D	20.00	0.977	E	40.00	0.972
	F	1.000	1.013	G	100.0	0.920									
1,3-Dichlorobenzene	A	0.500	1.662	B	5.000	1.532	C	10.00	1.640	D	20.00	1.584	E	40.00	1.548
	F	1.000	1.585	G	100.0	1.559									
1,4-Dichlorobenzene	A	0.500	1.603	B	5.000	1.594	C	10.00	1.695	D	20.00	1.645	E	40.00	1.611
	F	1.000	1.616	G	100.0	1.592									
1,2-Dichlorobenzene	A	0.500	1.419	B	5.000	1.465	C	10.00	1.539	D	20.00	1.526	E	40.00	1.468
	F	1.000	1.450	G	100.0	1.494									
1,2-Dichloroethane-d4				B	5.000	0.435	C	10.00	0.401	D	20.00	0.402	E	40.00	0.405
	F	1.000	0.490												
Toluene-d8				B	5.000	1.247	C	10.00	1.173	D	20.00	1.242	E	40.00	1.187
	F	1.000	1.292												
4-Bromofluorobenzene				B	5.000	0.809	C	10.00	0.772	D	20.00	0.796	E	40.00	0.787
	F	1.000	0.861												

Results flagged with an asterisk (*) indicate values outside control criteria

* SPCC Compound # CCC Compound

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
ICAL Date: 08/28/2006

Initial Calibration Summary
Volatile Organic Compounds

ICAL ID: 08/28/2006MSK

Column: DB-624

Instrument ID: MSK

Mean RSD: 4.95

Analyte Name	Compound Type	Fit Type	Calibration Evaluation				RRF Evaluation		
			Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
* Chloromethane	TRG	AverageRF	% RSD	9.5		15.0	0.310		0.10
# Vinyl Chloride	TRG	AverageRF	% RSD	2.0		15.0	0.270		0.01
Bromomethane	TRG	AverageRF	% RSD	6.0		15.0	0.180		0.01
Chloroethane	TRG	AverageRF	% RSD	10.0		15.0	0.135		0.01
# 1,1-Dichloroethene (1,1-DCE)	TRG	AverageRF	% RSD	5.4		15.0	0.225		0.01
Acetone	TRG	AverageRF	% RSD	12.4		15.0	0.084		0.01
Carbon Disulfide	TRG	AverageRF	% RSD	3.2		15.0	1.044		0.01
Dichloromethane (Methylene Chloride)	TRG	AverageRF	% RSD	3.0		15.0	0.345		0.01
trans-1,2-Dichloroethene	TRG	AverageRF	% RSD	3.3		15.0	0.284		0.01
Methyl tert-Butyl Ether	TRG	AverageRF	% RSD	1.7		15.0	0.743		0.01
* 1,1-Dichloroethane (1,1-DCA)	TRG	AverageRF	% RSD	4.2		15.0	0.642		0.10
Vinyl Acetate	TRG	AverageRF	% RSD	3.0		15.0	1.245		0.01
cis-1,2-Dichloroethene	TRG	AverageRF	% RSD	3.1		15.0	0.310		0.01
1,2-Dichloroethene, Total	TRG	AverageRF	% RSD	3.1		15.0	0.297		0.01
2-Butanone (MEK)	TRG	AverageRF	% RSD	4.2		15.0	0.131		0.01
# Chloroform	TRG	Linear	r	1.000		0.995	0.774		0.01
1,1,1-Trichloroethane (TCA)	TRG	AverageRF	% RSD	2.5		15.0	0.469		0.01
Carbon Tetrachloride	TRG	AverageRF	% RSD	3.9		15.0	0.370		0.01
Benzene	TRG	AverageRF	% RSD	3.0		15.0	1.160		0.01
1,2-Dichloroethane (EDC)	TRG	AverageRF	% RSD	3.4		15.0	0.507		0.01
Trichloroethene (TCE)	TRG	AverageRF	% RSD	2.1		15.0	0.315		0.01
# 1,2-Dichloropropane	TRG	AverageRF	% RSD	3.4		15.0	0.347		0.01
Bromodichloromethane	TRG	AverageRF	% RSD	2.8		15.0	0.496		0.01
cis-1,3-Dichloropropene	TRG	AverageRF	% RSD	4.3		15.0	0.526		0.01
4-Methyl-2-pentanone (MIBK)	TRG	AverageRF	% RSD	4.5		15.0	0.274		0.01
# Toluene	TRG	AverageRF	% RSD	3.7		15.0	0.920		0.01
trans-1,3-Dichloropropene	TRG	AverageRF	% RSD	7.3		15.0	0.684		0.01
1,1,2-Trichloroethane	TRG	AverageRF	% RSD	3.3		15.0	0.338		0.01
Tetrachloroethene (PCE)	TRG	AverageRF	% RSD	5.4		15.0	0.391		0.01
2-Hexanone	TRG	AverageRF	% RSD	7.0		15.0	0.272		0.01
Dibromochloromethane	TRG	AverageRF	% RSD	7.3		15.0	0.476		0.01
* Chlorobenzene	TRG	AverageRF	% RSD	3.6		15.0	0.982		0.30
# Ethylbenzene	TRG	AverageRF	% RSD	3.2		15.0	1.778		0.01
Xylenes, Total	TRG	AverageRF	% RSD	5.1		15.0	0.562		0.01
Styrene	TRG	AverageRF	% RSD	6.7		15.0	0.973		0.01
* Bromoform	TRG	AverageRF	% RSD	8.6		15.0	0.271		0.10
* 1,1,2,2-Tetrachloroethane	TRG	AverageRF	% RSD	3.2		15.0	0.980		0.30

Results flagged with an asterisk (*) indicate values outside control criteria

* SPCC Compound # CCC Compound

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
ICAL Date: 08/28/2006

Initial Calibration Summary
Volatile Organic Compounds

ICAL ID: 08/28/2006MSK
Instrument ID: MSK
Mean RSD: 4.95

Column: DB-624

Calibration Evaluation

RRF Evaluation

Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Miniumum RRF
1,3-Dichlorobenzene	TRG	AverageRF	% RSD	3.0		15.0	1.587		0.01
1,4-Dichlorobenzene	TRG	AverageRF	% RSD	2.3		15.0	1.622		0.01
1,2-Dichlorobenzene	TRG	AverageRF	% RSD	2.9		15.0	1.480		0.01
1,2-Dichloroethane-d4	SUR	AverageRF	% RSD	9.0		15.0	0.427		0.01
Toluene-d8	SUR	AverageRF	% RSD	3.9		15.0	1.228		0.01
4-Bromofluorobenzene	SUR	AverageRF	% RSD	4.2		15.0	0.805		0.01

Results flagged with an asterisk (*) indicate values outside control criteria

* SPCC Compound

CCC Compound

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 08/28/2006

Second Source Calibration Verification
Volatile Organic Compounds

ICAL ID: 08/28/2006MSK
Instrument ID: MSK
File ID: K066159

Column: DB-624

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%	Criteria	Curve Fit	Q
Chloromethane	10.0	8.130	0.310	0.252	-18.7	NA	+/- 40.0	AverageRF	
Vinyl Chloride	10.0	8.804	0.270	0.238	-12.0	NA	+/- 20.0	AverageRF	
Bromomethane	10.0	10.16	0.180	0.182	1.6	NA	+/- 40.0	AverageRF	
Chloroethane	10.0	8.921	0.135	0.121	-10.8	NA	+/- 40.0	AverageRF	
1,1-Dichloroethene (1,1-DCE)	10.0	11.43	0.225	0.258	14.3	NA	+/- 20.0	AverageRF	
Acetone	50.0	45.86	0.084	0.077	-8.3	NA	+/- 40.0	AverageRF	
Carbon Disulfide	10.0	10.10	1.045	1.055	1.0	NA	+/- 40.0	AverageRF	
Dichloromethane (Methylene Chloride)	10.0	10.26	0.345	0.354	2.6	NA	+/- 40.0	AverageRF	
trans-1,2-Dichloroethene	10.0	10.01	0.284	0.284	0.1	NA	+/- 40.0	AverageRF	
Methyl tert-Butyl Ether	10.0	9.766	0.743	0.726	-2.3	NA	+/- 40.0	AverageRF	
1,1-Dichloroethane (1,1-DCA)	10.0	9.508	0.642	0.610	-4.9	NA	+/- 40.0	AverageRF	
Vinyl Acetate	10.0	9.719	1.246	1.211	-2.8	NA	+/- 40.0	AverageRF	
cis-1,2-Dichloroethene	10.0	10.44	0.310	0.324	4.4	NA	+/- 40.0	AverageRF	
1,2-Dichloroethene, Total	20.0	20.45	0.297	0.304	2.4	NA	+/- 40.0	AverageRF	
2-Butanone (MEK)	50.0	48.55	0.131	0.127	-2.9	NA	+/- 40.0	AverageRF	
Chloroform	10.0	9.168	0.774	0.640	NA	-8.3	+/- 20.0	Linear	
1,1,1-Trichloroethane (TCA)	10.0	9.098	0.469	0.427	-9.0	NA	+/- 40.0	AverageRF	
Carbon Tetrachloride	10.0	9.651	0.370	0.357	-3.5	NA	+/- 40.0	AverageRF	
Benzene	10.0	10.15	1.160	1.177	1.5	NA	+/- 40.0	AverageRF	
1,2-Dichloroethane (EDC)	10.0	9.258	0.507	0.469	-7.4	NA	+/- 40.0	AverageRF	
Trichloroethene (TCE)	10.0	9.798	0.315	0.309	-2.0	NA	+/- 40.0	AverageRF	
1,2-Dichloropropane	10.0	10.18	0.348	0.354	1.8	NA	+/- 20.0	AverageRF	
Bromodichloromethane	10.0	9.286	0.496	0.460	-7.1	NA	+/- 40.0	AverageRF	
cis-1,3-Dichloropropene	10.0	9.941	0.526	0.523	-0.6	NA	+/- 40.0	AverageRF	
4-Methyl-2-pentanone (MIBK)	50.0	50.69	0.274	0.278	1.4	NA	+/- 40.0	AverageRF	
Toluene	10.0	10.12	0.921	0.932	1.2	NA	+/- 20.0	AverageRF	
trans-1,3-Dichloropropene	10.0	10.04	0.684	0.687	0.4	NA	+/- 40.0	AverageRF	
1,1,2-Trichloroethane	10.0	9.950	0.338	0.336	-0.5	NA	+/- 40.0	AverageRF	
Tetrachloroethene (PCE)	10.0	10.43	0.391	0.408	4.3	NA	+/- 40.0	AverageRF	
2-Hexanone	50.0	50.67	0.272	0.275	1.3	NA	+/- 40.0	AverageRF	
Dibromochloromethane	10.0	9.755	0.476	0.464	-2.4	NA	+/- 40.0	AverageRF	
Chlorobenzene	10.0	10.27	0.983	1.010	2.7	NA	+/- 40.0	AverageRF	
Ethylbenzene	10.0	9.813	1.778	1.745	-1.9	NA	+/- 20.0	AverageRF	
Xylenes, Total	30.0	30.21	0.562	0.566	0.7	NA	+/- 40.0	AverageRF	
Styrene	10.0	10.28	0.973	1.001	2.8	NA	+/- 40.0	AverageRF	
Bromoform	10.0	9.956	0.271	0.270	-0.4	NA	+/- 40.0	AverageRF	
1,1,2,2-Tetrachloroethane	10.0	10.62	0.980	1.041	6.2	NA	+/- 40.0	AverageRF	
1,3-Dichlorobenzene	10.0	10.38	1.587	1.647	3.8	NA	+/- 40.0	AverageRF	
1,4-Dichlorobenzene	10.0	10.21	1.622	1.657	2.1	NA	+/- 40.0	AverageRF	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 08/28/2006

Second Source Calibration Verification
Volatile Organic Compounds

ICAL ID: 08/28/2006MSK
Instrument ID: MSK
File ID: K066159

Column: DB-624

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%	Criteria	Curve Fit	Q
1,2-Dichlorobenzene	10.0	10.72	1.480	1.587	7.2	NA	+/- 40.0	AverageRF	
1,2-Dichloroethane-d4	N/A	N/A	0.427	0.371	0.0	NA	+/- 40.0	AverageRF	
Toluene-d8	N/A	N/A	1.228	1.250	0.0	NA	+/- 40.0	AverageRF	
4-Bromofluorobenzene	N/A	N/A	0.805	0.872	0.0	NA	+/- 40.0	AverageRF	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 08/28/2006

Continuing Calibration Verification Summary
Volatile Organic Compounds

ICAL ID: 08/28/2006MSK
Instrument ID: MSK
File ID: K066155

Column: DB-624

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
* Chloromethane	10.0	9.538	0.10	0.310	0.296	-4.6	NA	+/- 40.0	AverageRF	
# Vinyl chloride	10.0	10.22	0.01	0.270	0.276	2.2	NA	+/- 20.0	AverageRF	
Bromomethane	10.0	10.69	0.01	0.180	0.192	6.9	NA	+/- 40.0	AverageRF	
Chloroethane	10.0	10.07	0.01	0.135	0.136	0.6	NA	+/- 40.0	AverageRF	
# 1,1-Dichloroethene	10.0	10.22	0.01	0.225	0.230	2.2	NA	+/- 20.0	AverageRF	
Acetone	50.0	49.60	0.01	0.084	0.083	-0.8	NA	+/- 40.0	AverageRF	
Carbon disulfide	10.0	10.46	0.01	1.045	1.092	4.5	NA	+/- 40.0	AverageRF	
Methylene chloride	10.0	10.21	0.01	0.345	0.353	2.1	NA	+/- 40.0	AverageRF	
trans-1,2-Dichloroethene	10.0	10.38	0.01	0.284	0.294	3.8	NA	+/- 40.0	AverageRF	
Tert-butylmethylether	10.0	10.14	0.01	0.743	0.753	1.4	NA	+/- 40.0	AverageRF	
* 1,1-Dichloroethane	10.0	10.42	0.10	0.642	0.669	4.2	NA	+/- 40.0	AverageRF	
Vinyl acetate	10.0	10.36	0.01	1.246	1.291	3.6	NA	+/- 40.0	AverageRF	
cis-1,2-Dichloroethene	10.0	10.42	0.01	0.310	0.323	4.2	NA	+/- 40.0	AverageRF	
1,2-Dichloroethene (total)	N/A	N/A	0.01	0.297	0.309	4.0	NA	+/- 40.0	AverageRF	
2-Butanone	50.0	50.58	0.01	0.131	0.133	1.2	NA	+/- 40.0	AverageRF	
# Chloroform	10.0	10.14	0.01	0.774	0.704	NA	1.4	+/- 20.0	Linear	
1,1,1-Trichloroethane	10.0	10.33	0.01	0.469	0.485	3.3	NA	+/- 40.0	AverageRF	
Carbon tetrachloride	10.0	10.35	0.01	0.370	0.383	3.5	NA	+/- 40.0	AverageRF	
Benzene	10.0	10.55	0.01	1.160	1.224	5.5	NA	+/- 40.0	AverageRF	
1,2-Dichloroethane	10.0	10.43	0.01	0.507	0.529	4.4	NA	+/- 40.0	AverageRF	
Trichloroethene	10.0	10.13	0.01	0.315	0.320	1.3	NA	+/- 40.0	AverageRF	
# 1,2-Dichloropropane	10.0	10.37	0.01	0.348	0.360	3.7	NA	+/- 20.0	AverageRF	
Bromodichloromethane	10.0	10.32	0.01	0.496	0.512	3.2	NA	+/- 40.0	AverageRF	
cis-1,3-Dichloropropene	10.0	10.35	0.01	0.526	0.544	3.5	NA	+/- 40.0	AverageRF	
4-methyl-2-pentanone	50.0	52.55	0.01	0.274	0.288	5.1	NA	+/- 40.0	AverageRF	
# Toluene	10.0	10.17	0.01	0.921	0.936	1.7	NA	+/- 20.0	AverageRF	
trans-1,3-Dichloropropene	10.0	10.48	0.01	0.684	0.717	4.8	NA	+/- 40.0	AverageRF	
1,1,2-Trichloroethane	10.0	10.21	0.01	0.338	0.345	2.1	NA	+/- 40.0	AverageRF	
Tetrachloroethene	10.0	10.33	0.01	0.391	0.404	3.3	NA	+/- 40.0	AverageRF	
2-Hexanone	50.0	52.42	0.01	0.272	0.285	4.8	NA	+/- 40.0	AverageRF	
Dibromochloromethane	10.0	10.38	0.01	0.476	0.494	3.8	NA	+/- 40.0	AverageRF	
* Chlorobenzene	10.0	10.31	0.30	0.983	1.013	3.1	NA	+/- 40.0	AverageRF	
# Ethylbenzene	10.0	10.28	0.01	1.778	1.829	2.8	NA	+/- 20.0	AverageRF	
Xylene (total)	N/A	N/A	0.01	0.562	0.597	6.1	NA	+/- 40.0	AverageRF	
Styrene	10.0	10.46	0.01	0.973	1.018	4.6	NA	+/- 40.0	AverageRF	
* Bromoform	10.0	10.37	0.10	0.271	0.281	3.7	NA	+/- 40.0	AverageRF	
* 1,1,2,2-Tetrachloroethane	10.0	9.917	0.30	0.980	0.972	-0.8	NA	+/- 40.0	AverageRF	
1,3-Dichlorobenzene	10.0	10.33	0.01	1.587	1.640	3.3	NA	+/- 40.0	AverageRF	
1,4-Dichlorobenzene	10.0	10.45	0.01	1.622	1.695	4.5	NA	+/- 40.0	AverageRF	

Results flagged with an asterisk (*) indicate values outside control criteria

* SPCC Compound # CCC Compound

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 08/28/2006

Continuing Calibration Verification Summary
Volatile Organic Compounds

ICAL ID: 08/28/2006MSK
Instrument ID: MSK
File ID: K066155

Column: DB-624

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
1,2-Dichlorobenzene	10.0	10.40	0.01	1.480	1.539	4.0	NA	+/- 40.0	AverageRF	
1,2-dichloroethane-d4	10.0	9.392	0.01	0.427	0.401	-6.1	NA	+/- 40.0	AverageRF	
Toluene-d8	10.0	9.552	0.01	1.228	1.173	-4.5	NA	+/- 40.0	AverageRF	
Bromofluorobenzene	10.0	9.590	0.01	0.805	0.772	-4.1	NA	+/- 40.0	AverageRF	

Results flagged with an asterisk (*) indicate values outside control criteria

* SPCC Compound # CCC Compound

QA/QC Results

Service Request: D0601136

Analysis Method: SW8260

Instrument ID: MSK
Column: DB-624

[illegible]

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Extracted: 08/28/2006

Extraction Prep Log
Volatile Organic Compounds

Extraction Method: SW5030
Analysis Method: SW8260

Extraction Lot: K0828W01

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
Method Blank	K0828W01	NA	NA	10.00 ML	10.00	NA	
Laboratory Control Sample	K0828W01LCS	NA	NA	10.00 ML	10.00	NA	
Laboratory Control Sample Duplicate	K0828W01LCSD	NA	NA	10.00 ML	10.00	NA	
1213GW101CL	D0601136-004	08/16/2006	08/17/2006	10.00 ML	10.00	NA	
TB081606A	D0601136-005	08/16/2006	08/17/2006	10.00 ML	10.00	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Report

Service Request: D0601136

Analysis Method: SW8260

[illegible]

Comments: _____

MDL STUDY REPORT FORM

Lab Name: Columbia Analytical Services/Redding Analytical Method: SW8260 Matrix: WaterInstrument ID: MSKConcentration Units (ug/L or mg/kg): UG/L

Analyte	Analysis Date	Amt. Spiked	Replicates								Std. Dev.	MDL
			1	2	3	4	5	6	7	8		
ETHYLBENZENE	01/06/2006	0.50	0.431	0.426	0.481	0.424	0.482	0.502	0.423	0.401	0.037	0.11
STYRENE	01/06/2006	0.50	0.307	0.293	0.319	0.285	0.345	0.343	0.281	0.307	0.024	0.073
CIS-1,3-DICHLOROPROPENE	01/06/2006	0.50	0.439	0.416	0.485	0.417	0.483	0.501	0.403	0.373	0.046	0.14
TRANS-1,3-DICHLOROPROPE	01/06/2006	0.50	0.420	0.453	0.469	0.432	0.458	0.475	0.418	0.392	0.029	0.086
1,4-DICHLOROBENZENE	01/06/2006	0.50	0.616	0.612	0.661	0.573	0.666	0.711	0.634	0.578	0.047	0.14
1,2-DICHLOROETHANE	01/06/2006	0.50	0.589	0.586	0.607	0.565	0.618	0.634	0.587	0.520	0.035	0.10
VINYL ACETATE	01/06/2006	0.50	0.768	0.777	0.812	0.755	0.884	0.818	0.722	0.614	0.079	0.24
4-METHYL-2-PENTANONE	01/06/2006	2.50	1.834	1.836	2.273	1.941	2.114	2.163	1.971	1.726	0.19	0.56
TOLUENE	01/06/2006	0.50	0.442	0.446	0.491	0.421	0.471	0.545	0.474	0.419	0.042	0.13
CHLOROBENZENE	01/06/2006	0.50	0.596	0.570	0.654	0.572	0.640	0.663	0.609	0.566	0.039	0.12
DIBROMOCHLOROMETHANE	01/06/2006	0.50	0.649	0.589	0.636	0.578	0.693	0.640	0.618	0.572	0.041	0.12
TETRACHLOROETHENE	01/06/2006	0.50	0.517	0.554	0.570	0.547	0.590	0.611	0.546	0.529	0.031	0.093
XYLENES (TOTAL)	01/06/2006											0.10
CIS-1,2-DICHLOROETHENE	01/06/2006	0.50	0.496	0.515	0.566	0.441	0.549	0.569	0.500	0.459	0.047	0.14
TRANS-1,2-DICHLOROETHEN	01/06/2006	0.50	0.517	0.537	0.634	0.534	0.581	0.556	0.595	0.463	0.052	0.16
TERT-BUTYLMETHYLETHER	01/06/2006	0.50	0.379	0.393	0.445	0.344	0.411	0.406	0.369	0.337	0.036	0.11
1,2-DICHLOROETHENE	01/06/2006											0.14
1,3-DICHLOROBENZENE	01/06/2006	0.50	0.495	0.561	0.563	0.492	0.601	0.594	0.505	0.480	0.049	0.15
CARBON TETRACHLORIDE	01/06/2006	0.50	0.608	0.632	0.681	0.569	0.688	0.671	0.604	0.618	0.042	0.13
2-HEXANONE	01/06/2006	2.50	1.938	1.741	2.013	1.615	1.934	1.849	2.014	1.622	0.16	0.49
ACETONE	01/06/2006	2.50	5.993	6.219	6.524	6.228	6.718	6.116	6.546	5.821	0.30	0.91
CHLOROFORM	01/06/2006	0.50	0.648	0.622	0.701	0.591	0.689	0.709	0.644	0.620	0.043	0.13
BENZENE	01/06/2006	0.50	0.525	0.521	0.548	0.514	0.568	0.603	0.488	0.474	0.042	0.13
1,1,1-TRICHLOROETHANE	01/06/2006	0.50	0.597	0.629	0.704	0.591	0.667	0.705	0.593	0.576	0.053	0.16
BROMOMETHANE	01/06/2006	0.50	0.706	0.711	0.651	0.639	0.727	0.714	0.686	0.692	0.031	0.093
CHLOROMETHANE	01/06/2006	0.50	0.803	0.820	0.897	0.780	0.849	0.900	0.751	0.660	0.080	0.24
CHLOROETHANE	01/06/2006	0.50	0.690	0.765	0.718	0.692	0.848	0.807	0.702	0.693	0.061	0.18
VINYL CHLORIDE	01/06/2006	0.50	0.645	0.657	0.667	0.659	0.735	0.748	0.623	0.582	0.055	0.16
METHYLENE CHLORIDE	01/06/2006	0.50	0.718	0.673	0.778	0.652	0.775	0.795	0.705	0.618	0.065	0.19
CARBON DISULFIDE	01/06/2006	0.50	0.565	0.547	0.612	0.521	0.595	0.623	0.518	0.506	0.045	0.14
BROMOFORM	01/06/2006	0.50	0.537	0.573	0.609	0.536	0.620	0.690	0.542	0.497	0.061	0.18
BROMODICHLOROMETHANE	01/06/2006	0.50	0.624	0.595	0.671	0.569	0.693	0.665	0.615	0.583	0.045	0.14
ISOPROPYLETHER	01/06/2006	0.50	0.376	0.392	0.446	0.356	0.439	0.429	0.383	0.366	0.035	0.10
1,1-DICHLOROETHENE	01/06/2006	0.50	0.607	0.547	0.664	0.541	0.644	0.649	0.607	0.541	0.051	0.15
1,2-DICHLOROPROPANE	01/06/2006	0.50	0.548	0.601	0.614	0.490	0.631	0.616	0.569	0.502	0.054	0.16
2-BUTANONE	01/06/2006	2.50	2.540	2.392	2.283	2.327	2.838	2.447	2.231	2.129	0.22	0.66

MDL STUDY REPORT FORM

Lab Name: Columbia Analytical Services/Redding Analytical Method: SW8260 Matrix: Water

Instrument ID: MSK

Concentration Units (ug/L or mg/kg): UG/L

[illegible]

SUPPORT DOCUMENTATION

Columbia Analytical Services

GC/MS VOA Injection Log
MSK; Karl

Date
08/28/06

Analyst: 28/28/06
ICAL Date/Time: 08/28/06
Method: SW-8468200

Internal Standard Std Prep # 9msv-21-1
BFB / Surrogate Std Prep # 9msv-21-2
Calibration Std Prep # 9msv-21-3
QCALTSTD / LCS Std Prep # 9msv-21-3
MS/MSD Std Prep # 9msv-25-10

Page: 51

Time	Filename	Laboratory ID	Vial#	Matrix	pH	DL Factor	Weight (g)	M%	Run OK?	Rept?	Comments
0823	K026149	BFB	NA	NA	NA	NA	NA	NA	✓	✓	
0918	6120	Wash							✓	✓	
0945	51	VST0003							✓	✓	
1011	52	VST0005							✓	✓	
1038	53	VST0001							✓	✓	
1104	54	VST0005							✓	✓	
1121	55	VST0010							✓	✓	
1157	56	VST0020							✓	✓	
1224	57	VST0040							✓	✓	
1251	58	VST0100							✓	✓	
1317	59	OCALJSTD							✓	✓	
1349	60	K0828W1C03							✓	✓	
---	61	K0828W1C080							✓	✓	
---	62	Wash							✓	✓	
---	63	Wash							✓	✓	
---	64	Wash							✓	✓	
1530	65	K0828W01							✓	✓	
1559	66	D0601162-002	.06		12	X			✓	✓	Hill
1623	67	D0601178-001	.04		12	X			✓	✓	
1650	68	-002	.05		12	X			✓	✓	
1719	69	-003	.05		12	X			✓	✓	
1746	70	-004	.02		12	X			✓	✓	
1810	71	D0601121-002.02	.02		12	X			✓	✓	yes
1836	72	D0601136-004	.01		12	X			✓	✓	Residue
1903	73	-005	.03		12	X			✓	✓	+
1929	74	D0601181-011	.04		12	X			✓	✓	Clear HB
1956	75	D0601162-002.03	.05		12	X			✓	✓	Hill
2022	76	-002.03	.05		12	X			✓	✓	+

Last Analysis within 12-Hour clock? ☒ Yes ☐ No CCV Used? ☐ #3 ☐ #4 MS/MSD present? ☒ Yes ☐ No

**PURGEABLE AROMATICS
&
TPH-GASOLINE**

COLUMBIA ANALYTICAL SERVICES/REDDING

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136

Cover Page - Analysis Data Package
Gasoline Range Organics

Sample Name	Lab Code	Date Collected	Date Received
LF6GW103CL	D0601136-002	08/16/2006	08/17/2006
1065MW9BCL	D0601136-003	08/16/2006	08/17/2006
1213GW101CL	D0601136-004	08/16/2006	08/17/2006

I certify this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Brian MooreDate: 08/31/06Name: Brian MooreTitle: Technical Manager

COLUMBIA ANALYTICAL SERVICES/REDDING

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136

**Cover Page - Analysis Data Package
Halogenated and Aromatic Volatiles**

Sample Name	Lab Code	Date Collected	Date Received
1065MW9BCL	D0601136-003	08/16/2006	08/17/2006

I certify this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: B37m

Date: 08/31/06

Name: Brian Moore

Title: Technical Manager

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Collected: 08/16/2006
Date Received: 08/17/2006

Gasoline Range Organics

Sample Name: LF6GW103CL
Lab Code: D0601136-002
Extraction: SW5030
Analysis Method: SW8015

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
TPH-Gasoline (C7C12)	ND	U	50	1	08/22/2006	08/22/2006	NWB10822	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Chlorobenzene	95	65-135	08/22/2006	

Comments: _____

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Collected: 08/16/2006
Date Received: 08/17/2006

Gasoline Range Organics

Sample Name: 1065MW9BCL
Lab Code: D0601136-003
Extraction: SW5030
Analysis Method: SW8015

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
TPH-Gasoline (C7C12)	ND	U	50	1	08/22/2006	08/22/2006	NWB10822	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Chlorobenzene	95	65-135	08/22/2006	

Comments: _____

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Collected: 08/16/2006
Date Received: 08/17/2006

Halogenated and Aromatic Volatiles

Sample Name: 1065MW9BCL
Lab Code: D0601136-003
Extraction: SW5030
Analysis Method: SW8021

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.5	1	08/30/2006	08/30/2006	NWB10830	
Benzene	ND	U	0.50	1	08/30/2006	08/30/2006	NWB10830	
Toluene	ND	U	0.50	1	08/30/2006	08/30/2006	NWB10830	
Ethylbenzene	ND	U	0.50	1	08/30/2006	08/30/2006	NWB10830	
Xylenes, Total	ND	U	1.0	1	08/30/2006	08/30/2006	NWB10830	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorobenzene	109	80-120	08/30/2006	

Comments: _____

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Collected: 08/16/2006
Date Received: 08/17/2006

Gasoline Range Organics

Sample Name: 1213GW101CL
Lab Code: D0601136-004
Extraction: SW5030
Analysis Method: SW8015

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
TPH-Gasoline (C7C12)	55		50	1	08/22/2006	08/22/2006	NWB10822	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Chlorobenzene	97	65-135	08/22/2006	

Comments: _____

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Collected: NA
Date Received: NA

Gasoline Range Organics

Sample Name: Method Blank
Lab Code: NWB10822
Extraction: SW5030
Analysis Method: SW8015

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
TPH-Gasoline (C7C12)	ND	U	50	1	08/22/2006	08/22/2006	NWB10822	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Chlorobenzene	104	65-135	08/22/2006	

Comments: _____

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Collected: NA
Date Received: NA

Halogenated and Aromatic Volatiles

Sample Name: Method Blank
Lab Code: NWB10830
Extraction: SW5030
Analysis Method: SW8021

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.5	1	08/30/2006	08/30/2006	NWB10830	
Benzene	ND	U	0.50	1	08/30/2006	08/30/2006	NWB10830	
Toluene	ND	U	0.50	1	08/30/2006	08/30/2006	NWB10830	
Ethylbenzene	ND	U	0.50	1	08/30/2006	08/30/2006	NWB10830	
Xylenes, Total	ND	U	1.0	1	08/30/2006	08/30/2006	NWB10830	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorobenzene	109	80-120	08/30/2006	

Comments: _____

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136

Surrogate Recovery Summary
Gasoline Range Organics

Prep Method: SW5030
Analysis Method: SW8015

Units: Percent

<u>Sample Name</u>	<u>Lab Code</u>	<u>Q</u>	<u>S1</u>
Laboratory Control Sample	NWB10822LCS		108
Laboratory Control Sample Duplicate	NWB10822LCSD		108
Method Blank	NWB10822		104
LF6GW103CL	D0601136-002		95
1065MW9BCL	D0601136-003		95
1213GW101CL	D0601136-004		97

Surrogate Recovery Control Limits (%)

S1: Chlorobenzene 65-135

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136

Surrogate Recovery Summary
Halogenated and Aromatic Volatiles

Prep Method: SW5030
Analysis Method: SW8021

Units: Percent

<u>Sample Name</u>	<u>Lab Code</u>	<u>Q</u>	<u>S1</u>
Laboratory Control Sample	NWB10830LCS		104
Laboratory Control Sample Duplicate	NWB10830LCSD		107
Method Blank	NWB10830		109
1065MW9BCL	D0601136-003		109

Surrogate Recovery Control Limits (%)

S1: Fluorobenzene 80-120

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 08/22/2006

Laboratory Control Sample/Duplicate Laboratory Control Sample Summary
Gasoline Range Organics

LCS Sample Lab Control Sample
Lab Code: NWB10822LCS / NWB10822LCSD
Extraction SW5030
Analysis Method: SW8015

DLCS Sample Lab Control Sample Duplicate
Units: ug/L (ppb)

Analyte	MRL	Spike Level	Spike	Spike	Spike	Spike	CAS	Relative	Result Notes
			Result LCS	Result LCSD	% Rec LCS	% Rec LCSD	Acceptance Limits	Percent Difference	
TPH-Gasoline (C7C12)	50	2000	1770	1730	88	87	75-125	2	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
 Project: Presidio
 Sample Matrix: Water

Service Request: D0601136
 Date Collected: NA
 Date Received: NA
 Date Extracted: NA
 Date Analyzed: 08/30/2006

Laboratory Control Sample/Duplicate Laboratory Control Sample Summary
 Halogenated and Aromatic Volatiles

LCS Sample Lab Control Sample
 Lab Code: NWB10830LCS / NWB10830LCSD
 Extraction SW5030
 Analysis Method: SW8021

DLCS Sample Lab Control Sample Duplicate
 Units: ug/L (ppb)

Analyte	MRL	Spike Level	Spike Result LCS	Spike Result LCSD	Spike % Rec LCS	Spike % Rec LCSD	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Methyl tert-Butyl Ether	2.5	100.0	116.9	120.0	117	120	80-120	3	
Benzene	0.50	20.00	18.20	18.16	91	91	80-120	0	
Toluene	0.50	20.00	19.63	19.40	98	97	80-120	1	
Ethylbenzene	0.50	20.00	19.57	19.61	98	98	80-120	0	
Xylenes, Total	1.0	60.00	59.22	58.84	99	98	80-120	1	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Extracted: 08/22/2006
Date Analyzed: 08/22/2006
Time Analyzed: 14:17

Method Blank Summary
Gasoline Range Organics

Extraction Method: SW5030
Analysis Method: SW8015

Extraction Lot: NWB10822

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Laboratory Control Sample	NWB10822LCS	NF082203P	08/22/2006	13:28
Laboratory Control Sample Duplicate	NWB10822LCSD	NF082204P	08/22/2006	13:52
LF6GW103CL	D0601136-002	NF082220	08/22/2006	20:33
1065MW9BCL	D0601136-003	NF082221	08/22/2006	20:58
1213GW101CL	D0601136-004	NF082222	08/22/2006	21:23

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Extracted: 08/30/2006
Date Analyzed: 08/30/2006
Time Analyzed: 12:13

Method Blank Summary
Halogenated and Aromatic Volatiles

Extraction Method: SW5030
Analysis Method: SW8021

Extraction Lot: NWB10830

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Laboratory Control Sample	NWB10830LCS	NP083002	08/30/2006	11:23
Laboratory Control Sample Duplicate	NWB10830LCSD	NP083003	08/30/2006	11:48
1065MW9BCL	D0601136-003	NP083005	08/30/2006	12:38

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
ICAL Date: 06/27/2006

Initial Calibration Summary
Gasoline Range Organics

ICAL ID: 06/27/2006GCN
Instrument ID: GCN

Column: RTX-1, FID

Level ID File ID
A NF062702
B NF062703
C NF062704
D NF062705
E NF062706

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF
TPH-Gasoline (C7C12)	A	50.00	518.6	B	500.0	367.4	C	2000	387.1	D	3000	398.1	E	5000	404.4
Chlorobenzene	A	2.500	104.0	B	25.00	95.36	C	100.0	97.78	D	150.0	101.9	E	250.0	110.2

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
ICAL Date: 06/27/2006

Initial Calibration Summary
Gasoline Range Organics

ICAL ID: 06/27/2006GCN
Instrument ID: GCN
Mean RSD: 14.30

Column: RTX-1, FID

Calibration Evaluation

Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria
TPH-Gasoline (C7C12)	TRG	AverageRF	% RSD	14.3		20
Chlorobenzene	SUR	AverageRF	% RSD	5.7		20

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
ICAL Date: 08/03/2006

Initial Calibration Summary
Halogenated and Aromatic Volatiles

ICAL ID: 08/03/2006GCN
Instrument ID: GCN

Column: RTX-1, PID

Level ID File ID
A NP080301
B NP080302
C NP080303
D NP080304
E NP080305

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF
Methyl tert-Butyl Ether	A	5.000	1.729	B	25.00	1.233	C	100.0	1.135	D	150.0	1.108	E	250.0	1.063
Benzene	A	1.000	3.971	B	5.000	3.198	C	20.00	3.208	D	30.00	3.237	E	50.00	3.210
Toluene	A	1.000	5.065	B	5.000	3.074	C	20.00	3.089	D	30.00	3.100	E	50.00	3.093
Ethylbenzene	A	1.000	4.923	B	5.000	2.774	C	20.00	2.734	D	30.00	2.748	E	50.00	2.722
Xylenes, Total	A	3.000	5.671	B	15.00	3.050	C	60.00	3.039	D	90.00	3.066	E	150.0	3.038
Fluorobenzene	A	5.000	1.884	B	25.00	2.136	C	100.0	2.097	D	155.0	1.930	E	250.0	1.969

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
ICAL Date: 08/03/2006

Initial Calibration Summary
Halogenated and Aromatic Volatiles

ICAL ID: 08/03/2006GCN
Instrument ID: GCN
Mean RSD: 24.14

Column: RTX-1, PID

Calibration Evaluation

Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria
Methyl tert-Butyl Ether	TRG	Linear	r	1.000		0.995
Benzene	TRG	Linear	r	1.000		0.995
Toluene	TRG	Linear	r	1.000		0.995
Ethylbenzene	TRG	Linear	r	1.000		0.995
Xylenes, Total	TRG	Linear	r	1.000		0.995
Fluorobenzene	SUR	Linear	r	0.999		0.995

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 06/27/2006

Second Source Calibration Verification
Gasoline Range Organics

ICAL ID: 06/27/2006GCN
Instrument ID: GCN
File ID: NF062707

Column: RTX-1, FID

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%	Criteria	Curve Fit	Q
TPH-Gasoline (C7C12)	2000	1769	415.1	367.2	-11.6	NA	+/- 15.0	AverageRF	
Chlorobenzene	N/A	N/A	101.8	97.74	0.0	NA	+/- 15.0	AverageRF	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 08/03/2006

Second Source Calibration Verification
Halogenated and Aromatic Volatiles

ICAL ID: 08/03/2006GCN
Instrument ID: GCN
File ID: NP080306

Column: RTX-1, PID

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%	Criteria	Curve Fit	Q
Methyl tert-Butyl Ether	100.0	102.9	1.254	1.137	NA	2.9	+/- 15.0	Linear	
Benzene	20.00	21.08	3.365	3.398	NA	5.4	+/- 15.0	Linear	
Toluene	20.00	20.94	3.484	3.259	NA	4.7	+/- 15.0	Linear	
Ethylbenzene	20.00	20.92	3.180	2.883	NA	4.6	+/- 15.0	Linear	
Xylenes, Total	60.00	62.67	3.573	3.210	NA	4.4	+/- 15.0	Linear	
Fluorobenzene	100.0	104.0	2.003	2.069	NA	4.0	+/- 20.0	Linear	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 08/22/2006

Continuing Calibration Verification Summary
Gasoline Range Organics

ICAL ID: 06/27/2006GCN
Instrument ID: GCN
File ID: NF082202

Column: RTX-1, FID

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
TPH-Gasoline (C7C12)	2000	1833	415.1	380.5	-8.3	NA	+/- 15.0	AverageRF	
Chlorobenzene-ss	100.0	104.5	101.8	106.5	4.5	NA	+/- 15.0	AverageRF	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 08/22/2006

Continuing Calibration Verification Summary
Gasoline Range Organics

ICAL ID: 06/27/2006GCN
Instrument ID: GCN
File ID: NF082213

Column: RTX-1, FID

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
TPH-Gasoline (C7C12)	3000	2908	415.1	402.4	-3.1	NA	+/- 15.0	AverageRF	
Chlorobenzene-ss	150.0	167.3	101.8	113.6	11.5	NA	+/- 15.0	AverageRF	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 08/22/2006

Continuing Calibration Verification Summary
Gasoline Range Organics

ICAL ID: 06/27/2006GCN
Instrument ID: GCN
File ID: NF082223

Column: RTX-1, FID

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
TPH-Gasoline (C7C12)	2000	1803	415.1	374.3	-9.8	NA	+/- 15.0	AverageRF	
Chlorobenzene-ss	100.0	102.1	101.8	104.0	2.1	NA	+/- 15.0	AverageRF	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 08/30/2006

Continuing Calibration Verification Summary
Halogenated and Aromatic Volatiles

ICAL ID: 08/03/2006GCN
Instrument ID: GCN
File ID: NP083001

Column: RTX-1, PID

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
tert-Butyl Methyl Ether	100.0	108.5	1.254	1.196	NA	8.5	+/- 15.0	Linear	
Benzene	20.00	16.42	3.365	2.651	NA	-17.9	+/- 15.0	Linear	*
Toluene	20.00	17.72	3.484	2.765	NA	-11.4	+/- 15.0	Linear	
Ethylbenzene	20.00	17.95	3.180	2.482	NA	-10.2	+/- 15.0	Linear	
Xylene (total)	60.00	54.01	3.573	2.776	NA	-10.0	+/- 15.0	Linear	
Fluorobenzene-ss	100.0	104.1	2.003	2.071	NA	4.1	+/- 20.0	Linear	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 08/30/2006

Continuing Calibration Verification Summary
Halogenated and Aromatic Volatiles

ICAL ID: 08/03/2006GCN
Instrument ID: GCN
File ID: NP083006

Column: RTX-1, PID

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
tert-Butyl Methyl Ether	100.0	117.0	1.254	1.286	NA	17.0	+/- 15.0	Linear	*
Benzene	20.00	17.17	3.365	2.772	NA	-14.2	+/- 15.0	Linear	
Toluene	20.00	18.27	3.484	2.850	NA	-8.6	+/- 15.0	Linear	
Ethylbenzene	20.00	18.42	3.180	2.545	NA	-7.9	+/- 15.0	Linear	
Xylene (total)	60.00	54.56	3.573	2.803	NA	-9.1	+/- 15.0	Linear	
Fluorobenzene-ss	100.0	104.6	2.003	2.082	NA	4.6	+/- 20.0	Linear	

QA/QC Results

Service Request: D0601136

Instrument ID: GCN
Column: RTX-1, FID

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QA/QC Results

Service Request: D0601136

Analysis Method: SW8021

Instrument ID: GCN
Column: RTX-1, PID

[illegible]

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Extracted: 08/22/2006

Extraction Prep Log
Gasoline Range Organics

Extraction Method: SW5030
Analysis Method: SW8015

Extraction Lot: NWB10822

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
Method Blank	NWB10822	NA	NA	5.000 ML	5.000	NA	
Laboratory Control Sample	NWB10822LCS	NA	NA	5.000 ML	5.000	NA	
Laboratory Control Sample Duplicate	NWB10822LCSD	NA	NA	5.000 ML	5.000	NA	
LF6GW103CL	D0601136-002	08/16/2006	08/17/2006	5.000 ML	5.000	NA	
I065MW9BCL	D0601136-003	08/16/2006	08/17/2006	5.000 ML	5.000	NA	
I213GW101CL	D0601136-004	08/16/2006	08/17/2006	5.000 ML	5.000	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Extracted: 08/30/2006

Extraction Prep Log
Halogenated and Aromatic Volatiles

Extraction Method: SW5030
Analysis Method: SW8021

Extraction Lot: NWB10830

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
Method Blank	NWB10830	NA	NA	5.000 ML	5.000	NA	
Laboratory Control Sample	NWB10830LCS	NA	NA	5.000 ML	5.000	NA	
Laboratory Control Sample Duplicate	NWB10830LCSD	NA	NA	5.000 ML	5.000	NA	
1065MW9BCL	D0601136-003	08/16/2006	08/17/2006	5.000 ML	5.000	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Report

Service Request: D0601136

Analysis Method: SW8015

[illegible]

Comments: _____

QA/QC Report

Service Request: D0601136

Analysis Method: SW8021

[illegible]

Comments: _____

MDL STUDY REPORT FORM

Lab Name: Columbia Analytical Services/Redding Analytical Method: SW8015 Matrix: Water

Instrument ID: GCN

Concentration Units (ug/L or mg/kg): UG/L

[illegible]

MDL STUDY REPORT FORM

Lab Name: Columbia Analytical Services/Redding Analytical Method: SW8021 Matrix: Water

Instrument ID: GCN

Concentration Units (ug/L or mg/kg): UG/L[illegible]

Std A Prep # 3	67E
Std B Prep # 3	67F
Std C Prep # 3	—
Std D Prep # 3	—

Analyst:
ICAL Date: 06-27-06
Method: SW8015/AK101

Page: 36

Columbia Analytical Services - Redding

GC Volatiles

Date	08/03/06
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RT Marker Std Prep # 3 luft 59c
 Internal Standard Std Prep # 3 luft 66c
 Surrogate Std Prep # 3 luft 66c

Std A Prep # 3 luft 68c
 Std B Prep # 3 luft 680
 Std C Prep # 3 luft ---
 Std D Prep # 3 luft ---

Analyst: B
 ICAL Date: 8/3/06
 Method: SW8015

Filename	Laboratory ID	Vial	Matrix	pH	Weight (Grams)	%M	DL Factor	STD	Gas Run OK?	Gas Rept?	A1 Run OK?	A2 Run OK?	Aromatic Rept?	Comments
NP000301	ASTD1	-	-	-	-	-	-	A	✓		✓	✓	✓	
2	ASTD2	-	-	-	-	-	-	↓	✓		✓	✓	✓	
3	ASTD3	-	-	-	-	-	-	↓	✓		✓	✓	✓	
4	ASTD4	-	-	-	-	-	-	↓	✓		✓	✓	✓	
5	ASTD5	-	-	-	-	-	-	B	✓		✓	✓	✓	
6	GCACSTD	-	-	-	-	-	-	B	✓		✓	✓	✓	
7	NW810803005	-	W	-	-	-	1X	B	✓		✓	✓	✓	
8	NW810803005	-	↓	-	-	-	↓	B	✓		✓	✓	✓	
9	NW81080301k	-	↓	-	-	-	↓	A	✓		✓	✓	✓	
10	MDL-1	-	↓	-	-	-	↓	↓	✓		✓	✓	✓	BF=3
11	-2	-	↓	-	-	-	↓	↓	✓		✓	✓	✓	BF=3 ST=30
12	-3	-	↓	-	-	-	↓	↓	✓		✓	✓	✓	BF=3 ST=25
13	-4	-	↓	-	-	-	↓	↓	✓		✓	✓	✓	
14	-5	-	↓	-	-	-	↓	↓	✓		✓	✓	✓	
15	-6	-	↓	-	-	-	↓	↓	✓		✓	✓	✓	
16	-7	-	↓	-	-	-	↓	↓	✓		✓	✓	✓	
17	ASTD4	-	W	-	-	-	1X	↓	✓		✓	✓	✓	MTBE AVE RF
18	MDL-B	-	↓	-	-	-	↓	↓	✓		✓	✓	✓	
19	-check	-	↓	-	-	-	↓	↓	✓		✓	✓	✓	
20	LO600997-002	.03	↓	22	-	-	↓	↓	✓		✓	✓	✓	
21	-003	.03	↓	22	-	-	↓	↓	✓		✓	✓	✓	EB↑
22	DO600905-022	.01	↓	-	-	-	2X	↓	✓		✓	✓	✓	
23	-022	↓	↓	-	-	-	5X	↓	✓		✓	✓	✓	
24	-022	↓	↓	-	-	-	↓	↓	✓		✓	✓	✓	
25	ASTD3	-	-	-	-	-	-	A	✓		✓	✓	✓	

8/3/06

Page:

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Date
08/22/06

RT Marker Std Prep # 3 luft 65C
 Internal Standard Std Prep # 3 luft —
 Surrogate Std Prep # 3 luft 66C

Std A Prep # 3 luft 68A
 Std B Prep # 3 luft 68B
 Std C Prep # 3 luft —
 Std D Prep # 3 luft —

Analyst: B-
 ICAL Date: 08/27/06
 Method: SW8015

Filename	Laboratory ID	Vial	Matrix	pH	Weight (Grams)	%M	DL Factor	STD	Gas Run OK?	Gas Rept?	A1 Run OK?	A2 Run OK?	Aromatic Rept?	Comments
NF082201	RT MARKER	—	—	—	—	—	—	—	✓	✓				
2	GSTD3	—	—	—	—	—	—	A	✓	✓				
3	NWB10822C5	—	W	—	—	—	IX	B	✓	✓				
4	NWB10822C5D	—	—	—	—	—	—	B	✓	✓				
5	NWB10822B1K	—	—	—	—	—	—	—	✓	✓				
6	DO601141-001	.03	—	42	—	—	—	—	✓	✓				
7	—002	.03	—	—	—	—	—	—	✓	✓				
8	DO601125-001	.04	—	—	—	—	—	—	✓	✓				
9	—002	—	—	—	—	—	—	—	✓	✓				
10	—003	—	—	—	—	—	—	—	✓	✓				
11	—004	—	—	—	—	—	—	—	✓	✓				
12	—005	—	—	—	—	—	—	—	✓	✓				
13	GSTD4	—	—	—	—	—	—	A	✓	✓				
14	DO601125-006	.04	W	42	—	—	IX	—	✓	✓				
15	—007	—	—	—	—	—	—	—	✓	✓				
16	—008	—	—	—	—	—	—	—	✓	✓				
17	—009	—	—	—	—	—	—	—	✓	✓				
18	—010	—	—	—	—	—	—	—	✓	✓				
19	—012	.02	—	—	—	—	—	—	✓	✓				
20	DO601136-002	.02	—	—	—	—	—	—	✓	✓				
21	—003	.05	—	—	—	—	—	—	✓	✓				
22	—004	.03	—	—	—	—	—	—	✓	✓				
23	GSTD3	—	—	—	—	—	—	A	✓	✓				
B 08/24/06														

HPLC POLYNUCLEAR AROMATIC HYDROCARBONS

COLUMBIA ANALYTICAL SERVICES/REDDING

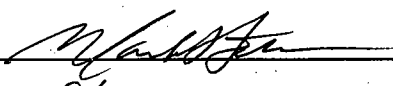
Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136

Cover Page - Analysis Data Package
Polynuclear Aromatic Hydrocarbons

Sample Name	Lab Code	Date Collected	Date Received
LF6GW103CL	D0601136-002	08/16/2006	08/17/2006
1213GW101CL	D0601136-004	08/16/2006	08/17/2006

I certify this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: 

Date: 9/8/06

Name: Mark S. Fessler

Title: Project Chemist

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Collected: 08/16/2006
Date Received: 08/17/2006

Polynuclear Aromatic Hydrocarbons

Sample Name: LF6GW103CL
Lab Code: D0601136-002
Extraction: SW3520
Analysis Method: SW8310

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	5.0	1	08/23/2006	09/01/2006	NWB10823	
Fluorene	ND	U	1.0	1	08/23/2006	09/01/2006	NWB10823	
Phenanthrene	ND	U	1.0	1	08/23/2006	09/01/2006	NWB10823	
Anthracene	ND	U	0.20	1	08/23/2006	09/01/2006	NWB10823	
Fluoranthene	ND	U	0.20	1	08/23/2006	09/01/2006	NWB10823	
Pyrene	ND	U	0.20	1	08/23/2006	09/01/2006	NWB10823	
Benz(a)anthracene	ND	U	0.20	1	08/23/2006	09/01/2006	NWB10823	
Chrysene	ND	U	0.20	1	08/23/2006	09/01/2006	NWB10823	
Benzo(b)fluoranthene	ND	U	0.20	1	08/23/2006	09/01/2006	NWB10823	
Benzo(k)fluoranthene	ND	U	0.20	1	08/23/2006	09/01/2006	NWB10823	
Benzo(a)pyrene	ND	U	0.20	1	08/23/2006	09/01/2006	NWB10823	
Dibenz(a,h)anthracene	ND	U	0.50	1	08/23/2006	09/01/2006	NWB10823	
Benzo(g,h,i)perylene	ND	U	0.20	1	08/23/2006	09/01/2006	NWB10823	
Indeno(1,2,3-cd)pyrene	ND	U	0.20	1	08/23/2006	09/01/2006	NWB10823	
Acenaphthylene	ND	U	2.0	1	08/23/2006	09/01/2006	NWB10823	
Acenaphthene	ND	U	5.0	1	08/23/2006	09/01/2006	NWB10823	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Terphenyl-d14 - SS	63	65-135	09/01/2006	*

Comments: _____

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
 Project: Presidio
 Sample Matrix: Water

Service Request: D0601136
 Date Collected: 08/16/2006
 Date Received: 08/17/2006

Polynuclear Aromatic Hydrocarbons

Sample Name: 1213GW101CL
 Lab Code: D0601136-004
 Extraction: SW3520
 Analysis Method: SW8310

Units: ug/L (ppb)
 Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	5.0	1	08/23/2006	09/01/2006	NWB10823	
Fluorene	ND	U	1.0	1	08/23/2006	09/01/2006	NWB10823	
Phenanthrene	ND	U	1.0	1	08/23/2006	09/01/2006	NWB10823	
Anthracene	ND	U	0.20	1	08/23/2006	09/01/2006	NWB10823	
Fluoranthene	ND	U	0.20	1	08/23/2006	09/01/2006	NWB10823	
Pyrene	ND	U	0.20	1	08/23/2006	09/01/2006	NWB10823	
Benz(a)anthracene	ND	U	0.20	1	08/23/2006	09/01/2006	NWB10823	
Chrysene	ND	U	0.20	1	08/23/2006	09/01/2006	NWB10823	
Benzo(b)fluoranthene	ND	U	0.20	1	08/23/2006	09/01/2006	NWB10823	
Benzo(k)fluoranthene	ND	U	0.20	1	08/23/2006	09/01/2006	NWB10823	
Benzo(a)pyrene	ND	U	0.20	1	08/23/2006	09/01/2006	NWB10823	
Dibenz(a,h)anthracene	ND	U	0.50	1	08/23/2006	09/01/2006	NWB10823	
Benzo(g,h,i)perylene	ND	U	0.20	1	08/23/2006	09/01/2006	NWB10823	
Indeno(1,2,3-cd)pyrene	ND	U	0.20	1	08/23/2006	09/01/2006	NWB10823	
Acenaphthylene	ND	U	2.0	1	08/23/2006	09/01/2006	NWB10823	
Acenaphthene	ND	U	5.0	1	08/23/2006	09/01/2006	NWB10823	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Terphenyl-d14 - SS	89	65-135	09/01/2006	

Comments: _____

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Collected: NA
Date Received: NA

Polynuclear Aromatic Hydrocarbons

Sample Name: Method Blank
Lab Code: NWB10823
Extraction: SW3520
Analysis Method: SW8310

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	5.0	1	08/23/2006	09/01/2006	NWB10823	
Fluorene	ND	U	1.0	1	08/23/2006	09/01/2006	NWB10823	
Phenanthrene	ND	U	1.0	1	08/23/2006	09/01/2006	NWB10823	
Anthracene	ND	U	0.20	1	08/23/2006	09/01/2006	NWB10823	
Fluoranthene	ND	U	0.20	1	08/23/2006	09/01/2006	NWB10823	
Pyrene	ND	U	0.20	1	08/23/2006	09/01/2006	NWB10823	
Benz(a)anthracene	ND	U	0.20	1	08/23/2006	09/01/2006	NWB10823	
Chrysene	ND	U	0.20	1	08/23/2006	09/01/2006	NWB10823	
Benzo(b)fluoranthene	ND	U	0.20	1	08/23/2006	09/01/2006	NWB10823	
Benzo(k)fluoranthene	ND	U	0.20	1	08/23/2006	09/01/2006	NWB10823	
Benzo(a)pyrene	ND	U	0.20	1	08/23/2006	09/01/2006	NWB10823	
Dibenz(a,h)anthracene	ND	U	0.50	1	08/23/2006	09/01/2006	NWB10823	
Benzo(g,h,i)perylene	ND	U	0.20	1	08/23/2006	09/01/2006	NWB10823	
Indeno(1,2,3-cd)pyrene	ND	U	0.20	1	08/23/2006	09/01/2006	NWB10823	
Acenaphthylene	ND	U	2.0	1	08/23/2006	09/01/2006	NWB10823	
Acenaphthene	ND	U	5.0	1	08/23/2006	09/01/2006	NWB10823	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Terphenyl-d14 - SS	84	65-135	09/01/2006	

Comments: _____

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Prep Method: SW3520
Analysis Method: SW8310

Units: Percent

<u>Sample Name</u>	<u>Lab Code</u>	<u>Q</u>	<u>S1</u>
Laboratory Control Sample	NWB10823LCS		84
Laboratory Control Sample Duplicate	NWB10823LCSD		84
Method Blank	NWB10823		84
LF6GW103CL	D0601136-002	*	63
1213GW101CL	D0601136-004		89

Surrogate Recovery Control Limits (%)

S1: Terphenyl-d14 - SS 65-135

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Collected: NA
Date Received: NA
Date Extracted: 08/23/2006
Date Analyzed: 09/01/2006

Laboratory Control Sample/Duplicate Laboratory Control Sample Summary
Polynuclear Aromatic Hydrocarbons

LCS Sample Lab Control Sample
Lab Code: NWB10823LCS / NWB10823LCSD
Extraction SW3520
Analysis Method: SW8310

DLCS Sample Lab Control Sample Duplicate
Units: ug/L (ppb)

Analyte	MRL	Spike Level	Spike Result	Spike Result	Spike % Rec	Spike % Rec	CAS Acceptance	Relative Percent	Result
			LCS	LCSD	LCS	LCSD	Limits	Difference	Notes
Naphthalene	5.0	20.00	16.18	16.79	81	84	50-135	4	
Fluorene	1.0	4.000	3.495	3.502	87	88	65-135	0	
Pyrene	0.20	2.000	1.860	1.889	93	94	65-135	2	
Benzo(a)pyrene	0.20	2.000	1.812	1.693	91	85	65-135	7	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Extracted: 08/23/2006
Date Analyzed: 09/01/2006
Time Analyzed: 01:44

Method Blank Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: SW3520
Analysis Method: SW8310

Extraction Lot: NWB10823

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Laboratory Control Sample	NWB10823LCS	I0831033	09/01/2006	00:43
Laboratory Control Sample Duplicate	NWB10823LCSD	I0831034	09/01/2006	01:13
LF6GW103CL	D0601136-002	I0831036	09/01/2006	02:15
1213GW101CL	D0601136-004	I0831037	09/01/2006	02:45

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
ICAL Date: 08/31/2006

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

ICAL ID: 08/31/2006LCI

Instrument ID: LCI

Level ID **File ID**
A I0831026
B I0831027
C I0831028
D I0831029
E I0831030

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF
Naphthalene	A	1.000	66.82	B	10.00	79.64	C	20.00	80.01	D	30.00	81.83	E	40.00	81.36
Fluorene	A	0.200	482.3	B	2.000	564.8	C	4.000	567.0	D	6.000	562.7	E	8.000	559.1
Phenanthrene	A	0.100	838.0	B	1.000	972.1	C	2.000	975.3	D	3.000	978.8	E	4.000	1000
Anthracene	A	0.100	824.4	B	1.000	970.3	C	2.000	969.4	D	3.000	936.5	E	4.000	955.6
Fluoranthene	A	0.100	185.3	B	1.000	268.9	C	2.000	313.6	D	3.000	295.2	E	4.000	285.8
Pyrene	A	0.100	685.1	B	1.000	850.0	C	2.000	842.1	D	3.000	866.6	E	4.000	888.2
Benz(a)anthracene	A	0.100	234.4	B	1.000	361.3	C	2.000	381.5	D	3.000	387.4	E	4.000	389.2
Chrysene	A	0.100	736.6	B	1.000	912.0	C	2.000	922.1	D	3.000	922.3	E	4.000	927.3
Benzo(b)fluoranthene	A	0.100	251.6	B	1.000	365.6	C	2.000	375.0	D	3.000	385.0	E	4.000	391.5
Benzo(k)fluoranthene	A	0.100	1985	B	1.000	2282	C	2.000	2304	D	3.000	2319	E	4.000	2318
Benzo(a)pyrene	A	0.100	2134	B	1.000	2504	C	2.000	2555	D	3.000	2554	E	4.000	2515
Dibenz(a,h)anthracene	A	0.200	1129	B	2.000	1354	C	4.000	1372	D	6.000	1374	E	8.000	1347
Benzo(g,h,i)perylene	A	0.200	849.6	B	2.000	962.4	C	4.000	1003	D	6.000	1019	E	8.000	986.2
Indeno(1,2,3-cd)pyrene	A	0.100	1150	B	1.000	1422	C	2.000	1541	D	3.000	1547	E	4.000	1442
Acenaphthene	A	1.000	101.8	B	10.00	113.1	C	20.00	112.4	D	30.00	114.6	E	40.00	114.7
p-Terphenyl-d14	A	0.250	286.9	B	2.500	343.5	C	5.000	345.3	D	7.500	349.7	E	10.00	349.3

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
ICAL Date: 08/31/2006

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

ICAL ID: 08/31/2006LCI
Instrument ID: LCI
Mean RSD: 9.73

Calibration Evaluation

Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria
Naphthalene	TRG	Linear	r	1.000		0.995
Fluorene	TRG	Linear	r	1.000		0.995
Phenanthrene	TRG	Linear	r	1.000		0.995
Anthracene	TRG	Linear	r	1.000		0.995
Fluoranthene	TRG	Linear	r	0.998		0.995
Pyrene	TRG	Linear	r	1.000		0.995
Benz(a)anthracene	TRG	Linear	r	1.000		0.995
Chrysene	TRG	Linear	r	1.000		0.995
Benzo(b)fluoranthene	TRG	Linear	r	1.000		0.995
Benzo(k)fluoranthene	TRG	Linear	r	1.000		0.995
Benzo(a)pyrene	TRG	Linear	r	1.000		0.995
Dibenz(a,h)anthracene	TRG	Linear	r	1.000		0.995
Benzo(g,h,i)perylene	TRG	Linear	r	1.000		0.995
Indeno(1,2,3-cd)pyrene	TRG	Linear	r	0.998		0.995
Acenaphthene	TRG	Linear	r	1.000		0.995
p-Terphenyl-d14	SUR	Linear	r	1.000		0.995

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 08/31/2006

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

ICAL ID: 08/31/2006LCI
Instrument ID: LCI
File ID: I0831031

Column: FL

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%	Criteria	Curve Fit	Q
Naphthalene	20.00	21.08	77.93	85.34	NA	5.4	+/- 15.0	Linear	
Fluorene	4.000	4.322	547.2	606.8	NA	8.0	+/- 15.0	Linear	
Phenanthrene	2.000	2.087	952.9	1028	NA	4.4	+/- 15.0	Linear	
Anthracene	2.000	2.166	931.2	1032	NA	8.3	+/- 15.0	Linear	
Fluoranthene	2.000	2.054	269.8	299.3	NA	2.7	+/- 15.0	Linear	
Pyrene	2.000	1.902	826.4	823.2	NA	-4.9	+/- 15.0	Linear	
Benz(a)anthracene	2.000	2.047	350.8	392.1	NA	2.4	+/- 15.0	Linear	
Chrysene	2.000	2.209	884.0	1019	NA	10.4	+/- 15.0	Linear	
Benzo(b)fluoranthene	2.000	2.207	353.7	423.2	NA	10.4	+/- 15.0	Linear	
Benzo(k)fluoranthene	2.000	2.177	2242	2515	NA	8.8	+/- 15.0	Linear	
Benzo(a)pyrene	2.000	2.242	2452	2836	NA	12.1	+/- 15.0	Linear	
Dibenz(a,h)anthracene	4.000	4.173	1315	1418	NA	4.3	+/- 15.0	Linear	
Benzo(g,h,i)perylene	4.000	4.280	964.1	1066	NA	7.0	+/- 15.0	Linear	
Indeno(1,2,3-cd)pyrene	2.000	2.246	1420	1671	NA	12.3	+/- 15.0	Linear	
Acenaphthene	20.00	22.10	111.3	126.0	NA	10.5	+/- 15.0	Linear	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 08/31/2006

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

ICAL ID: 08/31/2006LCI
Instrument ID: LCI
File ID: I0831031

Column: UV

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%	Criteria	Curve Fit	Q
Naphthalene	20.00	20.74	210.1	217.9	3.7	NA	+/- 15.0	AverageRF	
Fluorene	4.000	4.178	983.3	1027	4.4	NA	+/- 15.0	AverageRF	
Phenanthrene	2.000	2.031	2433	2471	1.6	NA	+/- 15.0	AverageRF	
Anthracene	2.000	2.148	4760	5112	7.4	NA	+/- 15.0	AverageRF	
Fluoranthene	2.000	2.003	659.1	660.1	0.1	NA	+/- 15.0	AverageRF	
Pyrene	2.000	1.963	561.4	550.9	-1.9	NA	+/- 15.0	AverageRF	
Benz(a)anthracene	2.000	2.062	1471	1516	3.1	NA	+/- 15.0	AverageRF	
Chrysene	2.000	2.136	2277	2433	6.8	NA	+/- 15.0	AverageRF	
Benzo(b)fluoranthene	2.000	2.019	1695	1712	1.0	NA	+/- 15.0	AverageRF	
Benzo(k)fluoranthene	2.000	1.982	1191	1180	-0.9	NA	+/- 15.0	AverageRF	
Benzo(a)pyrene	2.000	1.974	1578	1558	-1.3	NA	+/- 15.0	AverageRF	
Dibenz(a,h)anthracene	4.000	3.438	414.5	356.3	-14.1	NA	+/- 15.0	AverageRF	
Benzo(g,h,i)perylene	4.000	3.890	598.1	581.6	-2.8	NA	+/- 15.0	AverageRF	
Indeno(1,2,3-cd)pyrene	2.000	2.030	1331	1351	1.5	NA	+/- 15.0	AverageRF	
Acenaphthylene	40.00	41.72	142.0	148.1	4.3	NA	+/- 15.0	AverageRF	
Acenaphthene	20.00	21.39	83.02	88.80	7.0	NA	+/- 15.0	AverageRF	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 09/01/2006

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

ICAL ID: 08/31/2006LCI
Instrument ID: LCI
File ID: I0831039

Column: FL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
Naphthalene	30.00	30.42	77.93	82.42	NA	1.4	+/- 15.0	Linear	
Fluorene	6.000	5.742	547.2	537.3	NA	-4.3	+/- 15.0	Linear	
Phenanthrene	3.000	2.973	952.9	980.6	NA	-0.9	+/- 15.0	Linear	
Anthracene	3.000	2.936	931.2	932.0	NA	-2.1	+/- 15.0	Linear	
Fluoranthene	3.000	2.900	269.8	282.3	NA	-3.3	+/- 15.0	Linear	
Pyrene	3.000	3.043	826.4	887.4	NA	1.4	+/- 15.0	Linear	
Benzo(a)anthracene	3.000	3.004	350.8	387.3	NA	0.1	+/- 15.0	Linear	
Chrysene	3.000	3.006	884.0	926.5	NA	0.2	+/- 15.0	Linear	
Benzo(b)fluoranthene	3.000	2.995	353.7	385.9	NA	-0.2	+/- 15.0	Linear	
Benzo(k)fluoranthene	3.000	3.008	2242	2322	NA	0.3	+/- 15.0	Linear	
Benzo(a)pyrene	3.000	3.032	2452	2559	NA	1.1	+/- 15.0	Linear	
Dibenzo(a,h)anthracene	6.000	5.719	1315	1295	NA	-4.7	+/- 15.0	Linear	
Benzo(g,h,i)perylene	6.000	6.211	964.1	1033	NA	3.5	+/- 15.0	Linear	
Indeno(1,2,3-c,d)pyrene	3.000	2.998	1420	1487	NA	-0.1	+/- 15.0	Linear	
Acenaphthene	30.00	29.71	111.3	113.2	NA	-1.0	+/- 15.0	Linear	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
Date Analyzed: 09/01/2006

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

ICAL ID: 08/31/2006LCI
Instrument ID: LCI
File ID: I0831039

Column: UV

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
Naphthalene	30.00	30.15	210.1	211.2	0.5	NA	+/- 15.0	AverageRF	
Fluorene	6.000	6.028	983.3	987.9	0.4	NA	+/- 15.0	AverageRF	
Phenanthrene	3.000	2.922	2433	2369	-2.6	NA	+/- 15.0	AverageRF	
Anthracene	3.000	2.903	4760	4606	-3.2	NA	+/- 15.0	AverageRF	
Fluoranthene	3.000	2.832	659.1	622.2	-5.6	NA	+/- 15.0	AverageRF	
Pyrene	3.000	2.829	561.4	529.4	-5.7	NA	+/- 15.0	AverageRF	
Benzo(a)anthracene	3.000	2.961	1471	1452	-1.3	NA	+/- 15.0	AverageRF	
Chrysene	3.000	2.942	2277	2233	-1.9	NA	+/- 15.0	AverageRF	
Benzo(b)fluoranthene	3.000	2.772	1695	1567	-7.6	NA	+/- 15.0	AverageRF	
Benzo(k)fluoranthene	3.000	2.699	1191	1071	-10.0	NA	+/- 15.0	AverageRF	
Benzo(a)pyrene	3.000	2.678	1578	1409	-10.7	NA	+/- 15.0	AverageRF	
Dibenzo(a,h)anthracene	6.000	5.176	414.5	357.6	-13.7	NA	+/- 15.0	AverageRF	
Benzo(g,h,i)perylene	6.000	5.704	598.1	568.6	-4.9	NA	+/- 15.0	AverageRF	
Indeno(1,2,3-c,d)pyrene	3.000	2.827	1331	1254	-5.8	NA	+/- 15.0	AverageRF	
Acenaphthylene	60.00	60.39	142.0	142.9	0.6	NA	+/- 15.0	AverageRF	
Acenaphthene	30.00	29.41	83.02	81.39	-2.0	NA	+/- 15.0	AverageRF	

QA/QC Results

Service Request: D0601136

Instrument ID: LCI
Column: FL

Form 8 - Organic

QA/QC Results

Service Request: D0601136

Analysis Method: SW8310

Instrument ID: LCI
Column: UV

[illegible]

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601136
Date Extracted: 08/23/2006

Extraction Prep Log
Polynuclear Aromatic Hydrocarbons

Extaction Method: SW3520
Analysis Method: SW8310

Extraction Lot: NWB10823

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
Method Blank	NWB10823	NA	NA	1.000 L	1	NA	
Laboratory Control Sample	NWB10823LCS	NA	NA	1.000 L	1	NA	
Laboratory Control Sample Duplicate	NWB10823LCSD	NA	NA	1.000 L	1	NA	
LF6GW103CL	D0601136-002	08/16/2006	08/17/2006	1.050 L	1	NA	
1213GW101CL	D0601136-004	08/16/2006	08/17/2006	1.040 L	1	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Report

Service Request: D0601136

Analysis Method: SW8310

[illegible]

Comments: _____

Analysis Method: SW8310
Extraction Method: SW3520
Matrix: WATER
MDL Effective Date: 08/03/05

Analyst: B. Moore
Instrument: LCI
Description: C18 Reverse Phase
Department: HP

#	Compound	CAS No.	Date	MDL
1	Naphthalene	91-20-3	08/03/05	0.019
2	Fluorene	86-73-7	08/03/05	0.004
3	Phenanthrene	85-01-8	08/03/05	0.003
4	Anthracene	120-12-7	08/03/05	0.003
5	Fluoranthene	206-44-0	08/03/05	0.004
6	Pyrene	129-00-0	08/03/05	0.006
7	Benzo(a)anthracene	56-55-3	08/03/05	0.005
8	Chrysene	218-01-9	08/03/05	0.004
9	Benzo(b)fluoranthene	205-99-2	08/03/05	0.005
10	Benzo(k)fluoranthene	207-08-9	08/03/05	0.003
11	Benzo(a)pyrene	50-32-8	08/03/05	0.006
12	Dibenzo(a,h)anthracene	53-70-3	08/03/05	0.008
13	Benzo(g,h,i)perylene	191-24-2	08/03/05	0.007
14	Indeno(1,2,3-cd)pyrene	193-39-5	08/03/05	0.004
15	Acenaphthylene	208-96-8	08/03/05	0.086
16	Acenaphthene	83-32-9	08/03/05	0.018
17	1-Methylnaphthalene	90-12-0	08/03/05	0.021
18	2-Methylnaphthalene	91-57-6	08/03/05	0.021

UG/L	1	2	3	4	5	6	7	8
0.10	0.0377	0.0412	0.0430	0.0413	0.0435	0.0393	0.0553	0.0333
0.020	0.0068	0.0082	0.0077	0.0089	0.0081	0.0073	0.0096	0.0047
0.010	0.0054	0.0054	0.0060	0.0069	0.0055	0.0064	0.0076	0.0045
0.010	0.0030	0.0034	0.0037	0.0056	0.0034	0.0035	0.0048	0.0027
0.010	0.0047	0.0039	0.0058	0.0054	0.0054	0.0076	0.0058	0.0037
0.010	0.0044	0.0038	0.0058	0.0070	0.0050	0.0095	0.0075	0.0034
0.010	0.0022	0.0014	0.0027	0.0032	0.0018	0.0061	0.0038	0.0013
0.010	0.0043	0.0032	0.0049	0.0044	0.0043	0.0075	0.0055	0.0038
0.010	0.0070	0.0049	0.0068	0.0087	0.0056	0.0090	0.0077	0.0048
0.010	0.0058	0.0037	0.0061	0.0061	0.0058	0.0055	0.0071	0.0049
0.010	0.0038	0.0039	0.0048	0.0093	0.0042	0.0038	0.0056	0.0037
0.020	0.0125	0.0078	0.0147	0.0153	0.0153	0.0127	0.0162	0.0118
0.020	0.0076	0.0049	0.0096	0.0103	0.0098	0.0115	0.0121	0.0075
0.010	0.0039	0.0028	0.0054	0.0049	0.0049	0.0062	0.0069	0.0036
0.20	0.1214	0.1827	0.1758	0.1889	0.1609	0.1606	0.2152	0.1444
0.10	0.0442	0.0488	0.0485	0.0487	0.0464	0.0465	0.0578	0.0363
0.10	0.0444	0.0552	0.0526	0.0513	0.0482	0.0475	0.0584	0.0359
0.10	0.0440	0.0547	0.0500	0.0547	0.0484	0.0470	0.0578	0.0356

Mean	Std Dev	MDL Check	True Value	% Rec
0.0418	0.0063	0.0235	0.050	47
0.0077	0.0015	0.0021	0.010	21
0.0060	0.0010	0.0040	0.005	81
0.0037	0.0010	0.0019	0.005	38
0.0054	0.0013	0.0031	0.005	62
0.0058	0.0021	0.0026	0.005	52
0.0028	0.0016	0.0017	0.005	35
0.0047	0.0013	0.0034	0.005	68
0.0068	0.0016	0.0032	0.005	65
0.0056	0.0010	0.0039	0.005	78
0.0049	0.0019	0.0026	0.005	53
0.0133	0.0027	0.0089	0.010	89
0.0092	0.0024	0.0054	0.010	54
0.0048	0.0013	0.0033	0.005	65
0.1687	0.0287	0.0720	0.100	72
0.0472	0.0060	0.0254	0.050	51
0.0492	0.0070	0.0303	0.050	61
0.0490	0.0071	0.0297	0.050	59

APPENDIX

September 6, 2006

Service Request No: D0601136

Karen Sellers
Columbia Analytical Services
5090 Caterpillar Rd.
Redding, CA 96003

RE: Presidio

Dear Karen:

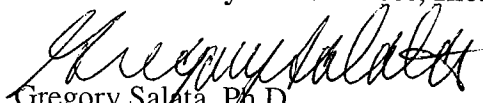
Enclosed are the results of the sample(s) submitted to our laboratory on August 17, 2006. For your reference, these analyses have been assigned our service request number D0601136.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards. Exceptions are noted in the case narrative report where applicable. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3376. You may also contact me via Email at GSalata@kelso.caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.



Gregory Salata, Ph.D.
Project Chemist

GS/jm

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Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.

Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- B The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.
- * The duplicate analysis not within control limits. See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a chromatographic interference.
- X See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request No.: D0601136
Date Received: 08/17/06

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

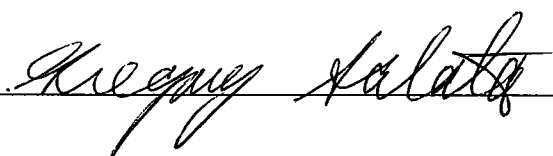
Sample Receipt

One water sample was received for analysis at Columbia Analytical Services on 08/17/06, and subcontracted to the Kelso lab on 8/22/06. The sample was received in good condition and consistent with the accompanying chain of custody form. The sample was stored in a refrigerator at 4°C upon receipt at the laboratory.

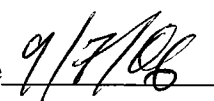
General Chemistry Parameters

No anomalies associated with the analysis of these samples were observed.

Approved by



Date



00005

Chain of Custody Documentation

00006

Ph: 415.955.9040 FAX: 415.955.9041

SUBCONTRACT

CHAIN OF CUSTODY RECORD

PRESIDIO OF SAN FRANCISCO

COC No. OP 2145

Page: of

2060156

~~1606910~~

Project Name: Presidio of San Francisco Location: Presidio of San Francisco Sampled By (Firm and Samplers): BT's Plominishy, W. Gray, D. Reaynd Recorder (signature required): P. Lathin						PROJECT MANAGER: Joshua Graber PROJECT NUMBER: 2893																	
Sent to Laboratory (Name): Columbia						REQUESTED ANALYSES																	
SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix	Number of Containers and Preservation	TPHg (8015M) 1	TPHd (8015M) 1	TPHo (8015M) 1	VOCs (8260)	General Chemistry 2	OCPs (8081)	Metals - Dissolved 3 (2, 22, 13, 9, 8, 7, 3, Other)	Metals - Total 3 (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	NDMA (1625)	Meths Diss (15)	Meths Diss (12)	PCB's 8080	BTEX, MTH6	5x H/de		
MKGU04 CL	8/16/06	1235		A	NaOH	Z				X	X	X	X	X	X	X	X	X	X	X	X	X	
LFLGWI03CL		1040		X	HNO ₃	1				X	X	X	X	X	X	X	X	X	X	X	X	X	
1065MW9BCL		1115		X	H ₂ SO ₄	1				X	X	X	X	X	X	X	X	X	X	X	X	X	
1213GW101CL		1050		X	HCl	1				X	X	X	X	X	X	X	X	X	X	X	X	X	
TB081606A				X	Other	2																	
Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Carbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate) 3 - Indicate in the metals column (by number) which metals list is requested. Metals Lists (23 - Al, Sb, As, Ba, Be, Cr, Cd, Cu, Co, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Ti, V, and Zn) Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Cu, Co, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Ti, V, and Zn) (13 - As, Ca, Cr, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn) Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (Other -)																							
RELINQUISHED BY: P. Lathin						RECEIVED BY: [Signature]						DATE: 8/16/06 TIME: 1350						DATE: 8/16/06 TIME: 1350					
PRINT NAME: P. Cornish						FIRM: BT'S						PRINT NAME: CAS						FIRM: CAS					
RELINQUISHED BY: [Signature]						RECEIVED BY: A. J. Well						DATE: 8/16/06 TIME: 1830						DATE: 8/16/06 TIME: 1830					
PRINT NAME: PRINS VIA						FIRM: CAS VIA FEDEX						PRINT NAME: CHD						FIRM: CHD					
ADDITIONAL REMARKS / LABORATORY NOTES: RESULTS ONLY SUBMITTED TO: CAS/KELSO, WA																							

RESULTS ONLY SUBBED TO: CAS/KELSO, WA
AND PHILIP GREG SANCHEZ

PH: GREG SAUTER

李

**Columbia Analytical Services Inc.
Cooler Receipt and Preservation Form**

PC greg

Project/Client TREADWELL, ROLLO Service Request ~~K06~~ D0601136

Cooler received on 8/17/10 and opened on 8/17/10 by AB

1. Were custody seals on outside of coolers? Y ☒ N
If yes, how many and where? _____
2. Were custody seals intact? ~~Y~~ N
3. Were signature and date present on the custody seals? ~~Y~~ N
4. Is the shipper's airbill available and filed? If no, record airbill number: _____ ☒ Y N
5. COC# _____
Temperature of cooler(s) upon receipt: (°C) 3.5 _____
Temperature Blank: (°C) _____
- Were samples hand delivered on the same day as collection? Y ☒ N
6. Were custody papers properly filled out (ink, signed, etc.)? ☒ Y N
7. Type of packing material present ICE, BUBBLE WRAP
8. Did all bottles arrive in good condition (unbroken)? ☒ Y N
9. Were all bottle labels complete (i.e analysis, preservation, etc.)? ☒ Y N
10. Did all bottle labels and tags agree with custody papers? ☒ Y N
11. Were the correct types of bottles used for the tests indicated? ☒ Y N
12. Were all of the preserved bottles received at the lab with the appropriate pH? ~~Y~~ N
13. Were VOA vials checked for absence of air bubbles, and if present, noted below? ~~Y~~ N
14. Were the 1631 Mercury bottles checked for absence of air bubbles, and if present, noted below? ~~Y~~ N
15. Did the bottles originate from CAS/K or a branch laboratory? ☒ Y N
16. Are CWA Microbiology samples received with >1/2 the 24hr. hold time remaining from collection? ~~Y~~ N
17. Was C12/Res negative? Y ☒ N

Explain any discrepancies: _____

RESOLUTION: _____

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

00008

General Chemistry Parameters

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : NA
Sample Matrix : WATER

Service Request : D0601136
Date Collected : 08/16/06
Date Received : 08/17/06

Sulfide, Total

Analysis Method : 376.2
Test Notes :

Units : mg/L (ppm)
Basis : NA

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
1065MW9BCL	D0601136-003	0.05	1	08/22/06	ND	
Method Blank	D0601136-MB	0.05	1	08/22/06	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : NA
Sample Matrix : GROUND WATER

Service Request : D0601136
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 08/22/06

Duplicate Summary Inorganic Parameters

Sample Name : Batch QC
Lab Code : L0601058-016DUP
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Sulfide, Total	376.2	0.05	ND	ND	ND	-	

00011

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : NA
Sample Matrix : GROUND WATER

Service Request : D0601136
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 08/22/06

Matrix Spike Summary
Inorganic Parameters

Sample Name : Batch QC
Lab Code : L0601058-016MS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS	Result Notes
							Percent Recovery Acceptance Limits	
Sulfide, Total	376.2	0.05	1.84	ND	1.80	98	75-125	

00012

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : NA
Sample Matrix : WATER

Service Request : D0601136
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 08/22/06

Laboratory Control Sample Summary Inorganic Parameters

Sample Name : Laboratory Control Sample
Lab Code : D0601136-LCS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery	Result Notes
						Acceptance Limits	
Sulfide, Total	None	376.2	1.84	1.80	98	85-115	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project : Presidio

Service Request : D0601136
Date Collected : NA
Date Received : NA

Sulfide, Total
EPA Method 376.2
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	08/22/06	1.84	1.85	101
CCV4 Result	08/22/06	1.84	1.85	101
CCV5 Result	08/22/06	1.84	1.85	101
CCV6 Result	08/22/06	1.84	1.84	100
CCV7 Result	08/22/06	1.84	1.86	101
CCV8 Result	08/22/06	1.84	1.85	101
CCV9 Result	08/22/06	1.84	1.85	101

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	08/22/06	0.05	ND
CCB4 Result	08/22/06	0.05	ND
CCB5 Result	08/22/06	0.05	ND
CCB6 Result	08/22/06	0.05	ND
CCB7 Result	08/22/06	0.05	ND
CCB8 Result	08/22/06	0.05	ND
CCB9 Result	08/22/06	0.05	ND

Original
Work Request # (L1053) L1058 L1065 ~~D11361~~
Tier: II II II V
Date Analyzed: 8/22/06
Analyst: S. Hopkins
Analysis: 376.2

**DATA QUALITY REPORT
INORGANICS**

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1. Is the method name and number correct and appropriate? ☒ yes/no/NA
2. Holding times met for all analyses and for all samples? ☒ yes/no/NA
3. Are calculations correct? ☒ yes/no/NA
4. Is the reporting basis correct? (Dry Weight) ☒ yes/no/NA
5. All quality control criteria met? ☒ yes/no/NA
 - a. Is the calibration curve correlation coefficient ≥ 0.995 ? ☒ yes/no/NA
 - b. MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency? ☒ yes/no/NA
 - c. Are ICVs, CCVs, and CCBs all within acceptance limits? ☒ yes/no/NA
 - d. Are results for methods blanks all ND? ☒ yes/no/NA
 - e. Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.) ☒ yes/no/NA
 - f. Are all exceptions explained? ☒ yes/no/NA
6. Are all service requests that apply attached? ☒ yes/no/NA
7. Are all samples labelled correctly? ☒ yes/no/NA
8. Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample) ☒ yes/no/NA
9. Are detection limits and units reported correctly? ☒ yes/no/NA
10. Are proper Analysis/Extraction stickers included on report? ☒ yes/no/NA
11. Is the unused space on the benchsheet crossed out? ☒ yes/no/NA
12. Was analysis turned in by the due date? (n-2) (If not record SR#) ☒ yes/no/NA

COMMENTS:

Final Approved by: _____

Date: _____

8/22/06

DQREPORT

Work Order #: L1053, L1058, 1065, D1136

Method: 376.2

Analysis: Analysis for Total Sulfide

	STD1	STD 2	STD 3	STD 4	STD 5	STD 6	STD 7			(R) = 0.9994
Conc. (mg/L)	0.000	0.046	0.459	0.918	1.376	1.835	2.294			Slope = 0.6859
Absorbance	0.000	0.035	0.346	0.672	0.977	1.293	1.559			Y Int. = 0.0185

Date Prep'd	Sample #	Dil Factor	Absorb. @ 670 nm	Conc. from Curve (mg/L)	Actual Conc. (mg/L)	Initial Wt./Vol. (g) / (ml)	Final Vol. (ml)	A Tower mg/L (solution)	B Tower mg/L (solution)	A & B mg/L - mg/kg as rec'd	% Solid	mg/kg Dry Wt.
8/22/2006	ICV	1	1.418	2.0402	2.0402	40	40	2.04		2.04		
8/22/2006	ICB	1	0.000	-0.0270	<0.05	40	40	<0.05		<0.05		
8/22/2006	CCV	1	1.289	1.8521	1.8521	40	40	1.85		1.85		
8/22/2006	CCB	1	-0.004	-0.0329	<0.05	40	40	<0.05		<0.05		
8/22/2006	CCV4	1	1.289	1.8521	1.8521	40	40	1.85		1.85		
8/22/2006	CCB4	1	0.000	-0.0270	<0.05	40	40	<0.05		<0.05		
8/22/2006	MB1	1	0.001	-0.0256	<0.05	20	20	<0.05		<0.05		
8/22/2006	LCS1	1	1.254	1.8011	1.8011	20	20	1.80		1.80		
8/22/2006	L1053-1	1	-0.001	-0.0285	<0.05	20	20	<0.05		<0.05		
8/22/2006	1053-3	1	0.000	-0.0270	<0.05	20	20	<0.05		<0.05		
8/22/2006	1053-4	1	-0.003	-0.0314	<0.05	20	20	<0.05		<0.05		
8/22/2006	1053-5	1	-0.002	-0.0299	<0.05	20	20	<0.05		<0.05		
8/22/2006	1053-6	1	0.000	-0.0270	<0.05	20	20	<0.05		<0.05		
8/22/2006	1053-8	1	0.064	0.0663	0.0663	20	20	0.07		0.07		
8/22/2006	1053-9	1	0.030	0.0167	<0.05	20	20	<0.05		<0.05		
8/22/2006	1053-10	1	0.008	-0.0154	<0.05	20	20	<0.05		<0.05		
8/22/2006	CCV5	1	1.289	1.8521	1.8521	40	40	1.85		1.85		
8/22/2006	CCB5	1	-0.002	-0.0299	<0.05	40	40	<0.05		<0.05		
8/22/2006	1053-11	1	0.096	0.1129	0.1129	20	20	0.11		0.11		
8/22/2006	1053-12	1	0.007	-0.0168	<0.05	20	20	<0.05		<0.05		
8/22/2006	1053-13	1	0.004	-0.0212	<0.05	20	20	<0.05		<0.05		
8/22/2006	L1058-1	1	-0.001	-0.0285	<0.05	20	20	<0.05		<0.05		
8/22/2006	1058-2	1	-0.002	-0.0299	<0.05	20	20	<0.05		<0.05		
8/22/2006	1058-4	1	0.001	-0.0256	<0.05	20	20	<0.05		<0.05		
8/22/2006	1058-5	1	0.001	-0.0256	<0.05	20	20	<0.05		<0.05		

CCV = 2ml*36.7mg/L/40ml = 1.84mg/L %REC = 101, 101, 101, 100, 101, 101, 101

LCS1/LCS2 = 1ml*36.7mg/L/20ml = 1.84mg/L %REC = 98, 95

ICV = 2.25ml*36.7mg/L/40ml = 2.06mg/L %REC = 99

L1058-17MS/MSD and L1058-16MS/MSD = 1ml*36.7mg/L/20ml = 1.84mg/L %REC = 98, 99, 100, 100

L1058-16/16d x = ND RPD = -- L1058-17/17d x = ND RPD = --

STD ID# s2/2-1-D CONC. = 3670

Distilled by: <i>SMV</i>	Date Distilled: <i>N/A</i>
Analyzed By: <i>SMV</i>	Date Analyzed: <i>8/22/06</i>
Reviewed By: <i>Joel</i>	Date Reviewed: <i>8/22/06</i>

COLUMBIA ANALYTICAL SERVICES, INC.

Work Order #.:

Method: 376.2

Analysis: Analysis for Total Sulfide

	STD1	STD 2	STD 3	STD 4	STD 5	STD 6	STD 7			(R) = 0.9994
Conc. (mg/L)	0.000	0.046	0.459	0.918	1.376	1.835	2.294			Slope = 0.6859
Absorbance	0.000	0.035	0.346	0.672	0.977	1.293	1.559			Y Int. = 0.0185

Date Prep'd	Sample #	Dil Factor	Absorb. @ 670 nm	Conc. from Curve (mg/L)	Actual Conc. (mg/L)	Initial Wt./Vol. (g) / (ml)	Final Vol. (ml)	A Tower mg/L (solution)	B Tower mg/L (solution)	A & B mg/L - mg/kg as rec'd	% Solid	mg/kg Dry Wt.
8/22/2006	1058-6	1	-0.002	-0.0299	<0.05	20	20	<0.05		<0.05		
8/22/2006	1058-7	1	-0.003	-0.0314	<0.05	20	20	<0.05		<0.05		
8/22/2006	1058-9	1	0.015	-0.0052	<0.05	20	20	<0.05		<0.05		
8/22/2006	CCV6	1	1.284	1.8448	1.8448	40	40	1.84		1.84		
8/22/2006	CCB6	1	-0.003	-0.0314	<0.05	40	40	<0.05		<0.05		
8/22/2006	1058-10	1	0.020	0.0021	<0.05	20	20	<0.05		<0.05		
8/22/2006	1058-11	1	0.008	-0.0154	<0.05	20	20	<0.05		<0.05		
8/22/2006	MB2	1	-0.004	-0.0329	<0.05	20	20	<0.05		<0.05		
8/22/2006	LCS2	1	1.220	1.7515	1.7515	20	20	1.75		1.75		
8/22/2006	1058-12	1	0.196	0.2587	0.2587	20	20	0.26		0.26		
8/22/2006	1058-13	1	0.023	0.0065	<0.05	20	20	<0.05		<0.05		
8/22/2006	1058-14	1	0.003	-0.0227	<0.05	20	20	<0.05		<0.05		
8/22/2006	1058-15	1	0.025	0.0094	<0.05	20	20	<0.05		<0.05		
8/22/2006	L1058-16	1	0.000	-0.0270	<0.05	20	20	<0.05		<0.05		
8/22/2006	1058-16D	1	-0.003	-0.0314	<0.05	20	20	<0.05		<0.05		
8/22/2006	CCV7	1	1.292	1.8565	1.8565	40	40	1.86		1.86		
8/22/2006	CCB7	1	0.001	-0.0256	<0.05	40	40	<0.05		<0.05		
8/22/2006	1058-16MS	1	1.256	1.8040	1.8040	20	20	1.80		1.80		
8/22/2006	058-16MSI	1	1.270	1.8244	1.8244	20	20	1.82		1.82		
8/22/2006	1058-17	1	-0.002	-0.0299	<0.05	20	20	<0.05		<0.05		
8/22/2006	1058-17D	1	-0.001	-0.0285	<0.05	20	20	<0.05		<0.05		
8/22/2006	1058-17MS	1	1.283	1.8434	1.8434	20	20	1.84		1.84		
8/22/2006	058-17MSI	1	1.278	1.8361	1.8361	20	20	1.84		1.84		
8/22/2006	L1065-2	1	-0.001	-0.0285	<0.05	20	20	<0.05		<0.05		
8/22/2006	1065-3	1	0.001	-0.0256	<0.05	20	20	<0.05		<0.05		

Distilled by: <i>SAH</i>	Date Distilled: <i>N/A</i>
Analyzed By: <i>SAH</i>	Date Analyzed: <i>8/22/06 1300</i>
Reviewed By: <i>joak</i>	Date Reviewed: <i>8/22/06</i>

000017

COLUMBIA ANALYTICAL SERVICES, INC.

Method: 376.2

Analysis:	Analysis for Total Sulfide
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	STD1	STD 2	STD 3	STD 4	STD 5	STD 6	STD 7				(R) = 0.9994
Conc. (mg/L)	0.000	0.046	0.459	0.918	1.376	1.835	2.294				Slope = 0.6859
Absorbance	0.000	0.035	0.346	0.672	0.977	1.293	1.559				Y Int. = 0.0185

[illegible]

Distilled by: <i>N/A</i>	Date Distilled: <i>N/A</i>
Analyzed By: <i>SAH</i>	Date Analyzed: <i>8/22/06</i>
Reviewed By: <i>[Signature]</i>	Date Reviewed: <i>8/22/06</i>

00018

DU520 S/N: 0112U2001732 1.03
 22-AUG-06 12:35:05 SCA Group 1446
 Wavelength: 670.0 nm
 Formula: A=a+bC a: 0.0190 b: 0.6857

Sample	Net A	Dil X	mg/L
0001	ICB 0.000	1.0000	-0.03
0002	ICV 1.418	1.0000	2.04
0003	CEV 1.289	1.0000	1.85
0004	CCB -0.004	1.0000	-0.03
0005	MB -0.000	1.0000	-0.03
0006	LCS 1.013	1.0000	1.45
0007	K7016 -10.005	1.0000	-0.02
0008	-10 0.001	1.0000	-0.03
0009	-1MS0.5966,2/20	1.0000	0.84
0010	-1MS0.6050,2/20	1.0000	0.85
0011	-2 0.002	1.0000	-0.02
0012	-3 0.002	1.0000	-0.03
0013	.4 0.298	1.0000	0.41
0014	-5 0.000	1.0000	-0.03
0015	CCV2 1.293	1.0000	1.86
0016	CCB2 -0.002	1.0000	-0.03
0017	K7016-6 0.037	1.0000	0.03
0018	MB -0.002	1.0000	-0.03
0019	LCS 0.010	1.0000	-0.01
0020	K7016-1 0.002	1.0000	-0.02
0021	-10 0.000	1.0000	-0.03
0022	-1MS 0.003	1.0000	-0.02
0023	-1MS0.003	1.0000	-0.02
0024	-2 0.004	1.0000	-0.02
0025	-3 0.000	1.0000	-0.03
0026	-4 0.004	1.0000	-0.02
0027	CCV3 1.291	1.0000	1.86
0028	CCB3 -0.000	1.0000	-0.03
0029	K7016-5 0.003	1.0000	-0.02
0030	-6 -0.001	1.0000	-0.03
0031	CCV4 1.289	1.0000	1.85
0032	CCB4 -0.000	1.0000	-0.03
0033	MB 0.001	1.0000	-0.03
0034	LCS 1.254	1.0000	1.80
0035	L1053-1 -0.001	1.0000	-0.03
0036	-3 0.000	1.0000	-0.03
0037	-4 -0.003	1.0000	-0.03
0038	-5 -0.002	1.0000	-0.03
0039	-6 0.000	1.0000	-0.03
0040	-8 0.064	1.0000	0.07
0041	-9 0.030	1.0000	0.02
0042	-10 0.008	1.0000	-0.02
0043	CCV5 1.289	1.0000	1.85
0044	CCB5 -0.002	1.0000	-0.03
0045	L1053-11 0.096	1.0000	0.11
0046	-12 0.007	1.0000	-0.02
0047	-13 0.004	1.0000	-0.02
0048	L1058-2 0.001	1.0000	-0.03
0049	-2 -0.002	1.0000	-0.03
0050	-4 0.001	1.0000	-0.03
0051	-5 0.001	1.0000	-0.03

AVS
A Towers

AVS
B Towers

376.2

8/22/06
W
8222

8/22/06

00019

0052	L1058-6-0.002	1.0000	-0.03
0053	↓ -7-0.003	1.0000	-0.03
0054	↓ -9 0.015	1.0000	-0.01
0055	CCV6 1.284	1.0000	1.85
0056	CCB6-0.003	1.0000	-0.03
0057	L1058-10 0.020	1.0000	0.00
0058	↓ -11 0.008	1.0000	-0.02
0059	MB2-0.004	1.0000	-0.03
0060	LCS2 1.220	1.0000	1.75
0061	L1058-12 0.196	1.0000	0.26
0062	↓ -13 0.023	1.0000	0.01
0063	↓ -14 0.003	1.0000	-0.02
0064	↓ -15 0.025	1.0000	0.01
0065	↓ -16-0.000	1.0000	-0.03
0066	↓ -16d-0.003	1.0000	-0.03
0067	CCV7 1.292	1.0000	1.86
0068	CCB7 0.001	1.0000	-0.03
0069	L1058-16ms 1.256	1.0000	1.80
0070	↓ -16msd 1.270	1.0000	1.82
0071	↓ -17-0.002	1.0000	-0.03
0072	↓ -17d-0.001	1.0000	-0.03
0073	↓ -17ms 1.283	1.0000	1.84
0074	↓ -17msd 1.278	1.0000	1.84
0075	L1065-2 0.001	1.0000	-0.03
0076	↓ -3 0.001	1.0000	-0.03
0077	↓ -4 0.000	1.0000	-0.03
0078	↓ -5 0.001	1.0000	-0.03
0079	CCV8 1.287	1.0000	1.85
0080	CCB8-0.003	1.0000	-0.03
0081	L1065-6 0.011	1.0000	-0.01
0082	↓ -7 -0.003	1.0000	-0.03
0083	↓ -8 0.000	1.0000	-0.03
0084	↓ -9 0.001	1.0000	-0.03
0085	↓ -10 -0.000	1.0000	-0.03
0086	↓ -11 -0.003	1.0000	-0.03
0087	↓ -13 0.004	1.0000	-0.02
0088	D1136-3 0.003	1.0000	-0.02
0089	CCV9 1.286	1.0000	1.85
0090	CCB9 0.001	1.0000	-0.03

SAT
8/22/06
W
8/22/06

© SAT 8/22/06

00020

Work Order #: _____ Method: _____ 376.2

Analysis: **Analysis for Total Sulfide**

Prep Date : 8/22/2006

	STD1	STD 2	STD 3	STD 4	STD 5	STD 6	STD 7					
Conc. (mg/L)	0.000	0.046	0.459	0.918	1.376	1.835	2.294					
Absorbance	0.000	0.035	0.346	0.672	0.977	1.293	1.559					

Sample Name Lab Code	Initial Wt./Vol. (g or (ml)	Dilution Factor	Abs of A tower @ 670 nm	Abs of B tower @ 670 nm	% Solids
ICV	40	1	1.418		
ICB	40	1	0.000		
CCV	40	1	1.289		
CCB	40	1	-0.004		
CCV4	40	1	1.289		
CCB4	40	1	0.000		
MB1	20	1	0.001		
LCS1	20	1	1.254		
L1053-1	20	1	-0.001		
1053-3	20	1	0.000		
1053-4	20	1	-0.003		
1053-5	20	1	-0.002		
1053-6	20	1	0.000		
1053-8	20	1	0.064		
1053-9	20	1	0.030		
1053-10	20	1	0.008		
CCV5	40	1	1.289		
CCB5	40	1	-0.002		
1053-11	20	1	0.096		
1053-12	20	1	0.007		
1053-13	20	1	0.004		
L1058-1	20	1	-0.001		
1058-2	20	1	-0.002		
1058-4	20	1	0.001		
1058-5	20	1	0.001		
1058-6	20	1	-0.002		
1058-7	20	1	-0.003		
1058-9	20	1	0.015		
CCV6	40	1	1.284		
CCB6	40	1	-0.003		
1058-10	20	1	0.020		
1058-11	20	1	0.008		
MB2	20	1	-0.004		
LCS2	20	1	1.220		
1058-12	20	1	0.196		
1058-13	20	1	0.023		
1058-14	20	1	0.003		
1058-15	20	1	0.025		

[illegible]

8/2206

8/22/06

AVS K0607016

376.2 L0601053, 1058, 1065

D0601136

DU520 S/N: 0112U2001732 1.03

22-AUG-06 12:34:26 SCA

Wavelength: 670.0 nm

Formula: $A=a+bC$ a: 0.0190 b: 0.6857

8/22/06

mg/L Net A $r^2=0.999$ $Var=0.0006$

0.0000	0.000
0.0460	0.035
0.4590	0.346
0.9180	0.672
1.3760	0.977
1.8350	1.293
2.2940	1.559

SAH
8/22/06
W
8/22/06

RECEIVED**NOV - 8 2006****TREADWELL & ROLLO**

2 November 2006

Josh Graber
Treadwell and Rollo
555 Montgomery St.
San Francisco, CA 94111

RE: CAS Service Request - D0601136
Amended Data for Treadwell and Rollo
Presidio

Dear Josh Graber:

Enclosed is the amended data for the General Chemistry portion of the above-mentioned service request. The modified Initial Calibration Summary Form 6A now lists %RSD for individual quantitation peaks and the average %RSD for specific Aroclor. Please replace the affected forms with those attached.

Columbia Analytical Services appreciates your business and looks forward to serving your future analytical needs. If you have any questions concerning the data or if you need additional information, please call me at (530) 244-5227.

Sincerely,
Columbia Analytical Services



Karen Sellers
Project Manager

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : NA
Sample Matrix : WATER

Service Request : D0601136
Date Collected : 08/16/06
Date Received : 08/17/06

Inorganic Parameters

Sample Name : 1213GW101CL
Lab Code : D0601136-004
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	PQL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Alkalinity as CaCO ₃ , Bicarbonate	mg/L	310.1	10	1	08/22/06 09:30	435	
Alkalinity as CaCO ₃ , Carbonate	mg/L	310.1	10	1	08/22/06 09:30	10	U
Alkalinity as CaCO ₃ , Total	mg/L	310.1	10	1	08/22/06 09:30	435	
Chloride	mg/L	300.0	50	50	08/23/06 01:43	288	
Fluoride	mg/L	300.0	50	50	08/23/06 01:43	50	U
Nitrate as Nitrogen	mg/L	300.0	1	10	08/18/06 14:36	7.1	
Nitrite as Nitrogen	mg/L	354.1	0.02	1	08/18/06 09:00	0.02	U
Sulfate	mg/L	300.0	10	10	08/18/06 14:36	1050	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Service Request: D0601136
Client : Treadwell and Rollo, Inc.
Project : Presidio

**Initial and Continuing Calibration Verification
Form II**

Analyte	Analysis Method	Date Analyzed	Units	Initial Calibration			Continuing Calibration							
								#1		#2		#3		
				True	Result	%R	True	Result	%R	Result	%R	Result	%R	
Alkalinity, Total	310.1	08/22/06	units	7.00	6.99	100	7.00	7.04	101		-		-	
Chloride	300.0	08/22/06	mg/L	5.00	4.87	97	8.00	7.84	98	7.77	97		-	
Chloride	300.0	09/02/06	mg/L	5.00	4.87	97	8.00	7.93	99		-		-	
Fluoride	300.0	08/22/06	mg/L	2.50	2.50	100	2.00	2.01	101	1.99	100		-	
Fluoride	300.0	09/02/06	mg/L	2.50	2.60	104	1.00	1.00	100		-		-	
Nitrate	300.0	08/18/06	mg/L	1.25	1.17	94	1.00	1.02	102		-		-	
Nitrite	354.1	08/18/06	mg/L	0.150	0.147	98	0.100	0.105	105		-		-	
Solids, Tot. Diss.	160.1	08/22/06	mg/L											
Sulfate	300.0	08/18/06	mg/L	10.00	9.15	92	8.00	8.26	103		-		-	
Sulfate	300.0	09/22/06	mg/L	10.00	9.79	98	8.00	7.79	97		-		-	

Control Limits are 90-110% unless noted.

Remarks

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
ICAL Date: 08/21/2006

Initial Calibration Summary
PolyChlorinated Biphenyls (PCBs)

ICAL ID: 08/21/2006GCC
Instrument ID: GCC

Column: RTX-CLP2

Level ID	File ID	Level ID	File ID												
A	C0821011	F	C0821016												
B	C0821012														
C	C0821013														
D	C0821014														
E	C0821015														
Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Decachlorobiphenyl - SS	A	0.010	2383	B	0.020	4289	C	0.050	3635	D	0.100	3472	E	0.150	3136
	F	0.200	3140												
Decachlorobiphenyl - SS	A	0.010	2383	B	0.020	4289	C	0.050	3635	D	0.100	3472	E	0.150	3136
	F	0.200	3140												
Tetrachloro-m-xylene	A	0.010	2407	B	0.020	4791	C	0.050	4281	D	0.100	4191	E	0.150	3846
	F	0.200	3833												
Tetrachloro-m-xylene	A	0.010	2407	B	0.020	4791	C	0.050	4281	D	0.100	4191	E	0.150	3846
	F	0.200	3833												
Aroclor-1221(1)										D	0.500	199.7			
Aroclor-1221(2)										D	0.500	452.2			
Aroclor-1221(3)										D	0.500	1449			
Aroclor-1221										D	0.500	700			
Aroclor-1232(1)										D	0.500	378.1			
Aroclor-1232(2)										D	0.500	612.0			
Aroclor-1232(3)										D	0.500	698.5			
Aroclor-1232										D	0.500	562.9			
Aroclor-1242(1)										D	0.500	1404			
Aroclor-1242(2)										D	0.500	800.2			
Aroclor-1242(3)										D	0.500	852.9			
Aroclor-1242										D	0.500	1019			
Aroclor-1248(1)										D	0.500	1913			

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
ICAL Date: 08/21/2006

Initial Calibration Summary
PolyChlorinated Biphenyls (PCBs)

ICAL ID: 08/21/2006GCC
Instrument ID: GCC

Column: RTX-CLP2

Level ID File ID

A C0821011

B C0821012

C C0821013

D C0821014

E C0821015

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF
Aroclor-1248(2)										D	0.500	2111			
Aroclor-1248(3)										D	0.500	2507			
Aroclor-1248										D	0.500	2177			
Aroclor-1254(1)										D	0.500	1701			
Aroclor-1254(2)										D	0.500	3010			
Aroclor-1254(3)										D	0.500	2615			
Aroclor-1254										D	0.500	2442			

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
ICAL Date: 08/21/2006

Initial Calibration Summary
PolyChlorinated Biphenyls (PCBs)

ICAL ID: 08/21/2006GCC
Instrument ID: GCC

Column: RTX-CLP2

Level ID **File ID**

A C0821011

B C0821012

C C0821013

D C0821014

E C0821015

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF
Aroclor-1016(1)	A	0.025	291.8	B	0.100	276.1	C	0.250	236.1	D	0.500	223.2	E	0.750	203.1
	F	1.000	200.4												
Aroclor-1016(2)	A	0.025	148.9	B	0.100	140.8	C	0.250	120.0	D	0.500	114.7	E	0.750	104.6
	F	1.000	103.9												
Aroclor-1016(3)	A	0.025	102.9	B	0.100	102.5	C	0.250	90.93	D	0.500	92.27	E	0.750	85.21
	F	1.000	85.76												
Aroclor-1016	A	0.025	181.2	B	0.100	173.1	C	0.250	149.0	D	0.500	143.4	E	0.750	131.0
	F	1.000	130.0												
Aroclor-1260(1)	A	0.025	518.8	B	0.100	460.9	C	0.250	405.2	D	0.500	389.7	E	0.750	354.4
	F	1.000	356.2												
Aroclor-1260(2)	A	0.025	147.9	B	0.100	156.0	C	0.250	134.8	D	0.500	129.1	E	0.750	117.3
	F	1.000	117.7												
Aroclor-1260(3)	A	0.025	44.92	B	0.100	55.41	C	0.250	51.34	D	0.500	51.72	E	0.750	47.85
	F	1.000	48.96												
Aroclor-1260	A	0.025	237.2	B	0.100	224.1	C	0.250	197.1	D	0.500	190.2	E	0.750	173.2
	F	1.000	174.3												

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
ICAL Date: 08/21/2006

Initial Calibration Summary
PolyChlorinated Biphenyls (PCBs)

ICAL ID: 08/21/2006GCC
Instrument ID: GCC
Mean RSD: 0.00

Column: RTX-CLP2

Analyte Name	Calibration Evaluation					
	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria
Decachlorobiphenyl - SS	SUR	AverageRF	% RSD	18.9		20.0
Decachlorobiphenyl - SS	SUR	AverageRF	% RSD	18.9		20.0
Tetrachloro-m-xylene	SUR	Linear	r	0.998		0.995
Tetrachloro-m-xylene	SUR	Linear	r	0.998		0.995
Aroclor-1221(1)	TRG	AverageRF	% RSD	0.0		20.0
Aroclor-1221(2)	TRG	AverageRF	% RSD	0.0		20.0
Aroclor-1221(3)	TRG	AverageRF	% RSD	0.0		20.0
Aroclor-1221	TRG	AverageRF	% RSD	0.0		20.0
Aroclor-1232(1)	TRG	AverageRF	% RSD	0.0		20.0
Aroclor-1232(2)	TRG	AverageRF	% RSD	0.0		20.0
Aroclor-1232(3)	TRG	AverageRF	% RSD	0.0		20.0
Aroclor-1232	TRG	AverageRF	% RSD	0.0		20.0
Aroclor-1242(1)	TRG	AverageRF	% RSD	0.0		20.0
Aroclor-1242(2)	TRG	AverageRF	% RSD	0.0		20.0
Aroclor-1242(3)	TRG	AverageRF	% RSD	0.0		20.0
Aroclor-1242	TRG	AverageRF	% RSD	0.0		20.0
Aroclor-1248(1)	TRG	AverageRF	% RSD	0.0		20.0
Aroclor-1248(2)	TRG	AverageRF	% RSD	0.0		20.0
Aroclor-1248(3)	TRG	AverageRF	% RSD	0.0		20.0
Aroclor-1248	TRG	AverageRF	% RSD	0.0		20.0
Aroclor-1254(1)	TRG	AverageRF	% RSD	0.0		20.0
Aroclor-1254(2)	TRG	AverageRF	% RSD	0.0		20.0
Aroclor-1254(3)	TRG	AverageRF	% RSD	0.0		20.0
Aroclor-1254	TRG	AverageRF	% RSD	0.0		20.0

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601136
ICAL Date: 08/21/2006

Initial Calibration Summary
PolyChlorinated Biphenyls (PCBs)

ICAL ID: 08/21/2006GCC
Instrument ID: GCC
Mean RSD: 12.38

Column: RTX-CLP2

Calibration Evaluation

Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria
Aroclor-1016(1)	TRG	AverageRF	% RSD	15.9		20.0
Aroclor-1016(2)	TRG	AverageRF	% RSD	15.4		20.0
Aroclor-1016(3)	TRG	AverageRF	% RSD	8.4		20.0
Aroclor-1016	TRG	AverageRF	% RSD	13.2		20.0
Aroclor-1260(1)	TRG	AverageRF	% RSD	15.6		20.0
Aroclor-1260(2)	TRG	AverageRF	% RSD	11.8		20.0
Aroclor-1260(3)	TRG	AverageRF	% RSD	7.2		20.0
Aroclor-1260	TRG	AverageRF	% RSD	11.5		20.0

Fourth Quarter 2006

Table F-2
Columbia Analytical Services
Sample Delivery Group Index List
Fourth Quarter 2006
Presidio-wide Groundwater Monitoring Project
Presidio of San Francisco, California

Location ID	Sample Date	SDG Number
1065MW9AC	12/5/2006	D0601981
1065PZ1BCL	12/5/2006	D0601981
231GW09CL	12/5/2006	D0601981
LF6GW103CL	12/5/2006	D0601981
TB120506ACL	12/5/2006	D0601981

January 22, 2007

Service Request No: D0601981

Josh Graber
Treadwell and Rollo
555 Montgomery St.
San Francisco, CA 94111

RECEIVED

JAN 23 2007

RE: Presidio/2893

TREADWELL & ROLLO

Dear Josh:

Enclosed are the results of the sample(s) submitted to our laboratory on December 6, 2006. For your reference, these analyses have been assigned our service request number D0601981.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 104. You may also contact me via email at KSellers@redding.caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.



Karen Sellers
Project Chemist

CC: Donna Breaux

Page 1 of 339

TABLE OF CONTENTS

CAS Service Request: D0601981

CAS Tier Level: III

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Current CAS Redding Accreditation Programs

Federal and National Programs

- U.S Air Force, Air Force Center for Environmental Excellence (AFCEE)
Approved laboratory for Wastewater and Hazardous Waste
- U.S. Army Corps of Engineers – MRD, HTRW Mandatory Center of Expertise
Validated for Wastewater and Hazardous Waste
- Department of the Navy, Naval Facilities Engineering Service Center (NFESC)
Approved laboratory for Wastewater and Hazardous Waste

State and Local Programs

- State of Alaska, Department of Environmental Conservation
Approved Laboratory for Contaminated Sites
Lab ID UST-001
- State of Arizona, Department of Health Services, Office of Laboratory Licensure
Approved Laboratory for Drinking Water, Wastewater, and Hazardous Waste
Lab ID AZ0604
- State of California, Department of Health Services, National Environmental Laboratory Accreditation Program (NELAP)
Approved Laboratory for Drinking Water, Wastewater and Hazardous Waste
Lab ID 01105CA
 - Los Angeles County Sanitation District
Approved Laboratory for Wastewater
Lab ID 10243
- State of California, Department of Health Services, Environmental Laboratory Accreditation Program (ELAP)
Approved Laboratory for Microbiology of Drinking Water and Wastewater
Lab ID 2635
- State of Florida, Department of Health, Bureau of Laboratories (NELAP)
Approved Environmental Testing Laboratory for Wastewater and Hazardous Waste
Lab ID E87203
- State of Kansas, Department of Health and Environment (NELAP)
Approved Laboratory for Hazardous Waste
Lab ID E-10323
- State of Massachusetts, Department of Environmental Protection
Approved laboratory for Drinking Water and Wastewater
Lab ID M-CA025
- State of Oklahoma, Department of Environmental Quality
Approved Laboratory for General Water Quality/Sludge Testing
Lab ID 9952
- State of Oregon, Environmental Laboratory Accreditation Program (ORELAP)
Approved Laboratory for Drinking Water, Wastewater, and Hazardous Waste
Lab ID CA200004
- State of Utah, Department of Health, Bureau of Laboratory Improvement (NELAP)
Approved Laboratory for Wastewater and Hazardous Waste
Lab ID QUAL1
- State of Washington, Department of Ecology
Approved Laboratory for Wastewater and Hazardous Waste
Lab ID C1234
- State of Wisconsin, Department of Natural Resources
Approved Laboratory for Wastewater and Hazardous Waste
Lab ID 999767340

CAS/Redding: Data Qualifiers

Organic Analyses

- A -- This qualifier indicates that a Tentatively Identified Compound (TIC) is a suspected aldol-condensation product.
- B -- This qualifier is used when the analyte is found in the associated blank as well as the sample, indicating possible blank contamination. The data user should carefully evaluate the qualified analyte and the reported concentrations.
- C -- This qualifier indicates the presence of this compound has been confirmed by the GC/MS analysis.
- D -- This qualifier is used for all the analytes identified in an analysis at a secondary dilution factor. "D" qualifiers are used only for the samples reported at more than one dilution factor.
- E -- This qualifier indicates that the value reported exceeds the linear calibration range for that analyte. Therefore, the sample should be reanalyzed at the appropriate dilution. The "E" qualified amount is an estimated concentration, and the results of the dilution will be reported on a separate Form I.
- J -- Indicates an estimated value. This qualifier is used when the data indicates the presence of a target analyte below the reporting limit or the presence of a Tentatively Identified Compound (TIC).
- N -- This qualifier indicates presumptive evidence of an analyte. This flag is only used for Tentatively Identified Compounds (TIC) where the identification is based on a mass spectral library research. It is applied to all TIC results. For generic characterization of a TIC, such as a chlorinated hydrocarbon, the "N" qualifier is not used.
- P -- This qualifier is used for target analytes when there is a greater than 40% difference for detected concentrations between the two columns or detectors. The concentration value is reported on Form I and flagged with a "P".
- U -- Indicates the compound was analyzed for but not detected. The number adjacent to the "U" qualifier indicates the reporting limit for that compound. The reporting limit can vary from sample to sample depending on dilution factors or percent moisture adjustments when indicated.
- DL -- Diluted reanalysis. "DL" indicates that the results were determined in an analysis of a secondary dilution of a sample or extract. A digit to indicate multiple dilutions of the sample or extract may follow the "DL" suffix. The results of more than one diluted reanalysis may be reported.
- MS -- Matrix spike (may be followed by a digit to indicate multiple matrix spikes within a sample set).
- MSD -- Matrix spike duplicate (may be followed by a digit to indicate multiple matrix spikes within a sample set).
- R -- Reanalysis. The extract was reanalyzed without re-extraction. The "R" is not used if the sample was also re-extracted. It may be followed by a digit to indicate multiple reanalysis of the sample at the same dilution.
- RE -- Re-extraction and reanalysis. The sample was re-extracted and reanalyzed. It may be followed by a digit to indicate multiple re-extracted analysis of the same sample at the same dilution.

Metals and Wet Chemistry Analyses

- B/J -- The reported value obtained was less than the MRL/CRDL, but greater than or equal to the MDL/IDL.
- U -- The value was less than the MDL/IDL or was not detected.
- E -- The reported value is estimate because of interference.
- N -- Spiked sample recovery not within control limits.
- ND -- Not detected at or above the MRL/CRDL.
- * -- Duplicate analysis not within control limits.

Client: Treadwell and Rollo
Project: Presidio/2893

Service Request: D0601981

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
D0601981-001	LF6GW103CL	12/05/06	11:00
D0601981-002	231GW09CL	12/05/06	12:15
D0601981-003	1065MW9ACL	12/05/06	14:50
D0601981-004	1065PZ1BCL	12/05/06	15:10
D0601981-005	TB-1	12/05/06	00:00

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Aqueous

Service Request No.: D0601981
Date Received: 12/06/06

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III data deliverables.

Sample Receipt

Five aqueous samples were received for analysis at Columbia Analytical Services on 12/06/06.

No discrepancies were noted upon initial sample inspection. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Volatile Organic Compounds by EPA Method 8260B

No anomalies associated with the analysis of these samples by the above-mentioned method were observed.

General Chemistry Parameters (310.1, 300.0, 160.1)

The following samples required dilution due to elevated levels of target analytes:

- LF6GW103CL, 231GW09CL and 1065PZ1BCL for Sulfate
- 231GW09CL for Nitrate
- 1065MW9ACL and 1065PZ1BCL for Chloride

The following sample required dilution due to elevated levels of matrix interference:

- LF6GW103CL for Nitrate

The reporting limits are adjusted to reflect the dilutions.

Dissolved Metals (6010B, 6020, 7470)

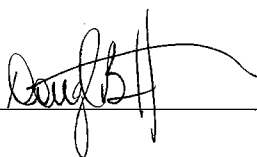
The post spike recoveries of Calcium, Magnesium, Sodium and Potassium for sample 1065PZ1BCL and Mercury for sample LF6GW103CL were outside control criteria. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicates the analytical batch was in control. The post spike outlier suggests a potential high bias in this matrix. No further corrective action was taken.

The reporting limit standard for Selenium was outside of acceptance, samples affected were non-detected. This outlier suggests a potential high bias in this run. No further corrective action was taken.

Diesel Range Organics by EPA Method 8015B

No anomalies associated with the analysis of these samples were observed.

Approved by: _____



Date: _____

1-22-07

COLUMBIA ANALYTICAL SERVICES, INC.

Gasoline Range Organics by EPA Method 8015B

No anomalies associated with the analysis of these samples by the above-mentioned method were observed.

BTEX by EPA Method 8021

The primary evaluation criterion was exceeded for the following analytes in Continuing Calibration Verification (CCV) NP121201: Methyl-tert-Butyl Ether. In accordance with CAS standard operating procedures, the alternative evaluation specified in the EPA method was performed using the average percent recovery of all analytes in the verification standard. The standard meets the alternative evaluation criteria.

Organochlorine Pesticides by EPA Method 8081A

The upper control criterion was exceeded for the following surrogate in Initial Calibration Verification (ICV) D061208022: Decachlorobiphenyl. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was taken.

The primary evaluation criterion was exceeded for 4,4'-DDE in Continuing Calibration Verification (CCV) of D061213031. In accordance with CAS standard operating procedures, the alternative evaluation specified in the EPA method was performed using the average percent recovery of all analytes in the verification standard. The standard meets the alternative evaluation criteria. The field samples analyzed in this sequence did not contain the analyte in question. Since the apparent problem equates to a potential high bias, the data quality is not affected. No further corrective action was taken.

PCB Aroclors by EPA Method 8082

The surrogate recovery of Decachlorobiphenyl in sample LF6GW103CL was below the Project specific acceptance criterion. Per the project QAPP, this sample was reanalyzed for confirmation. The reanalysis produced similar result. The results of the original analysis are reported. No further corrective action was taken.

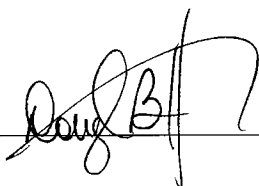
Polynuclear Aromatic Hydrocarbons by EPA Method 8310

No anomalies associated with the analysis of these samples by the above-mentioned method were observed.

Sulfide by Method 376.2

See Appendix

Approved by: _____



Date: _____

1-22-07

CHAIN OF CUSTODY DOCUMENTATION .

Project Name: Presidio of San Francisco

Location: Presidio of San Francisco

Sampled By (Firm and Samplers): BTS D. Rayner / P. Gornish

Recorder (signature required): *P. Gornish*Sent to Laboratory (Name): *Columbian Analytical*

PROJECT MANAGER: Joshua Graber

PROJECT NUMBER: 2893

REQUESTED ANALYSES

Recorder (signature required): <u>DES</u>										Project Laboratory to follow Presidio Quality Assurance Project Plan (Tetra Tech, 2001)																		
Sent to Laboratory (Name): <u>Columbian Analytical</u>																												
SAMPLE IDENTIFICATION	DATE	TIME	LAB ID	Matrix				Number of Containers and Preservation						TPH (8015M)	TPHd (8015M)	TPHto (8015M)	VOCs (8260) /MTBE	General Chemistry ²	OCPS (8081)	Metals - Dissolved ³ (22, 13, 9, 8, 7, 3, Other)	Metals - Total ³ (23, 22, 13, 9, 8, 7, 3, Other)	TDS (160.1)	PAHs (8310)	Nitrates - Dissolved	Total Solids	BTX / MTBE	COMMENTS / NOTES	
				Soil	Water	Other	HCl	H ₂ SO ₄	HNO ₃	NaOH	Other																	
LF6 Gw103CL	12/15/06	1100		X	X		3	1	1	6	6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	No VOCs / MTBE
231 Gw09CL	{	1215		X	X		6	1	1	6	6	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1065 Mw9ACL		1450		X	X		3	1	1	4	4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1065 PZ1BCL		1510		X	X		6	1	1	4	4	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
TB-1		-		X	X		3																					

Notes: 1 - Use EPA 3630A Silica Gel Cleanup Step. 2 - General Chemistry (Total Alkalinity, Bicarbonate, Chloride, Fluoride, Nitrate, Nitrite, and Sulfate)

3 - Indicate in the metals column (by number) which metals list is requested. Metals Lists (23 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Ti, V, and Zn)

Metals List Cont. (22 - Al, Sb, As, Ba, Be, Cr, Cd, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Ag, Na, Se, Ti, V, and Zn) (13 - As, Cr, Cd, Cu, Fe, K, Mg, Mn, Na, Ni, Pb, and Zn)

Metals List Cont. (7 - As, Cr, Cd, Cu, Pb, Ni and Zn) (3 - Al, Fe, and Cr) (Other -)

RELINQUISHED BY: *P. Gornish* RECEIVED BY: *P. Gornish* DATE: 12/15/06 TIME: 1622

PRINT NAME: P. Gornish FIRM: BTS DATE: 12/15/06 TIME: 1622

RELINQUISHED BY: *P. Gornish* RECEIVED BY: *Joel R. Johnson* DATE: 12/15/06 TIME: 1622

PRINT NAME: P. Gornish FIRM: CAS VIA GSO DATE: 12/15/06 TIME: 1622

ADDITIONAL REMARKS / LABORATORY NOTES: *Method of Shipment: GSO Courier*

White Copy - Original Yellow Copy - Laboratory Pink Copy - Field

COOLER RECEIPT FORM

Project/Client: TREADWELL & ROLLO Batch No.: _____
1. Cooler(s)/Sample(s) received on: 12/6/06 Shipped via: GSO
Shipping Bill # (s): _____ # of Coolers/Packages 1
2. Radiological Screening by: T REED Acceptable Rejected
3. Custody seals on outside of cooler: YES NO N/A
If yes, where? Front _____ Rear _____ Lt Side _____ Rt Side _____
Seals intact: YES NO

COOLER/SAMPLE PROCESSING

4. Sample Processing/Tagging by: JOEL JOHNSON
5. Cooler(s)/Sample(s) Temp's: 20C
(or)
Temp. Blank (if included): _____
6. Type of packing material (circle): Ice Blue Ice Bubble Wrap Bubble Bags Zip Locks Webbing
Other: _____
7. Custody papers properly filled out (ink, signed, dated, released, etc.)? YES NO
8. Containers arrived in good condition (not broken, leaking, etc.)? YES NO
9. Samples received with adequate holding time remaining to conduct analysis? YES NO
10. Container labels complete (i.e. analysis, preservation, date/time, etc.)? YES NO
11. Container labels and tags agree with custody papers? YES NO
12. Correct types of containers used for the tests indicated? YES NO
a.) Adequate sample received? If not, note on Exception Report. YES NO
13. Containers supplied by: CAS Other
14. Preserved containers received with the appropriate preservative? YES NO N/A
pH: VOA's @ L2 PER DOCS AND (or) See pH log.
15. VOA vials free of air bubbles? YES NO N/A
16. Trip Blank preparation date: _____ CAS Other N/A
17. Volatile Soil samples: Encores or Plugs in Vials
Freezer or GC/MS Date: _____ Time: N/A

See Exception Report for discrepancies.

GENERAL CHEMISTRY

COLUMBIA ANALYTICAL SERVICES, INC.**Analytical Report**

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : 2893
Sample Matrix : WATER

Service Request : D0601981
Date Collected : 12/05/06
Date Received : 12/06/06

Inorganic Parameters

Sample Name : LF6GW103CL
Lab Code : D0601981-001
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	PQL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Alkalinity as CaCO ₃ , Bicarbonate	mg/L	310.1	10	1	12/12/06 09:00	324	
Alkalinity as CaCO ₃ , Carbonate	mg/L	310.1	10	1	12/12/06 09:00	ND	U
Alkalinity as CaCO ₃ , Total	mg/L	310.1	10	1	12/12/06 09:00	324	
Chloride	mg/L	300.0	1	1	12/06/06 16:12	40	
Fluoride	mg/L	300.0	1	1	12/06/06 16:12	ND	U
Nitrate as Nitrogen	mg/L	300.0	0.5	5	12/06/06 17:46	3.0	
Nitrite as Nitrogen	mg/L	300.0	0.1	1	12/06/06 16:12	ND	U
Solids, Total Dissolved	mg/L	160.1	20	1	12/08/06 15:00	547	
Sulfate	mg/L	300.0	5	5	12/06/06 17:46	100	

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : 2893
Sample Matrix : WATER

Service Request : D0601981
Date Collected : 12/05/06
Date Received : 12/06/06

Inorganic Parameters

Sample Name : 231GW09CL
Lab Code : D0601981-002
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	PQL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Alkalinity as CaCO ₃ , Bicarbonate	mg/L	310.1	10	1	12/12/06 09:00	228	
Alkalinity as CaCO ₃ , Carbonate	mg/L	310.1	10	1	12/12/06 09:00	ND	U
Alkalinity as CaCO ₃ , Total	mg/L	310.1	10	1	12/12/06 09:00	228	
Chloride	mg/L	300.0	1	1	12/06/06 16:28	40	
Fluoride	mg/L	300.0	1	1	12/06/06 16:28	ND	U
Nitrate as Nitrogen	mg/L	300.0	0.5	5	12/06/06 18:02	15	
Nitrite as Nitrogen	mg/L	300.0	0.1	1	12/06/06 16:28	ND	U
Solids, Total Dissolved	mg/L	160.1	20	1	12/08/06 15:00	490	
Sulfate	mg/L	300.0	5	5	12/06/06 18:02	67.7	

COLUMBIA ANALYTICAL SERVICES, INC.**Analytical Report**

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : 2893
Sample Matrix : WATER

Service Request : D0601981
Date Collected : 12/05/06
Date Received : 12/06/06

Inorganic Parameters

Sample Name : 1065MW9ACL
Lab Code : D0601981-003
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	PQL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Alkalinity as CaCO ₃ , Bicarbonate	mg/L	310.1	10	1	12/12/06 09:00	433	
Alkalinity as CaCO ₃ , Carbonate	mg/L	310.1	10	1	12/12/06 09:00	ND	U
Alkalinity as CaCO ₃ , Total	mg/L	310.1	10	1	12/12/06 09:00	433	
Chloride	mg/L	300.0	5	5	12/12/06 18:12	192	
Fluoride	mg/L	300.0	1	1	12/06/06 16:44	ND	U
Nitrate as Nitrogen	mg/L	300.0	0.1	1	12/06/06 16:44	ND	U
Nitrite as Nitrogen	mg/L	300.0	0.1	1	12/06/06 16:44	ND	U
Solids, Total Dissolved	mg/L	160.1	20	1	12/08/06 15:00	743	
Sulfate	mg/L	300.0	1	1	12/06/06 16:44	19.3	

COLUMBIA ANALYTICAL SERVICES, INC.**Analytical Report**

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : 2893
Sample Matrix : WATER

Service Request : D0601981
Date Collected : 12/05/06
Date Received : 12/06/06

Inorganic Parameters

Sample Name : 1065PZ1BCL
Lab Code : D0601981-004
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	PQL	Dilution Factor	Date/Time Analyzed	Result	Result Notes
Alkalinity as CaCO ₃ , Bicarbonate	mg/L	310.1	10	1	12/12/06 09:00	335	
Alkalinity as CaCO ₃ , Carbonate	mg/L	310.1	10	1	12/12/06 09:00	ND	U
Alkalinity as CaCO ₃ , Total	mg/L	310.1	10	1	12/12/06 09:00	335	
Chloride	mg/L	300.0	5	5	12/12/06 18:28	174	
Fluoride	mg/L	300.0	1	1	12/06/06 16:59	ND	U
Nitrate as Nitrogen	mg/L	300.0	0.1	1	12/06/06 16:59	0.27	
Nitrite as Nitrogen	mg/L	300.0	0.1	1	12/06/06 16:59	ND	U
Solids, Total Dissolved	mg/L	160.1	20	1	12/08/06 15:00	725	
Sulfate	mg/L	300.0	5	5	12/12/06 18:28	82.2	

QC Summary

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Service Request: D0601981
Client : Treadwell and Rollo, Inc.
Project : Presidio

Initial and Continuing Calibration Verification Form II

Analyte	Analysis Method	Date Analyzed	Units	Initial Calibration			Continuing Calibration						
								#1		#2		#3	
				True	Result	%R	True	Result	%R	Result	%R	Result	%R
Alkalinity, Total	310.1	12/12/06	mg/L										
Chloride	300.0	12/06/06	mg/L	5.00	5.06	101	8.00	8.30	104	8.31	104		-
Chloride	300.0	12/12/06	mg/L	5.00	4.77	95	4.00	3.86	97	3.91	98		-
Fluoride	300.0	12/06/06	mg/L	2.50	2.61	104	1.00	1.03	103	1.04	104		-
Nitrate as N	300.0	12/06/06	mg/L	1.25	1.23	98	1.00	0.99	99	0.98	98		-
Nitrite as N	300.0	12/06/06	mg/L	1.25	1.27	102	1.00	1.02	102	1.01	101		-
Solids, Tot. Diss.	160.1	12/08/06	mg/L										
Sulfate	300.0	12/06/06	mg/L	10.00	9.98	100	8.00	8.21	103	8.11	101		-
Sulfate	300.0	12/12/06	mg/L	10.00	10.43	104	4.00	4.30	108	4.30	108		-

Control Limits are 90-110% unless noted.

Remarks

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Service Request: D0601981
Client : Treadwell and Rollo, Inc.
Project : Presidio

**Initial and Continuing Calibration Blanks
Form III**

Analyte	Analysis Method	Date Analyzed	Units	Initial		Continuing Calibration						Method Blank	
				Calibration		#1		#2		#3		units	
				Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.	Result	Qual.
Alkalinity, Total	310.1	12/12/06	mg/L									10	U
Chloride	300.0	12/06/06	mg/L	1	U	1	U	1	U			1	U
Chloride	300.0	12/12/06	mg/L	1	U	1	U	1	U			1	U
Fluoride	300.0	12/06/06	mg/L	1	U	1	U	1	U			1	U
Nitrate as N	300.0	12/06/06	mg/L	0.5	U	0.5	U	0.5	U			0.5	U
Nitrite as N	300.0	12/06/06	mg/L	0.1	U	0.1	U	0.1	U			0.1	U
Solids, Tot. Diss.	160.1	12/08/06	mg/L									20	U
Sulfate	300.0	12/06/06	mg/L	5	U	5	U	5	U			5	U
Sulfate	300.0	12/12/06	mg/L	5	U	5	U	5	U			5	U
Remarks													

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Service Request: D0601981
Client : Treadwell and Rollo, Inc.
Project : Presidio

**Laboratory Control Sample
Form VII**

Lab No.	LCS			Client Sample ID:	LCS								
Analyte	Analysis Method	Date Analyzed	Units		LCS TV		LCS Result	%R	LCSD Result	% R	Control Limit	RPD	Control Limit
Alkalinity, Total	310.1	12/12/06	mg/L		2,500		2,500	100	2,500	100	95-106	<1	20
Chloride	300.0	12/06/06	mg/L		5.00		5.06	101	5.10	102	90-110	<1	20
Chloride	300.0	12/12/06	mg/L		5.00		5.29	106	4.85	97	90-110	9	20
Fluoride	300.0	12/06/06	mg/L		2.50		2.61	104	2.59	104	90-110	<1	20
Nitrate as N	300.0	12/06/06	mg/L		1.25		1.23	98	1.20	96	90-110	2	20
Nitrite as N	300.0	12/06/06	mg/L		1.25		1.27	102	1.28	102	90-110	<1	20
Solids, Tot. Diss.	160.1	12/08/06	mg/L		575		557	97	555	97	92-106	<1	20
Sulfate	300.0	12/06/06	mg/L		10.00		9.98	100	9.81	98	90-110	2	20
Sulfate	300.0	12/12/06	mg/L		10.00		10.45	105	10.43	104	90-110	<1	20
Remarks													

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : 2893
Sample Matrix : WATER

Service Request : D0601981
Date Collected : 12/05/06
Date Received : 12/06/06
Date Prepared : NA
Date Analyzed : 12/08/06

Duplicate Summary Inorganic Parameters

Sample Name : 231GW09CL
Lab Code : D0601981-002DUP
Test Notes :

Units : mg/L
Basis : NA

Analyte	Analysis Method	PQL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Solids, Total Dissolved	160.1	20	490	493	491.5	<1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : 2893
Sample Matrix : WATER

Service Request : D0601981
Date Collected : 12/05/06
Date Received : 12/06/06
Date Prepared : NA
Date Analyzed : 12/12/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : 1065PZ1BCL
Lab Code : D0601981-004MS
Test Notes :

D0601981-004DMS

Units : mg/L
Basis : NA

Analyte	Prep Method	Analysis Method	PQL	Spike Level		Sample Result	Spike Result		Spike Recovery		CAS Acceptance Limits	Relative Percent Difference	Result Notes
				MS	DMS		MS	DMS	MS	DMS			
Alkalinity as CaCO ₃ , Total	None	310.1	10	125	125	335	459	459	99	96	95-106	<1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : 2893
Sample Matrix : WATER

Service Request : D0601981
Date Collected : 12/05/06
Date Received : 12/06/06
Date Prepared : NA
Date Analyzed : 12/06/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : 1065PZ1BCL
Lab Code : D0601981-004MS
Test Notes :

D0601981-004DMS

Units : mg/L
Basis : NA

Analyte	Prep Method	Analysis Method	PQL	Spike Level		Sample Result	Spike Result		Spike Recovery		CAS Acceptance Limits	Relative Percent Difference	Result Notes
				MS	DMS		MS	DMS	MS	DMS			
Fluoride	None	300.0	1	1.0	1.0	ND	0.92	0.91	92	91	90-110	1	

COLUMBIA ANALYTICAL SERVICES, INC.**QA/QC Report**

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : 2893
Sample Matrix : WATER

Service Request : D0601981
Date Collected : 12/05/06
Date Received : 12/06/06
Date Prepared : NA
Date Analyzed : 12/06/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : 1065PZ1BCL
Lab Code : D0601981-004MS
Test Notes :

D0601981-004DMS

Units : mg/L
Basis : NA

Analyte	Prep Method	Analysis Method	PQL	Spike Level		Sample Result	Spike Result		Spike Recovery		CAS Acceptance Limits	Relative Percent Difference	Result Notes
				MS	DMS		MS	DMS	MS	DMS			
Nitrite as Nitrogen	None	300.0	0.1	1.0	1.0	ND	0.88	0.89	88	89	90-110	1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : 2893
Sample Matrix : WATER

Service Request : D0601981
Date Collected : 12/05/06
Date Received : 12/06/06
Date Prepared : NA
Date Analyzed : 12/06/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : 1065PZ1BCL
Lab Code : D0601981-004MS
Test Notes :

D0601981-004DMS

Units : mg/L
Basis : NA

Analyte	Prep Method	Analysis Method	PQL	Spike Level		Sample Result	Spike Result		Spike Recovery		CAS Acceptance Limits	Relative Percent Difference	Result Notes
				MS	DMS		MS	DMS	MS	DMS			
Nitrate as Nitrogen	None	300.0	0.1	1.0	1.0	ND	1.08	1.06	108	106	90-110	2	

Support Documentation

MDL STUDY REPORT FORM

Lab Name: Columbia Analytical Services/Redding Analytical Method: E160.1 Matrix: Water

Instrument ID: _____

Concentration Units (ug/L or mg/kg): MG/L[illegible]

MDL STUDY REPORT FORM

Lab Name: Columbia Analytical Services/Redding Analytical Method: E310.1 Matrix: Water

Instrument ID: _____

Concentration Units (ug/L or mg/kg): MG/L

[illegible]

MDL FORM Method E310.1

MDL STUDY REPORT FORM

Lab Name: Columbia Analytical Services/Redding Analytical Method: E300 Matrix: Water

Instrument ID: ICS2000Concentration Units (ug/L or mg/kg): MG/L[illegible]

MDL FORM Method E300

Method Detection Limit Study

Columbia Analytical Services
Redding, CA

Analysis Method: E310.1 Analyst: c.skillern
 Extraction Method: NONE Instrument:
 Matrix: WATER Description: Alkalinity
 MDL Effective Date: 3/20/2006 Department: GN

#	Compound	CAS No.	Date	MDL
1	Alkalinity	ALK	3/20/2006	3

MG/L	1	2	3	4	5	6	7
10.0	10.0	12.0	12.5	10.5	12.0	12.0	11.0

Mean	Std Dev
11.429	0.93

Supervisor Approval: _____ Date: _____

EPA310_1.xls

QA Approval: _____ Date: _____

Analyst: mm

Method: EPA 310.1 / SM2320

Analysis Date: 12/12/06

Test Codes: ALK, ALKB, ALKC, ALKP, HCO3, CO3

N H₂SO₄: 0.02

Reporting Limit: 10 mg/L

Detection Limit: 2 mg/L 3

Sample Reference No.	mls spl.	pH	mls H2SO4 to pH 8.3			mls H2SO4 to pH 4.5			AlkC CO3	AlkB HCO3	Alk Total	units	True	%RPD
			Initial	Final	Vol.	Initial	Final	Vol.	mg/L	mg/L	mg/L		Value	%R
CS1 pH 4.00	<u>4301</u>	<u>4.01</u>										<u>4.01</u>	<u>4.00</u>	<u>100.3</u>
CS2 pH 10.00	<u>4599</u>	<u>10.01</u>										<u>10.01</u>	<u>10.00</u>	<u>100.1</u>
ICVS pH 7.00	<u>4383</u>	<u>7.01</u>										<u>7.01</u>	<u>7.00</u>	<u>100.1</u>
MB	<u>100</u>	<u>5.09</u>				<u>20.0</u>	<u>20.1</u>	<u>0.1</u>	<u><3</u>	<u><3</u>	<u><3</u>	mg/L		
LCS Na2CO3	<u>5</u>	<u>9.98</u>				<u>0</u>	<u>12.5</u>	<u>12.5</u>		<u>2500</u>	<u>2500</u>	mg/L	<u>2500</u>	<u>100.0</u>
LCSD Na2CO3	<u>5</u>	<u>9.99</u>				<u>12.5</u>	<u>25.0</u>	<u>12.5</u>		<u>2500</u>	<u>2500</u>	mg/L	<u>2500</u>	<u>100.0</u>
PO600274-1	<u>100</u>	<u>8.06</u>				<u>0</u>	<u>26.0</u>	<u>26.0</u>	<u><3</u>	<u>260</u>	<u>260</u>			<u><3</u>
DO601958-1	<u>100</u>	<u>11.62</u>	<u>0</u>	<u>27.1</u>	<u>27.1</u>	<u>27.1</u>	<u>37.0</u>	<u>37.0</u>	<u><198</u>	<u>370</u>	<u>370</u>			<u>172</u>
DO601981-1	<u>100</u>	<u>7.32</u>				<u>0</u>	<u>32.4</u>	<u>32.4</u>	<u><3</u>	<u>324</u>	<u>324</u>			<u><3</u>
<u>2</u>	<u>100</u>	<u>7.32</u>				<u>0</u>	<u>22.8</u>	<u>22.8</u>	<u><3</u>	<u>228</u>	<u>228</u>			<u><3</u>
<u>3</u>	<u>100</u>	<u>7.13</u>				<u>0</u>	<u>43.3</u>	<u>43.3</u>	<u><3</u>	<u>433</u>	<u>433</u>			<u><3</u>
<u>4</u>	<u>100</u>	<u>7.94</u>				<u>0</u>	<u>33.5</u>	<u>33.5</u>	<u><3</u>	<u>335</u>	<u>335</u>			<u><3</u>
MS-4	<u>100</u>	<u>9.08</u>				<u>0</u>	<u>45.9</u>	<u>45.9</u>	<u><3</u>	<u>459</u>	<u>459</u>		<u>125</u>	<u>99.2</u>
MSB-4	<u>100</u>	<u>9.07</u>				<u>0</u>	<u>45.5</u>	<u>45.5</u>	<u><3</u>	<u>455</u>	<u>455</u>		<u>125</u>	<u>96.0</u>
DO601996-1	<u>100</u>	<u>8.01</u>				<u>0</u>	<u>25.9</u>	<u>25.9</u>	<u><3</u>	<u>259</u>	<u>259</u>			<u><3</u>
CCV pH 7.00		<u>7.02</u>										<u>7.02</u>	<u>7.00</u>	<u>100.3</u>
CCV pH 7.00													<u>7.00</u>	

Date	DL	Sample	F	CI	NO2	SO4	Br	NO3						
12/06/06 12:18	1	ICVS / L C	2.61	104.5%	5.06	101.3%	1.27	101.8%	9.98	99.8%	6.26	100.1%	1.23	98.0%
12/06/06 12:34	1	ICB	<0.01		<0.2		<0.03		<0.07		<0.2		<0.01	
12/06/06 12:50	1	RLS	0.19	77.5%	1.01	100.6%	0.09	85.0%	0.80	80.0%	0.74	147.5%	0.06	59.1%
12/06/06 13:05	1	MB	<0.01		<0.2		<0.03		<0.07		<0.2		<0.01	
12/06/06 13:21	1	LCS	2.29	91.6%	4.65	93.1%	1.26	100.5%	8.38	83.8%	5.75	92.0%	1.03	82.0%
12/06/06 13:36	1	LCSD	2.59	103.7%	5.10	102.0%	1.28	102.4%	9.81	98.1%	6.19	99.0%	1.20	96.4%
12/06/06 13:52	5	D0601965-001	<0.05		<1		<0.15		<0.35		<1		<0.05	
12/06/06 14:08	5	D0601965-004	<0.05		0.75		<0.15		200.88		1.73		<0.05	
12/06/06 14:23	5	D0601965-004MS	5.34		40.97		4.93		238.58	94.3	25.15		4.76	
12/06/06 14:39	5	D0601965-004MSD	5.23		40.12		4.81		238.45	93.9	24.59		4.65	
12/06/06 14:54	20	D0601900-008	<0.2		612.11		<0.6		372.88		76.36		1.33	
12/06/06 15:10	20	D0601911-001	<0.2		579.87		<0.6		326.22		82.43		4.46	
12/06/06 15:26	20	D0601911-002	<0.2		656.75		<0.6		351.27		87.82		4.48	
12/06/06 15:41	1	CCVS 1 12/12/06	1.04	103.5%	8.370	103.9%	1.02	100.9%	8.41	102.6%	5.04	100.7%	0.93	98.0%
12/06/06 15:57	1	CCB 1 12/12/06	<0.01		<0.2		<0.03		<0.07		<0.2		<0.01	97.3
12/06/06 16:12	1	D0601981-001	<0.01		40.30		<0.03		109.10		39.41		2.98	Renund
12/06/06 16:28	1	D0601981-002	<0.01		39.62		<0.03		64.76		<0.2		2.97	d
12/06/06 16:44	1	D0601981-003	0.07		175.50		<0.03	REUN DIL.	19.30		<0.2		<0.01	
12/06/06 16:59	1	D0601981-004	<0.01		160.35		<0.03		81.29	REUN DIL.	<0.2		0.27	
12/06/06 17:15	1	D0601981-004MS	0.92	92.0	153.75		0.88	88.0	81.19		3.35		1.08	81.0
12/06/06 17:30	1	D0601981-004MSD	0.91	91.0	153.93		0.89	89.0	81.23		3.35		1.06	79.0
12/06/06 17:46	5	D0601981-001	<0.05		39.84		<0.15		<0.35		39.41		29.75	
12/06/06 18:02	5	D0601981-002	<0.05		39.87		<0.15		67.72		33.36		2.99	
12/06/06 18:17	1	CCVS 1 12/12/06	1.024	103.5%	8.371	103.7%	1.021	102.4%	8.21	101.4%	5.01	100.1%	0.93	98.3%
12/06/06 18:33	1	CCB 1 12/12/06	<0.01		<0.2		<0.03		<0.07		<0.2		<0.01	78.0
		MDL	0.01	0.20	0.03	0.07	0.01	0.01	0.01	0.01	0.20		0.01	

Date	DL	Sample	F	CI	NO2	SO4	Br	NO3
12/12/06 14:03	1	ICVS	2.96 3.08	477 3.18	1.35 1.13	6.90	6.08	12.2% 1.29
12/12/06 14:18	1	ICVS	2.86 2.86	477 3.18	1.35 1.13	6.90	6.08	12.2% 1.29
12/12/06 14:34	1	ICB	<0.01	<0.2	<0.03	<0.07	1.19	<0.01
12/12/06 14:50	1	RLS	0.22	86.8%	0.15	127.1%	1.19	182.2%
12/12/06 15:05	1	MB	<0.01	<0.2	<0.03	<0.07	1.38	<0.01
12/12/06 15:21	1	LCS	2.95	118.0%	1.35	104.5%	6.84	103.9%
12/12/06 15:36	1	LCS	2.99	119.6%	1.34	104.3%	7.17	103.1%
12/12/06 15:52	1000	D0601996-001.R03	<0.01	3629.39	<0.03	1083.61	1043.13	<0.01
12/12/06 16:08	1	RINSE	<0.01	<0.2	<0.03	<0.07	1.05	<0.01
12/12/06 16:23	1	RINSE	<0.01	<0.2	<0.03	<0.07	1.35	<0.01
12/12/06 16:39	1	CCVS2	1.26	125.5%	1.09	108.5%	5.14	103.4%
12/12/06 16:54	1	CCB2	<0.01	<0.2	<0.03	<0.07	1.37	<0.01
12/12/06 17:10	1	D0602025-001	0.25	23.66	<0.03	7.35	<0.2	1.26
12/12/06 17:26	1	D0601958-MB	<0.01	<0.2	<0.03	<0.07	<0.2	<0.01
12/12/06 17:41	2	D0601958-001.R01	0.49	243.69	0.41	<0.14	1.86	64.92
12/12/06 17:57	2	D0601958-001DUP.R01	0.53	255.40	0.42	<0.14	2.05	68.92
12/12/06 18:12	5	D0601981-003.R01	1.10	191.59	<0.15	18.72	<1	<0.05
12/12/06 18:28	5	D0601981-004.R01	<0.05	174.41	<0.15	82.18	20.94	0.74
12/12/06 18:44	5	D0602027-001.R01	<0.05	<1	<0.15	<0.35	2.83	<0.05
12/12/06 18:59	5	D0602027-004.R01	<0.05	<1	<0.15	119.92	3.55	<0.05
12/12/06 19:15	1	CCVS3	1.26	125.8%	1.08	108.2%	5.29	103.2%
12/12/06 19:31	1	CCB3	<0.01	<0.2	<0.03	<0.07	0.87	<0.01
MDL			0.01	0.20	0.03	0.07	0.20	0.01

TV CI, SO4 4 ppm
CCW

Incorrect std made

Columbia Analytical Services - Redding, CA

Total Dissolved Solids in Water

Gravimetric, 180°C Reporting Limit: 20 mg/L

EPA 160.1 Defection Limit: 16 mg/L

Test Codes: TDS

Work Group #:

Analyst:

Analysis Date:

Analyst Review:

Supervisor Review:

TDS 061208

MO

12/08/2006 @ 1500

CMO 12/12/06

Sx Type	Reference Number	Cup No.	Sample Vol. mL	Initial Wt. Gram	Final Wt. #1 g	Final Wt. #2 g	Wt. Verified	Dilution Factor	Final mg/L	Qual	MDL mg/L	RL mg/L	QC Value mg/L	True Value	%R	%RPD	Remarks
	VERIFICATION	1	100	99.9985	99.9977	99.9977											
QC MB		2	100	112.0942	112.0957	112.0956	pass	1	16	U	16	20	0				
QC LCS		3	100	101.3089	101.3646	101.3637	pass	1	557		16	20	557	575	96.9		
LCSD LCSD		4	100	102.1241	102.1796	102.1794	pass	1	555		16	20	555	575	96.5	0.4	
Sx D0601981-001		5	100	106.5104	106.5651	106.5645	pass	1	547		16	20					
QC D0601981-002		6	100	114.4909	114.5399	114.5391	pass	1	490		16	20	490				
DUP D0601981-002		7	100	100.2201	100.2694	100.2688	pass	1	493		16	20	493			0.6	
Sx D0601981-003		8	100	99.5701	99.6444	99.6429	pass	1	743		16	20					
Sx D0601981-004		9	100	97.8817	97.9542	97.9531	pass	1	725		16	20					
Sx D0601996-001		10	2	100.4733	100.5280	100.5265	pass	50	27400		800	1000					

Metals

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Collected: 12/05/2006
Date Received: 12/06/2006

Trace Metals

Sample Name: LF6GW103CL
Lab Code: D0601981-001
Test Notes:

Units: ug/L (ppb)

Basis: NA

Analyte	Prep Method	Analysis Method	PQL	Dilution Factor	Date Prepared	Date Analyzed	Result	Result Notes
Aluminum	Dissolved	SW6010	100	1	12/08/2006	12/12/2006	ND	U
Antimony	Dissolved	SW6020	2.0	1	12/08/2006	01/03/2007	ND	U
Arsenic	Dissolved	SW6020	2.0	1	12/08/2006	01/03/2007	ND	U
Barium	Dissolved	SW6010	10	1	12/08/2006	12/12/2006	79	
Beryllium	Dissolved	SW6020	1.0	1	12/08/2006	01/03/2007	ND	U
Cadmium	Dissolved	SW6020	1.0	1	12/08/2006	01/03/2007	ND	U
Calcium	Dissolved	SW6010	500	1	12/08/2006	12/12/2006	43600	
Chromium	Dissolved	SW6010	10	1	12/08/2006	12/12/2006	32	
Cobalt	Dissolved	SW6020	1.0	1	12/08/2006	01/03/2007	ND	U
Copper	Dissolved	SW6020	2.0	1	12/08/2006	01/03/2007	ND	U
Iron	Dissolved	SW6010	100	1	12/08/2006	12/12/2006	ND	U
Lead	Dissolved	SW6020	1.0	1	12/08/2006	01/03/2007	ND	U
Magnesium	Dissolved	SW6010	500	1	12/08/2006	12/12/2006	66200	
Manganese	Dissolved	SW6010	10	1	12/08/2006	12/12/2006	ND	U
Mercury	Dissolved	SW7470	0.200	1	12/26/2006	12/27/2006	ND	U
Nickel	Dissolved	SW6020	2.0	1	12/08/2006	01/03/2007	6.9	
Potassium	Dissolved	SW6010	5000	1	12/08/2006	12/12/2006	ND	U
Selenium	Dissolved	SW6020	2.0	1	12/08/2006	01/04/2007	ND	U
Silver	Dissolved	SW6020	1.0	1	12/08/2006	01/17/2007	ND	U
Sodium	Dissolved	SW6010	5000	1	12/08/2006	12/12/2006	75000	
Thallium	Dissolved	SW6020	1.0	1	12/08/2006	01/03/2007	ND	U
Vanadium	Dissolved	SW6010	10	1	12/08/2006	12/12/2006	13	
Zinc	Dissolved	SW6010	20	1	12/08/2006	12/12/2006	ND	U

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Collected: 12/05/2006
Date Received: 12/06/2006

Trace Metals

Sample Name: 231GW09CL
Lab Code: D0601981-002
Test Notes:

Units: ug/L (ppb)

Basis: NA

Analyte	Prep Method	Analysis Method	PQL	Dilution Factor	Date Prepared	Date Analyzed	Result	Result Notes
Aluminum	Dissolved	SW6010	100	1	12/08/2006	12/12/2006	ND	U
Antimony	Dissolved	SW6020	2.0	1	12/08/2006	01/03/2007	ND	U
Arsenic	Dissolved	SW6020	2.0	1	12/08/2006	01/03/2007	ND	U
Barium	Dissolved	SW6010	10	1	12/08/2006	12/12/2006	63	
Beryllium	Dissolved	SW6020	1.0	1	12/08/2006	01/03/2007	ND	U
Cadmium	Dissolved	SW6020	1.0	1	12/08/2006	01/03/2007	ND	U
Calcium	Dissolved	SW6010	500	1	12/08/2006	12/12/2006	30200	
Chromium	Dissolved	SW6010	10	1	12/08/2006	12/12/2006	30	
Cobalt	Dissolved	SW6020	1.0	1	12/08/2006	01/03/2007	ND	U
Copper	Dissolved	SW6020	2.0	1	12/08/2006	01/03/2007	ND	U
Iron	Dissolved	SW6010	100	1	12/08/2006	12/12/2006	ND	U
Lead	Dissolved	SW6020	1.0	1	12/08/2006	01/03/2007	ND	U
Magnesium	Dissolved	SW6010	500	1	12/08/2006	12/12/2006	51000	
Manganese	Dissolved	SW6010	10	1	12/08/2006	12/12/2006	ND	U
Mercury	Dissolved	SW7470	1.0	5	12/26/2006	12/27/2006	ND	U
Nickel	Dissolved	SW6020	2.0	1	12/08/2006	01/03/2007	18	
Potassium	Dissolved	SW6010	5000	1	12/08/2006	12/12/2006	ND	U
Selenium	Dissolved	SW6020	2.0	1	12/08/2006	01/04/2007	ND	U
Silver	Dissolved	SW6020	1.0	1	12/08/2006	01/17/2007	ND	U
Sodium	Dissolved	SW6010	5000	1	12/08/2006	12/12/2006	78000	
Thallium	Dissolved	SW6020	1.0	1	12/08/2006	01/03/2007	ND	U
Vanadium	Dissolved	SW6010	10	1	12/08/2006	12/12/2006	ND	U
Zinc	Dissolved	SW6010	20	1	12/08/2006	12/12/2006	ND	U

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
 Project: Presidio
 Sample Matrix: Water

Service Request: D0601981
 Date Collected: 12/05/2006
 Date Received: 12/06/2006

Trace Metals

Sample Name: 1065MW9ACL
 Lab Code: D0601981-003
 Test Notes:

Units: ug/L (ppb)

Basis: NA

Analyte	Prep Method	Analysis Method	PQL	Dilution Factor	Date Prepared	Date Analyzed	Result	Result Notes
Aluminum	Dissolved	SW6010	100	1	12/08/2006	12/12/2006	ND	U
Antimony	Dissolved	SW6020	2.0	1	12/08/2006	01/03/2007	ND	U
Arsenic	Dissolved	SW6020	2.0	1	12/08/2006	01/03/2007	16	
Cadmium	Dissolved	SW6020	1.0	1	12/08/2006	01/03/2007	ND	U
Calcium	Dissolved	SW6010	500	1	12/08/2006	12/12/2006	67600	
Chromium	Dissolved	SW6010	10	1	12/08/2006	12/12/2006	ND	U
Copper	Dissolved	SW6020	2.0	1	12/08/2006	01/03/2007	ND	U
Iron	Dissolved	SW6010	100	1	12/08/2006	12/12/2006	4480	
Lead	Dissolved	SW6020	1.0	1	12/08/2006	01/03/2007	ND	U
Magnesium	Dissolved	SW6010	500	1	12/08/2006	12/12/2006	99800	
Manganese	Dissolved	SW6010	10	1	12/08/2006	12/12/2006	498	
Nickel	Dissolved	SW6020	2.0	1	12/08/2006	01/03/2007	2.6	
Potassium	Dissolved	SW6010	5000	1	12/08/2006	12/12/2006	19600	
Sodium	Dissolved	SW6010	5000	1	12/08/2006	12/12/2006	79400	
Zinc	Dissolved	SW6010	20	1	12/08/2006	12/12/2006	ND	U

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
 Project: Presidio
 Sample Matrix: Water

Service Request: D0601981
 Date Collected: 12/05/2006
 Date Received: 12/06/2006

Trace Metals

Sample Name: 1065PZ1BCL
 Lab Code: D0601981-004
 Test Notes:

Units: ug/L (ppb)

Basis: NA

Analyte	Prep Method	Analysis Method	PQL	Dilution Factor	Date Prepared	Date Analyzed	Result	Result Notes
Aluminum	Dissolved	SW6010	100	1	12/08/2006	12/12/2006	ND	U
Antimony	Dissolved	SW6020	2.0	1	12/08/2006	01/03/2007	ND	U
Arsenic	Dissolved	SW6020	2.0	1	12/08/2006	01/03/2007	ND	U
Cadmium	Dissolved	SW6020	1.0	1	12/08/2006	01/03/2007	ND	U
Calcium	Dissolved	SW6010	500	1	12/08/2006	12/12/2006	57800	
Chromium	Dissolved	SW6010	10	1	12/08/2006	12/12/2006	ND	U
Copper	Dissolved	SW6020	2.0	1	12/08/2006	01/03/2007	ND	U
Iron	Dissolved	SW6010	100	1	12/08/2006	12/12/2006	138	
Lead	Dissolved	SW6020	1.0	1	12/08/2006	01/03/2007	ND	U
Magnesium	Dissolved	SW6010	500	1	12/08/2006	12/12/2006	85500	
Manganese	Dissolved	SW6010	10	1	12/08/2006	12/12/2006	80	
Nickel	Dissolved	SW6020	2.0	1	12/08/2006	01/03/2007	ND	U
Potassium	Dissolved	SW6010	5000	1	12/08/2006	12/12/2006	43900	
Sodium	Dissolved	SW6010	5000	1	12/08/2006	12/12/2006	96700	
Zinc	Dissolved	SW6010	20	1	12/08/2006	12/12/2006	ND	U

QC Summary

METALS

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Treadwell and Rollo, Inc.

Service Request: D0601981

Project No.: Presidio

Project Name: Presido

ICV Source: IV

CCV Source: IV

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						Method
	True	Found	%R(1)	True	Found	%R(1)	True	Found	%R(1)	
Aluminum	2000	2090	104	8000	8660	108	8000	8590	107	6010B
Barium	200	212	106	2000	2160	108	2000	2160	108	6010B
Calcium	3000	3280	109	40000	42900	107	40000	43000	108	6010B
Chromium	500	529	106	2000	2150	108	2000	2150	108	6010B
Iron	3000	3170	106	40000	43500	109	40000	43400	108	6010B
Magnesium	3000	3140	105	40000	43200	108	40000	43000	108	6010B
Manganese	200	208	104	2000	2150	108	2000	2160	108	6010B
Potassium	12000	12300	102	20000	21300	106	20000	21500	108	6010B
Sodium	4000	4140	104	40000	42900	107	40000	42700	107	6010B
Vanadium	200	205	102	2000	2120	106	2000	2140	107	6010B
Zinc	200	220	110	2000	2150	108	2000	2150	108	6010B

METALS

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Treadwell and Rollo, Inc.

Service Request: D0601981

Project No.: Presidio

Project Name: Presido

ICV Source: IV

CCV Source: IV

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						Method
	True	Found	%R(1)	True	Found	%R(1)	True	Found	%R(1)	
Aluminum				8000	8270	103	8000	8580	107	6010B
Barium				2000	2080	104	2000	2140	107	6010B
Calcium				40000	40800	102	40000	42600	106	6010B
Chromium				2000	2050	102	2000	2140	107	6010B
Iron				40000	41200	103	40000	43200	108	6010B
Magnesium				40000	41500	104	40000	42700	107	6010B
Manganese				2000	2050	102	2000	2140	107	6010B
Potassium				20000	20600	103	20000	21300	106	6010B
Sodium				40000	41300	103	40000	42500	106	6010B
Vanadium				2000	2030	102	2000	2130	106	6010B
Zinc				2000	2060	103	2000	2130	106	6010B

METALS

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Treadwell and Rollo, Inc.

Service Request: D0601981

Project No.: Presidio

Project Name: Presido

ICV Source: IV

CCV Source: IV

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Antimony	10.0	9.9	99	20.0	20.3	102	20.1	100	6020
Arsenic	10.0	10.6	106	20.0	21.4	107	21.9	110	6020
Beryllium	10.0	9.8	98	20.0	20.1	100	19.6	98	6020
Cadmium	10.0	9.8	98	20.0	19.6	98	19.7	98	6020
Cobalt	10.0	9.6	96	20.0	19.1	96	19.1	96	6020
Copper	10.0	9.4	94	20.0	19.0	95	18.9	94	6020
Lead	10.0	10.1	101	20.0	20.7	104	21.0	105	6020
Mercury	5.0	4.7	94	4.0	3.7	92	3.9	98	7470A
Nickel	10.0	9.7	97	20.0	19.3	96	19.6	98	6020
Selenium	50.0	52.0	104	100.0	105.0	105			6020
Thallium	10.0	10.1	101	20.0	20.6	103	20.5	102	6020

METALS

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Treadwell and Rollo, Inc.

Service Request: D0601981

Project No.: Presidio

Project Name: Presido

ICV Source: IV

CCV Source: IV

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Antimony				20.0	19.3	96			6020
Arsenic				20.0	21.2	106			6020
Beryllium				20.0	19.3	96			6020
Cadmium				20.0	19.8	99			6020
Cobalt				20.0	19.4	97			6020
Copper				20.0	19.3	96			6020
Lead				20.0	20.5	102			6020
Nickel				20.0	19.4	97			6020
Thallium				20.0	20.5	102			6020

METALS

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Treadwell and Rollo, Inc.

Service Request: D0601981

Project No.: Presidio

Project Name: Presido

ICV Source: IV

CCV Source: IV

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						Method
	True	Found	%R(1)	True	Found	%R(1)	True	Found	%R(1)	
Silver	10.0	10.1	101	20.0	19.9	100				6020

METALS

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Treadwell and Rollo, Inc.

Service Request: D0601981

Project No.: Presidio

Project Name: Presido

ICV Source: IV

CCV Source: IV

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration						Method
	True	Found	%R(1)	True	Found	%R(1)	True	Found	%R(1)	
Silver	10.0	10.1	101	20.0	19.7	98	20.0	18.8	94	6020

METALS

- 2b -

CRDL STANDARD FOR AA AND ICP

Client: Treadwell and Rollo, Inc.

Service Request: D0601981

Project No.: Presidio

Project Name: Presidio

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
	True	Found	%R	Initial True	Final Found	%R	Found	%R
Aluminum				60	67	112		
Barium				25			27	108
Calcium				500	560	112		
Chromium				10	12	120		
Iron				100	110	110		
Magnesium				200	220	110		
Manganese				5	6	120		
Potassium				1000	1400	140		
Sodium				500	520	104		
Vanadium				10	11	110		
Zinc				20	28	140		

METALS

- 2b -

CRDL STANDARD FOR AA AND ICP

Client: Treadwell and Rollo, Inc.

Service Request: D0601981

Project No.: Presidio

Project Name: Presidio

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
	True	Found	%R	Initial		Final		%R
				True	Found	True	Found	
Antimony				2.0	0.68	34		
Arsenic				0.5	0.52	104		
Beryllium				0.1	0.11	110		
Cadmium				0.1	0.13	130		
Cobalt				0.5	0.51	102		
Copper				0.5	0.69	138		
Lead				0.5	0.54	108		
Nickel				0.5	0.57	114		
Selenium				0.5	1.90	380		
Thallium				0.1	0.15	150		

METALS

- 2b -

CRDL STANDARD FOR AA AND ICP

Client: Treadwell and Rollo, Inc.

Service Request: D0601981

Project No.: Presidio

Project Name: Presido

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
	True	Found	%R	Initial		Final		%R
				True	Found	True	Found	
Silver				0.5	0.52	104		

METALS

- 2b -

CRDL STANDARD FOR AA AND ICP

Client: Treadwell and Rollo, Inc.

Service Request: D0601981

Project No.: Presidio

Project Name: Presido

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
	True	Found	%R	Initial	Final			
				True	Found	%R	Found	%R
Silver				0.5	0.49	98		

METALS

- 3 -

BLANKS

Client: Treadwell and Rollo, Inc.

Service Request: D0601981

Project No.: Presidio

Project Name: Presidio

Preparation Blank Matrix (soil/water):

WATER

Preparation Blank Concentration Units (ug/L or mg/kg):

ug/L

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		Method
		C	1	C	2	C	3	C		C	
Aluminum	100.0	U	100.0	U	100.0	U	100.0	U	100	U	6010B
Barium	10.0	U	10.0	U	10.0	U	10.0	U	10.00	U	6010B
Calcium	500.0	U	500.0	U	500.0	U	500.0	U	500.0	U	6010B
Chromium	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	6010B
Iron	100.0	U	100.0	U	100.0	U	100.0	U	100	U	6010B
Magnesium	500.0	U	500.0	U	500.0	U	500.0	U	500	U	6010B
Manganese	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	6010B
Potassium	5000.0	U	5000.0	U	5000.0	U	5000.0	U	5000	U	6010B
Sodium	5000.0	U	5000.0	U	5000.0	U	5000.0	U	5000	U	6010B
Vanadium	10.0	U	10.0	U	10.0	U	10.0	U	10.0	U	6010B
Zinc	20.0	U	20.0	U	20.0	U	20.0	U	20.0	U	6010B

METALS

- 3 -

BLANKS

Client: Treadwell and Rollo, Inc.

Service Request: D0601981

Project No.: Presidio

Project Name: Presido

Preparation Blank Matrix (soil/water):

WATER

Preparation Blank Concentration Units (ug/L or mg/kg):

ug/L

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		Method
	C		1	C	2	C	3	C	C		
Aluminum			100.0	U							6010B
Barium			10.0	U							6010B
Calcium			500.0	U							6010B
Chromium			10.0	U							6010B
Iron			100.0	U							6010B
Magnesium			500.0	U							6010B
Manganese			10.0	U							6010B
Potassium			5000.0	U							6010B
Sodium			5000.0	U							6010B
Vanadium			10.0	U							6010B
Zinc			20.0	U							6010B

METALS

- 3 -

BLANKS

Client: Treadwell and Rollo, Inc.

Service Request: D0601981

Project No.: Presidio

Project Name: Presido

Preparation Blank Matrix (soil/water):

WATER

Preparation Blank Concentration Units (ug/L or mg/kg):

ug/L

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		Method
	C		1	C	2	C	3	C	C		
Antimony	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	6020
Arsenic	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	6020
Beryllium	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	6020
Cadmium	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	6020
Cobalt	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	6020
Copper	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	6020
Lead	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	6020
Mercury	0.20	U	0.20	U	0.20	U			0.20	U	7470A
Nickel	2.00	U	2.00	U	2.00	U	2.00	U	2.00	U	6020
Selenium	2.00	U	2.00	U					2.00	U	6020
Thallium	1.00	U	1.00	U	1.00	U	1.00	U	1.00	U	6020

METALS

- 3 -

BLANKS

Client: Treadwell and Rollo, Inc.

Service Request: D0601981

Project No.: Presidio

Project Name: Presidio

Preparation Blank Matrix (soil/water):

WATER

Preparation Blank Concentration Units (ug/L or mg/kg):

ug/L

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		Method
	C		1	C	2	C	3	C	C		
Silver	1.00	U	1.00	U							6020

METALS

- 3 -

BLANKS

Client: Treadwell and Rollo, Inc.

Service Request: D0601981

Project No.: Presidio

Project Name: Presido

Preparation Blank Matrix (soil/water):

WATER

Preparation Blank Concentration Units (ug/L or mg/kg):

ug/L

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		Method
	C		1	C	2	C	3	C	C		
Silver	1.00	U	1.00	U					1.00	U	6020

METALS

- 4 -

ICP INTERFERENCE CHECK SAMPLE

Client: Treadwell and Rollo, Inc.

Service Request: D0601981

Project No.: Presidio

Project Name: Presido

ICP ID Number: TJA61

ICS Source: IV

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol. AB	Sol.A	Sol. AB	%R	Sol.A	Sol. AB	%R
Aluminum	500000	502000	536168.80	540000	108			
Barium		1000	0.56	1020	102			
Calcium	500000	500000	520146.80	520000	104			
Chromium		1000	-9.73	970	97			
Iron	200000	200000	197572.70	198000	99			
Magnesium	500000	500000	532131.10	533000	107			
Manganese		1000	13.87	991	99			
Potassium			-487.60	-8				
Sodium		2000	23.83	2140	107			
Vanadium		1000	-14.19	959	96			
Zinc		2000	2.36	2030	102			

METALS

- 4 -

ICP INTERFERENCE CHECK SAMPLE

Client: Treadwell and Rollo, Inc.

Service Request: D0601981

Project No.: Presidio

Project Name: Presido

ICP ID Number: ELAN 9000

ICS Source: IV

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol. A	Sol. AB	Sol. A	Sol. AB	%R	Sol. A	Sol. AB	%R
Antimony		20.0	0.1	18.1	90			
Arsenic		20.0	0.0	20.6	103			
Beryllium		20.0	0.0	20.3	102			
Cadmium		20.0	0.1	19.6	98			
Cobalt		20.0	0.0	20.1	100			
Copper		20.0	0.8	19.9	100			
Lead		20.0	0.3	20.5	102			
Nickel		20.0	0.4	20.0	100			
Selenium		100.0	0.1	110.0	110			
Thallium		20.0	0.1	20.6	103			

METALS

- 4 -

ICP INTERFERENCE CHECK SAMPLE

Client: Treadwell and Rollo, Inc.

Service Request: D0601981

Project No.: Presidio

Project Name: Presido

ICP ID Number: ELAN 9000

ICS Source: IV

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol. AB	Sol.A	Sol. AB	%R	Sol.A	Sol. AB	%R
Silver		20.0	0.1	20.5	102			

METALS

- 4 -

ICP INTERFERENCE CHECK SAMPLE

Client:

Treadwell and Rollo, Inc.

Service Request:

D0601981

Project No.:

Presidio

Project Name:

Presido

ICP ID Number:

ELAN 9000

ICS Source:

IV

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol. AB	Sol.A	Sol. AB	%R	Sol.A	Sol. AB	%R
Silver		20.0	0.1	19.6	98			

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Collected: 12/05/2006
Date Received: 12/06/2006
Date Extracted: 12/26/2006
Date Analyzed: 12/27/2006

Trace Metals

MS Sample Name: LF6GW103CLMS
Lab Code: D0601981-001MS / D0601981-001MSD
Test Notes:

DMS Sample LF6GW103CLMSD
Units: ug/L (ppb)
Basis: NA

Analyte	Prep	Analysis	PQL	Spike	Sample	Spike	Spike	Spike	Spike	CAS	Relative	Result
	Method	Method		Level	Result	Result	Result	% Rec	% Rec	Acceptance	Percent	
Mercury	Dissolved	SW7470	0.200	2.00	0.200	2.049	2.086	102	104	87-117	2	Notes

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Collected: 12/05/2006
Date Received: 12/06/2006
Date Extracted: 12/08/2006
Date Analyzed: 12/12/2006

Trace Metals

MS Sample Name: 1065PZ1BCLMS
Lab Code: D0601981-004MS / D0601981-004MSD
Test Notes:

DMS Sample 1065PZ1BCLMSD
Units: ug/L (ppb)
Basis: NA

Analyte	Prep Method	Analysis Method	PQL	Spike Level	Sample Result	Spike Result MS	Spike Result DMS	Spike % Rec MS	Spike % Rec DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Aluminum	Dissolved	SW6010	100.0	2000.0	100.0	2146.6	2151.2	107	108	75-125	<1	
Antimony	Dissolved	SW6020	2.00	20.0	2.00	20.20	19.60	101	98	75-125	3	
Arsenic	Dissolved	SW6020	2.00	20.0	2.00	23.30	22.80	117	114	75-125	2	
Barium	Dissolved	SW6010	10.0	2000.0	10.0	2243.6	2244.2	112	112	75-125	<1	
Beryllium	Dissolved	SW6020	1.00	20.0	1.00	17.80	17.80	89	89	75-125	<1	
Cadmium	Dissolved	SW6020	1.00	20.0	1.00	19.60	19.60	98	98	75-125	<1	
Calcium	Dissolved	SW6010	500.0	5000.0	57833.5	63361.3	63770.6	111	119	75-125	1	
Chromium	Dissolved	SW6010	10.0	200.0	10.0	175.2	174.9	88	87	75-125	<1	
Cobalt	Dissolved	SW6020	1.00	20.0	1.00	19.50	19.60	98	98	75-125	1	
Copper	Dissolved	SW6020	2.00	20.0	2.00	20.20	20.30	101	102	75-125	<1	
Iron	Dissolved	SW6010	100.0	1000.0	138.3	1254.3	1260.3	112	112	75-125	<1	
Lead	Dissolved	SW6020	1.00	20.0	1.00	20.90	20.50	105	103	75-125	2	
Magnesium	Dissolved	SW6010	500.0	5000.0	85489.4	91108.5	91567.1	112	122	75-125	1	
Manganese	Dissolved	SW6010	10.0	500.0	80.1	603.9	605.4	105	105	75-125	<1	
Nickel	Dissolved	SW6020	2.00	20.0	2.00	21.30	21.40	107	107	75-125	<1	
Potassium	Dissolved	SW6010	5000.0	5000.0	43925.6	49685.9	50181.8	115	125	75-125	1	
Silver	Dissolved	SW6020	1.00	20.0	1.00	21.90	21.30	110	107	75-125	3	
Sodium	Dissolved	SW6010	5000.0	5000.0	96651.7	102046.9	102499.6	108	117	75-125	<1	
Thallium	Dissolved	SW6020	1.00	20.0	1.00	21.40	21.10	107	106	75-125	1	
Vanadium	Dissolved	SW6010	10.0	500.0	10.0	558.5	563.5	112	113	75-125	1	
Zinc	Dissolved	SW6010	20.0	500.0	20.0	560.2	558.7	112	112	75-125	<1	

METALS

- 5b -

POST DIGEST SPIKE SAMPLE RECOVERY

Client: Treadwell and Rollo, Inc.

Service Request: D0601981

Project No.: Presidio

Units: ug/L

Project Name: Presido

Matrix: WATER

Sample Name: LF6GW103CLA

Lab Code: D0601981-001A

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Mercury	75 - 125	2.64	0.20 U	2.0	132		CV
Silver	75 - 125	18.14	1.00 U	20.0	91		M

Comments:

METALS

- 5b -

POST DIGEST SPIKE SAMPLE RECOVERY

Client: Treadwell and Rollo, Inc.

Service Request: D0601981

Project No.: Presidio

Units: ug/L

Project Name: Presido

Matrix: WATER

Sample Name: 231GW09CLA

Lab Code: D0601981-002A

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Selenium	75 - 125	94.96	2.00 U	100.0	95		M

Comments:

METALS

- 5b -

POST DIGEST SPIKE SAMPLE RECOVERY

Client: Treadwell and Rollo, Inc.

Service Request: D0601981

Project No.: Presidio

Units: ug/L

Project Name: Presido

Matrix: WATER

Sample Name: 1065PZ1BCLA

Lab Code: D0601981-004A

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Aluminum		2242.91	100.00 U	2000.0	112		P
Antimony	75 - 125	18.37	2.00 U	20.0	92		M
Arsenic	75 - 125	21.20	2.00 U	20.0	106		M
Barium	75 - 125	2318.9900	10.0000 U	2000.0	116		P
Beryllium	75 - 125	17.76	1.00 U	20.0	89		M
Cadmium	75 - 125	18.40	1.00 U	20.0	92		M
Calcium		64981.23	57833.51	5000.0	143		P
Chromium		186.7300	10.0000 U	200.0	93		P
Cobalt	75 - 125	18.92	1.00 U	20.0	95		M
Copper	75 - 125	19.81	2.00 U	20.0	99		M
Iron	75 - 125	1302.47	138.31	1000.0	116		P
Lead	75 - 125	19.66	1.00 U	20.0	98		M
Magnesium		92441.43	85489.38	5000.0	139		P
Manganese	75 - 125	630.6100	80.0600	500.0	110		P
Nickel	75 - 125	20.19	2.00 U	20.0	101		M
Potassium		50427.27	43925.61	5000.0	130		P
Sodium		103200.30	96651.71	5000.0	131		P
Thallium	75 - 125	19.75	1.00 U	20.0	99		M
Vanadium	75 - 125	583.81	10.00 U	500.0	117		P
Zinc	75 - 125	587.83	20.00 U	500.0	118		P

Comments:

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
 Project: Presidio
 Sample Matrix: WATER

Service Request: D0601981
 Date Collected: NA
 Date Received: NA
 Date Extracted: 12/08/2006
 Date Analyzed: 12/12/2006

Trace Metals

LCS Sample Name: Lab Control Sample
 Lab Code: LCSW-1208 / LCSDW-1208
 Test Notes:

DLCS Sample
 Units:
 Basis:
 Lab Control Sample Duplicate
 ug/L (ppb)
 NA

Analyte	Prep		Analysis		Spike		Spike		Spike		Spike		CAS Acceptance Limits	Relative Percent Difference	Result Notes
	Method	Method	PQL	Level	Result	Result	% Rec	% Rec	% Rec	% Rec	% Rec	% Rec			
Aluminum	Dissolved	SW6010	100	2000	2300	2260	115	113	115	113	115	113	80-120	2	
Barium	Dissolved	SW6010	10.0	1000	1150	1140.0	115	114	115	114	115	114	80-120	1	
Calcium	Dissolved	SW6010	500	1000	1030	986	103	99	103	99	103	99	80-120	4	
Chromium	Dissolved	SW6010	10.0	500	566	558	113	112	113	112	113	112	80-120	1	
Iron	Dissolved	SW6010	100	1000	1180.0	1160	118	116	118	116	118	116	80-120	2	
Magnesium	Dissolved	SW6010	500	1000	1180.0	1160	118	116	118	116	118	116	80-120	2	
Manganese	Dissolved	SW6010	10.0	1000	1120.0	1110	112	111	112	111	112	111	80-120	1	
Potassium	Dissolved	SW6010	5000	10000	11200	11500	112	115	112	115	112	115	80-120	3	
Sodium	Dissolved	SW6010	5000	2000.0	2330	2290	116	114	116	114	116	114	80-120	2	
Vanadium	Dissolved	SW6010	10.0	1000	1150	1130	115	113	115	113	115	113	80-120	2	
Zinc	Dissolved	SW6010	20.0	1000	1140.0	1130	114	113	114	113	114	113	80-120	1	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
 Project: Presidio
 Sample Matrix: WATER

Service Request: D0601981
 Date Collected: NA
 Date Received: NA
 Date Extracted: 12/08/2006
 Date Analyzed: 01/03/2007

Trace Metals

LCS Sample Name: Lab Control Sample
 Lab Code: LCSW-1208 / LCSDW-1208
 Test Notes:

DLCS Sample
 Units:
 Basis:
 Lab Control Sample Duplicate
 ug/L (ppb)
 NA

Analyte	Prep Method	Analysis Method	PQL	Spike Level	Spike Result	Spike Result	Spike % Rec	Spike % Rec	CAS Acceptance Limits	Relative Percent Difference	Result Notes
					LCS	DLCS	LCS	DLCS			
Antimony	Dissolved	SW6020	2.0	20.0	19.5	19.3	98	97	80-120	1	
Arsenic	Dissolved	SW6020	2.0	20.0	20.4	21.3	102	106	80-120	4	
Beryllium	Dissolved	SW6020	1.0	20.0	21.4	21.5	107	108	80-120	<1	
Cadmium	Dissolved	SW6020	1.0	20.0	20.5	20.6	102	103	80-120	<1	
Cobalt	Dissolved	SW6020	1.0	20.0	21.0	21.3	105	106	80-120	1	
Copper	Dissolved	SW6020	2.0	20.0	21.1	20.9	106	104	80-120	1	
Lead	Dissolved	SW6020	1.0	20.0	21.4	21.4	107	107	80-120	<1	
Nickel	Dissolved	SW6020	2.0	20.0	21.8	21.3	109	106	80-120	2	
Selenium	Dissolved	SW6020	2.0	100	100	110.0	100	110	80-120	10	
Silver	Dissolved	SW6020	1.0	20.0	22.2	22.1	111	110	80-120	<1	
Thallium	Dissolved	SW6020	1.0	20.0	21.3	21.8	106	109	80-120	2	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: WATER

Service Request: D0601981
Date Collected: NA
Date Received: NA
Date Extracted: 12/26/2006
Date Analyzed: 12/27/2006

Trace Metals

LCS Sample Name: Lab Control Sample
Lab Code: LCSW-1226 / LCSDW-1226
Test Notes:

DLCS Sample
Units:
Basis:

Lab Control Sample Duplicate
ug/L (ppb)
NA

Analyte	Prep	Analysis	PQL	Spike	Spike	Spike	Spike	CAS	Relative	Result	
	Method	Method		Level	Result	Result	% Rec	% Rec	Acceptance		Percent
	Method	Method		Level	LCS	DLCS	LCS	DLCS	Limits		Difference
Mercury	Dissolved	SW7470	0.20	2.00	2.06	2.12	103	106	80-120	3	

- 9 -

ICP SERIAL DILUTIONS

Client: Treadwell and Rollo, Inc.

Service Request: D0601981

Project No.: Presidio

Units: ug/L

Project Name: Presido

Sample Name: LF6GW103CLL

Lab Code: D0601981-001L

Analyte	Initial Sample Result (I) C	Serial Dilution Result (S) C	% Differ- ence	Q	Method
Mercury	0.20 U	1.00 U	NC		7470A
Silver	1.00 U	5.00 U	NC		6020

(1) NC - denotes that the % Difference was not calculated due to Non-Detects in the Initial and/or Serial Dilution Samples.

(2) Blank % D column signifies that Initial or Serial Dilution Result was not 50 times the MDL. Therefore, the %D was not quantified.

- 9 -

ICP SERIAL DILUTIONS

Client: Treadwell and Rollo, Inc.

Service Request: D0601981

Project No.: Presidio

Units: ug/L

Project Name: Presido

Sample Name: 231GW09CLL

Lab Code: D0601981-002L

Analyte	Initial Sample Result (I) C	Serial Dilution Result (S) C	% Differ- ence	Q	Method
Selenium	2.0000 U	10.0000 U	NC		6020

(1) NC - denotes that the % Difference was not calculated due to Non-Detects in the Initial and/or Serial Dilution Samples.

(2) Blank % D column signifies that Initial or Serial Dilution Result was not 50 times the MDL. Therefore, the %D was not quantified.

- 9 -

ICP SERIAL DILUTIONS

Client: Treadwell and Rollo, Inc.

Service Request: D0601981

Project No.: Presidio

Units: ug/L

Project Name: Presido

Sample Name: 1065PZ1BCLL

Lab Code: D0601981-004L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Differ- ence	Q	Method
Aluminum	100.00	U	500.00	U	NC		6010B
Antimony	2.00	U	10.00	U	NC		6020
Arsenic	2.0000	U	10.0000	U	NC		6020
Barium	10.00	U	50.00	U	NC		6010B
Beryllium	1.00	U	5.00	U	NC		6020
Cadmium	1.00	U	5.00	U	NC		6020
Calcium	57833.51		60496.50				6010B
Chromium	10.00	U	50.00	U	NC		6010B
Cobalt	1.00	U	5.00	U	NC		6020
Copper	2.00	U	10.00	U	NC		6020
Iron	138.31		500.00	U	NC		6010B
Lead	1.00	U	5.00	U	NC		6020
Magnesium	85489.38		88289.95				6010B
Manganese	80.06		84.14				6010B
Nickel	2.08		10.00	U	NC		6020
Potassium	43925.61		44876.00				6010B
Sodium	96651.71		98545.45				6010B
Thallium	1.00	U	5.00	U	NC		6020
Vanadium	10.00	U	50.00	U	NC		6010B
Zinc	20.00	U	100.00	U	NC		6010B

(1) NC - denotes that the % Difference was not calculated due to Non-Detects in the Initial and/or Serial Dilution Samples.

(2) Blank % D column signifies that Initial or Serial Dilution Result was not 50 times the MDL. Therefore, the %D was not quantified.

METHOD DETECTION LIMITS**Client:** Treadwell and Rollo, Inc.**Service Request:** D0601981**Project No.:** Presidio**Project Name:** Presido**ICP/ICP-MS ID #:** TJA61**GFAA ID #:****AA ID #:**

Analyte	Wave-length (nm)	Back-ground	PQL (ug/L)	MDL (ug/L)	M
Aluminum	308.22		0.100	0.100	P
Barium	493.41		0.010	0.010	P
Calcium	317.93		0.500	0.500	P
Chromium	267.72		0.010	0.010	P
Iron	271.44		0.100	0.100	P
Magnesium	279.08		0.500	0.500	P
Manganese	257.61		0.010	0.010	P
Potassium	766.49		5.000	5.000	P
Sodium	330.23		5.000	5.000	P
Vanadium	292.40		0.010	0.010	P
Zinc	213.86		0.020	0.020	P

Comments:

METHOD DETECTION LIMITS

Client: Treadwell and Rollo, Inc.

Service Request: D0601981

Project No.: Presidio

Project Name: Presido

ICP/ICP-MS ID #: ELAN 9000

GFAA ID #:

AA ID #:

Analyte	Isotope	Back-ground	PQL (ug/L)	MDL (ug/L)	M
Antimony	121		2.000	2.000	MS
Arsenic	75		2.000	2.000	MS
Beryllium	9		1.000	1.000	MS
Cadmium	111		1.000	1.000	MS
Cobalt	59		1.000	1.000	MS
Copper	63		2.000	2.000	MS
Lead	208		1.000	1.000	MS
Nickel	60		2.000	2.000	MS
Selenium	82		2.000	2.000	MS
Silver	107		1.000	1.000	MS
Thallium	205		1.000	1.000	MS

Comments:

METHOD DETECTION LIMITS

Client: Treadwell and Rollo, Inc. Service Request: D0601981
Project No.: Presidio
Project Name: Presidio

ICP/ICP-MS ID #:
GFAA ID #: PE FIMS AA ID #:

Analyte	Wave-length (nm)	Back-ground	PQL (ug/L)	MDL (ug/L)	M
Mercury	253.70		0.200	0.200	CV

Comments:

-12-

ICP LINEAR RANGESClient: **Treadwell and Rollo, Inc.**Service Request: **D0601981**Project No.: **Presidio**Project Name: **Presidio**

ICP ID Number: **ELAN 9000**

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Antimony	10.000	2500000000.0	6020
Arsenic	10.000	2500000.0	6020
Beryllium	10.000	2500000.0	6020
Cadmium	10.000	2500000.0	6020
Cobalt	10.000	2500000.0	6020
Copper	10.000	5000000.0	6020
Lead	10.000	2500000000.0	6020
Nickel	10.000	2500000.0	6020
Selenium	10.000	2500000.0	6020
Silver	10.000	2500000.0	6020
Thallium	10.000	2500000.0	6020

Comments:

-12-

ICP LINEAR RANGESClient: **Treadwell and Rollo, Inc.**Service Request: **D0601981**Project No.: **Presidio**Project Name: **Presido**

ICP ID Number: **TJA61**

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Aluminum	10.00	700000.0	6010B
Barium	10.00	100000.0	6010B
Calcium	10.00	1000000.0	6010B
Chromium	10.00	100000.0	6010B
Iron	10.00	1000000.0	6010B
Magnesium	10.00	1000000.0	6010B
Manganese	10.00	100000.0	6010B
Potassium	10.00	1000000.0	6010B
Sodium	10.00	1000000.0	6010B
Vanadium	10.00	10000.0	6010B
Zinc	10.00	200000.0	6010B

Comments:

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PREPARATION LOG

Client: **Treadwell and Rollo, Inc.**
Project No.: **Presidio**
Project Name: **Presido**

Service Request: **D0601981**

Method: **MS**

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
PBW	12/8/06	3020A	50.0	50.0
LCSW	12/8/06	3020A	50.0	50.0
LCSDW	12/8/06	3020A	50.0	50.0
LF6GW103CL	12/8/06	3020A	50.0	50.0
231GW09CL	12/8/06	3020A	50.0	50.0
1065PZ1BCL	12/8/06	3020A	50.0	50.0
1065PZ1BCLS	12/8/06	3020A	50.0	50.0
1065PZ1BCLSD	12/8/06	3020A	50.0	50.0

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PREPARATION LOG

Client: Treadwell and Rollo, Inc.
Project No.: Presidio
Project Name: Presido

Service Request: D0601981

Method: CV

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
PBW	12/26/06	Method	20.0	20.0
LCSW	12/26/06	Method	20.0	20.0
LCSWD	12/26/06	Method	20.0	20.0
LF6GW103CL	12/26/06	Method	20.0	20.0
LF6GW103CLSA	12/26/06	Method	20.0	20.0
LF6GW103CLSD	12/26/06	Method	20.0	20.0
231GW09CL	12/26/06	Method	20.0	20.0

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PREPARATION LOG

Client: Treadwell and Rollo, Inc.
Project No.: Presidio
Project Name: Presido

Service Request: D0601981

Method: MS

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
PBW	12/8/06	3010A	50.0	50.0
LCSW	12/8/06	3010A	50.0	50.0
LCSWD	12/8/06	3010A	50.0	50.0
LF6GW103CL	12/8/06	3010A	50.0	50.0
231GW09CL	12/8/06	3010A	50.0	50.0
1065MW9ACL	12/8/06	3010A	50.0	50.0
1065PZ1BCL	12/8/06	3010A	50.0	50.0
1065PZ1BCLS	12/8/06	3010A	50.0	50.0
1065PZ1BCLSD	12/8/06	3010A	50.0	50.0

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PREPARATION LOG

Client: Treadwell and Rollo, Inc.

Service Request: D0601981

Project No.: Presidio

Project Name: Presido

Method: P

Lab Code	Preparation Date	Preparation Method	Initial (mL or grams)	Final Volume (mL)
PBW	12/8/06	3010A	50.0	50.0
LCSW	12/8/06	3010A	50.0	50.0
LCSWD	12/8/06	3010A	50.0	50.0
1065PZ1BCL	12/8/06	3010A	50.0	50.0
1065PZ1BCLS	12/8/06	3010A	50.0	50.0
1065PZ1BCLSD	12/8/06	3010A	50.0	50.0
LF6GW103CL	12/8/06	3010A	50.0	50.0
231GW09CL	12/8/06	3010A	50.0	50.0
1065MW9ACL	12/8/06	3010A	50.0	50.0

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ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc.
Project No.: Presidio
Project Name: Presido

Service Request: D0601981

Instrument ID ELAN 9000
Number: Start Date: 1/3/2007

Method: M
End Date: 1/3/2007

Sample ID.	D/F	Time	% R	Analytes																					
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S G	A A	N L	T V	Z N
Blank	1.00	11:45				X		X	X			X	X		X				X				X		
Standard 1	1.00	11:49				X		X	X			X	X		X				X				X		
ICV	1.00	11:53				X		X	X			X	X		X				X				X		
ICB	1.00	11:57				X		X	X			X	X		X				X				X		
RLS	1.00	12:02				X		X	X			X	X		X				X				X		
ICSA	1.00	12:06				X		X	X			X	X		X				X				X		
ICSAB	1.00	12:10				X		X	X			X	X		X				X				X		
PBW	1.00	12:14				X		X	X			X	X		X				X				X		
LCSW	1.00	12:19				X		X	X			X	X		X				X				X		
LCSWD	1.00	12:24				X		X	X			X	X		X				X				X		
LF6GW103CL	1.00	12:29				X		X	X			X	X		X				X				X		
231GW09CL	1.00	12:33				X		X	X			X	X		X				X				X		
CCV	1.00	12:38				X		X	X			X	X		X				X				X		
CCB	1.00	12:42				X		X	X			X	X		X				X				X		
1065MW9ACL	1.00	12:47				X			X				X		X				X						
1065PZ1BCLL	5.00	12:56				X		X	X			X	X		X				X				X		
1065PZ1BCLA	1.00	13:01				X		X	X			X	X		X				X				X		
CCV	1.00	13:15				X		X	X			X	X		X				X				X		
CCB	1.00	13:19				X		X	X			X	X		X				X				X		
1065PZ1BCL	1.00	13:39				X			X				X		X				X						
1065PZ1BCLS	1.00	13:43				X		X	X			X	X		X				X				X		
1065PZ1BCLSD	1.00	13:48				X		X	X			X	X		X				X				X		
CCV	1.00	13:53				X		X	X			X	X		X				X				X		
CCB	1.00	13:57				X		X	X			X	X		X				X				X		

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

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ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc.
Project No.: Presidio
Project Name: Presido

Service Request: D0601981

Instrument ID ELAN 9000
Number: Start Date: 1/3/2007

Method: M
End Date: 1/3/2007

Sample ID.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S G	A A	N L	T V	Z N	C N					
Blank	1.00	15:37		X																											
Standard 1	1.00	15:40		X																											
ICV	1.00	15:44		X																											
ICB	1.00	15:47		X																											
ICSA	1.00	15:54		X																											
ICSAB	1.00	15:57		X																											
PBW	1.00	16:01		X																											
LCSW	1.00	16:05		X																											
LCSWD	1.00	16:08		X																											
LF6GW103CL	1.00	16:12		X																											
231GW09CL	1.00	16:16		X																											
CCV	1.00	16:20		X																											
CCB	1.00	16:24		X																											
1065MW9ACL	1.00	16:27		X																											
1065PZ1BCL	1.00	16:31		X																											
1065PZ1BCLL	5.00	16:35		X																											
1065PZ1BCLA	1.00	16:39		X																											
1065PZ1BCLS	1.00	16:43		X																											
1065PZ1BCLSD	1.00	16:47		X																											
CCV	1.00	16:51		X																											
CCB	1.00	16:54		X																											
RLS	1.00	17:07		X																											
CCV	1.00	17:39		X																											
CCB	1.00	17:43		X																											

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

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ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc.
Project No.: Presidio
Project Name: Presido

Service Request: D0601981

Instrument ID ELAN 9000
Number: Start Date: 1/4/2007

Method: M
End Date: 1/4/2007

Sample ID.	D/F	Time	% R	Analytes																							
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N
Blank	1.00	12:12																	X								
Standard 1	1.00	12:15																	X								
ICV	1.00	12:18																	X								
ICB	1.00	12:22																	X								
RLS	1.00	12:25																	X								
ICSA	1.00	12:28																	X								
ICSAB	1.00	12:31																	X								
PBW	1.00	12:34																	X								
LCSW	1.00	12:38																	X								
LCSWD	1.00	12:41																	X								
LF6GW103CL	1.00	12:45																	X								
231GW09CL	1.00	12:48																	X								
231GW09CLL	5.00	12:52																	X								
231GW09CLA	1.00	12:56																	X								
CCV	1.00	12:59																	X								
CCB	1.00	13:02																	X								

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

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ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc.
Project No.: Presidio
Project Name: Presido

Service Request: D0601981

Instrument ID ELAN 9000
Number: Start Date: 1/17/2007

Method: M
End Date: 1/17/2007

Sample ID.	D/F	Time	% R	Analytes																							
				A	S	A	B	B	C	C	C	C	C	F	P	M	M	H	N	K	S	A	N	T	V	Z	C
				L	B	S	A	E	D	A	R	O	U	E	B	G	N	G	I		E	G	A	L		N	N
Blank	1.00	12:00																			X						
Standard 1	1.00	12:05																			X						
ICV	1.00	12:10																			X						
ICB	1.00	12:14																			X						
RLS	1.00	12:19																			X						
ICSA	1.00	12:23																			X						
ICSAB	1.00	12:28																			X						
PBW	1.00	12:32																			X						
LCSW	1.00	12:36																			X						
LCSDW	1.00	12:40																			X						
LF6GW103CL	1.00	12:43																			X						
LF6GW103CLL	5.00	12:47																			X						
LF6GW103CLA	1.00	12:50																			X						
CCV	1.00	12:54																			X						
CCB	1.00	12:58																			X						
231GW09CL	1.00	13:03																			X						
CCV	1.00	13:21																			X						
CCB	1.00	13:26																			X						

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

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ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc.
Project No.: Presidio
Project Name: Presido

Service Request: D0601981

Instrument ID ELAN 9000
Number: Start Date: 1/17/2007

Method: M
End Date: 1/17/2007

Sample ID.	D/F	Time	% R	Analytes																					
				A	S	A	B	B	C	C	C	C	F	P	M	M	H	N	K	S	A	N	T	V	Z
				L	B	S	A	E	D	A	R	O	U	E	B	G	N	G	I		E	G	A	L	N
Blank	1.00	14:09																			X				
Standard 1	1.00	14:14																			X				
ICV	1.00	14:19																			X				
ICB	1.00	14:23																			X				
RLS	1.00	14:28																			X				
ICSA	1.00	14:32																			X				
ICSAB	1.00	14:37																			X				
1065PZ1BCL	1.00	14:43																							
1065PZ1BCLS	1.00	14:46																			X				
1065PZ1BCLSD	1.00	14:50																			X				
CCV	1.00	15:04																			X				
CCB	1.00	15:09																			X				

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

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ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc.
Project No.: Presidio
Project Name: Presido

Service Request: D0601981

Instrument ID TJA61
Number: Start Date: 12/12/2006

Method: P
End Date: 12/12/2006

Sample ID.	D/F	Time	% R	Analytes																					
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S G	A L	T V	Z N	C N
CB	1.00	11:08		X			X			X	X			X		X	X			X		X	X	X	
STD	1.00	11:11		X			X			X	X			X		X	X			X		X	X	X	
STD 1	1.00	11:15																							
ICV	1.00	11:20		X			X			X	X			X		X	X			X		X	X	X	
ICB	1.00	11:38		X			X			X	X			X		X	X			X		X	X	X	
RLS	1.00	11:43		X						X	X			X		X	X			X		X	X	X	
Ba	1.00	11:49					X																		
ICSA	1.00	11:53		X			X			X	X			X		X	X			X		X	X	X	
ICSAB	1.00	11:57		X			X			X	X			X		X	X			X		X	X	X	
CCV	1.00	12:03		X			X			X	X			X		X	X			X		X	X	X	
CCB	1.00	12:08		X			X			X	X			X		X	X			X		X	X	X	
CCV	1.00	12:54		X			X			X	X			X		X	X			X		X	X	X	
CCB	1.00	13:01		X			X			X	X			X		X	X			X		X	X	X	
PBW	1.00	13:05		X			X			X	X			X		X	X			X		X	X	X	
LCSW	1.00	13:09		X			X			X	X			X		X	X			X		X	X	X	
LCSWD	1.00	13:13		X			X			X	X			X		X	X			X		X	X	X	
1065PZ1BCL	1.00	13:17		X						X	X			X		X	X			X		X		X	
1065PZ1BCLS	1.00	13:21		X			X			X	X			X		X	X			X		X	X	X	
1065PZ1BCLSD	1.00	13:25		X			X			X	X			X		X	X			X		X	X	X	
1065PZ1BCLA	1.00	13:29		X			X			X	X			X		X	X			X		X	X	X	
1065PZ1BCLL	5.00	13:33		X			X			X	X			X		X	X			X		X	X	X	
LF6GW103CL	1.00	13:37		X			X			X	X			X		X	X			X		X	X	X	
231GW09CL	1.00	13:41		X			X			X	X			X		X	X			X		X	X	X	
CCV	1.00	13:47		X			X			X	X			X		X	X			X		X	X	X	
CCB	1.00	13:54		X			X			X	X			X		X	X			X		X	X	X	
1065MW9ACL	1.00	13:58		X						X	X			X		X	X			X		X		X	
CCV	1.00	14:44		X			X			X	X			X		X	X			X		X	X	X	
CCB	1.00	14:51		X			X			X	X			X		X	X			X		X	X	X	

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

- 14 -
ANALYSIS RUN LOG

Client: Treadwell and Rollo, Inc.
Project No.: Presidio
Project Name: Presido

Service Request: D0601981

Instrument ID
Number:

PE FIMS

Method: C

Start Date: 12/27/2006

End Date: 12/27/2006

Sample ID.	D/F	Time	% R	Analytes																							
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N
CALIB BLANK	1.00	12:26																X									
STANDARD 1	1.00	12:28																X									
STANDARD 2	1.00	12:30																X									
STANDARD 3	1.00	12:33																X									
STANDARD 4	1.00	12:35																X									
STANDARD 5	1.00	12:38																X									
ICV1	1.00	12:40																X									
ICB1	1.00	12:52																X									
PBW	1.00	12:55																X									
LCSW	1.00	13:00																X									
LCSWD	1.00	13:02																X									
LF6GW103CLL	5.00	13:05																X									
LF6GW103CL	1.00	13:07																X									
LF6GW103CLA	1.00	13:09																X									
LF6GW103CLSA	1.00	13:12																X									
LF6GW103CLSD	1.00	13:14																X									
CCV1	1.00	13:16																X									
CCB1	1.00	13:18																X									
231GW09CL	5.00	13:21																X									
CCV2	1.00	13:39																X									
CCB2	1.00	13:42																X									

* - Denotes additional elements (other than the standard elements) are represented on another Form 14

Form XIV - IN

GC TPH DIESEL

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893

Service Request: D0601981

Cover Page - Organic Analysis Data Package
Diesel Range Organics

Sample Name	Lab Code	Date Collected	Date Received
LF6GW103CL	D0601981-001	12/05/2006	12/06/2006

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Wida Ang

Name: WIDA ANG

Date: 12/19/06

Title: Organic Manager

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893
Sample Matrix: Water

Service Request: D0601981
Date Collected: 12/05/2006
Date Received: 12/06/2006

Diesel Range Organics

Sample Name: LF6GW103CL
Lab Code: D0601981-001
Extraction Method: EPA 3510C
Analysis Method: 8015B

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
TPH-Diesel (C10-C24)	ND	U	48	1	12/11/06	12/18/06	DWG0601056	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Octacosane	82	65-135	12/18/06	Acceptable
n-Triacontane	80	65-135	12/18/06	Acceptable

Comments:

Data File : C:\HPCHEM\1\DATA\121806\1218010.D Vial: 10
Acq On : 18 Dec 2006 6:35 pm Operator: MCM
Sample : D0601981-001.08 1.05L:1ml Inst : GCQ
Misc : Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 19 10:07 2006 Quant Results File: DOQ61208.RES

Quant Method : C:\HPCHEM\1\METHODS\DOQ61208.M (Chemstation Integrator)
Title : Diesel/M_Oil (c10-c36) Calibration
Last Update : Sun Dec 17 13:03:16 2006
Response via : Initial Calibration
DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
Signal Phase : RTX-5
Signal Info : 0.53 mm /30m

MCM
12/19/06

Compound	R.T.	Response	Conc Units

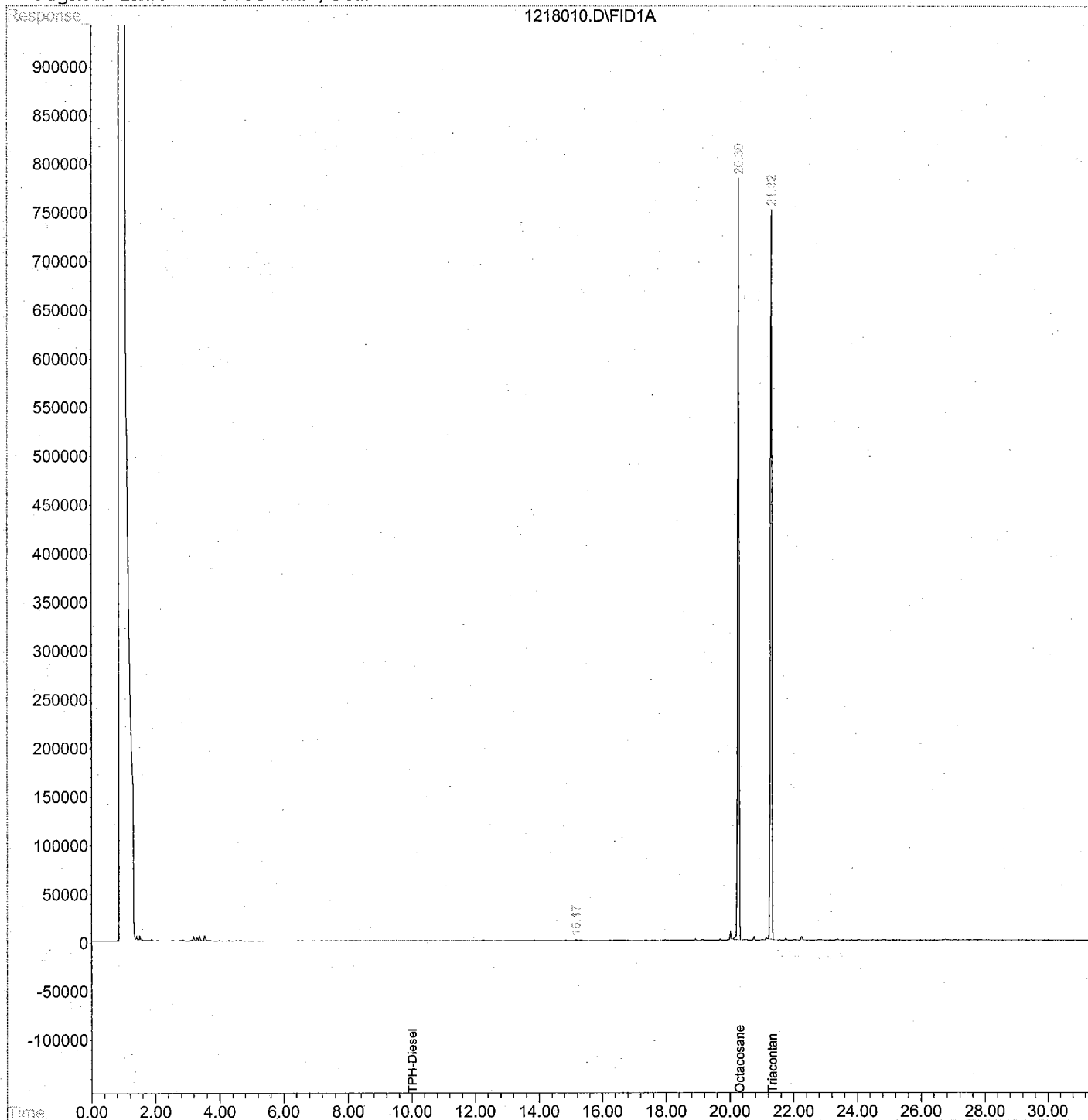
System Monitoring Compounds			
3) S Octacosane	20.30	23853578	205.292 mg/L
Spiked Amount 250.000		Recovery =	82.12%
4) S Triacontane	21.33	23670549	200.969 mg/L
Spiked Amount 250.000		Recovery =	80.39%
Target Compounds			
1) H TPH-Diesel (c10-c24)	10.00	1213505	6.451 mg/L
2) H Motor Oil (c24-c36)	21.00	2364023	N.D. mg/L

Quantitation Report

Data File : C:\HPCHEM\1\DATA\121806\1218010.D Vial: 10
 Acq On : 18 Dec 2006 6:35 pm Operator: MCM
 Sample : D0601981-001.08 1.05L:1ml Inst : GCQ
 Misc : Multiplr: 1.00
 IntFile : events.e
 Quant Time: Dec 19 10:07 2006 Quant Results File: DOQ61208.RES

Quant Method : C:\HPCHEM\1\METHODS\DOQ61208.M (Chemstation Integrator)
 Title : Diesel/M_Oil (c10-c36) Calibration
 Last Update : Sun Dec 17 13:03:16 2006
 Response via : Multiple Level Calibration
 DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
 Signal Phase : RTX-5
 Signal Info : 0.53 mm /30m



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893
Sample Matrix: Water

Service Request: D0601981
Date Collected: NA
Date Received: NA

Diesel Range Organics

Sample Name: Method Blank
Lab Code: DWG0601056-3
Extraction Method: EPA 3510C
Analysis Method: 8015B

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
TPH-Diesel (C10-C24)	ND	U	50	1	12/11/06	12/18/06	DWG0601056	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Octacosane	104	65-135	12/18/06	Acceptable
n-Triacontane	102	65-135	12/18/06	Acceptable

Comments:

Data File : C:\HPCHEM\1\DATA\121806\1218004.D Vial: 4
Acq On : 18 Dec 2006 1:11 pm Operator: MCM
Sample : wmb 12/11 1L:1ml Inst : GCQ
Misc : Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 19 10:07 2006 Quant Results File: DOQ61208.RES

Quant Method : C:\HPCHEM\1\METHODS\DOQ61208.M (Chemstation Integrator)
Title : Diesel/M_Oil (c10-c36) Calibration
Last Update : Sun Dec 17 13:03:16 2006
Response via : Initial Calibration
DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
Signal Phase : RTX-5
Signal Info : 0.53 mm /30m

MCM
12/19/06

Compound	R.T.	Response	Conc Units

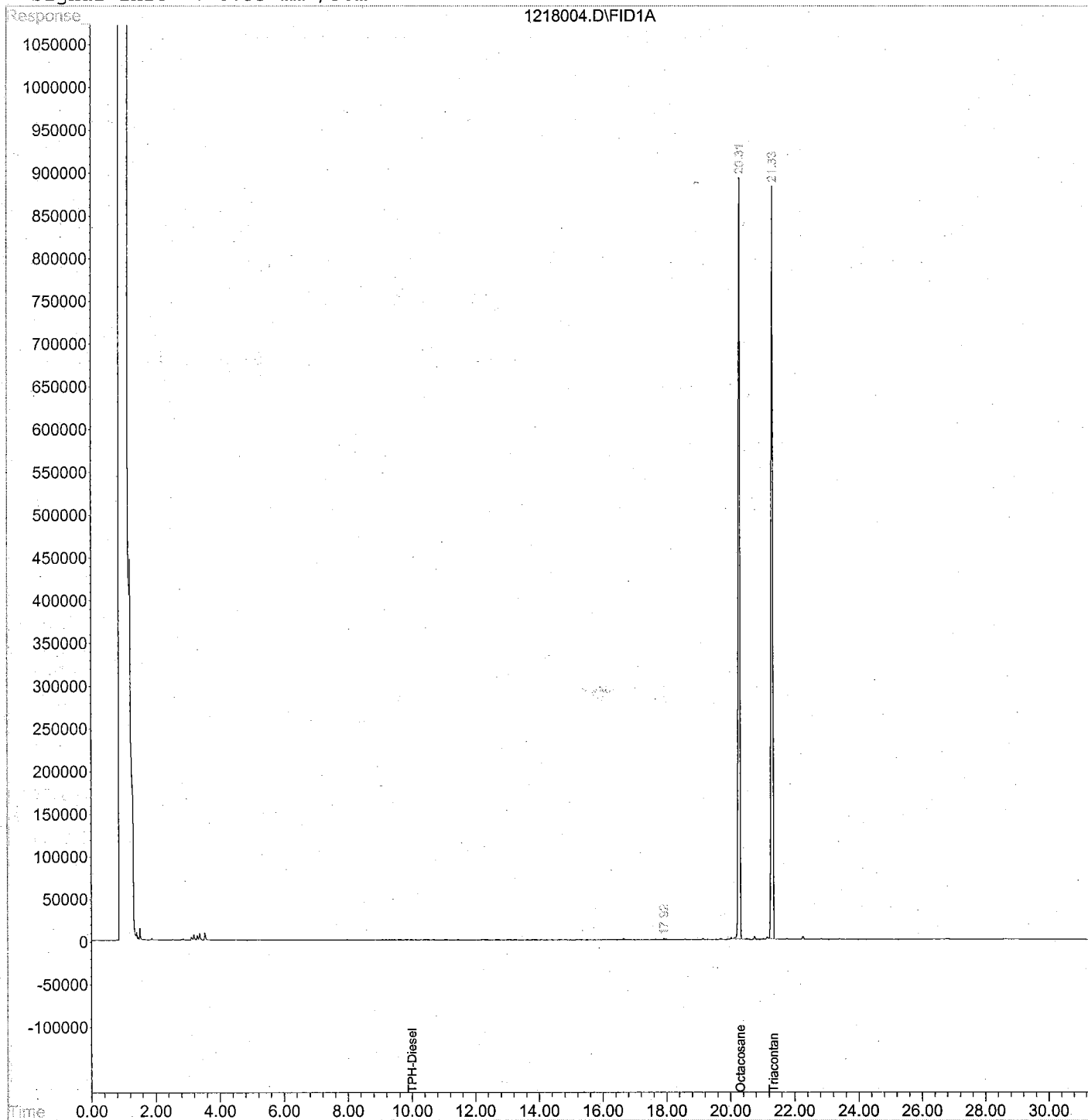
System Monitoring Compounds			
3) S Octacosane	20.31	30336313	261.084 mg/L
Spiked Amount 250.000		Recovery =	104.43%
4) S Triacontane	21.33	30060129	255.218 mg/L
Spiked Amount 250.000		Recovery =	102.09%
Target Compounds			
1) H TPH-Diesel (c10-c24)	10.00	4016766	21.354 mg/L
2) H Motor Oil (c24-c36)	21.00	3829690	N.D. mg/L

Quantitation Report

Data File : C:\HPCHEM\1\DATA\121806\1218004.D Vial: 4
 Acq On : 18 Dec 2006 1:11 pm Operator: MCM
 Sample : wmb 12/11 1L:1ml Inst : GCQ
 Misc : Multiplr: 1.00
 IntFile : events.e
 Quant Time: Dec 19 10:07 2006 Quant Results File: DOQ61208.RES

Quant Method : C:\HPCHEM\1\METHODS\DOQ61208.M (Chemstation Integrator)
 Title : Diesel/M_Oil (c10-c36) Calibration
 Last Update : Sun Dec 17 13:03:16 2006
 Response via : Multiple Level Calibration
 DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
 Signal Phase : RTX-5
 Signal Info : 0.53 mm /30m



QC Summary

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893
Sample Matrix: Water

Service Request: D0601981

Surrogate Recovery Summary
Diesel Range Organics

Extraction Method: EPA 3510C
Analysis Method: 8015B

Units: PERCENT
Level: Low

<u>Sample Name</u>	<u>Lab Code</u>	<u>Sur1</u>	<u>Sur2</u>
LF6GW103CL	D0601981-001	82	80
Method Blank	DWG0601056-3	104	102
Lab Control Sample	DWG0601056-1	101	99
Duplicate Lab Control Sample	DWG0601056-2	132	129

Surrogate Recovery Control Limits (%)

Sur1 = Octacosane	65-135
Sur2 = n-Triacontane	65-135

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893
Sample Matrix: Water

Service Request: D0601981
Date Extracted: 12/11/2006
Date Analyzed: 12/18/2006

Lab Control Spike/Duplicate Lab Control Spike Summary
Diesel Range Organics

Extraction Method: EPA 3510C
Analysis Method: 8015B

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: DWG0601056

Analyte Name	Lab Control Sample DWG0601056-1 Lab Control Spike			Duplicate Lab Control Sample DWG0601056-2 Duplicate Lab Control Spike			%Rec Limits	RPD	RPD Limit
	Result	Expected	%Rec	Result	Expected	%Rec			
TPH-Diesel (C10-C24)	2390	2500	96	2600	2500	104	65-135	8	35

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893
Sample Matrix: Water

Service Request: D0601981
Date Extracted: 12/11/2006
Date Analyzed: 12/18/2006
Time Analyzed: 13:11

Method Blank Summary
Diesel Range Organics

Sample Name: Method Blank
Lab Code: DWG0601056-3

File ID: Q:\TARGET\CHEM\GCQ\I121806O\1218004
Instrument ID: GCQ

Extraction Method: EPA 3510C
Analysis Method: 8015B

Level: Low
Extraction Lot: DWG0601056

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	DWG0601056-1	Q:\TARGET\CHEM\GCQ\I121806O\1218005.D	12/18/06	13:51
Duplicate Lab Control Sample	DWG0601056-2	Q:\TARGET\CHEM\GCQ\I121806O\1218006.D	12/18/06	14:30
LF6GW103CL	D0601981-001	Q:\TARGET\CHEM\GCQ\I121806O\1218010.D	12/18/06	18:35

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893
Sample Matrix: Water

Service Request: D0601981

Lab Control Sample/Duplicate Lab Control Sample Summary
Diesel Range Organics

Sample Name: Lab Control Sample
Lab Code: DWG0601056-1
File ID: Q:\TARGET\CHEM\GCQ\I121806O\1218005.D
Instrument ID: GCQ
Date Extracted: 12/11/2006
Date Analyzed: 12/18/2006
Time Analyzed: 13:51

Sample Name: Duplicate Lab Control Sample
Lab Code: DWG0601056-2
File ID: Q:\TARGET\CHEM\GCQ\I121806O\1218006.D
Instrument ID: GCQ
Date Extracted: 12/11/2006
Date Analyzed: 12/18/2006
Time Analyzed: 14:30

Extraction Method: EPA 3510C
Analysis Method: 8015B

Level: Low
Extraction Lot: DWG0601056

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	DWG0601056-3	Q:\TARGET\CHEM\GCQ\I121806O\1218004.D	12/18/06	13:11
LF6GW103CL	D0601981-001	Q:\TARGET\CHEM\GCQ\I121806O\1218010.D	12/18/06	18:35

Standards Data

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893

Service Request: D0601981
ICAL Date: 12/08/2006

Initial Calibration Summary
Diesel Range Organics

ICAL ID: CAL1237
Instrument ID: GCQ

Column: RTX-5

Level ID	File ID	Level ID	File ID
A	C:\HPCHEM\1\DATA\120806R\1208004.D	E	C:\HPCHEM\1\DATA\120806R\1208008.D
B	C:\HPCHEM\1\DATA\120806R\1208005.D	F	C:\HPCHEM\1\DATA\120806R\1208009.D
C	C:\HPCHEM\1\DATA\120806R\1208006.D	G	C:\HPCHEM\1\DATA\120806R\1208010.D
D	C:\HPCHEM\1\DATA\120806R\1208007.D	H	C:\HPCHEM\1\DATA\120806R\1208011.D

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF	ID	Amt	RF
TPH-Diesel (C10-C24)	A	5.0	2.12E+5	B	10	1.99E+5	C	50	2.04E+5	D	100	2.03E+5	E	500	1.98E+5
	F	1000	1.73E+5	G	2500	1.62E+5	H	5000	1.53E+5						
Octacosane				B	5.0	1.09E+5	C	25	1.20E+5	D	50	1.22E+5	E	75	1.29E+5
	F	130	1.13E+5	G	150	1.10E+5	H	300	1.11E+5						
n-Triacontane				B	5.0	1.12E+5	C	25	1.22E+5	D	50	1.24E+5	E	75	1.31E+5
	F	130	1.15E+5	G	150	1.10E+5	H	300	1.10E+5						

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893

Service Request: D0601981
ICAL Date: 12/08/2006

Initial Calibration Summary
Diesel Range Organics

ICAL ID: CAL1237
Instrument ID: GCQ

Column: RTX-5

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
TPH-Diesel (C10-C24)	MS	AverageRF	% RSD	11.8		≤ 20
Octacosane	SURR	AverageRF	% RSD	6.4		≤ 20
n-Triacontane	SURR	AverageRF	% RSD	6.8		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

Data File : C:\HPCHEM\1\DATA\120806R\1208004.D Vial: 4
Acq On : 8 Dec 2006 7:30 pm Operator: MCM
Sample : 5ppm Gas/Dsl/Oil Std Inst : GCQ
Misc : 22-GC-64J Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 16 18:55 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)
Title : Diesel/M Oil (c10-c36) Calibration
Last Update : Sat Dec 16 18:54:33 2006
Response via : Initial Calibration
DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
Signal Phase : RTX-5
Signal Info : 0.53 mm /30m

mem
12/16/06

Compound	R.T.	Response	Conc Units

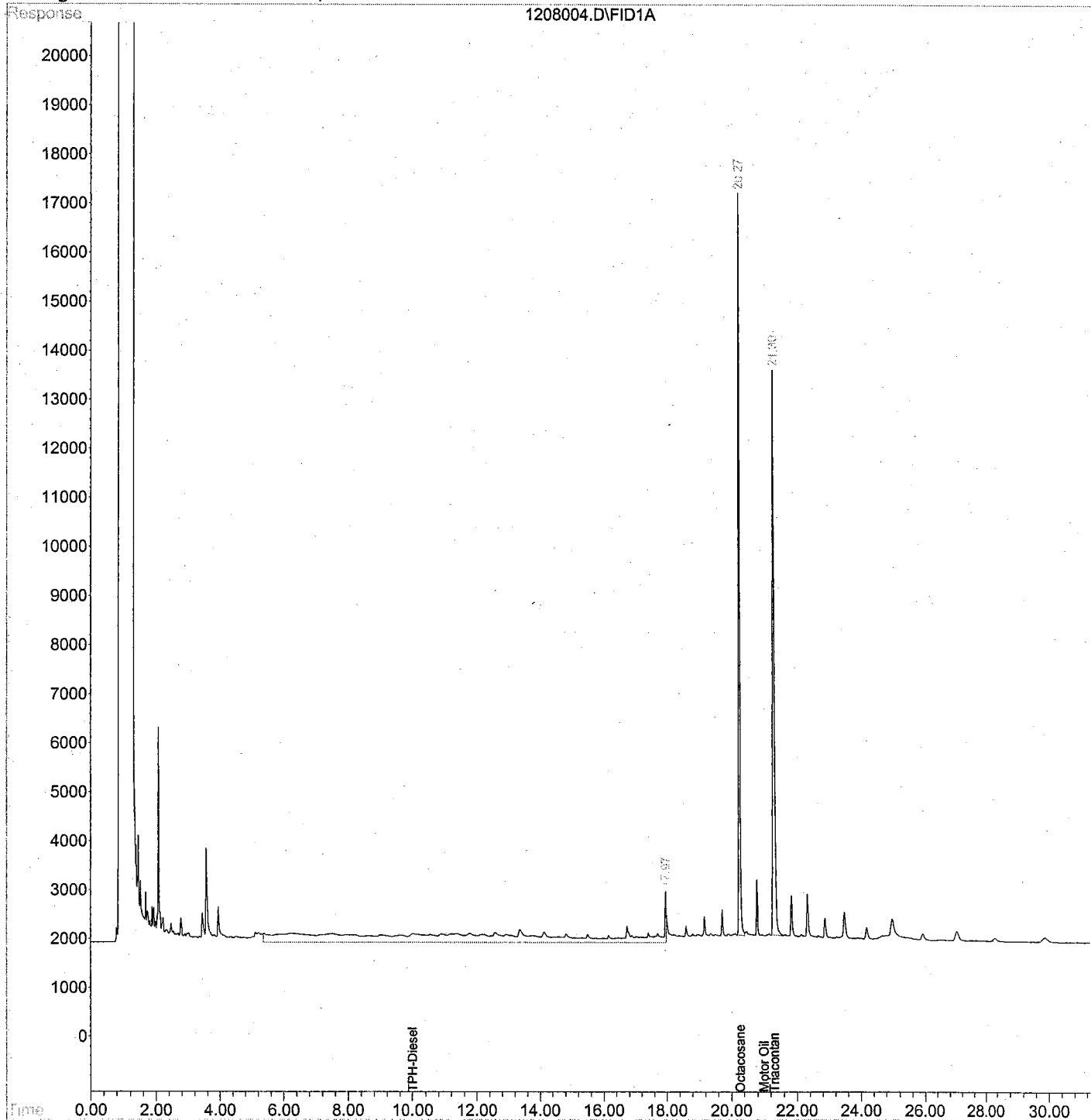
System Monitoring Compounds			
3) S Octacosane	20.27	392233	3.799 mg/L
Spiked Amount 75.000		Recovery =	5.07%
4) S Triacontane	21.30	411397	3.932 mg/L
Spiked Amount 75.000		Recovery =	5.24%
Target Compounds			
1) H TPH-Diesel (c10-c24)	10.00	1062048	6.795 mg/L
2) H Motor Oil (c24-c36)	21.00	735698	9.430 mg/L

Quantitation Report

Data File : C:\HPCHEM\1\DATA\120806R\1208004.D Vial: 4
 Acq On : 8 Dec 2006 7:30 pm Operator: MCM
 Sample : 5ppm Gas/Dsl/Oil Std Inst : GCQ
 Misc : 22-GC-64J Multiplr: 1.00
 IntFile : events.e
 Quant Time: Dec 16 18:55 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)
 Title : Diesel/M_Oil (c10-c36) Calibration
 Last Update : Sat Dec 16 18:54:33 2006
 Response via : Multiple Level Calibration
 DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
 Signal Phase : RTX-5
 Signal Info : 0.53 mm /30m



Data File : C:\HPCHEM\1\DATA\120806R\1208005.D Vial: 5
Acq On : 8 Dec 2006 8:10 pm Operator: MCM
Sample : 10ppm Gas/Dsl/Oil Std Inst : GCQ
Misc : 22-GC-64K Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 16 18:55 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)
Title : Diesel/M_Oil (c10-c36) Calibration
Last Update : Sat Dec 16 18:54:33 2006
Response via : Initial Calibration
DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
Signal Phase : RTX-5
Signal Info : 0.53 mm /30m

mem 12/18/06

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S Octacosane	20.26	546002	5.288 mg/L
Spiked Amount 75.000		Recovery =	7.05%
4) S Triacontane	21.29	562130	5.373 mg/L
Spiked Amount 75.000		Recovery =	7.16%
Target Compounds			
1) H TPH-Diesel (c10-c24)	10.00	1991024	12.738 mg/L
2) H Motor Oil (c24-c36)	21.00	1220640	15.646 mg/L

Quantitation Report

Data File : C:\HPCHEM\1\DATA\120806R\1208005.D

Vial: 5

Acq On : 8 Dec 2006 8:10 pm

Operator: MCM

Sample : 10ppm Gas/Dsl/Oil Std

Inst : GCQ

Misc : 22-GC-64K

Multiplr: 1.00

IntFile : events.e

Quant Time: Dec 16 18:55 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)

Title : Diesel/M_Oil (c10-c36) Calibration

Last Update : Sat Dec 16 18:54:33 2006

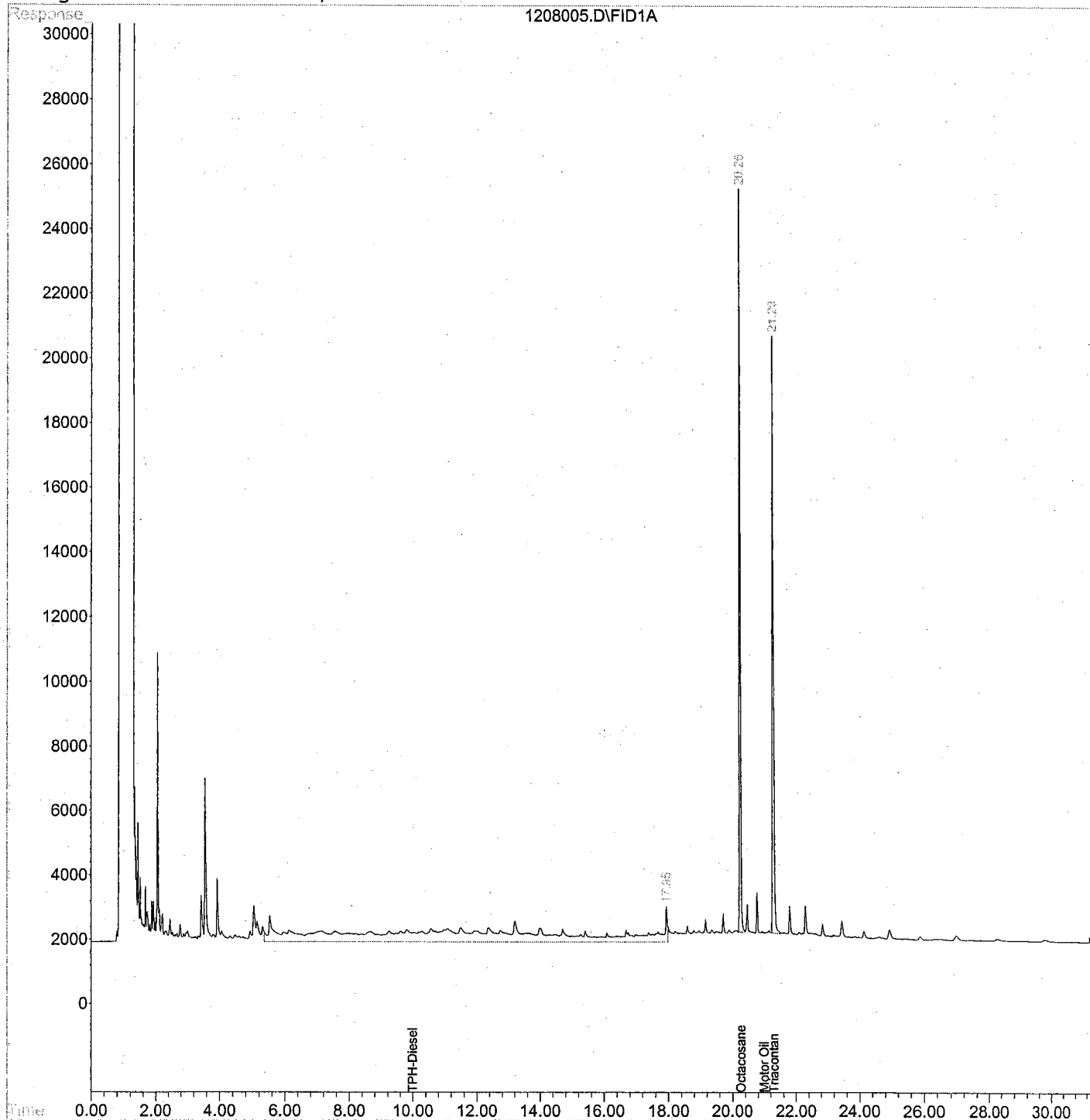
Response via : Multiple Level Calibration

DataAcq Meth : GCQFC.M

Volume Inj. : 5uL

Signal Phase : RTX-5

Signal Info : 0.53 mm /30m



Data File : C:\HPCHEM\1\DATA\120806R\1208006.D Vial: 6
Acq On : 8 Dec 2006 8:49 pm Operator: MCM
Sample : 50ppm Gas/Dsl/Oil Std Inst : GCQ
Misc : 22-GC-64D Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 16 18:55 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)
Title : Diesel/M_Oil (c10-c36) Calibration
Last Update : Sat Dec 16 18:54:33 2006
Response via : Initial Calibration
DataAcq Meth : GCQFC.M

mem
12/16/06

Volume Inj. : 5uL
Signal Phase : RTX-5
Signal Info : 0.53 mm /30m

Compound	R.T.	Response	Conc Units

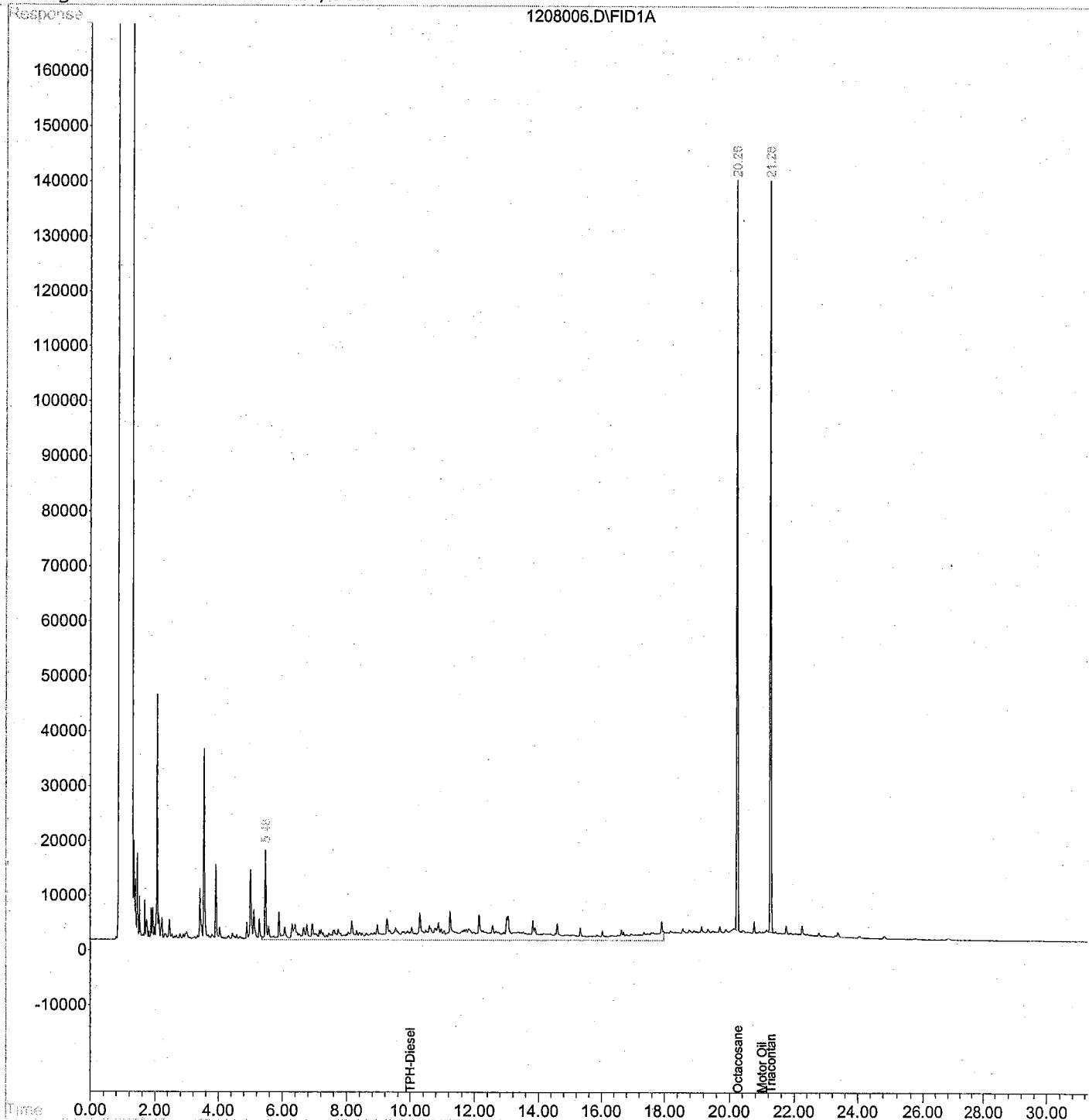
System Monitoring Compounds			
3) S Octacosane	20.26	2990844	28.967 mg/L
Spiked Amount 75.000		Recovery =	38.62%
4) S Triacontane	21.28	3055285	29.204 mg/L
Spiked Amount 75.000		Recovery =	38.94%
Target Compounds			
1) H TPH-Diesel (c10-c24)	10.00	10200414	65.260 mg/L
2) H Motor Oil (c24-c36)	21.00	5330755	68.328 mg/L

Quantitation Report

Data File : C:\HPCHEM\1\DATA\120806R\1208006.D Vial: 6
 Acq On : 8 Dec 2006 8:49 pm Operator: MCM
 Sample : 50ppm Gas/Dsl/Oil Std Inst : GCQ
 Misc : 22-GC-64D Multiplr: 1.00
 IntFile : events.e
 Quant Time: Dec 16 18:55 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)
 Title : Diesel/M_Oil (c10-c36) Calibration
 Last Update : Sat Dec 16 18:54:33 2006
 Response via : Multiple Level Calibration
 DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
 Signal Phase : RTX-5
 Signal Info : 0.53 mm /30m



Data File : C:\HPCHEM\1\DATA\120806R\1208007.D Vial: 7
Acq On : 8 Dec 2006 9:29 pm Operator: MCM
Sample : 100ppm Gas/Dsl/Oil Std Inst : GCQ
Misc : 22-GC-64E Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 16 18:55 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)
Title : Diesel/M_Oil (c10-c36) Calibration
Last Update : Sat Dec 16 18:54:33 2006
Response via : Initial Calibration
DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
Signal Phase : RTX-5
Signal Info : 0.53 mm /30m

mem 12/18/06

Compound	R.T.	Response	Conc Units

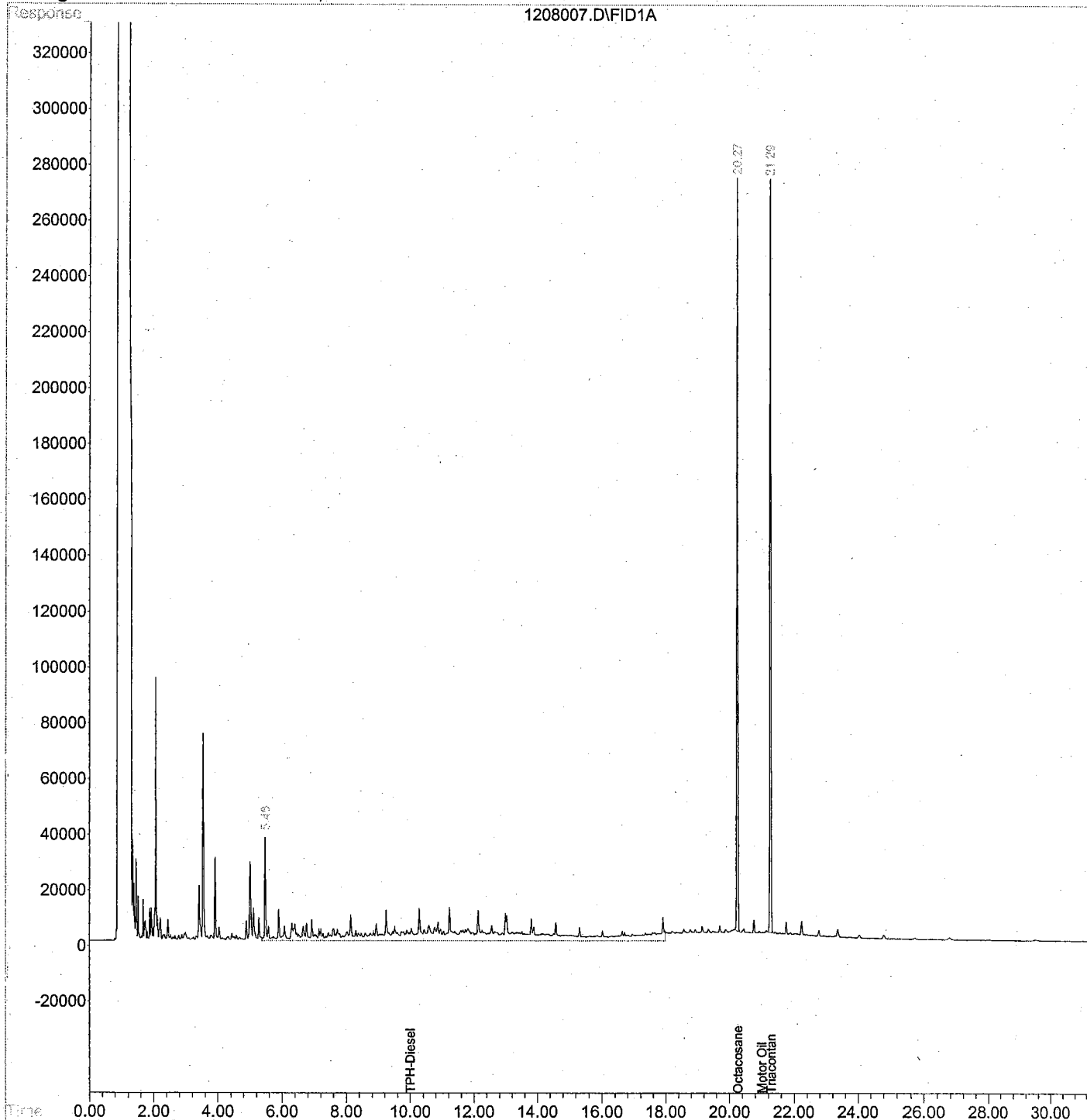
System Monitoring Compounds			
3) S Octacosane	20.27	6082102	58.906 mg/L
Spiked Amount 75.000		Recovery =	78.54%
4) S Triacontane	21.29	6209218	59.350 mg/L
Spiked Amount 75.000		Recovery =	79.13%
Target Compounds			
1) H TPH-Diesel (c10-c24)	10.00	20316586	129.982 mg/L
2) H Motor Oil (c24-c36)	21.00	10706682	137.235 mg/L

Quantitation Report

Data File : C:\HPCHEM\1\DATA\120806R\1208007.D Vial: 7
 Acq On : 8 Dec 2006 9:29 pm Operator: MCM
 Sample : 100ppm Gas/Dsl/Oil Std Inst : GCQ
 Misc : 22-GC-64E Multiplr: 1.00
 IntFile : events.e
 Quant Time: Dec 16 18:55 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)
 Title : Diesel/M_Oil (c10-c36) Calibration
 Last Update : Sat Dec 16 18:54:33 2006
 Response via : Multiple Level Calibration
 DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
 Signal Phase : RTX-5
 Signal Info : 0.53 mm /30m



Data File : C:\HPCHEM\1\DATA\120806R\1208008.D Vial: 8
Acq On : 8 Dec 2006 10:09 pm Operator: MCM
Sample : 500ppm Gas/Dsl/Oil Std Inst : GCQ
Misc : 22-GC-64F Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 16 18:55 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)
Title : Diesel/M_Oil (c10-c36) Calibration
Last Update : Sat Dec 16 18:54:33 2006
Response via : Initial Calibration
DataAcq Meth : GCQFC.M

mem
12/18/06

Volume Inj. : 5uL
Signal Phase : RTX-5
Signal Info : 0.53 mm /30m

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S Octacosane	20.28	9681743	93.770 mg/L
Spiked Amount 75.000		Recovery =	125.03%
4) S Triacontane	21.31	9799526	93.668 mg/L
Spiked Amount 75.000		Recovery =	124.89%
Target Compounds			
1) H TPH-Diesel (c10-c24)	10.00	99208277	634.716 mg/L
2) H Motor Oil (c24-c36)	21.00	48218620	618.052 mg/L

Quantitation Report

Data File : C:\HPCHEM\1\DATA\120806R\1208008.D

Vial: 8

Acq On : 8 Dec 2006 10:09 pm

Operator: MCM

Sample : 500ppm Gas/Dsl/Oil Std

Inst : GCQ

Misc : 22-GC-64F

Multiplr: 1.00

IntFile : events.e

Quant Time: Dec 16 18:55 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)

Title : Diesel/M_Oil (c10-c36) Calibration

Last Update : Sat Dec 16 18:54:33 2006

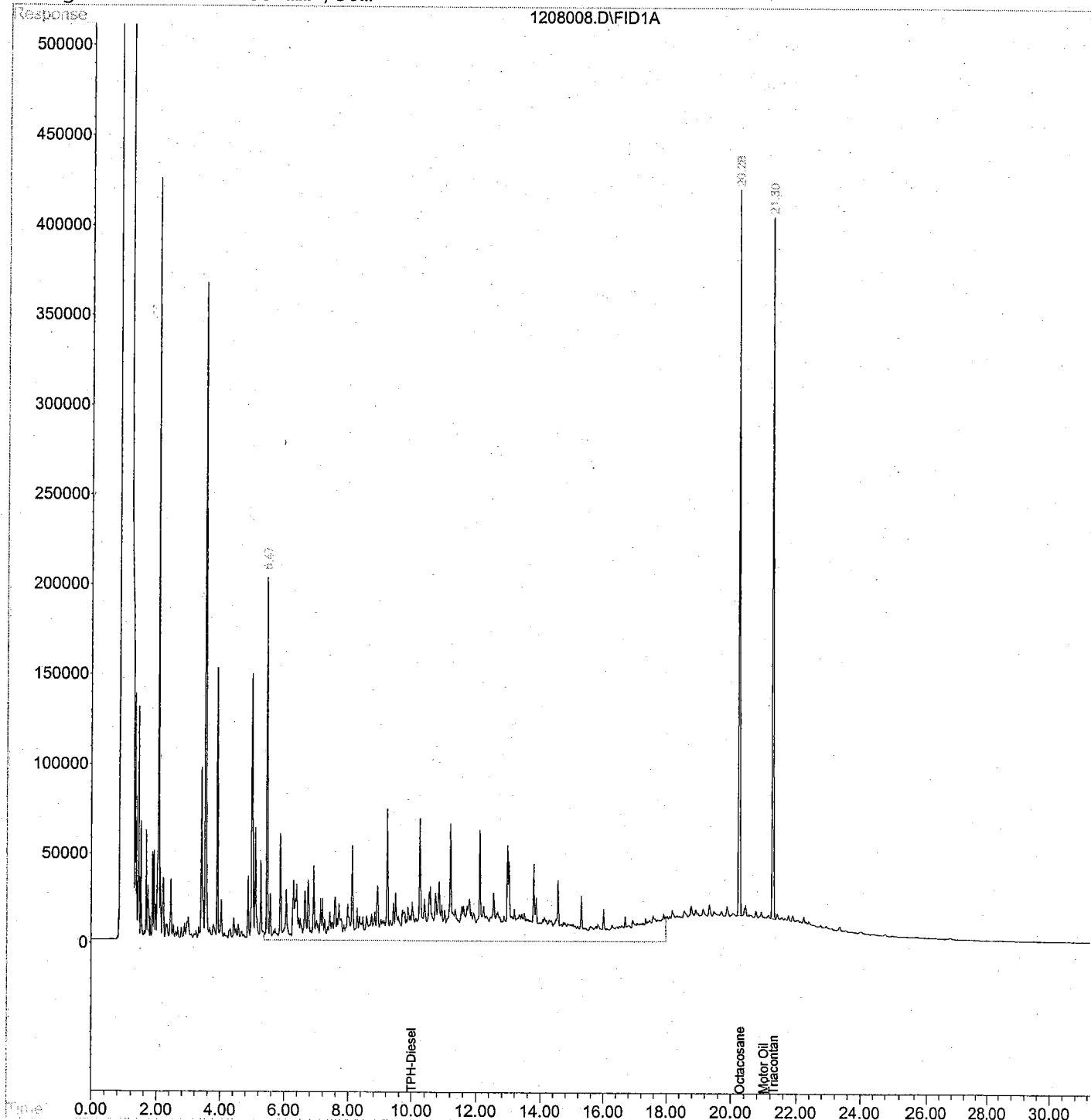
Response via : Multiple Level Calibration

DataAcq Meth : GCQFC.M

Volume Inj. : 5uL

Signal Phase : RTX-5

Signal Info : 0.53 mm /30m



Data File : C:\HPCHEM\1\DATA\120806R\1208009.D Vial: 9
Acq On : 8 Dec 2006 10:48 pm Operator: MCM
Sample : 1000ppm Gas/Dsl/Oil Std Inst : GCQ
Misc : 22-GC-64G Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 16 18:55 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)
Title : Diesel/M_Oil (c10-c36) Calibration
Last Update : Sat Dec 16 18:54:33 2006
Response via : Initial Calibration
DataAcq Meth : GCQFC.M

mem
12/16/06

Volume Inj. : 5uL
Signal Phase : RTX-5
Signal Info : 0.53 mm /30m

Compound	R.T.	Response	Conc Units

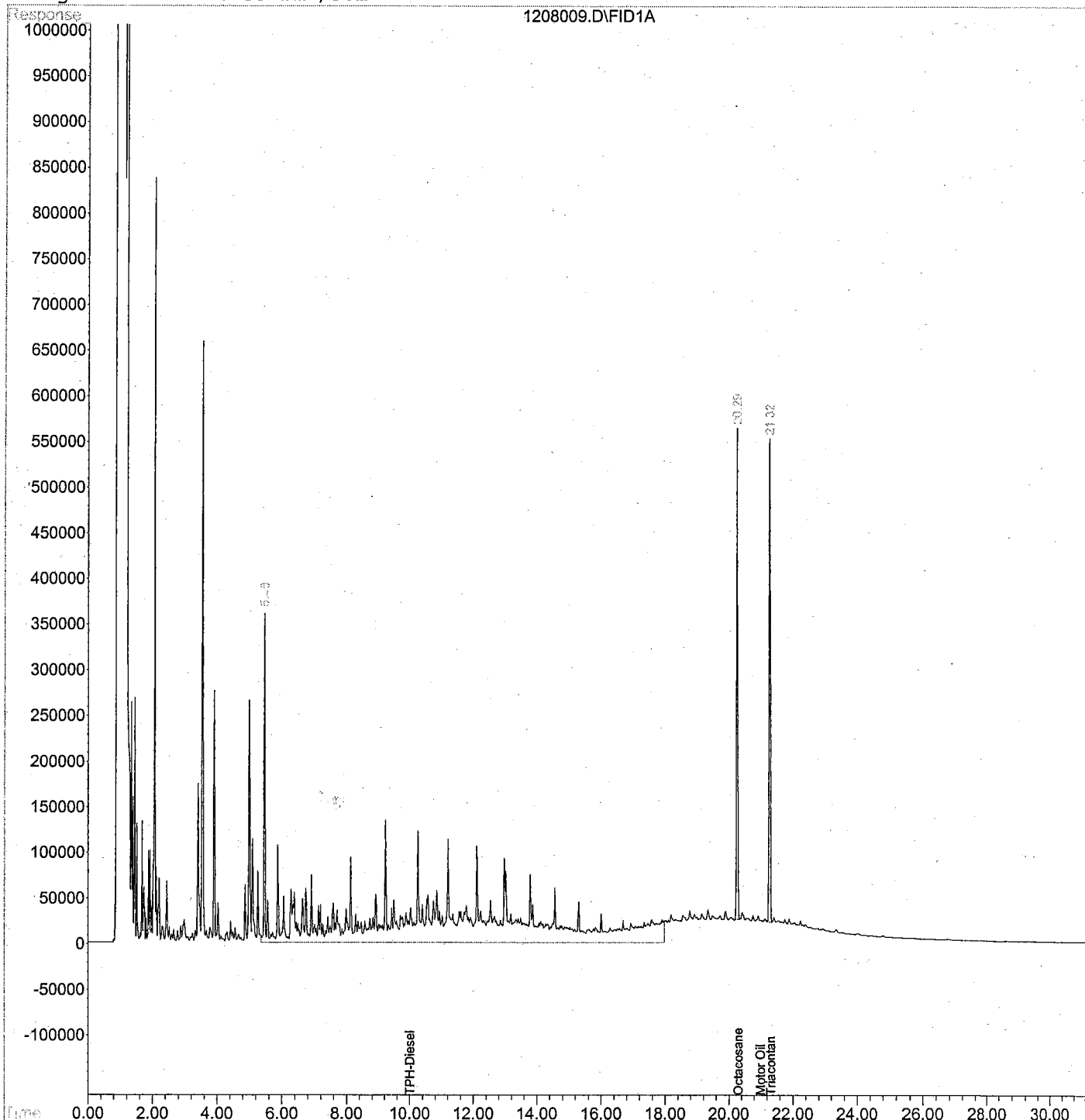
System Monitoring Compounds			
3) S Octacosane	20.29	14140340	136.952 mg/L
Spiked Amount 75.000		Recovery =	182.60%
4) S Triacontane	21.32	14346774	137.132 mg/L
Spiked Amount 75.000		Recovery =	182.84%
Target Compounds			
1) H TPH-Diesel (c10-c24)	10.00	172696624	1104.880 mg/L
2) H Motor Oil (c24-c36)	21.00	84583318	1084.165 mg/L

Quantitation Report

Data File : C:\HPCHEM\1\DATA\120806R\1208009.D Vial: 9
 Acq On : 8 Dec 2006 10:48 pm Operator: MCM
 Sample : 1000ppm Gas/Dsl/Oil Std Inst : GCQ
 Misc : 22-GC-64G Multiplr: 1.00
 IntFile : events.e
 Quant Time: Dec 16 18:55 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)
 Title : Diesel/M_Oil (c10-c36) Calibration
 Last Update : Sat Dec 16 18:54:33 2006
 Response via : Multiple Level Calibration
 DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
 Signal Phase : RTX-5
 Signal Info : 0.53 mm /30m



Data File : C:\HPCHEM\1\DATA\120806R\1208010.D Vial: 10
Acq On : 8 Dec 2006 11:28 pm Operator: MCM
Sample : 2500ppm Gas/Dsl/Oil Std Inst : GCQ
Misc : 22-GC-64H Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 16 18:55 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)
Title : Diesel/M Oil (c10-c36) Calibration
Last Update : Sat Dec 16 18:54:33 2006
Response via : Initial Calibration
DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
Signal Phase : RTX-5
Signal Info : 0.53 mm /30m

mem
12/18/06

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S Octacosane	20.31	16488237	159.692 mg/L
Spiked Amount 75.000		Recovery =	212.92%
4) S Triacontane	21.33	16475929	157.483 mg/L
Spiked Amount 75.000		Recovery =	209.98%
Target Compounds			
1) H TPH-Diesel (c10-c24)	10.00	405169521	2592.198 mg/L
2) H Motor Oil (c24-c36)	21.00	195976130	2511.965 mg/L

Quantitation Report

Data File : C:\HPCHEM\1\DATA\120806R\1208010.D

Vial: 10

Acq On : 8 Dec 2006 11:28 pm

Operator: MCM

Sample : 2500ppm Gas/Dsl/Oil Std

Inst : GCQ

Misc : 22-GC-64H

Multiplr: 1.00

IntFile : events.e

Quant Time: Dec 16 18:55 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)

Title : Diesel/M_Oil (c10-c36) Calibration

Last Update : Sat Dec 16 18:54:33 2006

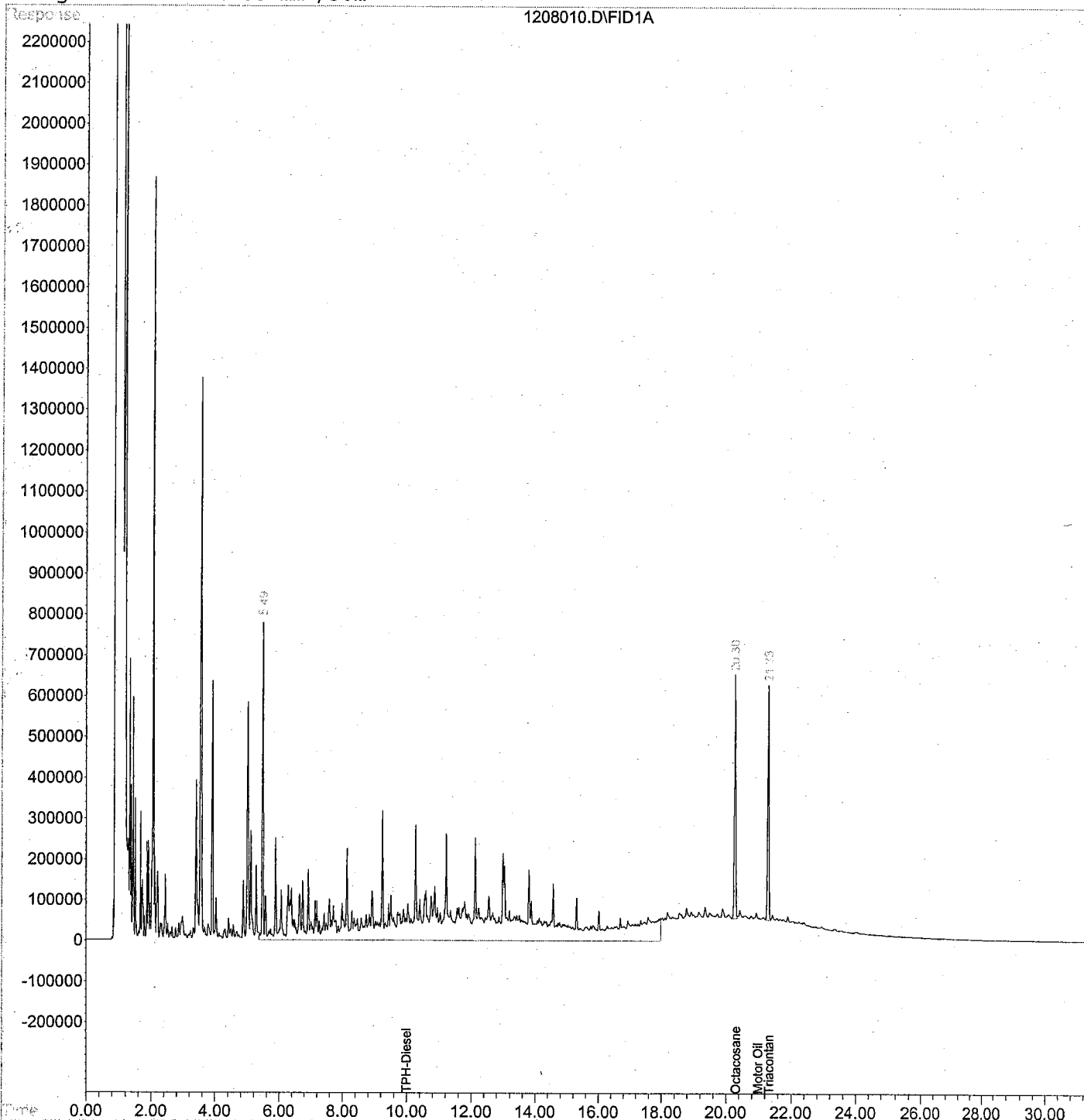
Response via : Multiple Level Calibration

DataAcq Meth : GCQFC.M

Volume Inj. : 5uL

Signal Phase : RTX-5

Signal Info : 0.53 mm /30m



Data File : C:\HPCHEM\1\DATA\120806R\1208011.D Vial: 11
Acq On : 9 Dec 2006 12:08 am Operator: MCM
Sample : 5000ppm Gas/Dsl/Oil Std Inst : GCQ
Misc : 22-GC-72A Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 16 18:56 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)
Title : Diesel/M Oil (c10-c36) Calibration
Last Update : Sat Dec 16 18:54:33 2006
Response via : Initial Calibration
DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
Signal Phase : RTX-5
Signal Info : 0.53 mm /30m

mem
12/16/06

Compound	R.T.	Response	Conc Units

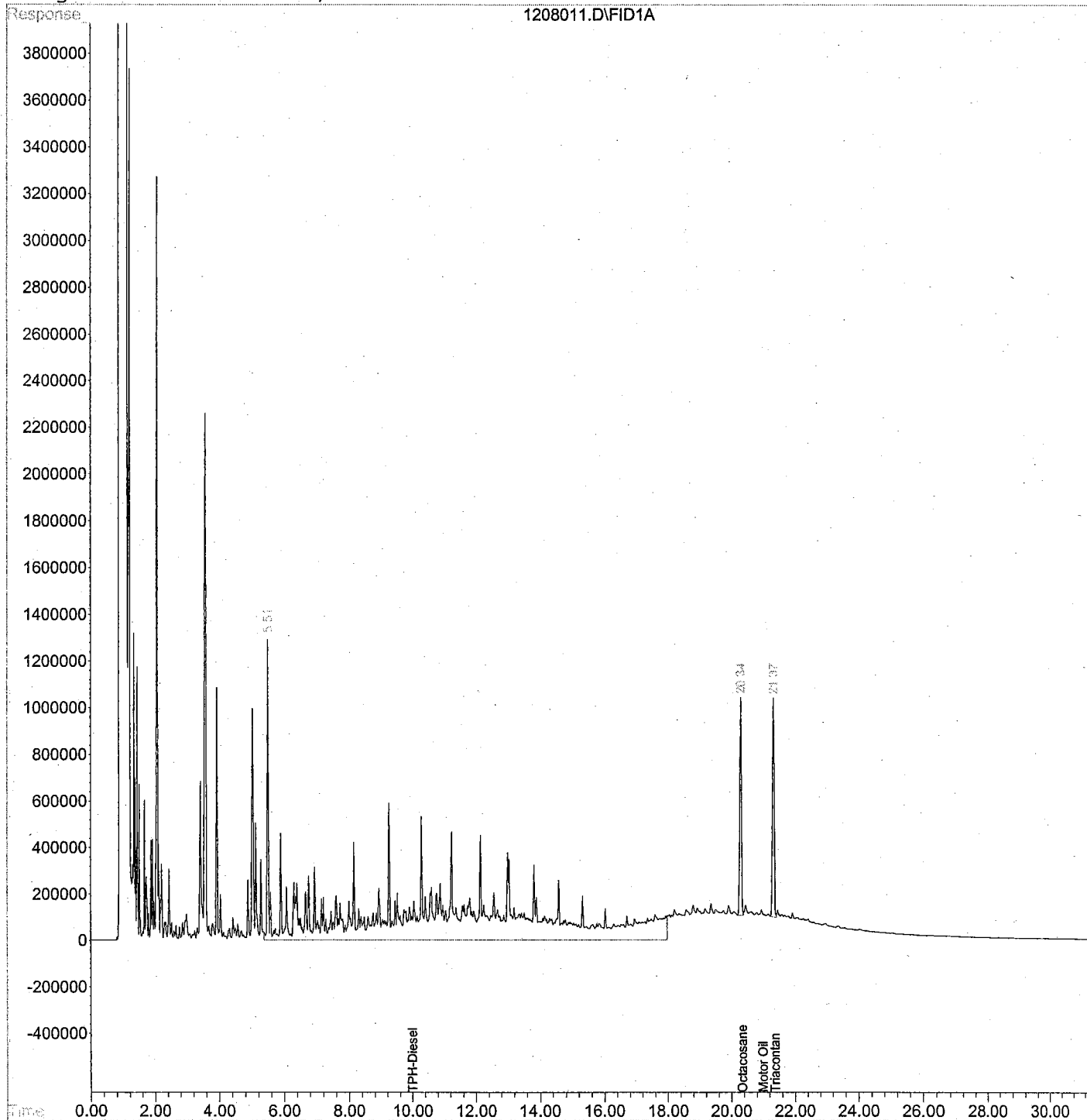
System Monitoring Compounds			
3) S Octacosane	20.34f	33223593	321.777 mg/L
Spiked Amount 75.000		Recovery =	429.04%
4) S Triacontane	21.37f	33113966	316.516 mg/L
Spiked Amount 75.000		Recovery =	422.02%
Target Compounds			
1) H TPH-Diesel (c10-c24)	10.00	764675632	4892.249 mg/L
2) H Motor Oil (c24-c36)	21.00	374141495	4795.638 mg/L

Quantitation Report

Data File : C:\HPCHEM\1\DATA\120806R\1208011.D Vial: 11
 Acq On : 9 Dec 2006 12:08 am Operator: MCM
 Sample : 5000ppm Gas/Dsl/Oil Std Inst : GCQ
 Misc : 22-GC-72A Multiplr: 1.00
 IntFile : events.e
 Quant Time: Dec 16 18:56 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)
 Title : Diesel/M_Oil (c10-c36) Calibration
 Last Update : Sat Dec 16 18:54:33 2006
 Response via : Multiple Level Calibration
 DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
 Signal Phase : RTX-5
 Signal Info : 0.53 mm /30m



COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893

Service Request: D0601981
ICAL Date: 12/08/2006
Date Analyzed: 12/09/2006

Second Source Calibration Verification
Diesel Range Organics

ICAL Type: External Standard
Analysis Method: 8015B

ICAL ID: CAL1237
Units: mg/L

File ID: C:\HPCHEM\1\DATA\120806R\1208015.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
TPH-Diesel (C10-C24)	1000	850	188000	159000	-15	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

Data File : C:\HPCHEM\1\DATA\120806R\1208015.D Vial: 13
Acq On : 9 Dec 2006 2:46 am Operator: MCM
Sample : 1000ppm Gas/Dsl/Oil ICV Std Inst : GCQ
Misc : 22-GC-64G Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 16 19:00 2006 Quant Results File: DOQ61208.RES

Quant Method : C:\HPCHEM\1\METHODS\DOQ61208.M (Chemstation Integrator)
Title : Diesel/M_Oil (c10-c36) Calibration
Last Update : Sat Dec 16 18:59:48 2006
Response via : Initial Calibration
DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
Signal Phase : RTX-5
Signal Info : 0.53 mm /30m

MEM
12/16/06

Compound	R.T.	Response	Conc Units

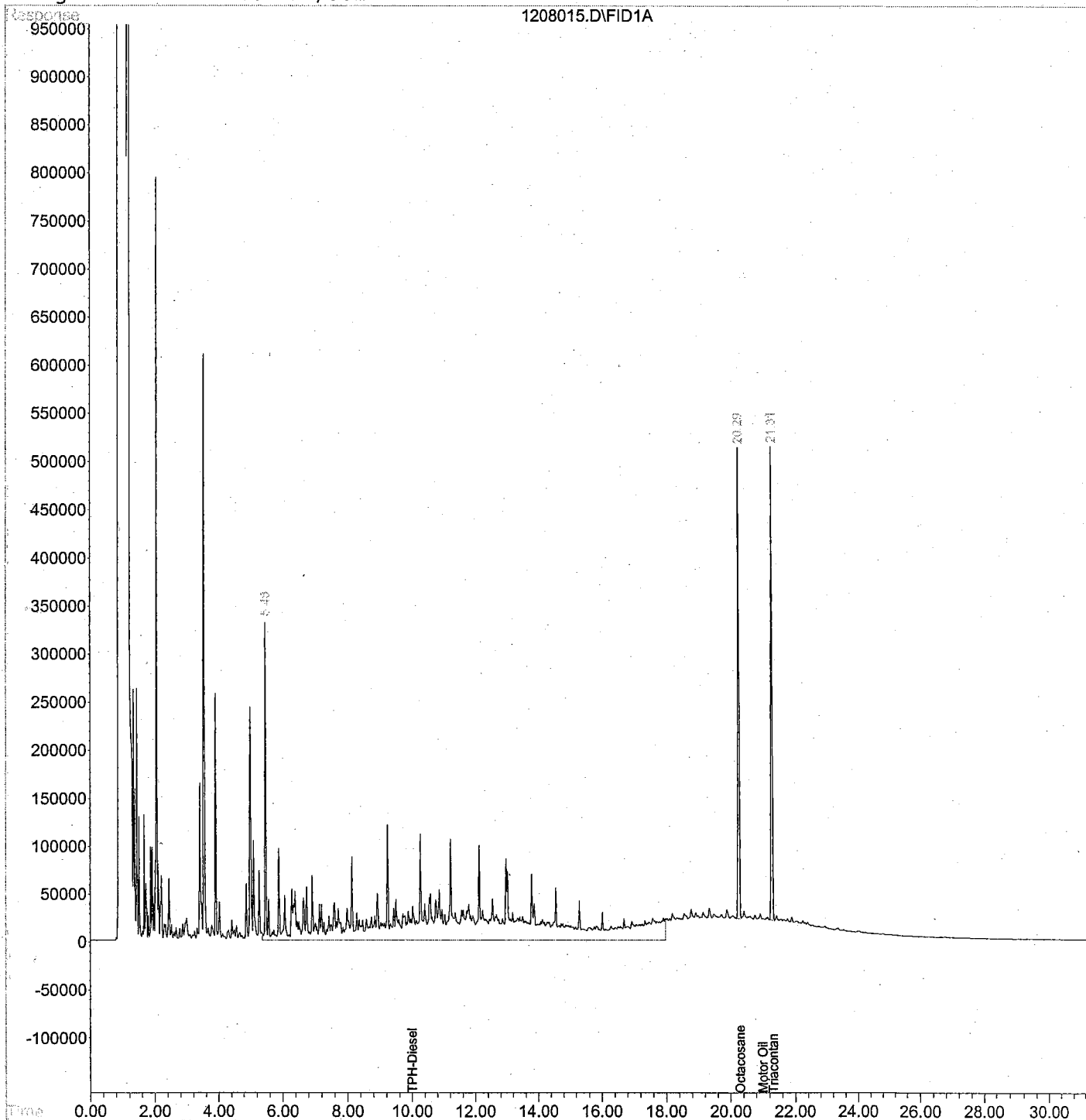
System Monitoring Compounds			
3) S Octacosane	20.29	12957208	111.514 mg/L
Spiked Amount 75.000		Recovery =	148.69%
4) S Triacontane	21.32	12999123	110.366 mg/L
Spiked Amount 75.000		Recovery =	147.15%
Target Compounds			
1) H TPH-Diesel (c10-c24)	10.00	159400142	847.421 mg/L
2) H Motor Oil (c24-c36)	21.00	77668559	979.060 mg/L

Quantitation Report

Data File : C:\HPCHEM\1\DATA\120806R\1208015.D Vial: 13
 Acq On : 9 Dec 2006 2:46 am Operator: MCM
 Sample : 1000ppm Gas/Dsl/Oil ICV Std Inst : GCQ
 Misc : 22-GC-64G Multiplr: 1.00
 IntFile : events.e
 Quant Time: Dec 16 19:00 2006 Quant Results File: DOQ61208.RES

Quant Method : C:\HPCHEM\1\METHODS\DOQ61208.M (Chemstation Integrator)
 Title : Diesel/M_Oil (c10-c36) Calibration
 Last Update : Sat Dec 16 18:59:48 2006
 Response via : Multiple Level Calibration
 DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
 Signal Phase : RTX-5
 Signal Info : 0.53 mm /30m



COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893

Service Request: D0601981
Date Analyzed: 12/18/2006

Continuing Calibration Verification Summary
Diesel Range Organics

ICAL Type: External Standard
Analysis Method: 8015B

ICAL Date: 12/08/2006
ICAL ID: CAL1237
Analysis Lot: DWG0601057
Units: mg/L
Column ID: RTX-5

File ID: C:\HPCHEM\1\DATA\121806\1218003.D

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
TPH-Diesel (C10-C24)	500	440	188000	166000	-12	NA	± 15 %	AverageRF
Octacosane	75	74	116000	115000	-1	NA	± 25 %	AverageRF
n-Triacontane	75	72	118000	113000	-4	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Data File : C:\HPCHEM\1\DATA\121806\1218003.D Vial: 3
Acq On : 18 Dec 2006 11:26 am Operator: MCM
Sample : 500ppm Gas/Dsl/Oil CCV Inst : GCQ
Misc : 22-GC-85h Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 19 10:07 2006 Quant Results File: DOQ61208.RES

Quant Method : C:\HPCHEM\1\METHODS\DOQ61208.M (Chemstation Integrator)
Title : Diesel/M_Oil (c10-c36) Calibration
Last Update : Sun Dec 17 13:03:16 2006
Response via : Initial Calibration
DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
Signal Phase : RTX-5
Signal Info : 0.53 mm /30m

mem
12/19/06

Compound	R.T.	Response	Conc Units

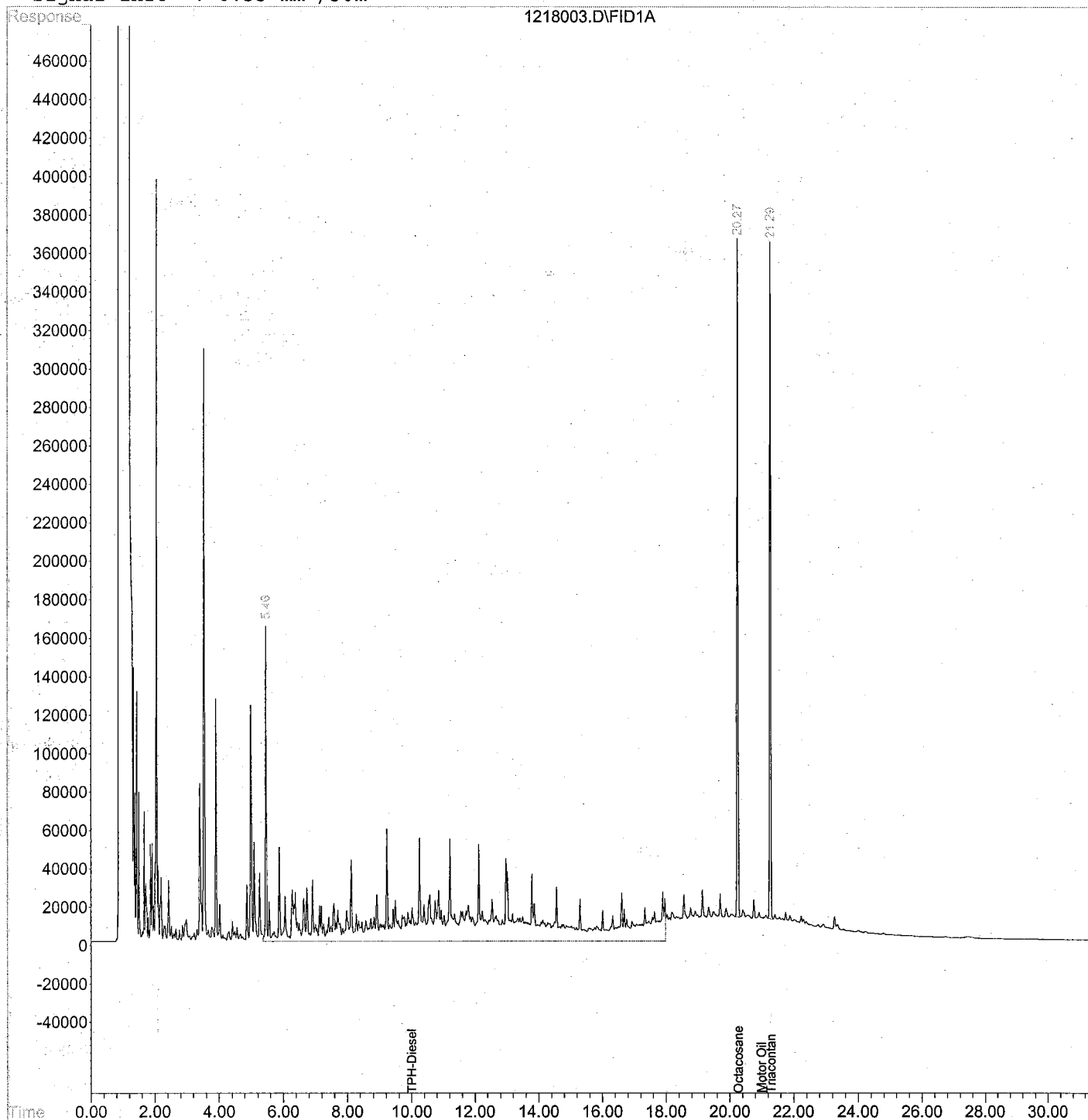
System Monitoring Compounds			
3) S Octacosane	20.27	8594465	73.967 mg/L
Spiked Amount 250.000		Recovery =	29.59%
4) S Triacontane	21.29	8504149	72.202 mg/L
Spiked Amount 250.000		Recovery =	28.88%
Target Compounds			
1) H TPH-Diesel (c10-c24)	10.00	82867535	440.550 mg/L
2) H Motor Oil (c24-c36)	21.00	43922455	527.423 mg/L

Quantitation Report

Data File : C:\HPCHEM\1\DATA\121806\1218003.D Vial: 3
 Acq On : 18 Dec 2006 11:26 am Operator: MCM
 Sample : 500ppm Gas/Dsl/Oil CCV Inst : GCQ
 Misc : 22-GC-85h Multiplr: 1.00
 IntFile : events.e
 Quant Time: Dec 19 10:07 2006 Quant Results File: DOQ61208.RES

Quant Method : C:\HPCHEM\1\METHODS\DOQ61208.M (Chemstation Integrator)
 Title : Diesel/M_Oil (c10-c36) Calibration
 Last Update : Sun Dec 17 13:03:16 2006
 Response via : Multiple Level Calibration
 DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
 Signal Phase : RTX-5
 Signal Info : 0.53 mm /30m



COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893

Service Request: D0601981
Date Analyzed: 12/18/2006

Continuing Calibration Verification Summary
Diesel Range Organics

ICAL Type: External Standard
Analysis Method: 8015B

ICAL Date: 12/08/2006
ICAL ID: CAL1237
Analysis Lot: DWG0601057
Units: mg/L
Column ID: RTX-5

File ID: C:\HPCHEM\1\DATA\121806\1218014.D

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
TPH-Diesel (C10-C24)	1000	880	188000	166000	-12	NA	± 15 %	AverageRF
Octacosane	130	120	116000	115000	-1	NA	± 25 %	AverageRF
n-Triacontane	130	120	118000	115000	-2	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Data File : C:\HPCHEM\1\DATA\121806\1218014.D Vial: 14
Acq On : 18 Dec 2006 9:13 pm Operator: MCM
Sample : 1000ppm Gas/Dsl/Oil CCV Inst : GCQ
Misc : 22-GC-85g Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 19 10:07 2006 Quant Results File: DOQ61208.RES

Quant Method : C:\HPCHEM\1\METHODS\DOQ61208.M (Chemstation Integrator)
Title : Diesel/M_Oil (c10-c36) Calibration
Last Update : Sun Dec 17 13:03:16 2006
Response via : Initial Calibration
DataAcq Meth : GCQFC.M

mem
12/19/06

Volume Inj. : 5uL
Signal Phase : RTX-5
Signal Info : 0.53 mm /30m

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S Octacosane	20.29	14417722	124.084 mg/L
Spiked Amount 250.000		Recovery =	49.63%
4) S Triacontane	21.31	14408978	122.336 mg/L
Spiked Amount 250.000		Recovery =	48.93%
Target Compounds			
1) H TPH-Diesel (c10-c24)	10.00	165581925	880.285 mg/L
2) H Motor Oil (c24-c36)	21.00	90060810	1144.911 mg/L

Quantitation Report

Data File : C:\HPCHEM\1\DATA\121806\1218014.D

Vial: 14

Acq On : 18 Dec 2006 9:13 pm

Operator: MCM

Sample : 1000ppm Gas/Dsl/Oil CCV

Inst : GCQ

Misc : 22-GC-85g

Multiplr: 1.00

IntFile : events.e

Quant Time: Dec 19 10:07 2006 Quant Results File: DOQ61208.RES

Quant Method : C:\HPCHEM\1\METHODS\DOQ61208.M (Chemstation Integrator)

Title : Diesel/M_Oil (c10-c36) Calibration

Last Update : Sun Dec 17 13:03:16 2006

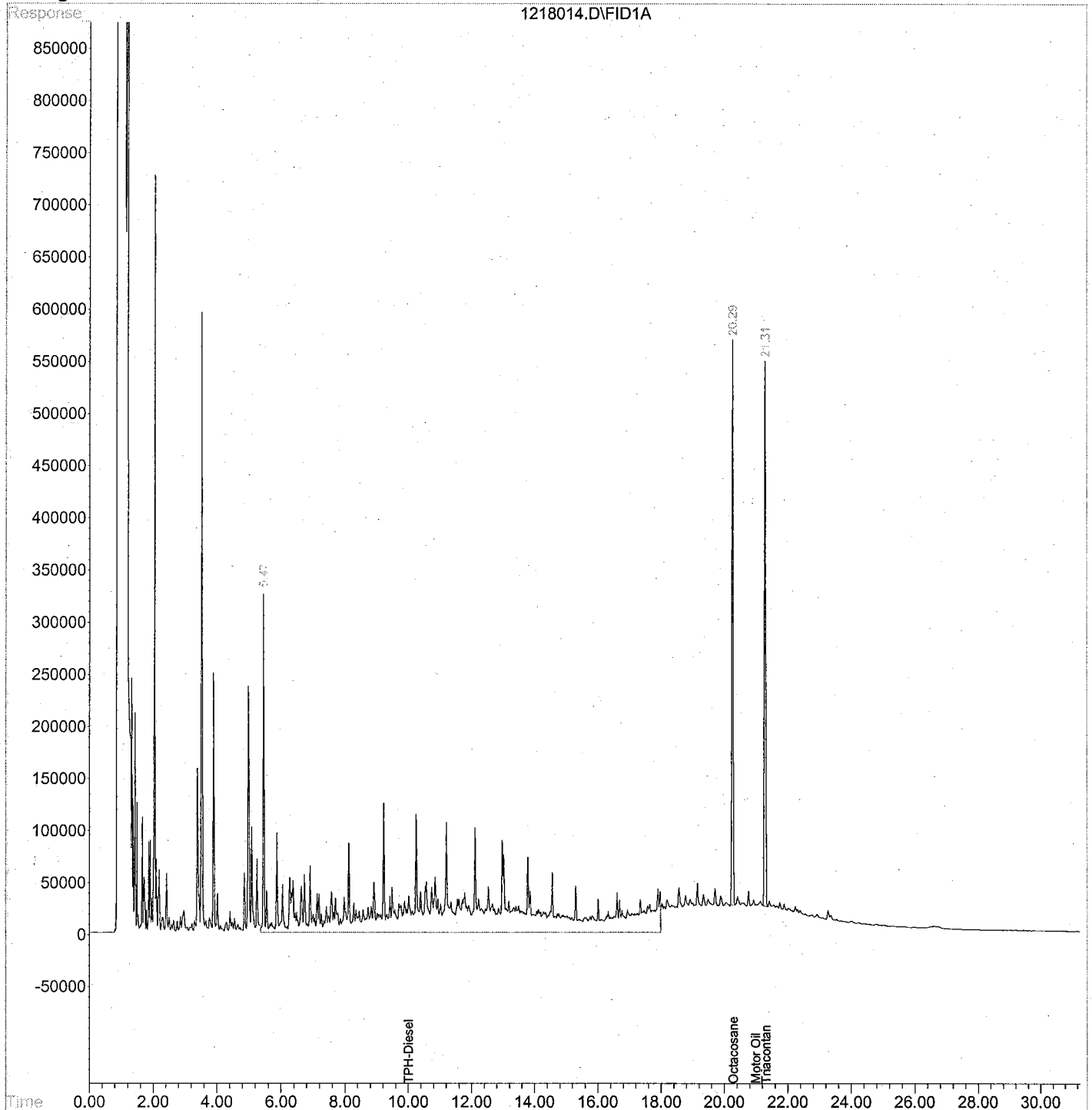
Response via : Multiple Level Calibration

DataAcq Meth : GCQFC.M

Volume Inj. : 5uL

Signal Phase : RTX-5

Signal Info : 0.53 mm /30m



COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893

Service Request: D0601981

Analysis Run Log
Diesel Range Organics

Analysis Method: 8015B

Analysis Lot: DWG0601057
Instrument ID: GCQ
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
\\1218003.D	Continuing Calibration Verification	DWG0601057-1	12/18/2006	11:26		12/18/2006	11:57
\\1218004.D	Method Blank	DWG0601056-3	12/18/2006	13:11		12/18/2006	13:42
\\1218005.D	Lab Control Sample	DWG0601056-1	12/18/2006	13:51		12/18/2006	14:22
\\1218006.D	Duplicate Lab Control Sample	DWG0601056-2	12/18/2006	14:30		12/18/2006	15:01
\\1218010.D	LF6GW103CL	D0601981-001	12/18/2006	18:35		12/18/2006	19:06
\\1218014.D	Continuing Calibration Verification	DWG0601057-2	12/18/2006	21:13		12/18/2006	21:44

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893
Sample Matrix: Water

Service Request: D0601981
Date Extracted: 12/11/2006

Extraction Prep Log
Diesel Range Organics

Extraction Method: EPA 3510C
Analysis Method: 8015B

Extraction Lot: DWG0601056
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
LF6GW103CL	D0601981-001	12/05/06	12/06/06	1.05L	1ml	NA	
Method Blank	DWG0601056-3	NA	NA	1.00L	1ml	NA	
Lab Control Sample	DWG0601056-1	NA	NA	1.00L	1ml	NA	
Duplicate Lab Control Sample	DWG0601056-2	NA	NA	1.00L	1ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

SUPPORT DOCUMENTATION

Date	12/11/12
Time	13:40

42/21

Batches DOW01981

Client(s) Treadwell & Rollo

Date sampled	
--------------	--

Analytical Method(s)	
☒	TFHD, 8015B
☐	DRO by 3520C
☐	DRAX, AK102.0
☒	Other DMO

Solvent Lots	
DCM	12/11/12

Spikes	
Surrogate	EXS-3882
Amt.	1.0 ml Exp: 11/9/07
Spike	EXS-3883
Amt.	1.0 ml Exp: 11/2/07
Spiked by	DMC
Witness	DMC

Comments:

DMO spike: 14-EXS-48A
use 0.25ml Exp: 3/11/07

1981-3: limited sample provided

Test Code(s)	Spikes	Amt	Final KD	Reling
8015 & DMO	Surrogate	(IL)	H2O bath temp	Date 12/12
	Spike 1		Date & Volume	By: KH
Sample ID	X	X	By: KH 12/12	By: KH
DWB1	X	1.0	1.0 mL	
DWB2				
DWL1 DSC	X	X	1.0	
DWL2 DSC	X	X	1.0	
L-3 DMO	X	X	1.0	
L-4 DMO	X	X	1.0	
DOW01981-1.00	X	1.05		
↓ -2 .01	X	1.05		
↓ -3 .01	X	0.77		
↓ -4 .01	X	1.05		

cm 12/11/12

cm 12/11/12

- ☒ Completed ms/msd
- ☒ Sample limited, no ms/msd, duplicate LCS

028

Peer Review By:

Organic Extractions Dept.
CAS-Redding

Sequence Name: C:\HPCHEM\1\SEQUENCE\121706.S

Comment:

Operator: MCM

Data Path: C:\HPCHEM\1\DATA\121806\

Pre-Seq Cmd:

Post-Seq Cmd:

Method Sections To Run On A Barcode Mismatch

(X) Full Method (X) Inject Anyway

() Reprocessing Only () Don't Inject

Line	Type	Vial	DataFile	Method	Sample Name
1	IB	1	1218001	GCQFC	Instrument Blk (DCM/SS)
2	PEM	2	1218002	GCQFC	RT Marker c6_c40
3	CCV	3	1218003	GCQFC	500ppm Gas/Dsl/Oil CCV
4	MB	4	1218004	GCQFC	wmb 12/11 1L:1ml
5	LCS	5	1218005	GCQFC	wlcs 12/11 Dsl
6	DLCS	6	1218006	GCQFC	wdlcs 12/11 Dsl
7	LCS	7	1218007	GCQFC	wlcs 12/11 Oil
8	DLCS	8	1218008	GCQFC	wdlcs 12/11 Oil
9	SOLV	9	1218009	GCQFC	wash blank
10	SMPL	10	1218010	GCQFC	D0601981-001.08 1.05L:1ml
11	SMPL	11	1218011	GCQFC	D0601981-002.07 1.05L:1ml
12	SMPL	12	1218012	GCQFC	D0601981-003.07 0.77L:1ml
13	SMPL	13	1218013	GCQFC	D0601981-004.07 1.05L:1ml
14	CCV	14	1218014	GCQFC	1000ppm Gas/Dsl/Oil CCV
15	SOLV	9	1218015	GCQFC	wash blank
16	MB	15	1218016	GCQFC	wmb 12/13 1L:1ml
17	LCS	16	1218017	GCQFC	wlcs 12/13 1L:1ml
18	DLCS	17	1218018	GCQFC	wdlcs 12/13 1L:1ml
19	SOLV	9	1218019	GCQFC	wash blank
20	SMPL	18	1218020	GCQFC	D0602031-001.05 1.05L:1mL
21	SMPL	19	1218021	GCQFC	D0602031-002.05 0.10L:1mL
22	SMPL	20	1218022	GCQFC	D0602031-003.05 1.05L:1mL
23	SMPL	21	1218023	GCQFC	D0602031-004.09 1.05L:1mL
24	SOLV	9	1218024	GCQFC	wash blank
25	CCV	3	1218025	GCQFC	500ppm Gas/Dsl/Oil CCV

MCM 11/19/06

Prep:

Analy:

DWG0601056 DWG0601057

DWG0601058 DWG0601059

GC TPH DIESEL/MOTOROIL

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893

Service Request: D0601981

Cover Page - Organic Analysis Data Package
Diesel / Motor Oil Range Organics

Sample Name	Lab Code	Date Collected	Date Received
231GW09CL	D0601981-002	12/05/2006	12/06/2006
1065MW9ACL	D0601981-003	12/05/2006	12/06/2006
1065PZ1BCL	D0601981-004	12/05/2006	12/06/2006

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Wida Ang

Name: WIDA ANG

Date: 12/19/06

Title: Organic Manager

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893
Sample Matrix: Water

Service Request: D0601981
Date Collected: 12/05/2006
Date Received: 12/06/2006

Diesel / Motor Oil Range Organics

Sample Name: 231GW09CL
Lab Code: D0601981-002
Extraction Method: EPA 3510C
Analysis Method: 8015B

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
TPH-Diesel (C10-C24)	ND	U	48	1	12/11/06	12/18/06	DWG0601058	
Motor Oil (C24-C36)	ND	U	290	1	12/11/06	12/18/06	DWG0601058	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Octacosane	99	65-135	12/18/06	Acceptable
n-Triacontane	97	65-135	12/18/06	Acceptable

Comments:

Data File : C:\HPCHEM\1\DATA\121806\1218011.D Vial: 11
Acq On : 18 Dec 2006 7:14 pm Operator: MCM
Sample : D0601981-002.07 1.05L:1ml Inst : GCQ
Misc : Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 19 10:07 2006 Quant Results File: DOQ61208.RES

Quant Method : C:\HPCHEM\1\METHODS\DOQ61208.M (Chemstation Integrator)
Title : Diesel/M_Oil (c10-c36) Calibration
Last Update : Sun Dec 17 13:03:16 2006
Response via : Initial Calibration
DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
Signal Phase : RTX-5
Signal Info : 0.53 mm /30m

MEM
12/19/06

Compound	R.T.	Response	Conc Units

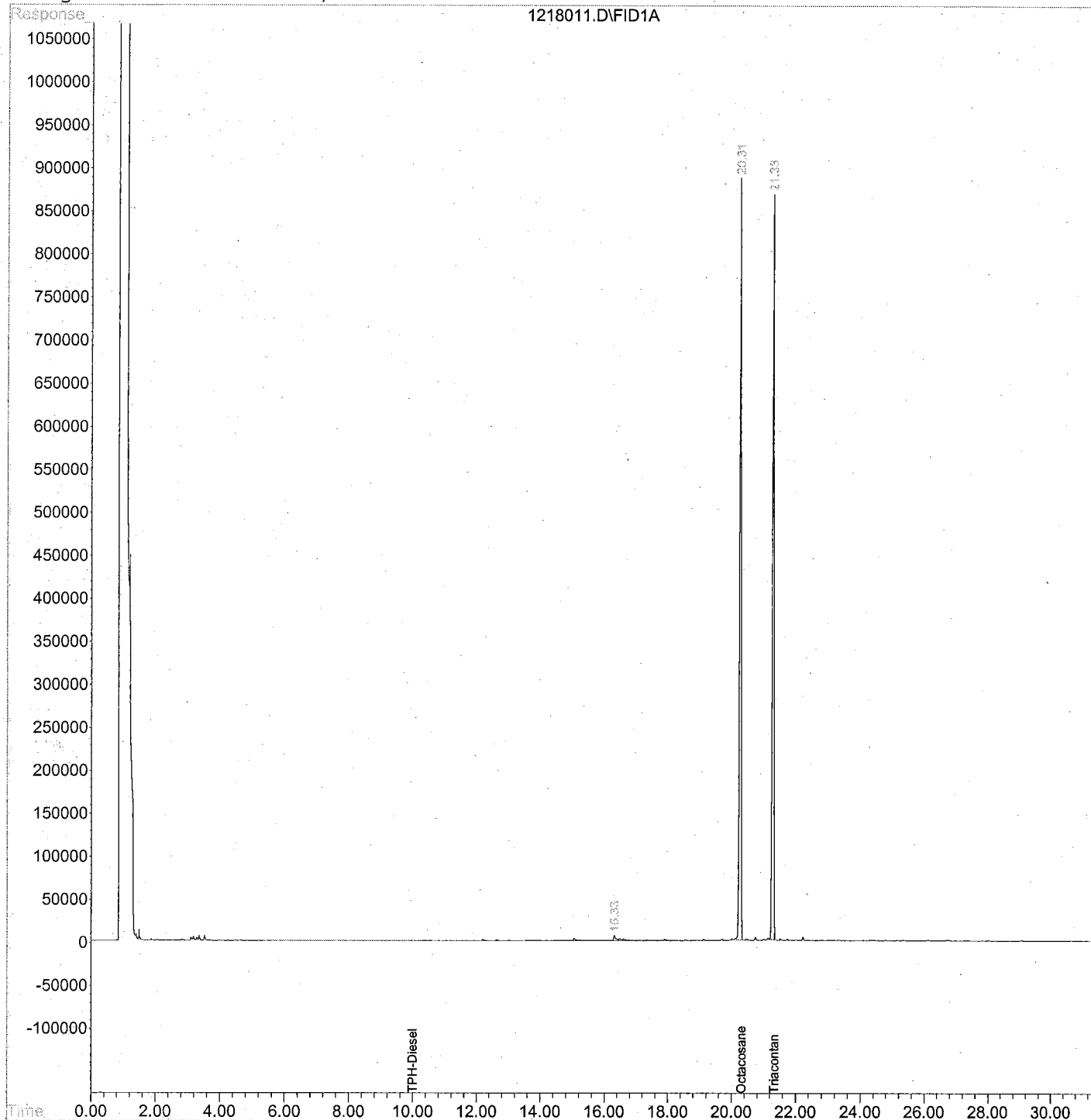
System Monitoring Compounds			
3) S Octacosane	20.31	28709130	247.080 mg/L
Spiked Amount 250.000		Recovery =	98.83%
4) S Triacontane	21.33	28443690	241.494 mg/L
Spiked Amount 250.000		Recovery =	96.60%
Target Compounds			
1) H TPH-Diesel (c10-c24)	10.00	2613922	13.896 mg/L
2) H Motor Oil (c24-c36)	21.00	3878681	N.D. mg/L

Quantitation Report

Data File : C:\HPCHEM\1\DATA\121806\1218011.D Vial: 11
 Acq On : 18 Dec 2006 7:14 pm Operator: MCM
 Sample : D0601981-002.07 1.05L:1ml Inst : GCQ
 Misc : Multiplr: 1.00
 IntFile : events.e
 Quant Time: Dec 19 10:07 2006 Quant Results File: DOQ61208.RES

Quant Method : C:\HPCHEM\1\METHODS\DOQ61208.M (Chemstation Integrator)
 Title : Diesel/M_Oil (c10-c36) Calibration
 Last Update : Sun Dec 17 13:03:16 2006
 Response via : Multiple Level Calibration
 DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
 Signal Phase : RTX-5
 Signal Info : 0.53 mm /30m



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893
Sample Matrix: Water

Service Request: D0601981
Date Collected: 12/05/2006
Date Received: 12/06/2006

Diesel / Motor Oil Range Organics

Sample Name: 1065MW9ACL
Lab Code: D0601981-003
Extraction Method: EPA 3510C
Analysis Method: 8015B

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
TPH-Diesel (C10-C24)	ND	U	65	1	12/11/06	12/18/06	DWG0601058	
Motor Oil (C24-C36)	ND	U	390	1	12/11/06	12/18/06	DWG0601058	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Octacosane	107	65-135	12/18/06	Acceptable
n-Triacontane	105	65-135	12/18/06	Acceptable

Comments:

Data File : C:\HPCHEM\1\DATA\121806\1218012.D Vial: 12
Acq On : 18 Dec 2006 7:54 pm Operator: MCM
Sample : D0601981-003.07 0.77L:1ml Inst : GCQ
Misc : Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 19 10:07 2006 Quant Results File: DOQ61208.RES

Quant Method : C:\HPCHEM\1\METHODS\DOQ61208.M (Chemstation Integrator)
Title : Diesel/M_Oil (c10-c36) Calibration
Last Update : Sun Dec 17 13:03:16 2006
Response via : Initial Calibration
DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
Signal Phase : RTX-5
Signal Info : 0.53 mm /30m

mem
12/19/06

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S Octacosane	20.31	31111541	267.756 mg/L
Spiked Amount 250.000		Recovery =	107.10%
4) S Triacontane	21.34	30851015	261.933 mg/L
Spiked Amount 250.000		Recovery =	104.77%
Target Compounds			
1) H TPH-Diesel (c10-c24)	10.00	2244434	11.932 mg/L
2) H Motor Oil (c24-c36)	21.00	2899513	N.D. mg/L

Quantitation Report

Data File : C:\HPCHEM\1\DATA\121806\1218012.D

Vial: 12

Acq On : 18 Dec 2006 7:54 pm

Operator: MCM

Sample : D0601981-003.07 0.77L:1ml

Inst : GCQ

Misc :

Multiplr: 1.00

IntFile : events.e

Quant Time: Dec 19 10:07 2006 Quant Results File: DOQ61208.RES

Quant Method : C:\HPCHEM\1\METHODS\DOQ61208.M (Chemstation Integrator)

Title : Diesel/M_Oil (c10-c36) Calibration

Last Update : Sun Dec 17 13:03:16 2006

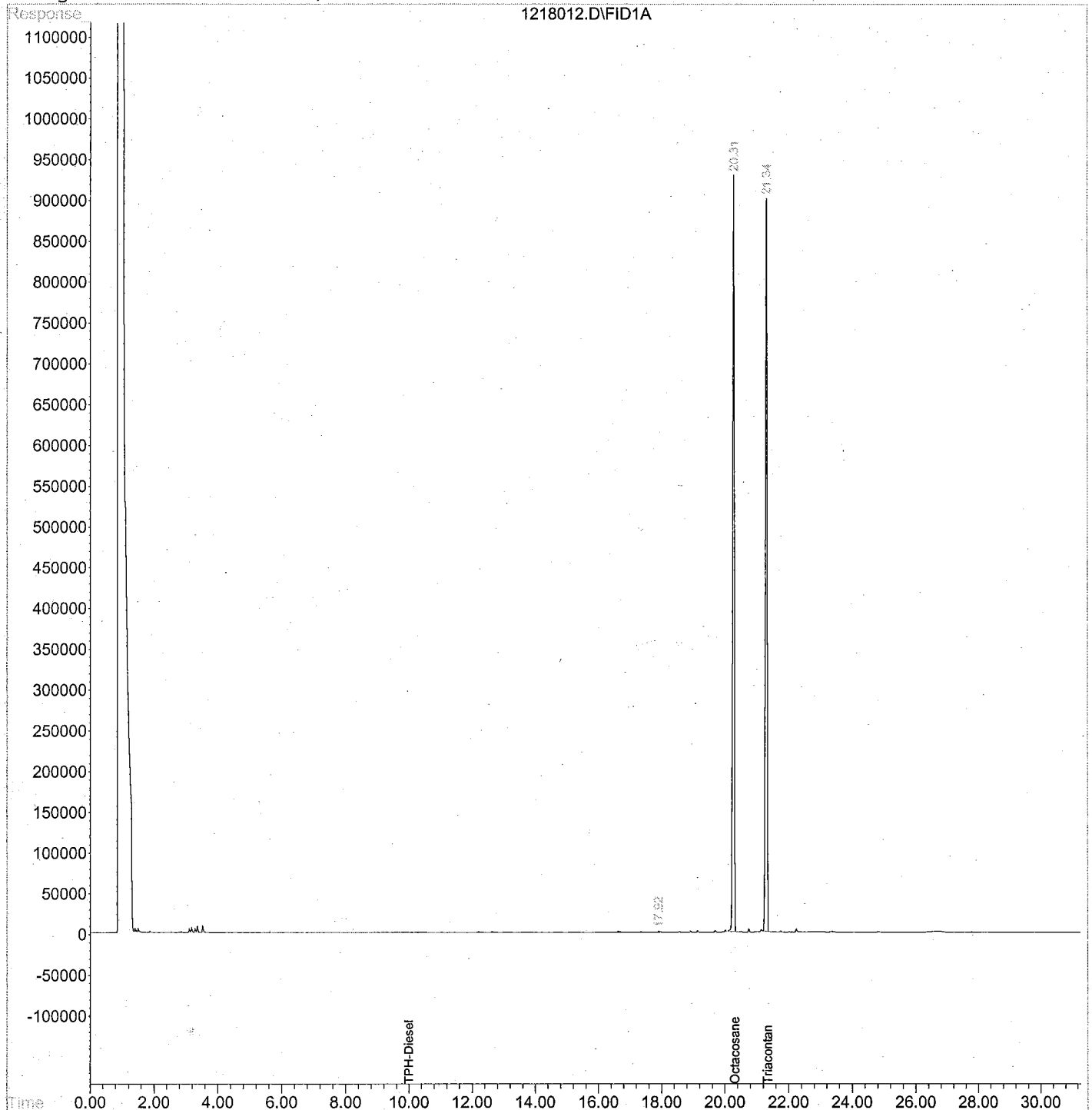
Response via : Multiple Level Calibration

DataAcq Meth : GCQFC.M

Volume Inj. : 5uL

Signal Phase : RTX-5

Signal Info : 0.53 mm /30m



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893
Sample Matrix: Water

Service Request: D0601981
Date Collected: 12/05/2006
Date Received: 12/06/2006

Diesel / Motor Oil Range Organics

Sample Name: 1065PZ1BCL
Lab Code: D0601981-004
Extraction Method: EPA 3510C
Analysis Method: 8015B

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
TPH-Diesel (C10-C24)	ND	U	48	1	12/11/06	12/18/06	DWG0601058	
Motor Oil (C24-C36)	ND	U	290	1	12/11/06	12/18/06	DWG0601058	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Octacosane	121	65-135	12/18/06	Acceptable
n-Triacontane	119	65-135	12/18/06	Acceptable

Comments:

Data File : C:\HPCHEM\1\DATA\121806\1218013.D Vial: 13
Acq On : 18 Dec 2006 8:33 pm Operator: MCM
Sample : D0601981-004.07 1.05L:1ml Inst : GCQ
Misc : Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 19 10:07 2006 Quant Results File: DOQ61208.RES

Quant Method : C:\HPCHEM\1\METHODS\DOQ61208.M (Chemstation Integrator)
Title : Diesel/M_Oil (c10-c36) Calibration
Last Update : Sun Dec 17 13:03:16 2006
Response via : Initial Calibration
DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
Signal Phase : RTX-5
Signal Info : 0.53 mm /30m

MCM
12/19/06

Compound	R.T.	Response	Conc Units

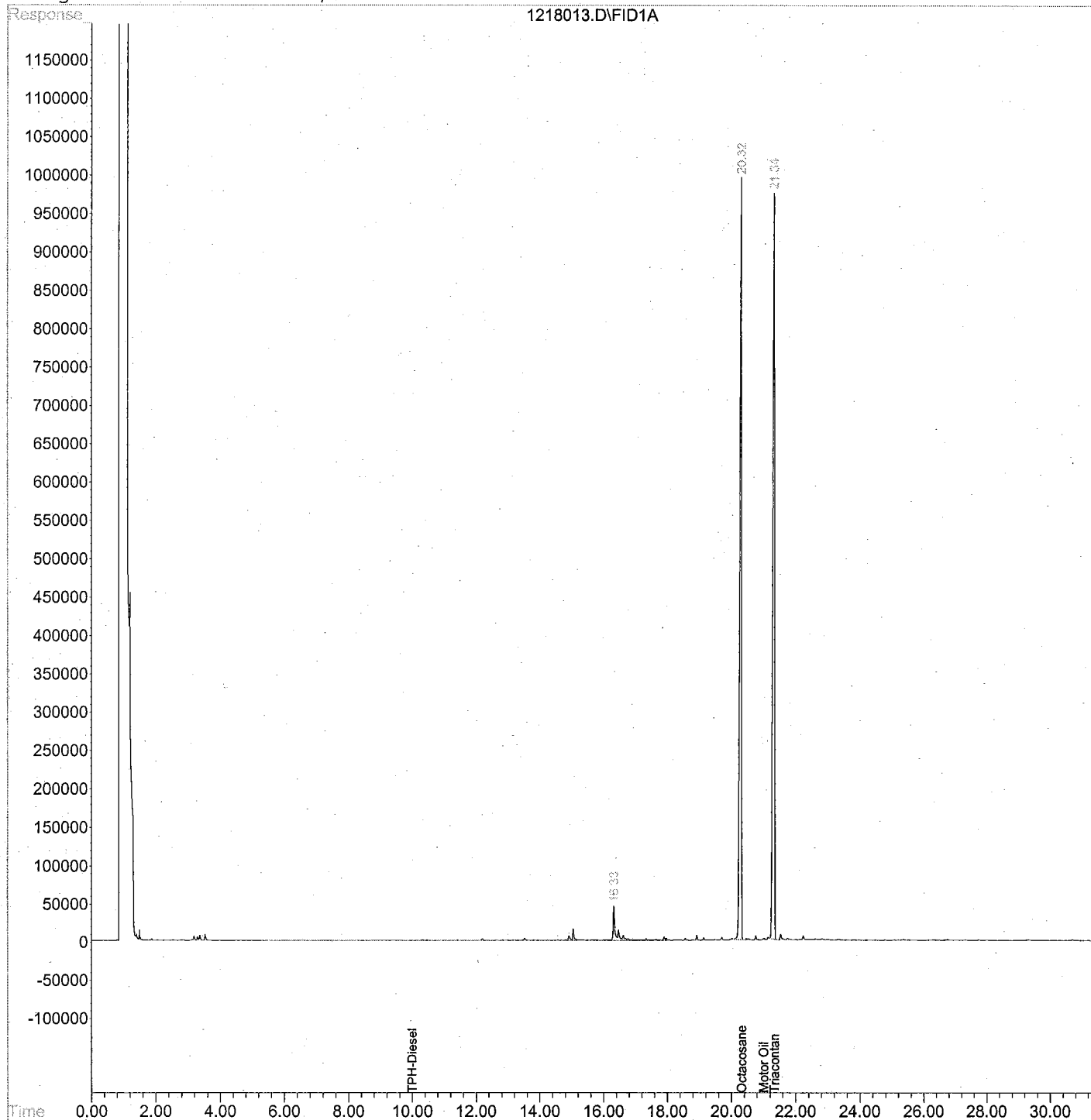
System Monitoring Compounds			
3) S Octacosane	20.32	35292303	303.737 mg/L
Spiked Amount 250.000		Recovery =	121.49%
4) S Triacontane	21.34f	34892978	296.250 mg/L
Spiked Amount 250.000		Recovery =	118.50%
Target Compounds			
1) H TPH-Diesel (c10-c24)	10.00	6169609	32.800 mg/L
2) H Motor Oil (c24-c36)	21.00	5742467	16.445 mg/L

Quantitation Report

Data File : C:\HPCHEM\1\DATA\121806\1218013.D Vial: 13
 Acq On : 18 Dec 2006 8:33 pm Operator: MCM
 Sample : D0601981-004.07 1.05L:1ml Inst : GCQ
 Misc : Multiplr: 1.00
 IntFile : events.e
 Quant Time: Dec 19 10:07 2006 Quant Results File: DOQ61208.RES

Quant Method : C:\HPCHEM\1\METHODS\DOQ61208.M (Chemstation Integrator)
 Title : Diesel/M_Oil (c10-c36) Calibration
 Last Update : Sun Dec 17 13:03:16 2006
 Response via : Multiple Level Calibration
 DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
 Signal Phase : RTX-5
 Signal Info : 0.53 mm /30m



COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893
Sample Matrix: Water

Service Request: D0601981
Date Collected: NA
Date Received: NA

Diesel / Motor Oil Range Organics

Sample Name: Method Blank
Lab Code: DWG0601058-3
Extraction Method: EPA 3510C
Analysis Method: 8015B

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
TPH-Diesel (C10-C24)	ND	U	50	1	12/11/06	12/18/06	DWG0601058	
Motor Oil (C24-C36)	ND	U	300	1	12/11/06	12/18/06	DWG0601058	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Octacosane	104	65-135	12/18/06	Acceptable
n-Triacontane	102	65-135	12/18/06	Acceptable

Comments:

Data File : C:\HPCHEM\1\DATA\121806\1218004.D Vial: 4
Acq On : 18 Dec 2006 1:11 pm Operator: MCM
Sample : wmb 12/11 1L:1ml Inst : GCQ
Misc : Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 19 10:07 2006 Quant Results File: DOQ61208.RES

Quant Method : C:\HPCHEM\1\METHODS\DOQ61208.M (Chemstation Integrator)
Title : Diesel/M_Oil (c10-c36) Calibration
Last Update : Sun Dec 17 13:03:16 2006
Response via : Initial Calibration
DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
Signal Phase : RTX-5
Signal Info : 0.53 mm /30m

MCM
12/19/06

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S Octacosane	20.31	30336313	261.084 mg/L
Spiked Amount 250.000		Recovery =	104.43%
4) S Triacontane	21.33	30060129	255.218 mg/L
Spiked Amount 250.000		Recovery =	102.09%
Target Compounds			
1) H TPH-Diesel (c10-c24)	10.00	4016766	21.354 mg/L
2) H Motor Oil (c24-c36)	21.00	3829690	N.D. mg/L

Quantitation Report

Data File : C:\HPCHEM\1\DATA\121806\1218004.D

Vial: 4

Acq On : 18 Dec 2006 1:11 pm

Operator: MCM

Sample : wmb 12/11 1L:1ml

Inst : GCQ

Misc :

Multiplr: 1.00

IntFile : events.e

Quant Time: Dec 19 10:07 2006 Quant Results File: DOQ61208.RES

Quant Method : C:\HPCHEM\1\METHODS\DOQ61208.M (Chemstation Integrator)

Title : Diesel/M_Oil (c10-c36) Calibration

Last Update : Sun Dec 17 13:03:16 2006

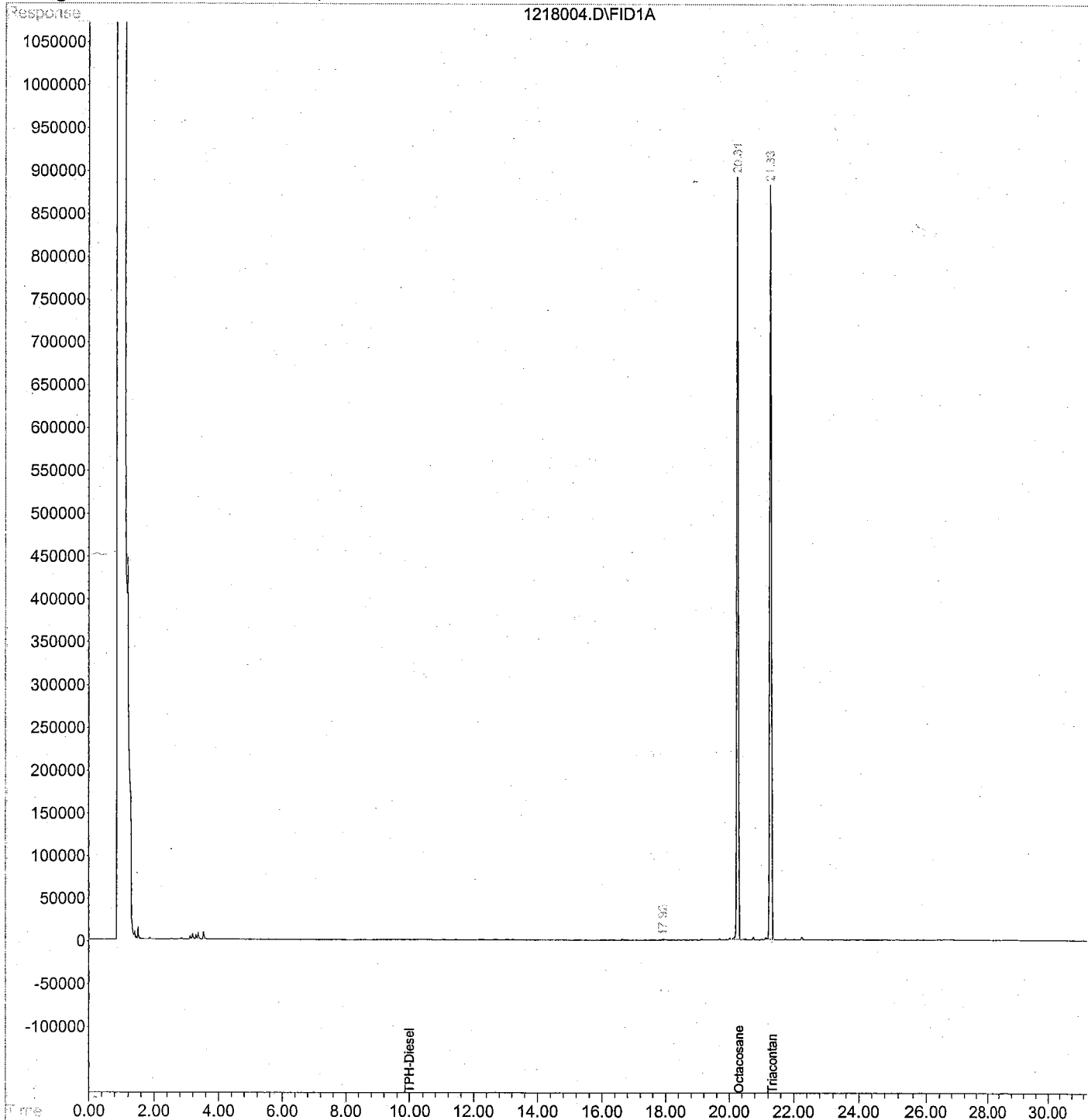
Response via : Multiple Level Calibration

DataAcq Meth : GCQFC.M

Volume Inj. : 5uL

Signal Phase : RTX-5

Signal Info : 0.53 mm /30m



QC Summary

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893
Sample Matrix: Water

Service Request: D0601981

Surrogate Recovery Summary
Diesel / Motor Oil Range Organics

Extraction Method: EPA 3510C
Analysis Method: 8015B

Units: PERCENT
Level: Low

<u>Sample Name</u>	<u>Lab Code</u>	<u>Sur1</u>	<u>Sur2</u>
231GW09CL	D0601981-002	99	97
1065MW9ACL	D0601981-003	107	105
1065PZ1BCL	D0601981-004	121	119
Method Blank	DWG0601058-3	104	102
Lab Control Sample	DWG0601058-1	127	124
Duplicate Lab Control Sample	DWG0601058-2	130	128

Surrogate Recovery Control Limits (%)

Sur1 = Octacosane	65-135
Sur2 = n-Triacontane	65-135

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893
Sample Matrix: Water

Service Request: D0601981
Date Extracted: 12/11/2006
Date Analyzed: 12/18/2006

Lab Control Spike/Duplicate Lab Control Spike Summary
Diesel / Motor Oil Range Organics

Extraction Method: EPA 3510C
Analysis Method: 8015B

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: DWG0601058

Analyte Name	Lab Control Sample DWG0601058-1 Lab Control Spike			Duplicate Lab Control Sample DWG0601058-2 Duplicate Lab Control Spike			%Rec Limits	RPD	RPD Limit
	Result	Expected	%Rec	Result	Expected	%Rec			
TPH-Diesel (C10-C24)	2340	2500	94	2390	2500	96	65-135	2	35
Motor Oil (C24-C36)	2490	2500	99	2610	2500	104	65-135	5	35

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893
Sample Matrix: Water

Service Request: D0601981
Date Extracted: 12/11/2006
Date Analyzed: 12/18/2006
Time Analyzed: 13:11

Method Blank Summary
Diesel / Motor Oil Range Organics

Sample Name: Method Blank
Lab Code: DWG0601058-3
Extraction Method: EPA 3510C
Analysis Method: 8015B

File ID: Q:\TARGET\CHEM\GCQ.I\121806M\121800
Instrument ID: GCQ
Level: Low
Extraction Lot: DWG0601058

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	DWG0601058-1	Q:\TARGET\CHEM\GCQ.I\121806M\1218007.D	12/18/06	15:10
Duplicate Lab Control Sample	DWG0601058-2	Q:\TARGET\CHEM\GCQ.I\121806M\1218008.D	12/18/06	15:50
231GW09CL	D0601981-002	Q:\TARGET\CHEM\GCQ.I\121806M\1218011.D	12/18/06	19:14
1065MW9ACL	D0601981-003	Q:\TARGET\CHEM\GCQ.I\121806M\1218012.D	12/18/06	19:54
1065PZ1BCL	D0601981-004	Q:\TARGET\CHEM\GCQ.I\121806M\1218013.D	12/18/06	20:33

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893
Sample Matrix: Water

Service Request: D0601981

Lab Control Sample/Duplicate Lab Control Sample Summary
Diesel / Motor Oil Range Organics

Sample Name: Lab Control Sample
Lab Code: DWG0601058-1
File ID: Q:\TARGET\CHEM\GCQ.I\121806M\1218007.D
Instrument ID: GCQ
Date Extracted: 12/11/2006
Date Analyzed: 12/18/2006
Time Analyzed: 15:10

Sample Name: Duplicate Lab Control Sample
Lab Code: DWG0601058-2
File ID: Q:\TARGET\CHEM\GCQ.I\121806M\1218008.D
Instrument ID: GCQ
Date Extracted: 12/11/2006
Date Analyzed: 12/18/2006
Time Analyzed: 15:50

Extraction Method: EPA 3510C
Analysis Method: 8015B

Level: Low
Extraction Lot: DWG0601058

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	DWG0601058-3	Q:\TARGET\CHEM\GCQ.I\121806M\1218004.D	12/18/06	13:11
231GW09CL	D0601981-002	Q:\TARGET\CHEM\GCQ.I\121806M\1218011.D	12/18/06	19:14
1065MW9ACL	D0601981-003	Q:\TARGET\CHEM\GCQ.I\121806M\1218012.D	12/18/06	19:54
1065PZ1BCL	D0601981-004	Q:\TARGET\CHEM\GCQ.I\121806M\1218013.D	12/18/06	20:33

Standards Data

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893

Service Request: D0601981
ICAL Date: 12/08/2006

Initial Calibration Summary
Diesel / Motor Oil Range Organics

ICAL ID: CAL1237
Instrument ID: GCQ

Column: RTX-5

Level ID File ID
A C:\HPCHEM\1\DATA\120806R\1208004.D
B C:\HPCHEM\1\DATA\120806R\1208005.D
C C:\HPCHEM\1\DATA\120806R\1208006.D
D C:\HPCHEM\1\DATA\120806R\1208007.D

Level ID File ID
E C:\HPCHEM\1\DATA\120806R\1208008.D
F C:\HPCHEM\1\DATA\120806R\1208009.D
G C:\HPCHEM\1\DATA\120806R\1208010.D
H C:\HPCHEM\1\DATA\120806R\1208011.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
TPH-Diesel (C10-C24)	A	5.0	2.12E+5	B	10	1.99E+5	C	50	2.04E+5	D	100	2.03E+5	E	500	1.98E+5
	F	1000	1.73E+5	G	2500	1.62E+5	H	5000	1.53E+5						
Motor Oil (C24-C36)	A	5.0	1.47E+5	B	10	1.22E+5	C	50	1.07E+5	D	100	1.07E+5	E	500	96400
	F	1000	84600	G	2500	78400	H	5000	74800						
Octacosane				B	5.0	1.09E+5	C	25	1.20E+5	D	50	1.22E+5	E	75	1.29E+5
	F	130	1.13E+5	G	150	1.10E+5	H	300	1.11E+5						
n-Triacontane				B	5.0	1.12E+5	C	25	1.22E+5	D	50	1.24E+5	E	75	1.31E+5
	F	130	1.15E+5	G	150	1.10E+5	H	300	1.10E+5						

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893

Service Request: D0601981
ICAL Date: 12/08/2006

Initial Calibration Summary
Diesel / Motor Oil Range Organics

ICAL ID: CAL1237
Instrument ID: GCQ

Column: RTX-5

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
TPH-Diesel (C10-C24)	MS	AverageRF	% RSD	11.8		≤ 20
Motor Oil (C24-C36)	MS	Linear	R2	0.999		≥ 0.990
Octacosane	SURR	AverageRF	% RSD	6.4		≤ 20
n-Triacontane	SURR	AverageRF	% RSD	6.8		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

Data File : C:\HPCHEM\1\DATA\120806R\1208004.D Vial: 4
Acq On : 8 Dec 2006 7:30 pm Operator: MCM
Sample : 5ppm Gas/Dsl/Oil Std Inst : GCQ
Misc : 22-GC-64J Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 16 18:55 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)
Title : Diesel/M_Oil (c10-c36) Calibration
Last Update : Sat Dec 16 18:54:33 2006
Response via : Initial Calibration
DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
Signal Phase : RTX-5
Signal Info : 0.53 mm /30m

mem
12/15/06

Compound	R.T.	Response	Conc Units

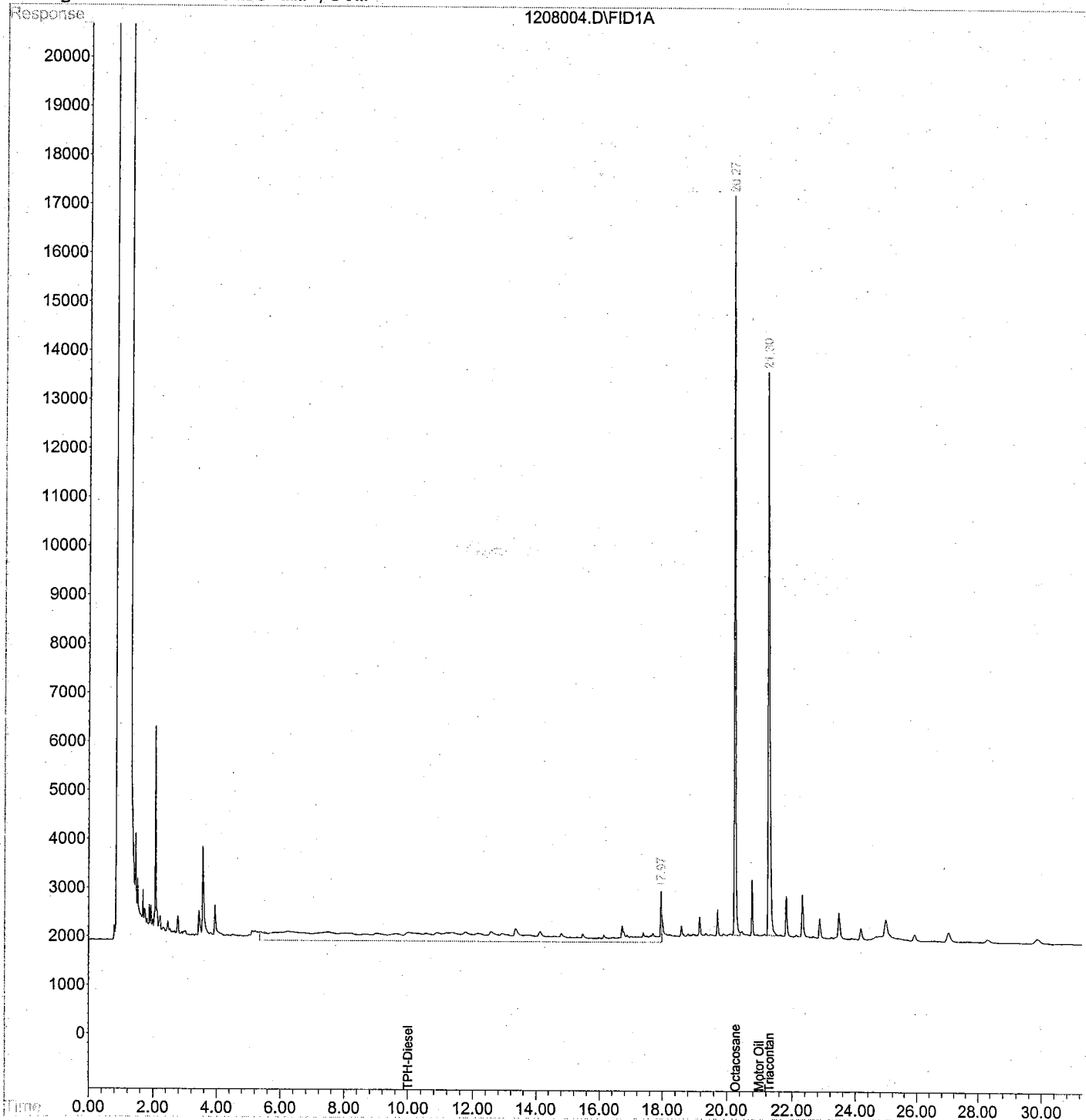
System Monitoring Compounds			
3) S Octacosane	20.27	392233	3.799 mg/L
Spiked Amount 75.000		Recovery =	5.07%
4) S Triacontane	21.30	411397	3.932 mg/L
Spiked Amount 75.000		Recovery =	5.24%
Target Compounds			
1) H TPH-Diesel (c10-c24)	10.00	1062048	6.795 mg/L
2) H Motor Oil (c24-c36)	21.00	735698	9.430 mg/L

Quantitation Report

Data File : C:\HPCHEM\1\DATA\120806R\1208004.D Vial: 4
 Acq On : 8 Dec 2006 7:30 pm Operator: MCM
 Sample : 5ppm Gas/Dsl/Oil Std Inst : GCQ
 Misc : 22-GC-64J Multiplr: 1.00
 IntFile : events.e
 Quant Time: Dec 16 18:55 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)
 Title : Diesel/M_Oil (c10-c36) Calibration
 Last Update : Sat Dec 16 18:54:33 2006
 Response via : Multiple Level Calibration
 DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
 Signal Phase : RTX-5
 Signal Info : 0.53 mm /30m



Data File : C:\HPCHEM\1\DATA\120806R\1208005.D Vial: 5
Acq On : 8 Dec 2006 8:10 pm Operator: MCM
Sample : 10ppm Gas/Dsl/Oil Std Inst : GCQ
Misc : 22-GC-64K Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 16 18:55 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)
Title : Diesel/M Oil (c10-c36) Calibration
Last Update : Sat Dec 16 18:54:33 2006
Response via : Initial Calibration
DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
Signal Phase : RTX-5
Signal Info : 0.53 mm /30m

mem 12/19/06

Compound	R.T.	Response	Conc Units

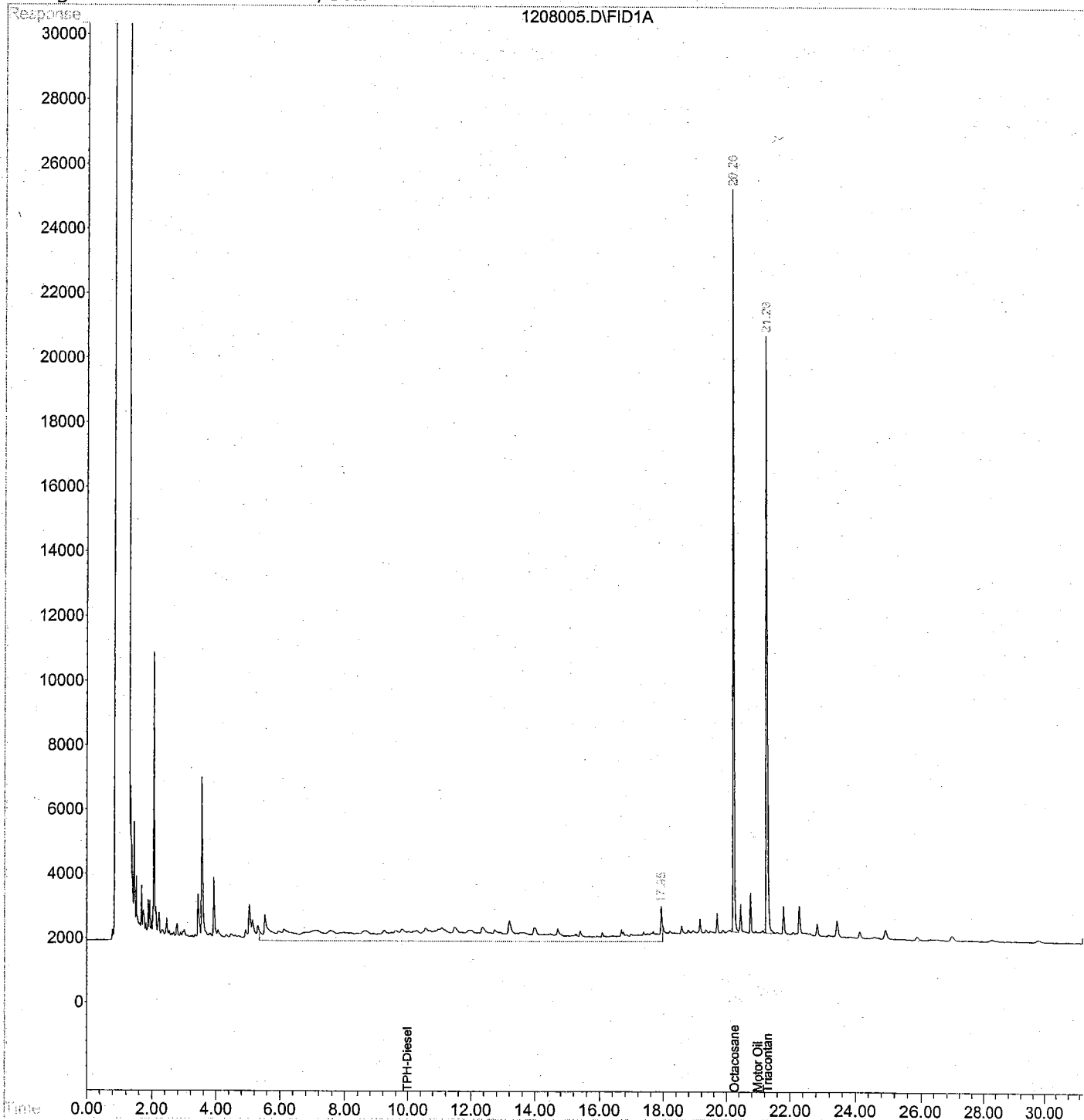
System Monitoring Compounds			
3) S Octacosane	20.26	546002	5.288 mg/L
Spiked Amount 75.000		Recovery =	7.05%
4) S Triacontane	21.29	562130	5.373 mg/L
Spiked Amount 75.000		Recovery =	7.16%
Target Compounds			
1) H TPH-Diesel (c10-c24)	10.00	1991024	12.738 mg/L
2) H Motor Oil (c24-c36)	21.00	1220640	15.646 mg/L

Quantitation Report

Data File : C:\HPCHEM\1\DATA\120806R\1208005.D Vial: 5
 Acq On : 8 Dec 2006 8:10 pm Operator: MCM
 Sample : 10ppm Gas/Dsl/Oil Std Inst : GCQ
 Misc : 22-GC-64K Multiplr: 1.00
 IntFile : events.e
 Quant Time: Dec 16 18:55 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)
 Title : Diesel/M_Oil (c10-c36) Calibration
 Last Update : Sat Dec 16 18:54:33 2006
 Response via : Multiple Level Calibration
 DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
 Signal Phase : RTX-5
 Signal Info : 0.53 mm /30m



Data File : C:\HPCHEM\1\DATA\120806R\1208006.D Vial: 6
Acq On : 8 Dec 2006 8:49 pm Operator: MCM
Sample : 50ppm Gas/Dsl/Oil Std Inst : GCQ
Misc : 22-GC-64D Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 16 18:55 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)
Title : Diesel/M_Oil (c10-c36) Calibration
Last Update : Sat Dec 16 18:54:33 2006
Response via : Initial Calibration
DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
Signal Phase : RTX-5
Signal Info : 0.53 mm /30m

mem
12/16/06

Compound	R.T.	Response	Conc Units

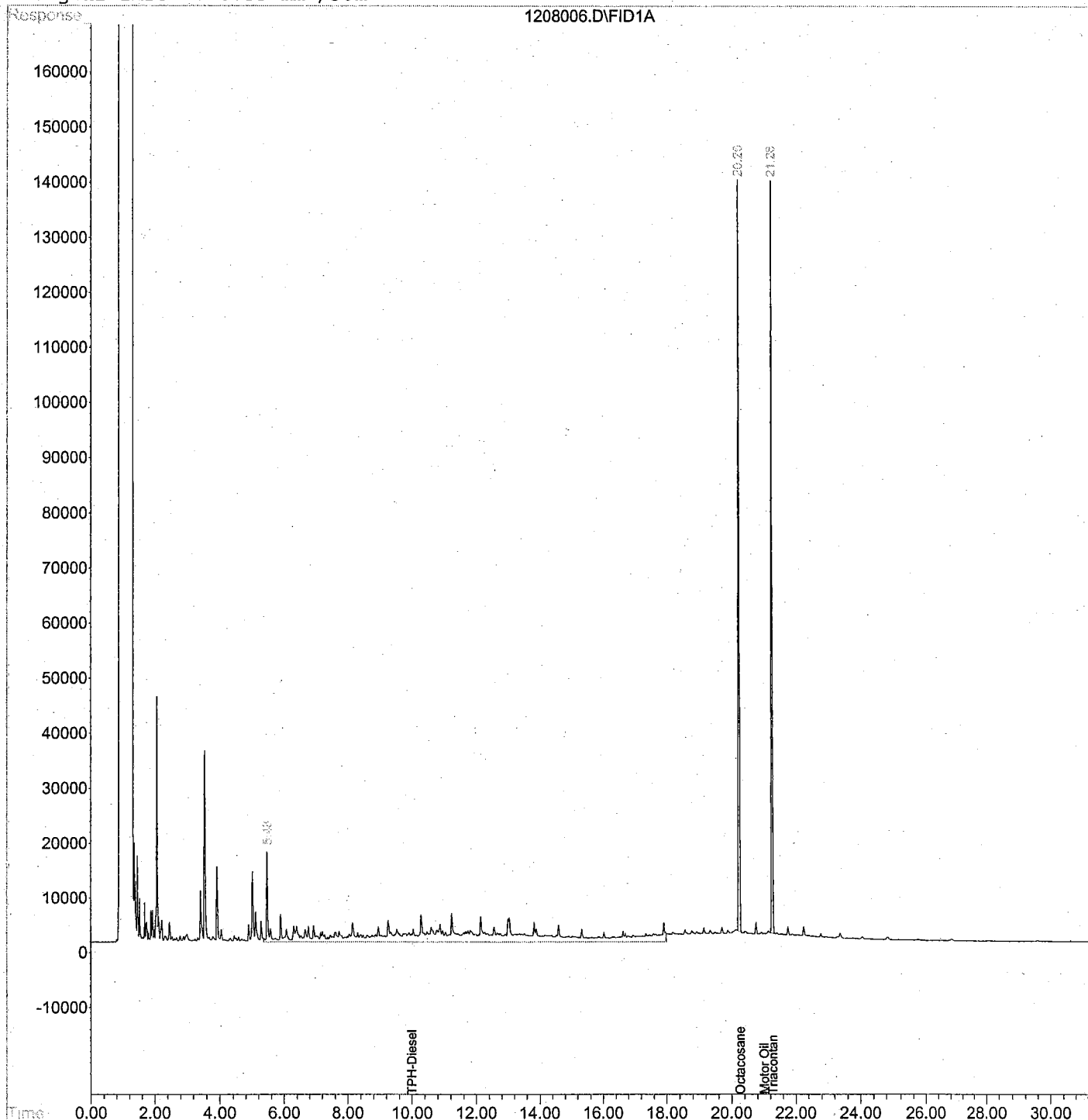
System Monitoring Compounds			
3) S Octacosane	20.26	2990844	28.967 mg/L
Spiked Amount 75.000		Recovery =	38.62%
4) S Triacontane	21.28	3055285	29.204 mg/L
Spiked Amount 75.000		Recovery =	38.94%
Target Compounds			
1) H TPH-Diesel (c10-c24)	10.00	10200414	65.260 mg/L
2) H Motor Oil (c24-c36)	21.00	5330755	68.328 mg/L

Quantitation Report

Data File : C:\HPCHEM\1\DATA\120806R\1208006.D Vial: 6
 Acq On : 8 Dec 2006 8:49 pm Operator: MCM
 Sample : 50ppm Gas/Dsl/Oil Std Inst : GCQ
 Misc : 22-GC-64D Multiplr: 1.00
 IntFile : events.e
 Quant Time: Dec 16 18:55 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)
 Title : Diesel/M_Oil (c10-c36) Calibration
 Last Update : Sat Dec 16 18:54:33 2006
 Response via : Multiple Level Calibration
 DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
 Signal Phase : RTX-5
 Signal Info : 0.53 mm /30m



Data File : C:\HPCHEM\1\DATA\120806R\1208007.D Vial: 7
Acq On : 8 Dec 2006 9:29 pm Operator: MCM
Sample : 100ppm Gas/Dsl/Oil Std Inst : GCQ
Misc : 22-GC-64E Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 16 18:55 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)
Title : Diesel/M_Oil (c10-c36) Calibration
Last Update : Sat Dec 16 18:54:33 2006
Response via : Initial Calibration
DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
Signal Phase : RTX-5
Signal Info : 0.53 mm /30m

mem 12/18/06

Compound	R.T.	Response	Conc Units

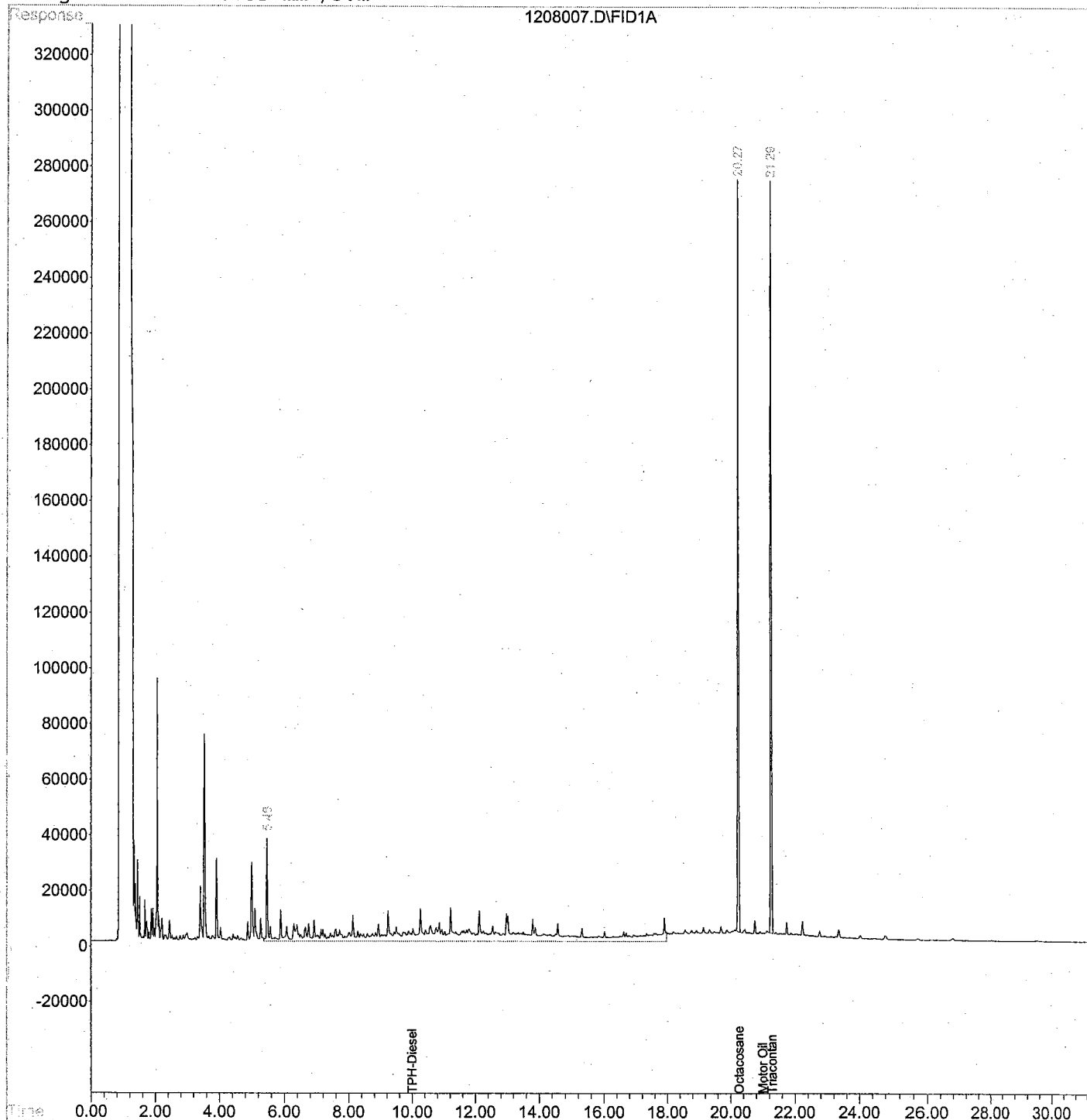
System Monitoring Compounds			
3) S Octacosane	20.27	6082102	58.906 mg/L
Spiked Amount 75.000		Recovery =	78.54%
4) S Triacontane	21.29	6209218	59.350 mg/L
Spiked Amount 75.000		Recovery =	79.13%
Target Compounds			
1) H TPH-Diesel (c10-c24)	10.00	20316586	129.982 mg/L
2) H Motor Oil (c24-c36)	21.00	10706682	137.235 mg/L

Quantitation Report

Data File : C:\HPCHEM\1\DATA\120806R\1208007.D Vial: 7
 Acq On : 8 Dec 2006 9:29 pm Operator: MCM
 Sample : 100ppm Gas/Dsl/Oil Std Inst : GCQ
 Misc : 22-GC-64E Multiplr: 1.00
 IntFile : events.e
 Quant Time: Dec 16 18:55 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)
 Title : Diesel/M_Oil (c10-c36) Calibration
 Last Update : Sat Dec 16 18:54:33 2006
 Response via : Multiple Level Calibration
 DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
 Signal Phase : RTX-5
 Signal Info : 0.53 mm /30m



Data File : C:\HPCHEM\1\DATA\120806R\1208008.D Vial: 8
Acq On : 8 Dec 2006 10:09 pm Operator: MCM
Sample : 500ppm Gas/Dsl/Oil Std Inst : GCQ
Misc : 22-GC-64F Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 16 18:55 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)
Title : Diesel/M_Oil (c10-c36) Calibration
Last Update : Sat Dec 16 18:54:33 2006
Response via : Initial Calibration
DataAcq Meth : GCQFC.M

MEM
12/18/06

Volume Inj. : 5uL
Signal Phase : RTX-5
Signal Info : 0.53 mm /30m

Compound	R.T.	Response	Conc Units

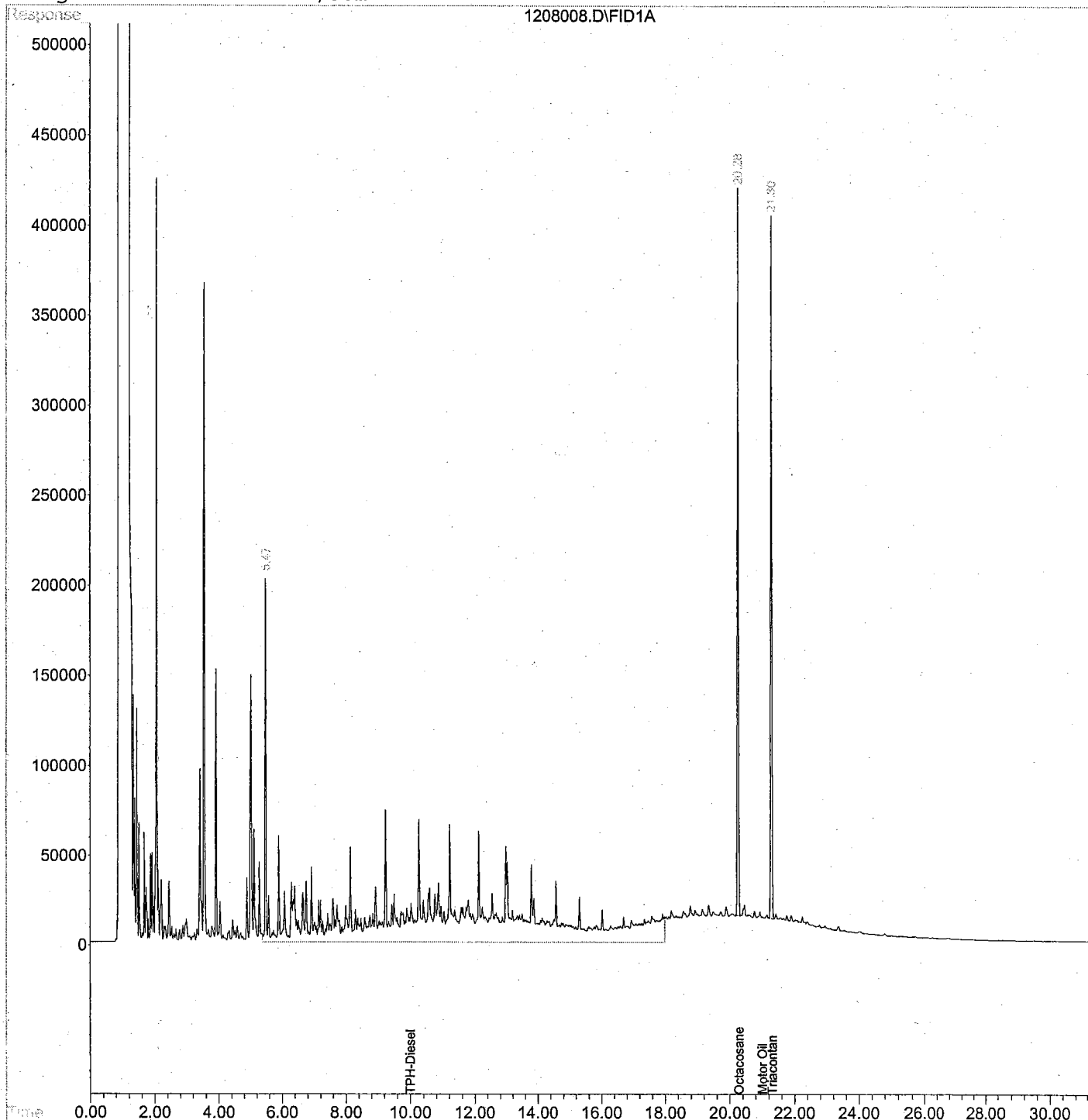
System Monitoring Compounds			
3) S Octacosane	20.28	9681743	93.770 mg/L
Spiked Amount 75.000		Recovery =	125.03%
4) S Triacontane	21.31	9799526	93.668 mg/L
Spiked Amount 75.000		Recovery =	124.89%
Target Compounds			
1) H TPH-Diesel (c10-c24)	10.00	99208277	634.716 mg/L
2) H Motor Oil (c24-c36)	21.00	48218620	618.052 mg/L

Quantitation Report

Data File : C:\HPCHEM\1\DATA\120806R\1208008.D Vial: 8
 Acq On : 8 Dec 2006 10:09 pm Operator: MCM
 Sample : 500ppm Gas/Dsl/Oil Std Inst : GCQ
 Misc : 22-GC-64F Multiplr: 1.00
 IntFile : events.e
 Quant Time: Dec 16 18:55 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)
 Title : Diesel/M_Oil (c10-c36) Calibration
 Last Update : Sat Dec 16 18:54:33 2006
 Response via : Multiple Level Calibration
 DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
 Signal Phase : RTX-5
 Signal Info : 0.53 mm /30m



Data File : C:\HPCHEM\1\DATA\120806R\1208009.D Vial: 9
Acq On : 8 Dec 2006 10:48 pm Operator: MCM
Sample : 1000ppm Gas/Dsl/Oil Std Inst : GCQ
Misc : 22-GC-64G Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 16 18:55 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)
Title : Diesel/M_Oil (c10-c36) Calibration
Last Update : Sat Dec 16 18:54:33 2006
Response via : Initial Calibration
DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
Signal Phase : RTX-5
Signal Info : 0.53 mm /30m

mem
12/16/06

Compound	R.T.	Response	Conc Units

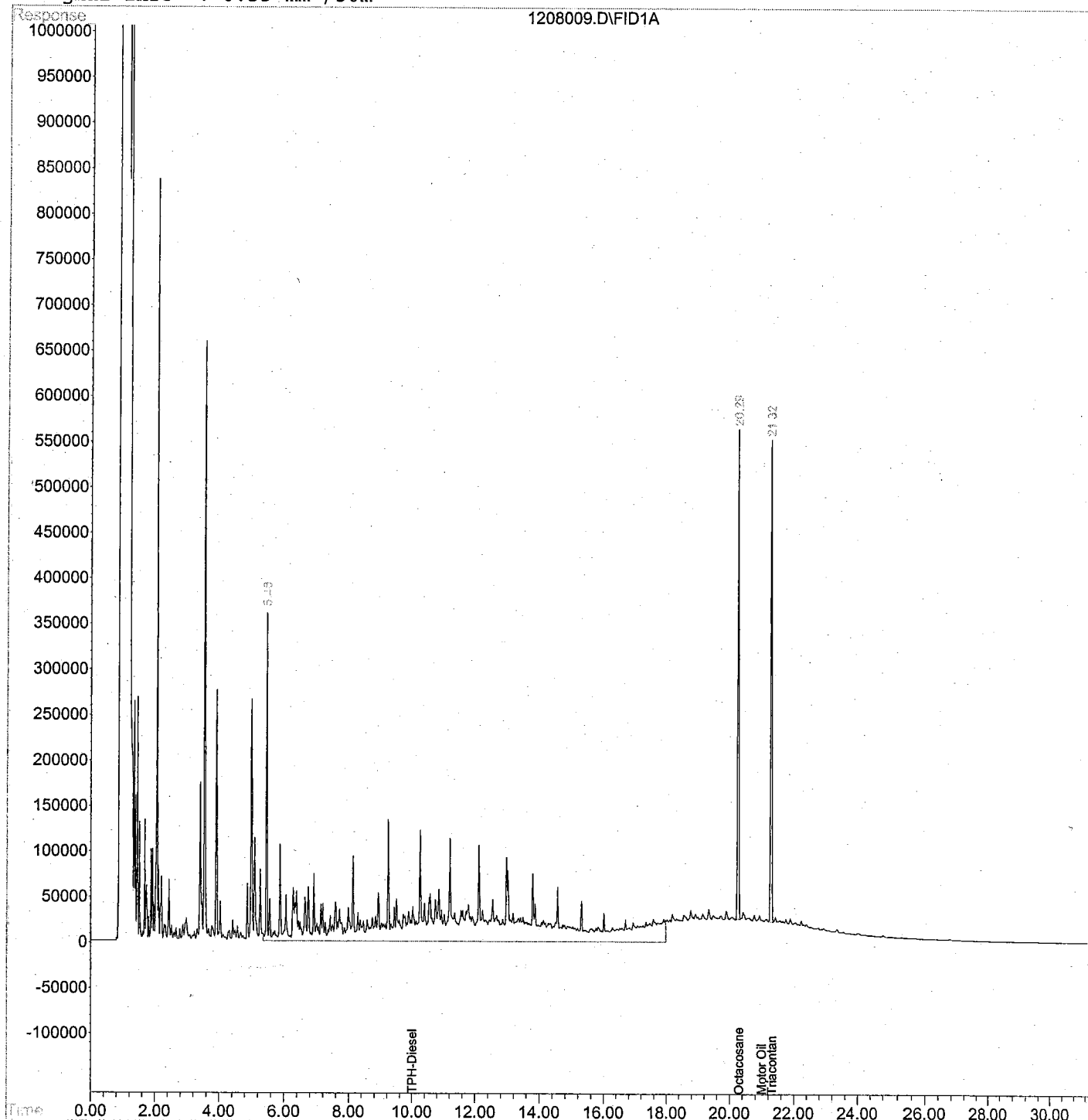
System Monitoring Compounds			
3) S Octacosane	20.29	14140340	136.952 mg/L
Spiked Amount 75.000		Recovery =	182.60%
4) S Triacontane	21.32	14346774	137.132 mg/L
Spiked Amount 75.000		Recovery =	182.84%
Target Compounds			
1) H TPH-Diesel (c10-c24)	10.00	172696624	1104.880 mg/L
2) H Motor Oil (c24-c36)	21.00	84583318	1084.165 mg/L

Quantitation Report

Data File : C:\HPCHEM\1\DATA\120806R\1208009.D Vial: 9
 Acq On : 8 Dec 2006 10:48 pm Operator: MCM
 Sample : 1000ppm Gas/Dsl/Oil Std Inst : GCQ
 Misc : 22-GC-64G Multiplr: 1.00
 IntFile : events.e
 Quant Time: Dec 16 18:55 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)
 Title : Diesel/M_Oil (c10-c36) Calibration
 Last Update : Sat Dec 16 18:54:33 2006
 Response via : Multiple Level Calibration
 DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
 Signal Phase : RTX-5
 Signal Info : 0.53 mm /30m



Data File : C:\HPCHEM\1\DATA\120806R\1208010.D Vial: 10
Acq On : 8 Dec 2006 11:28 pm Operator: MCM
Sample : 2500ppm Gas/Dsl/Oil Std Inst : GCQ
Misc : 22-GC-64H Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 16 18:55 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)
Title : Diesel/M_Oil (c10-c36) Calibration
Last Update : Sat Dec 16 18:54:33 2006
Response via : Initial Calibration
DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
Signal Phase : RTX-5
Signal Info : 0.53 mm /30m

mem
12/18/06

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S Octacosane	20.31	16488237	159.692 mg/L
Spiked Amount 75.000		Recovery =	212.92%
4) S Triacontane	21.33	16475929	157.483 mg/L
Spiked Amount 75.000		Recovery =	209.98%
Target Compounds			
1) H TPH-Diesel (c10-c24)	10.00	405169521	2592.198 mg/L
2) H Motor Oil (c24-c36)	21.00	195976130	2511.965 mg/L

Quantitation Report

Data File : C:\HPCHEM\1\DATA\120806R\1208010.D

Vial: 10

Acq On : 8 Dec 2006 11:28 pm

Operator: MCM

Sample : 2500ppm Gas/Dsl/Oil Std

Inst : GCQ

Misc : 22-GC-64H

Multiplr: 1.00

IntFile : events.e

Quant Time: Dec 16 18:55 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)

Title : Diesel/M_Oil (c10-c36) Calibration

Last Update : Sat Dec 16 18:54:33 2006

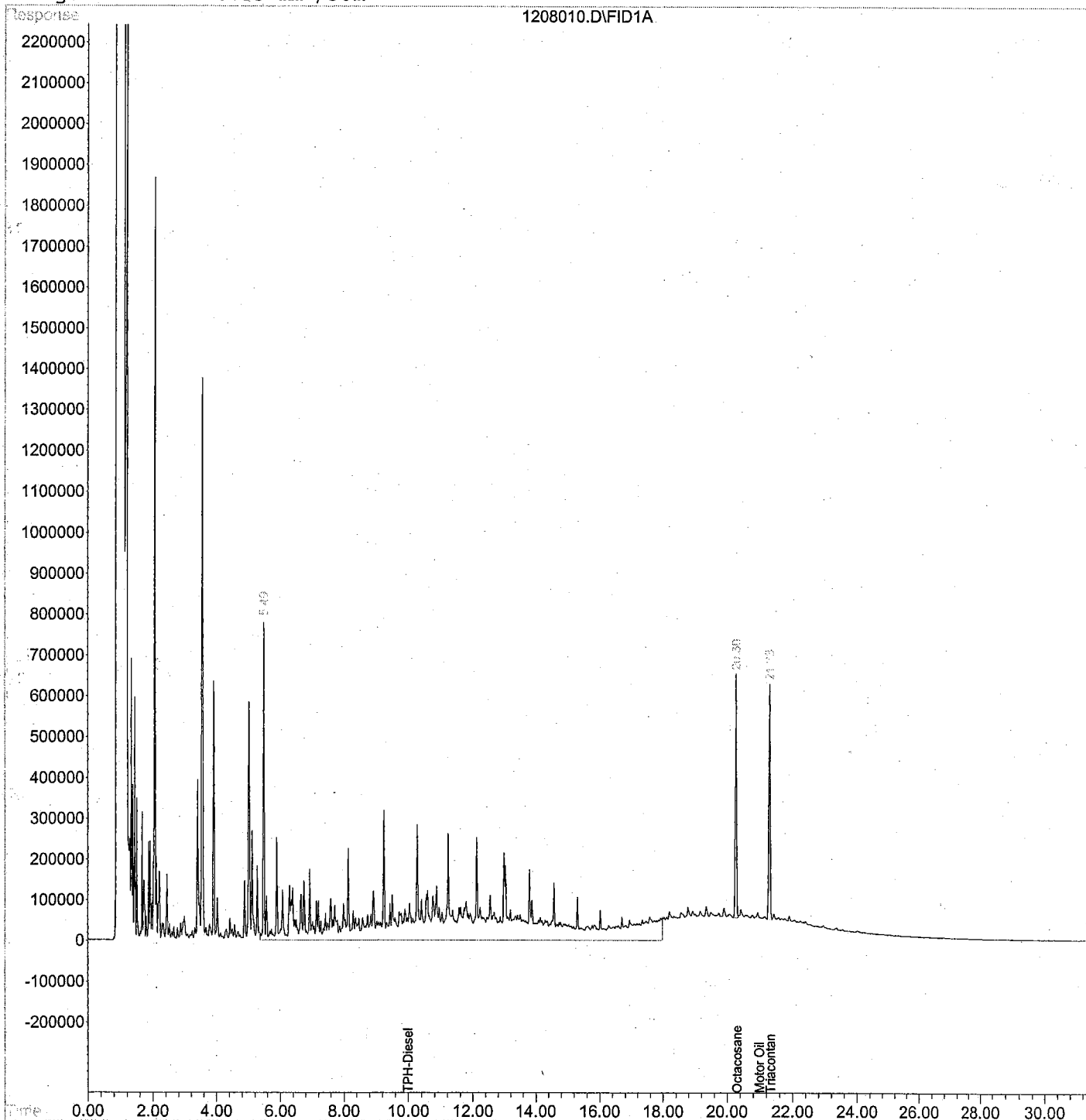
Response via : Multiple Level Calibration

DataAcq Meth : GCQFC.M

Volume Inj. : 5uL

Signal Phase : RTX-5

Signal Info : 0.53 mm /30m



Data File : C:\HPCHEM\1\DATA\120806R\1208011.D Vial: 11
Acq On : 9 Dec 2006 12:08 am Operator: MCM
Sample : 5000ppm Gas/Dsl/Oil Std Inst : GCQ
Misc : 22-GC-72A Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 16 18:56 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)
Title : Diesel/M_Oil (c10-c36) Calibration
Last Update : Sat Dec 16 18:54:33 2006
Response via : Initial Calibration
DataAcq Meth : GCQFC.M

mem
12/16/06

Volume Inj. : 5uL
Signal Phase : RTX-5
Signal Info : 0.53 mm /30m

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S Octacosane	20.34f	33223593	321.777 mg/L
Spiked Amount 75.000		Recovery =	429.04%
4) S Triacontane	21.37f	33113966	316.516 mg/L
Spiked Amount 75.000		Recovery =	422.02%
Target Compounds			
1) H TPH-Diesel (c10-c24)	10.00	764675632	4892.249 mg/L
2) H Motor Oil (c24-c36)	21.00	374141495	4795.638 mg/L

Quantitation Report

Data File : C:\HPCHEM\1\DATA\120806R\1208011.D

Vial: 11

Acq On : 9 Dec 2006 12:08 am

Operator: MCM

Sample : 5000ppm Gas/Dsl/Oil Std

Inst : GCQ

Misc : 22-GC-72A

Multiplr: 1.00

IntFile : events.e

Quant Time: Dec 16 18:56 2006 Quant Results File: DMQTEMP.RES

Quant Method : C:\HPCHEM\1\METHODS\DMQTEMP.M (Chemstation Integrator)

Title : Diesel/M_Oil (c10-c36) Calibration

Last Update : Sat Dec 16 18:54:33 2006

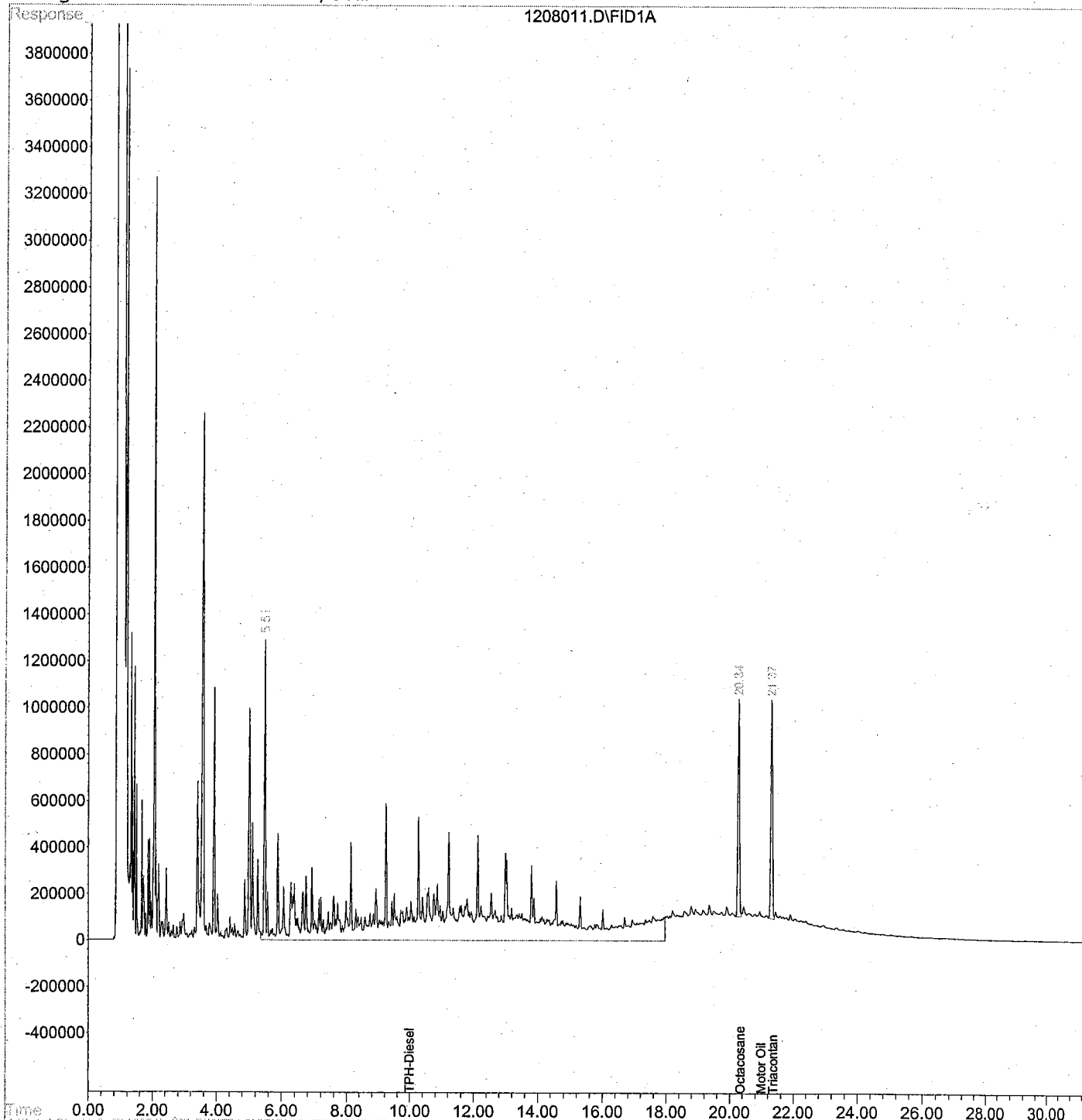
Response via : Multiple Level Calibration

DataAcq Meth : GCQFC.M

Volume Inj. : 5uL

Signal Phase : RTX-5

Signal Info : 0.53 mm /30m



COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893

Service Request: D0601981
ICAL Date: 12/08/2006
Date Analyzed: 12/09/2006

Second Source Calibration Verification
Diesel / Motor Oil Range Organics

ICAL Type: External Standard
Analysis Method: 8015B

ICAL ID: CAL1237
Units: mg/L

File ID: C:\HPCHEM\1\DATA\120806R\1208015.D

Column ID: RTX-5

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
TPH-Diesel (C10-C24)	1000	850	188000	159000	-15	NA	± 30 %	AverageRF
Motor Oil (C24-C36)	1000	980	102000	77700	NA	-2	± 30 %	Linear

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

Data File : C:\HPCHEM\1\DATA\120806R\1208015.D Vial: 13
Acq On : 9 Dec 2006 2:46 am Operator: MCM
Sample : 1000ppm Gas/Dsl/Oil ICV Std Inst : GCQ
Misc : 22-GC-64G Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 16 19:00 2006 Quant Results File: DOQ61208.RES

Quant Method : C:\HPCHEM\1\METHODS\DOQ61208.M (Chemstation Integrator)
Title : Diesel/M_Oil (c10-c36) Calibration
Last Update : Sat Dec 16 18:59:48 2006
Response via : Initial Calibration
DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
Signal Phase : RTX-5
Signal Info : 0.53 mm /30m

mem
12/18/06

Compound	R.T.	Response	Conc Units

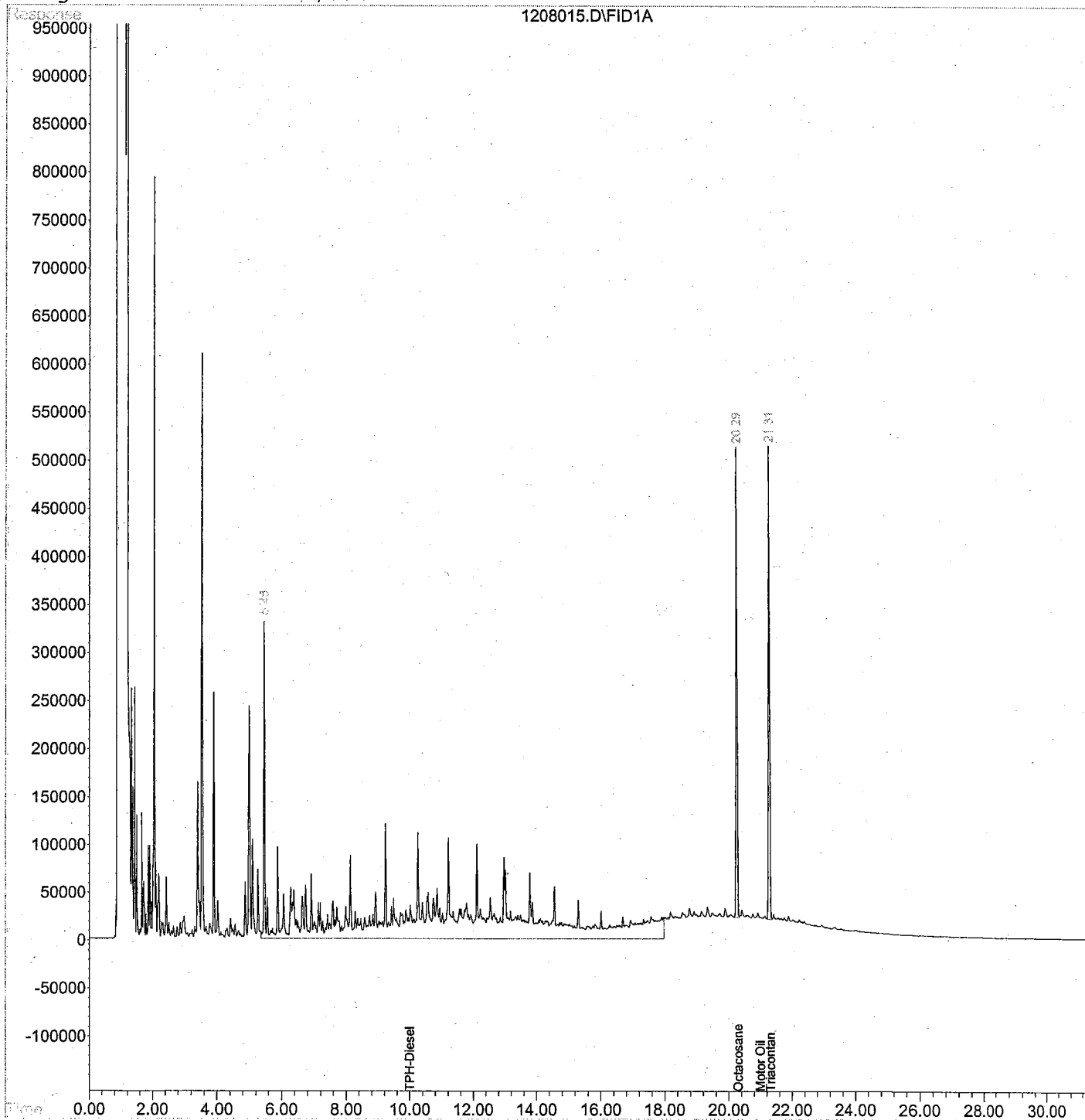
System Monitoring Compounds			
3) S Octacosane	20.29	12957208	111.514 mg/L
Spiked Amount 75.000		Recovery =	148.69%
4) S Triacontane	21.32	12999123	110.366 mg/L
Spiked Amount 75.000		Recovery =	147.15%
Target Compounds			
1) H TPH-Diesel (c10-c24)	10.00	159400142	847.421 mg/L
2) H Motor Oil (c24-c36)	21.00	77668559	979.060 mg/L

Quantitation Report

Data File : C:\HPCHEM\1\DATA\120806R\1208015.D Vial: 13
 Acq On : 9 Dec 2006 2:46 am Operator: MCM
 Sample : 1000ppm Gas/Dsl/Oil ICV Std Inst : GCQ
 Misc : 22-GC-64G Multiplr: 1.00
 IntFile : events.e
 Quant Time: Dec 16 19:00 2006 Quant Results File: DOQ61208.RES

Quant Method : C:\HPCHEM\1\METHODS\DOQ61208.M (Chemstation Integrator)
 Title : Diesel/M Oil (c10-c36) Calibration
 Last Update : Sat Dec 16 18:59:48 2006
 Response via : Multiple Level Calibration
 DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
 Signal Phase : RTX-5
 Signal Info : 0.53 mm /30m



COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893

Service Request: D0601981
Date Analyzed: 12/18/2006

Continuing Calibration Verification Summary
Diesel / Motor Oil Range Organics

ICAL Type: External Standard
Analysis Method: 8015B

ICAL Date: 12/08/2006
ICAL ID: CAL1237
Analysis Lot: DWG0601059
Units: mg/L
Column ID: RTX-5

File ID: C:\HPCHEM\1\DATA\121806\1218003.D

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
TPH-Diesel (C10-C24)	500	440	188000	166000	-12	NA	± 15 %	AverageRF
Motor Oil (C24-C36)	500	530	102000	87800	NA	5	± 15 %	Linear
Octacosane	75	74	116000	115000	-1	NA	± 25 %	AverageRF
n-Triacontane	75	72	118000	113000	-4	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Data File : C:\HPCHEM\1\DATA\121806\1218003.D

Vial: 3

Acq On : 18 Dec 2006 11:26 am

Operator: MCM

Sample : 500ppm Gas/Dsl/Oil CCV

Inst : GCQ

Misc : 22-GC-85h

Multiplr: 1.00

IntFile : events.e

Quant Time: Dec 19 10:07 2006 Quant Results File: DOQ61208.RES

Quant Method : C:\HPCHEM\1\METHODS\DOQ61208.M (Chemstation Integrator)

Title : Diesel/M_Oil (c10-c36) Calibration

Last Update : Sun Dec 17 13:03:16 2006

Response via : Initial Calibration

DataAcq Meth : GCQFC.M

Volume Inj. : 5uL

Signal Phase : RTX-5

Signal Info : 0.53 mm /30m

MCM 12/19/06

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S Octacosane	20.27	8594465	73.967 mg/L
Spiked Amount 250.000		Recovery =	29.59%
4) S Triacontane	21.29	8504149	72.202 mg/L
Spiked Amount 250.000		Recovery =	28.88%
Target Compounds			
1) H TPH-Diesel (c10-c24)	10.00	82867535	440.550 mg/L
2) H Motor Oil (c24-c36)	21.00	43922455	527.423 mg/L

Quantitation Report

Data File : C:\HPCHEM\1\DATA\121806\1218003.D

Vial: 3

Acq On : 18 Dec 2006 11:26 am

Operator: MCM

Sample : 500ppm Gas/Dsl/Oil CCV

Inst : GCQ

Misc : 22-GC-85h

Multiplr: 1.00

IntFile : events.e

Quant Time: Dec 19 10:07 2006 Quant Results File: DOQ61208.RES

Quant Method : C:\HPCHEM\1\METHODS\DOQ61208.M (Chemstation Integrator)

Title : Diesel/M Oil (c10-c36) Calibration

Last Update : Sun Dec 17 13:03:16 2006

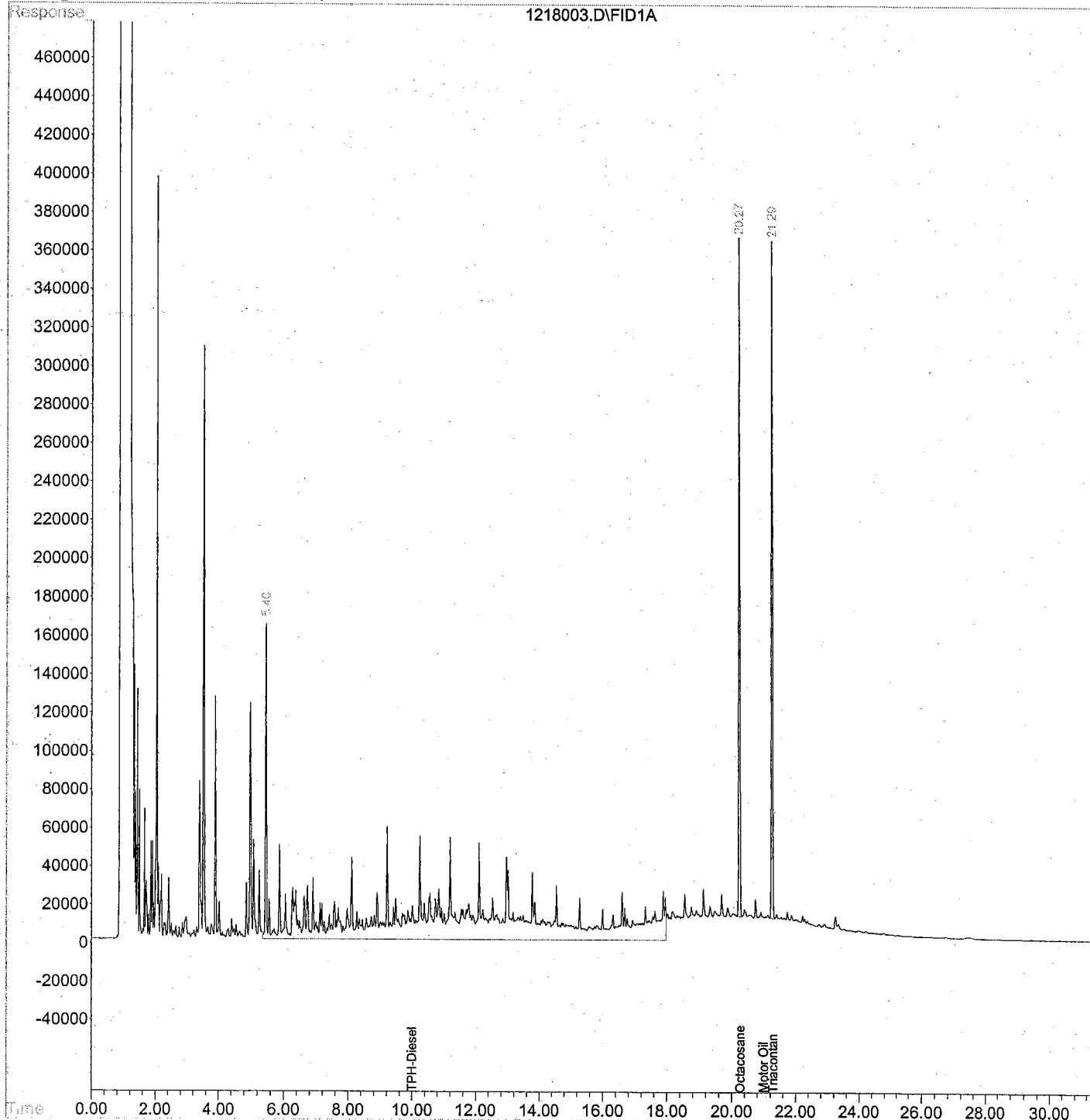
Response via : Multiple Level Calibration

DataAcq Meth : GCQFC.M

Volume Inj. : 5uL

Signal Phase : RTX-5

Signal Info : 0.53 mm /30m



COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893

Service Request: D0601981
Date Analyzed: 12/18/2006

Continuing Calibration Verification Summary
Diesel / Motor Oil Range Organics

ICAL Type: External Standard
Analysis Method: 8015B

ICAL Date: 12/08/2006
ICAL ID: CAL1237
Analysis Lot: DWG0601059
Units: mg/L
Column ID: RTX-5

File ID: C:\HPCHEM\1\DATA\121806\1218014.D

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
TPH-Diesel (C10-C24)	1000	880	188000	166000	-12	NA	± 15 %	AverageRF
Motor Oil (C24-C36)	1000	1100	102000	90100	NA	14	± 15 %	Linear
Octacosane	130	120	116000	115000	-1	NA	± 25 %	AverageRF
n-Triacontane	130	120	118000	115000	-2	NA	± 25 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Data File : C:\HPCHEM\1\DATA\121806\1218014.D Vial: 14
Acq On : 18 Dec 2006 9:13 pm Operator: MCM
Sample : 1000ppm Gas/Dsl/Oil CCV Inst : GCQ
Misc : 22-GC-85g Multiplr: 1.00
IntFile : events.e
Quant Time: Dec 19 10:07 2006 Quant Results File: DOQ61208.RES

Quant Method : C:\HPCHEM\1\METHODS\DOQ61208.M (Chemstation Integrator)
Title : Diesel/M Oil (c10-c36) Calibration
Last Update : Sun Dec 17 13:03:16 2006
Response via : Initial Calibration
DataAcq Meth : GCQFC.M

Volume Inj. : 5uL
Signal Phase : RTX-5
Signal Info : 0.53 mm /30m

MEM
12/19/06

Compound	R.T.	Response	Conc Units

System Monitoring Compounds			
3) S Octacosane	20.29	14417722	124.084 mg/L
Spiked Amount 250.000		Recovery =	49.63%
4) S Triacontane	21.31	14408978	122.336 mg/L
Spiked Amount 250.000		Recovery =	48.93%
Target Compounds			
1) H TPH-Diesel (c10-c24)	10.00	165581925	880.285 mg/L
2) H Motor Oil (c24-c36)	21.00	90060810	1144.911 mg/L

Quantitation Report

Data File : C:\HPCHEM\1\DATA\121806\1218014.D

Vial: 14

Acq On : 18 Dec 2006 9:13 pm

Operator: MCM

Sample : 1000ppm Gas/Dsl/Oil CCV

Inst : GCQ

Misc : 22-GC-85g

Multiplr: 1.00

IntFile : events.e

Quant Time: Dec 19 10:07 2006 Quant Results File: DOQ61208.RES

Quant Method : C:\HPCHEM\1\METHODS\DOQ61208.M (Chemstation Integrator)

Title : Diesel/M_Oil (c10-c36) Calibration

Last Update : Sun Dec 17 13:03:16 2006

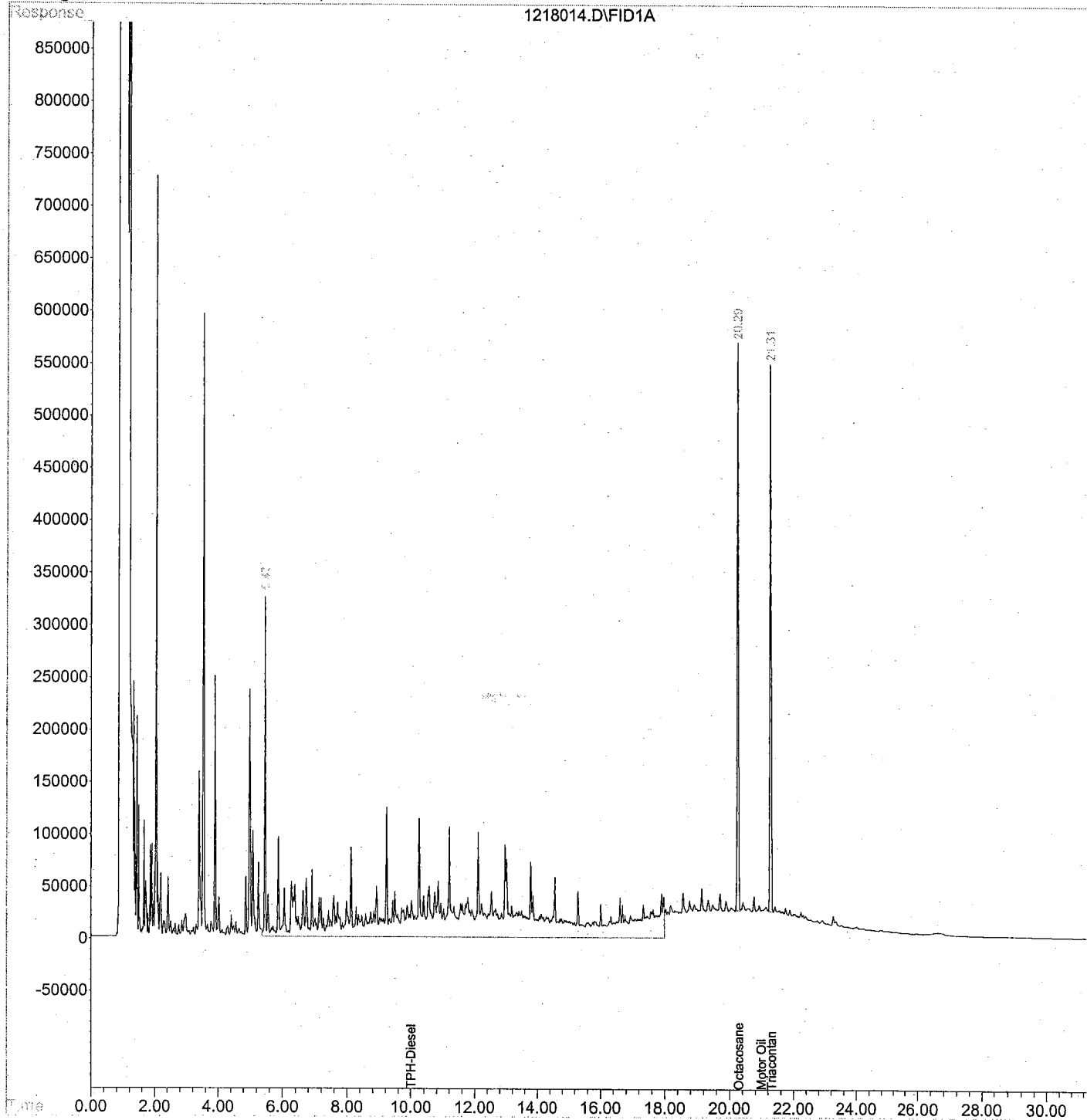
Response via : Multiple Level Calibration

DataAcq Meth : GCQFC.M

Volume Inj. : 5uL

Signal Phase : RTX-5

Signal Info : 0.53 mm /30m



COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893

Service Request: D0601981

Analysis Run Log
Diesel / Motor Oil Range Organics

Analysis Method: 8015B

Analysis Lot: DWG0601059
Instrument ID: GCQ
Column: RTX-5

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
\1218003.D	Continuing Calibration Verification	DWG0601059-1	12/18/2006	11:26		12/18/2006	11:57
\1218004.D	Method Blank	DWG0601058-3	12/18/2006	13:11		12/18/2006	13:42
\1218007.D	Lab Control Sample	DWG0601058-1	12/18/2006	15:10		12/18/2006	15:41
\1218008.D	Duplicate Lab Control Sample	DWG0601058-2	12/18/2006	15:50		12/18/2006	16:21
\1218011.D	231GW09CL	D0601981-002	12/18/2006	19:14		12/18/2006	19:45
\1218012.D	1065MW9ACL	D0601981-003	12/18/2006	19:54		12/18/2006	20:25
\1218013.D	1065PZ1BCL	D0601981-004	12/18/2006	20:33		12/18/2006	21:04
\1218014.D	Continuing Calibration Verification	DWG0601059-2	12/18/2006	21:13		12/18/2006	21:44

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893
Sample Matrix: Water

Service Request: D0601981
Date Extracted: 12/11/2006

Extraction Prep Log
Diesel / Motor Oil Range Organics

Extraction Method: EPA 3510C
Analysis Method: 8015B

Extraction Lot: DWG0601058
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
231GW09CL	D0601981-002	12/05/06	12/06/06	1.05L	1ml	NA	
1065MW9ACL	D0601981-003	12/05/06	12/06/06	0.77L	1ml	NA	
1065PZ1BCL	D0601981-004	12/05/06	12/06/06	1.05L	1ml	NA	
Method Blank	DWG0601058-3	NA	NA	1.00L	1ml	NA	
Lab Control Sample	DWG0601058-1	NA	NA	1.00L	1ml	NA	
Duplicate Lab Control Sample	DWG0601058-2	NA	NA	1.00L	1ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

SUPPORT DOCUMENTATION

Date	12/11/06
Time	13:40

Batches D0601981

Client(s) Treadwell & Rollo

Date sampled	
--------------	--

Analytical Method(s)	
☒	TFHD, 8015B
☐	DRO by 3520C
☐	DRAX, AK102.0
☒	Other <u>Dmo</u>

Solvent Lots	
DCM	Valon/ISide 12/1/1991

Spikes	
Surrogate	14 - EXS-388B-2
Amt. 1.0 ml	Exp: 11/19/07
Spike	14 - EXS-35B
Amt. 1.0 ml	Exp: 1/2/07
Spiked by	Witness

Comments:

Dmo spike: 14-BXS-48A
Use 0.25ml Exp: 3/11/07

1981-3: limited sample provided

Test Code(s)
8015 & Dmo

Sample ID

Spikes		Amt	Final KD	Relinq.
Surrogate	Spike 1		H2O bath temp 79 °C	
		(1L)	Date & Volume	Date 12/12
X	X	By: <i>cmc</i>	By: KH 12/12	By: KH
X		1.0	1.0mL	
X	X	1.0		
X	X	1.0		
X	X	1.0		
X		1.05		
X		1.05		
X		0.77		
X		1.05		
<i>cmc 12/11/12</i>				

cm
12/11/22

9/25/12/11/10/9

 Completed ms/msd
 Sample limited, no ms/msd, duplicate LCS

028

Peer Review By:

Organic Extractions Dept.
CAS-Redding

Sequence Name: C:\HPCHEM\1\SEQUENCE\121706.S

Comment:

Operator: MCM

Data Path: C:\HPCHEM\1\DATA\121806\

Pre-Seq Cmd:

Post-Seq Cmd:

Method Sections To Run On A Barcode Mismatch

(X) Full Method (X) Inject Anyway

() Reprocessing Only () Don't Inject

Line Type	Vial	DataFile	Method	Sample Name
1 IB	1	1218001	GCQFC	Instrument Blk (DCM/SS)
2 PEM	2	1218002	GCQFC	RT Marker c6_c40
3 CCV	3	1218003	GCQFC	500ppm Gas/Dsl/Oil CCV
4 MB	4	1218004	GCQFC	wmb 12/11 1L:1ml
5 LCS	5	1218005	GCQFC	wlcs 12/11 Dsl
6 DLCS	6	1218006	GCQFC	wdlcs 12/11 Dsl
7 LCS	7	1218007	GCQFC	wlcs 12/11 Oil
8 DLCS	8	1218008	GCQFC	wdlcs 12/11 Oil
9 SOLV	9	1218009	GCQFC	wash blank
10 SMPL	10	1218010	GCQFC	D0601981-001.08 1.05L:1ml
11 SMPL	11	1218011	GCQFC	D0601981-002.07 1.05L:1ml
12 SMPL	12	1218012	GCQFC	D0601981-003.07 0.77L:1ml
13 SMPL	13	1218013	GCQFC	D0601981-004.07 1.05L:1ml
14 CCV	14	1218014	GCQFC	1000ppm Gas/Dsl/Oil CCV
15 SOLV	9	1218015	GCQFC	wash blank
16 MB	15	1218016	GCQFC	wmb 12/13 1L:1ml
17 LCS	16	1218017	GCQFC	wlcs 12/13 1L:1ml
18 DLCS	17	1218018	GCQFC	wdlcs 12/13 1L:1ml
19 SOLV	9	1218019	GCQFC	wash blank
20 SMPL	18	1218020	GCQFC	D0602031-001.05 1.05L:1mL
21 SMPL	19	1218021	GCQFC	D0602031-002.05 0.10L:1mL
22 SMPL	20	1218022	GCQFC	D0602031-003.05 1.05L:1mL
23 SMPL	21	1218023	GCQFC	D0602031-004.09 1.05L:1mL
24 SOLV	9	1218024	GCQFC	wash blank
25 CCV	3	1218025	GCQFC	500ppm Gas/Dsl/Oil CCV
26				

MCM 12/19/06

Prep:

Analy:

DWG0601056 DWG0601057

DWG0601058 DWG0601059

Organochlorine Pesticides

COLUMBIA ANALYTICAL SERVICES/REDDING

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981

Cover Page - Analysis Data Package
ORGANOCHLORINE PESTICIDES

Sample Name	Lab Code	Date Collected	Date Received
LF6GW103CL	D0601981-001	12/05/2006	12/06/2006

I certify this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Wida AngName: WIDA ANGDate: 12/18/06Title: Organic Manager

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Collected: 12/05/2006
Date Received: 12/06/2006

ORGANOCHLORINE PESTICIDES

Sample Name: LF6GW103CL
Lab Code: D0601981-001
Extraction: SW3520
Analysis Method: SW8081

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Endosulfan I	ND	U	0.050	1	12/11/2006	12/14/2006	PWB11211	
Methoxychlor	ND	U	0.50	1	12/11/2006	12/14/2006	PWB11211	
alpha-BHC	ND	U	0.050	1	12/11/2006	12/14/2006	PWB11211	
beta-BHC	ND	U	0.050	1	12/11/2006	12/14/2006	PWB11211	
gamma-BHC (Lindane)	ND	U	0.050	1	12/11/2006	12/14/2006	PWB11211	
delta-BHC	ND	U	0.050	1	12/11/2006	12/14/2006	PWB11211	
Heptachlor	ND	U	0.050	1	12/11/2006	12/14/2006	PWB11211	
Aldrin	ND	U	0.050	1	12/11/2006	12/14/2006	PWB11211	
Heptachlor Epoxide	ND	U	0.050	1	12/11/2006	12/14/2006	PWB11211	
gamma-Chlordane	ND	U	0.50	1	12/11/2006	12/14/2006	PWB11211	
Toxaphene	ND	U	1.0	1	12/11/2006	12/14/2006	PWB11211	
alpha-Chlordane	ND	U	0.50	1	12/11/2006	12/14/2006	PWB11211	
4,4'-DDE	ND	U	0.10	1	12/11/2006	12/14/2006	PWB11211	
Dieldrin	ND	U	0.10	1	12/11/2006	12/14/2006	PWB11211	
Endrin	ND	U	0.10	1	12/11/2006	12/14/2006	PWB11211	
Endosulfan II	ND	U	0.10	1	12/11/2006	12/14/2006	PWB11211	
4,4'-DDD	ND	U	0.10	1	12/11/2006	12/14/2006	PWB11211	
Endosulfan Sulfate	ND	U	0.10	1	12/11/2006	12/14/2006	PWB11211	
4,4'-DDT	ND	U	0.10	1	12/11/2006	12/14/2006	PWB11211	
Endrin Ketone	ND	U	0.10	1	12/11/2006	12/14/2006	PWB11211	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl - SS	66	65-135	12/14/2006	
Tetrachloro-m-xylene - SS	84	65-135	12/14/2006	

Comments: _____

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
 Project: Presidio
 Sample Matrix: Water

Service Request: D0601981
 Date Collected: NA
 Date Received: NA

ORGANOCHLORINE PESTICIDES

Sample Name: Method Blank
 Lab Code: PWB11211
 Extraction: SW3520
 Analysis Method: SW8081

Units: ug/L (ppb)
 Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Endosulfan I	ND	U	0.050	1	12/11/2006	12/11/2006	PWB11211	
Methoxychlor	ND	U	0.50	1	12/11/2006	12/11/2006	PWB11211	
alpha-BHC	ND	U	0.050	1	12/11/2006	12/11/2006	PWB11211	
beta-BHC	ND	U	0.050	1	12/11/2006	12/11/2006	PWB11211	
gamma-BHC (Lindane)	ND	U	0.050	1	12/11/2006	12/11/2006	PWB11211	
delta-BHC	ND	U	0.050	1	12/11/2006	12/11/2006	PWB11211	
Heptachlor	ND	U	0.050	1	12/11/2006	12/11/2006	PWB11211	
Aldrin	ND	U	0.050	1	12/11/2006	12/11/2006	PWB11211	
Heptachlor Epoxide	ND	U	0.050	1	12/11/2006	12/11/2006	PWB11211	
gamma-Chlordane	ND	U	0.50	1	12/11/2006	12/11/2006	PWB11211	
Toxaphene	ND	U	1.0	1	12/11/2006	12/11/2006	PWB11211	
alpha-Chlordane	ND	U	0.50	1	12/11/2006	12/11/2006	PWB11211	
4,4'-DDE	ND	U	0.10	1	12/11/2006	12/11/2006	PWB11211	
Dieldrin	ND	U	0.10	1	12/11/2006	12/11/2006	PWB11211	
Endrin	ND	U	0.10	1	12/11/2006	12/11/2006	PWB11211	
Endosulfan II	ND	U	0.10	1	12/11/2006	12/11/2006	PWB11211	
4,4'-DDD	ND	U	0.10	1	12/11/2006	12/11/2006	PWB11211	
Endosulfan Sulfate	ND	U	0.10	1	12/11/2006	12/11/2006	PWB11211	
4,4'-DDT	ND	U	0.10	1	12/11/2006	12/11/2006	PWB11211	
Endrin Ketone	ND	U	0.10	1	12/11/2006	12/11/2006	PWB11211	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl - SS	105	65-135	12/11/2006	
Tetrachloro-m-xylene - SS	98	65-135	12/11/2006	

Comments: _____

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981

Surrogate Recovery Summary
ORGANOCHLORINE PESTICIDES

Prep Method: SW3520

Analysis Method: SW8081

Units: Percent

<u>Sample Name</u>	<u>Lab Code</u>	<u>Q</u>	<u>S1</u>	<u>S2</u>
Laboratory Control Sample Duplicate	PWB11211LCSD		91	85
Method Blank	PWB11211		105	98
LF6GW103CL	D0601981-001		66	84
Laboratory Control Sample	PWB11211LCS		98	93

Surrogate Recovery Control Limits (%)

S1: Decachlorobiphenyl - SS	65-135
S2: Tetrachloro-m-xylene - SS	65-135

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Collected: NA
Date Received: NA
Date Extracted: 12/11/2006
Date Analyzed: 12/15/2006

**Laboratory Control Sample/Duplicate Laboratory Control Sample Summary
 ORGANOCHLORINE PESTICIDES**

LCS Sample	Lab Control Sample	DLCS Sample	Lab Control Sample Duplicate
Lab Code:	PWB11211LCS / PWB11211LCSD	Units:	ug/L (ppb)
Extraction	SW3520		
Analysis Method:	SW8081		

Analyte	MRL	Spike Level	Spike Result	Spike Result	Spike % Rec	Spike % Rec	CAS Acceptance	Relative Percent	Result Notes
			LCS	LCSD	LCS	LCSD	Limits	Difference	
Endosulfan I	0.050	0.5000	0.4879	0.4188	98	84	65-135	15	
Endrin Ketone	0.10	0.5000	0.5626	0.5290	112	106	65-135	6	
alpha-BHC	0.050	0.5000	0.5082	0.4353	102	87	65-135	15	
beta-BHC	0.050	0.5000	0.5425	0.4809	108	96	65-135	12	
gamma-BHC (Lindane)	0.050	0.5000	0.5148	0.4455	103	89	65-135	14	
delta-BHC	0.050	0.5000	0.5820	0.4938	116	99	65-135	16	
Heptachlor	0.050	0.5000	0.4718	0.4223	94	84	65-135	11	
Aldrin	0.050	0.5000	0.4888	0.4375	98	88	65-135	11	
Heptachlor Epoxide	0.050	0.5000	0.5251	0.4378	105	88	65-135	18	
gamma-Chlordane	0.50	0.5000	0.4952	0.4467	99	89	65-135	10	
Methoxychlor	0.50	0.5000	0.5268	0.5256	105	105	65-135	0	
alpha-Chlordane	0.50	0.5000	0.4720	0.4462	94	89	65-135	6	
4,4'-DDE	0.10	0.5000	0.5360	0.4749	107	95	65-135	12	
Dieldrin	0.10	0.5000	0.4526	0.4085	90	82	65-135	10	
Endrin	0.10	0.5000	0.4795	0.4186	96	84	65-135	14	
Endosulfan II	0.10	0.5000	0.4791	0.4165	96	83	65-135	14	
4,4'-DDD	0.10	0.5000	0.5474	0.4725	109	94	65-135	15	
Endosulfan Sulfate	0.10	0.5000	0.5230	0.4712	105	94	65-135	10	
4,4'-DDT	0.10	0.5000	0.5025	0.4452	100	89	65-135	12	

COLUMBIA ANALYTICAL SERVICES/REDDING**QA/QC Results**

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Extracted: 12/11/2006
Date Analyzed: 12/11/2006
Time Analyzed: 20:53

Method Blank Summary
ORGANOCHLORINE PESTICIDES

Extraction Method: SW3520
Analysis Method: SW8081

Extraction Lot: PWB11211

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Laboratory Control Sample Duplicate	PWB11211LCSD	D1211011A	12/11/2006	20:01
LF6GW103CL	D0601981-001	D1213024	12/14/2006	11:21
Laboratory Control Sample	PWB11211LCS	D1214008	12/15/2006	13:04

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
ICAL Date: 12/09/2006

Initial Calibration Summary
ORGANOCHLORINE PESTICIDES

ICAL ID: 12/09/2006GCD
Instrument ID: GCD

Column: DB5

Level ID File ID

A D1208016
B D1208018
C D1208019
D D1208020
E D1208021

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF
Toxaphene	A	0.100	0.018	B	0.250	0.019	C	0.500	0.016	D	0.750	0.019	E	1.000	0.017
	F	0.025	0.027												
Chlordane	A	0.050	0.063	B	0.250	0.057	C	0.500	0.055	D	0.750	0.053	E	1.000	0.055
	F	0.025	0.085												

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
ICAL Date: 12/09/2006

Initial Calibration Summary
ORGANOCHLORINE PESTICIDES

ICAL ID: 12/09/2006GCD
Instrument ID: GCD

Column: DB5

Level ID	File ID						Level ID	File ID							
A	D1208016						F	D1208017							
B	D1208018														
C	D1208019														
D	D1208020														
E	D1208021														
Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Endosulfan I	A	0.002	1.206	B	0.015	0.957	C	0.050	0.827	D	0.075	0.913	E	0.100	0.942
	F	0.005	1.124												
Endrin Ketone	A	0.002	1.140	B	0.015	0.994	C	0.050	0.886	D	0.075	0.899	E	0.100	0.902
	F	0.005	1.124												
4,4'-DDT	A	0.002	0.924	B	0.015	0.882	C	0.050	0.840	D	0.075	0.815	E	0.100	0.846
	F	0.005	0.968												
alpha-BHC	A	0.002	2.348	B	0.015	1.767	C	0.050	1.644	D	0.075	1.674	E	0.100	1.678
	F	0.005	2.057												
beta-BHC	A	0.002	0.446	B	0.015	0.518	C	0.050	0.489	D	0.075	0.483	E	0.100	0.482
	F	0.005	0.468												
gamma-BHC (Lindane)	A	0.002	1.520	B	0.015	1.467	C	0.050	1.447	D	0.075	1.501	E	0.100	1.516
	F	0.005	1.483												
delta-BHC	A	0.002	1.146	B	0.015	1.283	C	0.050	1.286	D	0.075	1.330	E	0.100	1.357
	F	0.005	1.220												
Heptachlor	A	0.002	1.599	B	0.015	1.461	C	0.050	1.392	D	0.075	1.429	E	0.100	1.460
	F	0.005	1.572												
Aldrin	A	0.002	1.477	B	0.015	1.377	C	0.050	1.318	D	0.075	1.356	E	0.100	1.375
	F	0.005	1.464												
Heptachlor Epoxide	A	0.002	1.322	B	0.015	1.195	C	0.050	1.157	D	0.075	1.158	E	0.100	1.186
	F	0.005	1.308												
gamma-Chlordane	A	0.002	1.280	B	0.015	1.130	C	0.050	1.130	D	0.075	1.137	E	0.100	1.147
	F	0.005	1.250												
Methoxychlor	A	0.002	0.360	B	0.015	0.430	C	0.050	0.395	D	0.075	0.393	E	0.100	0.390
	F	0.005	0.452												
alpha-Chlordane	A	0.002	1.411	B	0.015	1.258	C	0.050	1.252	D	0.075	1.212	E	0.100	1.207
	F	0.005	1.316												
4,4'-DDE	A	0.002	1.040	B	0.015	0.924	C	0.050	0.874	D	0.075	0.868	E	0.100	0.890
	F	0.005	1.054												
Dieldrin	A	0.002	1.496	B	0.015	1.280	C	0.050	1.292	D	0.075	1.305	E	0.100	1.320
	F	0.005	1.417												
Endrin	A	0.002	1.185	B	0.015	1.072	C	0.050	0.986	D	0.075	0.980	E	0.100	0.998
	F	0.005	1.140												
Endosulfan II	A	0.002	1.096	B	0.015	0.971	C	0.050	0.905	D	0.075	0.897	E	0.100	0.906
	F	0.005	1.068												

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
 Project: Presidio

Service Request: D0601981
 ICAL Date: 12/09/2006

Initial Calibration Summary
 ORGANOCHLORINE PESTICIDES

ICAL ID: 12/09/2006GCD
 Instrument ID: GCD

Column: DB5

Level ID	File ID						Level ID	File ID								
A	D1208016						F	D1208017								
B	D1208018															
C	D1208019															
D	D1208020															
E	D1208021															
Analyte Name	Level			Level			Level			Level			Level			
	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	
4,4'-DDD	A	0.002	0.655	B	0.015	0.700	C	0.050	0.772	D	0.075	0.766	E	0.100	0.779	
	F	0.005	0.732													
Endrin Aldehyde	A	0.002	0.676	B	0.015	0.640	C	0.050	0.587	D	0.075	0.594	E	0.100	0.593	
	F	0.005	0.660													
Endosulfan Sulfate	A	0.002	1.015	B	0.015	0.828	C	0.050	0.711	D	0.075	0.734	E	0.100	0.732	
	F	0.005	0.928													
Tetrachloro-m-xylene	A	0.004	0.944	B	0.030	0.876	C	0.100	0.862	D	0.150	0.882	E	0.200	0.879	
	F	0.010	0.945													
Decachlorobiphenyl	A	0.004	0.906	B	0.030	0.824	C	0.100	0.732	D	0.150	0.729	E	0.200	0.727	
	F	0.010	0.906													

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
ICAL Date: 12/09/2006

Initial Calibration Summary
ORGANOCHLORINE PESTICIDES

ICAL ID: 12/09/2006GCD
Instrument ID: GCD
Mean RSD: 8.25

Column: DB5

Calibration Evaluation

Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria
Toxaphene	TRG	AverageRF	% RSD	8.7		20.0
Chlordane	TRG	AverageRF	% RSD	7.8		20.0

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
ICAL Date: 12/09/2006

Initial Calibration Summary
ORGANOCHLORINE PESTICIDES

ICAL ID: 12/09/2006GCD
Instrument ID: GCD
Mean RSD: 7.84

Column: DB5

Calibration Evaluation

Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria
Endosulfan I	TRG	Quadratic	r	1.000		0.990
Endrin Ketone	TRG	Quadratic	r	1.000		0.990
4,4'-DDT	TRG	AverageRF	% RSD	6.6		20.0
alpha-BHC	TRG	Quadratic	r	1.000		0.990
beta-BHC	TRG	AverageRF	% RSD	4.9		20.0
gamma-BHC (Lindane)	TRG	AverageRF	% RSD	1.9		20.0
delta-BHC	TRG	AverageRF	% RSD	6.0		20.0
Heptachlor	TRG	AverageRF	% RSD	5.5		20.0
Aldrin	TRG	AverageRF	% RSD	4.5		20.0
Heptachlor Epoxide	TRG	AverageRF	% RSD	6.1		20.0
gamma-Chlordane	TRG	AverageRF	% RSD	5.7		20.0
Methoxychlor	TRG	AverageRF	% RSD	8.1		20.0
alpha-Chlordane	TRG	AverageRF	% RSD	6.0		20.0
4,4'-DDE	TRG	Quadratic	r	1.000		0.990
Dieldrin	TRG	AverageRF	% RSD	6.4		20.0
Endrin	TRG	AverageRF	% RSD	8.2		20.0
Endosulfan II	TRG	Quadratic	r	1.000		0.990
4,4'-DDD	TRG	AverageRF	% RSD	6.6		20.0
Endrin Aldehyde	TRG	AverageRF	% RSD	6.2		20.0
Endosulfan Sulfate	TRG	Quadratic	r	1.000		0.990
Tetrachloro-m-xylene	SUR	AverageRF	% RSD	4.1		20.0
Decachlorobiphenyl	SUR	Quadratic	r	1.000		0.990

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
Date Analyzed: 12/09/2006

Second Source Calibration Verification
ORGANOCHLORINE PESTICIDES

ICAL ID: 12/09/2006GCD
Instrument ID: GCD
File ID: D1208022

Column: DB5

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%	Criteria	Curve Fit	Q
Endosulfan I	0.050	0.055	0.055	0.050	NA	9.3	+/- 15.0	Quadratic	
Endrin Ketone	0.050	0.054	0.054	0.050	NA	7.7	+/- 15.0	Quadratic	
4,4'-DDT	0.050	0.046	0.879	0.818	-6.90	NA	+/- 15.0	AverageRF	
alpha-BHC	0.050	0.050	0.050	0.050	NA	0.5	+/- 15.0	Quadratic	
beta-BHC	0.050	0.053	0.481	0.507	5.50	NA	+/- 15.0	AverageRF	
gamma-BHC (Lindane)	0.050	0.050	1.489	1.496	0.40	NA	+/- 15.0	AverageRF	
delta-BHC	0.050	0.055	1.270	1.401	10.30	NA	+/- 15.0	AverageRF	
Heptachlor	0.050	0.047	1.485	1.409	-5.10	NA	+/- 15.0	AverageRF	
Aldrin	0.050	0.048	1.395	1.352	-3.00	NA	+/- 15.0	AverageRF	
Heptachlor Epoxide	0.050	0.048	1.221	1.169	-4.20	NA	+/- 15.0	AverageRF	
gamma-Chlordane	0.050	0.050	1.179	1.176	-0.20	NA	+/- 15.0	AverageRF	
Methoxychlor	0.050	0.051	0.404	0.413	2.30	NA	+/- 15.0	AverageRF	
alpha-Chlordane	0.050	0.047	1.276	1.194	-6.40	NA	+/- 15.0	AverageRF	
4,4'-DDE	0.050	0.049	0.049	0.050	NA	-1.3	+/- 15.0	Quadratic	
Dieldrin	0.050	0.048	1.352	1.305	-3.40	NA	+/- 15.0	AverageRF	
Endrin	0.050	0.048	1.060	1.022	-3.60	NA	+/- 15.0	AverageRF	
Endosulfan II	0.050	0.050	0.050	0.050	NA	0.3	+/- 15.0	Quadratic	
4,4'-DDD	0.050	0.051	0.734	0.750	2.20	NA	+/- 15.0	AverageRF	
Endrin Aldehyde	0.050	0.048	0.625	0.600	-4.00	NA	+/- 15.0	AverageRF	
Endosulfan Sulfate	0.050	0.052	0.052	0.050	NA	5.1	+/- 15.0	Quadratic	
Tetrachloro-m-xylene	0.100	0.052	0.898	0.926	3.10	NA	+/- 15.0	AverageRF	
Decachlorobiphenyl	0.100	0.058	0.058	0.100	NA	15.2	+/- 15.0	Quadratic	*

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
Date Analyzed: 12/11/2006

Continuing Calibration Verification Summary
ORGANOCHLORINE PESTICIDES

ICAL ID: 12/09/2006GCD
Instrument ID: GCD
File ID: D1211004

Column: DB5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
Endosulfan I	0.050	0.052	0.052	0.050	NA	3.0	+/- 15.0	Quadratic	
Endrin Ketone	0.050	0.053	0.053	0.050	NA	5.8	+/- 15.0	Quadratic	
4,4'-DDT	0.050	0.051	0.879	0.893	1.50	NA	+/- 15.0	AverageRF	
alpha-BHC	0.050	0.050	0.050	0.050	NA	0.2	+/- 15.0	Quadratic	
beta-BHC	0.050	0.052	0.481	0.498	3.70	NA	+/- 15.0	AverageRF	
gamma-BHC (Lindane)	0.050	0.049	1.489	1.473	-1.10	NA	+/- 15.0	AverageRF	
delta-BHC	0.050	0.052	1.270	1.317	3.70	NA	+/- 15.0	AverageRF	
Heptachlor	0.050	0.049	1.485	1.467	-1.20	NA	+/- 15.0	AverageRF	
Aldrin	0.050	0.050	1.395	1.384	-0.80	NA	+/- 15.0	AverageRF	
Heptachlor Epoxide	0.050	0.049	1.221	1.206	-1.20	NA	+/- 15.0	AverageRF	
gamma-Chlordane	0.050	0.048	1.179	1.146	-2.80	NA	+/- 15.0	AverageRF	
Methoxychlor	0.050	0.055	0.404	0.446	10.50	NA	+/- 15.0	AverageRF	
alpha-Chlordane	0.050	0.047	1.276	1.210	-5.10	NA	+/- 15.0	AverageRF	
4,4'-DDE	0.050	0.051	0.051	0.050	NA	2.1	+/- 15.0	Quadratic	
Dieldrin	0.050	0.047	1.352	1.279	-5.30	NA	+/- 15.0	AverageRF	
Endrin	0.050	0.047	1.060	0.998	-5.80	NA	+/- 15.0	AverageRF	
Endosulfan II	0.050	0.051	0.051	0.050	NA	1.2	+/- 15.0	Quadratic	
4,4'-DDD	0.050	0.054	0.734	0.788	7.40	NA	+/- 15.0	AverageRF	
Endrin Aldehyde	0.050	0.049	0.625	0.610	-2.40	NA	+/- 15.0	AverageRF	
Endosulfan Sulfate	0.050	0.050	0.050	0.050	NA	0.4	+/- 15.0	Quadratic	
Tetrachloro-m-xylene	0.100	0.099	0.898	0.890	-0.90	NA	+/- 15.0	AverageRF	
Decachlorobiphenyl	0.100	0.107	0.107	0.100	NA	7.2	+/- 15.0	Quadratic	*

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
Date Analyzed: 12/12/2006

Continuing Calibration Verification Summary
ORGANOCHLORINE PESTICIDES

ICAL ID: 12/09/2006GCD
Instrument ID: GCD
File ID: D1211019

Column: DB5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
Endosulfan I	0.075	0.075	0.075	0.075	NA	0.5	+/- 15.0	Quadratic	
Endrin Ketone	0.075	0.075	0.075	0.075	NA	0.1	+/- 15.0	Quadratic	
4,4'-DDT	0.075	0.074	0.879	0.868	-1.30	NA	+/- 15.0	AverageRF	
alpha-BHC	0.075	0.074	0.074	0.075	NA	-1.0	+/- 15.0	Quadratic	
beta-BHC	0.075	0.078	0.481	0.498	3.60	NA	+/- 15.0	AverageRF	
gamma-BHC (Lindane)	0.075	0.075	1.489	1.483	-0.40	NA	+/- 15.0	AverageRF	
delta-BHC	0.075	0.080	1.270	1.365	7.40	NA	+/- 15.0	AverageRF	
Heptachlor	0.075	0.073	1.485	1.444	-2.80	NA	+/- 15.0	AverageRF	
Aldrin	0.075	0.071	1.395	1.315	-5.70	NA	+/- 15.0	AverageRF	
Heptachlor Epoxide	0.075	0.073	1.221	1.188	-2.70	NA	+/- 15.0	AverageRF	
gamma-Chlordane	0.075	0.070	1.179	1.108	-6.00	NA	+/- 15.0	AverageRF	
Methoxychlor	0.075	0.077	0.404	0.415	2.70	NA	+/- 15.0	AverageRF	
alpha-Chlordane	0.075	0.070	1.276	1.186	-7.00	NA	+/- 15.0	AverageRF	
4,4'-DDE	0.075	0.079	0.079	0.075	NA	5.7	+/- 15.0	Quadratic	
Dieldrin	0.075	0.065	1.352	1.172	-13.20	NA	+/- 15.0	AverageRF	
Endrin	0.075	0.068	1.060	0.962	-9.20	NA	+/- 15.0	AverageRF	
Endosulfan II	0.075	0.069	0.069	0.075	NA	-8.0	+/- 15.0	Quadratic	
4,4'-DDD	0.075	0.071	0.734	0.698	-4.90	NA	+/- 15.0	AverageRF	
Endrin Aldehyde	0.075	0.070	0.625	0.580	-7.20	NA	+/- 15.0	AverageRF	
Endosulfan Sulfate	0.075	0.072	0.072	0.075	NA	-4.2	+/- 15.0	Quadratic	
Tetrachloro-m-xylene	0.150	0.148	0.898	0.889	-1.00	NA	+/- 15.0	AverageRF	
Decachlorobiphenyl	0.150	0.152	0.152	0.150	NA	1.0	+/- 15.0	Quadratic	*

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
Date Analyzed: 12/14/2006

Continuing Calibration Verification Summary
ORGANOCHLORINE PESTICIDES

ICAL ID: 12/09/2006GCD
Instrument ID: GCD
File ID: D1213018

Column: DB5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
Endosulfan I	0.075	0.070	0.070	0.075	NA	-6.0	+/- 15.0	Quadratic	
Endrin Ketone	0.075	0.074	0.074	0.075	NA	-1.6	+/- 15.0	Quadratic	
4,4'-DDT	0.075	0.067	0.879	0.789	-10.20	NA	+/- 15.0	AverageRF	
alpha-BHC	0.075	0.076	0.076	0.075	NA	1.4	+/- 15.0	Quadratic	
beta-BHC	0.075	0.076	0.481	0.488	1.40	NA	+/- 15.0	AverageRF	
gamma-BHC (Lindane)	0.075	0.074	1.489	1.477	-0.80	NA	+/- 15.0	AverageRF	
delta-BHC	0.075	0.080	1.270	1.362	7.20	NA	+/- 15.0	AverageRF	
Heptachlor	0.075	0.072	1.485	1.428	-3.90	NA	+/- 15.0	AverageRF	
Aldrin	0.075	0.071	1.395	1.328	-4.80	NA	+/- 15.0	AverageRF	
Heptachlor Epoxide	0.075	0.069	1.221	1.131	-7.40	NA	+/- 15.0	AverageRF	
gamma-Chlordane	0.075	0.069	1.179	1.083	-8.20	NA	+/- 15.0	AverageRF	
Methoxychlor	0.075	0.077	0.404	0.415	2.80	NA	+/- 15.0	AverageRF	
alpha-Chlordane	0.075	0.066	1.276	1.122	-12.10	NA	+/- 15.0	AverageRF	
4,4'-DDE	0.075	0.077	0.077	0.075	NA	2.1	+/- 15.0	Quadratic	
Dieldrin	0.075	0.067	1.352	1.215	-10.10	NA	+/- 15.0	AverageRF	
Endrin	0.075	0.068	1.060	0.957	-9.70	NA	+/- 15.0	AverageRF	
Endosulfan II	0.075	0.070	0.070	0.075	NA	-5.9	+/- 15.0	Quadratic	
4,4'-DDD	0.075	0.074	0.734	0.723	-1.60	NA	+/- 15.0	AverageRF	
Endrin Aldehyde	0.075	0.070	0.625	0.582	-6.90	NA	+/- 15.0	AverageRF	
Endosulfan Sulfate	0.075	0.074	0.074	0.075	NA	-0.8	+/- 15.0	Quadratic	
Tetrachloro-m-xylene	0.150	0.147	0.898	0.881	-1.90	NA	+/- 15.0	AverageRF	
Decachlorobiphenyl	0.150	0.150	0.150	0.150	NA	-0.1	+/- 15.0	Quadratic	*

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
Date Analyzed: 12/14/2006

Continuing Calibration Verification Summary
ORGANOCHLORINE PESTICIDES

ICAL ID: 12/09/2006GCD
Instrument ID: GCD
File ID: D1213031

Column: DB5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
Endosulfan I	0.050	0.053	0.053	0.050	NA	6.2	+/- 15.0	Quadratic	
Endrin Ketone	0.050	0.050	0.050	0.050	NA	0.1	+/- 15.0	Quadratic	
4,4'-DDT	0.050	0.049	0.879	0.868	-1.20	NA	+/- 15.0	AverageRF	
alpha-BHC	0.050	0.050	0.050	0.050	NA	-0.6	+/- 15.0	Quadratic	
beta-BHC	0.050	0.051	0.481	0.490	1.90	NA	+/- 15.0	AverageRF	
gamma-BHC (Lindane)	0.050	0.049	1.489	1.470	-1.30	NA	+/- 15.0	AverageRF	
delta-BHC	0.050	0.051	1.270	1.305	2.70	NA	+/- 15.0	AverageRF	
Heptachlor	0.050	0.049	1.485	1.444	-2.80	NA	+/- 15.0	AverageRF	
Aldrin	0.050	0.048	1.395	1.348	-3.30	NA	+/- 15.0	AverageRF	
Heptachlor Epoxide	0.050	0.047	1.221	1.154	-5.40	NA	+/- 15.0	AverageRF	
gamma-Chlordane	0.050	0.047	1.179	1.105	-6.30	NA	+/- 15.0	AverageRF	
Methoxychlor	0.050	0.051	0.404	0.412	2.20	NA	+/- 15.0	AverageRF	
alpha-Chlordane	0.050	0.045	1.276	1.142	-10.50	NA	+/- 15.0	AverageRF	
4,4'-DDE	0.050	0.053	0.053	0.050	NA	5.7	+/- 15.0	Quadratic	
Dieldrin	0.050	0.046	1.352	1.256	-7.00	NA	+/- 15.0	AverageRF	
Endrin	0.050	0.047	1.060	1.007	-5.00	NA	+/- 15.0	AverageRF	
Endosulfan II	0.050	0.050	0.050	0.050	NA	0.8	+/- 15.0	Quadratic	
4,4'-DDD	0.050	0.058	0.734	0.852	16.00	NA	+/- 15.0	AverageRF	
Endrin Aldehyde	0.050	0.051	0.625	0.638	2.20	NA	+/- 15.0	AverageRF	
Endosulfan Sulfate	0.050	0.049	0.049	0.050	NA	-1.5	+/- 15.0	Quadratic	
Tetrachloro-m-xylene	0.100	0.098	0.898	0.880	-2.10	NA	+/- 15.0	AverageRF	
Decachlorobiphenyl	0.100	0.102	0.102	0.100	NA	1.7	+/- 15.0	Quadratic	*

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
Date Analyzed: 12/15/2006

Continuing Calibration Verification Summary
ORGANOCHLORINE PESTICIDES

ICAL ID: 12/09/2006GCD
Instrument ID: GCD
File ID: D1214004

Column: DB5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
Endosulfan I	0.050	0.052	0.052	0.050	NA	4.2	+/- 15.0	Quadratic	
Endrin Ketone	0.050	0.050	0.050	0.050	NA	0.3	+/- 15.0	Quadratic	
4,4'-DDT	0.050	0.046	0.879	0.811	-7.70	NA	+/- 15.0	AverageRF	
alpha-BHC	0.050	0.050	0.050	0.050	NA	-0.7	+/- 15.0	Quadratic	
beta-BHC	0.050	0.053	0.481	0.508	5.60	NA	+/- 15.0	AverageRF	
gamma-BHC (Lindane)	0.050	0.050	1.489	1.490	0.10	NA	+/- 15.0	AverageRF	
delta-BHC	0.050	0.052	1.270	1.317	3.60	NA	+/- 15.0	AverageRF	
Heptachlor	0.050	0.049	1.485	1.448	-2.50	NA	+/- 15.0	AverageRF	
Aldrin	0.050	0.049	1.395	1.358	-2.60	NA	+/- 15.0	AverageRF	
Heptachlor Epoxide	0.050	0.048	1.221	1.178	-3.50	NA	+/- 15.0	AverageRF	
gamma-Chlordane	0.050	0.047	1.179	1.110	-5.90	NA	+/- 15.0	AverageRF	
Methoxychlor	0.050	0.052	0.404	0.422	4.70	NA	+/- 15.0	AverageRF	
alpha-Chlordane	0.050	0.045	1.276	1.141	-10.60	NA	+/- 15.0	AverageRF	
4,4'-DDE	0.050	0.052	0.052	0.050	NA	3.6	+/- 15.0	Quadratic	
Dieldrin	0.050	0.046	1.352	1.252	-7.40	NA	+/- 15.0	AverageRF	
Endrin	0.050	0.046	1.060	0.985	-7.00	NA	+/- 15.0	AverageRF	
Endosulfan II	0.050	0.048	0.048	0.050	NA	-4.3	+/- 15.0	Quadratic	
4,4'-DDD	0.050	0.052	0.734	0.758	3.20	NA	+/- 15.0	AverageRF	
Endrin Aldehyde	0.050	0.043	0.625	0.537	-14.00	NA	+/- 15.0	AverageRF	
Endosulfan Sulfate	0.050	0.047	0.047	0.050	NA	-5.2	+/- 15.0	Quadratic	
Tetrachloro-m-xylene	0.100	0.098	0.898	0.877	-2.40	NA	+/- 15.0	AverageRF	
Decachlorobiphenyl	0.100	0.102	0.102	0.100	NA	1.7	+/- 15.0	Quadratic	*

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
 Project: Presidio

Service Request: D0601981
 Date Analyzed: 12/15/2006

Continuing Calibration Verification Summary
 ORGANOCHLORINE PESTICIDES

ICAL ID: 12/09/2006GCD
 Instrument ID: GCD
 File ID: D1214012

Column: DB5

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
Endosulfan I	0.075	0.073	0.073	0.075	NA	-2.6	+/- 15.0	Quadratic	
Endrin Ketone	0.075	0.073	0.073	0.075	NA	-2.6	+/- 15.0	Quadratic	
4,4'-DDT	0.075	0.068	0.879	0.796	-9.50	NA	+/- 15.0	AverageRF	
alpha-BHC	0.075	0.076	0.076	0.075	NA	1.8	+/- 15.0	Quadratic	
beta-BHC	0.075	0.074	0.481	0.474	-1.50	NA	+/- 15.0	AverageRF	
gamma-BHC (Lindane)	0.075	0.073	1.489	1.459	-2.00	NA	+/- 15.0	AverageRF	
delta-BHC	0.075	0.079	1.270	1.337	5.20	NA	+/- 15.0	AverageRF	
Heptachlor	0.075	0.071	1.485	1.408	-5.20	NA	+/- 15.0	AverageRF	
Aldrin	0.075	0.072	1.395	1.334	-4.30	NA	+/- 15.0	AverageRF	
Heptachlor Epoxide	0.075	0.070	1.221	1.148	-6.00	NA	+/- 15.0	AverageRF	
gamma-Chlordane	0.075	0.068	1.179	1.074	-8.90	NA	+/- 15.0	AverageRF	
Methoxychlor	0.075	0.076	0.404	0.408	1.20	NA	+/- 15.0	AverageRF	
alpha-Chlordane	0.075	0.066	1.276	1.127	-11.60	NA	+/- 15.0	AverageRF	
4,4'-DDE	0.075	0.075	0.075	0.075	NA	0.6	+/- 15.0	Quadratic	
Dieldrin	0.075	0.066	1.352	1.184	-12.40	NA	+/- 15.0	AverageRF	
Endrin	0.075	0.066	1.060	0.939	-11.40	NA	+/- 15.0	AverageRF	
Endosulfan II	0.075	0.067	0.067	0.075	NA	-10.7	+/- 15.0	Quadratic	
4,4'-DDD	0.075	0.067	0.734	0.657	-10.50	NA	+/- 15.0	AverageRF	
Endrin Aldehyde	0.075	0.067	0.625	0.556	-11.00	NA	+/- 15.0	AverageRF	
Endosulfan Sulfate	0.075	0.074	0.074	0.075	NA	-1.0	+/- 15.0	Quadratic	
Tetrachloro-m-xylene	0.150	0.147	0.898	0.878	-2.20	NA	+/- 15.0	AverageRF	
Decachlorobiphenyl	0.150	0.145	0.145	0.150	NA	-3.1	+/- 15.0	Quadratic	*

QA/QC Results

Service Request: D0601981

Analysis Method: SW8081

Instrument ID: GCD
Column: DB5

Form 8 - Organic

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Extracted: 12/11/2006

Extraction Prep Log
ORGANOCHLORINE PESTICIDES

Extraction Method: SW3520
Analysis Method: SW8081

Extraction Lot: PWB11211

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
Method Blank	PWB11211	NA	NA	1.000 L	10	NA	
Laboratory Control Sample Duplicate	PWB11211LCSD	NA	NA	1.000 L	10	NA	
LF6GW103CL	D0601981-001	12/05/2006	12/06/2006	0.500 L	10	NA	
Laboratory Control Sample	PWB11211LCS	NA	NA	1.000 L	10	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Report

Service Request: D0601981

Analysis Method: SW8081

[illegible]

Comments: _____

GC ORGANOCHLORINE PCBS

COLUMBIA ANALYTICAL SERVICES/REDDING

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981

Cover Page - Analysis Data Package
PolyChlorinated Biphenyls (PCBs)

Sample Name	Lab Code	Date Collected	Date Received
LF6GW103CL	D0601981-001	12/05/2006	12/06/2006

I certify this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Wida AngDate: 12/18/06Name: WIDA ANGTitle: Organic Manager

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
 Project: Presidio
 Sample Matrix: Water

Service Request: D0601981
 Date Collected: 12/05/2006
 Date Received: 12/06/2006

PolyChlorinated Biphenyls (PCBs)

Sample Name: LF6GW103CL
 Lab Code: D0601981-001
 Extraction: SW3520
 Analysis Method: SW8082

Units: ug/L (ppb)
 Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	ND	U	1.0	1	12/11/2006	12/11/2006	PWB11211	
Aroclor 1221	ND	U	2.0	1	12/11/2006	12/11/2006	PWB11211	
Aroclor 1232	ND	U	1.0	1	12/11/2006	12/11/2006	PWB11211	
Aroclor 1242	ND	U	1.0	1	12/11/2006	12/11/2006	PWB11211	
Aroclor 1248	ND	U	1.0	1	12/11/2006	12/11/2006	PWB11211	
Aroclor 1254	ND	U	1.0	1	12/11/2006	12/11/2006	PWB11211	
Aroclor 1260	ND	U	1.0	1	12/11/2006	12/11/2006	PWB11211	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl - SS	57	65-135	12/11/2006	*
Tetrachloro-m-xylene - SS	83	65-135	12/11/2006	

Comments: _____

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Collected: NA
Date Received: NA

PolyChlorinated Biphenyls (PCBs)

Sample Name: Method Blank
Lab Code: PWB11211
Extraction: SW3520
Analysis Method: SW8082

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	ND	U	1.0	1	12/11/2006	12/11/2006	PWB11211	
Aroclor 1221	ND	U	2.0	1	12/11/2006	12/11/2006	PWB11211	
Aroclor 1232	ND	U	1.0	1	12/11/2006	12/11/2006	PWB11211	
Aroclor 1242	ND	U	1.0	1	12/11/2006	12/11/2006	PWB11211	
Aroclor 1248	ND	U	1.0	1	12/11/2006	12/11/2006	PWB11211	
Aroclor 1254	ND	U	1.0	1	12/11/2006	12/11/2006	PWB11211	
Aroclor 1260	ND	U	1.0	1	12/11/2006	12/11/2006	PWB11211	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl - SS	73	65-135	12/11/2006	
Tetrachloro-m-xylene - SS	72	65-135	12/11/2006	

Comments: _____

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981

Surrogate Recovery Summary
PolyChlorinated Biphenyls (PCBs)

Prep Method: SW3520
Analysis Method: SW8082

Units: Percent

<u>Sample Name</u>	<u>Lab Code</u>	<u>Q</u>	<u>S1</u>	<u>S2</u>
Laboratory Control Sample	PWB11211LCS		78	78
Laboratory Control Sample Duplicate	PWB11211LCSD		78	83
Method Blank	PWB11211		73	72
LF6GW103CL	D0601981-001	*	57	83

Surrogate Recovery Control Limits (%)

S1: Decachlorobiphenyl - SS	65-135
S2: Tetrachloro-m-xylene - SS	65-135

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Collected: NA
Date Received: NA
Date Extracted: 12/11/2006
Date Analyzed: 12/11/2006

Laboratory Control Sample/Duplicate Laboratory Control Sample Summary
PolyChlorinated Biphenyls (PCBs)

LCS Sample Lab Control Sample
Lab Code: PWB11211LCS / PWB11211LCSD
Extraction SW3520
Analysis Method: SW8082

DLCS Sample Lab Control Sample Duplicate
Units: ug/L (ppb)

Analyte	MRL	Spike Level	Spike Result LCS	Spike Result LCSD	Spike % Rec LCS	Spike % Rec LCSD	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Aroclor 1016	1.0	5.000	4.308	4.594	86	92	65-135	6	
Aroclor 1260	1.0	5.000	3.475	3.693	70	74	65-135	6	

COLUMBIA ANALYTICAL SERVICES/REDDING**QA/QC Results**

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Extracted: 12/11/2006
Date Analyzed: 12/11/2006
Time Analyzed: 16:51

Method Blank Summary
PolyChlorinated Biphenyls (PCBs)

Extraction Method: SW3520
Analysis Method: SW8082

Extraction Lot: PWB11211

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Laboratory Control Sample	PWB11211LCS	A1211005	12/11/2006	15:53
Laboratory Control Sample Duplicate	PWB11211LCSD	A1211006	12/11/2006	16:22
LF6GW103CL	D0601981-001	A1211012	12/11/2006	19:17

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
ICAL Date: 11/21/2006

Initial Calibration Summary
PolyChlorinated Biphenyls (PCBs)

ICAL ID: 11/21/2006GCA
Instrument ID: GCA

Column: RTX-CLP

Level ID	File ID	Level ID	File ID
A	A1121019	F	A1121024
B	A1121020		
C	A1121021		
D	A1121022		
E	A1121023		

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Decachlorobiphenyl	A	0.005	17829	B	0.020	8721	C	0.050	7597	D	0.100	7728	E	0.150	7585
	F	0.200	7471												
Tetrachloro-m-xylene	A	0.005	19202	B	0.020	10478	C	0.050	9860	D	0.100	10263	E	0.150	10166
	F	0.200	10007												
Aroclor 1221										D	0.500	140.9			
Aroclor 1232										D	0.500	244.7			
Aroclor 1242										D	0.500	170.5			
Aroclor 1248										D	0.500	370.5			
Aroclor 1254										D	0.500	497.3			

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
ICAL Date: 11/21/2006

Initial Calibration Summary
PolyChlorinated Biphenyls (PCBs)

ICAL ID: 11/21/2006GCA
Instrument ID: GCA

Column: RTX-CLP

Level ID **File ID**

A A1121019
B A1121020
C A1121021
D A1121022
E A1121023

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF
Aroclor 1016	A	0.025	368.7	B	0.100	214.1	C	0.250	194.3	D	0.500	182.3	E	0.750	181.2
	F	1.000	178.0												
Aroclor 1260	A	0.025	788.8	B	0.100	405.7	C	0.250	365.7	D	0.500	354.7	E	0.750	351.6
	F	1.000	346.8												

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
ICAL Date: 11/21/2006

Initial Calibration Summary
PolyChlorinated Biphenyls (PCBs)

ICAL ID: 11/21/2006GCA
Instrument ID: GCA
Mean RSD: 0.00

Column: RTX-CLP

Calibration Evaluation

Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria
Decachlorobiphenyl	SUR	Linear	r	1.000		0.995
Tetrachloro-m-xylene	SUR	Linear	r	1.000		0.995
Aroclor 1221	TRG	AverageRF	% RSD	0.0		20.0
Aroclor 1232	TRG	AverageRF	% RSD	0.0		20.0
Aroclor 1242	TRG	AverageRF	% RSD	0.0		20.0
Aroclor 1248	TRG	AverageRF	% RSD	0.0		20.0
Aroclor 1254	TRG	AverageRF	% RSD	0.0		20.0

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
ICAL Date: 11/21/2006

Initial Calibration Summary
PolyChlorinated Biphenyls (PCBs)

ICAL ID: 11/21/2006GCA
Instrument ID: GCA
Mean RSD: 1.00

Column: RTX-CLP

Analyte Name	Calibration Evaluation					Control Criteria
	Compound Type	Fit Type	Eval. r	Eval. Result	Q	
Aroclor 1016	TRG	Linear	r	1.000		0.995
Aroclor 1260	TRG	Linear	r	1.000		0.995

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
Date Analyzed: 11/21/2006

Second Source Calibration Verification
PolyChlorinated Biphenyls (PCBs)

ICAL ID: 11/21/2006GCA
Instrument ID: GCA
File ID: A1121025

Column: RTX-CLP

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%	Criteria	Curve Fit	Q
Decachlorobiphenyl	0.100	0.100	0.100	0.100	NA	0.2	+/- 15.0	Linear	
Aroclor 1016	0.500	0.538	0.538	0.500	NA	7.6	+/- 15.0	Linear	
Aroclor 1260	0.500	0.474	0.473	0.500	NA	-5.3	+/- 15.0	Linear	
Tetrachloro-m-xylene	0.100	0.100	0.100	0.100	NA	0.2	+/- 15.0	Linear	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
Date Analyzed: 12/11/2006

Continuing Calibration Verification Summary
PolyChlorinated Biphenyls (PCBs)

ICAL ID: 11/21/2006GCA
Instrument ID: GCA
File ID: A1211003

Column: RTX-CLP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
Decachlorobiphenyl	0.100	0.106	0.106	0.100	NA	6.0	+/- 15.0	Linear	
Aroclor 1016	0.500	0.523	0.523	0.500	NA	4.6	+/- 15.0	Linear	
Aroclor 1260	0.500	0.518	0.518	0.500	NA	3.6	+/- 15.0	Linear	
Tetrachloro-m-xylene	0.100	0.107	0.107	0.100	NA	6.6	+/- 15.0	Linear	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
Date Analyzed: 12/11/2006

Continuing Calibration Verification Summary
PolyChlorinated Biphenyls (PCBs)

ICAL ID: 11/21/2006GCA
Instrument ID: GCA
File ID: A1211014

Column: RTX-CLP

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
Decachlorobiphenyl	0.150	0.156	0.156	0.150	NA	4.2	+/- 15.0	Linear	
Aroclor 1016	0.750	0.792	0.792	0.750	NA	5.6	+/- 15.0	Linear	
Aroclor 1260	0.750	0.788	0.788	0.750	NA	5.1	+/- 15.0	Linear	
Tetrachloro-m-xylene	0.150	0.160	0.160	0.150	NA	6.4	+/- 15.0	Linear	

QA/QC Results

Service Request: D0601981

Analysis Method: SW8082

Instrument ID: GCA
Column: RTX-CLP

Form 8 - Organic

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Extracted: 12/11/2006

Extraction Prep Log
PolyChlorinated Biphenyls (PCBs)

Extraction Method: SW3520
Analysis Method: SW8082

Extraction Lot: PWB11211

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
Method Blank	PWB11211	NA	NA	1.000 L	10	NA	
Laboratory Control Sample	PWB11211LCS	NA	NA	1.000 L	10	NA	
Laboratory Control Sample Duplicate	PWB11211LCSD	NA	NA	1.000 L	10	NA	
LF6GW103CL	D0601981-001	12/05/2006	12/06/2006	0.500 L	10	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Report

Service Request: D0601981

Analysis Method: SW8082

[illegible]

Comments: _____

Method Detection Limit Study

Columbia Analytical Services
Redding, CA

Analysis Method: EPA 8082
 Extraction Method: EPA 3510C
 Matrix: WATER
 MDL Effective Date: 10/26/06

Analyst: M. Dyer
 Instrument: GCA
 Description: Combined MDL for Col. 1 and Col. 2
 Department: GS

#	Compound	CAS No.	Date	MDL
1	AROCLOR-1016	12674-11-2	10/26/2006	0.2178
2	AROCLOR-1221	11104-28-2	10/17/2006	0.0836
3	AROCLOR-1232	11141-16-5	10/18/2006	0.0565
4	AROCLOR-1242	53469-21-9	10/26/2006	0.1315
5	AROCLOR-1248	12672-29-6	10/20/2006	0.0704
6	AROCLOR-1254	11097-69-1	10/17/2006	0.0545
7	AROCLOR-1260	11096-82-5	10/26/2006	0.0831

UCI	1	2	3	4	5	6	7	8
0.25	0.16	0.21	0.24	0.38	0.19	0.18	0.21	0.14
0.25	0.19	0.19	0.16	0.22	0.19	0.18	0.21	0.25
0.25	0.21	0.20	0.18	0.20	0.23	0.19	0.21	0.17
0.25	0.18	0.12	0.13	0.22	0.13	0.21	0.12	0.10
0.25	0.17	0.17	0.19	0.14	0.22	0.17	0.18	0.16
0.25	0.17	0.16	0.13	0.18	0.18	0.19	0.16	0.16
0.25	0.14	0.22	0.16	0.21	0.20	0.20	0.22	0.18

Mean	Std Dev
0.21	0.07
0.20	0.03
0.20	0.02
0.15	0.04
0.17	0.02
0.17	0.02
0.19	0.03

MDL Check	True Value	%Rec
0.11	0.13	85
0.10	0.13	78
0.10	0.13	78
0.11	0.13	88
0.06	0.13	51
0.07	0.13	55
0.09	0.13	71

Reported MDL

1	AROCLOR-1016	12674-11-2	0.22
2	AROCLOR-1221	11104-28-2	0.084
3	AROCLOR-1232	11141-16-5	0.057
4	AROCLOR-1242	53469-21-9	0.14
5	AROCLOR-1248	12672-29-6	0.071
6	AROCLOR-1254	11097-69-1	0.055
7	AROCLOR-1260	11096-82-5	0.084

Supervisor Approval: BT Date: 10/26/06

PCBs_3510C-8082_GCA_Water_MDL_061026.xls

QA Approval: LM Date: 10/26/06

GC/MS VOLATILE ORGANICS

COLUMBIA ANALYTICAL SERVICES/REDDING

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981

Cover Page - Analysis Data Package
Volatile Organic Compounds

Sample Name	Lab Code	Date Collected	Date Received
LF6GW103CL	D0601981-001	12/05/2006	12/06/2006
231GW09CL	D0601981-002	12/05/2006	12/06/2006
1065PZ1BCL	D0601981-004	12/05/2006	12/06/2006
TB-1	D0601981-005	12/05/2006	12/06/2006

I certify this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Brian MooreName: Brian MooreDate: 12/11/06Title: Technical Manager

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
 Project: Presidio
 Sample Matrix: Water

Service Request: D0601981
 Date Collected: 12/05/2006
 Date Received: 12/06/2006

Volatile Organic Compounds

Sample Name: LF6GW103CL
 Lab Code: D0601981-001
 Extraction: SW5030
 Analysis Method: SW8260

Units: ug/L (ppb)
 Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	1	12/08/2006	12/08/2006	U1208W02	
Vinyl Chloride	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Bromomethane	ND	U	1.0	1	12/08/2006	12/08/2006	U1208W02	
Chloroethane	ND	U	1.0	1	12/08/2006	12/08/2006	U1208W02	
1,1-Dichloroethene (1,1-DCE)	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Acetone	ND	U	10	1	12/08/2006	12/08/2006	U1208W02	
Carbon Disulfide	ND	U	5.0	1	12/08/2006	12/08/2006	U1208W02	
Dichloromethane (Methylene Chloride)	ND	U	4.5	1	12/08/2006	12/08/2006	U1208W02	
trans-1,2-Dichloroethene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Methyl tert-Butyl Ether	ND	U	2.0	1	12/08/2006	12/08/2006	U1208W02	
1,1-Dichloroethane (1,1-DCA)	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Vinyl Acetate	ND	U	10	1	12/08/2006	12/08/2006	U1208W02	
cis-1,2-Dichloroethene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,2-Dichloroethene, Total	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
2-Butanone (MEK)	ND	U	10	1	12/08/2006	12/08/2006	U1208W02	
Chloroform	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Carbon Tetrachloride	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Benzene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Trichloroethene (TCE)	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,2-Dichloropropane	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Bromodichloromethane	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
cis-1,3-Dichloropropene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	12/08/2006	12/08/2006	U1208W02	
Toluene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
trans-1,3-Dichloropropene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,1,2-Trichloroethane	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Tetrachloroethene (PCE)	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
2-Hexanone	ND	U	10	1	12/08/2006	12/08/2006	U1208W02	
Dibromochloromethane	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Chlorobenzene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Ethylbenzene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Xylenes, Total	ND	U	1.0	1	12/08/2006	12/08/2006	U1208W02	
Styrene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Bromoform	ND	U	1.0	1	12/08/2006	12/08/2006	U1208W02	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,3-Dichlorobenzene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	

Comments:

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Collected: 12/05/2006
Date Received: 12/06/2006

Volatile Organic Compounds

Sample Name: LF6GW103CL
Lab Code: D0601981-001
Extraction: SW5030
Analysis Method: SW8260

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,4-Dichlorobenzene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,2-Dichlorobenzene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4 - SS	99	76-114	12/08/2006	
4-Bromofluorobenzene - SS	99	86-115	12/08/2006	
Toluene-d8 - SS	97	88-110	12/08/2006	

Comments: _____

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Collected: 12/05/2006
Date Received: 12/06/2006

Volatile Organic Compounds

Sample Name: 231GW09CL
Lab Code: D0601981-002
Extraction: SW5030
Analysis Method: SW8260

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	1	12/08/2006	12/08/2006	U1208W02	
Vinyl Chloride	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Bromomethane	ND	U	1.0	1	12/08/2006	12/08/2006	U1208W02	
Chloroethane	ND	U	1.0	1	12/08/2006	12/08/2006	U1208W02	
1,1-Dichloroethene (1,1-DCE)	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Acetone	ND	U	10	1	12/08/2006	12/08/2006	U1208W02	
Carbon Disulfide	ND	U	5.0	1	12/08/2006	12/08/2006	U1208W02	
Dichloromethane (Methylene Chloride)	ND	U	4.5	1	12/08/2006	12/08/2006	U1208W02	
trans-1,2-Dichloroethene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Methyl tert-Butyl Ether	ND	U	2.0	1	12/08/2006	12/08/2006	U1208W02	
1,1-Dichloroethane (1,1-DCA)	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Vinyl Acetate	ND	U	10	1	12/08/2006	12/08/2006	U1208W02	
cis-1,2-Dichloroethene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,2-Dichloroethene, Total	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
2-Butanone (MEK)	ND	U	10	1	12/08/2006	12/08/2006	U1208W02	
Chloroform	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Carbon Tetrachloride	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Benzene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Trichloroethene (TCE)	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,2-Dichloropropane	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Bromodichloromethane	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
cis-1,3-Dichloropropene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	12/08/2006	12/08/2006	U1208W02	
Toluene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
trans-1,3-Dichloropropene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,1,2-Trichloroethane	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Tetrachloroethene (PCE)	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
2-Hexanone	ND	U	10	1	12/08/2006	12/08/2006	U1208W02	
Dibromochloromethane	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Chlorobenzene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Ethylbenzene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Xylenes, Total	ND	U	1.0	1	12/08/2006	12/08/2006	U1208W02	
Styrene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Bromoform	ND	U	1.0	1	12/08/2006	12/08/2006	U1208W02	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,3-Dichlorobenzene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	

Comments:

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Collected: 12/05/2006
Date Received: 12/06/2006

Volatile Organic Compounds

Sample Name: 231GW09CL
Lab Code: D0601981-002
Extraction: SW5030
Analysis Method: SW8260

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,4-Dichlorobenzene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,2-Dichlorobenzene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4 - SS	110	76-114	12/08/2006	
4-Bromofluorobenzene - SS	112	86-115	12/08/2006	
Toluene-d8 - SS	106	88-110	12/08/2006	

Comments:

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Collected: 12/05/2006
Date Received: 12/06/2006

Volatile Organic Compounds

Sample Name: 1065PZ1BCL
Lab Code: D0601981-004
Extraction: SW5030
Analysis Method: SW8260

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	1	12/08/2006	12/08/2006	U1208W02	
Vinyl Chloride	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Bromomethane	ND	U	1.0	1	12/08/2006	12/08/2006	U1208W02	
Chloroethane	ND	U	1.0	1	12/08/2006	12/08/2006	U1208W02	
1,1-Dichloroethene (1,1-DCE)	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Acetone	ND	U	10	1	12/08/2006	12/08/2006	U1208W02	
Carbon Disulfide	ND	U	5.0	1	12/08/2006	12/08/2006	U1208W02	
Dichloromethane (Methylene Chloride)	ND	U	4.5	1	12/08/2006	12/08/2006	U1208W02	
trans-1,2-Dichloroethene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Methyl tert-Butyl Ether	ND	U	2.0	1	12/08/2006	12/08/2006	U1208W02	
1,1-Dichloroethane (1,1-DCA)	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Vinyl Acetate	ND	U	10	1	12/08/2006	12/08/2006	U1208W02	
cis-1,2-Dichloroethene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,2-Dichloroethene, Total	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
2-Butanone (MEK)	ND	U	10	1	12/08/2006	12/08/2006	U1208W02	
Chloroform	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Carbon Tetrachloride	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Benzene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Trichloroethene (TCE)	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,2-Dichloropropane	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Bromodichloromethane	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
cis-1,3-Dichloropropene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	12/08/2006	12/08/2006	U1208W02	
Toluene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
trans-1,3-Dichloropropene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,1,2-Trichloroethane	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Tetrachloroethene (PCE)	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
2-Hexanone	ND	U	10	1	12/08/2006	12/08/2006	U1208W02	
Dibromochloromethane	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Chlorobenzene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Ethylbenzene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Xylenes, Total	ND	U	1.0	1	12/08/2006	12/08/2006	U1208W02	
Styrene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Bromoform	ND	U	1.0	1	12/08/2006	12/08/2006	U1208W02	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,3-Dichlorobenzene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	

Comments:

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Collected: 12/05/2006
Date Received: 12/06/2006

Volatile Organic Compounds

Sample Name: 1065PZ1BCL
Lab Code: D0601981-004
Extraction: SW5030
Analysis Method: SW8260

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,4-Dichlorobenzene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,2-Dichlorobenzene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4 - SS	106	76-114	12/08/2006	
4-Bromofluorobenzene - SS	106	86-115	12/08/2006	
Toluene-d8 - SS	101	88-110	12/08/2006	

Comments: _____

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
 Project: Presidio
 Sample Matrix: Water

Service Request: D0601981
 Date Collected: 12/05/2006
 Date Received: 12/06/2006

Volatile Organic Compounds

Sample Name: TB-1
 Lab Code: D0601981-005
 Extraction: SW5030
 Analysis Method: SW8260

Units: ug/L (ppb)
 Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	1	12/08/2006	12/08/2006	U1208W02	
Vinyl Chloride	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Bromomethane	ND	U	1.0	1	12/08/2006	12/08/2006	U1208W02	
Chloroethane	ND	U	1.0	1	12/08/2006	12/08/2006	U1208W02	
1,1-Dichloroethene (1,1-DCE)	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Acetone	ND	U	10	1	12/08/2006	12/08/2006	U1208W02	
Carbon Disulfide	ND	U	5.0	1	12/08/2006	12/08/2006	U1208W02	
Dichloromethane (Methylene Chloride)	ND	U	4.5	1	12/08/2006	12/08/2006	U1208W02	
trans-1,2-Dichloroethene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Methyl tert-Butyl Ether	ND	U	2.0	1	12/08/2006	12/08/2006	U1208W02	
1,1-Dichloroethane (1,1-DCA)	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Vinyl Acetate	ND	U	10	1	12/08/2006	12/08/2006	U1208W02	
cis-1,2-Dichloroethene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,2-Dichloroethene, Total	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
2-Butanone (MEK)	ND	U	10	1	12/08/2006	12/08/2006	U1208W02	
Chloroform	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Carbon Tetrachloride	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Benzene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Trichloroethene (TCE)	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,2-Dichloropropane	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Bromodichloromethane	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
cis-1,3-Dichloropropene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	12/08/2006	12/08/2006	U1208W02	
Toluene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
trans-1,3-Dichloropropene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,1,2-Trichloroethane	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Tetrachloroethene (PCE)	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
2-Hexanone	ND	U	10	1	12/08/2006	12/08/2006	U1208W02	
Dibromochloromethane	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Chlorobenzene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Ethylbenzene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Xylenes, Total	ND	U	1.0	1	12/08/2006	12/08/2006	U1208W02	
Styrene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Bromoform	ND	U	1.0	1	12/08/2006	12/08/2006	U1208W02	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,3-Dichlorobenzene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	

Comments:

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Collected: 12/05/2006
Date Received: 12/06/2006

Volatile Organic Compounds

Sample Name: TB-1
Lab Code: D0601981-005
Extraction: SW5030
Analysis Method: SW8260

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,4-Dichlorobenzene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,2-Dichlorobenzene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4 - SS	106	76-114	12/08/2006	
4-Bromofluorobenzene - SS	104	86-115	12/08/2006	
Toluene-d8 - SS	100	88-110	12/08/2006	

Comments:

QC Summary

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
 Project: Presidio
 Sample Matrix: Water

Service Request: D0601981
 Date Collected: NA
 Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
 Lab Code: U1208W02
 Extraction: SW5030
 Analysis Method: SW8260

Units: ug/L (ppb)
 Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	1.0	1	12/08/2006	12/08/2006	U1208W02	
Vinyl Chloride	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Bromomethane	ND	U	1.0	1	12/08/2006	12/08/2006	U1208W02	
Chloroethane	ND	U	1.0	1	12/08/2006	12/08/2006	U1208W02	
1,1-Dichloroethene (1,1-DCE)	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Acetone	ND	U	10	1	12/08/2006	12/08/2006	U1208W02	
Carbon Disulfide	ND	U	5.0	1	12/08/2006	12/08/2006	U1208W02	
Dichloromethane (Methylene Chloride)	ND	U	4.5	1	12/08/2006	12/08/2006	U1208W02	
trans-1,2-Dichloroethene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Methyl tert-Butyl Ether	ND	U	2.0	1	12/08/2006	12/08/2006	U1208W02	
1,1-Dichloroethane (1,1-DCA)	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Vinyl Acetate	ND	U	10	1	12/08/2006	12/08/2006	U1208W02	
cis-1,2-Dichloroethene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,2-Dichloroethene, Total	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
2-Butanone (MEK)	ND	U	10	1	12/08/2006	12/08/2006	U1208W02	
Chloroform	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Carbon Tetrachloride	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Benzene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,2-Dichloroethane (EDC)	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Trichloroethene (TCE)	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,2-Dichloropropane	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Bromodichloromethane	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
cis-1,3-Dichloropropene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
4-Methyl-2-pentanone (MIBK)	ND	U	10	1	12/08/2006	12/08/2006	U1208W02	
Toluene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
trans-1,3-Dichloropropene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,1,2-Trichloroethane	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Tetrachloroethene (PCE)	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
2-Hexanone	ND	U	10	1	12/08/2006	12/08/2006	U1208W02	
Dibromochloromethane	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Chlorobenzene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Ethylbenzene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Xylenes, Total	ND	U	1.0	1	12/08/2006	12/08/2006	U1208W02	
Styrene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
Bromoform	ND	U	1.0	1	12/08/2006	12/08/2006	U1208W02	
1,1,2,2-Tetrachloroethane	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,3-Dichlorobenzene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	

Comments:

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: U1208W02
Extraction: SW5030
Analysis Method: SW8260

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,4-Dichlorobenzene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	
1,2-Dichlorobenzene	ND	U	0.50	1	12/08/2006	12/08/2006	U1208W02	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2-Dichloroethane-d4 - SS	104	76-114	12/08/2006	
4-Bromofluorobenzene - SS	105	86-115	12/08/2006	
Toluene-d8 - SS	105	88-110	12/08/2006	

Comments:

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981

Surrogate Recovery Summary
Volatile Organic Compounds

Prep Method: SW5030
Analysis Method: SW8260

Units: Percent

<u>Sample Name</u>	<u>Lab Code</u>	<u>Q</u>	<u>S1</u>	<u>S2</u>	<u>S3</u>
Laboratory Control Sample	U1208W02LCS		100	100	101
Laboratory Control Sample Duplicate	U1208W02LCSD		100	99	102
Method Blank	U1208W02		104	105	105
LF6GW103CL	D0601981-001		99	99	97
231GW09CL	D0601981-002		110	112	106
1065PZ1BCL	D0601981-004		106	106	101
TB-1	D0601981-005		106	104	100

Surrogate Recovery Control Limits (%)

S1:	1,2-Dichloroethane-d4 - SS	76-114
S2:	4-Bromofluorobenzene - SS	86-115
S3:	Toluene-d8 - SS	88-110

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
Date Analyzed: 12/08/2006
Time Analyzed: 1720

Internal Standard Area and RT Summary
Volatile Organic Compounds

File ID: U065092
Instrument ID: MSU
Analysis Method: SW8260

Analysis Lot: MSU12/08/2006

	Fluorobenzene		Chlorobenzene-d5		1,4-Dichlorobenzene-d4	
	<u>Area</u>	<u>RT</u>	<u>Area</u>	<u>RT</u>	<u>Area</u>	<u>RT</u>
Results ==>	529363	6.43	312472	10.22	73188	13.10
Upper Limit ==>	1058726	6.93	624944	10.72	146376	13.60
Lower Limit ==>	264682	5.93	156236	9.72	36594	12.60

Associated Analyses

Laboratory Control Sample	U1208W02LCS	532254	6.44	315040	10.22	72692	13.10
Laboratory Control Sample Duplicate	U1208W02LCSD	522236	6.44	304823	10.22	71312	13.10
Method Blank	U1208W02	499471	6.44	301158	10.22	63473	13.10
LF6GW103CL	D0601981-001	553039	6.44	340827	10.22	72819	13.10
231GW09CL	D0601981-002	549575	6.43	338455	10.22	70973	13.10
106SPZ1BCL	D0601981-004	541521	6.43	333242	10.22	69679	13.10
TB-1	D0601981-005	531258	6.44	333695	10.22	69621	13.10

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 12/08/2006

Laboratory Control Sample/Duplicate Laboratory Control Sample Summary
Volatile Organic Compounds

LCS Sample Lab Control Sample
Lab Code: U1208W02LCS / U1208W02LCSD
Extraction SW5030
Analysis Method: SW8260

DLCS Sample Lab Control Sample Duplicate
Units: ug/L (ppb)

Analyte	MRL	Spike Level	Spike Result LCS	Spike Result LCSD	Spike % Rec LCS	Spike % Rec LCSD	CAS Acceptance Limits	Relative Percent Difference	Result Notes
1,1-Dichloroethene (1,1-DCE)	0.50	10.0	11.2	11.6	112	116	65-135	4	
Benzene	0.50	10.0	9.93	10.2	99	102	65-135	3	
Trichloroethene (TCE)	0.50	10.0	10.1	10.1	101	101	65-135	0	
Toluene	0.50	10.0	9.94	10.2	99	102	65-135	2	
Chlorobenzene	0.50	10.0	10.0	10.2	100	102	65-135	2	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Extracted: 12/08/2006
Date Analyzed: 12/08/2006
Time Analyzed: 18:58

Method Blank Summary
Volatile Organic Compounds

Extraction Method: SW5030
Analysis Method: SW8260

Extraction Lot: U1208W02

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Laboratory Control Sample	U1208W02LCS	U065093P	12/08/2006	17:45
Laboratory Control Sample Duplicate	U1208W02LCSD	U065094P	12/08/2006	18:09
LF6GW103CL	D0601981-001	U065098	12/08/2006	19:47
231GW09CL	D0601981-002	U065099	12/08/2006	20:12
1065PZ1BCL	D0601981-004	U065100	12/08/2006	20:36
TB-1	D0601981-005	U065101	12/08/2006	21:01

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
Date Analyzed: 11/29/2006
Time Analyzed: 0943

Tune Summary
Volatile Organic Compounds

File ID: U064842
Instrument ID: MSU
Column: DB-624

Analysis Method: SW8260
Analysis Lot:

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	32.5	7089	PASS
75	95	30	60	51.2	11168	PASS
95	95	100	100	100.0	21832	PASS
96	95	5	9	7.9	1715	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	80.5	17568	PASS
175	174	5	9	7.4	1292	PASS
176	174	95	101	95.0	16696	PASS
177	176	5	9	6.7	1126	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
VSTD00.5	VSTD00.5	U064844	11/29/2006	1033	
VSTD001	VSTD001	U064845	11/29/2006	1058	
VSTD005	VSTD005	U064846	11/29/2006	1122	
VSTD010	VSTD010	U064847	11/29/2006	1147	
VSTD020	VSTD020	U064848	11/29/2006	1211	
VSTD040	VSTD040	U064849	11/29/2006	1236	
VSTD100	VSTD100	U064850	11/29/2006	1301	
QCALTSTD	QCALTSTD	U064852	11/29/2006	1350	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
Date Analyzed: 12/08/2006
Time Analyzed: 1541

Tune Summary
Volatile Organic Compounds

File ID: U065088
Instrument ID: MSU
Column: DB-624

Analysis Method: SW8260
Analysis Lot:

Target Mass	Relative to Mass	Lower Limit %	Upper Limit %	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	32.7	21472	PASS
75	95	30	60	50.4	33024	PASS
95	95	100	100	100.0	65576	PASS
96	95	5	9	7.3	4808	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	83.2	54584	PASS
175	174	5	9	7.9	4301	PASS
176	174	95	101	96.9	52904	PASS
177	176	5	9	6.5	3459	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
VSTD010	VSTD010	U065092	12/08/2006	1720	
Laboratory Control Sample	U1208W02LCS	U065093P	12/08/2006	1745	
Laboratory Control Sample Duplicate	U1208W02LCSD	U065094P	12/08/2006	1809	
Method Blank	U1208W02	U065096P	12/08/2006	1858	
LF6GW103CL	D0601981-001	U065098	12/08/2006	1947	
231GW09CL	D0601981-002	U065099	12/08/2006	2012	
1065PZ1BCL	D0601981-004	U065100	12/08/2006	2036	
TB-1	D0601981-005	U065101	12/08/2006	2101	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

Standards Data

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
ICAL Date: 11/29/2006

Initial Calibration Summary
Volatile Organic Compounds

ICAL ID: 11/29/2006MSU
Instrument ID: MSU

Column: DB-624

Level ID	File ID	Level ID	File ID												
A	U064845	F	U064850												
B	U064846	G	U064844												
C	U064847														
D	U064848														
E	U064849														
Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
* Chloromethane	A	1.000	0.189	B	5.000	0.181	C	10.00	0.270	D	20.00	0.273	E	40.00	0.264
	F	100.0	0.279	G	0.500	0.239									
# Vinyl Chloride	A	1.000	0.257	B	5.000	0.278	C	10.00	0.276	D	20.00	0.289	E	40.00	0.273
	F	100.0	0.275	G	0.500	0.271									
Bromomethane	A	1.000	0.079	B	5.000	0.099	C	10.00	0.103	D	20.00	0.105	E	40.00	0.075
	F	100.0	0.059												
Chloroethane	A	1.000	0.118	B	5.000	0.137	C	10.00	0.142	D	20.00	0.144	E	40.00	0.132
	F	100.0	0.123												
# 1,1-Dichloroethene (1,1-DCE)	A	1.000	0.136	B	5.000	0.144	C	10.00	0.144	D	20.00	0.150	E	40.00	0.143
	F	100.0	0.138	G	0.500	0.130									
Acetone	A	5.000	0.075	B	25.00	0.088	C	50.00	0.080	D	100.0	0.084	E	200.0	0.080
	F	500.0	0.081												
Carbon Disulfide	A	1.000	0.473	B	5.000	0.488	C	10.00	0.488	D	20.00	0.503	E	40.00	0.468
	F	100.0	0.450	G	0.500	0.503									
Dichloromethane (Methylene Chloride)	A	1.000	0.138	B	5.000	0.142	C	10.00	0.137	D	20.00	0.144	E	40.00	0.136
	F	100.0	0.135	G	0.500	0.132									
trans-1,2-Dichloroethene	A	1.000	0.181	B	5.000	0.193	C	10.00	0.239	D	20.00	0.217	E	40.00	0.188
	F	100.0	0.179	G	0.500	0.230									
Methyl tert-Butyl Ether	A	1.000	0.530	B	5.000	0.560	C	10.00	0.598	D	20.00	0.607	E	40.00	0.569
	F	100.0	0.558	G	0.500	0.590									
* 1,1-Dichloroethane (1,1-DCA)	A	1.000	0.552	B	5.000	0.571	C	10.00	0.564	D	20.00	0.591	E	40.00	0.576
	F	100.0	0.591	G	0.500	0.575									
Vinyl Acetate	A	1.000	1.270	B	5.000	1.435	C	10.00	1.467	D	20.00	1.561	E	40.00	1.529
	F	100.0	1.564	G	0.500	1.359									
cis-1,2-Dichloroethene	A	1.000	0.259	B	5.000	0.276	C	10.00	0.275	D	20.00	0.285	E	40.00	0.270
	F	100.0	0.264	G	0.500	0.268									
1,2-Dichloroethene, Total	A	2.000	0.220	B	10.00	0.235	C	20.00	0.257	D	40.00	0.251	E	80.00	0.229
	F	200.0	0.222	G	1.000	0.249									
2-Butanone (MEK)	A	5.000	0.158	B	25.00	0.178	C	50.00	0.170	D	100.0	0.180	E	200.0	0.180
	F	500.0	0.183	G	2.500	0.156									
# Chloroform	A	1.000	0.434	B	5.000	0.456	C	10.00	0.445	D	20.00	0.459	E	40.00	0.444
	F	100.0	0.449	G	0.500	0.478									
1,1,1-Trichloroethane (TCA)	A	1.000	0.315	B	5.000	0.341	C	10.00	0.360	D	20.00	0.390	E	40.00	0.381
	F	100.0	0.390	G	0.500	0.315									

Results flagged with an asterisk (*) indicate values outside control criteria

* SPCC Compound # CCC Compound

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
ICAL Date: 11/29/2006

Initial Calibration Summary
Volatile Organic Compounds

ICAL ID: 11/29/2006MSU
Instrument ID: MSU

Column: DB-624

Level ID	File ID	Level ID	File ID												
A	U064845	F	U064850												
B	U064846	G	U064844												
C	U064847														
D	U064848														
E	U064849														
Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Carbon Tetrachloride	A	1.000	0.212	B	5.000	0.263	C	10.00	0.288	D	20.00	0.324	E	40.00	0.329
	F	100.0	0.351	G	0.500	0.238									
Benzene	A	1.000	0.988	B	5.000	1.042	C	10.00	1.014	D	20.00	1.042	E	40.00	0.983
	F	100.0	0.947	G	0.500	1.086									
1,2-Dichloroethane (EDC)	A	1.000	0.418	B	5.000	0.450	C	10.00	0.449	D	20.00	0.461	E	40.00	0.442
	F	100.0	0.447	G	0.500	0.438									
Trichloroethene (TCE)	A	1.000	0.253	B	5.000	0.268	C	10.00	0.264	D	20.00	0.278	E	40.00	0.266
	F	100.0	0.270	G	0.500	0.254									
# 1,2-Dichloropropane	A	1.000	0.297	B	5.000	0.321	C	10.00	0.319	D	20.00	0.339	E	40.00	0.327
	F	100.0	0.336	G	0.500	0.309									
Bromodichloromethane	A	1.000	0.256	B	5.000	0.299	C	10.00	0.314	D	20.00	0.336	E	40.00	0.327
	F	100.0	0.345	G	0.500	0.278									
cis-1,3-Dichloropropene	A	1.000	0.258	B	5.000	0.324	C	10.00	0.347	D	20.00	0.385	E	40.00	0.385
	F	100.0	0.387	G	0.500	0.280									
4-Methyl-2-pentanone (MIBK)	A	5.000	0.320	B	25.00	0.397	C	50.00	0.381	D	100.0	0.402	E	200.0	0.390
	F	500.0	0.314	G	2.500	0.350									
# Toluene	A	1.000	0.895	B	5.000	0.953	C	10.00	0.935	D	20.00	0.955	E	40.00	0.905
	F	100.0	0.936	G	0.500	0.908									
trans-1,3-Dichloropropene	A	1.000	0.263	B	5.000	0.410	C	10.00	0.472	D	20.00	0.544	E	40.00	0.563
	F	100.0	0.645	G	0.500	0.250									
1,1,2-Trichloroethane	A	1.000	0.224	B	5.000	0.272	C	10.00	0.277	D	20.00	0.286	E	40.00	0.278
	F	100.0	0.299	G	0.500	0.229									
Tetrachloroethene (PCE)	A	1.000	0.414	B	5.000	0.455	C	10.00	0.447	D	20.00	0.457	E	40.00	0.437
	F	100.0	0.462	G	0.500	0.440									
2-Hexanone	A	5.000	0.277	B	25.00	0.408	C	50.00	0.408	D	100.0	0.436	E	200.0	0.419
	F	500.0	0.335	G	2.500	0.306									
Dibromochloromethane	A	1.000	0.266	B	5.000	0.340	C	10.00	0.375	D	20.00	0.414	E	40.00	0.414
	F	100.0	0.449	G	0.500	0.287									
* Chlorobenzene	A	1.000	0.921	B	5.000	0.962	C	10.00	0.930	D	20.00	0.942	E	40.00	0.873
	F	100.0	0.806	G	0.500	0.992									
# Ethylbenzene	A	1.000	1.390	B	5.000	1.484	C	10.00	1.443	D	20.00	1.469	E	40.00	1.376
	F	100.0	1.314	G	0.500	1.484									
Xylenes, Total	A	3.000	0.431	B	15.00	0.467	C	30.00	0.471	D	60.00	0.482	E	120.0	0.449
	F	300.0	0.429	G	1.500	0.450									

Results flagged with an asterisk (*) indicate values outside control criteria

* SPCC Compound # CCC Compound

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
ICAL Date: 11/29/2006

Initial Calibration Summary
Volatile Organic Compounds

ICAL ID: 11/29/2006MSU
Instrument ID: MSU

Column: DB-624

Level ID **File ID**
A U064845
B U064846
C U064847
D U064848
E U064849

Level ID **File ID**
F U064850
G U064844

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF
Styrene	A	1.000	0.681	B	5.000	0.775	C	10.00	0.766	D	20.00	0.797	E	40.00	0.740
	F	100.0	0.703	G	0.500	0.650									
* Bromoform	A	1.000	0.105	B	5.000	0.155	C	10.00	0.178	D	20.00	0.204	E	40.00	0.199
	F	100.0	0.177	G	0.500	0.102									
* 1,1,2,2-Tetrachloroethane	A	1.000	0.966	B	5.000	1.191	C	10.00	1.176	D	20.00	1.168	E	40.00	1.002
	F	100.0	0.817	G	0.500	1.163									
1,3-Dichlorobenzene	A	1.000	1.480	B	5.000	1.632	C	10.00	1.577	D	20.00	1.625	E	40.00	1.540
	F	100.0	1.580	G	0.500	1.488									
1,4-Dichlorobenzene	A	1.000	1.571	B	5.000	1.642	C	10.00	1.581	D	20.00	1.642	E	40.00	1.534
	F	100.0	1.583	G	0.500	1.711									
1,2-Dichlorobenzene	A	1.000	1.276	B	5.000	1.403	C	10.00	1.380	D	20.00	1.444	E	40.00	1.371
	F	100.0	1.426	G	0.500	1.343									
1,2-Dichloroethane-d4	A	1.000	0.321	B	5.000	0.326	C	10.00	0.329	D	20.00	0.340	E	40.00	0.318
Toluene-d8	A	1.000	1.203	B	5.000	1.272	C	10.00	1.273	D	20.00	1.301	E	40.00	1.203
4-Bromofluorobenzene	A	1.000	1.126	B	5.000	1.234	C	10.00	1.284	D	20.00	1.310	E	40.00	1.168

Results flagged with an asterisk (*) indicate values outside control criteria

* SPCC Compound # CCC Compound

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
ICAL Date: 11/29/2006

Initial Calibration Summary
Volatile Organic Compounds

ICAL ID: 11/29/2006MSU
Instrument ID: MSU
Mean RSD: 8.78

Column: DB-624

Analyte Name	Compound Type	Fit Type	Calibration Evaluation			RRF Evaluation			
			Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
* Chloromethane	TRG	Linear	r	1.000		0.995	0.242		0.10
# Vinyl Chloride	TRG	AverageRF	% RSD	3.5		15.0	0.274		0.01
Bromomethane	TRG	AverageRF	% RSD	21.3		15.0	0.087		0.01
Chloroethane	TRG	AverageRF	% RSD	7.8		15.0	0.133		0.01
# 1,1-Dichloroethene (1,1-DCE)	TRG	AverageRF	% RSD	4.5		15.0	0.141		0.01
Acetone	TRG	AverageRF	% RSD	5.4		15.0	0.081		0.01
Carbon Disulfide	TRG	AverageRF	% RSD	4.0		15.0	0.482		0.01
Dichloromethane (Methylene Chloride)	TRG	AverageRF	% RSD	2.8		15.0	0.138		0.01
trans-1,2-Dichloroethene	TRG	AverageRF	% RSD	12.0		15.0	0.204		0.01
Methyl tert-Butyl Ether	TRG	AverageRF	% RSD	4.7		15.0	0.573		0.01
* 1,1-Dichloroethane (1,1-DCA)	TRG	AverageRF	% RSD	2.5		15.0	0.574		0.10
Vinyl Acetate	TRG	AverageRF	% RSD	7.5		15.0	1.455		0.01
cis-1,2-Dichloroethene	TRG	AverageRF	% RSD	3.1		15.0	0.271		0.01
1,2-Dichloroethene, Total	TRG	AverageRF	% RSD	6.3		15.0	0.238		0.01
2-Butanone (MEK)	TRG	AverageRF	% RSD	6.5		15.0	0.172		0.01
# Chloroform	TRG	AverageRF	% RSD	3.1		15.0	0.452		0.01
1,1,1-Trichloroethane (TCA)	TRG	AverageRF	% RSD	9.3		15.0	0.356		0.01
Carbon Tetrachloride	TRG	Linear	r	1.000		0.995	0.286		0.01
Benzene	TRG	AverageRF	% RSD	4.6		15.0	1.014		0.01
1,2-Dichloroethane (EDC)	TRG	AverageRF	% RSD	3.0		15.0	0.444		0.01
Trichloroethene (TCE)	TRG	AverageRF	% RSD	3.3		15.0	0.265		0.01
# 1,2-Dichloropropane	TRG	AverageRF	% RSD	4.5		15.0	0.321		0.01
Bromodichloromethane	TRG	AverageRF	% RSD	10.4		15.0	0.308		0.01
cis-1,3-Dichloropropene	TRG	Linear	r	1.000		0.995	0.338		0.01
4-Methyl-2-pentanone (MIBK)	TRG	AverageRF	% RSD	10.1		15.0	0.365		0.01
# Toluene	TRG	AverageRF	% RSD	2.6		15.0	0.927		0.01
trans-1,3-Dichloropropene	TRG	Linear	r	0.999		0.995	0.450		0.01
1,1,2-Trichloroethane	TRG	AverageRF	% RSD	10.7		15.0	0.266		0.01
Tetrachloroethene (PCE)	TRG	AverageRF	% RSD	3.6		15.0	0.444		0.01
2-Hexanone	TRG	AverageRF	% RSD	17.0		15.0	0.370		0.01
Dibromochloromethane	TRG	Linear	r	1.000		0.995	0.364		0.01
* Chlorobenzene	TRG	AverageRF	% RSD	6.7		15.0	0.918		0.30
# Ethylbenzene	TRG	AverageRF	% RSD	4.5		15.0	1.423		0.01
Xylenes, Total	TRG	AverageRF	% RSD	4.4		15.0	0.454		0.01
Styrene	TRG	AverageRF	% RSD	7.4		15.0	0.730		0.01
* Bromoform	TRG	Linear	r	0.998		0.995	0.160		0.10
* 1,1,2,2-Tetrachloroethane	TRG	AverageRF	% RSD	13.4		15.0	1.069		0.30

Results flagged with an asterisk (*) indicate values outside control criteria

* SPCC Compound # CCC Compound

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
ICAL Date: 11/29/2006

Initial Calibration Summary
Volatile Organic Compounds

ICAL ID: 11/29/2006MSU
Instrument ID: MSU
Mean RSD: 8.78

Column: DB-624

Analyte Name	Compound Type	Fit Type	Calibration Evaluation			RRF Evaluation			
			Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Miniumum RRF
1,3-Dichlorobenzene	TRG	AverageRF	% RSD	3.9		15.0	1.560		0.01
1,4-Dichlorobenzene	TRG	AverageRF	% RSD	3.7		15.0	1.609		0.01
1,2-Dichlorobenzene	TRG	AverageRF	% RSD	4.1		15.0	1.378		0.01
1,2-Dichloroethane-d4	SUR	AverageRF	% RSD	2.6		15.0	0.327		0.01
Toluene-d8	SUR	AverageRF	% RSD	3.6		15.0	1.250		0.01
4-Bromofluorobenzene	SUR	AverageRF	% RSD	6.3		15.0	1.224		0.01

Results flagged with an asterisk (*) indicate values outside control criteria

* SPCC Compound # CCC Compound

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
Date Analyzed: 11/29/2006

Second Source Calibration Verification
Volatile Organic Compounds

ICAL ID: 11/29/2006MSU
Instrument ID: MSU
File ID: U064852

Column: DB-624

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%	Criteria	Curve Fit	Q
Chloromethane	10.0	11.75	0.242	0.306	NA	17.4	+/- 25.0	Linear	
Vinyl Chloride	10.0	11.37	0.274	0.312	13.7	NA	+/- 25.0	AverageRF	
Bromomethane	10.0	12.17	0.087	0.106	21.7	NA	+/- 25.0	AverageRF	
Chloroethane	10.0	11.55	0.133	0.153	15.5	NA	+/- 25.0	AverageRF	
1,1-Dichloroethene (1,1-DCE)	10.0	11.60	0.141	0.163	16.0	NA	+/- 25.0	AverageRF	
Acetone	50.0	49.18	0.081	0.080	-1.7	NA	+/- 25.0	AverageRF	
Carbon Disulfide	10.0	10.51	0.482	0.506	5.1	NA	+/- 25.0	AverageRF	
Dichloromethane (Methylene Chloride)	10.0	10.66	0.138	0.147	6.6	NA	+/- 25.0	AverageRF	
trans-1,2-Dichloroethene	10.0	9.286	0.204	0.189	-7.1	NA	+/- 25.0	AverageRF	
Methyl tert-Butyl Ether	10.0	10.34	0.573	0.593	3.4	NA	+/- 25.0	AverageRF	
1,1-Dichloroethane (1,1-DCA)	10.0	10.14	0.574	0.583	1.4	NA	+/- 25.0	AverageRF	
Vinyl Acetate	10.0	11.11	1.455	1.616	11.1	NA	+/- 25.0	AverageRF	
cis-1,2-Dichloroethene	10.0	10.82	0.271	0.293	8.2	NA	+/- 25.0	AverageRF	
1,2-Dichloroethene, Total	20.0	20.11	0.238	0.241	1.6	NA	+/- 25.0	AverageRF	
2-Butanone (MEK)	50.0	50.98	0.172	0.175	2.0	NA	+/- 25.0	AverageRF	
Chloroform	10.0	9.920	0.452	0.449	-0.8	NA	+/- 25.0	AverageRF	
1,1,1-Trichloroethane (TCA)	10.0	10.46	0.356	0.372	4.6	NA	+/- 25.0	AverageRF	
Carbon Tetrachloride	10.0	9.742	0.287	0.301	NA	-2.6	+/- 25.0	Linear	
Benzene	10.0	10.41	1.015	1.056	4.1	NA	+/- 25.0	AverageRF	
1,2-Dichloroethane (EDC)	10.0	10.24	0.444	0.454	2.4	NA	+/- 25.0	AverageRF	
Trichloroethene (TCE)	10.0	10.43	0.265	0.276	4.3	NA	+/- 25.0	AverageRF	
1,2-Dichloropropane	10.0	10.53	0.321	0.338	5.3	NA	+/- 25.0	AverageRF	
Bromodichloromethane	10.0	10.26	0.308	0.316	2.6	NA	+/- 25.0	AverageRF	
cis-1,3-Dichloropropene	10.0	10.12	0.338	0.374	NA	1.2	+/- 25.0	Linear	
4-Methyl-2-pentanone (MIBK)	50.0	54.62	0.365	0.399	9.2	NA	+/- 25.0	AverageRF	
Toluene	10.0	10.49	0.927	0.972	4.8	NA	+/- 25.0	AverageRF	
trans-1,3-Dichloropropene	10.0	10.28	0.450	0.530	NA	2.8	+/- 25.0	Linear	
1,1,2-Trichloroethane	10.0	10.75	0.267	0.287	7.5	NA	+/- 25.0	AverageRF	
Tetrachloroethene (PCE)	10.0	10.56	0.445	0.470	5.6	NA	+/- 25.0	AverageRF	
2-Hexanone	50.0	58.16	0.370	0.430	16.3	NA	+/- 25.0	AverageRF	
Dibromochloromethane	10.0	9.750	0.364	0.383	NA	-2.5	+/- 25.0	Linear	
Chlorobenzene	10.0	10.66	0.918	0.978	6.6	NA	+/- 25.0	AverageRF	
Ethylbenzene	10.0	10.62	1.423	1.512	6.2	NA	+/- 25.0	AverageRF	
Xylenes, Total	30.0	32.53	0.454	0.492	8.4	NA	+/- 25.0	AverageRF	
Styrene	10.0	10.95	0.730	0.800	9.5	NA	+/- 25.0	AverageRF	
Bromoform	10.0	9.596	0.160	0.183	NA	-4.0	+/- 25.0	Linear	
1,1,2,2-Tetrachloroethane	10.0	11.16	1.069	1.193	11.6	NA	+/- 25.0	AverageRF	
1,3-Dichlorobenzene	10.0	10.63	1.560	1.658	6.3	NA	+/- 25.0	AverageRF	
1,4-Dichlorobenzene	10.0	10.37	1.609	1.668	3.7	NA	+/- 25.0	AverageRF	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
Date Analyzed: 11/29/2006

Second Source Calibration Verification
Volatile Organic Compounds

ICAL ID: 11/29/2006MSU
Instrument ID: MSU
File ID: U064852

Column: DB-624

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%	Criteria	Curve Fit	Q
1,2-Dichlorobenzene	10.0	10.83	1.378	1.492	8.3	NA	+/- 25.0	AverageRF	
1,2-Dichloroethane-d4	N/A	N/A	0.327	0.334	0.0	NA	+/- 25.0	AverageRF	
Toluene-d8	N/A	N/A	1.251	1.335	0.0	NA	+/- 25.0	AverageRF	
4-Bromofluorobenzene	N/A	N/A	1.225	1.310	0.0	NA	+/- 25.0	AverageRF	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
Date Analyzed: 12/08/2006

Continuing Calibration Verification Summary
Volatile Organic Compounds

ICAL ID: 11/29/2006MSU
Instrument ID: MSU
File ID: U065092

Column: DB-624

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
* Chloromethane	10.0	11.46	0.10	0.242	0.298	NA	14.6	+/- 40.0	Linear	
# Vinyl Chloride	10.0	10.39	0.01	0.274	0.285	3.9	NA	+/- 20.0	AverageRF	
Bromomethane	10.0	11.62	0.01	0.087	0.101	16.2	NA	+/- 40.0	AverageRF	
Chloroethane	10.0	10.70	0.01	0.133	0.142	7.0	NA	+/- 40.0	AverageRF	
# 1,1-Dichloroethene (1,1-DCE)	10.0	10.50	0.01	0.141	0.148	5.0	NA	+/- 20.0	AverageRF	
Acetone	50.0	51.63	0.01	0.081	0.084	3.2	NA	+/- 40.0	AverageRF	
Carbon Disulfide	10.0	10.24	0.01	0.482	0.494	2.4	NA	+/- 40.0	AverageRF	
Dichloromethane (Methylene Chloride)	10.0	10.06	0.01	0.138	0.139	0.6	NA	+/- 40.0	AverageRF	
trans-1,2-Dichloroethene	10.0	12.03	0.01	0.204	0.245	20.3	NA	+/- 40.0	AverageRF	
Methyl tert-Butyl Ether	10.0	11.22	0.01	0.573	0.643	12.2	NA	+/- 40.0	AverageRF	
* 1,1-Dichloroethane (1,1-DCA)	10.0	10.04	0.10	0.574	0.577	0.4	NA	+/- 40.0	AverageRF	
Vinyl Acetate	10.0	11.49	0.01	1.455	1.673	14.9	NA	+/- 40.0	AverageRF	
cis-1,2-Dichloroethene	10.0	10.29	0.01	0.271	0.279	2.9	NA	+/- 40.0	AverageRF	
1,2-Dichloroethene, Total	20.0	22.32	0.01	0.238	0.262	10.4	NA	+/- 40.0	AverageRF	
2-Butanone (MEK)	50.0	52.29	0.01	0.172	0.180	4.6	NA	+/- 40.0	AverageRF	
# Chloroform	10.0	10.06	0.01	0.452	0.455	0.6	NA	+/- 20.0	AverageRF	
1,1,1-Trichloroethane (TCA)	10.0	10.61	0.01	0.356	0.378	6.1	NA	+/- 40.0	AverageRF	
Carbon Tetrachloride	10.0	9.781	0.01	0.287	0.302	NA	-2.2	+/- 40.0	Linear	
Benzene	10.0	10.14	0.01	1.015	1.029	1.4	NA	+/- 40.0	AverageRF	
1,2-Dichloroethane (EDC)	10.0	9.972	0.01	0.444	0.442	-0.3	NA	+/- 40.0	AverageRF	
Trichloroethene (TCE)	10.0	10.20	0.01	0.265	0.270	2.0	NA	+/- 40.0	AverageRF	
# 1,2-Dichloropropane	10.0	10.11	0.01	0.321	0.325	1.1	NA	+/- 20.0	AverageRF	
Bromodichloromethane	10.0	10.05	0.01	0.308	0.309	0.5	NA	+/- 40.0	AverageRF	
cis-1,3-Dichloropropene	10.0	10.01	0.01	0.338	0.370	NA	0.1	+/- 40.0	Linear	
4-Methyl-2-pentanone (MIBK)	50.0	54.22	0.01	0.365	0.396	8.4	NA	+/- 40.0	AverageRF	
# Toluene	10.0	10.34	0.01	0.927	0.959	3.4	NA	+/- 20.0	AverageRF	
trans-1,3-Dichloropropene	10.0	10.20	0.01	0.450	0.525	NA	2.0	+/- 40.0	Linear	
1,1,2-Trichloroethane	10.0	10.46	0.01	0.267	0.279	4.6	NA	+/- 40.0	AverageRF	
Tetrachloroethene (PCE)	10.0	10.12	0.01	0.445	0.450	1.2	NA	+/- 40.0	AverageRF	
2-Hexanone	50.0	57.61	0.01	0.370	0.426	15.2	NA	+/- 40.0	AverageRF	
Dibromochloromethane	10.0	9.423	0.01	0.364	0.368	NA	-5.8	+/- 40.0	Linear	
* Chlorobenzene	10.0	10.13	0.30	0.918	0.930	1.3	NA	+/- 40.0	AverageRF	
# Ethylbenzene	10.0	10.21	0.01	1.423	1.453	2.1	NA	+/- 20.0	AverageRF	
Xylenes, Total	30.0	31.17	0.01	0.454	0.472	3.9	NA	+/- 40.0	AverageRF	
Styrene	10.0	10.62	0.01	0.730	0.775	6.2	NA	+/- 40.0	AverageRF	
* Bromoform	10.0	8.925	0.10	0.160	0.171	NA	-10.8	+/- 40.0	Linear	
* 1,1,2,2-Tetrachloroethane	10.0	10.09	0.30	1.069	1.078	0.8	NA	+/- 40.0	AverageRF	
1,3-Dichlorobenzene	10.0	9.992	0.01	1.560	1.559	-0.1	NA	+/- 40.0	AverageRF	
1,4-Dichlorobenzene	10.0	9.957	0.01	1.609	1.602	-0.4	NA	+/- 40.0	AverageRF	

Results flagged with an asterisk (*) indicate values outside control criteria

* SPCC Compound # CCC Compound

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
Date Analyzed: 12/08/2006

Continuing Calibration Verification Summary
Volatile Organic Compounds

ICAL ID: 11/29/2006MSU
Instrument ID: MSU
File ID: U065092

Column: DB-624

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
1,2-Dichlorobenzene	10.0	10.12	0.01	1.378	1.394	1.2	NA	+/- 40.0	AverageRF	
1,2-Dichloroethane-d4	10.0	10.17	0.01	0.327	0.332	1.7	NA	+/- 40.0	AverageRF	
Toluene-d8	10.0	10.23	0.01	1.251	1.279	2.3	NA	+/- 40.0	AverageRF	
4-Bromofluorobenzene	10.0	9.914	0.01	1.225	1.214	-0.9	NA	+/- 40.0	AverageRF	

Results flagged with an asterisk (*) indicate values outside control criteria

* SPCC Compound # CCC Compound

QA/QC Results

Service Request: D0601981

Analysis Method: SW8260

Instrument ID: MSU
Column: DB-624

Form 8 - Organic

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Extracted: 12/08/2006

Extraction Prep Log
Volatile Organic Compounds

Extraction Method: SW5030
Analysis Method: SW8260

Extraction Lot: U1208W02

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
Method Blank	U1208W02	NA	NA	10.00 ML	10.00	NA	
Laboratory Control Sample	U1208W02LCS	NA	NA	10.00 ML	10.00	NA	
Laboratory Control Sample Duplicate	U1208W02LCSD	NA	NA	10.00 ML	10.00	NA	
LF6GW103CL	D0601981-001	12/05/2006	12/06/2006	10.00 ML	10.00	NA	
231GW09CL	D0601981-002	12/05/2006	12/06/2006	10.00 ML	10.00	NA	
1065PZ1BCL	D0601981-004	12/05/2006	12/06/2006	10.00 ML	10.00	NA	
TB-1	D0601981-005	12/05/2006	12/06/2006	10.00 ML	10.00	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Report

Service Request: D0601981

Analysis Method: SW8260

[illegible]

Comments: _____

MDL STUDY REPORT FORM

Lab Name: Columbia Analytical Services/Redding Analytical Method: SW8260 Matrix: WaterInstrument ID: MSUConcentration Units (ug/L or mg/kg): UG/L

Analyte	Analysis Date	Amt. Spiked	Replicates								Std. Dev.	MDL
			1	2	3	4	5	6	7	8		
ETHYLBENZENE	02/21/2006	0.50	0.394	0.464	0.492	0.466	0.345	0.491	0.471	0.440	0.052	0.16
STYRENE	02/21/2006	0.50	0.334	0.416	0.432	0.426	0.314	0.456	0.424	0.394	0.050	0.15
CIS-1,3-DICHLOROPROPENE	02/21/2006	0.50	0.359	0.409	0.387	0.427	0.304	0.445	0.400	0.403	0.044	0.13
TRANS-1,3-DICHLOROPROPE	02/21/2006	0.50	0.314	0.368	0.387	0.363	0.273	0.396	0.385	0.332	0.043	0.13
1,4-DICHLOROBENZENE	02/21/2006	0.50	0.424	0.505	0.485	0.496	0.387	0.518	0.482	0.466	0.044	0.13
1,2-DICHLOROETHANE	02/21/2006	0.50	0.398	0.478	0.525	0.491	0.364	0.504	0.533	0.453	0.060	0.18
VINYL ACETATE	02/21/2006	0.50	0.395	0.439	0.472	0.487	0.297	0.394	0.446	0.438	0.060	0.18
4-METHYL-2-PENTANONE	02/21/2006	2.50	1.914	2.002	2.102	2.132	1.755	2.160	2.050	1.964	0.13	0.40
TOLUENE	02/21/2006	0.50	0.376	0.453	0.483	0.459	0.349	0.478	0.455	0.434	0.049	0.15
CHLOROBENZENE	02/21/2006	0.50	0.404	0.494	0.486	0.485	0.371	0.502	0.509	0.460	0.050	0.15
DIBROMOCHLOROMETHANE	02/21/2006	0.50	0.406	0.436	0.445	0.441	0.340	0.459	0.424	0.411	0.037	0.11
TETRACHLOROETHENE	02/21/2006	0.50	0.411	0.492	0.486	0.479	0.345	0.517	0.465	0.434	0.055	0.17
XYLENES (TOTAL)	02/21/2006											0.11
CIS-1,2-DICHLOROETHENE	02/21/2006	0.50	0.405	0.468	0.485	0.504	0.385	0.506	0.505	0.449	0.047	0.14
TRANS-1,2-DICHLOROETHEN	02/21/2006	0.50	0.438	0.486	0.518	0.496	0.376	0.528	0.484	0.465	0.049	0.15
TERT-BUTYLMETHYLETHER	02/21/2006	0.50	0.402	0.448	0.465	0.477	0.369	0.507	0.455	0.424	0.044	0.13
1,2-DICHLOROETHENE	02/21/2006											0.14
1,3-DICHLOROBENZENE	02/21/2006	0.50	0.392	0.454	0.465	0.468	0.372	0.512	0.465	0.421	0.046	0.14
CARBON TETRACHLORIDE	02/21/2006	0.50	0.402	0.521	0.537	0.509	0.383	0.484	0.515	0.438	0.059	0.18
2-HEXANONE	02/21/2006	2.50	1.560	1.818	1.934	1.821	1.415	1.848	1.781	1.585	0.18	0.54
ACETONE	02/21/2006	2.50	3.209	3.297	3.482	3.549	3.207	3.560	3.148	2.824	0.25	0.74
CHLOROFORM	02/21/2006	0.50	0.423	0.488	0.521	0.505	0.380	0.521	0.507	0.490	0.051	0.15
BENZENE	02/21/2006	0.50	0.406	0.468	0.488	0.497	0.358	0.502	0.495	0.461	0.051	0.15
1,1,1-TRICHLOROETHANE	02/21/2006	0.50	0.425	0.485	0.499	0.510	0.364	0.504	0.515	0.450	0.053	0.16
BROMOMETHANE	02/21/2006	0.50	0.378	0.604	0.530	0.527	0.417	0.451	0.541	0.561	0.077	0.23
CHLOROMETHANE	02/21/2006	0.50	0.462	0.548	0.541	0.568	0.447	0.578	0.573	0.573	0.052	0.16
CHLOROETHANE	02/21/2006	0.50	0.454	0.522	0.552	0.503	0.377	0.542	0.570	0.510	0.062	0.19
VINYL CHLORIDE	02/21/2006	0.50	0.456	0.536	0.533	0.539	0.421	0.544	0.513	0.480	0.046	0.14
METHYLENE CHLORIDE	02/21/2006	0.50	0.458	0.480	0.509	0.528	0.442	0.575	0.512	0.522	0.042	0.13
CARBON DISULFIDE	02/21/2006	0.50	0.401	0.469	0.511	0.492	0.367	0.537	0.502	0.467	0.058	0.17
BROMOFORM	02/21/2006	0.50	0.383	0.401	0.414	0.383	0.288	0.413	0.407	0.387	0.041	0.12
BROMODICHLOROMETHANE	02/21/2006	0.50	0.420	0.462	0.474	0.471	0.358	0.487	0.498	0.464	0.045	0.14
ISOPROPYLETHER	02/21/2006	0.50	0.408	0.468	0.479	0.492	0.369	0.487	0.484	0.465	0.044	0.13
1,1-DICHLOROETHENE	02/21/2006	0.50	0.405	0.499	0.518	0.491	0.385	0.543	0.542	0.457	0.060	0.18
1,2-DICHLOROPROPANE	02/21/2006	0.50	0.392	0.463	0.467	0.485	0.366	0.507	0.470	0.460	0.048	0.14
2-BUTANONE	02/21/2006	2.50	2.128	2.365	2.395	2.524	2.134	2.396	2.294	2.166	0.15	0.44

MDL STUDY REPORT FORM

Lab Name: Columbia Analytical Services/Redding Analytical Method: SW8260 Matrix: Water

Instrument ID: MSU

Concentration Units (ug/L or mg/kg): UG/L

[illegible]

SUPPORT DOCUMENTATION

Columbia Analytical Services
GC/MS VOA Injection Log
MSU; Gummo

Page: 75

Date
11/29/06

Analyst: TV
ICAL Date: 11/29/06
Method: 81840920

Internal Standard Std Prep # 9msv-32-1
BFB / Surrogate Std Prep # 9msv-32-2
Calibration Std Prep # 9msv-32-2
QCALTSTD / LCS Std Prep # 9msv-32-4
MS/MSD Std Prep # ✓

Time	Filename	Laboratory ID	Vial#	Matrix	pH	DL Factor	Weight (g)	M%	Run OK?	Rept?	Comments
1942	VO64842	BFB	NA	NA	NA	NA	NA	NA	✓	✓	
1009	43	VST000.3							✓	✓	
1033	44	VST000.5							✓	✓	
1038	45	VST000.1							✓	✓	
1122	46	VST000.5							✓	✓	
1147	47	VST0010							✓	✓	
1111	48	VST0020							✓	✓	
1236	49	VST0040							✓	✓	
1301	50	VST0100							✓	✓	bm 05-2
1325	51	QCALTSTD							✓	✓	bm 05-2
1350	52	QCALTSTD							N	N	compd out of criteria c/o 100 STD
1414	53	U1129W0105							✓	✓	
1439	54	U1129W0105							✓	✓	
---	55	WASH							---	---	
---	56	WASH							---	---	
1552	57	U1129W01							✓	✓	
1617	58	D0601880-0020L.02			<2	2x			✓	✓	full
1641	59	-0030L.07			22	2x			✓	✓	
1906	60	-0040L.07			22	2x			✓	✓	
1920	61	D0601889-0020L.02			22	10x			✓	✓	
1955	62	-003			<2	1x			✓	✓	
1919	63	-006			<2	1x			✓	✓	
1844	64	-007			<2	1x			✓	✓	
1908	65	-008			<2	1x			N	✓	CB@115
1933	66	D0601924-001			<2	1x			N	✓	CB@533; 1,4 DCB@18
1957	67	-002			<2	1x			✓	✓	c/o learn
2022	68	-003			<2	1x			✓	✓	c/o learn
2046	69	-001 M9			<2	1x			✓	✓	c/o learn
2111	70	-001 M90			<2	1x			✓	✓	not suggested
---	71	WASH							✓	✓	

Last Analysis within 12-Hour clock? ☒ Yes ☐ No CCV Used? ☐ #3 ☐ #4 MS/MSD present? ☒ Yes ☐ No

Columbia Analytical Services
GC/MS VOA Injection Log
MSU; Gummo

Page: 84

Date
12/08/2011

Analyst: 2
ICAL Date: 11/29/11
Method: 8260
Internal Standard Std Prep #: 9MSV-31-1
BFB / Surrogate Std Prep #: 9MSV-31-2
Calibration Std Prep #: 9MSV-32-2
QCALTSTD / LCS Std Prep #: 9MSV-32-4
MS/MSD Std Prep #: 4

Time	Filename	Laboratory ID	Vial#	Matrix	pH	DL Factor	Weight (g)	M%	Run OK?	Rept?	Comments
1541	UOL02088	BFB	NA	NA	NA	NA	NA	NA	✓	✓	
	89	Subsampler									
	90	Subsampler									
	91	VST0010							✓	N	Use 2nd
1720	92	VST0010							✓	✓	
1745	93	V1208W02L030							✓	✓	
1809	94	V1208W02L030							✓	✓	
	95	W00K									
1838	96	V1208W02							✓	✓	
1923	97	DOL01985-005DL	.02		✓	5x			✓	✓	NSC
1947	98	DOL01981-001	.01		✓	1x			✓	✓	Pseudo
2012	99	-002	.01		✓	1x			✓	✓	
2030	5100	-004	.01		✓	1x			✓	✓	
2101	01	-005	.01		✓	1x			✓	✓	
2126	02	DOL02012-001	.01		✓	1x			✓	✓	Martec
2150	03	-002	.01		✓	1x			✓	✓	
2215	04	-003	.01		✓	1x			✓	✓	
2239	05	-004	.01		✓	1x			✓	✓	
2301	06	-005	.01		✓	1x			✓	✓	
2328	07	-006	.01		✓	1x			✓	✓	
2353	08	-007	.01		✓	1x			✓	✓	
0017	09	-008	.01		✓	1x			✓	✓	
0042	10	-009	.01		✓	1x			✓	✓	
0106	11	-010	.01		✓	1x			✓	✓	
0131	12	-011	.01		✓	1x			✓	✓	
0150	13	-011 mg	.01		✓	1x			✓	✓	not requested
0170	14	-011 mg	.01		✓	1x			✓	✓	
	15	7101814									
											12/18/11

Last Analysis within 12-Hour clock? ☒ Yes ☐ No
CCV Used? ☒ #3 ☐ #4
MS/MSD present? ☒ Yes ☐ No

**PURGEABLE AROMATICS
&
TPH-GASOLINE**

COLUMBIA ANALYTICAL SERVICES/REDDING

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981

Cover Page - Analysis Data Package
Halogenated and Aromatic Volatiles

Sample Name	Lab Code	Date Collected	Date Received
1065MW9ACL	D0601981-003	12/05/2006	12/06/2006

I certify this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Brian MooreDate: 12/13/06Name: Brian MooreTitle: Technical Manager

COLUMBIA ANALYTICAL SERVICES/REDDING

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981

Cover Page - Analysis Data Package
Gasoline Range Organics

Sample Name	Lab Code	Date Collected	Date Received
LF6GW103CL	D0601981-001	12/05/2006	12/06/2006
231GW09CL	D0601981-002	12/05/2006	12/06/2006
1065MW9ACL	D0601981-003	12/05/2006	12/06/2006
1065PZ1BCL	D0601981-004	12/05/2006	12/06/2006

I certify this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: B. MooreDate: 12/13/06Name: Brian MooreTitle: Technical manager

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Collected: 12/05/2006
Date Received: 12/06/2006

Gasoline Range Organics

Sample Name: LF6GW103CL
Lab Code: D0601981-001
Extraction: SW5030
Analysis Method: SW8015

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
TPH-Gasoline (C7C12)	ND	U	50	1	12/11/2006	12/11/2006	NWB11211	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Chlorobenzene	105	65-135	12/11/2006	

Comments: _____

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Collected: 12/05/2006
Date Received: 12/06/2006

Gasoline Range Organics

Sample Name: 231GW09CL
Lab Code: D0601981-002
Extraction: SW5030
Analysis Method: SW8015

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
TPH-Gasoline (C7C12)	ND	U	50	1	12/11/2006	12/11/2006	NWB11211	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Chlorobenzene	106	65-135	12/11/2006	

Comments: _____

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Collected: 12/05/2006
Date Received: 12/06/2006

Halogenated and Aromatic Volatiles

Sample Name: 1065MW9ACL
Lab Code: D0601981-003
Extraction: SW5030
Analysis Method: SW8021

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.5	1	12/12/2006	12/12/2006	NWB11212	
Benzene	ND	U	0.50	1	12/12/2006	12/12/2006	NWB11212	
Toluene	ND	U	0.50	1	12/12/2006	12/12/2006	NWB11212	
Ethylbenzene	ND	U	0.50	1	12/12/2006	12/12/2006	NWB11212	
Xylenes, Total	ND	U	1.0	1	12/12/2006	12/12/2006	NWB11212	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorobenzene	94	80-120	12/12/2006	

Comments: _____

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Collected: 12/05/2006
Date Received: 12/06/2006

Gasoline Range Organics

Sample Name: 1065MW9ACL
Lab Code: D0601981-003
Extraction: SW5030
Analysis Method: SW8015

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
TPH-Gasoline (C7C12)	ND	U	50	1	12/11/2006	12/11/2006	NWB11211	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Chlorobenzene	108	65-135	12/11/2006	

Comments: _____

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Collected: 12/05/2006
Date Received: 12/06/2006

Gasoline Range Organics

Sample Name: 1065PZ1BCL
Lab Code: D0601981-004
Extraction: SW5030
Analysis Method: SW8015

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
TPH-Gasoline (C7C12)	ND	U	50	1	12/11/2006	12/11/2006	NWB11211	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Chlorobenzene	98	65-135	12/11/2006	

Comments: _____

QC Summary

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Collected: NA
Date Received: NA

Halogenated and Aromatic Volatiles

Sample Name: Method Blank
Lab Code: NWB11212
Extraction: SW5030
Analysis Method: SW8021

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Methyl tert-Butyl Ether	ND	U	2.5	1	12/12/2006	12/12/2006	NWB11212	
Benzene	ND	U	0.50	1	12/12/2006	12/12/2006	NWB11212	
Toluene	ND	U	0.50	1	12/12/2006	12/12/2006	NWB11212	
Ethylbenzene	ND	U	0.50	1	12/12/2006	12/12/2006	NWB11212	
Xylenes, Total	ND	U	1.0	1	12/12/2006	12/12/2006	NWB11212	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Fluorobenzene	96	80-120	12/12/2006	

Comments:

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Collected: NA
Date Received: NA

Gasoline Range Organics

Sample Name: Method Blank
Lab Code: NWB11211
Extraction: SW5030
Analysis Method: SW8015

Units: ug/L (ppb)
Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
TPH-Gasoline (C7C12)	ND	U	50	1	12/11/2006	12/11/2006	NWB11211	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Chlorobenzene	103	65-135	12/11/2006	

Comments: _____

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981

Surrogate Recovery Summary
Halogenated and Aromatic Volatiles

Prep Method: SW5030
Analysis Method: SW8021

Units: Percent

<u>Sample Name</u>	<u>Lab Code</u>	<u>Q</u>	<u>S1</u>
Laboratory Control Sample	NWB11212LCS		95
Laboratory Control Sample Duplicate	NWB11212LCSD		95
Method Blank	NWB11212		96
1065MW9ACL	D0601981-003		94

Surrogate Recovery Control Limits (%)

S1: Fluorobenzene 80-120

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981

Surrogate Recovery Summary
Gasoline Range Organics

Prep Method: SW5030

Units: Percent

Analysis Method: SW8015

<u>Sample Name</u>	<u>Lab Code</u>	<u>Q</u>	<u>S1</u>
Laboratory Control Sample	NWB11211LCS		107
Laboratory Control Sample Duplicate	NWB11211LCSD		114
Method Blank	NWB11211		103
LF6GW103CL	D0601981-001		105
231GW09CL	D0601981-002		106
1065MW9ACL	D0601981-003		108
1065PZ1BCL	D0601981-004		98

Surrogate Recovery Control Limits (%)

S1: Chlorobenzene	65-135
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COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
 Project: Presidio
 Sample Matrix: Water

Service Request: D0601981
 Date Collected: NA
 Date Received: NA
 Date Extracted: NA
 Date Analyzed: 12/12/2006

Laboratory Control Sample/Duplicate Laboratory Control Sample Summary
 Halogenated and Aromatic Volatiles

LCS Sample Lab Control Sample DLCS Sample Lab Control Sample Duplicate
 Lab Code: NWB11212LCS / NWB11212LCSD Units: ug/L (ppb)
 Extraction SW5030
 Analysis Method: SW8021

Analyte	MRL	Spike Level	Spike Result	Spike Result	Spike % Rec	Spike % Rec	CAS Acceptance	Relative Percent	Result Notes
			LCS	LCSD	LCS	LCSD	Limits	Difference	
Methyl tert-Butyl Ether	2.5	100.0	91.68	93.74	92	94	80-120	2	
Benzene	0.50	20.00	19.04	18.44	95	92	80-120	3	
Toluene	0.50	20.00	20.74	19.96	104	100	80-120	4	
Ethylbenzene	0.50	20.00	20.60	20.06	103	100	80-120	3	
Xylenes, Total	1.0	60.00	62.09	60.25	103	100	80-120	3	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 12/11/2006

Laboratory Control Sample/Duplicate Laboratory Control Sample Summary
Gasoline Range Organics

LCS Sample Lab Control Sample
Lab Code: NWB11211LCS / NWB11211LCSD
Extraction SW5030
Analysis Method: SW8015

DLCS Sample Lab Control Sample Duplicate
Units: ug/L (ppb)

Analyte	MRL	Spike Level	Spike	Spike	Spike	Spike	CAS	Relative	Result Notes
			Result	Result	% Rec	% Rec	Acceptance	Percent Difference	
			LCS	LCSD	LCS	LCSD	Limits		
TPH-Gasoline (C7C12)	50	2000	1790	1770	90	89	75-125	1	

COLUMBIA ANALYTICAL SERVICES/REDDING**QA/QC Results**

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Extracted: 12/12/2006
Date Analyzed: 12/12/2006
Time Analyzed: 13:04

Method Blank Summary
Halogenated and Aromatic Volatiles

Extraction Method: SW5030
Analysis Method: SW8021

Extraction Lot: NWB11212

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Laboratory Control Sample	NWB11212LCS	NP121202	12/12/2006	12:14
Laboratory Control Sample Duplicate	NWB11212LCSD	NP121203	12/12/2006	12:39
1065MW9ACL	D0601981-003	NP121205	12/12/2006	13:28

COLUMBIA ANALYTICAL SERVICES/REDDING**QA/QC Results**

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Extracted: 12/11/2006
Date Analyzed: 12/11/2006
Time Analyzed: 12:13

Method Blank Summary
Gasoline Range Organics

Extraction Method: SW5030
Analysis Method: SW8015

Extraction Lot: NWB11211

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Laboratory Control Sample	NWB11211LCS	NF121103P	12/11/2006	11:24
Laboratory Control Sample Duplicate	NWB11211LCSD	NF121104P	12/11/2006	11:49
LF6GW103CL	D0601981-001	NF121107	12/11/2006	13:03
231GW09CL	D0601981-002	NF121108	12/11/2006	13:28
1065MW9ACL	D0601981-003	NF121109	12/11/2006	13:53
1065PZ1BCL	D0601981-004	NF121110	12/11/2006	14:18

Standards Data

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
ICAL Date: 11/30/2006

Initial Calibration Summary
Halogenated and Aromatic Volatiles

ICAL ID: 11/30/2006GCN
Instrument ID: GCN

Column: RTX-1, PID

Level ID File ID
A NP113001
B NP113002
C NP113003
D NP113004
E NP113005

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF
Methyl tert-Butyl Ether	A	5.000	0.984	B	25.00	1.095	C	100.0	0.925	D	150.0	0.758	E	250.0	0.818
Benzene	A	1.000	2.908	B	5.000	2.368	C	20.00	2.333	D	30.00	2.048	E	50.00	2.166
Toluene	A	1.000	3.532	B	5.000	2.265	C	20.00	2.191	D	30.00	1.950	E	50.00	2.050
Ethylbenzene	A	1.000	2.122	B	5.000	1.748	C	20.00	1.761	D	30.00	1.722	E	50.00	1.812
Xylenes, Total	A	3.000	2.436	B	15.00	1.823	C	60.00	1.907	D	90.00	1.894	E	150.0	1.983
Fluorobenzene	A	5.000	1.839	B	25.00	1.610	C	100.0	1.596	D	155.0	1.386	E	250.0	1.403

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
ICAL Date: 11/30/2006

Initial Calibration Summary
Halogenated and Aromatic Volatiles

ICAL ID: 11/30/2006GCN
Instrument ID: GCN
Mean RSD: 15.34

Column: RTX-1, PID

Calibration Evaluation

Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria
Methyl tert-Butyl Ether	TRG	AverageRF	% RSD	14.6		20
Benzene	TRG	AverageRF	% RSD	14.0		20
Toluene	TRG	Linear	r	0.999		0.995
Ethylbenzene	TRG	AverageRF	% RSD	9.0		20
Xylenes, Total	TRG	AverageRF	% RSD	12.2		20
Fluorobenzene	SUR	AverageRF	% RSD	11.8		20

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
ICAL Date: 11/17/2006

Initial Calibration Summary
Gasoline Range Organics

ICAL ID: 11/17/2006GCN
Instrument ID: GCN

Column: RTX-1, FID

Level ID **File ID**
A NF111702
B NF111703
C NF111704
D NF111705
E NF111706

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF
TPH-Gasoline (C7C12)	A	50.00	622.3	B	500.0	404.0	C	2000	429.0	D	3000	445.8	E	5000	452.8
Chlorobenzene	A	2.500	62.40	B	25.00	79.40	C	100.0	93.81	D	150.0	95.88	E	250.0	105.3

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
ICAL Date: 11/17/2006

Initial Calibration Summary
Gasoline Range Organics

ICAL ID: 11/17/2006GCN
Instrument ID: GCN
Mean RSD: 18.40

Column: RTX-1, FID

Calibration Evaluation

Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria
TPH-Gasoline (C7C12)	TRG	AverageRF	% RSD	18.4		20
Chlorobenzene	SUR	AverageRF	% RSD	19.2		20

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
Date Analyzed: 11/30/2006

Second Source Calibration Verification
Halogenated and Aromatic Volatiles

ICAL ID: 11/30/2006GCN
Instrument ID: GCN
File ID: NP113006

Column: RTX-1, PID

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%	Criteria	Curve Fit	Q
Methyl tert-Butyl Ether	100.0	95.50	0.916	0.875	-4.5	NA	+/- 15.0	AverageRF	
Benzene	20.00	19.91	2.365	2.354	-0.5	NA	+/- 15.0	AverageRF	
Toluene	20.00	21.29	2.398	2.206	NA	6.4	+/- 15.0	Linear	
Ethylbenzene	20.00	20.83	1.833	1.909	4.1	NA	+/- 15.0	AverageRF	
Xylenes, Total	60.00	62.36	2.009	2.086	3.8	NA	+/- 15.0	AverageRF	
Fluorobenzene	100.0	94.38	1.567	1.478	-5.7	NA	+/- 20.0	AverageRF	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
Date Analyzed: 11/17/2006

Second Source Calibration Verification
Gasoline Range Organics

ICAL ID: 11/17/2006GCN
Instrument ID: GCN
File ID: NF111707

Column: RTX-1, FID

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%	Criteria	Curve Fit	Q
TPH-Gasoline (C7C12)	2000	1860	470.8	437.7	-7.0	NA	+/- 15.0	AverageRF	
Chlorobenzene	N/A	N/A	87.35	92.82	0.0	NA	+/- 15.0	AverageRF	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
Date Analyzed: 12/12/2006

Continuing Calibration Verification Summary
Halogenated and Aromatic Volatiles

ICAL ID: 11/30/2006GCN
Instrument ID: GCN
File ID: NP121201

Column: RTX-1, PID

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
Methyl tert-Butyl Ether	100.0	83.27	0.916	0.763	-16.7	NA	+/- 15.0	AverageRF	*
Benzene	20.00	18.09	2.365	2.138	-9.6	NA	+/- 15.0	AverageRF	
Toluene	20.00	20.34	2.398	2.111	NA	1.7	+/- 15.0	Linear	
Ethylbenzene	20.00	19.67	1.833	1.803	-1.6	NA	+/- 15.0	AverageRF	
Xylenes, Total	60.00	60.10	2.009	2.010	0.0	NA	+/- 15.0	AverageRF	
Fluorobenzene	100.0	98.87	1.567	1.549	-1.1	NA	+/- 20.0	AverageRF	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
Date Analyzed: 12/12/2006

Continuing Calibration Verification Summary
Halogenated and Aromatic Volatiles

ICAL ID: 11/30/2006GCN
Instrument ID: GCN
File ID: NP121206

Column: RTX-1, PID

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
Methyl tert-Butyl Ether	100.0	95.44	0.916	0.874	-4.6	NA	+/- 15.0	AverageRF	
Benzene	20.00	19.01	2.365	2.248	-4.9	NA	+/- 15.0	AverageRF	
Toluene	20.00	20.36	2.398	2.113	NA	1.8	+/- 15.0	Linear	
Ethylbenzene	20.00	20.28	1.833	1.858	1.4	NA	+/- 15.0	AverageRF	
Xylenes, Total	60.00	59.60	2.009	1.993	-0.8	NA	+/- 15.0	AverageRF	
Fluorobenzene	100.0	98.67	1.567	1.546	-1.3	NA	+/- 20.0	AverageRF	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
Date Analyzed: 12/11/2006

Continuing Calibration Verification Summary
Gasoline Range Organics

ICAL ID: 11/17/2006GCN
Instrument ID: GCN
File ID: NF121102

Column: RTX-1, FID

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
TPH-Gasoline (C7C12)	2000	1977	470.8	465.3	-1.2	NA	+/- 15.0	AverageRF	
Chlorobenzene	100.0	114.8	87.35	100.3	14.8	NA	+/- 15.0	AverageRF	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
Date Analyzed: 12/11/2006

Continuing Calibration Verification Summary
Gasoline Range Organics

ICAL ID: 11/17/2006GCN
Instrument ID: GCN
File ID: NF121111

Column: RTX-1, FID

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
TPH-Gasoline (C7C12)	3000	3010	470.8	472.4	0.3	NA	+/- 15.0	AverageRF	
Chlorobenzene	150.0	165.9	87.35	96.63	10.6	NA	+/- 15.0	AverageRF	

QA/QC Results

Service Request: D0601981

Analysis Method: SW8021

Instrument ID: GCN
Column: RTX-1, PID

Form 8 - Organic

QA/QC Results

Service Request: D0601981

Analysis Method: SW8015

Instrument ID: GCN
Column: RTX-1, FID

Form 8 - Organic

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Extracted: 12/12/2006

Extraction Prep Log
Halogenated and Aromatic Volatiles

Extraction Method: SW5030
Analysis Method: SW8021

Extraction Lot: NWB11212

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
Method Blank	NWB11212	NA	NA	5.000 ML	5.000	NA	
Laboratory Control Sample	NWB11212LCS	NA	NA	5.000 ML	5.000	NA	
Laboratory Control Sample Duplicate	NWB11212LCSD	NA	NA	5.000 ML	5.000	NA	
1065MW9ACL	D0601981-003	12/05/2006	12/06/2006	5.000 ML	5.000	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Extracted: 12/11/2006

Extraction Prep Log
Gasoline Range Organics

Extraction Method: SW5030
Analysis Method: SW8015

Extraction Lot: NWB11211

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
Method Blank	NWB11211	NA	NA	5.000 ML	5.000	NA	
Laboratory Control Sample	NWB11211LCS	NA	NA	5.000 ML	5.000	NA	
Laboratory Control Sample Duplicate	NWB11211LCSD	NA	NA	5.000 ML	5.000	NA	
LF6GW103CL	D0601981-001	12/05/2006	12/06/2006	5.000 ML	5.000	NA	
231GW09CL	D0601981-002	12/05/2006	12/06/2006	5.000 ML	5.000	NA	
1065MW9ACL	D0601981-003	12/05/2006	12/06/2006	5.000 ML	5.000	NA	
1065PZ1BCL	D0601981-004	12/05/2006	12/06/2006	5.000 ML	5.000	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Report

Service Request: D0601981

Analysis Method: SW8021

[illegible]

Comments: _____

QA/QC Report

Service Request: D0601981

Analysis Method: SW8015

[illegible]

Comments: _____

MDL STUDY REPORT FORM

Lab Name: Columbia Analytical Services/Redding Analytical Method: SW8021 Matrix: Water

Instrument ID: GCN

Concentration Units (ug/L or mg/kg): UG/L[illegible]

MDL STUDY REPORT FORM

Lab Name: Columbia Analytical Services/Redding Analytical Method: SW8015 Matrix: Water

Instrument ID: GCN

Concentration Units (ug/L or mg/kg): UG/L

[illegible]

SUPPORT DOCUMENTATION

Columbia Analytical Services - Redding

Date	11/17/06
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RT Marker Std Prep # 3 luft 65C
 Internal Standard Std Prep # 3 luft
 Surrogate Std Prep # 3 luft 66C

Calibration Std Prep # 3 luft 69C
 QCAL/STD / LCS /
 MS/MSD Std Prep # 3 luft 69D

Analyst: B
 ICAL Date: 11/17/06
 Method: SWB015

Filename	Laboratory ID	Vial	Matrix	pH	Weight (Grams)	%M	DL Factor	STD	Run OK?	Report?	Comments
NF111701	RTMARKER	-	-	-	-	-	-	-	✓	✓	
2	GSTD1	-	-	-	-	-	-	-	✓	✓	
3	GSTD2	-	-	-	-	-	-	-	✓	✓	
4	GSTD3	-	-	-	-	-	-	-	✓	✓	
5	GSTD4	-	-	-	-	-	-	-	✓	✓	
6	GSTD5	-	-	-	-	-	-	-	✓	✓	
7	QCAL/STD	-	-	-	-	-	-	-	✓	✓	
8	NW181117C5	-	W	-	-	-	1X	-	✓	✓	
9	NW181117C5D	-	-	-	-	-	-	-	✓	✓	
10	NW181117BIK	-	-	-	-	-	-	-	✓	✓	
11	D0601850-001	.01	-	<2	-	-	-	-	✓	✓	
12	D0601773-001	.01	-	-	-	-	-	-	✓	✓	
13	D0601853-001	.02	-	-	-	-	-	-	✓	✓	
14	-002	-	-	-	-	-	-	-	✓	✓	
15	-003	-	-	-	-	-	-	-	✓	✓	
16	-004	-	-	-	-	-	-	-	✓	✓	
17	D0601833-001	✓	✓	✓	-	-	2X	-	✓	✓	Diluted due to matrix BF=3
18	GSTDY	-	-	-	-	-	-	-	✓	✓	
19	D0601797-001	.03	W	<2	-	-	10X	-	✓	✓	
20	-002	-	-	-	-	-	2X	-	✓	✓	
21	-003	-	-	-	-	-	20X	-	✓	✓	
22	-004	-	-	-	-	-	10X	-	✓	✓	
23	-005	-	-	-	-	-	10X	-	✓	✓	
24	-006	✓	-	-	-	-	10X	-	✓	✓	
25	-007	.03	-	-	-	-	1X	-	✓	✓	
26	-008	.02	-	-	-	-	-	-	✓	✓	
27	-009	.05	-	-	-	-	-	-	✓	✓	
28	D0601644-006	.01	✓	-	-	-	✓	-	✓	✓	26ml → 40ml
29	GSTD3	-	-	-	-	-	-	-	✓	✓	
											B 11/17/06

Columbia Analytical Services - Redding

Analyst: B
ICAL Date: 11/30/64
Method: SW8021

Calibration Std Prep # 3 luft **69F**
 QCALTSTD / LCS /
 MS/MSD Std Prep # 3 luft **69G**

RT Marker Std Prep # 3	luft
Internal Standard Std Prep # 3	luft
Surrogate Std Prep # 3	luft

Date	11/30/06
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Filename	Laboratory ID	Vial	Matrix	pH	Weight (Grams)	%M	DL Factor	STD	Run OK?	Report?	Comments
NP113001	ASTD1	-	-	-	-	-	-	-	✓	✓	
2	ASTD2	-	-	-	-	-	-	-	✓	✓	
3	ASTD3	-	-	-	-	-	-	-	✓	✓	
4	ASTD4	-	-	-	-	-	-	-	✓	✓	
5	ASTD5	-	-	-	-	-	-	-	✓	✓	
6	QCART STD	-	-	-	-	-	-	-	✓	✓	
7	NWB111306CS	-	W	-	-	-	1X	-	✓	✓	
8	NWB111306CS	-	-	-	-	-	↓	-	✓	✓	
9	NWB111306BK	-	-	-	-	-	↓	-	✓	✓	
10	DO601644-005	.01	-	-	-	-	5X	-	N	✓	20ml → 40ml 4 ml
11	-005	↓	-	-	-	-	5X	-	✓	✓	Toluene ↑
12	-006	↓	-	-	-	-	1X	-	N	✓	20ml → 40ml 4 ml
13	-006	↓	-	-	-	-	5X	-	✓	✓	Toluene ↑
14	-007	↓	-	-	-	-	1X	-	✓	✓	
15	-007	↓	↓	-	-	-	5X	-	✓	N	20ml → 40ml 4 ml
16	ASTD3	-	-	-	-	-	-	-	✓	✓	Not Needed

B11/30/06

Date	12/11/06
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 RT Marker Std Prep # 3 luff 68C 7AA
 Internal Standard Std Prep # 3 luff

 Calibration Std Prep # 3 luff 69C
 QCALTSTD / LCS /

 Analyst: B
 ICAL Date: 11/27/06
 Method: SW8015

 Surrogate Std Prep # 3 luff 66C

 MS/MSD Std Prep # 3 luff 69D

Filename	Laboratory ID	Vial	Matrix	pH	Weight (Grams)	%M	DL Factor	STD	Run OK?	Report?	Comments
NF121101	RTMARKER	-	-	-	-	-	-	-	✓	✓	
2	GSTD3	-	-	-	-	-	-	-	✓	✓	
3	NWB11211C65	-	W	-	-	-	1X	-	✓	✓	
4	NWB11211C65D	-	-	-	-	-	-	-	✓	✓	
5	NWB11211B1K	-	-	-	-	-	-	-	✓	✓	
6	D0601966-001	.01	-	22	-	-	-	-	✓	✓	
7	D0601981-001	.02	-	-	-	-	-	-	✓	✓	
8	-002	.02	-	-	-	-	-	-	✓	✓	
9	-003	.01	-	-	-	-	-	-	✓	✓	
10	-004	.02	✓	✓	-	-	✓	-	✓	✓	
11	GSTD4	-	-	-	-	-	-	-	✓	✓	
12	D0600301-002	.06	W	22	-	-	1X	-	✓	✓	
13	-003	-	-	-	-	-	-	-	✓	✓	
14	-004	-	-	-	-	-	-	-	✓	✓	
15	-005	-	-	-	-	-	-	-	✓	✓	
16	-006	-	-	-	-	-	-	-	✓	✓	
17	-007	-	-	-	-	-	-	-	✓	✓	
18	-008	-	-	-	-	-	-	-	✓	✓	
19	-009	-	-	-	-	-	-	-	✓	✓	
20	-010	✓	✓	-	-	-	-	-	✓	✓	
21	GSTD3	-	-	-	-	-	-	-	✓	✓	
22	-011	.06	W	22	-	-	1X	-	✓	✓	
23	-012	-	-	-	-	-	-	-	✓	✓	
24	-013	-	-	-	-	-	-	-	✓	✓	
25	-014	-	-	-	-	-	-	-	✓	✓	
26	-015	-	-	-	-	-	-	-	✓	✓	
27	-016	✓	✓	-	-	-	-	-	✓	✓	
28	GSTD3	-	-	-	-	-	-	-	✓	✓	
B 12/11/06											

Columbia Analytical Services - Redding

GC Volatiles

Date	12/12/06
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RT Marker Std Prep # 3 luft
Internal Standard Std Prep # 3 luft
Surrogate Std Prep # 3 luft

Calibration Std Prep # 3 luft **69F**

QC/ALSTSD / LCS /

MS/MSD Std Prep # 3 luft **69G**

Analyst: B
ICAL Date: 11/30/06
Method: SW8021

Filename	Laboratory ID	Vial	Matrix	pH	Weight (Grams)	%M	DL Factor	STD	Run OK?	Report?	Comments
NP121201	ASTD3	-	-	-	-	-	-		✓	✓	
2	NWB1212CCJ	-	W	-	-	-	1X		✓	✓	
3	NWB1212CCSD	-	↓	-	-	-	↓		✓	✓	
4	NWB1212B1L	-	↓	-	-	-	↓		✓	✓	
5	D0601981-003	.02	↓	42	-	-	↓		✓	✓	
6	ASTD3	-	-	-	-	-	-		✓	✓	

8/12/12/06

HPLC POLYNUCLEAR AROMATIC HYDROCARBONS

COLUMBIA ANALYTICAL SERVICES/REDDING

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981

Cover Page - Analysis Data Package
Polynuclear Aromatic Hydrocarbons

Sample Name	Lab Code	Date Collected	Date Received
LF6GW103CL	D0601981-001	12/05/2006	12/06/2006

I certify this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: SL-CL
Date: 12/15/06

Name: Sylvia Chen
Title: Scientist

COLUMBIA ANALYTICAL SERVICES/REDDING

Analytical Report

Client: Treadwell and Rollo, Inc.
 Project: Presidio
 Sample Matrix: Water

Service Request: D0601981
 Date Collected: 12/05/2006
 Date Received: 12/06/2006

Polynuclear Aromatic Hydrocarbons

Sample Name: LF6GW103CL
 Lab Code: D0601981-001
 Extraction: SW3520
 Analysis Method: SW8310

Units: ug/L (ppb)
 Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	5.0	1	12/11/2006	12/14/2006	NWB11211	
Fluorene	ND	U	1.0	1	12/11/2006	12/14/2006	NWB11211	
Phenanthrene	ND	U	1.0	1	12/11/2006	12/14/2006	NWB11211	
Anthracene	ND	U	0.20	1	12/11/2006	12/14/2006	NWB11211	
Fluoranthene	ND	U	0.20	1	12/11/2006	12/14/2006	NWB11211	
Pyrene	ND	U	0.20	1	12/11/2006	12/14/2006	NWB11211	
Benz(a)anthracene	ND	U	0.20	1	12/11/2006	12/14/2006	NWB11211	
Chrysene	ND	U	0.20	1	12/11/2006	12/14/2006	NWB11211	
Benzo(b)fluoranthene	ND	U	0.20	1	12/11/2006	12/14/2006	NWB11211	
Benzo(k)fluoranthene	ND	U	0.20	1	12/11/2006	12/14/2006	NWB11211	
Benzo(a)pyrene	ND	U	0.20	1	12/11/2006	12/14/2006	NWB11211	
Dibenz(a,h)anthracene	ND	U	0.50	1	12/11/2006	12/14/2006	NWB11211	
Benzo(g,h,i)perylene	ND	U	0.20	1	12/11/2006	12/14/2006	NWB11211	
Indeno(1,2,3-cd)pyrene	ND	U	0.20	1	12/11/2006	12/14/2006	NWB11211	
Acenaphthylene	ND	U	2.0	1	12/11/2006	12/14/2006	NWB11211	
Acenaphthene	ND	U	5.0	1	12/11/2006	12/14/2006	NWB11211	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Terphenyl-d14 - SS	71	65-135	12/14/2006	

Comments: _____

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
 Project: Presidio
 Sample Matrix: Water

Service Request: D0601981
 Date Collected: NA
 Date Received: NA

Polynuclear Aromatic Hydrocarbons

Sample Name: Method Blank
 Lab Code: NWB11211
 Extraction: SW3520
 Analysis Method: SW8310

Units: ug/L (ppb)
 Basis: NA

Analyte	Result	Q	MRL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Naphthalene	ND	U	5.0	1	12/11/2006	12/14/2006	NWB11211	
Fluorene	ND	U	1.0	1	12/11/2006	12/14/2006	NWB11211	
Phenanthrene	ND	U	1.0	1	12/11/2006	12/14/2006	NWB11211	
Anthracene	ND	U	0.20	1	12/11/2006	12/14/2006	NWB11211	
Fluoranthene	ND	U	0.20	1	12/11/2006	12/14/2006	NWB11211	
Pyrene	ND	U	0.20	1	12/11/2006	12/14/2006	NWB11211	
Benz(a)anthracene	ND	U	0.20	1	12/11/2006	12/14/2006	NWB11211	
Chrysene	ND	U	0.20	1	12/11/2006	12/14/2006	NWB11211	
Benzo(b)fluoranthene	ND	U	0.20	1	12/11/2006	12/14/2006	NWB11211	
Benzo(k)fluoranthene	ND	U	0.20	1	12/11/2006	12/14/2006	NWB11211	
Benzo(a)pyrene	ND	U	0.20	1	12/11/2006	12/14/2006	NWB11211	
Dibenz(a,h)anthracene	ND	U	0.50	1	12/11/2006	12/14/2006	NWB11211	
Benzo(g,h,i)perylene	ND	U	0.20	1	12/11/2006	12/14/2006	NWB11211	
Indeno(1,2,3-cd)pyrene	ND	U	0.20	1	12/11/2006	12/14/2006	NWB11211	
Acenaphthylene	ND	U	2.0	1	12/11/2006	12/14/2006	NWB11211	
Acenaphthene	ND	U	5.0	1	12/11/2006	12/14/2006	NWB11211	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Terphenyl-d14 - SS	86	65-135	12/14/2006	

Comments: _____

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981

Surrogate Recovery Summary
Polynuclear Aromatic Hydrocarbons

Prep Method: SW3520
Analysis Method: SW8310

Units: Percent

<u>Sample Name</u>	<u>Lab Code</u>	<u>Q</u>	<u>S1</u>
Method Blank	NWB11211		86
Laboratory Control Sample	NWB11211LCS		82
LF6GW103CL	D0601981-001		71

Surrogate Recovery Control Limits (%)

S1: Terphenyl-d14 - SS 65-135

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Report

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Collected: NA
Date Received: NA
Date Extracted: 12/11/2006
Date Analyzed: 12/14/2006

Laboratory Control Sample/Duplicate Laboratory Control Sample Summary
Polynuclear Aromatic Hydrocarbons

LCS Sample Lab Control Sample
Lab Code: NWB11211LCS
Extraction SW3520
Analysis Method: SW8310

Units: ug/L (ppb)

Analyte	MRL	Spike Level	Spike Result LCS	Spike % Rec LCS	CAS Acceptance Limits	Result Notes
Naphthalene	5.0	20.00	15.86	79	50-135	
Fluorene	1.0	4.000	3.585	90	65-135	
Pyrene	0.20	2.000	1.855	93	65-135	
Benzo(a)pyrene	0.20	2.000	1.701	85	65-135	

COLUMBIA ANALYTICAL SERVICES/REDDING**QA/QC Results**

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Extracted: 12/11/2006
Date Analyzed: 12/14/2006
Time Analyzed: 12:55

Method Blank Summary
Polynuclear Aromatic Hydrocarbons

Extraction Method: SW3520
Analysis Method: SW8310

Extraction Lot: NWB11211

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Laboratory Control Sample	NWB11211LCS	I1214005P	12/14/2006	13:26
LF6GW103CL	D0601981-001	I1214006	12/14/2006	13:57

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
ICAL Date: 11/02/2006

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

ICAL ID: 11/02/2006LCI
Instrument ID: LCI

Level ID **File ID**
A I1102006
B I1102007
C I1102008
D I1102009
E I1102010

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF
Naphthalene	A	1.000	59.52	B	10.00	75.65	C	20.00	79.57	D	30.00	78.23	E	40.00	79.33
Fluorene	A	0.200	472.7	B	2.000	546.0	C	4.000	567.2	D	6.000	552.9	E	8.000	560.7
Phenanthrene	A	0.100	749.4	B	1.000	902.3	C	2.000	946.0	D	3.000	921.7	E	4.000	938.7
Anthracene	A	0.100	810.8	B	1.000	936.8	C	2.000	963.8	D	3.000	920.5	E	4.000	922.8
Fluoranthene	A	0.100	197.6	B	1.000	261.7	C	2.000	279.7	D	3.000	274.2	E	4.000	281.0
Pyrene	A	0.100	504.6	B	1.000	689.7	C	2.000	764.5	D	3.000	766.8	E	4.000	802.0
Benz(a)anthracene	A	0.100	218.6	B	1.000	328.9	C	2.000	353.8	D	3.000	346.3	E	4.000	360.0
Chrysene	A	0.100	711.4	B	1.000	874.2	C	2.000	911.8	D	3.000	886.3	E	4.000	909.2
Benzo(b)fluoranthene	A	0.100	235.6	B	1.000	360.5	C	2.000	386.7	D	3.000	379.4	E	4.000	389.3
Benzo(k)fluoranthene	A	0.100	2111	B	1.000	2257	C	2.000	2361	D	3.000	2284	E	4.000	2303
Benzo(a)pyrene	A	0.100	2041	B	1.000	2341	C	2.000	2476	D	3.000	2412	E	4.000	2421
Dibenz(a,h)anthracene	A	0.200	1184	B	2.000	1274	C	4.000	1344	D	6.000	1306	E	8.000	1320
Benzo(g,h,i)perylene	A	0.200	701.0	B	2.000	807.3	C	4.000	886.2	D	6.000	879.2	E	8.000	904.0
Indeno(1,2,3-cd)pyrene	A	0.100	1224	B	1.000	1253	C	2.000	1342	D	3.000	1307	E	4.000	1340
Acenaphthene	A	1.000	97.59	B	10.00	113.1	C	20.00	118.6	D	30.00	114.2	E	40.00	115.4
p-Terphenyl-d14	A	0.250	289.9	B	2.500	344.3	C	5.000	358.3	D	7.500	346.1	E	10.00	350.5

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
ICAL Date: 11/02/2006

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

ICAL ID: 11/02/2006LCI
Instrument ID: LCI

Level ID File ID
A I1102006
B I1102007
C I1102008
D I1102009
E I1102010

Analyte Name	Level			Level			Level			Level			Level		
	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF	ID	Amt	RRF
Naphthalene	A	1.000	219.6	B	10.00	217.5	C	20.00	221.6	D	30.00	215.9	E	40.00	218.4
Fluorene	A	0.200	969.4	B	2.000	933.7	C	4.000	967.3	D	6.000	965.0	E	8.000	976.5
Phenanthrene	A	0.100	2382	B	1.000	2269	C	2.000	2338	D	3.000	2263	E	4.000	2298
Anthracene	A	0.100	4671	B	1.000	4416	C	2.000	4437	D	3.000	4207	E	4.000	4186
Fluoranthene	A	0.100	717.6	B	1.000	620.1	C	2.000	603.5	D	3.000	616.0	E	4.000	586.0
Pyrene	A	0.100	557.3	B	1.000	542.4	C	2.000	557.0	D	3.000	541.1	E	4.000	532.9
Benz(a)anthracene	A	0.100	1599	B	1.000	1413	C	2.000	1439	D	3.000	1404	E	4.000	1421
Chrysene	A	0.100	2616	B	1.000	2326	C	2.000	2380	D	3.000	2304	E	4.000	2326
Benzo(b)fluoranthene	A	0.100	1515	B	1.000	1587	C	2.000	1633	D	3.000	1589	E	4.000	1618
Benzo(k)fluoranthene	A	0.100	916.5	B	1.000	1052	C	2.000	1089	D	3.000	1056	E	4.000	1071
Benzo(a)pyrene	A	0.100	1240	B	1.000	1359	C	2.000	1430	D	3.000	1412	E	4.000	1424
Dibenz(a,h)anthracene	A	0.200	490.3	B	2.000	339.2	C	4.000	372.3	D	6.000	363.4	E	8.000	372.7
Benzo(g,h,i)perylene	A	0.200	477.6	B	2.000	561.8	C	4.000	582.0	D	6.000	565.0	E	8.000	581.3
Indeno(1,2,3-cd)pyrene	A	0.100	910.0	B	1.000	1147	C	2.000	1215	D	3.000	1176	E	4.000	1250
Acenaphthylene	A	2.000	147.6	B	20.00	144.6	C	40.00	147.8	D	60.00	143.5	E	80.00	145.0
Acenaphthene	A	1.000	89.28	B	10.00	81.38	C	20.00	82.97	D	30.00	86.67	E	40.00	83.75
p-Terphenyl-d14	A	0.250	678.5	B	2.500	615.1	C	5.000	625.3	D	7.500	608.9	E	10.00	618.5

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
ICAL Date: 11/02/2006

Initial Calibration Summary
Polynuclear Aromatic Hydrocarbons

ICAL ID: 11/02/2006LCI
Instrument ID: LCI
Mean RSD: 9.92

Analyte Name	Calibration Evaluation					Control Criteria
	Compound Type	Fit Type	Eval.	Eval. Result	Q	
Naphthalene	TRG	AverageRF	% RSD	11.4		20.0
Fluorene	TRG	AverageRF	% RSD	7.1		20.0
Phenanthrene	TRG	AverageRF	% RSD	9.1		20.0
Anthracene	TRG	AverageRF	% RSD	6.4		20.0
Fluoranthene	TRG	AverageRF	% RSD	13.5		20.0
Pyrene	TRG	Linear	r	0.999		0.995
Benz(a)anthracene	TRG	Linear	r	1.000		0.995
Chrysene	TRG	Linear	r	1.000		0.995
Benzo(b)fluoranthene	TRG	Linear	r	1.000		0.995
Benzo(k)fluoranthene	TRG	AverageRF	% RSD	4.1		20.0
Benzo(a)pyrene	TRG	Linear	r	1.000		0.995
Dibenz(a,h)anthracene	TRG	AverageRF	% RSD	4.8		20.0
Benzo(g,h,i)perylene	TRG	AverageRF	% RSD	10.0		20.0
Indeno(1,2,3-cd)pyrene	TRG	AverageRF	% RSD	4.1		20.0
Acenaphthene	TRG	AverageRF	% RSD	7.3		20.0
p-Terphenyl-d14	SUR	AverageRF	% RSD	8.1		20.0

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
 Project: Presidio

Service Request: D0601981
 ICAL Date: 11/02/2006

Initial Calibration Summary
 Polynuclear Aromatic Hydrocarbons

ICAL ID: 11/02/2006LCI
 Instrument ID: LCI
 Mean RSD: 5.36

Calibration Evaluation

Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria
Naphthalene	TRG	AverageRF	% RSD	1.0		20.0
Fluorene	TRG	AverageRF	% RSD	1.7		20.0
Phenanthrene	TRG	AverageRF	% RSD	2.2		20.0
Anthracene	TRG	AverageRF	% RSD	4.5		20.0
Fluoranthene	TRG	AverageRF	% RSD	8.2		20.0
Pyrene	TRG	AverageRF	% RSD	2.0		20.0
Benz(a)anthracene	TRG	AverageRF	% RSD	5.6		20.0
Chrysene	TRG	AverageRF	% RSD	5.4		20.0
Benzo(b)fluoranthene	TRG	AverageRF	% RSD	2.9		20.0
Benzo(k)fluoranthene	TRG	AverageRF	% RSD	6.6		20.0
Benzo(a)pyrene	TRG	AverageRF	% RSD	5.8		20.0
Dibenz(a,h)anthracene	TRG	AverageRF	% RSD	15.2		20.0
Benzo(g,h,i)perylene	TRG	AverageRF	% RSD	7.8		20.0
Indeno(1,2,3-cd)pyrene	TRG	AverageRF	% RSD	11.8		20.0
Acenaphthylene	TRG	AverageRF	% RSD	1.3		20.0
Acenaphthene	TRG	AverageRF	% RSD	3.7		20.0
p-Terphenyl-d14	SUR	AverageRF	% RSD	4.5		20.0

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
Date Analyzed: 11/02/2006

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

ICAL ID: 11/02/2006LCI
Instrument ID: LCI
File ID: I1102011

Column: FL

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%	Criteria	Curve Fit	Q
Naphthalene	20.00	22.34	74.46	83.17	11.7	NA	+/- 15.0	AverageRF	
Fluorene	4.000	4.434	539.9	598.5	10.8	NA	+/- 15.0	AverageRF	
Phenanthrene	2.000	2.220	891.6	989.6	11.0	NA	+/- 15.0	AverageRF	
Anthracene	2.000	2.253	910.9	1026	12.6	NA	+/- 15.0	AverageRF	
Fluoranthene	2.000	2.275	258.8	294.4	13.7	NA	+/- 15.0	AverageRF	
Pyrene	2.000	2.237	705.5	865.6	NA	11.8	+/- 15.0	Linear	
Benz(a)anthracene	2.000	2.169	321.5	380.7	NA	8.4	+/- 15.0	Linear	
Chrysene	2.000	2.231	858.6	1002	NA	11.6	+/- 15.0	Linear	
Benzo(b)fluoranthene	2.000	2.217	350.3	423.9	NA	10.8	+/- 15.0	Linear	
Benzo(k)fluoranthene	2.000	2.210	2263	2501	10.5	NA	+/- 15.0	AverageRF	
Benzo(a)pyrene	2.000	2.246	2339	2717	NA	12.3	+/- 15.0	Linear	
Dibenz(a,h)anthracene	4.000	4.195	1286	1348	4.9	NA	+/- 15.0	AverageRF	
Benzo(g,h,i)perylene	4.000	4.444	835.5	928.4	11.1	NA	+/- 15.0	AverageRF	
Indeno(1,2,3-cd)pyrene	2.000	2.261	1293	1462	13.1	NA	+/- 15.0	AverageRF	
Acenaphthene	20.00	22.52	111.8	125.9	12.6	NA	+/- 15.0	AverageRF	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
Date Analyzed: 11/02/2006

Second Source Calibration Verification
Polynuclear Aromatic Hydrocarbons

ICAL ID: 11/02/2006LCI
Instrument ID: LCI
File ID: I1102011

Column: UV

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%	Criteria	Curve Fit	Q
Naphthalene	20.00	20.87	218.6	228.1	4.3	NA	+/- 15.0	AverageRF	
Fluorene	4.000	4.323	962.4	1040	8.1	NA	+/- 15.0	AverageRF	
Phenanthrene	2.000	2.070	2310	2391	3.5	NA	+/- 15.0	AverageRF	
Anthracene	2.000	2.151	4384	4715	7.6	NA	+/- 15.0	AverageRF	
Fluoranthene	2.000	1.987	628.6	624.5	-0.6	NA	+/- 15.0	AverageRF	
Pyrene	2.000	2.124	546.1	580.1	6.2	NA	+/- 15.0	AverageRF	
Benz(a)anthracene	2.000	2.128	1455	1548	6.4	NA	+/- 15.0	AverageRF	
Chrysene	2.000	2.166	2390	2589	8.3	NA	+/- 15.0	AverageRF	
Benzo(b)fluoranthene	2.000	2.189	1588	1738	9.4	NA	+/- 15.0	AverageRF	
Benzo(k)fluoranthene	2.000	2.104	1037	1091	5.2	NA	+/- 15.0	AverageRF	
Benzo(a)pyrene	2.000	2.231	1373	1531	11.5	NA	+/- 15.0	AverageRF	
Dibenz(a,h)anthracene	4.000	3.597	387.6	348.5	-10.1	NA	+/- 15.0	AverageRF	
Benzo(g,h,i)perylene	4.000	3.935	553.5	544.5	-1.6	NA	+/- 15.0	AverageRF	
Indeno(1,2,3-cd)pyrene	2.000	2.132	1140	1215	6.6	NA	+/- 15.0	AverageRF	
Acenaphthylene	40.00	41.98	145.7	152.9	5.0	NA	+/- 15.0	AverageRF	
Acenaphthene	20.00	21.77	84.81	92.32	8.8	NA	+/- 15.0	AverageRF	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
Date Analyzed: 12/14/2006

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

ICAL ID: 11/02/2006LCI
Instrument ID: LCI
File ID: I1214003

Column: FL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
Naphthalene	30.00	31.24	74.46	77.54	4.1	NA	+/- 15.0	AverageRF	
Fluorene	6.000	6.429	539.9	578.5	7.2	NA	+/- 15.0	AverageRF	
Phenanthrene	3.000	3.099	891.6	921.1	3.3	NA	+/- 15.0	AverageRF	
Anthracene	3.000	2.954	910.9	897.0	-1.5	NA	+/- 15.0	AverageRF	
Fluoranthene	3.000	2.941	258.8	253.7	-2.0	NA	+/- 15.0	AverageRF	
Pyrene	3.000	2.959	705.5	772.1	NA	-1.4	+/- 15.0	Linear	
Benz(a)anthracene	3.000	2.855	321.5	336.7	NA	-4.8	+/- 15.0	Linear	
Chrysene	3.000	2.977	858.6	894.7	NA	-0.8	+/- 15.0	Linear	
Benzo(b)fluoranthene	3.000	2.826	350.3	362.3	NA	-5.8	+/- 15.0	Linear	
Benzo(k)fluoranthene	3.000	2.955	2263	2229	-1.5	NA	+/- 15.0	AverageRF	
Benzo(a)pyrene	3.000	2.909	2339	2350	NA	-3.0	+/- 15.0	Linear	
Dibenz(a,h)anthracene	6.000	6.078	1286	1302	1.3	NA	+/- 15.0	AverageRF	
Benzo(g,h,i)perylene	6.000	5.177	835.5	720.9	-13.7	NA	+/- 15.0	AverageRF	
Indeno(1,2,3-cd)pyrene	3.000	2.784	1293	1200	-7.2	NA	+/- 15.0	AverageRF	
Acenaphthene	30.00	29.07	111.8	108.3	-3.1	NA	+/- 15.0	AverageRF	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
Date Analyzed: 12/14/2006

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

ICAL ID: 11/02/2006LCI
Instrument ID: LCI
File ID: I1214003

Column: UV

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
Naphthalene	30.00	29.69	218.6	216.3	-1.0	NA	+/- 15.0	AverageRF	
Fluorene	6.000	6.378	962.4	1023	6.3	NA	+/- 15.0	AverageRF	
Phenanthrene	3.000	2.917	2310	2246	-2.8	NA	+/- 15.0	AverageRF	
Anthracene	3.000	2.897	4384	4233	-3.4	NA	+/- 15.0	AverageRF	
Fluoranthene	3.000	2.918	628.6	611.4	-2.7	NA	+/- 15.0	AverageRF	
Pyrene	3.000	2.972	546.1	541.0	-0.9	NA	+/- 15.0	AverageRF	
Benz(a)anthracene	3.000	2.764	1455	1340	-7.9	NA	+/- 15.0	AverageRF	
Chrysene	3.000	2.918	2390	2325	-2.7	NA	+/- 15.0	AverageRF	
Benzo(b)fluoranthene	3.000	2.959	1588	1567	-1.4	NA	+/- 15.0	AverageRF	
Benzo(k)fluoranthene	3.000	3.009	1037	1040	0.3	NA	+/- 15.0	AverageRF	
Benzo(a)pyrene	3.000	3.003	1373	1374	0.1	NA	+/- 15.0	AverageRF	
Dibenz(a,h)anthracene	6.000	5.857	387.6	378.3	-2.4	NA	+/- 15.0	AverageRF	
Benzo(g,h,i)perylene	6.000	5.868	553.5	541.3	-2.2	NA	+/- 15.0	AverageRF	
Indeno(1,2,3-cd)pyrene	3.000	3.204	1140	1217	6.8	NA	+/- 15.0	AverageRF	
Acenaphthylene	60.00	58.92	145.7	143.1	-1.8	NA	+/- 15.0	AverageRF	
Acenaphthene	30.00	28.02	84.81	79.22	-6.6	NA	+/- 15.0	AverageRF	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
Date Analyzed: 12/14/2006

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

ICAL ID: 11/02/2006LCI
Instrument ID: LCI
File ID: I1214010

Column: FL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
Naphthalene	20.00	21.31	74.46	79.35	6.6	NA	+/- 15.0	AverageRF	
Fluorene	4.000	4.302	539.9	580.7	7.6	NA	+/- 15.0	AverageRF	
Phenanthrene	2.000	2.131	891.6	950.0	6.5	NA	+/- 15.0	AverageRF	
Anthracene	2.000	1.991	910.9	907.0	-0.4	NA	+/- 15.0	AverageRF	
Fluoranthene	2.000	1.999	258.8	258.7	-0.0	NA	+/- 15.0	AverageRF	
Pyrene	2.000	2.187	705.5	845.3	NA	9.4	+/- 15.0	Linear	
Benz(a)anthracene	2.000	1.931	321.5	337.6	NA	-3.4	+/- 15.0	Linear	
Chrysene	2.000	2.014	858.6	903.7	NA	0.7	+/- 15.0	Linear	
Benzo(b)fluoranthene	2.000	1.874	350.3	356.6	NA	-6.3	+/- 15.0	Linear	
Benzo(k)fluoranthene	2.000	1.970	2263	2230	-1.5	NA	+/- 15.0	AverageRF	
Benzo(a)pyrene	2.000	1.939	2339	2343	NA	-3.0	+/- 15.0	Linear	
Dibenz(a,h)anthracene	4.000	3.942	1286	1267	-1.4	NA	+/- 15.0	AverageRF	
Benzo(g,h,i)perylene	4.000	4.209	835.5	879.2	5.2	NA	+/- 15.0	AverageRF	
Indeno(1,2,3-cd)pyrene	2.000	2.157	1293	1395	7.8	NA	+/- 15.0	AverageRF	
Acenaphthene	20.00	19.80	111.8	110.7	-1.0	NA	+/- 15.0	AverageRF	

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio

Service Request: D0601981
Date Analyzed: 12/14/2006

Continuing Calibration Verification Summary
Polynuclear Aromatic Hydrocarbons

ICAL ID: 11/02/2006LCI
Instrument ID: LCI
File ID: I1214010

Column: UV

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%	Criteria	Curve Fit	Q
Naphthalene	20.00	20.05	218.6	219.1	0.3	NA	+/- 15.0	AverageRF	
Fluorene	4.000	4.259	962.4	1025	6.5	NA	+/- 15.0	AverageRF	
Phenanthrene	2.000	1.979	2310	2286	-1.0	NA	+/- 15.0	AverageRF	
Anthracene	2.000	1.979	4384	4338	-1.0	NA	+/- 15.0	AverageRF	
Fluoranthene	2.000	2.002	628.6	629.3	0.1	NA	+/- 15.0	AverageRF	
Pyrene	2.000	2.028	546.1	553.7	1.4	NA	+/- 15.0	AverageRF	
Benz(a)anthracene	2.000	1.855	1455	1350	-7.2	NA	+/- 15.0	AverageRF	
Chrysene	2.000	1.946	2390	2325	-2.7	NA	+/- 15.0	AverageRF	
Benzo(b)fluoranthene	2.000	1.982	1588	1574	-0.9	NA	+/- 15.0	AverageRF	
Benzo(k)fluoranthene	2.000	2.031	1037	1053	1.6	NA	+/- 15.0	AverageRF	
Benzo(a)pyrene	2.000	2.039	1373	1400	2.0	NA	+/- 15.0	AverageRF	
Dibenz(a,h)anthracene	4.000	3.615	387.6	350.2	-9.6	NA	+/- 15.0	AverageRF	
Benzo(g,h,i)perylene	4.000	3.898	553.5	539.4	-2.6	NA	+/- 15.0	AverageRF	
Indeno(1,2,3-cd)pyrene	2.000	2.082	1140	1186	4.1	NA	+/- 15.0	AverageRF	
Acenaphthylene	40.00	40.00	145.7	145.7	0.0	NA	+/- 15.0	AverageRF	
Acenaphthene	20.00	20.53	84.81	87.08	2.7	NA	+/- 15.0	AverageRF	

QA/QC Results

Service Request: D0601981

Analysis Method: SW8310

Instrument ID: LCI
Column: FL

[illegible]

QA/QC Results

Service Request: D0601981

Analysis Method: SW8310

Instrument ID: LCI
Column: UV

Form 8 - Organic

COLUMBIA ANALYTICAL SERVICES/REDDING

QA/QC Results

Client: Treadwell and Rollo, Inc.
Project: Presidio
Sample Matrix: Water

Service Request: D0601981
Date Extracted: 12/11/2006

Extraction Prep Log
Polynuclear Aromatic Hydrocarbons

Extraction Method: SW3520
Analysis Method: SW8310

Extraction Lot: NWB11211

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
Method Blank	NWB11211	NA	NA	1.000 L	1	NA	
Laboratory Control Sample	NWB11211LCS	NA	NA	1.000 L	1	NA	
LF6GW103CL	D0601981-001	12/05/2006	12/06/2006	1.050 L	1	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

QA/QC Report

Service Request: D0601981

Analysis Method: SW8310

[illegible]

Comments: _____

APPENDIX

December 18, 2006

Service Request No: D0601981

Karen Sellers
Columbia Analytical Services
5090 Caterpillar Rd.
Redding, CA 96003

RE: Presidio/2893

Dear Karen:

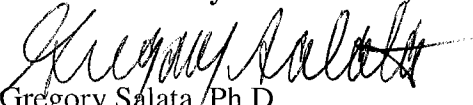
Enclosed are the results of the sample(s) submitted to our laboratory on December 06, 2006. For your reference, these analyses have been assigned our service request number D0601981.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards. Exceptions are noted in the case narrative report where applicable. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3376. You may also contact me via Email at GSalata@kelso.caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.



Gregory Salata, Ph.D.
Project Chemist

GS/lmb

Page 1 of 14

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.

Metals Data Qualifiers

- # The control limit criteria is not applicable. See case narrative.
- B The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL has been elevated due to a matrix interference.
- X See case narrative.
- * The duplicate analysis not within control limits. See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
- U The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
- i The MRL/MDL has been elevated due to a chromatographic interference.
- X See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

- F The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

Columbia Analytical Services, Inc.
Kelso, WA
State Certifications, Accreditations, and Licenses

Program	Number
Alaska DEC UST	UST-040
Arizona DHS	AZ0339
Arkansas - DEQ	88-0637
California DHS	2286
Colorado DPHE	-
Florida DOH	E87412
Hawaii DOH	-
Idaho DHW	-
Indiana DOH	C-WA-01
Louisiana DEQ	3016
Louisiana DHH	LA050010
Maine DHS	WA0035
Michigan DEQ	9949
Minnesota DOH	053-999-368
Montana DPHHS	CERT0047
Nevada DEP	WA35
New Jersey DEP	WA005
New Mexico ED	-
North Carolina DWQ	605
Oklahoma DEQ	9801
Oregon - DHS	WA200001
South Carolina DHEC	61002
Utah DOH	COLU
Washington DOE	C1203
Wisconsin DNR	998386840
Wyoming (EPA Region 8)	-

Clear Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Treadwell and Rollo, Inc.
Project: Presidio/2893
Sample Matrix: Water

Service Request No.: D0601981
Date Received: 12/06/06

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier III validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

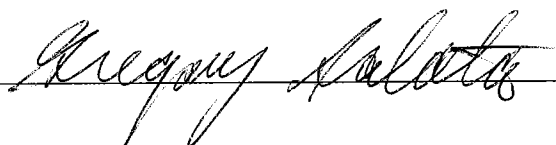
Sample Receipt

Five water samples were received for analysis at Columbia Analytical Services on 12/06/06. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

General Chemistry Parameters

No anomalies associated with the analysis of these samples were observed.

Approved by



Date

12/20/06

00006

Chamber of Commerce
Pittsburgh, Pa.

**Columbia Analytical Services Inc.
Cooler Receipt and Preservation Form**

PC HLG

Project/Client CAS (Redding) Service Request K06 10601981
Cooler received on 12-8-06 and opened on 12-8-06 by BW

1. Were custody seals on outside of coolers? (Y) N
If yes, how many and where? _____
2. Were custody seals intact? (Y) N
3. Were signature and date present on the custody seals? (Y) N
4. Is the shipper's airbill available and filed? If no, record airbill number: UPS 1Z52X 72X 01-4568-4179 (Y) N
5. COC# _____
Temperature of cooler(s) upon receipt: (°C) 4-8 _____
Temperature Blank: (°C) N-P _____
- Were samples hand delivered on the same day as collection? (Y) N
6. Were custody papers properly filled out (ink, signed, etc.)? (Y) N
7. Type of packing material present ice, gel packs, hard ice
8. Did all bottles arrive in good condition (unbroken)? (Y) N
9. Were all bottle labels complete (i.e analysis, preservation, etc.)? (Y) N
10. Did all bottle labels and tags agree with custody papers? (Y) N
11. Were the correct types of bottles used for the tests indicated? (Y) N
12. Were all of the preserved bottles received at the lab with the appropriate pH? (Y) N
13. Were VOA vials checked for absence of air bubbles, and if present, noted below? (Y) N
14. Were the 1631 Mercury bottles checked for absence of air bubbles, and if present, noted below? (Y) N
15. Did the bottles originate from CAS/K or a branch laboratory? (Y) N
16. Are CWA Microbiology samples received with >1/2 the 24hr. hold time remaining from collection? (Y) N
17. Was C12/Res negative? (Y) N

Explain any discrepancies: _____

RESOLUTION: _____

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials

General Technology Principles

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : NA
Sample Matrix : WATER

Service Request : D0601981
Date Collected : 12/05/06
Date Received : 12/06/06

Sulfide, Total

Analysis Method : 376.2

Test Notes :

Units : mg/L (ppm)

Basis : NA

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
231GW09CL	D0601981-002	0.05	1	12/12/06	ND	
1065MW9ACL	D0601981-003	0.05	1	12/12/06	ND	
1065PZ1BCL	D0601981-004	0.05	1	12/12/06	ND	
Method Blank	D0601981-MB	0.05	1	12/12/06	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : NA
Sample Matrix : WATER

Service Request : D0601981
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 12/12/06

**Duplicate Summary
Inorganic Parameters**

Sample Name : Batch QC
Lab Code : K0610563-001DUP
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Sulfide, Total	376.2	0.05	ND	ND	ND	-	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : NA
Sample Matrix : WATER

Service Request : D0601981
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 12/12/06

Matrix Spike Summary Inorganic Parameters

Sample Name : Batch QC
Lab Code : K0610563-001MS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS	Result Notes
							Percent Recovery Acceptance Limits	
Sulfide, Total	376.2	0.05	2.04	ND	2.00	98	75-125	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project Name : Presidio
Project Number : NA
Sample Matrix : WATER

Service Request : D0601981
Date Collected : NA
Date Received : NA
Date Prepared : NA
Date Analyzed : 12/12/06

Laboratory Control Sample Summary Inorganic Parameters

Sample Name : Laboratory Control Sample
Lab Code : D0601981-LCS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS	Result Notes
						Percent Acceptance Limits	
Sulfide, Total	None	376.2	2.04	1.98	97	85-115	

00013

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Treadwell and Rollo, Inc.
Project : Presidio

Service Request : D0601981
Date Collected : NA
Date Received : NA

Sulfide, Total
EPA Method 376.2
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	Date Analyzed	True Value	Measured Value	Percent Recovery
CCV1 Result	12/12/06	2.04	2.06	101
CCV4 Result	12/12/06	2.04	2.06	101
CCV5 Result	12/12/06	2.04	2.06	101
CCV6 Result	12/12/06	2.04	2.05	100

CONTINUING CALIBRATION BLANK (CCB)

	Date Analyzed	MRL	Blank Value
CCB1 Result	12/12/06	0.05	ND
CCB4 Result	12/12/06	0.05	ND
CCB5 Result	12/12/06	0.05	ND
CCB6 Result	12/12/06	0.05	ND

00014

31 January 2007

Josh Graber
Treadwell and Rollo
555 Montgomery St.
San Francisco, CA 94111

RE: CAS Service Request - D0601981
Amended Data for Treadwell and Rollo
Presidio

Dear Josh Graber:

Enclosed is the amended data for the Wet Chemistry, Metals, and Pesticides portions of the above-mentioned service request. The amendment was created to add the missing calibration data. Please place the attached forms to the end of the original report.

Columbia Analytical Services appreciates your business and looks forward to serving your future analytical needs. If you have any questions concerning the data or if you need additional information, please call me at (530) 244-5227.

Sincerely,
Columbia Analytical Services



Douglas Burnett
Project Manager

RECEIVED

FEB - 1 2007

TREADWELL & ROLLO

INITIAL CALIBRATION DATA FOR WET CHEMISTRY

COLUMBIA ANALYTICAL SERVICES, INC.

73426

Work Order #: K10563, K10640, D1981

Method: 376.2

Analysis: Analysis for Total Sulfide

	STD1	STD 2	STD 3	STD 4	STD 5	STD 6	STD 7			(R) = 0.9990
Conc. (mg/L)	0.000	0.051	0.509	1.018	1.526	2.035	2.544			Slope = 0.6682
Absorbance	0.000	0.035	0.379	0.732	1.083	1.385	1.684			Y Int. = 0.0235

Date Prep'd	Sample #	Dil. Factor	Absorb. @ 670 nm	Conc. from Curve (mg/L)	Actual Conc. (mg/L)	Initial Wt./Vol. (g) / (ml)	Final Vol. (ml)	A Tower mg/L (solution)	B Tower mg/L (solution)	A & B mg/L - mg/kg as rec'd	% Solid	mg/kg Dry Wt.
12/12/2006	ICV	1	1.542	2.2726	2.2726	40	40	2.27		2.27		
12/12/2006	ICB	1	0.000	-0.0352	<0.05	40	40	<0.05		<0.05		
12/12/2006	CCV	1	1.397	2.0556	2.0556	40	40	2.06		2.06		
12/12/2006	CCB	1	-0.002	-0.0382	<0.05	40	40	<0.05		<0.05		
12/12/2006	CCV4	1	1.403	2.0646	2.0646	40	40	2.06		2.06		
12/12/2006	CCB4	1	-0.002	-0.0382	<0.05	40	40	<0.05		<0.05		
12/12/2006	MB	1	-0.002	-0.0382	<0.05	20	20	<0.05		<0.05		
12/12/2006	LCS	1	1.349	1.9838	1.9838	20	20	1.98		1.98		
12/12/2006	k10563-1	1	0.002	-0.0322	<0.05	20	20	<0.05		<0.05		
12/12/2006	10563-ID	1	0.001	-0.0337	<0.05	20	20	<0.05		<0.05		
12/12/2006	10563-IMS	1	1.358	1.9973	1.9973	20	20	2.00		2.00		
12/12/2006	10563-IMSD	1	1.364	2.0062	2.0062	20	20	2.01		2.01		
12/12/2006	10563-3	1	0.000	-0.0352	<0.05	20	20	<0.05		<0.05		
12/12/2006	10640-1	1	-0.003	-0.0397	<0.05	20	20	<0.05		<0.05		
12/12/2006	10640-2	1	-0.001	-0.0367	<0.05	20	20	<0.05		<0.05		
12/12/2006	10640-7	1	0.000	-0.0352	<0.05	20	20	<0.05		<0.05		
12/12/2006	CCV5	1	1.402	2.0631	2.0631	40	40	2.06		2.06		
12/12/2006	CCB5	1	-0.003	-0.0397	<0.05	40	40	<0.05		<0.05		
12/12/2006	10640-8	1	0.000	-0.0352	<0.05	20	20	<0.05		<0.05		
12/12/2006	10640-10	1	0.000	-0.0352	<0.05	20	20	<0.05		<0.05		
12/12/2006	10640-12	1	-0.001	-0.0367	<0.05	20	20	<0.05		<0.05		
12/12/2006	10640-13	1	-0.001	-0.0367	<0.05	20	20	<0.05		<0.05		
12/12/2006	D1981-2	1	0.038	0.0217	<0.05	20	20	<0.05		<0.05		
12/12/2006	D1981-3	1	-0.001	-0.0367	<0.05	20	20	<0.05		<0.05		
12/12/2006	D1981-4	1	0.012	-0.0172	<0.05	20	20	<0.05		<0.05		

CCV = 2ml*40.7mg/l/40ml = 2.04mg/l %REC = 101, 101, 101, 100

LCS = 1ml*40.7mg/l/20ml = 2.04mg/l %REC = 97

ICV = 2.25ml*40.7mg/L/40ml = 2.29mg/L %REC = 99

MS/MSD = 1ml*40.7mg/L/20ml = 2.04mg/L %REC = 98, 99

K10563-1/1d x = ND RPD = --

STD ID# s2/2-1-F CONC. = 4070

Distilled by: <i>MA</i>	Date Distilled: <i>N/A</i>
Analyzed By: <i>SA</i>	Date Analyzed: <i>12/12/06 1330</i>
Reviewed By: <i>M</i>	Date Reviewed: <i>12/13/06</i>

Work Order #.:

Method: 376.2

Analysis:

Analysis for Total Sulfide

[illegible]

Distilled by:

Analyzed By:

Reviewed By:

Date Distilled:

Date Analyzed:

Date Reviewed:

Method: 376.2

Prep Date : 12/12/2006

	STD1	STD 2	STD 3	STD 4	STD 5	STD 6	STD 7					
Conc. (mg/L)	0.000	0.051	0.509	1.018	1.526	2.035	2.544					
Absorbance	0.000	0.035	0.379	0.732	1.083	1.385	1.684					

[illegible][illegible]

SAH
12/12/06

DU520 S/N: 0112U2001732 1.03
12-DEC-06 15:09:04 SCA
Wavelength: 670.0 nm
Formula: $A=a+bC$ a: 0.0232 b: 0.6683

9020M K10498, MBL Study
376.2 K10563, 10640, D1981

12/12/04

mg/L Net A $r^2=0.998$ Var=0.0011

0.0000	-0.000
0.0510	0.035
0.5090	0.379
1.0180	0.732
1.5260	1.083
2.0350	1.385
2.5440	1.684

SM
12/12/06

#73486

OK
12/13/0

DU520 S/N: 0112U2001732 1.03
 12-DEC-06 15:09:42 SCA Group 2282
 Wavelength: 670.0 nm
 Formula: A=a+bC a: 0.0232 b: 0.6683

Sample	Net A	Dil X	mg/L
0001	ICB-0.000	1.0000	-0.03
0002	ICV 1.542	1.0000	2.27
0003	CCV 1.397	1.0000	2.06
0004	CCB-0.002	1.0000	-0.04
0005	MB 0.002	1.0000	-0.03
0006	LCS 0.973	1.0000	1.42
0007	K10498-230.645	1.0000	0.93
0008	-23d 0.616	1.0000	0.89
0009	-23ms 0.6300.2/20	1.0000	0.91
0010	-23msd 0.6490.2/20	1.0000	0.94
0011	-24 0.176	1.0000	0.23
0012	MDL-1 0.020	1.0000	-0.00
0013	-2 0.024	1.0000	0.00
0014	-3 0.024	1.0000	0.00
0015	CCV2 1.399	1.0000	2.06
0016	CCB2-0.004	1.0000	-0.04
0017	MDL-4 0.024	1.0000	0.00
0018	-5 0.017	1.0000	-0.01
0019	-6 0.017	1.0000	-0.01
0020	-7 0.026	1.0000	0.00
0021	-8 0.016	1.0000	-0.01
0022	MB -0.002	1.0000	-0.04
0023	LCS 0.001	1.0000	-0.03
0024	K10498-23 0.003	1.0000	-0.03
0025	-23d -0.000	1.0000	-0.03
0026	-23ms -0.001	1.0000	-0.04
0027	CCV3 1.407	1.0000	2.07
0028	CCB3-0.002	1.0000	-0.04
0029	K10498-23msd 0.004	1.0000	-0.03
0030	-24 -0.003	1.0000	-0.04
0031	MDL-1 -0.000	1.0000	-0.04
0032	-2 -0.001	1.0000	-0.04
0033	-3 -0.001	1.0000	-0.04
0034	-4 0.002	1.0000	-0.03
0035	-5 -0.000	1.0000	-0.03
0036	-6 -0.000	1.0000	-0.04
0037	-7 0.004	1.0000	-0.03
0038	-8 0.004	1.0000	-0.03
0039	CCV4 1.403	1.0000	2.06
0040	CCB4-0.002	1.0000	-0.04
0041	MB -0.002	1.0000	-0.04
0042	LCS 1.349	1.0000	1.98
0043	K10563-1 0.002	1.0000	-0.03
0044	-1d 0.001	1.0000	-0.03
0045	-1ms 1.358	1.0000	2.00
0046	-1msd 1.364	1.0000	2.01
0047	-3 0.000	1.0000	-0.03
0048	K10640-1 -0.003	1.0000	-0.04
0049	-2 -0.001	1.0000	-0.04
0050	-7 0.000	1.0000	-0.03
0051	CCV5 1.402	1.0000	2.06

9030 AToms

903088

376.2

R

12/13/06

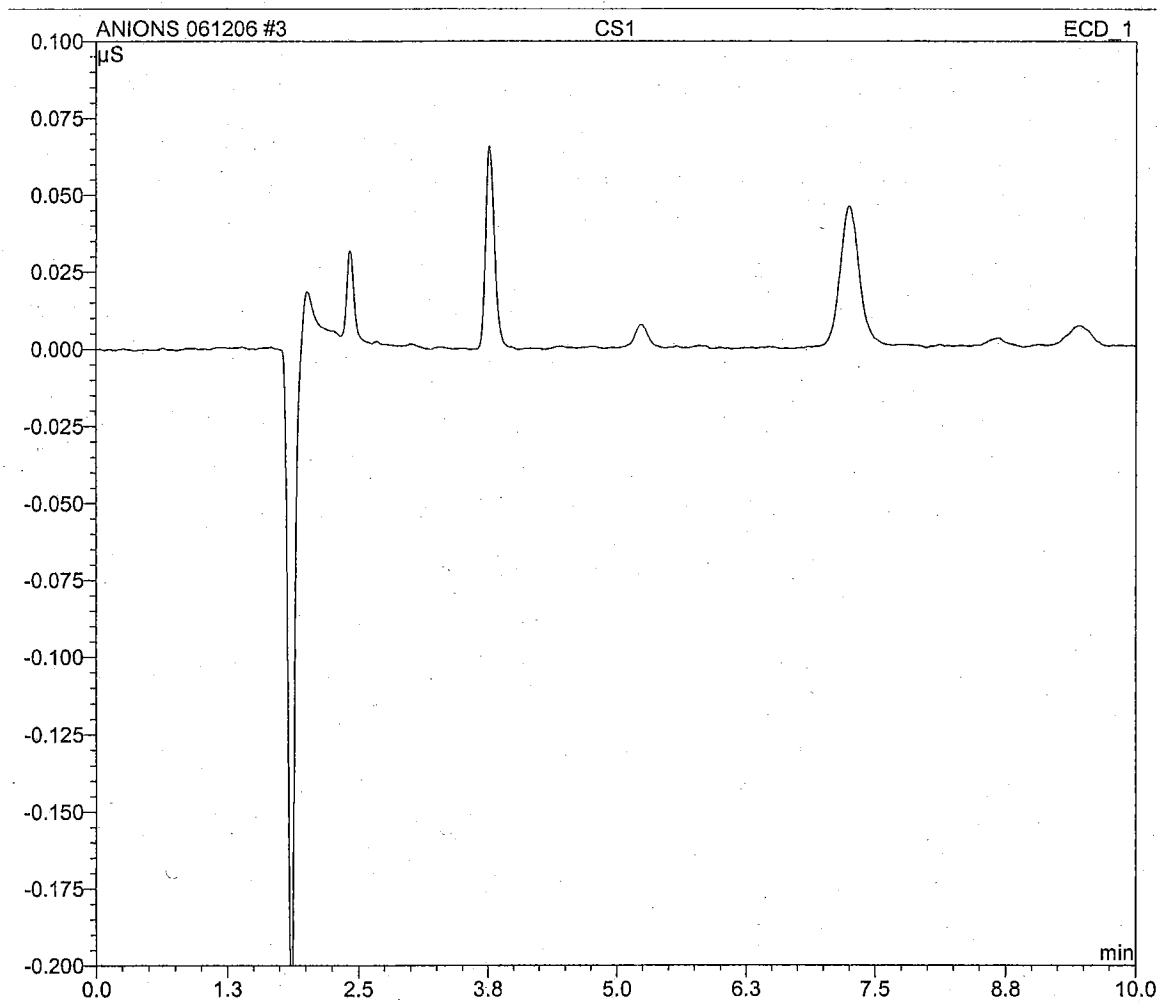
SMN
12/12/06

0052	COB5	-0.003	1.0000	-0.04
0053	K10640-8	-0.000	1.0000	-0.03
0054	↓ -10	-0.000	1.0000	-0.03
0055	↓ -12	-0.001	1.0000	-0.04
0056	↓ -13	-0.001	1.0000	-0.04
0057	D1981-2	0.038	1.0000	0.02
0058	↓ -3	-0.001	1.0000	-0.04
0059	↓ -4	0.012	1.0000	-0.02
0060	CCV 6	1.403	1.0000	2.07
0061	CCBL	-0.000	1.0000	-0.03


 12/12/06

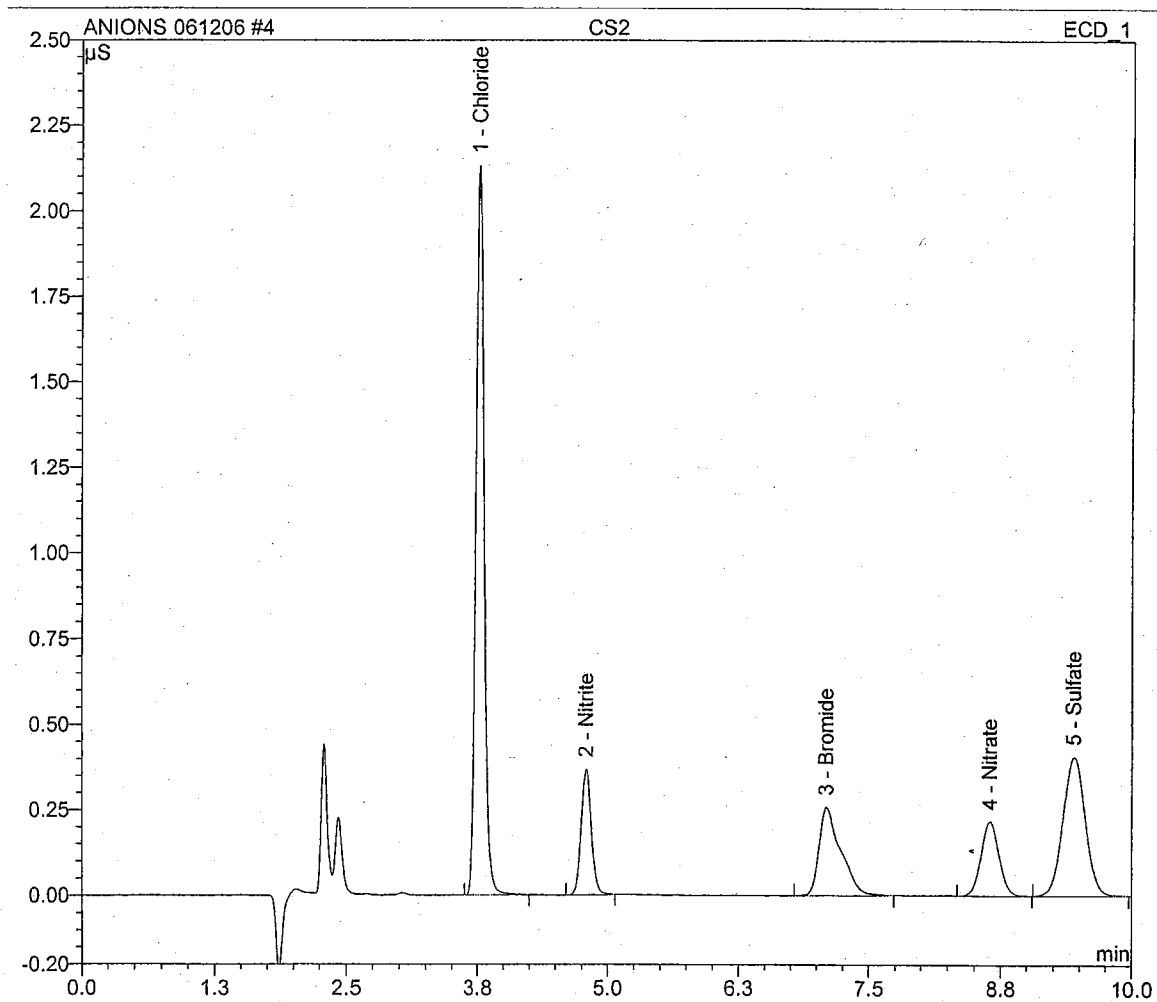
Sample Name:	CS1	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	29.11.06 17:11	Run Time:	13.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
TOTAL:				0.00	0.00	0.00



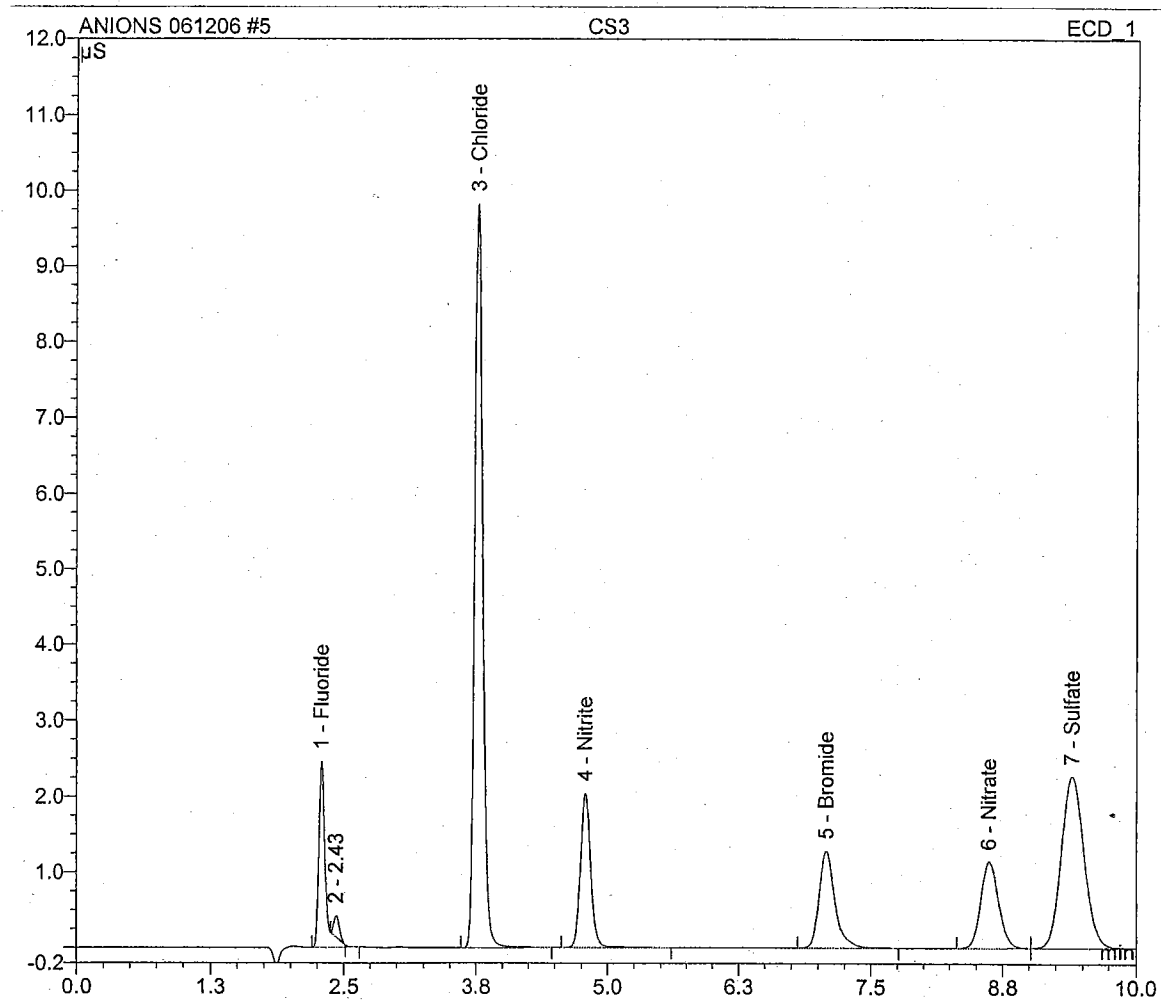
Sample Name:	CS2	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	29.11.06 17:27	Run Time:	13.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	3.77	Chloride	BMB	0.192	2.131	0.8066
2	4.79	Nitrite	BMB	0.041	0.366	0.0789
3	7.10	Bromide	BMB	0.062	0.257	0.6785
4	8.65	Nitrate	BMB	0.043	0.216	0.0520
5	9.45	Sulfate	BMB	0.101	0.405	0.4835
TOTAL:				0.44	3.38	2.10



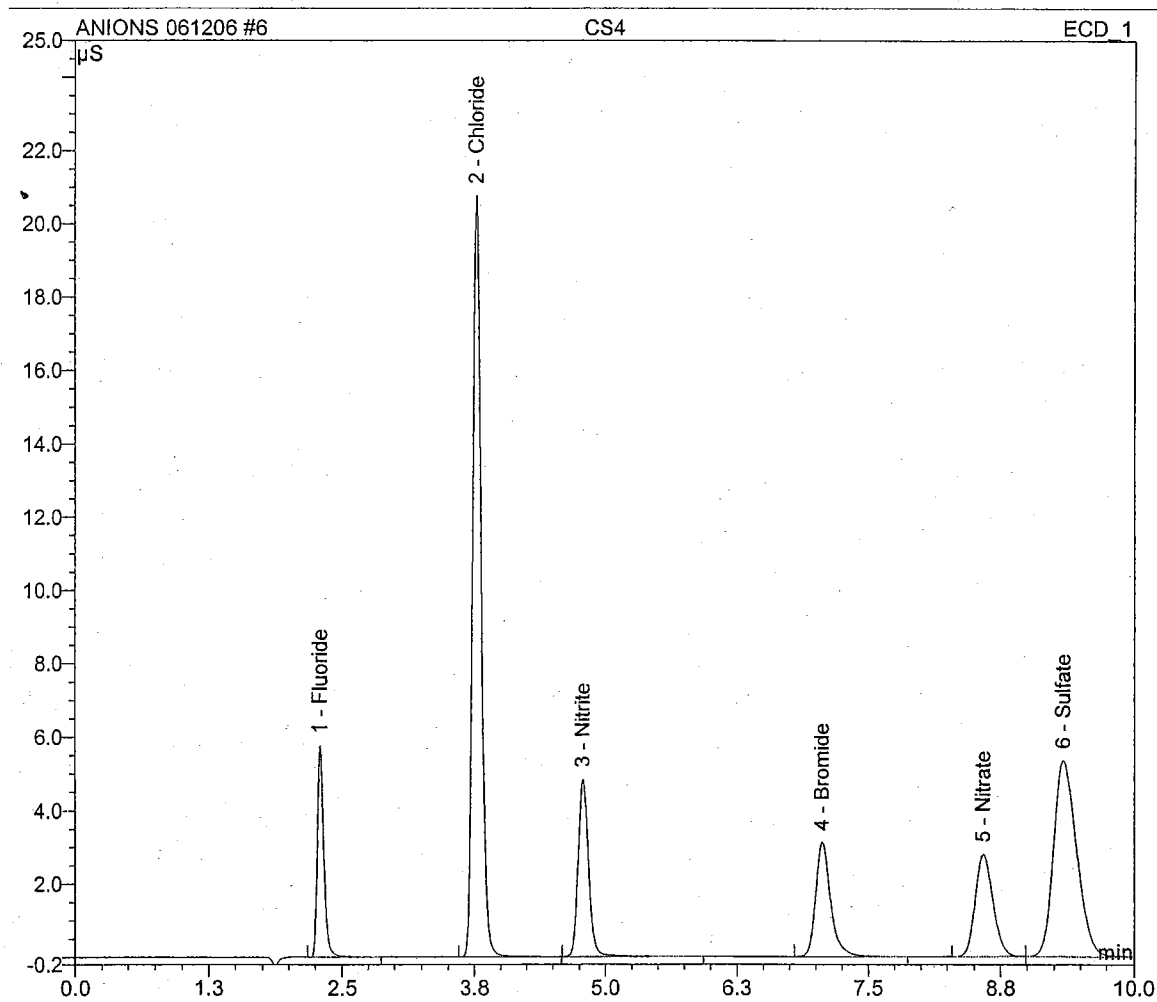
Sample Name:	CS3	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	29.11.06 17:43	Run Time:	13.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	2.29	Fluoride	BMB	0.178	2.451	0.4027
3	3.77	Chloride	BMB	0.891	9.823	3.6945
4	4.79	Nitrite	BMB	0.231	2.038	0.4097
5	7.08	Bromide	BMB	0.222	1.285	2.1789
6	8.62	Nitrate	BMB	0.226	1.149	0.3806
7	9.40	Sulfate	bMB	0.563	2.269	3.2094
TOTAL:				2.31	19.01	10.28



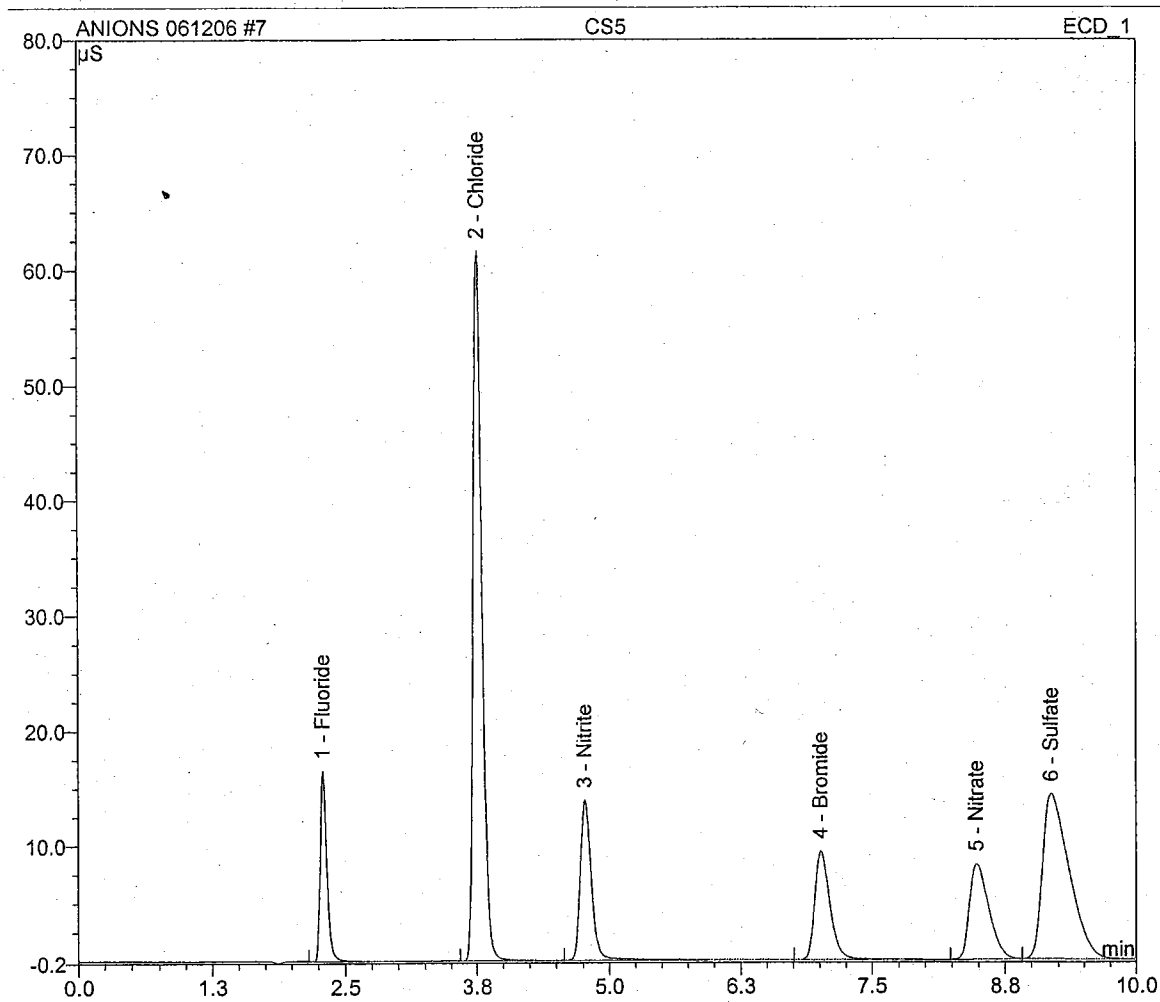
Sample Name:	CS4	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	30.11.06 07:30	Run Time:	13.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	2.30	Fluoride	BMB	0.402	5.750	0.9998
2	3.77	Chloride	BMB	1.930	20.764	7.9932
3	4.79	Nitrite	BMB	0.565	4.830	0.9939
4	7.06	Bromide	BMB	0.527	3.118	5.0381
5	8.58	Nitrate	BMB	0.552	2.800	0.9680
6	9.34	Sulfate	bMB	1.363	5.354	7.9341
TOTAL:				5.34	42.62	23.93



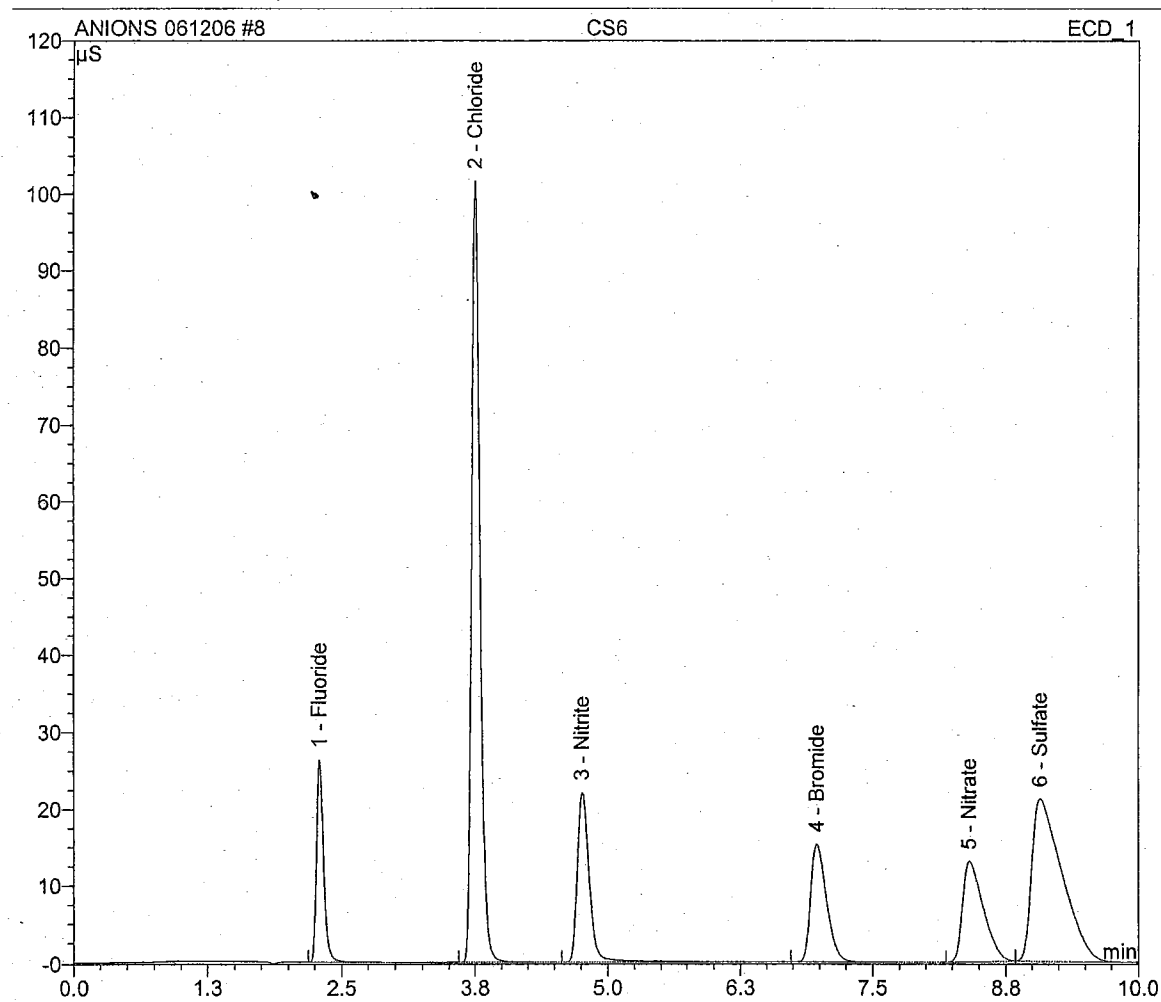
Sample Name:	CS5	Inj. Vol:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	30.11.06 07:46	Run Time:	13.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	2.30	Fluoride	BMB	1.199	16.533	3.1209
2	3.76	Chloride	BMB	5.828	61.602	24.1107
3	4.77	Nitrite	BMB	1.750	13.907	3.0639
4	7.02	Bromide	bMB	1.582	9.441	14.9246
5	8.49	Nitrate	BMB	1.738	8.287	3.1035
6	9.19	Sulfate	BMB	4.197	14.355	24.6599
TOTAL:				16.29	124.13	72.98



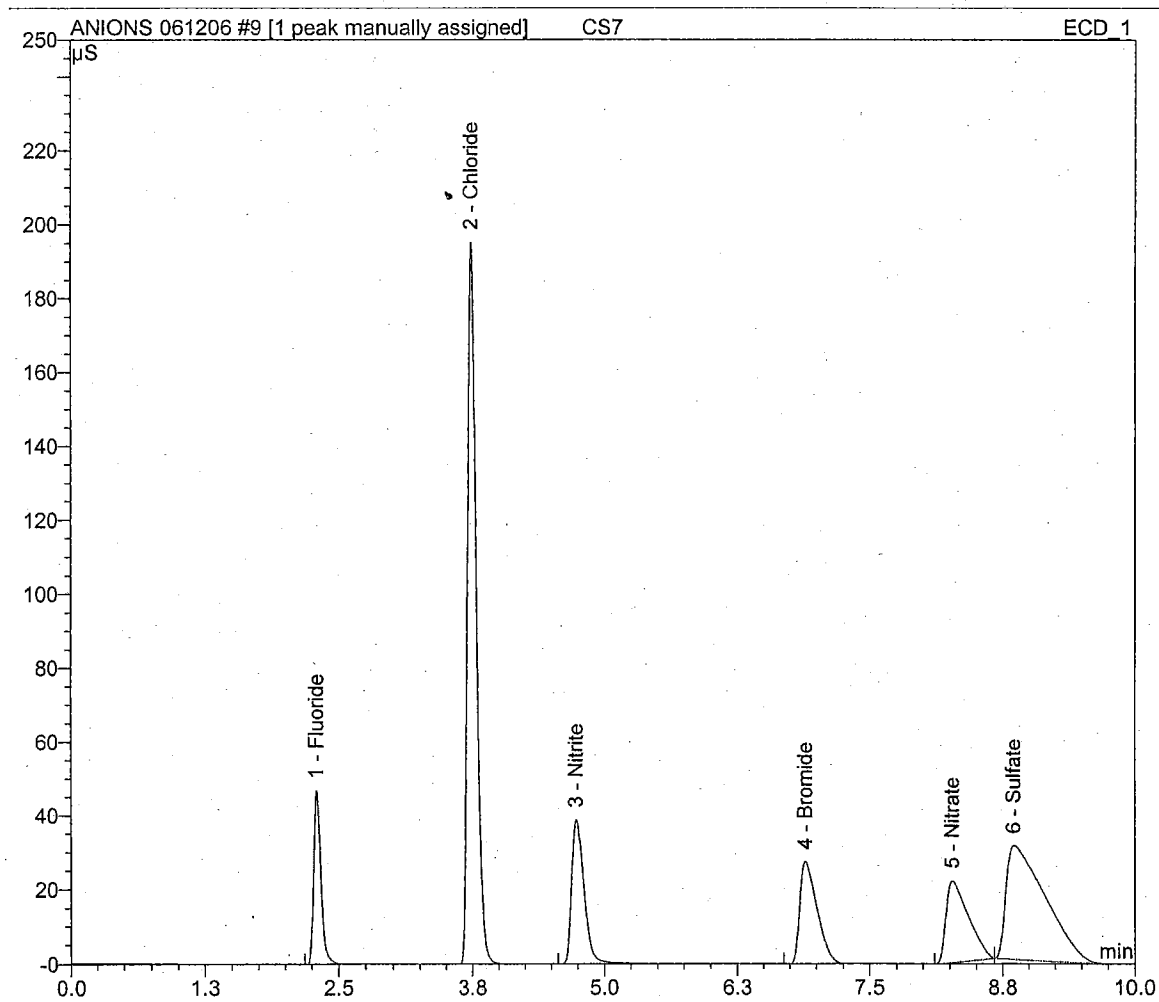
Sample Name:	CS6	Inj. Vol:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	30.11.06 08:01	Run Time:	13:00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	2.30	Fluoride	BMB	1.965	26.372	5.1568
2	3.76	Chloride	BMB	9.767	101.700	40.4013
3	4.76	Nitrite	BMB	2.927	22.134	5.1218
4	6.98	Bromide	bMB	2.668	15.400	25.1020
5	8.41	Nitrate	BMB	2.950	13.123	5.2866
6	9.07	Sulfate	bMB	7.058	21.218	41.5474
TOTAL:				27.33	199.95	122.62



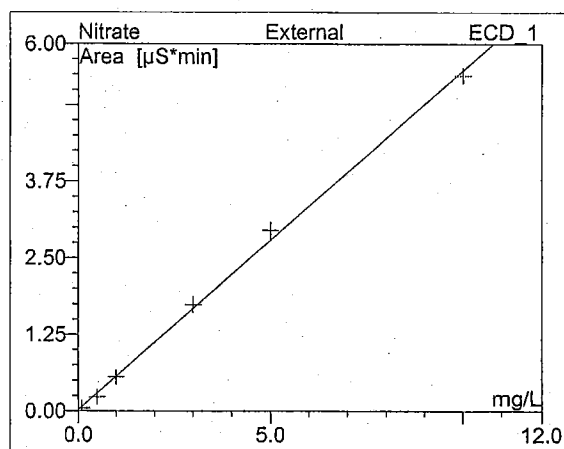
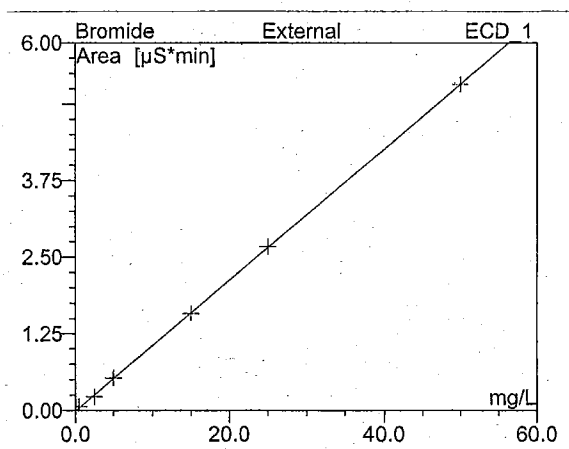
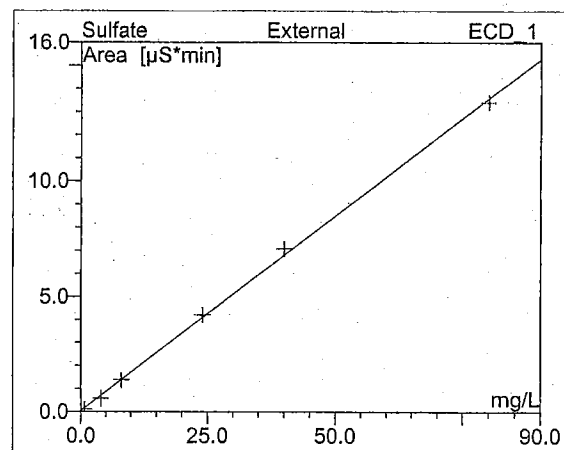
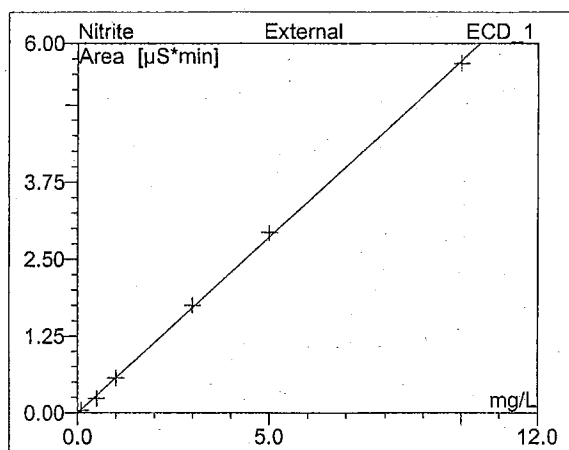
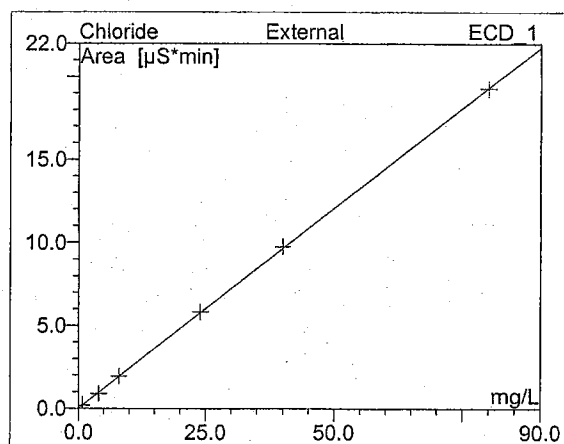
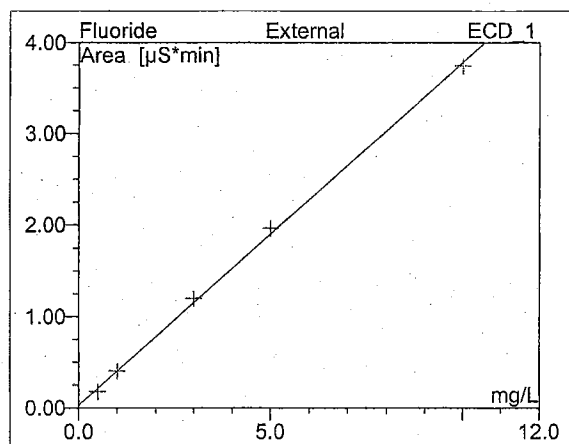
Sample Name:	CS7	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	30.11.06 08:17	Run Time:	13.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	2.30	Fluoride	BMB	3.744	47.150	9.8902
2	3.74	Chloride	BMB	19.290	195.762	79.7820
3	4.74	Nitrite	BMB	5.676	39.261	9.9253
4	6.90	Bromide	bMB	5.322	27.929	49.9821
5	8.28	Nitrate	BMB	5.477	22.216	9.8353
6	8.86	Sulfate	bMB^	13.416	30.932	79.0776
TOTAL:				52.92	363.25	238.49



Calibration Batch Report

Sequence:	ANIONS 061206	Inj. Vol:	25.0
Program:	Anions_Program	Operator:	RDD-ACQU-WC-8
Ini. Date/Time:	11/30/06 08:17	Run Time:	13.00



Sequence:	ANIONS 061206	Inj. Vol.:	25.0
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	11/30/06 08:17	Run Time:	13.00

No.	Ret. Time min	Peak Name	Cal. Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr. Coeff. %
1	2.96	Fluoride	0LOff	5	0.005	0.465	0.000	99.999
2	4.01	Chloride	0LOff	8	-0.061	0.290	0.000	99.991
3	4.72	Nitrite	0LOff	7	0.008	0.665	0.000	99.992
4	5.48	Sulfate	0LOff	8	-0.082	0.218	0.000	99.995
5	6.43	Bromide	0LOff	7	-0.026	0.125	0.000	99.954
6	7.35	Nitrate	0LOff	6	-0.041	0.713	0.000	99.978
AVERAGE:					-0.0329	0.4126	0.0000	99.9846

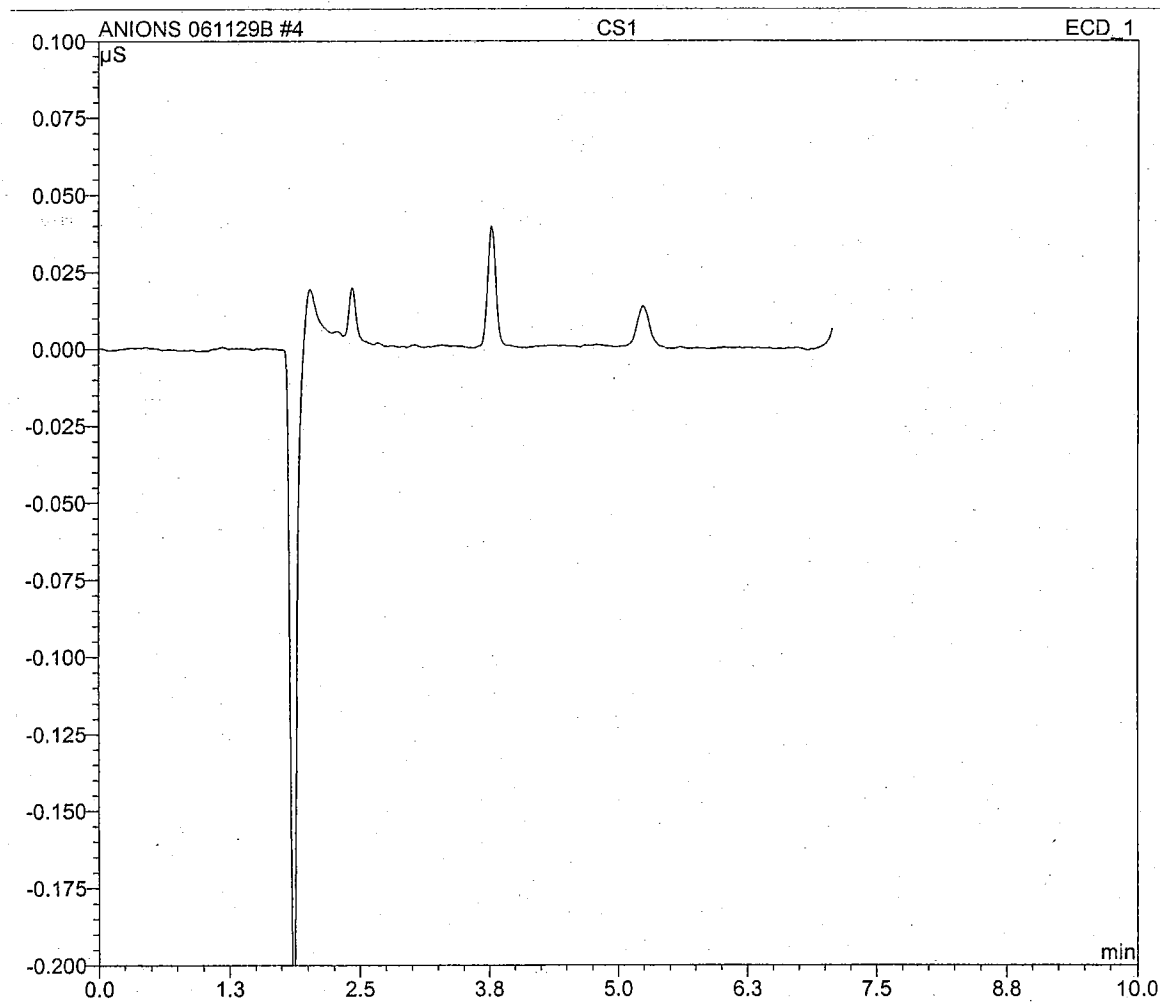
BQS
12/7/06

No.	Ret. Time min	Peak Name	Cal. Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr. Coeff. %
1	2.29666667	Fluoride	0LOff	5	0.026482	0.375835	0	99.9501805
2	3.74333333	Chloride	0LOff	6	-0.00283	0.24182	0	99.9965544
3	4.73666667	Nitrite	0LOff	6	-0.003727	0.572252	0	99.97676978
4	6.9	Bromide	0LOff	6	-0.010219	0.106685	0	99.99579759
5	8.27666667	Nitrate	0LOff	6	0.014442	0.555362	0	99.9035266

0.00 6
-4.00
8.86 Sulfate 0LOff 6 0.018952 0.16941 0 99.95164617

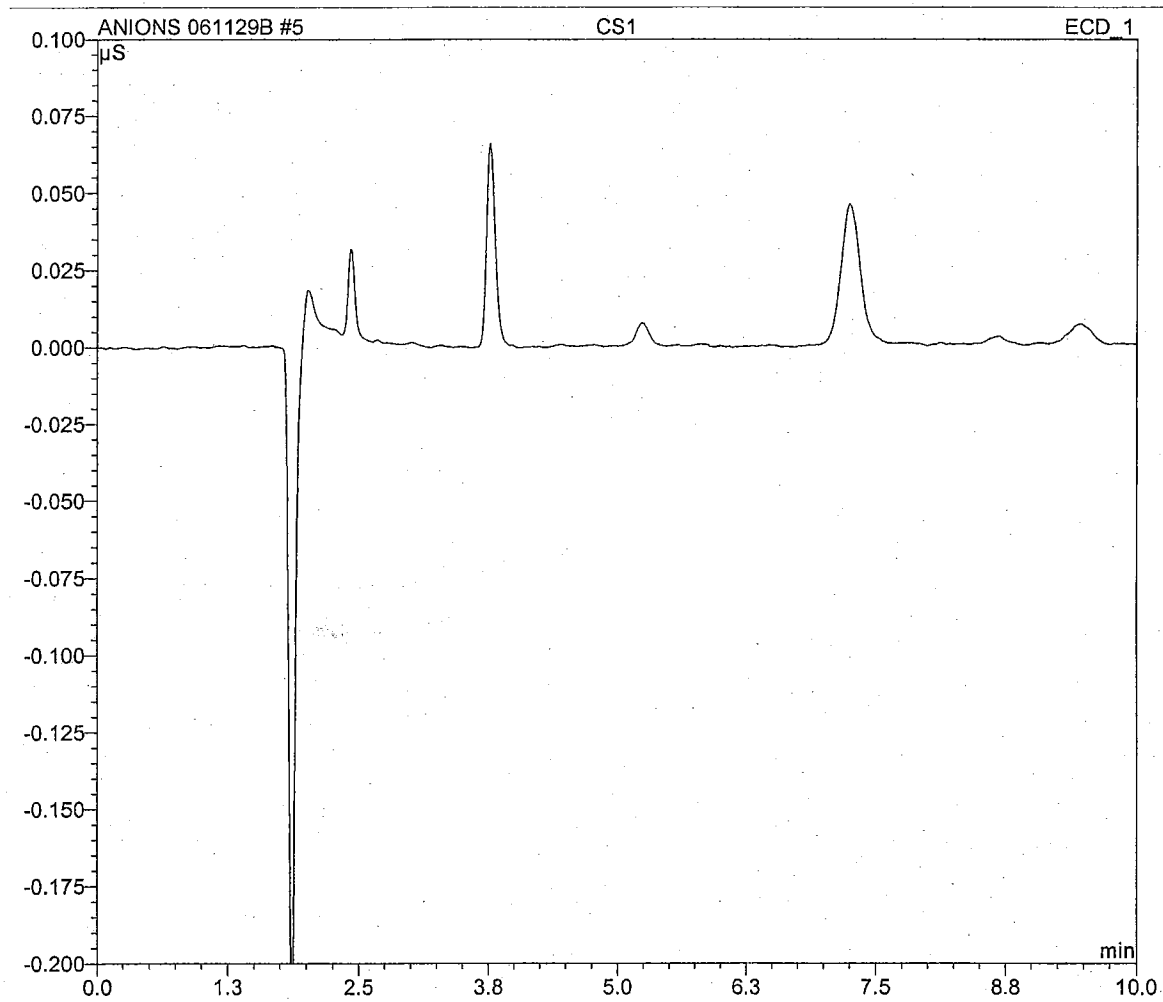
Sample Name:	CS1	Inj. Vol.:	25.0
Sample Type:	unknown	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	29.11.06 16:56	Run Time:	7.07

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
TOTAL:				0.00	0.00	0.00



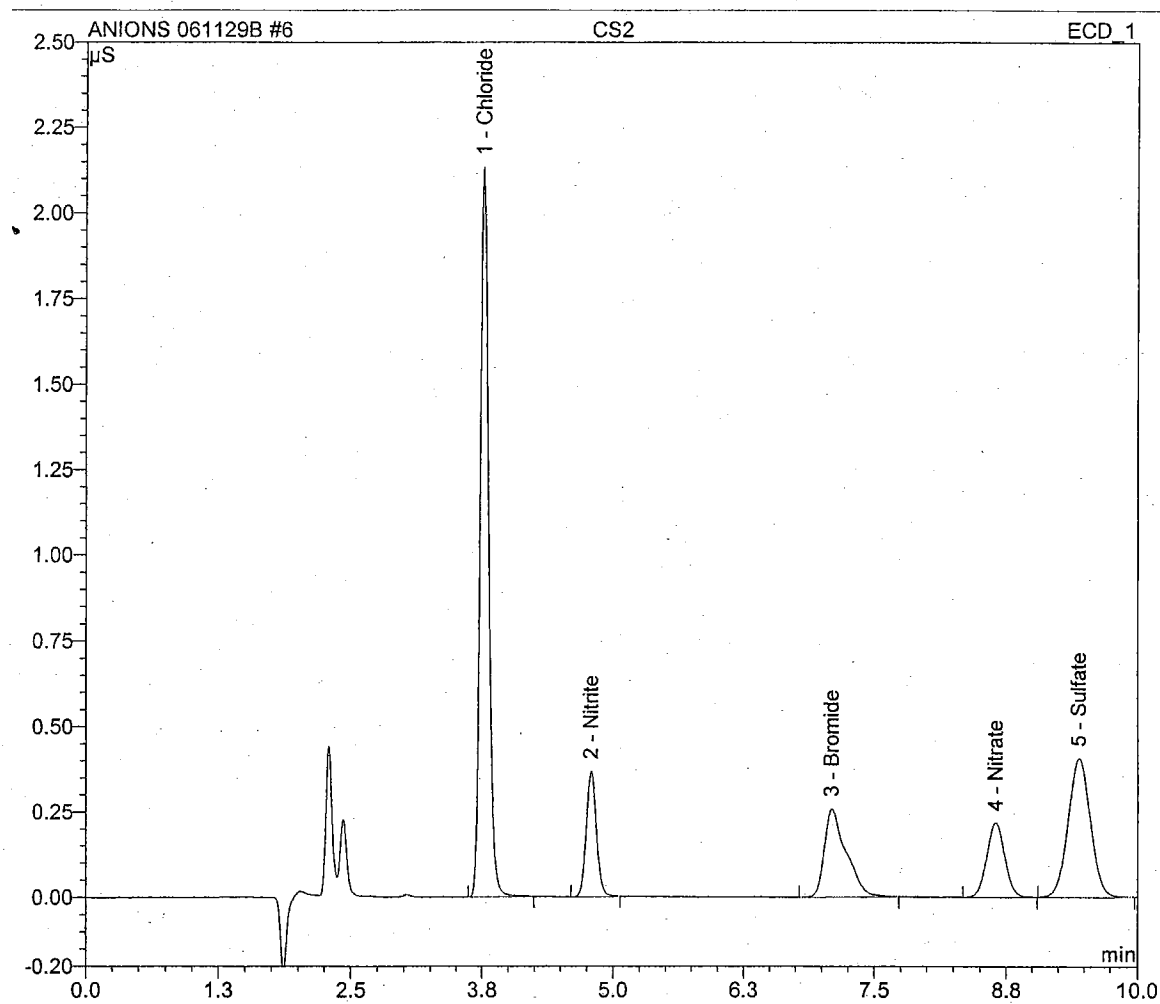
Sample Name:	CS1	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	29.11.06 17:11	Run Time:	13.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
TOTAL:				0.00	0.00	0.00



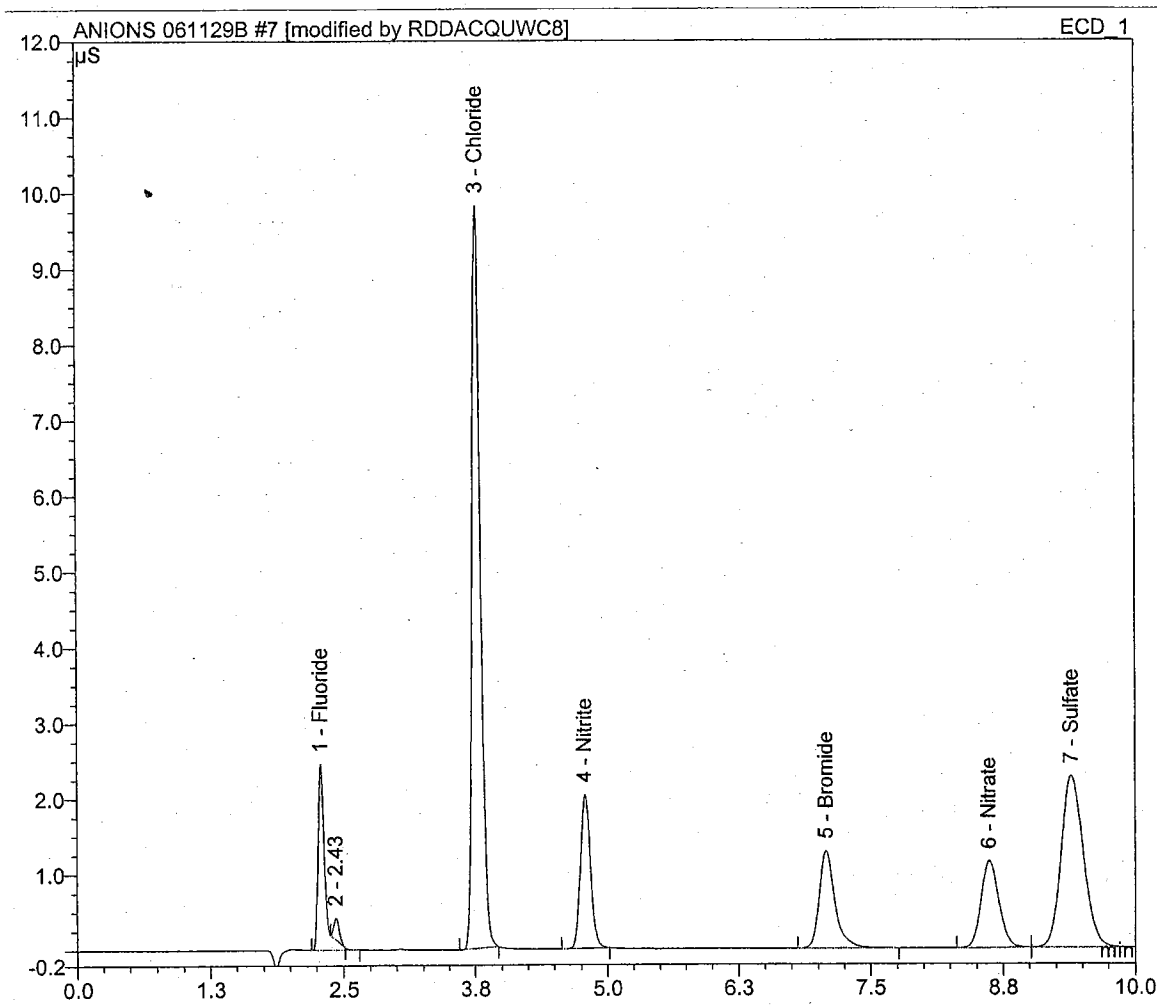
Sample Name:	CS2	Inj. Vol:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions Program	Operator:	n.a.
Inj. Date/Time:	29.11.06 17:27	Run Time:	13.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	3.77	Chloride	BMB	0.192	2.131	0.8167
2	4.79	Nitrite	BMB	0.041	0.366	0.1419
3	7.10	Bromide	BMB	0.062	0.257	1.2282
4	8.65	Nitrate	BMB	0.043	0.216	0.0520
5	9.45	Sulfate	BMB	0.101	0.405	0.4835
TOTAL:				0.44	3.38	2.72



Sample Name:	CS3	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	29.11.06 17:43	Run Time:	13.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	2.29	Fluoride	BMB	0.178	2.451	0.4027
3	3.77	Chloride	BMB*	0.879	9.804	3.6581
4	4.79	Nitrite	BMB*	0.225	2.031	0.4662
5	7.08	Bromide	BMB	0.222	1.285	2.7628
6	8.62	Nitrate	BMB	0.226	1.149	0.3806
7	9.40	Sulfate	bMB	0.563	2.269	3.2094
TOTAL:				2.29	18.99	10.88



Calibration Batch Report

Sequence: ANIONS 061129B

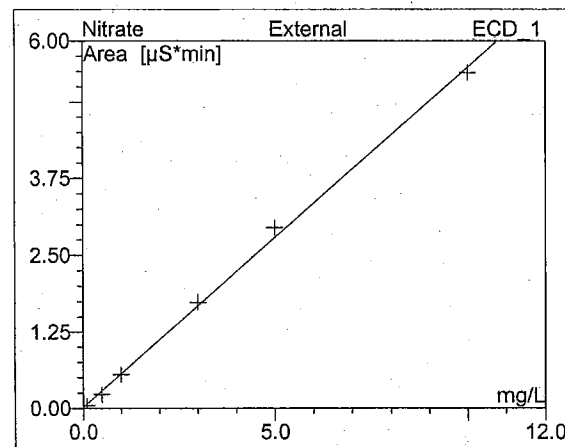
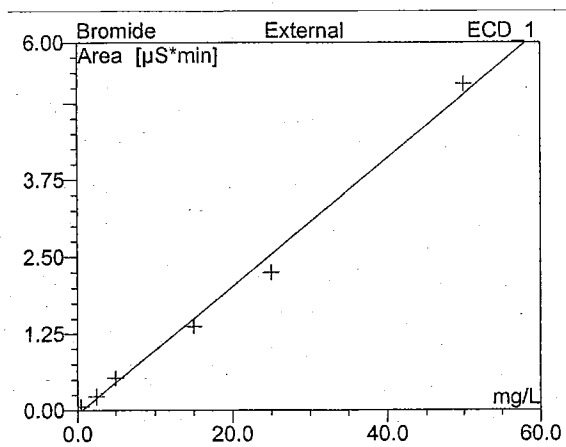
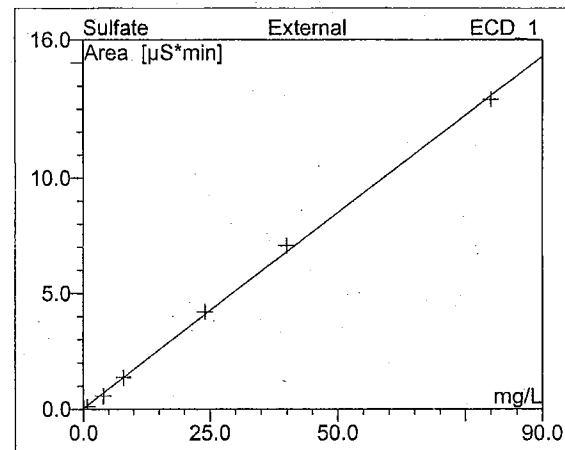
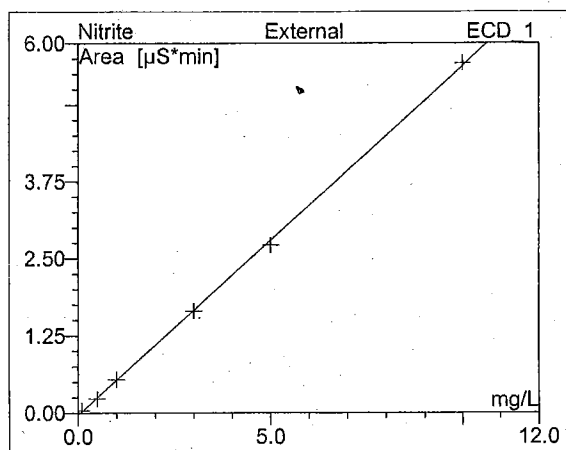
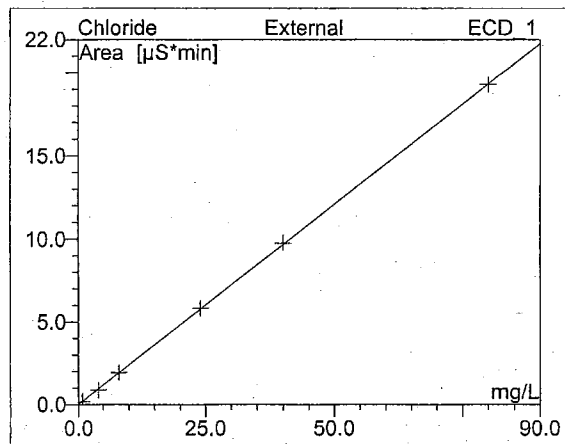
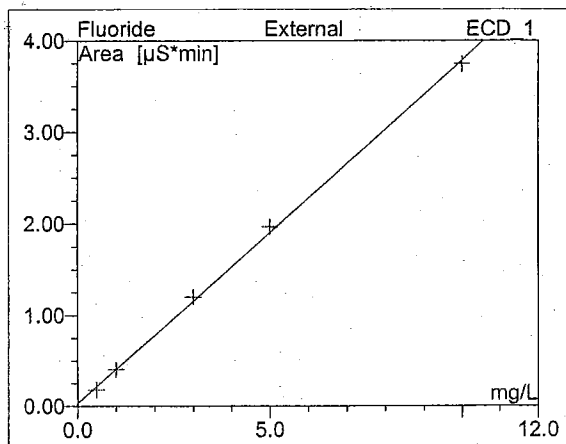
Inj. Vol.: 25.0

Program: Anions_Program

Operator: RDD-ACQU-WC-8

Inj. Date/Time: 11/29/06 17:43

Run Time: 13:00



Sequence:	ANIONS 061129B	Inj. Vol:	25.0
Program:	Anions_Program	Operator:	n.a.
Ini. Date/Time:	11/29/06 17:43	Run Time:	13.00

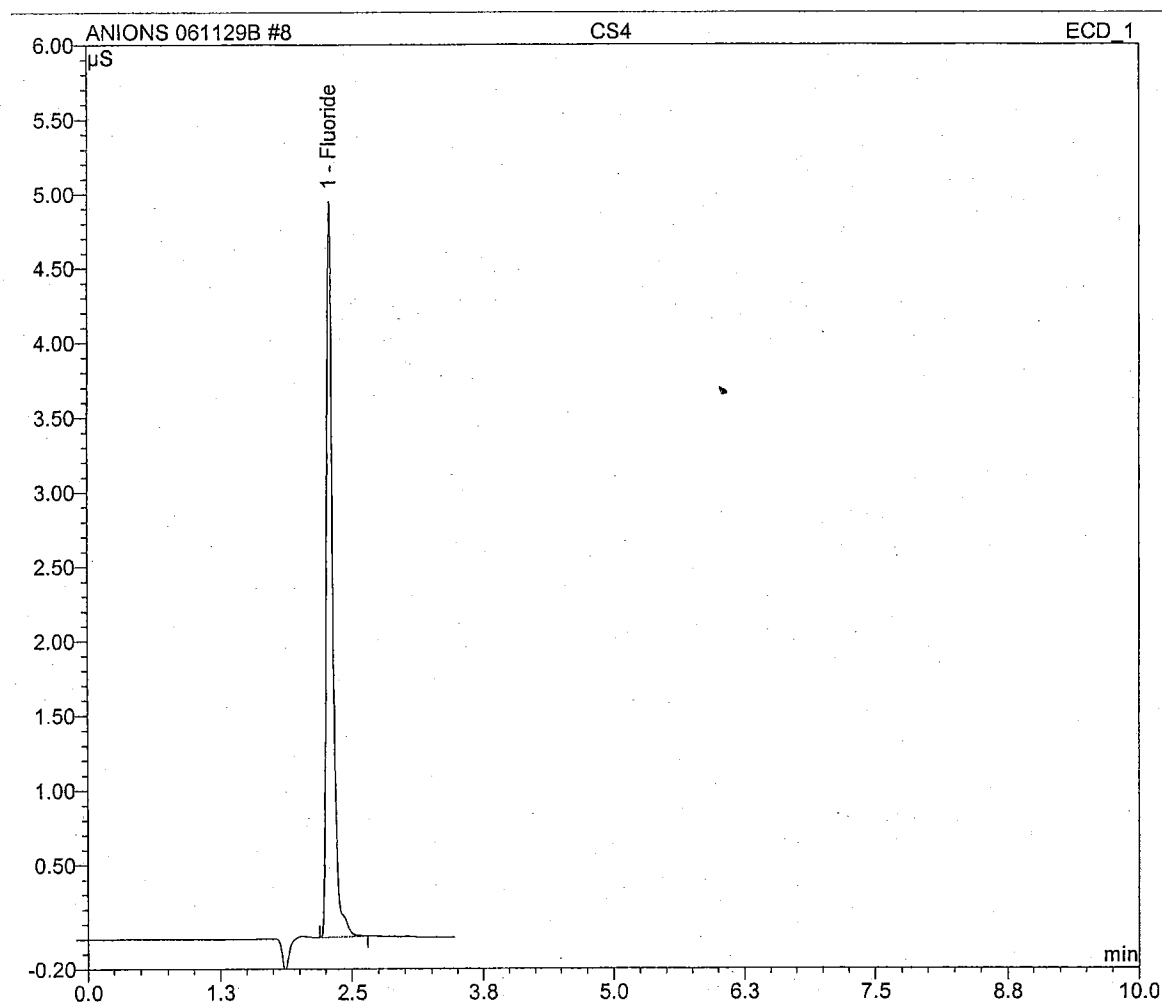
No.	Ret.Time min	Peak Name	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr.Coeff. %
1	2.96	Fluoride	0LOff	5	0.005	0.465	0.000	99.999
2	4.01	Chloride	0LOff	8	-0.061	0.290	0.000	99.991
3	4.72	Nitrite	0LOff	7	0.008	0.665	0.000	99.992
4	5.48	Sulfate	0LOff	8	-0.082	0.218	0.000	99.995
5	6.43	Bromide	0LOff	7	-0.026	0.125	0.000	99.954
6	7.35	Nitrate	0LOff	6	-0.041	0.713	0.000	99.978
AVERAGE:					-0.0329	0.4126	0.0000	99.9846

No.	Ret.Time min	Peak Name	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr.Coeff. %
1	2.29333333	Fluoride	0LOff	5	0.026482	0.375835	0	99.9501805
3	3.77333333	Chloride	0LOff	6	-0.00531	0.24186	0	99.99623455
4	4.79	Nitrite	0LOff	6	-0.039025	0.566975	0	99.97950029
5	7.08	Bromide	0LOff	6	-0.065948	0.104307	0	99.64659064
6	8.62	Nitrate	0LOff	6	0.014442	0.555362	0	99.9035266

7
0.00
-4.00
9.4 Sulfate 0LOff 6 0.018952 0.16941 0 99.95164617

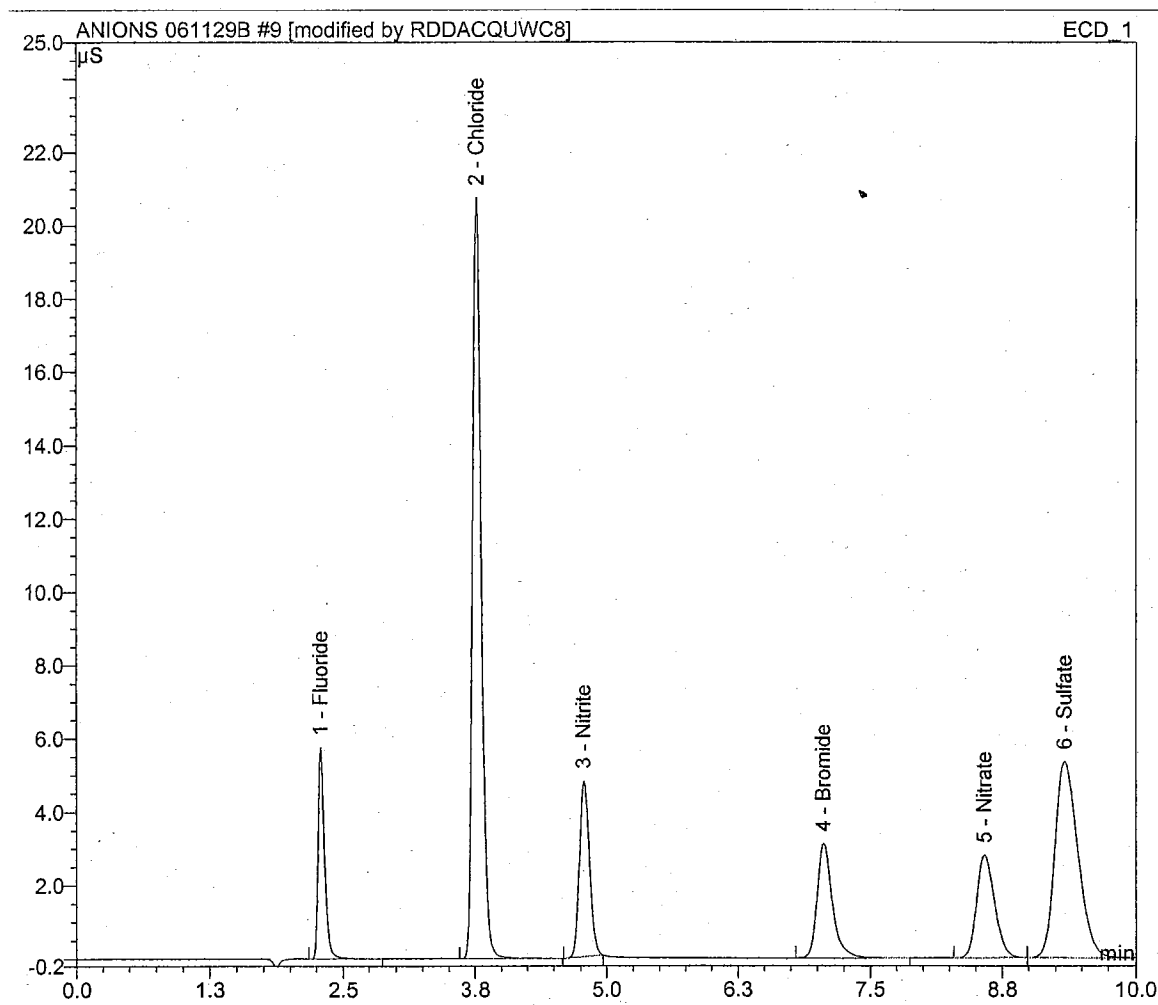
Sample Name:	CS4	Inj. Vol.:	25.0
Sample Type:	unknown	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	29.11.06 17:58	Run Time:	3.47

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	2.29	Fluoride	BMB	0.341	4.938	0.8370
TOTAL:				0.34	4.94	0.84



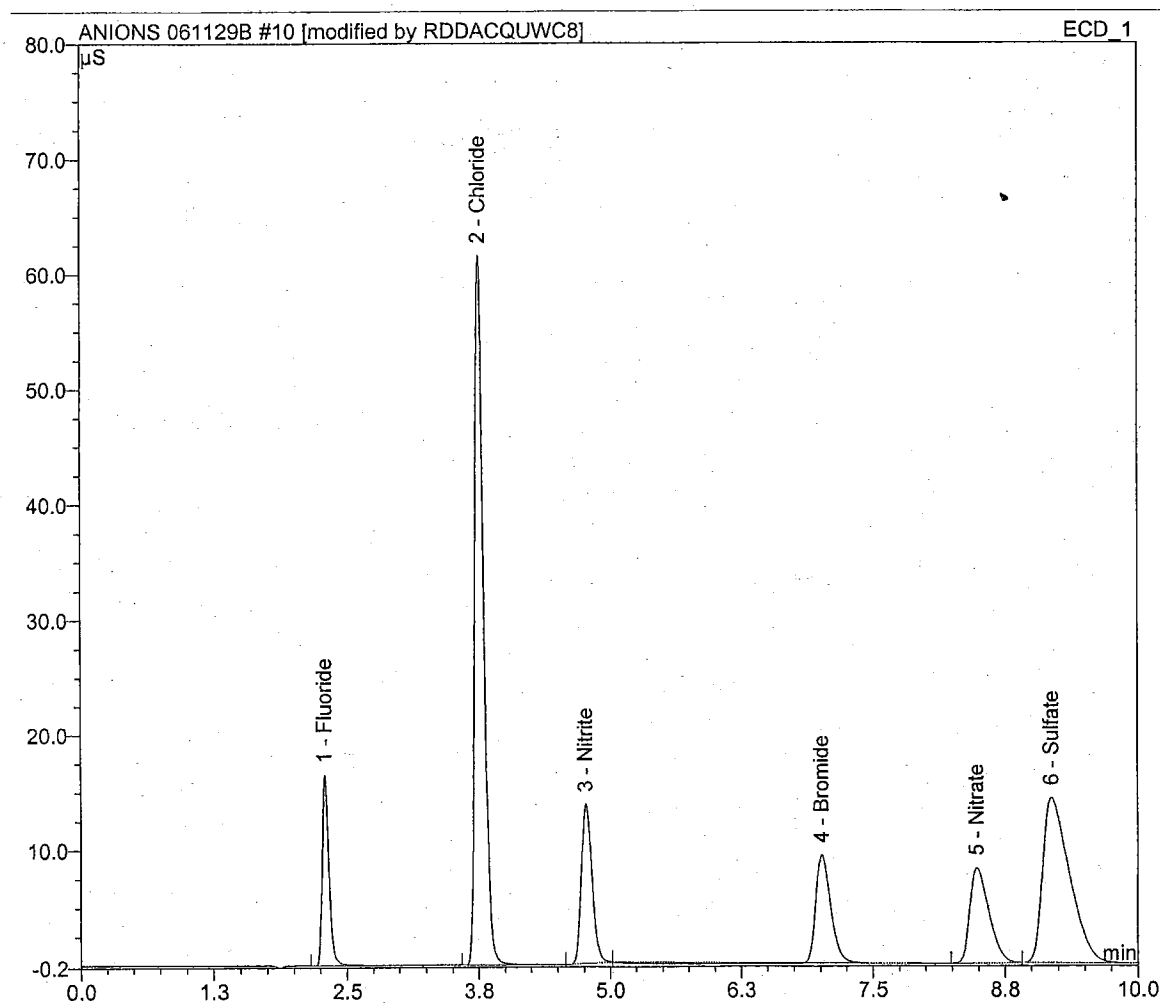
Sample Name:	CS4	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	30.11.06 07:30	Run Time:	13.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	2.30	Fluoride	BMB	0.402	5.750	0.9998
2	3.77	Chloride	BMB	1.930	20.764	8.0021
3	4.79	Nitrite	BMB*	0.536	4.785	1.0140
4	7.06	Bromide	BMB	0.527	3.118	5.6872
5	8.58	Nitrate	BMB	0.552	2.800	0.9680
6	9.34	Sulfate	bMB	1.363	5.354	7.9341
TOTAL:				5.31	42.57	24.61



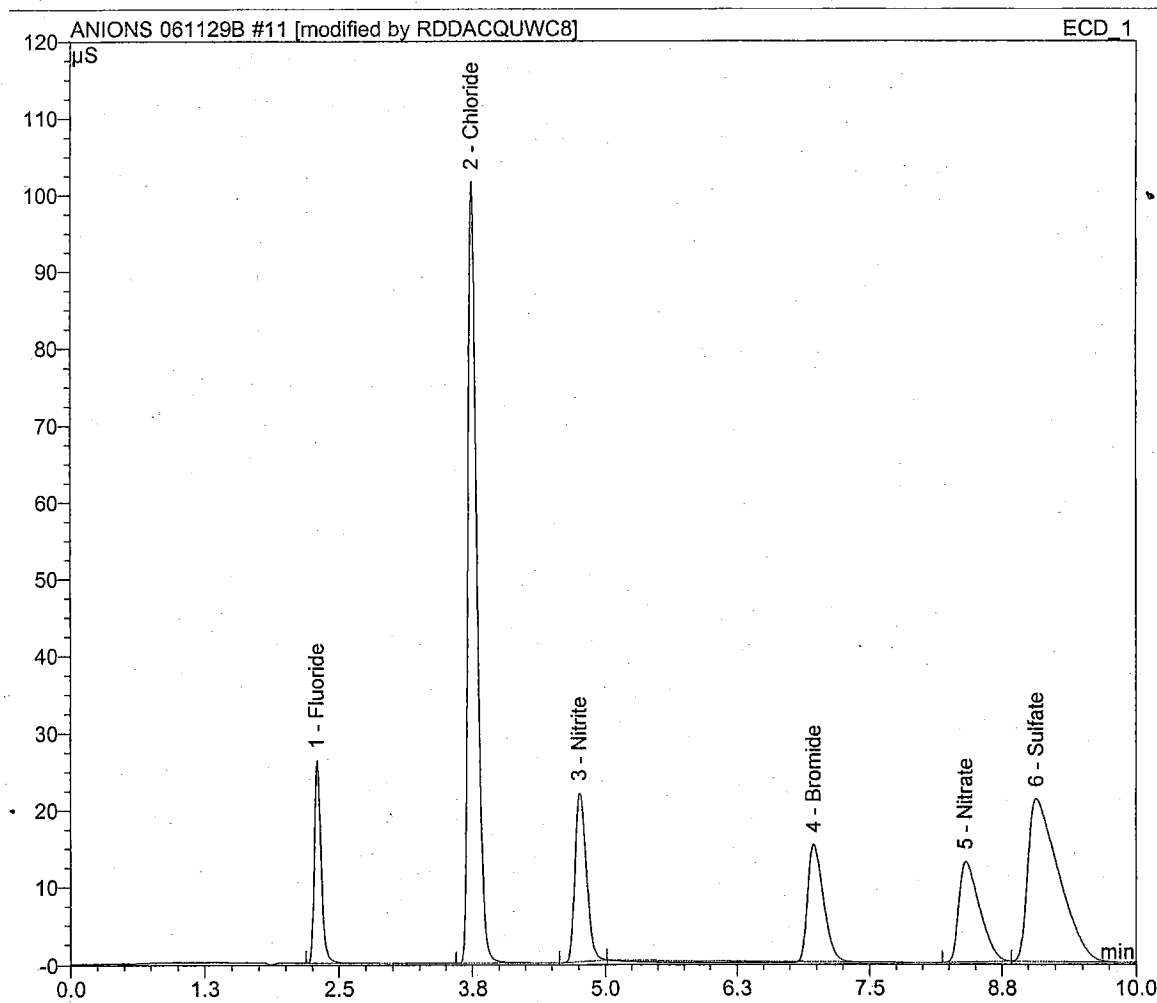
Sample Name:	CS5	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	30.11.06 07:46	Run Time:	13.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	2.30	Fluoride	BMB	1.199	16.533	3.1209
2	3.76	Chloride	BMB	5.828	61.602	24.1170
3	4.77	Nitrite	BMB*	1.647	13.827	2.9731
4	7.02	Bromide	bMB*	1.374	9.383	13.8081
5	8.49	Nitrate	BMB	1.738	8.287	3.1035
6	9.19	Sulfate	BMB	4.197	14.355	24.6599
TOTAL:				15.98	123.99	71.78



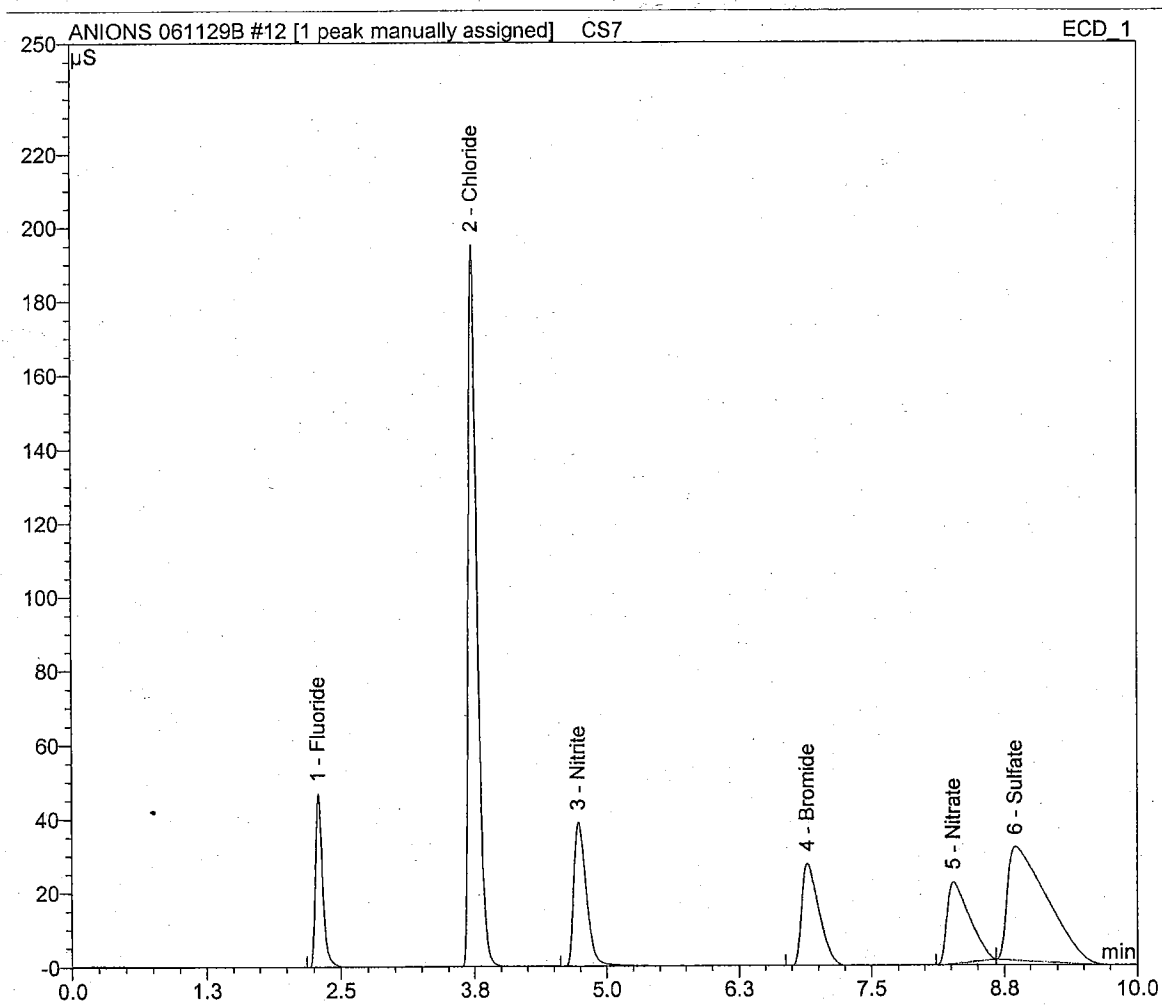
Sample Name:	CS6	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	30.11.06 08:01	Run Time:	13.00

No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	2.30	Fluoride	BMB	1.965	26.372	5.1568
2	3.76	Chloride	BMB	9.767	101.700	40.4049
3	4.76	Nitrite	BMB*	2.714	21.975	4.8561
4	6.98	Bromide	bMB*	2.252	15.277	22.2260
5	8.41	Nitrate	BMB	2.950	13.123	5.2866
6	9.07	Sulfate	bMB	7.058	21.218	41.5474
TOTAL:				26.71	199.66	119.48



Sample Name:	CS7	Inj. Vol.:	25.0
Sample Type:	standard	Dilution Factor:	1.0000
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	30.11.06 08:17	Run Time:	13.00

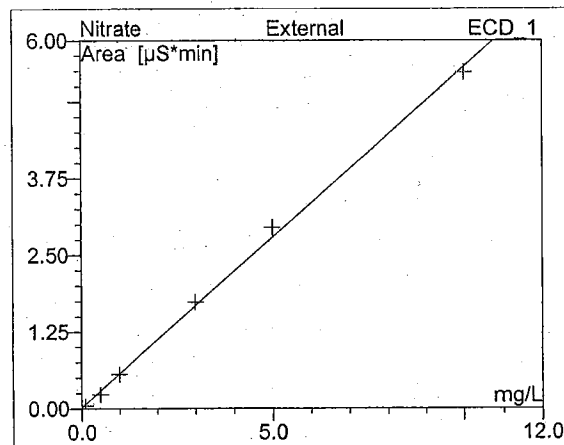
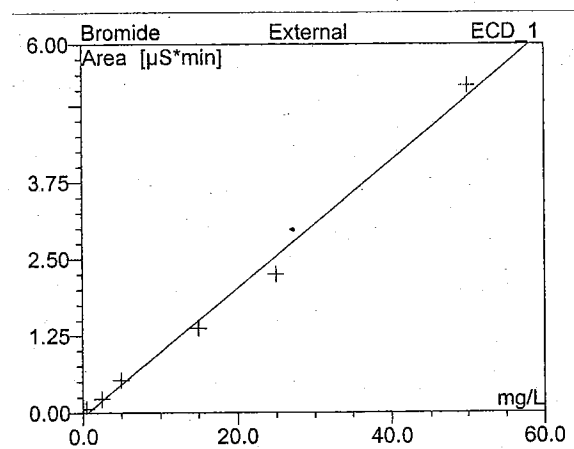
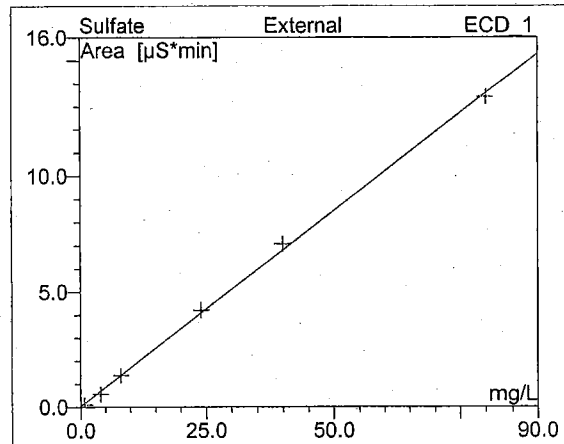
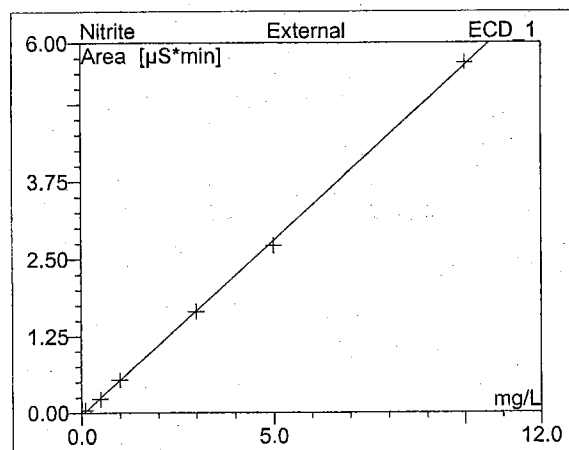
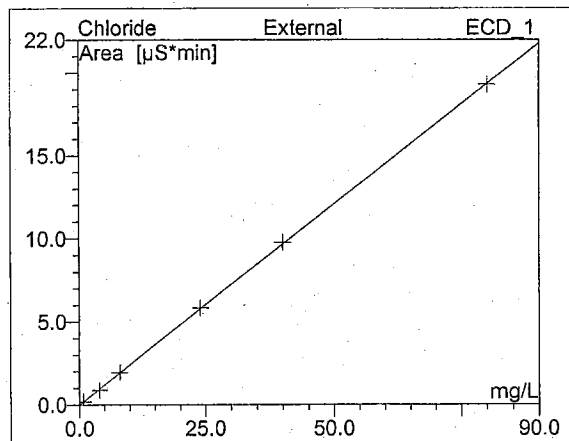
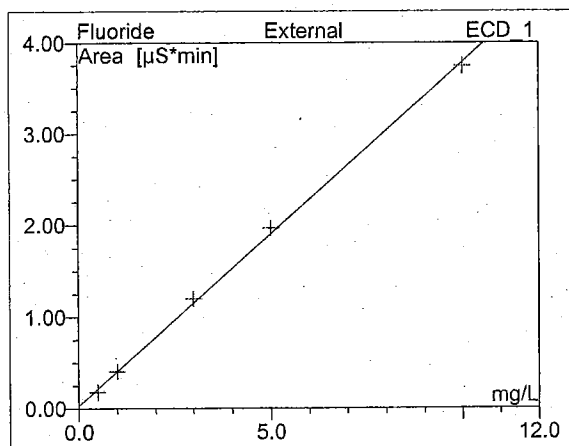
No.	Time min	Peak Name	Type	Area $\mu\text{S}\cdot\text{min}$	Height μS	Amount mg/L
1	2.30	Fluoride	BMB	3.744	47.150	9.8902
2	3.74	Chloride	BMB	19.290	195.762	79.7791
3	4.74	Nitrite	BMB	5.676	39.261	10.0799
4	6.90	Bromide	bMB	5.322	27.929	51.6554
5	8.28	Nitrate	BMB	5.477	22.216	9.8353
6	8.86	Sulfate	bMB^	13.416	30.932	79.0776
TOTAL:				52.92	363.25	240.32



Calibration Batch Report

Sequence: ANIONS 061129B
Program: Anions_Program
Inj. Date/Time: 11/30/06 08:17

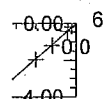
Inj. Vol: 25.0
Operator: RDD-ACQU-WC-8
Run Time: 13.00



Sequence:	ANIONS 061129B	Inj. Vol.:	25.0
Program:	Anions_Program	Operator:	n.a.
Inj. Date/Time:	11/30/06 08:17	Run Time:	13:00

No.	Ret.Time min	Peak Name	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr.Coeff. %
1	2.96	Fluoride	0LOff	5	0.005	0.465	0.000	99.999
2	4.01	Chloride	0LOff	8	-0.061	0.290	0.000	99.991
3	4.72	Nitrite	0LOff	7	0.008	0.665	0.000	99.992
4	5.48	Sulfate	0LOff	8	-0.082	0.218	0.000	99.995
5	6.43	Bromide	0LOff	7	-0.026	0.125	0.000	99.954
6	7.35	Nitrate	0LOff	6	-0.041	0.713	0.000	99.978
AVERAGE:					-0.0329	0.4126	0.0000	99.9846

No.	Ret.Time min	Peak Name	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Corr.Coeff. %
1	2.296666667	Fluoride	0LOff	5	0.026482	0.375835	0	99.9501805
2	3.743333333	Chloride	0LOff	6	-0.00531	0.24186	0	99.99623455
3	4.736666667	Nitrite	0LOff	6	-0.039025	0.566975	0	99.97950029
4	6.9	Bromide	0LOff	6	-0.065948	0.104307	0	99.64659064
5	8.276666667	Nitrate	0LOff	6	0.014442	0.555362	0	99.9035266



8.86

Sulfate

LOff

6

0.018952

0.16941

0

99.95164617

INITIAL CALIBRATION DATA FOR METALS

#	µg/L	µg/L	Signal	Area	Height	Stored
Method Name: 10WaterHg						
Method Description: 10WaterHg						
Element: Hg						

Date: 12/27/2006

Technique: FI-MHS

Calibration Type:

Hg, Calc. Intercept : Linear

Wavelength: 253.7 nm

Sample Info Name:

Results Data Set Name: V061227

Method Name: 10WaterHg

Method Description: 10WaterHg

Element: Hg

Date: 12/27/2006

Technique: FI-MHS

Calibration Type:

Hg, Calc. Intercept : Linear

Wavelength: 253.7 nm

Sample Info Name:

Results Data Set Name: V061227

Element: Hg Seq. No.: 7 AS Loc.: 1 Date: 12/27/2006
Sample ID: Calib Blank

Repl #	Sample Conc µg/L	Std Conc µg/L	Blk Corr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0043	0.0218	0.0043	12:25:46	No
2			0.0037	0.0173	0.0037	12:26:19	No
Mean:			0.0040				
SD :			0.0004				
%RSD:			10.3079				

Auto-zero performed.

Element: Hg Seq. No.: 8 AS Loc.: 2 Date: 12/27/2006
Sample ID: Standard 1

Repl #	Sample Conc µg/L	Std Conc µg/L	Blk Corr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0015	0.0188	0.0055	12:28:04	No
2			0.0021	0.0306	0.0061	12:28:39	No
Mean:			0.0018				
SD :			0.0004				
%RSD:			22.1724				

[Hg] Standard number 1 applied. [0.200]
Correlation Coefficient: 1.00000 Slope: 0.00887
Intercept : 0.00000

Element: Hg Seq. No.: 9 AS Loc.: 3 Date: 12/27/2006
Sample ID: Standard 2

Repl #	Sample Conc µg/L	Std Conc µg/L	Blk Corr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0132	0.0836	0.0172	12:30:23	No
2			0.0127	0.0870	0.0167	12:30:57	No
Mean:			0.0129				
SD :			0.0004				
%RSD:			2.9857				

[Hg] Standard number 2 applied. [1.000]
Correlation Coefficient: 0.99801 Slope: 0.01321
Intercept : -0.00039

=====

Element: Hg Seq. No.: 10 AS Loc.: 4 Date: 12/27/2006
 Sample ID: Standard 3

Repl #	SampleConc $\mu\text{g/L}$	StdConc $\mu\text{g/L}$	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0565	0.3023	0.0605	12:32:43	No
2			0.0567	0.3005	0.0607	12:33:18	No
Mean:			0.0566				
SD :			0.0002				
%RSD:			0.3141				

[Hg] Standard number 3 applied. [4.000]
 Correlation Coefficient: 0.99974 Slope: 0.01429
 Intercept : -0.00076

=====

Element: Hg Seq. No.: 11 AS Loc.: 5 Date: 12/27/2006
 Sample ID: Standard 4

Repl #	SampleConc $\mu\text{g/L}$	StdConc $\mu\text{g/L}$	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0861	0.4510	0.0902	12:35:13	No
2			0.0894	0.4682	0.0934	12:35:48	No
Mean:			0.0878				
SD :			0.0023				
%RSD:			2.6088				

[Hg] Standard number 4 applied. [6.000]
 Correlation Coefficient: 0.99972 Slope: 0.01467
 Intercept : -0.00104

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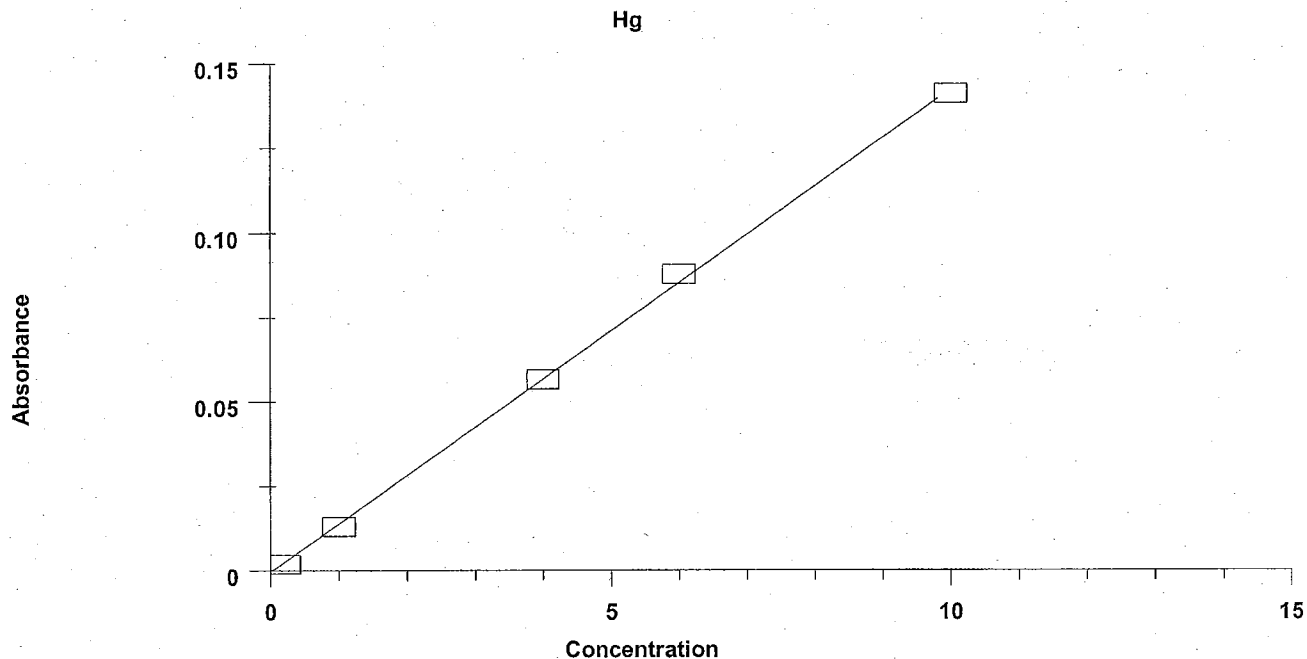
Element: Hg Seq. No.: 12 AS Loc.: 6 Date: 12/27/2006
 Sample ID: Standard 5

Repl #	SampleConc $\mu\text{g/L}$	StdConc $\mu\text{g/L}$	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.1397	0.7450	0.1438	12:37:36	No
2			0.1424	0.7406	0.1465	12:38:09	No
Mean:			0.1411				
SD :			0.0019				
%RSD:			1.3509				

[Hg] Standard number 5 applied. [10.00]
 Correlation Coefficient: 0.99970 Slope: 0.01429
 Intercept : -0.00047

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration ($\mu\text{g/L}$)	Calculated Concentration ($\mu\text{g/L}$)	Standard Deviation	%RSD
Calib Blank	0.0040	---	---	---	---
Standard 1	0.0018	0.200	0.157	0.0004	22.2
Standard 2	0.0129	1.000	0.938	0.0004	3.0
Standard 3	0.0566	4.000	3.992	0.0002	0.3
Standard 4	0.0878	6.000	6.174	0.0023	2.6
Standard 5	0.1411	10.000	9.906	0.0019	1.4
Correlation Coefficient: 0.99970		Slope:	0.01429	Intercept:	-0.0005



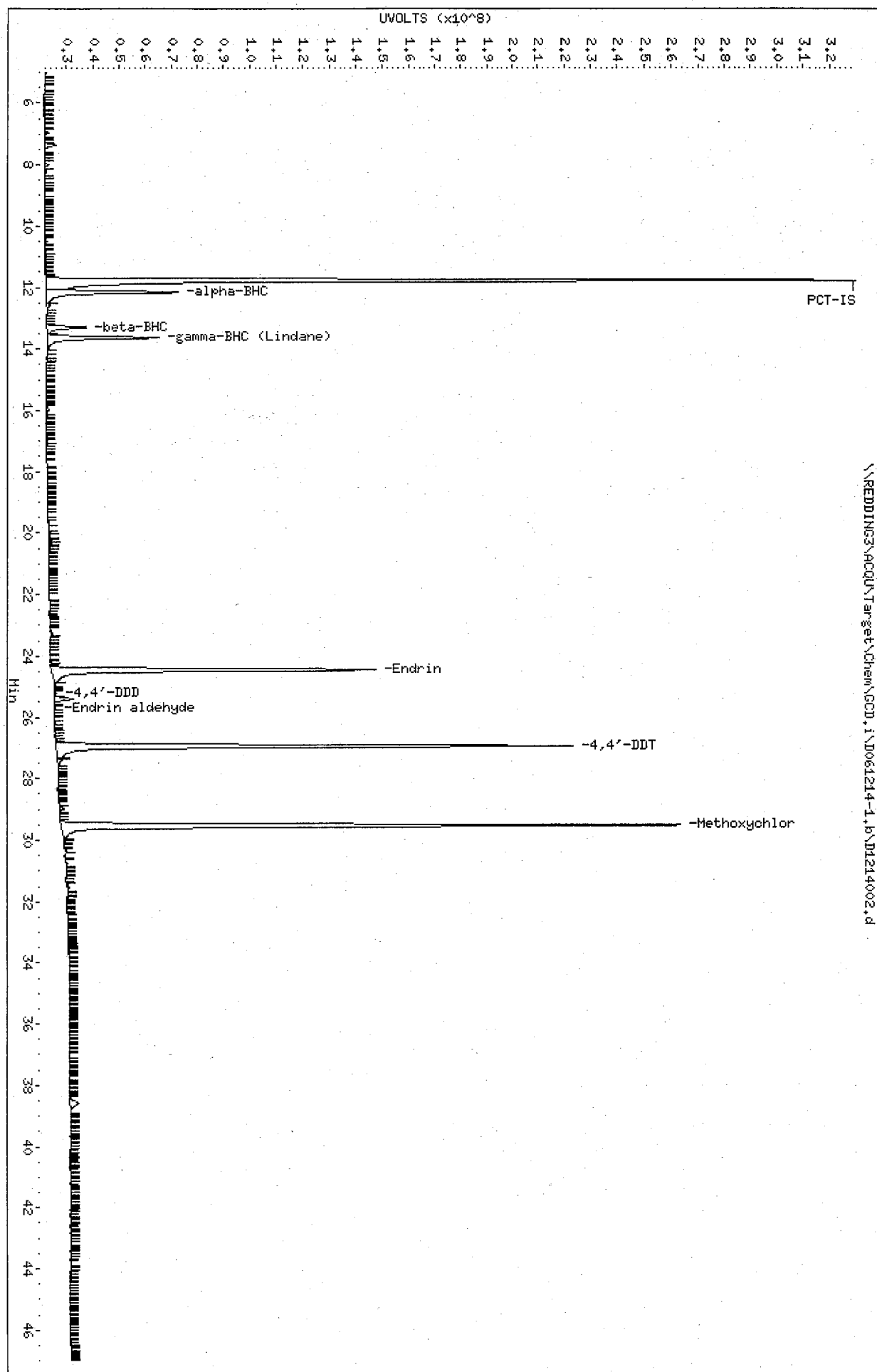
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Element: Hg Seq. No.: 13 AS Loc.: 9 Date: 12/27/2006

Sample ID: ~~Sample 009~~ ICV1

Repl #	SampleConc μg/L	StdConc μg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	4.680	4.680	0.0664	0.3627	0.0704	12:40:00	No
2	4.716	4.716	0.0669	0.3574	0.0709	12:40:34	No
Mean:	4.698	4.698	0.0667				
SD :	0.0249	0.0249	0.0004				
%RSD:	0.5	0.5	0.5336				

INITIAL CALIBRATION DATA FOR PESTICIDES



Data File: D1214002.d
Report Date: 30-Jan-2007 09:45

Columbia Analytical Services - Redding

SW846 8081A

Data file : \\REDDING3\ACQU\Target\Chem\GCD.i\D061214-1.b\D1214002.d
Lab Smp Id: PEM 12/14 Client Smp ID: PEM 12/14
Inj Date : 15-DEC-2006 07:48
Operator : SW846 8081A Inst ID: GCD.i
Smp Info : PEM 12/14
Misc Info :
Comment :
Method : \\REDDING3\ACQU\Target\Chem\GCD.i\D061214-1.b\D8081A_1208_1.m
Meth Date : 20-Dec-2006 09:47 GCD.i Quant Type: ISTD
Cal Date : 09-DEC-2006 08:15 Cal File: D1208021.d
Als bottle: 1 QC Sample: PEM
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: pem.sub
Target Version: 4.12

Compounds	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ug/mL)	FINAL (ug/mL)
-----	-----	-----	-----	-----	-----	-----
* 1 PCT-IS	11.787	11.784	(1.000)	1890743155	0.10000	
4 alpha-BHC	12.162	12.164	(1.032)	352581950	0.01044	0.01044
5 beta-BHC	13.304	13.303	(1.129)	98286763	0.01081	0.01081
6 gamma-BHC (Lindane)	13.629	13.634	(1.156)	284022958	0.01009	0.01009
14 4,4'-DDE	Compound Not Detected.					
16 Endrin	24.462	24.458	(2.075)	875485139	0.04368	0.04368
18 4,4'-DDD	25.229	25.223	(2.140)	4254454	3e-004	0.0003065
19 Endrin aldehyde	25.712	25.711	(2.181)	1548718	1e-004	0.0001310
21 4,4'-DDT	26.954	26.955	(2.287)	1316541408	0.07920	0.07920
22 Endrin ketone	Compound Not Detected.					
23 Methoxychlor	29.529	29.546	(2.505)	1582120749	0.20730	0.2073 (A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

7D
PESTICIDE BREAKDOWN

Lab Name: COLUMBIA ANALYTICAL SERVICES Case No.: D0700073 SDG No.: D061214-1

GC Column: DB5 ID: 0.53 (mm) Init. Calib. Date(s): 12/08/06 12/09/06

Lab File ID: D1214002

Date Analyzed :12/15/06

Time Analyzed :0748

DDE AREA = 0

DDD AREA = 4254454

DDT AREA = 1316541408

Endrin Aldehyde AREA = 1548718

Endrin Ketone AREA = 0

Endrin AREA = 875485139

4,4'-DDT % breakdown (1): 0.32 Endrin % breakdown (1): 0.18

QC LIMITS:

4,4'-DDT breakdown must be less than or equal to 15.0%

Endrin breakdown must be less than or equal to 15.0%